

5900 Hollis Street, Suite A Emeryville, California 94608 Telephone: (510) 420-0700

www.CRAworld.com

Fax: (510) 420-9170

TR	ΑN	ISN	W.		ΔL	j
				\$1,000 miles		

DATE: April 16, 2010			Dece	DENCE NO.	540188				
DATE:	Aprii	16, 2010			RENCE NO.: ECT NAME:		rrison Street, Oakland		
		X.7. 1		rkoj	ECI NAME:	1432 1 1a			
To:		rry Wick)		444 ⁴⁴⁴ -12		RECEIVED		
	Alamo	eda Coun	ty Environmen	tal Health		e e e e e e e e e e e e e e e e e e e	8:51 am, Apr 20, 2010		
	1131 Harbor Bay Parkway, Suite 250								
	Alame	eda, Calif	ornia 94502		· · · · · · · · · · · · · · · · · · ·		Alameda County Environmental Health		
Please find	d enclos	ed:	Draft Originals		Final Other	· · · · · · · · · · · · · · · · · · ·			
* *	٠	Ļ	Prints			¥			
Sent via:			Mail Overnight Cou	rier 🖂	Same Day C Other <u>Ge</u>		ACEH ftp uploads		
QUAN	TITY		100		DESCRIP				
1		First 20	010 Semi-Annu	al Groundw	ater Monitor	ing Report			
L									
	dequeste Your Use				and Commen re and Return				
Should yo	COMMENTS: Should you have any questions regarding the content of this document, please contact Robert Foss at (510) 420-3348.								
Copy to:	-		. Bacharach/Ba Mark Borsuk	arbara Jean l		,			
Complete	ed by:	Robert F	oss [Please P	rintl	Si	gned: K	But Joss		
Filing:									



FIRST 2010 SEMI-ANNUAL GROUNDWATER MONITORING REPORT

ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

FUEL LEAK CASE NO. RO0000266

Prepared by: Conestoga-Rovers & Associates

5900 Hollis Street, Suite A Emeryville, California U.S.A. 94608

Office: 510-420-0700 Fax: 510-420-9170

web: http:\\www.CRAworld.com

APRIL 16, 2010 Ref. no. 540188 (7)

This report is printed on recycled paper.

TABLE OF CONTENTS

			<u>Page</u>
1.0	INTROI	DUCTION	1
	1.1	SITE INFORMATION	1
2.0	SITE AC	CTIVITIES AND RESULTS	1
	2.1	CURRENT MONITORING/SAMPLING EVENT ACTIVITIES	1
	2.1.1	FIELD ACTIVITIES	1
	2.1.2	SAMPLE ANALYSIS	2
	2.2	CURRENT MONITORING/SAMPLING EVENT RESULTS	3
	2.2.1	GROUNDWATER FLOW DIRECTION	
	2.2.2	HYDROCARBON DISTRIBUTION IN GROUNDWATER	3
	2.3	PROPOSED ACTIVITIES FOR THE SECOND 2010 SEMI-ANNUAL	
		GROUNDWATER MONITORING/SAMPLING EVENT	4
	2.3.1	MONITORING ACTIVITIES	

LIST OF FIGURES (Following Text)

FIGURE 1 VICINITY MAP

FIGURE 2 GROUNDWATER ELEVATION AND HYDROCARBON

CONCENTRATION MAP

LIST OF TABLES

TABLE 1 WELL CONSTRUCTION DETAILS

TABLE 2 GROUNDWATER ELEVATIONS AND ANALYTICAL DATA

LIST OF APPENDICES

APPENDIX A STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING

AND SAMPLING

APPENDIX B CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY

DOCUMENTATION

APPENDIX C FIELD DATA SHEETS

APPENDIX D BENZENE CONCENTRATION AND DEPTH TO WATER VS. TIME-SERIES

GRAPHS

1.0 INTRODUCTION

On behalf of the Estate of A. Bacharach/Barbara Jean Borsuk, Conestoga-Rovers & Associates (CRA) has prepared this *First 2010 Semi-Annual Groundwater Monitoring Report* for the site located at 1432 Harrison Street in Oakland, California (Figure 1). Presented in this report are the first 2010 semi-annual groundwater monitoring activities and results and activities anticipated for the second semi-annual 2010 event. Work is performed under the regulatory oversight of Alameda County Environmental Health (ACEH).

Figure 2 presents groundwater elevation contours and hydrocarbon concentrations for this monitoring event. Table 1 provides well construction details. Table 2 presents recent and historical depth to water measurements, analytical data and separate phase hydrocarbon (SPH) observations and measurements. Appendix A contains CRA's *Standard Field Procedures for Groundwater Monitoring and Sampling*. Appendix B contains the analytical laboratory report of sample results. Appendix C contains field data sheets of this sampling event, and Appendix D contains benzene concentrations and depth to water time-series graphs.

1.1 <u>SITE INFORMATION</u>

Site Address 1432 Harrison Street, Oakland

Site Use Parking Facility

Client and Contact The Estate of A. Bacharach/

Barbara Jean Borsuk Contact: Mark Borsuk

Consultant and Contact Person CRA, Robert Foss, P.G.

Lead Agency and Contact Person ACEH, Jerry Wickham, P.G.

2.0 SITE ACTIVITIES AND RESULTS

2.1 CURRENT MONITORING/SAMPLING EVENT ACTIVITIES

2.1.1 FIELD ACTIVITIES

CRA coordinated with Muskan Environmental Sampling (MES) to conduct monitoring and sampling activities on March 1, 2010. MES measured depth to water and inspected

each well for the presence of separate-phase hydrocarbons (SPH). During well purging prior to sample collection, SPH was observed entering the well casing of MW-2, and accumulated to an approximate thickness of 0.22 feet. An SPH sample was collected and submitted to McCampbell Analytical Laboratory (McCampbell) of Pittsburg, California for fuel fingerprinting. Groundwater samples were collected from wells MW-3 through MW-6. Similar to the Third Quarter 2009 event, there was insufficient water available in well MW-1 to measure and collect a groundwater sample. Groundwater monitoring field data sheets are included in Appendix C and groundwater monitoring data have been uploaded to the GeoTracker database.

Prior to sampling, each well was purged by repeated bailing using a new, disposable bailer. Field measurements of pH, specific conductance, and temperature of the purged groundwater were measured after extraction of each successive casing volume or at regular volume intervals. Purging of groundwater continued until at least three casing volumes were extracted and consecutive pH, conductivity and temperature measurements appeared to stabilize. Field water quality measurements, purge volumes, and sample collection data were recorded on field sampling data sheets (Appendix C).

Samples were decanted from the bailers into 40 milliliter (mL) glass volatile organic analysis (VOA) vials supplied by McCampbell. Immediately after collection, the sample containers were labeled and placed on ice in a cooler. Samples were logged onto a chain-of-custody (COC) form that accompanied them to the laboratory (Appendix B).

To minimize the potential for cross-contamination, groundwater monitoring equipment was decontaminated prior to being deployed in the first well, and between each successive well. The probe of the electric well sounder used for water level measurements was rinsed thoroughly with distilled water and Alconox TM detergent prior to first use and between subsequent water level measurements. The disposable bailers were discarded after use in each well.

2.1.2 SAMPLE ANALYSIS

Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene and xylenes (BTEX) by modified EPA Method 8015/8021, and methyl tertiary butyl ether (MTBE) by EPA Method 8260. All analyses were performed by McCampbell. The laboratory analytical report is included as Appendix B. Hydrocarbon concentrations are summarized on Figure 2 and presented in Table 2. The analytical data were submitted to the GeoTracker database.

2.2 CURRENT MONITORING/SAMPLING EVENT RESULTS

Groundwater Flow Direction North
Hydraulic Gradient 0.002

Range of Depth to Water Measurements

From Top of Casing 19.20 to 21.20 feet

Presence of Measureable Separate Phase

Hydrocarbons? Yes

2.2.1 GROUNDWATER FLOW DIRECTION

Based on depth-to-water measurements from the March 1, 2010 site visit the calculated flow direction of groundwater beneath the site is toward the north at a gradient of 0.002. This flow direction and gradient are consistent with conditions observed during previous monitoring events. Groundwater elevation data are summarized on Figure 2 and presented in Table 2.

2.2.2 HYDROCARBON DISTRIBUTION IN GROUNDWATER

Hydrocarbon concentrations were detected in wells MW-4 and MW-5, and are assumed to be at saturation levels in well MW-2 based to the presence of SPH. TPHg concentrations were detected at 220 micrograms per liter ($\mu g/L$) in well MW-4 and 57,000 $\mu g/L$ in well MW-5. Benzene, ethylbenzene and xylenes were detected in well MW-4 at concentrations of 1.8, 1.2 and 1.5 $\mu g/L$, respectively. Benzene, toluene, ethylbenzene, and xylenes were detected in well MW-5 at concentrations of 16,000, 240, 1,800 and 5,000 $\mu g/L$, respectively. No MTBE was detected in any of the sampled wells. Refer to Table 2 for dissolved hydrocarbon concentrations and Appendix D for benzene concentration trend graphs for wells MW-1 through MW-6. The unshaded symbols on the graphs represent results below laboratory detection limits.

2.3 PROPOSED ACTIVITIES FOR THE SECOND 2010 SEMI-ANNUAL GROUNDWATER MONITORING/SAMPLING EVENT

2.3.1 MONITORING ACTIVITIES

The second groundwater monitoring and sampling event will be scheduled for September. All wells will be gauged and wells MW-1, MW-2, MW-4, and MW-5 will be sampled. Wells MW-3 and MW-6 will not be sampled during the next event as they are sampled annually during the first semi-annual event. CRA will contract MES to perform these monitoring and sampling activities. MES will gauge depth to water and check each well for accumulations of SPH. Groundwater samples will be collected from wells not containing SPH. Groundwater samples will be analyzed for TPHg and BTEX by Modified EPA Method 8015/8021 and MTBE by EPA Method 8260B. If another laboratory is selected to analyze the next round of samples, TPHg, BTEX, and MTBE would be analyzed using EPA Method 8260. Groundwater monitoring and sampling results will be uploaded to the State's GeoTracker database. CRA will summarize groundwater monitoring activities and results in the Second 2010 Semi-Annual Groundwater Monitoring Report.

Well MW-1 has not been sampled during the previous four monitoring/sampling events due to insufficient water present in the well. This is not a result of a decreasing water table, but due to approximately 6 feet of silt in the well. CRA has proposed the redevelopment of this well prior to the September 2010 event. In the December 2009 Additional Site Characterization Report, it was erroneously stated that MW-1 had been used for extraction during remediation. No records of any groundwater extraction have been located and the only documented remediation efforts have involved Air Sparging and Vapor Extraction. It was hypothesized that infiltration and deposition in the well of fine-grained material occurred during groundwater extraction. As there is no available documentation of groundwater extraction, CRA has no hypothesis of how this well has silted in to this degree. CRA recommends the redevelopment of well MW-1 occurs prior to the next sampling to again obtain source area samples.

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

Bryan A. Fong

.

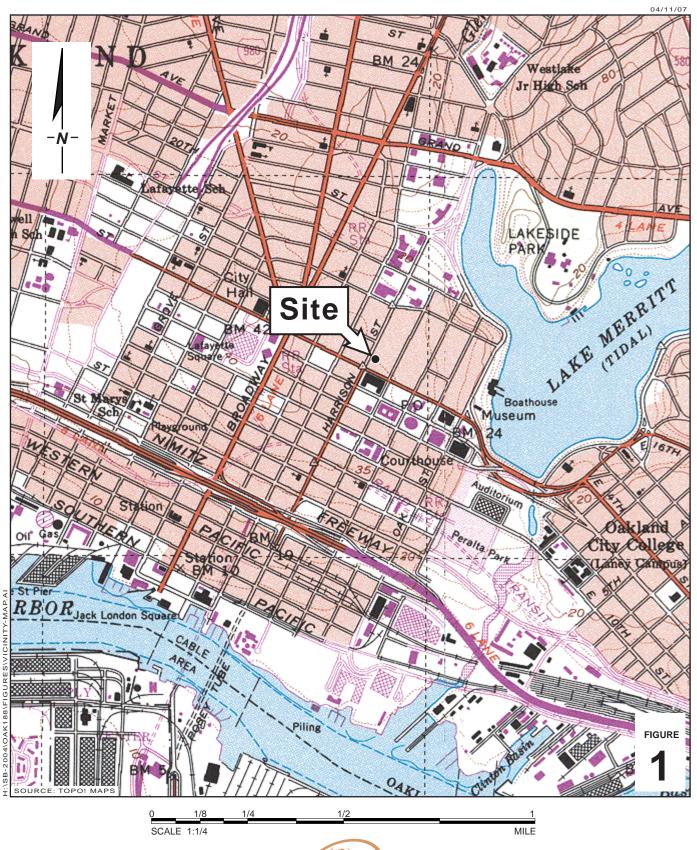
Robert Foss, P.G.

Robert Fors



Conestoga-Rovers & Associates, Inc. (CRA) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to CRA from outside sources and/or in the public domain, and partially on information supplied by CRA and its subcontractors. CRA makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by CRA. This document represents the best professional judgment of CRA. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature

FIGURES

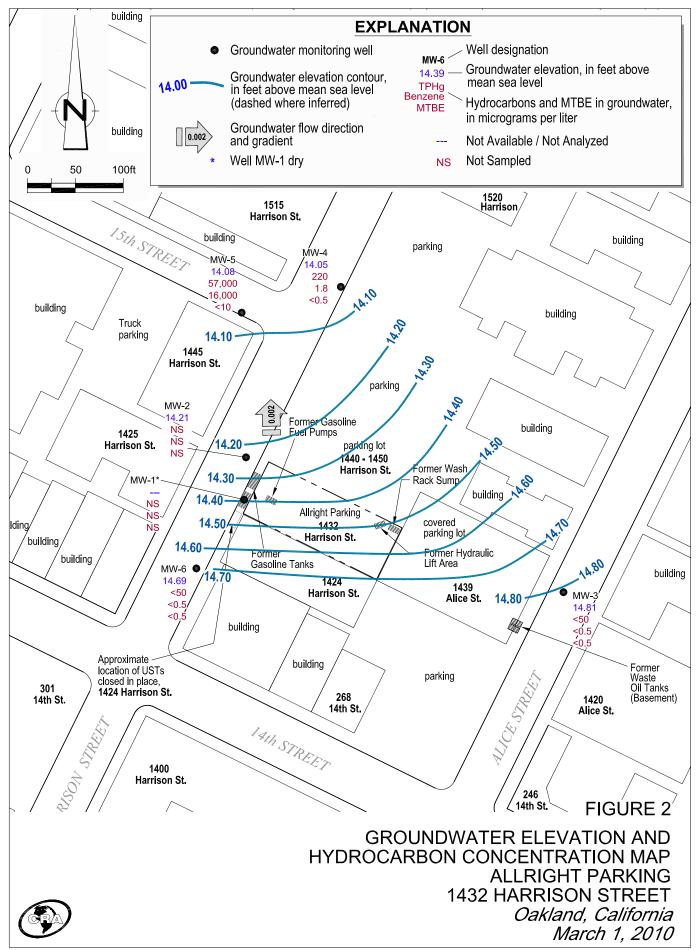


Allright Parking

1432 Harrison Street Oakland, California



Vicinity Map



TABLES

TABLE 1 Page 1 of 1

WELL CONSTRUCTION DETAILS ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

Well No.	Installation Date	Total Depth (ft-bgs)	Boring Diameter (inch)	Well Diameter (inch)	Screen Size (inch)	Screened Interval (ft-bgs)	Sand Pack Interval (ft-bgs)	Surface Seal (ft-bgs)	TOC Elevation (ft-msl)
MW-1	1/12/1994	27	12	4	0.020	16-26.5	14.5-27	0-14.5	35.37
MW-2	7/30/1994	26		2	0.010	11-26	9-26	0-9	35.21
MW-3	7/30/1994	25		2	0.010	15-25	13-25	0-13	34.01
MW-4	10/2/1996	25	8	2	0.010	15-25	13-25	0-13	33.75
MW-5	10/2/1996	30	8	2	0.010	14-29	12-30	0-12	34.63
MW-6	10/2/1996	30.5	8	2	0.010	14-29	30-Dec	0-12	35.89
VES-1 (VE) VES-1 (AS)	7/23/1999	30	8	3 1	0.020 0.020	5-20 28-30	4.5-20 27.5-30	0-5 0-27.5	
VES-2 (VE) VES-2 (AS)	7/22/1999	29.5	8	3 1	0.020 0.020	5-20 27.5-29.5	4-20 27-29.5	0-4 0-27	
VES-3 (VE) VES-3 (AS)	7/23/1999	30	8	3 1	0.020 0.020	5-20 28-30	4-20 25-30	0-4 0-25	
VES-4 (VE) VES-4 (AS)	7/23/1999	29	8	3 1	0.020 0.020	5-20 27-29	4-20 26.5-28.5	0-4 0-26.5	
SV-3	8/31/2009	5.5	3	1/4	probe	4.8-5.3	4.5-5.5	0.5-4.5	
SV-4	8/31/2009	5.75	3	1/4	probe	4.8-5.3	4.5-5.75	0.5-4.5	
SV-5	8/31/2009	5.5	3	1/4	probe	4.8-5.3	4.5-5.5	0.5-4.5	
SV-6	8/31/2009	5.5	3	1/4	probe	4.8-5.3	4.5-5.5	0.5-4.5	
SV-7	8/31/2009	5.75	3	1/4	probe	4.8-5.3	4.5-5.75	0.5-4.5	
SV-8	8/31/2009	5.5	3	1/4	probe	4.8-5.3	4.5-5.5	0.5-4.5	

Notes:

ft-bgs Feet below ground surface ft-msl Feet above mean sea level

-- Not surveyed
VE Vapor extraction
AS Air sparge
SV Soil Vapor Well

TABLE 2 Page 1 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene (µg/L) ———	Xylenes	MTBE >	Notes
36 10 1 747 1	10 1 10 1										
Monitoring Wel	•	ts:			170.000	25.000	F1 000	2.400	12 000		
MW-1 34.95	8/1/1994 12/21/1994	19.53		 15.42	170,000 180,000	35,000 41,000	51,000 64,000	2,400 3,100	13,000 100,000		
34.33	3/13/1995	18.66		16.29	150,000	31,000	45,000	2,500	17,000	 	
	6/27/1995	18.20		16.75	71,000	17,000	18,000	1,600	7,700	 	
	7/7/1995	18.35		16.60	71,000	17,000	18,000	1,600	7,700	 	
	9/28/1995	18.20		16.75	110,000	27,000	34,000	1,700	14,000		
	12/20/1995	19.96		14.99	120,000	33,000	43,000	2,300	15,000		
	3/26/1996	19.27		15.68	140,000	29,000	36,000	1,900	13,000	<200*	d
	6/20/1996	18.64		16.31	110,000	30,000	38,000	2,200	13,000	<200*	
	9/26/1996	19.35		15.60	170,000	28,000	40,000	2,200	15,000	ND**	
	10/28/1996	19.58		15.37							
	12/12/1996	19.68		15.27	110,000	36,000	47,000	2,500	16,000	ND*	
	3/31/1997	18.80		16.15	160,000	24,000	39,000	1,900	13,000	ND*	
	6/27/1997	19.26		15.69	130,000	25,000	36,000	2,000	14,000	ND*	
	9/9/1997	19.70		15.25	99,000	22,000	27,000	1,600	13,000	270*	
	12/18/1997	19.25		15.70	160,000	30,000	44,000	2,200	15,000	ND***	
	3/12/1998	17.52		17.43	190,000	20,000	49,000	2,500	18,000	ND***	
	6/22/1998	18.63		16.32	90,000	19,000	40,000	2,100	16,000		
	9/18/1998	18.60 19.18		16.35 15.77	190,000	29,000	48,000	2,400 2,000	17,000 8,200		
	12/23/1998 3/29/1999	18.52		16.43	140,000 181,000	24,000 22,200	44,000 40,100	1,844	12,200		
	6/23/1999	18.60		16.35	80,000	20,000	33,000	1,600	11,000	 	
	9/24/1999	19.05		15.90	117,000	15,100	20,700	1,550	11,800		
	12/23/1999	19.95		15.00	186,000	25,900	39,000	1,990	12,400		
	3/21/2000	18.48		16.47	210,000	35,000	42,000	2,200	13,000	<3,000	a
	7/3/2000	18.95		16.00	200,000	33,000	46,000	2,200	15,000	<200*	a
	9/7/2000	19.45	Sheen Field	15.50							
	12/5/2000	19.90		15.05	220,000	42,000	57,000	2,700	17,000	<200	a
	3/6/2001	18.20		16.75	180,000	27,000	39,000	2,000	13,000	<1200* /<20***	a,l
	6/8/2001	20.14		14.81	170,000	28,000	40,000	1,900	13,000	<200	a
	8/27/2001	21.19		13.76	130,000	24,000	33,000	1,600	11,000	<350	a
	10/25/2001	21.74		13.21	160,000	22,000	28,000	1,500	10,000	<350	a
	3/1/2002	21.39	0.41	13.84 ^x	210,000		 				
34.96	6/10/2002	22.30 21.40		12.65 13.56	210,000	30,000	51,000	3,100 29,000	22,000	<1,000*	a
34.90	9/3/2002	20.50		14.46	2,500,000 89,000	31,000 2,600	170,000 9,300	530	170,000 28,000	2,500,000* <1,700	a
	12/22/2002 1/23/2003	18.57	Sheen Lab	16.39	130,000	600	1,600	<100	41,000	<50***	a,m a,b,l
	6/12/2003	19.10	0.07	15.91 ^x							a,D,1
	7/23/2003	19.42	0.07	15.59 ^x							
35.37#	12/22/2003	17.09	0.01	18.29 ^x							
	3/10/2004	13.82		21.55	22,000	190	250	<10	5,100	<100	a,c
	6/16/2004	14.75		20.62	2,700	23	160	13	520	<25	a
	9/27/2004	18.02	Sheen Field	17.35	27,000	580	2,000	56	6,800	<10***	a,m
	12/22/2004	11.25		24.12	250	3.5	18	< 0.5	47	<0.5***	a,m
	3/3/2005	14.42		20.95	320	5.2	13	3.2	46	<5.0	a
34.96##	6/9/2005	17.80		17.16							+
	9/9/2005	18.26		16.70							+
	12/20/2005	18.68		16.28		270	400		4 400		+
	3/26/2006	16.96		18.00	23,000	270	400	65 170	4,400	<50	a
	6/23/2006	17.55 18.53		17.41 16.43	30,000 34,000	340 540	680 630	170 190	6,900 7,000	<500 <500	a,m
	9/7/2006 12/29/2006	19.43	Sheen Field	15.53	20,000	540 550	55	130	7,000 4,700	<100*/<0.5***	a a m
	3/21/2007	18.92	Sheen Field	16.04	23,000	910	210	140	5,900	<250*	a,m a
	6/7/2007	19.22	Sheen Field	15.74	24,000	680	61	190	4,300	<100*	a,b
	9/28/2007	20.19		14.77							+
	12/9/2007	20.40		14.56							+
	3/3/2008	19.16	Sheen Lab	15.80	10,000	510	28	<10	1,700	<2.5***	a,b,m,l
	6/4/2008	20.05		14.91							
	9/9/2008	20.40		14.56							
	12/5/2008	20.42		14.54							

TABLE 2 Page 2 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene (µg/L) —	Xylenes	MTBE >	Notes
MW-1 cont.	3/2/2009	20.39		14.57							
	9/15/2009	Well Dry									
	3/1/2010	Well Dry									
MW-2	8/1/1994				130,000	28,000	35,000	3,000	12,000		
35.18	12/21/1994	19.91		15.27	200	140,000	200,000	3,500	22,000		
	3/13/1995	19.15		16.03	500	9,200	23,000	7,000	36,000		
	6/27/1995	18.74		16.44	120,000	23,000	30,000	2,700	13,000		
	7/7/1995	18.80		16.38	120,000	23,000	30,000	2,700	13,000		
	9/28/1995	19.30		15.88	110,000	23,000	29,000	2,500	11,000		
	12/20/1995	20.24		14.94	83,000	980	1,800	2,200	10,000		
	3/26/1996	19.69		15.49	150,000	23,000	32,000	2,800	12,000	<200* <200*	d
	6/20/1996 9/26/1996	19.20 19.80		15.98 15.38	94,000 150,000	15,000 20,000	23,000 29,000	2,400 2,800	12,000 12,000	ND**	
	10/28/1996	20.18		15.00							
	12/12/1996	20.17		15.01	58,000	3,100	11,000	1,700	8,100	220*	
	3/31/1997	19.67		15.51	38,000	6,000	7,900	690	3,300	ND*	
	6/27/1997	19.68		15.50	62,000	13,000	16,000	1,300	6,000	ND*	
	9/9/1997	20.20		14.98	81,000	16,000	18,000	1,800	8,600	ND***	
	12/18/1997	19.80		15.38	110,000	18,000	26,000	2,200	9,500	ND***	
	3/12/1998	18.07		17.11	120,000	16,000	26,000	2,200	9,400	ND***	
	6/22/1998	18.29		16.89	38,000	9,800	9,500	1,500	6,000		
	9/18/1998	19.09		16.09	68,000	12,000	16,000	1,400	5,900		
	12/23/1998	19.67		15.51	180,000	16,000	22,000	2,200	8,300		
	3/29/1999	18.97		16.21	16,600	1,380	1,920	373	1,840		
	6/23/1999	18.25		16.93	41,000	10,000	9,400	1,100	5,000		
	9/24/1999	19.60		15.58	40,600	4,880	3,490	1,090	4,560		
	12/23/1999	20.21		14.97	61,900	6,710	9,320	1,150	5,360		
	3/21/2000	18.93		16.25	98,000	14,000	21,000	1,600	6,900	<1600	a
	7/3/2000 9/7/2000	19.38 19.83		15.80 15.35	140,000 110,000	18,000 17,000	33,000 21,000	2,600 2,200	11,000 9,700	<200* <100***	a
	12/5/2000	20.30		14.88	130,000	19,000	28,000	2,200	11,000	<200	a,l a
	3/6/2001	19.57		15.61	32,000	3,400	3,400	580	2,500	<200	a
	6/8/2001	20.59		14.59	72,000	9,400	9,200	1,300	5,800	<200	a
	8/27/2001	21.79		13.39	110,000	17,000	28,000	2,600	11,000	<950	a
	10/25/2001	22.05		13.13	110,000	15,000	18,000	2,000	8,700	<350	a
	3/1/2002	21.80		13.38	3,100	370	180	62	330	<5.0*	a
	6/10/2002	22.83		12.35	7,800	2,000	1,100	76	570	<100*	a
35.21	9/3/2002	22.03		13.18	21,000	2,400	2,900	320	1,400	<500	a
	12/22/2002	22.70		12.51	630	48	56	19	82	< 5.0	a
	1/23/2003	20.49		14.72	1,100	27	32	19	150	<25	a
	6/12/2003	21.03		14.18	10,000	2,100	1,600	150	660	<250	a
	7/23/2003	21.40		13.81	28,000	4,800	4,800	380	1,700	<500	a
	12/22/2003	19.33		15.88	<50	<0.5	<0.5	<0.5	< 0.5	<5.0	
	3/10/2004 6/16/2004	19.33 19.90		15.88 15.31	3,100 9,100	460	290 1,200	38 220	240 830	<50 <400	a
	9/27/2004	22.08		13.13	14,000	1,600 2,800	490	340	1,600	<400 <350	a
	12/22/2004	21.74		13.47	1,100	300	28	22	71	<15	a a
	3/3/2005	19.60		15.61	340	12	4.4	9.1	28	<10	a
	6/9/2005	18.65		16.56	240	22	2.7	6.4	27	<10	a
	9/9/2005	19.27		15.94	7,800	1,100	170	380	690	<160	a
	12/20/2005	19.70		15.51	150	10	1.9	2.8	10	<5.0	a
	3/26/2006	18.51		16.70	2,200	93	19	66	130	<50	a
	6/23/2006	18.47		16.74	8,800	1,600	110	500	480	<500	a,m
	9/7/2006	18.97		16.24	29,000	4,800	280	940	1,000	<500	a
	12/29/2006	19.76		15.45	4,500	720	54	250	480	75*1/<0.5***	a
	3/21/2007	19.59		15.62	34,000	9,100	500	890	2,500	<1,100*	a
	6/7/2007	19.74	Sheen Lab	15.47	46,000	7,100	410	870	2,400	<800*	a,b
	9/28/2007	20.23		14.98	44,000	9,400	630	1,400	3,600	<0.5***	a
	12/9/2007	20.68		14.53	37,000	8,400	550	1,400	4,500	<17***	a,l
	3/3/2008	20.11		15.10	40,000	7,700	490	1,400	4,400	<17***	a,l

TABLE 2 Page 3 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene	Xylenes	MTBE >	Notes
MW-2 cont.	6/4/2008	20.40		14.81	56,000	7,400	600	1,500	4,100	<25***	a,j
1V1 V - 2 CO11t.	9/9/2008	20.85		14.36	65,000	7,800	510	1,700	4,700	<25***	a,l
	12/5/2008	₹		11.00		Inaccessible		2,7.00	1,, 00	— →	4,1
	3/2/2009	•				naccessible					
	9/15/2009	21.22		13.99	48,000	6,400	600	1,900	2,800	<2.5***	a,l
	3/1/2010	21.00	0.22	14.21	•	SP	H Observe	d During Purg	ing ——		
3.6747.0	0.44.4004				.=0	.0.5	.0.=	.0.5			
MW-3	8/1/1994	10.00			<50	<0.5	< 0.5	<0.5	<2.0		
33.97	12/21/1994	18.82		15.15	<50	<0.5	<0.5	<0.5	<0.5		
	3/13/1995 7/7/1995	17.86 18.25		16.11 15.72	<50 	<0.5 	<0.5	<0.5 	<0.5		e f a
	9/28/1995	18.00		15.97							f,g h
	12/20/1995	18.74		15.23							
	3/26/1996	18.25		15.72							
	6/20/1996	18.35		15.62							
	9/26/1996	19.12		14.85							
	10/28/1996	19.11		14.86							
	12/12/1996	18.61		15.36							
	3/31/1997	18.35		15.62							
	6/27/1997	18.81		15.16							
	9/9/1997	19.18		14.79							
	12/18/1997	18.64		15.33							
	3/12/1998	17.56		16.41							
	6/22/1998	18.64 18.33		15.33 15.64							
	9/18/1998 12/23/1998	18.60		15.37							
	3/29/1999	17.85		16.12							
	6/23/1999	18.67		15.30							
	9/24/1999	18.64		15.33							
	12/23/1999	19.32		14.65							
	3/21/2000	17.89		16.08							
	7/3/2000	18.40		15.57							
	9/7/2000	18.75		15.22							
34.01	12/5/2000	19.03		14.94	<50	<0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	3/6/2001	18.12		15.85	<50	<0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	6/8/2001	20.02		13.95	<50	<0.5	< 0.5	<0.5	< 0.5	<5.0	
	8/27/2001	21.09		12.88	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/25/2001	21.29		12.68	<50	<0.5	<0.5	<0.5	<0.5	< 5.0	
	3/1/2002	21.14 21.99		12.83 11.98	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<5.0* <5.0*	
	6/10/2002										
	9/3/2002 12/22/2002	21.17 21.94		12.84 12.07							
	1/23/2003	20.08		13.93	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/12/2003	20.95		13.06							
	7/23/2003	21.28		12.73							
	12/22/2003	19.05		14.96							
	3/10/2004	18.22		15.79	< 50	<0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	6/16/2004	18.82		15.19							
	9/27/2004	21.03		12.98							
	12/22/2004	20.69		13.32							
	3/3/2005	17.94		16.07	<50	<0.5	< 0.5	<0.5	< 0.5	<5.0	
	6/9/2005	18.00		16.01							
	9/9/2005	18.43		15.58							
	12/20/2005	18.18		15.83	 -E0	 -0 F	 -0 F	 <0.5	 -0 F	 <e 0<="" td=""><td></td></e>	
	3/26/2006	17.42		16.59	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/23/2006 9/7/2006	17.77 18.20		16.24 15.81							
	12/29/2006	18.49		15.51							
	3/21/2007	18.44		15.57	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	
	6/7/2007	18.68		15.33							
	9/28/2007	19.19		14.82							
	, ,										

TABLE 2 Page 4 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

т	<u>'</u>	0	
- 1	v	L	

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene (μg/L) —	Xylenes	MTBE >	Notes
MW-3 cont.	12/9/2007	19.31		14.70							
WWV-3 COIII.	3/3/2008	18.68		15.33	<50	<0.5	<0.5	<0.5	<0.5	<0.5***	
	6/4/2008	19.11		14.90							
	9/9/2008	19.65		14.36							
	12/5/2008	19.96		14.05							
	3/2/2009	19.19		14.82	< 50	< 0.5	< 0.5	< 0.5	< 0.5	<0.5***	
	9/15/2009	19.90		14.11							
	3/1/2010	19.20		14.81	<50	<0.5	<0.5	<0.5	<0.5	<0.5***	
MW-4	10/28/1996	19.32		14.43	10,000	3,900	420	400	360	<200*	n
33.75	12/12/1996	19.42		14.33	11,000	4,200	410	420	260	32*	
	3/31/1997	18.67		15.08	ND	ND	ND	ND	ND	ND*	
	6/27/1997	19.08		14.67	160	49	1.2	ND	5.9	ND*	
	9/9/1997	19.33		14.42	7,400	5,000	410	230	470	33*	
	12/18/1997	19.17		14.58	710	170	8.0	ND	39	ND***	
	3/12/1998	17.68		16.07	1,300	410	21	ND	57	ND***	
	6/22/1998	17.63		16.12	ND	ND	ND	ND	ND		
	9/18/1998	18.58		15.17	ND	42	1.6	ND	4.8		
	12/23/1998	19.01		14.74	1,900	1,000	76	50	120		
	3/29/1999	18.35		15.40	ND	ND	ND	ND	ND		
	6/23/1999	17.58		16.17	ND	ND	ND	ND	ND		
	9/24/1999	19.05		14.70	9,150	3,270	131	34	537		
	12/23/1999	19.41		14.34	12,200	5,360	275	424	592		
	3/21/2000	18.42		15.33	45,000	16,000	1,100	1,400	1,900	1400* /<35***	a,l
	7/3/2000	18.82		14.93	33,000	10,000	720	840	1,800	<200*	a
	9/7/2000	19.21		14.54	26,000	8,800	800	740	1,500	<50***	a,c,l
	12/5/2000	19.60		14.15	41,000	11,000	840	930	1,900	<200	a
	3/6/2001	18.24 20.91		15.51 12.84	1,100 92	400 19	5.7 <0.5	<0.5 <0.5	20 1	<5.0 <5.0	a
	6/8/2001 8/27/2001	21.63		12.04	49,000	17,000	1700	1,700	3,200	<260	a
	10/25/2001	21.70		12.05	57,000	16,000	1,500	1,600	2,600	<300	a a
	3/1/2002	21.53		12.22	400	140	2.3	<0.5	12	<5.0*	a
	6/10/2002	22.23		11.52	<50	2.5	<0.5	<0.5	< 0.5	<5.0*	
	9/3/2002	21.85		11.90	31,000	9,700	300	650	1,100	<1,000	a
	12/22/2002	22.39		11.36	35,000	13,000	310	1,100	1,800	<1,500	a
	1/23/2003	20.61		13.14	51,000	18,000	430	1,500	2,200	<5.0***	a,l
	6/12/2003	21.20		12.55	80	12	<0.5	<0.5	1.0	<10	a
	7/23/2003	21.51		12.24	20,000	7,600	100	65	660	<250	a
	12/22/2003	19.60		14.15	26,000	9,500	200	380	1,100	<150	a
	3/10/2004	18.81		14.94	14,000	4,800	150	320	530	<400	a
	6/16/2004	19.32		14.43	2,800	1,100	24	17	100	<50	a
	9/27/2004	21.45		12.30	45,000	16,000	260	1,700	2,000	<25***	a
	12/22/2004	21.15		12.60	29,000	10,000	160	890	1,200	<5.0***	a,j
	3/3/2005	18.60		15.15	18,000	6,400	98	500	610	<600	a
	6/9/2005	18.11		15.64	20,000	6,100	110	460	580	<500	a
	9/9/2005	18.65		15.10	17,000	6,400	100	470	730	<250	a
	12/20/2005	19.01		14.74	26,000	8,500	160	640	800	<120	a
	3/26/2006	17.84		15.91	1,900	700	22	49	85	<50	a
	6/23/2006	17.96		15.79	12,000	3,400	130	370	510	260	a
	9/7/2006	18.29		15.46	8,600	1,800	100	170	220	<210	a,i
	12/29/2006	18.93		14.82	4,200	1,100	120	150	280	<150*/<0.5***	a
	3/21/2007	18.76		14.99	550	30	2.0	4.5	5.1	<30*	a
	6/7/2007	18.92		14.83	85	4.4	<0.5	0.77	0.82	<5.0*	a
	9/28/2007	19.41		14.34	140	7.0	<0.5	1.2	<0.5	<0.5***	a
	12/9/2007	19.86		13.89	120	4.5	<0.5	0.62	<0.5	<0.5	a :
	3/3/2008	19.22		14.53	63	0.78	<0.5	<0.5	< 0.5	<0.5***	i
	6/4/2008	19.58		14.17	86 460	2.2	<0.5 0.95	<0.5	0.58	<0.5*** <0.5***	a
	9/9/2008	20.01 20.29		13.74	460 200	9.4 4.3		3.1 3.0	19 14	<0.5***	a
	12/5/2008 3/2/2009	19.86		13.46 13.89	290 520	6.0	1.4 2.2	5.0 6.5	9.2	<0.5***	a
	9/15/2009	20.23		13.52	370	2.2	1.1	2.8	3.3	<0.5***	a a
	7/ 15/ 2009	20.23		10.02	570	4.4	1.1	2.0	5.5	٠٠.٥	и

TABLE 2 Page 5 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

т	n	\sim	
1	v	L	

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene (µg/L) ———	Xylenes	<i>MTBE</i> >	Notes
MW-4 cont.	3/1/2010	19.70		14.05	220	1.8	<0.5	1.2	1.5	<0.5***	a
MW-5	10/28/1996	19.88		14.75	90	4.0	0.6	< 0.50	< 0.50	16*	
34.63	12/12/1996	20.09		14.54	230	5.6	0.9	ND	0.9	3.6*	n
	3/31/1997	19.24		15.39	90	3.1	ND	ND	ND	ND*	
	6/27/1997	19.16		15.47	ND	ND	ND	ND	ND	ND*	
	9/9/1997	19.93		14.70	ND	ND	ND	ND	ND	ND*	
	12/18/1997	19.77		14.86	ND	ND	ND	ND	ND	ND***	
	3/12/1998	19.77		14.86	79	2.3	ND	0.8	ND	ND*	
	6/22/1998	18.08		16.55	ND	ND	ND	ND	ND		
	9/18/1998	19.12		15.51	ND	ND	ND	ND	ND		
	12/23/1998	19.60		15.03	ND	0.8	0.9	ND	ND		
	3/29/1999	18.88		15.75	ND	ND	ND	ND	ND		
	6/23/1999	18.05		16.58	ND	ND	ND	ND	ND		
	9/24/1999	19.61		15.02	ND	ND	ND	ND	ND		
	12/23/1999	20.01		14.62	ND	ND	ND	ND	ND		
	3/21/2000	19.05		15.58	140	<0.5	< 0.5	<0.5	< 0.5	<5.0	
	7/3/2000	19.40		15.23	85	8.1	3.1	1.6	7.8	<5.0*	k
	9/7/2000	19.62		15.01	<50	<0.5	<0.5	<0.5	< 0.5	<5.0*	a
	12/5/2000	20.25		14.38	<50	<0.5	<0.5	<0.5	< 0.5	<5.0	
	3/6/2001	19.07		15.56	91	5.5	<0.5	<0.5	<0.5	<5.0	
	6/8/2001	20.77		13.86	290	22.0	0.8	<0.5	<0.5	<5.0	
	8/27/2001	21.33		13.30	660	24.0	2.2	1.3	4.0	<25	a
	10/25/2001	21.62		13.01	55	3.5	<0.5	<0.5	<0.5	<5.0	a
	3/1/2002	21.49		13.14	200	1.9	0.69	<0.5	<0.5	<5.0*	a
	6/10/2002	22.15		12.48	<50	<0.5	<0.5	<0.5	< 0.5	<5.0*	a
	9/3/2002	21.50 22.19		13.13 12.44	60 82	1.9 0.57	<0.5 <0.5	<0.5 0.68	0.77 <0.5	<5.0 <5.0	
	12/22/2002									<5.0 <5.0	a
	1/23/2003	20.27		14.36	<50	2.1 0.88	<0.5	<0.5 <0.5	<0.5		a
	6/12/2003	21.10		13.53	<50		<0.5		<0.5	<5.0 <5.0	
	7/23/2003 12/22/2003	21.47 19.57		13.16 15.06	<50 <50	4.0 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<5.0 <5.0	
	3/10/2004	19.61		15.02	990	200	2.9	4.0	20	<70	
	6/16/2004	20.15		14.48	250	42	<0.5	0.88	< 0.5	<35	a
	9/27/2004	22.14		12.49	1,600	140	4.8	45	18	<110	a
	12/22/2004	21.81		12.82	<50	5.3	<0.5	<0.5	0.66	<5.0	
	3/3/2005	19.35		15.28	2,000	330	4.4	63	39	<150	a
	6/9/2005	18.73		15.90	250	42	1.4	14	3.2	<5.0	a
	9/9/2005	19.30		15.33	2,000	390	5.0	71	38	<400	a
	12/20/2005	19.65		14.98	4,300	760	18	170	150	<35	a
	3/26/2006	18.58		16.05	1,600	460	3.3	35	32	<50	a
	6/23/2006	18.57		16.06	1,900	500	3.9	81	56	<17	a
	9/7/2006	18.98		15.65	8,800	1,900	12	350	220	<260	a,i
	12/29/2006	19.70		14.93	15,000	3,400	69	610	700	<450*/<0.5***	a
	3/21/2007	19.57		15.06	9,900	2,300	24	360	410	<240*	a
	6/7/2007	19.70		14.93	14,000	3,800	40	790	720	<550*	a
	9/28/2007	20.16		14.47	26,000	7,200	84	1,100	1,600	<25***	a,l
	12/9/2007	20.56		14.07	25,000	7,000	59	1,100	2,000	<17	a,l
	3/3/2008	19.97		14.66	30,000	6,200	31	900	1,400	<10***	a,l
	6/4/2008	20.32		14.31	7,500	1,600	4.6	25	91	<10***	a,j
	9/9/2008	20.75		13.88	54,000	8,900	76	1,300	1,700	<25***	a,l
	12/5/2008	21.08		13.55	33,000	9,200	43	1,500	1,800	<5.0***	a,l
	3/2/2009	20.74		13.89	34,000	9,700	41	1,100	1,300	<5.0***	a,l
	9/15/2009	21.02		13.61	40,000	10,000	280	1,400	2,600	<2.5***	a,l
	3/1/2010	20.55		14.08	57,000	16,000	240	1,800	5,000	<10***	a,l
MW-6	10/28/1996	20.02		15.87	<50	< 0.50	< 0.50	<0.50	< 0.50	<2.0*	
35.89	12/12/1996	20.18		15.71	ND	ND	ND	ND	ND	ND*	n
	3/31/1997	19.81		16.08							
	6/27/1997	19.76		16.13							
	9/9/1997	20.06		15.83	ND	ND	ND	ND	ND	ND*	

TABLE 2 Page 6 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene		Ethylbenzene (µg/L) ———	Xylenes	MTBE >	Notes
MW-6 cont.	12/18/1997	19.90		15.99	ND	ND	ND	ND	ND		
1777 0 00111.	3/12/1998	18.00		17.89	ND	ND	ND	ND	ND	ND*	
	6/22/1998	18.43		17.46	ND	ND	ND	ND	ND		
	9/18/1998	19.10		16.79	ND	ND	ND	ND	ND		
	12/23/1998	19.61		16.28	ND	ND	ND	ND	ND		
	3/29/1999	18.92		16.97	ND	ND	ND	ND	ND		
	6/23/1999	18.41		17.48	ND	ND	ND	ND	ND		
	9/24/1999	19.61		16.28	ND	ND	ND	ND	ND		
		20.30		15.59	ND ND	ND ND	ND	ND ND	ND		
	12/23/1999	18.97		16.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/21/2000	19.46		16.43	59	5.1	2.3	1.1	5.3	<5.0*	
	7/3/2000	19.46		15.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	
	9/7/2000										a
	12/5/2000	20.50		15.39	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/6/2001	19.54		16.35	<50	<0.5	<0.5	<0.5	<0.5	< 5.0	
	6/8/2001	20.92		14.97	<50	<0.5	<0.5	<0.5	<0.5	<5.1	
	8/27/2001	21.37		14.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/25/2001	21.59		14.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/1/2002	21.33		14.56	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	
	6/10/2002	21.97		13.92	<50	<0.5	<0.5	<0.5	<0.5	<5.0*	
	9/3/2002	21.55		14.34							
	12/22/2002	22.25		13.64	<50	<0.5	< 0.5	<0.5	< 0.5	<5.0	
	1/23/2003	20.47		15.42	<50	<0.5	< 0.5	<0.5	< 0.5	<5.0	
	6/12/2003	21.09		14.80							
	7/23/2003	21.42		14.47							
	12/22/2003	19.49		16.40							
	3/10/2004	20.20		15.69	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	6/16/2004	20.73		15.16							
	9/27/2004	22.88		13.01							
	12/22/2004	22.53		13.36							
	3/3/2005	19.87		16.02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	6/9/2005	18.95		16.94							
	9/9/2005	19.45		16.44							
	12/20/2005	19.90		15.99							
	3/26/2006	18.85		17.04	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	
	6/23/2006	18.57		17.32							
	9/7/2006	19.13		16.76							
	12/29/2006	19.96		15.93							
	3/21/2007	19.87		16.02	<50	< 0.5	< 0.5	< 0.5	< 0.5	<5.0*	m
	6/7/2007	20.05		15.84							
	9/28/2007	20.51		15.38							
	12/9/2007	20.90		14.99							
	3/3/2008	20.47		15.42	<50	<0.5	< 0.5	<0.5	< 0.5	<0.5***	
	6/4/2008	20.70		15.12			-0.0			-0.5	
MW-6 cont.	9/9/2008	21.09		14.80							
IVI VV -O COIII.	12/5/2008	21.50		14.39							
	3/2/2009	21.30		14.59	<50	<0.5	<0.5	<0.5	<0.5	<0.5***	
	9/15/2009	21.55		14.34							
	3/1/2010	21.20		14.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5***	m
m.i. pi	0 /04 /0000				4E0	-O =	*O =	-0.5	-O.F	4F.0	
Trip Blank	3/21/2000				<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/7/2000				<50	<0.5	<0.5	<0.5	<0.5	< 5.0	
Grab Groundw	ater Sample Res	ults:									
SB-A	7/6/1995	~20			330	16	3.6	1.3	4.9		i,j
SB-B	7/7/1995	~20			450	55	3.1	5.1	5.0		a
SB-C	7/6/1995	~20			44,000	6,600	5,900	980	4,400		a
SB-D	7/6/1995	~20			70,000	7,400	10,000	1,600	7,200		a
SB-E	7/6/1995	~20			25,000	1,000	3,000	610	2,700		a
SB-G	7/7/1995	~20			84,000	9,400	16,000	2,200	9,900		a,b
SB-I	7/7/1995	~20			24,000	6,100	1,400	680	1,600		a
SB-J	7/7/1995	~20			960	110	66	8.7	71		a
J. ,	.,.,.,,	_0			, 00			~			•

TABLE 2 Page 7 of 7

GROUNDWATER ELEVATION AND ANALYTICAL DATA ALLRIGHT PARKING 1432 HARRISON STREET OAKLAND, CALIFORNIA

TOC

Well ID Sample ID TOC (ft amsl)	Date	Depth to Groundwater (ft below TOC)	SPH Thickness (feet)	Groundwater Elevation (ft amsl)	TPHg ←	Benzene	Toluene —— (Ethylbenzene (µg/L) ———	Xylenes	MTBE >	Notes
SB-K	7/7/1995	~20			72,000	9,600	9,600	1,800	7,000		a
CB-1-W	7/22/1999				110,000	1,300	16,000	2,700	12,000	<3000*	a,b,c
CB-2-W	7/22/1999				4,700	21	13	170	76	<50*	a,c
GW-1	7/30/1994				<50	<0.5	<0.5	<0.5	<2.0		
GW-2 ^	7/29/1994				< 50	< 0.5	< 0.5	< 0.5	<2.0		
GW-3 ^	7/29/1994				<50	< 0.5	< 0.5	<0.5	<2.0		

Abbreviations, Methods, & Notes

TOC = Top of casing elevation

ft amsl = feet above mean sea level

SPH = Separate-phase hydrocarbons

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C

Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B

MTBE = Methyl tert-butyl ether * = MTBE by EPA Method SW8021B

** = MTBE by EPA Method SW8240

*** = MTBE by EPA Method SW8260

- 1 = Not confirmed with EPA Method 8260B.
- μ g/L = micrograms per liter, equivalent to parts per billion
- -- = Not sampled, not analyzed, not applicable, or no SPH was measured or observed
- <n = Not detected in sample above n mg/L
- ND = Not detected above laboratory detection limit
- x = Groundwater elevation adjusted for SPH by the relation:
 - Groundwater Elevation = TOC Elevation Depth to Groundwater + (0.7 x SPH thickness)
- # = The wellhead elevation was raised by 0.41 feet when well MW-1 was connected to the SVE system on October 31, 2003.
- ## = The wellhead elevation was lowered by 0.41 feet when well MW-1 was disconnected from the SVE system on April 30. 2005.
- + = Well de-watered during purging, no measurable water to sample.

Sheen = A sheen was observed on the water's surface

Field = Observed in the field

- Lab = Observed in analytical laboratory
- ^ = Samples associated with 1439 Alice St. Property
- a = Unmodified or weakly modified gasoline is significant.
- b = Lighter than water immiscibl
- 20.46
- c = Liquid sample that contains greater than \sim 2 vol. % sediment.
- d = MTBE result confirmed by secondary column or GC/MS analysis.
- e = Sample analyzed for purgeable hydrocarbons by EPA Method SW8010, no purgeable hydrocarbons were detected.
- $f = Sample \ analyzed \ for \ VOCs \ by \ EPA \ Method \ SW8240$, no non-BTEX compounds were detected.
- g = Sample analyzed for Total Petroleum Hydrocarbons as motor oil (TPHmo) by Modified EPA Method SW8015, no TPHmo was detected.
- h = Analytic sampling discontinued. Approved by Alameda County Department of Environmental Health.
- i = Lighter gasoline range compounds are significant.
- j = Gasoline range compounds having broad chromatographic peaks are significant.
- k = No recognizable pattern.
- l = Sample diluted due to high organic content.
- m = Liquid sample that contains greater than ~1 vol. % sediment.
- n = TOC well elevation was increased by 3 ft based on a benchmark discrepancy discovered during a well survey performed on September 11, 2002.

APPENDIX A

STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. Cambria's specific field procedures are summarized below.

Groundwater Elevation Monitoring

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain non-aqueous phase liquid (NAPL) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of NAPL, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be measured last. In wells with a history of NAPL, the NAPL level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-noxTM or AlconoxTM followed by one rinse of clean tap water and then two rinses of distilled water.

Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of NAPL or floating NAPL globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no NAPL is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or WatteraTM) or down-hole pump (e.g. GrundfosTM or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at least once per well casing volume removed. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall also be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged. If the well is slow to recharge, a sample shall be collected after the water column is allowed to recharge to 80% of the pre-purging static water level. If the well does not recover to 80% in 2 hours, a sample shall be collected once there is enough groundwater in the well. Groundwater samples shall be collected using clean disposable bailers or pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be

Conestoga-Rovers & Associates

used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-noxTM or AlconoxTM followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

Sample Handling

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. A copy of the COC shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

Waste Handling and Disposal

Groundwater extracted during sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums and shall be labeled with the contents, date of generation, generator identification, and consultant contact. Extracted groundwater may be disposed offsite by a licensed waste handler or may be treated and discharged via an operating onsite groundwater extraction/treatment system.

H:\- MGT IR Group Info\SOPs\Groundwater Monitoring and Sampling SOP 07-2005.doc

APPENDIX B

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

McCampbell Analytical, Inc.

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates	Client Project ID: #540188; Borsuk	Date Sampled: 03/01/10
5900 Hollis St, Suite A		Date Received: 03/01/10
	Client Contact: Bob Foss	Date Reported: 03/04/10
Emeryville, CA 94608	Client P.O.:	Date Completed: 03/04/10

WorkOrder: 1003009

March 22, 2010

1	Dear	D	_1	L	
	Dear	D	()	I)	

Enclosed within are:

- 1) The results of the 1 analyzed sample from your project: #540188; Borsuk,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.



McCAMPBELL ANALYTICAL, INC. 1534 WILLOW PASS ROAD

PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF	CUSTO	DDY	RECO	RD

TURN AROUND TIME			
	PETIDAL	ADOUGH TIME	B17

	-	
	1160	
	146	
-	1678	

RUSH 24 HR 48 HR 72 HR 5 DAY GeoTracker EDF 📮 PDF 📮 Excel 📮 Write On (DW) 📮

							_	_				-		4	_						- 4		_	_	_	amp	le is	eff	luen	t ar			s required
Report To: 130			<u>f</u>	Bill T	o: San	me (m	este	Sep.	Ro	ver	586	755	000	de					A	nal	ysis	Re	ques	t	_			_	_	Oth	er	Comments
Company: (By	cetoea-R	overs	FAS	1120	160				0								0					2											Filter
590	OHBILIS	54	Ste	A	10	-	Or.		100	4	-	tai:			8015) / MTBE		B&F					Sene											Samples
em	erxville,	CA		E-Ma	il:	25	Up.	COL	WO (M.	00	Ma			N		OE/					Com							6				for Metals
Tele: (510) 42	0-3348]	Fax:	(510)4	20	-91	70						013)		352	0		110		181		(sa)				ale n	602				analysis:
Project #: 54(3188		1	Projec	et Na	me:		des		k.					7.50		199	418,		7.80	3	rock		bicie			NAS	XR	101		4		Yes / No
Project Location		erri so	n St.	0	akla	ma	. (A			0				8021		0 %	us (602	cide	(; A	3	Her	(8)	(S)	1 P	010	1,66	020)	13		
Sampler Signatu	re: Muski	in Fo	wires	me	hal	32	20	13	2	1	Ł	1			(602 / 8021 +	П	reas	urbo		EPA.	Pest	NE	ficid	0	00	0.0	AH	9020	8.003	9/0	1		
			PLING		1	Π	MA		XIX	Т	M	ETH	OD	100	90	9	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Fotal Petroleum Hydrocarbons (418.1)	(8)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515.3 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020) 10 X Rule	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Secprin		
CAMPI CID	LOCATION/			# Containers	Type Containers	Г				7					l as (TPH as Diesel (8015)	0 111	H	EPA 8260 (HVOCs)	X ON	/ 808	82 PC	41 (N	1518	24/8	25/8	M/8	als (2)	ds (20	200.8	1		
SAMPLE ID	Field Point		5.00	tair	oni	I.			da.	- 1	П		1		& TPH	Diese	role	role	D) 09	BTE	809/	7.808	/ 81	3/2	2/6	2/6	1S O	Met	Meta	0.77	9		
	Name	Date	Time	On	96	Water	_		Sludge	Other	E)	1	HNO3	Other	X	R	1 Pet	I Pe	82(3E /	508	909	507	515	524	525	827	117	1.0	1 (20	1		
				#	Tyl	3	Soil	Air	Slu	5	ICE	HCL		5	BTEX	TPH	Tota	Tota	EPA	MT	EPA	EPA	EPA	EPA	EPA	EPA	EPA	CAN	15	Len	Line	1	
MN-2		3-1-10	10:40	3	VOF	1			_	X	_	_		+	+														-			+	+
INNA		2-1-10	14-40	2	VVF.	1			-	2	2	+	+	+	-	-															~	+	
				-	-	\vdash		-	-	+	+	+	+	-	+	-	-		-			-	-	-					-	\vdash		-	
				-	-	\vdash				4	_	-	4	+	-	4										-							
			1																						-								
						Г																										1	
						1		7	\forall	+		-	+	1	7	1																	
					-	+			\rightarrow	+	-	+	+	+	+	+	-	\exists								-						+	
		_	_	-	-	\vdash		-	-	+	-	+	+	+	+	-	-	\dashv	-			-	-	-	-		-			-		-	
	-								_	1	-	4	4	4	4	4	_	_															
																	-															+	
			-																														
								\exists	7	\pm	_			+	_																	1	
	/						H	-	-	+	-	+	+	+	+	-	-												-	-	-	+	
n.u. di in /	0			-							_			1			0			,		_											6
Relinquished By:	1	Date	Time: 1302	Rece	cived 1			-		1	7/		1			/t°_ OD C			ION	V									CO	MM	ENTS:		
Relinquish@By:		71/10		Pari	district to	_	W.	1		0	1		0	- 1	HEA	AD S	PAC	EA	BSE			_		,									
Kennquisheczby:		Date:	Time:	Rece	eived B	y:								1	APP	ROP	RIA	NAT	CON	IN L	AB_ INEI	RS	1										
Relinquished By:		Date:	Time:	Dage	eived B	***	_	_			_		_			SER						-	1										
exchaquisited by:		Date:	4 mie;	Rece	aveu B	y.													ve	DAS	0.	9.0	MI	TAI	S	оті	IFR						
														1	PRE	SER	VA	TION					pH-										

McCampbell Analytical, Inc.

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

	rg, CA 94565-1701 252-9262					Work	Order	: 1003	8009		Client(Code: (ETE				
		WaterTrax	WriteOn	EDF		Excel		Fax		✓ Emai	I	Hard	Сору	Thi	rdParty	٦	l-flag
		cc: PO: ProjectNo: #	cc:				Co 59	ccounts onestog 900 Hol	Payab ga-Rove lis St, S e, CA 9	ers & A te. A	Associates L			uested e Rece e Prin	5 days 03/01/2010 03/01/2010		
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	Rec 4	uestec 5	Tests 6	(See le	gend b	elow)	10	11	12
1003009-001	MW-2		Product	3/1/2010 10:40		Α									ī	T	T
Test Legend:																	
	X_Product 2			3				Γ	4					5			
6	7			8					9					10			
The following Sa	mpID: 001A contains testgrou	up.											Prepa	ared by	: Melis	ssa Vall	es

Comments:

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name:	Conestoga-Roy	ers & Associates			Date a	and Time Received:	3/1/2010 1	:34:27 PM
Project Name:	#540188; Borsı	ık			Check	list completed and r	eviewed by:	Melissa Valles
WorkOrder N°:	1003009	Matrix Product			Carrie	r: <u>Client Drop-In</u>		
		<u>Chair</u>	of Cu	stody (C	COC) Informa	ntion		
Chain of custody	present?		Yes	V	No 🗆			
Chain of custody	signed when reling	uished and received?	Yes	V	No 🗆			
Chain of custody	agrees with sample	e labels?	Yes	✓	No 🗌			
Sample IDs noted	d by Client on COC?		Yes	V	No 🗆			
Date and Time of	collection noted by	Client on COC?	Yes	~	No 🗆			
Sampler's name r	noted on COC?		Yes	V	No 🗆			
		<u>s</u>	ample	Receipt	Information	!		
Custody seals in	tact on shipping cor	tainer/cooler?	Yes		No 🗆		NA 🔽	
Shipping contain	er/cooler in good co	ndition?	Yes	V	No 🗆			
Samples in prope	er containers/bottles	?	Yes	~	No 🗆			
Sample containe	ers intact?		Yes	✓	No 🗆			
Sufficient sample	e volume for indicate	d test?	Yes	✓	No 🗌			
		Sample Prese	rvatio	n and Ho	old Time (HT)) Information		
All samples recei	ived within holding t	me?	Yes	✓	No 🗌			
Container/Temp I	Blank temperature		Coole	er Temp:	1.2°C		NA \square	
Water - VOA via	ls have zero headsp	pace / no bubbles?	Yes		No 🗹	No VOA vials subm	itted	
Sample labels ch	necked for correct p	eservation?	Yes	~	No 🗌			
Metal - pH accep	table upon receipt (0H<2)?	Yes		No 🗆		NA 🗹	
Samples Receive	ed on Ice?		Yes	V	No 🗆			
		(Ice Typ	e: WE	T ICE)			
* NOTE: If the "N	No" box is checked,	see comments below.						
	:		=					
Client contacted:		Date contac	ted:			Contacted	by:	
Comments:								



MW-2

P

1003009-

001A

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

This sample has a significant hydrocarbon pattern between C6 and C12 that resembles

unmodified to weakly modified gasoline. Chromatograms enclosed.

	when Quality	Counts		Telephone: 8	77-252-9262 Fax: 92	5-252-9269	
Conestoga-R	overs & Associates		Client Project ID:	Date Sampled:	03/01/10		
5900 Hollis S	t, Suite A				Date Received:	03/01/10	
			Client Contact: Bo	ob Foss	Date Extracted:	03/01/10	
Emeryville, C	A 94608		Client P.O.:		Date Analyzed	03/01/10	
			Fuel Fing	erPrint *			
Extraction method	SW3550C		Analytical m	ethods SW8015B		Work Order:	1003009
Lab ID	Client ID	Matrix		Fuel Fin	gerprint		

File : D:\HPCHEM\GC19\DATA\03021016.D

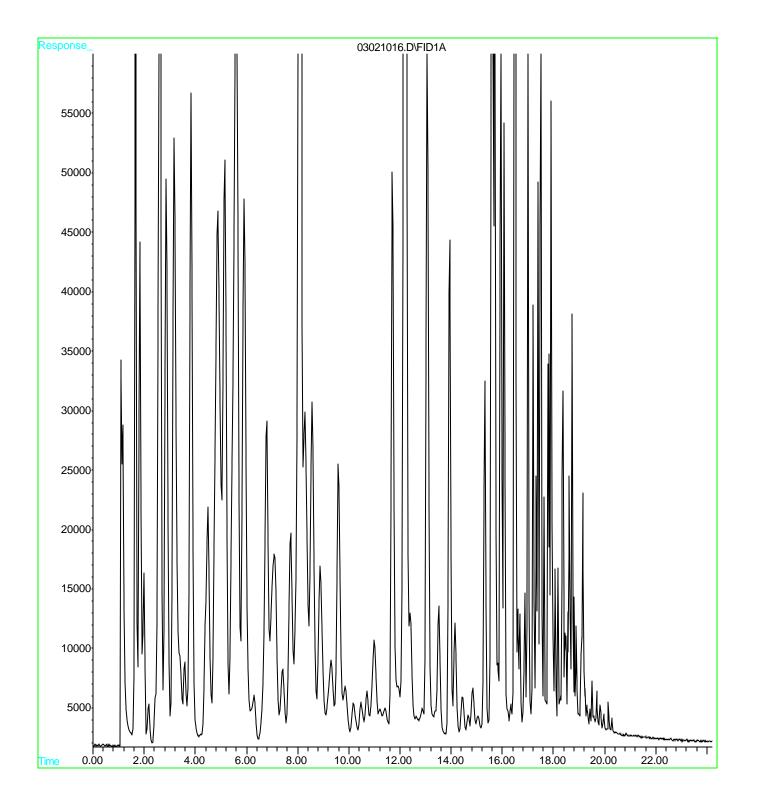
Operator :

Acquired : 2 Mar 2010 5:31 pm using AcqMethod GC19M.M

Instrument: GC-19

Sample Name: 1003009-001A S
Misc Info : G-MBTEX_PRODUCT

Vial Number: 16



File : D:\HPCHEM\GC6\DATAB\03011019.D

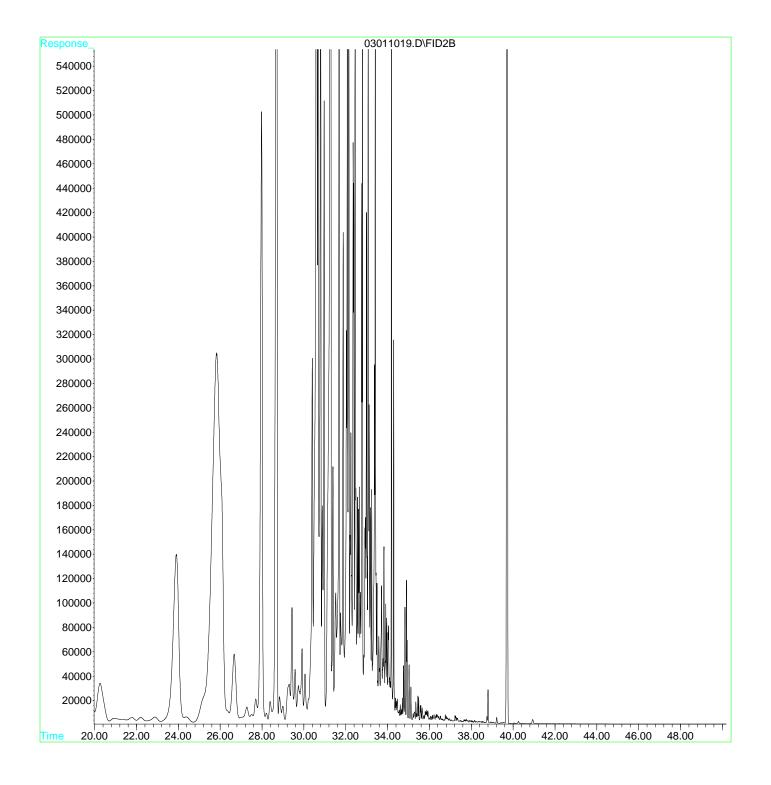
Operator :

Acquired: 1 Mar 2010 10:49 pm using AcqMethod GC6A50B.M

Instrument: GC-6

Sample Name: 1003009-001A
Misc Info : TPH(FF)_P

Vial Number: 60



1534 Willow Pass Road, Pittsburg, CA 94565-1701

Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Bm

QC Matrix: Soil BatchID: 48886 WorkOrder 1003009 W.O. Sample Matrix: Product

EPA Method SW8021B/8015Bm	Extra	ction SW	5030B					5	Spiked San	nple ID:	: 1002449-0	009A
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	
7 that y to	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btexf)	ND	0.60	106	110	4.18	107	109	2.17	70 - 130	20	70 - 130	20
MTBE	ND	0.10	121	118	2.53	119	116	2.54	70 - 130	20	70 - 130	20
Benzene	ND	0.10	100	98.2	1.81	101	97.9	3.56	70 - 130	20	70 - 130	20
Toluene	ND	0.10	99.9	98.3	1.65	101	98.1	3.06	70 - 130	20	70 - 130	20
Ethylbenzene	ND	0.10	99.2	97.3	1.91	101	97.2	4.05	70 - 130	20	70 - 130	20
Xylenes	ND	0.30	99.1	97.8	1.29	101	98.8	2.53	70 - 130	20	70 - 130	20
%SS:	84	0.10	86	84	2.73	88	84	4.47	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 48886 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed	
1003009-001A	03/01/10 10:40 AM	1 03/01/10	03/02/10 5:31 PM					

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

QA/QC Officer

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Product QC Matrix: Soil BatchID: 48887 WorkOrder 1003009

EPA Method SW8015B	5B Extraction SW3550C				Spiked Sample ID: 1002449-010A						10A	
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH-Diesel (C10-C23)	460	40	123	120	0.178	93.2	92.8	0.485	70 - 130	30	70 - 130	30
%SS:	112	25	114	113	0.519	98	97	0.476	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 48887 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1003009-001A	03/01/10 10:40 AM	1 03/01/10	03/01/10 10:49 PM				

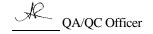
MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / (MS + MSD) * 2.

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



McCampbell Analytical, Inc.

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Web: www.mccampbell.com E-mail: main@mccampbell.com Telephone: 877-252-9262 Fax: 925-252-9269

Conestoga-Rovers & Associates	Client Project ID: #540188; Borsuk	Date Sampled: 03/01/10
5900 Hollis St, Suite A		Date Received: 03/01/10
	Client Contact: Bob Foss	Date Reported: 03/04/10
Emeryville, CA 94608	Client P.O.:	Date Completed: 03/03/10

WorkOrder: 1003008

March 04, 2010

Dear Bob:

Enclosed within are:

- 4 analyzed samples from your project: #540188; Borsuk, 1) The results of the
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius Laboratory Manager

McCampbell Analytical, Inc.



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com Telephone: (877) 252-9262 Fax: (925) 252-9269 CHAIN OF CUSTODY RECORD

HIDN	AROUND	THATE	1 1
LI PE IN	ARCHINE	P I HIVER.	100

RUSH 24 HR

48 HR 72 HR 5 DAY

GeoTracker EDF

PDF D Excel D Write On (DW)

Check if sample is effluent and "J" flag is required Bill To: Same Concepeer Rovers & A550 Report To: Rob Foss Analysis Request Other Comments Company: Constan-Rovers & Associates EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners Fotal Petroleum Oil & Grease (1664 / 5520 E/B&F) Filter E-Mail: Che Conver lo Samples EMPRYVILLEI OF for Metals LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020) Fax: (510) 420-9170 Tele: (510) 420 - 2342 CAM 17 Metals (200.8 / 6020) 10 X Rule analysis: EPA 8270 SIM / 8310 (PAHs / PNAs) Project Name: Book Project #: 5UN 1856 Yes / No BTEX & TPH as Gas (602 / 8021 + EPA 505/ 608 / 8081 (CI Pesticides) Lead (200.7 / 200.8 / 6010 / 6020) Project Location: 1432 Haverson EPA 525.2 / 625 / 8270 (SVOCs) EPA 507 / 8141 (NP Pesticides) EPA 524,2 / 624 / 8260 (VOCs) Sampler Signature: Musken Francison men METHOD SAMPLING MATRIX Type Containers PRESERVED Containers LOCATION/ SAMPLE ID Field Point Sludge Name Time Other HNO3 Date HCL Soil MW.2 10:47 3-1-10 MU-3 9:23 M21-4 10:03 MW-S 10:22 MW 9:45 Relinquished By 5 ICE/to C Date: Time: Received By: COMMENTS: GOOD CONDITION 1302 HEAD SPACE ABSENT N Relinquished By: Date: Time: Received By: DECHLORINATED IN LAB APPROPRIATE CONTAINERS PRESERVED IN LAB Relinquished By: Date: Time: Received By: VOAS O&G METALS OTHER PRESERVATION

McCampbell Analytical, Inc.

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Pittsbur	rg, CA 94565-1701 52-9262					Wor	kOrder	: 1003	8008	(ClientC	Code: C	ЕТЕ				
		WaterTrax	WriteOn	✓ EDF		Exce	I	Fax		✓ Email		Hard	Сору	Thi	rdParty	J-	flag
Report to: Bob Foss Conestoga- 5900 Hollis Emeryville, (510) 420-076	CA 94608	cc: PO: ProjectNo: #	foss@crawoi 540188; Bors	rld.com, chee@cr	aworl	d.c	Co 59	counts	ga-Rove lis St, S	ers & As Ste. A	sociate	es	Date	uested e Rece e Prin	ived:		
									Red	quested	Tests	(See leg	end b	elow)		-	
Lab ID	Client ID		Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1003008-002	MW-3		Water	3/1/2010 9:23		Α	В	Α							Τ		
1003008-003	MW-4		Water	3/1/2010 10:03		Α	В									1	
1003008-004	MW-5		Water	3/1/2010 10:22		Α	В										
1003008-005	MW-6		Water	3/1/2010 9:45		Α	В										
Test Legend: 1 G-MB 6	TEX_W 2 7 12	MTBE_\	V	3 PRE	:DF RE	PORT			4 9					5 10			
													Prepa	red by:	: Meliss	sa Valle	es

Comments:

Sample Receipt Checklist

Client Name:	Conestoga-Rovers & As	sociates		Date a	and Time Received:	3/1/2010 1	1:29:54 PM
Project Name:	#540188; Borsuk			Check	klist completed and	reviewed by:	Melissa Valles
WorkOrder N°:	1003008 Matrix	<u>Water</u>		Carrie	er: <u>Client Drop-In</u>	<u>.</u>	
		Chain of (Custody (COC) Informa	ation		
Chain of custody	present?	Ye	s V	No 🗆			
Chain of custody	signed when relinquished and	received? Ye	s V	No 🗆			
Chain of custody	agrees with sample labels?	Ye	s 🗸	No 🗌			
Sample IDs noted	d by Client on COC?	Ye	s V	No 🗆			
Date and Time of	f collection noted by Client on CC	DC? Ye	s 🗸	No 🗆			
Sampler's name	noted on COC?	Ye	s 🗸	No 🗆			
		Samp	le Receip	t Information	<u>1</u>		
Custody seals in	tact on shipping container/coole	-		No 🗆		NA 🔽	
Shipping contain	er/cooler in good condition?	Ye	s V	No 🗆			
Samples in prope	er containers/bottles?	Ye	s 🗸	No 🗆			
Sample containe	ers intact?	Ye	s 🗸	No 🗆			
Sufficient sample	e volume for indicated test?	Ye	s 🗸	No 🗌			
	<u>Sar</u>	mple Preservati	ion and H	old Time (HT) Information		
All samples recei	ived within holding time?	Ye	s V	No 🗌			
Container/Temp I	Blank temperature	Co	oler Temp:	1.2°C		NA \square	
Water - VOA via	ls have zero headspace / no bu	ubbles? Ye	s 🗸	No 🗆	No VOA vials subr	mitted \square	
Sample labels ch	necked for correct preservation	? Ye	s 🗸	No 🗌			
Metal - pH accep	etable upon receipt (pH<2)?	Ye	s \square	No 🗆		NA 🔽	
Samples Receive	ed on Ice?	Ye	s 🗸	No 🗆			
		(Ice Type: V	VET ICE)			
* NOTE: If the "N	No" box is checked, see comme	ents below.					
	=======		===			=====	
Client contacted:		Date contacted:			Contacte	d by:	
Comments:							

Conestoga-Rovers & Associates	Client Project ID: #540188; Borsuk	Date Sampled:	03/01/10
5900 Hollis St, Suite A		Date Received:	03/01/10
	Client Contact: Bob Foss	Date Extracted:	03/02/10-03/03/10
Emeryville, CA 94608	Client P.O.:	Date Analyzed:	03/02/10-03/03/10

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE* Analytical methods: SW8021B/8015Bm Extraction method: SW5030B Work Order: 1003008 Lab ID Client ID Matrix TPH(g) MTBE Benzene Toluene Ethylbenzene Xylenes DF % SS Comments 002A MW-3 W ND ND ND ND ND 101 003A MW-4 W 220 ND 117 1.8 1.2 1.5 1 d1 004A MW-5 W 57,000 16,000 240 1800 5000 100 100 d1 005A MW-6 W ND ND ND ND ND 1 103 b1 Reporting Limit for DF = 1; W 5.0 0.5 0.5 0.5 50 0.5 μ g/L ND means not detected at or 1.0 0.05 0.005 0.005 0.005 0.005 mg/Kg above the reporting limit

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all
TCLP & SPLP extracts in mg/L.

[#] cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference.

- +The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:
- b1) aqueous sample that contains greater than ~1 vol. % sediment
- d1) weakly modified or unmodified gasoline is significant

Conestoga-Rovers & Associates	Client Project ID: #540188; Borsuk	Date Sampled: 03/01/10
5900 Hollis St, Suite A		Date Received: 03/01/10
	Client Contact: Bob Foss	Date Extracted: 03/02/10
Emeryville, CA 94608	Client P.O.:	Date Analyzed 03/02/10

Methyl tert-Butyl Ether*

Extraction method SW5030B Analytical methods SW8260B Work Order: 1003008

Extraction method SW5	030B	Analytical	methods SW8260B	Wo	ork Order:	1003008
Lab ID	Client ID	Matrix	Methyl-t-butyl ether (MTBE)	DF	% SS	Comments
002B	MW-3	W	ND	1	106	
003B	MW-4	W	ND	1	121	
004B	MW-5	W	ND<10	20	94	a3
005B	MW-6	W	ND	1	110	b1
	ng Limit for DF =1;	W	0.5		μg/L	
ND mea	ns not detected at or	S	NΔ		NΑ	

Reporting Limit for Dr =1,	W	0.5	μg/L
ND means not detected at or	S	N/A	NI A
above the reporting limit	5	IVA	INA

^{*} water and vapor samples are reported in μ g/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in μ g/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

- a3) sample diluted due to high organic content.
- b1) aqueous sample that contains greater than ~1 vol. % sediment



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 48966 WorkOrder 1003008

EPA Method SW8021B/8015Bm	Extra	tion SW	5030B					S	Spiked San	nple ID	: 1003007-0	A800
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acce	eptance	Criteria (%)	1
Analyto	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btexf	ND	60	111	109	1.74	112	110	1.61	70 - 130	20	70 - 130	20
MTBE	ND	10	107	112	3.93	105	108	3.71	70 - 130	20	70 - 130	20
Benzene	ND	10	105	110	5.27	107	108	1.56	70 - 130	20	70 - 130	20
Toluene	ND	10	94.2	98.1	4.05	94.9	96.1	1.28	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	93.5	97.1	3.78	94.7	96	1.30	70 - 130	20	70 - 130	20
Xylenes	ND	30	107	110	3.47	108	110	1.17	70 - 130	20	70 - 130	20
%SS:	99	10	106	107	0.512	104	107	2.48	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 48966 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1003008-002A	03/01/10 9:23 AM	03/03/10	03/03/10 1:30 AM	1003008-003A	03/01/10 10:03 AM	03/03/10	03/03/10 1:59 AM
1003008-004A	03/01/10 10:22 AM	03/02/10	03/02/10 2:28 PM	1003008-005A	03/01/10 9:45 AM	03/03/10	03/03/10 2:28 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

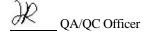
MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water BatchID: 48947 WorkOrder 1003008

EPA Method SW8260B	Extra	ction SW	5030B					s	piked Sar	nple ID:	1002666-0	01E
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acc	eptance	Criteria (%)	1
, undry to	μg/L	μg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Methyl-t-butyl ether (MTBE)	ND	10	78.3	79.7	1.72	96.1	101	5.40	70 - 130	30	70 - 130	30
%SS1:	92	25	106	106	0	92	94	1.58	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions: NONE

BATCH 48947 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1003008-002B	03/01/10 9:23 AM	03/02/10	03/02/10 1:20 AM	1003008-003B	03/01/10 10:03 AM	03/02/10	03/02/10 2:03 AM
1003008-004B	03/01/10 10:22 AM	03/02/10	03/02/10 11:25 AM	1003008-005B	03/01/10 9:45 AM	03/02/10	03/02/10 3:31 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

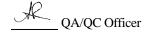
% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



APPENDIX C

FIELD DATA SHEETS



WELL GAUGING SHEET

Site Address:	1432 Harris	on Street, O	akland, CA			
Date:	3/1/2010			Signature:	1	
Well ID	Time	Depth to SPH	Depth to Water	SPH Thickness	Depth to Bottom	Comments
MW-1	8:40		DCA		20.38	
4-4W	8:35		21.00		25.54	
WH-3	8:15		19.20		2395	
MH-4	8:25		19.70		24.50	
MH-5	8:30		20.55		27.90	
MN-6	8:20		21.20		28.25	



Date:		3/1/2010										
Client:		Conestoga-Rovers and Associates										
Site Address: 1432 Harrison Street, Oakland, C.												
Well ID:		MW-1										
Well Dia	Well Diameter:											
Purging I	Device:											
Sampling	Method:	Disposable	Bailer									
Total We	ell Depth:			20.38	Fe=	mg/L						
Depth to	Water:		D	ry	ORP=	mV						
Water Co	olumn Heigl	nt:			DO=	mg/L						
Gallons/f	ì:											
1 Casing	Volume (ga	11):			COMMENTS:							
	3 Casing Volumes (gal):											
TIME:	CASING VOLUME TEMP COND.											
Sample ID:	Sample D	ate:	Sample Time:	Containe	er Type	Preservative	Analytes	Method				
				40 mL VOA		HCI, ICE	TPHg, BTEX, 1-2 DCA, MTBE	8015, 8021,8260				
						Signatu	ire:					



Date:		3/1/2010										
Client:		Conestoga-R	Rovers and	Associates								
Site Addr	'ess:	1432 Harris	on Street, (Oakland, C	A							
Well ID:		MN-2										
Well Dian	neter:	2"										
Purging D	evice:	Disposab	le Bail	er \$								
Sampling	Method:	Disposable	Bailer									
Total Wel	1 Depth:			25.54	Fe=	mg/L						
Depth to V	Water:			21.00	ORP=	mV						
Water Col	umn Heigh	t:		4.54	DO=	mg/L						
Gallons/ft				0.16								
1 Casing V	Volume (gal):		0.72	COMMENTS: SPH 'in well \(\sigma \) 20.78							
	Volumes (ga			2.16								
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND.	DTW = 21.00 SPH sampled for feel linear print at 10:40							
10:40	SPH	sample.	-	_	pur	sed to a hea	vy shee	~, sample taken				
	= pur		wy shee	/	420	Rx HCl su	lbbles in	VOAS				
Sample ID;	Sample Da	nte:	Sample Time:	Containe	r Type	Preservative	Analytes	Method				
MU-2 3/1/				40 mJ		HCI, ICE	TPHe BTEX, 1-2 DCA, MTBE	8015, 8021,8260				
						Signati	ure:					



Date:		3/1/2010											
Client:		Conestoga-Rovers and Associates											
Site Add	ress:	1432 Harris											
Well ID:		MW-3											
Well Diar	neter:	MH-3											
Purging Device: Disposable Bailer													
Sampling	Method:	Disposable											
Total Wel	ll Depth:			23.95	Fe=	mg/L							
Depth to	Water:			19.20	ORP=	mV							
Water Co	lumn Heigh	rt:		4.75	DO=	mg/L							
Gallons/fi	ti.			0.16									
1 Casing	Volume (ga	1):			COMMENTS:								
3 Casing Volumes (gal): 2.28					comments: very turbid, silty								
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	рН	COND.									
9:15	1.0	19.1	7.12	387									
9:17	1.5	19-1	7.09										
9:20	2.0	19.1	7.10	371									
							_	T					
Sample ID:	Sample D	ate:	Sample Time:	Containe	r Type	Preservative	Analytes	Method					
Wh-3	2/		9:23	40 ml		HCI, ICE	TPHg BTEX. 1-2 DCA. MTBE	8015, 8021,8260					
						Signati	ıre:						



Date:		3/1/2010									
Client:		Conestoga-I	Rovers and	Associates							
Site Addr	ess:	1432 Harris	on Street.	Dakland, C	A						
Well ID:		MW-4									
Well Dian		2"									
Purging D	evice:	Disposal	ble Ba	nler				11			
Sampling	Method:	Disposable	Bailer								
Total Wel	1 Depth:			24.50	Fe=	mg/L					
Depth to \	Water:			19.70	ORP=	mV					
Water Col	lunın Heigh	t:		4.80	DO=	mg/L					
Gallons/ft				0.16							
						COMMENTS:					
3 Casing Volumes (gal): 2.28											
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pH	COND.							
9:55	1.6	19.6	7.31	431							
9:57	1.5	20.0	7.29	427							
10:00	2.0	20.2	7.28	420							
Sample			Sample								
ID:	Sample D	ate:	Time:	Containe	r Type	Preservative	Analytes				
MN-4	3/1/10		10:03	40 ml.	VOA HCI. ICE		1-2 DCA. MTBE	8015, 8021,8260			
						Signatu	ire: /	R			



Date:		3/1/2010									
Client:		Conestoga-	Rovers and	l Associates							
Site Add	ress:			Oakland, C							
Well ID:		MN-5									
Well Dia	neter:	2"									
Purging Device: Disposable Bailer											
Sampling	Method:	Disposable									
Total We	Il Depth:			27.90	Fe=	mg/L					
Depth to	Water:			20.55	ORP=	mV					
Water Co	lumn Heigh	t:		7.35		mg/L					
Gallons/fi	(:			0.16							
1 Casing	Volume (ga	1):		1.17	COMMENTS:						
3 Casing	3 Casing Volumes (gal): 3.51										
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	pfI	COND.							
10:13	1.5	18.5	6.46	-							
10:16		19.1	6.39								
10:19		19.1	6.41	936							
Sample			Sample								
ID:	Sample D	ate:	Time:	Containe	r Type	Preservative	Analytes				
MNS	3/1/10		10:22	40 ml.	VOA	HCI, ICE	10 DCA, MTBE	8015, 8021,8260			
						Signate	ire:	15			



Date:		3/1/2010											
Client:		Conestoga-	Rovers and	Associates									
Site Addr	ess:	1432 Harris											
Well ID:		MN-6											
Well Dian	neter:	2"											
Purging D	evice:	Disposal	de Bai	ler l									
Sampling	Method:	Disposable											
Total Wel	Depth:			28.25	Fe=	mg/L							
Depth to V	Water:			21.20	ORP=	mV							
Water Col	umn Heigh	it:		7.05	DO=	mg/L							
Gallons/ft				0.16									
1 Casing	Volume (ga	1):		1.12	COMMENTS:								
				3.36	very turbid, silty								
TIME:	CASING VOLUME (gal)	TEMP (Celsius)	рН	COND.									
9:37 9:40 9:49	2 3	19.2	7.29 7.18 7.20	753 751 757									
Sample ID:	Sample D	ate:	Sample Time:	Containe	r Type	Preservative	Analytes	Method					
MN-6	3/1/10		9:45	40 mL VOA		HCl, ICE	TPHG BTEN. I-2 DCA. MTBE	8015, 8021,8260					
						Signate	ure:	B					

APPENDIX D

BENZENE CONCENTRATION AND DEPTH TO WATER VS. TIME-SERIES GRAPHS

