

Roya KambinProject Manager
Marketing Business Unit

Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6270 RKambin@Chevron.com

December 11, 2012

Alameda County Health Care Services 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Former 76 Service Station No. 351644

66 MacArthur Boulevard Oakland, California ACHCS Case NO 0455 **RECEIVED**

By Alameda County Environmental Health at 5:41 pm, Dec 13, 2012

I accept the Second Semi-Annual 2012 Groundwater Monitoring and Sampling Report and Third Quarter 2012 Ozone Injection System O&M Report.

I agree with the conclusions and recommendations presented in this document. The information included is accurate to the best of my knowledge, and appears to meet local agency and Regional Board guidelines. This **Second Semi-Annual 2012 Groundwater Monitoring and Sampling Report and Third Quarter 2012 Ozone Injection System O&M Report** was prepared by Conestoga Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Roya Kambin Project Manager

Attachment: Second Semi-Annual 2012 Groundwater Monitoring and Sampling Report and Third Quarter 2012 Ozone Injection System O&M Report



5900 Hollis Street, Suite A Emeryville, California 94608

Telephone: (510) 420-0700 Fax: (510) 420-9170

http://www.craworld.com

December 11, 2012 Reference No. 060727

Mr. Keith Nowell Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Second Semi-Annual 2012 Groundwater Monitoring and Sampling Report

and Third Quarter 2012 Ozone Injection System O&M Report

76 Products Service Station 1871 (Union Oil 351644)

66 MacArthur Boulevard

Formerly 96 MacArthur Boulevard

Oakland, California ACHCS Case No. 0455

Dear Mr. Nowell:

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), Conestoga-Rovers & Associates (CRA) is submitting the *Second Semi-Annual 2012 Groundwater Monitoring and Sampling Report and Third Quarter 2012 Ozone Injection System O&M Report* for the site referenced above (Figure 1). Groundwater monitoring and sampling was performed by TRC Solutions (TRC) of Irvine, California and their *Field Monitoring Data Package* is included as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1. Laboratory analyses were performed by BC Laboratories of Bakersfield, California and their report is included as Attachment B. Historical groundwater monitoring and sampling data is included as Attachment C.

Ozone system monitoring was performed by Environ Strategy Consultants, Inc. (ESC) and their report is included as Attachment D.

RESULTS OF SECOND SEMI-ANNUAL 2012 EVENT

On October 16, 2012, TRC monitored and sampled the site wells per the established schedule. Results of the current monitoring event indicate the following:

• Groundwater Flow Direction Southwest

• Hydraulic Gradient 0.05

Approximate Depth to Groundwater
 7.5 to 17 feet below grade

Equal Employment Opportunity Employer



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Results of the current sampling event are presented below in Table A.

	TA	BLE A: GI	ROUNDW	ATER ANALY	ΓICAL DA	ТА	
					Total		
	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TBA
Well ID	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
ESLs	100	1	40	30	20	5	12
MW-1	290	<1.0	<1.0	7.5	<2.0	<1.0	30
MW-6	< 50	< 0.50	< 0.50	< 0.50	<1.0	1.1	<10
MW-7	<50	< 0.50	< 0.50	< 0.50	<1.0	2.6	<10
MW-8	<50	< 0.50	< 0.50	< 0.50	<1.0	0.74	<10
MW-9	70	< 0.50	< 0.50	< 0.50	<1.0	72	13
MW-10	<50	< 0.50	< 0.50	< 0.50	<1.0	< 0.50	<10
MW-11	<50	< 0.50	< 0.50	< 0.50	<1.0	< 0.50	<10
. 0,	icrograms p		I evels from	Screening for Envi	ronmental Ca	oncerns at Si	ites mith

ESLs Environmental Screening Levels from *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, California Regional Water Quality Control Board-San Francisco Bay Region, Interim Final November 2007, Revised May 2008 (Table A – Groundwater is a potential source of drinking water source)

Bold Exceeds ESL

REMEDIATION SYSTEM OPERATION

The KVA ozone injection system operated with 100 percent up-time during the report period.

CONCLUSIONS

The results of ongoing groundwater monitoring and sampling indicate the following:

- Dissolved total petroleum hydrocarbons as gasoline (TPHg) is only detected above ESLs in onsite well MW-1.
- TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations are two to three orders of magnitude less than historical maximum concentrations.
- Historically MW-1 had the highest MTBE concentrations detected. However, since 2008 the highest MTBE concentrations have been detected in offsite well MW-9, which had a concentration of 72 μ g/L.



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• MTBE concentrations are below the laboratory detection limit and/or drinking water ESL in all other wells and have decreased over time in other wells.

• Dissolved tertiary butyl alcohol was detected in wells MW-1 and MW-9.

RECOMMENDATIONS

CRA submitted a *Closure Request* dated July 16, 2012 and an *Addendum to Case Closure Request* dated November 1, 2012. The site meets the low-threat case closure criteria under the State Water Resources Control Board (SWRCB) adopted Resolution No. 2012-0016, the *Low-Threat Underground Storage Tank (UST) Case Closure Policy* on August 17, 2012.

Since the site meets low-threat case closure criteria, CRA proposes the shutdown of the ozone system and cease groundwater monitoring and sampling activities. CRA will contact the ACEH to discuss the next steps.

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

Gettler Ryan, Inc. will monitor and sample site wells per the established schedule, unless ACEH approves discontinuation of the groundwater monitoring and sampling activities.



December 11, 2013 Reference No. 060727

Please contact Nathan Lee at (510) 420-3333 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES



Celina Hernandez, PG 8931

CH/cw/8

Encl.

Figure 1 Vicinity Map

Figure 2 Groundwater Elevation and Hydrocarbon Concentration Map

Table 1 Groundwater Monitoring and Sampling Data

Attachment A Monitoring Data Package Attachment B Laboratory Analytical Report

Attachment C Historical Groundwater Monitoring and Sampling Data

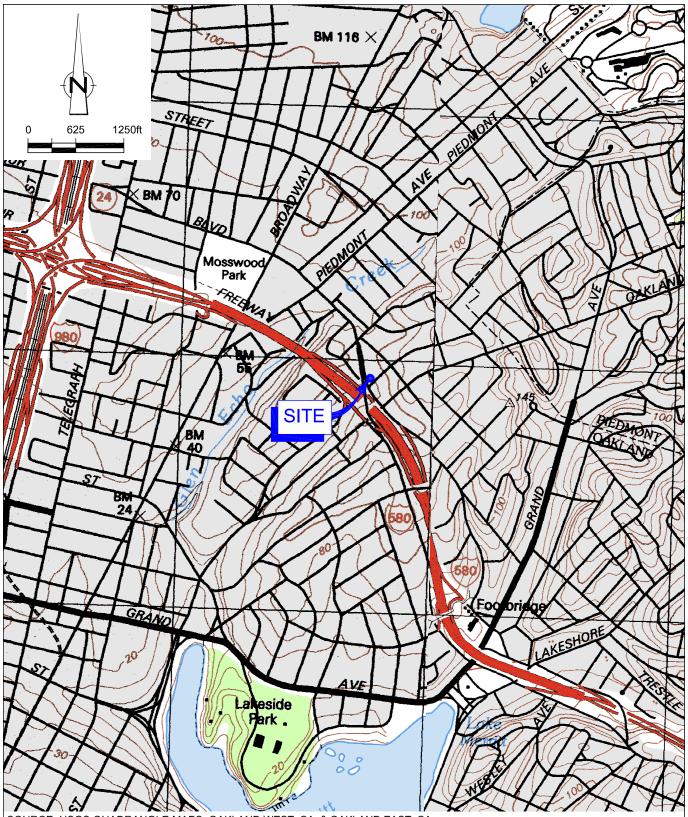
Attachment D Ozone Injection System O & M Report

cc: Ms. Roya Kambin, Union Oil (electronic copy)

Ms. Cherie McClaulou, RWQCB-SF

Ms. Barbara Bee Allen

FIGURES

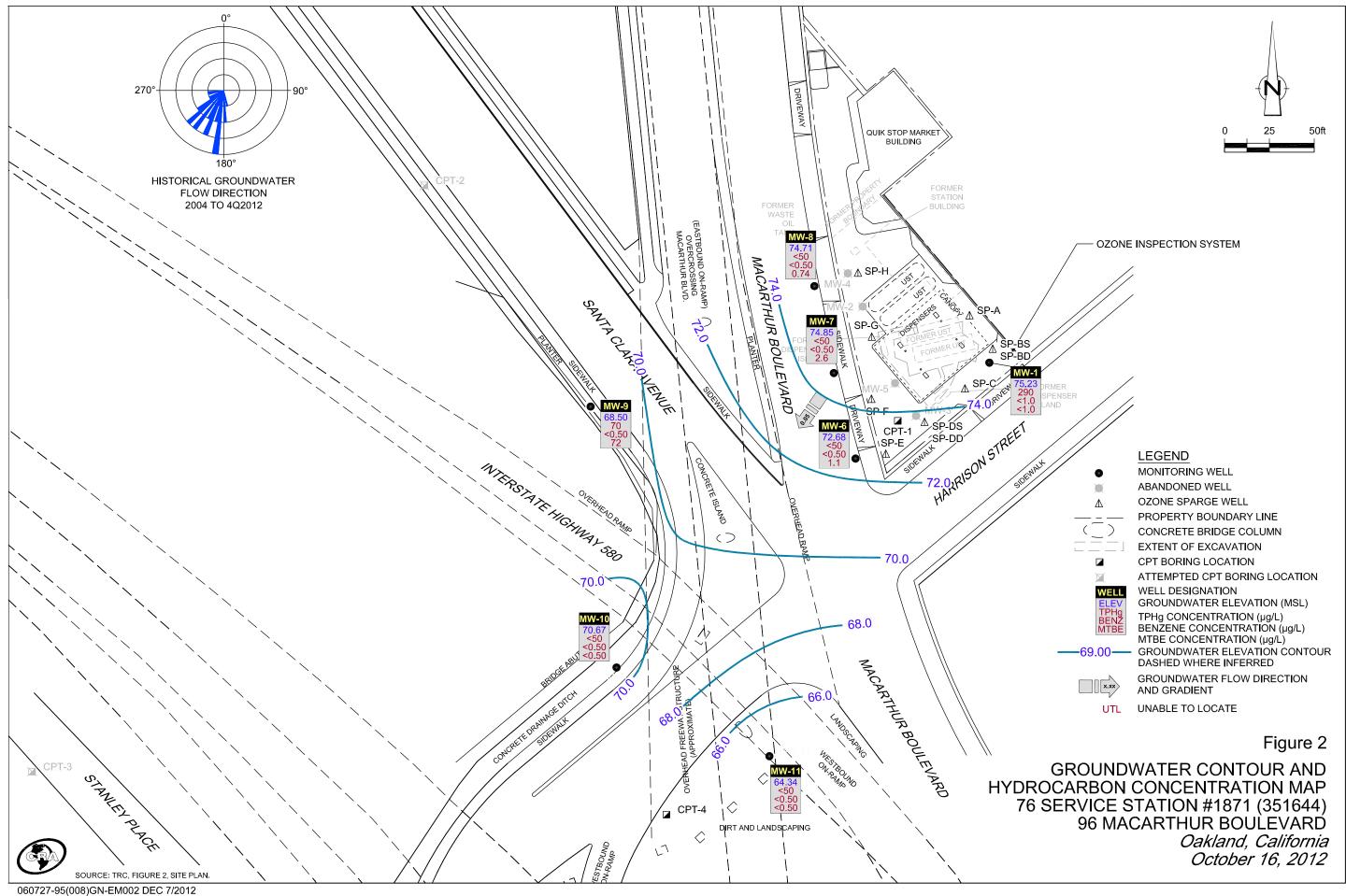


SOURCE: USGS QUADRANGLE MAPS: OAKLAND WEST, CA. & OAKLAND EAST, CA.

Figure 1

VICINITY MAP 76 SERVICE STATION #351644 96 MACARTHUR BOULEVARD Oakland, California





TABLE

GROUNDWATER MONITORING AND SAMPLING DATA UNION OIL #1871 96 MACARTHUR BLVD. OAKLAND, CALIFORNIA

	1			I	HYDROCARBONS					PRIMARY VOCS					GEI	NERAL C	HEMIS	ΓRY
Location	Date	тос	DTW	GWE	TPH Gasoline	В	T	E	X	MTBE by SW8260	TBA	EDB	1,2-DCA	Ethanol	Ferrous iron	Methane	Nitrate (as N)	Sulfate
	Units	ft	ft	ft-amsl	μg/L	µg∕L	μg/L	μg/L	µg∕L	μg/L	µg∕L	μg/L	μg/L	μg/L	µg∕L	mg/L	mg/L	mg/L
•																		
MW-1	11/10/2011	90.21	14.43	75.78	410	0.72	<0.50	7.1	1.4	2.4	60	<0.50	<0.50	<250	360	0.032	1.2	19
MW-1	04/12/2012	90.21	12.78	77.43	2,700	4.7	<0.50	130	7.5	14	170	< 0.50	<0.50	<250	<100	1.5	1.9	27
MW-1	10/16/2012	90.21	14.98	75.23	290	<1.0	<1.0	7.5	<2.0	<1.0	30	<1.0	<1.0	< 500	120	0.0018	0.44	29
MW-6	11/10/2011	82.51	9.61	72.90	<50	<0.50	<0.50	< 0.50	<1.0	2.2	<10	< 0.50	< 0.50	<250	<100	<0.0010	< 0.44	24
MW-6	04/12/2012	82.51	8.08	74.43	<50	< 0.50	< 0.50	< 0.50	<1.0	0.96	<10	< 0.50	< 0.50	<250	<100	0.0013	< 0.44	21
MW-6	10/16/2012	82.51	9.83	72.68	<50	<0.50	<0.50	<0.50	<1.0	1.1	<10	<0.50	<0.50	<250	<100	0.0097	<0.44	22
MW-7	11/10/2011	83.80	9.38	74.42	<50	<0.50	< 0.50	< 0.50	<1.0	2.9	<10	< 0.50	< 0.50	<250	140	0.0041	< 0.44	9.0
MW-7	04/12/2012	83.80	7.44	76.36	<50	< 0.50	< 0.50	< 0.50	<1.0	4.7	<10	< 0.50	< 0.50	<250	<100	0.0038	< 0.44	16
MW-7	10/16/2012	83.80	8.95	74.85	<50	<0.50	<0.50	<0.50	<1.0	2.6	<10	<0.50	<0.50	<250	120	0.0019	<0.44	15
MW-8	11/10/2011	84.86	9.94	74.92	<50	< 0.50	< 0.50	< 0.50	<1.0	<0.50	<10	< 0.50	< 0.50	<250	<200	< 0.0010	3.0	54
MW-8	04/12/2012	84.86	8.42	76.44	<50	< 0.50	< 0.50	< 0.50	<1.0	1.4	<10	< 0.50	< 0.50	<250	<100	0.0014	5.0	54
MW-8	10/16/2012	84.86	10.15	74.71	<50	<0.50	<0.50	<0.50	<1.0	0.74	<10	<0.50	<0.50	<250	<100	<0.0010	3.2	55
MW-9	11/10/2011	85.18	15.98	69.20	51	< 0.50	< 0.50	< 0.50	<1.0	63	<10	< 0.50	< 0.50	<250	270	< 0.0010	1.3	30
MW-9	$04/12/2012^1$	85.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	10/16/2012	85.18	16.68	68.50	70	<0.50	<0.50	<0.50	<1.0	72	13	<0.50	<0.50	<250	150	<0.0010	0.62	40
MW-10	11/10/2011	78.18	7.01	71.17	<50	< 0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	< 0.50	<250	<100	< 0.0010	26	24
MW-10	04/12/2012	78.18	6.02	72.16	<50	< 0.50	<0.50	< 0.50	<1.0	<0.50	<10	<0.50	< 0.50	<250	<100	<0.0010	19	18
MW-10	10/16/2012	78.18	7.51	70.67	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<250	<100	<0.0010	15	29

TABLE 1 Page 2 of 3

GROUNDWATER MONITORING AND SAMPLING DATA UNION OIL #1871 96 MACARTHUR BLVD. OAKLAND, CALIFORNIA

					HYDROCARBONS					PRIMARY VOCS					GENERAL CHEMISTRY				
Location	Date	тос	DTW	GWE	TPH Gasoline	В	T	E	X	MTBE by SW8260	TBA	EDB	1,2-DCA	Ethanol	Ferrous iron	Methane	Nitrate (as N)	Sulfate	
	Units	ft	ft	ft-amsl	μg/L	μg/L	μg/L	μ <i>g/</i> L	µg∕L	μg/L	μg/L	µg∕L	µg∕L	μg/L	µg∕L	mg/L	mg/L	mg/L	
MW-11	11/10/2011	80.44	14.49	65.95	<50	< 0.50	<0.50	<0.50	<1.0	<0.50	<10	< 0.50	<0.50	<250	<100	<0.0010	5.1	57	
MW-11	04/12/2012	80.44	14.60	65.84	<50	< 0.50	< 0.50	< 0.50	<1.0	<0.50	<10	< 0.50	< 0.50	<250	<100	<0.0010	<2.2	69	
MW-11	10/16/2012	80.44	16.10	64.34	<50	< 0.50	< 0.50	< 0.50	<1.0	<0.50	<10	< 0.50	<0.50	<250	<100	0.0014	4.4	53	

Abbreviations and Notes:

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

(ft-amsl) = Feet above mean sea level

ft = Feet

 μ g/L = Micrograms per liter

mg/L = Milligrams per liter

TPH - Total petroleum hydrocarbons

VOCS = Volatile organic compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes (Total)

MTBE = Methyl tert butyl ether

TBA = Tert-butyl alcohol

DIPE = Diisopropyl ether

ETBE = Tert-butyl ethyl ether

TAME = Tert-amyl methyl ether

TABLE 1 Page 3 of 3

GROUNDWATER MONITORING AND SAMPLING DATA UNION OIL #1871 96 MACARTHUR BLVD. OAKLAND, CALIFORNIA

						HYDROCARBONS					PRIMARY VOCS					GEN	JERAL C	HEMIS	TRY
	Location	Date	тос	DTW	GWE	TPH Gasoline	В	Т	E	X	MTBE by SW8260	TBA	EDB	1,2-DCA	Ethanol	Ferrous iron	Methane	Nitrate (as N)	Sulfate
I	•	Units	ft	ft	ft-amsl	μg/L	µg/L	μg/L	µg∕L	µg/L	μg/L	µg∕L	μg/L	µg/L	µg/L	μg/L	mg/L	mg/L	mg/L

EDB = 1,2-Dibromoethane (Ethylene dibromide)

1,2-DCA = 1,2-Dichloroethane

-- = Not available / not applicable

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

J = Estimated concentration

Unable to locate.

ATTACHMENT A

MONITORING DATA PACKAGE



123 Technology Drive West Irvine, CA 92618

949.727.9336 PHONE 949.727.7399 FAX

www.TRCsolutions.com

DATE:

October 22, 2012

TO:

Tina Hariu, CRA

Miriam Smith, CRA

SITE:

Unocal Site 1871

Facility 351644

96 MacArthur Blvd, Oakland CA

RE:

Transmittal of Groundwater Monitoring Data

Dear Ms Hariu,

Please find attached the field data sheets, chain of custody (COC) forms, and technical services request (TSR) form for the monitoring event that was completed on October 16, 2012. Field measurements and collection of samples submitted to the laboratory were completed in general accordance with our usual groundwater monitoring protocol which is also attached for your reference.

Please call me at 949-727-7345 if you have questions.

Sincerely,

TRC

Christina Carrillo

Groundwater Program Coordinator

GENERAL FIELD PROCEDURES

Groundwater Gauging and Sampling Assignments

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater gauging and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

Fluid Level Measurements (Gauging)

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Unless otherwise instructed, a well that is found to contain a measureable amount of LPH (0.01 foot) is not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps. The pump intake is initially set at about 5 feet below the level of water in the casing, and is lowered as needed to compensate for falling water level. Pump depths are recorded in Field Notes.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurements are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously, using a flow cell, until they become stable in general accordance with EPA guidelines.

Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

GENERAL FIELD PROCEDURES

Samples are collected by lowering a new, disposable polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

Sample containers are labeled with project number (or site number), well designation, sample date, sample time, and the sampler's initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging and Sampling

The sequence in which monitoring activities are conducted is specified on the TSR. In general, wells are gauged beginning with the least affected well and ending with the well that has the highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected to the most-affected well. If wells must be gauged or sampled out of order, alternate interface probes and/or pumps are utilized and are noted in field documentation.

Decontamination

In order to reduce the possibility of cross contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging, and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liquinox and water and rinsing twice. The final rinse is in deionized water.

Purge Water Disposal

Purge water is generally collected in labeled drums for disposal as non-hazardous waste. Drums may be left on site for disposal by others, or transported to a collection location at a TRC field office, in either Fullerton, California or Concord, California, for eventual transfer to a licensed treatment or recycling facility. Alternatively, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, are documented in field notes on the following pages.

FIELD MONITORING DATA SHEET

Technician: JoE	Job #/Task #: <u>18979/.00357.16</u> 44	Date: <u>/0//6//2</u>
Site # 1871	Project Manager A. Farfan	Page/_ of/

Well# TOC Gauged Depth Water MW-I0 X 0527 20.01 7.51 MW-II X 0533 30.07 16.10 MW-6 X 0549 24.45 9.83 MW-8 X 0555 24.31 10.15 MW-7 X 0602 24.33 8.95 MW-9 X 0607 19.43 16.63 MW-1 X 0611 24.06 14.93	Product	(feet)	Sampled 1030 1041 1119 1053 1140 1055 1150 1150	Misc. Well Notes 2" 2" 2" 2" 2" 2" ***** ***** ***** ***** ***** ****
MW-11 X 0533 30.07 16.10 MW-6 X 0549 24.45 9.83 MW-8 X 0555 24.31 10.15 MW-7 X 0602 24.33 8.95 MW-9 X 0607 19.88 16.68 MW-1 X 0611 24.00 14.98	And the state of t		1041 1119 1053 1140 1055	2" z" z" z" z"
MW-6 X 0549 24,43 9,83 MW-8 X 0555 24,31 10,15 MW-7 X 0602 24,33 8,95 MW-9 X 0607 19,88 16.68 MW-1 X 0611 24.00 14.98	And the state of t		1119 1053 1140 1055	z" z" z" z"
MW-8 X 0555 24.31 10.15 MW-7 X 0602 24.33 8.95 MW-9 X 0607 19.88 16.68 MW-1 X 0611 24.00 14.98	And the state of t		1053 1140 1055	2" 2" 2"
MW-7 X 0602 24.33 8.95 MW-9 X 0607 19.88 16.68 MW-1 X 0611 24.00 14.98	and distribution .		1140	2" 2"
MW-9 X 0607 19.88 16.68 MW-1 X 0611 24.00 14.98			1055	2"
MW-1 X 0611 24.00 14.98		Aggregation of the control of the co		
,			1150	
>				
	Marie 197			
		<u> </u>		
				
FIELD DATA COMPLETE QA/QC	COC	W	ELL BOX C	ONDITION SHEETS
FIELD DATA CONFELTE QAGO				<u> </u>
MANIFEST DRUM INVENTORY	TRAFFIC	CONTROL		



JOE

Technician: Date: 10/16/12 Site:_ 1871 Project No.: 18979/.0035.1644 Well No. MW-/0 Purge Method:____ Depth to Water (feet): 7.51 Depth to Product (feet):_ LPH & Water Recovered (gallons):__ Total Depth (feet)____ 20.01 Casing Diameter (Inches): 2/ Water Column (feet): 12.50 1 Well Volume (gallons):__ 80% Recharge Depth(feet): 10.01

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F C	рН	D.O. (mg/L)	ORP	Turbidity
Pre-F	ourge						1.60	200	-
0817			3	591.8	16.6	7.46	1.68	202	
	0319		Ġ.	594.2	16.5	7.43	703	198	
			9	A MARIE MARI	•	- AND THE PROPERTY OF THE PROP	, co	~	
Stat	ic at Time S	ampled	Tota	al Gailons Purg	ed		Sample	Time	
	14.60		7				10	o 30	
Comments		7 gals.	Did n	ot rechav	ye In :	2 413.			

Well No. MW - //	Purge Method: THB DZA
Depth to Water (feet):	Depth to Product (feet):
Total Depth (feet) 30.07	LPH & Water Recovered (gallons):
Water Column (feet): 13.97	Casing Diameter (Inches): 2"
80% Recharge Depth(feet): 18.39	1 Well Volume (gallons):

	Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F,C)	рН	D.O. (mg/L)	ORP	Turbidity
Ì	0746 Pre-	Purge		SANCKER OF SANCKER IN				2.13	3,85	
نا	6721			3	2882	17.	7.23	3.11	211	
				6	2866	16.7	6.87	3.03	211	
		0750		9	2924	16.6	6.86	2.81	211	
					/					
ı	Stat	tic at Time S	Sampled	Tota	al Gallons Purg	ed		Sample	Time	
Ì		21.40	3	9	()		_ : :	10	41	
	Comments	s: Did N	not recha	nge IN	2 Hrs.					



JOE Technician: Date: 10/16/12 Site: <u>/871</u> Project No.: 189 79/. 0035.1444 Purge Method: TLSUB Well No. Mw-6 Depth to Water (feet): 9.63Depth to Product (feet):_ 24.45 Total Depth (feet)____ LPH & Water Recovered (gallons):____ Casing Diameter (Inches): 2 // Water Column (feet): 14.62 1 Well Volume (gallons):_ 80% Recharge Depth(feet): 12:75

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F,C)	рΗ	D.O. (mg/L)	ORP	Turbidity
Pre-l	urge						0.39	172	
0856			3	658.7	20.5	6.89	1,03	163	
			6	680,0	19.8	6.81	0.92	163	
	0859		9	654.0	19.9	6.98	6.43	154	
				· · ·					
Stat	ic at Time S	ampled	Tota	l Gallons Purg	ed		Sample	Time	<u> </u>
	10.0		9				11/	9	
Comments	:Dry at	- 9 gals.							

Well No. MW-8	Purge Method: The DIA
Depth to Water (feet): 10.15	Depth to Product (feet):
Total Depth (feet) 24:3/	LPH & Water Recovered (gallons):
Water Column (feet): 14.16	Casing Diameter (Inches): 2"
80% Recharge Depth(feet): 12.78	1 Well Volume (gallons):

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (FC)	Нα	D.O. (mg/L)	ORP	Turbidity
Pre-l	urge						0.88	179	
0913			3	686.8	20.2	6.83	1.37	128	
			6	688.7	19.6	6.74	1.66	123	
	0915		9	676.3	19.3	6.81	6.09	114	
01-1	i Time C		Та	ol Collone Dura	ad T		Sample	Time	
Stat	ic at Time S (೦೯ರ್	<u>.</u>	4	al Gallons Purg	ea		1/3 <i>0</i>		
Comments	ory a	t 9 gals	*						



	Technician:	JOE	
Site: 1371	Project No.: 189	791.0035.1644	Date: /0/16/12
Well No. MW-7		Purge Method: JL SMB	DIA
Depth to Water (feet): 8,95		Depth to Product (feet):	**************************************
Total Depth (feet) 24.33		LPH & Water Recovered (gallons	
Water Column (feet): 15.33		Casing Diameter (Inches): $2^{\prime\prime}$	
80% Recharge Depth(feet): 12.	02	1 Well Volume (gallons):	

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F C	рН	D.O. (mg/L)	ORP	Turbidity		
Pre-l	ourge		17936,0618				1.04	55			
0930			3	5820	20,5	6.94	1.07	18			
			6	535.7	19.9	6.83	3.37	-17			
	0932		9	587.9	19.8	6.94	6.71	-12			
Stat	ic at Time S	ampled	Tota	il Gallons Purg	ed		Sample	Time	<u> </u>		
	10.0		9 1140								
Comments	ory a	+ 4 gale	~ ·								

Well No. MW-9	Purge Method: HB
Depth to Water (feet): 16.68	Depth to Product (feet):
Total Depth (feet) 19.88	LPH & Water Recovered (gallons):
Water Column (feet): 3,20	LPH & Water Recovered (gallons): Casing Diameter (Inches): 2''
80% Recharge Depth(feet): 17.32	1 Well Volume (gallons):

Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F(C)	рН	D.O. (mg/L)	ORP	Turbidity
Pre-l	urge						1.66	210	
0827			l	519.9	17.4	6.99	1,53	201	
			2	5'11,2	17.4	6.94	1.50	124	
	0336		.3	522.3	17.4	6.92	1.13	115	
Stat	ic at Time S	Sampled	Tota	al Gallons Purg	ed		Sample	Time	
	16.7		3				1055	ī	
omments									



		Tec	hnician:	JOE	· · · · · · · · · · · · · · · · · · ·	_			
Site: <u>187</u>	<u></u>	Proj	ect No.: <u>/%</u> 9	791.00357./L	,44 <u> </u>		Date:_	10/16,	112
Well No	MW-1			Purge Method	JLSU	B 0			
		14.98		Depth to Produ	uct (feet):	and the second s	их и при при при при при при при при при п		
		24.05		LPH & Water I					
		9.07		Casing Diame					
		eet): <u>16:79</u>		1 Well Volume					
Time Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature	рН	D.O. (mg/L)	ORP	Turbidity
Pre-l	urge						0.84	73	
0948			6	322.4 572.8	21.0		1,05		
			12	572.8	20.4	6.77	2.24	-48	
	0951		13						
Stat	ic at Time S	ampled	Tota	al Gallons Purg	ed		Sample		
		2	12				115	50	
Comments	: Dry a	+ 12 gal	s, Did 1	not recl	rarge Ir	121	49		
	·								
Well No.		٠		Purge Method	:				
•				Depth to Prod					
-				LPH & Water					
				Casing Diame		•			
	rge Depth(fe			1 Weil Volume	•			_	
0070 Neona	iigo Doptii(it			T VVOII VOIGITIC	/ (ganono)				
Tìme Start	Time Stop	Pump Depth (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F , C)	рН	D.O. (mg/L)	ORP	Turbidity
Pre-l	urge								

Total Gallons Purged

Static at Time Sampled

Comments:



Sample Time

WELL BOX CONDITION REPORT

SITE NO. ADDRESS DATE	18: 96: 10/	71 Ma 16/1	CAC 2	thur	- Bi	ud.														PERFOMED BY:
Well Neme	Current Well Box Size	# of Ears		# of Broken Ears	# of Broken Bolts	# of Missing Bolts	Seal Damaged	Missing Lid	Broken Lld	Well Box is Exposed	Well Box is Below Grade	Unable to Access	Unable to Locate	Foundation Damaged	Paved Over	Street Well	Saw Cut Needed	System Well	USA Marked Well	Comments
MW-10	1211	Ĵ_														ý				
MW2-11	121	2														У				
MW-11 MW-6	12"	2														ÿ.				
MW-8	12"	2														У				
1000	121	2					ļ									ý				
mw-7 mw-9	1211	2														У				
mw-1	12"			<u> </u>			<u> </u>					<u> </u>								
100-1	1	-	1		1		 	<u> </u>	}											-
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			-	-				+-		-	-	-	 		-	-	-			
					+		-			 		 								

CHAIN OF CUSTODY FORM

Union Oil Company of California

6101 Bollinger Canyon Road

San Ramon, CA 94583 Union Oil Site ID: Union Oil Consultant: ANALYSES REQUIRED Site Global ID: 70600101473 Consultant Contact: Tina 142511 Turnaround Time (TAT): Site Address: 96 Myc Ar Ann Bloc. Consultant Phone No.: 513- 425- 337/4 8260B Standard 🗹 24 Hours □ Sampling Company: TRC 48 Hours □ 72 Hours □ Union Oil PM: KOYA KAMOIA Sampled By (PRINT):__ Special Instructions Union Oil PM Phone No.: 425 - 7/0 - 62 70 BTEX/MTBE/OXYS by EPA 8260B EPA 8260B Full List with OXYS Iron Sampler Signature: Charge Code: NWRTB- 0 35 / 644 -0- LAB Ethanol by EPA 8260B BC Laboratories, Inc. TPH - G by GC/MS Project Manager: Molly Meyers This is a LEGAL document. ALL fields must be filled out CORRECTLY and 4100 Atlas Court, Bakersfield, CA 93308 COMPLETELY. Phone No. 661-327-4911 SAMPLE ID Date Field Point Name Matrix DTW (yymmdd) Sample Time # of Containers Notes / Comments 1030 12/10/16 MW-10 Ŵ-S-A MW-11 1041 W-S-A MW- 6 W-S-A MW-8 1053 W-S-A MW-7 1140 W-S-A MW- S 1055 W-S-A 1150 W-s-A MU-1 W-S-A W-S-A W-S-A W-S-A W-S-A Date / Time: 1 ろのの Relinquished By Company Date / Time: Relinquished By Company Date / Time: Received By Company Date / Time : Received By Company Date / Time: aux Bran Tolleb 11 11 17 1130

TRC SOLUTIONS TECHNICAL SERVICES REQUEST FORM 17-Sep-12

Site ID: Address City: Cross Street	1871 96 MacArthur Bou Oakland ; Harrison Street	levard	Project No.: Client: Contact #: PM: PM Contact #:	189791.0035.1644 / 00 Roya Kambin 925-790-6270 Tina Hariu CR 510-420-3344	
Total number Depth to Wate		Min. Well Diamete Max. Well Diamete Max. Well Depth (er (in.): 4	# of Techs, # of Hrs: Travel Time (hrs): Hotel PO#:	1, 6
ACTIVITIES	Frequency	/		otes	
Gauging: Purge/Samplin					
No Purge/Sam	ple 🗌			e yazan yee	_mm
RELATED A	ACTIVITIES No	te			
Drums:	✓				·
Other Activities	*	ng signs			. .
Traffic Control:	☑ City of Oa	akland & Caltrans		Cathans P	ermit attic
PERMIT INF	ORMATION:			aprisera	11 DRECEN
NOTIFICATI Mark Karvelot, Qu Son's 76: 510-653	ick Stop Markets, 510-6	57-8500			
SITE INFORI					
Take field measure	ements after each casin	g volume purged.			
Monitor and sampl	le MW-1 last and MW-9	second to last.			
Ozone sparge sys 818-968-5864.	tem on site. O&M compa	any is EnvironStrategies. If th	ere are any problems	with the system please call Da	rren Azarian @

TRC SOLUTIONS TECHNICAL SERVICES REQUEST FORM

17-Sep-12

Site ID:

1871

Address

96 MacArthur Boulevard

City:

Oakland

Cross Street: Harrison Street

Project No.: Client:

189791.0035.1644 / 00TA01

Roya Kambin

Contact #:

925-790-6270

PM:

Tina Hariu

CRA

PM Contact #: 510-420-3344

LAB INFORMATION:

Global ID: T0600101493

Lab WO: 351644

Lab Used: BC Labs

Lab Notes: Lab anaylses:
TPH-G by GC/MS, BTEX/MTBE/TBA by 8260B, Ethanol by 8260B, EDB/EDC by 8260B [Containers. 3 voas w/HCl]
Sulfate, Nitrate [Container: one 500 mL poly unprserved]
Ferrous Iron [Container: one 500 mL poly w/ HCl]

Methane [Containers: 2 yoas unpreserved]

Date Printed: 9/17/2012

2 of 2

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

17-Sep-12

Site ID.:

1871

Address 96 MacArthur Boulevard

City:

Oakland

Cross Street Harrison Street

			1	Ga	ugin	g		Sam	pling	ľ		Field Measu	rements	
Well IDs	Benz.	MTBE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge	Туре	Comments
MW-11	0		o 🗆	~				V		Y	V	V	D.O., ORP	2" casing
MW-10	0		ם כ	V		\mathbf{Z}		\checkmark		V	✓	7	D.O., ORP	2" casing
MW-6	0	0.90	5 _	✓				V		V	V	~	D.O., ORP	2" casing
MW-8	0	1.4	4	V				~		✓	V	~	D.O., ORP	2" casing
MW-7	0	4.	7 🗆	V				✓		~	V	~	D.O., ORP	2" casing
MW-9	0	6	3	V				✓		y			D.O., ORP	2" casing
MW-1	4.7	14	\$ [_	V		V		$ \mathbf{Z} $		✓	V	7	D.O., ORP	4" casing

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



Date of Report: 10/30/2012

Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

Project: 1871

BC Work Order: 1219981 Invoice ID: B133015

Enclosed are the results of analyses for samples received by the laboratory on 10/16/2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers

Molly Meyers

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014



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Chain of Custody and Cooler Receipt Form for 1219981 Page 1 of 2 24 Hours □ 72 Hours TIme (TAT) Special instructions Notes / Comments 48 Hours 10-16-12 Standard 💆 UDIT ANALYSES 85008 19 48_1 Union Oll Company of Californla 🖪 6101 Bollinger Canyon Road 🛭 San Ramon, CA 94583 EPA 8260B Full List with OXYS Ethanol by EPA 8260B 買 19:15 BTEX/MTBE/OXYS by EPA 8260B TPH - G by GC/MS 2108 A93 yd IeseiO - H9T D-19-0 10-16-12 CHAIN OF CUSTODY FORM à Date / Tme EWIN CHK # of Containers Project Manager: Molly Meyers 4100 Allas Court, Bakersfield, CA 93308 Phone No. 661-327-4911 BC Laboratories, Inc. BULDB ğ Ind. 510-Company Sampled By (PRINT): Sampling Company: TRC Consultant Phone No.: Union Oll Consultant: Consultant Contact: 1053 Sampler Signature: Sample Time 150 1030 140 055 1401 Relinquished By This is a LEGAL document. <u>ALL</u> fields must be filled out CORRECTLY and COMPLETELY. Date (yymmdd) 300 10-16-12 925-790-6270 Date / Time: Charge Code: NWRTB- 0 35 1 644 -0- LAB MLQ 9 'n MACALITAN 5600101493 SAMPLE ID ambie Matrix 19-S-A V-S-A V-S-V 4-S-A N-S-A Y-S-V W-S-A V-S-A W-S-A W-S-A W-S-A W-S-A Сотралу Julen Oil PM Phone No.: Field Point Name MW-8 MW-10 MW-7 MW-11 Jnlon Oil Site ID: MW-ME. Site Global ID: Jníon Oil PM: Site Address: MW



Chain of Custody and Cooler Receipt Form for 1219981 Page 2 of 2

BC LABORATORIES INC.		COOL	ER RECE	IPT FOR	M	Rev. No. 1	3 08/17,	/12 Pa	ge \ O	
Submission #: 12-1998		• •							-9- <u>-1</u> -0	`
		·		T						
SHIPPING INFO	Hand Deli Hand Deli						NG CONT			
	r 🗆 (Specify		•		Ice Chest			1e □		
1		'		١	DUX		Oine	er ⊔ (Spe	ecify)	
Refrigerant: Ice 🕅 Blue Ice	e□ Non	a 🗆	Other 🗆			_==				
		====		-	ents;					
Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐	Contair Intact? Yes	1	None	Ø⊃Comi	ments:					
All samples received? Yes P No 🗆	All sample	s containers	intact? Ý	es 🗷 No	٥	Descript	ion(s) matc	h COC? Y	'es □ No	8
COC Received	Emissivity: (195		Jan			27			'
Ø YES □ NO								Date/Tim	ле <u>10-110-</u>	2 _
	Temperatur	e: (A)	_2.B	°C /	1012.	9 .	°C	Analyst J	WUL in	22US
YES NO Temperature: (A) 2.8 °C / (C) 2.9 °C Analyst Init JNW 2005										
SAMPLE CONTAINERS	1	2				NUMBERS	· · ·		T	
OT GENERAL MINERAL/ GENERAL PHYSICA			3	4	5	6	7	8	9	10
PT PE UNPRESERVED	\ C	C	<u> </u>	<u></u>	C				 	+
QT INORGANIC CHEMICAL METALS							C			1
										├
PT INORGANIC CHEMICAL METALS PT CYANIDE	+			-			-		ļ	
									ļ	
PT NITROGEN FORMS									 	
PT TOTAL SULFIDE 202. NITRATE / NITRITE	+									
	-								 	
PT TOTAL ORGANIC CARBON PT TOX							· -		 	
		7.								
PT CHEMICAL OXYGEN DEMAND PIA PHENOLICS		- 1			2,94	240,70		go messagin.		
40ml VOA VIAL TRAVEL BLANK					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FrielEnside +	ego t		State of the	
	A 3	n .2.	0.7	n 2	Λ- -	V 0	0 7		<u> </u>	
QT EPA 413.1, 413.2, 418.1		H 101	A 3	171 13		-A131			la, tara	1 . 1
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BACTERIOLOGICAL	-				!				ļ <u>-</u>	
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OT EPA 508/608/8080 OT EPA 515.1/8150						- :				
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OT EPA 525 TRAVEL BLANK 100ml EPA 547		-		·			17.	-		
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200ml M A 331.1										
QT EPA 548	_ -									
OT EPA 549								<u>,</u>	<u> </u>	
OT EPA 632										
OT EPA 8015M										
OT AMBER			·							
8 OZ. JAR				-						
32 OZ. JAR										
SOILSLEEVE										
PCB VIAL										
PLASTIC BAG				-						
FERROUS IRON	D	D	D_	D	D	<i>A</i>	σ		<u> </u>	
ENCORE										
SMART KIT									-	
Comments: -4 time read	1130	on 1	ماللم	2 .	2011	<u> </u>			L.,	
Sample Numbering Completed By:	BLI	Date	Time:	0117117	(a) (1) (a)	Б				
A = Actual / C = Conected				-11		·				

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information

1219981-01 COC Number: -

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-10-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 10:30

Sample Depth: --Lab Matrix: Water
Sample Type: Water

Delivery Work Order: Global ID: T0600101493

Location ID (FieldPoint): MW-10

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1219981-02 COC Number: ---

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-11-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 10:41

Sample Depth: --Lab Matrix: Water
Sample Type: Water
Delivery Work Order:
Global ID: T0600101493

Location ID (FieldPoint): MW-11

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

Sample Depth:

1219981-03 COC Number: ---

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-6-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05

Sampling Date: 10/16/2012 11:19

Lab Matrix: Water
Sample Type: Water
Delivery Work Order:
Global ID: T0600101493

Matrix: W

Sample QC Type (SACode): CS

Location ID (FieldPoint): MW-6

Cooler ID:

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information

1219981-04 COC Number:

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-8-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 10:53

Sample Depth: --Lab Matrix: Water
Sample Type: Water

Delivery Work Order: Global ID: T0600101493 Location ID (FieldPoint): MW-8

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1219981-05 COC Number: ---

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-7-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 11:40

Sample Depth: --Lab Matrix: Water
Sample Type: Water
Delivery Work Order:

Global ID: T0600101493 Location ID (FieldPoint): MW-7

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1219981-06 COC Number: --

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-9-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 10:55

Sample Depth: --Lab Matrix: Water
Sample Type: Water
Delivery Work Order:

Global ID: T0600101493 Location ID (FieldPoint): MW-9

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:



5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information

1219981-07 COC Number: --

Project Number: 1871 Sampling Location: ---

Sampling Point: MW-1-W-121016

Sampled By: TRCI

Receive Date: 10/16/2012 22:05 **Sampling Date:** 10/16/2012 11:50

Sample Depth: --Lab Matrix: Water
Sample Type: Water

Delivery Work Order: Global ID: T0600101493 Location ID (FieldPoint): MW-1

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

5900 Hollis St. Suite A Emeryville, CA 94608



10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	219981-01	Client Sampl	e Name:	1871, MW-10-W-12	1016, 10/16/2012	_		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surre	ogate)	108	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		95.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surr	ogate)	92.6	%	80 - 120 (LCL - UCL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 17:32	JMC	MS-V12	1	BVJ1512	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871 Project Number: 351644

Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-01	Client Sampl	e Name:	1871, MW-10-	W-121016, 10/16/2012	10:30:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane		ND	mg/L	0.0010	RSK-175M	ND		1

			Run			QC		
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 08:03	JMC	GC-V1	1	BVJ1639	

5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

BCL Sample ID:	1219981-01	Client Sampl	e Name:	1871, MW-10-W-121016, 10/16/2012 10:30:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		15	mg/L	0.44	EPA-300.0	ND		1
Sulfate		29	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		ND	ug/L	100	SM-3500-FeD	ND		2

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/17/12	10/17/12 20:24	LS1	IC5	1	BVJ1478	
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453	

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	219981-02	Client Sampl	e Name:	1871, MW-11-W-12	1016, 10/16/2012	10:41:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surro	ogate)	106	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		96.1	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surr	ogate)	94.5	%	80 - 120 (LCL - UCL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 17:14	JMC	MS-V12	1	BVJ1512	

5900 Hollis St. Suite A Emeryville, CA 94608

10/30/2012 8:20 Reported:

Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-02	Client Sample	e Name:	1871, MW-11	-W-121016, 10/16/2012	10:41:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane		0.0014	mg/L	0.0010	RSK-175M	ND		1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 07:59	JMC	GC-V1	1	BVJ1639	

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

BCL Sample ID:	1219981-02	Client Sampl	e Name:	1871, MW-11-W-121016, 10/16/2012 10:41:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		4.4	mg/L	0.88	EPA-300.0	ND	A01	1
Sulfate		53	mg/L	2.0	EPA-300.0	ND	A01	1
Iron (II) Species		ND	ug/L	100	SM-3500-FeD	ND		2

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/17/12	10/17/12 20:39	LS1	IC5	2	BVJ1478	
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453	

5900 Hollis St. Suite A Emeryville, CA 94608

Reported:

10/30/2012 8:20

Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	219981-03	Client Sampl	e Name:	1871, MW-6-W-121	016, 10/16/2012	11:19:00AM	_	_
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		1.1	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surr	ogate)	109	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		93.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Sur	rogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 16:57	JMC	MS-V12	1	BVJ1512	

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5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-03	Client Sample	e Name:	1871, MW-6-	W-121016, 10/16/2012	11:19:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane		0.0097	mg/L	0.0010	RSK-175M	ND		1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 07:55	JMC	GC-V1	1	BVJ1639	

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A

Emeryville, CA 94608

BCL Sample ID:	1219981-03	Client Sampl	e Name:	1871, MW-6-V	V-121016, 10/16/2012 1	11:19:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate		22	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		ND	ug/L	100	SM-3500-FeD	ND		2

			Run			QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-300.0	10/17/12	10/17/12 20:53	LS1	IC5	1	BVJ1478
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871

Project Number: 351644
Project Manager: Tina Hariu

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	219981-04	Client Sampl	e Name:	1871, MW-8-W-121	016, 10/16/2012	10:53:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		0.74	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surro	ogate)	103	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		102	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surr	ogate)	85.7	%	80 - 120 (LCL - UCL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 16:39	JMC	MS-V12	1	BVJ1512	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871 Project Number: 351644

Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-04	Client Sampl	e Name:	1871, MW-8-\	W-121016, 10/16/2012	10:53:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane	_	ND	mg/L	0.0010	RSK-175M	ND	_	1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 07:52	JMC	GC-V1	1	BVJ1639	

5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

BCL Sample ID:	1219981-04	Client Sampl	e Name:	1871, MW-8-V	1871, MW-8-W-121016, 10/16/2012 10:53:00AM					
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #		
Nitrate as NO3		3.2	mg/L	0.44	EPA-300.0	ND		1		
Sulfate		55	mg/L	1.0	EPA-300.0	ND		1		
Iron (II) Species		ND	ug/L	100	SM-3500-FeD	ND		2		

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/17/12	10/17/12 21:07	LS1	IC5	1	BVJ1478	
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453	

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1	219981-05	Client Sampl	e Name:	1871, MW-7-W-121	016, 10/16/2012	11:40:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		2.6	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surr	ogate)	109	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		97.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Sur	rogate)	100	%	80 - 120 (LCL - UCL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 16:22	JMC	MS-V12	1	BVJ1512	

5900 Hollis St. Suite A Emeryville, CA 94608

10/30/2012 8:20 Reported:

Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-05	Client Sampl	e Name:	1871, MW-7-V	V-121016, 10/16/2012	11:40:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane		0.0019	mg/L	0.0010	RSK-175M	ND		1

			Run				QC		
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	RSK-175M	10/19/12	10/22/12 07:48	JMC	GC-V1	1	BVJ1639		

5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871 roject Number: 351644

Project Number: 351644 Project Manager: Tina Hariu

BCL Sample ID:	1219981-05	Client Sampl	e Name:	1871, MW-7-W-121016, 10/16/2012 11:40:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate		15	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		120	ug/L	100	SM-3500-FeD	ND		2

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/17/12	10/17/12 21:22	LS1	IC5	1	BVJ1478	
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453	

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	19981-06	Client Sampl	e Name:	1871, MW-9-W-121	016, 10/16/2012	10:55:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260B	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260B	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260B	ND		1
Methyl t-butyl ether		72	ug/L	0.50	EPA-8260B	ND		1
Toluene		ND	ug/L	0.50	EPA-8260B	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260B	ND		1
t-Butyl alcohol		13	ug/L	10	EPA-8260B	ND		1
Ethanol		ND	ug/L	250	EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons		70	ug/L	50	Luft-GC/MS	ND	A90	1
1,2-Dichloroethane-d4 (Surrog	gate)	111	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		96.1	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surro	gate)	97.5	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run							QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 16:04	JMC	MS-V12	1	BVJ1512	

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-06	Client Sampl	e Name:	1871, MW-9-W	/-121016, 10/16/2012	10:55:00AM		
Constituent		Result	Units	PQL	Method	Lab Quals	Run #	
Methane	<u> </u>	ND	mg/L	0.0010	RSK-175M	ND		1

	Run							
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 07:43	JMC	GC-V1	1	BVJ1639	



5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

BCL Sample ID:	1219981-06	Client Sampl	e Name:	1871, MW-9-W-121016, 10/16/2012 10:55:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		0.62	mg/L	0.44	EPA-300.0	ND		1
Sulfate		40	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		150	ug/L	100	SM-3500-FeD	ND		2

			QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-300.0	10/17/12	10/17/12 21:36	LS1	IC5	1	BVJ1478
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453

Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 12	19981-07	Client Sampl	e Name:	1871, MW-1-W-121	016, 10/16/2012	11:50:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene		ND	ug/L	1.0	EPA-8260B	ND	A01	1
1,2-Dibromoethane		ND	ug/L	1.0	EPA-8260B	ND	A01	1
1,2-Dichloroethane		ND	ug/L	1.0	EPA-8260B	ND	A01	1
Ethylbenzene		7.5	ug/L	1.0	EPA-8260B	ND	A01	1
Methyl t-butyl ether		ND	ug/L	1.0	EPA-8260B	ND	A01	1
Toluene		ND	ug/L	1.0	EPA-8260B	ND	A01	1
Total Xylenes		ND	ug/L	2.0	EPA-8260B	ND	A01	1
t-Butyl alcohol		30	ug/L	20	EPA-8260B	ND	A01	1
Ethanol		ND	ug/L	500	EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons		290	ug/L	100	Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surro	gate)	103	%	75 - 125 (LCL - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		95.8	%	80 - 120 (LCL - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surre	ogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B			1

Run							QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	10/18/12	10/18/12 15:37	JMC	MS-V12	2	BVJ1512	

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Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

BCL Sample ID:	1219981-07	Client Sample	e Name:	1871, MW-1-	1871, MW-1-W-121016, 10/16/2012 11:50:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #	
Methane		0.0018	mg/L	0.0010	RSK-175M	ND		1	

	Run							
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/19/12	10/22/12 07:29	JMC	GC-V1	1	BVJ1639	

5900 Hollis St. Suite A Emeryville, CA 94608

10/30/2012 8:20 Reported:

Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

BCL Sample ID:	1219981-07	Client Sampl	e Name:	1871, MW-1	-W-121016, 10/16/2012 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Nitrate as NO3		0.44	mg/L	0.44	EPA-300.0	ND		1
Sulfate		29	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		120	ug/L	100	SM-3500-FeD	ND		2

				QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-300.0	10/17/12	10/17/12 21:51	LS1	IC5	1	BVJ1478
2	SM-3500-FeD	10/17/12	10/17/12 08:56	TDC	KONE-1	1	BVJ1453

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVJ1512						
Benzene	BVJ1512-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BVJ1512-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BVJ1512-BLK1	ND	ug/L	0.50		
Ethylbenzene	BVJ1512-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BVJ1512-BLK1	ND	ug/L	0.50		
Toluene	BVJ1512-BLK1	ND	ug/L	0.50		
Total Xylenes	BVJ1512-BLK1	ND	ug/L	1.0		
t-Butyl alcohol	BVJ1512-BLK1	ND	ug/L	10		
Ethanol	BVJ1512-BLK1	ND	ug/L	250		
Total Purgeable Petroleum Hydrocarbons	BVJ1512-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BVJ1512-BLK1	108	%	75 - 12	25 (LCL - UCL)	
Toluene-d8 (Surrogate)	BVJ1512-BLK1	98.9	%	80 - 12	20 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BVJ1512-BLK1	96.1	%	80 - 12	20 (LCL - UCL)	

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Project: 1871 Project Number: 351644

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

								Control I	imits	
0	00.0	-	D 14	Spike	11	Percent	DDD	Percent		Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: BVJ1512										
Benzene	BVJ1512-BS1	LCS	31.020	25.000	ug/L	124		70 - 130		
Toluene	BVJ1512-BS1	LCS	27.650	25.000	ug/L	111		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BVJ1512-BS1	LCS	10.480	10.000	ug/L	105		75 - 125		
Toluene-d8 (Surrogate)	BVJ1512-BS1	LCS	9.3700	10.000	ug/L	93.7		80 - 120		
4-Bromofluorobenzene (Surrogate)	BVJ1512-BS1	LCS	10.850	10.000	ug/L	108		80 - 120		

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Project: 1871

Project Number: 351644 Project Manager: Tina Hariu

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

			·			·			Cont		
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BVJ1512	Use	d client samp	ole: N								
Benzene	— MS	1219714-06	ND	30.360	25.000	ug/L		121		70 - 130	
	MSD	1219714-06	ND	30.890	25.000	ug/L	1.7	124	20	70 - 130	
Toluene	MS	1219714-06	ND	25.200	25.000	ug/L		101		70 - 130	
	MSD	1219714-06	ND	28.810	25.000	ug/L	13.4	115	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1219714-06	ND	10.280	10.000	ug/L		103		75 - 125	
	MSD	1219714-06	ND	10.240	10.000	ug/L	0.4	102		75 - 125	
Toluene-d8 (Surrogate)	MS	1219714-06	ND	9.4400	10.000	ug/L		94.4		80 - 120	
	MSD	1219714-06	ND	10.200	10.000	ug/L	7.7	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1219714-06	ND	10.520	10.000	ug/L		105		80 - 120	
	MSD	1219714-06	ND	10.580	10.000	ug/L	0.6	106		80 - 120	



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Project: 1871

Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVJ1639						
Methane	BVJ1639-BLK1	ND	mg/L	0.0010		



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Project: 1871

Project Number: 351644
Project Manager: Tina Hariu

Gas Testing in Water

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Control L Percent Recovery	<u>imits</u>	Lab Quals
QC Batch ID: BVJ1639										
Methane	BVJ1639-BS1 BVJ1639-BSD1	LCS LCSD	0.011166 0.010783	0.010843 0.010843	mg/L mg/L	103 99.4	3.5	80 - 120 80 - 120	20	

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Project: 1871

Project Number: 351644
Project Manager: Tina Hariu

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BVJ1453						
Iron (II) Species	BVJ1453-BLK1	ND	ug/L	100		
QC Batch ID: BVJ1478						
Nitrate as NO3	BVJ1478-BLK1	ND	mg/L	0.44		
Sulfate	BVJ1478-BLK1	ND	mg/L	1.0		

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Reported: 10/30/2012 8:20

Project: 1871
Project Number: 351644
Project Manager: Tina Hariu

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
QC Batch ID: BVJ1453										
Iron (II) Species	BVJ1453-BS1	LCS	2468.3	2500.0	ug/L	98.7		90 - 110		
QC Batch ID: BVJ1478										
Nitrate as NO3	BVJ1478-BS1	LCS	21.837	22.134	mg/L	98.7		90 - 110		
Sulfate	BVJ1478-BS1	LCS	102.28	100.00	mg/L	102		90 - 110		

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Project: 1871 t Number: 351644

Project Number: 351644
Project Manager: Tina Hariu

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

									Con	trol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BVJ1453	Use	d client samp	le: Y - Des	cription: MV	V-10-W-121	016, 10/16	/2012 1	10:30			
Iron (II) Species	DUP	1219981-01	ND	ND		ug/L			10		
QC Batch ID: BVJ1478	Use	d client samp	le: Y - Des	cription: MV	V-10-W-121	016, 10/16	/2012 1	10:30			
Nitrate as NO3	DUP	1219981-01	14.976	14.847		mg/L	0.9		10		
	MS	1219981-01	14.976	37.315	22.358	mg/L		99.9		80 - 120	
	MSD	1219981-01	14.976	38.509	22.358	mg/L	3.1	105	10	80 - 120	
Sulfate	DUP	1219981-01	29.306	29.388		mg/L	0.3		10		
	MS	1219981-01	29.306	137.50	101.01	mg/L		107		80 - 120	
	MSD	1219981-01	29.306	137.96	101.01	mg/L	0.3	108	10	80 - 120	

Reported: 10/30/2012 8:20

Project: 1871 Project Number: 351644 Project Manager: Tina Hariu

Notes And Definitions

5900 Hollis St. Suite A Emeryville, CA 94608

MDL Method Detection Limit

Conestoga-Rovers & Associates

ND Analyte Not Detected at or above the reporting limit

PQL Practical Quantitation Limit RPD Relative Percent Difference

PQL's and MDL's are raised due to sample dilution. A01

TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE. A90

ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

TABLE KEY

STANDARD ABBREVIATIONS

-- e not analyzed, measured, or collected

LPH = liquid-phase hydrocarbons

μg/l = micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l = milligrams per liter (approx. equivalent to parts per million, ppm)

ND< = not detected at or above laboratory detection limit TOC = top of casing (surveyed reference elevation)

D = duplicate P = no-purge sample

ANALYTES

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether

PCB = polychlorinated biphenyls

PCE = tetrachloroethene

TBA = tertiary butyl alcohol
TCA = trichloroethane
TCE = trichloroethene

TPH-G = total petroleum hydrocarbons with gasoline distinction

TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B

TPH-D = total petroleum hydrocarbons with diesel distinction

TRPH = total recoverable petroleum hydrocarbons

TAME = tertiary amyl methyl ether

1,2-DCA = 1,2-dichloroethane (same as EDC, ethylene dichloride)

NOTES

- 1. Elevations are in feet above mean sea level. Depths are in feet below surveyed top-of-casing.
- 2. Groundwater elevations for wells with LPH are calculated as: <u>Surface Elevation Measured Depth to Water + (Dp x LPH Thickness)</u>, where Dp is the density of the LPH, if known. A value of 0.75 is used for gasoline and when the density is not known. A value of 0.83 is used for diesel.
- 3. Wells with LPH are generally not sampled for laboratory analysis (see General Field Procedures).
- 4. Comments shown on tables are general. Additional explanations may be included in field notes and laboratory reports, both of which are included as part of this report.
- 5. A "J" flag indicates that a reported analytical result is an estimated concentration value between the method detection limit (MDL) and the practical quantification limit (PQL) specified by the laboratory.
- 6. Other laboratory flags (qualifiers) may have been reported. See the official laboratory report (attached) for a complete list of laboratory flags.
- 7. Concentration graphs based on tables (presented following Figures) show non-detect results prior to the Second Quarter 2000 plotted at fixed values for graphical display. Non-detect results reported since that time are plotted at reporting limits stated in the official laboratory report.
- 8. Prior to the 1st quarter 2010, the word "monitor" was used in table comments interchangeably with the word "gauge". Starting in the 1st quarter 2010, the word "monitor" is used to include both "gauge" and "sample".

REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 1871 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

Contents of Tables 1 and 2 Site: 76 Station 1871

Current	Event												
Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 1a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	Post-purge Dissolved Oxygen	Post-purge ORP						
Historic	Data												
Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 2a	Well/ Date	TPH-D	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	pH (lab)	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP
Table 2b	Well/ Date	Post-purge ORP											

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
May 27, 2011
76 Station 1871

		D 4	· Y DYT		01									Comments
Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/I)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	_(μg/l)	
MW-1			(Scre	en Interva	l in feet: 9.5	-24.5)		*						
5/27/201	11 90.21	13.75	0.00	76.46	1.08		1500	3.2	ND<2.5	86	14		10	
MW-6 5/27/201	11 82.51	8.76	(Scree	en Interva 73.75	l in feet: 5.0	-25.0)	52	ND<0.50	ND<0.50	ND<0.50	ND<1.0		6.0	
MW-7 5/27/201	11 83.80	8.73	(Scree	en Interva 75.07	l in feet: 5.0 4.53	-25.0)	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.2	
MW-8 5/27/201	11 84.86	8.12	(Scree		l in feet: 5.0 2.67	-25.0) 	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.1	
MW-9 5/27/201	11 85.18	15.37	(Scree	en Interva 69.81	l in feet:) 1.43		59	ND<0.50	ND<0.50	ND<0.50	ND<1.0		70	
MW-10 5/27/201	11 78.18	6.62	(Scree 0.00	en Interva 71.56	l in feet:) 1.02	·	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
MW-11 5/27/201	11 80.44	15.60	(Scree	en Interva 64.84	l in feet:) -0.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	



Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 1871

Date Sampled		Ethanol	Ethylene- dibromide	1,2-DCA	Post-purge Dissolved	Post-purge	
	TBA (μg/l)	(8260B) (μg/l)	(EDB) (μg/l)	(EDC) (μg/l)	Oxygen (mg/l)	ORP (mV)	
MW-1 5/27/2011	ND<50	ND<1200	ND<2.5	ND<2.5	0.37	-19	·
MW-6 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	0.61	199	
MW-7 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	0.48	145	
MW-8 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	0.48	209	
MW-9 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	1.51	95	
MW-10 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	1.52	192	
MW-11 5/27/2011	ND<10	ND<250	ND<0.50	ND<0.50	3.11	205	



Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled	TOC Elevati	ion	Depth to Water (feet)	LPH Thickness	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (μg/l)	TPH-G (GC/MS) (μg/l)	Benzene (µg/l)	Toluene (μg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (μg/l)	MTBE (8260B) (μg/l)		Comments	
MW-1			· /			in feet: 9.5						*****				·	
11/3/19	992 -						260000		2300	4600	3700	17000					
1/25/19	993 81	1.18		0.00			120000		2100	4600	4900	22000					
4/29/19	993 81	1.18	13.71	0.00	67.47	·	100000		850	2000	4300	19000					
7/16/19	993 81	1.18	14.51	0.00	66.67	-0.80	29000		590	560	980	4200					
10/19/1	993 81	1.18	15.20	0.00	65.98	-0.69	67000		1400	2600	2900	5000					
1/20/19	994 81	1.18	15.17	0.00	66.01	0.03	92000		1200	3000	3400	17000					
4/13/19	994 81	1.18	14.44	0.00	66.74	0.73	51000		1000	2600	3200	15000					
7/13/19	994 81	1.18	14.88	0.00	66.30	-0.44	35000		550	150	1400	5700					
10/10/1	994 81	1.18	15.55	0.00	65.63	-0.67	52000		1000	810	3300	12000					
1/10/19	995 81	1.18	12.44	0.00	68.74	3.11	810		16	18	59	250					•
4/17/19	995 81	1.18	12.68	0.00	68.50	-0.24	48000		880	530	2500	11000		·			
7/24/19	995 81	1.18	13.97	0.00	67.21	-1.29	48000		1500	420	2700	9700	, 				
10/23/1	995. 81	1.18	14.85	0.00	66.33	-0.88	47000		780	210	2100	11000	270				
1/18/19	996 81	1.18	14.21	0.00	66.97	0.64	30000		1500	500	3500	13000	2400				
4/18/19	996 86	5.24	13.40	0.00	72.84	5.87	66000	·	2700	2200	3100	13000	57000				
7/24/19	996 86	5.24	14.15	0.00	72.09	-0.75	5600		2100	ND	160	160	24000				
10/24/1	996 86	5.24	14.85	0.00	71.39	-0.70	110000	- -	7500	8000	3300	14000	58000				
1/28/19	997 86	5.24	11.25	0.00	74.99	3.60	94000		7700	19000	3100	15000	120000				
7/29/19	997 86	5.24	14.67	0.00	71.57	-3.42	ND		ND	ND	ND	ND	70000				
1/14/19	998 86	5.24	12.27	0.00	73.97	2.40	85000		6100	10000	3000	17000	110000				
7/1/19	98 86	5.24	14.32	0.00	71.92	-2.05	110000		8700	12000	2700	15000	110000				
6/18/19	999 86	5.24	13.93	0.00	72.31	0.39	49000		6900	6500	380	12000	72000	47000			



Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date	TOC	Depth to	LPH	Ground-	Change											Comments
Sampled		Water	Thickness	water	in	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE			
				Elevation	Elevation	8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)			
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	$(\mu g/l)$	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)			<u>. </u>
MW-1	continued															
1/21/200		15.05	0.00	71.19	-1.12	63700		5520	2000	2640	13100	57100				
7/10/200	00 86.24	13.97	0.00	72.27	1.08	67800	- ·	-9910	4120	3330	16100	67400	54000			
1/4/200	1 86.24	14.92	0.00	71.32	-0.95	63900		6270	784	2670	12900		38100			
7/16/200	01 86.24	14.32	0.00	71.92	0.60	66000		7100	330	2300	9800	36000	41000			
1/31/200	02 86.99	13.54	0.00	73.45	1.53	42000		5800	1800	2000	8200	26000	26000			
4/11/200	02 86.99	13.64	0.00	73.35	-0.10	58000	· 	2900	1200	1800	10000	19000				
7/11/200	02 86.99	13.96	0.00	73.03	-0.32	,	5900	330	ND<10	230	600		3400			
10/15/20	02 86.99	14.71	0.00	72.28	-0.75		470	16	ND<2.5	14	16	<u></u> .	390			
1/14/200	03 86.99	12.77	0.00	74.22	1.94		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		49			
4/16/200	03 86.99	13.18	0.00	73.81	-0.41		510	57	0.62	29	61		160			
7/16/200		14.26	0.00	72.73	-1.08		27000	260	. 23	730	3200	'	1200			
10/2/200		14.95	0.00	72.04	-0.69		45000	1400	32	2900	7600		3200			
1/7/200				74.69	2.65		34000	690	41	1600	5200	;	2600			
4/2/200				73.81	-0.88		350	1.8	ND<0.50	6.2	30		19			
7/29/20				72.38	-1.43		41000	550	ND<20	2000	6100		1200			
11/24/20		14.98		72.01	-0.37		55000	910	28	3100	11000		1600			
1/24/20				74.01	2.00		24000	240	ND<20	1100	3600	'	1800			٠.
6/23/20				73.60	-0.41		24000	140	ND<25	1100	2900		600			
9/28/20				72.36			8200	22	0.97	290	660		320			
12/20/20				75.57	3.21		10000	17	29	180	840		2400			
3/10/20				76.01	0.44		10000	35	ND<5.0	470	1300		960			
6/23/20				75.14		<u></u> ·	11000	110	ND<5.0	610	1600		780		•	
9/27/20				72.88			8500	22	ND<10	270	740	. 	460	•		
	00.77	11		• •				Page 2	2 of 16							ATDA
1871																CITO

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

	Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPH-G	_		Ethyl-	Total	MTBE	MTBE	Comments
		(C4)	(f4)	(f ₂₋₄)			8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes (μg/l)	(8021B) (μg/l)	(8260B) (μg/l)	
-		(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/ι)	(μg/1)	(μg/1)	
	MW-1 12/22/200			5 0.00	73.33	0.45		7300	35	ND<5.0	370	850		210	
	3/23/200				73.74	0.41		8800	28	ND<2.5	440	910		170	
	6/29/200				73.52	-0.22		6300	16	ND<2.5	300	650		50	
	9/28/200				73.07	-0.45		ND<50	ND<0.50	ND<0.50		ND<0.50	·	1.2	
	12/17/200				72.42	-0.65		4700	ND<5.0	ND<5.0	71	160		18	
	3/25/200				73.43	1.01		7400	28	ND<2.5	430	540		170	
	6/12/200				72.92	-0.51	: 	4900	6.4	ND<2.5	170	280		16	
	9/25/200			0.00	72.44	-0.48		2200	2.1	ND<0.50	72	110		11	
	12/30/200				72.83	0.39		3200	2.5	ND<0.50	100	150	·	8.3	
	3/24/200			6 0.00	74.23	1.40		3500	6.8	ND<0.50	140	140		28	
	6/23/200			3 0.00	73.11	-1.12		740	ND<2.5	ND<2.5	17	12		7.5	
	12/16/20				72.67	-0.44		4600	10	ND<1.0	270	140		52	
	4/14/201	10 86.9	99 12.12	0.00	74.87	2.20		1500	4.8	ND<1.0	100	36		20	
	10/13/20	10 90.2	21 14.83	0.00	75.38	0.51		4600	3.0	ND<0.50	180	73		5.6	
	5/27/201	11 90.2	21 13.7:	5 0.00	76.46	1.08		1500	3.2	ND<2.5	86	14		10	· •
ו	MW-2			(Ser	een Interva	ıl in feet:)				· ·				ě	
,	11/3/199	92 76.0	51				140		2.2	ND	ND	2.0			
	1/25/199	93 76.0	51			·	2100		56	1.1	90	140			
	4/29/199	93 76.0	51 9.73	0.00	66.88		1500		290	ND	33	11			
	7/16/199	93 76.0	51 10.1	7 0.00	66.44	-0.44	510		17	0.60	3.2	2.5		 .	
	10/19/19	93 76.0	51 11.13	0.00	65.43	-1.01	670		24	1.1	7.7	23			
	1/20/199	94 76.0	51 11.12	2 0.00	65.49	0.06	820		97	ND	12	ND			
	4/13/199	94 76.0	51 10.13	0.00	66.49	1.00	550		71	ND	5.1	1.3			
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

	Date	TOC	Depth to	LPH	Ground-	Change										Comments
	Sampled	Elevation	Water	Thickness	water	in Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE		
							8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)		
		(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	· ·	-
	MW-2	continued														
١.	7/13/19	94 76.61	10.86		65.75	-0.74	2000		490	ND	17	13				
	10/10/19	994 76.61	11.48		65.13	-0.62	2300		340	ND	25	ND				
	1/10/19	95 76.61	8.71	0.00	67.90	2.77	850		3.8	ND	8.5	1.3		- -		
	4/17/19	95 76.61	8.90	0.00	67.71	-0.19	1300		4.7	ND	8.3	1.2				
	7/24/19	95 76.61	9.94	0.00	66.67	-1.04	960	· 	20	ND	4.2	6.2				
	10/23/19	95 76.61	10.70	0.00	65.91	-0.76	ND		ND	ND	ND	ND	19			
	1/18/19	96 76.61	10.11	0.00	66.50	0.59	900		300	86	7.6	18	4300			
	4/18/19	96 81.66	9.27	0.00	72.39	5.89	18000		3600	680	890	4100	19000			
	7/24/19	96 81.66	10.02	0.00	71.64	-0.75	100000		13000	21000	2700	16000	120000			
	10/24/19	996 81.66	10.78	0.00	70.88	-0.76	800	,	110	17	11	20	20000			
	1/28/19	97 81.66	7.70	0.00	73.96	3.08	45000		2400	2900	2000	7600	29000	_.		
	7/29/19	97 81.66	10.28	0.00	71.38	-2.58	ND		1.2	0.72	0.63	0.62	17000			
	1/14/19	98 81.66	8.63	0.00	73.03	1.65	14000		1000	150	790	3300	23000			
	7/1/199	81.66	9.53	0.00	72.13	-0.90	2700		100	ND	180	78	7100			
	6/18/19	99										. 				Well was destroyed
	MW-3			(Scre	en Interva	l in feet:)										
	11/3/19	92 77.48					2100		120	15	38	200				
	1/25/19	93 77.48					2300		80	1	55	52				
	4/29/19	93 77.48	11.37	0.00	66.11		4500		1700	ND	200	140				
	7/16/19	93 77.48	12.09	0.00	65.39	-0.72	4000		1100	28	52	70				
	10/19/19	993 77.48	12.69	0.00	64.79	-0.60	3800		42	ND	50	56				
	1/20/19	94 77.48	12.65	0.00	64.83	0.04	4200		11	ND	21	15				
	4/13/19	94 77.48	12.02	0.00	65.46	0.63	4200		210	ND	36	53				
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

	Sampled Ele	evation		LPH Thickness	Ground- water Elevation		TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comment	ts
-	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)		
	MW-3 co			0.00	65.00	0.44	1000		16	16	NID.	21				
	7/13/1994	77.48	12.46		65.02	-0.44	1800		16	16 ND	ND 12	ND				
	10/10/1994		12.98	0.00	64.50	-0.52	4300		11 4.6	ND	3.5	2.1				
	1/10/1995	77.48	10.42	0.00	67.06	2.56	310					450	 .			
	4/17/1995	77.48	10.42	0.00	67.06	0.00	7800		ND	4.6	300	16				
	7/24/1995	77.48	11.76		65.72	-1.34	3200		170	ND	22		4500			
	10/23/1995		12.50		64.98	-0.74	3900		55	ND	19	11	5500			
	1/18/1996	77.48	11.79	0.00	65.69	0.71	2200		270	33	26	18			•	
	4/18/1996	82.55	11.30		71.25	5.56	6000		1800	ND	100	230	48000			
	7/24/1996	82.55	12.17	0.00	70.38	-0.87	ND		2500	ND	ND	ND	71000			
	10/24/1996		12.65	0.00	69.90	-0.48	3800		660	ND	15	ND	65000			
	1/28/1997	82.55	9.50	0.00	73.05	3.15	4400		250	13	87	47	54000			
	7/29/1997	82.55	11.99	0.00	70.56	-2.49	ND	, 	3500	ND	220	ND	75000			
	1/14/1998	82.55	10.30	0.00	72.25	1.69	ND	,	430	ND	100	380	37000			
	7/1/1998	82.55	11.70	0.00	70.85	-1.40	ND		430	ND	ND	ND	45000			
	6/18/1999							, 							Well was desi	troyed
	MW-4			(Scre	en Interval	in feet:)										
	4/18/1996	82.04	9.83	0.00	72.21		ND		630	ND	ND	ND	18000			
	7/24/1996	82.04	10.47	0.00	71.57	-0.64	ND		ND	ND	ND	5.2	3900			
	10/24/1996	82.04	11.14	0.00	70,90	-0.67	ND		ND	ND	ND	ND	6300			
	1/28/1997	82.04	7.94	0.00	74.10	3.20	1200	. 	490	ND	17	6.8	16000			
	7/29/1997	82.04	10.86	0.00	71.18	-2.92	50		1.5	0.61	0.73	0.78	15000			
	1/14/1998	82.04	8.73	0.00	73.31	2.13	ND		ND	ND	ND	ND	5200			
	7/1/1998	82.04	10.51	0.00	71.53	-1.78	ND		ND	ND	ND	ND	640		•	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	·	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	$(\mu g/l)$	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)		
MW-4 6/18/19	continued		<u></u> .		· <u>.</u> .						••				Well was destroyed
MW-5			(Scre		ıl in feet: –)										
4/18/19	96 81.8	0 9.65	0.00	72.15	·	31000		5500	1400	1700	8100	66000			
7/24/19	96 81.8	0 10.80	0.00	71.00	-1.15	32000		6400	ND	1600	6100	120000			
10/24/19	996 81.8	0 11.40	0.00	70.40	-0.60	17000	, 	6900	ND	970	130	84000			
1/28/19	97 81.8	0 7.76	0.00	74.04	3.64	19000		6100	62	82	310	160000			
7/29/19	97 81.8	0 11.58	0.00	70.22	-3.82	ND.		ND	ND	ND	NĎ	71000			•
1/14/19	98 81.8	0 9.08	0.00	72.72	2.50	ND		3600	ND	ND	ND	80000			
7/1/199	81.8	0 11.25	0.00	70.55	-2.17	6400		2100	21	120	330	61000			
6/18/19	99 81.8	0													Well was destroyed
MW-6			(Scre	een Interva	ıl in feet: 5.0	0-25.0)									
6/18/19	99 78.9	1 9.30	0.00	69.61		2100		21	29	ND	47	97000	71000		
1/21/20	78.9	1 9.37	0.00	69.54	-0.07	1880		143	31.2	106	196	41200	48800		
7/10/20	000 78.9	1 8.94	0.00	69.97	0.43	5710		869	209	301	1430	22200	19500		
1/4/200	78.9	1 9.21	0.00	69.70	-0.27	ND	·	ND	ND	ND	ND		9510	•	
7/16/20	001 78.9	1 9.42	0.00	69.49	-0.21	4800		200	21	150	440	29000	34000		
1/31/20			0.00	70.41	0.92	12000		250	92	500	1500	26000	31000		
4/11/20				70.59	0.18	3600		42	32	39	280	120000			
7/11/20				69.97	-0.62		12000	ND<100	ND<100	ND<100	ND<200		15000		,
10/15/20				69.71	-0.26		1300	ND<10	ND<10	ND<10	ND<20		3200		
1/14/20							ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		120		
4/16/20							270	ND<0.50	ND<0.50	ND<0.50	1.3		15		
7/16/20							290	39	0.60	ND<0.50	15		150		
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled Ele		Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)		Comment	S
. (feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	 		
 MW-6 co	ntinued															
10/2/2003	79.67	9.92	0.00	69.75	-0.49	· , ,	200	ND<1.0	ND<1.0	ND<1.0	ND<2.0		220			
1/7/2004	79.67	8.08	0.00	71.59	1.84		140	2.4	ND<1.0	8.6	13		86			
4/2/2004	79.67	8.63	0.00	71.04	-0.55		3200	ND<20	ND<20	ND<20	ND<40		5900			
7/29/2004	79.67	9.75	0.00	69.92	-1.12		170	ND<1.0	ND<1.0	ND<1.0	ND<2.0	·	160			
11/24/2004	79.67	9.59	0.00	70.08	0.16		80	ND<0.50	ND<0.50	ND<0.50	ND<1.0		45			
1/24/2005	79.67	8.33	0.00	71.34	1.26		100	1.1	ND<0.50	0.60	1.1		40			
6/23/2005	79.67	8.33	0.00	71.34	0.00		230	0.52	ND<0.50	3.6	9.6		200			
9/28/2005	79.67	9.56	0.00	70.11	-1.23	· 	500	ND<0.50	ND<0.50	ND<0.50	1.2	· ·	980			
12/20/2005	79.67	7.82	0.00	71.85	1.74		640	0.79	ND<0.50	0.68	2.3		2400			
3/10/2006	79.67	6.83	0.00	72.84	0.99		970	1.2	ND<0.50	1.3	5.0		3600			
6/23/2006	79.67	8.13	0.00	71.54	-1.30		1700	ND<12	ND<12	ND<12	ND<25		1100		* 4	
9/27/2006	79.67	9.44	0.00	70.23	-1.31		ND<1200	ND<12	ND<12	ND<12	ND<12		620			
12/22/2006	79.67	8.60	0.00	71.07	0.84	 ,	9100	ND<10	ND<10	ND<10	ND<10		600			
3/23/2007	79.67	8.39	0.00	71.28	0.21	·	330	ND<0.50	ND<0.50	0.82	ND<0.50	-	680		£	
6/29/2007	79.67	9.02	0.00	70.65	-0.63		180	ND<0.50	ND<0.50	ND<0.50	ND<0.50		290			
9/28/2007	79.67	9.65	0.00	70.02	-0.63		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50			
12/17/2007	79.67	9.62	0.00	70.05	0.03		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		21			
3/25/2008	79.67	8.63	0.00	71.04	0.99		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		12			
6/12/2008	79.67	9.47	0.00	70.20	-0.84		84	ND<0.50	ND<0.50	ND<0.50	ND<1.0		17			
9/25/2008	79.67	9.95	0.00	69.72	-0.48		66	ND<0.50	ND<0.50	ND<0.50	ND<1.0		15			
12/30/2008	79.67	8.96	0.00	70.71	0.99		55	ND<0.50	ND<0.50	ND<0.50	ND<1.0		12			
3/24/2009	79.67	8.02	0.00	71.65	0.94		73	ND<0.50	ND<0.50	ND<0.50	ND<1.0		10			
6/23/2009	79.67	9.33	0.00	70.34	-1.31		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.0			
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date	TO	OC :	Depth to	LPH	Ground-	Change	•								Comments
Sample		ation	Water	Thickness	water	in	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
					Elevation	Elevation	8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(fe	eet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	$(\mu g/l)$	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	
MW-	6 cont	timued	· ·					•							
_		79.67	9.39	0.00	70.28	-0.06		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.7	
4/14/	2010	79.67	8.13	0.00	71.54	1.26		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.1	
10/13	/2010	82.51	9.88	0.00	72.63	1.09	,	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.0	
5/27/	2011	82.51	8.76	0.00	73.75	1.12	:	52	ND<0.50	ND<0.50	ND<0.50	ND<1.0		6.0	
MW-7				(Scre	en Interva	l in feet: 5.0	-25.0)								
6/18/	1999	79.92	8.70	0.00	71.22		ND		ND	ND	ND	ND	16000	13000	
1/21/	2000	79.92	9.30	0.00	70.62	-0.60	ND		ND	ND	ND	ND	12300	18200	
7/10/	2000	79.92	8.72	0.00	71.20	0.58	ND		ND	ND	ND	ND	16900	13800	
1/4/2		79.92	9.17	0.00	70.75	-0.45	ND	·	ND	ND	ND	0.719		37.3	
7/16/		79.92	9.02	0.00	70.90	0.15	ND		ND	ND	ND	ND	7200	4700	
	2002	79.92	7.91	0.00	72.01	1.11	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	8900	9900	
	2002	80.67											-		Inaccessible
	2002	80.67									'				Inaccessible
	/2002	80.67	9.81	0.00	70.86			ND<5000	ND<50	ND<50	ND<50	ND<100		12000	
	/2003	80.67	7.89	0.00	72.78	1.92		ND<25000	ND<250	ND<250	ND<250	ND<500		33000	
	/2003	80.67	8.04	0.00	72.63	-0.15		ND<25000	ND<250	ND<250	ND<250	ND<500		37000	
	2003	80.67	9.19	0.00	71.48	-1.15		25000	ND<250	ND<250	ND<250	ND<500		38000	·
	/2003	80.67	9.89	0.00	70.78	-0.70	·	17000	ND<100	ND<100	ND<100	ND<200		22000	
	2004	80.67	7.27	0.00	73,40	2.62		ND<20000	ND<200	460	ND<200	540		19000	
	2004	80.67	8.09	0.00	72.58	-0.82		3400	ND<20	ND<20	ND<20	ND<40	 .	5100	
	/2004	80.67	9.40	0.00	71.27	-1.31		7400	ND<50	ND<50	ND<50	ND<100		11000	
	/2004	80.67	9.65	0.00	71.02	-0.25		6200	ND<50	ND<50	ND<50	ND<100		6800	
	/2004	80.67	7.92	0.00	72.75	1.73		ND<5000		ND<0.50	ND<0.50	ND<1.0		13000	
		50.07	2	,						8 of 16					(A) TRC
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

	Date	TOC	Depth to	LPH	Ground-	Change								•	Comments
	Sampled	Elevation	Water	Thickness	water	in Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
						Elevation	8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
_		(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l) ⁻	(μg/l)	 						
		continued												10000	
	6/23/20	05 80.67	8.56	0.00	72.11	-0.64		8700	ND<25	ND<25	ND<25	ND<50		12000	
	9/28/20	05 80.67	9.37	0.00	71.30	-0.81		1200	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5700	
	12/20/20	05 80.67	6.31	0.00	74.36	3.06		1100	0.90	ND<0.50	24	37		8200	
	3/10/20	06 80.67	5.84	0.00	74.83	0.47		1200	24	ND<0.50	3.6	ND<1.0		4700	
	6/23/20	06 80.67	6.83	0.00	73.84	-0.99		1800	21	ND<12	ND<12	ND<25		1500	
	9/27/20	06 80.67	8.95	0.00	71.72	-2.12		ND<1200	ND<12	ND<12	ND<12	ND<12		350	
	12/22/20	06 80.67	8.35	0.00	72.32	0.60	· :	24000	ND<50	ND<50	ND<50	ND<50		190	
	3/23/20	07 80.67	8.01	0.00	72.66	0.34		85	ND<0.50	ND<0.50	ND<0.50	ND<0.50		92	
	6/29/20	07 80.67			, 	 :									Car parked over well
	9/28/20	07 80.67	9.05	0.00	71.62			50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		37	
	12/19/20	07 80.67	9.23	0.00	71.44	-0.18		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.2	
	3/25/20	08 80.67	8.45	0.00	72.22	0.78		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		7.3	
	6/12/20	08 80.67	8.92	0.00	71.75	-0.47		52	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.4	
	9/25/20		9.55	0.00	71.12	-0.63		65	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.6	
	12/30/20			0.00	71.68	0.56		: 130	ND<0.50	ND<0.50	ND<0.50	1.1	'	5.7	
	3/24/20			0.00	72.94	1.26		98	0.50	ND<0.50	ND<0.50	ND<1.0		9.2	
	6/23/20			0.00	71.62	-1.32		290	1.2	ND<0.50	ND<0.50	ND<1.0		6.7	
	12/16/20			0.00	71.25	-0.37		150	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.7	•
	4/14/20			0.00	72.80	1.55		60	ND<0.50	ND<0.50	ND<0.50	ND<1.0		6.7	
	10/13/20				70.54	-2.26		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.6	
	5/27/20			0.00	75.07	4.53		ND<50			ND<0.50	ND<1.0		5.2	
		11 05.00	0.75				25.0								
	MW-8	99 80.96	9.10	(Scre 0.00	en Interva 71.86	l in feet: 5.0)-25.0) ND		ND	ND	ND	ND	290	160	
	6/18/19	77 80.90	9.10	0.00	/1.00		1112	•		9 of 16					
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water	Change in Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE		Commen	ts
						8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)			
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)			
	continued		0.00	-0.04	2.22			ND	NID	ND	1.09	224	221			
1/21/20			0.00	70.96	-0.90	ND		ND ND	ND ND	ND ND	ND	234	223			
7/10/20			0.00	73.02	2.06	ND		_	8.92	128	375		34200			
1/4/200			0.00	71.20	-1.82	3790		141	8.92 ND	ND	ND	66	70			
7/16/20			0.00	71.81	0.61	ND		ND	ND<10	630	390	670	700			
1/31/20			0.00	72.97	1.16	5900	·	86		38	2.2	410				
4/11/20			0.00	72.71	-0.26	250		2.0	ND<0.50		ND<1.0		120			
7/11/20			0.00	72.11	-0.60		110		ND<0.50		ND<1.0		21			
10/15/20			0.00	71.11	-1.00		ND<50		ND<0.50		ND<1.0		430			
1/14/20			0.00	73.08	1.97		ND<250	2.6	ND<2.5	18			18			
4/16/20	03 81.71		0.00	72.73	-0.35		ND<50		ND<0.50	ND<0.50	ND<1.0					
7/16/20	03 81.71	9.63	0.00	72.08	-0.65		110		ND<0.50		ND<1.0	 .	140			
10/2/20	03 81.71	10.41	0.00	71.30	-0.78		75		ND<0.50		ND<1.0		. 78			
1/7/200	04 81.71	8.21	0.00	73.50	2.20		ND<5000	ND<50	ND<50	ND<50	340	· 	3700		•	
4/2/200	04 81.71	8.51	0.00	73.20	-0.30	-	3000	ND<20	ND<20	ND<20	ND<40		5200	•		
7/29/20	04 81.71	9.78	0.00	71.93	-1.27		3200	ND<25	ND<25	ND<25	ND<50		5500			
11/24/20	004 81.71	10.19	0.00	71.52	-0.41	. +-	2100	ND<10	ND<10	ND<10	ND<20		2400			
1/24/20	05 81.71	8.49	0.00	73.22	1.70		ND<2500	4.0	0.52	ND<0.50	29		1800			
6/23/20	05 81.71	8.34	0.00	73.37	0.15		490		ND<0.50	1.5	ND<1.0	-	980			
9/28/20	05 81.71	9.61	0.00	72.10	-1.27		270			ND<0.50	ND<1.0		520			
12/20/20	005 81.71	7.35	0.00	74.36	2.26		2700		ND<0.50	78	82		86			
3/10/20	06 81.71	6.63	0.00	75.08	0.72		190	ND<0.50	ND<0.50	ND<0.50	ND<1.0		51			•
6/23/20	06 81.71	6.56	0.00	75.15	0.07	**	3600		ND<0.50	100	57		ND<0.50			
9/27/20	06 81.71	9.64	0.00	72.07	-3.08		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	'	18			
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date	T	COC	Depth to	LPH	Ground-	Change										Comments
Sample	ed Ele	vation	Water	Thickness	water	in Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE		
					Elevation		8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)		
	(:	feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)		
MW-	·8 co	ntinued													·	
12/22	2/2006	81.71	9.42	0.00	72.29	0.22		ND<50		ND<0.50		0.50		16		
3/23	/2007	81.71	8.68	0.00	73.03	0.74		ND<50			ND<0.50			12		
6/29	/2007	81.71	9.10	0.00	72.61	-0.42		ND<50			ND<0.50			17		
9/28	/2007	81.71	9.89	0.00	71.82	-0.79		99	ND<0.50	ND<0.50	ND<0.50	ND<0.50		21		
12/17	/2007	81.71	9.81	0.00	71.90	0.08		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		16		
3/25	2008	81.71	8.40	0.00	73.31	1.41		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		14		
6/12	/2008	81.71	9.53	0.00	72.18	-1.13		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		14		
9/25	/2008	81.71	10.24	0.00	71.47	-0.71		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.6		
12/30	/2008	81.71	9.72	0.00	71.99	0.52		50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.7		
3/24	2009	81.71	8.43	0.00	73.28	1.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.4		
6/23	2009	81.71	9.63	0.00	72.08	-1.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.7		
12/16	/2009	81.71	10.08	0.00	71.63	-0.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.4		
4/14	/2010	81.71	8.28	0.00	73.43	1.80		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.4		
10/13	/2010	84.86	10.79	0.00	74.07	0.64		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.0		
5/27	/2011	84.86	8.12	0.00	76.74	2.67		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.1		
MW-9				(Scra	an Intarva	l in feet:)										
	/2002	82.07	14.72		67.35		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	680	910		
	/2002	82.07	14.85	0.00	67.22	-0.13	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	620			
	/2002	82.07	15.39		66.68	-0.54		580	ND<5.0	ND<5.0	ND<5.0	ND<10		580		
	72002	82.07	16.16		65.91	-0.77		570	ND<5.0	ND<5.0	ND<5.0	ND<10		1400		
	/2003	82.07	14.75		67.32	1.41		ND<200	ND<2.0	ND<2.0	ND<2.0	ND<4.0		220		***
	/2003	82.07	14.51		67.56	0.24		ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10		860		
	/2003	82.07	15.54		66.53	-1.03		ND<2500	ND<25	ND<25	ND<25	ND<50		1300		
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)			Comments	
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)				
MW-9	continued				· <u>-</u>												
10/2/200			0.00	65.79	-0.74	'	820	ND<5.0	ND<5.0	ND<5.0	ND<10		990				
1/7/200	4 82.07	14.65	0.00	67.42	1.63		ND<1000	ND<10	ND<10	ND<10	ND<20		1200				
4/2/200	4 82.07	15.08	0.00	66.99	-0.43	· ·	510	ND<5.0	ND<5.0	ND<5.0	ND<10		850				
7/29/20	04 82.07	15.81	0.00	66.26	-0.73		ND<1000	ND<10	ND<10	ND<10	ND<20		1300				
11/24/20	04 82.07	16.25	0.00	65.82	-0.44		1100	ND<5.0	ND<5.0	ND<5.0	ND<10	· ·	1300				*. ***
1/24/20	05 82.07	14.96	0.00	67.11	1.29		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2300				
6/23/20	05 82.07	14.40	0.00	67.67	0.56		1500	ND<5.0	ND<5.0	ND<5.0	ND<10		2000				
9/28/20	05 82.07	15.67	0.00	66.40	-1.27	·	ND<2500	ND<25	ND<25	ND<25	ND<50		2400				
12/20/20	05 82.07	14.61	0.00	67.46	1.06		560	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2800				* *
3/10/20	06 82.07	13.39	0.00	68.68	1.22		1100	ND<5.0	ND<5.0	ND<5.0	ND<10		2100				
6/23/20	06 82.07	13.68	0.00	68.39	-0.29		1700	ND<12	ND<12	ND<12	ND<25		1700				
9/27/20		14.83	0.00	67.24	-1.15	·	ND<1200	ND<12	ND<12	ND<12	ND<12		1400				
12/22/20		14.75	0.00	67.32	0.08	\ '	680	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1100				
3/23/20		14.52	0.00	67.55	0.23	, 	240	ND<0.50	ND<0.50	ND<0.50	ND<0.50		660				
6/29/20			0.00	67.18	-0.37		210	ND<0.50	ND<0.50	ND<0.50	0.52		410				
9/28/20				66.59	-0.59		390	ND<2.5	ND<2.5	ND<2.5	ND<2.5		430				
12/17/20				66.35	-0.24		190	ND<0.50	ND<0.50	ND<0.50	ND<1.0		480				
3/25/20				67.16	0.81		250	ND<2.5	ND<2.5	ND<2.5	ND<5.0		340				
6/12/20				66.37	-0.79		180	ND<0.50	ND<0.50	ND<0.50	ND<1.0		270				
9/25/20				65.59	-0.78		170	ND<0.50	ND<0.50	ND<0.50	ND<1.0		320				
12/30/20				65.91	0.32		160	ND<0.50	ND<0.50	ND<0.50	ND<1.0		230				
3/24/20				66.84	0.93		120	ND<0.50	ND<0.50	ND<0.50	ND<1.0		180				
6/23/20				66.12	-0.72		110	ND<0.50	ND<0.50	ND<0.50	ND<1.0		190				
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

	Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Cor	nments
		(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	 <u></u>	
	MW-9	continue	ed.											120		
	12/16/20	09 82.0	7 16.4	7 0.00	65.60	-0.52		86			ND<0.50			130		
	4/14/201	10 82.0	7 14.6	0.00	67.39	1.79		100			ND<0.50	ND<1.0		160		
	10/13/20	10 85.	18 16.8	0.00	68.38	0.99		63			ND<0.50			160		
	5/27/201	11 85.	18 15.3	7 0.00	69.81	1.43		59	ND<0.50	ND<0.50	ND<0.50	ND<1.0		70		
N	/W-10			(Scr	een Interva	ıl in feet: —))									
	1/31/200	02 74.9	98 8.02	0.00	66.96		ND<50				ND<0.50			1.2		
	4/11/200	02 74.9	98 7.60	0.00	67.38	0.42	ND<50	·			ND<0.50		ND<2.5			•
	7/11/200	02 74.9	98 8.91	0.00	66.07	-1.31		ND<50			ND<0.50			1.1		
	10/15/20	02 74.	98 11.4	9 0.00	63.49	-2.58		ND<50			ND<0.50	ND<1.0		ND<2.0		
	1/14/200	03 74.	98 8.47	0.00	66.51	3.02	'	ND<50			ND<0.50			ND<2.0		
	4/16/200	03 74.9	98 7.92	0.00	67.06	0.55		ND<50			ND<0.50			ND<2.0		
	7/16/200	03 74.	98 7.03	0.00	67.95	0.89		ND<50			ND<0.50	ND<1.0		ND<2.0		
	10/2/200	03 74.9	98 7.63	0.00	67.35	-0.60	·	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0		
	1/7/200	74.	98 6.22	0.00	68.76	1.41		54		ND<0.50		4.5		ND<2.0		
	4/2/200	94 74.5	98 7.49	0.00	67.49	-1.27		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	·	1.0		
	7/29/200	04 74.	98 7.4	0.00	67.57	0.08		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50		
	11/24/20	004 74.	98 7.55	0.00	67.43	-0.14		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.5		
	1/24/200	05 74.	98 6.40	0.00	68.58	1.15		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.71	•	
	6/23/200	05 74.	98 6.46	0.00	68.52	-0.06	·	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50		
• :	9/28/20	05 74.	98 7.52	0.00	67.46	-1.06		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50		
	12/20/20	005 74.	98 6.04	0.00	68.94	1.48		ND<50			ND<0.50			0.57		
	3/10/20	06 74.	98 5.80	6 0.00	69.12	0.18		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50		
	6/23/20	06 74.	98 6.42	0.00	68.56	-0.56		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	:	0.50		
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date	TOC	Depth to	LPH	Ground-	Change									Comments
Sampled	Elevation	Water	Thickness	water Elevation	in Elevation	TPH-G	TPH-G	_		Ethyl-	Total	MTBE	MTBE	
						8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	
	0 continue	_											. 10	
9/27/2	006 74.98		0.00	68.06	-0.50		ND<50			ND<0.50			48	
12/22/2	2006 74.98	5.90	0.00	69.08	1.02		ND<50			ND<0.50		,	8.5	
3/23/2	007 74.98	6.48	0.00	68.50	-0.58		ND<50			ND<0.50		<u> </u>	0.54	
6/29/2	007 74.98	6.78	0.00	68.20	-0.30		ND<50		ND<0.50	0.76	1.6		5.6	
9/28/2	007 74.98	7.24	0.00	67.74	-0.46		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		15	
12/17/2	2007 74.98	6.92	0.00	68.06	0.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.6	
3/25/2	008 74.98	6.74	0.00	68.24	0.18		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.3	
6/12/2	008 74.98	7.11	0.00	67.87	-0.37		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.6	and the second second
9/25/2	008 74.98	3 7.70	0.00	67.28	-0.59	,	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.8	
12/30/2	2008 74.98	6.73	0.00	68.25	0.97		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.80	
3/24/2	009 74.98	6.41	0.00	68.57	0.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
6/23/2	009 74.98	7.07	0.00	67.91	-0.66		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.60	
12/16/2	2009 74.98	6.59	0.00	68.39	0.48		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
4/14/2		6.16	0.00	68.82	0.43		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
10/13/			0.00	70.54	1.72		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.58	
5/27/2			0.00	71.56	1.02		ND<50			ND<0.50	ND<1.0		ND<0.50	
	011 /0.10	. 0.02												
MW-11 1/31/2	002 - 77.3	I 11. 71	· -	en Interva 65.60	l in feet:) 	ND<50	. 	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	
				65.36	-0.24	ND<50					ND<0.50			
4/11/2					-0.24		ND<50			ND<0.50			ND<0.50	
7/11/2				64.52			ND<50			ND<0.50	ND<1.0		ND<2.0	
10/15/2				63.64	-0.88					ND<0.50			ND<2.0	
1/14/2		•		64.00	0.36		ND<50							
4/16/2	003 77.3	14.08	0.00	63.23	-0.77	'	ND<50			ND<0.50	ND<1.0		ND<2.0	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date Sampled		Depth to Water	LPH Thickness	Ground- water Elevation	in	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	
MW-11	continued	l ·											> TD - G - G	
7/16/200	77.31	12.98	0.00	64.33	1.10		65		ND<0.50		ND<1.0		ND<2.0	
10/2/200	77.31	12.96	0.00	64.35	0.02		ND<50		ND<0.50		ND<1.0		ND<2.0	
1/7/200	4 77.31	16.20	0.00	61.11	-3.24		63		ND<0.50	0.68	2.2		ND<2.0	
4/2/200	4 77.31	18.01	0.00	59.30	-1.81		ND<50		ND<0.50		ND<1.0		ND<0.50	
7/29/200	04 77.31	14.39	0.00	62.92	3.62		ND<50		ND<0.50				ND<0.50	
11/24/20	04 77.31	16.72	0.00	60.59	-2.33		ND<50		ND<0.50		ND<1.0		ND<0.50	
1/24/200	05 77.31	17.44	0.00	59.87	-0.72		ND<50			ND<0.50			ND<0.50	
6/23/200	05 77.31	12.37	0.00	64.94	5.07		ND<50			ND<0.50			ND<0.50	
9/28/200	05 77.31	16.78	0.00	60.53	-4.41	·	ND<50			ND<0.50			ND<0.50	
12/20/20	05 77.31	17.06	0.00	60.25	-0.28	· 	ND<50		ND<0.50		ND<1.0		ND<0.50	
3/10/20	06 77.31	16.20	0.00	61.11	0.86		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
6/23/20	06 77.31	12.65	0.00	64.66	3.55		ND<50		ND<0.50		ND<1.0		ND<0.50	
9/27/20	06 77.31	14.78	0.00	62.53	-2.13		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
12/22/20	06 77.31	13.48	0.00	63.83	1.30		55		ND<0.50	2.1	5.4	, 	ND<0.50	
3/23/20	07 77.31	13.78	0.00	63.53	-0.30		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
6/29/20	77.31	15.58	0.00	61.73	-1.80	:	ND<50	ND<0.50	ND<0.50	ND<0.50	0.62		ND<0.50	·
9/28/20	07 77.31	16.02	0.00	61.29	-0.44		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	,
12/17/20	07 77.31	15.75	0.00	61.56	0.27		ND<50	ND<0.50	ND<0.50	ND<0.50	1.0		ND<0.50	·
3/25/20	08 77.31	15.74	0.00	61.57	0.01		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
6/12/20	08 77.31	13.87	0.00	63.44	1.87		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
9/25/20	08 77.31	16.30	0.00	61.01	-2.43		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/30/20		15.82	0.00	61.49	0.48		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
3/24/20		15.58	0.00	61.73	0.24		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1992 Through May 2011
76 Station 1871

Date ampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)		Change in Elevation (feet)	TPH-G 8015 (μg/l)	TPH-G (GC/MS) (μg/l)	Benzene (µg/l)	Toluene (μg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (μg/l)	MTBE (8260B) (μg/l)	 Comments
MW-11	continue	ď												
6/23/200			0.00	63.33	1.60		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/16/20	09 77.31	15.03	0.00	62.28	-1.05		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
4/14/20	10 77.31	15.48	0.00	61.83	-0.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
10/13/20	10 80.44	15.15	0.00	65.29	3.46		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
5/27/20				64.84	-0.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	



Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (μg/l)	ΤΒΑ (μg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (μg/l)	DIPE (µg/l)	ETBE (μg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-1								2.00				
6/18/1999		ND	ND	ND	 '	ND	ND	ND				
7/16/2001		ND	ND	ND		ND	ND	ND		***	·	
1/14/2003		ND<100	ND<500	ND<2.0		ND<2.0	ND<2.0	ND<2.0				
7/16/2003			ND<10000		- -					25.1	 45.7	80.1
10/2/2003		·	ND<25000					' 			12.31	142
1/7/2004			ND<20000		·					12.12	13.42	36
4/2/2004			ND<50	·				-		11.33 5.37	5.51	-2
7/29/2004			ND<2000								3.31 4.73	-2 -43
11/24/2004			ND<2000			•			6.58	3.08	4.73 17.0	100
1/24/2005			ND<2000							14.3	4.79	-103
6/23/2005			ND<50000				·			 2.45	4.79	-103 -91
9/28/2005			ND<1000		. 					3.45	2.76	-91 -210
12/20/2005			ND<250							4.16	1.64	-210 -511
3/10/2006			ND<2500							1.45		-030
6/23/2006			ND<2500			••		 ,		4.50	4.31	-32
9/27/2006	· 	 ·	ND<5000			·				4.50	4.72	-32 -121
12/22/2006		. -	ND<2500							6.80	2.35	
3/23/2007	'		ND<1200			 .				3.22	3.45	-135 -131
6/29/2007	 '		ND<1200				. ·			6.64	7.11	
9/28/2007	<u></u>		ND<250						 ,		7.84	-167
12/17/2007			ND<2500							9.74	6.51	-63 -60
3/25/2008			ND<1200							6.70	6.50	
6/12/2008		330	ND<1200					·			4.33	65
9/25/2008	-,-	740	ND<250				· . .		'		1.16	105
12/30/2008		400	ND<250							2.44	0.91	0

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (µg/l)	TBA (μg/l)	Ethanol (8260Β) (μg/l)	Ethylene- dibromide (EDB) (μg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (μg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-1 co	ntinued											
3/24/2009		390	ND<250							1.60	1.31	-29
6/23/2009	· 	500	ND<1200							·	0.86	-28
12/16/2009		ND<20	ND<500							0.66		'
4/14/2010	 '	500	ND<500		·					2.48		
10/13/2010		73	ND<250	ND<0.50	ND<0.50					2.00		
5/27/2011		ND<50	ND<1200	ND<2.5	ND<2.5	. 				0.37		,
MW-4												
4/18/1996	110										, 	
7/24/1996	ND							 .				
10/24/1996	ND								*-	 ,		
1/28/1997	210											
7/29/1997	ND									· 		
1/14/1998	ND								, 			
7/1/1998	ND			,	·		'					
MW-6												
6/18/1999		ND	ND	ND	ND	ND	ND	ND				
7/16/2001		ND	ND	ND	ND	ND	ND	ND	·			
7/11/2002		ND<1000	ND<5000	ND<100	ND<100	ND<200	ND<100	ND<100		· 		
1/14/2003		ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		· 		
7/16/2003		·	ND<500									
10/2/2003			ND<1000							15.5	26.2	139
1/7/2004			ND<1000							12.63	14.29	-12
4/2/2004			ND<2000							12.63	12.72	9
7/29/2004			ND<100					'		4.74	4.79	-19
11/24/2004			ND<50						6.99	2.81	5.54	-29
				•		Page 2 of 10					<i>(</i> -2)-	TD/

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (μg/l)	TBA (μg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (μg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (μg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-6 co	ontinued									14.5	15.3	72
1/24/2005			ND<50	·			~- .			1.86	1.73	70
6/23/2005			ND<1000	·							2.57	-74
9/28/2005			ND<1000			, 				2.63		-280
12/20/2005			ND<250			 .	· 			1.52	2.30	-280 173
3/10/2006			ND<250							5.25	0.80	-105
6/23/2006			ND<6200		<u></u> ·						3.39	
9/27/2006			ND<6200			· 	·			2.54	3.01	-109
12/22/2006		· ·	ND<5000							1.22	4.03	-46
3/23/2007			ND<250						'	3.64	3.62	-101
6/29/2007			ND<250							8.49	6.78	171
9/28/2007			ND<250	'						8.36	8.40	167
12/17/2007			ND<250							10.19	9.38	-23
3/25/2008	·		ND<250	. 		·				10.03	10.10	-20
6/12/2008		ND<10	ND<250								0.80	30
9/25/2008		ND<10	ND<250								1.05	118
12/30/2008		ND<10	ND<250							4.50	1.62	14
3/24/2009	 -	ND<10	ND<250				4	·		1.79	1.87	104
6/23/2009		ND<10	ND<250	<u></u>						1.96	2.12	64
12/16/2009		ND<10	ND<250							1.55		
4/14/2010	<u></u>	ND<10	ND<250							3.19	· 	
10/13/2010		ND<10	ND<250	ND<0.50	ND<0.50					6.40		
5/27/2011	 	ND<10 ND<10	ND<250	ND<0.50	ND<0.50					0.61		
MW- 7 6/18/1999		ND	ND	ND	ND	ND	ND	ND	. 			
7/16/2001		ND	ND	ND	ND	ND	ND	ND				
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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	ΤΡΗ-D (μg/l)	TBA (μg/l)	Ethanol (8260Β) (μg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-7 co		ND<50000	ND<250000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000				
1/14/2003			ND<250000									
7/16/2003 10/2/2003		 ,.	ND<100000	· 						24.3	28.2	109
1/7/2004			ND<200000			<u> </u>				10.79	10.85	23
4/2/2004			ND<2000							12.41	11.32	24
7/29/2004	. 		ND<5000			-				4.10	3.96	17
11/24/2004			ND<5000		· 		 .	· <u></u>	6.60	1.99	3.29	-43
1/24/2004	 	 	ND<5000							17.2	14.5	71
6/23/2005			ND<50000					· 	·	2.84	2.18	-37
9/28/2005	 ,	·	ND<1000							3.45	3.63	-81
12/20/2005		·	ND<250				. 			2.04	2.03	-263
3/10/2006		 	ND<250							1.28	0.95	164
6/23/2006		 	ND<6200							·	3.95	-119
9/27/2006		 	ND<6200							3.16	3.98	-107
12/22/2006		 	ND<25000				4. 3 4 1			2.25	2.03	-86
3/23/2007		·	ND<250				·			3.38	3.75	-49
9/28/2007	 		ND<250							8.16	7.96	30
12/19/2007	 		ND<250						 '	6.70	6.72	-17
3/25/2008			ND<250	<u></u> ·	. <u></u>					4.77	4.81	-30
6/12/2008		30	ND<250				·				3.96	55
9/25/2008		ND<10	ND<250				·				1.11	115
12/30/2008		ND<10	ND<250							4.13	1.81	-14
3/24/2009		ND<10 ND<10	ND<250							2.70	2.39	159
6/23/2009		ND<10	ND<250							0.42	0.84	-8
12/16/2009		ND<10	ND<250							1.08		

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (μg/l)	TBA (µg/l)	Ethanol (8260B) (µg/I)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (μg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
	ntinued				•							
4/14/2010		ND<10	ND<250							0.78		- -
10/13/2010		ND<10	ND<250	ND<0.50	ND<0.50					6.50		
5/27/2011		ND<10	ND<250	ND<0.50	ND<0.50					0.48		
/IW-8					•							
6/18/1999		ND	ND	ND	ND	ND	ND	ND				
7/16/2001		ND	ND	ND -	ND	ND	ND	ND				
1/14/2003	·	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10				
7/16/2003	'		· ND<500	'								
10/2/2003			ND<500			·	``			23.6	28.5	188
1/7/2004			ND<50000			 ·				9.94	13.13	-15
4/2/2004	~ -		ND<2000							13.37	12.82	-10
7/29/2004			ND<2500							3.68	3.73	18
11/24/2004			ND<1000						6.67	3.97	2.71	-36
1/24/2005			ND<2500							41.6	41.2	56
6/23/2005			ND<1000	- -						2.05	2.13	58
9/28/2005			ND<1000							2.12	1.98	-40
12/20/2005			ND<250							2.02	3.72	-402
3/10/2006		<u></u>	ND<250		*-	·	·			1.51	0.99	-182
6/23/2006			ND<250				·				2.81	-135
9/27/2006			ND<250			'			·	4.87	4.91	-155
12/22/2006			ND<250							1.80	2.40	16
3/23/2007			ND<250							3.52	3.90	25
6/29/2007	 ·		ND<250		. 				. 	5.35	5.29	98
9/28/2007		·	ND<250							7.18	7.24	16
12/17/2007			ND<250							6.95	5.26	26

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (µg/l)	TBA (μg/l)	Ethanol (8260Β) (μg/l)	Ethylene- dibromide (EDB) (μg/l)	1,2-DCA (EDC) (μg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-8 c										7.00	5.15	70
3/25/2008			ND<250		 *					5.22	5.15	70
6/12/2008		ND<10	ND<250		·			. 			9.40	38
9/25/2008	- -	ND<10	ND<250								1.33	98
12/30/2008		ND<10	ND<250	•					 '	1.78	2.19	11
3/24/2009		ND<10	ND<250							2.07	1.87	103
6/23/2009		ND<10	ND<250		, 		. 			0.55	0.90	73
12/16/2009	·	ND<10	ND<250		i.					1.24		
4/14/2010		ND<10	ND<250		 ·					0.92		
10/13/2010		ND<10	ND<250	ND<0.50	ND<0.50				• ••	0.70	·	 , , ,
5/27/2011		ND<10	ND<250	ND<0.50	ND<0.50		:		'	0.48		4
MW-9												
1/31/2002		ND<140	ND<3600	ND<7.1	ND<7.1	ND<7.1	ND<7.1	ND<7.1				·
1/14/2003	1 44 , 1	ND<400	ND<2000	ND<8.0	ND<8.0	ND<8.0	ND<8.0	ND<8.0				
7/16/2003			ND<25000								20.4	201
10/2/2003			ND<5000			**	.=-			29.5	28.4	201
1/7/2004		·	ND<10000				, 			10.45	12.00	9
4/2/2004			ND<500		·		 ' .	. 		16.37	13.21	12
7/29/2004			ND<1000				'					
11/24/2004	<u> </u>	* * ;	ND<500	·		· 	· 		6.47	3.24	1.71	-68
1/24/2005			ND<1000							26.0	22.5	-45
6/23/2005		·	ND<10000		'					1.50	1.44	-136
9/28/2005			ND<50000		 , ,	. 		 '		2.51	1.67	-94
12/20/2005	i		ND<250		·					5.05	4.67	-102
3/10/2006			ND<2500		·					2.82	2.13	160
6/23/2006			ND<6200		~~			- -			0.84	-65
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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (μg/l)	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (μg/l)	ETBE (µg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-9 co	ntinued	-								0.68	0.75	-61
9/27/2006			ND<6200	·	'			, 		9.00	4.89	-44
12/22/2006		· 	ND<250							6.85	5.33	-114
3/23/2007		. 	ND<250							6.87	6.25	23
6/29/2007	. 		ND<250		. .					7.17	7.04	30
9/28/2007	·		ND<1200	·	-		 .			5.05	4.81	-27
12/17/2007			ND<250			. 						
3/25/2008		 '	ND<1200		· · <u></u>	 ,				6.55	6.67	-10
6/12/2008		250	ND<250	·		 "		· 			2.55	86
9/25/2008		ND<10	ND<250		;** * .			·			1.44	26
12/30/2008	 ,	21	ND<250			·	- .		'	5.47	5.43	52
3/24/2009	·	24	ND<250	. 	 :					2.80	2.69	
6/23/2009	a"	14	ND<250		, '					1.88	1.42	-20
12/16/2009		22	ND<250					 '		0.99		
4/14/2010		ND<10	ND<250						-	1.41		
10/13/2010		11	ND<250	ND<0.50	ND<0.50		·			1.08		 '',
5/27/2011	·	ND<10	ND<250	ND<0.50	ND<0.50		 ·	. 		1.51	·	
MW-10) TD 410	ND<1.0				:
1/31/2002	-	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0				 	
1/14/2003		ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0				 .
7/16/2003			ND<500		·						25.7	102
10/2/2003			ND<500							24.8	25.7	192
1/7/2004			ND<500		 , ·		~-			10.04	11.62	35
4/2/2004	·		ND<50	·						11.91	12.02	42
7/29/2004			ND<50	 .					·	4.81	4.83	83
11/24/2004			ND<50						6.89	2.59	3.07	-39
											227944	

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (μg/l)	TBA (µg/l)	Ethanol (8260Β) (μg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (μg/l)	DIPE (µg/l)	ETBE (μg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
MW-10 c	ontinued									27.5	25.5	87
1/24/2005			ND<50						'	27.5	25.5	
6/23/2005		· 	ND<1000		. 	·		· 		7.83	176	40
9/28/2005		·	ND<1000							6.95	2.37	-66
12/20/2005		<u>-</u>	ND<250		·		·			3.85	3.45	59
3/10/2006			ND<250		, 					2.52	4.48	87
6/23/2006		· ·	ND<250	 **							1.49	-68 05
9/27/2006			ND<250	,		·				1.79	1.55	-85
12/22/2006	** .	·	ND<250	<u></u>						3.20	3.00	107
3/23/2007			ND<250							5.09	5.01	-60
6/29/2007	·		ND<250							9.12	6.27	165
9/28/2007			ND<250							8.34	8.21	124
12/17/2007		, <u></u>	ND<250						·	4.97	4.46	-15
3/25/2008			ND<250			 .		·		4.35	4.40	-10
6/12/2008		ND<10	ND<250	. <u></u> ·		·		 .			1.42	75
9/25/2008		ND<10	ND<250	·			·				52.15	94
12/30/2008	. 	ND<10	ND<250	. 						5.89	3.18	181
3/24/2009		ND<10	ND<250							4.37	4.07	144
6/23/2009		ND<10	ND<250		<u></u>			.		3.17	1.64	57
12/16/2009		ND<10	ND<250							3.31	·	
4/14/2010		ND<10	ND<250							1.61		
10/13/2010		ND<10	ND<250	ND<0.50	ND<0.50					6.67		
5/27/2011		ND<10	ND<250	ND<0.50	ND<0.50			·		1.52		
		112 20										
MW-11		ND < 10	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0			 ·	 '
1/31/2002	· 	ND<20	ND<500	ND<1.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0				
1/14/2003	, 	ND<100	000~עעו	110~2.0	1117-2.0	Page 8 of 10					0	TRC

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled	TPH-D (µg/l)	TBA (μg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (μg/l)	DIPE (μg/l)	ETBE (μg/l)	TAME (µg/l)	pH (lab) (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)
	continued											
7/16/2003	·		ND<500									202
10/2/2003			ND<500							33.7	23.2	
1/7/2004			ND<500	· 						11.69	13.82	99
4/2/2004			ND<50							11.94	14.08	-1
7/29/2004			ND<50	·		 ,						
11/24/2004			ND<50		,				6.75	3.85	4.32	82
1/24/2005		· 	ND<50						 '	30.01	32.6	79
6/23/2005			ND<1000					·		2.17	2.16	76
9/28/2005			ND<1000				 .			4.97	4.59	-4
12/20/2005			ND<250			 -	 ·		'	5.16	4.77	35
3/10/2006			ND<250	· ·			· ·			5.11	9.99	68
6/23/2006			ND<250		·						7.74	-26
9/27/2006			ND<250		· 					5.72	5.98	32
12/22/2006	. 		ND<250							3.81	4.35	46
3/23/2007			ND<250		-*				 .	5.47	5.85	38
6/29/2007			ND<250							7.87	7.80	242
9/28/2007			ND<250			**	:			7.24	7.30	280
12/17/2007		·	ND<250						•	8.71	8.01	47
3/25/2008			ND<250	 .						8.41	8.40	45
6/12/2008		ND<10	ND<250					· ·			3.33	160
9/25/2008		ND<10	ND<250				· 	·			4.28	115
12/30/2008		ND<10	ND<250			'				2.74	2.67	195
3/24/2009		ND<10	ND<250					**	 ·	2.27	2.20	185
6/23/2009		ND<10	ND<250							3.62	4.14	67
12/16/2009		ND<10	ND<250			, 	 .		·	4.62		

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 1871

Date Sampled			Ethanol	Ethylene- dibromide	1,2-DCA				рH	Post-purge Dissolved	Pre-purge Dissolved	Pre-purge
Janpica	TPH-D	TBA	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME	(lab)	Oxygen	Oxygen	ORP
	(μg/l)	1ΒΑ (μg/l)	(8200B) (μg/l)	(EDB) (μg/l)	(EDC) (μg/l)	(μg/l)	(μg/l)	(μg/l)	(pH)	(mg/l)	(mg/l)	(mV)
MW-11	continued								,			
4/14/2010). /	ND<10	ND<250	-	,		·			4.15		
10/13/201	0	ND<10	ND<250	ND<0.50	ND<0.50			, .		2.21		
5/27/2011	l	ND<10	ND<250	ND<0.50	ND<0.50	•	·	:		3.11		



Date Sampled	Post-purge ORP						
	(mV)					 <u>.</u>	
MW-1			•				
10/2/2003	3 21.0						
1/7/2004	24						
4/2/2004	34						
7/29/2004	-4						
11/24/2004	4 -39						
1/24/2005	96						
9/28/2005	5 -94	•					
12/20/200	5 -328						
3/10/2006	-615						
9/27/2006	-25						
12/22/2000	6 -72						
3/23/2007	-141				-		
6/29/2007	-65						
12/17/200	7 -46	•					
3/25/2008	-64	•					
12/30/2008	8 -2						
3/24/2009	-32						
12/16/2009	9 38						
4/14/2010	55						
10/13/2010	0 -48						
5/27/2011	-19						
MW-6							
10/2/2003	3 175						
1/7/2004							
4/2/2004							
				Page 1 of 7			A TOO

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Sampled	Post-purge
	ORP
	(mV)
MW-6 c	ontinued
7/29/2004	-8
11/24/2004	-12
1/24/2005	70
6/23/2005	71
9/28/2005	-80
12/20/2005	-217
3/10/2006	224
9/27/2006	-104
12/22/2006	-67
3/23/2007	-92
6/29/2007	84
9/28/2007	154
12/17/2007	-14
3/25/2008	-18
12/30/2008	8
3/24/2009	91
6/23/2009	79
12/16/2009	116
4/14/2010	108
10/13/2010	129
5/27/2011	199
MW-7	
10/2/2003	153
1/7/2004	5
4/2/2004	10

Date Sampled

OTRC

Date	
Sampled	Post-purge
	ORP
	(mV)
MW-7 c	ontinued
7/29/2004	18
11/24/2004	-24
1/24/2005	48
6/23/2005	-32
9/28/2005	-85
12/20/2005	-256
3/10/2006	-179
9/27/2006	-95
12/22/2006	-101
3/23/2007	-47
9/28/2007	26
12/19/2007	-13
3/25/2008	-34
12/30/2008	-19
3/24/2009	138
6/23/2009	-33
12/16/2009	118
4/14/2010	112
10/13/2010	44
5/27/2011	145
MW-8	
10/2/2003	197
1/7/2004	21
4/2/2004	16
7/29/2004	30

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Date	
Sampled	Post-purge
	ORP
	(mV)
MW-8 c	ontinued
11/24/2004	-20
1/24/2005	60
6/23/2005	56
9/28/2005	-26
12/20/2005	-326
3/10/2006	-181
9/27/2006	-139
12/22/2006	12
3/23/2007	22
6/29/2007	92
9/28/2007	22
12/17/2007	7 24
3/25/2008	77
12/30/2008	3 14
3/24/2009	109
6/23/2009	55
12/16/2009	9 75
4/14/2010	120
10/13/2010	92
5/27/2011	209
MW-9	
10/2/2003	3 203
1/7/2004	27
4/2/2004	. 32
11/24/200	4 -67

Date

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Date Sampled	Post-purge						
	ORP						
<u> </u>	(mV)					 	
MW-9 c							
1/24/2005							
6/23/2005							
9/28/2005							
12/20/2005							
3/10/2006							
9/27/2006	-43						
12/22/2006	-70						
3/23/2007	-82						
6/29/2007	22						
9/28/2007	30						
12/17/2007	-35						
3/25/2008	-14						
12/30/2008	38						
3/24/2009	58						
6/23/2009	-30		•				
12/16/2009	102						
4/14/2010	49						
10/13/2010	114						
5/27/2011	95						
MW-10							
10/2/2003	213	÷					
1/7/2004	59						
4/2/2004	45						
7/29/2004	102						
11/24/2004	-29				•		



Date	
Sampled	Post-purge
	ORP
	(mV)
	continued
1/24/2005	84
6/23/2005	44
9/28/2005	-64
12/20/2005	58
3/10/2006	83
9/27/2006	-65
12/22/2006	85
6/29/2007	172
9/28/2007	126
12/17/2007	-2
3/25/2008	-12
12/30/2008	184
3/24/2009	160
6/23/2009	68
12/16/2009	118
4/14/2010	112
10/13/2010	147
5/27/2011	192
MW-11	
10/2/2003	255
1/7/2004	103
4/2/2004	108
11/24/2004	143
1/24/2005	83
6/23/2005	82

Date

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Date	
Sampled	Post-purge
	ORP
	(mV)
MW-11 c	ontinued
9/28/2005	-1
12/20/2005	070
3/10/2006	97
9/27/2006	40
12/22/2006	44
3/23/2007	34
6/29/2007	223
9/28/2007	244
12/17/2007	46
3/25/2008	44
12/30/2008	195
3/24/2009	190
6/23/2009	67
12/16/2009	160
4/14/2010	143
10/13/2010	133
5/27/2011	205

Date



ATTACHMENT D

OZONE INJECTION SYSTEM O & M REPORT

September 14, 2012

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Project No. 696-A

C 051072

Third Quarter 2012 Ozone Injection System O&M Report 76 Service Station No. 1871 (351644)

96 MacArthur Boulevard Oakland, California

Dear Ms. Hariu:

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California, Environ Strategy Consultants Inc. (Environ Strategy) is pleased to submit this Ozone Injection System Operation and Maintenance (O&M) Report for 76 Service Station No. 1871, located at 96 MacArthur Boulevard, Oakland, California (Figure 1). An ozone injection system was started on June 23, 2003 to remediate hydrocarbon-impacted groundwater (Table 1). Wells MW-1 and MW-7 are monitored as indicators of ozone injection system performance (Table 2).

Environ Strategy appreciates the opportunity to be of service. If you have any questions or require additional information regarding this report, please do not hesitate to contact us at (714) 919-6525, or by email at dnygaard@environstrategy.com.

Respectfully submitted,

Dane Nygaard Project Manager Jinghui Niu, P.E. Principal Engineer

Third Quarter 2012 O&M Report 76 Service Station No. 1871 (351644)

September 14, 2012

Ozone Injection System

KVA Ozone Injection System

Reporting Period: June 1, 2012 – August 31, 2012

Days of Operation: Operated 92 days during the period

Hours of Operation: 2,260

System Operation Data Since Startup on June 23, 2003:

Total Hours of Operation: 54,920

Notes: Third Quarter 2012 – Period hours includes dates May 28, 2012 to August 30, 2012.

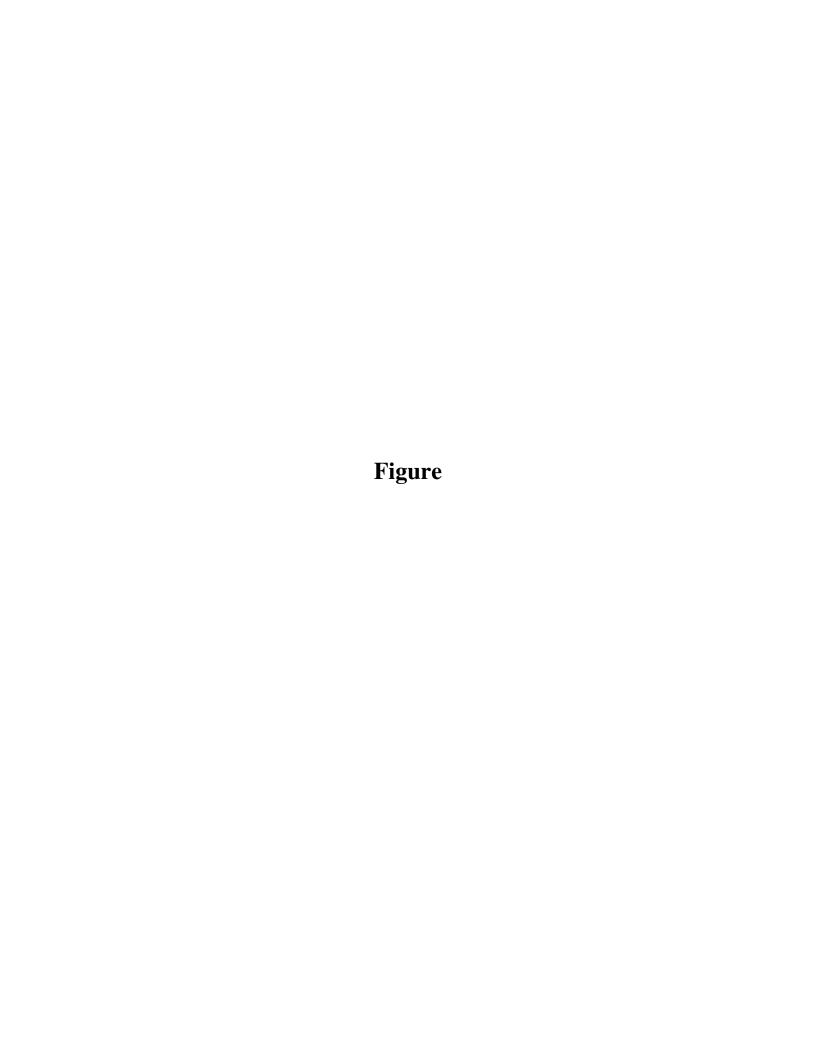
Attachments: Figure - Site Plan

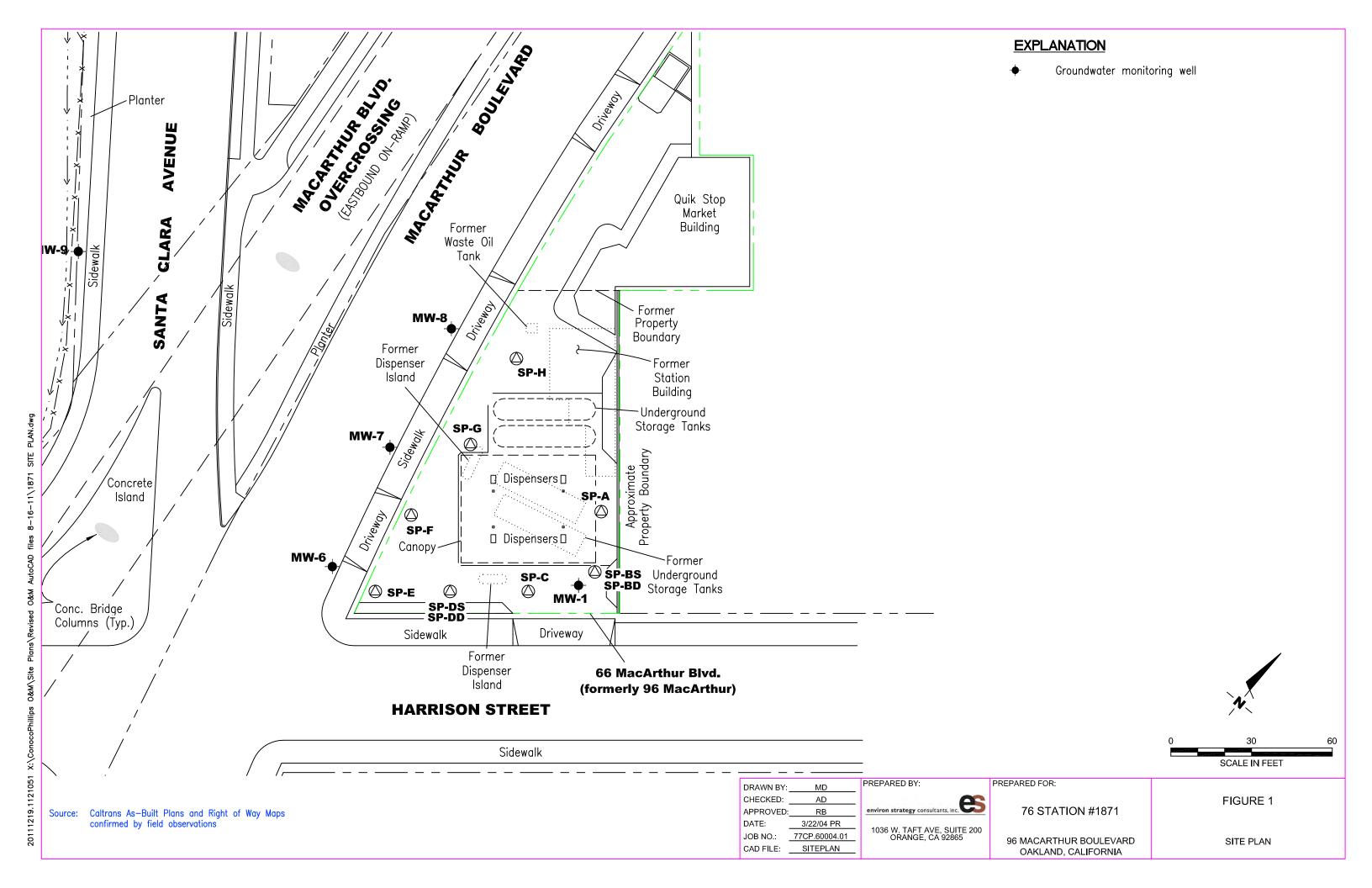
Table 1 - Ozone Injection - System Operation Data

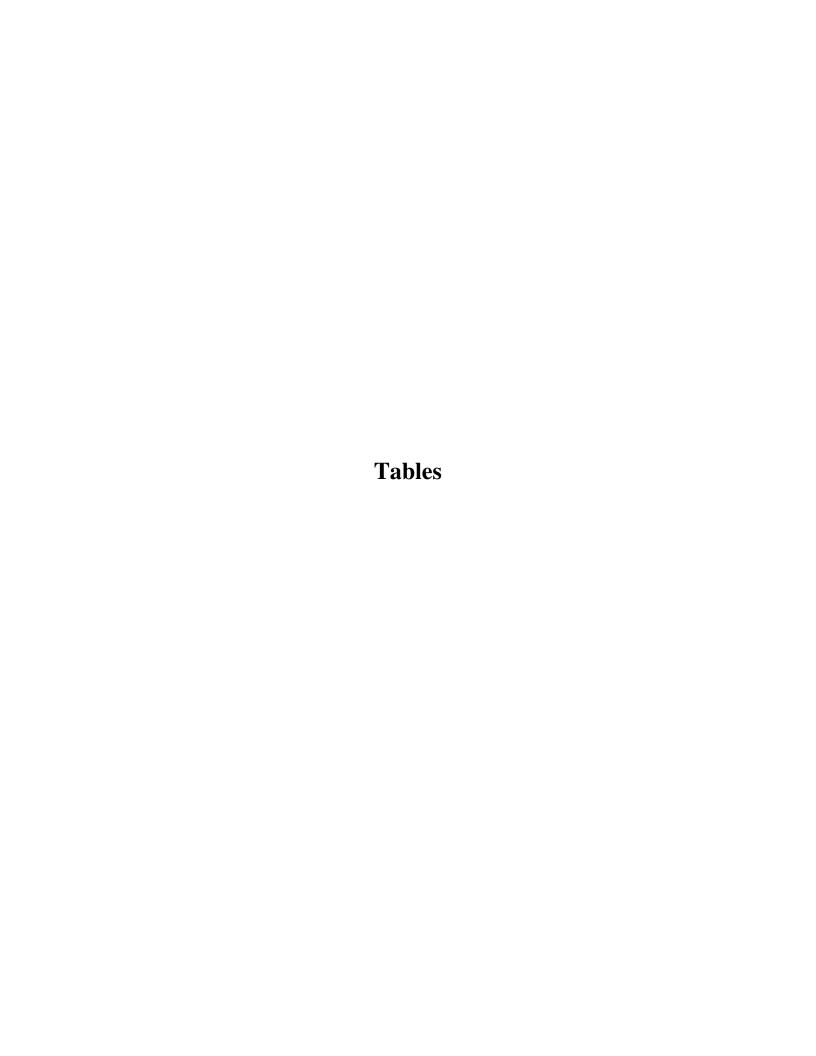
Table 2 - Ozone Injection - Groundwater Monitoring Data

Graph 1 - MW-1 TPHg, Benzene, and MTBE Groundwater Concentrations Graph 2 - MW-7 TPHg, Benzene, and MTBE Groundwater Concentrations

Appendix A - Field Notes







Ozone Injection - System Operation Data 76 Service Station No. 1871 (351644) 96 MacArthur Blvd., Oakland, California Page 1 of 4

		OZONE SPARGE SYSTEM						SP-A	SP-BS	SP-BD	SP-C	SP-DS	SP-DD	SP-E	SP-F	SP-G	SP-H
					Period		Ozone										
		System Sta	tus (On/Off)	Hourmeter	Online	Cumulative	Injected	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure	Pressure
Date	Notes	Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
6/23/03		On	On	8807.26		0.95		20	18	19	20	21	23	20	26	14	26
7/16/03		Off	On	8850.46	0.09	0.91	0.39	27	18	31	40	28	29	31	38	24	25
8/30/03		On	On	9180.61	0.35	0.86	2.97	17	15	17	19	19	19	20	26	19	26
9/18/03		On	On	9327.43	0.37	0.84	1.32	13.5	14.7	17.0	16.3	16.0	19.7	16.8	19.8	15.7	20
10/16/03		On	On			0.84		27.0	19.5	40.8	39.0	40.8	38.5	34.2	46.4	24.2	39.8
11/17/03		On	On	9696.55	0.29	0.81		11.0	20.0	17.0	18.0	17.5	17.0	16.0	21.0	51.0	22.0
12/5/03		On	On	9804.98	0.29	0.80	0.98	33.0	21.0	44.0	40.0	43.0	39.0	33.5	44.0	26.0	33.0
1/16/04		On	On	10471.28	0.76	0.79	6.00	12.5	11.0	18.5	16.5	17.5	17.0	16.0	20.0	16.0	20.0
2/3/04		On	On	10727.69	0.68	0.79	2.31	12.3	11.5	18.2	16.5	18.2	17.3	16.0	19.0	16.0	18.2
3/24/04		On	On	11424.95	0.66	0.78	6.28	31.0	18.3	37.5	26.0	34.0	33.2	32.3	41.5	23.0	31.0
4/14/04		On	On	11676.10	0.57	0.77	2.26	32.0	19.0	38.7	26.0	37.7	37.1	32.8	41.8	23.8	29.5
4/15/04	а	On	On	11685.29	0.37	0.77	0.08										
4/16/04	a	On	On	11693.80	0.41	0.77	0.08										
4/19/04	a	On	On	11742.90	0.78	0.77	0.08										
4/23/04	a	On	On	11773.10	0.76	0.77	0.44										
5/4/04	a	Off	On	11837.70	0.36	0.76	0.58	32.2	20.5	39.4	36.2	38.1	32.0	33.5	60.0	25.8	33.1
		On						32.5	20.5							23.5	
5/11/04	L .		On	11950.51	0.77	0.76	1.02			38.5	29.8	38.8	39.5	34.8	60.0		35.9
6/14/04 7/29/04	b,c d	On On	On On	12464.64 844.62	0.72 0.99	0.76 0.77	4.63 7.60	20.0 22	21.0 15	38.8	27.2 26	37.0 35	38.2 34	35.2 35	60.0	24.0 25	32.1 33
8/12/04	e e	On	On	1075.97	0.98	0.77	2.08										
9/10/04		On	On	1490.23	0.85	0.78	3.73	32	32	33	33	21	24	30	20	26	30
10/5/04		On	On	1868.83	0.90	0.78	3.41	31	32	33	31	22	23	31	21	26	28
11/5/04		On	On	2360.90	0.93	0.79	4.43	22	26	12	18	12	22	30	32	26	22
12/2/04	f	Off	Off	2802.02	0.97	0.79	3.97										
1/13/05		Off	On	2802.07	0.00	0.76	0.00	23	27	15	20	15	23	31	34	28	25
2/25/05	g	Off	Off	2802.42	0.00	0.73	0.00										
3/8/05	h,i	Off	Off	2802.42	0.00	0.72	0.00										
4/5/05	į	Off	Off	2802.42	0.00	0.70	0.00										
5/4/05	J.	Off	On	2802.49	0.00	0.69	0.00 5.45	14 35	11 25	16 Off	12	20	27	25 35	29 34	25 27	31 25
6/2/05 7/7/05	k k,l,m	On On	On On	3407.97 4067.42	1.00 1.29	0.69 0.71	5.45	35	23	Off	40 30	41 Off	36 26	32	28	25	Off
8/26/05	n	On	On	4665.98	0.81	0.71	5.39	13	13	Off	14	Off	13	12	12	13	Off
9/23/05	0	On	On	4947.97	0.69	0.71	2.54	16	15	Off	Off	Off	16	16	16	16	Off
10/23/05	р	On	On	5264.28	0.72	0.71	2.85	16	16	Off	Off	Off	16	16	16	16	Off
11/11/05	q,r	On	Off	0.90		0.71											
11/15/05	S	Off	On	0.90	0.00	0.71	0.00	35	16	16	22	23	18	23	23	23	24
12/6/05	t	Off	On	2.49	0.00	0.70	0.01	22	20	19	24	24	22	26	23	24	25
1/4/06	u	Off	On	6	0.01	0.69	0.03	20	20	18	17	23	20	25	19	22	20
1/18/06	u	Off	On	203	0.67	0.69	1.77	22	19	19	20	19	18	21	22	22	23
2/1/06	V	Off	On	316	0.38	0.68	1.02	20	20	18	22	22	18	23	23	22	25
2/15/06 3/1/06	V	Off Off	On	344 417	0.10	0.68	0.25	20	19 20	18 19	17 19	19	20 17	23 24	19	22	20
3/1/06	v u	Off	On On	501	0.25 0.27	0.67 0.67	0.66 0.76	21 20	19	19	19	21 19	20	23	23 20	21 22	21 20
3/16/06	u u	Off	On	560	0.27	0.67	0.76	20	20	19	17	20	21	25	21	22	21
4/16/06	u	Off	On	624	0.22	0.66	0.58	20	19	18	17	19	20	23	20	23	21
4/25/06	u	Off	On	718	0.50	0.66	0.85	20	20	19	18	20	22	24	21	22	20

Ozone Injection - System Operation Data 76 Service Station No. 1871 (351644) 96 MacArthur Blvd., Oakland, California Page 2 of 4

		OZONE SPARGE SYSTEM						SP-A	SP-BS	SP-BD	SP-C	SP-DS	SP-DD	SP-E	SP-F	SP-G	SP-H
					Period		Ozone										
		System Sta	atus (On/Off)	Hourmeter	Online	Cumulative	Injected	Pressure									
Date	Notes	Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)									
5/9/06	u	Off	On	776	0.20	0.65	0.52	20	19	19	17	19	21	22	20	22	20
5/23/06	u	Off	On	834	0.20	0.65	0.52	19	20	18	18	20	20	23	20	23	21
6/6/06	u	Off	On	1,042	0.71	0.65	1.87	20	19	18	17	19	20	23	20	22	20
6/20/06	W	Off	On	1,206	0.56	0.65	1.48	19	20	18	18	19	20	25	21	23	21
7/7/06	Х	Off	Off	1,313	0.30	0.65	0.96										
7/28/06	У	Off	On	1,313	0.00	0.64	0.00	19	17	16	19	24	17 19	22	19	21	23
8/15/06 8/29/06	u u	Off Off	On On	1,616 1,801	0.80 0.63	0.64 0.64	2.73 1.67	19 19	17 19	17 17	16 17	19 21	18	23 21	19 19	21 22	21 23
9/12/06	u	Off	On	2,022	0.63	0.64	1.67	23	19	17	16	19	19	25	19	22	23
9/22/06	u	Off	On	2,022	0.73	0.64	1.64	21	21	19	20	23	21	26	23	25	27
10/4/06	u	Off	On	2,204	0.43	0.64	0.98	18	18	17	18	18	18	25	23	22	21
10/4/06	u	Off	On	2,401	0.30	0.64	0.79	20	19	17	16	18	19	20	20	21	27
10/31/06	W	Off	On	2,516	0.42	0.63	1.04	22	20	19	20	19	19	23	21	25	23
11/14/06	u	Off	On	2,636	0.41	0.63	1.08	18	18	17	17	18	18	22	24	22	24
11/28/06	u	Off	On	2,744	0.37	0.63	0.97	20	20	19	20	22	21	25	25	22	23
12/14/06	u	Off	On	2,801	0.17	0.63	0.51	19	19	18	18	19	19	22	22	23	22
12/26/06	u	Off	On	2,906	0.42	0.62	0.95	20	20	19	20	21	20	25	25	20	24
1/15/07	u	Off	On	2,983	0.18	0.62	0.69	19	20	18	18	19	19	22	23	22	22
1/29/07	V	Off	On	3,076	0.32	0.62	0.84	20	20	19	20	20	20	24	21	23	24
2/6/07	u	Off	On	3,156	0.48	0.62	0.72	19	20	18	17	19	19	21	24	21	23
2/21/07	u	Off	On	3,303	0.47	0.62	1.32	20	21	20	20	18	21	23	21	25	23
3/5/07	u	Off	On	3,378	0.30	0.61	0.68	19	20	18	18	18	20	21	23	22	22
3/19/07	u	Off	On	3,476	0.33	0.61	0.88	20	21	20	19	18	21	23	24	23	24
4/4/07	u	Off	On	3,515	0.12	0.61	0.35	19	20	18	17	18	19	21	21	21	22
4/18/07	u	Off	On	3,606	0.31	0.60	0.82	21	21	20	20	18	21	24	24	24	23
5/10/07	u	Off Off	On On	3,676	0.15	0.60	0.63	19 22	20	19	17 19	18 19	19 21	20 22	23 22	20 22	21 23
5/25/07 6/4/07	u u	Off	On	3,758 3,801	0.26 0.18	0.60 0.59	0.74	18	21 20	20 18	18	17	19	19	20	21	20
6/18/07	u	On	On	4,137	1.00	0.59	3.02	20	20	19	19	17	20	22	22	20	22
7/2/07		On	On	4,137	0.70	0.60	2.12	15	21	19	18	20	19	24	21	21	23
7/16/07	1	On	On	4,409	0.11	0.59	0.32	18	20	20	19	21	20	26	23	22	25
8/8/07		On	On	4,961	1.00	0.60	4.97	13	20	20	18	20	18	29	22	20	24
8/27/07		On	On	5,411	0.99	0.60	4.05	14	21	19	20	21	19	30	20	21	21
9/13/07		On	On	5,822	1.00	0.61	3.70	22	21	21	23	21	22	30	20	21	21
9/27/07		On	On	6,155	0.99	0.61	3.00	28	25	25	27	25	26	32	21	26	25
10/29/07		On	On	6,917	0.99	0.62	6.86	28	25	24	25	33	32	32	21	30	30
11/26/07		On	On	7,591	1.00	0.62	6.07	26	22	24	25	31	30	32	22	30	30
12/31/07		On	On	8,425	0.99	0.63	7.51	26	20	24	24	30	32	32	30	28	30
1/28/08		On	On	9,103	1.01	0.63	6.10	26	21	22	21	26	30	28	26	27	27
2/25/08		On	On	9,778	1.00	0.64	6.08	23	19	22	20	25	30	30	28	27	28
3/24/08		On	On	10,475	1.00	0.64	6.27	25	20	21	20	24	30	28	27	26	27
4/28/08		On	On	11,317	1.00	0.65	7.58	24	22	20	22	22	30	29	24	26	26
5/26/08		On	On	11,992	1.00	0.65	6.08	23	20	22	22	23	30	30	25	27	28
6/30/08	-	On	On	12,828	1.00	0.66	7.52	25	22	21	23	22	31	29	26	27	26
7/28/08		On	On	13,498	1.00	0.66	6.03	22	26	24	28	23	30	22	27	29	21
8/25/08 9/29/08		On	On On	14,261	1.00	0.66	6.87	18 20	15 14	25 15	14 16	19 18	22 28	23 28	25 20	24 19	20 22
	7	On On	On	15,100 15,358		0.67 0.67	7.55	20	16	16	17				18	19	22
10/27/08	Z	On	On	10,308	0.38	0.67	2.32	20	10	10	17	20	28	28	18	19	∠1

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			(OZONE SPAR	RGE SYSTE	EM	SP-A	SP-BS	SP-BD	SP-C	SP-DS	SP-DD	SP-E	SP-F	I SP-G	SP-H	
					Period		Ozone										
		System Sta	tus (On/Off)	Hourmeter	Online	Cumulative	Injected	Pressure									
Date	Notes	Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)									
11/24/08		On	On	16,028	1.00	0.67	6.03	20	15	15	15	18	25	25	18	16	20
12/29/08		On	On	16,869	1.00	0.67	7.57	20	15	17	16	20	24	22	19	14	20
1/26/09		On	On	17,542	1.00	0.68	6.06	22	17	16	16	21	25	20	18	15	22
2/23/09		On	On	18,214	1.00	0.68	6.05	21	18	19	18	20	23	21	19	16	20
3/30/09		On	On	19,005	0.94	0.69	7.12	20	19	17	17	22	22	21	18	16	21
4/27/09		On	On	19,727	1.00	0.69	6.50	21	21	18	18	21	22	20	19	18	20
5/25/09		On	On	20,400	1.00	0.69	6.06	22	20	17	16	20	21	21	20	19	19
6/22/09		On	On	21,072	1.00	0.70	6.05	20	20	17	18	17	20	21	19	20	20
7/27/09		On	On	21,912	1.00	0.70	7.56	22	21	18	19	16	22	22	21	19	18
8/3/09		On	Off	22,080	1.00	0.70	1.51	21	20	20	21	18	21	20	20	21	19
11/4/09		Off	On	22,080	0.00	0.68	0.00	20	19	19	20	17	20	19	18	19	17
12/30/09		On	On	23,424	1.00	0.68	12.10	23	21	21 20	23 22	20	22	23 23	21	22	21
1/27/10 2/24/10		On On	On On	24,096 24,767	1.00	0.69 0.69	6.05 6.04	21 22	20 24	20	22	21 22	24 25	23	20 21	24 26	23 24
3/30/10		On	On	25,607	1.00	0.69	7.56	20	21	22	23	19	23	22	22	25	23
4/27/10		On	On	26,280	1.00	0.70	6.06	21	22	21	22	20	21	20	20	24	23
5/25/10		On	On	26,953	1.00	0.70	6.06	22	24	23	21	21	22	21	22	23	22
6/29/10		On	On	27,795	1.00	0.70	7.58	24	21	22	24	22	20	21	22	24	23
7/27/10		On	On	28,467	1.00	0.71	6.05	21	18	20	22	20	17	19	18	21	20
8/31/10		On	On	29,308	1.00	0.71	7.57	12	18	24	15	13	14	16	10	17	8
9/28/10		On	On	29,980	1.00	0.71	6.05	11	18	15	19	20	17	23	16	15	20
10/26/10		On	On	30,652	1.00	0.71	6.05	9	18	18	20	21	17	21	10	19	17
11/30/10		On	On	31,492	1.00	0.72	7.56	13	22	19	18	28	20	19	15	17	19
12/28/10		On	On	32,163	1.00	0.72	6.04	14	19	18	18	26	21	20	18	18	18
1/25/11		On	On	32,834	1.00	0.72	6.04	18	17	15	21	24	17	19	21	20	15
2/22/11		On	On	33,506	1.00	0.72	6.05	20	21	18	25	21	23	28	25	22	20
3/29/11		On	On	34,342	1.00	0.73	7.52	19	20	18	22	23	22	25	24	23	20
4/26/11		On	On	35,012	1.00	0.73	6.03	22	21	19	20	21	21	23	24	23	22
5/31/11		On	On	35,851	1.00	0.73	7.55	20	20	20	21	20	20	21	22	21	21
6/28/11		On	On	36,523	1.00	0.73	6.05	21	22	21	19	20	22	19	20	23	20
7/26/11		On	On	37,196	1.00	0.74	6.06	19	20	20	21	18	20	16	22	21	22
8/30/11		On	On	38,034	1.00	0.74	7.54	25	31	26	-	30	34	27	28	22	24
9/27/11		On	On	38,705	1.00	0.74	6.04	21	30	27	20	29	31	22	26	20	23
10/27/11		On	On	39,417	0.99	0.74	6.41	18	22	17	26	19	24	18	19	15	19
11/24/11		On	On	40,093	1.00	0.75	6.08	21	20	17	24	16	21	19	17	16	18
12/29/11		On	On	40,931	1.00	0.75	7.54	25	22	29	23	20	20	19	18	15	17
1/24/12		On	On	41,555	1.00	0.75	5.62	21	18	25	20	20 22	18	19	15	16 24	21
2/27/12		On On	On On	42,391 43.064	1.00	0.75 0.75	7.52 6.06	30 26	25 22	33 29	44 35	22	29 25	23 21	20 18	23	29 33
3/26/12 4/23/12		On	On	43,064	1.00	0.75	6.08	26	17	25	35		25	25	18	23	29
5/28/12		On	On	43,739	1.00	0.76	7.60	23	17	25	30	26 21	22	25	16	23	29
6/28/12		On	On	,	1.00	0.76	6.71	22	21	20	30	20	24	21	17	18	23
0/28/12		On	On	45,329	1.00	U./b	6./1	22	21	20	32	20	24	21	17	18	23

Ozone Injection - System Operation Data

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			OZONE SPARGE SYSTEM							SP-BD	SP-C	SP-DS	SP-DD	SP-E	SP-F	SP-G	SP-H
					Period		Ozone										
. .		System Sta	tus (On/Off)	Hourmeter	Online	Cumulative	·			Pressure		Pressure					
Date	Notes	Arrival	Departure	Reading	Factor	Online Factor	(lbs)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
7/26/12		On	On	45,999	1.00	0.76	6.03	23	18	21	29	21	20	20	17	20	20
8/30/12		On	On	46,843	1.00	0.76	7.60	20	15	19	25	16	18	19	16	18	16
	(6/23/2003-present) Sparge time per cycle (min							7	7	7	7	7	7	7	7	7	7
		Number of Cycles per Da							20	20	20	20	20	20	20	20	20

Reporting Period: Third Quarter 2012 (6/1/2012 to 8/31/2012)

Total Hours Operational: 54,920 Total Pounds Ozone Injected: 494 Period Hours Operational: 2260 Period Percent Operational: 100% Period Pounds Ozone Injected: 20

Definitions:

psi Pounds per square inch
-- Data not available
NA Not applicable
lbs Pounds

Notes:

а

Hour Meter Formula adjusted 12/19/07

June 4, 2007 - Control Panel retrofit installed.

August 3, 2009 - Ozone down by request of COP PM

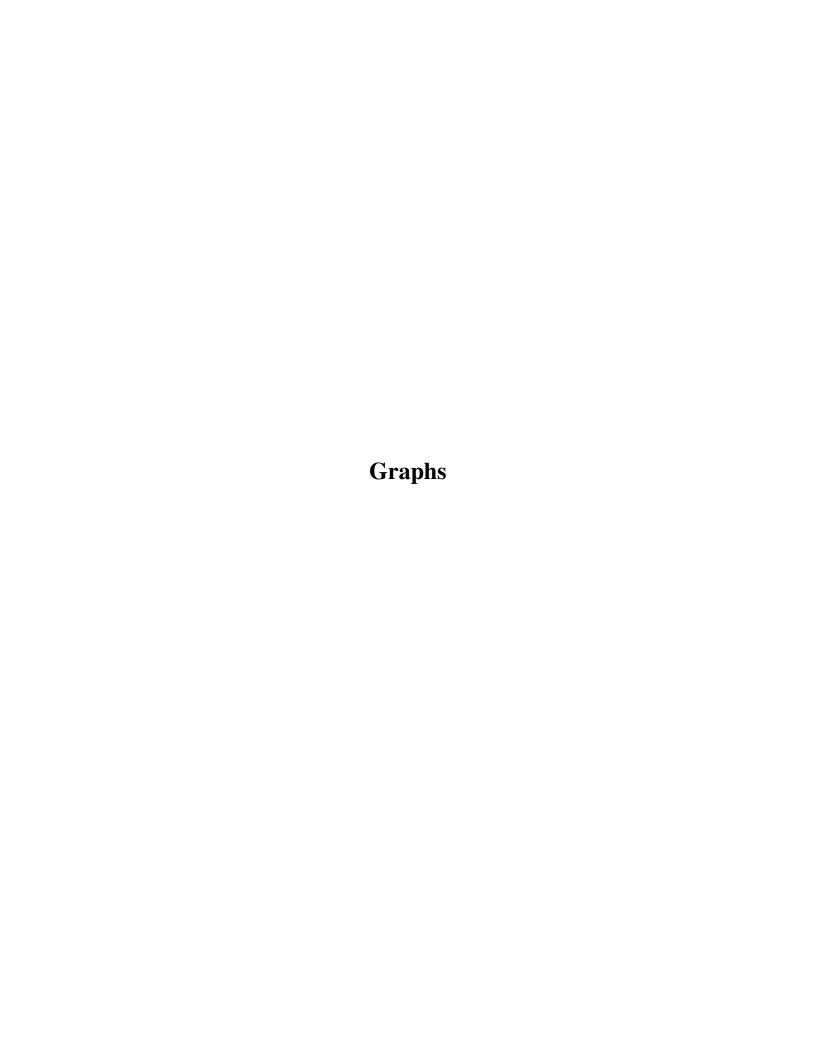
November 4, 2009 - System restarted

- Troubleshooting time counter
- b Hourmeter replaced
- c Solenoid 8 has high pressure, taken offline
- d Solenoid 3 leaking, taken off line
- e Pressures not properly recorded
- f Ozone generator hose ruptured on effluent side to solenoid manifold. No Readings.
- g System down due to bad GFI
- h New GFI was installed.
- Fan in compressor broken and tubing from compressor to manifold needs to be replaced. System left off until repairs made.
- Installed new motor fan and manifold fittings, restarted system.
- k OZ-3 turned off due to high pressure of over 60 psi.
- OZ-5 too brittle. Left off until lines are replaced.
- OZ-5 too brittle. Left off until lines are replaced.
- m OZ-10 turned off due to leak in secondary containment
- n Hourmeter reading not correct, will check next visit
- o Hourmeter not working properly.
- p Pressure gauge stuck at 16 psi.
- q New hourmeter, panel fan, and GFCI installed
- r Fuse blown in ozone generator, system left off
- s Replaced tubing to all wells and replaced ozone generator circuit board and pressure gauge
- t System down due to tripped GFI; foam on door may have been pressing reset button. Foam removed.
- u Ozone sensor tripped; system restarted.
- v Rainbird meter malfunction.
- w System down time due to tripped GFI; system restarted.
- x System off due to bad compressor.
- y Compressor repaired; system restarted.
- z September 10-27,2008 System down for well repair.

Ozone Injection - Groundwater Monitoring Data 76 Service Station No. 1871 (351644) 96 MacArthur Blvd., Oakland, California Page 1 of 1

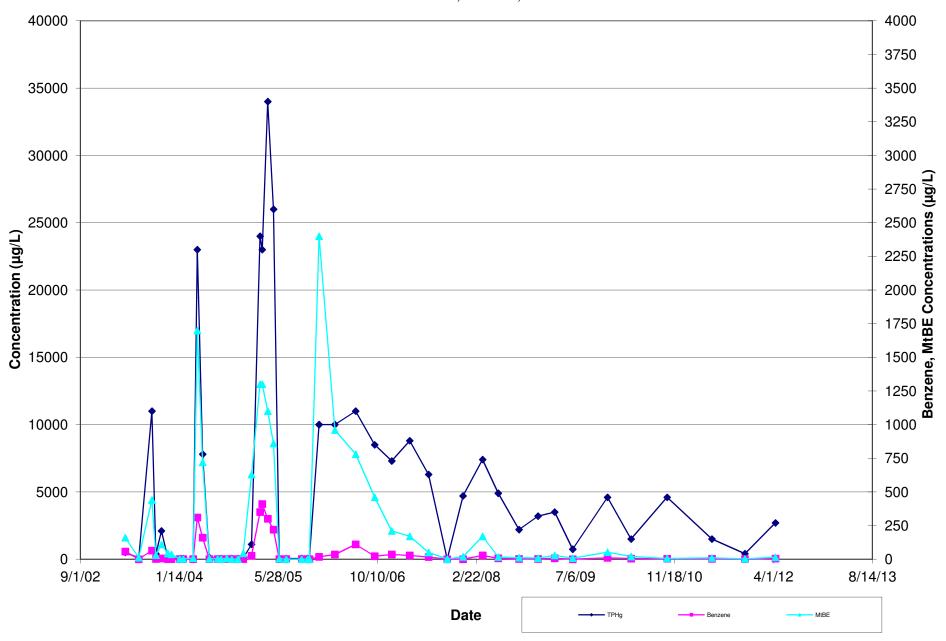
		Monitoring Well: MW-1										Monitoring Well: MW-7									
	Notes	ORP	DO	TPHq	Benzene	Toluona	Ethyl-benzene	Yylonoc (total)	MtBE	ORP DO TPHg Benzene Toluene Ethyl-benzene Xylenes (tol							MtBE				
Date	notes	(mV)	(mg/l)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mV)	(mg/l)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	Xylenes (total) (μg/L)	(μg/L)				
4/16/03	а	NM	NM	510	57	0.62	29	61	160	NM	NM	<25,000	<250	<250	<250	<500	37,000				
6/23/03	a	NM	NM	75	<0.50	< 0.50	< 0.50	5.3	12	NM	NM	20,000	260	<0.50	<0.50	<1.0	20,000				
8/29/03	a	NM	NM	11,000	64	<10	330	1,400	440	NM	NM	<10,000	<100	<100	<100	<200	24,000				
9/18/03		NM	NM	390	2.3	<0.50	3.6	31	30	NM	NM										
10/16/03		NM	NM	2,100	6.0	<0.50	24.0	120	110	NM	NM										
11/17/03		NM	NM	130	0.51	< 0.50	2.1	7.9	43	NM	NM	16,000	<130	<130	<130	<250	17,000				
12/5/03		NM	NM	<50	< 0.50	<0.50	< 0.50	<1.0	36	NM	NM	12,000	<100	<100	<100	<200	19,000				
1/16/04	b	NM	NM	<50	< 0.50	<0.50	< 0.50	<1.0	<2.0	NM	NM	17,000	160	270	<130	<250	19,000				
2/3/04		238	NM	<50	< 0.50	< 0.50	<0.50	<1.0	<2.0	72	NM	10,000	<25	<25	<25	<50	15,000				
3/24/04	b	169	NM	55	< 0.50	<0.50	0.80	2.9	7.8	56	NM	13,000	<100	<100	<100	<200	15,000				
4/14/04	b	0.4	NM	23,000	310	10	590	2400	1700	42	NM	9,000	<50	<50	<50	<100	11,000				
5/11/04		С	NM	7,800	160	<10	170	700	720	-3	NM	8,300	<50	<50	<50	<100	11,000				
6/14/04		20	5.25	110	<0.50	<0.50	1.0	6.4	3.4	35	1.45	<5,000	<50	<50	<50	<100	6,500				
7/26/04 8/12/04		NM 171	NM 0.07	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.0	3.2 0.80	NM 117	NM	<5,000 2.100	<50 <10	<50 <10	<50 <10	<100 <20	3,100 2,700				
9/10/04		180	0.07	<50 <50	<0.50	<0.50	<0.50	<1.0	5.7	122	0.06	3,100	<13	<13	<10	<20 <25	4,400				
10/5/04		175	0.08	<50 <50	<0.50	< 0.50	<0.50	<1.0	< 0.50	117	0.07	<50	<0.50	<0.50	<0.50	<1.0	7.1				
11/5/04	d	117	0.05	<50	<0.50	<0.50	<0.50	<1.0	0.89	210	0.06	50	<0.50	<0.50	<0.50	<1.0	1.1				
12/2/04		109	0.03	83	0.83	<0.50	<0.50	1.2	44	214	0.03	180	1.6	<0.50	66	4.5	51				
1/13/05		105	0.04	1,100	26	1.2	2.10	70	630	201	0.05	1,000	25	1	1.9	68	460				
2/25/05	c,f		2.67	24,000	350	10	820	2,200	1,300	21	2.05	680	<2.0	<2.0	2.3	58	2,500				
3/8/05	g	-35	4.43	23,000	410	<10	1,100	2,300	1,300	NR	NR										
4/5/05		-30	4.56	34,000	300	<10	910	2,000	1,100	135	6.53	<5,000	<.50	<.50	<.50	<1.00	19,000				
5/4/05		-59	2.40	26,000	220	7.4	790	2,100	860	-24	1.13	<2,000	< 0.50	<0.50	<0.50	<1.0	7,100				
6/2/05		-20	7.34	<50	< 0.50	<0.50	<0.50	<1.0	3.5	-12	1.01	3500	<0.50	<0.50	<0.50	<1.0	4,000				
7/7/05	i,j	142	7.42	<50	<0.50	<0.50	<0.50	<1.0	0.61	154	1.40	5000	<0.50	<0.50	<0.50	<1.0	8,900				
9/23/05		16	7.77	<50	<0.50	<0.50	<0.50	<1.0	<0.50	56	1.39	<500	<5.0	<5.0	<5.0	<10	1,900				
10/23/05		154	7.13	<50	<0.50	<0.50	<0.50	<1.0	0.56	191	1.59	<250	<2.5	<2.5	<2.5	<5	680				
11/1/05	k					29		 840	2400			1100	0.90		24	37	 8200				
12/20/05 3/10/06				10000	17 35	< 0.50	180 470	1300	960			1200	24	<0.50 <0.50	3.6	<1.0	4700				
6/23/06				11000	110	<0.50	610	1600	780			1800	21	<0.50	<0.50	<1.0	1500				
9/27/06				8500	22	<0.50	270	740	460			<2,000	<0.50	<0.50	<0.50	<1.0	350				
12/22/06				7300	35	<0.50	370	850	210			24000	<0.50	<0.50	<0.50	<1.0	190				
3/23/07				8800	28	<0.50	440	910	170			85	<0.50	<0.50	<0.50	<1.0	92				
6/26/07				6300	16	<0.50	300	650	50												
9/28/07				<50	< 0.50	< 0.50	<0.50	<1.0	1.2			50	<0.50	<0.50	<0.50	<1.0	37				
12/17/07				4700	<0.50	<0.50	71	160	18												
3/25/08				7400	28	<0.50	430	540	170			<50	<0.50	<0.50	<0.50	<1.0	7.3				
6/12/08				4900	6.4	<0.50	170	280	16			52	<0.50	<0.50	<0.50	<1.0	9.4				
9/25/08				2200	2.1	<0.50	72	110	11			65	<0.50	<0.50	<0.50	<1.0	5.6				
12/30/08				3200	2.5	<0.50	100	150	8.3			130	<0.50	<0.50	<0.50	1.1	5.7				
3/24/09				3500	6.8	<0.50	140	140	28			98	0.50	<0.50	<0.50	<1.0	9.2 6.7				
6/23/09 12/16/09				740 4600	<0.50	<0.50 <0.50	17 270	12 140	8 52			290 150	1.2 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.0	3.7				
4/14/10		54	1.88	1500	4.8	<1.00	100	36	20	110	0.97	60	<0.50	<0.50	<0.50	<1.0	2.1				
10/13/10			1.00	4600	3.0	<0.50	180	73	6		0.97	<50	<0.50	<0.50	<0.50	<1.0	3.6				
5/27/11				1500	3.2	<2.50	86	14	10	-		<50	<0.50	<0.50	<0.50	<1.0	5.2				
11/10/11		177	0.81	410	0.72	<0.50	7.1	1.4	2.4	169	2.74	<50	<0.50	<0.50	<0.50	<1.0	2.9				
4/12/12		237	5.30	2700	4.7	<0.50	130	7.5	14.0	210	1.61	<50	<0.50	<0.50	< 0.50	<1.0	4.7				

Definitions:	Notes:	
TPHg = Total petroleum hydrocarbons as gasoline		Data not available
MtBE = Methyl tert-butyl ether	NM	Not Measured
μg/L = Micrograms per liter	а	Sampled by Gettler-Ryan, Inc.
	b	Hydrocarbon in gasoline range does not match laboratory gasoline standard.
ORP = Oxidation Reduction Potential	С	ORP reading under the range
DO = Dissolved Oxygen	d	Quantity of unknown hydrocarbon(s) in sample based on gasoline.
mV = Millivolts	е	Data not available at time of reporting
mg/l = Milligrams per liter	f	MW-7 Estimated value of MtBE; concentration exceeded the calibration of analysis
	g	Car parked on MW-7.
	h	Data not available at time of reporting
	i	Siloxane peaks were found in the sample which are not believed to be gasoline related. If they were to be quantified as gasoline, the concentration would be 58 ug/L. (MW-1).
	j	The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern. (MW-1)
	k	Monthly sampling discontinued at the request of ConocoPhillips



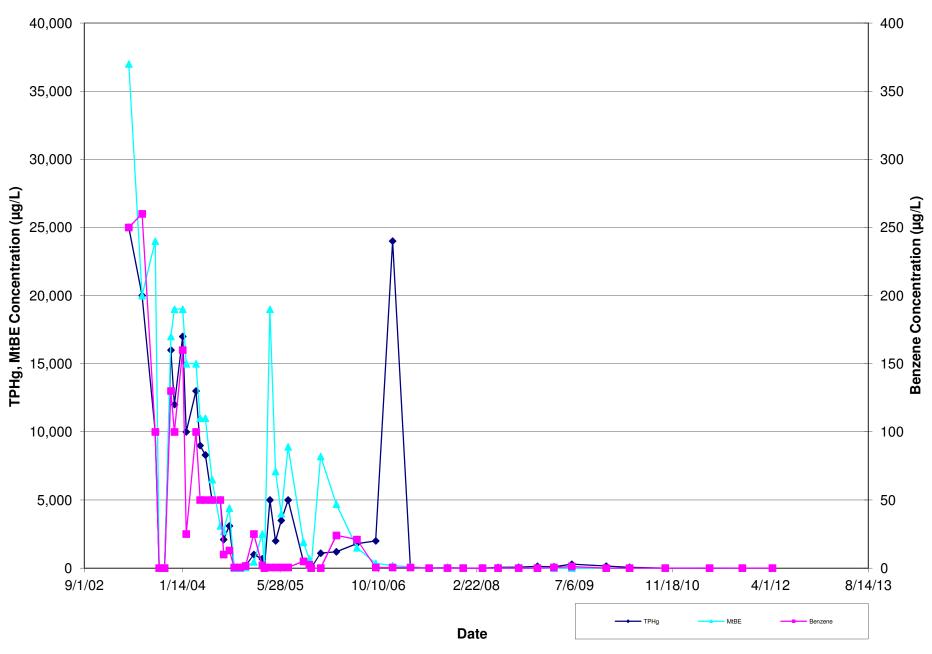
Graph 1 MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations

76 Service Station No. 1871 (351644) 96 MacArthur Blvd., Oakland, California



Graph 2 MW-7 TPHg, Benzene, and MtBE Groundwater Concentrations

76 Service Station No. 1871 (351644) 96 MacArthur Blvd., Oakland, California



Appendix A Field Notes

Ozone Injection System Data Sheet

Station No.: 1871 (UOC 351644)

City: Oakland

					Well I.D. SP-A				Well I.D. SP-BS				Well i.D. SP-BD			
Date	Notes	Status ON/OFF	Cycles/ Day	Hour Meter	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate
					(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)
ZEOWEIZ		arlas	20	45529	72		7		7.7		7		20		7	
26 ouy 12		onlon	20	45999	7		7		18		フ		7.5		フ	
30 Ayuz		unpor	ZO	46843	20	,	7_		15		7		19		7	
	Well (.D. SF)-c			Well I.D. SP	-DS			Well I.D. SP	-DD			Well I.D. SI	P-E		
Date	Pressure	Temp.	Run Time	Run Time Flow Rate		Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate
	(psi)	(°F)	(min)	(acfm)	Pressure (psi)	(°F)	(min)	(acfm)	(psi)	(°F)	(min)	(acfm)	(leq)	(°F)	(min)	(acfm)
28 June 12	32		7		70		7		24		7		7/		7	
7674412	29		7		21		7	***************************************	70		7		26		7	
JU Ary 12	755		7		16		フ		18		7		19		7	
	W. II D. O.															
	Well I.D. SP-F					_			W-ULD SD				144-1115			
	.		l		Well I.D. SP				Well I.D. SP		T		Well I.D.			
Date	Pressure	Тетр.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	Flow Rate	Pressure	Temp.	Run Time	
	Pressure (psl)		(mln)		Pressure (psi)		(min)	Flow Rate (acfm)	Pressure (psi)		(min)	Flow Rate (acfm)	.	Temp. (°F)	Run Time	Flow Rate (acfm)
Zeome 12	Pressure (psi)	Тетр.	(mln) 7	Flow Rate	Pressure (psi)	Temp.	(min)		Pressure (psi)	Temp.	(mln) 7		Pressure		ļ	
Date ZBOWIZ ZBOWIZ ZBOWIZ ZBOWIZ	Pressure (psl)	Тетр.	(mln)	Flow Rate	Pressure (psi)	Temp.	(min)		Pressure (psi)	Temp.	(min)		Pressure		ļ	Flow Rate (acfm)
28 June 12 26 July 12	Pressure (psl) /7 / 7	Тетр.	(mln) 7 7	Flow Rate	Pressure (psl) / # 7 ()	Temp.	(min) 7		Pressure (psi)	Temp.	(min) 7		Pressure		ļ	
28 June 12 26 July 12	Pressure (psl) /7 / 7	Тетр.	(mln) 7 7	Flow Rate	Pressure (psl) / # 7 ()	Temp. (*F)	(min) 7 7 7	(acfm)	Pressure (psi) 7 \to 7	Temp.	(mln) 7 7 7		Pressure (pal)		ļ	
26 JU12	Pressure (psl) /7 / 7	Тетр.	(min) 7 7 7 Che	Flow Rate	Pressure (psl) / # 7 ()	Ozo Check Blowe Tens	(min) 7 7 7	(acfm)	Pressure (psi) 7 \to 7	Temp. (°F) ance a Sparge Grease	(min) 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	(ecfm)	Pressure (pal)		ļ	(acfm)
ZBOTUNE 12 ZB TW/Z ZB TW/Z ZB TO Ay IZ Date	Pressure (psi) /7 /7 /6 Check/ Repair	Check Hoses Fittings &	(mln) 7 7 7 Che Fi (Doc	Flow Rate (acfm) ack Air iter ument	Pressure (psi) / # 7 U / # Check & Test Safety	Oze Check Blower Tens	(min) 7 7 7 One Sy Sparge r V-Belt sion &	stem M Check Controller	Pressure (psi) 7 \(\) 7 \(\) / \(\) A \(\) Change Blower	Temp. (°F) ance a Sparge Grease	(min) 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Dection Sparge E Repair/R	Pressure (pal)		(min)	(acfm)
26 July 12 26 July 12 20 Ay 12	Pressure (psi) 17 17 16 Check/ Repair Leaks	Check Hoses Fittings & Pipes	(mln) 7 7 7 Che Fi (Doc	Flow Rate (acfm) cck Air liter ument eplaced)	Pressure (psl) / # 7 () / C Check & Test Safety Interlock	Oze Check Blower Tens	(min) 7 7 7 7 Sparge r V-Belt sion & ditions	stem M Check Controller Program	Pressure (psi) 7 () 7 () / 6 Ainten Change Blower Oil	Temp. (°F) ance a Sparge Grease	(mln) 7 7 7 9 Ind Insi	Oection Sparge E Repair/R	Pressure (pal)		(min)	(scfm)