

Roya C. Kambin Project Manager Marketing Business Unit Chevron Environmental Management Company 6101 Bollinger Canyon Road San Ramon, CA 94583 Tel (925) 790-6270 RKLG@chevron.com

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

Re: Unocal #5781

Union Oil Site 351640 3535 Pierson Street Oakland, CA

I have reviewed the attached report dated November 23, 2011.

RECEIVED

3:34 pm, Nov 23, 2011

Alameda County Environmental Health

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This 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: Report



5900 Hollis Street, Suite A Emeryville, California 94608

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

http://www.craworld.com

November 23, 2011

Reference No. 060723

Ms. Barbara Jakub Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Fourth Quarter 2011

Groundwater Monitoring and Sampling Report

UNOCAL #5781

Union Oil Company of California Site 351640

3535 Pierson Street Oakland, California

Fuel Leak Case No. RO0000253

Dear Ms. Barbara Jakub:

Conestoga-Rovers & Associates (CRA), on behalf of Union Oil Company of California, is submitting this *Fourth Quarter 2011 Groundwater Monitoring and Sampling Report* for the site referenced above (Figures 1 and 2). Groundwater monitoring and sampling was performed by TRC Solutions (TRC) of Irvine, California. TRC's October 12, 2011 *Groundwater Monitoring Data* is presented as Attachment A. Current groundwater monitoring and sampling data are presented in Table 1. Laboratory analyses were performed by BC Laboratories of Bakersfield, California. BC Laboratories' October 20, 2011 *Analytical Results* are included as Attachment B. Historical groundwater monitoring and sampling data is included as Attachment C.

RESULTS OF FOURTH QUARTER 2011 EVENT

On October 4, 2011, TRC monitored and sampled the site wells per the established schedule.

Results of the current monitoring event indicate the following:

Groundwater Flow Direction northeast Hydraulic Gradient 0.027

Approximate Depths to Groundwater
 13 to 15 feet below grade

Equal Employment Opportunity Employer



November 23, 2011 Reference No. 060723

Groundwater elevation data from monitoring well MW-A was not used in contouring due to a different screened interval.

A partial summary of results of the current sampling event is presented below in Table A:

		TABLE A:	GROUNDW	ATER ANA	LYTICAL DATA		
Well ID	TPHd (µg/L)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (μg/L)
ESLs	100	100	1	40	30	20	5
MW-A	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	0.72
MW-4	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	3.8
MW-5	20,000	42,000	21	2,400	2,400	20,000	42
MW-6	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	3.1
MW-7	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	< 0.50
MW-8	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	1.5
MW-9	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	2.4

TPHd Total petroleum hydrocarbons as diesel

TPHg Total petroleum hydrocarbons as gasoline

MTBE Methyl tertiary butyl ether

μg/L Micrograms per Liter

ESLs Environmental Screening Levels (Table F-1a) for groundwater that is a current or potential drinking water resource; *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.

< x.x Not detected above laboratory reported practical quantitation limit

BOLD Concentration exceeds applicable ESL

CONCLUSIONS AND RECOMMENDATIONS

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

- Dissolved-phase petroleum hydrocarbon and oxygenate concentrations are below ESLs in all wells except MW-5
- Dissolved petroleum hydrocarbons are centered around MW-5

CRA recommends continuing quarterly groundwater monitoring and sampling to establish concentration trends over time. Groundwater monitoring wells MW-6 through MW-9 were first



November 23, 2011

Reference No. 060723

- 3 -

sampled December 2010. After the first quarter 2012 groundwater monitoring and sampling event, CRA will update the site conceptual model to conclude an appropriate strategy.

ANTICIPATED FUTURE ACTIVITIES

Groundwater Monitoring

TRC will monitor and sample site wells per the established schedule. CRA will submit a groundwater monitoring and sampling report.

Please contact Jim Schneider at (949) 648-5200 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Ian Hull

Jim Schneider, PG 7914

IH/aa/4 Encl.

Figure 1 Vicinity Map

Can Auch

Figure 2 Groundwater Elevation and Hydrocarbon Concentration Map

Table 1 Groundwater Monitoring and Sampling Data

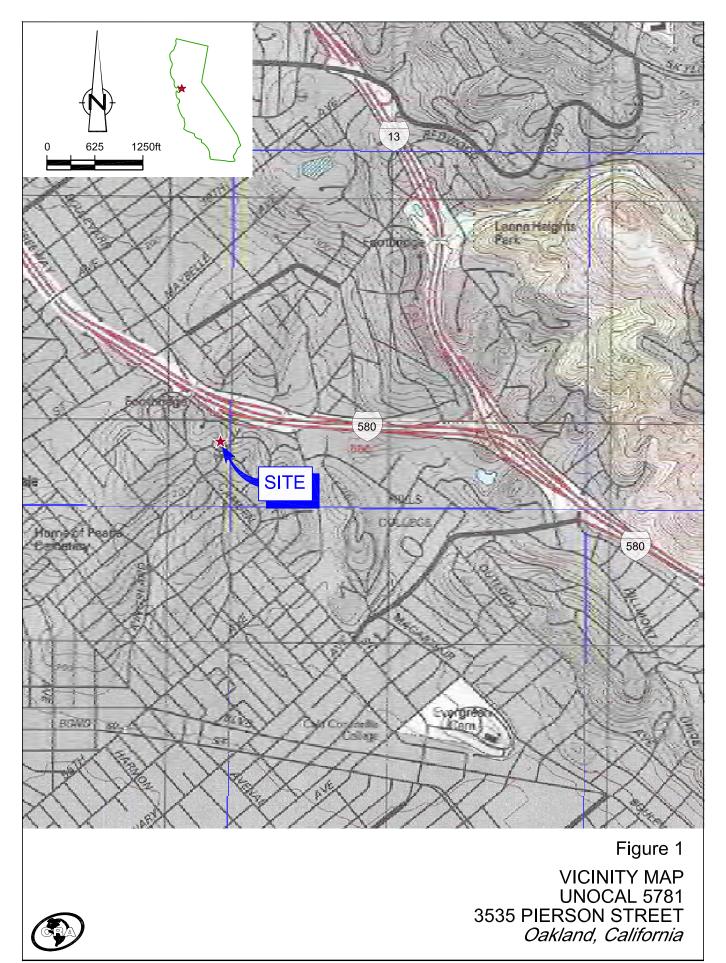
Attachment A Monitoring Data Package
Attachment B Laboratory Analytical Report

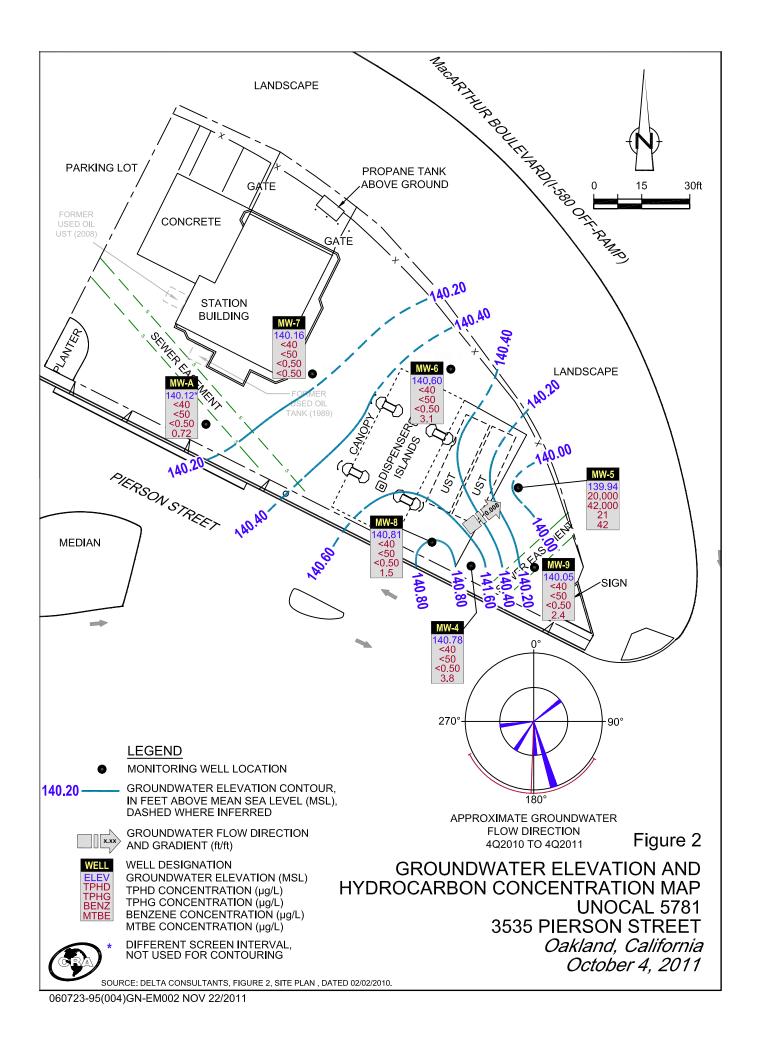
Attachment C Historical Groundwater Monitoring and Sampling Data

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

United Brothers Enterprise, Inc., Property Owner

FIGURES





TABLE

TABLE 1 Page 1 of 2

GROUNDWATER MONITORING AND SAMPLING DATA UNOCAL #5781 UNION OIL OF CALIFORNIA FACILITY 351640 3535 PIERSON STREET OAKLAND, CALIFORNIA

				Ī	HYDRO	CARBONS					PR	IMARY	vocs							GAS	GENER	AL CHE	MISTRY
Location	Date	тос	DTW	GWE	TPH - Diesel	TPH - Gasoline	В	T	E	X	MTBE by SW8260	TBA	ETBE	DIPE	TAME	EDB	1,2-DCA	Ethanol	Methanol	Methane	Ferrous iron	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	µg/L	µg∕L	µg/L	µg/L	mg/L	µg/L	mg/L	mg/L
MW-A	06/07/2011 08/18/2011	154.79 154.79	13.92 18.83	140.87 135.96	<40 <40	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.0	0.57	<10 <10	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<250 <250	<100 <100	<0.0010	140	- 11	- 69
MW-A	10/04/2011	154.79	14.67	140.12	<40	<50	<0.50	<0.50	<0.50	<1.0	0.72	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	<0.0010	<100	13	69
MW-4 MW-4	06/07/2011	153.48 153.48	10.94 12.07	142.54	<40	<50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.0	1.6	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	- 0.040	- <100	-	-
MW-4	08/18/2011 10/04/2011	153.48	12.07 12.70	141.41 140.78	<40 <40	<50 < 50	<0.50	<0.50	<0.50	<1.0	4.0 3.8	<10 <10	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<250 <250	<100 <100	0.040	100	4.6 4.3	52 50
MW-5	06/07/2011	153.66	11.45	142.21	3,700	40,000	32	2,300	1,500	16,000	24	150	<0.50	<0.50	<0.50	<0.50	<0.50	330	<100	-	-	-	-
MW-5	08/18/2011	153.66	12.30	141.36	5,400	30,000	29	1,000	980	7,200	56	44	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	9.7	15,000	< 0.44	<1.0
MW-5	10/04/2011	153.66	13.72	139.94	20,000	42,000	21	2,400	2,400	20,000	42	<250	<12	<12	<12	<12	<12	<6,200	<100	1.9	17,000	<0.44	1.3
MW-6	06/07/2011	154.62	11.33	143.29	<40	<50	<0.50	<0.50	<0.50	<1.0	4.3	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	-	-	-	-
MW-6	08/18/2011	154.62	13.00	141.62	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	2.4	<10	< 0.50	< 0.50	<0.50	< 0.50	< 0.50	<250	<100	0.0027	<200	18	66
MW-6	10/04/2011	154.62	14.02	140.60	<40	<50	<0.50	<0.50	<0.50	<1.0	3.1	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	<0.0010	100	24	78
MW-7	06/07/2011	155.38	12.59	142.79	<40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	-	-	-	_
MW-7	08/18/2011	155.38	14.37	141.01	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	< 0.50	<10	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	<250	<100	0.0012	<500	3.8	100
MW-7	10/04/2011	155.38	15.22	140.16	<40	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	<0.0010	<500	4.2	100
MW-8	06/07/2011	153.71	11.54	142.17	71	<50	<0.50	<0.50	<0.50	<1.0	3.6	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	-	-	-	-
MW-8	08/18/2011	153.71	12.47	141.24	<40	<50	< 0.50	< 0.50	< 0.50	<1.0	2.1	<10	<0.50	<0.50	<0.50	< 0.50	< 0.50	<250	<100	<0.0010	140	1.5	65
MW-8	10/04/2011	153.71	12.90	140.81	<40	<50	<0.50	< 0.50	<0.50	<1.0	1.5	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	<100	<0.0010	190	2.8	67

TABLE 1 Page 2 of 2

GROUNDWATER MONITORING AND SAMPLING DATA UNOCAL #5781 UNION OIL OF CALIFORNIA FACILITY 351640 3535 PIERSON STREET OAKLAND, CALIFORNIA

					HYDROG	CARBONS					PR	IMARY	vocs							GAS	GENER	AL CHE	MISTRY
Location	Date	тос	DTW	GWE	TPH - Diesel	TPH - Gasoline	В	T	E	X	MTBE by SW8260	TBA	ETBE	ОІРЕ	TAME	EDB	1,2-DCA	Ethanol	Methanol	Methane	Ferrous iron	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	μg/L	µg∕L	μg/L	μg/L	mg/L	µg/L	mg/L	mg/L
MW-9 MW-9	06/07/2011 08/18/2011	153.37 153.37	11.36 12.52	142.01 140.85	<40 <40	<50 <50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<1.0 <1.0	1.4 2.1	<10 <10	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<0.50 <0.50	<250 <250	<100 <100	- 0.0010	- <500	- 2.7	- 47
MW-9	10/04/2011	153.37	13.32	140.05	<40	<50	< 0.50	<0.50	< 0.50	<1.0	2.4	<10	<0.50	<0.50	<0.50	< 0.50	< 0.50	<250	<100	<0.0010	<200	3.2	47

Abbreviations and Notes:

TOC = Top of Casing

DTW = Depth to Water

GWE = Groundwater elevation

(ft-amsl) = Feet Above Mean sea level

ft = Feet

 $\mu g/L$ = Micrograms per Liter

TPH - Total Petroleum Hydrocarbons

VOCS = Volatile Organic Compounds

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylene

 $MTBE = Methyl \ tert \ butyl \ ether$

TBA = Tert-Butyl alcohol

DIPE = Diisopropyl ether

ETBE = Tert-Butyl ethyl ether

 $TAME = Tert\text{-}Amyl \ methyl \ ether$

EDB = 1,2-Dibromoethane (Ethylene dibromide)

1,2-DCA = 1,2-Dichloroethane

-- = Not available / not applicable

x = Not detected above laboratory method detection limit

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 12, 2011

TO:

Ian Hull

CRA

5900 Hollis Street, Suite A Emeryville, California 94608

SITE:

Unocal Site 5781

Facility 351640

3535 Pierson Street, Oakland, CA

RE:

Transmittal of Groundwater Monitoring Data

Dear Mr. Hull,

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 4, 2011. 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 949-341-7440 if you have questions.

Sincerely,

TRC

Groundwater Program Operations Manager

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:	Ba	ruli	_ Joi	b #/Task #:	1834B	7.0035.	1640	Date: 10 - 4-11
Site #	<u> 5</u>	781	Projec	xt Manager	Anj	u F.	-	Page of
		Time	Total	Depth to	Depth to	Product Thickness	Time	
Well#	TOC	Gauged	Depth	Water	Product	(feet)	Sampled	Misc. Well Notes
MW-7	V	0558	19.70	15.22		-	1010	Z
MW-A	~	0611	44.94	14.67		/mage:	1030	Zu
MW-9	V	0620	19.68			-	1054	21
MW-8	V	0628					1113	Z "
MW-6	V	0639	19.87	14.02)		1137	Z "
MW-4	· V	0648	24.75		_		1210	4"
MW-5	V	0659	19.92			-	1230	4"
	ļ <u> </u>							
					-			
								-
								
								N
		-						
FIELD DATA (<u>-</u>	QA/QC		COC	J N/E		ANDITION OUTETO
Bloom backer over CIII	001111		Q/VQC		000	VVE	LL BUX CO	ONDITION SHEETS
MANIFEST		DRUM INV	/ENTORY		TRAFFIC C	ONTROL		

Technician: Baselia Project No.: 183487. 0035. 1640 Date: 10-4-11 Site: 5781 Purge Method: _____ H3 M.W-Well No. 5.22 Depth to Product (feet):___ Depth to Water (feet): LPH & Water Recovered (gallons):_ Total Depth (feet) Casing Diameter (Inches): 2 Water Column (feet):_ 80% Recharge Depth(feet): 1 Well Volume (gallons):____ Depth to Volume Time Conductivity Temperature D.O. Time ORP Turbidity Water pΗ Purged Start Stop (µS/cm) (F,C)(mg/L) (feet) (gallons) Pre-Purge 27 2.34 0719 3/ 17721 1109 20,2 Total Gallons Purged Sample Time Static at Time Sampled 1010 7.02 Comments: Bust recover Zhis. Well No. Purge Method:_ Depth to Water (feet):_ Depth to Product (feet):__ LPH & Water Recovered (gallons):_ Total Depth (feet)___ Casing Diameter (Inches):_ Water Column (feet):_ 1 Well Volume (gallons): 80% Recharge Depth(feet) Depth to Volume Conductivity Temperature D.O. Time Time ORP Turbidity рΗ Water Purged (F (C) (mg/L) (µS/cm) Start Stop (feet) (gallons) Pre-Purge 0740 0749 Sample Time Total Gallons Purged Static at Time Sampled 1030 26.42 ft. below DTW adjusted due to drawdown. Comments: Comped Aprov J



		Technician:	Ba	silis				
Site: <u>578</u> 1		Project No.:				Date:_	10-9	1-14
Well No. <u>Mw</u> -	7		Purge Method	d:	HB			
Depth to Water (feet):	- 1	32		luct (feet):		<u> </u>		
				Recovered (g	_		····	
Total Depth (feet) Water Column (feet):	6.	36		eter (Inches):_			•	
80% Recharge Depth(fee	11/	,59		e (gallons):	•			
		· · · · · · · · · · · · · · · · · · ·		o (9anons)	. 			
Time Time Start Stop	Depth t Water (feet)	Purged	Conductivity (µS/cm)	Temperature (F,C)	рН	D.O. (mg/L)	ORP	Turbidity
Pre-Purge						3.11	108	
0806			771.5		6.66	2.06		
0010		2	802.9	20.4	6-53	1.70	109	
0810		3	821.0	20.2	6.47	1.41	106	
			_		<u> </u>			
Static at Time Sa	mpled	То	tal Gallons Pur	ged		Sample	Time	<u> </u>
15.45		3		<u> </u>		105		
Comments: Pre pur	ge son	- Dk 0800	0/4 9	t 3 6/4.				
Comments: Pe pu	du	y rec	oved 2	2 hrs.				
Well No. MW^{-8}	>		Purge Metho	d:	MB		· ·	
Depth to Water (feet):	117	90		duct (feet):				
Total Depth (feet)			·	Recovered (g				
Water Column (feet):	F &			eter (Inches):	_			
80% Recharge Depth(fe	4	1,30	1 Well Volum	ne (gallons):	2			
00 /4 / (00 Hai go 10 0 p a / (10			, 170% 1014	(94,,51,67,	 			
· · · · · · · · · · · · · · · · · · ·	Depth	to Volumo				T	1	
Time Time Start Stop	Wate (feet	r Purged	Conductivity (µS/cm)	Temperature (F/C)	pН	D.O. (mg/L)	ORP	Turbidity
Pre-Purge				ļ	1	1.68	121	1
0819	1	2	730.1	20.2	6.32	1,50	130	
09.2			747.2	20.1	6.33	1.18	123	
0829		<u> </u>	131-0	20.0	W. 31	11: 70	110	
			-			 	 	127
				1		t		1
Static at Time Sa	ampled	Т	otal Gallons Pu	rged		Sampl	e Time	
Static at Time Sa		T 6	otal Gallons Pu	rged	1/.	Sampl	e Time	



Technician: Dasilis Site: 5781 Project No.: 183487. 0035. 1640 Date: 10-4-11 Purge Method:_____ 14.02 Depth to Water (feet): Depth to Product (feet): Total Depth (feet) LPH & Water Recovered (gallons): Water Column (feet):_ Casing Diameter (Inches): 80% Recharge Depth(feet): 1 Well Volume (gailons): Depth to Volume Time Conductivity Temperature Time D.O. рΗ Water Purged ORP Turbidity (F,C) Start Stop (µS/cm) (mg/L)(feet) (gallons) Pre-Purge 538 138 0844 514.1 19.2 6.68 144 GA.Z 6.40 4. 25 0848 7/7.3 3.67 Static at Time Sampled Total Gallons Purged Sample Time Comments: Dry at 3 61-Well No._ MWPurge Method: Depth to Water (feet): Depth to Product (feet): LPH & Water Recovered (gallons): Total Depth (feet)_ Water Column (feet): Casing Diameter (Inches):_ 1 Well Volume (gallons): 80% Recharge Depth(feet) Depth to Volume D.O. Conductivity Temperature Time Time ORP Turbidity Water рΗ Purged (F,10) (mg/L)Start Stop (µS/cm) (feet) (gallons) Pre-Purge 0915 Sample Time Total Gallons Purged ... Static at Time Sampled 1210 Ple purge 0900 Comments:



Technician: Dasilio Site: 5781 Project No.: 183487. 0035. 1640 Date: 10-4-11 Purge Method: 545 Well No.__ _ 13.72 Depth to Product (feet): Depth to Water (feet): LPH & Water Recovered (gallons):__ Total Depth (feet) Casing Diameter (Inches):____ Water Column (feet): 80% Recharge Depth(feet): 1 Well Volume (gallons):__ Depth to Volume Time Conductivity Temperature D.O. Time ORP Turbidity pН Water Purged Stop (µS/cm) (F**,(**C)) (mg/L) Start (feet) (gallons) 1,08 129 Pre-Purge 0932 0.58 25 0937 6.52 0.63-15 Sample Time Total Gallons Purged Static at Time Sampled 1230 Comments: pure sample 0976 recover 45 line Purge Method: Well No.___ Depth to Product (feet):______ Depth to Water (feet): LPH & Water Recovered (gallons):_____ Total Depth (feet)___ Casing Diameter (Inches):_____ Water Column (feet):__ Well Volume (gallons): 80% Recharge Depth(feet) Depth to Volume Conductivity Temperature D.O. Time Time ORP Turbidity рΗ Water Purged (F,C) (mg/L) (µS/cm) Start Stop (gallons) (feet) Pre-Purge *\$* Sample Time Total Gallons Purged Static at Time Sampled Comments:

WELL BOX CONDITION REPORT

SITENO. 5781 ADDRESS 3535 Pierson Street DATE 10-4-11 Foundation Damaged # of Stripped Ears # of Broken Ears # of Missing Bolts Well Box is Exposed Well Box is Below Grade Unable to Access # of Broken Bolts Unable to Locate Saw Cut Needed Seal Damaged USA Marked Well Well Name Broken Lid Missing Lid Paved Over System Well Street Well Comments

CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

Union Oil Site ID: 578	71 -			Union Oil Consultant:	PRA							AN	ALYS	ES R	EQUIF	RED		
Site Global ID: 1060	01014			Consultant Contact:	INN HULL		,		177								Turnaround ⁻	Time (TAT):
Site Address: 3535	rens	ion The	eet	Consultant Phone No.:	10-420 3344				\ \display				İ				Standard 🗗	24 Hours □
i	OKKI	1and		Sampling Company: TRC		100	3		1								48 Hours □	72 Hours □
Union Oil PM: 1007.	6 KA	ira bin	***************************************	Sampled By (PRINT):	× × 1 /	17.7		_	. 4		1					1	Special Ins	tructions
Union Oil PM Phone No.: 47	15 70	90-62	70	-1	5116,110	14. T	1	360	11/2	ြ	6	7,5						-
Charge Code: NWRTB- 0	<u>516</u> 2	<u> </u>		Sampler Signature:	Jul	EPA 8015	8078	/ EPA 8260B	1, E) 15/21K	th OXY	10/4	(101					
		,			atories, Inc.	P. P.	S	Sp	909.	st w	-	1.7	1	1				* ,
This is a LEGAL document. COMPLETELY.	ALL fields n	nust be filled ou	t CORRECTLY and	4100 Atlas Court, E	er: Molly Meyers Bakersfield, CA 93308 661-327-4911	Dieset by E	oy GC/MS	BTEX/MTBE/OXYS by	Ethanol by EPA 8260B,	EPA 8260B Full List with OXYS	1349	74	5/70	7614		:		
	SAMPLE	E ID				1 .	-G by	TMS	<u> 현</u>	8260	1	1	10	1				
Field Point Name	Matrix	DTW	Date (yymmdd)	Sample Time	# of Containers	Ŧ	Ŧ	BTE	Ethar	EPA	34.7	-62	14	700			Notes / Co	mments
adlu-t	W-S-A		10-4-11	1010	15	\times	X	\times	<u> </u>		\geq	X	X	\times				
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21W-9	W-S-A		;	1054		Ì	1) Wi	***************************************									
201W - 8	W-S-A		i	1113	w' .		N. C.	-	- Aller and				-					
MW-6	W-S-A			1137			· Continue		Marié mayant									
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	W-S-A					<u> </u>												
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Relinquished By Con	npany	Date / Time:	To a Winger	Relinquished By Cor	mpany Date / Time :				Reli	nquishe	ed By	<i>'</i>	C	Compa	iny		Pate / Time:	· · · · · · · · · · · · · · · · · · ·
	ipany	Date / Time:		Received By Cor	mpan y Date / Time :				Rec	eived E	Ву		(Сотр	any	[Pate / Time:	
Hary Bogan	Beln	bs 10-4	11 1330					٠.										

TRC SOLUTIONS TECHNICAL SERVICES REQUEST FORM

20-Sep-11

Address City:	3535 Oakla	Pierson Street			Client:		Roya Kambin 925-790-6270	0700TA0	
Cross Street:	Reddi	ng St.			PM: PM Cont	act #:	lan Hull 510-420-3344	CRA	**.
Total number Depth to Wate	r (ft.):		Max.	Well Diamete Well Diamete Well Depth (1	er (in.):	2 45	# of Techs, # of Travel Time (hr otes		1, 5
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No Purge/Samp	ole 🗌		,						
RELATED A	CTIVIT	ΓΙΕS Note							
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Other Activities:					THE PROPERTY OF THE PROPERTY O				
Traffic Control:			nnaro orraromiranion		rolaway waxay katalay waxay				,p
PERMIT INF		ITION:							
NOTIFICATION 76 Station: 510-43									
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SITE INFOR	MATIC	N:							
Submit pre-purge s	samples	if monitoirng does	n't recove	er with enought w	ater to collect	follow s the requ	standard TRC purge an uired bottles after two h	d sample pro lours.	ocedures.
Collect DO and OF	RP mea	surements pre-purg	e and aft	ter each purge vo	olume.	-			
									٠
					-				
	\$1. :								



1 of 2

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

20-Sep-11

Site ID:

5781 -

Address

3535 Pierson Street

City:

Cross Street: Redding St.

Oakland

Project No.:

183487.0035.1640 / 00TA01

Client:

Roya Kambin

Contact #:

925-790-6270

PM:

Ian Hull

CRA

PM Contact #: 510-420-3344

LAB INFORMATION:

Global ID: T0600101467

Lab WO: 351640

Lab Used: BC Labs

Lab Notes: Lab Analyses:

TPH-D by 8015M w/silica gel clean-up [Containers: two 1L ambers unpreserved]

TPH-G by 8015 [Containers: 3 voas w/HCl]
BTEX/MTBE/OXYS by 8260B, EDB/EDC by 8260B, Ethanol by 8260B [Containers: 3 voas w/HCl]
Methanol by 8015 [Containers: 3 voas unpreserved]
Nitrate, Sulfate [Container: one 500 mL poly unpreserved] Ferrous Iron [Container: one 500 mL poly w/ HCl]

Methane [Containers: 2 voas unpreserved]

TRC SOLUTIONS

TECHNICAL SERVICES REQUEST FORM

20-Sep-11

Site ID.: Address

5781 3535 Pierson Street

City:

Oakland

Cross Street Redding St.

				Gau	ging			San	pling			Field Measu	rements		1	
Well IDs	Benz. MT	BE	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Pre-Purge	Post-Purge		Type	Comments	
MW-7	0	0	✓.	✓	V	Y	V	✓	V	~	✓	✓	D.O., 0	DRP	2" casing	
MW-A	0	0.61	V	V	V	V	V	✓	V	✓	✓	✓	D.O., 0	DRP	2" casing	-
MW-9	0	2.1	✓	V	V	✓	~	✓	V	✓	V	V	D.O., (ORP	2" casing	
MW-8	0	2.1	✓	V	V	✓	V	✓	~	✓	V	✓	D.O., 0	ORP	2" casing	
MW-6	0	2.4	✓	V	V	✓	V	✓	V	✓	V	✓	D.O., 0	ORP	2" casing	
MW-4	0	4	✓	V	~	✓	V	✓	V	✓	✓	✓	D.O., 0	ORP	4" casing	
MW-5	29	56	✓	V	~	✓	V	✓	✓	✓	V	✓	D.O., 0	ORP	4" casing	

ATTACHMENT B

LABORATORY ANALYTICAL REPORT



Date of Report: 10/20/2011

Ian Hull

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

Project: 5781

BC Work Order: 1116133 Invoice ID: B109722

Enclosed are the results of analyses for samples received by the laboratory on 10/4/2011. 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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DO	Cl ₂	BOD	MBAS	COT

Union Oil Company of California 6101 Bollinger Canyon Road San Ramon, CA 94583 COC_ 5781 CRA Union Oil Site ID: Union Oil Consultant: ANALYSES REQUIRED T0600101467 IAN HULL Site Global ID: Consultant Contact: Turnaround Time (TAT): 8260 Pierson Street Oakland Site Address: 3535 510-420-3344 Standard 24 Hours 🗆 Consultant Phone No.: Sampling Company: TRC 48 Hours □ 72 Hours □ Roua Kambin Union Oil PM: Sampled By (PRINT): Ethanol by EPA 8260B, EUS EV Special Instructions BTEX/MTBE/OXYS by EPA 8260B 8 Union Oil PM Phone No.: 925-790-6270 EPA 8260B Full List with OXYS TPH - Diesel by EPA 8015 $\omega_{m{\prime}}$ Sampler Signature: 80% Charge Code: NWRTB- 0 3 5 1 6 4 D-0- LAB BC Laboratories, Inc. TPH - G by Gentus 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 DTW Sample Time # of Containers Notes / Comments Matrix (yymmdd) 10-4-11 1010 MW- H W-S-A 1030 W-S-A 1054 W-S-A W-S-A 5 W-S-A 1210 W-S-A 1230 W-S-A W-S-A W-S-A W-S-A W-S-A W-S-A Date / Time: Relinquished By Company Date / Time: Relinquished By Company Date / Time : Relinquished By Company Law Bogen BCLADS Company Received By 1330 10-4-11 19:00 10-4-11 2310



Chain of Custody and Cooler Receipt Form for 1116133 Page 2 of 3

		ry 🗆		lc	e Chest,l Box I		Non		ify)	
Refrigerant: Ice □ Blue Ice □	None [Othe	er□ C	omments	s:					
actory	Container		None 🗅	Commer	its:					
.II samples received? Yes ☐ No ☐ A	All samples	ontainers	intact? Y.e	8 No		Descripti	on(s) mat	ch COC? Y	es D No	
CANCO DINO	nissivity: _C	_		otpe_ T		ter ID: <u>\</u> \ 7	7	B .	e <u>1044-1</u> nit <u>JWW</u>	2320
						NUMBERS		τ .	T 9	10
SAMPLE CONTAINERS	1	2	3	4	5	6	7	8	1 9	10
OT GENERAL MINERAL! GENERAL PHYSICAL	0	-	0		-					
T PE UNPRESERVED OT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS PT CYANIDE										
PT NITROGEN FORMS						ļ				
PT TOTAL SULFIDE									-	
202. NITRATE / NITRITE PT TOTAL ORGANIC CARBON										
РТ ТОХ						-		+	-	
PT CHEMICAL OXYGEN DEMAND PIA PHENOLICS										
40mi VOA VLAL TRAVEL BLANK	1/1/1/	AIG	AID	1	-) () [) (1 1	()
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100ml EPA 531.1	· ·									
QT EPA 548 QT EPA 549										
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OT EPA 8015M										-
OT AMBER	PP	LF	EP							-
8 OZ. JAR		ļ		-	-		-			
32 OZ. JAR		-	-				-			
SOIL SLEEVE	BEALTH COLUMN TO THE COLUMN TO	-	_	-			-			
PCB VIAL		-	-	-	-		-		_	
PLASTIC BAG	1	10	+2	-	-					
FERROUS IRON		1		1	+		1			
ENCORE										A STATE OF THE PARTY OF THE PAR



Chain of Custody and Cooler Receipt Form for 1116133 Page 3 of 3

Submission #: \(\big - \(\lambda \) \(\big \) SHIPPING INFOR			1			SHIPPIN				
	Hand Deliv ☐ (Specify			lce	e ChestÆ Box □		None Other	□ (Spec	ify)	
Refrigerant: Ice 🗵 Blue Ice 🗆	None	□ Oth	ner 🗆 🔾	Comments	:					
	Containe Intact? Yes	□ No □		Commen					10	
Il samples received? Yes No □	All samples	containers	intact? Ye	No 🗆		Description	on(s) matcl			1
				ptpe TI				Date/Tim Analyst li	e <u>1044.1</u> nit <u>JNU</u>	2320
					SAMPLE N		- T		9	10
SAMPLE CONTAINERS	11	2	3	4 1	5	6	7	88	9	10
OT GENERAL MINERAL/ GENERAL PHYSICAL PT PE UNPRESERVED				C	-0	C	C			
OT INORGANIC CHEMICAL METALS	-									
PT INORGANIC CHEMICAL METALS										
PT CYANIDE	1	1	1							
PT NITROGEN FORMS PT TOTAL SULFIDE	1									
	1									
202. NITRATE / NITRITE PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND									-	
PIA PHENOLICS										
40mi VOA VIAL TRAVEL BLANK				\perp_{Λ}	10 10	N (1 1			
40mi VOA VIAL) (1 A IL	AB	A.6	4 1	1015	1 (()
QT EPA 413.1, 413.2, 418.1			-							
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BACTERIOLOGICAL	-		-	135	26	13/5	186			
40 ml VOA VIAL-504			-	100	The same	1	PCS			
QT EPA 508/608/8080										
QT EPA 515.1/8150										
OT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547 100ml EPA 531.1										
OT EPA 548										
QT EPA 549										-
QT EPA 632										
QT EPA 8015M							1	-		-
QT AMBER				EF	I E,E	EF	15P			-
8 OZ. JAR					- '	-			-	
32 OZ. JAR					1					-
SOIL SLEEVE					-	-	-	-		-
PCB VIAL	_				-		+	+	-	-
PLASTIC BAG				1	+	+	+0	-		-
FERROUS IRON				+4	$\perp \mathcal{D}$	10	$+ \mathcal{V}$			+
ENCORE	ii.									

Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information

1116133-01 COC Number:

Project Number: 5781 Sampling Location: ---

Sampling Point: MW-7-W-111004

Sampled By: TRCI

Receive Date: 10/04/2011 23:10 **Sampling Date:** 10/04/2011 10:10

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

Delivery Work Order: Global ID: T0600101467 Location ID (FieldPoint): MW-7

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1116133-02 COC Number: ---

Project Number: 5781
Sampling Location: ---

Sampling Point: MW-A-W-111004

Sampled By: TRCI

Receive Date: 10/04/2011 23:10 **Sampling Date:** 10/04/2011 10:30

Sample Depth: --Lab Matrix: Water
Sample Type: Water
Delivery Work Order:
Global ID: T0600101467

Location ID (FieldPoint): MW-A Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1116133-03 COC Number: --

Project Number: 5781
Sampling Location: ---

Sampling Point: MW-9-W-111004

Sampled By: TRCI

Receive Date: 10/04/2011 23:10 **Sampling Date:** 10/04/2011 10:54

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

Global ID: T0600101467 Location ID (FieldPoint): MW-9

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

Conestoga-Rovers & Associates Reported: 10/20/2011 11:50

5900 Hollis St. Suite A Project: 5781 Emeryville, CA 94608 Project Number: 351640 Project Manager: Ian Hull

Laboratory / Client Sample Cross Reference

Laboratory **Client Sample Information**

1116133-04 COC Number:

> **Project Number:** 5781 Sampling Location:

Sampling Point: MW-8-W-111004

Sampled By:

TRCI

10/04/2011 23:10 Receive Date: Sampling Date: 10/04/2011 11:13

Sample Depth: Lab Matrix: Water Water Sample Type:

Delivery Work Order: Global ID: T0600101467

Location ID (FieldPoint): MW-8

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1116133-05 **COC Number:**

> **Project Number:** 5781 Sampling Location:

MW-6-W-111004 Sampling Point:

TRCI Sampled By:

10/04/2011 23:10 Receive Date: 10/04/2011 11:37 Sampling Date:

Sample Depth: Lab Matrix: Water Water Sample Type: Delivery Work Order: Global ID: T0600101467

Location ID (FieldPoint): MW-6

Sample QC Type (SACode): CS

Cooler ID:

Matrix: W

1116133-06 COC Number:

5781 **Project Number:** Sampling Location:

MW-4-W-111004 Sampling Point:

TRCI Sampled By:

Receive Date: 10/04/2011 23:10 10/04/2011 12:10 Sampling Date:

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

Global ID: T0600101467 Location ID (FieldPoint): MW-4

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Laboratory / Client Sample Cross Reference

Laboratory Client Sample Information

1116133-07 COC Number: --

Project Number: 5781 Sampling Location: ---

Sampling Point: MW-5-W-111004

Sampled By: TRCI

Receive Date: 10/04/2011 23:10 **Sampling Date:** 10/04/2011 12:30

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

Delivery Work Order:
Global ID: T0600101467

Location ID (FieldPoint): MW-5

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

MU

Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-01	Client Sampl	e Name:	5781, MW-7-W-111	004, 10/4/2011 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	59.4	%	60 - 140 (LCL - UCL)	EPA-8015B		S09	1

Run						QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B	10/06/11	10/06/11 14:12	LRS	GC-12	1	BUJ0662		

Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 1

10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 11	1116133-01	Client Sampl	e Name:	5781, MW-7-W-111004, 10/4/2011 10:10:00AM						
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #		
Benzene		ND	ug/L	0.50	EPA-8260	ND		1		
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	ND		1		
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	ND		1		
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1		
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1		
Toluene		ND	ug/L	0.50	EPA-8260	ND		1		
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1		
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	ND		1		
t-Butyl alcohol		ND	ug/L	10	EPA-8260	ND		1		
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	ND		1		
Ethanol		ND	ug/L	250	EPA-8260	ND		1		
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1		
1,2-Dichloroethane-d4 (Surro	gate)	90.8	%	76 - 114 (LCL - UCL)	EPA-8260			1		
Toluene-d8 (Surrogate)		101	%	88 - 110 (LCL - UCL)	EPA-8260			1		
4-Bromofluorobenzene (Surro	gate)	98.4	%	86 - 115 (LCL - UCL)	EPA-8260			1		

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260	10/05/11	10/07/11 02:35	KEA	HPCHEM	1	BUJ0289	

Project Number: 351640
Project Manager: Ian Hull

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

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-01	Client Sampl	e Name:	5781, MW-7-W-111	004, 10/4/2011 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organ	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	93.3	%	70 - 130 (LCL - UCL)	EPA-8015B			1

	Run					QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B	10/07/11	10/11/11 20:15	jjh	GC-V4	1	BUJ0424		

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Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-01	Client Sampl	e Name:	5781, MW-7-W-111004, 10/4/2011 10:10:00AM					
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #	
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1	
Tetracosane (Surroga	te)	113	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1	

Run								
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B/TPHd	10/10/11	10/17/11 15:25	MWB	GC-5	1	BUJ1180	

5900 Hollis St. Suite A

Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-01	Client Sampl	e Name:	5781, MW-7-W-111004, 10/4/2011 10:10:00AM				
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	10/07/11	10/11/11 08:53	JMC	GC-V1	1	BUJ0374		

Project Number: 351640
Project Manager: Ian Hull

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

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-01	Client Sampl	e Name:	5781, MW-7-	W-111004, 10/4/2011 10	:10:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Nitrate as NO3		4.2	mg/L	0.44	EPA-300.0	ND		1
Sulfate		100	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		ND	ug/L	500	SM-3500-FeD	ND	A10	2

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/05/11	10/06/11 00:12	LD1	IC2	1	BUJ0336	
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	5	BUJ0277	

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Conestoga-Rovers & Associates

5900 Hollis St. Suite A Emeryville, CA 94608 **Reported:** 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-02	Client Sampl	e Name:	5781, MW-A-W-111	004, 10/4/2011 1	0:30:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	59.8	%	60 - 140 (LCL - UCL)	EPA-8015B		S09	1

	Run							
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/06/11	10/06/11 14:34	LRS	GC-12	1	BUJ0662	

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

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

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1	116133-02	Client Sample	e Name:	5781, MW-A-W-111	004, 10/4/2011	10:30:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether		0.72	ug/L	0.50	EPA-8260	ND		1
Toluene		ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	ND		1
Ethanol		ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surro	ogate)	100	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)		100	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surr	rogate)	99.8	%	86 - 115 (LCL - UCL)	EPA-8260			1

	Run						QC		
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8260	10/05/11	10/06/11 23:54	KEA	HPCHEM	1	BUJ0289		

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Conestoga-Rovers & Associates 5900 Hollis St. Suite A

Emeryville, CA 94608

Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-02	Client Sampl	e Name:	5781, MW-A-W-111	004, 10/4/2011 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Orga	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	95.1	%	70 - 130 (LCL - UCL)	EPA-8015B			1

		Run				QC			
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B	10/07/11	10/11/11 20:37	jjh	GC-V4	1	BUJ0424		

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-02	Client Sampl	e Name:	5781, MW-A-W-111	5781, MW-A-W-111004, 10/4/2011 10:30:00AM				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #	
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1	
Tetracosane (Surroga	te)	121	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1	

	Run						QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/TPHd	10/10/11	10/17/11 15:39	MWB	GC-5	1	BUJ1180

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

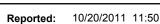
Project Number: 351640
Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-02	Client Sampl	e Name:	5781, MW-A-W-111004, 10/4/2011 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	10/07/11	10/11/11 08:49	JMC	GC-V1	1	BUJ0374	

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Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-02	Client Sampl	e Name:	5781, MW-A-\	N-111004, 10/4/2011 10			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		13	mg/L	0.44	EPA-300.0	ND		1
Sulfate		69	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	10/05/11	10/06/11 01:47	LD1	IC2	1	BUJ0336	
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	1	BUJ0277	

5900 Hollis St. Suite A Emeryville, CA 94608

Reported: 10/20/2011 11:50

Project: 5781 Project Number: 351640 Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-03	Client Sampl	e Name:	5781, MW-9-W-111	004, 10/4/2011 1	0:54:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	63.6	%	60 - 140 (LCL - UCL)	EPA-8015B			1

	Run				QC			
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/06/11	10/06/11 14:54	LRS	GC-12	1	BUJ0662	

Project Number: 351640
Project Manager: Ian Hull

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

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1	116133-03	Client Sample	e Name:	5781, MW-9-W-111	004, 10/4/2011 1	0:54:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether		2.4	ug/L	0.50	EPA-8260	ND		1
Toluene		ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	ND		1
Ethanol		ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surro	ogate)	104	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)		101	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surr	ogate)	101	%	86 - 115 (LCL - UCL)	EPA-8260			1

	Run						QC		
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8260	10/05/11	10/06/11 23:30	KEA	HPCHEM	1	BUJ0289		

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-03	Client Sampl	e Name:	5781, MW-9-W-111	004, 10/4/2011 1	0:54:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organ	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	95.1	%	70 - 130 (LCL - UCL)	EPA-8015B			1

		Run				QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B	10/07/11	10/11/11 20:58	jjh	GC-V4	1	BUJ0424		

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5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-03	Client Sampl	e Name:	5781, MW-9-W-111	5781, MW-9-W-111004, 10/4/2011 10:54:00AM					
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #		
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1		
Tetracosane (Surroga	te)	118	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1		

	Run					QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B/TPHd	10/10/11	10/17/11 15:54	MWB	GC-5	0.960	BUJ1180		

Project Number: 351640
Project Manager: Ian Hull

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

Gas Testing in Water

BCL Sample ID:	1116133-03	Client Sampl	e Name:	5781, MW-9-W	/-111004, 10/4/2011 1	0:54:00AM		
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	10/07/11	10/11/11 08:45	JMC	GC-V1	1	BUJ0374			

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5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-03	Client Sampl	e Name:	5781, MW-9-V	V-111004, 10/4/2011 10	0:54:00AM		
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		47	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		ND	ug/L	200	SM-3500-FeD	ND	A10	2

			Run					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/05/11	10/06/11 02:01	LD1	IC2	1	BUJ0336	
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	2	BUJ0277	

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Reported: 10/20/2011 11:50

Project: 5781 Project Number: 351640 Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-04	Client Sampl	e Name:	5781, MW-8-W-111	004, 10/4/2011 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	86.8	%	60 - 140 (LCL - UCL)	EPA-8015B			1

	Run				QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/06/11	10/06/11 15:15	LRS	GC-12	1	BUJ0662	

10/20/2011 11:50

5900 Hollis St. Suite A Emeryville, CA 94608

Conestoga-Rovers & Associates

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Reported:

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1	1116133-04	Client Sampl	e Name:	5781, MW-8-W-111	004, 10/4/2011 1	1:13:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Benzene		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether		1.5	ug/L	0.50	EPA-8260	ND		1
Toluene		ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	ND		1
Ethanol		ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Sur	rogate)	103	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)		102	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Su	rrogate)	99.4	%	86 - 115 (LCL - UCL)	EPA-8260			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260	10/05/11	10/06/11 23:07	KEA	HPCHEM	1	BUJ0289	

5900 Hollis St. Suite A Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-04	Client Sampl	e Name:	5781, MW-8-W-111	004, 10/4/2011 1	1:13:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organ	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	94.9	%	70 - 130 (LCL - UCL)	EPA-8015B			1

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/07/11	10/11/11 21:20	jjh	GC-V4	1	BUJ0424	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-04	Client Sampl	e Name:	5781, MW-8-W-111	004, 10/4/2011 11	:13:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1
Tetracosane (Surroga	te)	104	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1

				QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B/TPHd	10/10/11	10/17/11 16:08	MWB	GC-5	1	BUJ1180	

5900 Hollis St. Suite A

Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-04	Client Sampl	e Name:	5781, MW-8-W	V-111004, 10/4/2011 1	1:13:00AM		
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	10/07/11	10/11/11 08:41	JMC	GC-V1	1	BUJ0374		

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-04	Client Sampl	e Name:	5781, MW-8-\	V-111004, 10/4/2011 11			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		2.8	mg/L	0.44	EPA-300.0	ND		1
Sulfate		67	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		190	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	10/05/11	10/06/11 02:15	LD1	IC2	1	BUJ0336
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	1	BUJ0277

Project: 5781 Project Number: 351640 Project Manager: Ian Hull

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

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-05	Client Sampl	e Name:	5781, MW-6-W-111	004, 10/4/2011 1	1:37:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (Surrogate)		107	%	60 - 140 (LCL - UCL)	EPA-8015B			1

	Run						QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B	10/06/11	10/06/11 15:37	LRS	GC-12	1	BUJ0662

Project Number: 351640
Project Manager: Ian Hull

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

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 111	6133-05 Clien	t Sample Name:	5781, I	MW-6-W-111004, 10/4/20	11 11:37:00AM		
Constituent	Re	sult Unit	s PQL	Method	MB Bias	Lab Quals	Run #
Benzene	1	ND ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane	1	ND ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane	1	ND ug/L	0.50	EPA-8260	ND		1
Ethylbenzene	1	ND ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether	3	3.1 ug/L	. 0.50	EPA-8260	ND		1
Toluene	1	ND ug/L	0.50	EPA-8260	ND		1
Total Xylenes	1	ND ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether	1	ND ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol	1	ND ug/L	. 10	EPA-8260	ND		1
Diisopropyl ether	1	ND ug/L	0.50	EPA-8260	ND		1
Ethanol	1	ND ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether	1	ND ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surroga	ate) 9	8.9 %	76 - 114	(LCL - UCL) EPA-8260			1
Toluene-d8 (Surrogate)	1	01 %	88 - 110	(LCL - UCL) EPA-8260			1
4-Bromofluorobenzene (Surrog	ate) 1	01 %	86 - 115	(LCL - UCL) EPA-8260			1

	Run						QC		
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8260	10/05/11	10/06/11 22:44	KEA	HPCHEM	1	BUJ0289		



5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-05	Client Sampl	e Name:	5781, MW-6-W-111	004, 10/4/2011 1			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organ	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	94.8	%	70 - 130 (LCL - UCL)	EPA-8015B			1

Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/10/11	10/11/11 21:42	jjh	GC-V4	1	BUJ0423	

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

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

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-05	Client Sampl	e Name:	5781, MW-6-W-111	004, 10/4/2011 11	:37:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1
Tetracosane (Surroga	te)	113	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1

	Run					QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B/TPHd	10/10/11	10/17/11 16:23	MWB	GC-5	0.960	BUJ1180		

5900 Hollis St. Suite A Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781 Project Number: 351640

Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-05	Client Sample	e Name:	5781, MW-6	5781, MW-6-W-111004, 10/4/2011 11:37:00AM				
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	10/07/11	10/11/11 08:37	JMC	GC-V1	1	BUJ0374				

Project Number: 351640
Project Manager: Ian Hull

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

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-05	Client Sampl	e Name:	5781, MW-6-V	V-111004, 10/4/2011 11	1:37:00AM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		24	mg/L	0.44	EPA-300.0	ND		1
Sulfate		78	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		100	ug/L	100	SM-3500-FeD	ND		2

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/05/11	10/06/11 02:28	LD1	IC2	1	BUJ0336	
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	1	BUJ0277	

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

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

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-06	Client Sampl	e Name:	5781, MW-4-W-111	004, 10/4/2011 1	2:10:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	98.3	%	60 - 140 (LCL - UCL)	EPA-8015B			1

Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/06/11	10/06/11 15:59	LRS	GC-12	1	BUJ0662	

Project: 5781

Project Number: 351640
Project Manager: Ian Hull

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

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 11	116133-06	Client Sampl	e Name:	5781, MW-4-W-111	004, 10/4/2011 1	12:10:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	ND		1
Ethylbenzene		ND	ug/L	0.50	EPA-8260	ND		1
Methyl t-butyl ether		3.8	ug/L	0.50	EPA-8260	ND		1
Toluene		ND	ug/L	0.50	EPA-8260	ND		1
Total Xylenes		ND	ug/L	1.0	EPA-8260	ND		1
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	ND		1
t-Butyl alcohol		ND	ug/L	10	EPA-8260	ND		1
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	ND		1
Ethanol		ND	ug/L	250	EPA-8260	ND		1
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	ND		1
1,2-Dichloroethane-d4 (Surro	ogate)	95.7	%	76 - 114 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)		98.0	%	88 - 110 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surr	ogate)	99.2	%	86 - 115 (LCL - UCL)	EPA-8260			1

	Run						QC		
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8260	10/05/11	10/11/11 15:36	KEA	HPCHEM	1	BUJ0289		

Project Number: 351640
Project Manager: lan Hull

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

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-06	Client Sampl	e Name:	5781, MW-4-W-111	004, 10/4/2011 1	2:10:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organ	nics (C4 - C12)	ND	ug/L	50	EPA-8015B	ND		1
a,a,a-Trifluorotoluene	(FID Surrogate)	94.6	%	70 - 130 (LCL - UCL)	EPA-8015B			1

			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/10/11	10/11/11 22:04	jjh	GC-V4	1	BUJ0423	

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

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

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-06	Client Sampl	e Name:	5781, MW-4-W-111				
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organic	s (C12 - C24)	ND	ug/L	40	EPA-8015B/TPH d	ND		1
Tetracosane (Surroga	te)	106	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1

			Run			QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8015B/TPHd	10/10/11	10/17/11 17:22	MWB	GC-5	1	BUJ1180		

5900 Hollis St. Suite A

Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-06	Client Sampl	e Name:	5781, MW-4-V	V-111004, 10/4/2011 1:	2:10:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methane		0.030	mg/L	0.0010	RSK-175M	ND	_	1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/07/11	10/11/11 08:33	JMC	GC-V1	1	BUJ0374	

5900 Hollis St. Suite A Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-06	Client Sampl	e Name:	5781, MW-4-	W-111004, 10/4/2011 12	2:10:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		4.3	mg/L	0.44	EPA-300.0	ND		1
Sulfate		50	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		100	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	10/05/11	10/06/11 02:42	LD1	IC2	1	BUJ0336
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	1	BUJ0277

5900 Hollis St. Suite A Emeryville, CA 94608

Reported: 10/20/2011 11:50

Project: 5781 Project Number: 351640 Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

BCL Sample ID:	1116133-07	Client Sampl	e Name:	5781, MW-5-W-111	004, 10/4/2011 1	2:30:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Methanol		ND	ug/L	100	EPA-8015B	ND		1
2-Chloroacrylonitrile (Surrogate)	63.3	%	60 - 140 (LCL - UCL)	EPA-8015B			1

			Run		QC			
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/06/11	10/06/11 17:25	LRS	GC-12	1	BUJ0662	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 1116133-07	Client Sampl	e Name:	5781, MW-5-W-111	004, 10/4/2011 1	12:30:00PM		
Constituent	Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Benzene	21	ug/L	12	EPA-8260	ND	A01	1
1,2-Dibromoethane	ND	ug/L	12	EPA-8260	ND	A01	1
1,2-Dichloroethane	ND	ug/L	12	EPA-8260	ND	A01	1
Ethylbenzene	2400	ug/L	12	EPA-8260	ND	A01	1
Methyl t-butyl ether	42	ug/L	12	EPA-8260	ND	A01	1
Toluene	2400	ug/L	12	EPA-8260	ND	A01	1
Total Xylenes	20000	ug/L	200	EPA-8260	ND	A01	2
t-Amyl Methyl ether	ND	ug/L	12	EPA-8260	ND	A01	1
t-Butyl alcohol	ND	ug/L	250	EPA-8260	ND	A01	1
Diisopropyl ether	ND	ug/L	12	EPA-8260	ND	A01	1
Ethanol	ND	ug/L	6200	EPA-8260	ND	A01	1
Ethyl t-butyl ether	ND	ug/L	12	EPA-8260	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	76 - 114 (LCL - UCL)	EPA-8260			1
1,2-Dichloroethane-d4 (Surrogate)	88.4	%	76 - 114 (LCL - UCL)	EPA-8260			2
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260			1
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)	EPA-8260			2
4-Bromofluorobenzene (Surrogate)	96.3	%	86 - 115 (LCL - UCL)	EPA-8260			1
4-Bromofluorobenzene (Surrogate)	94.2	%	86 - 115 (LCL - UCL)	EPA-8260			2

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260	10/05/11	10/06/11 21:57	KEA	HPCHEM	25	BUJ0289	
2	EPA-8260	10/05/11	10/11/11 15:58	KEA	HPCHEM	200	BUJ0289	

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5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640
Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID:	1116133-07	Client Sampl	e Name:	5781, MW-5-W-111	004, 10/4/2011 1	2:30:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Gasoline Range Orga	nics (C4 - C12)	42000	ug/L	2500	EPA-8015B	ND	A01	1
a,a,a-Trifluorotoluene	(FID Surrogate)	99.6	%	70 - 130 (LCL - UCL)	EPA-8015B			1

	Run							
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	10/10/11	10/12/11 17:33	jjh	GC-V4	50	BUJ0423	

Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

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

Total Petroleum Hydrocarbons (Silica Gel Treated)

BCL Sample ID:	1116133-07	Client Sampl	e Name:	5781, MW-5-W-111	004, 10/4/2011 12	:30:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organio	cs (C12 - C24)	20000	ug/L	1000	EPA-8015B/TPH d	ND	A52	1
Tetracosane (Surroga	te)	146	%	28 - 139 (LCL - UCL)	EPA-8015B/TPH d			1

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B/TPHd	10/10/11	10/18/11 14:08	MWB	GC-5	24.500	BUJ1180	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640

Project Manager: Ian Hull

Gas Testing in Water

BCL Sample ID:	1116133-07	Client Sample	e Name:	5781, MW-5-	W-111004, 10/4/2011 12			
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run#
Methane		1.9	mg/L	0.025	RSK-175M	ND	A01	1

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	RSK-175M	10/07/11	10/11/11 08:30	JMC	GC-V1	25	BUJ0374	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

BCL Sample ID:	1116133-07	Client Sampl	e Name:	5781, MW-5-V	N-111004, 10/4/2011 12	2:30:00PM		
Constituent		Result	Units	PQL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3		ND	mg/L	0.44	EPA-300.0	ND		1
Sulfate		1.3	mg/L	1.0	EPA-300.0	ND		1
Iron (II) Species		17000	ug/L	1000	SM-3500-FeD	ND	A01	2

			Run		QC			
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-300.0	10/05/11	10/06/11 02:55	LD1	IC2	1	BUJ0336	
2	SM-3500-FeD	10/05/11	10/05/11 19:30	MRM2	SPEC05	10	BUJ0277	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BUJ0662						
Methanol	BUJ0662-BLK1	ND	ug/L	100		
2-Chloroacrylonitrile (Surrogate)	BUJ0662-BLK1	57.8	%	60 - 140	(LCL - UCL)	

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

Quality Control Report - Laboratory Control Sample

							Control Limits			
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
QC Batch ID: BUJ0662										
Methanol	BUJ0662-BS1	LCS	2177.3	2000.0	ug/L	109		50 - 150		
2-Chloroacrylonitrile (Surrogate)	BUJ0662-BS1	LCS	2365.9	4000.0	ug/L	59.1		60 - 140		S09

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Solvent Scan (EPA Method 8015)

Quality Control Report - Precision & Accuracy

		•		•				<u> </u>			
									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BUJ0662	Use	d client samp	ole: N								
Methanol	MS	1115418-30	ND	2172.3	2000.0	ug/L		109		50 - 150	
	MSD	1115418-30	ND	2071.8	2000.0	ug/L	4.7	104	30	50 - 150	
2-Chloroacrylonitrile (Surrogate)	MS	1115418-30	ND	2411.0	4000.0	ug/L		60.3		60 - 140	
	MSD	1115418-30	ND	2241.8	4000.0	ug/L	7.3	56.0		60 - 140	S09

5900 Hollis St. Suite A Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

		Units	PQL	MDL	Lab Quals
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	1.0		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	10		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	ND	ug/L	250		
BUJ0289-BLK1	ND	ug/L	0.50		
BUJ0289-BLK1	108	%	76 - 114	1 (LCL - UCL)	
BUJ0289-BLK1	100	%	88 - 110) (LCL - UCL)	
BUJ0289-BLK1	102	%	86 - 115	5 (LCL - UCL)	
	BUJ0289-BLK1	BUJ0289-BLK1 ND	BUJ0289-BLK1 ND ug/L	BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 1.0 BUJ0289-BLK1 ND ug/L 1.0 BUJ0289-BLK1 ND ug/L 1.0 BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 10 BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 1.0 BUJ0289-BLK1 ND ug/L 1.0 BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 0.50 BUJ0289-BLK1 ND ug/L 10 BUJ0289-BLK1 ND ug/L 0.50	

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

							Control Limit			
				Spike		Percent		Percent		Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: BUJ0289										
Benzene	BUJ0289-BS1	LCS	28.940	25.000	ug/L	116		70 - 130		
Toluene	BUJ0289-BS1	LCS	27.310	25.000	ug/L	109		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BUJ0289-BS1	LCS	10.510	10.000	ug/L	105		76 - 114		
Toluene-d8 (Surrogate)	BUJ0289-BS1	LCS	10.260	10.000	ug/L	103		88 - 110		
4-Bromofluorobenzene (Surrogate)	BUJ0289-BS1	LCS	9.6000	10.000	ug/L	96.0		86 - 115		

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Project Number: 351640
Project Manager: Ian Hull

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BUJ0289	Use	d client samp	ole: N								
Benzene	MS	1115418-44	ND	28.830	25.000	ug/L		115		70 - 130	
	MSD	1115418-44	ND	27.860	25.000	ug/L	3.4	111	20	70 - 130	
Toluene	MS	1115418-44	ND	27.760	25.000	ug/L		111		70 - 130	
	MSD	1115418-44	ND	26.030	25.000	ug/L	6.4	104	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1115418-44	ND	9.8300	10.000	ug/L		98.3		76 - 114	
	MSD	1115418-44	ND	10.240	10.000	ug/L	4.1	102		76 - 114	
Toluene-d8 (Surrogate)	MS	1115418-44	ND	10.220	10.000	ug/L		102		88 - 110	
	MSD	1115418-44	ND	10.110	10.000	ug/L	1.1	101		88 - 110	
4-Bromofluorobenzene (Surrogate)	MS	1115418-44	ND	9.5900	10.000	ug/L		95.9		86 - 115	
	MSD	1115418-44	ND	9.8300	10.000	ug/L	2.5	98.3		86 - 115	

Conestoga-Rovers & Associates 5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BUJ0423						
Gasoline Range Organics (C4 - C12)	BUJ0423-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BUJ0423-BLK1	91.8	%	70 - 130	(LCL - UCL)	
QC Batch ID: BUJ0424						
Gasoline Range Organics (C4 - C12)	BUJ0424-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	BUJ0424-BLK1	96.2	%	70 - 130	(LCL - UCL)	

Conestoga-Rovers & Associates 5900 Hollis St. Suite A

Emeryville, CA 94608

10/20/2011 11:50 Reported:

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

						•	Control Limits			•
				Spike		Percent		Percent		Lab
Constituent	QC Sample ID	Type	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: BUJ0423										
Gasoline Range Organics (C4 - C12)	BUJ0423-BS1	LCS	972.35	1000.0	ug/L	97.2		85 - 115		
a,a,a-Trifluorotoluene (FID Surrogate)	BUJ0423-BS1	LCS	40.919	40.000	ug/L	102		70 - 130		
QC Batch ID: BUJ0424										
Gasoline Range Organics (C4 - C12)	BUJ0424-BS1	LCS	1017.3	1000.0	ug/L	102		85 - 115		
a,a,a-Trifluorotoluene (FID Surrogate)	BUJ0424-BS1	LCS	42.303	40.000	ug/L	106		70 - 130		

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

	•						•	•	Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BUJ0423	Use	d client samp	le: N								
Gasoline Range Organics (C4 - C12)	MS	1115418-40	ND	977.01	1000.0	ug/L		97.7		70 - 130	
	MSD	1115418-40	ND	1010.0	1000.0	ug/L	3.3	101	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1115418-40	ND	40.413	40.000	ug/L		101		70 - 130	
	MSD	1115418-40	ND	40.431	40.000	ug/L	0.0	101		70 - 130	
QC Batch ID: BUJ0424	Use	d client samp	ole: N								
Gasoline Range Organics (C4 - C12)	MS	1115418-41	ND	1012.3	1000.0	ug/L		101		70 - 130	
	MSD	1115418-41	ND	1056.8	1000.0	ug/L	4.3	106	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1115418-41	ND	41.263	40.000	ug/L		103		70 - 130	
	MSD	1115418-41	ND	42.416	40.000	ug/L	2.8	106		70 - 130	

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BUJ1180						
Diesel Range Organics (C12 - C24)	BUJ1180-BLK1	ND	ug/L	40		
Tetracosane (Surrogate)	BUJ1180-BLK1	89.3	%	28 - 139	(LCL - UCL)	

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Laboratory Control Sample

								Control Limits			
				Spike		Percent		Percent		Lab	
Constituent	QC Sample ID	Type	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals	
QC Batch ID: BUJ1180											
Diesel Range Organics (C12 - C24)	BUJ1180-BS1	LCS	334.03	500.00	ug/L	66.8		48 - 125			
Tetracosane (Surrogate)	BUJ1180-BS1	LCS	21.220	20.000	ug/L	106		28 - 139			

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Total Petroleum Hydrocarbons (Silica Gel Treated)

Quality Control Report - Precision & Accuracy

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BUJ1180	Use	d client samp	ole: N								
Diesel Range Organics (C12 - C24)	MS	1115418-17	ND	268.80	500.00	ug/L		53.8		36 - 130	
	MSD	1115418-17	ND	329.25	500.00	ug/L	20.2	65.9	30	36 - 130	
Tetracosane (Surrogate)	MS	1115418-17	ND	19.389	20.000	ug/L		96.9		28 - 139	
	MSD	1115418-17	ND	23.104	20.000	ug/L	17.5	116		28 - 139	

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Project: 5781

Project Number: 351640 Project Manager: Ian Hull

Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BUJ0374						
Methane	BUJ0374-BLK1	ND	mg/L	0.0010		

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project: 5781

Project Number: 351640 Project Manager: Ian Hull

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: BUJ0374										
Methane	BUJ0374-BS1 BUJ0374-BSD1	LCS LCSD	0.010105 0.010274	0.010843 0.010843	mg/L mg/L	93.2 94.8	1.7	80 - 120 80 - 120	20	

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Project: 5781
Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BUJ0277						
Iron (II) Species	BUJ0277-BLK1	ND	ug/L	100		
QC Batch ID: BUJ0336						
Nitrate as NO3	BUJ0336-BLK1	ND	mg/L	0.44		
Sulfate	BUJ0336-BLK1	ND	mg/L	1.0		

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Project: 5781
Project Number: 351640

Project Manager: lan Hull Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

								Control L	imits	
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
QC Batch ID: BUJ0277										
Iron (II) Species	BUJ0277-BS1	LCS	2043.9	2000.0	ug/L	102		90 - 110		
QC Batch ID: BUJ0336										
Nitrate as NO3	BUJ0336-BS1	LCS	21.209	22.134	mg/L	95.8		90 - 110		
Sulfate	BUJ0336-BS1	LCS	100.51	100.00	mg/L	101		90 - 110		

5900 Hollis St. Suite A Emeryville, CA 94608 Reported: 10/20/2011 11:50

Project Number: 351640
Project Manager: Ian Hull

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BUJ0277	Use	d client samp	le: Y - Des	cription: MV	V-7-W-11100	04, 10/04/2	2011 10):10			
Iron (II) Species	DUP	1116133-01	ND	ND		ug/L			10		
QC Batch ID: BUJ0336	Use	d client samp	le: Y - Des	cription: MV	V-7-W-11100	04, 10/04/2	2011 10):10			
Nitrate as NO3	DUP	1116133-01	4.2055	4.5330		mg/L	7.5		10		
	MS	1116133-01	4.2055	26.529	22.358	mg/L		99.8		80 - 120	
	MSD	1116133-01	4.2055	26.556	22.358	mg/L	0.1	100	10	80 - 120	
Sulfate	DUP	1116133-01	100.30	99.949	·	mg/L	0.4	·	10	·	
	MS	1116133-01	100.30	207.78	101.01	mg/L		106		80 - 120	
	MSD	1116133-01	100.30	207.38	101.01	mg/L	0.2	106	10	80 - 120	

Reported: 10/20/2011 11:50

Project: 5781 Project Number: 351640 Project Manager: Ian Hull

Conestoga-Rovers & Associates 5900 Hollis St. Suite A

Emeryville, CA 94608

Notes And Definitions

MDL Method Detection Limit

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

PQL's and MDL's were raised due to matrix interference. A10

A52 Chromatogram not typical of diesel.

S09 The surrogate recovery on the sample for this compound was not within the control limits.

ATTACHMENT C

HISTORICAL GROUNDWATER MONITORING AND SAMPLING DATA

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

March 10, 2011 76 Station 5781

				Ground-										
Date	TOC	Depth to	LPH	Water	Change in		TPH-G			Ethyl-	Total	MTBE	MTBE	
Sampled	Elevation	Water	Thickness	Elevation	Elevation	TPH-D	8015	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	Comments
_	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	(µg/l)	$(\mu g/l)$	$(\mu g/l)$	
MW-4														
6/16/2010	153.48	11.13	0	142.35		ND<50	58	ND<0.50	9.7	1.3	16		5.4	
9/29/2010	153.48	12.62	0	140.86	-1.49	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		7.3	
12/21/2010	153.48	11.17	0	142.31	1.45	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
3/10/2011	153.48	10.57	0	142.91	0.60	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.2	
MW-5														
6/16/2010	153.66	11.95	0	141.71		3000	29000	580	6800	850	7200		ND<50	
9/29/2010	153.66	13.67	0	139.99	-1.72	64000	29000	220	4100	2500	23000		52	
12/21/2010	153.66	11.17	0	142.49	2.50	11000	50000	81	4800	2200	22000		ND<50	
3/10/2011	153.66	11.35	0	142.31	-0.18	4900	48000	69	3600	1700	20000		ND<50	
MW-6														
12/21/2010	154.62	12.10	0	142.52		ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		32	
3/10/2011	154.62	11.36	0	143.26	0.74	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.6	
MW-7														
12/21/2010		13.46	0	141.92		ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
3/10/2011	155.38	12.07	0	143.31	1.39	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
MW-8														
12/21/2010		11.63	0	142.08		81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.9	
3/10/2011	153.71	11.38	0	142.33	0.25	61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.3	
MW-9														
12/21/2010		10.53	0	142.84		ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.2	
3/10/2011	153.37	10.86	0	142.51	-0.33	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.90	
MW-A														
12/18/1990						73	ND	ND	ND	ND	ND			
5/3/1991						ND	ND	ND	ND	ND	ND			
8/7/1991						ND	ND	ND	ND	ND	ND			
11/8/1991						ND	ND	ND	ND	ND	ND			
2/6/1992	151.80	19.88	0	131.92		ND	ND	ND	ND	ND	ND			
8/4/1992	151.80	18.95	0	132.85	0.93	ND	ND	ND	ND	ND	0.51			
2/10/1993	151.80	17.71	0	134.09	1.24	ND	ND	ND	ND	ND	ND			
2/10/1994	151.80	15.25	0	136.55	2.46	ND	ND	ND	0.52	ND	0.92			
2/9/1995	151.80	15.68	0	136.12	-0.43	ND	ND	ND	ND	ND	ND			
2/6/1996	151.80	12.52	0	139.28	3.16	120	ND	ND	ND	ND	2.1			
2/5/1997	151.80	13.01	0	138.79	-0.49	61	ND	ND	ND	ND	ND		ND	
2/2/1998	151.80	11.91	0	139.89	1.10	ND	ND	ND	ND	ND	ND		ND	
2/22/1999	151.80	11.24	0	140.56	0.67	ND	ND Page	ND 1 of 2	ND	ND	ND		ND	
								-						

Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

March 10, 2011 76 Station 5781

				Ground-										
Date	TOC	Depth to	LPH	Water	Change in		TPH-G			Ethyl-	Total	MTBE	MTBE	
Sampled	Elevation	Water	Thickness	Elevation	Elevation	TPH-D	8015	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$								
2/26/2000	151.80	12.16	0	139.64	-0.92	ND	ND	ND	1.01	ND	ND		ND	
3/7/2001	151.80	11.91	0	139.89	0.25	131	ND							
2/22/2002	151.80	14.08	0	137.72	-2.17	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<5.0	
2/22/2003	151.80	14.41	0	137.39	-0.33	93	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	
2/3/2004	151.80	14.32	0	137.48	0.09	60	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
2/18/2005	151.80	14.21	0	137.59	0.11	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	
3/29/2006	151.80	12.72	0	139.08	1.49	ND<200	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	0.54	
3/28/2007	151.80	13.98	0	137.82	-1.26	92	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
3/22/2008	151.80	12.68	0	139.12	1.30	ND<50	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
3/27/2009	151.80	14.35	0	137.45	-1.67	53	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
3/23/2010	151.80	19.55	0	132.25	-5.20	ND<58								
6/16/2010	154.79	17.85	0	136.94	4.69	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
9/29/2010	154.79	15.50	0	139.29	2.35	ND<1200	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.63	
12/21/2010	154.79	14.43	0	140.36	1.07	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.65	
3/10/2011	154.79	17.70	0	137.09	-3.27	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.56	

Table 2a ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 5781

				Ethylene-								Bromo-	
Date	TPH-G		Ethanol	dibromide	1,2-DCA					Total Oil		dichloro-	
Sampled	(GC/MS)	TBA	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME	Methanol	and Grease	TRPH	methane	Comments
	()	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	(mg/l)	(mg/l)	(µg/l)						
MW-4													
6/16/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
9/29/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
MW-5													
6/16/2010		ND<1000	ND<25000	ND<50	ND<50	ND<50	ND<50	ND<50	ND<100				
9/29/2010		ND<1000	ND<25000	ND<50	ND<50	ND<50	ND<50	ND<50	ND<1000				
12/21/2010		ND<1000	ND<25000	ND<50	ND<50	ND<50	ND<50	ND<50	ND<100				
3/10/2011		ND<1000	ND<25000	ND<50	ND<50	ND<50	ND<50	ND<50	ND<100				
MW-6													
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
MW-7													
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
MW-8													
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
MW-9													
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
MW-A													
2/6/1996													
2/5/1997													
3/7/2001		ND	ND	ND	ND	ND	ND	ND					
2/22/2003		ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0					
2/3/2004		ND<100	ND<500	ND<2.0	ND<0.50	ND<2.0	ND<2.0	ND<2.0			ND<1.0	ND<0.50	
2/18/2005		ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<2.0		ND<0.50	
3/29/2006		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50				ND<0.50	
3/28/2007		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<5.0		ND<0.50	
3/22/2008		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<5.0		ND<0.50	
3/27/2009		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<5.0		ND<0.50	
6/16/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
9/29/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
12/21/2010		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100				
3/10/2011		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50 Page		ND<100				
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Table 2b ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 5781

			Carbon			2-			Dibromo-	1,2-	1,3-	1,4-	
Date	Bromo-	Bromo-	Tetra-	Chloro-		Chloroethyl		Chloro-	chloro-	Dichloro-	Dichloro-	Dichloro-	
Sampled	form (μg/l)	methane (µg/l)	chloride (µg/l)	benzene (µg/l)	ethane (µg/l)	vinyi etner (μg/l)	Chloroform $(\mu g/l)$	methane (µg/l)	methane (μg/l)	benzene (µg/l)	benzene (µg/l)	benzene (µg/l)	Comments
MW-4	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	(μg/1)	
6/16/2010													
9/29/2010													
12/21/2010													
3/10/2011													
MW-5													
6/16/2010													
9/29/2010													
12/21/2010													
3/10/2011													
MW-6													
12/21/2010													
3/10/2011													
MW-7													
12/21/2010													
3/10/2011													
MW-8													
12/21/2010													
3/10/2011													
MW-9													
12/21/2010													
3/10/2011													
MW-A													
2/6/1996													
2/5/1997													
3/7/2001													
2/22/2003	 ND -2.0	 ND -1 0	 ND -0.50	 ND -0.50	 ND -1 0	 ND -0.50	 ND -0 50	 ND -2.0	 ND -0.50	 ND -0.50	 ND -0.50	 ND -0 50	
2/3/2004 2/18/2005	ND<2.0 ND<2.0	ND<1.0 ND<1.0	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<1.0 ND<1.0	ND<0.50	ND<0.50 ND<0.50	ND<2.0 ND<1.0	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<0.50	
3/29/2006	ND<0.50	ND<1.0	ND<0.50 ND<0.50	ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
3/28/2007	ND<0.50	ND<1.0		ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
3/22/2008 3/27/2009	ND<0.50	ND<1.0	ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50		ND<0.50 ND<0.50	ND<0.50 ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
6/16/2010	ND<0.50	ND<1.0			ND<0.50				ND<0.50	ND<0.50	ND<0.50	ND<0.50	
9/29/2010													
12/21/2010													
12/21/2010							Page 1	of 2					

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Table 2b ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 5781

			Carbon			2-			Dibromo-	1,2-	1,3-	1,4-	
Date	Bromo-	Bromo-	Tetra-	Chloro-	Chloro-	Chloroethyl		Chloro-	chloro-	Dichloro-	Dichloro-	Dichloro-	
Sampled	form	methane	chloride	benzene	ethane	vinyl ether	Chloroform	methane	methane	benzene	benzene	benzene	Comments
	$(\mu g/l)$	(µg/l)	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$								
3/10/2011													

Table 2c ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 5781

	Dichloro-					1,2-	cis-1,3-	trans-1,3-			Tetrachloro		
Date	difluoro-			cis-	trans-	Dichloro-	Dichloro-	Dichloro-		Tetrachloro-		trifluoro-	_
Sampled	methane (µg/l)	1,1-DCA (μg/l)	1,1-DCE (µg/l)	1,2-DCE (μg/l)	1,2-DCE (μg/l)	propane (μg/l)	propene (μg/l)	propene (μg/l)	chloride (µg/l)	ethane (µg/l)	(PCE) (µg/l)	ethane (µg/l)	Comments
MW-4	(μg/1)	(μg/1)	(μg/1)	(μg/1)									
6/16/2010													
9/29/2010													
12/21/2010													
3/10/2011													
MW-5													
6/16/2010													
9/29/2010													
12/21/2010													
3/10/2011													
MW-6													
12/21/2010													
3/10/2011													
MW-7													
12/21/2010													
3/10/2011													
MW-8													
12/21/2010													
3/10/2011													
MW-9													
12/21/2010													
3/10/2011													
MW-A													
2/6/1996													
2/5/1997													
3/7/2001													
2/22/2003													
2/3/2004	ND<1.0	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<0.50							
2/18/2005	ND<1.0	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<0.50							
3/29/2006	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50								
3/28/2007	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50								
3/22/2008	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50								
3/27/2009	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50								
6/16/2010													
9/29/2010													
12/21/2010													
3/10/2011							 Do 1	 1 of 1					
							Page 1	1 01 1					

Table 2d ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 5781

Date Sampled	1,1,1- Trichloro- ethane (µg/l)	1,1,2- Trichloro- ethane (µg/l)	Trichloro- ethene (TCE) (µg/l)	Trichloro- fluoro- methane (µg/l)	Vinyl chloride (µg/l)	Comments	
MW-4							
6/16/2010							
9/29/2010							
12/21/2010							
3/10/2011							
MW-5							
6/16/2010							
9/29/2010							
12/21/2010							
3/10/2011							
MW-6							
12/21/2010							
3/10/2011							
MW-7							
12/21/2010							
3/10/2011							
MW-8							
12/21/2010							
3/10/2011							
MW-9							
12/21/2010							
3/10/2011							
MW-A							
2/6/1996							
2/5/1997							
3/7/2001							
2/22/2003							
2/3/2004	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50		
2/18/2005	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50		
3/29/2006	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
3/28/2007	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
3/22/2008	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
3/27/2009	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		
6/16/2010							
9/29/2010							
12/21/2010							
3/10/2011							Page 1 of 1

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TABLE KEY

STANDARD ABBREVIATIONS

-- 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

FTBE = 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 Surface Elevation Measured Depth to Water + (Dp x LPH Thickness), 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
- 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 5781 in October 2003 Historical data compiled prior to that time were provided by Gettler-Ryan Inc