Treadwell&Rollo

6 March 2008
Project 3494.01

Mr. Steven Plunkett
Hazardous Substances Scientist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Letter Report
Groundwater Monitoring conducted 30 January 2008
Fuel Leak Case No. RO0000052
Former Peterson Manufacturing Company Facility
1600 63rd Street
Emeryville, California

Dear Mr. Plunkett:

This letter report is submitted by Treadwell & Rollo, Inc. on behalf of Wareham Property Group to document groundwater monitoring conducted in January 2008 at 1600 63rd Street, Emeryville, California (the "Site"). This report presents a summary of the groundwater monitoring conducted on 30 January 2008.

BACKGROUND

The Site is located at 1600 63rd Street, Emeryville, California (Figure 1). The Site occupies 2.75 acres bounded by 63rd Street to the south, Overland Avenue to the west, 64th Street to the north, and the City of Emeryville Fire Station Number 2 to the east (Figure 2). The surrounding land use is primarily commercial and light industrial.

The property was originally developed as a tallow manufacturing plant by Peterson Manufacturing Company in 1914. Historical records indicate six underground storage tanks (USTs) were previously located at the Site (Figure 2).

The Site has been operated as a Fed Ex shipping facility since 1989, when the Site was redeveloped and construction of the Fed Ex facility was completed. Fed Ex currently operates one 10,000 gallon gasoline UST at the Site.

Numerous environmental investigation and remediation activities by others have occurred at the Site since 1987. Activities included: underground storage tank removal, overexcavation and disposal (or landfarming) of affected soil, numerous soil borings, collection and analysis of soil and groundwater samples, installation and sampling of monitoring wells, and cone penetrometer testing. Details of previous activities have been reported elsewhere, and are not duplicated in this report.

In January 2007, Treadwell & Rollo installed five monitoring wells at the Site (TR-1, TR-2, TR-3, TR-4, and TR-5), and abandoned four previously installed monitoring wells (MW-1, MW-3, MW-4, MW-5). Groundwater sampling was performed after the installation of the monitoring wells, and subsequently has been performed on a quarterly basis.

In September 2007, a free phase product collection system consisting of hydrophobic socks and a collection canister system were installed in well MW-2, TR-2, and TR-5. The free phase product is periodically monitored.

Groundwater at the Site has been monitored since 1989. Based on historical and current data, groundwater flows towards the west with minor northwest – southwest components.

GROUNDWATER MONITORING

On 30 January 2008, groundwater monitoring was conducted for monitoring wells TR-1, TR-3, and TR-4. Groundwater monitoring wells TR-2, TR-5, and MW-2 were not sampled due to the presence of free product in the wells. Figure 2 shows the monitoring well locations.

Groundwater Sampling and Analytical Methods

Treadwell and Rollo used an oil/water interface meter to measure the depth to groundwater in monitoring wells TR-1, TR-2, TR-3, TR-4, TR-5 and MW-2. A sheen (<0.01 feet) of free phase product was detected in wells MW-2, TR-2, and TR-5. Groundwater elevations are summarized in Table 1. Free phase product measurements are summarized in Table 2.

Groundwater is interpreted to flow towards the west based on groundwater elevations measured on 30 January 2008. Groundwater gradient information is shown on Figure 3.

Groundwater samples from monitoring wells (TR-1, TR-3, and TR-4) were collected by purging at least three casing volumes of water from each well using a submersible purge pump. During purging, water-quality parameters (pH, temperature, conductivity, turbidity, and dissolved oxygen), were measured. Groundwater sampling forms, including the water-quality parameters measured in the field, are included in Appendix A. Stabilized groundwater quality measurements are presented in Table 3.

Purged groundwater samples were collected and placed into appropriately-preserved containers prepared by the laboratory for analysis. Each sample was immediately sealed, labeled, placed in an ice-cooled chest, and delivered to the laboratory under chain-of-custody procedures.

Groundwater samples were analyzed for:

- Total petroleum hydrocarbons quantified as diesel (TPHd) by EPA Method 8015M
- Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) by EPA Method 8260

- Fuel oxygenates and total petroleum hydrocarbons quantified as gasoline (TPHg) by EPA Method 8260
- Total lead.

Groundwater Analytical Results

Groundwater quality parameters were measured during purging and prior to sampling. The water quality data is summarized in Table 3.

TPHg and BTEX were not detected above laboratory reporting limits in any samples. TPHd was detected in all three samples, and concentrations ranged from 0.12 mg/L to 1.00 mg/L. MTBE was detected in wells TR-1 and TR-4 at concentrations of 0.0078 mg/L and 0.0022 mg/L. Total lead was not detected above laboratory reporting limits in any sample.

Groundwater analytical results are presented in Table 4. Groundwater Sampling Forms are presented in Appendix A. Certified analytical laboratory reports are provided in Appendix B. Figure 2 shows the monitoring well locations.

The concentrations are similar to the historical groundwater data. The next round of groundwater monitoring will be conducted in late January 2009.

Free Phase Product Results

Free phase product is passively collected and removed by using hydrophobic collection socks and canisters located in wells MW-2, TR-2, and TR-5. The passive remediation system is checked approximately every three weeks. Removal volume measurements are collected and free phase product thickness measurements are performed. The free phase product removal data is summarized in Table 5.

The results of the monitoring suggest that the hydrophobic socks are appropriate for removal of the low viscosity free phase product in monitoring wells TR-2 and TR-5. To date, the collection canister has been ineffective in removal of the higher viscosity free phase product in monitoring well MW-2. A hydrophobic sock was installed in monitoring well MW-2 in conjunction with the collection canister on 30 January 2008. Results from the next round of free phase product monitoring, planned for April 2008, will be used to evaluate if the sock technology is effective in well MW-2.

CONCLUSIONS

Based on the monitoring results from the period January 2007 to January 2008, concentrations of the analyzed constituents are not increasing in any of the sampled wells. The free product observed in MW-2 does not appear to be migrating down-gradient. We propose annual groundwater monitoring. The next groundwater monitoring event will occur in January 2009. We propose to conduct free phase product monitoring on a quarterly basis. The next free phase product monitoring event will occur in April 2008.

Feel free to contact Matthew Hall at 510/874-4500 ext. 556 with any questions or comments.

Sincerely yours,
TREADWELL & ROLLO, INC.

Matthew B. Hall
Project Scientist

David R. Kleesattel, P.G.
Senior Geologist

PROFESSIONAL GEOLOGIST
DAVID R. KLEESATTEL
No. 5136
STATE OF CALIFORNIA

349040110.OAK

Attachments: References
Tables
Figures
Appendices Appendix A – Monitoring Well Sampling Forms
Appendix B – Laboratory Analytical Results

REFERENCES

Treadwell & Rollo 2007a. Letter Report, Supplemental Soil and Groundwater Investigation, Fuel Leak Case No. RO0000052, Former Peterson Manufacturing Company Facility, 1600 63rd Street, Emeryville, California. 21 March 2007.

Treadwell & Rollo 2007b. Letter Report, Groundwater Monitoring Conducted 26 July 2007, Fuel Leak Case No. RO0000052, Former Peterson Manufacturing Company Facility, 1600 63rd Street, Emeryville, California. 3 October 2007.

Treadwell & Rollo 2007c. Letter Report, Groundwater Monitoring conducted 30 October 2007, Fuel Leak Case No. RO0000052, Former Peterson Manufacturing Company Facility. 1600 63rd Street, Emeryville, California. 20 December 2007.

Treadwell&Rollo

TABLES

Treadwell&Rollo

TABLE 1
GROUNDWATER
ELEVATION DATA
1600 63rd Street, Emeryville, CA

Well Number	Top-of-Casing Elevation (feet)	Depth of Well Screen Interval (feet)	Date Measured	Depth to Water (feet)	Water Elevation (feet)	Change in Elevation (feet)
MW-2	16.53	12.5-20.5	8/3/1989	6.66	9.87	
			9/21/1989	6.32	10.21	0.34
			10/20/1989	6.78	9.75	-0.46
			12/20/1989	7.32	9.21	-0.54
			3/20/1990	6.76	9.77	0.56
			5/11/1990	6.66*	--	--
			7/20/1990	6.74*	--	--
			11/12/1990	6.75*	--	--
			11/21/1990	7.00*	--	--
			2/7/1991	6.88*	--	--
			5/8/1991	6.92*	--	--
			5/14/1999	NM*	--	--
			11/28/2006	6.85*	--	--
			1/15/2007	6.80*	--	--
			1/30/2007	6.40*	--	--
			2/13/2007	5.83*	--	--
			2/27/2007	5.89*	--	--
			7/26/2007	6.67*	--	--
			10/30/2007	7.16	9.37	--
			1/30/2008	5.96	10.57	--
TR-1	17.50	5-20	1/15/2007	6.21	11.29	
			1/30/2007	6.14	11.36	0.07
			7/26/2007	6.33	11.17	-0.19
			10/30/2007	6.35	11.15	-0.02
			1/30/2008	5.45	12.05	0.90
TR-2	16.50	5-20	1/15/2007	8.11*	8.39	
			1/30/2007	7.19	7.19	-1.20
			2/13/2007	6.57*	9.93	2.74
			2/27/2007	6.59*	9.91	-0.02
			7/26/2007	7.75	8.75	-1.16
			10/30/2007	7.86	8.64	-1.27
			1/30/2008	6.76	8.64	-0.11
TR-3	18.60	5-20	1/15/2007	4.85	13.75	
			1/30/2007	4.68	13.92	0.17
			7/26/2007	5.16	13.44	-0.48
			10/30/2007	5.14	13.46	-0.46
			1/30/2008	4.53	14.07	0.63
TR-4	16.38	5-20	1/15/2007	8.71	7.67	
			1/30/2007	6.17	10.21	2.54
			7/26/2007	8.68	7.70	-2.51
			10/30/2007	8.79	7.59	-0.11
			1/30/2008	7.88	8.50	0.80

TABLE 1
GROUNDWATER
ELEVATION DATA
1600 63rd Street, Emeryville, CA

Well Number	Top-of-Casing Elevation (feet)	Depth of Well Screen Interval (feet)	Date Measured	Depth to Water (feet)	Water Elevation (feet)	Change in Elevation (feet)
TR-5	16.27	5-20	1/15/2007	7.34*	8.93	
			1/30/2007	6.87	9.40	0.47
			2/13/2007	6.22	10.05	0.65
			2/27/2007	6.19	10.08	0.03
			7/26/2007	6.19	9.98	-0.10
			10/30/2007	7.52	8.75	-1.23
			1/30/2008	6.42	9.85	1.10

Notes:

* - Petroleum product measured in well (0.01- to 3-feet thick)

Survey conducted by CSS Environmental Services (Novato, CA) on 15 January 2007.

Water elevation referenced to mean sea level.

Monitoring wells MW1, MW3, MW4, and MW5 were abandoned on 15 January 2007.

Treadwell&Rollo

TABLE 2
FREE PHASE PRODUCT MEASUREMENTS
FROM WELLS MW-2, TR-2, and TR-5 (Since January 2007)
1600 63rd Street, Emeryville, CA

Well Number	Top-of-Casing Elevation (feet)	Depth of Well Screen Interval (feet)	Date Measured	Depth to Free Phase Product (feet)	Depth to Water (feet)	Thickness of Free Phase Product (feet)	Unadjusted Water Level (feet)	Adjusted Water Level (feet)
MW-2	16.53	12.5-20.5	1/15/2007	6.72	6.80	0.08	9.73	9.79
			1/30/2007	6.33	6.40	0.07	10.13	10.19
			2/13/2007	5.81	5.83	0.02	10.70	10.72
			2/27/2007	5.78	5.89	0.11	10.64	10.73
			7/26/2007	6.65	6.67	0.02	9.86	9.88
			8/10/2007	6.89	6.91	0.02	9.62	9.64
			9/19/2007	7.05	7.07	0.02	9.46	9.48
			10/4/2007	7.36	7.36	<0.01	9.17	9.17
			10/30/2007	7.16	7.16	<0.01	9.37	9.37
			1/30/2008	5.96	5.96	<0.01	10.57	10.57
TR-2	16.50	5-20	1/15/2007	7.42	8.11	0.69	8.39	8.94
			1/30/2007	7.19	7.19	<0.01	9.31	9.31
			2/13/2007	6.56	6.57	0.01	9.93	9.94
			2/27/2007	6.58	6.59	0.01	9.91	9.92
			7/26/2007	7.75	7.75	<0.01	8.75	8.75
			8/10/2007	7.87	7.87	<0.01	8.63	8.63
			9/19/2007	8.01	8.01	<0.01	8.49	8.49
			10/4/2007	8.15	8.15	<0.01	8.35	8.35
			10/30/2007	7.86	7.86	<0.01	8.64	8.64
			1/30/2008	6.76	6.76	<0.01	9.74	9.74
TR-5	16.27	5-20	1/15/2007	7.14	7.34	0.20	8.93	9.09
			1/30/2007	6.87	6.87	<0.01	9.40	9.40
			2/13/2007	6.22	6.22	<0.01	10.05	10.05
			2/27/2007	6.19	6.19	<0.01	10.08	10.08
			7/26/2007	6.19	6.19	<0.01	10.08	10.08
			8/10/2007	7.56	7.56	<0.01	8.71	8.71
			9/19/2007	7.70	7.70	<0.01	8.57	8.57
			10/4/2007	7.78	7.78	<0.01	8.49	8.49
			10/30/2007	7.52	7.52	<0.01	8.75	8.75
			1/30/2008	6.42	6.42	<0.01	9.85	9.85

General Notes:

Measurements collected from top of casing, north side.

Adjusted water level = unadjusted water level + (Thickness of Free Phase Product x 0.8).

TABLE 3
Water Quality Measurements
1600 63rd Street, Emeryville, CA

Well Number	Date	Purge Method	Purge Duration (minutes)	Volume Purged (gallons)	Purged Dry? (yes/no)	Dissolved Oxygen (mg/L)	pH	Specific Conductance (µS/cm)	Temperature (C˚)	ORP (mV)
TR-1	1/15/2007	SP	30	30.0	No	NM	6.62	830	NM	140
	7/26/2007	SP	10	7.5	No	1.07	7.02	910	22.7	70
	10/30/2007	SP	9	8.5	No	1.49	6.84	900	23.1	10
	1/30/2008	SP	10	10.0	No	1,17	6.90	813	20.6	40
TR-3	1/15/2007	SP	35	20.0	Yes	NM	7.75	1,330	21.4	NM
	7/26/2007	SP	20	7.5	No	1.19	6.90	1,530	18.8	120
	10/30/2007	SP	13	10.0	No	1.21	6.88	1,420	19.1	150
	1/30/2008	SP	14	10.0	No	0.95	7.04	1,310	17.5	69
TR-4	1/15/2007	SP	25	25.0	No	NM	6.76	1,780	NM	130
	7/26/2007	SP	7	7.0	No	1.59	7.00	1,800	20.4	50
	10/30/2007	SP	6	8.0	No	1.07	7.06	1,920	20.3	-10
	1/30/2008	SP	6	9.0	No	1.25	7.26	1,667	19.0	41

General Notes

ORP = Oxidation Reduction Potential
mV = millivolts
mg/L = milligrams per Liter
µS/cm = microseimens per centimeter
SP = submersible pump

TABLE 4
GROUNDWATER SAMPLING RESULTS FROM MONITORING WELLS
1600 63rd Street, Emeryville, CA

Sample No.	Date Sampled	Notes	Chemical Concentrations Detected (mg/L)												
			TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	PCBs	EPA 8080 Analytes	EPA 8270 Analytes	EPA 8240 Analytes	Fuel Oxygenates (including Ethanol)	Total Lead	Motor Oil
HLA															
MW-2	6/25/1989		<0.5	0.3	<0.005	<0.005	<0.005	<0.005	<0.0005	--	(2)	<0.01	--	--	--
	9/21/1989		**1**	<0.5	<0.005	<0.005	<0.005	<0.005	<0.0005	(3)	(4)	<0.01	--	--	--
	12/20/1989		<0.5	**0.53**	<0.005	<0.005	<0.005	<0.005	<0.0005	ND	(5)	<0.01	--	--	--
	2/20/1990		**49**	0.42	<0.005	<0.005	<0.005	<0.005	<0.0005	(6)	(7)	0.044 (8)	--	--	--
	5/11/1990		**8.4**	**1.2**	<0.005	<0.005	<0.005	<0.005	--	--	--	<0.01	--	--	--
	5/11/1990		**<2.5**	<0.5	<0.01	<0.01	<0.01	<0.01	--	--	--	<0.02	--	--	--
	7/20/1990		**27**	**3.9**	<0.005	<0.005	<0.005	0.011	--	ND	--	--	--	--	--
	7/20/1990		**30**	**2.3**	<0.005	<0.0025	<0.0025	0.0033	--	ND	--	--	--	--	--
	11/12/1990		**61**	**380**	<0.005	<0.0005	<0.0005	0.0005	<0.0005	ND	--	--	--	--	--
	11/12/1990		**35**	**7**	<0.005	0.0009	0.0001	0.0079	<0.0005	ND	--	--	--	--	--
	2/7/1991		**41**	**11**	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	ND	--	--	--	--	--
	2/7/1991		**27**	**13**	<0.005	<0.0005	<0.0005	0.043	<0.0005	ND	--	--	--	--	--
	5/8/1991		**43**	**88**	<0.005	<0.0005	<0.0005	<0.005	<0.0005	ND	--	--	--	--	--
	5/8/1991		**26**	**150**	<0.005	<0.0005	<0.0005	<0.005	<0.0005	ND	--	--	--	--	--
Certified															
MW-2	11/19/1992		**22**	**0.59**	<0.0003	0.0014	<0.0003	0.0015	--	--	--	--	--	--	--
	7/13/1994		**6**	<2	<0.001	<0.001	<0.001	<0.001	--	--	--	--	--	--	--
SOMA Corporation-Monitoring Wells															
MW-2	5/14/1999	(1)	**550**	**210**	**<2.5**	**<2.5**	**<2.5**	**4.9**	<0.5	--	--	--	--	--	<3,500
Treadwell & Rollo, Inc.															
MW-2	1/10/2007	(9)	**10**	**0.6**	<0.0005	<0.0005	<0.0005	0.00053	--	--	--	--	MtBE = 0.00095 Di-isopropyl ether = 0.00097 Others <0.0005 to <0.1	<0.1	--
TR-1	1/15/2007	(9)	0.14	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.0074 Others <0.0005 to <0.1	<0.1	--
	7/26/2007		0.20	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.0085 Others <0.0005 to <0.01	0.0038	--
	10/30/2007	(9)	0.25	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.0078 Others <0.0005 to <0.01	<0.0034	--
	1/30/2008	(9)	0.12	< 0.05	< 0.0005	< 0.0005	< 0.0005	< 0.0005	--	--	--	--	MtBE = 0.0078 Others <0.0005 to <0.01	<0.003	
TR-2	1/10/2007	(9)	**480**	**3.4**	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005 to <1	<0.1	--
TR-3	1/10/2007	(9)	0.098	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	Other <0.0005 to <0.1	<0.1	--
	7/26/2007		0.37	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	Other <0.0005 to <0.01	<0.003	--
	10/30/2007	(9)	0.17	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	Other <0.0005 to <0.05	<0.003	--
	1/30/2008	(9)	0.27	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	Other <0.0005 to <0.05	<0.003	
TR-4	1/10/2007	(9)	0.43	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.0022 Di-isopropyl ether = 0.001 Other <0.0005 to <0.1	<0.1	--
	7/26/2007		0.76	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.003 Di-isopropyl ether = 0.0014 Other <0.0005 to <0.01	<0.003	--
	10/30/2007	(9)	**1.00**	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	Other <0.0005 to <0.05	<0.0034	--
	1/30/2008	(9)	**1.00**	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	MtBE = 0.0022 Di-isopropyl ether = 0.0012 Other <0.0005 to <0.01	<0.003	--
TR-5	1/10/2007	(9)	**31**	**12**	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005 to <1	<0.1	--
ESL			0.64	0.5	0.046	0.13	0.29	0.1	0.014				MtBE = 1.8		

General Notes:

mg/L = milligrams per liter
TPHd = Total Petroleum Hydrocarbons as Diesel
TPHg = Total Petroleum Hydrocarbons as Gasoline
PCBs = Polychlorinated biphenyls
MtBE = Methyl tert-Butyl Ether
< = Below Specified Reporting Limits.
-- = Not Analyzed.
ESL = Environmental Screening Level, Shallow Soil, Groundwater not a source of drinking water, Commercial/Industrial Land Use (RWQCB 2005)
1 = **Bold** values exceed the environmental screening levels.

Footnotes:

(1) Product sample collected; Chromalab (STL San Francisco) results indicate hydrocarbon reported does not match diesel standard. Friedman & Bruya results indicate "patterns displayed by these peaks are indicative of Bunker C or crude oil"
(2) Trace flourene detected
(3) 0.00016 ppm heptachlor and 0.00015 ppm 4,4'-DDD detected.
(4) 0.006 ppm flourene, 0.005 ppm bis (2-ethyl-hexyl) phthalate, and 0.0061 ppm 2-methyl-napthalene detected.
(5) 0.012 ppm 2-methyl-napthalene detected.
(6) 0.00035 ppm Gamma-BHC detected.
(7) 0.0061 ppm flourene, 0.018 ppm 2-methyl-napthalene, and 0,0055 ppm phenanthrene detected.
(8) 0.044 ppm acetone detected.
(9) Laboratory reported that the TPH compounds detected in samples did not match their respective laboratory standard.

Table 5
Free Phase Product Monitoring Table
1600 63rd Street
Emeryville, California

Treadwell&Rollo

	MW-2		TR-2		TR-5		
FPP Extraction System	Passive Skimmer		Hydrophobic Sock		Hydrophobic Sock		
Date	Volume (L)	Extraction Rate (L/day)	Volume (L)	Extraction Rate (L/day)	Volume (L)	Extraction Rate (L/day)	Notes
8/15/2007	0	--	0.00	--	0.00	--	
9/19/2007	0	0	0.00	0.00	0.21	0.01	Sock changed out in TR-2 & TR-5
10/4/2007	0	0	0.34	0.02	0.13	0.01	
10/30/2007	0	0	0.34	0.01	0.05	0.00	
11/16/2007	0	0	0.03	0.00	0.37	0.02	Sock changed out in TR-2 & TR-5
1/30/2008	0	0	0.95	0.01	0.55	0.01	Sock changed out in TR-2 & TR-5; installed Hydrophobic Sock to MW-2
Total volume extracted	0		1.66		1.31		

Notes:
L - liters
FPP - free-phase product
Passive Skimmer - Durham Geo Slope Indicator, model no. TR-254, Passive Skimmer
Hydrophobic Sock - Durham Geo Slope Indicator, model no. TB2-100, SoakEase™ absorbent sock

Treadwell&Rollo

FIGURES

Base map: The Thomas Guide
Alameda County
1999

0 1/4 1/2 Mile

Approximate scale

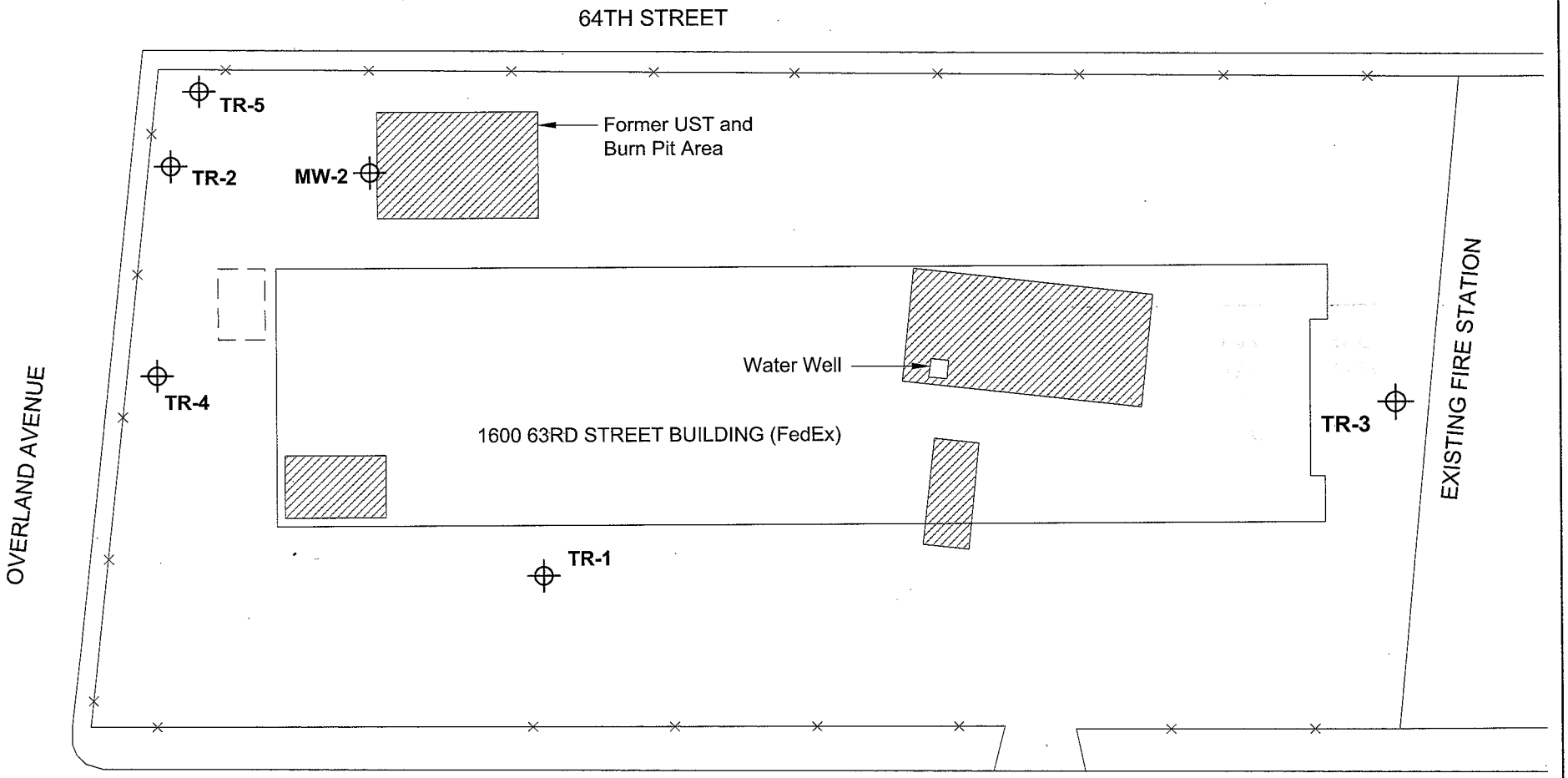
N

1600 63RD STREET
Emeryville, California

SITE LOCATION MAP

Treadwell&Rollo

Date 08/08/07	Project No. 3494.01	Figure 1



Map Source: Harding Lawson Associates, 5/91, and SOMA, 2000.

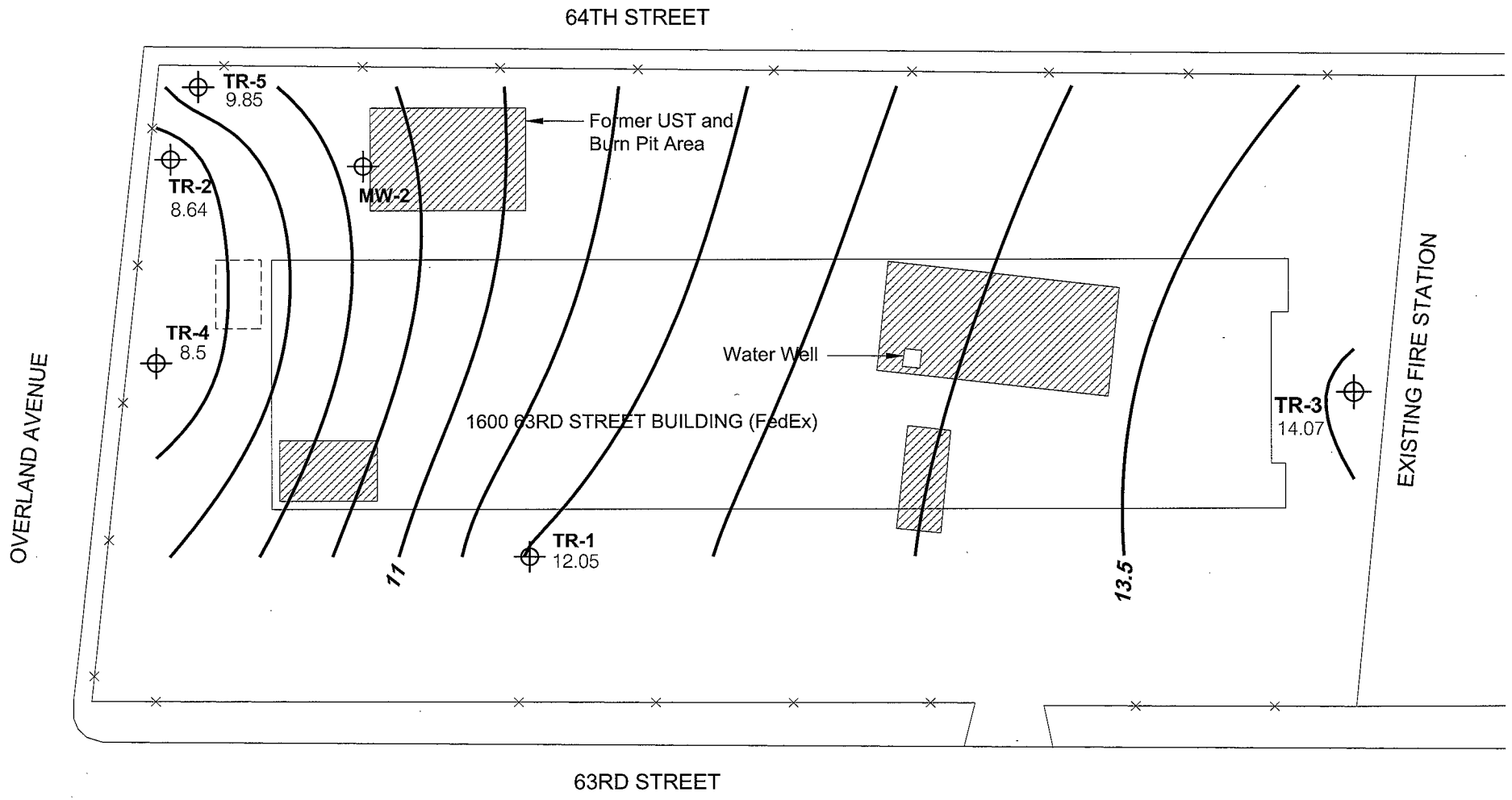
1600 63RD STREET
Emeryville, California

SITE PLAN

Date 08/08/07	Project No. 3494.01	Figure 2

Treadwell&Rollo

S:\Trgraphics-Oak\3400's\3494.01\3494.01-REV_SITE-PLAN 2.dwg 2/29/08



EXPLANATION

TR-1 12.05 — Location of monitoring well, with well ID and Groundwater elevation

Soil and Tank excavation areas

11 — Isopiezometric line

0 60 Feet

Approximate scale

Map Source: Harding Lawson Associates, 5/91, and SOMA, 2000.

1600 63RD STREET
Emeryville, California

GROUNDWATER GRADIENT

Date 03/04/08	Project No. 3494.01	Figure 3

Treadwell&Rollo

S:\Trgraphics-Oak\3400's\3494.01\3494.01-2-2008_GROUNDWATER-PLAN 2.dwg 3/05/08

APPENDIX A
Monitoring Well Sampling Forms

GROUNDWATER SAMPLING FORM

Project Name 1600 Second St Well No. TR-1

Project Number 321941.01 Well Type [X] Monitor [ ] Extraction [ ] Other

Recorded By LMA Sampled by LMA Date 1/30/08

WELL PURGING

PURGE VOLUME

Well casing diameter

[X] 2-inch [ ] 3/8-inch [ ] Other

Well Total Depth (TD, ft. below TOC) : 25'

Depth to Water (WL, ft. below TOC) : 5.45

Depth to free phase (FP, ft. below TOC) :

Number of casing volumes to be purged

[ ] 4 [ ] 10 [X] Other 3

PURGE METHOD

[ ] Bailer \ Type

[X] Pump \ Type Submersible

[ ] Other

PUMP INTAKE

[ ] Near top Depth (ft)

[ ] Near Bottom Depth (ft)

[ ] Other

PURGE VOLUME CALCULATION

Water Column Length		Multiplier		No. Vols		
19.55	X	0.17	X	3	=	10.0 gals CALCULATED PURGE VOLUME

Total Purge Time (Multiplier : 2" = 0.17, 4" = 0.66, 6" = 1.5) gals ACTUAL PURGE VOLUME

Recharge Rate Purge Rate

GROUNDWATER PARAMETER MEASUREMENTS

Meter or Meter Type Horiba U22 Flow Through Cell

Time	/ ~~Liters~~ gal	pH	Temp *C *F	Cond. (mS/cm)	Turbidity NTU	DO (%)	DO (mg/L)	ORP (mV)	Comments
1254	/ 8.0	7.82	19.6	898	cloudy		1.13	59	
1255	/ 12.0								
1256	/ 14.5	7.04	20.0	888	cloudy		0.7	32	pause to empty bucket
1308	/ 16.0	7.32	19.7	874	cloudy		1.64	41	
1304	/ 10.0	6.90	20.6	813	cloudy		1.18	40	
	/								
	/								
	/								
	/								
	/								
	/								
	/								
	/								
	/								
	/								

Comments Purge water storage/disposal [X] Drummed onsite [ ] Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 1/30/08 1327

Bailer - Type [X] disposable poly Sample port [ ] Other [ ]

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
TR-1-5	6 VOAs	TPH g, BTEX	HCl	Curtis & Tompkins	
		Fuel oxys			
	1 L amber	TPH-d	none		
	1 500mL poly	lead	HNO_3		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Treadwell&Rollo
Environmental and Geotechnical Consultant

GROUNDWATER SAMPLING FORM

Project Name 1600 6 3rd st Well No. TR-3

Project Number 3494.01 Well Type [X] Monitor [ ] Extraction [ ] Other

Recorded By LMA Sampled by LMA Date 1/30/08

WELL PURGING

PURGE VOLUME

Well casing diameter

[X] 2-inch [ ] 3/8-inch [ ] Other

Well Total Depth (TD, ft. below TOC) : 25'

Depth to Water (WL, ft. below TOC) : 4.53'

Depth to free phase (FP, ft. below TOC) :

Number of casing volumes to be purged

[ ] 4 [ ] 10 [X] Other 3

PURGE METHOD

[ ] Bailer \ Type

[X] Pump \ Type submersible

[ ] Other

PUMP INTAKE

[ ] Near top Depth (ft)

[X] Near Bottom Depth (ft) 25'

[ ] Other

PURGE VOLUME CALCULATION

20.47 Water Column Length X 0.17 Multiplier X 3 No. Vols = 10.4 gals CALCULATED PURGE VOLUME

Total Purge Time

Recharge Rate

(Multiplier : 2" = 0.17, 4" = 0.66, 6" = 1.5)

Purge Rate

gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter or Meter Type Horiba U22 Flow Through Cell

Time / Liters	pH	Temp °C °F	Cond. µS (mS/cm)	Turbidity NTU	DO (%)	DO (mg/L)	ORP (mV)	Comments
Set 1								
1143 / 10								
1146 / 15	6.85	16.3	1378	clear		1.64	108	Pause to empty bucket
1155 / 16	7.01	17.9	12.94	clear		1.54	70	
1157 / 10	7.04	17.5	13.0	clear		0.95	69	
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								

Comments

Purge water storage/disposal [X] Drummed onsite [ ] Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 1/30/08 / 1230

Bailer - Type [X] disposable poly Sample port [ ] Other [ ]

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
TR-3-5	6 VOAs	TPH-g, BTEX	HCl	Curtis & Tompkins	
		fuel oxys			
	1 L-L amber	TPH-d	none		
	1 500ml-poly	lead	HNO_3		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Treadwell&Rollo
Environmental and Geotechnical Consultant

GROUNDWATER SAMPLING FORM

Project Name 1600 63rd St Well No. TR-4

Project Number 3494.01 Well Type [X] Monitor [ ] Extraction [ ] Other

Recorded By LMA Sampled by LMA Date 1/30/08

WELL PURGING

PURGE VOLUME

Well casing diameter

[X] 2-inch [ ] 3/8-inch [ ] Other

Well Total Depth (TD, ft. below TOC) : 25'

Depth to Water (WL, ft. below TOC) : 7.88'

Depth to free phase (FP, ft. below TOC) :

Number of casing volumes to be purged

[ ] 4 [ ] 10 [X] Other 3

PURGE METHOD

[ ] Bailer \ Type

[X] Pump \ Type Submersible

[ ] Other

PUMP INTAKE

[ ] Near top Depth (ft)

[X] Near Bottom Depth (ft) 25'

[ ] Other

PURGE VOLUME CALCULATION

17.12 (Water Column Length) X 0.17 (Multiplier) X 3 (No. Vols) = 8.7 gals CALCULATED PURGE VOLUME

Total Purge Time Recharge Rate Purge Rate

(Multiplier : 2" = 0.17, 4" = 0.66, 6" = 1.5)

gals ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter or Meter Type Horiba U22 Flow Through Cell

Time / Liters (gal)	pH	Temp °C °F	Cond. µS (mS/cm)	Turbidity NTU	DO (%)	DO (mg/L)	ORP (mV)	Comments
1457 / 0.0	7.47	18.0	1768	Cloudy		1.73	26	
1458 / 4.5	7.13	18.4	1547	Clear		0.37	21	Purge to 5 gal poly bucket
1501 / 5.5	7.16	18.1	1608	Clear		2.8	31	
1503 / 9.0	7.26	19.0	1667	Clear		1.25	41	
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								

Comments Purge water storage/disposal [X] Drummed onsite [ ] Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 1/30/08 / 1528

Bailer - Type [X] disposable poly Sample port [ ] Other [ ]

SAMPLING PROGRAM

Sample No.	Container #/Volume	Analysis	Preservatives	Laboratory	Comments
TR-4-5	6 VOAs	TPH-g, BTEX	HCl	Curtis & Tompkins	
		fuel oxy.			
	1 1-L amber	TPH-d	none		
	1 500-mL poly	lead	HNO_3		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Treadwell&Rollo
Environmental and Geotechnical Consultant

APPENDIX B
Laboratory Analytical Reports

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	3494.01	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	01/30/08
Units:	ug/L	Received:	01/30/08
Diln Fac:	1.000	Prepared:	01/31/08
Batch#:	134337		

Field ID: TR-1-5 Lab ID: 200852-001
Type: SAMPLE Analyzed: 02/04/08

Analyte	Result	RL
Diesel C10-C24	120 Y	50

Surrogate	%REC	Limits
Hexacosane	70	63-130

Field ID: TR-3-5 Lab ID: 200852-002
Type: SAMPLE Analyzed: 02/04/08

Analyte	Result	RL
Diesel C10-C24	270 Y	50

Surrogate	%REC	Limits
Hexacosane	88	63-130

Field ID: TR-4-5 Lab ID: 200852-003
Type: SAMPLE Analyzed: 02/01/08

Analyte	Result	RL
Diesel C10-C24	1,000 Y	50

Surrogate	%REC	Limits
Hexacosane	89	63-130

Type: BLANK Analyzed: 02/04/08
Lab ID: QC426323

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	87	63-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	3494.01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC426324	Batch#:	134337
Matrix:	Water	Prepared:	01/31/08
Units:	ug/L	Analyzed:	02/01/08

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,813	73	61-120

Surrogate	%REC	Limits
Hexacosane	81	63-130

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	3494.01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	134337
MSS Lab ID:	200848-002	Sampled:	01/29/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Prepared:	01/31/08
Diln Fac:	1.000	Analyzed:	02/01/08

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC426325

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	30.92	2,500	1,720	68	58-126

Surrogate	%REC	Limits
Hexacosane	78	63-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC426326

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,723	68	58-126	0	31

Surrogate	%REC	Limits
Hexacosane	81	63-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	3494.01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	134337
MSS Lab ID:	200850-005	Sampled:	01/29/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Prepared:	01/31/08
Diln Fac:	1.000	Analyzed:	02/04/08

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC426327

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	<11.75	2,500	1,548	62	58-126

Surrogate	%REC	Limits
Hexacosane	84	63-130

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC426328

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,498	60	58-126	3	31

Surrogate	%REC	Limits
Hexacosane	80	63-130

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

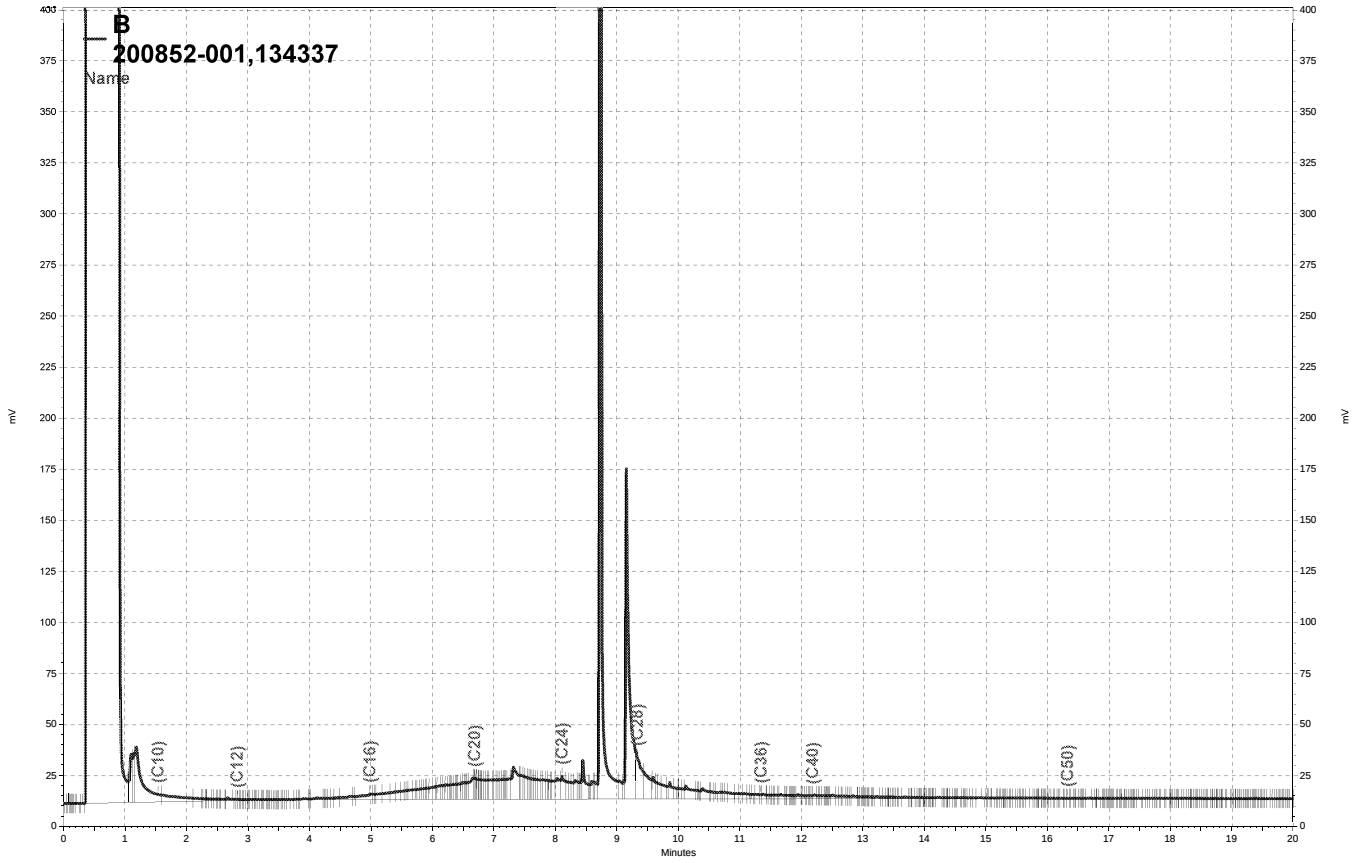
Total Extractable Hydrocarbons

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	3494.01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	134337
MSS Lab ID:	200841-024	Sampled:	01/30/08
Lab ID:	QC426329	Received:	01/30/08
Matrix:	Water	Prepared:	01/31/08
Units:	ug/L	Analyzed:	02/04/08

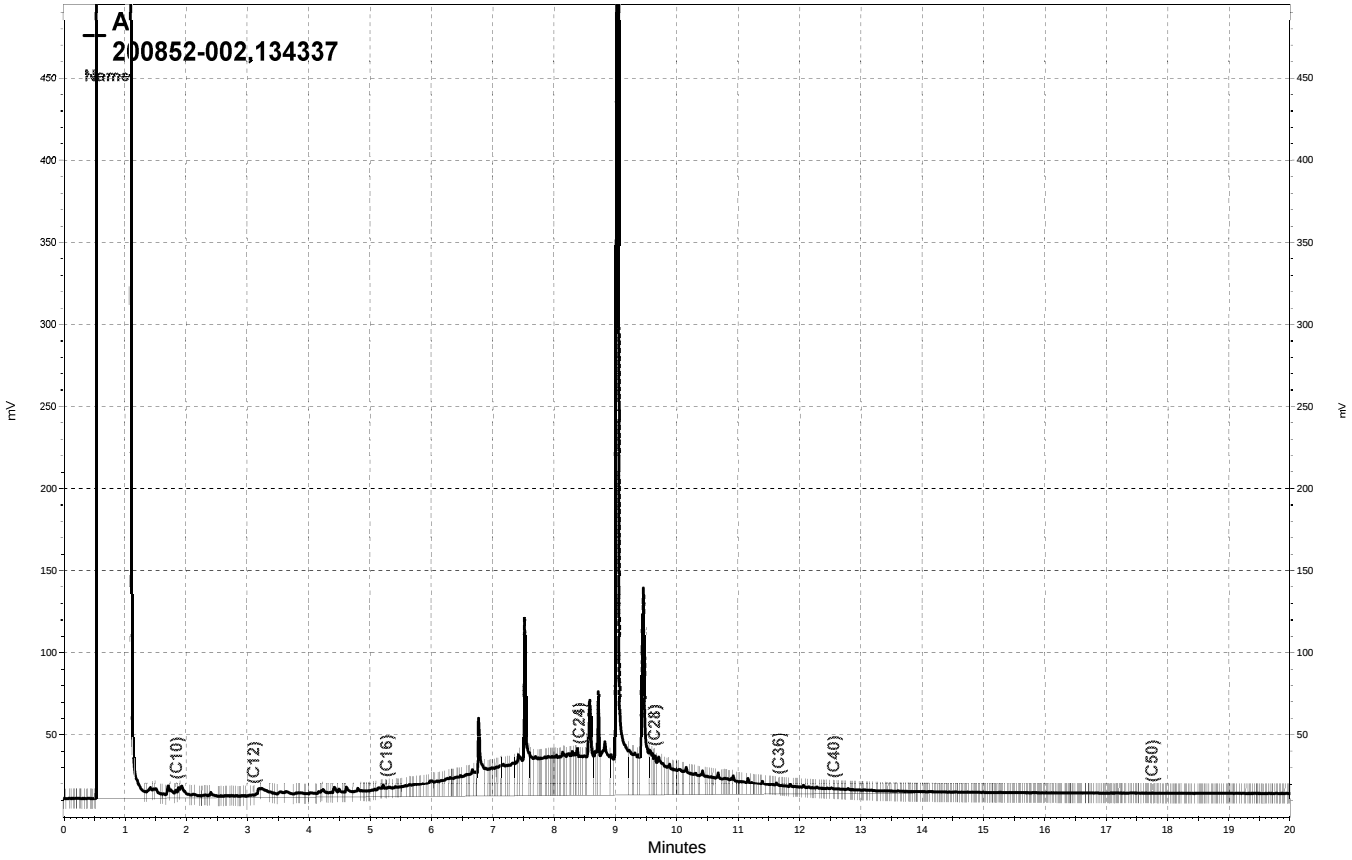
Analyte	MSS Result	Result	RL	RPD	Lim
Diesel C10-C24	1,379	1,150	50.00	18	31

Surrogate	%REC	Limits
Hexacosane	86	63-130

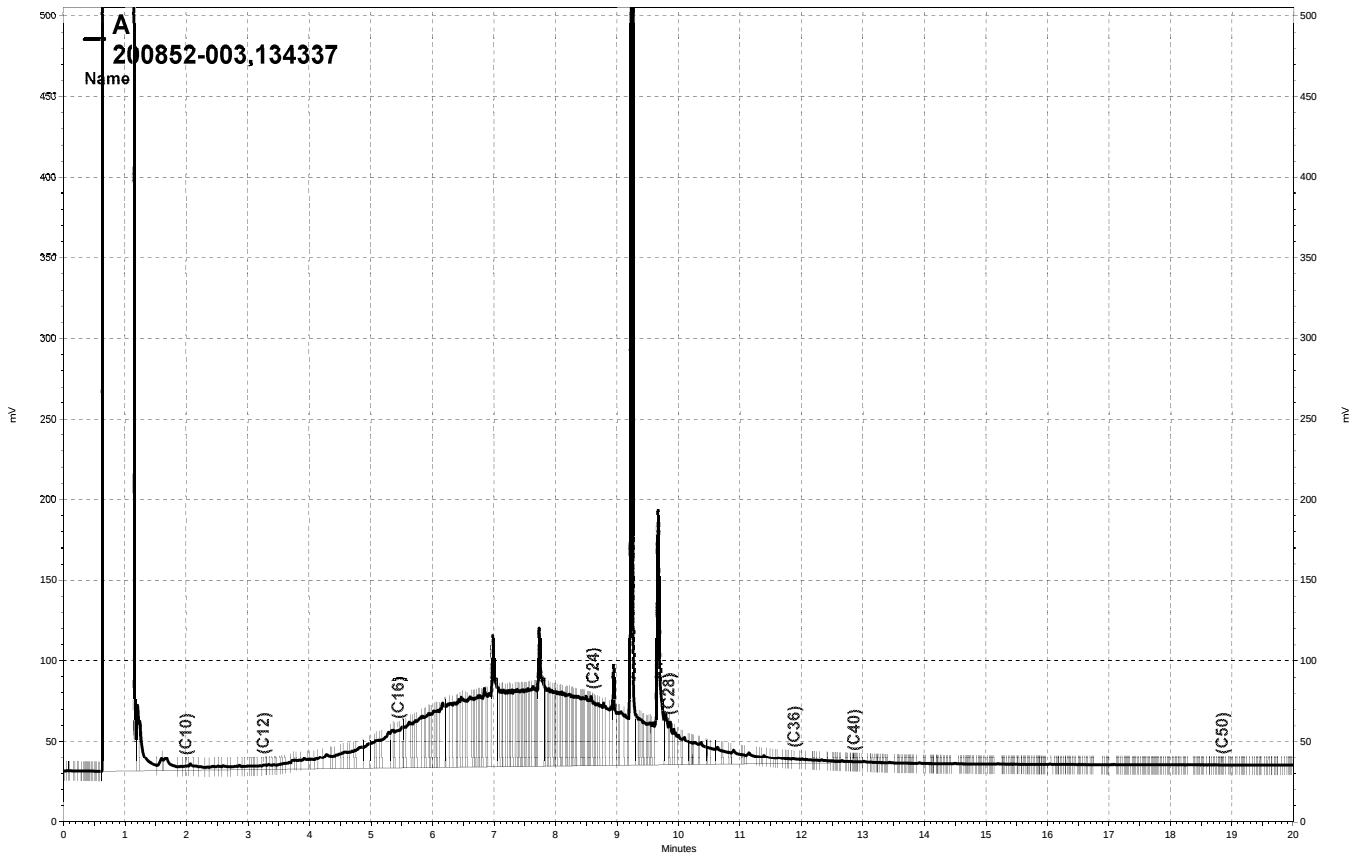
RL= Reporting Limit
RPD= Relative Percent Difference



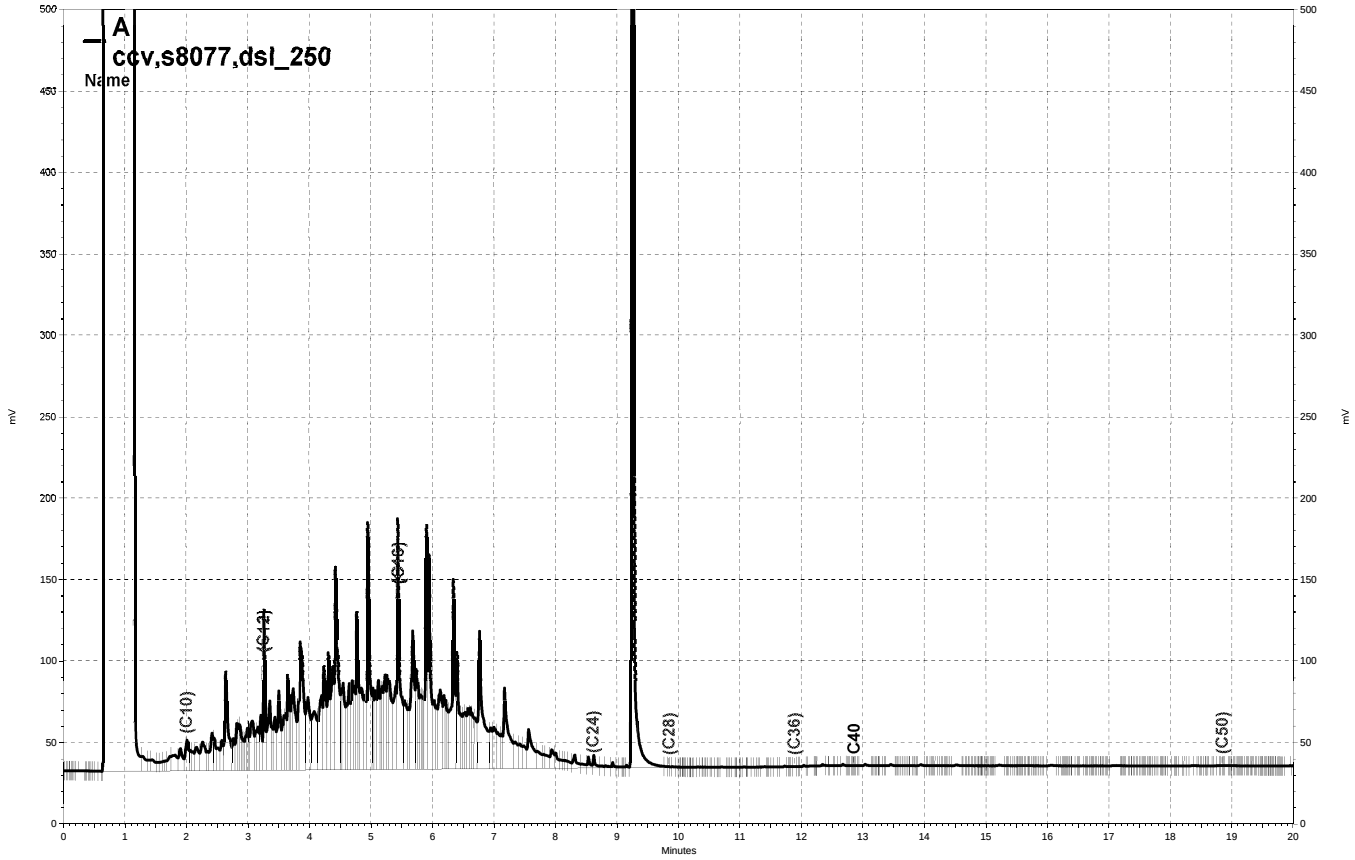
\\Lims\gdrive\ezchrom\Projects\GC14B\Data\035b016, B



\\Lims\gdrive\ezchrom\Projects\GC17A\Data\035a015, A



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\032a015, A



\\Lims\gdrive\ezchrom\Projects\GC11A\Data\032a004, A

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Field ID:	TR-1-5	Batch#:	134375
Lab ID:	200852-001	Sampled:	01/30/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Analyzed:	02/01/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	7.8	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	117	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Field ID:	TR-3-5	Batch#:	134375
Lab ID:	200852-002	Sampled:	01/30/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Analyzed:	02/01/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	115	76-138
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Field ID:	TR-4-5	Batch#:	134375
Lab ID:	200852-003	Sampled:	01/30/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Analyzed:	02/01/08
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	1.2	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	2.2	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-123
1,2-Dichloroethane-d4	116	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	134375
Units:	ug/L	Analyzed:	02/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC426462

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	148.1	118	55-158
Isopropyl Ether (DIPE)	25.00	25.82	103	63-122
Ethyl tert-Butyl Ether (ETBE)	25.00	25.67	103	62-133
Methyl tert-Amyl Ether (TAME)	25.00	26.42	106	69-137
MTBE	25.00	23.93	96	60-136
1,2-Dichloroethane	25.00	28.25	113	77-125
Benzene	25.00	26.68	107	80-120
Toluene	25.00	25.95	104	80-121
1,2-Dibromoethane	25.00	23.73	95	80-120
Ethylbenzene	25.00	27.19	109	80-124
m,p-Xylenes	50.00	52.89	106	80-128
o-Xylene	25.00	26.30	105	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-123
1,2-Dichloroethane-d4	113	76-138
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-120

Type: BSD Lab ID: QC426463

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	138.7	111	55-158	7	20
Isopropyl Ether (DIPE)	25.00	23.68	95	63-122	9	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.52	94	62-133	9	20
Methyl tert-Amyl Ether (TAME)	25.00	25.21	101	69-137	5	20
MTBE	25.00	22.96	92	60-136	4	20
1,2-Dichloroethane	25.00	26.30	105	77-125	7	20
Benzene	25.00	24.81	99	80-120	7	20
Toluene	25.00	24.14	97	80-121	7	20
1,2-Dibromoethane	25.00	22.43	90	80-120	6	20
Ethylbenzene	25.00	24.73	99	80-124	9	20
m,p-Xylenes	50.00	48.00	96	80-128	10	20
o-Xylene	25.00	23.92	96	80-123	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-123
1,2-Dichloroethane-d4	113	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC426464	Batch#:	134375
Matrix:	Water	Analyzed:	02/01/08
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	115	76-138
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	3494.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	134375
Units:	ug/L	Analyzed:	02/01/08
Diln Fac:	1.000		

Type: BS Lab ID: QC426506

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,027	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-123
1,2-Dichloroethane-d4	109	76-138
Toluene-d8	101	80-120
Bromofluorobenzene	101	80-120

Type: BSD Lab ID: QC426507

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,036	102	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-123
1,2-Dichloroethane-d4	109	76-138
Toluene-d8	101	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	3494.01	Analysis:	EPA 6010B
Analyte:	Lead	Sampled:	01/30/08
Matrix:	Water	Received:	01/30/08
Units:	ug/L	Prepared:	01/31/08
Diln Fac:	1.000	Analyzed:	01/31/08
Batch#:	134325		

Field ID	Type	Lab ID	Result	RL
TR-1-5	SAMPLE	200852-001	ND	3.0
TR-3-5	SAMPLE	200852-002	ND	3.0
TR-4-5	SAMPLE	200852-003	ND	3.0
	BLANK	QC426261	ND	3.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	200852	Location:	1600 63rd St
Client:	Treadwell & Rollo	Prep:	EPA 3010A
Project#:	3494.01	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	134325
Field ID:	ZZZZZZZZZZ	Sampled:	01/29/08
MSS Lab ID:	200850-005	Received:	01/30/08
Matrix:	Water	Prepared:	01/31/08
Units:	ug/L	Analyzed:	01/31/08
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC426262		100.0	96.48	96	80-120		
BSD	QC426263		100.0	94.88	95	80-120	2	20
MS	QC426264	<0.6892	100.0	91.64	92	77-120		
MSD	QC426265		100.0	94.63	95	77-120	3	20

RPD= Relative Percent Difference