YRC Worldwide
Enterprise Services, Inc.
10990 Roe Avenue
Overland Park, KS 66211
Phone: 913.344.3000
yrcw.com

YRC Worldwide
Enterprise Services

January 22, 2009

To Whom It May Concern:

Attached is the "Fourth Quarter 2008 Groundwater Monitoring Report" for the Roadway Express, Inc. property located at 1708 Wood Street in Oakland, CA 94607. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Roadway Express, Inc. is a subsidiary of YRC Worldwide, Inc. I am authorized by YRC Worldwide, Inc. to represent Roadway Express, Inc. regarding environmental matters.

Sincerely,

Ruben D. Byerley
Supervisor-Environmental Services

January 22, 2009

Mr. Paresh C. Khatri
Hazardous Materials Specialist
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Fourth Quarter 2008 Groundwater Monitoring Report
Roadway Express, Inc.
1708 Wood Street
Oakland, California
Fuel Leak Case No. RO0000039
Burns & McDonnell Project No. 48791

Dear Mr. Khatri,

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) has been retained by YRC North American Transportation, Inc. (YRC) to prepare a letter report summarizing the groundwater sampling activities for the third quarter of 2008 at the Roadway Express, Inc. truck terminal located at 1708 Wood Street, Oakland, California (Site). Figure 1 shows the location of the Site.

1.0 Site Description and Location

The Site is currently operating as a trucking facility, which includes a terminal, loading dock, warehouse, business office, and the perimeter is used for trailer storage (Figure 2). The Site is secured with a full perimeter fence and staffed by professional security guards.

The Site is situated between Wood Street to the west, 18th Street to the north, 17th Street to the south, and Campbell Street to the east. Across 18th Street is a community park and surrounding businesses are industrial complexes.

2.0 Regional and Site Geology

The Site is located approximately 1 mile east of the central-east portion of the San Francisco Bay, at an elevation of approximately 10 feet above mean sea level (MSL). The Site is near the current eastern extent of the San Francisco Bay, and in the recent geologic past, was part of the San Francisco Bay. The near-surface geology has largely been controlled by the changing morphology of the San Francisco Bay over geologic time. The closest surface-water bodies to the

Site are the Oakland Outer Harbor, located approximately 1 mile west of the Site and the Oakland Inner Harbor, located approximately 1.75 miles south of the Site.

The Site's lithology is characterized by: dark gray, very soft, moist clay to a depth of approximately 15 feet below ground surface (bgs); overlying approximately 10 feet of brown, soft, wet, silty sandy clay that extends from approximately 15 to 25 feet bgs; approximately 4 feet of brown, wet, silty clayey sand that extends from approximately 25 to 29 feet bgs; and a gray, very soft, wet clay of unknown thickness.

3.0 Site History and Underground Storage Tank Overview

According to an internal document review conducted by the consultant firm Marshal Miller & Associates, (*Marshall Miller & Associates 2006*) between the years 1987 to 1996, three underground storage tanks (USTs) were properly removed and two USTs were abandoned-in-place.

In March 1987, two USTs (one 10,000 gallon gasoline tank and one 2,000 gallon motor oil tank) were removed from the central-eastern area of the Site (Figure 2). During this work, two other USTs were identified at the northwest corner of the property (one 2,000 gallon waste oil tank and one 10,000 gallon tank of unknown contents). These two USTs were abandoned-in-place (filled with sand slurry and grout) by R.S. Eagan & Co. At that time, R.S. Eagan & Co. installed two monitoring wells, MW-1 and MW-2, within the footprint of the central-eastern excavation.

In April 1996, the remaining 10,000 gallon diesel UST and all associated piping was removed from the central-eastern area of the Site.

In September 2000, One Environment installed three monitoring wells (MW-3, MW-4, and MW-5) around the location of the removed USTs in the central-eastern area of the Site. Well construction details are summarized in Table 1.

In August 2008, Burns & McDonnell removed monitoring wells MW-1 and MW-2. These wells were constructed without a proper sanitary seal and posed a risk as a pathway to the subsurface for contaminants.

4.0 Groundwater Monitoring

On December 29, 2008, groundwater samples were collected from the Site's existing groundwater monitoring wells: MW-3 through MW-5 (Figure 3).

4.1 Depth to Water

Prior to collecting groundwater samples, depth-to-water (DTW) was measured from the top of casing (TOC) at each well using a clean, battery-operated, oil/water interface probe. Well gauging and groundwater elevations are summarized in Table 2. The DTW for each well was

recorded on Groundwater Sampling Forms (Appendix A). The interface probe was cleaned between each well with an Alconox water solution and rinsed with deionized water.

4.2 Depth to Water

Prior to sampling, the wells were purged with new, disposable polyethylene bailers. Groundwater parameters (temperature, pH, and specific conductance) were measured and recorded on Groundwater Sampling Forms (Appendix A). Water clarity was visually qualified and recorded. After field parameters stabilized to within +/- 10% over at least three consecutive readings while at a stabilized water elevation, groundwater samples were collected in laboratory supplied sampling bottles.

4.3 Well Sampling

Groundwater samples were uniquely labeled with the well identification, date, time of collection, type of preservative, and analyses to be performed. A duplicate sample was taken from MW-5, and submitted to the laboratory as Dup-1. Once collected, each groundwater sample was immediately placed into an insulated, ice-filled cooler. Samples were transferred under Chain-of-Custody protocol to Curtis & Tompkins Laboratories Inc., a California State Certified Laboratory.

5.0 Groundwater Monitoring Results

5.1 Groundwater Flow Direction and Gradient

On December 29, 2008, static groundwater was observed in the Site's wells, at depths ranging from 3.71 feet (MW-4) to 4.42 feet (MW-3) below the TOC, with corresponding groundwater elevations ranging from 5.69 feet (MW-3) to 5.81 feet (MW-4) above MSL. Burns & McDonnell used gauging and well casing elevation data to calculate groundwater elevations. In the area of the removed USTs, groundwater flow direction was to the west-southwest with a gradient of approximately 0.015 feet per foot (ft/ft). Groundwater elevations are summarized in Table 2 and presented on Figure 3.

5.2 Groundwater Analytical Results

Samples were analyzed for Total Petroleum Hydrocarbons (TPH) in the Diesel (TPH-d), Gasoline (TPH-g), and Motor Oil (TPH-mo) ranges using Environmental Protection Agency (EPA) Method 8015M. Silica gel cleanup, EPA Method 3630C, was used on the samples that had results for TPH-d and TPH-mo, to remove naturally occurring organic compounds and are flagged with an '*' qualifier in Table 3. Monitoring wells MW-3 and MW-4 did not have concentrations of TPH-d or TPH-mo at or above the laboratory detection limits. MW-5 had detectable concentrations of TPH-d and TPH-mo, however after silica gel cleanup, none of the TPH concentrations were at or above the detection limit.

Samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), and Methyl tert-butyl ether (MTBE) using EPA Method 8260 B. None of the samples submitted for analysis had concentrations above the method detection limits for BTEX or MTBE.

Current and historical concentrations for all Site monitoring wells are presented in Table 3, with results from this quarter's sampling presented on Figure 4. Copies of the certified analytical reports and Chain-of-Custody documentation are included as Appendix B.

6.0 Summary

Groundwater samples from the monitoring wells screened in the deep water zone did not show any petroleum impacts above laboratory detection limits.

7.0 Certification

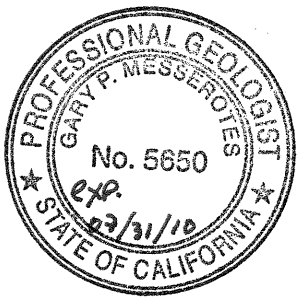
This report was prepared under the supervision of a California Professional Geologist. All statements, conclusions and recommendations are based solely upon published results from previous consultants, field observations by Burns & McDonnell and laboratory analysis performed by a California state-certified laboratory related to the work performed by Burns & McDonnell.

If you have any questions regarding this project please feel free to contact either of the undersigned at (650) 871-2926.

Sincerely,

Patrick Bratton
Project Manager

Gary P. Messerotes, P.G.
Senior Geologist



Attachments:

Figure 1 – Site Location Map
Figure 2 – Site Map
Figure 3 – Groundwater Elevations Fourth Quarter 2008 – Former USTs Area
Figure 4 – Groundwater Concentrations – Former USTs Area

Table 1: Well Construction Details
Table 2: Groundwater Elevations
Table 3: Monitoring Well Groundwater Summary

Appendix A – Field Sampling Forms
Appendix B – Certified Analytical Report

TABLES

TABLE 1

Well Construction Details
USF Roadway Express Facility
1708 Wood Street
Oakland, California

Well ID	Casing Diameter	Casing Elevation	Construction Depth	Screened Interval
	(Inches)	Feet (1)	Feet (2)	Feet (2)
MW-1	4	unknown	10	0.5-10
MW-2	4	9.89	9.5	0.5-9.5
MW-3	2	10.11	30	10-30
MW-4	2	9.52	30	10-30
MW-5	2	9.97	30	10-30

1 - Elevation in feet above mean sea level
2 - Depth in feet below ground surface

Costruction depth and screened intervals based on boring logs located in the *Additional Groundwater Investigation Report by One Environment, 2001*
Casing Elevation Resurveyed by Luk and Associates on December 20, 2007

TABLE 2

Groundwater Elevations
USF Roadway Express Facility
1708 Wood Street
Oakland, California

Well ID	Date Measured	Total Depth	Depth to Water	Groundwater Elevation
		Feet (1)	Feet (1)	Feet (2)
MW-1	*Well Abandoned August 2008*			
MW-2	17-Dec-07	9.2	1.56	8.33
	28-Mar-08	9.2	1.03	8.86
	2-Jun-08	9.2	1.44	8.45
	Well Abandoned August 2008			
MW-3	22-Mar-07	29.4	4.04	6.07
	17-Dec-07	29.4	4.40	5.71
	28-Mar-08	29.4	4.12	5.99
	2-Jun-08	29.5	4.35	5.76
	10-Sep-08	29.5	4.48	5.63
	29-Dec-08	29.5	4.42	5.69
MW-4	22-Mar-07	29.5	3.25	6.27
	17-Dec-07	29.5	3.66	5.86
	28-Mar-08	29.5	3.32	6.20
	2-Jun-08	29.5	3.56	5.96
	10-Sep-08	29.5	3.91	5.61
	29-Dec-08	29.4	3.71	5.81
MW-5	22-Mar-07	29.2	3.73	6.24
	17-Dec-07	29.2	4.11	5.86
	28-Mar-08	29.2	3.82	6.15
	2-Jun-08	29.5	4.05	5.92
	10-Sep-08	29.5	3.45	6.52
	29-Dec-08	29.5	4.19	5.78

1 - Measured depth in feet below top of casing
2 - Elevation in feet above mean sea level

TABLE 3

Monitoring Well Groundwater Summary
Total Petroleum Hydrocarbons in Groundwater
USF Roadway Express Facility
1708 Wood Street
Oakland, California

Well ID	Date Sampled	TPH-d	TPH-g	Total BTEX	MTBE	Total Oil & Grease	TPH-mo
Analytical Reporting Units		µg/L	µg/L	µg/L	µg/L	mg/L	µg/L
MW-1	24-Jul-97	1,200	<50	---	---	1.4	---
	Well Abandoned August 2008						
MW-2	24-Jul-97	940	<50	---	---	6.2	---
	17-Dec-07	140	---	<2.0	---	<5.0	---
	28-Mar-08	180* Y	<50	<2.5	<0.5	---	<300*
	3-Jun-08	150*	<50	<2.5	<2.0	---	<300*
	Well Abandoned August 2008						
MW-3	6-Sep-00	65.9	ND	---	---	ND	---
	22-Mar-07	<50	<50	---	<0.5	<4.75	---
	17-Dec-07	<50	---	<2.0	---	<5.0	---
	28-Mar-08	<50	<50	<2.5	<0.5	---	<300
	3-Jun-08	<50	<50	<2.5	<2.0	---	<300
	10-Sep-08	<50	<50	<2.5	<2.0	---	<300
	29-Dec-08	<50	<50	<2.5	<2.0	---	<300
dup-1	29-Dec-08	<50	<50	<2.5	<2.0	---	<300
MW-4	6-Sep-00	65.7	ND	---	---	ND	---
	22-Mar-07	<50	<50	---	<0.5	<4.75	---
	17-Dec-07	<50	---	<2.0	---	<5.0	---
	28-Mar-08	<50	<50	<2.5	<0.5	---	<300
	2-Jun-08	<50	<50	<2.5	<2.0	---	<300
	10-Sep-08	<50	<50	<2.5	<2.0	---	<300
	29-Dec-08	<50	<50	<2.5	<2.0	---	<300
MW-5	6-Sep-00	78.7	ND	---	---	ND	---
	22-Mar-07	500 HY	<50	---	<0.5	<4.85	---
	17-Dec-07	<50	---	<2.0	---	<5.0	---
	28-Mar-08	<50*	<50	<2.5	<0.5	---	<300
	2-Jun-08	<50*	<50	<2.5	<2.0	---	<300*
	10-Sep-08	<50*	<50	<2.5	<2.0	---	<300*
dup-1	10-Sep-08	<50*	<50	<2.5	<2.0	---	<300*
	29-Dec-08	<50*	<50	<2.5	<2.0	---	<300*

Notes:

ND = Sample not detected above detection limit; unable to find detection limit in prior sampling reports

< ## = Sample not detected above detection limit of ##

--- = Not sampled/analyzed for this constituent

* = Silica Gel Cleanup (EPA 3630) run to remove natually occuring organic compounds

Y = Sample exhibits chromatographic pattern which does not resemble standard

FIGURES

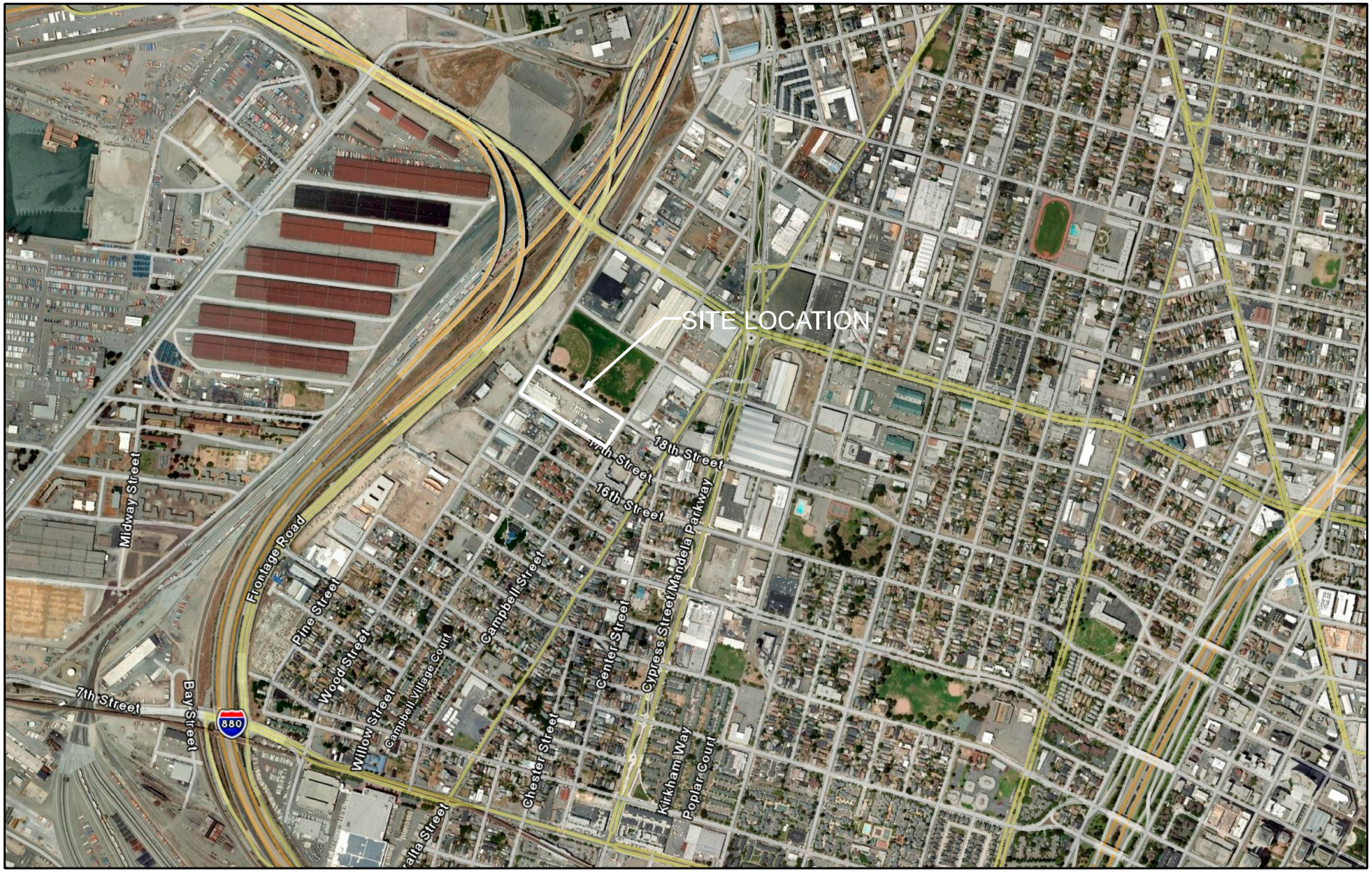
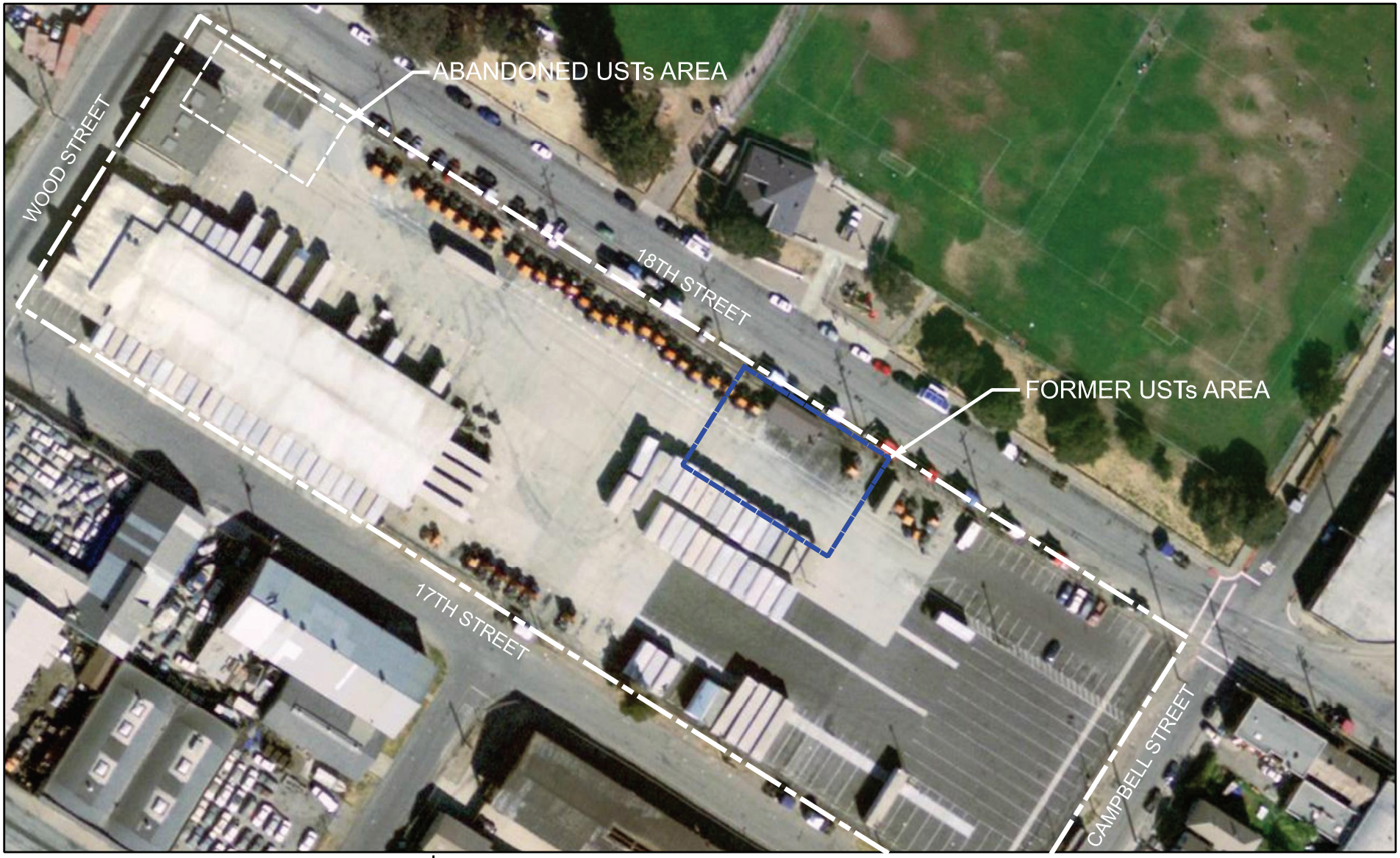


Figure 1

SITE LOCATION MAP
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

K:\YRC ENTERPRISE SERVICES INC\YRCW OAKLAND, CA\USTN\SITE\YRC OAKLAND FIG 1.DGN 12-04-2007 16:40 F_BITTNE



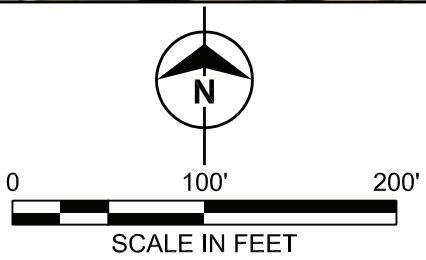


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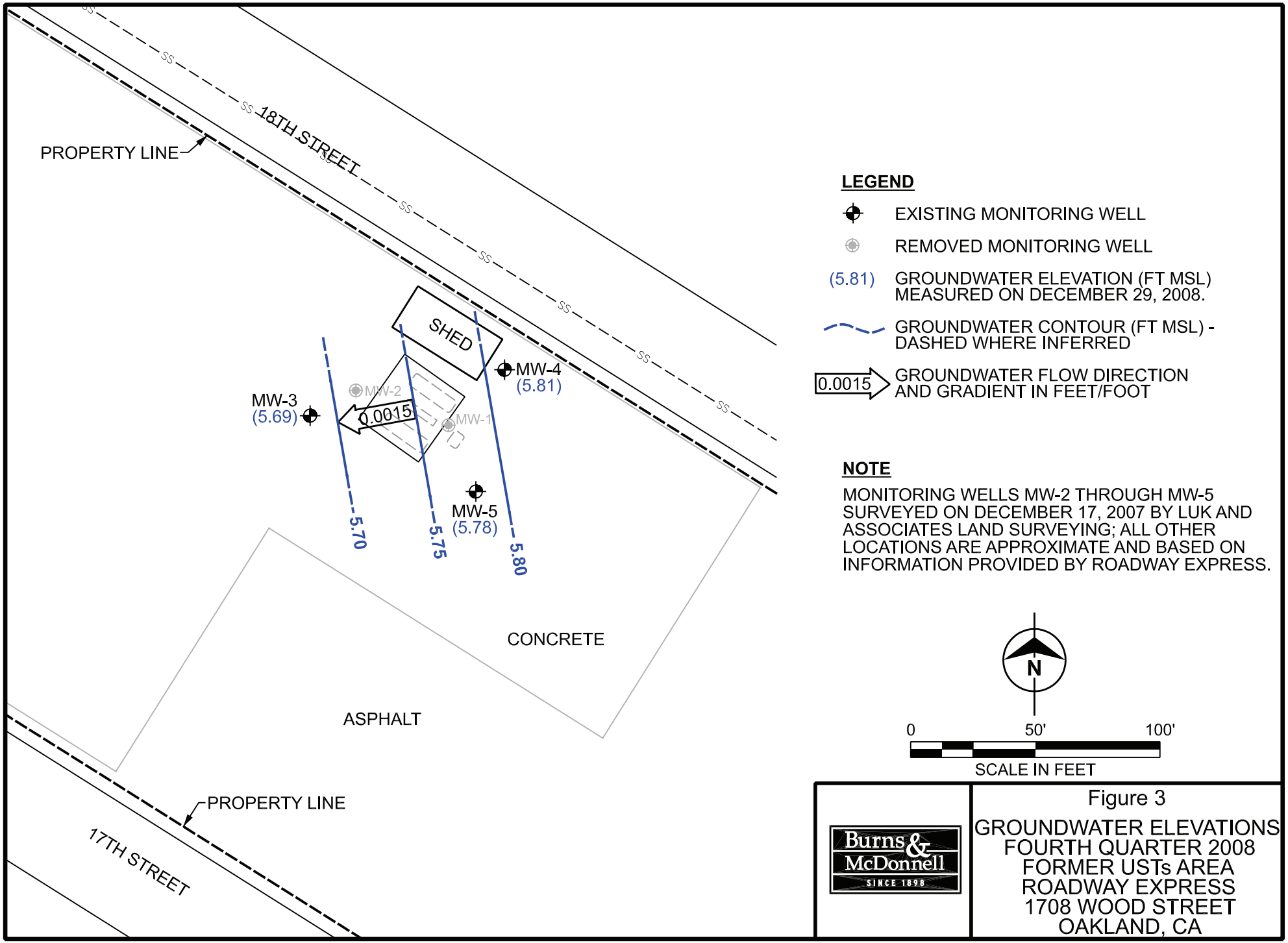
Figure 2

SITE MAP
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA



LEGEND

- EXISTING MONITORING WELL
- REMOVED MONITORING WELL
- (5.81) GROUNDWATER ELEVATION (FT MSL) MEASURED ON DECEMBER 29, 2008.
- GROUNDWATER CONTOUR (FT MSL) - DASHED WHERE INFERRED
- 0.0015 GROUNDWATER FLOW DIRECTION AND GRADIENT IN FEET/FOOT

NOTE

MONITORING WELLS MW-2 THROUGH MW-5 SURVEYED ON DECEMBER 17, 2007 BY LUK AND ASSOCIATES LAND SURVEYING; ALL OTHER LOCATIONS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY ROADWAY EXPRESS.

N

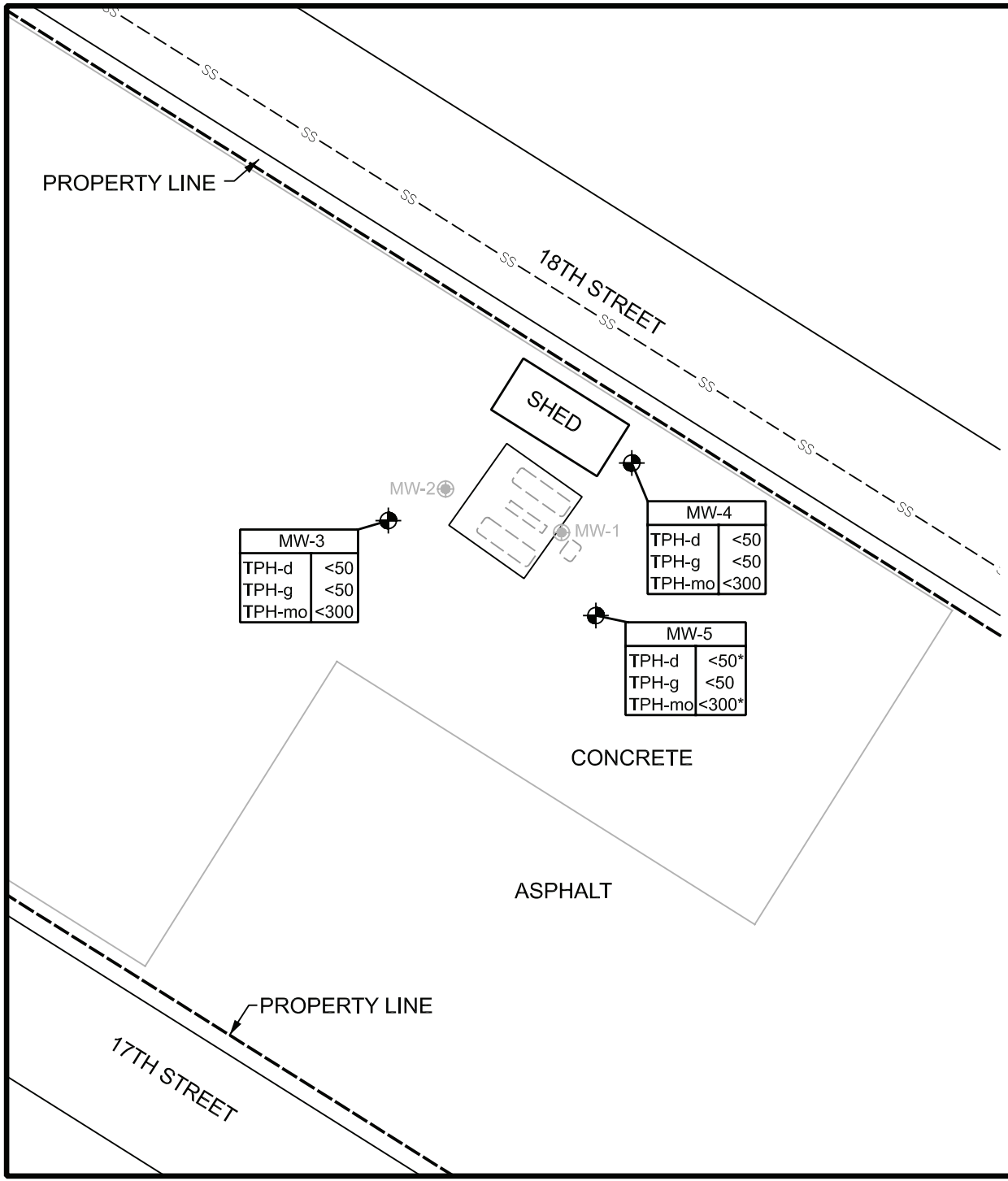
0 50' 100'

SCALE IN FEET

Figure 3

GROUNDWATER ELEVATIONS
FOURTH QUARTER 2008
FORMER USTs AREA
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

K:\YRC ENTERPRISE SERVICES INC\YRCW OAKLAND, CA\USTN\SITE\YRC-OAK 2008-12-29 GW.DGN 10-14-2008 14:42 F_BITTNER



LEGEND

⊕	EXISTING MONITORING WELL
◈	REMOVED MONITORING WELL
TPH-d	CONCENTRATION OF TPH AS DIESEL
TPH-g	CONCENTRATION OF TPH AS GASOLINE
TPH-mo	CONCENTRATION OF TPH AS MOTOR OIL
*	CONCENTRATION AFTER SILICA GEL CLEANUP

NOTES

1. MONITORING WELLS MW-2 THROUGH MW-5 SURVEYED ON DECEMBER 17, 2007 BY LUK AND ASSOCIATES LAND SURVEYING; ALL OTHER LOCATIONS ARE APPROXIMATE AND BASED ON INFORMATION PROVIDED BY ROADWAY EXPRESS.
2. TPH = TOTAL PETROLEUM HYDROCARBONS
3. ALL CONCENTRATIONS ARE IN MICROGRAMS PER LITER (µg/l)
4. SAMPLES COLLECTED ON DECEMBER 29, 2008.

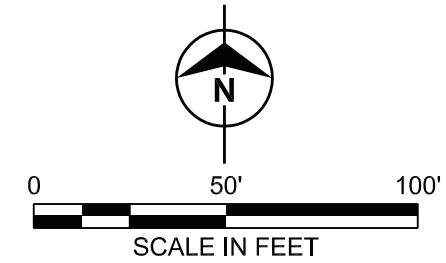


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Figure 4

GROUNDWATER CONCENTRATIONS FORMER USTs AREA ROADWAY EXPRESS 1708 WOOD STREET OAKLAND, CA

APPENDIX A

FIELD SAMPLING FORMS

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GROUNDWATER SAMPLING FORM

Site Name: YRC-OAKLAND
Project Number: 48791
Recorded By: PB

Well Number: MW-3 & Dup-1
Well Type: (Monitor) Extraction Other:
Date: 12-29-08 Sample Time: 1450

Purge Method

Bailer-Type: 2 inch
Pumping Method: ~~
Other-Type:

Purge Volume

Casing Diameter (D in inches): 2
Total Depth of Casing (TD in feet BTOC): 29.5
Water Level Depth (WL in feet BTOC): 4.42

Purge Volume Calculation:

(29.5) - (4.42) x (2)² x 3 x 0.0408 = 12.3
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons):

Start Time: 1420 Stop Time: 1500

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1426	Init	18.91	7.29	6938	Clear
1432	4.1	19.76	7.19	7003	Clear
1439	8.2	19.87	7.29	6900	Clear
1445	12.3	19.82	7.21	6910	Slightly Cloudy

Notes:
Temperature is measured in degrees Celsius
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (mS/cm)

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-3	MW-3	2	—	TPHd, mo
	MW-3	4	HCl	BTEX, MTBE
	Dup-1	2	—	TPHd, mo
	Dup-1	4	HCl	BTEX, MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

Site Name: VRC-OAKLAND
Well Number: MW-4
Project Number: 48791
Well Type: (Monitor) Extraction Other:
Recorded By: PB
Date: 12-29-08 Sample Time: 1410

Purge Method
Bailer-Type: 2-inch
Pumping Method: /
Other-Type:

Purge Volume
Casing Diameter (D in inches): 2
Total Depth of Casing (TD in feet BTOC): 29.4
Water Level Depth (WL in feet BTOC): 3.71

Purge Volume Calculation:

(29.4) - (3.71) x (2)^2 x 3 x 0.0408 = 12.6
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons):

Start Time: 1335 Stop Time: 1415

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1340	Init	18.67	7.70	5587	Clear
1347	4.2	19.73	7.44	5567	Clear
1358	8.4	19.82	7.56	5400	Slightly Cloudy
1405	12.6	19.72	7.62	5280	Slightly Cloudy

Notes:
Temperature is measured in degrees Celsius
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (mS/cm)

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-4	MW-4	2	/	TPH-g, mo
	MW-4	4	HCl	BTEX, MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

Site Name: YRC-OAKLAND
Project Number: 48791
Recorded By: PB

Well Number: MW-5
Well Type: (Monitor) Extraction Other:
Date: 12-29-08 Sample Time: 1315

Purge Method

Bailer-Type: 2 inch
Pumping Method:
Other-Type:

Purge Volume

Casing Diameter (D in inches): 2
Total Depth of Casing (TD in feet BTOC): 29.5
Water Level Depth (WL in feet BTOC): 4.19

Purge Volume Calculation:

(29.5) - (4.19) X (2)² X 3 X 0.0408 = 12.4
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons): 12.5

Start Time: 1245 Stop Time: 1320

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1250	Init	19.41	7.41	6695	Mostly Clear, Slightly Yellow
1256	4.1	20.73	7.54	8031	Mostly Clear, Slightly Yellow
1304	8.2	20.68	7.37	7263	Same as above
1310	12.4	20.72	7.48	7121	Same as above

Notes:
Temperature is measured in degrees Celsius
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (mS/cm)

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-5	MW-5	2	—	TPHd, mo
	MW-5	4	HCl	BTEX, MTBE

APPENDIX B

CERTIFIED ANALYTICAL REPORT
BURNS & MCDONNELL QA/QC REPORT

Date: January 26, 2009

To: Patrick Bratton

From: Michelle Beckman

Re: QA/QC Review of Analytical Data
Yellow Freight – Oakland December 2008 Groundwater Samples
Project Number (48791 – Yellow Freight - Oakland)

Groundwater samples were collected on December 29, 2008. Samples were analyzed for one or more of the following parameters:

Analysis	Method
Groundwater Samples – Curtis & Tompkins, Ltd. of Berkeley, California	
Total Petroleum Hydrocarbons (TPH)	
Gasoline C7-C12	SW-846 Methods 5030B / 8015B
Diesel C10-C24	SW-846 Methods 3520C / 8015B
Diesel C10-C24 (Silica Gel Cleanup [SGCU])	SW-846 Methods 3520C / 3630C / 8015B
Motor Oil C24-C36	SW-846 Methods 3520C / 8015B
Motor Oil C24-C36 (SGCU)	SW-846 Methods 3520C / 3630C / 8015B
Volatile Organic Compounds (VOCs)	
Methyl-tert-butyl ether (MTBE)	SW-846 Methods 5030B / 8260B
Benzene, Toluene, Ethylbenzene, and Xylene (BTEX)	

The following data set was reviewed in support of this investigation:

Lab	Data Set	Date Collected	Matrix
Curtis & Tompkins	208934	12/29/2008	Groundwater

The quality assurance/quality control (QA/QC) results for the analyses were evaluated for achievement of any method-specific QA/QC criteria. Data qualifiers, when appropriate, were assigned according to the guidelines presented in *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (NFGO), 1999. No data required qualification as a result of the data review. The QA/QC review results are discussed in the following paragraphs.

1. Chain-of-Custody – No problems were noted with the chain-of-custody (COC) forms.

2. Requested Analyses Completed – All samples were analyzed as requested on the COCs.

3. Holding Times – All samples were extracted and/or analyzed within the method holding times.

4. Sample Preservation – Sample Dup-1 (Lab ID 208934-004) had a pH greater than 2, but was analyzed within the 7-day recommended holding time for unpreserved samples. Therefore, no data were qualified. No other problems were noted with sample preservation.

5. Laboratory Method Blanks – Method blanks were reviewed to determine the potential for sample cross contamination due to handling within the laboratory. No detections of target compounds were noted in the method blanks.

6. Trip Blanks – No trip blanks were submitted for analysis.

7. Surrogates – Surrogates are added for organic analyses. Surrogates are compounds not normally found in the environment that are added (spiked) into samples and analyzed for percent recovery (REC). Maximum and minimum limits on the REC are set by the laboratory for the method used.

   All surrogate RECs were within control limits.

8. Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) – The LCS contains a matrix similar to that of the sample that has been spiked with known concentrations of target analytes. The LCS is prepared and analyzed by the same method as the samples. As a measure of analytical accuracy, the results of the LCS are compared against the known analyte concentrations in the spike to determine REC. The purpose of the LCS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. The LCSD is a duplicate preparation and analysis of the LCS. Results of the LCS and LCSD are compared to each other to determine analytical precision using the relative percent difference (RPD). Note: these QC samples were also called Blind Spike (BS)/Blind Spike Duplicate (BSD) samples for some analyses.

   All LCS/LCSD and/or BS/BSD results were within QC limits.

9. Matrix Spike and Matrix Spike Duplicate (MS/MSD) – MS and MSDs are typically run for organic analyses performed using a soil or water matrix. A sample is split into three portions (original, MS, and MSD), and a known amount of a target analyte is added (spiked) to two portions (MS and MSD) of the sample. The results are compared against the unspiked portion of the sample for REC of the spike. Additionally, the results are compared against each other using a relative percent difference (RPD) to determine reproducibility.

   - Project-specific MS/MSD results were not provided any of the analyses. Analytical accuracy and precision for these analyses were assessed based on the associated surrogate, LCS/LCSD, and/or BS/BSD results. All results were within control limits and no qualifiers were added based on this omission.

10. Field Duplicate Results – Table 1 provides a summary of the field duplicate results. The following field duplicate sample was collected:

    - MW-3 and Dup-1: All analytes were adequately replicated.

11. Detection and Quantitation Limits – No dilutions were required to account for matrix interference and/or high concentrations of target analytes.

12. Other – In addition to data qualifiers assigned during the QA/QC data review, the laboratory assigned the following laboratory qualifiers:

    - Diesel, C10-C24
      – A "Y" flag was assigned to Sample MW-5 to indicate that the samples exhibited a chromatographic pattern that does not resemble the standard.

13. Conclusion – No data were qualified as a result of the QA/QC review. All data are usable in reporting the results of this investigation.

    Attachments
    Table 1 – Field Duplicate Results – MW-3 and Dup-1

Table 1
Field Duplicate Results - MW-3 and Dup-1
Yellow Freight - Oakland

	Sample Name	MW-3		Dup-1		
	Date Sampled	12/29/2008		12/29/2008		Meets Criteria?
	Laboratory Number	208934-001		208934-001		(Yes/No)
Parameter	**Units**					
Volatile Organic Compounds						
All VOCs	µg/L	Not Detected		Not Detected		Yes
Total Petroleum Hydrocarbons						
Gasoline C7-C12	µg/L	50	U	50	U	Yes
Diesel C10-C24	µg/L	50	U	50	U	Yes
Motor Oil C24-C36	µg/L	300	U	300	U	Yes

µg/L = micrograms per liter

U = Not Detected. Value reported is the detection limit.


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 208934
ANALYTICAL REPORT

Burns & McDonnell	Project : 48791
393 East Grand Avenue	Location : YRC-Oakland
South San Francisco, CA 94080	Level : II

Sample ID	Lab ID
MW-3	208934-001
MW-4	208934-002
MW-5	208934-003
DUP-1	208934-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____ Date: 01/12/2009
Project Manager

Signature: _____ Date: 01/12/2009
Senior Program Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**208934**
Client:	**Burns & McDonnell**
Project:	**48791**
Location:	**YRC-Oakland**
Request Date:	**12/29/08**
Samples Received:	**12/29/08**

This data package contains sample and QC results for four water samples, requested for the above referenced project on 12/29/08. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
DUP-1 (lab # 208934-004) had pH greater than 2. This sample was analyzed within the seven day holding time for unpreserved samples. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
No analytical problems were encountered.

Burns & McDonnell SINCE 1898

208934

Request for Chemical Analysis and Chain of Custody Record

Burns & McDonnell Engineering
393 E. Grand Avenue, Suite J
So. San Francisco, CA 94080
Phone: (650) 871-2926 Fax: (650) 871-2653

Attention:

Laboratory: Curtis & Tompkins
Address: 2323 5th Street
City/State/Zip: Berkeley, CA
Telephone: (510) 486-0900

Document Control No.: 122908
Lab. Reference No. or Episode No.:

Project Number: 48791

Client Name: YRC - OAKLAND

Sample Number			Sample Event		Sample Depth (in feet)		Sample Collected		Sample Type: Matrix			Number of Containers	Analysis: TPHg (8015M)*	Analysis: TPHd,mo (8015M)*	Analysis: BTEX, MTBE (8021+)				Remarks
Group or SMWU Name	Sample Point	Sample Designator	Round	Year	From	To	Date	Time	Liquid	Solid	Gas								
1	MW-3		4th	2008			12-29	1450	X			6	X	X	X				* If detected
2	MW-4		4th	2008			12-29	1410	X			6	X	X	X				re-run after
3	MW-5		4th	2008			12-29	1315	X			6	X	X	X				Silica Gel Cleanup.
4	Dup-1		4th	2008			12-29	—	X			6	X	X	X				
																			+ Confirm MTBE
																			detections with
																			8260B
																			Standard TAT

Sampler (signature):

Sampler (signature):

Special Instructions:

Relinquished By (signature):	Date/Time	Received By (signature):	Date/Time
1.	1544 12-29-08		12/29/08 15:44
Relinquished By (signature):	Date/Time	Received By (signature):	Date/Time
2.			

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

on ice, intact

051804 Form WCD-KC1-SDO-C&T

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 208934 Date Received 12/29/08 Number of coolers 1
Client BURNS & McDonnell Project YRC - Oakland

Date Opened 12/29/08 By (print) PHUONG (sign) P. Le
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES (NO)
   Shipping info _____

2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☑ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) _____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☑ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None Temp(°C) _____

☑ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
11. Are sample labels present, in good condition and complete? _____ (YES) NO
12. Do the sample labels agree with custody papers? _____ (YES) NO
13. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
14. Are the samples appropriately preserved? _____ (YES) NO N/A
15. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A
16. Was the client contacted concerning this sample delivery? _____ YES NO
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Sampled:	12/29/08
Units:	ug/L	Received:	12/29/08
Diln Fac:	1.000	Analyzed:	01/02/09
Batch#:	146597		

Field ID: MW-3 Lab ID: 208934-001
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	61-149	EPA 8015B
Bromofluorobenzene (FID)	105	65-146	EPA 8015B
Trifluorotoluene (PID)	103	52-143	EPA 8021B
Bromofluorobenzene (PID)	102	56-141	EPA 8021B

Field ID: MW-4 Lab ID: 208934-002
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	61-149	EPA 8015B
Bromofluorobenzene (FID)	104	65-146	EPA 8015B
Trifluorotoluene (PID)	101	52-143	EPA 8021B
Bromofluorobenzene (PID)	102	56-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Sampled:	12/29/08
Units:	ug/L	Received:	12/29/08
Diln Fac:	1.000	Analyzed:	01/02/09
Batch#:	146597		

Field ID: MW-5 Lab ID: 208934-003
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	101	61-149	EPA 8015B
Bromofluorobenzene (FID)	110	65-146	EPA 8015B
Trifluorotoluene (PID)	98	52-143	EPA 8021B
Bromofluorobenzene (PID)	101	56-141	EPA 8021B

Field ID: DUP-1 Lab ID: 208934-004
Type: SAMPLE

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	61-149	EPA 8015B
Bromofluorobenzene (FID)	104	65-146	EPA 8015B
Trifluorotoluene (PID)	99	52-143	EPA 8021B
Bromofluorobenzene (PID)	99	56-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Sampled:	12/29/08
Units:	ug/L	Received:	12/29/08
Diln Fac:	1.000	Analyzed:	01/02/09
Batch#:	146597		

Type: BLANK Lab ID: QC477906

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
m,p-Xylenes	ND	0.50	EPA 8021B
o-Xylene	ND	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	61-149	EPA 8015B
Bromofluorobenzene (FID)	95	65-146	EPA 8015B
Trifluorotoluene (PID)	93	52-143	EPA 8021B
Bromofluorobenzene (PID)	89	56-141	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC477907	Batch#:	146597
Matrix:	Water	Analyzed:	01/02/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	940.8	94	78-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	61-149
Bromofluorobenzene (FID)	99	65-146

Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC477908	Batch#:	146597
Matrix:	Water	Analyzed:	01/02/09
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.06	101	61-143
Benzene	10.00	9.690	97	80-120
Toluene	10.00	10.49	105	77-120
Ethylbenzene	10.00	11.23	112	79-123
m,p-Xylenes	10.00	10.96	110	78-123
o-Xylene	10.00	10.58	106	78-122

Surrogate	%REC	Limits
Trifluorotoluene (PID)	98	52-143
Bromofluorobenzene (PID)	96	56-141

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	146597
MSS Lab ID:	208897-002	Sampled:	12/22/08
Matrix:	Water	Received:	12/23/08
Units:	ug/L	Analyzed:	01/03/09
Diln Fac:	1.000		

Type: MS Lab ID: QC477909

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.96	2,000	1,733	86	65-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	127	61-149
Bromofluorobenzene (FID)	107	65-146

Type: MSD Lab ID: QC477910

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,737	86	65-120	0	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	123	61-149
Bromofluorobenzene (FID)	103	65-146

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/29/08
Units:	ug/L	Received:	12/29/08
Diln Fac:	1.000	Prepared:	01/02/09
Batch#:	146621		

Field ID: MW-3 Lab ID: 208934-001
Type: SAMPLE Analyzed: 01/05/09

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	117	63-124

Field ID: MW-4 Lab ID: 208934-002
Type: SAMPLE Analyzed: 01/04/09

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	98	63-124

Field ID: MW-5 Lab ID: 208934-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL	Analyzed
Diesel C10-C24	380 Y	50	01/04/09
Diesel C10-C24 (SGCU)	ND	50	01/05/09
Motor Oil C24-C36	380	300	01/04/09
Motor Oil C24-C36 (SGCU)	ND	300	01/05/09

Surrogate	%REC	Limits	Analyzed
o-Terphenyl	106	63-124	01/04/09
o-Terphenyl (SGCU)	122	63-124	01/05/09

Field ID: DUP-1 Lab ID: 208934-004
Type: SAMPLE Analyzed: 01/04/09

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	103	63-124

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

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/29/08
Units:	ug/L	Received:	12/29/08
Diln Fac:	1.000	Prepared:	01/02/09
Batch#:	146621		

Type:	BLANK	Analyzed:	01/04/09
Lab ID:	QC478009	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50
Diesel C10-C24 (SGCU)	ND	50
Motor Oil C24-C36	ND	300
Motor Oil C24-C36 (SGCU)	ND	300

Surrogate	%REC	Limits
o-Terphenyl	102	63-124
o-Terphenyl (SGCU)	91	63-124

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

Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	208934	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	146621
Units:	ug/L	Prepared:	01/02/09
Diln Fac:	1.000	Analyzed:	01/04/09

Type: BS Cleanup Method: EPA 3630C
Lab ID: QC478010

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24 (SGCU)	2,500	2,013	81	52-120

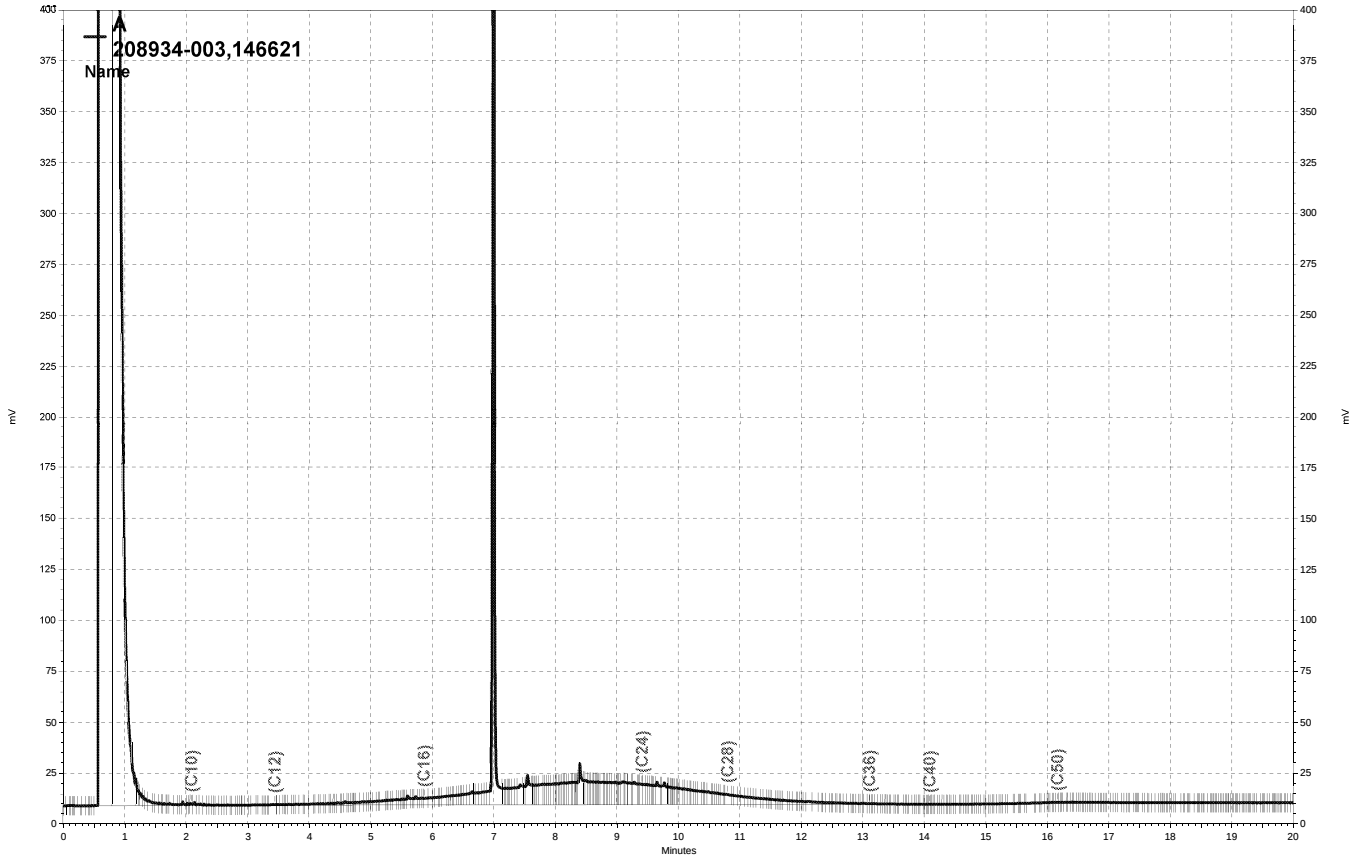
Surrogate	%REC	Limits
o-Terphenyl (SGCU)	83	63-124

Type: BSD Cleanup Method: EPA 3630C
Lab ID: QC478011

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24 (SGCU)	2,500	2,283	91	52-120	13	30

Surrogate	%REC	Limits
o-Terphenyl (SGCU)	95	63-124

RPD= Relative Percent Difference
SGCU= Silica gel cleanup



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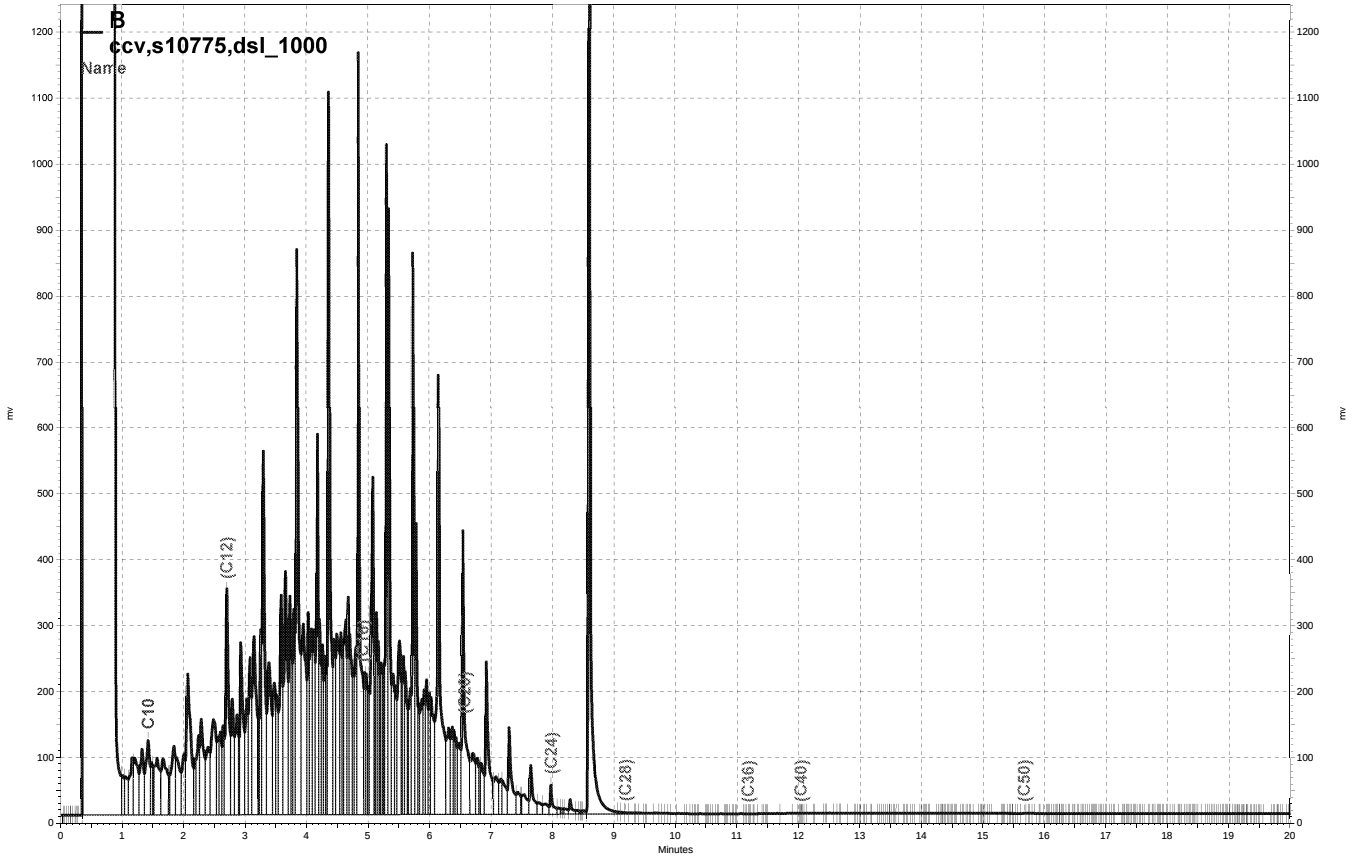

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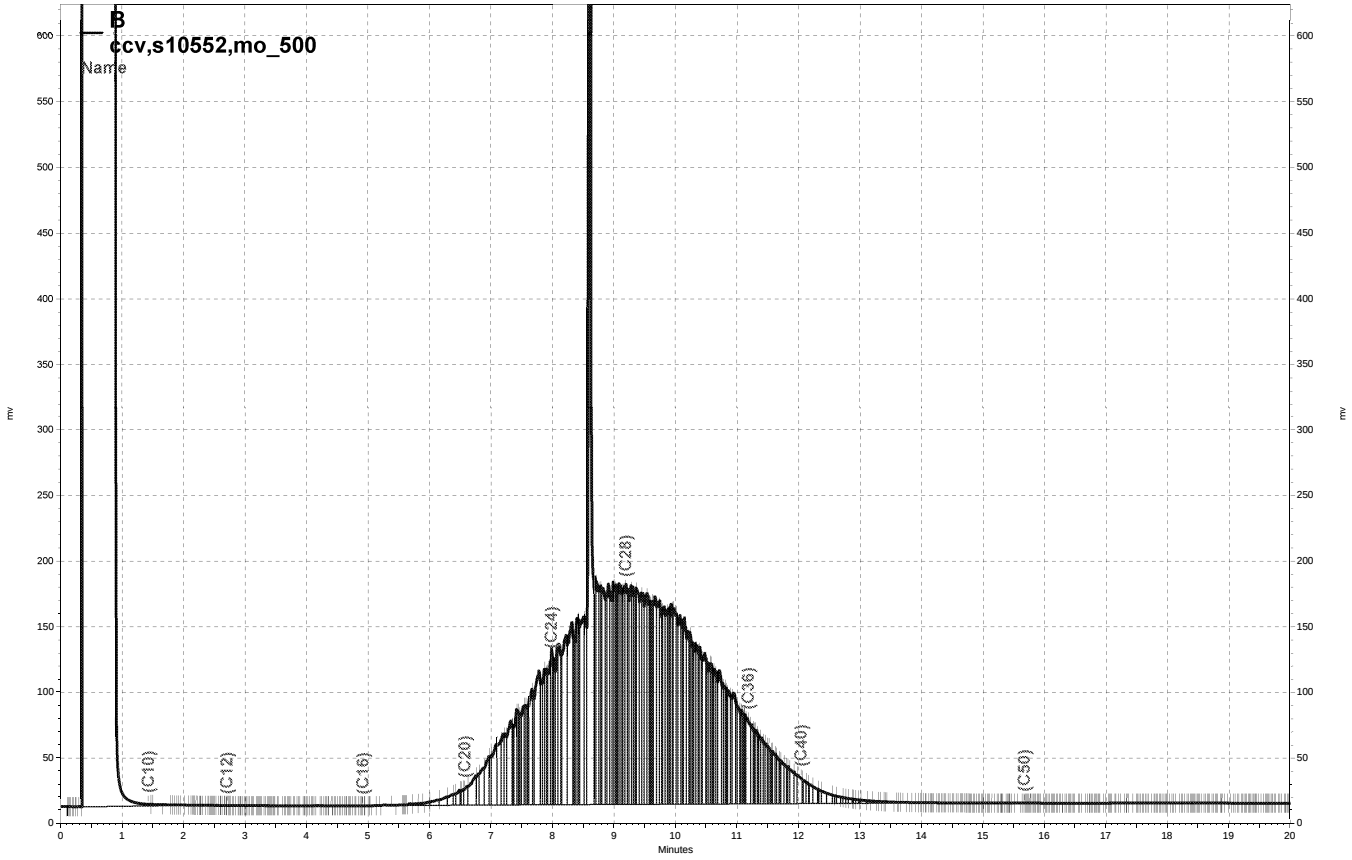

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