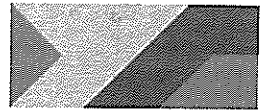


**RECEIVED**

3:03 pm, Jul 24, 2008

Alameda County  
Environmental Health

YRC Worldwide Inc.  
10990 Roe Avenue  
Overland Park, KS 66211-1213  
Phone 913 696 6100  
yrcw.com



July 21, 2008

To Whom It May Concern:

Attached is the "Second Quarter 2008 Groundwater Monitoring Report" for the Roadway Express, Inc. property located at 1708 Wood Street in Oakland, CA 94607, Fuel Leak Case No. RO 0000039. I declare, under penalty of perjury, 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., and as Supervisor of Environmental Services at YRC North American Transportation I have been charged by YRC Worldwide, Inc. to represent Roadway Express, Inc. regarding environmental matters.

Sincerely,

Ruben D. Byerley  
Supervisor – Environmental Services

July 22, 2008

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

Subject: Second 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 second quarter of 2008 at the Roadway Express, Inc. truck terminal located at 1708 Wood Street, Oakland, CA (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). The 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. During this tank removal, monitoring well MW-1, located within the excavation footprint, was removed.

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.

### **4.0 Groundwater Monitoring**

On June 2 and June 3, 2008, groundwater samples were collected from the Site's existing groundwater monitoring wells: MW-2 through MW-5 (Figure 3). Samples were collected from MW-4 and MW-5 on June 2 and from MW-2 and MW-3 on June 3, 2008.

#### **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-2, 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 June 2, 2008, static groundwater was observed in the Site's wells, at depths ranging from 3.56 feet (MW-4) to 4.35 feet (MW-3) below the top of casing (TOC), with corresponding groundwater elevations ranging from 5.76 feet (MW-3) to 5.96 feet (MW-4) above MSL. MW-2 is only screened down to 9 feet bgs and likely only encounters a perched water zone. Therefore the depth to water (1.44 ft below TOC) and corresponding groundwater elevation (8.45 feet MSL) of MW-2 were not used in the groundwater contouring or gradient calculations. Burns & McDonnell used gauging and well casing elevation data to calculate groundwater elevation. In the area of the removed USTs, groundwater flow direction was to the west-southwest with a gradient of approximately 0.0024 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 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 a '\*' qualifier. Monitoring wells MW-2 and MW-5 had detectable concentrations of TPH-d and TPH-mo, however after silica gel cleanup, only monitoring well MW-2 had any TPH concentrations above the detection limit, at 150 micrograms per liter ( $\mu\text{g/L}$ ) for TPH-d.

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 and on Figure 4. Copies of the certified analytical reports and Chain-of-Custody documentation are included as Appendix B.

## 6.0 Summary

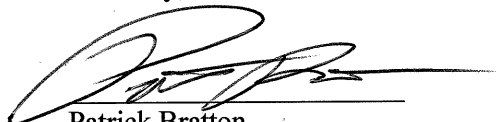
Groundwater samples from the monitoring wells only showed petroleum impacts in well MW-2, which is screened in a probable perched water zone. The remainder of the monitoring wells, MW-3, MW-4, and MW-5, did not contain any detectable petroleum hydrocarbon constituents at or above detection limits.

## 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 Second 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-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-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
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
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
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

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	---
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*
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
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
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*

**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 naturally occurring organic compounds

Y = Sample exhibits chromatographic pattern which does not resemble standard

## **FIGURES**

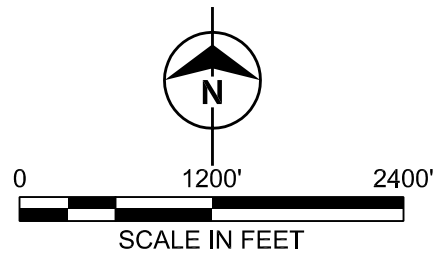
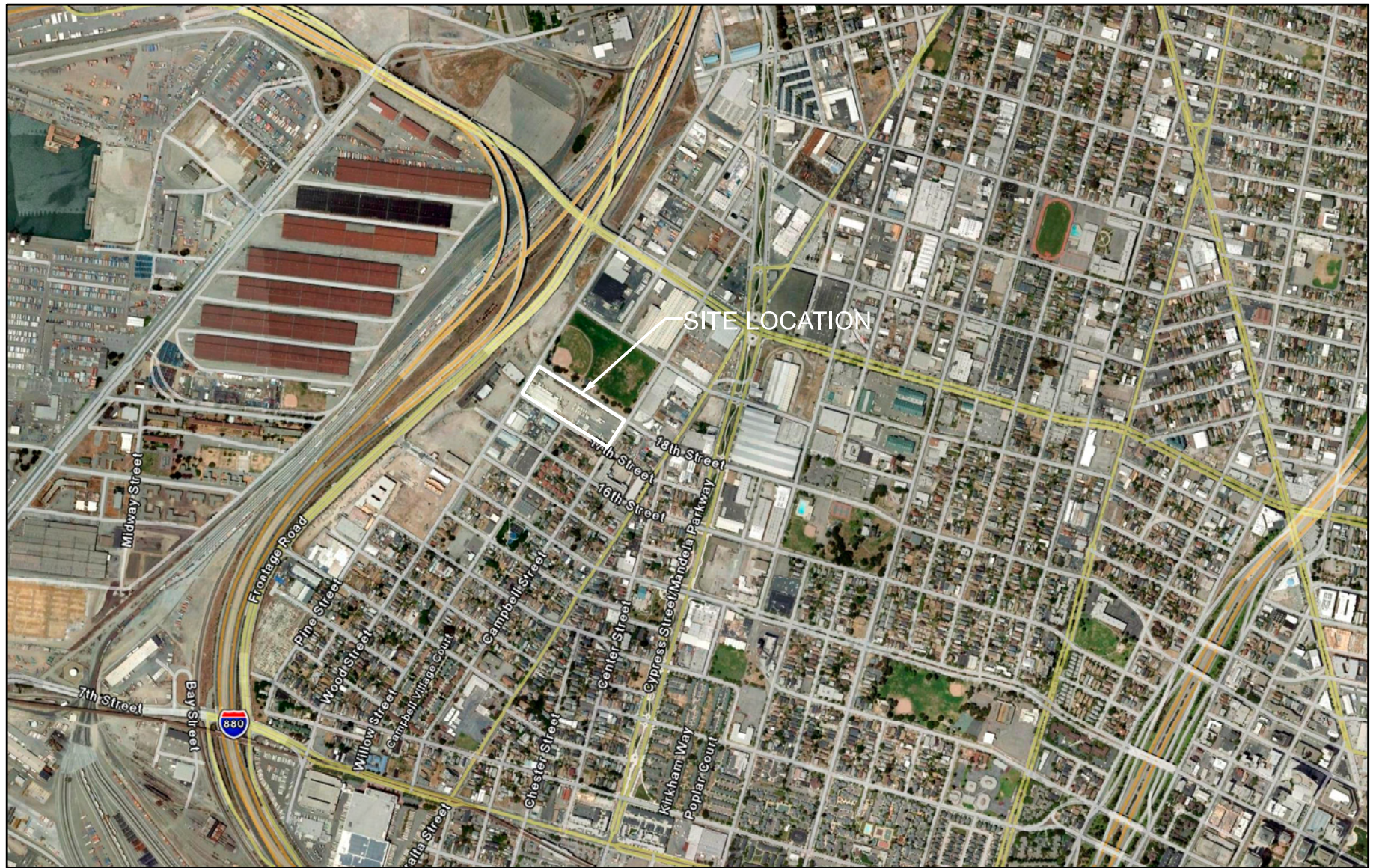


Figure 1  
SITE LOCATION MAP  
ROADWAY EXPRESS  
1708 WOOD STREET  
OAKLAND, CA

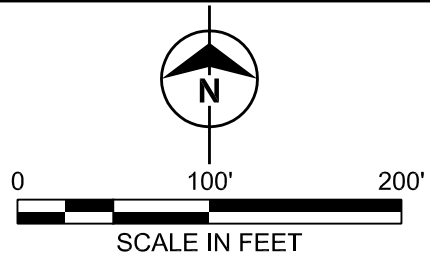
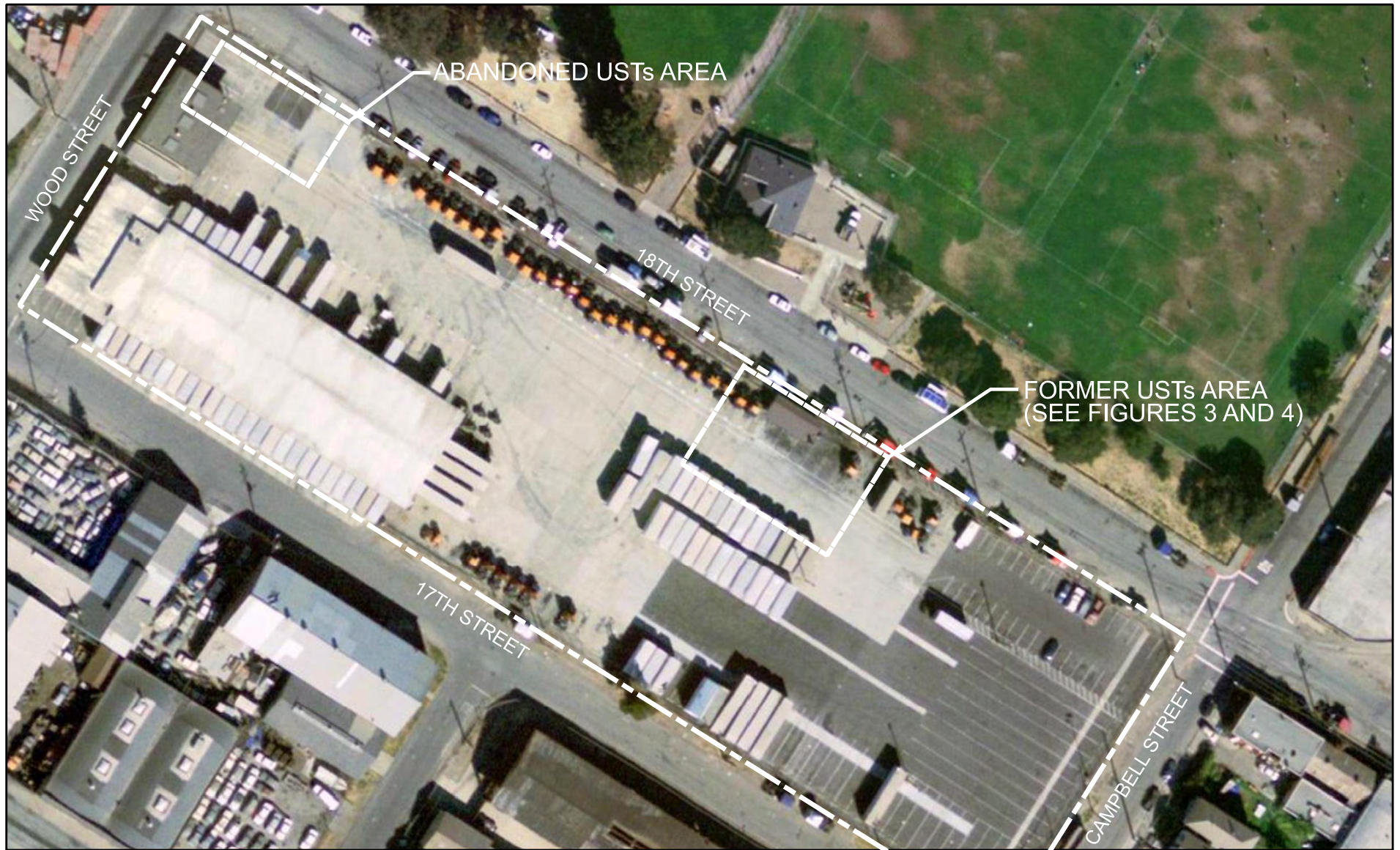
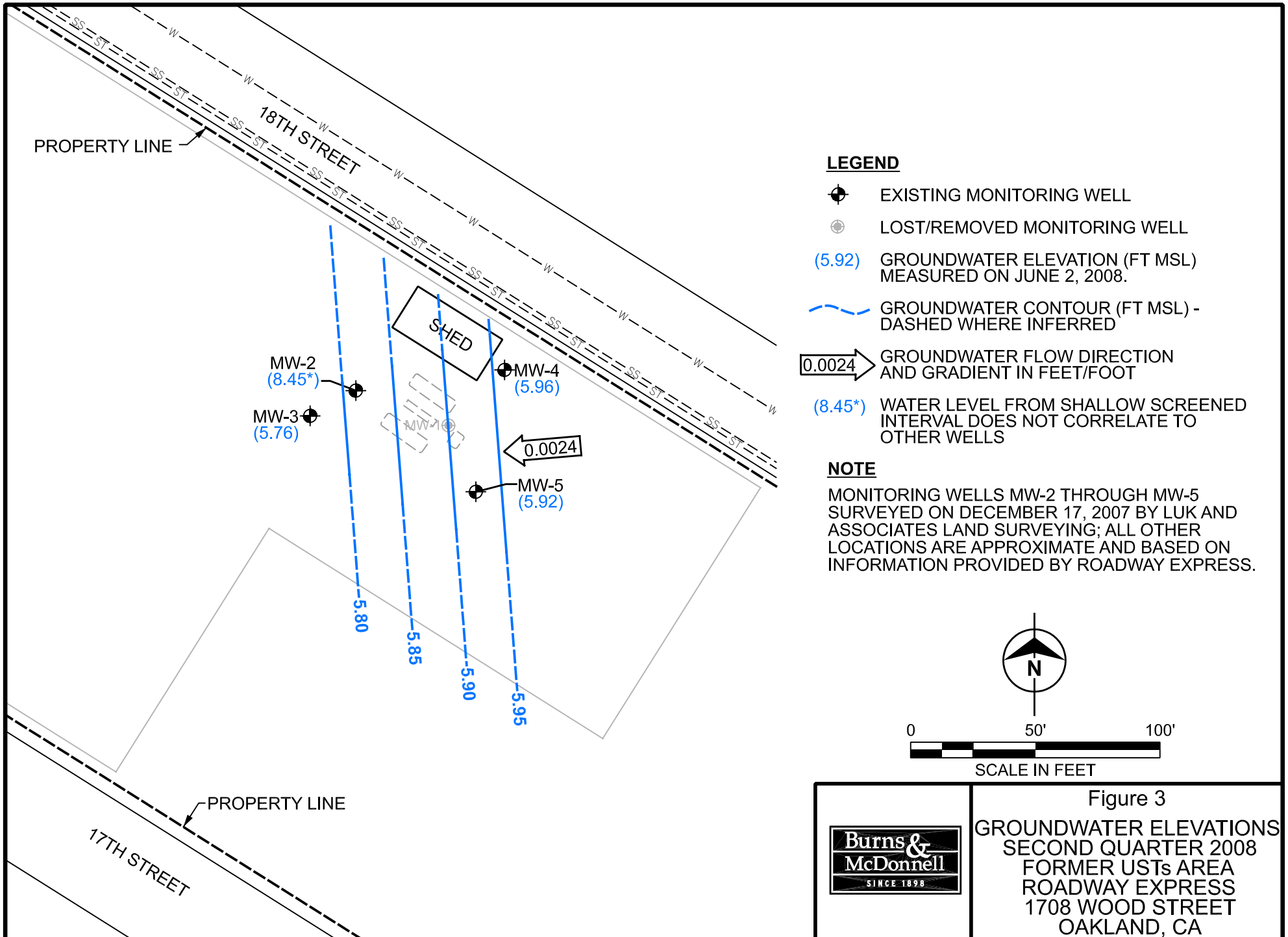
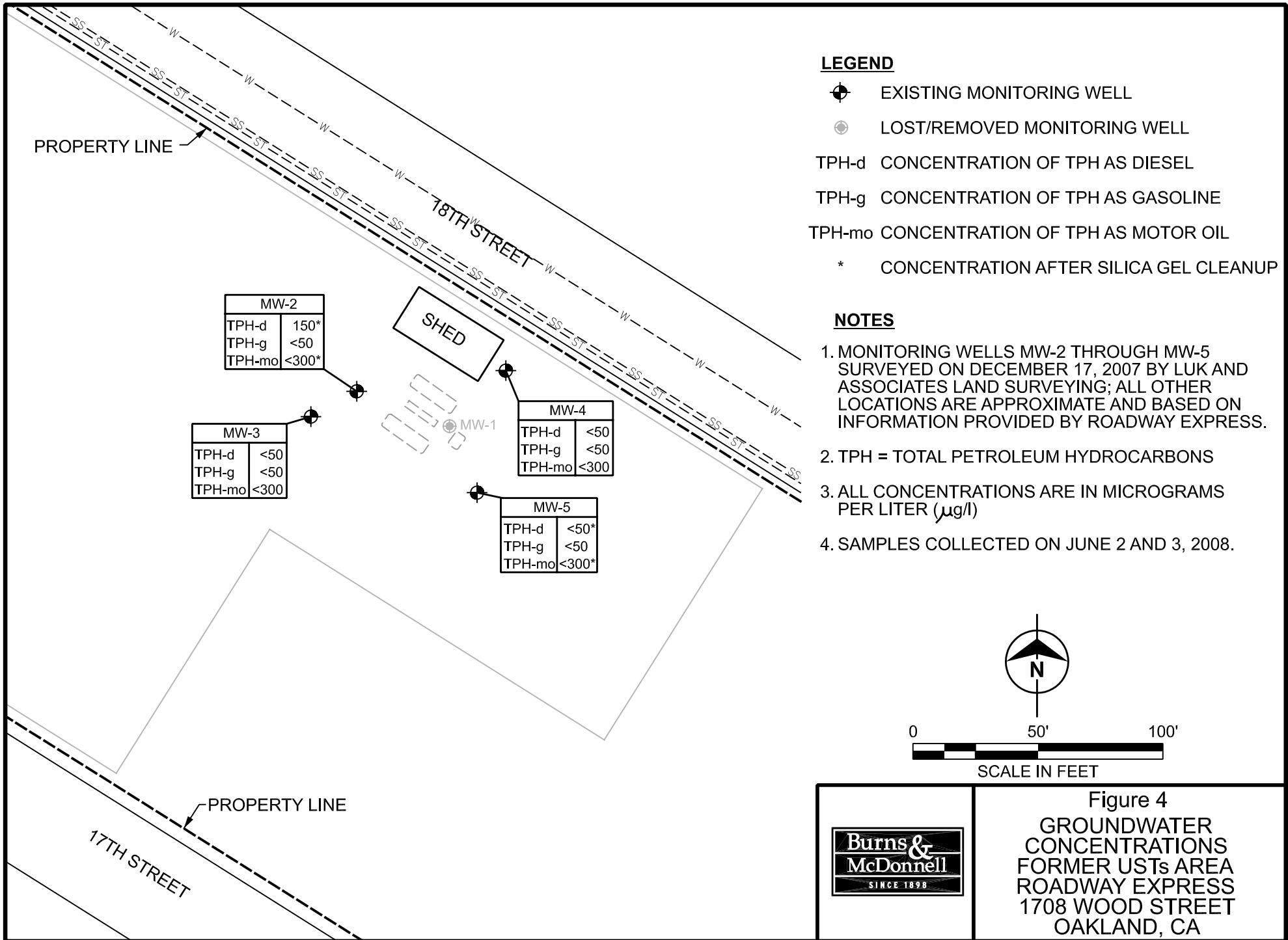


Figure 2  
SITE MAP  
ROADWAY EXPRESS  
1708 WOOD STREET  
OAKLAND, CA





**APPENDIX A**  
**FIELD SAMPLING FORMS**



**GROUNDWATER SAMPLING FORM**

Site Name: Roadway Express, Oakland

Well Number: MW-2 + Dup-1

Project Number: 48791

Well Type: Monitor Extraction Other: C

Recorded By: PS

Date: 6-2-08 Sample Time: 1220

**Purge Method**

Bailer-Type: 3 inch

Pumping Method: NA

Other-Type: \_\_\_\_\_

**Purge Volume**

Casing Diameter (D in inches): 4

Total Depth of Casing (TD in feet BTOC): 9.2

Water Level Depth (WL in feet BTOC): 1.44

**Purge Volume Calculation:**

$$(9.2) - (1.44) \times (4)^2 \times 3 \times 0.0408 = 15.2$$

TD (feet)    WL (feet)    D (inches)    # Vols    Purge Volume (gallons)

Total Volume Generated (gallons): 16

Start Time: 1150

Stop Time: 1230

Field Parameter Measurements					
Time	Volume	Temp	pH	Conductivity	Remarks
1205	3.2	22.9	6.8	2000	Slightly Yellow odor
1209	5.0	24.2	6.9	1800	Same
1213	10.1	23.9	7.0	1800	Same, getting slightly cloudy
1217	15.2	24.8	6.9	1600	Same cloudy, yellow/black

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





**GROUNDWATER SAMPLING FORM**

Site Name: Roadway Express, Oakland

Well Number: MW-3

Project Number: 48791

Well Type: Monitor Extraction Other: \_\_\_\_\_

Recorded By: PT

Date: 6-3-08 Sample Time: 1130

**Purge Method**

Bailer-Type: 2 inch

Pumping Method: NA

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): 4.35

**Purge Volume Calculation:**

$$(29.5) - (4.35) \times (2)^2 \times 3 \times 0.0408 = 12.3$$

TD (feet)    WL (feet)    D (inches)    # Vols    Purge Volume (gallons)

Total Volume Generated (gallons): 13

Start Time: 1050

Stop Time: 1140

Field Parameter Measurements					
Time	Volume	Temp	pH	Conductivity	Remarks
1103	1.2	20.8	7.3	3000	Clear
1115	4.1	20.2	6.8	4000	Slightly Cloudy, Brown
1123	8.2	19.8	6.7	4000	same
1128	12.3	19.9	6.8	4500	Getting Clearer

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



**GROUNDWATER SAMPLING FORM**

Site Name: Roadway Express, Oakland

Well Number: MW-4

Project Number: 48791

Well Type: Monitor Extraction Other: \_\_\_\_\_

Recorded By: PB

Date: 6-2-08 Sample Time: 1448

**Purge Method**

**Purge Volume**

Bailer-Type: 2 inch

Casing Diameter (D in inches): 2

Pumping Method: NA

Total Depth of Casing (TD in feet BTOC): 29.5

Other-Type: \_\_\_\_\_

Water Level Depth (WL in feet BTOC): 3.56

**Purge Volume Calculation:**

$(29.5) - (3.56) \times (2)^2 \times 3 \times 0.0408 = 12.7$   
 TD (feet)    WL (feet)    D (inches)    # Vols    Purge Volume (gallons)

Total Volume Generated (gallons): 13

Start Time: 1335 Stop Time: 1450

Field Parameter Measurements					
Time	Volume	Temp	pH	Conductivity	Remarks
1348	5.1	20.5	6.3	4672	Clear
1400	4.2				VSI meter Not working, continue without
1428	8.4				parameters. Clear
1438	12.7				Clear

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

Sampling Information				
Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments



**GROUNDWATER SAMPLING FORM**

Site Name: Roadway Express, Oakland

Well Number: MW-5

Project Number: 48791

Well Type: Monitor Extraction Other: \_\_\_\_\_

Recorded By: BB

Date: 6-2-08 Sample Time: 1313

**Purge Method**

Bailer-Type: 2 inch

Pumping Method: NA

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): 4.05

**Purge Volume Calculation:**

$$\frac{(29.5) - (4.05)}{2} \times (2)^2 \times 3 \times 0.0408 = 12.5$$

TD (feet)      WL (feet)      D (inches)      # Vols      Purge Volume (gallons)

Total Volume Generated (gallons): 13

Start Time: 1235

Stop Time: 1325

Field Parameter Measurements					
Time	Volume	Temp	pH	Conductivity	Remarks
1246	In.†	19.97	6.61	3033	Mostly Clear, Yellow tint
1255	4.0	17.59	6.76	6239	Mostly Clear, Brownish color
1303	8.0	17.46	6.83	6388	Same
1311	12.5	17.49	6.84	6223	Same

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

Sampling Information				
Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments

**APPENDIX B**

**CERTIFIED ANALYTICAL REPORT  
BURNS & MCDONNELL QA/QC REPORT**



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 203700
ANALYTICAL REPORT

Burns & McDonnell
393 East Grand Avenue
South San Francisco, CA 94080

Project : 48791
Location : YRC-Oakland
Level : II

Table with 2 columns: Sample ID, Lab ID. Rows include MW-2 through MW-5, DUP-1, and TRIP.

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: [Handwritten Signature]
Project Manager

Date: 06/12/2008

Signature: [Handwritten Signature]
Senior Program Manager

Date: 06/12/2008

**CASE NARRATIVE**

Laboratory number: 203700  
Client: Burns & McDonnell  
Project: 48791  
Location: YRC-Oakland  
Request Date: 06/03/08  
Samples Received: 06/03/08

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 06/03/08. The samples were received cold and intact.

**TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):**

No analytical problems were encountered.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Field ID:	MW-2	Lab ID:	203700-001
Type:	SAMPLE	Sampled:	06/03/08

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	ND	50	139046	06/09/08	EPA 8015B
MTBE	ND	2.0	139015	06/07/08	EPA 8021B
Benzene	ND	0.50	139015	06/07/08	EPA 8021B
Toluene	ND	0.50	139015	06/07/08	EPA 8021B
Ethylbenzene	ND	0.50	139015	06/07/08	EPA 8021B
m,p-Xylenes	ND	0.50	139015	06/07/08	EPA 8021B
o-Xylene	ND	0.50	139015	06/07/08	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	95	69-140	139046	06/09/08	EPA 8015B
Bromofluorobenzene (FID)	105	73-144	139046	06/09/08	EPA 8015B
Trifluorotoluene (PID)	87	60-146	139015	06/07/08	EPA 8021B
Bromofluorobenzene (PID)	90	65-143	139015	06/07/08	EPA 8021B

Field ID:	MW-3	Batch#:	139015
Type:	SAMPLE	Sampled:	06/03/08
Lab ID:	203700-002	Analyzed:	06/07/08

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)	96	69-140	EPA 8015B
Bromofluorobenzene (FID)	92	73-144	EPA 8015B
Trifluorotoluene (PID)	94	60-146	EPA 8021B
Bromofluorobenzene (PID)	93	65-143	EPA 8021B

NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Field ID:	MW-4	Batch#:	139015
Type:	SAMPLE	Sampled:	06/02/08
Lab ID:	203700-003	Analyzed:	06/07/08

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)	97	69-140	EPA 8015B
Bromofluorobenzene (FID)	97	73-144	EPA 8015B
Trifluorotoluene (PID)	93	60-146	EPA 8021B
Bromofluorobenzene (PID)	95	65-143	EPA 8021B

Field ID:	MW-5	Batch#:	139015
Type:	SAMPLE	Sampled:	06/02/08
Lab ID:	203700-004	Analyzed:	06/07/08

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)	94	69-140	EPA 8015B
Bromofluorobenzene (FID)	98	73-144	EPA 8015B
Trifluorotoluene (PID)	90	60-146	EPA 8021B
Bromofluorobenzene (PID)	95	65-143	EPA 8021B

NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Field ID:               DUP-1                               Lab ID:                     203700-005  
Type:                     SAMPLE                                        Sampled:                 06/03/08

Analyte	Result	RL	Batch#	Analyzed	Analysis
Gasoline C7-C12	ND	50	139078	06/09/08	EPA 8015B
MTBE	ND	2.0	139015	06/07/08	EPA 8021B
Benzene	ND	0.50	139015	06/07/08	EPA 8021B
Toluene	ND	0.50	139015	06/07/08	EPA 8021B
Ethylbenzene	ND	0.50	139015	06/07/08	EPA 8021B
m,p-Xylenes	ND	0.50	139015	06/07/08	EPA 8021B
o-Xylene	ND	0.50	139015	06/07/08	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analyzed	Analysis
Trifluorotoluene (FID)	96	69-140	139078	06/09/08	EPA 8015B
Bromofluorobenzene (FID)	106	73-144	139078	06/09/08	EPA 8015B
Trifluorotoluene (PID)	86	60-146	139015	06/07/08	EPA 8021B
Bromofluorobenzene (PID)	89	65-143	139015	06/07/08	EPA 8021B

Field ID:               TRIP                               Sampled:                 06/03/08  
Type:                     SAMPLE                                        Analyzed:                06/09/08  
Lab ID:                   203700-006

Analyte	Result	RL	Batch#	Analysis
Gasoline C7-C12	ND	50	139078	EPA 8015B
MTBE	ND	2.0	139047	EPA 8021B
Benzene	ND	0.50	139047	EPA 8021B
Toluene	ND	0.50	139047	EPA 8021B
Ethylbenzene	ND	0.50	139047	EPA 8021B
m,p-Xylenes	ND	0.50	139047	EPA 8021B
o-Xylene	ND	0.50	139047	EPA 8021B

Surrogate	%REC	Limits	Batch#	Analysis
Trifluorotoluene (FID)	90	69-140	139078	EPA 8015B
Bromofluorobenzene (FID)	101	73-144	139078	EPA 8015B
Trifluorotoluene (PID)	76	60-146	139047	EPA 8021B
Bromofluorobenzene (PID)	76	65-143	139047	EPA 8021B

NA= Not Analyzed  
ND= Not Detected  
RL= Reporting Limit

### Curtis & Tompkins Laboratories Analytical Report

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Type: BLANK    Batch#: 139015  
 Lab ID: QC445460                                    Analyzed: 06/07/08

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)	94	69-140	EPA 8015B
Bromofluorobenzene (FID)	92	73-144	EPA 8015B
Trifluorotoluene (PID)	90	60-146	EPA 8021B
Bromofluorobenzene (PID)	91	65-143	EPA 8021B

Type: BLANK    Analyzed: 06/09/08  
 Lab ID: QC445574                                    Analysis: EPA 8015B  
 Batch#: 139046

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		111	69-140
Bromofluorobenzene (FID)		105	73-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

Type: BLANK    Analyzed: 06/09/08  
 Lab ID: QC445576                                    Analysis: EPA 8021B  
 Batch#: 139047

Analyte	Result	RL
MTBE	ND	2.0
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)	NA		
Bromofluorobenzene (FID)	NA		
Trifluorotoluene (PID)		92	60-146
Bromofluorobenzene (PID)		91	65-143

NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791		
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Type:	BLANK	Analyzed:	06/09/08
Lab ID:	QC445721	Analysis:	EPA 8015B
Batch#:	139078		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	Result	%REC	Limits
Trifluorotoluene (FID)		100	69-140
Bromofluorobenzene (FID)		101	73-144
Trifluorotoluene (PID)	NA		
Bromofluorobenzene (PID)	NA		

NA= Not Analyzed  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC445461	Batch#:	139015
Matrix:	Water	Analyzed:	06/07/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,038	104	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	124	69-140
Bromofluorobenzene (FID)	108	73-144

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC445462	Batch#:	139015
Matrix:	Water	Analyzed:	06/07/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.81	108	70-129
Benzene	10.00	10.70	107	80-120
Toluene	10.00	10.29	103	80-120
Ethylbenzene	10.00	11.37	114	80-120
m,p-Xylenes	10.00	10.69	107	80-120
o-Xylene	10.00	10.97	110	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	107	60-146
Bromofluorobenzene (PID)	107	65-143

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	139015
MSS Lab ID:	203728-004	Sampled:	06/03/08
Matrix:	Water	Received:	06/04/08
Units:	ug/L	Analyzed:	06/08/08
Diln Fac:	1.000		

Type: MS Lab ID: QC445463

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	54.70	2,000	1,882	91	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	69-140
Bromofluorobenzene (FID)	98	73-144

Type: MSD Lab ID: QC445464

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,897	92	67-120	1	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	69-140
Bromofluorobenzene (FID)	99	73-144

RPD= Relative Percent Difference

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	139046
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Type: BS Lab ID: QC445575

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,009	101	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	115	69-140
Bromofluorobenzene (FID)	106	73-144

Type: BSD Lab ID: QC445698

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,238	112	80-120	10	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	69-140
Bromofluorobenzene (FID)	106	73-144

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8021B
Matrix:	Water	Batch#:	139047
Units:	ug/L	Analyzed:	06/09/08
Diln Fac:	1.000		

Type: BS Lab ID: QC445689

Analyte	Spiked	Result	%REC	Limits
MTBE	10.00	10.84	108	70-129
Benzene	10.00	9.811	98	80-120
Toluene	10.00	9.064	91	80-120
Ethylbenzene	10.00	10.04	100	80-120
m,p-Xylenes	10.00	9.873	99	80-120
o-Xylene	10.00	9.407	94	80-120

Surrogate	%REC	Limits
Trifluorotoluene (PID)	90	60-146
Bromofluorobenzene (PID)	90	65-143

Type: BSD Lab ID: QC445690

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	20.74	104	70-129	4	21
Benzene	20.00	19.52	98	80-120	1	20
Toluene	20.00	18.91	95	80-120	4	20
Ethylbenzene	20.00	20.52 b	103	80-120	2	20
m,p-Xylenes	20.00	19.56	98	80-120	1	20
o-Xylene	20.00	19.57	98	80-120	4	20

Surrogate	%REC	Limits
Trifluorotoluene (PID)	84	60-146
Bromofluorobenzene (PID)	84	65-143

b= See narrative

RPD= Relative Percent Difference



## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC445722	Batch#:	139078
Matrix:	Water	Analyzed:	06/09/08
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,191	119	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	69-140
Bromofluorobenzene (FID)	100	73-144

## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	139078
MSS Lab ID:	203756-001	Sampled:	06/05/08
Matrix:	Water	Received:	06/05/08
Units:	ug/L	Analyzed:	06/10/08
Diln Fac:	1.000		

Type: MS Lab ID: QC445723

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	23.05	2,000	2,015	100	67-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	69-140
Bromofluorobenzene (FID)	106	73-144

Type: MSD Lab ID: QC445724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,849	91	67-120	9	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	69-140
Bromofluorobenzene (FID)	101	73-144

RPD= Relative Percent Difference

**Total Extractable Hydrocarbons**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Field ID:	MW-2	Sampled:	06/03/08
Type:	SAMPLE	Prepared:	06/09/08
Lab ID:	203700-001	Analyzed:	06/11/08
Batch#:	139080	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	840	50
Diesel C10-C24 (SGCU)	120	50
Motor Oil C24-C36	890	300
Motor Oil C24-C36 (SGCU)	ND	300

Surrogate	%REC	Limits
Hexacosane (SGCU)	77	63-130
Hexacosane	88	63-130

Field ID:	MW-3	Sampled:	06/03/08
Type:	SAMPLE	Prepared:	06/04/08
Lab ID:	203700-002	Analyzed:	06/09/08
Batch#:	138927		

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

Surrogate	%REC	Limits
Hexacosane	109	63-130

Field ID:	MW-4	Sampled:	06/02/08
Type:	SAMPLE	Prepared:	06/04/08
Lab ID:	203700-003	Analyzed:	06/08/08
Batch#:	138927		

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

Surrogate	%REC	Limits
Hexacosane	110	63-130

ND= Not Detected  
 RL= Reporting Limit  
 SGCU= Silica gel cleanup

Total Extractable Hydrocarbons			
Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Field ID:	MW-5	Sampled:	06/02/08
Type:	SAMPLE	Prepared:	06/04/08
Lab ID:	203700-004	Cleanup Method:	EPA 3630C
Batch#:	138927		

Analyte	Result	RL	Analyzed
Diesel C10-C24	660	50	06/08/08
Diesel C10-C24 (SGCU)	ND	50	06/09/08
Motor Oil C24-C36	900	300	06/08/08
Motor Oil C24-C36 (SGCU)	ND	300	06/09/08

Surrogate	%REC	Limits	Analyzed
Hexacosane (SGCU)	105	63-130	06/09/08
Hexacosane	102	63-130	06/08/08

Field ID:	DUP-1	Sampled:	06/03/08
Type:	SAMPLE	Prepared:	06/04/08
Lab ID:	203700-005	Analyzed:	06/09/08
Batch#:	138927	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	870	50
Diesel C10-C24 (SGCU)	150	50
Motor Oil C24-C36	920	300
Motor Oil C24-C36 (SGCU)	ND	300

Surrogate	%REC	Limits
Hexacosane (SGCU)	90	63-130
Hexacosane	104	63-130

Type:	BLANK	Prepared:	06/04/08
Lab ID:	QC445082	Cleanup Method:	EPA 3630C
Batch#:	138927		

Analyte	Result	RL	Analyzed
Diesel C10-C24	ND	50	06/08/08
Diesel C10-C24 (SGCU)	ND	50	06/09/08
Motor Oil C24-C36	ND	300	06/08/08
Motor Oil C24-C36 (SGCU)	ND	300	06/09/08

Surrogate	%REC	Limits	Analyzed
Hexacosane (SGCU)	114	63-130	06/09/08
Hexacosane	90	63-130	06/08/08

ND= Not Detected  
 RL= Reporting Limit  
 SGCU= Silica gel cleanup

**Total Extractable Hydrocarbons**

Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	06/03/08

Type:	BLANK	Prepared:	06/09/08
Lab ID:	QC445729	Analyzed:	06/11/08
Batch#:	139080	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
Hexacosane (SGCU)	100	63-130
Hexacosane	101	63-130

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	138927
Units:	ug/L	Prepared:	06/04/08
Diln Fac:	1.000	Analyzed:	06/06/08

Type: BS Cleanup Method: EPA 3630C  
 Lab ID: QC445083

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24 (SGCU)	2,500	2,061	82	61-120

Surrogate	%REC	Limits
Hexacosane (SGCU)	106	63-130

Type: BSD Cleanup Method: EPA 3630C  
 Lab ID: QC445084

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24 (SGCU)	2,500	1,902	76	61-120	8	29

Surrogate	%REC	Limits
Hexacosane (SGCU)	92	63-130

RPD= Relative Percent Difference  
 SGCU= Silica gel cleanup

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC445730	Batch#:	139080
Matrix:	Water	Prepared:	06/09/08
Units:	ug/L	Analyzed:	06/11/08

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24 (SGCU)	2,500	1,891	76	61-120

Surrogate	%REC	Limits
Hexacosane (SGCU)	92	63-130

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	203700	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 3520C
Project#:	48791	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	139080
MSS Lab ID:	203772-004	Sampled:	06/04/08
Matrix:	Water	Received:	06/05/08
Units:	ug/L	Prepared:	06/09/08
Diln Fac:	1.000	Analyzed:	06/11/08

Type: MS Cleanup Method: EPA 3630C  
 Lab ID: QC445731

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24 (SGCU)	41.63	2,500	1,537	60	58-126

Surrogate	%REC	Limits
Hexacosane (SGCU)	77	63-130

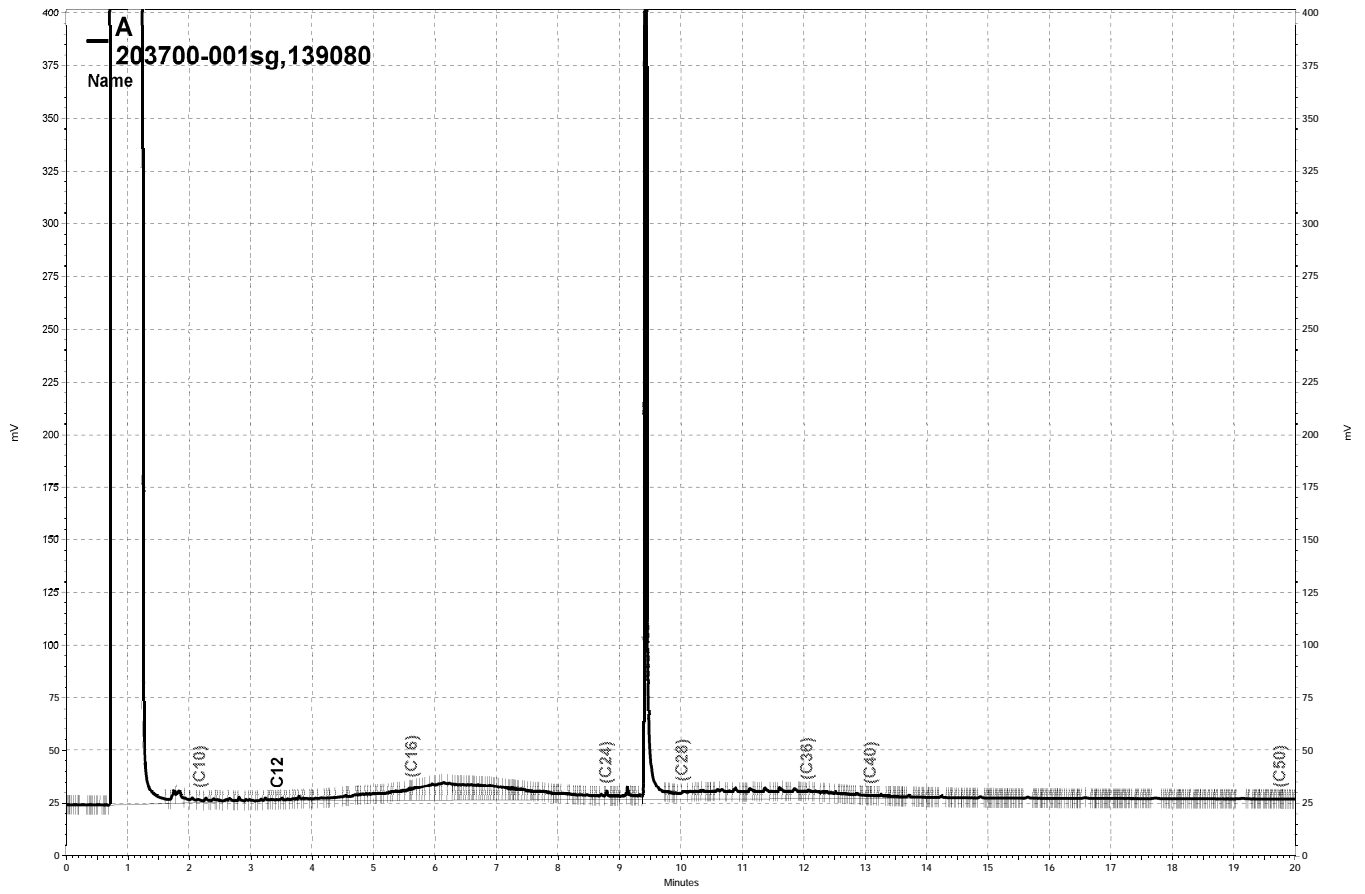
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 Lab ID: QC445732

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24 (SGCU)	2,500	1,861	73	58-126	19	31

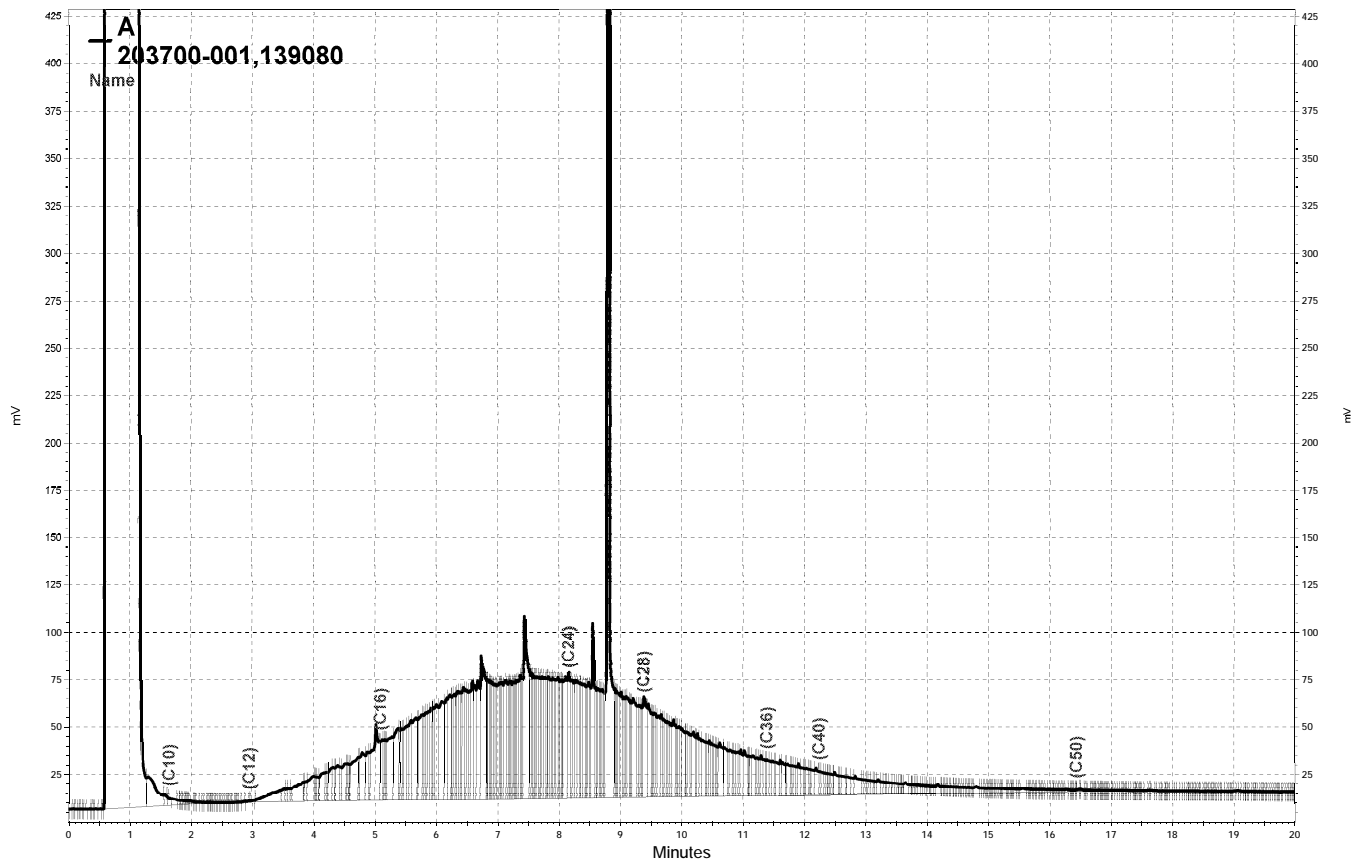
Surrogate	%REC	Limits
Hexacosane (SGCU)	93	63-130

RPD= Relative Percent Difference  
 SGCU= Silica gel cleanup

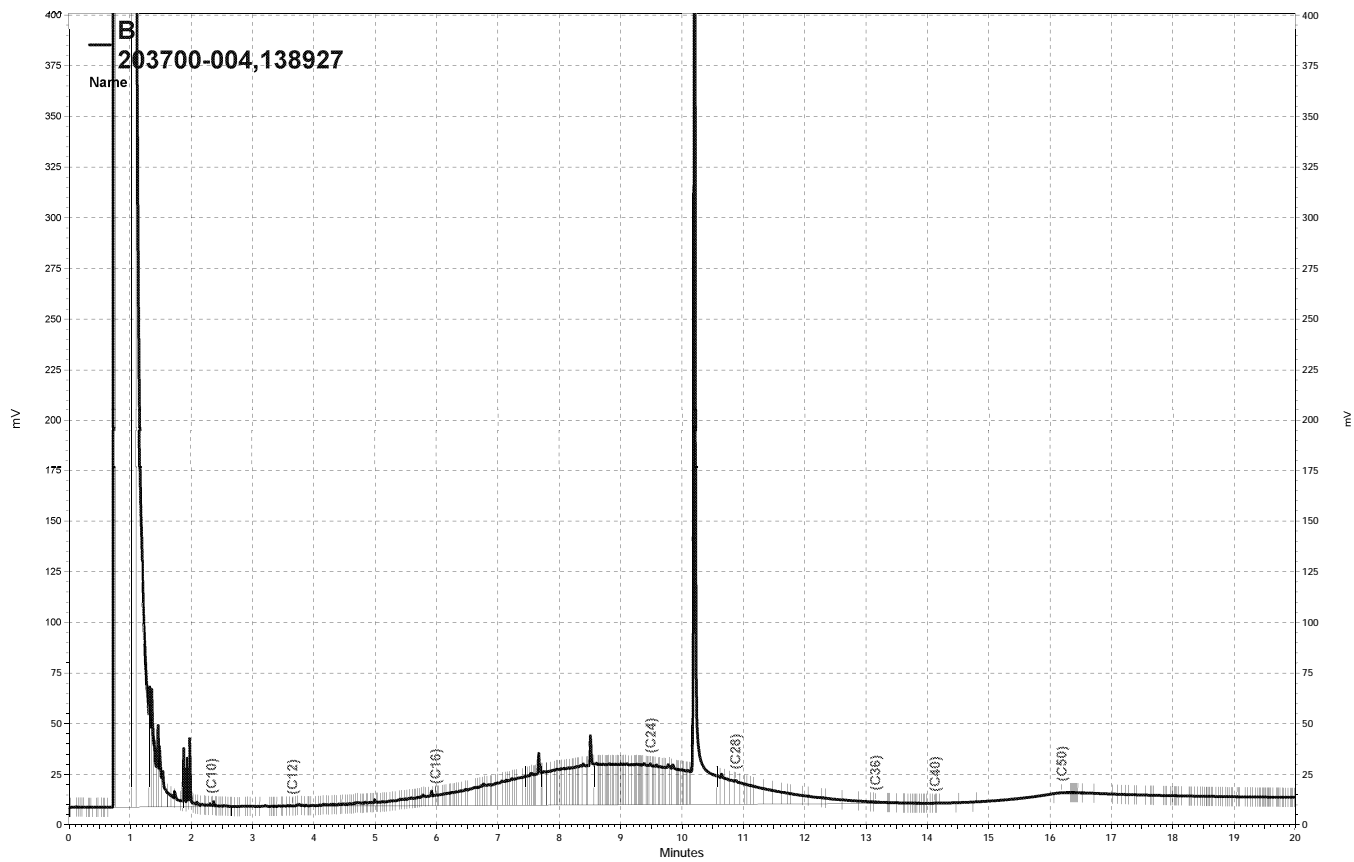




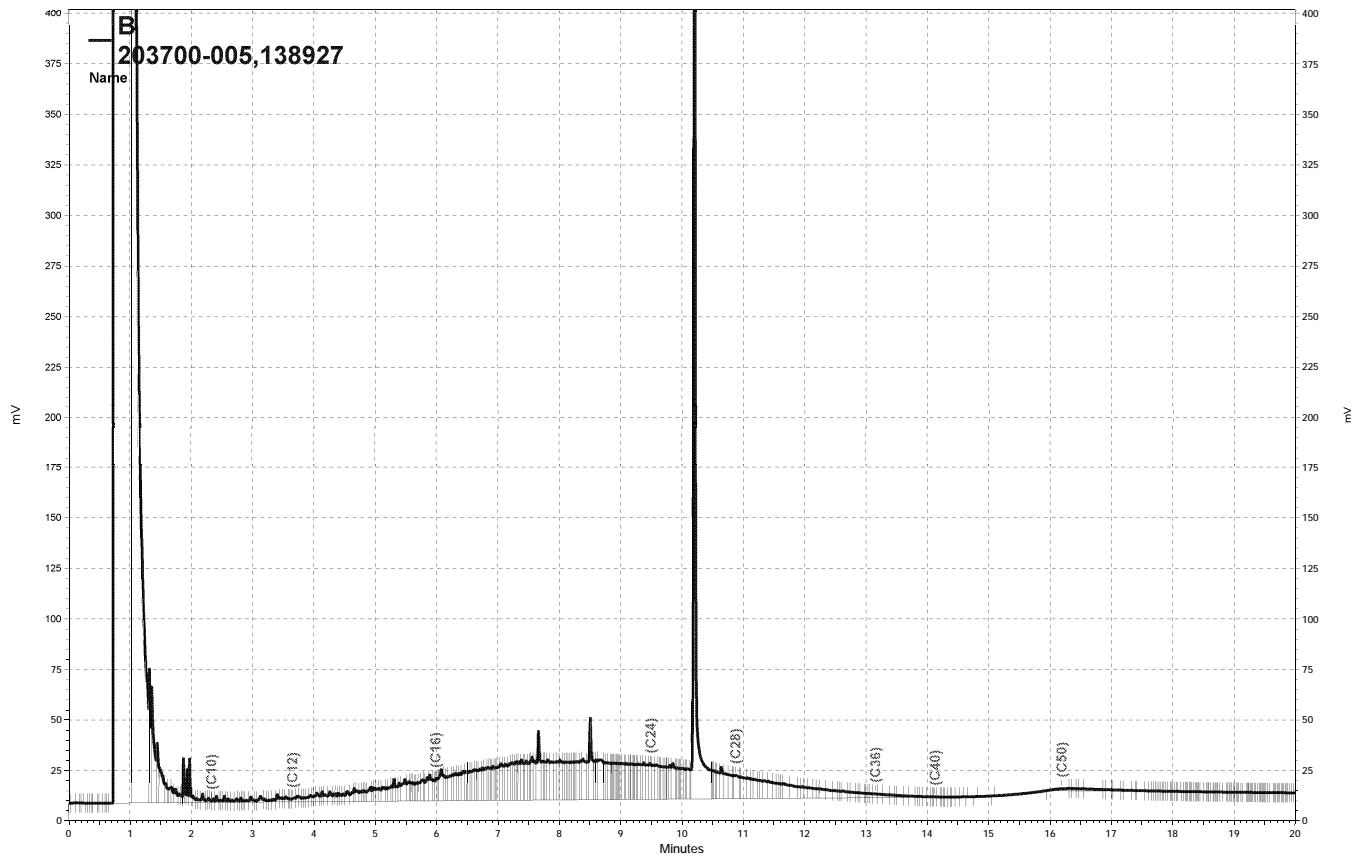
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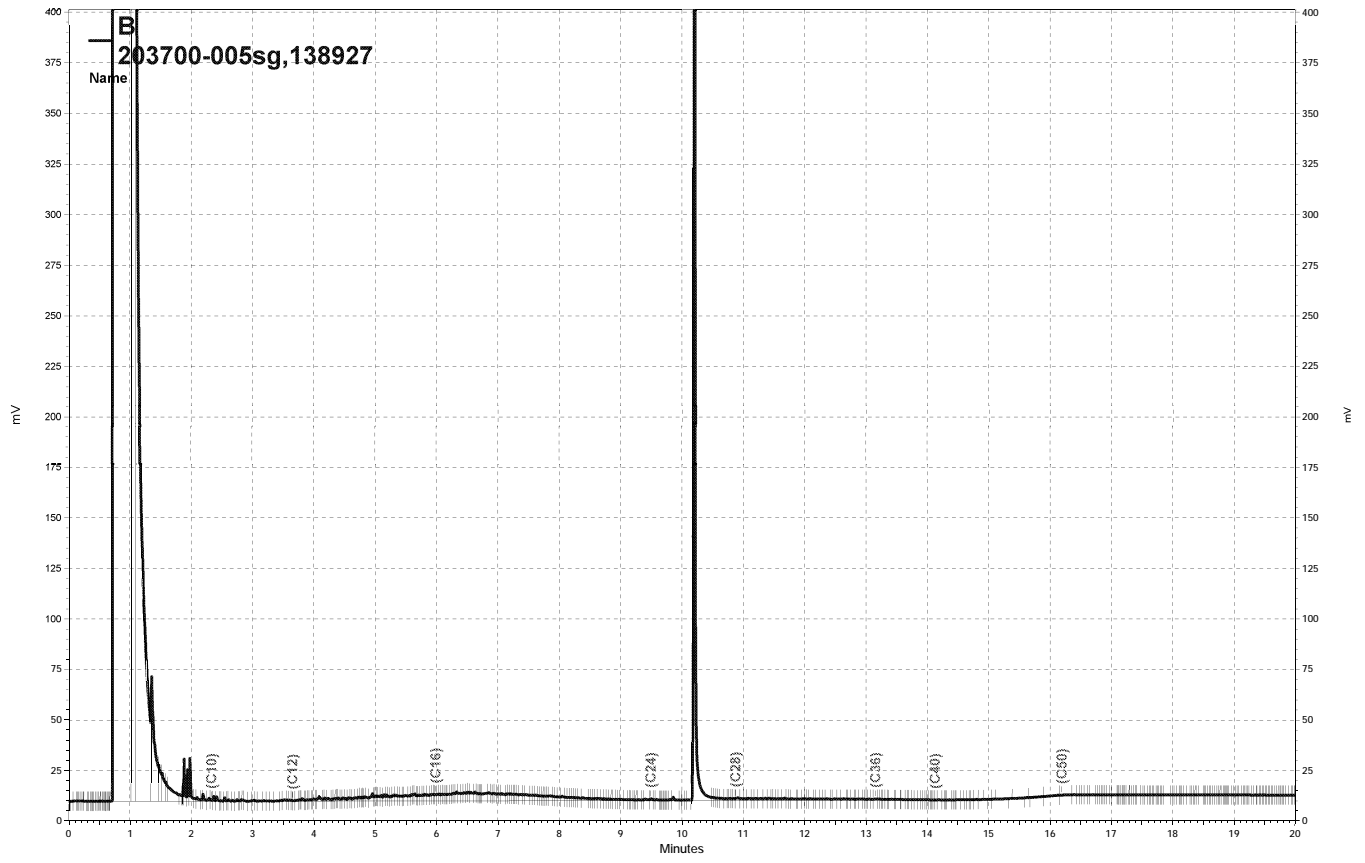
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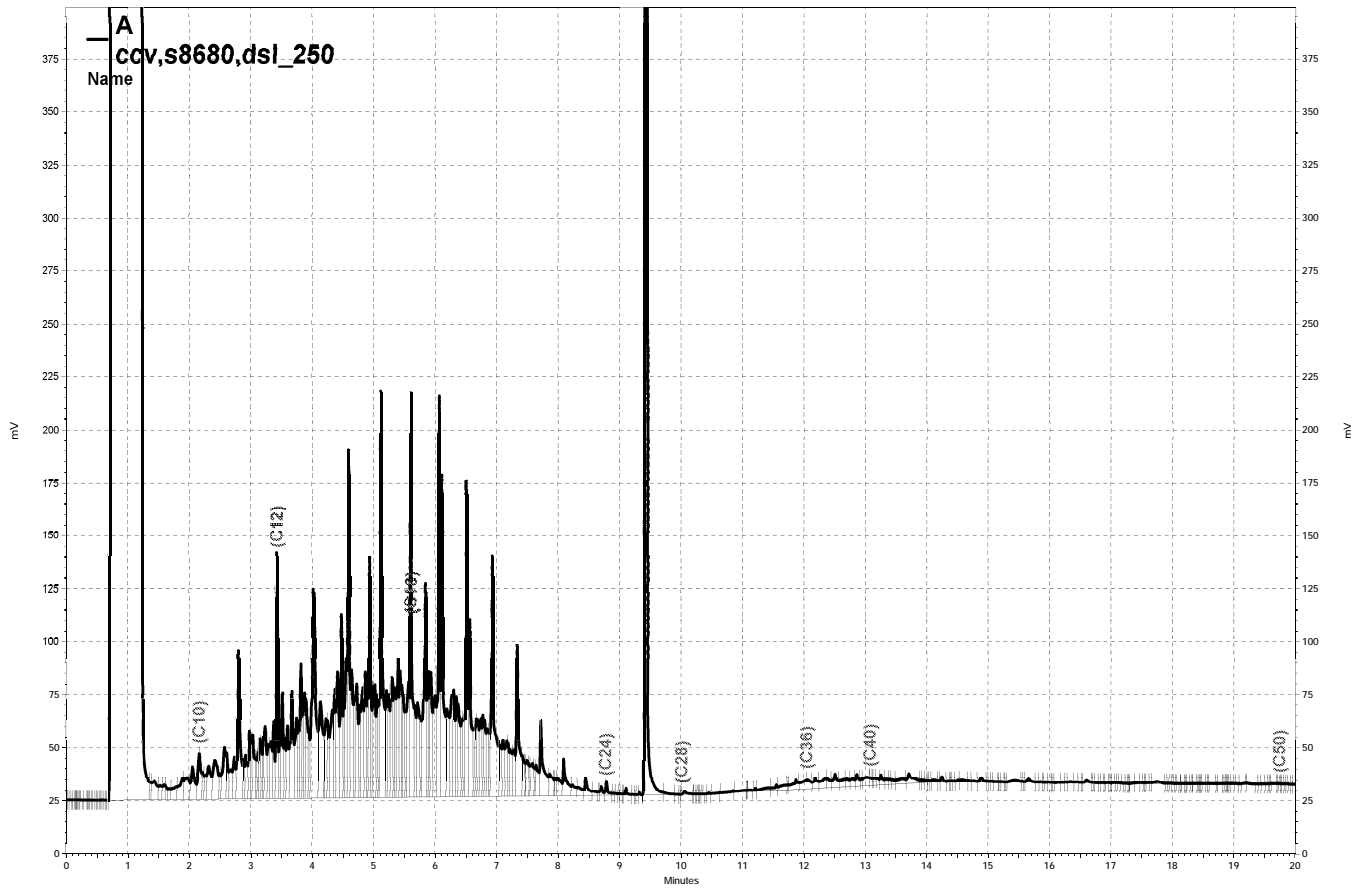
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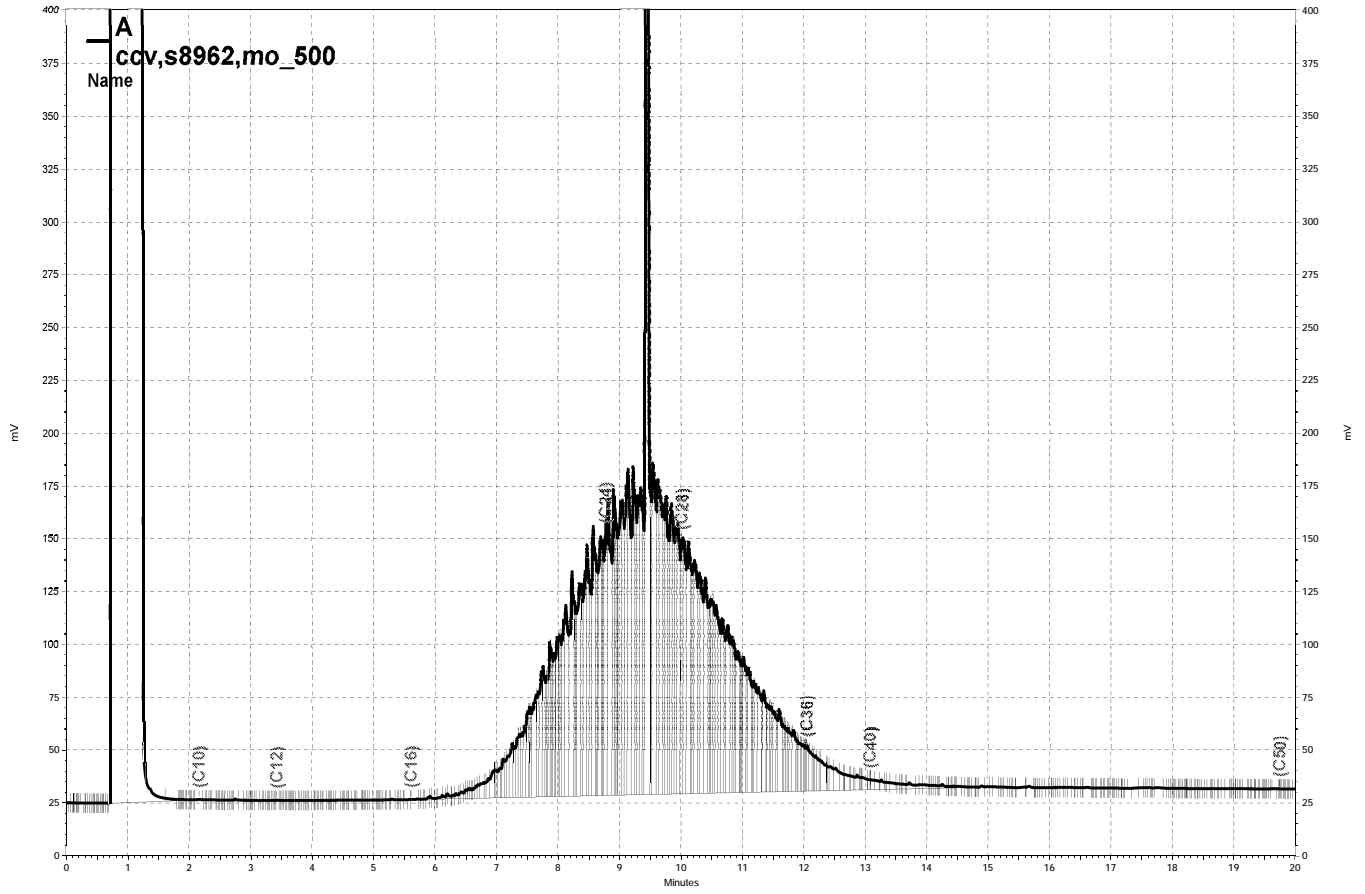
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