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10:49 am, May 02, 2008

Alameda County Environmental Health YRC Worldwide Inc. 10990 Ros Avenue Overland Park, KS 66211-1213 Phone 913 696 6100 yrcw.com



April 28, 2008

To Whom It May Concern:

Attached is the "First 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

April 29, 2008

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

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

Dear Mr. Khatri,

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) has been retained by YRC Worldwide Enterprise Services Inc. (YRCW) to prepare a letter report summarizing the groundwater sampling activities for the first 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

4.1 Well Sampling

On March 28, 2008, groundwater samples were collected from the Site's existing groundwater monitoring wells: MW-2 through MW-5 (Figure 3). 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

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.

Groundwater samples were uniquely labeled with the well identification, date, time of collection, type of preservative, and analyses to be performed. 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.

5.0 Groundwater Monitoring Results

5.1 Groundwater Flow Direction and Gradient

On March 28, 2008, static groundwater was observed in the Site's wells, at depths ranging from 3.32 feet (MW-4) to 4.12 feet (MW-3) below TOC, with corresponding groundwater elevations ranging from 5.99 feet (MW-3) to 6.20 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 (1.03 ft below TOC) and corresponding groundwater elevation (8.86 feet MSL) of MW-2 were not used in the groundwater contouring. 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 with a gradient of approximately 0.0025 feet per foot (ft/ft). Groundwater elevations are summarized in Table 1 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. Only monitoring well MW-2 had any TPH concentrations above the detection limit at 180 micrograms per liter (μ g/L) for TPH-d. It was noted by the laboratory that the result for TPH-d from MW-2 exhibited a chromatographic pattern which did not resemble the standard and was flagged with a 'Y' qualifier. 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.

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

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,

Mr. Paresh C. Khatri Alameda County Environmental Health Services April 29, 2008 Page 4 of 4

MW-3, MW-4, and MW-5, did not contain any detectable petroleum hydrocarbon constituents. It has been noted that MW-3, MW-4, and MW-5 have screen intervals that are below a suspected impermeable zone and that the static water level is above the screened intervals. Therefore, samples from these wells may not be representative of actual Site conditions.

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

Geologist

Messerotes, P.C Gar Senior Geologist



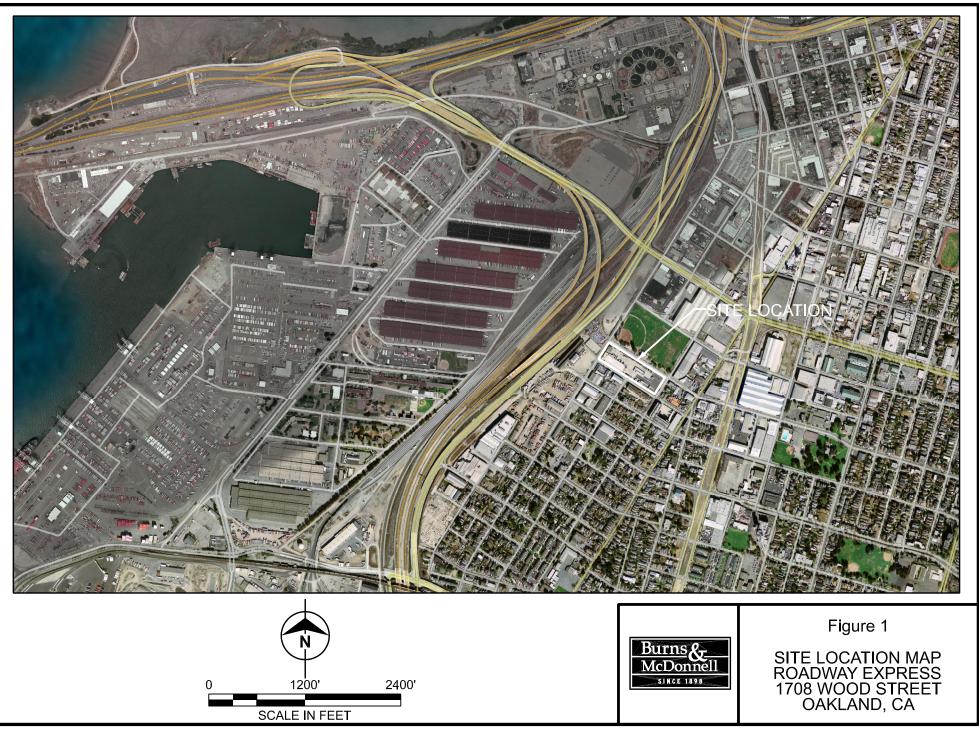
Attachments:

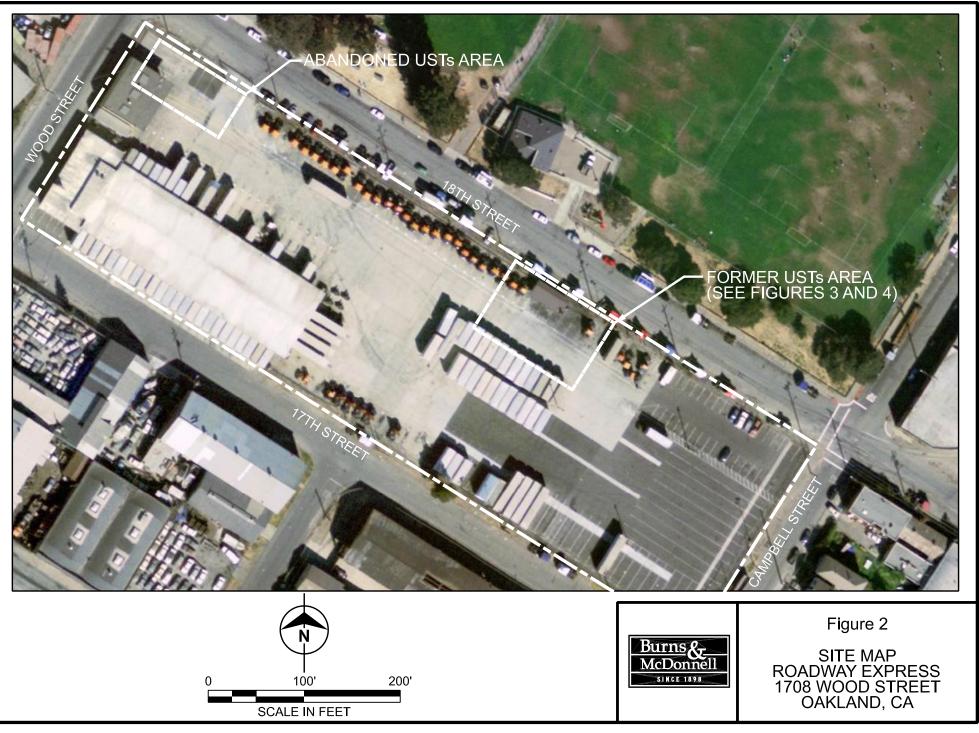
Figure 1 – Site Location Map Figure 2 – Site Map Figure 3 – Groundwater Elevations First Quarter 2008 – Former USTs Area Figure 4 – Groundwater Concentrations – Former USTs Area

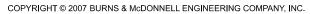
Table 1: Well Construction Details Table 2: Groundwater Elevations Table 3: Monitoring Well Groundwater Summary

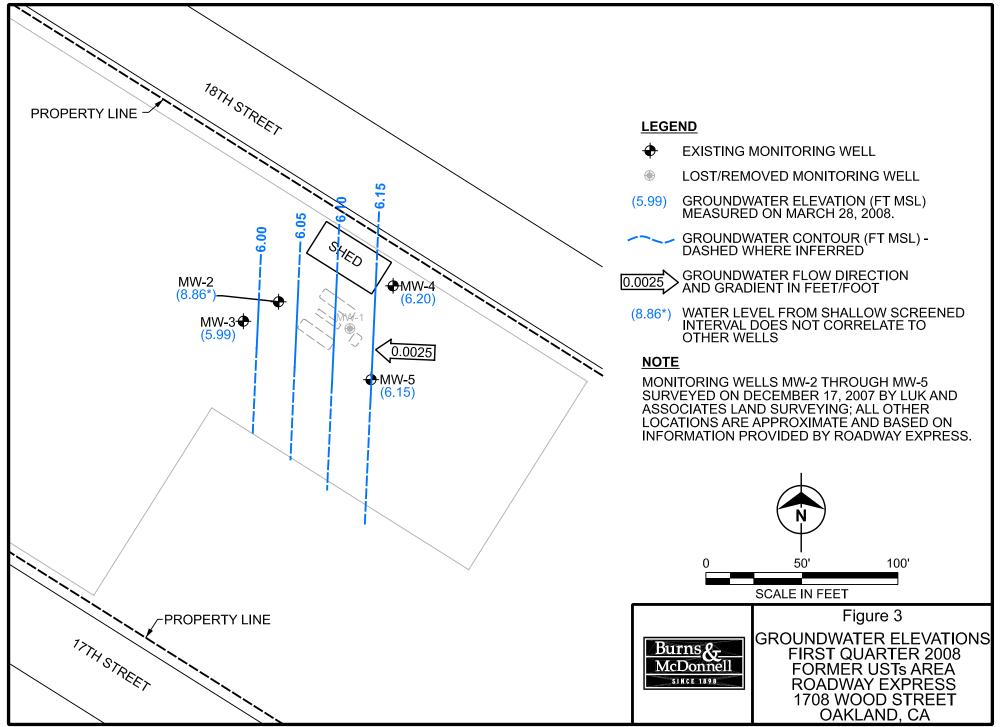
Appendix A – Field Sampling Forms Appendix B – Certified Analytical Report

FIGURES

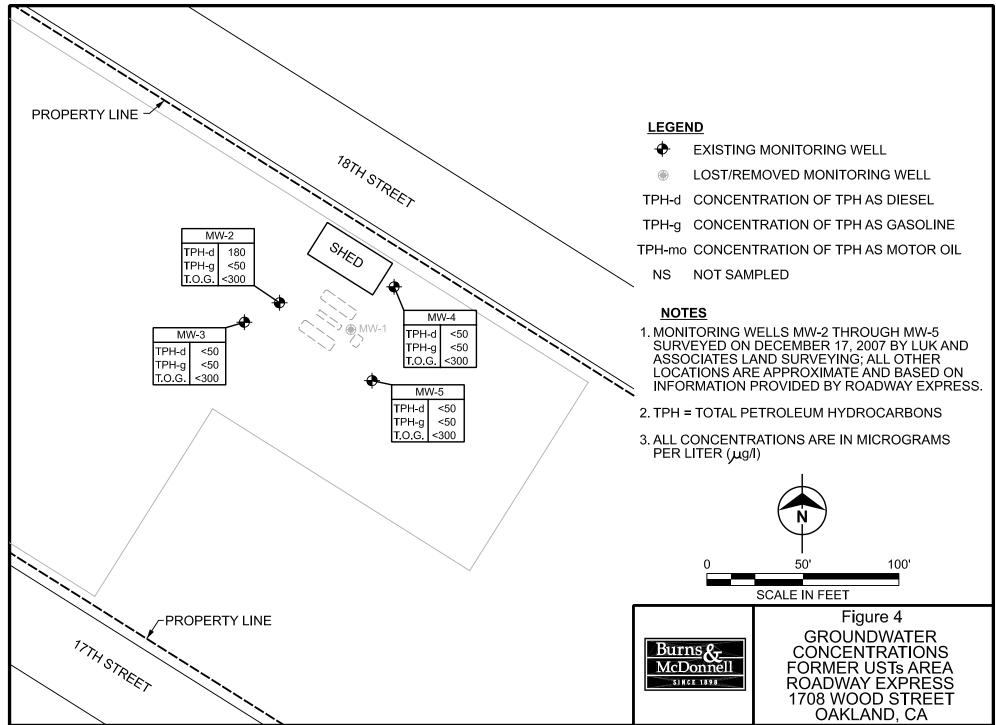












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TABLES

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 (2)	Feet (3)
MW-2	17-Dec-07	9.2	1.56	8.33
	28-Mar-08	9.2	1.03	8.86
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
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
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

Depth in feet below top of casing
 Measured depth in feet below top of casing

3 - 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-Diesel	TPH-Gasoline	MTBE	Total Oil & Grease	TPH-mo
Analytical R	Analytical Reporting Units		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			<5.0	
	28-Mar-08	180* Y	<50	<0.5		<300*
MW-3	6-Sep-00	65.9	ND		ND	
	22-Mar-07	<50	<50	<0.5	<4.75	
	17-Dec-07	<50			<5.0	
	28-Mar-08	<50	<50	<0.5		<300
MW-4	6-Sep-00	65.7	ND		ND	
	22-Mar-07	<50	<50	<0.5	<4.75	
	17-Dec-07	<50			<5.0	
	28-Mar-08	<50	<50	<0.5		<300
MW-5	6-Sep-00	78.7	ND		ND	
	22-Mar-07	500 HY	<50	<0.5	<4.85	
	17-Dec-07	<50			<5.0	
	28-Mar-08	<50*	<50	<0.5		<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

APPENDIX A

FIELD SAMPLING FORMS

Burns & McDonnell	GROUNDWATER SAMPLING FORM
Site Name: <u>Roadway</u> Exp. Project Number: <u>48791</u> Recorded By: <u>PB</u>	Well Number: <u>MW - Z</u> Dup -) Well Type: <u>Monitor</u> Extraction Other Date: <u>3 - 28 - 08</u> Sample Time: <u>1530</u>
Purge Method Bailer-Type: Pumping Method: Other-Type:	Purge Volume Casing Diameter (D in inches): 1 Total Depth of Casing (TD in feet BTOC): 1. 2 Water Level Depth (WL in feet BTOC): 1. 0.3
Purge Volume Calculation: $(\underline{9.2}) - (\underline{1.03}) \times (\underline{4})^2 \times \underline{3}$ TD (reet) WL (reet) D (inches) # Vols Total Volume Generated (gallons): 16.5	$X \ 0.0408 = \underbrace{IG.O}_{Parge Volume (gallons)}$

Stop Time: 1535 Start Time: <u>1505</u>

Field Pa	rameter A	leasurem	ents		
Time	Volume	Тепр	· pH	Conductivity	Remarks
ъ́н	In: F	16.74	8.41	1019	Clear, odor
1513	5.3	17.41	7.56	718	Clear, Oder
ise)	10.6	16.93	7.51	724	Elsar Odar
1922	16.0	10.40	7.50	748	Clear, whor
					Wall casing bent, bailer stopping ~
					halfman down the well. Still able to
					purge since well is recharging to 1ft
					balow TOC.

Notes:

Temperature is measured in degrees Celsius

Volume units are in gallons-

Conductivity units are in microstemens per centimeter (mS/cm)

Sampling Information Sample Point Sample Designator # of Containers Preservatives MW-Z MW-Z MW-Z G NW-Z Same MW-Z Same Sample Designator G NW-Z MW-Z MW-Z Same Same Same Same Same						
MW-Z MW-Z 6 2none/4444 TPHdeyno /BJEX, MTBE, TPHg MW-Z AWDapil 6 Same Some	Sampling Informa	tion				
Mw-2 Awpapt 6 Same Same	Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments	
	MW-Z	MW-2	6	2 more / 4 HCI	TPHeno /	BIEX, MIBE, TPH,
	Mw-Z	-Aw Dup-1	6	Same	Same	, , , ,
		,				

Burns & McDonnell	GROUNDWATER SAMPLING FORM
Site Name: <u>Readway Exp.</u> Project Number: <u>46791</u> Recorded By: <u>PB</u>	Well Number: <u>MW-3</u> Well Type: Monitor Extraction Other: Date: <u>3-28-08</u> Sample Time: <u>1450</u>
Purge Method Baller-Type:Z Char Pumping Method: Other-Type:	Purge Volume Casing Diameter (D in inches): 2 Total Depth of Casing (TD in feet BTOC): 2.9.5 Water Level Depth (WL in feet BTOC): 4.12
Purge Volume Calculation: (29.5) - (4.12) X (2.1) ² X 3 TD (feet) WL (set) D (inches) # Vols Total Volume Generated (gallons): 12.5 Start Time: 1915 Stop Time: 1455	X 0.0408 = <u>\2.4</u> Purge Volume (gallons)
Field Parameter Measurements	·

Field Parameter Measurements							
Valunte	Temp	∙рЭН	Conductivity	Remarks			
1-1	15.94	6.97	6172	Clear			
4.2	16.87	7.02	6226	Clear			
8.4	17.06	7.05	6094	Slightly Claudy			
12.5	17.14	7.05	6067	Simily Cloudy			
	Valume 17 4.2	Volume Temp T-:7 15.74 4.2 16.87	Volume Temp pH 1-:+ 15:+4 6:97 4.2 36.87 7.02	Volume Temp pH Conductivity 1-:+ 15:44 6.97 6172 4.2 16.87 7.02 6226 8.4 17.06 7.05 6094			

Notes:

F

Temperature is measured in degrees Celsius

Volume units are in gallons

-

Conductivity units are in microslemens per centimeter (mS/cm)

Sampling Information							
Sample Point	Sample Designator	# of Containers	Preservatives	Anatysis/Comments			
MW-3	MW-3	6	2 mone /4 44	TPHQ, ~0 / BTEX, MIBE, TPHO			
	· ·						

Burns & McDonnell	GROUNDWATER SAMPLING FORM
Site Name: <u>Readway Erp</u> Projact Number: <u>49791</u> Recorded By: <u>B</u>	Well Number: Well Type: MonitoP Extraction Other: Date:3-2-8-08Sample Time:14000
Purge Method Bailer-Type: <u>Zinch</u> Pumping Method: <u></u> Other-Type:	Purge Volume Casing Diameter (D in inches): 7 Total Depth of Casing (TD in feet BTOC): 2.9 Water Level Depth (WL in feet BTOC): 3
Purge Volume Calculation: $(2!:4:-)$ $-(3:3:2)$ $X(2:-)$ $X = 3$ TD (feet) WL (feet) D (inches)# VolsTotal Volume Generated (gallons): 13Start Time: 13:25Stop Time: 14:05	_ X 0.0408 = <u>\728</u> Purge Volume (gallans)
J	

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Field Parameter Measurements						
₹īme	Volume	Témp	∙рн	Conductivity	Remarks	
1328	Frit	16.77	6.98	4697	Clear	
1336	4.2	17.56	7.04	4681	Slightly Cloudy, Lt Brown	
1343	8.5	1753	74	4376	Slightly Cloudy, Lt Brown Sightly Cloudy	
1352	12.8	17.42	744	4508	Stightly Cloudy	
i						
<u> </u>				1		

Notes:

Temperature is measured in degrees Celsius

Volume units are in gallons

Conductivity units are in microsiemens per contimeter (mS/cm)

Sampling Information						
Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments		
HW-4	MW-4	6	2 mone/4 He	A TPHD, no / BTEY, MTBE, TPH,		

Burns & McDonnell	GROUNDWATER SAMPLING FORM
Site Name: <u>Roadway Exp</u> Project Number: <u>48791</u> Recorded By:	Well Number: <u>NW-5</u> Well Type: Monitor Extraction Other: Date: <u>3-28-08</u> Sample Time: <u>1300</u>
Purge Method	Purge Volume
Bailer-Type: <u>2 inch</u>	Casing Diameter (D in inches):
Pumping Method:	Total Depth of Casing (TD in feet BTOC): $29-5$
Other-Type:	Water Level Depth (WL in feet BTOC):3. 23.
Purge Volume Calculation:	
(29.5)-(3.82) × (2-) ² × _	3 x 0.0408 = 12.57
TD (feet) WL (feet) D (inches) # Vols	Purge Volume (gallons)
Total Volume Generated (gallons): <u>13</u>	
Start Time: <u>1215</u> Stop Time: <u>1310</u>	2
Field Parameter Measurements	
Time Volume Temp pH Conductiv	ity Remarks

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Time	Volume	Тетр	· pH	Conductivity	Remarks
1226	Lit		6.89	7658	Clightly Cloudy
1236	4.2		6.96	7211	Coudy Gray
1243	8.4		6.98	6793	Cloudy, Cray
1252	12.6		7.00	6470	Clondy, Gray
					-

Notes:

Α.

Temperature is measured in degrees Celsius

Volume units are in gallons

-

Conductivity units are in microsiemens per centimeter (mS/cm)

Sampling Inform	ation			
Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
Mw-9	NW-5	6	ZNone/4HCl	TPH & mo / BTEX, ATBE, TPHA

APPENDIX B

CERTIFIED ANALYTICAL REPORT BURNS & MCDONNELL QA/QC REPORT



Laboratory Job Number 202319 ANALYTICAL REPORT

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

<u>Sample ID</u>	<u>Lab ID</u>
MW-2	202319-001
MW-3	202319-002
MW-4	202319-003
MW-5	202319-004
DUP-1	202319-005
TRIP	202319-006

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.

Project Manager

Signature:

Operations Manager

Date: 04/15/2008

Date: 04/15/2008

Signature:

NELAP # 01107CA



CASE NARRATIVE

Laboratory number:202319Client:Burns & McDonnellProject:48791Location:YRC-OaklandRequest Date:03/31/08Samples Received:03/31/08

This hardcopy data package contains sample and QC results for six water samples, requested for the above referenced project on 03/31/08. The samples were received cold and intact.

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

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.



		Total	Volatil	e Hydrocarb	ons		
Lab #: Client:	202319 Burns & McI	Oonnell		Location: Prep:		YRC-Oakland EPA 5030B	
Project#: Matrix:	48791			Analysis:		EPA 8015B 03/28/08	
Units:	Water ug/L			Sampled: Received:		03/28/08	
Diln Fac:	1.000			Analyzed:		04/10/08	
Batch#:	136950						
Field ID:	MW-2			Lab ID:		202319-001	
Type:	SAMPLE					202319-001	
۸n	alyte		Result		RL		
Gasoline C7-C		NE			50		
Gum		*DEC	Timita				
Trifluorotolue	rogate ene (FID)	97	Limits 69-140				
Bromofluorober	nzene (FID)	97	73-144				
Field ID:	MW-3			Lab ID:		202319-002	
Туре:	SAMPLE						
	alyte		Result		RL		
Gasoline C7-C	12	NI)		50		
Suri	rogate		Limits				
Trifluorotolue Bromofluorober	ene (FID) nzene (FID)	95 96	69-140 73-144				
Diomorracioner	lizelie (FID)	20	/5 111				
Field ID:	MW-4			Lab ID:		202319-003	
Field ID: Type:	MW-4 SAMPLE			Lab ID:		202319-003	
Туре:	SAMPLE		Result		RL	202319-003	
Туре:	SAMPLE alyte	NI	Result		RL 50	202319-003	
Type: Ana Gasoline C7-C	SAMPLE alyte 12	ND)			202319-003	
Type: Ana Gasoline C7-C Surr Trifluorotolue	SAMPLE alyte 12 rogate ene (FID)	NI %REC 99	Limits 69-140			202319-003	
Type: Ana Gasoline C7-C Surr	SAMPLE alyte 12 rogate ene (FID)	NI %REC	Limits			202319-003	
Type: Ana Gasoline C7-C Surr Trifluorotolue	SAMPLE alyte 12 rogate ene (FID)	NI %REC 99	Limits 69-140			202319-003	
Type: Ana Gasoline C7-C Surr Trifluorotolua Bromofluorober	SAMPLE alyte 12 rogate ene (FID) nzene (FID)	NI %REC 99	Limits 69-140				
Type: Ana Gasoline C7-C Surr Trifluorotolua Bromofluorober Field ID:	SAMPLE alyte 12 rogate ene (FID)	NI %REC 99	Limits 69-140			202319-003	
Type: Ana Gasoline C7-C Surr Trifluorotolue Bromofluorober Field ID: Type:	SAMPLE alyte 12 rogate ene (FID) nzene (FID) MW-5 SAMPLE	NI %REC 99 110	Limits 69-140 73-144	Lab ID:	50		
Type: Ana Gasoline C7-C2 Surr Trifluorotolua Bromofluorober Field ID: Type: Ana	SAMPLE alyte 12 rogate ene (FID) nzene (FID) MW-5 SAMPLE alyte	NI %REC 99 110	Limits 69-140 73-144 Result	Lab ID:	50 RL		
Type: Ana Gasoline C7-C2 Surr Trifluorotolua Bromofluorober Field ID: Type: Ana Gasoline C7-C2	SAMPLE alyte 12 rogate ene (FID) nzene (FID) MW-5 SAMPLE alyte 12	NE %REC 99 110 NE	Limits 69-140 73-144 Result	Lab ID:	50		
Type: Ana Gasoline C7-C2 Surr Trifluorotoluc Bromofluorober Field ID: Type: Ana Gasoline C7-C2 Surr	SAMPLE alyte 12 rogate ene (FID) nzene (FID) MW-5 SAMPLE alyte 12 rogate	NI %REC 99 110 NI NI	Limits 69-140 73-144 Result	Lab ID:	50 RL		
Type: Ana Gasoline C7-C2 Surr Trifluorotolue Bromofluorober Field ID: Type: Ana Gasoline C7-C2	SAMPLE alyte 12 rogate ene (FID) nzene (FID) MW-5 SAMPLE alyte 12 rogate ene (FID)	NE %REC 99 110 NE	Limits 69-140 73-144 Result	Lab ID:	50 RL		



		Total	Volatil	.e Hydrocar	bons	
Lab #: Client: Project#: Matrix: Units: Diln Fac: Batch#:	202319 Burns & McD 48791 Water ug/L 1.000 136950	onnell		Location: Prep: Analysis: Sampled: Received: Analyzed:		YRC-Oakland EPA 5030B EPA 8015B 03/28/08 03/31/08 04/10/08
Field ID: Type:	DUP-1 SAMPLE			Lab ID:		202319-005
Ar Gasoline C7-C	alyte 112	I ND	Result		RL 50	
Sur Trifluorotolu Bromofluorobe	r rogate lene (FID) enzene (FID)	%REC 98 101	Limits 69-140 73-144			
Field ID: Type:	TRIP SAMPLE			Lab ID:		202319-006
Ar Gasoline C7-C	alyte	I ND	Result		RL 50	
	r rogate lene (FID)	97 99	Limits 69-140 73-144		50	
Туре:	BLANK			Lab ID:		QC436998
Ar Gasoline C7-C	alyte	I ND	Result		RL 50	
					50	
Sur Trifluorotolu Bromofluorobe		% REC 95 93	Limits 69-140 73-144			



Batch QC Report

Total Volatile Hydrocarbons						
Lab #:	202319	Location:	YRC-Oakland			
Client:	Burns & McDonnell	Prep:	EPA 5030B			
Project#:	48791	Analysis:	EPA 8015B			
Matrix:	Water	Batch#:	136950			
Units:	ug/L	Analyzed:	04/10/08			
Diln Fac:	1.000					

Туре:	BS			Lab ID:		QC436999		
	Analyte		Spiked	R	esult	%REC	Limits	
Gasoline	C7-C12		3,000	2	,595	86	80-120	
	Surrogate	%REC	Limits					
Trifluor	otoluene (FID)	132	69-140					
Bromoflue	orobenzene (FID)	117	73-144					

Туре:	BSD			Lab ID:		QC437024			
Ana	lyte		Spiked		Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2		2,000		1,737	87	80-120	0	20
Surro	ogate	%REC	Limits						
Trifluorotoluer	ne (FID)	138	69-140						
Bromofluorobenz	zene (FID)	111	73-144						



	Total Extract	able Hydrocarbo	ns
Lab #: 202319 Client: Burns & Project#: 48791 Matrix: Water	& McDonnell	Location: Prep: Analysis: Sampled:	YRC-Oakland EPA 3520C EPA 8015B 03/28/08
Units: ug/L Diln Fac: 1.000 Batch#: 136775		Received: Prepared:	03/31/08 04/05/08
Field ID: MW-2 Type: SAMPLE		Lab ID: Cleanup Method:	
Analyte Diesel C10-C24 Diesel C10-C24 (SGCU) Motor Oil C24-C36 Motor Oil C24-C36 (SGCU	Result 820 Y 180 Y 1,000 ND	RL 50 50 300 300	Analyzed 04/10/08 04/11/08 04/10/08 04/11/08
Surrogate Hexacosane (SGCU) Hexacosane	%REC Limits 105 63-130 103 63-130	Analyzed 04/11/08 04/10/08	
Field ID: MW-3 Type: SAMPLE		Lab ID: Analyzed:	202319-002 04/10/08
Analyte Diesel C10-C24 Motor Oil C24-C36	Result ND ND	RL 50 300	
Surrogate Hexacosane	%REC Limits 112 63-130		
Hexacosane Field ID: MW-4 Type: SAMPLE	112 63-130	Lab ID: Analyzed:	202319-003 04/11/08
Hexacosane Field ID: MW-4			
Hexacosane Field ID: MW-4 Type: SAMPLE Analyte Diesel C10-C24	112 63-130 Result ND	Analyzed: <u>RL</u> 50	
Hexacosane Field ID: MW-4 Type: SAMPLE Malyte Diesel C10-C24 Motor Oil C24-C36 Surrogate	112 63-130 Result ND ND %REC Limits 103 63-130	Analyzed: <u>RL</u> 50	04/11/08
HexacosaneField ID:MW-4Type:SAMPLEAnalyteDiesel C10-C24Motor Oil C24-C36SurrogateHexacosaneField ID:MW-5Type:SAMPLE	112 63-130 Result ND ND %REC Limits 103 63-130 004 Result 290 Y ND ND	Analyzed: RL 50 300 Analyzed:	04/11/08
HexacosaneField ID:MW-4Type:SAMPLEDiesel C10-C24Motor Oil C24-C36SurrogateHexacosaneField ID:MW-5Type:SAMPLELab ID:202319-0Diesel C10-C24Diesel C10-C24Diesel C10-C24SGCU)Motor Oil C24-C36	112 63-130 Result ND ND %REC Limits 103 63-130 004 Result 290 Y ND ND	Analyzed: RL 50 300 Analyzed: Cleanup Method: RL 50 50 300	04/11/08

RL= Reporting Limit SGCU= Silica gel cleanup Page 1 of 2



		Total H	Extracta	able Hydroca:	rboi	ns	
Lab #: Client: Project#:	202319 Burns & McDo 48791	onnell		Location: Prep: Analysis:		YRC-Oakland EPA 3520C EPA 8015B	
Matrix: Units: Diln Fac: Batch#:	Water ug/L 1.000 136775			Sampled: Received: Prepared:		03/28/08 03/31/08 04/05/08	
Field ID: Type:	DUP-1 SAMPLE			Lab ID: Cleanup Metho	od:	202319-005 EPA 3630C	
Anal Diesel C10-C24 Diesel C10-C24 Motor Oil C24-C Motor Oil C24-C	- (SGCU) 236	ND	Result 640 Y 160 Y 620		RL 50 50 300 300	Analyzed 04/11/08 04/10/08 04/11/08 04/10/08	
Surro Hexacosane (SGC Hexacosane		% REC 94 118	Limits 63-130 63-130	Analyzed 04/10/08 04/11/08			
Type: Lab ID:	BLANK QC436267			Analyzed: Cleanup Metho	od:	04/11/08 EPA 3630C	
Anal Diesel C10-C24 Diesel C10-C24 Motor Oil C24-C Motor Oil C24-C	- (SGCU) 236	ND ND ND ND)		RL 50 50 300 300		
Surro Hexacosane (SGO Hexacosane		% REC 111 115	Limits 63-130 63-130				

Y= Sample exhibits chromatographic pattern which does not resemble standard ND= Not Detected RL= Reporting Limit SGCU= Silica gel cleanup Page 2 of 2



Batch QC Report

Total Extractable Hydrocarbons				
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 3520C	
Project#:	48791	Analysis:	EPA 8015B	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC436268	Batch#:	136775	
Matrix:	Water	Prepared:	04/05/08	
Units:	ug/L	Analyzed:	04/11/08	

Cleanup Method: EPA 3630C

Analyte		Spiked	Result	%REC	Limits
Diesel C10-C24 (SGCU)		2,500	1,996	80	61-120
Surrogate	%REC	Limits			
Hexacosane (SGCU)	105	63-130			

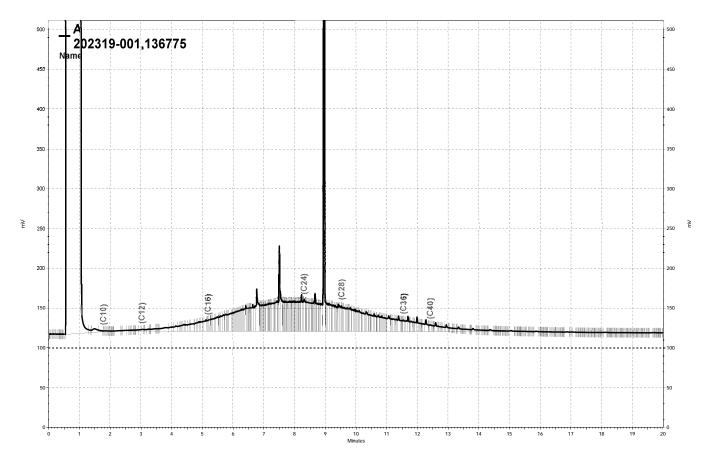


Batch QC Report

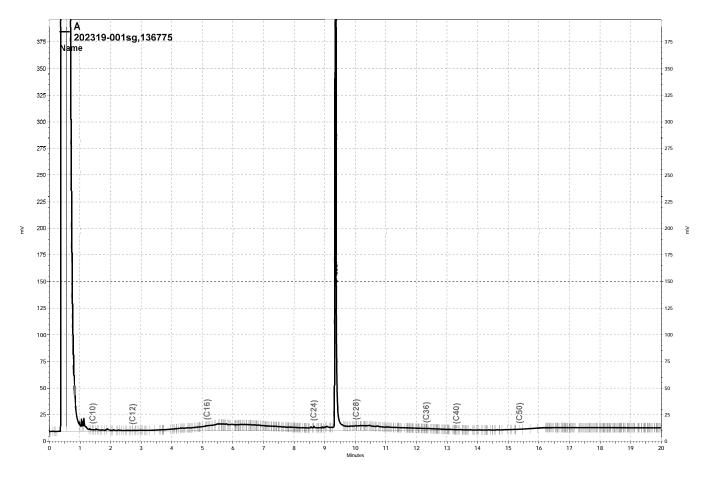
:				
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 3520C	
Project#:	48791	Analysis:	EPA 8015B	
Field ID:	ZZZZZZZZZ	Batch#:	136775	
MSS Lab ID:	202237-004	Sampled:	03/24/08	
Matrix:	Water	Received:	03/26/08	
Units:	ug/L	Prepared:	04/05/08	
Diln Fac:	1.000	Analyzed:	04/11/08	

Type: Lab ID:	MS QC436269			Cleanup Method:	EPA 3630C		
Diesel Cl0-	Analyte -C24 (SGCU)	MSS F	esult 15.89	Spiked 2,500	Result 1,554	%REC 62	Limits 58-126
Hexacosane	Surrogate (SGCU)	%REC 84	Limits 63-130				
Type: Lab ID:	MSD QC436270			Cleanup Method:	EPA 3630C		
Diesel C10-	Analyte -C24 (SGCU)		Spiked 2,500	Result 1,553	% REC	Limits 58-126	RPD Lim 0 31

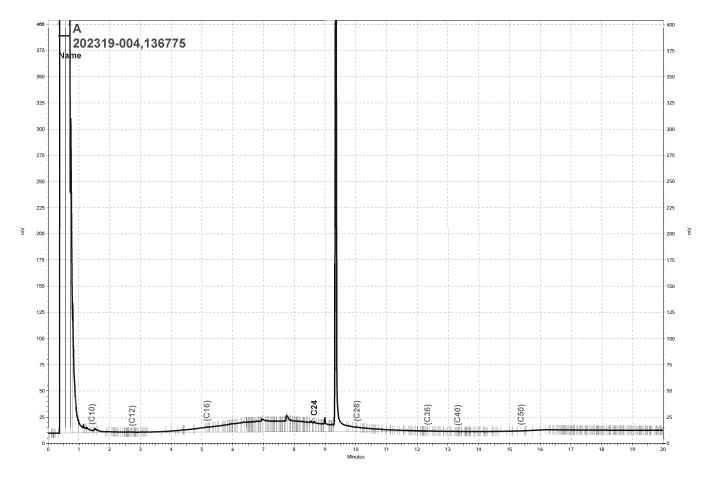
Surrogate	%REC	Limits
Hexacosane (SGCU)	83	63-130



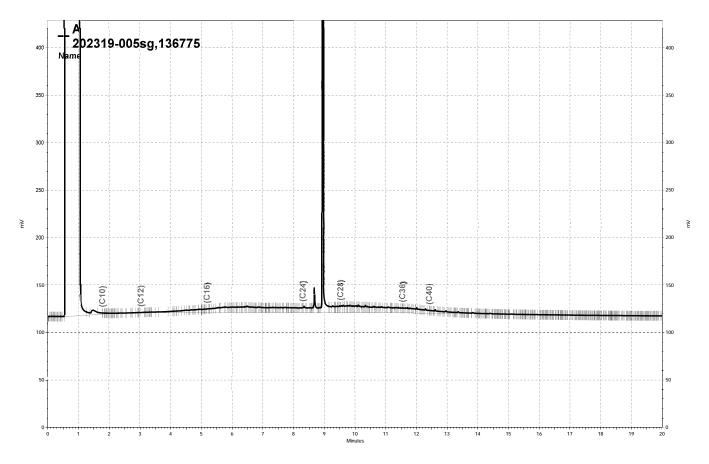
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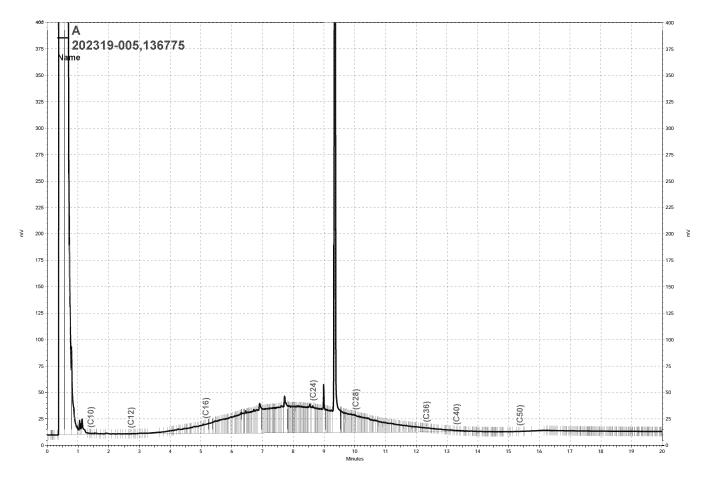
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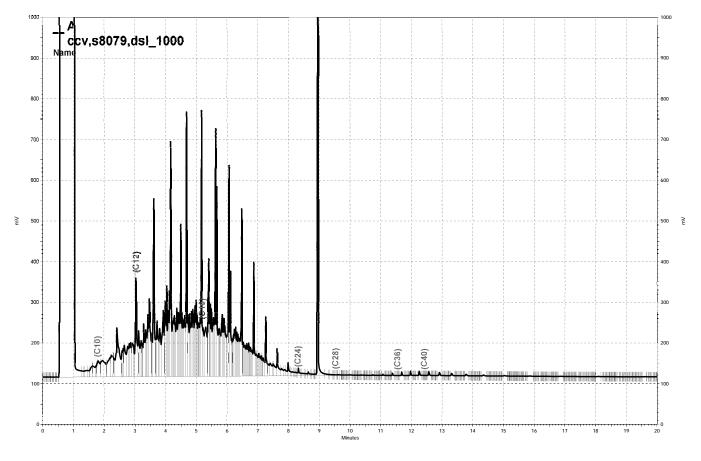
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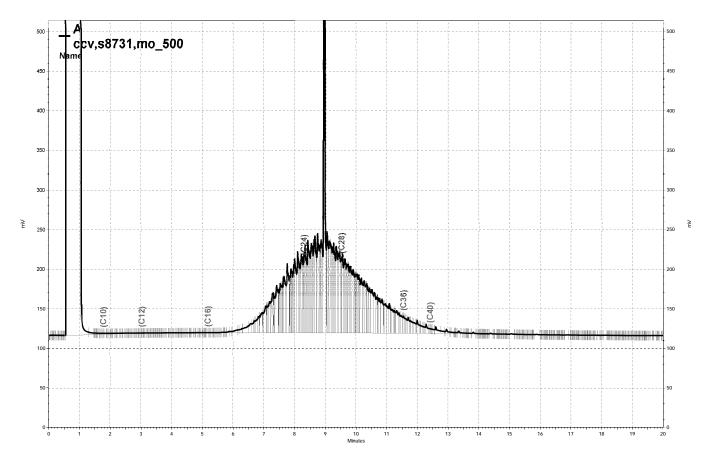
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	Purgeable	Aromatics by GC	/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	MW-2	Batch#:	136851	
Lab ID:	202319-001	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/08/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	113	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	116	80-120



	Purgeable	e Aromatics by GO	C/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	MW-3	Batch#:	136851	
Lab ID:	202319-002	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/08/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	115	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-120



	Purgeable	e Aromatics by GO	C/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	MW-4	Batch#:	136851	
Lab ID:	202319-003	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/08/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	115	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	117	80-120



	Purgeable	Aromatics by GC	/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	MW-5	Batch#:	136851	
Lab ID:	202319-004	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/08/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	117	76-138
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-120



	Purgeable	Aromatics by GC	/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	DUP-1	Batch#:	136851	
Lab ID:	202319-005	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/09/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	116	76-138
Toluene-d8	104	80-120
Bromofluorobenzene	114	80-120



	Purgeable	Aromatics by GC	/MS	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Field ID:	TRIP	Batch#:	136851	
Lab ID:	202319-006	Sampled:	03/28/08	
Matrix:	Water	Received:	03/31/08	
Units:	ug/L	Analyzed:	04/08/08	
Diln Fac:	1.000			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

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



Batch QC Report

	Purgeable	Aromatics by GC	:/ms	
Lab #:	202319	Location:	YRC-Oakland	
Client:	Burns & McDonnell	Prep:	EPA 5030B	
Project#:	48791	Analysis:	EPA 8260B	
Туре:	BLANK	Diln Fac:	1.000	
Lab ID:	QC436581	Batch#:	136851	
Matrix:	Water	Analyzed:	04/08/08	
Units:	ug/L			

Analyte	Result	RL	
MTBE	ND	0.5	
Benzene	ND	0.5	
Toluene	ND	0.5	
Ethylbenzene	ND	0.5	
m,p-Xylenes o-Xylene	ND	0.5	
o-Xylene	ND	0.5	

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	76-138
Toluene-d8	103	80-120
Bromofluorobenzene	113	80-120



Batch QC Report

	Purgeable Aro	matics by GC/M	S
Lab #:	202319	Location:	YRC-Oakland
Client:	Burns & McDonnell	Prep:	EPA 5030B
Project#:	48791	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	136851
Units:	ug/L	Analyzed:	04/08/08
Diln Fac:	1.000		

Type:

BS

Lab ID: QC436582

Analyte	Spiked	Result	%REC	Limits
MTBE	12.50	12.57	101	60-136
Benzene	12.50	12.70	102	80-120
Toluene	12.50	12.65	101	80-121
Ethylbenzene	12.50	12.65	101	80-124
m,p-Xylenes	25.00	24.64	99	80-128
o-Xylene	12.50	11.97	96	80-123

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	108	76-138
Toluene-d8	102	80-120
Bromofluorobenzene	112	80-120

Type:

BSD

Lab ID:

QC436583

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	12.50	12.49	100	60-136	1	20
Benzene	12.50	13.27	106	80-120	4	20
Toluene	12.50	12.58	101	80-121	1	20
Ethylbenzene	12.50	12.89	103	80-124	2	20
m,p-Xylenes	25.00	24.55	98	80-128	0	20
o-Xylene	12.50	12.14	97	80-123	1	20

Surrogate	%REC	Limits	
1,2-Dichloroethane-d4	111	76-138	
Toluene-d8	104	80-120	
Bromofluorobenzene	110	80-120	

Burns & McDonnell				Request	for Che	mical A	nalysis	and Ch	ain o	f Custo	ody R	ecord				2	0	2	319	
	onnell Engineer		Labora	tory: Cu	rtis & Torr	npkins													2808	
393 E. Grand Avenue, Suite J Categorials () So. San Francisco, CA 94080 Address: 2323 5th Street								⊢	Lab. Reference No. or Episode No.:											
Phone: (650) 871-2926 Fax: (650) 871-2653 Pbratton @bn/n>med City/State/Zip: Berkeley, CA													/	/	12	$\delta \delta$	7			
Attention:	pencereb	unsmed.C	~Teleph	one: (51	0) 486-09							<u>م</u>		ହ /	/ 	γ'	Ý.			
Project Numb	per: 4879	1						San	nple T	уре		Number of Containers	Analus	$\frac{3}{c}$	is a	Ľ		Y /		
Client Name:	VRC-O	AKLANT)				Matrix						₹/	Ì	1 ²	7.	5/^	\mathbf{N}		
	Client Name: VRC- OAKLAND Sample Number Sar				Sample (in fe			nple ected	bir	lid	Gas,		1	7	Ý,	\downarrow	r	$^{\prime}$		
Group or SMWU Name	Sample Point	Sample Designator	Round	Year	From	То	Date	Time	Liquid	Solid	ö		A.	4	6	7		\square	Remarks	
- 1	MW-2		Ist	2008			3-28		X				XX	: 7	\times				IF TPH det	ected
-2	MW-3		1	1			1		×				××	. -	*	N			rerun after	SGCU
-3	MW-4								×			7	(X	: ;	\star		\backslash		EPA 3630	
-4	MW-5								x			7	< ×	:	\times			N		
-5	Pup-1							/	X			2	× >	< \	\times					
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forfas						TP # TOGOO 10 Z 107 Ice Present in Container: Temperature Upon Receipt:														
Relinquished	By (signature):	Date 3/-	<i>l</i> . h		(signature):	\sim		Date/Tir 3/31/08		Yes [N	o 🗌			ier	npei	atur	e Upon Receipt:	
Relinquished	By (signature):			Received By	(signature):	:		Date/Tir	ne	Labor	atory	Comm	ents:							
2.											int	ait i	m	150	- 1	010	l r	26	051804 Form WCD-	KC1-SDO-C&1

COOLER RECEIPT CHECKLIST

.



Login # 202319 Date Received 3/31/08 Number of coolers 1 Client Burns & McDonnell Project YRC-OAKLAND
Date Opened 3/31 By (print) KING((sign) HUDDer Compared in by (print) By (print) (sign) HUDDer (sign)
1. Did cooler come with a shipping slip (airbill, etc)?
2A. Were custody seals present? □ YES (circle) on cooler on samples Image: Date
 3. Were custody papers dry and intact when received?
🗌 Bubble Wrap 🛛 Foam blocks 📈 Bags 🗌 None
Cloth material Cardboard Styrofoam Paper towels 7. If required, was sufficient ice used? Samples should be < or = 6°C
Type of ice used: X WET \square BLUE \square NONE Temp(°C) 1.3°
SAMPLES RECEIVED ON ICE DIRECTLY FROM FIELD. COOLING PROCESS HAD BEGUN.
8. Were soil Encore sampling devices present?
If YES, what time were they transferred to freezer?
10. Are samples in the appropriate containers for indicated tests?
11. Are sample labels present, in good condition and complete?
12. Do the sample labels agree with custody papers? NO 13. Was sufficient amount of sample sent for tests requested? NO
13. Was sufficient amount of sample sent for tests requested? NO 14. Are the samples appropriately preserved? NO
15. Are bubbles absent in VOA samples?
16. Was the client contacted concerning this sample delivery?
If YES, Who was called? By Date:
COMMENTS

SOP Volume: Client Services Section: 1.1.2 Page 1 of 1 Rev: 4 Number 1 of 3 Effective: 06 March 2008 F:\qc\forms\checklists\Cooler Receipt Checklist_rv4.doc

- Date: April 15, 2008
- To: Patrick Bratton
- From: Michelle Beckman
- Re: QA/QC Review of Analytical Data Yellow Freight – Oakland 1st Quarter Groundwater Samples Project Number (48791 – Yellow Freight - Oakland)

Groundwater samples were collected on March 28, 2007. 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	202319	03/28/2008	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. <u>Chain-of-Custody</u> No problems were noted with the chain-of-custody (COC) forms.
- 2. <u>Requested Analyses Completed</u> All samples were analyzed as requested on the COCs.
- 3. <u>Holding Times</u> All samples were extracted and/or analyzed within the method holding times.
- 4. <u>Sample Preservation</u> No problems were noted with sample preservation.
- 5. <u>Laboratory Method Blanks</u> 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.

Memorandum April 15, 2008 Page 2

- 6. <u>Trip Blanks</u> Trip blank results were reviewed to determine the potential for VOC sample cross contamination due to sampling, handling, and shipping. No detections of target compounds were noted in the trip blank.
- <u>Surrogates</u> 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. <u>Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)</u> – 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. <u>Matrix Spike and Matrix Spike Duplicate (MS/MSD)</u> 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.
 - MS/MSD results were provided for the TPH-diesel analyses. The laboratory performed the MS/MSD analyses using a non-project sample, and the MS/MSD results were within QC limits.
 - MS/MSD results were not provided for the VOC or TPH-gasoline QC Batches. Analytical accuracy and precision for these analyses were assessed based on the associated surrogate and BS/BSD results. All results were within control limits and no qualifiers were added based on this omission.
- 10. <u>Field Duplicate Results</u> Table 1 provides a summary of the field duplicate results. The following field duplicate sample was collected:
 - MW-2 and Dup-1: The RPD between the TPH-diesel results exceeded the QC limit, and the TPH-motor oil results failed the sensitivity test. Because all associated QC results

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were within QC limits and neither exceedance was greater than two times the QC limit, no qualifiers were added based on these field duplicate results.

- 11. <u>Detection and Quantitation Limits</u> No dilutions were required to account for matrix interference and/or high concentrations of target analytes.
- 12. <u>Other</u> 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 Samples MW-2, MW-5, and Dup-1 to indicate that the samples exhibited a chromatographic pattern that does not resemble the standard.
- 13. <u>Conclusion</u> 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-2 and Dup-1

Table 1 Field Duplicate Results - MW-2 and Dup-1 Yellow Freight - Oakland

Labo	MW-2 3/28/2008 202319-001		Dup-1 3/28/2008 202319-00		Meets Criteria? (Yes/No)	
Parameter	Units					-
Volatile Organic Compou	inds					
All VOCs	µg/L	Not Detected		Not Detecte	d	Yes
Total Petroleum Hydroca	rbons					•
Gasoline C7-C12	µg/L	50	U	50	U	Yes
Diesel C10-C24	µg/L	820	Y	640	Υ	No (RPD=25%)
Diesel C10-C24 (SGCU)	µg/L	180	Y	160	Y	Yes
Motor Oil C24-C36	µg/L	1,000		620		No, STF

 μ g/L = micrograms per liter

RPD = Relative percent difference

SGCU = Silica gel cleanup

STF = Sensitivity test failure

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

Y = Sample exhibits chomatographic pattern that does not resemble standard.