April 27, 2009

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

Subject: First Quarter 2009 Groundwater Monitoring and Shallow Well Installation Report
YRC, 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 and the installation of three shallow groundwater monitoring wells, conducted in the first quarter of 2009 at the YRC Inc. (formerly Roadway Express, Inc.) truck terminal located at 1708 Wood Street, Oakland, California (Site). Figure 1 shows the location of the Site. This work was performed in response to Alameda County Environmental Health Services letter dated May 29, 2008 and described in the Burns & McDonnell *Shallow Monitoring Well Installation Workplan* submitted November 21, 2008.

1.0 Site Description and Location

The Site is currently operating as a trucking facility, which includes a terminal, loading dock, warehouse, business office, with the perimeter 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 inter-bedded with silt and sand layers to a depth of approximately 8 to 10 feet below ground surface (bgs); this is overlying a 5 to 10 foot layer of blackish-brown to gray, soft, clay layer with a distinct peat layer and high organics content; approximately 5 to 10 feet of brown, soft, wet, silty sand and clay 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.

The Site's hydrology is divided into two separate groundwater zones, a shallow water zone and a deeper water zone. The shallow zone is made up of 1 foot thick sand and silt layers extending from the near surface to approximately 8 to 10 feet bgs. This zone appears to be under semi-confined conditions with a clay layer above and below it. The deeper zone is made up of silty and sandy layers which grade into medium and coarse sand to a depth of approximately 30 feet. This zone also appears to be under confined conditions. The two water zones are separated by a 5 to 10 foot thick layer of soft clay with a characteristic peat layer and high organic content, designated as bay mud.

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 Shallow Monitoring Well Installation

In order to determine the groundwater flow direction and to monitor the impacts in the shallow water zone, three new monitoring wells (MW-6, MW-7, and MW-8), screened in the shallow water zone, were installed in the central-eastern portion of the Site surrounding the location of the former USTs (Figure 3).

4.1 Permitting and Utility Clearance

Burns & McDonnell obtained boring and well installation permits from the Alameda County Public Works Agency (ACPWA) prior to conducting field activities. A copy of the final permit is included as Appendix A. Prior to drilling, all proposed boring locations were cleared for subsurface utilities. Burns & McDonnell notified Underground Service Alert (USA) of the proposed boring activities and determined that no local utilities were present in the area. Additionally, Burns & McDonnell retained a subsurface geophysical company to verify that no piping, utilities, or other subsurface obstructions were in the area of each proposed drilling location.

4.2 Drilling and Soil Sampling

On February 18, 2009, an experienced Burns & McDonnell field geologist, under the supervision of a California Professional Geologist, directed RSI Drilling (RSI), an experienced C-57 licensed contractor, in drilling and well construction activities. RSI used a Geoprobe 6600 rig to advance soil borings to an approximate depth of 15 feet bgs. Borings were advanced in two foot intervals to ensure that the borings did not extend through the bay mud layer and into the deeper water zone.

Soil cores were screened with a photo ionization detector (PID) for volatile organic compounds (VOCs) and recorded on boring logs. A soil sample was taken from immediately above the first encountered groundwater and submitted to Accutest Laboratories for analysis. Samples were labeled, designated by boring number, documented on a Chain-of-Custody form, and placed on ice in a cooler for transport to the analytical laboratory.

A 4-inch diameter Geoprobe mounted direct push coring rod was used to ream out the boreholes for completing the borings as monitoring wells. During drilling activities, soil cores were retained for visual classification according to the Unified Soil Classification System. Lithologic descriptions and drilling observations were recorded on boring logs and are included as Appendix B.

4.3 Well Installation

Burns & McDonnell supervised the construction of a monitoring well in each of the boreholes. Monitoring wells were constructed with clean, flush-threaded, 1-inch diameter schedule 40 PVC well materials. The well screen, with 0.01-inch machine slotted perforations, extends from the bottom of each boring at 9.5 feet to 4.5 feet below the ground surface. Blank casing was coupled to the screen and extend to near ground surface. A filter pack of Monterey #3 sand, was extend from the bottom of each boring to one-foot above the screened interval. The filter pack was sealed by a one-foot layer of hydrated bentonite pellets. The remaining annular space was filled with cement and a traffic rated, tamper-resistant box, was concreted in place over the wellhead. The new wells were designated MW-6, MW-7, and MW-8.

4.4 Wellhead Survey and Development

Burns & McDonnell retained Luk and Associates, a California Licensed Land Surveyor, to survey the location and elevation of the new wells relative to MSL, in accordance with the California Geotracker requirements. The Surveying report is included as Appendix C.

On February 24, 2009, the new monitoring wells were developed by a combination of surging and pumping with pre-cleaned field equipment. Groundwater parameters (temperature, pH, and specific conductance) were measured using a flow-through cell and recorded on the Well Development Logs (Appendix D). Water was removed from each of the wells until groundwater parameters stabilized and the well was relatively free of sediment. The development water was temporarily stored on-Site in labeled 55-gallon steel drums, pending disposal at an appropriate recycling facility.

5.0 Groundwater Monitoring

On March 6, 2009, Burns & McDonnell gauged depth-to-water (DTW) and collected groundwater samples from the Site's existing groundwater monitoring wells: MW-3 through MW-8 (Figures 3 and 4).

5.1 Depth to Water

Prior to collecting groundwater samples, 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 E). The interface probe was cleaned between each well with an Alconox water solution and rinsed with deionized water.

5.2 Well Sampling

The monitoring wells screening in the deep water zone (MW-3, MW-4, and MW-5) were purged with new, disposable polyethylene bailers. Groundwater parameters (temperature, pH, and specific conductance) were measured and recorded on Groundwater Sampling Forms (Appendix E). 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.

Because the shallow wells (MW-6, MW-7, and MW-8) were screened in relatively thin water bearing zones and accurate boring logs were available showing the depth of the sandy layers, these wells were purged and sampled using low-flow sampling methods. Clean, new polyethylene tubing was lowered to a depth that matches the shallow sand layer based on the soil borings logged during the installation of the wells. A peristaltic pump was used to maintain a flow rate of approximately 0.5 Liters per minute (L/min). Water levels were monitored and recorded to ensure minimal drawn down. Groundwater parameters (temperature, pH, and specific conductance) were measured using a flow-through cell and recorded on Groundwater Sampling Forms (Appendix E). Once a minimum of 1 Liter was purged and groundwater parameters stabilized, groundwater samples were collected in laboratory supplied sampling bottles while keeping the flow rate constant.

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 Accutest Laboratories Inc., a California State Certified Laboratory.

6.0 Groundwater Monitoring Results

6.1 Groundwater Flow Direction and Gradient

On March 6, 2009, static groundwater was observed in the Site's shallow groundwater monitoring wells, at depths ranging from 0.42 feet (MW-7) to 0.60 feet (MW-6) below the TOC, with groundwater elevations ranging from 9.37 feet (MW-8) to 9.53 feet (MW-6) above MSL.

Static groundwater in the Site's deep groundwater monitoring wells was observed at depths ranging from 2.90 feet (MW-4) to 3.68 feet (MW-3) below the TOC, with groundwater elevations ranging from 6.43 feet (MW-3) to 6.65 feet (MW-5) above MSL.

Burns & McDonnell used gauging and well casing elevation data to calculate groundwater elevations. For this sampling event, there is an average difference of 3.2 feet between the shallow groundwater zone elevations and the deep groundwater zone evaluations. In the area of the removed USTs, the flow direction in the shallow groundwater zone was to the east with a gradient of approximately 0.00325 feet per foot (ft/ft). The flow direction in the deep groundwater zone was to the west-northwest with a gradient of approximately 0.0030 ft/ft.

Groundwater elevations are summarized in Table 2 and presented on Figures 3 and 4.

6.2 Groundwater Analytical Results

Samples were analyzed for Total Petroleum Hydrocarbons (TPH) in the Diesel (TPH-d) and Motor Oil (TPH-mo) ranges using Environmental Protection Agency (EPA) Method 8015M.

Silica gel cleanup, EPA Method 3630C, was used prior to analysis for TPH-d and TPH-mo, to remove naturally occurring organic compounds and are flagged with an 'SG' qualifier in Table 2. None of the samples submitted for analysis had concentrations at or above the method detection limit for TPH-d or TPH-mo.

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

Current and historical groundwater data for all Site monitoring wells is presented in Table 2. Copies of the certified analytical reports and Chain-of-Custody documentation are included as Appendix F.

7.0 Soil Analytical Results

Soil samples were analyzed for TPH-d and TPH-mo using EPA Method 8015M. Silica gel cleanup, EPA Method 3630C, was used prior to analysis for TPH-d and TPH-mo, to remove naturally occurring organic compounds and are flagged with an '*' qualifier in Table 3. None of the soil samples submitted for analysis had concentrations at or above the detection limit for TPH-d or TPH-mo.

Soil samples were also analyzed for TPH-g, BTEX, and MTBE using EPA Method 8260B. None of the soil samples submitted for analysis had concentrations above the method detection limits for TPH-g, BTEX, or MTBE.

Current and historical soil data is presented in Table 3. Copies of the certified analytical reports and Chain-of-Custody documentation are included as Appendix F.

8.0 Summary

Soil samples from the soil borings did not show any petroleum impacts. Groundwater samples from both the monitoring wells screened in the shallow and deep water zones did not show any petroleum impacts above laboratory detection limits. Quarterly groundwater sampling will continue to monitor for potential impacts to the shallow and deep water zones. The next quarterly groundwater monitoring event is scheduled for June 2009.

9.0 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

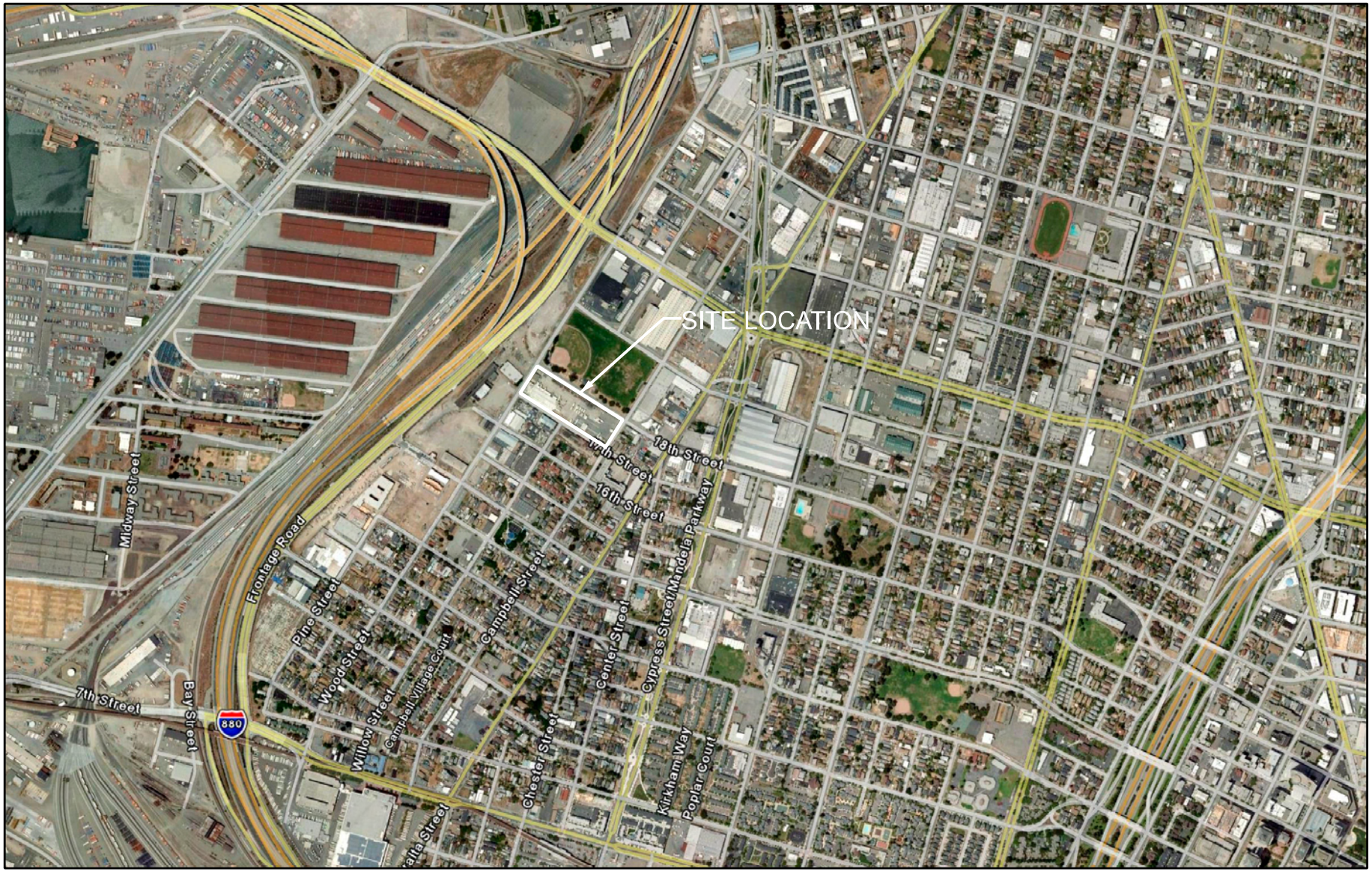
Attachments:

Figure 1 – Site Location Map
Figure 2 – Site Map
Figure 3 – Groundwater Elevations Shallow Zone First Quarter 2009 – Former USTs Area
Figure 4 – Groundwater Elevations Deep Zone First Quarter 2009 – Former USTs Area

Table 1: Well Construction Details
Table 2: Monitoring Well Groundwater Summary
Table 3: Historical Soil Sample Summary

Appendix A – Alameda County Public Works Agency – Water Resources Well Permit
Appendix B – Boring Logs
Appendix C – Monitoring Well Survey Report
Appendix D – Well Development Logs
Appendix E – Groundwater Sampling Forms
Appendix F – Laboratory Analytical Reports

FIGURES



Burns & McDonnell
SINCE 1898

Figure 1

SITE LOCATION MAP
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

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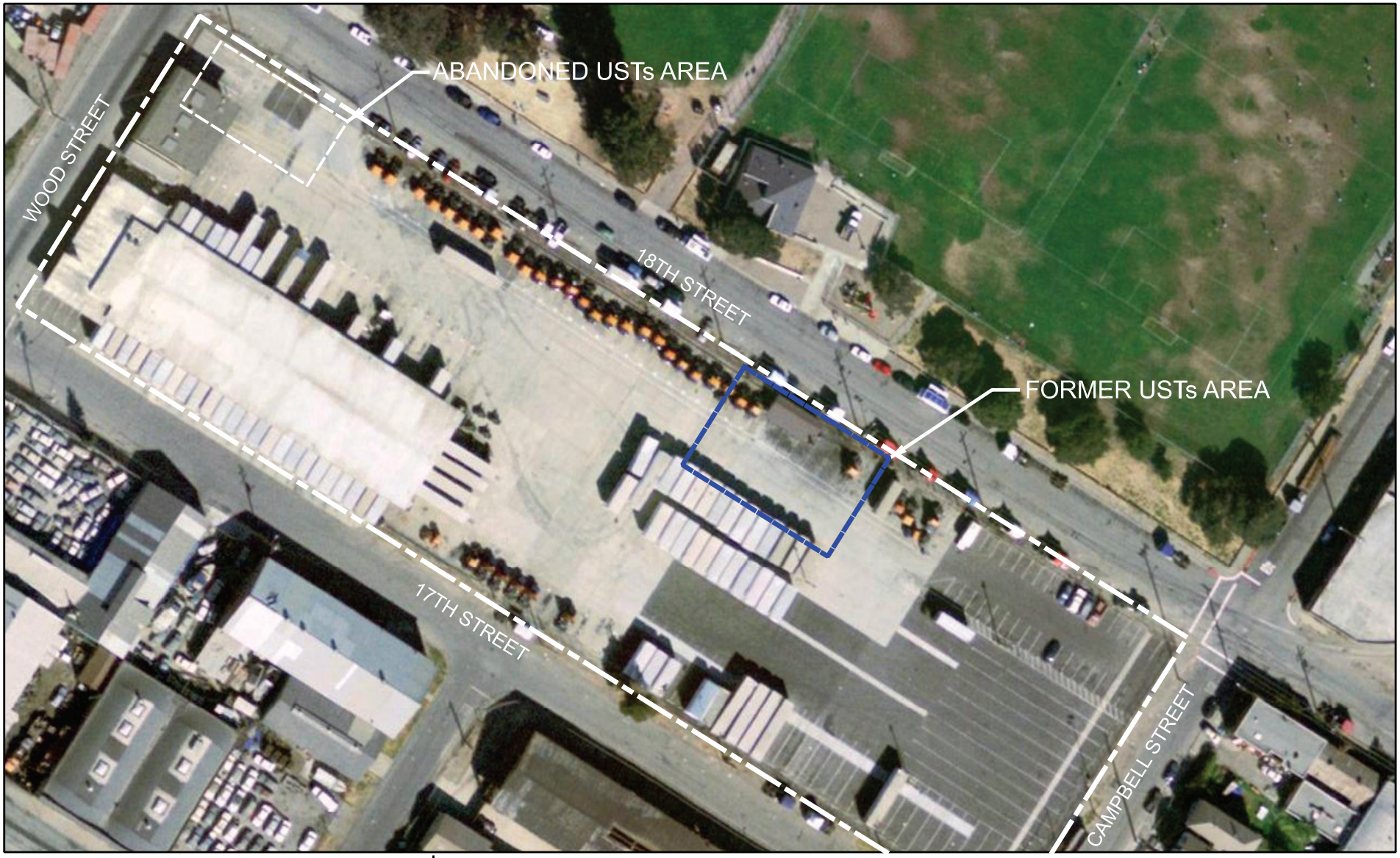
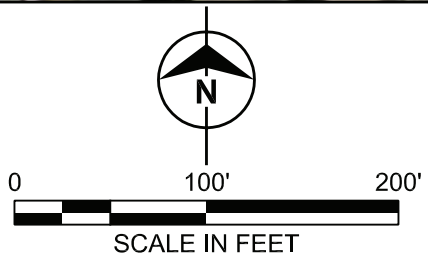
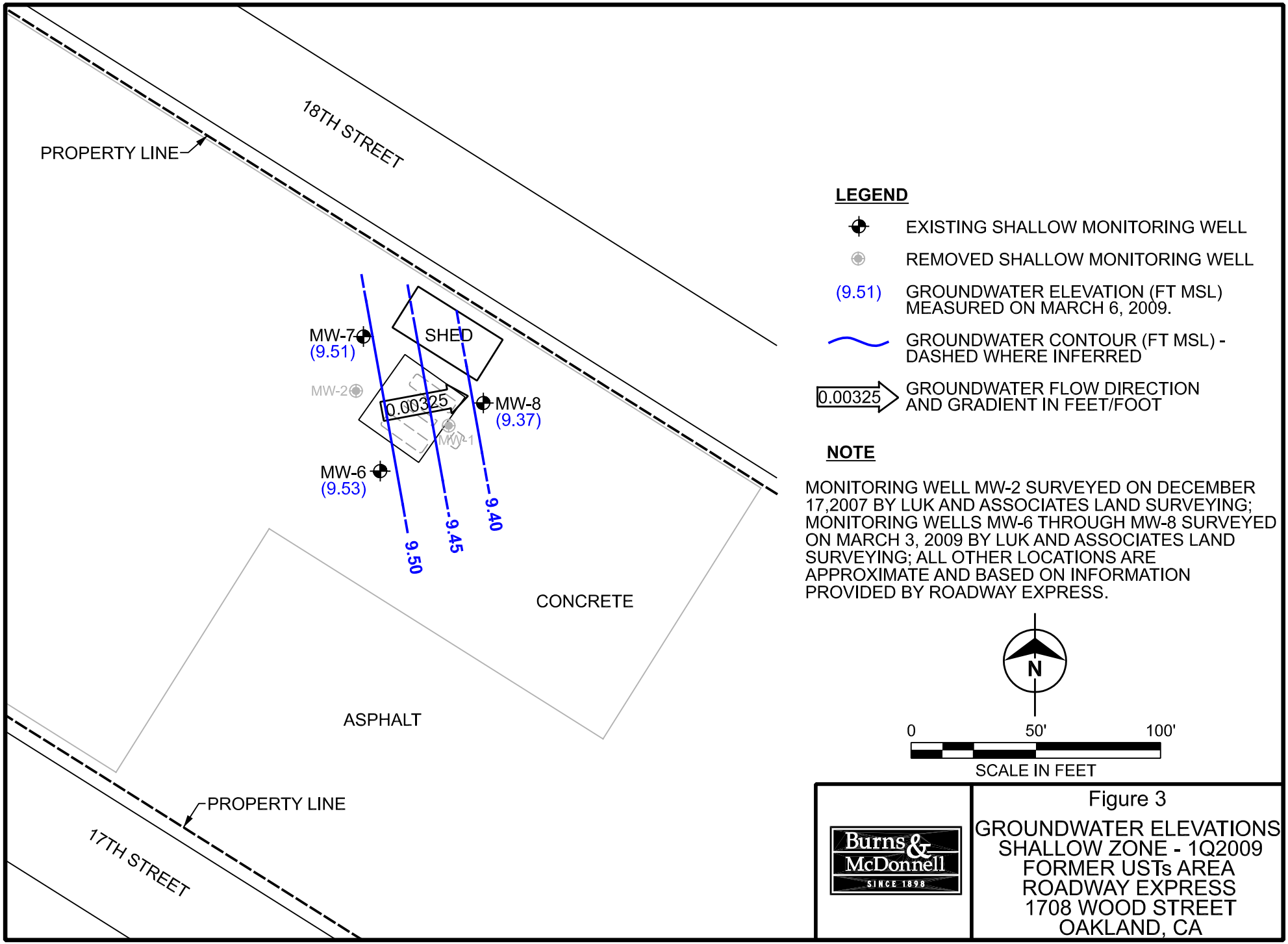




Burns & McDonnell
SINCE 1898

Figure 2

SITE MAP
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA



LEGEND

- EXISTING SHALLOW MONITORING WELL
- REMOVED SHALLOW MONITORING WELL
- (9.51) GROUNDWATER ELEVATION (FT MSL) MEASURED ON MARCH 6, 2009.
- GROUNDWATER CONTOUR (FT MSL) - DASHED WHERE INFERRED
- 0.00325 GROUNDWATER FLOW DIRECTION AND GRADIENT IN FEET/FOOT

NOTE

MONITORING WELL MW-2 SURVEYED ON DECEMBER 17,2007 BY LUK AND ASSOCIATES LAND SURVEYING; MONITORING WELLS MW-6 THROUGH MW-8 SURVEYED ON MARCH 3, 2009 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
SHALLOW ZONE - 1Q2009
FORMER USTs AREA
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

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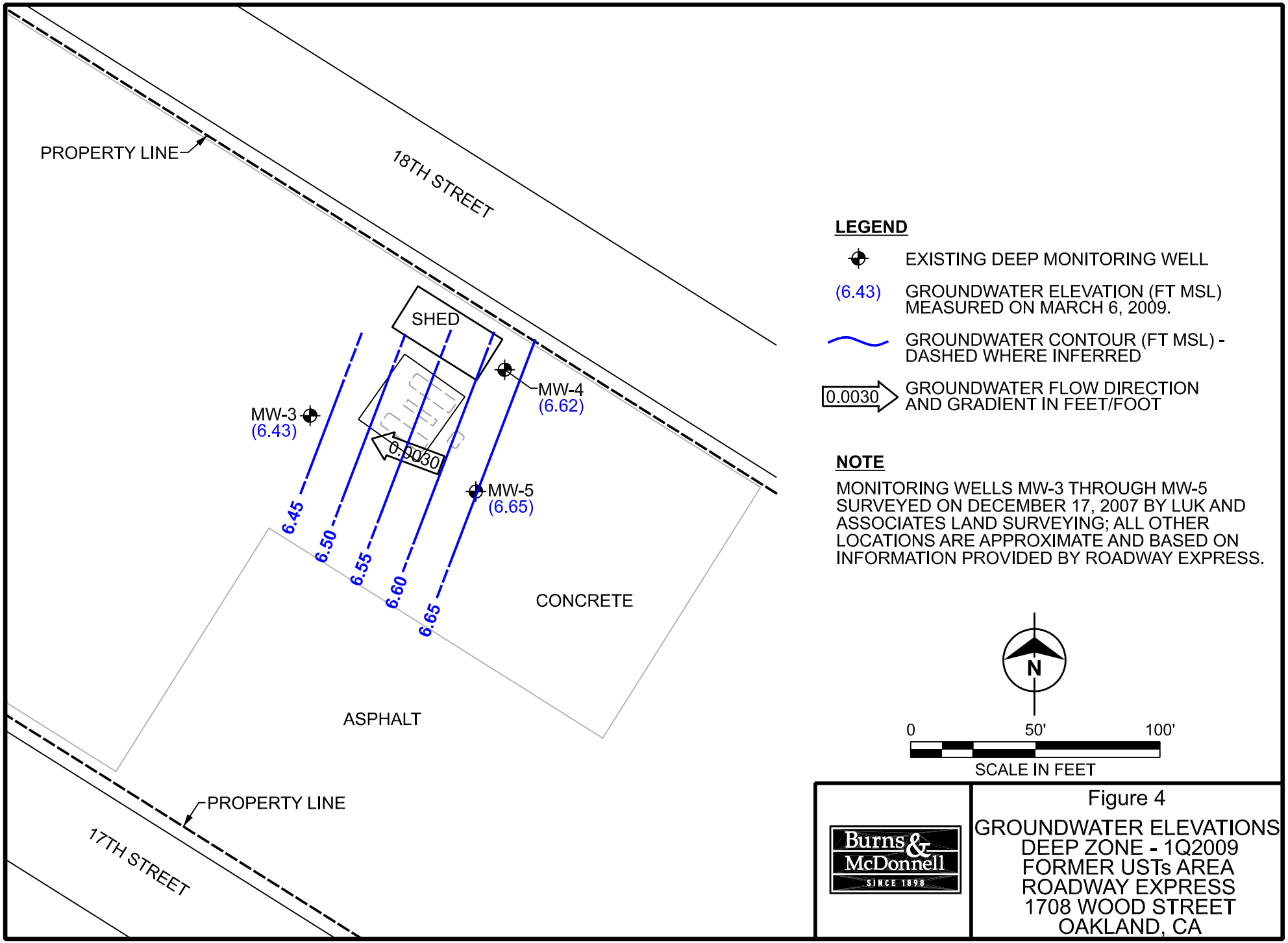

LEGEND

- EXISTING DEEP MONITORING WELL
- (6.43) GROUNDWATER ELEVATION (FT MSL) MEASURED ON MARCH 6, 2009.
- GROUNDWATER CONTOUR (FT MSL) - DASHED WHERE INFERRED
- 0.0030 GROUNDWATER FLOW DIRECTION AND GRADIENT IN FEET/FOOT

NOTE

MONITORING WELLS MW-3 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 4

GROUNDWATER ELEVATIONS
DEEP ZONE - 1Q2009
FORMER USTs AREA
ROADWAY EXPRESS
1708 WOOD STREET
OAKLAND, CA

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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-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

Notes:

- Construction depth and screened intervals for MW-3, MW-4, and MW-5 based on boring logs located in the *Additional Groundwater Investigation Report by One Environment, 2001*
- Casing elevation for MW-2, MW-3, MW-4, and MW-5 resurveyed by Luk and Associates on December 20, 2007
- Casing elevation for MW-6, MW-7, and MW-8 surveyed by Luk and Associates on March 3, 2009

- In August 2008, Burns & McDonnell removed monitoiring 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.

TABLE 2

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

Well ID	Aquifer Zone	Date	Depth to Water (ft below Top of Casing)	Groundwater Elevation (ft MSL)	TPHd (µg/L)	TPHg (µg/L)	TPHmo (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	Total Oil & Grease (mg/L)	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)
MW-1	Shallow	24-Jul-97	---	---	1,200	50 U	---	---	---	---	---	1.4	---	---
Well Abandoned August 2008														
MW-2	Shallow	24-Jul-97	---	---	940	50 U	---	---	---	---	---	6.2	---	---
MW-2	Shallow	17-Dec-07	1.56	8.33	140	---	---	---	---	---	---	---	---	---
MW-2	Shallow	28-Mar-08	1.03	8.86	180 BI, SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	---	0.5 U
MW-2 (DUP-1)	Shallow	28-Mar-08	---	---	160 BI, SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	---	0.5 U
MW-2	Shallow	02-Jun-08	1.44	8.45	---	---	---	---	---	---	---	---	---	---
MW-2	Shallow	03-Jun-08	---	---	120 SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-2 (DUP-1)	Shallow	03-Jun-08	---	---	150 SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
Well Abandoned August 2008														
MW-3	Deep	22-Mar-07	4.04	6.07	50 U	50 U	---	---	---	---	---	4.75 U	---	0.5 U
MW-3	Deep	28-Mar-08	4.12	5.99	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	---	0.5 U
MW-3	Deep	02-Jun-08	4.35	5.76	---	---	---	---	---	---	---	---	---	---
MW-3	Deep	03-Jun-08	---	---	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-3	Deep	10-Sep-08	4.48	5.63	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-3	Deep	29-Dec-08	4.42	5.69	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-3 (DUP-1)	Deep	29-Dec-08	---	---	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-3	Deep	06-Mar-09	3.68	6.43	95 U	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-4	Deep	22-Mar-07	3.25	6.27	50 U	50 U	---	---	---	---	---	4.75 U	---	0.5 U
MW-4	Deep	28-Mar-08	3.32	6.2	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	---	0.5 U
MW-4	Deep	02-Jun-08	3.56	5.96	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-4	Deep	10-Sep-08	3.91	5.61	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-4	Deep	29-Dec-08	3.71	5.81	50 U	50 U	300 U	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-4	Deep	06-Mar-09	2.90	6.62	95 U	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-5	Deep	22-Mar-07	3.73	6.24	500 BI	50 U	---	---	---	---	---	4.85 U	---	0.5 U
MW-5 (DUP-1)	Deep	22-Mar-07	---	---	710 BI	50 U	---	---	---	---	---	4.75 U	---	0.5 U
MW-5	Deep	28-Mar-08	3.82	6.15	50 U,SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	---	0.5 U
MW-5	Deep	02-Jun-08	4.05	5.92	50 U,SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-5	Deep	10-Sep-08	3.45	6.52	50 U,SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-5 (DUP-1)	Deep	10-Sep-08	---	---	50 U,SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-5	Deep	29-Dec-08	4.19	5.78	50 U,SG	50 U	300 U,SG	0.5 U	0.5 U	0.5 U	---	---	2 U	---
MW-5	Deep	06-Mar-09	3.32	6.65	95 U	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-5 (DUP-1)	Deep	06-Mar-09	---	---	95 U	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-6	Shallow	06-Mar-09	0.60	9.53	95 U	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-7	Shallow	06-Mar-09	0.42	9.51	95 U,SG	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U
MW-8	Shallow	06-Mar-09	0.46	9.37	96 U,SG	50 U	190 U	1 U	1 U	1 U	2 U	---	---	1 U

Notes:
U = Sample not detected above detection limit
µg/L = Micrograms per liter
--- = Not sampled/analyzed for this constituent
SG = Silica Gel Cleanup (EPA 3630) run to remove natually occuring organic compounds
BI = Sample exhibits chromatographic pattern which does not resemble standard
MSL = Mean Sea Level

TABLE 3
Historical Soil Sample Summary
Total Petroleum Hydrocarbons, Motor Oil, BTEX, and MTBE
Roadway Express
1708 Wood Street
Oakland, California

Sample ID	Date Sampled	Depth	TPH-Gasoline	TPH-Diesel	TPH-Motor Oil	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Analytical Reporting Units		(Feet bgs)	mg/Kg	mg/Kg	mg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
B-1	24-Jul-97	4	<1	<1	---	---	---	---	---	---
B-3	24-Jul-97	6	<1	240	---	---	---	---	---	---
B-4	24-Jul-97	7	<1	<1	---	---	---	---	---	---
B-5	24-Jul-97	3.5	<1	5.4	---	---	---	---	---	---
B-6	24-Jul-97	5	<1	<1	---	---	---	---	---	---
B-7	24-Jul-97	3	<1	<1	---	---	---	---	---	---
B-8	24-Jul-97	2	<1	<1	---	---	---	---	---	---
MW-3	6-Sep-00	5	ND	ND	---	---	---	---	---	---
MW-3	6-Sep-00	10	ND	ND	---	---	---	---	---	---
MW-4	6-Sep-00	5	ND	ND	---	---	---	---	---	---
MW-4	6-Sep-00	10	ND	ND	---	---	---	---	---	---
MW-5	6-Sep-00	5	ND	ND	---	---	---	---	---	---
MW-5	6-Sep-00	10	ND	ND	---	---	---	---	---	---
BM-2	10-Dec-07	5	<0.50	8.8 Y	86	---	---	---	---	---
BM-2	10-Dec-07	13	<0.50	<5.0	---	---	---	---	---	---
BM-6	10-Dec-07	---	---	---	---	---	---	---	---	---
BM-7	10-Dec-07	6	<0.50	<5.0	86	---	---	---	---	---
BM-8	10-Dec-07	7	<0.50	<120	1,700	---	---	---	---	---
BM-9	10-Dec-07	5	<0.50	<5.0	83	---	---	---	---	---
BM-10	4-Aug-08	5	<0.93	4.5* Y	12*	<4.6	<4.6	<4.6	<4.6	<19
BM-10	4-Aug-08	24	<0.91	<0.99	<5.0	<4.5	<4.5	<4.5	<4.5	<18
BM-11	4-Aug-08	2.6	<0.94	30* Y	860* Y	<4.7	<4.7	<4.7	<4.7	<19
BM-11	4-Aug-08	11	<0.93	<1.0*	<5.0	<4.6	<4.6	<4.6	<4.6	<19
BM-11	4-Aug-08	20	<1.0	1.1* Y	<5.0	<4.6	<4.6	<4.6	<4.6	<18
BM-12	4-Aug-08	3	<0.98	65* Y	130*	<4.6	<4.6	<4.6	<4.6	<18
BM-12	5-Aug-08	9.6	<0.93	1.2* Y	10*	<4.7	<4.7	<4.7	<4.7	<19
BM-12	5-Aug-08	19.6	<0.98	<0.99	<5.0	<4.9	<4.9	<4.9	<4.9	<20
BM-13	5-Aug-08	3.6	<1.0	3.7* Y	13*	<5.2	<5.2	<5.2	<5.2	<21
BM-13	5-Aug-08	21	<1.1	<1.0	<5.0	<5.3	<5.3	<5.3	<5.3	<21
BM-14	5-Aug-08	3	<1.0	56* Y	90*	<5.0	<5.0	<5.0	<5.0	<20
BM-14	5-Aug-08	17.6	<0.99	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20
BM-14	5-Aug-08	23.6	<0.95	<0.99	<5.0	<4.8	<4.8	<4.8	<4.8	<19
BM-15	5-Aug-08	3.6	<1.0	45* Y	320*	<5.1	<5.1	<5.1	<5.1	<20
BM-15	5-Aug-08	11	<0.98	1.3* Y	11*	<4.9	<4.9	<4.9	<4.9	<20
BM-16	5-Aug-08	19	<1.0	2.4* Y	13*	<5.2	<5.2	<5.2	<5.2	<21
BM-16	5-Aug-08	29	<0.99	<1.0*	<5.0	<5.0	<5.0	<5.0	<5.0	<20
BM-17	6-Aug-08	10.6	<1.0	2.4* Y	16*	<5.0	<5.0	<5.0	<5.0	<20
BM-17	6-Aug-08	23.2	<0.97	3.1* Y	15*	<4.9	<4.9	<4.9	<4.9	<19
BM-17	6-Aug-08	25	<1.0	1.3* Y	8.2	<5.2	<5.2	<5.2	<5.2	<21
BM-18	6-Aug-08	2.6	<0.97	3.7* Y	16*	<4.9	<4.9	<4.9	<4.9	<19
BM-18	6-Aug-08	8.6	<1.0	<1.0*	<5.0*	<5.1	<5.1	<5.1	<5.1	<20
BM-18	6-Aug-08	12.6	<0.93	2.0* Y	13*	<4.7	<4.7	<4.7	<4.7	<19
BM-19	6-Aug-08	7.8	<0.98	7.6* Y	15*	<4.9	<4.9	<4.9	<4.9	<20
BM-19	6-Aug-08	11	<0.98	3.7* Y	19*	<4.9	<4.9	<4.9	<4.9	<20
BM-19	6-Aug-08	19	<0.97	<1.0* Y	<5.0	<4.9	<4.9	<4.9	<4.9	<19
BM-19	6-Aug-08	22	<0.94	<1.0	<5.0	<4.7	<4.7	<4.7	<4.7	<19
MW-6	18-Feb-09	4	<0.1	<10*	<20*	<5.0	<5.0	<5.0	<10	<5.0
MW-7	18-Feb-09	4	<0.099	<9.8*	<20*	<5.0	<5.0	<5.0	<9.9	<5.0
MW-8	18-Feb-09	5	<0.1	<10*	<20*	<5.0	<5.0	<5.0	<10	<5.0

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
Boring Locations are indicated on Figures 1 and 2
* = Result after silica gel clean-up procedure, EPA Method 3630C
Y = Sample exhibits chromatagraphic pattern that does not resemble the standard
mg/Kg = Milligrams per Kilogram
µg/Kg = Micrograms per Kilogram
bgs = Below Ground Surface

APPENDIX A

ALAMEDA COUNTY PUBLIC WORKS AGENCY
WATER RESOURCES WELL PERMIT

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 02/10/2009 By jamesy

Permit Numbers: W2009-0129 to W2009-0131
Permits Valid from 02/18/2009 to 02/28/2009

Application Id: 1233945793114 **City of Project Site:** Oakland
Site Location: 1708 Wood St (Roadway Express), Oakland, CA
Project Start Date: 02/18/2009 **Completion Date:** 02/28/2009
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: Burns & McDonnell - Patrick Bratton **Phone:** 650-871-2926
393 E Grand Avenue Ste J, South San Francisco, CA 94080
Property Owner: YRC - North American Transportation c/o Ruben Byerly **Phone:** 913-234-8940
10990 Roe Avenue, Overland, KS 66211
Client: ** same as Property Owner **

Total Due: $1035.00
Receipt Number: WR2009-0051 **Total Amount Paid:** $1035.00
Payer Name : Burns & McDonnell Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 3 Wells
Driller: RSI - Lic #: 802334 - Method: auger **Work Total: $1035.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2009-0129	02/10/2009	05/19/2009	MW-6	8.00 in.	1.00 in.	1.00 ft	15.00 ft
W2009-0130	02/10/2009	05/19/2009	MW-7	8.00 in.	1.00 in.	1.00 ft	15.00 ft
W2009-0131	02/10/2009	05/19/2009	MW-8	8.00 in.	1.00 in.	1.00 ft	15.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

APPENDIX B

BORING LOGS

Reviewed By: _____

Boring/Well Construction Log

Burns & McDonnell	Project Name: YRCW Roadway Express Oakland	Project Number: 48791	Boring/Well Number: MW-6
	Ground Elevation: ~10	Location: 1708 Wood Street North West corner of Site	Page: 1 of 1
	Air Monitoring Equipment: Mini RAE 2000 PID		Total Footage: 10

Drilling Method	Borehole Size	Casing Type/Diam.	Screen Type/Slot	Depth to Water	Top of Casing Elevation
Direct Push	4"	PVC/1"	Slotted PVC/0.010"	6.0 ft. bgs	10.1 ft above MSL

Drilling Company:	RSI Drilling	Driller(s):	Jose and Gilbert
Drilling Rig:	Geoprobe 6600	Type of Sampler:	Geoprobe Sleeve
Date:	2/18/09	Logged by:	Patrick Bratton

Depth (feet) BGL	USCS	Lithologic Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	Sample	PID (ppm) BZ/BH/S	Well Diagram
	Concrete	CONCRETE								
	Fill	FILL - gravel and silt, brown							0/9.0/0	
	ML	SILT - brown								
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium grained, subangular			100%		MW-6-4		0/0/0	
5	CL	CLAY - light gray, soft								
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium grained, subangular								
	SP	Same as above, wet			100%				0/0/0	
	OL	BAY MUD								
	PT	PEAT								
	OL	BAY MUD, grasses			100%				0/0/0	
					100%				0/0/0	
10		END OF BORING, TD = 10.0 ft. bgs								

BZ=Breathing Zone BH=Bore Hole S=Sample

BORING/WELL YRC OAKLAND.GPJ BURNS&MC.GDT 4/20/09

Reviewed By: _____

Boring/Well Construction Log

Burns & McDonnell	Project Name	Project Number	Boring/Well Number
	YRCW Roadway Express Oakland	48791	MW-7
	Ground Elevation	Location	Page
	~10	1708 Wood Street - Central Eastern portion of the site	1 of 1
Air Monitoring Equipment			Total Footage
Mini RAE 2000 PID			10

Drilling Method	Borehole Size	Casing Type/Diam.	Screen Type/Slot	Depth to Water	Top of Casing Elevation
Direct Push	4"	PVC/1"	Slotted PVC/0.010"	5.5 ft. bgs	9.9 ft above MSL

Drilling Company:	RSI Drilling	Driller(s):	Jose and Gilbert
Drilling Rig:	Geoprobe 6600	Type of Sampler:	Geoprobe Sleeve
Date:	2/18/09	Logged by:	Patrick Bratton

Depth (feet) BGL	USCS	Lithologic Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	Sample	PID (ppm) BZ/BH/S	Well Diagram
	Concrete	CONCRETE								
	Fill	FILL - gravel and silt, brown							0/11/0	
	ML	SILT - brown								
									0/0/0	
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium grained, subangular, moist								
	OL	CLAY - light gray, soft								
					100%		MW-7-4		0/0/0	
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium grained, subangular, wet								
5										
					100%				0/0/0	
	OL	BAY MUD - gray, soft								
	OL	BAY MUD - black, peat			100%				0/0/0	
	PT	PEAT - clay, gray								
					100%				0/0/0	
10		END OF BORING, 10.0 ft. bgs								

BORING/WELL YRC OAKLAND.GPJ BURNS&MC.GDT 4/20/09

BZ=Breathing Zone BH=Bore Hole S=Sample

Reviewed By: _____

Boring/Well Construction Log

Burns & McDonnell	Project Name	Project Number	Boring/Well Number
	YRCW Roadway Express Oakland	48791	MW-8
	Ground Elevation	Location	Page
	~10	1708 Wood Street - Central Eastern portion of the site	1 of 1
Air Monitoring Equipment			Total Footage
Mini RAE 2000 PID			10

Drilling Method	Borehole Size	Casing Type/Diam.	Screen Type/Slot	Depth to Water	Top of Casing Elevation
Direct Push	4"	PVC/1"	Slotted PVC/0.010"	6.0 ft. bgs	9.8 ft above MSL

Drilling Company:	RSI Drilling	Driller(s):	Jose and Gilbert
Drilling Rig:	Geoprobe 6600	Type of Sampler:	Geoprobe Sleeve
Date:	2/18/09	Logged by:	Patrick Bratton

Depth (feet) BGL	USCS	Lithologic Description	Class	Blow Count	Recov.	Run/ Time	Sample Desig.	Sample	PID (ppm) BZ/BH/S	Well Diagram
	Concrete	CONCRETE								
	Fill	FILL - angular gravel, black with coarse sand, similar to asphalt								
	ML	SILT - gray, sand layers								
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium grained, subangular								
	OL	CLAY - light gray, soft								
					100%				0/0/0	
	SP	sand lense - gray, fine grained, silty								
	OL	CLAY - light gray, soft								
5							MW-8-5		16/0/0	
	SP	SAND - very dark gray to black, 2.5Y 3/1, fine to medium, subangular, wet; with some fines and silt lenses			100%				0/0/0	
	PT	PEAT - brown, heavy organics, weed like			100%				0/0/0	
	0L	BAY MUD - grasses			100%				0/0/0	
10		END OF BORING, TD = 10.0 ft. bgs								

BZ=Breathing Zone BH=Bore Hole S=Sample

BORING/WELL YRC OAKLAND.GPJ BURNS&MC.GDT 4/20/09

APPENDIX C

MONITORING WELL SURVEY REPORT

Luk and Associates
738 Alfred Nobel Drive
Hercules, CA 94547
510-724-3388 Fax: 510-724-3383

Civil Engineering
Land Planning
Land Surveying

March 3, 2009
Job No. 27151-10

Patrick Bratton
Burns & McDonnell Engineering Co., Inc.
393 East Grand Avenue, Suite J
South San Francisco, CA 94002

Subject: Monitoring Well Survey
1708 Wood Street
Oakland, California

Dear Patrick:

Monitoring well locations have been converted to Coordinate System NAD 83, California, Zone 3, and the elevations are based on NAVD 88. The following monitoring wells have been located per your request:

Well No.	Description	Northing	Easting	Latitude (N)	Longitude (W)	Elevation
MW6	TOP OF PVC	2124183.189	6043399.839	37° 48' 53.93061"	122° 17' 39.31255"	10.131'
MW7	TOP OF PVC	2124237.116	6043393.144	37° 48' 54.46240"	122° 17' 39.40886"	9.932'
MW8	TOP OF PVC	2124210.479	6043441.188	37° 48' 54.20820"	122° 17' 38.80385"	9.830'

Also, please note the followings:

1. The X, Y, and Z value is obtained by GPS (Global Positioning System) method.
2. The GPS equipment is the Trimble R8 Rover Kit O SC/SW, 450-170 MHZ.
3. The X and Y accuracy is 0.03' horizontally and is based on the exact measurement point of the top of the pipe.
4. The elevation accuracy is 0.04' vertically and is based on the exact measurement point of the top of the pipe.

Please feel free to give me a call if you have any questions.

Sincerely yours,

LUK AND ASSOCIATES
CIVIL ENGINEERS/SURVEYORS/PLANNERS

Paul Canumay, P.L.S. 3272
Project Surveyor

F:\WP\2007\27151-10 1708 Wood St. Oakland\Report.MonitoringWell.03032009\Results.Monitoring 03032009.doc

APPENDIX D

WELL DEVELOPMENT LOGS

Burns & McDonnell
SINCE 1898

WELL DEVELOPMENT FORM- Continuation

Site Name: VRC - OAKLAND

Project Number: 48791

Well ID: MW-6

Recorded By: Patrick Bratlien

Date: 2-24-2009

Observations During Well Development

Date	Time	WL	TD	Volume	Temp	pH	Conductivity	Remarks
2-24	1330	4.6	9.01	—	—	—	—	Setup
	1335	—	—	Init	15.51	7.35	5013	Very Cloudy fines silt & sand
	1337	—	—	0.5	15.46	6.70	4808	Cloudy, fines
	1339	—	—	0.75	15.61	6.42	5230	Slightly Cloudy
	1341	—	—	1.00	15.36	6.47	4861	Slightly cloudy
	1345	—	—					Surge well
	1352	—	—	1.50	15.68	8.22	5435	Very cloudy fines silt & sand
	1354	—	—	1.75	15.56	6.75	5617	Cloudy, fines
	1400	—	—	2.0				Surge well
	1406	—	—	2.5	13.42	6.68	5557	Cloudy fines
	1408	—	—	2.75	15.71	7.08	5561	Slightly Cloudy
	1410	—	—	3.00	15.75	6.91	5578	Slightly Cloudy
	1402	—	—	3.50	—	—	—	Surge well
	1420	—	—	3.75	15.74	7.32	5637	Cloudy, fines
	1423	—	—	4.0	15.52	6.66	5637	Cloudy fines
	1428	—	—	4.25	15.48	6.47	5633	Slightly Cloudy
	1430	—	—					Surge well
	1435	—	—	4.50	15.34	7.55	5434	Cloudy, fines, silt
	1438	—	—	4.75	15.86	6.57	5397	Cloudy
	1439	—	—	5.0	16.03	6.50	5392	Clear
	1440							Surge well
	1448			5.5	15.39	7.60	5334	Cloudy
	1450	—	—	5.75	15.34	6.67	5348	Mostly Clear
	1452	—	—	6.0	15.30	6.54	5342	Clear
	1459	—	—	6.25	15.32	6.47	5337	Clear
		0.95	9.42					

Notes:
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (µS/cm)

Burns & McDonnell
SINCE 1898

WELL DEVELOPMENT FORM- Continuation

Site Name: YRC - OAKLAND
Project Number: 48791

Well ID: MW-7

Recorded By: Patrick Bratton
Date: 2-24-09

Observations During Well Development

Date	Time	Wt.	TD	Volume	Temp	pH	Conductivity	Remarks
2-24	1210 ~~1150~~	0.24	9.29	~~5.0~~	16.67	7.80	7044	Cloudy Sediment
	1215	—	—	0.50	17.04	7.13	3108	Slightly Cloudy
	1217	—	—	0.75	16.68	6.94	1924	Slightly Cloudy
	1219	—	—	0.85	16.79	6.89	2193	Slightly Cloudy
	1221	—	—	1.0	16.77	6.91	2097	Mostly Clear
								Surge well
	1236	—	—	1.75	17.06	6.97	1843	Cloudy, Sediment
	1240	—	—	2.0	16.71	6.91	1808	Slightly Cloudy
	1242	—	—	2.25	16.62	7.63	1793	Slightly Cloudy
	1244	1.57	9.30	2.50	16.52	7.23	1980	Slightly Cloudy
	1252	1.81	9.30					Surge well
	1253	—	—	3.0	17.4	7.94	1900	Cloudy Fines only
	1256	—	—	3.25	17.0	7.73	1864	Slightly Cloudy
	1258	—	—	3.5	16.85	7.05	1874	Slightly Cloudy
	1300	—	—	3.75	16.86	7.00	1894	Mostly Clear
	1302			4.0	16.68	7.23	1858	Clear
	1308	1.35	9.30	—	—	—	—	

Notes:
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (uS/cm)

Well Volume = $9.05 \times (1)^2 \times 0.0408 = 0.37$ gallons

Wt: 0.24
TD: 9.29

10 volumes = 3.7 gallons

Burns & McDonnell
SINCE 1898

WELL DEVELOPMENT FORM- Continuation

Site Name: YRC-OAKLAND

Project Number: 48791

Well ID: MW-8

Recorded By: Patricia Bratton

Date: 2-24-09

Observations During Well Development

Date	Time	WL	TD	Volume	Temp	pH	Conductivity	Remarks
	1518	0.35	9.46	—	—	—	—	
	1525	—	—	Emit	16.13	8.07	2273	Clear
	1527	—	—	0.5	16.27	7.25	2115	Clear
	1530	—	—	0.75	16.74	6.94	2453	Clear
	1532	—	—	—	—	—	—	Surge Well
	1535	—	—	1.0	17.71	6.89	1877	Clear
	1542	—	—	1.25	17.73	7.43	1779	Clear (well Recharging Slowly)
	1543			1.5				Surge well
				—				Leave well to Recharge
	1557			2.0	17.92	8.12	1945	Cloudy, fines
	1600			2.25	17.29	7.11	1698	Slightly Cloudy
	1602	—	—	2.50	17.67	6.87	1739	Clear
	1605	—	—	2.75	17.83	6.64	1716	Clear
	1608	—	—	3.0	17.57	7.08	1705	Clear

Notes:
Volume units are in gallons
Conductivity units are in microsiemens per centimeter (µS/cm)

APPENDIX E

GROUNDWATER SAMPLING FORMS

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

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

Well Number: MW-3
Well Type: (Monitor) Extraction Other:
Date: 3-6-09 Sample Time: 1230

Purge Method

Bailer-Type: 2" Bailer
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): 3.68

Purge Volume Calculation:

(29.5) - (3.68) X (2)^2 X 3 X 0.0408 = 12.6
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons): 13

Start Time: 1200 Stop Time: 1240

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1205	Start	16.64	7.28	7228	Clear
1213	4.2	18.31	7.29	7022	Clear
1220	8.4	19.02	6.88	7041	~~Clear~~ Slightly Cloudy
1228	12.6	19.10	6.72	7005	Slightly Cloudy Sample

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	TPHg, 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: 3-6-09 Sample Time: 1320

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): 2.90

Purge Volume Calculation:

(29.4) - (2.90) x (2)² x 3 x 0.0408 = 13.0
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons): 13.2

Start Time: 1255 Stop Time: 1330

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1257	Initial	15.18	7.11	5646	Clear
1303	4.3	15.16	6.95	5933	Clear
1309	8.6	18.06	6.83	5237	Slightly Cloudy
1315	13.0	17.94	6.88	5209	Slightly Cloudy
					Sample

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	—	TPHdmo
	MW-4	4	HCl	TPHg, BTEX, MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

Site Name: YRC - Oakland
Well Number: MW-5
Project Number: 48791
Well Type: (Monitor) Extraction Other:
Recorded By: PB
Date: 3-6-09 Sample Time: 1410

Purge Method
Bailer-Type: 2 inch Bailer
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): 3.32

Purge Volume Calculation:

(29.5) - (3.32) X (2)² X 3 X 0.0408 = 12.8
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (gallons): 13

Start Time: 1340 Stop Time: 1420

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1343	Initial	16.98	6.68	5994	Mostly clear, Yellow Tint, no odor
1350	4.3	19.42	6.65	8028	Slightly cloudy, yellowish
1358	8.6	19.65	6.62	7368	Slightly cloudy yellowish
1405	12.8	19.53	6.61	7079	Slightly cloudy, yellowish
					Sample

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	TPHg, BTEX + MTBE
	Dup-1	2	—	TPHd, mo
	Dup-1	4	HCl	TPHg, BTEX+MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

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

Well Number: MW-6D
Well Type: Monitor Extraction Other:
Date: 3-6-09 Sample Time: 1545

Purge Method
Bailer-Type: —
Pumping Method: Low Flow
Other-Type:

Purge Volume
Casing Diameter (D in inches): 1
Total Depth of Casing (TD in feet BTOC): 9.5
Water Level Depth (WL in feet BTOC): 0.6

Purge Volume Calculation: Low Flow Sampling

( ) − ( ) × (1)² × ____ × 0.0408 = ____

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

Total Volume Generated (~~gallons~~ Liters): 2.5

Start Time: 1525 Stop Time: 1550

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1530	0.00	14.49	6.49	3740	Clear DTW ~ 0.6
1531	0.25	14.34	6.39	3962	Clear 1.70
1532	0.50	14.41	6.33	4125	Clear 1.75
1533	0.75	14.66	6.27	4279	Clear 2.0
1534	1.0	14.50	6.24	4404	Clear 1.90
1536	1.25	14.47	6.23	4527	Clear 1.90
1537	1.50	14.59	6.22	4637	Clear 2.0
1539	1.75	14.67	6.22	4642	Clear 2.0
1540	2.0	14.66	6.21	4702	Clear 1.9
1542	2.25	14.71	6.21	4667	Clear 2.0
1543	2.50	14.75	6.21	4702	Clear 2.0

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

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-6	MW-6	2	—	TPHd, mo
		4	HCl	TPHg, BTEX, MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

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

Well Number: MW-7
Well Type: ~~Monitor~~ Extraction Other:
Date: 3-6-09 Sample Time: 1505

Purge Method

Bailer-Type:
Pumping Method: Low Flow
Other-Type:

Purge Volume

Casing Diameter (D in inches): 1 inch
Total Depth of Casing (TD in feet BTOC): 9.5
Water Level Depth (WL in feet BTOC): ~~0.00~~ 0.42

Purge Volume Calculation:

( ) - ( ) X ( )^2 X Low Flow X 0.0408 = ( )

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

Total Volume Generated (~~gallons~~ Liters): 30

Start Time: 1450 Stop Time: 1510

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1452	Init	15.94	7.83	2053	Clear
1453	0.25	16.06	7.37	1956	Clear NM
1454	0.50	16.13	7.07	1790	Clear DTW 1.40
1455	0.75	16.13	6.94	1711	Clear DTW 1.40
1456	1.0	16.17	6.87	1617	Clear DTW 1.40
1458	1.25	16.11	6.83	1624	Clear DTW 1.45
1459	1.50	16.01	6.82	1595	Clear DTW 1.50
1500	1.75	15.99	6.80	1583	Clear DTW 1.45
1501	2.0	16.02	6.79	1566	Clear DTW 1.45
1503	2.25	16.07	6.78	1578	Clear DTW 1.45
1504	2.50	15.94	6.77	1588	Clear DTW 1.45

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

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-7	MW-7	2	—	TPHd, no
		4	HCl	TPHg, BTEX, MTBE

Burns & McDonnell
SINCE 1898

GROUNDWATER SAMPLING FORM

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

Well Number: MW-8
Well Type: Monitor Extraction Other:
Date: 3-6-09 Sample Time: 1630

Purge Method

Bailer-Type:
Pumping Method: Low Flow
Other-Type:

Purge Volume

Casing Diameter (D in inches): 1
Total Depth of Casing (TD in feet BTOC): 9.5
Water Level Depth (WL in feet BTOC): 0.46

Purge Volume Calculation: Low Flow

( ) ( ) X ( )² X ____ X 0.0408 = ____
TD (feet) WL (feet) D (inches) # Vols Purge Volume (gallons)

Total Volume Generated (~~gallons~~ Liters): 1.5

Start Time: 1610 Stop Time: 1635

Field Parameter Measurements

Time	Volume	Temp	pH	Conductivity	Remarks
1611	Initial	16.06	7.22	3365	Clear DTW 1.5
1612	0.25	16.18	6.83	3287	Clear DTW 1.9
1614	0.5	15.76	6.74	3288	Clear DTW 2.0
1616	0.75	16.15	6.66	3188	Clear DTW 2.2
1619	1.0	15.86	6.58	3166	Clear DTW 2.4 Slowly drawing down, reducing flow Rate
1622	1.25	15.99	6.55	3086	Clear DTW -2.4
~~1626~~	~~1.50~~	—			
					Sample

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

Sampling Information

Sample Point	Sample Designator	# of Containers	Preservatives	Analysis/Comments
MW-8	MW-8	2	/	TPHd, no
		4	HCl	TPHg, BTEX, MTBE

APPENDIX F

LABORATORY ANALYTICAL REPORTS

Burns & McDonnell
SINCE 1898

Date: April 1, 2009

To: Patrick Bratton

From: Michelle Beckman

Re: QA/QC Review of Analytical Data
Yellow Freight – Oakland March 2009 Groundwater Samples
Project Number (48791 – Yellow Freight - Oakland)

Groundwater samples were collected on March 6, 2009. Samples were analyzed for one or more of the following parameters:

Analysis	Method
Groundwater Samples – Accutest Laboratories of Santa Clara, California	
Total Petroleum Hydrocarbons (TPH)	
Gasoline C6-C10	SW-846 Methods 5030B / 8260B
Diesel C10-C28	SW-846 Methods 3510C / 8015B M
Diesel C10-C28 (Silica Gel Cleanup [SGCU])	SW-846 Methods 3510C / 3630C / 8015B M
Motor Oil >C28-C40	SW-846 Methods 3510C / 8015B M
Motor Oil >C28-C40 (SGCU)	SW-846 Methods 3510C / 3630C / 8015B M
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
Accutest	C4751	3/6/2009	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 – No 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. Blank Spike (BS)/Blank Spike Duplicate (BSD) – The BS contains a matrix similar to that of the sample that has been spiked with known concentrations of target analytes. The BS is prepared and analyzed by the same method as the samples. As a measure of analytical accuracy, the results of the BS are compared against the known analyte concentrations in the spike to determine REC. The purpose of the BS is to determine the performance of the laboratory with respect to analyte recovery, independent of field sample matrix interference. The BSD is a duplicate preparation and analysis of the BS. Results of the BS and BSD are compared to each other to determine analytical precision using the relative percent difference (RPD).

   All 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.

   - MS/MSD analyses were conducted on Sample MW-3 (Lab ID C4751-1) for BTEX and MTBE analyses. All results were within QC limits.

   - No project-specific MS/MSD analyses were provided for the other analyses in this data package. 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. Field Duplicate Results – Table 1 provides a summary of the field duplicate results. The following field duplicate sample was collected:

    - MW-5 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. 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-5 and Dup-1

Table 1
Field Duplicate Results - MW-5 and Dup-1
Yellow Freight - Oakland

	Sample Name	MW-5		Dup-1		
	Date Sampled	3/6/2009		3/6/2009		Meets Criteria?
	Laboratory Number	C4751-3		C4751-7		(Yes/No)
Parameter	**Units**					
Volatile Organic Compounds						
All VOCs	µg/L	Not Detected		Not Detected		Yes
Total Petroleum Hydrocarbons						
Gasoline C6-C10	µg/L	50	U	50	U	Yes
Diesel C10-C28	µg/L	95	U	95	U	Yes
Motor Oil >C28-C40	µg/L	190	U	190	U	Yes

µg/L = micrograms per liter

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

Northern California ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/16/09

Technical Report for

Burns and McDonnell Engineering

T0600102107-YRC-Roadway Express, Oakland, CA

48791

Accutest Job Number: C4751

Sampling Date: 03/06/09

Report to:

Burns and McDonnell Engineering

fbittner@burnsmcd.com

ATTN: Fabrizio Bittner

Total number of pages in report: **24**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Diane Theesen 408-588-0200

Certifications: CA (08258CA)

Test results relate only to samples analyzed.

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Sample Summary

Burns and McDonnell Engineering

Job No: C4751

T0600102107-YRC-Roadway Express, Oakland, CA
Project No: 48791

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
C4751-1	03/06/09	12:30		03/10/09	AQ	Ground Water	MW-3
C4751-2	03/06/09	13:20		03/10/09	AQ	Ground Water	MW-4
C4751-3	03/06/09	14:10		03/10/09	AQ	Ground Water	MW-5
C4751-4	03/06/09	15:45		03/10/09	AQ	Ground Water	MW-6
C4751-5	03/06/09	15:05		03/10/09	AQ	Ground Water	MW-7
C4751-5A	03/06/09	15:05		03/10/09	AQ	Ground Water	MW-7
C4751-6	03/06/09	16:30		03/10/09	AQ	Ground Water	MW-8
C4751-6A	03/06/09	16:30		03/10/09	AQ	Ground Water	MW-8
C4751-7	03/06/09	00:00		03/10/09	AQ	Ground Water	DUP-1
C4751-8	03/06/09	00:00		03/10/09	AQ	Trip Blank Water	TRIP BLANKS

Sample Results

Report of Analysis

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	C4751-1	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4784.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		60-130%
2037-26-5	Toluene-D8	97%		60-130%
460-00-4	4-Bromofluorobenzene	101%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	C4751-1	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4332.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	77%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	C4751-2	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4785.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		60-130%
2037-26-5	Toluene-D8	99%		60-130%
460-00-4	4-Bromofluorobenzene	99%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-4		
Lab Sample ID:	C4751-2	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4333.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	75%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	C4751-3	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4786.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		60-130%
2037-26-5	Toluene-D8	98%		60-130%
460-00-4	4-Bromofluorobenzene	98%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	C4751-3	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4334.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	78%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	C4751-4	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4787.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		60-130%
2037-26-5	Toluene-D8	99%		60-130%
460-00-4	4-Bromofluorobenzene	100%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-6		
Lab Sample ID:	C4751-4	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4335.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	58%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	C4751-5	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4788.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		60-130%
2037-26-5	Toluene-D8	98%		60-130%
460-00-4	4-Bromofluorobenzene	100%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	C4751-5	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4351.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0832	0.095	0.048	mg/l	J
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	70%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-7		
Lab Sample ID:	C4751-5A	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4391.D	1	03/12/09	JH	03/12/09	OP788	GGG167
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	53%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	C4751-6	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4789.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		60-130%
2037-26-5	Toluene-D8	98%		60-130%
460-00-4	4-Bromofluorobenzene	99%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	C4751-6	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4352.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	0.0594	0.096	0.048	mg/l	J
	TPH (> C28-C40)	ND	0.19	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	82%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	MW-8		
Lab Sample ID:	C4751-6A	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4392.D	1	03/12/09	JH	03/12/09	OP788	GGG167
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.096	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	60%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	DUP-1		
Lab Sample ID:	C4751-7	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4790.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		60-130%
2037-26-5	Toluene-D8	99%		60-130%
460-00-4	4-Bromofluorobenzene	98%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	DUP-1		
Lab Sample ID:	C4751-7	**Date Sampled:**	03/06/09
Matrix:	AQ - Ground Water	**Date Received:**	03/10/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4353.D	1	03/11/09	JH	03/11/09	OP781	GGG166
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	0.095	0.048	mg/l	
	TPH (> C28-C40)	ND	0.19	0.095	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	84%		45-140%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@16:01 16-Mar-2009

Report of Analysis

Client Sample ID:	TRIP BLANKS		
Lab Sample ID:	C4751-8	**Date Sampled:**	03/06/09
Matrix:	AQ - Trip Blank Water	**Date Received:**	03/10/09
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W4783.D	1	03/12/09	BD	n/a	n/a	VW164
Run #2							

	Purge Volume
Run #1	10.0 ml
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		60-130%
2037-26-5	Toluene-D8	97%		60-130%
460-00-4	4-Bromofluorobenzene	100%		60-130%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Burns & McDonnell SINCE 1898

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: ~~Fabrizio Bittner~~ Patrick Bratton

Laboratory: Accutest
Address: 3334 Victor Court
City/State/Zip: Santa Clara, 95054
Telephone: (408) 588-0200

Document Control No: 030609 1 of 1
Lab. Reference No. or Episode No.:

Project Number: 48791
Client Name: YRC-Oakland

Sample Type

Matrix

Sample Number: Group or SWMU Name	Sample Number: Sample Point	Sample Number: Sample Designator	Sample Event: Round	Sample Event: Year	Sample Depth (in feet): From	Sample Depth (in feet): To	Sample Collected: Date	Sample Collected: Time	Matrix: Liquid	Matrix: Solid	Matrix: Gas	Number of Containers	Analysis: TPH	Analysis: 5035 BTEX + MTBE EPA 8260	Analysis: TPH diesel EPA 8015M	Analysis: TPH motor O:I EPA 8015M Silica Gel Cleanup EPA 3630	Analysis:	Remarks
	MW-3		1st	~~2009~~			3-6	1230	WG	-1		6	X		X	X	X	C4751
	MW-4		1st	2009			3-6	1320	WG	-2		6	X		X	X	X	Standard Turn
	MW-5		1st	2009			3-6	1410	WG	-3		6	X		X	X	X	around time
	MW-6		1st	2009			3-6	1545	WG	-4		6	X		X	X	X	
	MW-7		1st	2009			3-6	1505	WG	-5		6	X		X	X	X	
	MW-8		1st	2009			3-6	1630	WG	-6		5	X		X	X	X	Comm B + report
	Dup-1		1st	2009			3-6	—	WG	-7		6	X		X	X	X	
	Trip Blanks		—	—			—	—		-8		3	X					
	Rec'd 4 VOA's 2 Lit Amb NLP		each except Sample -6 (1 Lit ONLY and Sample -8 (3 VOA's ONLY															
	W/4.7° Temp																	

Sampler (signature):

Sampler (signature):

Special Instructions: Submit Geotracker EDF
T0600102107

Relinquished By (signature)	Date/Time	Received By (signature)	Date/Time
1.	3/10/09 0858		3/10/09 0858
2.	3/10/09 1312		3/10/09 1315

Ice Present in Container: Yes ☐ No ☐

Temperature Upon Receipt:

Laboratory Comments:

011102 Form WCD-KC1-SDO

C4751: Chain of Custody
Page 1 of 2

Accutest Laboratories Northern California
STANDARD OPERATING PROCEDURE

Sample Receiving Checklist

Job # C4751
Sample Control Initial JM

Review Chain of Custody The Chain of Custody is to be completely and legibly filled out by Client.

- ☑ Are these regulatory (NPDES) samples? Yes / No circle one
- ☐ Is pH requested? Yes / No circle one ☐ Was Client informed that hold time is 15 min? Yes / No circle one
  If yes, did Client consent to continue? ____
- ☑ Are sample within hold time? Yes / No circle one Are sample in danger of exceeding its hold-time within 6-48 hours?
- ☑ Report to info is complete and legible, including;
  - ☐ Type of deliverable needed ☑ Name ☐ Address ☑ phone ☐ e-mail
- ☑ Bill to info is complete and legible, including; ☐ PO# ☐ Credit card ☐ Contact ☐ address ☐ phone ☐ e-mail
- ☑ Contact and/or Project Manager identified, including; ☑ phone ☑ e-mail
- ☐ Project name / number ☐ Special requirements? Yes / No circle one
- ☑ Sample IDs / date & time of collection provided? Yes / No circle one
- ☑ Is Matrix listed and correct? Yes / No circle one
- ☑ Analyses listed are those we do ~~or client has authorized a subcontract?~~ JM Yes / No circle one
- ☑ Chain is signed and dated by both client and sample custodian? Yes / No circle one
- ☐ TAT requested available? Approved by _____

Review Coolers:

- ☑ Were Coolers temperatures measured at ≤6°C? Cooler # ____ Temp 4.7 °C
  - If cooler is outside the ≤6°C; note down below the affected bottles in that cooler
  - Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
- ☑ Shipment Method Accutest Courier
- ☐ Custody Seals: Present : Yes / No circle one Unbroken: Yes / No circle one

Review of Sample Bottles: If you answer no, explain below

- ☑ Sample ID / bottle number / Date / Time of bottle labels match the COC? Yes / No circle one
- ☐ Sample bottle intact? Yes / No circle one
- ☑ Is there enough samples for requested analyses? If so, were samples placed in proper containers? Yes / No circle one
- ☑ Proper Preservatives? Check pH on preserved samples except 1664, 625, 8270 and VOAs and list below
- ☐ Are VOAs received without headspace? Size of bubble **(not greater than 6mm in diameter)** Yes / No circle one

List sample ID and affected container

Lab #	Client Sample ID	pH Check	Other Comments/Issues

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

\\Anc-srv-file1\Entech-Data\Laboratory\Sample_Control\Form_Sample Receipt Checklist_Rev0.doc

C4751: Chain of Custody
Page 2 of 2

Northern California ACCUTEST Laboratories

IT'S ALL IN THE CHEMISTRY

03/04/09

Technical Report for

Burns and McDonnell Engineering

T0600102107-YRC-Roadway Express, Oakland, CA

47561

Accutest Job Number: C4487

Sampling Date: 02/18/09

Report to:

Burns and McDonnell Engineering
393 East Grand Avenue Suite J
San Francisco, CA 94080
pbratton@burnsmcd.com

ATTN: Patrick Bratton

Total number of pages in report: **22**

ACCUTEST LABORATORIES 50 YEARS 1956-2006

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Diane Theesen 408-588-0200

Certifications: CA (08258CA)

Test results relate only to samples analyzed.

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Sample Summary

Burns and McDonnell Engineering

Job No: C4487

T0600102107-YRC-Roadway Express, Oakland, CA
Project No: 47561

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
C4487-1	02/18/09	11:25	PB	02/19/09	SO	Soil	MW-6-4
C4487-2	02/18/09	10:10	PB	02/19/09	SO	Soil	MW-7-4
C4487-3	02/18/09	10:50	PB	02/19/09	SO	Soil	MW-8-5

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-6-4		
Lab Sample ID:	C4487-1	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M4612.D	1	02/20/09	XB	n/a	n/a	VM150
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		60-130%
2037-26-5	Toluene-D8	112%		60-130%
460-00-4	4-Bromofluorobenzene	95%		60-130%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-6-4		
Lab Sample ID:	C4487-1	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4074.D	1	03/02/09	JH	03/02/09	OP748	GGG159
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (> C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	75%		45-140%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-7-4		
Lab Sample ID:	C4487-2	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M4615.D	1	02/20/09	XB	n/a	n/a	VM150
Run #2							

	Initial Weight
Run #1	5.03 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	9.9	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	0.99	ug/kg	
	TPH-GRO (C6-C10)	ND	99	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		60-130%
2037-26-5	Toluene-D8	111%		60-130%
460-00-4	4-Bromofluorobenzene	96%		60-130%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-7-4		
Lab Sample ID:	C4487-2	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4081.D	1	03/02/09	JH	03/02/09	OP748	GGG159
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	4.9	mg/kg	
	TPH (> C28-C40)	ND	20	9.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	76%		45-140%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-8-5		
Lab Sample ID:	C4487-3	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8260B	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M4616.D	1	02/20/09	XB	n/a	n/a	VM150
Run #2							

	Initial Weight
Run #1	5.00 g
Run #2	

Purgeable Aromatics, MTBE

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		60-130%
2037-26-5	Toluene-D8	111%		60-130%
460-00-4	4-Bromofluorobenzene	95%		60-130%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	MW-8-5		
Lab Sample ID:	C4487-3	**Date Sampled:**	02/18/09
Matrix:	SO - Soil	**Date Received:**	02/19/09
Method:	SW846 8015B M SW846 3510C	**Percent Solids:**	n/a [a]
Project:	T0600102107-YRC-Roadway Express, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG4082.D	1	03/02/09	JH	03/02/09	OP748	GGG159
Run #2							

	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable w/ Silica Gel Cleanup

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (> C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	72%		45-140%

(a) All results reported on wet weight basis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest
CHAIN OF CUSTODY

Fresh Ponds Corporate Village, Building B
2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

Accutest Job #:
Accutest Quote #: C4487

Client Information

Name: Burns & McDonnell
Address: 393 East Grand Ave ~~08691~~
City: South San Francisco State: CA Zip: 94080
Send Report to: Patrick Bratton
Phone #: (650) 871-2926 x225

Facility Information

Project Name: YRC-Oakland
Location: Roadway Express
Project/PO #: 48791
FAX #:

Analytical Information

Field ID / Point of Collection	Date	Time	Sampled By	Matrix	# of bottles	HCL	NaOH	HNO3	H2SO4	None	8015 DRO/ORO-SGC* TPH-Diesel 8015M/ TPH-Motor Oil	TPH-Gasoline, BTEX, MTBE (8260B)								
MW-6-4'	2-18-09	1125	PB	Soil	1					X	X	X						-1		
MW-7-4'	2-18-09	1010	PB	Soil	1					X	X	X						-2		
MW-8-5'	2-18-09	1050	PB	Soil	1					X	X	X						-3		

Rec'd (3) Acetate w/ 2.0° Temp.

Turnaround Information

- [ ] 21 Day Standard
- [ ] 14 Day
- [ ] 7 Days EMERGENCY
- [ ] Other 10 (Days)

Approved By: Standard turn Around time

RUSH TAT is for FAX data unless previously approved.

Data Deliverable Information

- [ ] NJ Reduced
- [ ] NJ Full
- [ ] FULL CLP
- [ ] Disk Deliverable
- [ ] Other (Specify)
- [ ] Commercial "A"
- [x] Commercial "B" ✝
- [ ] ASP Category B
- [ ] State Forms

Comments / Remarks

*Run Silica Gel Cleanup prior to TPH diesel and Motor Oil
Geotracker ID
T0600102107

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	2/19/09 0828	1 [signature]	2		2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4 2/19/09 945	Date Time:	Received By: 4
Relinquished by Sampler: 5	Date Time:	Received By: 5	Seal #	Preserved where applicable	On Ice:

C4487: Chain of Custody
Page 1 of 2

Accutest Laboratories Northern California
STANDARD OPERATING PROCEDURE

Sample Receiving Checklist

Job # C4487
Sample Control Initial ___ JM

Review Chain of Custody The Chain of Custody is to be completely and legibly filled out by Client.
- ☑ Are these regulatory (NPDES) samples? Yes / (No) circle one
- ☐ Is pH requested? Yes / (No) circle one ☐ Was Client informed that hold time is 15 min? Yes / No circle one
  If yes, did Client consent to continue? ____
- ☑ Are sample within hold time? (Yes) / No circle one Are sample in danger of exceeding its hold-time within 6-48 hours?
- ☑ Report to info is complete and legible, including;
  - ☐ Type of deliverable needed ☑ Name ☑ Address ☑ phone ☑ e-mail
- ☑ Bill to info is complete and legible, including; ☑ PO# ☐ Credit card ☑ Contact ☑ address ☑ phone ☑ e-mail
- ☑ Contact and/or Project Manager identified, including; ☑ phone ☐ e-mail
- ☑ Project name / number ☐ Special requirements? (Yes) / No circle one
- ☑ Sample IDs / date & time of collection provided? (Yes) / No circle one
- ☑ Is Matrix listed and correct? (Yes) / No circle one JM
- ☑ Analyses listed are those we do ~~or client has authorized a subcontract?~~ (Yes) / No circle one
- ☑ Chain is signed and dated by both client and sample custodian? (Yes) / No circle one
- ☐ TAT requested available? Approved by _____

Review Coolers:
- ☑ Were Coolers temperatures measured at ≤6°C? Cooler # ____ Temp 20° °C
  - If cooler is outside the ≤6°C; note down below the affected bottles in that cooler
  - Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)
- ☑ Shipment Method Accutest Courier
- ☐ Custody Seals: Present : Yes / No circle one Unbroken: Yes / No circle one

Review of Sample Bottles: If you answer no, explain below
- ☑ Sample ID / bottle number / Date / Time of bottle labels match the COC? (Yes) / No circle one
- ☑ Sample bottle intact? (Yes) / No circle one
- ☐ Is there enough samples for requested analyses? If so, were samples placed in proper containers? (Yes) / No circle one
- ☑ Proper Preservatives? Check pH on preserved samples except 1664, 625, 8270 and VOAs and list below
- ☐ Are VOAs received without headspace? Size of bubble **(not greater than 6mm in diameter)** Yes / No circle one
  List sample ID and affected container

Lab #	Client Sample ID	pH Check	Other Comments/Issues

Non-Compliance issues and discrepancies on the COC are forwarded to Project Management

C4487: Chain of Custody
Page 2 of 2

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM150-MB	M4610.D	1	02/20/09	XB	n/a	n/a	VM150

The QC reported here applies to the following samples: **Method:** SW846 8260B

C4487-1, C4487-2, C4487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.5	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	1.5	ug/kg	
1330-20-7	Xylene (total)	ND	10	4.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	60-130%
2037-26-5	Toluene-D8	111%	60-130%
460-00-4	4-Bromofluorobenzene	94%	60-130%

Blank Spike Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM150-BS	M4606.D	1	02/20/09	XB	n/a	n/a	VM150

The QC reported here applies to the following samples: **Method:** SW846 8260B

C4487-1, C4487-2, C4487-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	40	40.8	102	60-130
100-41-4	Ethylbenzene	40	43.7	109	60-130
1634-04-4	Methyl Tert Butyl Ether	40	38.6	97	60-130
108-88-3	Toluene	40	41.7	104	60-130
1330-20-7	Xylene (total)	120	126	105	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	60-130%
2037-26-5	Toluene-D8	109%	60-130%
460-00-4	4-Bromofluorobenzene	100%	60-130%

Blank Spike Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM150-BS	M4609.D	1	02/20/09	XB	n/a	n/a	VM150

The QC reported here applies to the following samples: **Method:** SW846 8260B

C4487-1, C4487-2, C4487-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
	TPH-GRO (C6-C10)	250	260	104	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	60-130%
2037-26-5	Toluene-D8	112%	60-130%
460-00-4	4-Bromofluorobenzene	95%	60-130%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C4497-3MS	M4619.D	1	02/20/09	XB	n/a	n/a	VM150
C4497-3MSD	M4620.D	1	02/20/09	XB	n/a	n/a	VM150
C4497-3	M4613.D	1	02/20/09	XB	n/a	n/a	VM150

The QC reported here applies to the following samples: **Method:** SW846 8260B

C4487-1, C4487-2, C4487-3

CAS No.	Compound	C4497-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		39.8	37.4	94	33.8	85	10	60-130/30
100-41-4	Ethylbenzene	ND		39.8	39.7	100	36.0	91	10	60-130/30
1634-04-4	Methyl Tert Butyl Ether	ND		39.8	37.4	94	35.6	90	5	60-130/30
108-88-3	Toluene	ND		39.8	38.3	96	35.0	88	9	60-130/30
1330-20-7	Xylene (total)	ND		119	114	96	103	86	10	60-130/30

CAS No.	Surrogate Recoveries	MS	MSD	C4497-3	Limits
1868-53-7	Dibromofluoromethane	105%	102%	104%	60-130%
2037-26-5	Toluene-D8	109%	107%	110%	60-130%
460-00-4	4-Bromofluorobenzene	103%	100%	93%	60-130%

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP748-MB	GG4077.D	1	03/02/09	JH	03/02/09	OP748	GGG159

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C4487-1, C4487-2, C4487-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	5.0	mg/kg	
	TPH (> C28-C40)	ND	20	10	mg/kg	

CAS No.	Surrogate Recoveries		Limits
630-01-3	Hexacosane	81%	45-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP748-BS	GG4078.D	1	03/02/09	JH	03/02/09	OP748	GGG159
OP748-BSD	GG4079.D	1	03/02/09	JH	03/02/09	OP748	GGG159

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C4487-1, C4487-2, C4487-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	69.4	69	67.6	68	3	45-140/30
	TPH (> C28-C40)	100	76.1	76	77.4	77	2	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	79%	77%	45-140%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C4487
Account: BMECASF Burns and McDonnell Engineering
Project: T0600102107-YRC-Roadway Express, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP748-MS	GG4148.D	1	03/04/09	JH	03/02/09	OP748	GGG160
OP748-MSD	GG4149.D	1	03/04/09	JH	03/02/09	OP748	GGG160
C4563-7	GG4087.D	1	03/03/09	JH	03/02/09	OP748	GGG159

The QC reported here applies to the following samples: **Method:** SW846 8015B M

C4487-1, C4487-2, C4487-3

CAS No.	Compound	C4563-7 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND		100	70.3	70	68.2	68	3	45-140/30
	TPH (> C28-C40)	ND		100	82.6	83	86.8	87	5	45-140/30

CAS No.	Surrogate Recoveries	MS	MSD	C4563-7	Limits
630-01-3	Hexacosane	72%	80%	80%	45-140%