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Alameda County
Environmental Health

PACCAR Inc

March 20, 2012

Mr. Jerry Wickham
Senior Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection, Local Oversight Program
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Subject: Letter of Transmittal for 2011 Groundwater Monitoring Report
O'Reilly Auto Parts (Former Grand Auto #43)
4240 International Boulevard (East 14th Street)
Oakland, California 94601
ACEH Fuel Leak Case No. RO0002483
GeoTracker Global ID No. T06019705075**

Dear Mr. Wickham:

As required in your letter of May 16, 2011 regarding the above-referenced subject site, we submit this transmittal letter and accompanying *2011 Groundwater Monitoring Report* containing the results of the groundwater monitoring performed on December 20, 2011.

I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,

PACCAR, Inc.



Vicki ZumBrunnen, REM
Environmental Project Supervisor



AllWest Environmental, Inc.

Specialists in Physical Due
Diligence and Remedial Services

530 Howard Street, Suite 300
San Francisco, CA 94105
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2011 GROUNDWATER MONITORING REPORT

**O'Reilly Auto Parts
(Former Grand Auto #43)
4240 International Boulevard (East 14th Street)
Oakland, California**

(Geotracker ID - T06019705075 & ACHS #RO0002483)

PREPARED FOR:

PACCAR, Inc.
Corporate Environmental Department
P.O. Box 1518
Bellevue, WA 98009


ALLWEST PROJECT No. 11134.28
March 16, 2012

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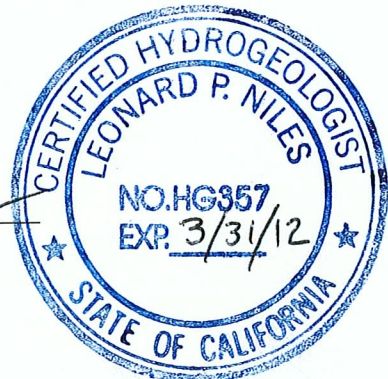




TABLE OF CONTENTS

I.	INTRODUCTION	Page 1
II.	PROJECT BACKGROUND.....	Page 1
	A. Site Setting.....	Page 1
III.	GROUNDWATER SAMPLING AND FIELD OBSERVATIONS.....	Page 2
	A. Sampling Protocols.....	Page 2
	B. Well Sampling Purge Characteristics	Page 3
	C. Groundwater Depth and Gradient.....	Page 3
IV.	LABORATORY ANALYSES	Page 4
	A. Laboratory Analytical Data	Page 4
	B. Laboratory QA/QC	Page 4
V.	DISCUSSION.....	Page 5
	A. Contaminant Distribution and Concentration Trends.....	Page 5
	B. Environmental Screening Levels.....	Page 6
VI.	CONCLUSIONS AND RECOMMENDATIONS	Page 7
VII.	REPORT LIMITATIONS	Page 7
VIII.	REFERENCES	Page 8

TABLES

- Table 1: Well Construction Details
- Table 2: Groundwater Elevation Measurements
- Table 3: Summary of Groundwater Sample Analytical Data

FIGURES

- Figure 1: Site Location Map
- Figure 2: Site Plan with Well Locations
- Figure 3: Groundwater Contour Elevation Map

APPENDICES

- Appendix A: Groundwater Sampling Logs and Protocols
- Appendix B: Laboratory Analytical Reports and Chain-of-Custody Documents



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2011 Groundwater Monitoring Report

**O'Reilly Auto Parts
(Former Grand Auto #43)
4240 International Boulevard (East 14th Street)
Oakland, California**

(Geotracker ID - T06019705075 & ACEHD #RO0002483)

I. INTRODUCTION

This report presents the results of the 2011 groundwater monitoring event conducted on December 20, 2011, by AllWest Environmental at the former Grand Auto Retail Store #43, Oakland, California. At the time of the 2011 monitoring the property was occupied by O'Reilly Auto Parts facility. The sampling event consisted of monitoring four on-site groundwater wells, MW-1, MW-2, MW-3A and MW-4. Included in this report is an abbreviated site setting, a description of field activities, a summary of analytical results, interpretation of the data and conclusions. Supporting information such as site figures, sampling logs, and laboratory reports are included as attachments or appendices to this report.

The purpose of this report is to present data from the groundwater sampling of the four on-site groundwater monitoring wells, demonstrate the stability of the plume and present conclusions and recommendations to the Alameda County Health Care Services Agency, Environmental Health Services (ACHCS / ACEH) and the State Water Resources Control Board (Water Board).

II. PROJECT BACKGROUND

A. Site Setting

The approximately 1.2 acre former Grand Auto retail facility is located at the northwest corner of High Street and International Boulevard (formerly 14th Street)

in Oakland, California. The site currently is used as an O'Reilly Auto Parts store, and was previously a Kragen Auto Supply store. Previously the site was used for retail gasoline sales and had underground storage tanks (USTs) and a car wash facility with an associated drainage sump. The USTs were removed in 1986. The car wash drainage sump was removed in August 1992. In October 1993, the remaining fuel conveyance piping associated with the former USTs was excavated and removed from the site.

When environmental activities were initiated at the subject property, the former Super Tire store at 4256 East 14th Street (currently All Mufflers Discounted) was located southeast of the subject property were included as part of the Grand Auto site. Subsequently, the former Super Tire store was considered by both PACCAR and ACHCS as separate sites. In a letter to PACCAR dated December 27, 1993, the ACHCS indicated that no further action was required for soil-related issues at the former Super Tire store. In a second letter dated November 20, 2000, ACHCS approved the destruction of a single groundwater well, HC-1, located on the former Super Tire facility.

Review of previous work indicated the site is underlain by an irregularly layered sequence of silty to gravelly sand lenses separated by clayey silt to depths of 46 feet. The groundwater gradient in the area is very flat, thus the determination of the groundwater flow direction is difficult to assess. Regionally, groundwater is typically reported to flow from the east to the west from the Oakland Hills towards the San Francisco Bay. Groundwater flow in the vicinity of the site has been historically calculated to be primarily to the east, at a very flat gradient. Groundwater levels continued to show a gradual increase since the California drought years of the late 1980s and early 1990s. Groundwater levels have risen approximately 11 feet at the site since 1993. Groundwater levels measured in 2011 have decreased slightly, approximately 0.4 feet from their 2008 levels.

III. GROUNDWATER SAMPLING AND FIELD OBSERVATIONS

This groundwater monitoring event included, gauging the depth to groundwater to calculate the groundwater flow direction and gradient and sampling of the wells to demonstrate the stability of the groundwater plume. The sampling of the four wells, MW-1 through MW-4, occurred December 20, 2011.

A. Sampling Protocols

AllWest's standard groundwater sampling protocols were followed. As per these protocols, an electronic sounder was utilized to measure the depth to groundwater in each well. Each well was then purged a minimum of three well volumes using a 4-inch polyethylene disposable bailers. During purging, groundwater field parameters (temperature, pH, and conductivity) were monitored and recorded on a

field log. After purging, samples from each well were collected. Copies of the groundwater sampling field logs are presented in Appendix A. The purged groundwater was temporarily stored on site in 55-gallon drums and was removed from the site by Integrated Waste Management, San Jose, California, a state licensed hazardous waste transporter. The purge water was transported to a disposal facility under appropriate state and local regulations.

B. Well Purging Characteristics

The groundwater observed during purging was slightly cloudy to silty. Field parameters measured were similar to historical measurements. Post-purge pH measurements ranged from 5.25 in MW-1 to 8.69 in MW-2. Post-purge conductivity levels were between 395 microSiemens (μS) in MW-3A to 704 μS in MW-2. Post-purge temperatures were between 64.94^oF and 68.54^oF. Temperature and conductivities varied from well to well but measurements were consistent in individual wells to within 10% between the last 2 casing volumes purged.

C. Groundwater Depth and Gradient

The depth to groundwater ranged between 22.51 feet below ground surface (bgs) in MW-4 to 24.13 feet bgs in MW-3A. As compared to 2008, groundwater levels have decreased by an average of approximately 0.4 feet. The current groundwater levels are slightly below historic highs and are approximately 11 feet higher than those measured in 1993 at the end of the California drought years of the late 1980s and early 1990s. Groundwater elevations are shown on Table 2 and Figure 3.

Groundwater elevations between the wells varied only slightly, by a maximum of 0.02 feet above mean sea level (MSL). As shown on Figure 3, groundwater elevations ranged from lows of 12.56 feet MSL in MW-1 to a high of 12.58 feet MSL in MW-2, MW-3A and MW-4. The groundwater gradient calculated in the vicinity of MW-1, MW3A and MW-4 is approximately 0.001 feet/foot. As noted during previous investigations, groundwater gradients have historically been very flat.

The local groundwater flow direction measured during this sampling event is generally towards the east. The regional groundwater is to the southwest towards San Francisco Bay, concurrent with the topography. Historically, gradients have been generally to the east.

IV. LABORATORY ANALYSES

All groundwater samples selected for analysis were analyzed by a State of California certified independent analytical laboratory, McCampbell Analytical, Inc., (McCampbell) of Pittsburg, California. All selected samples were analyzed on a five day turn-around basis.

The groundwater samples collected from monitoring wells MW-1, MW-2, MW-3A and MW-4 were analyzed for TPH-g and VOCs by EPA Method 8260B. Analytical methods were chosen based on historic site use and results of previous investigations. Analysis for TPH-g was performed in conjunction with the upcoming subsurface investigation of the former USTs to satisfy case closure requirements. Groundwater sample analytical results are summarized in Table 3. Copies of the laboratory data sheets and chain of custody documents are attached as Appendix B.

A. Laboratory Analytical Data

Tetrachloroethene (PCE) was detected in all four monitoring wells at the site with concentrations ranging from a low of 13 micrograms per liter ($\mu\text{g/L}$) in the sample collected from MW-2 to a high of 64 $\mu\text{g/L}$ in the sample collected from MW-1. Trichloroethene (TCE), a degradation product of PCE, was detected in samples collected from wells MW-1, MW-3A and MW-4 at respective concentrations of 9.2 $\mu\text{g/L}$, 7.8 $\mu\text{g/L}$ and 4.3 $\mu\text{g/L}$, while concentrations in MW-2 were below the detection limits. Cis-1,2-dichloroethene (cis-1,2-DCE), another PCE degradation product, was detected in the samples collected from wells MW-1 and MW-3A at concentrations of 5.1 $\mu\text{g/L}$ and 1.3 $\mu\text{g/L}$, but was not detected in the samples collected from wells MW-2 and MW-4.

Dichlorodifluoromethane (Freon[®] 12) was detected in samples collected from all four wells at concentrations ranging from 7.5 $\mu\text{g/L}$ in MW-3A to 130 $\mu\text{g/L}$ in MW-2. TPH-g range constituents were reported by the laboratory in samples collected from MW-1, MW-3A and MW-4 at respective concentrations of 110 $\mu\text{g/L}$, 95 $\mu\text{g/L}$ and 65 $\mu\text{g/L}$. However, upon laboratory review of the chromatogram, the detected TPH-g range constituents were determined to be derived solely from chlorinated hydrocarbons (mostly PCE) detected in samples, and were not representative of a TPH-g range fuel pattern according to a written communication from McCampbell. TPH-g was not detected in the sample collected from MW-2. No other VOCs were detected during the December 2011 sampling event.

B. Laboratory QA/QC

A review of laboratory internal quality assurance/quality control (QA/QC) report indicates the method blank and sample spike data for all analyses were within the laboratory recovery limits. The samples were also analyzed within the acceptable

EPA holding times. Other than issues noted above, the data from the McCampbell Analytical laboratory are considered to be of good quality. Laboratory analytical and QA/QC reports, and chain-of-custody records, are included in Appendix B.

V. DISCUSSION

A. Contaminant Distribution and Concentration Trends

Chlorinated solvents continue to be detected in all wells at the property. Concentrations of chlorinated solvents have generally decreased in MW-1 and MW-3A and increased in MW-2 and MW-4 since the last sampling performed in 2008. The highest concentrations of PCE have historically been detected in MW-1. Slightly lower levels have been detected in MW-3A and MW-4. Significantly lower concentrations of PCE have been detected in MW-2. The PCE breakdown products TCE, and cis-1,2 DCE also follow this trend, and have been historically detected in all groundwater samples collected from the site. Freon[®] 12 concentrations historically ranged in the tens of parts per billion with the lowest concentrations detected in MW-3A and the highest in wells MW-1 and MW-2. Based on the spatial distribution of the chemicals detected in site monitoring wells, a single, well defined source for the chlorinated solvents is not apparent.

Historically, very low concentrations of chloroform, 1,1,1-trichloroethane (TCA), 1,2-dichloroethane (1,2-DCA), the PCE degradation product vinyl chloride, and carbon tetrachloride have been detected in groundwater samples at the subject site, but were not detected in any of the samples collected during the December 2011 sampling event.

TPH-g range compounds were detected in groundwater samples collected from MW-1, MW-3A and MW-4 during the December 2011 sampling event. Historically, TPH-g range compounds were detected in groundwater samples from all wells monitored from 1992 to 1994, and a single detection in well MW-3A in 1999. TPH-g was not analyzed during the sampling events conducted from 1994 to 1996, and 2001 through 2008. Since the laboratory chromatograms of most historical TPH-g detections do not match typical gasoline standards, the detected constituents are probably chlorinated VOCs (mostly PCE) within the TPH-g range. The detected TPH-g range compounds do not appear to originate from the subject site, based on spatial distribution and the lack of detected TPH-g in soil and groundwater samples collected from the former onsite UST vicinity during the subsurface investigation performed in January 2012. The results of that investigation will be detailed in the forthcoming report.

B. Environmental Screening Levels

AllWest compared groundwater sample data generated during this assessment to Environmental Screening Levels (ESLs) for commercial/industrial land use compiled by the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, and listed in *Table A and F1-a – Groundwater Screening Levels where Groundwater is a Current or Potential Source of Drinking Water* (RWQCB, Interim Final November 2007, revised May 2008). We chose this Table because the Regional Board considers site groundwater to be a potential drinking water source, although no drinking water supply wells are located within ½ mile of the subject site. The drinking water ESLs for PCE and TCE are 5.0 µg/L, the ESL for cis 1,2-DCE is 6.0 µg/L and the ESL for TPH-g is 100 µg/L. ESLs have not been established for Freon[®] 12.

ESLs were developed by the RWQCB to address environmental protection goals. These goals include protection of human health, drinking water resources, aquatic and terrestrial biota and adverse nuisance conditions. Under most conditions, the presence of chemicals at concentrations below the corresponding ESLs can be assumed to not pose a significant threat to human health and the environment. Concentrations of chemicals above ESLs does not necessarily indicate impacts to human health or the environment exists or that remedial measure are required, only that further evaluation is required. ESLs are not intended to be used as a “clean-up” standard.

As exhibited in the December 2011 sampling data, site groundwater contains PCE at concentrations exceeding its ESL for drinking water in all four wells. TCE concentrations in groundwater exceed their drinking water ESL in wells MW-1 and MW-3A. Cis-1,2-DCE concentrations in groundwater did not exceed their ESL.

TPH-g range compounds were detected in the groundwater samples from well MW-1, MW-3A and MW-4 at respective concentrations of 110 µg/L, 95 µg/L and 65 µg/L; however, these detections do not match gasoline standards and are probably representative of chlorinated VOCs. The reported TPH-g range concentration in MW-1 exceeded the ESL of 100 µg/L. TPH-g was not detected in the groundwater sample from well MW-2. Groundwater analytical results and applicable ESLs are summarized in Table 3.

VI. CONCLUSIONS AND RECOMMENDATIONS

The December 2011 groundwater sampling data indicate that shallow groundwater at the subject property is impacted with chlorinated solvents. No specific source of the chemicals of concern has been identified.

Concentrations of PCE and TCE and their breakdown products have generally remained similar since the 2008 sampling event and have declined since the early to mid 1990s. It is reasonable to presume the concentrations will continue to decrease due to the processes of natural in situ degradation which include biodegradation, volatilization and dispersion. Detected TPH-g range compounds do not match typical gasoline standards and are probably representative of chlorinated VOCs in the TPH-g range.

AllWest recommends a meeting be arranged with the ACHCS to discuss further steps toward obtaining case closure for the subject site.

VII. REPORT LIMITATIONS

This report has been prepared for the exclusive use of PACCAR Inc for submittal to the Alameda County Health Care Services (ACHCS) and the Regional Water Quality Control Board (RWQCB) as it pertains to the property located at 4240 International Boulevard (East 14th Street), Oakland, California. Our services were performed in accordance with generally accepted professional practices, related to the nature of the work accomplished, in the same or similar localities, at the time the services are performed, and under the terms and conditions of the existing contract between PACCAR and AllWest.

The conclusions and recommendations contained in this report are made based on observed conditions existing at the site, laboratory test results of the submitted samples, and interpretation of a limited data set. It must be recognized that changes can occur in subsurface conditions due to site use or other reasons. Furthermore, the distribution of chemical concentrations in the subsurface can vary spatially and over time. The results of chemical analysis are valid as of the date and at the sampling location only. AllWest is not responsible for the accuracy of the test data from an independent laboratory, nor for any analyte quantities falling below the recognized standard detection limits or for the method utilized by the independent laboratories.

Background information that AllWest has used in preparing this report, including but not limited to previous field measurements, analytical results, site plans, and other data, has been furnished to AllWest by the Client, its previous consultants, and/or third parties. AllWest has relied on this information as furnished. AllWest is not responsible for nor has it confirmed the accuracy of this information.

VIII. REFERENCES

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TABLES

Table 1 - Well Construction Details

**O'Reilly Auto Parts (Former Grand Auto #43)
4240 International Boulevard (East 14th Street) Oakland, California**

AllWest Project Number 11134.28

Well Number	Surface Elevation (ft MSL)	Top of Casing (ft MSL)	Total Depth (ft bgs)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Well Diameter (Inches)
MW-1	36.83	36.55	43	33	43	4
MW-2	36.68	36.43	45	31	45	4
MW-3A	37.03	36.71	41	20	41	4
MW-4	25.54	35.08	45	30	45	4

Notes: MW-3 was replaced by MW-3A on May 25, 2000
HC-1 was abandoned on June 18, 2001
bgs = below ground surface
MSL = mean sea level
Elevations relative North American Vertical Datum 1988-Ortho. Ht. (GEOID03)
Wells were resurveyed on 9/26/06 for horizontal and vertical control by
CSS Environmental Services, Inc,
Novato, California (Aaron N. Stessman PE No: C 054644)

TABLE 2
Groundwater Elevation Measurements
O' Reilly Auto Parts (Former Grand Auto #43)
4240 International Boulevard (East 14th Street), Oakland, California
Project Number 11134.28

Well Number	Date	Top of Well Casing Feet - MSL (1)	Depth to Groundwater Feet	Groundwater Elevation Feet - MSL
MW-1 (1)	20-Dec-11	36.55	23.99	12.56
MW-1 (1)	2-Jun-08	36.55	23.56	12.99
MW-1 (1)	27-Sep-06	36.55	23.27	13.28
MW-1	23-Jul-04	30.53	24.76	5.77
MW-1	15-May-03	30.53	25.29	5.24
MW-1	21-May-02	30.53	24.91	5.62
MW-1	19-Jun-01	30.53	25.67	4.86
MW-1	4-Nov-99	30.53	27.40	3.13
MW-1	10-May-96	30.53	28.18	2.35
MW-1	15-Sep-95	30.53	29.34	1.19
MW-1	31-Jan-95	30.53	30.83	-0.30
MW-1	20-Sep-94	30.53	32.44	-1.91
MW-1	7-Jun-94	30.53	33.04	-2.51
MW-1	18-Feb-94	30.53	34.60	-4.07
MW-1	17-Nov-93	30.53	35.30	-4.77
MW-1	4-Aug-93	30.53	34.93	-4.40
MW-1	5-May-93	30.53	35.45	-4.92
MW-2 (1)	20-Dec-11	36.43	23.85	12.58
MW-2 (1)	2-Jun-08	36.43	23.46	12.97
MW-2 (1)	27-Sep-06	36.43	23.13	13.30
MW-2	23-Jul-04	30.41	24.62	5.79
MW-2	15-May-03	30.41	25.16	5.25
MW-2	21-May-02	30.41	24.78	5.63
MW-2	19-Jun-01	30.41	25.54	4.87
MW-2	4-Nov-99	30.41	27.28	3.13
MW-2	10-May-96	30.41	28.06	2.35
MW-2	15-Sep-95	30.41	29.19	1.22
MW-2	31-Jan-95	30.41	30.71	-0.30
MW-2	20-Sep-94	30.41	32.40	-1.99
MW-2	7-Jun-94	30.41	32.92	-2.51
MW-2	18-Feb-94	30.41	34.46	-4.05
MW-2	17-Nov-93	30.41	35.18	-4.77
MW-2	4-Aug-93	30.41	34.79	-4.38
MW-2	5-May-93	30.41	35.32	-4.91
MW-3A (1)	20-Dec-11	36.71	24.13	12.58
MW-3A (1)	2-Jun-08	36.71	23.74	12.97
MW-3A (1)	27-Sep-06	36.71	23.42	13.29
MW-3A	23-Jul-04	30.70	24.90	5.80
MW-3A	15-May-03	30.70	25.43	5.27
MW-3A	21-May-02	30.70	25.04	5.66
MW-3A	19-Jun-01	30.70	25.81	4.89
MW-3	4-Nov-99	30.31	27.22	3.09
MW-3	10-May-96	30.31	27.96	2.35
MW-3	15-Sep-95	30.31	29.11	1.20
MW-3	31-Jan-95	30.31	30.62	-0.31
MW-3	20-Sep-94	30.31	32.30	-1.99
MW-3	7-Jun-94	30.31	32.83	-2.52
MW-3	18-Feb-94	30.31	34.38	-4.07
MW-3	17-Nov-93	30.31	35.13	-4.82
MW-3	4-Aug-93	30.31	34.70	-4.39
MW-3	5-May-93	30.31	35.22	-4.91

TABLE 2
Groundwater Elevation Measurements
O' Reilly Auto Parts (Former Grand Auto #43)
4240 International Boulevard (East 14th Street), Oakland, California
Project Number 11134.28

Well Number	Date	Top of Well Casing Feet - MSL (1)	Depth to Groundwater Feet	Groundwater Elevation Feet - MSL
MW-4 (1)	20-Dec-11	35.08	22.51	12.57
MW-4 (1)	2-Jun-08	35.08	22.11	12.97
MW-4 (1)	27-Sep-06	35.08	21.81	13.27
MW-4	23-Jul-04	29.08	23.30	5.78
MW-4	15-May-03	29.08	23.82	5.26
MW-4	21-May-02	29.08	23.46	5.62
MW-4	19-Jun-01	29.08	24.20	4.88
MW-4	4-Nov-99	29.08	25.92	3.16
MW-4	10-May-96	29.08	26.70	2.38
MW-4	15-Sep-95	29.08	27.86	1.22
MW-4	31-Jan-95	29.08	29.38	-0.30
MW-4	20-Sep-94	29.08	31.07	-1.99
MW-4	7-Jun-94	29.08	31.60	-2.52
MW-4	18-Feb-94	29.08	33.14	-4.06
MW-4	17-Nov-93	29.08	33.90	-4.82
MW-4	4-Aug-93	29.08	33.47	-4.39
MW-4	5-May-93	29.08	33.98	-4.90

Notes:

(1) Wells were resurveyed on September 27, 2006 to North America Vertical Datum 1988-Otrho. Mt (GEOID03)
MSL = Mean Sea Level per NAVD88 Datum

TABLE 3
Summary of Groundwater Sample Analytical Data
O'Reilly Auto Supply
(Former Grand Auto Supply #43)
4240 East 14th Street, Oakland, California
AllWest Project Number 11134.28

Location	Date	PCE (µg/L)	TCE (µg/L)	cis-1,2 DCE (µg/L)	FREON 12 (µg/L)	Chloroform (µg/L)	1,1,1-TCA (µg/L)	1,2-DCA (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetrachloride (µg/L)	TPH-g (µg/L)	Other VOCs (µg/L)	LUFT 5 Metals (µg/L)
MW-1	12/20/2011	64	9.2	5.1	53	ND (<1.7)	ND (<1.7)	ND (<1.7)	ND (<1.7)	ND (<1.7)	110 ³	ND (varies)	NA
MW-1	6/2/2008	68	10	4.6	36	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-1	9/27/2006	110	15	8.7	21	0.83	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-1	7/23/2004	140	19	5.9	69	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	NA	ND (varies)	NA
MW-1	5/15/2003	120	15	5.8	50	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-1	5/21/2002	140	15	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-1	6/19/2001	130	17	5.3	35	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-1	11/4/1999	120	17	6.6	62	ND (<3.0)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<50)	ND (varies)	NA
MW-1	5/10/1996	270	24	4.3	NA	2.6	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	NA	ND (varies)	NA
MW-1	9/15/1995	200	25	6.8	NA	1.4	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-1	1/31/1995	54	13	9.7	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<1.0)	NA	ND (varies)	NA
MW-1 (D)	1/31/1995	54	13	9.3	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<1.0)	NA	ND (varies)	NA
MW-1	9/20/1994	270	37	19	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-1 (D)	9/20/1994	270	36	18	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-1	6/7/1994	200	28	25	NA	1.6	(ND <0.5)	(ND <0.5)	(ND <0.5)	(ND <0.5)	83 ²	ND (varies)	ND (varies)
MW-1 (D)	6/7/1994	340	35	22	NA	1.5	(ND <0.5)	(ND <0.5)	(ND <0.5)	(ND <0.5)	NA	ND (varies)	NA
MW-1	2/18/1994	200	25	12	NA	1	(ND <0.5)	(ND <0.5)	(ND <0.5)	(ND <0.5)	110 ²	ND (varies)	ND (varies)
MW-1	11/17/1993	230	28	15	NA	1.8	(ND <0.5)	(ND <0.5)	ND (<1.0)	(ND <0.5)	99 ²	ND (varies)	ND (varies)
MW-1	8/4/1993	290	23	10	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	150 ²	Toluene 0.4, others ND (varies)	ND (varies)
MW-1	4/26/1993	300	22	8.7	37	1.0	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	57 ²	ND (varies)	ND (varies)
MW-1 (D)	4/26/1993	300	22	8.7	110	1.1	0.6	ND (<0.5)	ND (<1.0)	ND (<0.5)	74 ²	ND (varies)	ND (varies)
MW-1	1/19/1993	220	28	14	NA	ND (<3.0)	ND (<3.0)	ND (<1.0)	--	ND (<1.0)	160 ²	ND (varies)	ND (varies)
MW-1	9/10/1992	310	26	11	NA	1.1	ND (<0.5)	ND (<0.6)	--	ND (<0.5)	150 ²	ND (varies)	ND (varies)
MW-2	12/20/2011	13	ND (<2.5)	ND (<2.5)	130	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<50)	ND (varies)	NA
MW-2	6/2/2008	6.5	1.8	ND	47	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	NA	ND (varies)	NA
MW-2	9/27/2006	8.3	5.9	1.7	24	0.91	ND (<0.5)	ND (<0.5)	ND (<0.5)	1.9	NA	ND (varies)	NA
MW-2	7/23/2004	3.7	11	3	60	ND (<0.5)	ND (<0.5)	0.53	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-2	5/15/2003	3.9	12	2.9	56	ND (<0.5)	ND (<0.5)	0.63	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-2	5/21/2002	6.3	4.7	0.84	44	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	0.61	NA	ND (varies)	NA
MW-2	6/19/2001	9.1	5.3	1	38	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	0.83	NA	ND (varies)	NA
MW-2	11/4/1999	7.6	8.1	1.9	55	ND (<3.0)	ND (<0.5)	ND (<0.5)	ND (<0.5)	2.0	ND (<50)	ND (varies)	NA

TABLE 3
Summary of Groundwater Sample Analytical Data
O'Reilly Auto Supply
(Former Grand Auto Supply #43)
4240 East 14th Street, Oakland, California
AllWest Project Number 11134.28

Location	Date	PCE (µg/L)	TCE (µg/L)	cis-1,2 DCE (µg/L)	FREON 12 (µg/L)	Chloroform (µg/L)	1,1,1-TCA (µg/L)	1,2-DCA (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetrachloride (µg/L)	TPH-g (µg/L)	Other VOCs (µg/L)	LUFT 5 Metals (µg/L)
MW-2	5/10/1996	7.2	51	13	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	NA	ND (varies)	NA
MW-2	9/15/1995	6.3	52	17	NA	ND (<0.5)	ND (<0.5)	ND (<0.5)	0.8	ND (<0.5)	NA	ND (varies)	NA
MW-2 (D)	9/15/1995	6.5	69	17	NA	ND (<0.5)	ND (<0.5)	0.9	0.9	ND (<0.5)	NA	ND (varies)	NA
MW-2	1/31/1995	3	60	17	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)	ND (<1.0)	NA	ND (varies)	NA
MW-2	9/20/1994	6	130	36	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-2	6/7/1994	6.9	120	31	NA	ND (<0.5)	ND (<0.5)	1.8	ND (<0.5)	ND (<0.5)	52 ²	ND (varies)	Zinc 20, others ND (varies)
MW-2	2/18/1994	4.8	75	25	NA	ND (<0.5)	ND (<0.5)	1.5	ND (<0.5)	ND (<0.5)	58 ²	ND (varies)	ND (varies)
MW-2	11/17/1993	6.1	32	8.7	NA	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	ND (varies)
MW-2	8/4/1993	7.2	110	22	NA	ND (<1.2)	ND (<1.2)	ND (<1.2)	ND (<2.4)	ND (<1.2)	120 ²	Toluene 0.3, others ND (varies)	ND (varies)
MW-2	4/26/1993	7.5	32	8.5	31	0.9	0.6	0.6	ND (<1.0)	ND (<0.5)	70	Benzene 0.8, Toluene 1.1, Xylenes 1.0, others ND (varies)	ND (varies)
MW-3A	12/20/2011	58	7.8	1.3	7.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	95 ³	ND (varies)	NA
MW-3A	6/2/2008	71	11	ND (<2.5)	8.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-3A	9/27/2006	83	12	4.7	3.6	0.83	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-3A	7/23/2004	85	12	2.4	8.3	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	NA	ND (varies)	NA
MW-3A	5/15/2003	130	16	ND (<2.5)	21	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-3A	5/2/2002	120	16	ND (<2.5)	7.1	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-3A ¹	6/19/2001	120	21	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-3	11/4/1999	150	24	14	14	ND (<15)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	61	ND (varies)	NA
MW-3	5/10/1996	160	25	7.2	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	NA	ND (varies)	NA
MW-3	9/15/1995	170	25	6.2	NA	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-3	1/31/1995	160	34	6.2	NA	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	NA	ND (varies)	NA
MW-3	9/20/1994	240	37	11	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-3	6/7/1994	160	34	8.3	NA	0.6	0.6	ND (<0.5)	ND (<0.5)	ND (<0.5)	78 ²	ND (varies)	ND (varies)
MW-3	2/18/1994	85	19	5	NA	0.7	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	64 ²	ND (varies)	ND (varies)
MW-3	11/17/1993	170	29	12	NA	1.3	0.8	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	ND (varies)

TABLE 3
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O'Reilly Auto Supply
(Former Grand Auto Supply #43)
4240 East 14th Street, Oakland, California
AllWest Project Number 11134.28

Location	Date	PCE (µg/L)	TCE (µg/L)	cis-1,2 DCE (µg/L)	FREON 12 (µg/L)	Chloroform (µg/L)	1,1,1-TCA (µg/L)	1,2-DCA (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetrachloride (µg/L)	TPH-g (µg/L)	Other VOCs (µg/L)	LUFT 5 Metals (µg/L)
MW-3	8/4/1993	170	28	ND (<5.0)	NA	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	170 ²	Benzene 0.3, Toluene 0.4, others ND (varies)	ND (varies)
MW-3	4/26/1993	79	21	9.7	35	ND (<0.5)	0.8	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	Chromium 170, others ND (varies)
MW-4	12/20/2011	42	4.3	ND (<1.0)	48	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	65 ³	ND (varies)	NA
MW-4	6/2/2008	39	4.3	ND (<1.0)	29	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	NA	ND (varies)	NA
MW-4	9/27/2006	62	7.8	1.4	13	1.1	ND (<0.5)	ND (<0.5)	ND (<0.5)	1.3	NA	ND (varies)	NA
MW-4	7/23/2004	23	3.7	1	26	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	0.5	NA	ND (varies)	NA
MW-4	5/15/2003	120	7.7	0.75	16	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-4	5/21/2002	70	7.7	ND (<2.5)	18	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	ND (<2.5)	NA	ND (varies)	NA
MW-4	6/19/2001	47	7	1.2	19	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-4	11/4/1999	61	10	2.2	41	ND (<3.0)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<50)	ND (varies)	NA
MW-4	5/10/1996	190	22	2.5	NR	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	ND (<1.3)	NA	ND (varies)	NA
MW-4	9/15/1995	160	24	4.4	NR	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	NA	ND (varies)	NA
MW-4	1/31/1995	140	20	4.7	NR	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<5.0)	ND (<1.0)	NA	ND (varies)	NA
MW-4	9/20/1994	220	32	5	NR	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
MW-4	6/7/1994	140	28	7.1	NR	0.9	0.9	ND (<0.5)	ND (<0.5)	ND (<0.5)	62 ²	ND (varies)	Nickel 20, others ND (varies)
MW-4	2/18/1994	120	31	6	NR	1.9	0.7	ND 0.5	ND 0.5	ND	95 ²	ND (varies)	ND (varies)
MW-4	11/17/1993	87	20	6.6	NR	1.0	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	ND (varies)
MW-4	8/4/1993	110	16	ND (<5.0)	NR	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<10)	ND (<5.0)	110 ²	Toluene 0.4, others ND (varies)	ND (varies)
MW-4	4/26/1993	78	17	3.9	28	0.6	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	Chromium 60, others ND (varies)
HC-1	11/4/1999	100	17	8.7	43	ND <3.0)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<50)	ND (varies)	NA
HC-1	5/10/1996	200	27	13	NR	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	NA	ND (varies)	NA
HC-1	9/15/1995	170	27	14	NR	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<50)	ND (varies)	NA
HC-1	1/31/1995	120	27	11	NR	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<50)	ND (varies)	NA

TABLE 3
Summary of Groundwater Sample Analytical Data
O'Reilly Auto Supply
(Former Grand Auto Supply #43)
4240 East 14th Street, Oakland, California
AllWest Project Number 11134.28

Location	Date	PCE (µg/L)	TCE (µg/L)	cis-1,2 DCE (µg/L)	FREON 12 (µg/L)	Chloroform (µg/L)	1,1,1-TCA (µg/L)	1,2-DCA (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetrachloride (µg/L)	TPH-g (µg/L)	Other VOCs (µg/L)	LUFT 5 Metals (µg/L)
HC-1	9/20/1994	190	37	15	NR	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<5.0)	ND (<50)	ND (varies)	NA
HC-1	6/7/1994	180	42	22	NR	1.0	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	69 ²	ND (varies)	NA
HC-1	2/18/1994	140	30	13	NR	0.7	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	96 ²	ND (varies)	NA
HC-1	2/18/1994	150	22	11	NR	0.6	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<0.5)	90 ²	ND (varies)	NA
HC-1	11/17/1993	130	27	16	NR	1.1	0.7	ND (<0.6)	ND (<2.0)	ND (<0.5)	ND (<50)	ND (varies)	NA
HC-1	8/4/1993	83	27	15	NR	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	100 ²	ND (varies)	NA
HC-1	4/26/1993	46	22	13	47	ND (<0.5)	ND (<0.5)	ND (<0.5)	ND (<1.0)	ND (<0.5)	ND (<50)	ND (varies)	NA
RWQCB Commercial/Industrial ESLs, current or potential drinking water		5	5	6	NE	70	62	0.5	0.5	0.5	100	Benzene 1.0, Toluene 40, Xylenes 20, MTBE 5.0, others NE or varies	Cadmium 0.25, Chromium 50, Lead 2.5, Nickel 8.2, and Zinc 81

Notes: All results are reported in micrograms per liter (µg/L) [equivalent to parts per billion (ppb)], except where noted.

1,1,1-TCA 1,1,1-Trichloroethane (analytical method SW8260B)
1,2-DCA 1,2-Dichloroethane (analytical method SW8260B)
cis-1,2 DCE cis-1,2-Dichloroethene (analytical method SW8260B)
Freon 12 Dichlorodifluoromethane (analytical method SW8260B)
MTBE Methyl tertiary butyl ether (analytical method SW8260B)
TCE Trichloroethene (analytical method SW8260B)
TPH-g Total petroleum hydrocarbons as gasoline (analytical method SW8260B)
VOCs Volatile organic compounds (analytical method SW8260B)
LUFT 5 Metals Cadmium, chromium, lead, nickel and zonce by EPA Method 200.8
(D) Duplicate sample
NA Not analyzed
ND (<0.5) Not detected at or above listed reporting limit
NE Not established

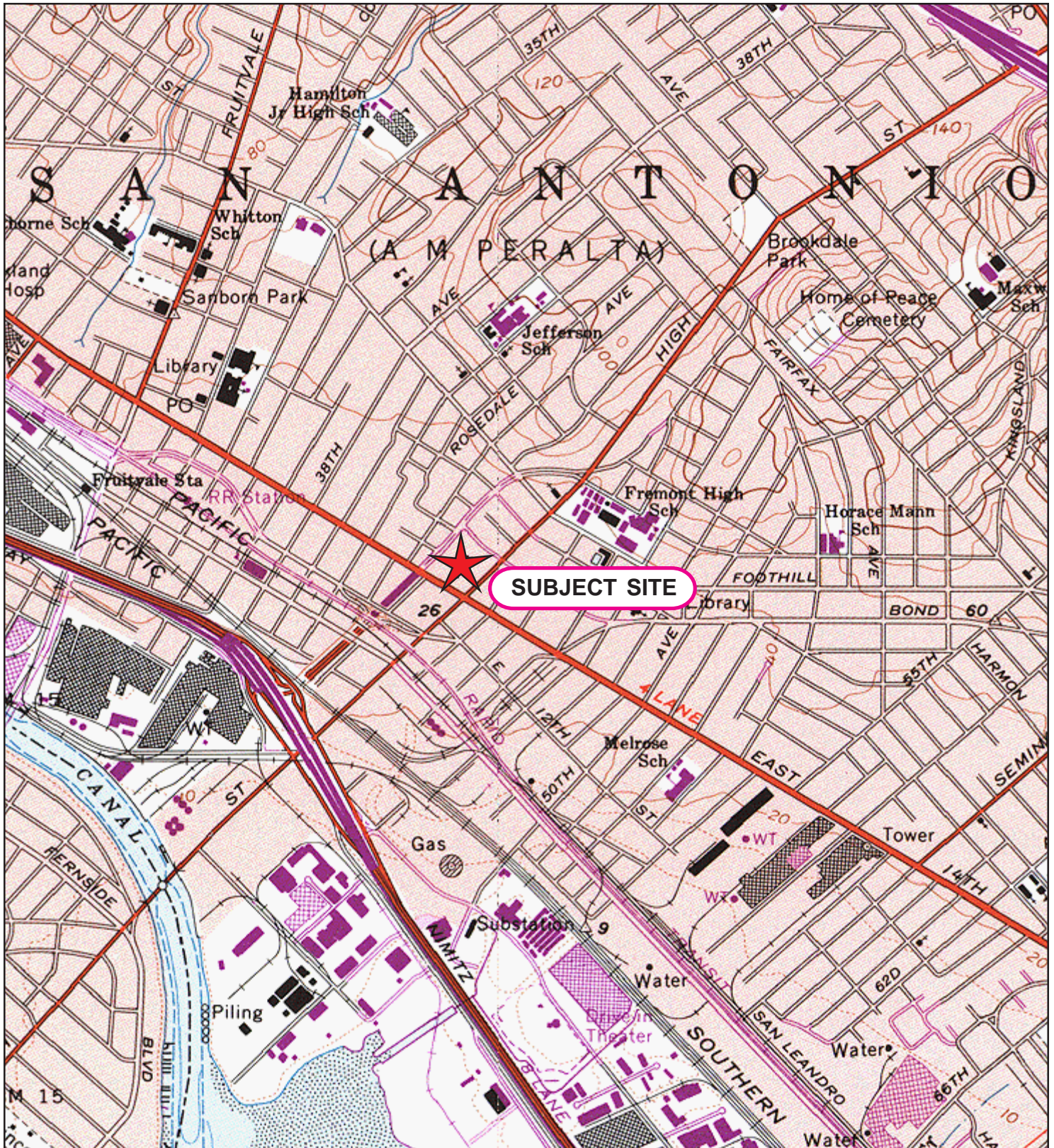
TABLE 3
Summary of Groundwater Sample Analytical Data
O'Reilly Auto Supply
(Former Grand Auto Supply #43)
4240 East 14th Street, Oakland, California
AllWest Project Number 11134.28

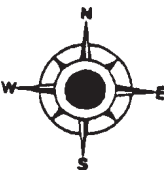

Location	Date	PCE (µg/L)	TCE (µg/L)	cis-1,2 DCE (µg/L)	FREON 12 (µg/L)	Chloroform (µg/L)	1,1,1-TCA (µg/L)	1,2-DCA (µg/L)	Vinyl Chloride (µg/L)	Carbon Tetrachloride (µg/L)	TPH-g (µg/L)	Other VOCs (µg/L)	LUFT 5 Metals (µg/L)
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- 1 Monitoring Well MW-3 was destroyed in May 2000 and replaced by MW-3A
- 2 Gasoline range concentration reported. The chromatogram showed only a single peak in the gasoline range, and did not match typical gasoline pattern. Was interpreted by Hart Crowser to represent analytical overlap from halogenated VOCs detected in samples and not TPH-g (Hart Crowser Quarterly Status Report, November 9, 1994).
- 3 Upon laboratory review of chromatogram, TPH range is derived solely from chlorinated hydrocarbons (mostly PCE) detected in samples and not TPH-g range fuel pattern (McC Campbell Analytical, Inc., written communication, February 21, 2012).

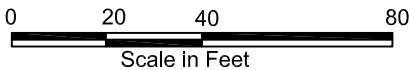
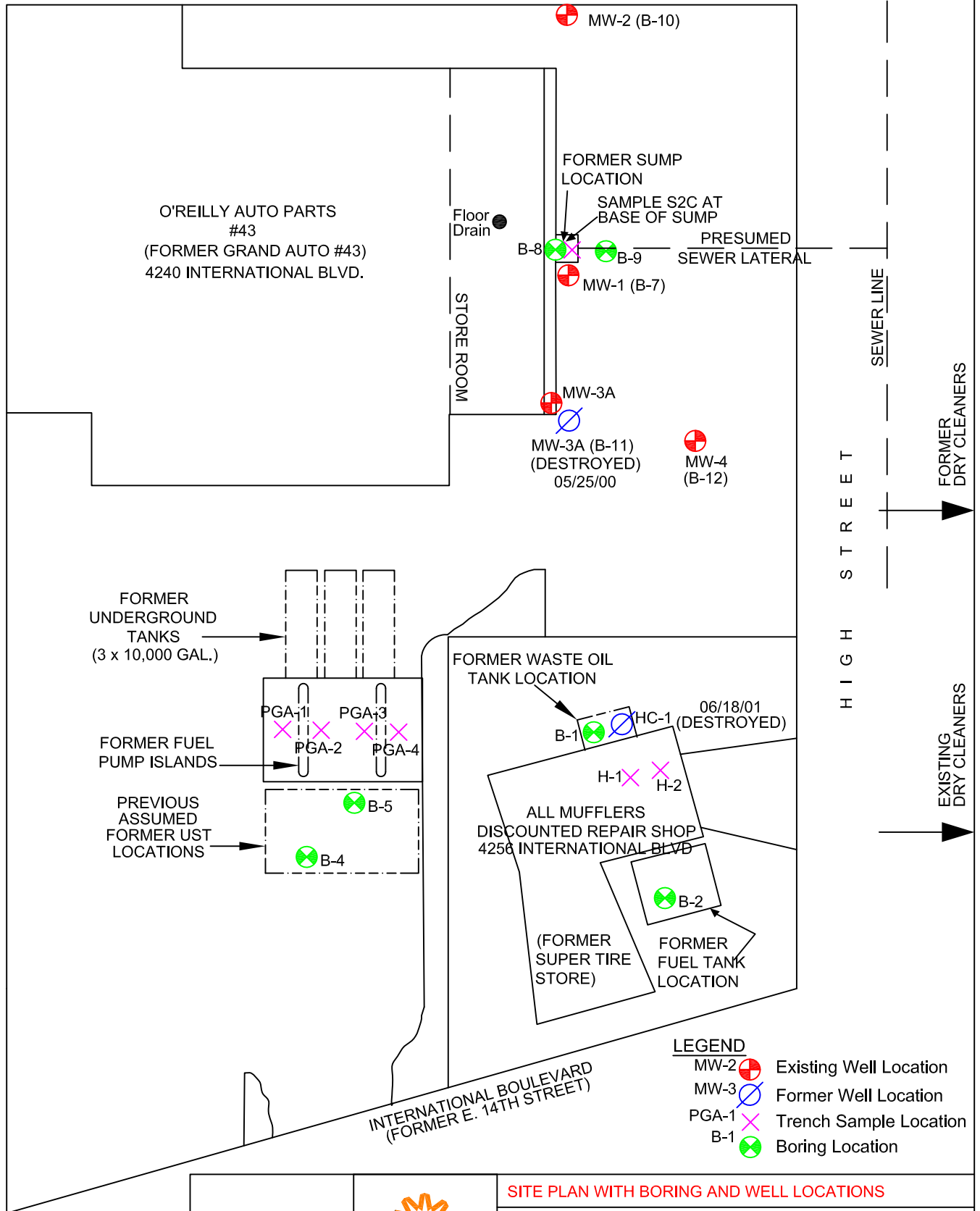
San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for commercial/industrial land use where groundwater is a current or potential drinking water resource from Tables A and F1a, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*. RWQCB, Interim Final November 2007, revised May 2008.

FIGURES



 NOT TO SCALE	 PROJECT NO. 11134.28	SITE LOCATION MAP FIGURE 1 4240 INTERNATIONAL BOULEVARD OAKLAND, CALIFORNIA SOURCE: USGS TOPO
		PREPARED BY: E. VELA DATE: 04/08/11

MISSION AUTOMOTIVE



PROJECT NO.
11134.28

SITE PLAN WITH BORING AND WELL LOCATIONS

FIGURE 2: O'REILLY AUTO PARTS

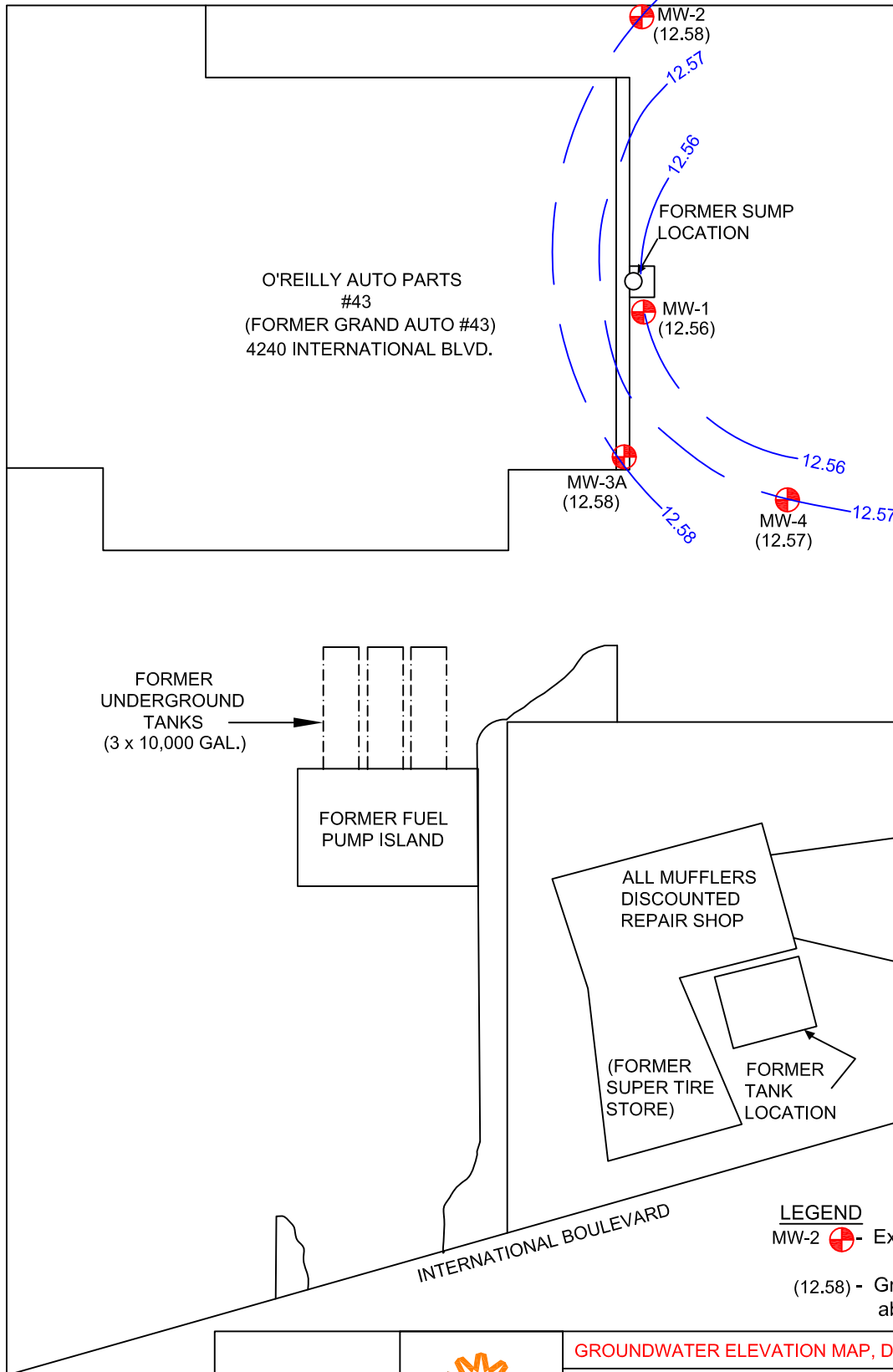
4240 INTERNATIONAL BOULEVARD

OAKLAND, CALIFORNIA

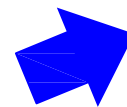
SOURCE: ALLWEST

PREPARED BY: C. RAMELB

MISSION AUTOMOTIVE



APPROXIMATE GROUNDWATER FLOW DIRECTION



Gradient 0.001 ft.

H I G H S T R E E T

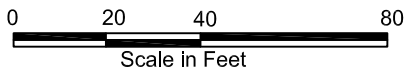
FORMER DDDRY CLEANERS

EXISTING DDDRY CLEANERS

LEGEND

MW-2 Existing Well Location

(12.58) - Groundwater elevation above mean sea level (ft)



PROJECT NO.
11134.28

GROUNDWATER ELEVATION MAP, DECEMBER 20, 2011

FIGURE 3: O'REILLY AUTO PARTS

4240 INTERNATIONAL BOULEVARD

OAKLAND, CALIFORNIA

SOURCE: ALLWEST

PREPARED BY: D. ZAMORA (REV. 01/23/12)

Appendix A



AllWest

PURGE TABLE

WELL ID: MW-1
Page 1 of 1

SITE NAME: <u>PACCAR-Oakland (O'Reilly's)</u>	LOCATION: <u>4240 International Blvd, Oakland</u>
PROJECT NO: <u>11134.28</u>	DATE PURGED: <u>12/20/11</u>
PURGED/SAMPLED BY: <u>Leonard Niles</u>	DATE SAMPLED: <u>12/20/11</u>
TIME SAMPLED: <u>12:28</u>	DEPTH TO BOTTOM (feet): <u>44.20</u>
DEPTH TO WATER (feet): <u>23.99 @ 10:28</u>	WATER COLUMN HEIGHT (feet): <u>20.21</u>
CALCULATED PURGE (gallons): <u>40 gal</u>	CASING VOLUME (gallons): <u>13.34</u>
ACTUAL PURGE (gallons) <u>40</u>	<u>x 3 vols = 40.02</u>

DEVELOPMENT QUARTERLY BIENNIAL OTHER BIENNIAL

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" (0.16) 3" (0.38) 4" (0.66) x 3 vols
 Casing Volume (gallons per foot): Disposable PE Bailer: 2.8" ID x 3' = 0.96 gallons

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (umhos/cm)	TOTAL	
					DISSOLVED OXYGEN (mg/L)	TURBIDITY (NTU)
<u>1.0</u>	<u>11:33</u>	<u>20.8</u>	<u>6.24</u>	<u>565</u>	<u>275</u>	<u>clear</u>
<u>14.0</u>	<u>11:54</u>	<u>20.8</u>	<u>5.42</u>	<u>621</u>	<u>310</u>	<u>slightly cloudy</u>
<u>27.0</u>	<u>12:10</u>	<u>20.0</u>	<u>5.21</u>	<u>644</u>	<u>322</u>	<u>slightly cloudy</u>
<u>40.0</u>	<u>12:21</u>	<u>20.3</u>	<u>5.25</u>	<u>649</u>	<u>324</u>	<u>slightly cloudy</u>

SAMPLE INFORMATION w/ silica gel

SAMPLE DEPTH TO WATER (feet): 23.96 Analyses: TPH-d/mo (8015), TPH-g/VOCs (8260)
 80% RECHARGE: Y/N (28.03') SAMPLE TURBIDITY: slightly cloudy
 ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 3 x VOCs, 1 x 1 Lamber w/HCl

PURGING EQUIPMENT

Centrifugal Pump
 Submersible Pump
 Peristaltic Pump
 Purge Pump
 Other: _____
 Bailer (Teflon)
 Bailer (PVC or disposable) PE
 Bailer (Stainless-Steel)

SAMPLING EQUIPMENT

Centrifugal Pump
 Submersible Pump
 Peristaltic Pump
 Purge Pump
 Other: _____
 Bailer (Teflon)
 Bailer (PVC or disposable) PE
 Bailer (Stainless-Steel)

Comments: _____



AllWest

PURGE TABLE

WELL ID: MW-2

Page 1 of 1

SITE NAME: PACCAR-Oakland (O'Reilly's)	LOCATION: 4240 International Blvd, Oakland
PROJECT NO: 11134.28	DATE PURGED: 12/20/11
PURGED/SAMPLED BY: Leonard Niles	DATE SAMPLED:
TIME SAMPLED: 17:25	DEPTH TO BOTTOM (feet): 46.50
DEPTH TO WATER (feet): 23.85 @ 10:34	WATER COLUMN HEIGHT (feet): 22.65
CALCULATED PURGE (gallons): 44.8 gal	CASING VOLUME (gallons): 14.95
ACTUAL PURGE (gallons) 45	x 3 vols = 44.8 gal

DEVELOPMENT QUARTERLY BIENNIAL OTHER BIENNIAL

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" 3" 4" x 3 vols

Casing Volume (0.16) (0.38) (0.66)

(gallons per foot):

Disposable PE Bailer: 2.8" 10 x 3' ≈ 0.96 gal

FIELD MEASUREMENTS

TOTAL

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (umhos/cm)	DISSOLVED OXYGEN SOLIDS (mg/L)	TURBIDITY (NTU)
1.0	16:09	19.6	7.4	605	302	clear
15	16:24	18.7	7.79	642	319	silty
30	16:43	19.0	8.68	690	345	silty
45	17:04	18.3	8.69	704	352	silty

SAMPLE INFORMATION w/silica gel

SAMPLE DEPTH TO WATER (feet): 23.8 Analyses: TPH-d/mo (8015), TPH-g/VOCs (8260)

80% RECHARGE: Y/N (29.38') SAMPLE TURBIDITY: Silty

ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 3 x VOCs, 1 x Lamber w/HCl

PURGING EQUIPMENT

SAMPLING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump

Other: _____

- Bailer (Teflon)
- Bailer (PVC or disposable) PE
- Bailer (Stainless Steel)

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump

Other: _____

- Bailer (Teflon)
- Bailer (PVC or disposable) PE
- Bailer (Stainless Steel)

Comments: _____



AllWest

PURGE TABLE

WELL ID: MW-3A
Page 1 of 1

SITE NAME: PACCAR-Oakland (O'Reilly)	LOCATION: 4240 International Blvd, Oakland
PROJECT NO: 11134.28	DATE PURGED: 12/20/11
PURGED/SAMPLED BY: Leonard Niles	DATE SAMPLED: 12/20/11
TIME SAMPLED: 15:25 - 15:30	DEPTH TO BOTTOM (feet): 40.25*
DEPTH TO WATER (feet): 24.13 @ 10:21	WATER COLUMN HEIGHT (feet): 16.12
CALCULATED PURGE (gallons): 31.9 gals	CASING VOLUME (gallons): 10.64
ACTUAL PURGE (gallons)	x 3 vols = 31.9 gal

DEVELOPMENT _____ QUARTERLY _____ BIENNIAL _____ OTHER BIENNIAL

SAMPLE TYPE: Groundwater _____ Surface Water _____ Other _____

CASING DIAMETER: 2" _____ 3" _____ 4" x 3 vols
 Casing Volume (0.16) (0.38) (0.66) 0.96
 (gallons per foot): Disposable PE Bailer: 2.8" ID x 3' ≈ 0.65 gal

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (umhos/cm)	TOTAL DISSOLVED OXYGEN SOLIDS (mg/L)	TURBIDITY (NTU)
<u>1.065</u>	<u>14:37</u>	<u>20.5</u>	<u>7.40</u>	<u>394</u>	<u>196</u>	<u>clear</u>
<u>1.065</u>	<u>14:50</u>	<u>20.5</u>	<u>7.61</u>	<u>395</u>	<u>197</u>	<u>silty</u>
<u>27.065</u>	<u>15:06</u>	<u>20.1</u>	<u>7.38</u>	<u>395</u>	<u>197</u>	<u>silty</u>
<u>32.0</u>	<u>15:22</u>	<u>20.1</u>	<u>7.40</u>	<u>395</u>	<u>197</u>	<u>silty</u>

SAMPLE INFORMATION w/ silice gel

SAMPLE DEPTH TO WATER (feet): 24.09' Analyses: TPH-d/mo (8015), TPH-g/VOCs (8260)
 80% RECHARGE: Y/N (27.35') SAMPLE TURBIDITY: cloudy-silty
 ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 3x VOA's, 1x Lamber w/HCl

PURGING EQUIPMENT

____ Centrifugal Pump
 ____ Submersible Pump
 ____ Peristaltic Pump
 ____ Purge Pump
 Other: _____

X Bailer (Teflon) (PE)
X Bailer (PVC or disposable)
 ____ Bailer (Stainless Steel)

SAMPLING EQUIPMENT

____ Centrifugal Pump
 ____ Submersible Pump
 ____ Peristaltic Pump
 ____ Purge Pump
 Other: _____

____ Bailer (Teflon) (PE)
X Bailer (PVC or disposable)
 ____ Bailer (Stainless Steel)

Comments: * silt on bottom of well ≈ 6" thick



AllWest

PURGE TABLE

WELL ID: MW-4
Page 1 of 1

SITE NAME: PACCAR-Oakland (O'Reilly)	LOCATION: 4240 International Blvd, Oakland
PROJECT NO: 11134.23	DATE PURGED: 12/20/11
PURGED/SAMPLED BY: Leonard Niles	DATE SAMPLED: 12/20/11
TIME SAMPLED: 14:03	DEPTH TO BOTTOM (feet): 44.58
DEPTH TO WATER (feet): 22.51 @ 10:16	WATER COLUMN HEIGHT (feet): 22.07
CALCULATED PURGE (gallons): 43.7 gals	CASING VOLUME (gallons): 14.57
ACTUAL PURGE (gallons) 44	x 3 vols = 43.7 gals

DEVELOPMENT QUARTERLY BIENNIAL OTHER BIENNIAL

SAMPLE TYPE: Groundwater Surface Water Other

CASING DIAMETER: 2" 3" 4" x 3 vols
Casing Volume (0.16) (0.38) (0.66)

(gallons per foot): Disposable PE Bailer - 2.8" ID x 36" ≈ 0.65 gal

FIELD MEASUREMENTS

VOLUME (gal)	TIME	TEMP (degrees C)	PH (units)	CONDUCTIVITY (umhos/cm)	TOTAL	TURBIDITY (NTU)
					DISSOLVED OXYGEN SOLIDS (mg/L)	
1.065	12:58	21.4	5.26	417	2.08	clear
15.4	13:15	19.7 19.6	5.35	632	3.17	slightly cloudy
30.0	13:32	19.5	5.37	663	3.31	slightly cloudy
44.0	13:48	19.6	7.40	666	3.31	slightly cloudy

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER (feet): ~~22.44~~ Analyses: TPH-d/mo (8015), TPH-g/VOCs (8260)
80% RECHARGE: Y/N (26.92') SAMPLE TURBIDITY: slightly cloudy
ODOR: none SAMPLE BOTTLE/PRESERVATIVE: 3xVOAS & 1x1L amber w/HCl

PURGING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Other: _____
- Bailer (Teflon)
- Bailer (PVC or disposable)
- Bailer (Stainless Steel)

SAMPLING EQUIPMENT

- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Purge Pump
- Other: _____
- Bailer (Teflon)
- Bailer (PVC or disposable)
- Bailer (Stainless Steel)

Comments: _____



Groundwater Monitoring Well Development

Groundwater monitoring wells will be developed with the combination of surging and pumping actions. The wells will be alternately surged with a surging block for five minutes and pumped with a submersible pump for two minutes. The physical characteristics of the groundwater, such as water color and clarity, pH, temperature, and conductivity, will be monitored during well development. Well development will be considered complete when the groundwater is relatively sediment-free and groundwater characteristic indicators are stabilized (consecutive readings within 10% of each other).

Groundwater will be sampled from the developed wells no sooner than 48 hours after well development to allow stabilization of groundwater conditions. Prior to groundwater sampling, a proper purging process will be performed at each well. The purpose of well purging is to remove fine grained materials from the well casing and to allow fresh and more representative water to recharge the well. Prior to well purging, an electric water depth sounder will be lowered into the well casing to measure the depth to the water to the nearest 0.01 feet. A clear poly bailer will then be lowered into the well casing and partially submerged. Upon retrieval of the clear bailer, the surface of the water column retained in the bailer will be carefully examined for any floating product or product sheen.

After all initial measurements are completed and recorded, the well will be purged by an electrical submersible pump or a bailer. A minimum of 3 well volumes of groundwater will be purged and groundwater characteristics (temperature, pH, and conductivity) monitored at each well volume interval. Purging is considered complete when indicators are stabilized (consecutive readings within 10% of each other) and the purged water is relatively free of sediments.

Groundwater sampling will be conducted after the water level has recovered to at least 80% of the initial level, recorded prior to purging. The groundwater sample will be collected by a disposable bailer. Upon retrieval of the bailer, the retained water will be carefully transferred to appropriate sample bottle furnished by the analytical laboratory. All sample bottles will have a Teflon lined septum/cap and be filled such that no headspace is present. Then the sample bottles will be labeled and immediately placed on ice to preserve the chemical characteristics of its content.

To prevent cross contamination, all groundwater sampling equipment that comes in contact with the groundwater will be thoroughly decontaminated prior to sampling. A disposable bailer will be used to collect the groundwater samples. Sample handling, storage, and transport procedures described in the following sections will be employed. All well development and purging water will be temporarily stored on-site in 55-gallon drums awaiting test results to determine the proper disposal method.

Appendix B



Analytical Report

All West Environmental, Inc 530 Howard Street, Ste. 300 San Francisco, CA 94105	Client Project ID: #11134.28; PACCAR-Oakland GWM	Date Sampled: 12/20/11
		Date Received: 12/21/11
	Client Contact: Leonard Niles	Date Reported: 12/29/11
	Client P.O.:	Date Completed: 12/29/11

WorkOrder: 1112645

February 21, 2012

Dear Leonard:

Enclosed within are:

- 1) The results of the **4** analyzed samples from your project: **#11134.28; PACCAR-Oakland GWM,**
- 2) QC data for the above samples, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF PDF Excel Write On (DW)

T06019705075

Report To: Leonard Niles Bill To: Darlene Torio
Company: AllWest Environmental, Inc.
530 Howard Street, Suite 300
San Francisco, CA 94904
Tele: (415) 391-2510 E-Mail: Leonard@allwest1.com
parlene@allwest1.com
Fax: (415) 391-2008
Project #: 11134.28 Project Name: PACCAR-Oakland GWM
Project Location: O'Kielly Auto, 4240 International Blvd, Oakland, CA
Sampler Signature: Leonard Niles

Analysis Request

Other Comments

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED		Analysis Request	Other	Comments	
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL				HNO ₃
MW-1	MW-1	12/20/11	12:28	3	VOA	X						X	X			
MW-1	MW-1		↓	1	IL	X						X	X			
MW-4	MW-4		14:03	3	VOA	X						X	X			HOLD
MW-4	MW-4		↓	1	IL	X						X	X			
MW-3A	MW-3A		15:30	3	VOA	X						X	X			HOLD
MW-3A	MW-3A		↓	1	IL	X						X	X			
MW-2	MW-2		17:05	3	VOA	X						X	X			HOLD
MW-2	MW-2		↓	1	IL	X						X	X			HOLD

MTBE / BTEX & TPH as Gas (602 / 8021 + 8015)	
MTBE / BTEX ONLY (EPA 602 / 8021)	
TPH as Diesel / Motor Oil (8015)	
Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	
Total Petroleum Hydrocarbons (418.1)	
EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	
EPA 505 / 608 / 8081 (CI Pesticides)	
EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	
EPA 507 / 8141 (NP Pesticides)	
EPA 515 / 8151 (Acidic CI Herbicides)	
EPA 524.2 / 624 / 8260 (VOCs) / <u>TPH-9</u>	
EPA 525.2 / 625 / 8270 (SVOCs)	
EPA 8270 SIM / 8310 (PAHs / PNAs)	
CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	
LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	
Lead (200.7 / 200.8 / 6010 / 6020)	

Relinquished By: Leonard Niles Date: 12/21/11 Time: 14:45 Received By: [Signature]
Relinquished By: [Signature] Date: 12/21/11 Time: 16:00 Received By: [Signature]
Relinquished By: [Signature] Date: [Signature] Time: [Signature] Received By: [Signature]

ICE pH 6.0
GOOD CONDITION _____
HEAD SPACE ABSENT _____
DECHLORINATED IN LAB _____
APPROPRIATE CONTAINERS _____
PRESERVED IN LAB _____
VOAS O&G METALS OTHER
PRESERVATION pH-2

McC Campbell Analytical, Inc.

1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1112645

ClientCode: AWE

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to: Leonard Niles
 All West Environmental, Inc
 530 Howard Street, Ste. 300
 San Francisco, CA 94105
 (415) 391-2510 FAX: (415) 391-2008

Email: Leonard@allwest1.com

ProjectNo: #11134.28; PACCAR-Oakland GWM

Bill to: Darlene Torio
 All West Environmental, Inc
 530 Howard Street, Ste.300
 San Francisco, CA 94105
 darlene@allwest1.com

Requested TAT: 5 days

Date Received: 12/21/2011
Date Printed: 12/21/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1112645-001	MW-1	Water	12/20/2011 12:28	<input type="checkbox"/>	A	A											
1112645-002	MW-4	Water	12/20/2011 14:03	<input type="checkbox"/>	A												
1112645-003	MW-3A	Water	12/20/2011 15:30	<input type="checkbox"/>	A												
1112645-004	MW-2	Water	12/20/2011 17:05	<input type="checkbox"/>	A												

Test Legend:

1	GAS8260_W	2	PREFD REPORT	3		4		5	
6		7		8		9		10	
11		12							

The following SampIDs: 001A, 002A, 003A, 004A contain testgroup.

Prepared by: Zoraida Cortez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **All West Environmental, Inc**

Date and Time Received: **12/21/2011 8:36:23 PM**

Project Name: **#11134.28; PACCAR-Oakland GWM**

Checklist completed and reviewed by: **Zoraida Cortez**

WorkOrder N°: **1112645** Matrix: Water

Carrier: Rob Pringle (MAI Courier)

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No
- Container/Temp Blank temperature Cooler Temp: 6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
<http://www.mccampbell.com> / E-mail: main@mccampbell.com

All West Environmental, Inc 530 Howard Street, Ste. 300 San Francisco, CA 94105	Client Project ID: #11134.28; PACCAR-Oakland GWM	Date Sampled: 12/20/11
		Date Received: 12/21/11
	Client Contact: Leonard Niles	Date Reported: 12/29/11
	Client P.O.:	Date Completed: 12/29/11

Work Order: 1112645

February 21, 2012

Case Narrative for TPH(g) results on samples #1112645-001, -002, -003:

The EPA 8260 VOC chromatograms show that the TPH(g) values are derived from chlorinated compounds present within the samples (PCE mostly) and not a TPH gas pattern.



All West Environmental, Inc
530 Howard Street, Ste. 300
San Francisco, CA 94105

Client Project ID: #11134.28;
PACCAR-Oakland GWM
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 12/20/11
Date Received: 12/21/11
Date Extracted: 12/28/11
Date Analyzed: 12/28/11

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112645

Table with 2 columns: Lab ID (1112645-001A), Client ID (MW-1), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 109, %SS2: 106, %SS3: 94

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



All West Environmental, Inc
530 Howard Street, Ste. 300
San Francisco, CA 94105

Client Project ID: #11134.28;
PACCAR-Oakland GWM
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 12/20/11
Date Received: 12/21/11
Date Extracted: 12/28/11
Date Analyzed: 12/28/11

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112645

Lab ID	1112645-002A
Client ID	MW-4
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<20	2.0	10	tert-Amyl methyl ether (TAME)	ND<1.0	2.0	0.5
Benzene	ND<1.0	2.0	0.5	Bromobenzene	ND<1.0	2.0	0.5
Bromochloromethane	ND<1.0	2.0	0.5	Bromodichloromethane	ND<1.0	2.0	0.5
Bromoform	ND<1.0	2.0	0.5	Bromomethane	ND<1.0	2.0	0.5
2-Butanone (MEK)	ND<4.0	2.0	2.0	t-Butyl alcohol (TBA)	ND<4.0	2.0	2.0
n-Butyl benzene	ND<1.0	2.0	0.5	sec-Butyl benzene	ND<1.0	2.0	0.5
tert-Butyl benzene	ND<1.0	2.0	0.5	Carbon Disulfide	ND<1.0	2.0	0.5
Carbon Tetrachloride	ND<1.0	2.0	0.5	Chlorobenzene	ND<1.0	2.0	0.5
Chloroethane	ND<1.0	2.0	0.5	Chloroform	ND<1.0	2.0	0.5
Chloromethane	ND<1.0	2.0	0.5	2-Chlorotoluene	ND<1.0	2.0	0.5
4-Chlorotoluene	ND<1.0	2.0	0.5	Dibromochloromethane	ND<1.0	2.0	0.5
1,2-Dibromo-3-chloropropane	ND<0.40	2.0	0.2	1,2-Dibromoethane (EDB)	ND<1.0	2.0	0.5
Dibromomethane	ND<1.0	2.0	0.5	1,2-Dichlorobenzene	ND<1.0	2.0	0.5
1,3-Dichlorobenzene	ND<1.0	2.0	0.5	1,4-Dichlorobenzene	ND<1.0	2.0	0.5
Dichlorodifluoromethane	48	2.0	0.5	1,1-Dichloroethane	ND<1.0	2.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND<1.0	2.0	0.5	1,1-Dichloroethene	ND<1.0	2.0	0.5
cis-1,2-Dichloroethene	ND<1.0	2.0	0.5	trans-1,2-Dichloroethene	ND<1.0	2.0	0.5
1,2-Dichloropropane	ND<1.0	2.0	0.5	1,3-Dichloropropane	ND<1.0	2.0	0.5
2,2-Dichloropropane	ND<1.0	2.0	0.5	1,1-Dichloropropene	ND<1.0	2.0	0.5
cis-1,3-Dichloropropene	ND<1.0	2.0	0.5	trans-1,3-Dichloropropene	ND<1.0	2.0	0.5
Diisopropyl ether (DIPE)	ND<1.0	2.0	0.5	Ethylbenzene	ND<1.0	2.0	0.5
Ethyl tert-butyl ether (ETBE)	ND<1.0	2.0	0.5	Freon 113	ND<20	2.0	10
Hexachlorobutadiene	ND<1.0	2.0	0.5	Hexachloroethane	ND<1.0	2.0	0.5
2-Hexanone	ND<1.0	2.0	0.5	Isopropylbenzene	ND<1.0	2.0	0.5
4-Isopropyl toluene	ND<1.0	2.0	0.5	Methyl-t-butyl ether (MTBE)	ND<1.0	2.0	0.5
Methylene chloride	ND<1.0	2.0	0.5	4-Methyl-2-pentanone (MIBK)	ND<1.0	2.0	0.5
Naphthalene	ND<1.0	2.0	0.5	n-Propyl benzene	ND<1.0	2.0	0.5
Styrene	ND<1.0	2.0	0.5	1,1,1,2-Tetrachloroethane	ND<1.0	2.0	0.5
1,1,2,2-Tetrachloroethane	ND<1.0	2.0	0.5	Tetrachloroethene	42	2.0	0.5
Toluene	ND<1.0	2.0	0.5	1,2,3-Trichlorobenzene	ND<1.0	2.0	0.5
1,2,4-Trichlorobenzene	ND<1.0	2.0	0.5	1,1,1-Trichloroethane	ND<1.0	2.0	0.5
1,1,2-Trichloroethane	ND<1.0	2.0	0.5	Trichloroethene	4.3	2.0	0.5
Trichlorofluoromethane	ND<1.0	2.0	0.5	1,2,3-Trichloropropane	ND<1.0	2.0	0.5
1,2,4-Trimethylbenzene	ND<1.0	2.0	0.5	1,3,5-Trimethylbenzene	ND<1.0	2.0	0.5
Vinyl Chloride	ND<1.0	2.0	0.5	Xylenes, Total	ND<1.0	2.0	0.5

Surrogate Recoveries (%)

%SS1:	110	%SS2:	106
%SS3:	94		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



All West Environmental, Inc
530 Howard Street, Ste. 300
San Francisco, CA 94105

Client Project ID: #11134.28;
PACCAR-Oakland GWM
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 12/20/11
Date Received: 12/21/11
Date Extracted: 12/28/11
Date Analyzed: 12/28/11

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112645

Table with 2 columns: Lab ID (1112645-003A), Client ID (MW-3A), Matrix (Water)

Main data table with 8 columns: Compound, Concentration *, DF, Reporting Limit, Compound, Concentration *, DF, Reporting Limit. Lists various organic compounds and their detection results.

Surrogate Recoveries (%)

Table showing surrogate recoveries: %SS1: 114, %SS2: 105, %SS3: 85

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.
ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



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530 Howard Street, Ste. 300
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Client Project ID: #11134.28;
PACCAR-Oakland GWM
Client Contact: Leonard Niles
Client P.O.:

Date Sampled: 12/20/11
Date Received: 12/21/11
Date Extracted: 12/28/11
Date Analyzed: 12/28/11

Volatile Organics by P&T and GC/MS (Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1112645

Lab ID	1112645-004A
Client ID	MW-2
Matrix	Water

Compound	Concentration *	DF	Reporting Limit	Compound	Concentration *	DF	Reporting Limit
Acetone	ND<50	5.0	10	tert-Amyl methyl ether (TAME)	ND<2.5	5.0	0.5
Benzene	ND<2.5	5.0	0.5	Bromobenzene	ND<2.5	5.0	0.5
Bromochloromethane	ND<2.5	5.0	0.5	Bromodichloromethane	ND<2.5	5.0	0.5
Bromoform	ND<2.5	5.0	0.5	Bromomethane	ND<2.5	5.0	0.5
2-Butanone (MEK)	ND<10	5.0	2.0	t-Butyl alcohol (TBA)	ND<10	5.0	2.0
n-Butyl benzene	ND<2.5	5.0	0.5	sec-Butyl benzene	ND<2.5	5.0	0.5
tert-Butyl benzene	ND<2.5	5.0	0.5	Carbon Disulfide	ND<2.5	5.0	0.5
Carbon Tetrachloride	ND<2.5	5.0	0.5	Chlorobenzene	ND<2.5	5.0	0.5
Chloroethane	ND<2.5	5.0	0.5	Chloroform	ND<2.5	5.0	0.5
Chloromethane	ND<2.5	5.0	0.5	2-Chlorotoluene	ND<2.5	5.0	0.5
4-Chlorotoluene	ND<2.5	5.0	0.5	Dibromochloromethane	ND<2.5	5.0	0.5
1,2-Dibromo-3-chloropropane	ND<1.0	5.0	0.2	1,2-Dibromoethane (EDB)	ND<2.5	5.0	0.5
Dibromomethane	ND<2.5	5.0	0.5	1,2-Dichlorobenzene	ND<2.5	5.0	0.5
1,3-Dichlorobenzene	ND<2.5	5.0	0.5	1,4-Dichlorobenzene	ND<2.5	5.0	0.5
Dichlorodifluoromethane	130	5.0	0.5	1,1-Dichloroethane	ND<2.5	5.0	0.5
1,2-Dichloroethane (1,2-DCA)	ND<2.5	5.0	0.5	1,1-Dichloroethene	ND<2.5	5.0	0.5
cis-1,2-Dichloroethene	ND<2.5	5.0	0.5	trans-1,2-Dichloroethene	ND<2.5	5.0	0.5
1,2-Dichloropropane	ND<2.5	5.0	0.5	1,3-Dichloropropane	ND<2.5	5.0	0.5
2,2-Dichloropropane	ND<2.5	5.0	0.5	1,1-Dichloropropene	ND<2.5	5.0	0.5
cis-1,3-Dichloropropene	ND<2.5	5.0	0.5	trans-1,3-Dichloropropene	ND<2.5	5.0	0.5
Diisopropyl ether (DIPE)	ND<2.5	5.0	0.5	Ethylbenzene	ND<2.5	5.0	0.5
Ethyl tert-butyl ether (ETBE)	ND<2.5	5.0	0.5	Freon 113	ND<50	5.0	10
Hexachlorobutadiene	ND<2.5	5.0	0.5	Hexachloroethane	ND<2.5	5.0	0.5
2-Hexanone	ND<2.5	5.0	0.5	Isopropylbenzene	ND<2.5	5.0	0.5
4-Isopropyl toluene	ND<2.5	5.0	0.5	Methyl-t-butyl ether (MTBE)	ND<2.5	5.0	0.5
Methylene chloride	ND<2.5	5.0	0.5	4-Methyl-2-pentanone (MIBK)	ND<2.5	5.0	0.5
Naphthalene	ND<2.5	5.0	0.5	n-Propyl benzene	ND<2.5	5.0	0.5
Styrene	ND<2.5	5.0	0.5	1,1,1,2-Tetrachloroethane	ND<2.5	5.0	0.5
1,1,2,2-Tetrachloroethane	ND<2.5	5.0	0.5	Tetrachloroethene	13	5.0	0.5
Toluene	ND<2.5	5.0	0.5	1,2,3-Trichlorobenzene	ND<2.5	5.0	0.5
1,2,4-Trichlorobenzene	ND<2.5	5.0	0.5	1,1,1-Trichloroethane	ND<2.5	5.0	0.5
1,1,2-Trichloroethane	ND<2.5	5.0	0.5	Trichloroethene	ND<2.5	5.0	0.5
Trichlorofluoromethane	ND<2.5	5.0	0.5	1,2,3-Trichloropropane	ND<2.5	5.0	0.5
1,2,4-Trimethylbenzene	ND<2.5	5.0	0.5	1,3,5-Trimethylbenzene	ND<2.5	5.0	0.5
Vinyl Chloride	ND<2.5	5.0	0.5	Xylenes, Total	ND<2.5	5.0	0.5

Surrogate Recoveries (%)

%SS1:	112	%SS2:	105
%SS3:	83		

Comments:

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.



All West Environmental, Inc 530 Howard Street, Ste. 300 San Francisco, CA 94105	Client Project ID: #11134.28; PACCAR-Oakland GWM	Date Sampled: 12/20/11
	Client Contact: Leonard Niles	Date Received: 12/21/11
	Client P.O.:	Date Extracted: 12/23/11
		Date Analyzed: 12/23/11

TPH(g) by Purge & Trap and GC/MS*

Extraction method: SW5030B

Analytical methods: SW8260B

Work Order: 1112645

Lab ID	Client ID	Matrix	TPH(g)	DF	% SS	Comments
001A	MW-1	W	110	1	107	j1
002A	MW-4	W	65	1	108	j1
003A	MW-3A	W	95	1	107	j1
004A	MW-2	W	ND	1	108	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

j1) see attached narrative



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 63589

WorkOrder: 1112645

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
tert-Amyl methyl ether (TAME)	ND	10	87.4	89.1	1.86	99.5	70 - 130	30	70 - 130
Benzene	ND	10	108	107	1.02	111	70 - 130	30	70 - 130
t-Butyl alcohol (TBA)	ND	40	91.2	95.9	5.08	103	70 - 130	30	70 - 130
Chlorobenzene	ND	10	101	102	1.04	115	70 - 130	30	70 - 130
1,2-Dibromoethane (EDB)	ND	10	98.9	101	1.96	110	70 - 130	30	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	102	103	0.636	106	70 - 130	30	70 - 130
1,1-Dichloroethene	ND	10	109	110	0.989	122	70 - 130	30	70 - 130
Diisopropyl ether (DIPE)	ND	10	108	108	0	109	70 - 130	30	70 - 130
Ethyl tert-butyl ether (ETBE)	ND	10	104	105	1.50	110	70 - 130	30	70 - 130
Methyl-t-butyl ether (MTBE)	0.57	10	96.7	100	3.42	107	70 - 130	30	70 - 130
Toluene	ND	10	102	103	0.825	115	70 - 130	30	70 - 130
Trichloroethene	ND	10	99.3	98.1	1.24	110	70 - 130	30	70 - 130
%SS1:	106	25	108	107	0.805	110	70 - 130	30	70 - 130
%SS2:	104	25	103	104	0.840	115	70 - 130	30	70 - 130
%SS3:	99	2.5	108	111	2.48	112	70 - 130	30	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 63589 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112645-001A	12/20/11 12:28 PM	12/28/11	12/28/11 2:18 PM	1112645-002A	12/20/11 2:03 PM	12/28/11	12/28/11 2:59 PM
1112645-003A	12/20/11 3:30 PM	12/28/11	12/28/11 2:35 PM	1112645-004A	12/20/11 5:05 PM	12/28/11	12/28/11 3:15 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 # surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.
 Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.