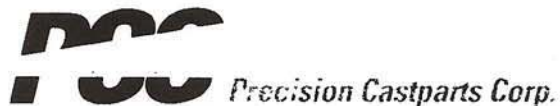


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4:02 pm, Feb 16, 2012

Alameda County  
Environmental Health



February 15, 2012

Mr. Mark E. Detterman, PG, CEG  
Environmental Protection  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Subject: **Fuel Leak Case No. R0000320, Former Paco Pumps, Inc., 9201 San Leandro Street, Oakland, CA: Groundwater Monitoring Report and Request to Conduct Semi-Annual Sampling**

Dear Mr. Detterman:

Please find enclosed the *Second Semi-Annual 2011 Groundwater Monitoring Report (GMR)* for the Former Paco Pumps facility located at 9201 San Leandro in Oakland, California, Case No. R0000320. The December 2011 monitoring data, which have been uploaded to Geotracker, represent groundwater conditions approximately one and one half year after the dual-phase extraction (DPE) near and downgradient of the former gasoline underground storage tank (UST) area, previously referred to as AREA 4. The sampling method and analyses included the silica gel analyses you requested, and the increased number of wells sampled. The results of the sampling as described in the attached report document essentially similar conditions to the previous sampling event. The Remedial Investigation (RI) Workplan submitted in January 2012 proposed the installation of an additional monitoring well southwest of the Area 4 building, and that new well is proposed to be sampled quarterly.

Therefore, while awaiting your approval of the RI Workplan, we are also requesting concurrence that semi-annual sampling as proposed in the attached report is acceptable for this site at this time.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the

Mr. Mark E. Detterman, PG, CEG

February 15, 2012

information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Dave Murray  
PCC Flow Technologies, Inc.

Enclosure

cc: Mr. Scott Kaplan, Stoel Rives LLP  
Mr. Mark Zeppetello, Barg Coffin Lewis & Trapp, LLP  
Mr. Paul Parmentier, The Source Group

**FORMER PACO PUMPS OAKLAND FACILITY  
SECOND SEMI-ANNUAL 2011 GROUNDWATER MONITORING REPORT  
January 28, 2012**

<b>Location:</b>	9201 San Leandro St., Oakland, CA
<b>Former PACO Pumps Site Contact/Phone</b>	Mr. Dave Murray (503) 777-7494
<b>Primary Consultant/Contact Person/Phone</b>	SGL / Paul Parmentier / (562) 597-1055 x106
<b>SGL Project Number</b>	04-PFT-001
<b>Lead Agency / Contact Person</b>	ACEH / Mr. Mark E. Detterman
<b>Agency Case No.</b>	R0000320
<b>Other Agencies to Receive Copies</b>	N/A

**INTRODUCTION:**

This report presents the results of the second semi-annual 2011 groundwater monitoring and sampling event, and includes a section on data interpretation and recommendations. The fourth quarter 2011 monitoring event was conducted as part of the Alameda County Environmental Health (ACEH)-instructed semi-annual monitoring schedule, and as a means to further evaluate groundwater conditions following 2010 dual-phase extraction (DPE) activities.

**SITE REMEDIATION SUMMARY:**

In 1992, the gasoline underground storage tank (UST) at the site was removed, and soil around the former UST was excavated. Multiple phases of investigation, including pilot testing, have been conducted to evaluate the elevated petroleum hydrocarbon concentrations that remained in the subsurface following these activities.

Although a workplan for in-situ treatment was submitted in 2009, a revised workplan was submitted in November 2009 (The Source Group, October 2009). Due to the predominance of clay, in-situ remedial methods were not considered applicable to the site, and a temporary, aggressive extraction approach rather than semi-permanent low-flow remediation methods were proposed. In 2010, 12 extraction wells were installed in the vicinity and downgradient of the former UST. In April and June 2010, DPE of vapor and groundwater was conducted, resulting in the removal of an estimated 1,590 pounds of hydrocarbons, and approximately 41,000 gallons of hydrocarbon-bearing groundwater. The remediation activities confirmed that the subsurface consists of fine-grained (low permeability) vadose soil that would limit the effectiveness of any in-situ active remediation method.

An evaluation of the hydrocarbon concentrations, including benzene, in subsurface and potential exposures via indoor air inhalation indicated that the associated human health risk estimates were within acceptable ranges. At the request of ACEH, a workplan (*Sub-Slab Vapor Survey and Remedial Investigation Work Plan* (RI Workplan) for subslab soil gas sampling was submitted to ACEH to confirm the previous soil gas interpretations.

The RI workplan also included the proposed installation of a monitoring well located at the former soil boring location GP-8, and monitored attenuation sampling.

**GROUNDWATER MONITORING [SECOND SEMI-ANNUAL 2012]:**

1. Conducted the second semi-annual 2011 groundwater monitoring and sampling event on December 15 and 16, 2011.
2. Depth to groundwater measured in December 2011 was similar to previous measurements and ranged from approximately 6.88 to 9.73 feet below the top of well casings. Associated groundwater elevations ranged from 9.00 to 10.49 feet above Mean Sea Level. Groundwater elevation contours are presented on Figure 3 and are similar to previous groundwater gradient maps. The horizontal hydraulic gradient was toward the west approximately 0.006 ft/ft with local variations. As noted in recent monitoring events, no free-phase hydrocarbons were measured in any of the wells.

3. Gasoline-range organics (GRO, total petroleum hydrocarbons as gasoline [TPHg]) were reported in 18 of the 24 well samples. Where reported, concentrations were generally within historic ranges with 27.1 µg/L (estimated) to 35,100 µg/L reported (Figure 4 and Table 2). Since the second quarter of 2010, GRO concentrations increased slightly at well MW-6, AS-1S, and E11, and decreased in wells MW-3, MW-4, ASMW-2S, E1, E-7, and E-12. GRO was not reported at detected concentrations in samples collected from wells MW-2, MW-1, MW-5, MW-7, MW-8, ASMW-2D, E2, and MW-4.
4. Diesel-range organics (DRO, total petroleum hydrocarbons as diesel [TPHd]) were reported in 18 of the 24 well samples. Where reported, concentrations were generally within historic ranges with 69.9 µg/L (estimated) to 13,900 µg/L reported (Table 2). Since the second quarter of 2010, DRO concentrations increased slightly at well MW-3, MW-6, AS-1S, and ASMW-2S, and decreased in wells MW-5, E7, and E8. DRO was not reported at detected concentrations in samples collected from wells MW-1, MW-5, MW-7, MW-8, E2, and MW-4. As requested by the RWQCB, DRO was analyzed using Environmental Protection Agency (EPA) method 8015B with Silica Gel Cleanup (SGC).
5. Total petroleum hydrocarbons as motor oil [TPHmo]) were reported in 14 of the 24 well samples. Where reported, concentrations were generally within historic ranges with 130 µg/L (estimated) to 15,600 µg/L reported (Table 2). Since the second quarter of 2010, TPHmo concentrations increased slightly at well MW-1, MW-6, and MW-7, and decreased in wells MW-2, MW-3, and E2. TPHmo was not reported at detected concentrations in samples collected from wells MW-3, AS-1D, ASMW-2D, E1, E7, E8, E9, E10, E11, and E12. As requested by the RWQCB, TPHmo was analyzed using EPA method 8015B with SGC.
6. Benzene was reported in 18 of the 24 well samples. Where reported, concentrations were generally within historic ranges with 0.76 µg/L (estimated) to 4,810 µg/L reported (Figure 4 and Table 2). Since the second quarter of 2010, benzene concentrations increased in wells MW-6, AS-1S, and E11, and decreased in wells MW-3, ASMW-2S, E1, E7, E12, and MW-4. Benzene was not reported at detected concentrations in samples collected from wells MW-2, MW-1, MW-5, MW-8, E2, and E5.
7. Methyl tertiary-butyl ether (MTBE) was reported in five of the 24 well samples (see Table 2). Where reported, concentrations ranged from 0.74 µg/L (estimated) to 4.4 µg/L, which are below State drinking water standards.
8. 1,2-Dichloroethane (1,2-DCA) was reported in five of the 24 wells samples. Where reported, concentrations ranged from 1.0 µg/L to 37 µg/L (Table 2). Since the second quarter 2010 sampling event, concentrations of 1,2-DCA decreased in wells MW-6, AS-1S, E2, and E-12.

**MONITORING SUMMARY:**

Current Phase of Project:	Groundwater Monitoring
Frequency of Monitoring/Sampling:	Semi-annual (per RWQCB's directive letter dated 6/15/2009)
Wells Sampled and/or Gauged this Quarter	MW-1 through MW-8, AS-1S, AS-1D, ASMW-2S, ASMW-2D E1 through E12
Depth to Groundwater (all wells had no LPH):	6.88 to 9.73 feet below top of casings
Groundwater Gradient Direction/Magnitude:	West at approximately 0.006 ft/ft.
Gradient Consistent w/Previous Quarters:	Yes
GRO Concentration Range:	ND (27.1 µg/L) to 35,100 µg/L
Well with Highest GRO Concentration:	MW-3
Benzene Concentration Range:	ND (<1.0 µg/L) to 2,180 µg/L
Well with Highest Benzene Concentration:	E9
MTBE Concentration Range:	0.74 µg/L (estimated) to 4.4 µg/L
Well with Highest MTBE Concentration:	E7

Separate Phase Hydrocarbons Present: Yes No <b>X</b>	None
Maximum Hydrocarbon Thickness:	N/A
Wells and/or Surface Water within 2,000 feet:	None
Distance and Direction from Site:	N/A
Current Remediation Techniques:	Natural Attenuation
Free Product Recovered Manually this Quarter:	None
Gallons of Groundwater Purged this Quarter:	236.4
Disposal/Recycling Facility:	Demmenno Kerdoon, Compton, CA-Pending
Summary of Unusual Activity:	None
Agency Directive Requirements:	Groundwater Monitoring, RI Workplan (submitted)

**Recommendations**

In a November 1, 2011 correspondence, the RWQCB requested monitoring and sampling of recently installed monitoring wells (E1 through E12) be conducted on a quarterly basis for one year. However, these wells were installed as remediation wells that are spaced approximately 20-40 feet apart in an area already documented to contain dissolved hydrocarbons. Monitoring wells E2, E7, and E8 are located downgradient, southwest of the former UST area and have been sampled three to four times since June of 2010. SGI's January 2012 RI Workplan included a proposal to install one additional monitoring well southwest of wells E-6 and E-7, and that well will be monitored and sampled on a quarterly basis for one year.

Therefore SGI proposes that all wells at the site be sampled semi-annually, and that the proposed well be sampled quarterly after installation.

As recommended by ACEH, groundwater samples collected during upcoming monitoring and sampling events will be analyzed for TPHd and TPHmo using EPA method 8015B with SGC.



*Paul Parmentier*

**REVIEWED BY:**

Paul Parmentier, CHG

DATE: Feb 13 2012

**ATTACHMENTS:**

- Current Groundwater Analysis and Gauging Results (Table 1)
- Historical Groundwater Analysis and Gauging Results (Table 2)
- Site Location Map (Figure 1)
- Site Map With Well Locations (Figure 2)

- Groundwater Gradient Map – December 2011 (Figure 3)
- Groundwater Concentrations Benzene and Total Petroleum Hydrocarbons – December 2011 (Figure 4)
- Groundwater Monitoring Field Data Sheets
- Groundwater Sampling Laboratory Report and Chain-of-Custody

**DISTRIBUTION:**

- Mr. Dave Murray, PCC Flow Technologies
- Mr. Vignoles, Site Owner

## TABLES

**Table 1**  
**Current and Historical Groundwater Elevations**  
Paco Pump  
9201 San Leandro Street  
Oakland, California

<b>Well Identification</b>	<b>Date Collected</b>	<b>Top-of-Casing Elevation <sup>(1)</sup></b>	<b>Depth to Groundwater <sup>(2)</sup></b>	<b>Groundwater Elevation <sup>(1)</sup></b>
MW-1	15-Nov-92	18.05	9.34	8.71
	9-Mar-93		8.50	9.55
	21-Jul-93		9.00	9.05
	26-May-94		9.06	8.99
	24-Aug-94		8.40	9.65
	22-Nov-94		8.20	9.85
	8-Feb-95		8.30	9.75
	31-May-95		9.35	8.70
	8-Aug-95		9.16	8.89
	29-Nov-95		9.28	8.77
	29-Feb-96		7.62	10.43
	23-May-96		8.28	9.77
	4-Nov-96		9.20	8.85
	13-May-97		9.04	9.01
	14-Nov-07		8.50	9.55
	17-Jun-08		9.04	9.01
	13-Jan-09	17.76	8.65	9.11
	28-Apr-09		8.67	9.09
	6-Nov-09		8.79	8.97
	28-Jun-10		8.77	8.99
30-Dec-10		7.20	10.56	
8-Jun-11		8.12	9.64	
15-Dec-11			8.76	9.00
MW-2	15-Nov-92	19.40	10.05	9.35
	9-Mar-93		9.21	10.19
	21-Jul-93		9.72	9.68
	26-May-94		9.58	9.82
	24-Aug-94		9.98	9.42
	22-Nov-94		8.70	10.70
	8-Feb-95		8.68	10.72
	31-May-95		9.48	9.92
	8-Aug-95		9.64	9.76
	29-Nov-95		9.86	9.54
	29-Feb-96		8.12	11.28
	23-May-96		8.70	10.70
	4-Nov-96		9.50	9.90
	13-May-97		9.44	9.96
	14-Nov-07		8.94	10.46
	17-Jun-08		9.57	9.83
	13-Jan-09	19.12	9.21	9.91
	28-Apr-09		9.30	9.82
	6-Nov-09		8.91	10.21
	28-Jun-10		9.33	9.79
30-Dec-10		7.52	11.60	
8-Jun-11		8.52	10.60	
15-Dec-11			9.25	9.87



**Table 1**  
**Current and Historical Groundwater Elevations**  
Paco Pump  
9201 San Leandro Street  
Oakland, California

<b>Well Identification</b>	<b>Date Collected</b>	<b>Top-of-Casing Elevation <sup>(1)</sup></b>	<b>Depth to Groundwater <sup>(2)</sup></b>	<b>Groundwater Elevation <sup>(1)</sup></b>
MW-3	15-Nov-92	19.70	10.35	9.35
	9-Mar-93		9.19	10.51
	21-Jul-93		11.07	8.63
	26-May-94		10.04	9.66
	24-Aug-94		11.08	8.62
	22-Nov-94		8.92	10.78
	8-Feb-95		8.90	10.80
	31-May-95		10.16	9.54
	8-Aug-95		9.92	9.78
	29-Nov-95		10.7	9.00
	29-Feb-96		8.52	11.18
	23-May-96		8.15	11.55
	4-Nov-96		7.21	12.49
	13-May-97		9.82	9.88
	14-Nov-07		9.21	10.49
	17-Jun-08		9.81	9.89
	13-Jan-09	19.42	9.58	9.84
	28-Apr-09		9.59	9.83
	6-Nov-09		9.52	9.90
	28-Jun-10		9.60	9.82
30-Dec-10		7.74	11.68	
8-Jun-11		8.80	10.62	
15-Dec-11			9.54	9.88
MW-4	15-Nov-92	19.65	8.87	10.78
	9-Mar-93		7.96	11.69
	21-Jul-93		8.06	11.59
	26-May-94		8.57	11.08
	24-Aug-94		8.75	10.90
	22-Nov-94		7.41	12.24
	8-Feb-95		7.20	12.45
	31-May-95		8.32	11.33
	8-Aug-95		8.66	10.99
	29-Nov-95		8.93	10.72
	29-Feb-96		6.54	13.11
	23-May-96		7.24	12.41
	4-Nov-96		8.58	11.07
	13-May-97		8.42	11.23
	14-Nov-07		7.61	12.04
	17-Jun-08		8.31	11.34
	13-Jan-09	19.37	NM	NM
	28-Apr-09		NM	NM
	6-Nov-09		8.00	11.37
	28-Jun-10		8.05	11.32
30-Dec-10		5.70	13.67	
8-Jun-11		6.88	12.49	
15-Dec-11			8.88	10.49

**Table 1**  
**Current and Historical Groundwater Elevations**  
Paco Pump  
9201 San Leandro Street  
Oakland, California

<b>Well Identification</b>	<b>Date Collected</b>	<b>Top-of-Casing Elevation <sup>(1)</sup></b>	<b>Depth to Groundwater <sup>(2)</sup></b>	<b>Groundwater Elevation <sup>(1)</sup></b>
MW-5	24-Aug-94	18.49	8.22	10.27
	22-Nov-94		7.90	10.59
	8-Feb-95		7.92	10.57
	31-May-95		8.74	9.75
	8-Aug-95		8.93	9.56
	29-Nov-95		9.11	9.38
	29-Feb-96		7.36	11.13
	23-May-96		7.92	10.57
	4-Nov-96		8.78	9.71
	13-May-97		8.82	9.67
	14-Nov-07		8.16	10.33
	17-Jun-08		8.75	9.74
	13-Jan-09	18.21	8.46	9.75
	28-Apr-09		8.50	9.71
	6-Nov-09		9.93	8.28
28-Jun-10		8.42	9.79	
30-Dec-10		6.68	11.53	
8-Jun-11		7.64	10.57	
15-Dec-11			8.45	9.76
MW-6	13-Jan-09	19.46	9.59	9.87
	28-Apr-09		9.65	9.81
	6-Nov-09		9.60	9.86
	28-Jun-10		9.54	9.92
	30-Dec-10		7.80	11.66
	8-Jun-11		8.74	10.72
15-Dec-11			9.64	9.82
MW-7	13-Jan-09	19.44	9.66	9.78
	28-Apr-09		9.67	9.77
	6-Nov-09		9.64	9.80
	28-Jun-10		NM	NM
	30-Dec-10		7.89	11.55
	8-Jun-11		8.79	10.65
15-Dec-11			9.64	9.80
MW-8	28-Jun-10	18.27	8.07	10.20
	30-Dec-10		5.92	12.35
	8-Jun-11		7.30	10.97
	15-Dec-11		7.86	10.41
AS-1S	13-Jan-09	19.38	9.45	9.93
	28-Apr-09		9.67	9.71
	6-Nov-09		9.63	9.75
	28-Jun-10		9.90	9.48
	30-Dec-10		7.65	11.73
	8-Jun-11		8.65	10.73
15-Dec-11			9.01	10.37
ASMW2S	13-Jan-09	19.38	9.51	9.87
	28-Apr-09		9.55	9.83
	6-Nov-09		9.53	9.85
	28-Jun-10		10.30	9.08

**Table 1**  
**Current and Historical Groundwater Elevations**  
Paco Pump  
9201 San Leandro Street  
Oakland, California

Well Identification	Date Collected	Top-of-Casing Elevation <sup>(1)</sup>	Depth to Groundwater <sup>(2)</sup>	Groundwater Elevation <sup>(1)</sup>
	30-Dec-10		7.73	11.65
	8-Jun-11		8.70	10.68
	15-Dec-11		9.51	9.87
AS-1D	13-Jan-09	19.31	9.42	9.89
	28-Apr-09		9.48	9.83
	6-Nov-09		9.50	9.81
	28-Jun-10		9.90	9.41
	30-Dec-10		7.65	11.66
	8-Jun-11		8.60	10.71
	15-Dec-11		9.47	9.84
ASMW-2D	13-Jan-09	19.52	9.65	9.87
	28-Apr-09		9.69	9.83
	6-Nov-09		9.70	9.82
	28-Jun-10		9.70	9.82
	30-Dec-10		7.88	11.64
	8-Jun-11		8.85	10.67
	15-Dec-11		9.65	9.87
E-1	15-Dec-11		9.43	
E-2	30-Dec-10	19.56	7.95	11.61
	8-Jun-11		8.91	10.65
	15-Dec-11		9.70	9.86
E-3	15-Dec-11		9.72	
E-4	15-Dec-11		9.60	
E-5	15-Dec-11		9.69	
E-6	15-Dec-11		9.61	
E-7	30-Dec-10	19.59	7.95	11.64
	8-Jun-11		8.89	10.70
	15-Dec-11		9.72	9.87
E-8	30-Dec-10	19.59	7.96	11.63
	8-Jun-11		8.88	10.71
	15-Dec-11		9.73	9.86
E-9	15-Dec-11		9.63	
E-10	15-Dec-11		9.44	
E-11	15-Dec-11		9.28	
E-12	15-Dec-11		8.89	

**Notes:**

<sup>(1)</sup> Top-of-casing and groundwater elevation in North America Vertical Datum 1988; wells re-surveyed by Tronoff Associates Land Surveying on February 2, 2009.

<sup>(2)</sup> Depth to water measured in feet below top of casing.

**Table 2**  
**Current and Historical Analytical Results for Volatile Organic Compounds in Groundwater**  
Paco Pump  
9201 San Leandro Street  
Oakland, California  
concentrations (µg/L)

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Other Fuel Additives
<b>LFR Area 1 - Southwestern Corner of the Site, west of the "workshop building"</b>											
MW-2	16-Nov-92	5.25-20.25	<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	9-Mar-93		<b>430</b>	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	21-Jul-93		<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	29-Jan-94		<50	NA	<50	<2.0	<2.0	<2.0	<2.0	NA	NA
	26-May-94		<50	NA	<50	<b>2.3</b>	0.8	<0.5	<0.5	NA	NA
	24-Aug-94		<50	NA	<50	<b>3.1</b>	1.4	0.5	0.6	NA	NA
	22-Nov-94		<50	NA	<50	<b>3.4</b>	1.8	<0.5	0.5	NA	NA
	8-Feb-95		<50	NA	<50	<b>4.5</b>	1.3	<0.5	0.5	NA	NA
	31-May-95		<50	NA	NA	NA	NA	NA	NA	NA	NA
	8-Aug-95		<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	29-Nov-95		<50	NA	NA	NA	NA	NA	NA	NA	NA
	29-Feb-96		<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	23-May-96		<50	NA	NA	NA	NA	NA	NA	NA	NA
	4-Nov-96		<50	NA	NA	NA	NA	NA	NA	NA	ND
	13-Nov-03		NA	NA	<50	<0.5	<0.5	<0.5	<2.0	NA	ND
	17-Jun-08		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	1.1	ND
	6-Nov-09		<b>360</b>	NA	<50	<0.5	<0.5	<0.5	<1.0	0.63	ND
	28-Jun-10		53.4J	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	30-Dec-10		<280	<b>3,240</b>	29.2 J <sup>a</sup>	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	8-Jun-11		NA	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	15-Dec-11		95/<94*	<b>422/311*</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
<b>LFR Area 2 - Area South of the Warehouse Storage Area Building Adjacent to the Southern Property Boundary</b>											
MW-1	15-Nov-92	5.25-20.25	<50	NA	NA	NA	NA	NA	NA	NA	NA
	9-Mar-93		<b>140</b>	NA	NA	NA	NA	NA	NA	NA	NA
	21-Jul-93		<50	NA	NA	NA	NA	NA	NA	NA	NA
	29-Jan-94		<50	NA	NA	NA	NA	NA	NA	NA	NA
	26-May-94		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	24-Aug-94		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	22-Nov-94		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	8-Feb-95		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	31-May-95		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	23-May-96		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	27-Oct-00		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
	14-Nov-07		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<2.0	NA
	17-Jun-08		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	0.67	NA
	6-Nov-09		<51	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
	28-Jun-10		56.8J	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	30-Dec-10		<94	<b>114 J</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	16-Dec-11		<94*	<b>522*</b>	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
<b>LFR Area 4 - Former UST near Groundwater Monitoring Well MW-3</b>											
MW-3	16-Nov-92	5.25-20.25	<50	NA	<b>40,000</b>	<b>2,900</b>	<b>6,100</b>	<b>550</b>	<b>1,700</b>	NA	NA
	9-Mar-93		<b>290</b>	NA	<b>12,000</b>	<b>1,000</b>	<b>300</b>	<b>110</b>	<b>170</b>	NA	NA
	21-Jul-93		<50	NA	<b>3,400</b>	<b>420</b>	<b>63</b>	<b>36</b>	<b>37</b>	NA	NA
	29-Jan-94		<50	NA	<b>5,600</b>	<b>910</b>	<b>220</b>	<b>47</b>	<b>36</b>	NA	NA
	26-May-94		<50	NA	<b>5,200</b>	<b>890</b>	<b>180</b>	<b>45</b>	<b>43</b>	NA	NA
	24-Aug-94		<50	NA	<b>5,200</b>	<b>580</b>	<b>76</b>	<b>29</b>	<b>22</b>	NA	NA
	22-Nov-94		<50	NA	<b>2,200</b>	<b>670</b>	<b>130</b>	<b>31</b>	<b>28</b>	NA	NA
	8-Feb-95		<50	NA	<b>2,900</b>	<b>780</b>	<b>120</b>	<b>31</b>	<b>33</b>	NA	NA
	31-May-95		NA	NA	<b>9,100</b>	<b>2,800</b>	<b>160</b>	<b>91</b>	<b>72</b>	NA	NA
D	31-May-95		NA	NA	<b>5,300</b>	<b>1,300</b>	<b>170</b>	<b>37</b>	<b>44</b>	NA	NA

**Table 2**  
**Current and Historical Analytical Results for Volatile Organic Compounds in Groundwater**  
Paco Pump  
9201 San Leandro Street  
Oakland, California

concentrations (µg/L)

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Other Fuel Additives
MW-3	28-Aug-95		NA	NA	1,400	<0.5	<0.5	1.7	8.9	NA	NA
D	28-Aug-95		NA	NA	4,800	2,500	150	53	44	NA	NA
	29-Nov-95		NA	NA	3,000	780	43	32	32	NA	NA
D	29-Nov-95		NA	NA	2,400	830	38	21	16	NA	NA
	29-Feb-96		NA	NA	3,800	1,200	130	36	35	NA	NA
D	29-Feb-96		NA	NA	8,000	3,400	430	100	99	NA	NA
	23-May-96		NA	NA	6,900	3,300	340	71	74	NA	NA
D	23-May-96		NA	NA	4,300	3,200	350	72	74	NA	NA
	4-Nov-96		NA	NA	4,900	2,100	110	70	44	NA	NA
D	4-Nov-96		NA	NA	4,500	2,100	130	61	39	NA	NA
	13-May-97		NA	NA	10,000	4,800	530	100	92	<100	NA
	26-Jan-98		NA	NA	12,000	5,000	250	91	100	NA	NA
	27-Oct-00		NA	NA	19,000	9,000	1,000	250	130	NA	NA
	3-Nov-03		NA	NA	13,000	3,900	370	300	130	<40	NA
	17-Jun-08		NA	NA	13,000	4,400	600	300	150	<100	NA
	6-Nov-09		710	NA	13,000	3,400	400	310	220	<2.5	4.1 (1,2-DCA)
	28-Jun-10		699	NA	22,200	1,740	2,100	318	1,060	<50	ND
D	28-Jun-10		722	NA	31,000	1,560	2,210	380	1,240	<50	ND
	10-Aug-10		NA	NA	12,000	1,400	1,200	190	540	<13	ND
	30-Dec-10		36,500	3,900	22,200	1,730	2,030	406	1,530	<50	ND
	8-Jun-11		NA	NA	20,400	2,180	2,040	273	765	<25	ND
	16-Dec-11		1,710/832*	312 J/<190*	9,000	1,220	1,290	163	518	<25	ND
D	16-Dec-11		1,530/2,530*	<570/<750*	13,200	1,590	1,680	207	671	<50	ND
MW-5	24-Aug-94	5.25-20.25	130	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
D	22-Nov-94		<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	8-Feb-95		<50	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	31-May-95		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	8-Aug-95		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	29-Feb-96		NA	NA	<50	0.6	<0.5	<0.5	<0.5	NA	NA
	13-May-97		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	27-Oct-00		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
	13-Nov-03		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<2.0	NA
	17-Jun-08		NA	NA	<50	<0.5	<0.5	<0.5	<0.5	<0.5	ND
	6-Nov-09		1,300	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
	28-Jun-10		289	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	30-Dec-10		<94	808	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	16-Dec-11		<94/<95*	681/547*	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
MW-6	14-Jan-09	10-17	NA	NA	740	66	48	6.3	23	1.2	17 (1,2-DCA)
	6-Nov-09		1,200	NA	4,500	1,300	270	110	44	<2.5	39 (1,2-DCA)
	28-Jun-10		474	NA	3,810	484	284	78.7	233	<10	20.8 (1,2-DCA)
	10-Aug-10		NA	NA	4,600	800	160	160	210	<6.3	12 (1,2-DCA)
	30-Dec-10		2,470	<380	9,720	1,130	469	364	1,360	<20	20.7 (1,2-DCA)
	8-Jun-11		NA	NA	8,140	1,460	377	206	515	<20	15.4 (1,2-DCA)
	16-Dec-11		2,200/874*	2,350/1,670	5,920	1,500	74.9	135	254	<25	12.4 (1,2-DCA)
AS-1S	13-Jan-09	14-17	NA	NA	41,000	4,100	2,700	510	1,000	<25	ND
	6-Nov-09		1,300	NA	3,800	950	7.3	76	42	<0.5	3.1 (1,2-DCA)
	28-Jun-10		214	NA	1,630	202	26.2	9.1	25.4	2.1	3.1 (1,2-DCA)
	10-Aug-10		NA	NA	1,200	370	44	34		<2.5	2.6 (1,2 DCA)
	30-Dec-10		2,790	<570	30,000	4,530	4,040	538	1,100	<100	ND
	15-Dec-11		1,340*	582*	7,640	772	788	290	590	<20	ND

**Table 2**  
**Current and Historical Analytical Results for Volatile Organic Compounds in Groundwater**  
Paco Pump  
9201 San Leandro Street  
Oakland, California  
concentrations (µg/L)

Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Other Fuel Additives
ASMW-2S	13-Jan-09	10-17	NA	NA	9,100	2,800	430	140	230	<10	25 (1,2-DCA)
	6-Nov-09		2,400	NA	18,000	4,700	540	330	530	<2.5	50 (1,2-DCA), 46 (TBA)
	28-Jun-10		479	NA	8,330	416	434	151	583	<33	ND
	10-Aug-10		NA	NA	3,200	420	69	61	130	<3.1	3.4 (1,2 DCA)
	30-Dec-10		3,440	<2,000	5,300	447	80.1	95.0	181	ND<10	5.7 (1,2 DCA)
	15-Dec-11		998*	148*	2,250	253	19.8	49.9	77.4	<10	ND
MW-7	14-Jan-09	20-28	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	1.1	ND
	6-Nov-09		<52	NA	<50	<0.5	<0.5	<0.5	<1.0	1.3	ND
	30-Dec-10		<96	<190	<50	<1.0	<1.0	<1.0	<2.0	1.1	ND
	8-Jun-11		NA	NA	<50	<1.0	<1.0	<1.0	<2.0	1.0	ND
	16-Dec-11		<94*	832*	<50	0.67	<1.0	0.35 J	<2.0	0.88 J	ND
D	16-Dec-11		<94*	1,730*	<50	0.62 J	<1.0	0.33 J	<2.0	0.91 J	ND
MW-8	28-Jun-10	8-18	<100	NA	<50	0.81J	1.3	0.41J	1.6 J	0.62J	ND
	30-Dec-10		<95	<190	<50	<1.0	<1.0	<1.0	<2.0	0.53J	ND
	8-Jun-11		NA	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	16-Dec-11		<95*	155 J*	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
AS-1D	13-Jan-09	31-34	NA	NA	<50	0.69	0.54	<0.5	<0.5	<0.5	ND
	6-Nov-09		<53	NA	<50	<0.5	<0.5	<0.5	<1.0	<0.5	ND
	28-Jun-10		<94	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	30-Dec-10		<94	<190	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	15-Dec-11		86.2 J*	<190*	27.6	1.7	3.1	0.54	2.3	<1.0	ND
ASMW-2D	13-Jan-09	24-34	NA	NA	<50	0.80	0.78	<0.5	<0.5	0.56	ND
	6-Nov-09		<51	NA	<50	<0.5	<0.5	<0.5	<1.0	0.58	ND
	28-Jun-10		<94	NA	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	30-Dec-10		<100	<200	<50	<1.0	<1.0	<1.0	<2.0	<1.0	ND
	15-Dec-11		96.1*	<190*	<50	0.76 J	0.99	<1.0	1.1	<1.0	ND
E1	16-Jun-10	8-18	NA	NA	36,000	3,200	2,300	750	2,170	<25	<25
	30-Jun-10		NA	NA	124	11.7	9.4	1.5	7.7	<1	0.31 (1,2 DCA)
	16-Dec-11		323*	<190*	1,700	55.5	22.1	16.1	27.6	<5.0	ND
E2	16-Jun-10	8-18	NA	NA	72	5.3	5.9	0.89	4.9	2.1	0.68 (1,2 DCA)
	30-Jun-10		NA	NA	<50	<1.0	<1.0	<1.0	<2.0	2.0	0.5 (1,2 DCA)
	30-Dec-10		<190	3,740	<50	<1.0	<1.0	<1.0	<2.0	1.8	0.41 (1,2 DCA)
	8-Jun-11		NA	NA	<50	<1.0	<1.0	<1.0	<2.0	1.7	0.45 (1,2-DCA)
	15-Dec-11		<95/<96*	1,570/1,270*	<50	<1.0	<1.0	<1.0	<2.0	1.2	ND
E3	16-Dec-11		13,900*	15,600*	185	1.2	<1.0	<1.0	<2.0	0.74 J	1.0 (1,2-DCA)
E4	16-Dec-11		264*	447*	1,580	240	9.9	18.3	5.8 J	<5.0	2.7 (1,2-DCA)
E5	15-Dec-11		11,100*	11,500*	27.1 J	<1.0	<1.0	<1.0	<2.0	0.83 J	ND
E6	15-Dec-11		1,460*	931*	617	17.6	<2.0	3.3	<4.0	<2.0	ND
E7	16-Jun-10	8-18	NA	NA	780	100	73	20	80	5.2	1.9 (1,2 DCA)
	30-Jun-10		NA	NA	3,460	207	258	<25	360	3.8	2.5 (1,2 DCA)
	30-Dec-10		1,360	<190	3,380	339	20.0	83.3	23.9	5.4	3.5 (1,2 DCA)
	8-Jun-11		NA	NA	1,580	143	17.4	26.9	21.7	4.3	2.2 (1,2-DCA)
	15-Dec-11		373/287*	<190/<190*	1,070	144	29.5	16	27.2	4.4	3.1 (1,2-DCA)
E8	30-Dec-10		1,220	<190	8,930	480	19.1	164	51.8	<10	4.8 (1,2-DCA)
	8-Jun-11		NA	NA	3,520	178	9.6	56	49.5	<5	2.7 (1,2-DCA)
	15-Dec-11		508*	<190*	2,000	208	4	43	14.0	<5.0	ND
E9	15-Dec-11		7,950*	<190*	35,100	4,810	5,710	768	3,260	<100	ND
E10	15-Dec-11		10,400*	<190*	32,800	4,350	6,450	667	2,880	<100	37 (1,2-DCA)

**Table 2**  
**Current and Historical Analytical Results for Volatile Organic Compounds in Groundwater**  
Paco Pump  
9201 San Leandro Street  
Oakland, California  
concentrations (µg/L)

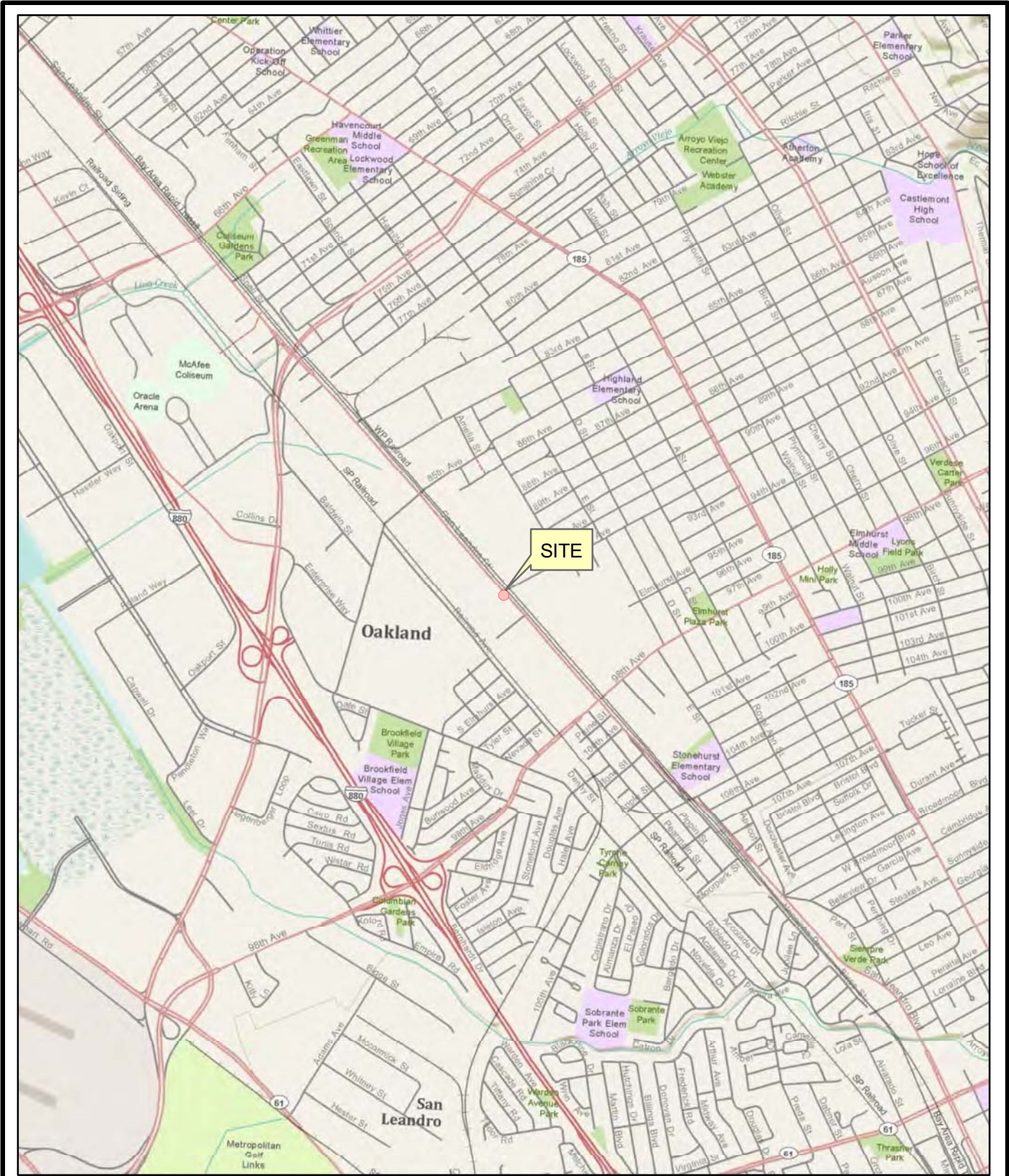
Sample Location	Date Collected	Depth (feet bgs)	TPHd	TPHmo	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Other Fuel Additives
E11	16-Jun-10	8-18	NA	NA	<b>25,000</b>	<b>1,800</b>	<b>1,500</b>	<b>480</b>	<b>980</b>	<13	<13
	30-Jun-10		NA	NA	<b>15,300</b>	<b>268</b>	<b>509</b>	<b>473</b>	<b>1,140</b>	<40	<40
	16-Dec-11		<b>3,920*</b>	<970*	<b>17,200</b>	<b>634</b>	<b>916</b>	<b>384</b>	<b>934</b>	<50	ND
E12	16-Jun-10	8-18	NA	NA	<b>4,300</b>	<b>190</b>	15	43	<b>49</b>	<2	<b>2.0 (1,2 DCA)</b>
	30-Jun-10		NA	NA	<b>1,570</b>	<b>130</b>	6.6	<3	<b>24.2</b>	<3	<3
	16-Dec-11		69.9 J*	<190*	<b>297</b>	<b>27.5</b>	1.1 J	3.2	<4.0	<2.0	ND
<b>LFR Area 5 - Suspected Former UST near Groundwater Monitoring Well MW-4</b>											
MW-4	16-Nov-92	5.25-20.25	<50	NA	<b>560</b>	<b>66</b>	<b>73</b>	16	<b>130</b>	NA	NA
D	16-Nov-92		<50	NA	<b>520</b>	<b>63</b>	<b>67</b>	15	<b>140</b>	NA	NA
	9-Mar-93		<50	NA	<b>750</b>	<b>67</b>	12	29	<b>62</b>	NA	NA
	21-Jul-93		<50	NA	<b>250</b>	<b>21</b>	4.2	8.4	11	NA	NA
	29-Jan-94		<50	NA	<b>180</b>	<b>28</b>	2.2	6.2	10	NA	NA
	26-May-94		NA	NA	<b>130</b>	<b>14</b>	3.2	6.1	4.7	NA	NA
	24-Aug-94		NA	NA	70	<b>6.7</b>	0.9	2.8	2.6	NA	NA
	22-Nov-94		NA	NA	90	<b>16</b>	1.7	5.6	3.4	NA	NA
	8-Feb-95		NA	NA	90	<b>17</b>	1.3	5.5	3.0	NA	NA
	31-May-95		NA	NA	90	<b>13</b>	0.6	2.3	1.2	NA	NA
	8-Aug-95		NA	NA	80	<b>3.6</b>	<0.5	1.4	0.6	NA	NA
	29-Nov-95		NA	NA	<50	<b>4.5</b>	0.7	1.0	0.7	NA	NA
	29-Feb-96		NA	NA	<50	<b>7.4</b>	1.0	3.2	2.4	NA	NA
	23-May-96		NA	NA	80	<b>11</b>	2.0	2.3	1.0	NA	NA
	3-Nov-03		<50	NA	<50	<b>6.3</b>	0.56	3.4	1.0	<2.0	NA
	18-Jun-08		<50	NA	81	<b>11</b>	0.51	4.7	1.6	<0.5	ND
	6-Nov-09		<50	NA	<50	<b>4.0</b>	<0.5	1.3	<1.0	<0.5	ND
	28-Jun-10		<100	NA	<b>186</b>	<b>12.3</b>	0.9	5.9	2.3	<1.0	ND
	30-Dec-10		<94	<190	77.4	<b>7.4</b>	<1.0	2.6	0.98	<1.0	ND
	8-Jun-11		NA	NA	94.2	<b>10.2</b>	1	3.4	1.60	<1.0	ND
	16-Dec-11		<97*	<b>130 J*</b>	<50	<b>2.6</b>	<1.0	<1.0	<2.0	<1.0	ND
<b>ESL's Groundwater is current or potential drinking water source</b>			100	100	100	1.0	40	30	20	5.0	0.5 (1,2-DCA), 12 (TBA)

**Notes:**


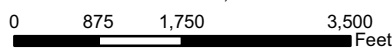

bgs = below ground surface                      NA = parameter not analyzed                      ND = parameter not present above laboratory reporting limits  
TPHd = total petroleum hydrocarbons as diesel  
TPHg = total petroleum hydrocarbons as gasoline  
D = duplicate sample  
TBA - tertiary butyl alcohol  
ESL = San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels Table F-1a and Table F-1b RWQCB May 2008  
**Bold Font** denotes concentration was greater than the ESL .  
J = Estimated value above method detection limit but below laboratory reporting limit.  
\* = TPH Extracable with Silica Gel Cleanup

## FIGURES



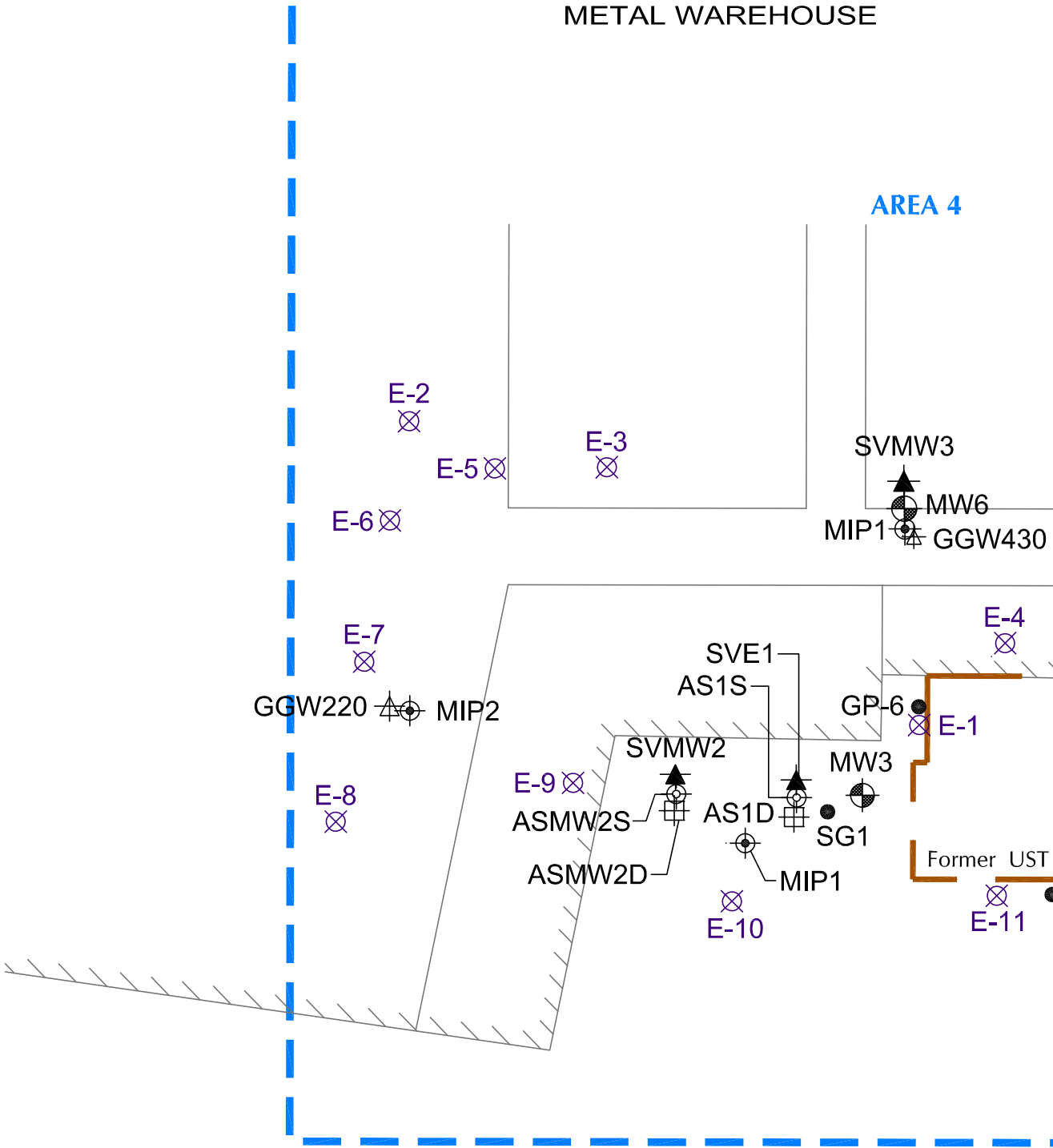


SOURCE: 7.5 MINUTE USGS TOPOGRAPHIC MAP FROM ARCGIS MAP SERVICE

 <b>THE SOURCE GROUP, INC.</b> 1962 FREEMAN AVE. SIGNAL HILL, CA 90755	PROJECT NO.: 04-PFT-001	DATE: 10/14/2009	DR.BY: AC	APP.BY: SS	SCALE 1:24,000 	N  <b>FIGURE 1</b>
	<b>FORMER PACO PUMPS FACILITY</b> 9201 SAN LEANDRO STREET OAKLAND, CALIFORNIA				<b>SITE LOCATION MAP</b>	

METAL WAREHOUSE

AREA 4



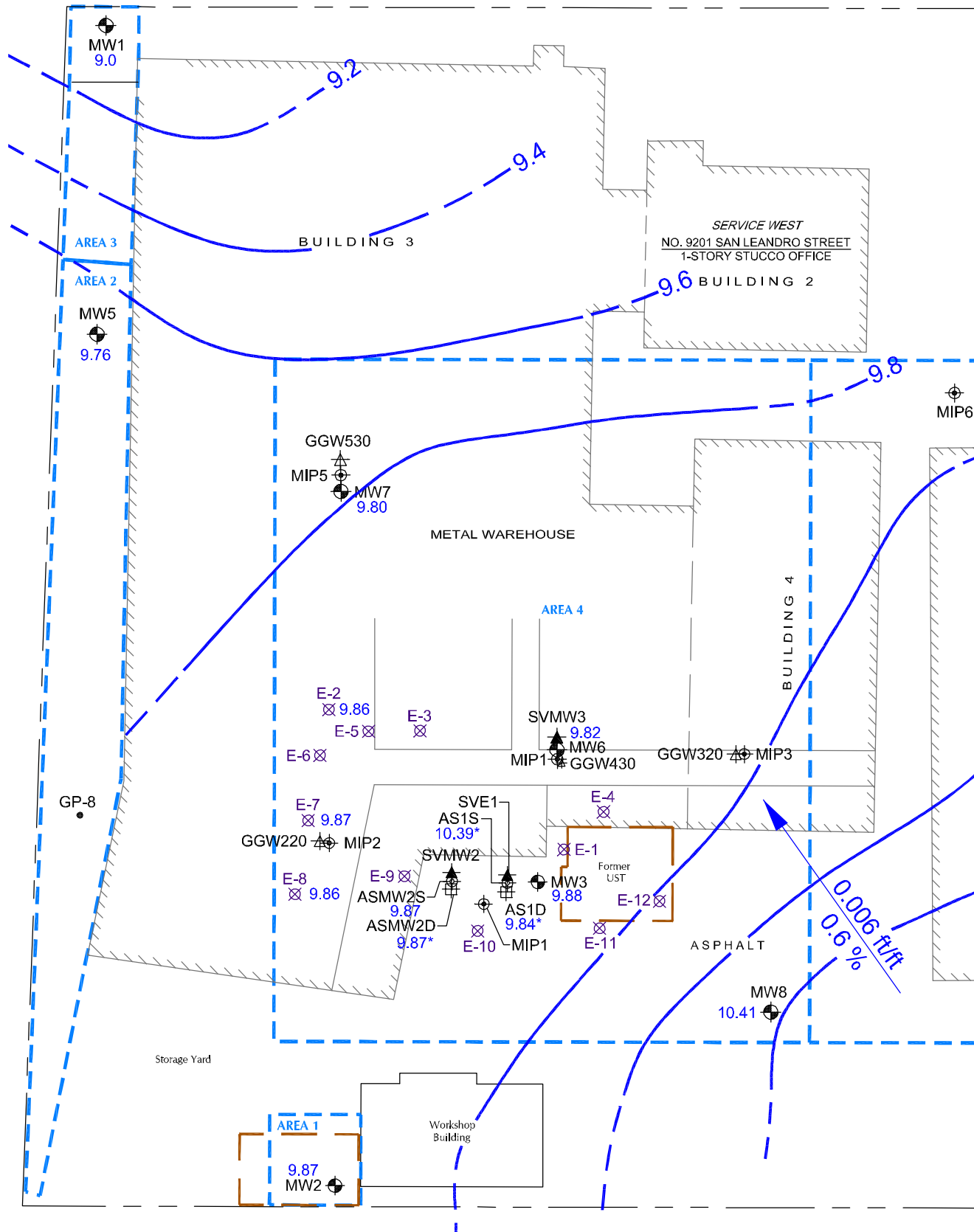
Storage Yard

AREA 1

Workshop Building

Former UST

Transformer



SERVICE WEST  
NO. 9201 SAN LEANDRO STREET  
1-STORY STUCCO OFFICE

METAL WAREHOUSE

ASPHALT

Workshop Building

Storage Yard

0.006 ft/ft  
0.6 %

AREA 1

AREA 3

AREA 2

AREA 4

BUILDING 3

BUILDING 2

BUILDING 4

GGW530

MIP5

MW7

9.80

E-2

9.86

E-3

E-6

E-7

9.87

E-8

9.86

E-9

9.87

ASMW2S

9.87

ASMW2D

9.87\*

SVE1

AS1S

10.39\*

SVMW2

AS1D

9.84\*

E-10

MIP1

SVMW3

9.82

MW6

GGW430

MIP1

GGW320

MIP3

E-4

E-1

Former UST

MW3

9.88

E-12

E-11

MW1

9.0

MW5

9.76

GP-8

MW2

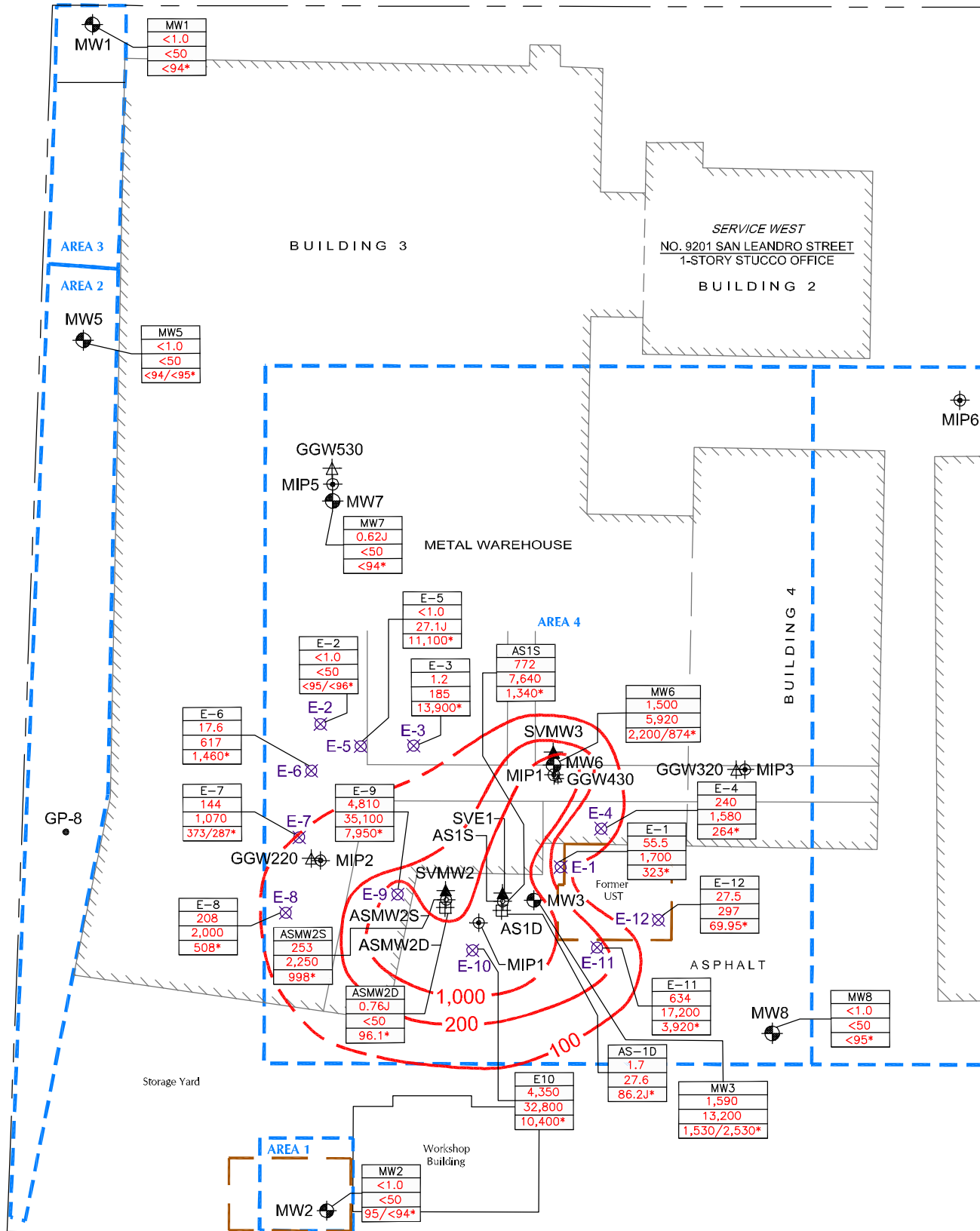
9.87

MW8

10.41

MIP6

Transformer



GROUNDWATER MONITORING FIELD DATA SHEETS

# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pump  
 PROJECT NO.: 04-PFI-005  
 TASK NO.: 5  
 WELL ID: mw-1  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1435  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_

# of volumes: \_\_\_\_\_

INITIAL DTW (ft): 3.76 1035  
 DEPTH TO BOTTOM (ft): 19.89  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 22  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )			
8.68	1410	0	7.36	747	19.09	1.92	21.3	clear	X	
10.59	1416	7	7.06	751	19.42	0.69	17.0	" "		
11.00	1422	14	7.03	770	19.46	0.32	17.1	" "		
11.08	1428	22	7.02	776	19.47	0.10	13.9	" "		

Total Gallons Purged: 22

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 11.08

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: mw-1

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES  NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pump  
 PROJECT NO.: 04-PFT-003  
 TASK NO.: 5  
 WELL ID: mw-2  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1630  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.25 1030  
 DEPTH TO BOTTOM (ft): 19.99  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 21  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )			
9.20	1600	0	6.94	1043	19.35	1.09	17.0	clear	X	
10.29	1608	7	6.93	1041	19.78	0.16	22.6	" "		
10.32	1616	14	6.92	1046	19.80	0.11	-4.9	" "		
10.33	1624	21	6.91	1051	19.82	0.09	-15.1	" "		

Total Gallons Purged: 21

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.33

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: mw-2

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pump 9  
 PROJECT NO.: 04-PFI-003  
 TASK NO.: \_\_\_\_\_  
 WELL ID: MW-3  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 945  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: B. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.54 1031  
 DEPTH TO BOTTOM (ft): 20.02  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 20.4  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)

DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.78	950	0	6.98	1108	21.67	5.52	-96.3	Brown	—	—
10.21	1005	6.8	7.06	1067	19.36	5.18	-116.1	Clearish	—	—
10.21	1022	13.6	7.11	1041	19.24	3.86	-114.8	Clear	—	—
10.21	1037	20.4	6.84	1027	19.72	3.09	-116.3	Clear	—	—

Total Gallons Purged: 20.4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.21

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: MW-3

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: MW-3-DUP    950    TYPE: Rinsate Blank    Duplicate Field Blank

PROPER DECON: Yes    No

**COMMENTS:**

No well lid!!!, cap intact though



# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Peace Pump  
 PROJECT NO.: 04-PFT-003  
 TASK NO.: 5  
 WELL ID: mw-4  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1540  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 888  
 DEPTH TO BOTTOM (ft): 19.80  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 21  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
8.88	1517	0	7.04	770	17.96	0.77	87.8	clear		
9.43	1525	7	6.95	775	18.33	0.07	24.2	" "	X	
9.60	1531	14	6.94	776	18.35	0.05	17.1	" "		
9.60	1537	21	6.93	777	18.37	0.05	14.0	" "		

Total Gallons Purged: 21

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.60

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: mw-4

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pump 5  
 PROJECT NO.: 04-PFT-007  
 TASK NO.: 5  
 WELL ID: mw-5  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 0847  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 8.45 1024  
 DEPTH TO BOTTOM (ft): 19.90  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 22  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )			
8.45	0821	0	7.03	476	19.82	0.57	-21.2	clear	<del>X</del>	
9.85	0828	7	7.04	492	19.92	0.05	-131.3	" "		
9.95	0835	14	7.07	427	19.90	0.04	-123.9	" "		
9.95	0842	22	7.07	436	19.90	0.04	-116.0	" "		

Total Gallons Purged: 22

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.95

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: mw-5

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Pico Pump  
 PROJECT NO.: 04-PFT-003  
 TASK NO.: 5  
 WELL ID: mw-6  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1200  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.64 1015  
 DEPTH TO BOTTOM (ft): 16.24  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 3.2  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )			
9.62	1150	0	7.11	1277	16.20	7.22	-104.7	cloudy	X	
9.96	1152	1	6.77	1293	20.30	0.23	-133.5	" "		
10.30	1154	2	6.75	1286	20.32	0.22	-131.7	" "		
10.34	1156	3	6.78	1271	20.37	0.23	-128.2	" "		

Total Gallons Purged: 3

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.34

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: mw-6

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Rice Pump  
 PROJECT NO.: 04-PFT-603  
 TASK NO.: 5  
 WELL ID: mw-7  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 0946  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.64 1013  
 DEPTH TO BOTTOM (ft): 26.96  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 8.3  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.34	0924	0	7.15	852	16.60	5.39	67.8	cloudy	X	
9.65	0928	2	7.01	970	17.46	0.92	52.1	brown		
9.72	0933	4	7.00	953	19.28	0.80	47.6	" "		
9.75	0937	6	6.98	930	19.17	0.60	35.7	cloudy		
9.75	0941	8.5	6.97	923	19.15	0.57	35.0	" "		

Total Gallons Purged: 8.5

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.75

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: mw-7

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: mw-7 dup 0950 TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: De-Perchloro Pace Pumps  
 PROJECT NO.: 64-PFT-023  
 TASK NO.: 5  
 WELL ID: MW-8  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1633  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 7.86 948  
 DEPTH TO BOTTOM (ft): 18.09  
 WELL DIAM. (in): 4"  
 3 VOLUMES (gals): 17  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
7.87	1610	0	6.94	321	20.63	0.38	20.3	clear		
9.54	1616	5	6.94	323	20.71	0.62	33.7	clear		
10.23	1622	10	6.93	397	20.67	0.41	41.3	" "		
11.90	1630	17	6.92	902	20.71	0.38	41.3	" "		

Total Gallons Purged: 17

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 11.90

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: MW-8

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: 04-PP4-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: \_\_\_\_\_  
 WELL ID: AS-10  
 PURGE DATE: 12-15-4  
 SAMPLE TIME: 1620  
 SAMPLE DATE: 12-15-4  
 PERSONNEL: B. Foglar

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 94.7 101.8  
 DEPTH TO BOTTOM (ft): 3.86  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 10.7  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.55	1555	0	7.07	800	18.82	1.80	-14.7	Brown	—	—
9.62	1600	3.5	7.05	803	18.54	0.40	-6.0	Brown	—	—
9.57	1607	7.0	7.04	800	18.51	0.37	-5.2	Brown	—	—
9.59	1615	10.7	7.04	806	18.50	0.36	-5.0	Clarity	—	—

Total Gallons Purged: 10.7

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.54

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: AS-10

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE: Rinsate Blank    Duplicate    Field Blank

PROPER DECON: Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: PACO Pumps  
04-PFT-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: \_\_\_\_\_  
 WELL ID: ASMW-25  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1440  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.51 1047  
 DEPTH TO BOTTOM (ft): 16.82  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 3.46  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)

DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
10.31	1415	0	6.86	1082	17.73	1.07	-118.0	Brown	-	-
10.28	1421	1.2	6.94	1083	18.98	0.64	-120.5	Black	-	-
10.28	1426	2.4	6.93	1073	19.09	0.61	-118.0	Black	-	-
10.21	1430	3.6	6.92	1068	19.17	0.68	-121.0	Clearer	-	-

Total Gallons Purged: 3.6

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.21

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: ASMW-25

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO 0

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Pace Pump  
 PROJECT NO.: 04-PF-003  
 TASK NO.: \_\_\_\_\_  
 WELL ID: ASMW-20  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1310  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.65 1040  
 DEPTH TO BOTTOM (ft): 33.71  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 11.5  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.65	1240	0	7.06	891	18.04	0.21	24.0	Clear	—	—
9.65	1248	5.0	7.04	885	18.59	0.40	18.9	Clear	—	—
9.66	1256	8.0	7.03	883	18.47	0.37	26.4	Clear	—	—
9.66	1305	10.5	7.01	886	18.44	0.37	31.0	Clear	—	—

Total Gallons Purged: 11.5

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.66

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: ASMW-20

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paces Pump  
 PROJECT NO.: 04-PFT-008  
 TASK NO.: 5  
 WELL ID: E-1  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1040  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 943 1006  
 DEPTH TO BOTTOM (ft): 17.81  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4.07  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)

DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.72	1018	0	7.35	623	18.47	6.29	-26.2	Drawn	—	—
11.23	1023	1.4	7.20	6.21	19.27	5.80	-14.5	clearly	—	—
11.41	1032	2.8	7.20	6.12	20.65	2.47	-19.7	clearly	—	—
11.55	1038	4.2	7.22	6.10	20.77	1.72	-27.1	clearing	—	—

Total Gallons Purged: 4.2

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 11.35

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-1

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE: Rinsate Blank    Duplicate    Field Blank

PROPER DECON: Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form

Rec Pump



PROJECT NAME: 04-PFT-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: 5  
 WELL ID: E-2  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1524  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_  
 INITIAL DTW (ft): 9.70 0955  
 DEPTH TO BOTTOM (ft): 18.10  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.68	1510	0	6.93	1220	18.36	3.67	-55.1	cloudy	X	
10.08	1512	1	6.81	1175	19.75	0.08	-80.1	" "		
10.36	1514	2	6.80	1173	19.77	0.08	-79.9	clear		
10.48	1516	3	6.79	1174	19.79	0.08	-79.3	" "		
10.53	1518	4	6.80	1173	19.81	0.08	-79.5	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.53

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-2

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: \_\_\_\_\_

Historical rate: \_\_\_\_\_

PROJECT NO.: \_\_\_\_\_

# of volumes: \_\_\_\_\_

TASK NO.: \_\_\_\_\_

WELL ID: E-3

INITIAL DTW (ft): 9.72 1005

PURGE DATE: 12-16-11

DEPTH TO BOTTOM (ft): 13.15

SAMPLE TIME: 1425

WELL DIAM. (in): 2"

SAMPLE DATE: 12-16-11

3 VOLUMES (gals): 4

PERSONNEL: H. Newton

h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )			
9.72	1112	0	7.02	1098	18.52	0.87	-118.4	cloudy		
10.57	1114	1	6.91	1090	18.96	0.83	-113.9	" "		
11.03	1116	2	6.91	1037	19.14	0.07	-142.6	clear		
11.29	1118	3	6.91	1036	19.30	0.06	-111.5	" "		
11.34	1120	4	6.91	1035	19.38	0.06	-128.0	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 11.34

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-3

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE: Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: \_\_\_\_\_

Historical rate: \_\_\_\_\_

PROJECT NO.: \_\_\_\_\_

# of volumes: \_\_\_\_\_

TASK NO.: \_\_\_\_\_

WELL ID: E-4

INITIAL DTW (ft): 9.60 1007

PURGE DATE: 12-16-11

DEPTH TO BOTTOM (ft): 12.07

SAMPLE TIME: 1333

WELL DIAM. (in): 2"

SAMPLE DATE: 12-16-11

3 VOLUMES (gals): 4

PERSONNEL: H. Newton

h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)

DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.60	1315	0	7.10	924	18.34	4.48	-100.1	cloudy		
9.99	1318	1	7.01	931	19.70	0.19	-134.7	" "		
10.00	1321	2	7.00	919	20.10	0.05	-150.3	" "		
10.01	1324	3	7.00	918	20.15	0.05	-150.0	" "		
10.01	1327	4	7.06	917	20.21	0.04	-149.7	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.01

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: E-4

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pump  
 PROJECT NO.: GU-PFT-003  
 TASK NO.: 5  
 WELL ID: E-5  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1050  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.69 0958  
 DEPTH TO BOTTOM (ft): 17.90  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 3.9  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.69	1038	0	6.30	1086	16.97	5.79	-88.4	cloudy	X	
10.15	1040	1	6.76	1167	18.96	0.19	-126.9	" "		
10.39	1042	2	6.74	1170	19.23	0.09	-132.3	" "		
10.44	1044	3	6.77	1168	19.45	0.06	-129.6	" "		
10.47	1046	4	6.79	1158	19.53	0.05	-125.1	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.47

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-5

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Rice Pump  
 PROJECT NO.: 04-PFT-003  
 TASK NO.: 5  
 WELL ID: E-6  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1425  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.61 0953  
 DEPTH TO BOTTOM (ft): 17.95  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )			
9.59	1412	0	7.11	1097	18.04	4.79	-111.1	cloudy	X	
10.23	1414	1	6.95	1146	19.30	0.13	-156.2	" "		
10.33	1416	2	6.95	1113	19.59	0.06	-159.7	" "		
10.38	1418	3	6.95	1105	19.62	0.05	-158.6	" "		
10.41	1420	4	6.96	1073	19.67	0.05	-154.7	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.41

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-6

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Rec Pump  
 PROJECT NO.: 01-PFT-007  
 TASK NO.: 5  
 WELL ID: E-2  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1245  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: H. Newton

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.73 0943  
 DEPTH TO BOTTOM (ft): 17.90  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 3.9  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)				Color	Turbidity	Other Observations
				EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )			
9.73	1228	0	7.12	1067	17.29	4.89	-110.7	clear		
10.50	1232	1	6.96	1115	19.01	0.84	-142.8	" "		
10.73	1236	2	6.95	1094	19.26	0.65	-152.4	" "		
10.80	1240	3	6.95	1073	19.36	0.62	-154.2	" "		
10.82	1244	4	6.93	1056	19.40	0.55	-151.3	" "		

Total Gallons Purged: 4

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.82

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-2

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON:    Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



*Raco Pumps*

PROJECT NAME: 04-PFT-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: \_\_\_\_\_  
 WELL ID: E-9  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 12:10  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.63 1055  
 DEPTH TO BOTTOM (ft): 18.02  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4.02  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)

DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Dissolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.97	11:45	0	6.69	1366	16.70	1.37	-69.2	Murky	-	_____
9.97	11:51	1.25	6.83	1377	18.15	0.34	-99.1	Murky	-	_____
10.00	11:58	2.5	6.83	1376	18.58	0.31	-102.0	Murky	-	_____
10.08	10:04	4.0	6.83	1361	18.44	0.27	-104.2	Murky	-	_____

Total Gallons Purged: 4.0

Purging Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 10.08

Sampling Method: 2" Submersible Pump 12 Volt Pump Peristaltic Pump Bailer PDB

SAMPLE ID: E-9

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL? YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_ TYPE: Rinsate Blank Duplicate Field Blank

PROPER DECON: Yes No

**COMMENTS:**

Strong diesel/gas smell

# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pumps  
04-PFT-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: \_\_\_\_\_  
 WELL ID: E-10  
 PURGE DATE: 12-15-11  
 SAMPLE TIME: 1535  
 SAMPLE DATE: 12-15-11  
 PERSONNEL: B. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 9.44 1035  
 DEPTH TO BOTTOM (ft): 18.07  
 WELL DIAM. (in): 2 1/4  
 3 VOLUMES (gals): 4.14  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.65	1514	0	6.73	1255	17.83	3.64	-121.3	clear	-	-
10.31	1519	1.4	6.80	1284	19.10	0.51	-125.1	clear	-	-
10.35	1524	2.8	6.81	1274	19.27	0.39	-124.2	clear	-	-
10.28	1529	4.2	6.81	1250	19.36	0.35	-120.0	clear	-	-

Total Gallons Purged: 4.2

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.84

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-10

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES  NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE:    Rinsate Blank    Duplicate    Field Blank

PROPER DECON: Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Paco Pumps  
 PROJECT NO.: 04-PFT-001  
 TASK NO.: \_\_\_\_\_  
 WELL ID: E-11  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1125  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 928 10:00  
 DEPTH TO BOTTOM (ft): 17.91  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4.14  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

(check units!)										
DTW	Time (24 hr)	No. Gallons	pH	EC ( )	Temp. ( )	Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
9.65	11:00	0	19.06	975	19.04	2.46	-140.3	Branit	—	—
9.72	1103	1.4	19.97	963	19.98	2.89	-156.5	clearing	—	—
9.89	1111	2.8	20.26	958	20.27	0.81	-160.8	clearing	—	—
9.87	1114	3.8	20.29	953	20.30	0.83	-160.5	clear	—	—
9.85	1118	4.2	20.37	951	20.35	0.83	-159.0	clear	—	—

Total Gallons Purged: 4.2

Purging Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.88

Sampling Method: 2" Submersible Pump    12 Volt Pump    Peristaltic Pump    Bailer    PDB

SAMPLE ID: E-11

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?    YES / NO

IF SO, SAMPLE ID: \_\_\_\_\_    TYPE: Rinsate Blank    Duplicate    Field Blank

PROPER DECON: Yes    No

**COMMENTS:**

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# Groundwater Monitoring Well Field Sampling Form



PROJECT NAME: Raw Pump? 04-PFT-003  
 PROJECT NO.: \_\_\_\_\_  
 TASK NO.: 5  
 WELL ID: E-12  
 PURGE DATE: 12-16-11  
 SAMPLE TIME: 1215  
 SAMPLE DATE: 12-16-11  
 PERSONNEL: G. Taylor

Historical rate: \_\_\_\_\_  
 # of volumes: \_\_\_\_\_

INITIAL DTW (ft): 8.89 9.55  
 DEPTH TO BOTTOM (ft): 177.6  
 WELL DIAM. (in): 2"  
 3 VOLUMES (gals): 4.25  
h\*3\*0.064 (1.25"); h\*3\*0.16 (2"); h\*3\*0.26 (2.5");  
 h\*3\*0.38 (3"); h\*3\*0.65 (4"); h\*3\*1.5 (6")

**PURGE LOG:**

DTW	Time (24 hr)	No. Gallons	pH	(check units!)		Disolved Oxygen ( )	REDOX ( )	Color	Turbidity	Other Observations
				EC ( )	Temp. ( )					
9.18	1053	0	8.48	470	21.45	1.45	-93.0	Brown	—	
9.23	1058	1.4	6.84	958	20.79	0.84	-100.4	clear	—	
9.28	1103	2.8	6.55	948	20.55	0.78	-6.5	clear	—	
9.22	1108	4.2	6.73	946	20.63	0.80	-13.7	clear	—	

Total Gallons Purged: \_\_\_\_\_

Purging Method

2"  
Submersible Pump

12 Volt Pump

Peristaltic Pump

Bailer

**WELL SAMPLING:**

DTW at Time of Sampling: 9.22

Sampling Method

2"  
Submersible Pump

12 Volt Pump

Peristaltic Pump

Bailer

PDB

SAMPLE ID: E-12

**QA/QC SAMPLING:**

WAS QA/QC SAMPLE COLLECTED FOR THIS WELL?

YES  NO

IF SO, SAMPLE ID: \_\_\_\_\_

TYPE: Rinsate Blank

Duplicate Field Blank

PROPER DECON:

Yes

No

**COMMENTS:**

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Project No.	_____
Project Name	_____
Date	_____ Data Entry _____
Category	_____

# Daily Field Log

Site: Paco Pump Project #: 04-PFT-003/5  
 Date: 12-15-11 Page \_\_\_\_\_ of \_\_\_\_\_  
 Weather: Scary Overcast 50's  
 Field Activities: GW Sampling  
 Report Prepared By: B. Taylor  
 Field Personnel on Site: B. Taylor, H. Newton

Notes: 905 Arrived onsite @  
 940 Started gauging after getting equipment squared away.  
 1120 Finished gauging  
 1125 Started E-9, #1  
 1220 Finished E-9  
 1225 Started ASMW-20  
 1315 Finished ASMW-20  
 1330-1400 ~~work~~ lunch  
 1410 Started ASMW-25  
 1450 Finished ASMW-25  
 1455 Started E-10  
 1540 Finished E-10  
 1545 Started AS-10  
 1625 Finished AS-10  
 1630 Started AS-15  
 1655 Finished AS-15

Project No.	_____
Project Name	_____
Date	_____ Data Entry _____
Category	_____

# Daily Field Log

Site: Paco Pumps Project #: \_\_\_\_\_

Date: 12-15-11 Page \_\_\_\_\_ of \_\_\_\_\_

Weather: Overcast 50's

Field Activities: GW Sampling

Report Prepared By: G. Taylor

Field Personnel on Site: G. Taylor, H. Newton

Notes:

805 arrived onsite

820 started MW-3, issues getting pump to work

950 Finished MW-3

955 started E-1

1045 Finished E-1

1050 Started E-11

1132 Finished E-11

1135 Started E-12

1225 Finished E-12

1230-1300 ~~Started~~ took lunch

1315 Started MW-8, pump not work... hot to the touch.

1330 talk to equipos, recommend letting the pump cool down in the water and try it again

1345 Help Harben finish his well

~~1420~~ 1420 Fill out chain and go out for ice

1430 Counter arrives, behind

1530 trying to open well MW-4



**GROUNDWATER SAMPLING LABORATORY REPORT  
AND  
CHAIN OF CUSTODY**

**Technical Report for**

**The Source Group**

T0600101592-9201 San Leandro Street, Oakland CA

04-PFT-003

Accutest Job Number: C19437

Sampling Date: 12/15/11

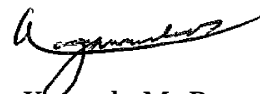
**Report to:**

The Source Group  
3451C Vincent Road  
Pleasant Hill, CA 94523  
pparmentier@thesourcegroup.net; sdaro@thesourcegroup.net  
ATTN: Paul Parmentier

Total number of pages in report: **63**



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.

A handwritten signature in black ink, appearing to read "Kesavalu M. Bagawandoss".

**Kesavalu M. Bagawandoss,**  
Ph.D., J.D., Lab Director

**Client Service contact: Nutan Kabir 408-588-0200**

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

# Table of Contents

Sections:

1

2

3

4

5

-1-

<b>Section 1: Sample Summary .....</b>	<b>3</b>
<b>Section 2: Sample Results .....</b>	<b>4</b>
<b>2.1: C19437-1: E-7 .....</b>	<b>5</b>
<b>2.2: C19437-1A: E-7 .....</b>	<b>9</b>
<b>2.3: C19437-2: E-8 .....</b>	<b>10</b>
<b>2.4: C19437-3: E-9 .....</b>	<b>14</b>
<b>2.5: C19437-4: ASMW-2D .....</b>	<b>18</b>
<b>2.6: C19437-5: E-6 .....</b>	<b>22</b>
<b>2.7: C19437-6: ASMW-2S .....</b>	<b>26</b>
<b>2.8: C19437-7: TRIP BLANK .....</b>	<b>30</b>
<b>Section 3: Misc. Forms .....</b>	<b>33</b>
<b>3.1: Chain of Custody .....</b>	<b>34</b>
<b>Section 4: GC/MS Volatiles - QC Data Summaries .....</b>	<b>36</b>
<b>4.1: Method Blank Summary .....</b>	<b>37</b>
<b>4.2: Blank Spike/Blank Spike Duplicate Summary .....</b>	<b>43</b>
<b>4.3: Laboratory Control Sample Summary .....</b>	<b>49</b>
<b>4.4: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	<b>51</b>
<b>Section 5: GC Semi-volatiles - QC Data Summaries .....</b>	<b>57</b>
<b>5.1: Method Blank Summary .....</b>	<b>58</b>
<b>5.2: Blank Spike/Blank Spike Duplicate Summary .....</b>	<b>60</b>
<b>5.3: Matrix Spike/Matrix Spike Duplicate Summary .....</b>	<b>62</b>



## Sample Summary

The Source Group

**Job No:** C19437

T0600101592-9201 San Leandro Street, Oakland CA  
 Project No: 04-PFT-003

Sample Number	Collected		Matrix		Client Sample ID
	Date	Time By	Received	Code Type	
C19437-1	12/15/11	11:55	HNGT 12/15/11	AQ Ground Water	E-7
C19437-1A	12/15/11	11:55	HNGT 12/15/11	AQ Ground Water	E-7
C19437-2	12/15/11	12:45	HNGT 12/15/11	AQ Ground Water	E-8
C19437-3	12/15/11	12:10	HNGT 12/15/11	AQ Ground Water	E-9
C19437-4	12/15/11	13:10	HNGT 12/15/11	AQ Ground Water	ASMW-2D
C19437-5	12/15/11	14:25	HNGT 12/15/11	AQ Ground Water	E-6
C19437-6	12/15/11	14:40	HNGT 12/15/11	AQ Ground Water	ASMW-2S
C19437-7	12/15/11	14:50	HNGT 12/15/11	AQ Trip Blank Water	TRIP BLANK

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> E-7		
<b>Lab Sample ID:</b> C19437-1		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6764.D	2	12/22/11	BD	n/a	n/a	VR237
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	20	ug/l	
71-43-2	Benzene	144	2.0	0.60	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.60	ug/l	
74-97-5	Bromochloromethane	ND	2.0	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.60	ug/l	
75-25-2	Bromoform	ND	2.0	1.0	ug/l	
104-51-8	n-Butylbenzene	ND	10	1.0	ug/l	
135-98-8	sec-Butylbenzene	1.6	10	1.0	ug/l	J
98-06-6	tert-Butylbenzene	1.7	10	1.0	ug/l	J
108-90-7	Chlorobenzene	ND	2.0	0.60	ug/l	
75-00-3	Chloroethane	ND	2.0	0.60	ug/l	
67-66-3	Chloroform	ND	2.0	0.60	ug/l	
95-49-8	o-Chlorotoluene	ND	10	1.0	ug/l	
106-43-4	p-Chlorotoluene	ND	10	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.60	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	10	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.40	ug/l	
107-06-2	1,2-Dichloroethane	3.1	2.0	0.60	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.60	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.60	ug/l	
108-20-3	Di-Isopropyl ether	ND	10	1.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.60	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.60	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.60	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	1.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	2.0	0.60	ug/l	
95-50-1	o-Dichlorobenzene	ND	2.0	0.60	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.60	ug/l	

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

## Report of Analysis

<b>Client Sample ID:</b> E-7		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-1		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.60	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.40	ug/l	
100-41-4	Ethylbenzene	16.0	2.0	0.60	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	10	1.0	ug/l	
591-78-6	2-Hexanone	ND	40	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	1.0	ug/l	
98-82-8	Isopropylbenzene	5.4	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	1.1	10	1.0	ug/l	J
108-10-1	4-Methyl-2-pentanone	ND	40	10	ug/l	
74-83-9	Methyl bromide	ND	10	3.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	40	10	ug/l	
78-93-3	Methyl ethyl ketone	ND	40	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.4	2.0	1.0	ug/l	
91-20-3	Naphthalene	5.9	10	1.0	ug/l	J
103-65-1	n-Propylbenzene	12.1	10	1.0	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	10	1.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	10	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	21.5	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.40	ug/l	
108-88-3	Toluene	29.5	2.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.60	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.60	ug/l	
1330-20-7	Xylene (total)	27.2	4.0	1.4	ug/l	
	TPH-GRO (C6-C10)	1070	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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

## Report of Analysis

<b>Client Sample ID:</b> E-7		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-1		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	105%		60-130%
460-00-4	4-Bromofluorobenzene	105%		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



### Report of Analysis

<b>Client Sample ID:</b> E-7		
<b>Lab Sample ID:</b> C19437-1		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19539.D	1	12/17/11	JH	12/16/11	OP5073	GHH627
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

**TPH Extractable**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup>	0.332	0.097	0.049	mg/l	
	TPH (Motor Oil)	0.118	0.19	0.097	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	87%		45-140%

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).

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

### Report of Analysis

<b>Client Sample ID:</b> E-7		
<b>Lab Sample ID:</b> C19437-1A		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19538.D	1	12/17/11	JH	12/16/11	OP5078	GHH627
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 (Diesel) <sup>a</sup>	0.287	0.096	0.048	mg/l	
	TPH (Motor Oil)	ND	0.19	0.096	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		45-140%

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).

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

### Report of Analysis

<b>Client Sample ID:</b> E-8		
<b>Lab Sample ID:</b> C19437-2		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6765.D	5	12/22/11	BD	n/a	n/a	VR237
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	100	50	ug/l	
71-43-2	Benzene	208	5.0	1.5	ug/l	
108-86-1	Bromobenzene	ND	5.0	1.5	ug/l	
74-97-5	Bromochloromethane	ND	5.0	2.5	ug/l	
75-27-4	Bromodichloromethane	ND	5.0	1.5	ug/l	
75-25-2	Bromoform	ND	5.0	2.5	ug/l	
104-51-8	n-Butylbenzene	ND	25	2.5	ug/l	
135-98-8	sec-Butylbenzene	3.1	25	2.5	ug/l	J
98-06-6	tert-Butylbenzene	ND	25	2.5	ug/l	
108-90-7	Chlorobenzene	ND	5.0	1.5	ug/l	
75-00-3	Chloroethane	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	5.0	1.5	ug/l	
95-49-8	o-Chlorotoluene	ND	25	2.5	ug/l	
106-43-4	p-Chlorotoluene	ND	25	2.5	ug/l	
56-23-5	Carbon tetrachloride	ND	5.0	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	1.5	ug/l	
75-35-4	1,1-Dichloroethylene	ND	5.0	1.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	5.0	1.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	25	ug/l	
106-93-4	1,2-Dibromoethane	ND	5.0	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	5.0	1.5	ug/l	
78-87-5	1,2-Dichloropropane	ND	5.0	1.5	ug/l	
142-28-9	1,3-Dichloropropane	ND	5.0	1.5	ug/l	
108-20-3	Di-Isopropyl ether	ND	25	2.5	ug/l	
594-20-7	2,2-Dichloropropane	ND	5.0	1.5	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	1.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.5	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	2.5	ug/l	
541-73-1	m-Dichlorobenzene	ND	5.0	1.5	ug/l	
95-50-1	o-Dichlorobenzene	ND	5.0	1.5	ug/l	
106-46-7	p-Dichlorobenzene	ND	5.0	1.5	ug/l	

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

### Report of Analysis

<b>Client Sample ID:</b> E-8		
<b>Lab Sample ID:</b> C19437-2		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	1.5	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.0	ug/l	
100-41-4	Ethylbenzene	42.9	5.0	1.5	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	25	2.5	ug/l	
591-78-6	2-Hexanone	ND	100	50	ug/l	
87-68-3	Hexachlorobutadiene	ND	25	2.5	ug/l	
98-82-8	Isopropylbenzene	8.5	5.0	1.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	25	2.5	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	100	25	ug/l	
74-83-9	Methyl bromide	ND	25	7.5	ug/l	
74-87-3	Methyl chloride	ND	5.0	1.5	ug/l	
74-95-3	Methylene bromide	ND	5.0	1.0	ug/l	
75-09-2	Methylene chloride	ND	100	25	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.5	ug/l	
91-20-3	Naphthalene	4.8	25	2.5	ug/l	J
103-65-1	n-Propylbenzene	20.8	25	2.5	ug/l	J
100-42-5	Styrene	ND	5.0	1.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	25	2.5	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	50	25	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	25	2.5	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	25	2.5	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	25	2.5	ug/l	
95-63-6	1,2,4-Trimethylbenzene	53.3	25	2.5	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	25	2.5	ug/l	
127-18-4	Tetrachloroethylene	ND	5.0	1.0	ug/l	
108-88-3	Toluene	4.0	5.0	2.5	ug/l	J
79-01-6	Trichloroethylene	ND	5.0	1.5	ug/l	
75-69-4	Trichlorofluoromethane	ND	5.0	1.5	ug/l	
75-01-4	Vinyl chloride	ND	5.0	1.5	ug/l	
1330-20-7	Xylene (total)	14.0	10	3.5	ug/l	
	TPH-GRO (C6-C10)	2000	250	130	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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

# Report of Analysis

<b>Client Sample ID:</b> E-8		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-2		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	104%		60-130%
460-00-4	4-Bromofluorobenzene	106%		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

### Report of Analysis

<b>Client Sample ID:</b> E-8		
<b>Lab Sample ID:</b> C19437-2		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19533.D	1	12/17/11	JH	12/16/11	OP5078	GHH627
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 (Diesel) <sup>a</sup>	0.508	0.096	0.048	mg/l	
	TPH (Motor Oil)	ND	0.19	0.096	mg/l	

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

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).

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

## Report of Analysis

<b>Client Sample ID:</b> E-9		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-3		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6784.D	100	12/23/11	BD	n/a	n/a	VR238
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	1000	ug/l	
71-43-2	Benzene	4810	100	30	ug/l	
108-86-1	Bromobenzene	ND	100	30	ug/l	
74-97-5	Bromochloromethane	ND	100	50	ug/l	
75-27-4	Bromodichloromethane	ND	100	30	ug/l	
75-25-2	Bromoform	ND	100	50	ug/l	
104-51-8	n-Butylbenzene	ND	500	50	ug/l	
135-98-8	sec-Butylbenzene	ND	500	50	ug/l	
98-06-6	tert-Butylbenzene	ND	500	50	ug/l	
108-90-7	Chlorobenzene	ND	100	30	ug/l	
75-00-3	Chloroethane	ND	100	30	ug/l	
67-66-3	Chloroform	ND	100	30	ug/l	
95-49-8	o-Chlorotoluene	ND	500	50	ug/l	
106-43-4	p-Chlorotoluene	ND	500	50	ug/l	
56-23-5	Carbon tetrachloride	ND	100	20	ug/l	
75-34-3	1,1-Dichloroethane	ND	100	30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	100	20	ug/l	
563-58-6	1,1-Dichloropropene	ND	100	30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1000	500	ug/l	
106-93-4	1,2-Dibromoethane	ND	100	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	100	30	ug/l	
78-87-5	1,2-Dichloropropane	ND	100	30	ug/l	
142-28-9	1,3-Dichloropropane	ND	100	30	ug/l	
108-20-3	Di-Isopropyl ether	ND	500	50	ug/l	
594-20-7	2,2-Dichloropropane	ND	100	30	ug/l	
124-48-1	Dibromochloromethane	ND	100	20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	100	30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	100	30	ug/l	
10061-01-5	cis-1,3-Dichloropropene <sup>a</sup>	ND	100	50	ug/l	
541-73-1	m-Dichlorobenzene	ND	100	30	ug/l	
95-50-1	o-Dichlorobenzene	ND	100	30	ug/l	
106-46-7	p-Dichlorobenzene	ND	100	30	ug/l	

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

### Report of Analysis

<b>Client Sample ID:</b> E-9		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-3		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	100	30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	100	20	ug/l	
100-41-4	Ethylbenzene	768	100	30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	500	50	ug/l	
591-78-6	2-Hexanone	ND	2000	1000	ug/l	
87-68-3	Hexachlorobutadiene	ND	500	50	ug/l	
98-82-8	Isopropylbenzene	89.0	100	20	ug/l	J
99-87-6	p-Isopropyltoluene	ND	500	50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	2000	500	ug/l	
74-83-9	Methyl bromide	ND	500	150	ug/l	
74-87-3	Methyl chloride	ND	100	30	ug/l	
74-95-3	Methylene bromide	ND	100	20	ug/l	
75-09-2	Methylene chloride	ND	2000	500	ug/l	
78-93-3	Methyl ethyl ketone	ND	2000	500	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	100	50	ug/l	
91-20-3	Naphthalene	403	500	50	ug/l	J
103-65-1	n-Propylbenzene	228	500	50	ug/l	J
100-42-5	Styrene	ND	100	20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	500	50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	1000	500	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	100	20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	100	20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	500	50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	500	50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	500	50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2410	500	50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	540	500	50	ug/l	
127-18-4	Tetrachloroethylene	ND	100	20	ug/l	
108-88-3	Toluene	5710	100	50	ug/l	
79-01-6	Trichloroethylene	ND	100	30	ug/l	
75-69-4	Trichlorofluoromethane	ND	100	30	ug/l	
75-01-4	Vinyl chloride	ND	100	30	ug/l	
1330-20-7	Xylene (total)	3260	200	70	ug/l	
	TPH-GRO (C6-C10)	35100	5000	2500	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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



## Report of Analysis

<b>Client Sample ID:</b> E-9	<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-3	<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B	
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA	

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	107%		60-130%
460-00-4	4-Bromofluorobenzene	106%		60-130%

(a) CCV outside of control limits (biased high); not detected in sample.

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

### Report of Analysis

<b>Client Sample ID:</b> E-9		
<b>Lab Sample ID:</b> C19437-3		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19604.D	10	12/18/11	JH	12/16/11	OP5078	GHH628
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 (Diesel) <sup>a</sup>	7.95	0.96	0.48	mg/l	
	TPH (Motor Oil)	ND	1.9	0.96	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		45-140%

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2D		
<b>Lab Sample ID:</b> C19437-4		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6758.D	1	12/22/11	BD	n/a	n/a	VR237
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	0.76	1.0	0.30	ug/l	J
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	0.52	5.0	0.50	ug/l	J
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

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

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2D		
<b>Lab Sample ID:</b> C19437-4		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	1.0	5.0	0.50	ug/l	J
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	2.3	5.0	0.50	ug/l	J
108-67-8	1,3,5-Trimethylbenzene	0.76	5.0	0.50	ug/l	J
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	0.99	1.0	0.50	ug/l	J
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	1.1	2.0	0.70	ug/l	J
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2D		
<b>Lab Sample ID:</b> C19437-4		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

#### VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	107%		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

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2D	<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-4	<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19535.D	1	12/17/11	JH	12/16/11	OP5078	GHH627
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.094	0.047	mg/l	
	TPH (Motor Oil)	0.0954	0.19	0.094	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		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

## Report of Analysis

<b>Client Sample ID:</b> E-6		
<b>Lab Sample ID:</b> C19437-5		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6785.D	2	12/23/11	BD	n/a	n/a	VR238
Run #2							

Run #1	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	20	ug/l	
71-43-2	Benzene	17.6	2.0	0.60	ug/l	
108-86-1	Bromobenzene	ND	2.0	0.60	ug/l	
74-97-5	Bromochloromethane	ND	2.0	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	2.0	0.60	ug/l	
75-25-2	Bromoform	ND	2.0	1.0	ug/l	
104-51-8	n-Butylbenzene	2.0	10	1.0	ug/l	J
135-98-8	sec-Butylbenzene	2.3	10	1.0	ug/l	J
98-06-6	tert-Butylbenzene	3.6	10	1.0	ug/l	J
108-90-7	Chlorobenzene	ND	2.0	0.60	ug/l	
75-00-3	Chloroethane	ND	2.0	0.60	ug/l	
67-66-3	Chloroform	ND	2.0	0.60	ug/l	
95-49-8	o-Chlorotoluene	ND	10	1.0	ug/l	
106-43-4	p-Chlorotoluene	ND	10	1.0	ug/l	
56-23-5	Carbon tetrachloride	ND	2.0	0.40	ug/l	
75-34-3	1,1-Dichloroethane	ND	2.0	0.60	ug/l	
75-35-4	1,1-Dichloroethylene	ND	2.0	0.40	ug/l	
563-58-6	1,1-Dichloropropene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	10	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.40	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	0.60	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	0.60	ug/l	
142-28-9	1,3-Dichloropropane	ND	2.0	0.60	ug/l	
108-20-3	Di-Isopropyl ether	ND	10	1.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	2.0	0.60	ug/l	
124-48-1	Dibromochloromethane	ND	2.0	0.40	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.60	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	2.0	0.60	ug/l	
10061-01-5	cis-1,3-Dichloropropene <sup>a</sup>	ND	2.0	1.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	2.0	0.60	ug/l	
95-50-1	o-Dichlorobenzene	ND	2.0	0.60	ug/l	
106-46-7	p-Dichlorobenzene	ND	2.0	0.60	ug/l	

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

## Report of Analysis

<b>Client Sample ID:</b> E-6		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-5		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

### VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	2.0	0.60	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	0.40	ug/l	
100-41-4	Ethylbenzene	3.3	2.0	0.60	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	10	1.0	ug/l	
591-78-6	2-Hexanone	ND	40	20	ug/l	
87-68-3	Hexachlorobutadiene	ND	10	1.0	ug/l	
98-82-8	Isopropylbenzene	7.1	2.0	0.40	ug/l	
99-87-6	p-Isopropyltoluene	ND	10	1.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	40	10	ug/l	
74-83-9	Methyl bromide	ND	10	3.0	ug/l	
74-87-3	Methyl chloride	ND	2.0	0.60	ug/l	
74-95-3	Methylene bromide	ND	2.0	0.40	ug/l	
75-09-2	Methylene chloride	ND	40	10	ug/l	
78-93-3	Methyl ethyl ketone	ND	40	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	10	1.0	ug/l	
103-65-1	n-Propylbenzene	10.9	10	1.0	ug/l	
100-42-5	Styrene	ND	2.0	0.40	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	10	1.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	20	10	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	2.0	0.40	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	0.40	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	2.0	0.40	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	10	1.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	10	1.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	10	1.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	10	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	10	1.0	ug/l	
127-18-4	Tetrachloroethylene	ND	2.0	0.40	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
79-01-6	Trichloroethylene	ND	2.0	0.60	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.60	ug/l	
75-01-4	Vinyl chloride	ND	2.0	0.60	ug/l	
1330-20-7	Xylene (total)	ND	4.0	1.4	ug/l	
	TPH-GRO (C6-C10)	617	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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



## Report of Analysis

<b>Client Sample ID:</b> E-6		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-5		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	102%		60-130%
460-00-4	4-Bromofluorobenzene	105%		60-130%

(a) CCV outside of control limits (biased high); not detected in sample.

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

### Report of Analysis

<b>Client Sample ID:</b> E-6		
<b>Lab Sample ID:</b> C19437-5		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8015B M SW846 3510C		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH20096.D	2	12/29/11	MT	12/16/11	OP5078	GHH637
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup>	0.225	0.19	0.094	mg/l	
	TPH (Motor Oil) <sup>b</sup>	1.81	0.38	0.19	mg/l	

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

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).  
 (b) Atypical Motor Oil pattern (C28-C40).

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

## Report of Analysis

<b>Client Sample ID:</b> ASMW-2S		
<b>Lab Sample ID:</b> C19437-6		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6766.D	10	12/22/11	BD	n/a	n/a	VR237
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	200	100	ug/l	
71-43-2	Benzene	253	10	3.0	ug/l	
108-86-1	Bromobenzene	ND	10	3.0	ug/l	
74-97-5	Bromochloromethane	ND	10	5.0	ug/l	
75-27-4	Bromodichloromethane	ND	10	3.0	ug/l	
75-25-2	Bromoform	ND	10	5.0	ug/l	
104-51-8	n-Butylbenzene	15.3	50	5.0	ug/l	J
135-98-8	sec-Butylbenzene	ND	50	5.0	ug/l	
98-06-6	tert-Butylbenzene	ND	50	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	3.0	ug/l	
75-00-3	Chloroethane	ND	10	3.0	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
95-49-8	o-Chlorotoluene	ND	50	5.0	ug/l	
106-43-4	p-Chlorotoluene	ND	50	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	10	2.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	2.0	ug/l	
563-58-6	1,1-Dichloropropene	ND	10	3.0	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	50	ug/l	
106-93-4	1,2-Dibromoethane	ND	10	2.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	3.0	ug/l	
142-28-9	1,3-Dichloropropane	ND	10	3.0	ug/l	
108-20-3	Di-Isopropyl ether	ND	50	5.0	ug/l	
594-20-7	2,2-Dichloropropane	ND	10	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	10	3.0	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	10	3.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	5.0	ug/l	
541-73-1	m-Dichlorobenzene	ND	10	3.0	ug/l	
95-50-1	o-Dichlorobenzene	ND	10	3.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	10	3.0	ug/l	

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

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2S		
<b>Lab Sample ID:</b> C19437-6		<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B		<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	10	3.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.0	ug/l	
100-41-4	Ethylbenzene	49.9	10	3.0	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	50	5.0	ug/l	
591-78-6	2-Hexanone	ND	200	100	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	5.0	ug/l	
98-82-8	Isopropylbenzene	14.0	10	2.0	ug/l	
99-87-6	p-Isopropyltoluene	ND	50	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	200	50	ug/l	
74-83-9	Methyl bromide	ND	50	15	ug/l	
74-87-3	Methyl chloride	ND	10	3.0	ug/l	
74-95-3	Methylene bromide	ND	10	2.0	ug/l	
75-09-2	Methylene chloride	ND	200	50	ug/l	
78-93-3	Methyl ethyl ketone	ND	200	50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
91-20-3	Naphthalene	31.1	50	5.0	ug/l	J
103-65-1	n-Propylbenzene	32.1	50	5.0	ug/l	J
100-42-5	Styrene	ND	10	2.0	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	50	5.0	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	100	50	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	10	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	2.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	2.0	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	50	5.0	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	50	5.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	50	5.0	ug/l	
95-63-6	1,2,4-Trimethylbenzene	221	50	5.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	34.6	50	5.0	ug/l	J
127-18-4	Tetrachloroethylene	ND	10	2.0	ug/l	
108-88-3	Toluene	19.8	10	5.0	ug/l	
79-01-6	Trichloroethylene	ND	10	3.0	ug/l	
75-69-4	Trichlorofluoromethane	ND	10	3.0	ug/l	
75-01-4	Vinyl chloride	ND	10	3.0	ug/l	
1330-20-7	Xylene (total)	77.4	20	7.0	ug/l	
	TPH-GRO (C6-C10)	2250	500	250	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	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

### Report of Analysis

<b>Client Sample ID:</b> ASMW-2S		<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-6		<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water		<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8260B		
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA		

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		60-130%
460-00-4	4-Bromofluorobenzene	106%		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

## Report of Analysis

<b>Client Sample ID:</b> ASMW-2S	<b>Date Sampled:</b> 12/15/11
<b>Lab Sample ID:</b> C19437-6	<b>Date Received:</b> 12/15/11
<b>Matrix:</b> AQ - Ground Water	<b>Percent Solids:</b> n/a
<b>Method:</b> SW846 8015B M SW846 3510C	
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH19537.D	1	12/17/11	JH	12/16/11	OP5078	GHH627
Run #2							

	Initial Volume	Final Volume
Run #1	1060 ml	1.0 ml
Run #2		

**TPH Extractable w/ Silica Gel Cleanup**

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel) <sup>a</sup>	0.998	0.094	0.047	mg/l	
	TPH (Motor Oil)	0.148	0.19	0.094	mg/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	90%		45-140%

(a) Not a typical Diesel pattern; value due higher boiling gasoline compounds in the Diesel range (C10-C16).

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

## Report of Analysis

<b>Client Sample ID:</b>	TRIP BLANK	<b>Date Sampled:</b>	12/15/11
<b>Lab Sample ID:</b>	C19437-7	<b>Date Received:</b>	12/15/11
<b>Matrix:</b>	AQ - Trip Blank Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8260B		
<b>Project:</b>	T0600101592-9201 San Leandro Street, Oakland CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R6753.D	1	12/22/11	BD	n/a	n/a	VR237
Run #2							

Run #	Purge Volume
Run #1	10.0 ml
Run #2	

## VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	

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

### Report of Analysis

<b>Client Sample ID:</b> TRIP BLANK	
<b>Lab Sample ID:</b> C19437-7	<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Trip Blank Water	<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA	

**VOA 8260 List**

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		60-130%
2037-26-5	Toluene-D8	103%		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



## Report of Analysis

<b>Client Sample ID:</b> TRIP BLANK	
<b>Lab Sample ID:</b> C19437-7	<b>Date Sampled:</b> 12/15/11
<b>Matrix:</b> AQ - Trip Blank Water	<b>Date Received:</b> 12/15/11
<b>Method:</b> SW846 8260B	<b>Percent Solids:</b> n/a
<b>Project:</b> T0600101592-9201 San Leandro Street, Oakland CA	

**VOA 8260 List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		60-130%

ND = Not detected      MDL - Method Detection Limit  
 RL = Reporting Limit

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Misc. Forms

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### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

**CHAIN OF CUSTODY**

2105 Lundy Ave, San Jose, CA 95131  
(408) 588-0200 FAX: (408) 588-0201

SGRPCAPH2805

FED-EX Tracking #		Bottle Order Control #																																																																																																																	
Accutest Quote #		Accutest NC Job #: <b>C19437</b>																																																																																																																	
Client / Reporting Information		Project Information																																																																																																																	
Company Name: <b>Source Group Inc</b>		Project Name: <b>Paco Pump</b>																																																																																																																	
Address: <b>3478 Bustirk Ave Ste 100</b>		Street: <b>San Leandro St</b>																																																																																																																	
City: <b>Pleasant Hill CA 94523</b>		City: <b>Oakland CA</b>																																																																																																																	
Project Contact: <b>Kristene Tidwell</b>		Project #: <b>04-PFT-003</b>																																																																																																																	
Phone #: <b>925-944-2856</b>		EMAIL: <b>k.tidwell@thesourcegroup.net</b>																																																																																																																	
Sampler's Name: <b>Harlow Newton / Geoff Taylor</b>		Client Purchase Order #																																																																																																																	
Requested Analysis		Matrix Codes																																																																																																																	
<p>5105 Ca (DRO + MB) 105 with silica gel BTEX + Oxygens BTEX Ca spool TPH (DRO + MB) by GAS with silica gel</p>		<p>WW- Wastewater GW- Ground Water SW- Surface Water SO- Soil OI-OI WP-Wipe LIQ - Non-aqueous Liquid AIR DW- Drinking Water (Perchlorate Only)</p>																																																																																																																	
Number of preserved Bottles		LAB USE ONLY																																																																																																																	
<table border="1"> <thead> <tr> <th>Sample ID</th> <th>Date</th> <th>Time</th> <th>Sampled by</th> <th>Matrix</th> <th># of bottles</th> <th>DP</th> <th>MOCH</th> <th>HMDS</th> <th>MSDCL</th> <th>MONE</th> <th>MAWCO</th> <th>MEIN</th> <th>SUCROE</th> </tr> </thead> <tbody> <tr> <td>E-7</td> <td>12-15-11</td> <td>1155</td> <td>H.N.</td> <td>GW</td> <td>5</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>E-8</td> <td></td> <td>1245</td> <td>H.N.</td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>E-9</td> <td></td> <td>1210</td> <td>G.T.</td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>ASMW-2D</td> <td></td> <td>1310</td> <td>G.T.</td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>E-6</td> <td></td> <td>1125</td> <td>H.N.</td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>ASMW-2S</td> <td></td> <td>1440</td> <td>G.T.</td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td>X X X X</td> </tr> <tr> <td>Trip blank</td> <td></td> <td>N50</td> <td>H.N.</td> <td></td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>		Sample ID	Date	Time	Sampled by	Matrix	# of bottles	DP	MOCH	HMDS	MSDCL	MONE	MAWCO	MEIN	SUCROE	E-7	12-15-11	1155	H.N.	GW	5				2				X X X X	E-8		1245	H.N.		3				2				X X X X	E-9		1210	G.T.		3				2				X X X X	ASMW-2D		1310	G.T.		3				2				X X X X	E-6		1125	H.N.		3				2				X X X X	ASMW-2S		1440	G.T.		3				2				X X X X	Trip blank		N50	H.N.		8								X	<p>3-VIALS(W/HCO) 2-L-1A+MBE15N/A</p> <p>3-VIALS(W/HCO) 2-L-1A+MBE15N/A</p>	
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Emergency T/A data available VIA Lablink																																																																																																																			
Sample Custody must be documented below each time samples change possession, including courier delivery.																																																																																																																			
Relinquished by:	Date Time:	Received By:	Date Time:																																																																																																																
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Custody Seal #		Appropriate Bottle / Free (Y) / N																																																																																																																	
		Headspace Y (Y) / N																																																																																																																	
		On Ice (Y) / N $3.8 + 0.1 = 3.9^{\circ}C$																																																																																																																	
		Cooler Temp. $5.0 - 0.4 = 4.6^{\circ}C$																																																																																																																	
		Labels match Coc (Y) / N Separate Receiving Check List used (Y) / N																																																																																																																	

31  
3

Review Chain of Custody

Chain of Custody is to be complete and legible.

- Are these regulatory (NPDES) samples? CWA Yes/No  Yes /  No
- Is pH requested? Yes/No  Yes /  No
  - Was Client Informed that hold time is 15 min? Yes / No Continue Yes / No
  - Was ortho-Phosphate filtered with in 15 min? Yes / No Continue Yes / No
- Are sample within hold time? Yes/No  Yes /  No
- Are sample in danger of exceeding hold-time Yes/No  Yes /  No
- Existing Client?  Yes /  No Existing Project?  Yes /  No
  - If No: Is Report to Info complete and legible, including;
    - deliverable  Name  Address  phone  e-mail
  - Is Bill to info complete and legible, including;
    - PO#  Credit card  Contact address  phone  e-mail
  - Is Contact and/or Project Manager identified, including;
    - phone  e-mail
    - Project name / number
- Special requirements? Yes/No  Yes /  No
- Sample IDs / date & time of collection provided? Yes/No  Yes /  No
- Is Matrix listed and correct? Yes/No  Yes /  No
- Analyses listed, we do, or client has authorized a subcontract? Yes/No  Yes /  No
- Chain is signed and dated by both client and sample custodian? Yes/No  Yes /  No
- TAT requested available?  Yes /  No Approved by PM

Client Sample ID	pH Check	Other Comments/Issues

Review Coolers:

- Were all Coolers temperatures measured at ≤6°C? Yes/No  Yes /  No
  - If cooler is outside the ≤6°C; note down the affected bottles in that cooler on the left
  - Are samples on Ice? Yes/No  Yes /  No
- Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)

- Shipment Received Method AC
- Custody Seals: Present: Yes /  No If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- Chain matches bottle labels?  Yes /  No Sample bottle intact?  Yes /  No
  - Is there enough sample volume in proper bottle for requested analyses?  Yes /  No
  - Proper Preservatives?  Yes /  No
- Check pH on preserved samples except 1664, 625, 8270 and VOAs; make notes on left.
- Head-space-VOAs? Greater than 6mm in diameter Yes/No  Yes /  No
  - List sample ID and affected container

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

\\Accunca.accutest.com\depts\qalsops\sop\_completelist\_2010\current\_active\_sop\_oct\_2010\sc001f1\_0\_form1\_samplecontrol\_samplereceivingchecklist\_2009-01-01.doc

3  
1  
3



## GC/MS Volatiles

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### QC Data Summaries

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Includes the following where applicable:

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

# Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-MB	R6749.D	1	12/22/11	BD	n/a	n/a	VR237

4.1.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-MB	R6749.D	1	12/22/11	BD	n/a	n/a	VR237

4.1.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-MB	R6749.D	1	12/22/11	BD	n/a	n/a	VR237

4.1.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 60-130%
2037-26-5	Toluene-D8	106% 60-130%
460-00-4	4-Bromofluorobenzene	105% 60-130%



# Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-MB	R6777.D	1	12/23/11	BD	n/a	n/a	VR238

4.1.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	20	10	ug/l	
71-43-2	Benzene	ND	1.0	0.30	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.30	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.30	ug/l	
75-25-2	Bromoform	ND	1.0	0.50	ug/l	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/l	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/l	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.30	ug/l	
75-00-3	Chloroethane	ND	1.0	0.30	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/l	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.20	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.30	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.20	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.30	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	5.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.20	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.30	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.30	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.30	ug/l	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.30	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.20	ug/l	
75-71-8	Dichlorodifluoromethane	ND	1.0	0.30	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.50	ug/l	
541-73-1	m-Dichlorobenzene	ND	1.0	0.30	ug/l	
95-50-1	o-Dichlorobenzene	ND	1.0	0.30	ug/l	
106-46-7	p-Dichlorobenzene	ND	1.0	0.30	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.30	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.20	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
637-92-3	Ethyl Tert Butyl Ether	ND	5.0	0.50	ug/l	

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-MB	R6777.D	1	12/23/11	BD	n/a	n/a	VR238

4.1.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.0	0.50	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.20	ug/l	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/l	
108-10-1	4-Methyl-2-pentanone	ND	20	5.0	ug/l	
74-83-9	Methyl bromide	ND	5.0	1.5	ug/l	
74-87-3	Methyl chloride	ND	1.0	0.30	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.20	ug/l	
75-09-2	Methylene chloride	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	20	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
91-20-3	Naphthalene	ND	5.0	0.50	ug/l	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/l	
100-42-5	Styrene	ND	1.0	0.20	ug/l	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/l	
75-65-0	Tert-Butyl Alcohol	ND	10	5.0	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.20	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.20	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.20	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	5.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	0.50	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	0.50	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.20	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.30	ug/l	
75-69-4	Trichlorofluoromethane	ND	1.0	0.30	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.30	ug/l	
1330-20-7	Xylene (total)	ND	2.0	0.70	ug/l	
	TPH-GRO (C6-C10)	ND	50	25	ug/l	

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-MB	R6777.D	1	12/23/11	BD	n/a	n/a	VR238

4.1.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 60-130%
2037-26-5	Toluene-D8	106% 60-130%
460-00-4	4-Bromofluorobenzene	106% 60-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-BS	R6746.D	1	12/22/11	BD	n/a	n/a	VR237
VR237-BSD	R6747.D	1	12/22/11	BD	n/a	n/a	VR237

4.2.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	84.3	105	78.9	99	7	60-130/30
71-43-2	Benzene	20	20.6	103	19.9	100	3	60-130/30
108-86-1	Bromobenzene	20	18.5	93	17.7	89	4	60-130/30
74-97-5	Bromochloromethane	20	20.9	105	20.1	101	4	60-130/30
75-27-4	Bromodichloromethane	20	21.6	108	20.8	104	4	60-130/30
75-25-2	Bromoform	20	19.9	100	19.1	96	4	60-130/30
104-51-8	n-Butylbenzene	20	19.8	99	19.7	99	1	60-130/30
135-98-8	sec-Butylbenzene	20	19.5	98	19.5	98	0	60-130/30
98-06-6	tert-Butylbenzene	20	19.3	97	19.0	95	2	60-130/30
108-90-7	Chlorobenzene	20	19.7	99	19.1	96	3	60-130/30
75-00-3	Chloroethane	20	21.3	107	21.5	108	1	60-130/30
67-66-3	Chloroform	20	20.9	105	20.3	102	3	60-130/30
95-49-8	o-Chlorotoluene	20	19.9	100	19.4	97	3	60-130/30
106-43-4	p-Chlorotoluene	20	19.8	99	19.1	96	4	60-130/30
56-23-5	Carbon tetrachloride	20	19.7	99	19.8	99	1	60-130/30
75-34-3	1,1-Dichloroethane	20	21.3	107	21.0	105	1	60-130/30
75-35-4	1,1-Dichloroethylene	20	20.8	104	21.1	106	1	60-130/30
563-58-6	1,1-Dichloropropene	20	20.6	103	20.6	103	0	60-130/30
96-12-8	1,2-Dibromo-3-chloropropane	20	19.3	97	18.6	93	4	60-130/30
106-93-4	1,2-Dibromoethane	20	20.6	103	19.8	99	4	60-130/30
107-06-2	1,2-Dichloroethane	20	20.5	103	19.6	98	4	60-130/30
78-87-5	1,2-Dichloropropane	20	21.0	105	20.4	102	3	60-130/30
142-28-9	1,3-Dichloropropane	20	21.5	108	20.6	103	4	60-130/30
108-20-3	Di-Isopropyl ether	20	20.8	104	20.4	102	2	60-130/30
594-20-7	2,2-Dichloropropane	20	20.1	101	20.3	102	1	60-130/30
124-48-1	Dibromochloromethane	20	20.8	104	19.9	100	4	60-130/30
75-71-8	Dichlorodifluoromethane	20	23.4	117	23.4	117	0	60-130/30
156-59-2	cis-1,2-Dichloroethylene	20	20.2	101	19.7	99	3	60-130/30
10061-01-5	cis-1,3-Dichloropropene	20	22.2	111	21.2	106	5	60-130/30
541-73-1	m-Dichlorobenzene	20	19.1	96	18.5	93	3	60-130/30
95-50-1	o-Dichlorobenzene	20	18.9	95	18.3	92	3	60-130/30
106-46-7	p-Dichlorobenzene	20	19.3	97	18.7	94	3	60-130/30
156-60-5	trans-1,2-Dichloroethylene	20	20.6	103	20.4	102	1	60-130/30
10061-02-6	trans-1,3-Dichloropropene	20	18.9	95	18.1	91	4	60-130/30
100-41-4	Ethylbenzene	20	20.6	103	20.2	101	2	60-130/30
637-92-3	Ethyl Tert Butyl Ether	20	20.0	100	19.5	98	3	60-130/30

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-BS	R6746.D	1	12/22/11	BD	n/a	n/a	VR237
VR237-BSD	R6747.D	1	12/22/11	BD	n/a	n/a	VR237

4.2.1  
4

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

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	90.3	113	86.5	108	4	60-130/30
87-68-3	Hexachlorobutadiene	20	16.2	81	16.9	85	4	60-130/30
98-82-8	Isopropylbenzene	20	20.3	102	20.0	100	1	60-130/30
99-87-6	p-Isopropyltoluene	20	19.1	96	19.0	95	1	60-130/30
108-10-1	4-Methyl-2-pentanone	80	84.5	106	81.4	102	4	60-130/30
74-83-9	Methyl bromide	20	21.1	106	20.8	104	1	60-130/30
74-87-3	Methyl chloride	20	19.3	97	19.0	95	2	60-130/30
74-95-3	Methylene bromide	20	21.6	108	20.6	103	5	60-130/30
75-09-2	Methylene chloride	20	20.6	103	20.1	101	2	60-130/30
78-93-3	Methyl ethyl ketone	80	84.7	106	81.1	101	4	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	21.1	106	20.5	103	3	60-130/30
91-20-3	Naphthalene	20	18.8	94	18.5	93	2	60-130/30
103-65-1	n-Propylbenzene	20	19.6	98	19.2	96	2	60-130/30
100-42-5	Styrene	20	21.1	106	20.5	103	3	60-130/30
994-05-8	Tert-Amyl Methyl Ether	20	19.7	99	19.3	97	2	60-130/30
75-65-0	Tert-Butyl Alcohol	100	103	103	99.6	100	3	60-130/30
630-20-6	1,1,1,2-Tetrachloroethane	20	19.8	99	19.0	95	4	60-130/30
71-55-6	1,1,1-Trichloroethane	20	19.9	100	20.2	101	1	60-130/30
79-34-5	1,1,2,2-Tetrachloroethane	20	20.4	102	19.5	98	5	60-130/30
79-00-5	1,1,2-Trichloroethane	20	21.6	108	20.6	103	5	60-130/30
87-61-6	1,2,3-Trichlorobenzene	20	17.7	89	17.7	89	0	60-130/30
96-18-4	1,2,3-Trichloropropane	20	19.9	100	19.1	96	4	60-130/30
120-82-1	1,2,4-Trichlorobenzene	20	17.6	88	17.4	87	1	60-130/30
95-63-6	1,2,4-Trimethylbenzene	20	19.9	100	19.5	98	2	60-130/30
108-67-8	1,3,5-Trimethylbenzene	20	19.5	98	19.2	96	2	60-130/30
127-18-4	Tetrachloroethylene	20	17.8	89	18.6	93	4	60-130/30
108-88-3	Toluene	20	20.8	104	20.2	101	3	60-130/30
79-01-6	Trichloroethylene	20	20.0	100	19.4	97	3	60-130/30
75-69-4	Trichlorofluoromethane	20	20.6	103	20.8	104	1	60-130/30
75-01-4	Vinyl chloride	20	21.5	108	21.7	109	1	60-130/30
1330-20-7	Xylene (total)	60	58.8	98	57.2	95	3	60-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	104%	105%	60-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-BS	R6746.D	1	12/22/11	BD	n/a	n/a	VR237
VR237-BSD	R6747.D	1	12/22/11	BD	n/a	n/a	VR237

4.2.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	106%	106%	60-130%
460-00-4	4-Bromofluorobenzene	108%	107%	60-130%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-BS	R6774.D	1	12/23/11	BD	n/a	n/a	VR238
VR238-BSD	R6775.D	1	12/23/11	BD	n/a	n/a	VR238

4.2.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	80	88.4	111	88.2	110	0	60-130/30
71-43-2	Benzene	20	21.6	108	21.9	110	1	60-130/30
108-86-1	Bromobenzene	20	19.3	97	19.6	98	2	60-130/30
74-97-5	Bromochloromethane	20	22.0	110	21.9	110	0	60-130/30
75-27-4	Bromodichloromethane	20	22.4	112	22.8	114	2	60-130/30
75-25-2	Bromoform	20	20.7	104	20.8	104	0	60-130/30
104-51-8	n-Butylbenzene	20	20.9	105	21.3	107	2	60-130/30
135-98-8	sec-Butylbenzene	20	20.7	104	21.0	105	1	60-130/30
98-06-6	tert-Butylbenzene	20	20.2	101	20.7	104	2	60-130/30
108-90-7	Chlorobenzene	20	20.5	103	20.7	104	1	60-130/30
75-00-3	Chloroethane	20	21.9	110	22.7	114	4	60-130/30
67-66-3	Chloroform	20	22.0	110	22.1	111	0	60-130/30
95-49-8	o-Chlorotoluene	20	19.9	100	20.6	103	3	60-130/30
106-43-4	p-Chlorotoluene	20	21.5	108	21.2	106	1	60-130/30
56-23-5	Carbon tetrachloride	20	21.2	106	21.3	107	0	60-130/30
75-34-3	1,1-Dichloroethane	20	22.5	113	22.6	113	0	60-130/30
75-35-4	1,1-Dichloroethylene	20	22.8	114	22.7	114	0	60-130/30
563-58-6	1,1-Dichloropropene	20	21.9	110	22.3	112	2	60-130/30
96-12-8	1,2-Dibromo-3-chloropropane	20	19.9	100	20.7	104	4	60-130/30
106-93-4	1,2-Dibromoethane	20	21.2	106	21.6	108	2	60-130/30
107-06-2	1,2-Dichloroethane	20	21.1	106	21.5	108	2	60-130/30
78-87-5	1,2-Dichloropropane	20	21.8	109	22.2	111	2	60-130/30
142-28-9	1,3-Dichloropropane	20	22.0	110	22.3	112	1	60-130/30
108-20-3	Di-Isopropyl ether	20	21.8	109	21.9	110	0	60-130/30
594-20-7	2,2-Dichloropropane	20	21.9	110	21.6	108	1	60-130/30
124-48-1	Dibromochloromethane	20	21.4	107	21.6	108	1	60-130/30
75-71-8	Dichlorodifluoromethane	20	24.3	122	24.9	125	2	60-130/30
156-59-2	cis-1,2-Dichloroethylene	20	21.4	107	21.4	107	0	60-130/30
10061-01-5	cis-1,3-Dichloropropene	20	23.0	115	23.4	117	2	60-130/30
541-73-1	m-Dichlorobenzene	20	20.0	100	20.3	102	1	60-130/30
95-50-1	o-Dichlorobenzene	20	19.8	99	20.0	100	1	60-130/30
106-46-7	p-Dichlorobenzene	20	20.1	101	20.4	102	1	60-130/30
156-60-5	trans-1,2-Dichloroethylene	20	22.1	111	22.1	111	0	60-130/30
10061-02-6	trans-1,3-Dichloropropene	20	19.2	96	19.5	98	2	60-130/30
100-41-4	Ethylbenzene	20	21.4	107	21.8	109	2	60-130/30
637-92-3	Ethyl Tert Butyl Ether	20	21.0	105	21.0	105	0	60-130/30

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

4.2.2  
4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-BS	R6774.D	1	12/23/11	BD	n/a	n/a	VR238
VR238-BSD	R6775.D	1	12/23/11	BD	n/a	n/a	VR238

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

C19437-3, C19437-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	80	93.3	117	94.9	119	2	60-130/30
87-68-3	Hexachlorobutadiene	20	17.3	87	18.3	92	6	60-130/30
98-82-8	Isopropylbenzene	20	21.3	107	21.6	108	1	60-130/30
99-87-6	p-Isopropyltoluene	20	20.4	102	20.7	104	1	60-130/30
108-10-1	4-Methyl-2-pentanone	80	87.1	109	88.8	111	2	60-130/30
74-83-9	Methyl bromide	20	21.6	108	22.2	111	3	60-130/30
74-87-3	Methyl chloride	20	19.7	99	20.0	100	2	60-130/30
74-95-3	Methylene bromide	20	22.6	113	22.8	114	1	60-130/30
75-09-2	Methylene chloride	20	21.7	109	21.8	109	0	60-130/30
78-93-3	Methyl ethyl ketone	80	88.8	111	90.2	113	2	60-130/30
1634-04-4	Methyl Tert Butyl Ether	20	22.2	111	22.2	111	0	60-130/30
91-20-3	Naphthalene	20	19.7	99	20.7	104	5	60-130/30
103-65-1	n-Propylbenzene	20	20.6	103	20.9	105	1	60-130/30
100-42-5	Styrene	20	21.8	109	22.1	111	1	60-130/30
994-05-8	Tert-Amyl Methyl Ether	20	20.8	104	20.7	104	0	60-130/30
75-65-0	Tert-Butyl Alcohol	100	112	112	115	115	3	60-130/30
630-20-6	1,1,1,2-Tetrachloroethane	20	20.5	103	20.7	104	1	60-130/30
71-55-6	1,1,1-Trichloroethane	20	21.7	109	21.3	107	2	60-130/30
79-34-5	1,1,2,2-Tetrachloroethane	20	21.3	107	21.5	108	1	60-130/30
79-00-5	1,1,2-Trichloroethane	20	22.1	111	22.3	112	1	60-130/30
87-61-6	1,2,3-Trichlorobenzene	20	18.8	94	19.7	99	5	60-130/30
96-18-4	1,2,3-Trichloropropane	20	20.6	103	20.9	105	1	60-130/30
120-82-1	1,2,4-Trichlorobenzene	20	18.4	92	19.1	96	4	60-130/30
95-63-6	1,2,4-Trimethylbenzene	20	21.0	105	21.2	106	1	60-130/30
108-67-8	1,3,5-Trimethylbenzene	20	20.7	104	20.9	105	1	60-130/30
127-18-4	Tetrachloroethylene	20	18.4	92	19.0	95	3	60-130/30
108-88-3	Toluene	20	21.5	108	21.8	109	1	60-130/30
79-01-6	Trichloroethylene	20	20.8	104	21.3	107	2	60-130/30
75-69-4	Trichlorofluoromethane	20	21.2	106	22.2	111	5	60-130/30
75-01-4	Vinyl chloride	20	22.3	112	23.0	115	3	60-130/30
1330-20-7	Xylene (total)	60	61.3	102	62.0	103	1	60-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	105%	104%	60-130%



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437

**Account:** SGRPCAPH The Source Group

**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-BS	R6774.D	1	12/23/11	BD	n/a	n/a	VR238
VR238-BSD	R6775.D	1	12/23/11	BD	n/a	n/a	VR238

4.2.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	105%	105%	60-130%
460-00-4	4-Bromofluorobenzene	106%	105%	60-130%

# Laboratory Control Sample Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR237-LCS	R6748.D	1	12/22/11	BD	n/a	n/a	VR237

4.3.1  
4

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

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	115	92	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	60-130%
2037-26-5	Toluene-D8	107%	60-130%
460-00-4	4-Bromofluorobenzene	106%	60-130%

# Laboratory Control Sample Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR238-LCS	R6776.D	1	12/23/11	BD	n/a	n/a	VR238

4.3.2  
4

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

C19437-3, C19437-5

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
	TPH-GRO (C6-C10)	125	98.5	79	60-130

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	60-130%
2037-26-5	Toluene-D8	106%	60-130%
460-00-4	4-Bromofluorobenzene	105%	60-130%

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19415-1MS	R6767.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1MSD	R6768.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1	R6754.D	1	12/22/11	BD	n/a	n/a	VR237

4.4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	C19415-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND	80	81.3	102	86.2	108	6	60-130/25
71-43-2	Benzene	ND	20	22.3	112	22.1	111	1	60-130/25
108-86-1	Bromobenzene	ND	20	19.8	99	19.9	100	1	60-130/25
74-97-5	Bromochloromethane	ND	20	22.2	111	22.2	111	0	60-130/25
75-27-4	Bromodichloromethane	ND	20	22.3	112	22.3	112	0	60-130/25
75-25-2	Bromoform	ND	20	18.1	91	18.3	92	1	60-130/25
104-51-8	n-Butylbenzene	ND	20	21.6	108	21.3	107	1	60-130/25
135-98-8	sec-Butylbenzene	ND	20	21.7	109	21.3	107	2	60-130/25
98-06-6	tert-Butylbenzene	ND	20	21.0	105	20.6	103	2	60-130/25
108-90-7	Chlorobenzene	ND	20	21.1	106	21.0	105	0	60-130/25
75-00-3	Chloroethane	ND	20	23.6	118	23.0	115	3	60-130/25
67-66-3	Chloroform	ND	20	22.5	113	22.3	112	1	60-130/25
95-49-8	o-Chlorotoluene	ND	20	21.3	107	21.0	105	1	60-130/25
106-43-4	p-Chlorotoluene	ND	20	21.3	107	21.1	106	1	60-130/25
56-23-5	Carbon tetrachloride	ND	20	21.6	108	21.0	105	3	60-130/25
75-34-3	1,1-Dichloroethane	ND	20	23.0	115	22.7	114	1	60-130/25
75-35-4	1,1-Dichloroethylene	ND	20	22.9	115	22.1	111	4	60-130/25
563-58-6	1,1-Dichloropropene	ND	20	22.6	113	22.2	111	2	60-130/25
96-12-8	1,2-Dibromo-3-chloropropane	ND	20	19.4	97	20.0	100	3	60-130/25
106-93-4	1,2-Dibromoethane	ND	20	21.3	107	21.7	109	2	60-130/25
107-06-2	1,2-Dichloroethane	ND	20	21.2	106	21.6	108	2	60-130/25
78-87-5	1,2-Dichloropropane	ND	20	22.5	113	22.7	114	1	60-130/25
142-28-9	1,3-Dichloropropane	ND	20	22.3	112	22.4	112	0	60-130/25
108-20-3	Di-Isopropyl ether	ND	20	22.3	112	22.4	112	0	60-130/25
594-20-7	2,2-Dichloropropane	ND	20	20.8	104	20.2	101	3	60-130/25
124-48-1	Dibromochloromethane	ND	20	20.3	102	20.2	101	0	60-130/25
75-71-8	Dichlorodifluoromethane	ND	20	20.9	105	20.0	100	4	60-130/25
156-59-2	cis-1,2-Dichloroethylene	ND	20	21.8	109	21.8	109	0	60-130/25
10061-01-5	cis-1,3-Dichloropropene	ND	20	21.6	108	22.1	111	2	60-130/25
541-73-1	m-Dichlorobenzene	ND	20	20.5	103	20.5	103	0	60-130/25
95-50-1	o-Dichlorobenzene	ND	20	20.2	101	20.1	101	0	60-130/25
106-46-7	p-Dichlorobenzene	ND	20	20.7	104	20.5	103	1	60-130/25
156-60-5	trans-1,2-Dichloroethylene	ND	20	22.4	112	21.9	110	2	60-130/25
10061-02-6	trans-1,3-Dichloropropene	ND	20	17.5	88	18.1	91	3	60-130/25
100-41-4	Ethylbenzene	ND	20	22.2	111	21.9	110	1	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND	20	21.4	107	21.5	108	0	60-130/25

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19415-1MS	R6767.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1MSD	R6768.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1	R6754.D	1	12/22/11	BD	n/a	n/a	VR237

4.4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Compound	C19415-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	90.4	113	92.6	116	2	60-130/25
87-68-3	Hexachlorobutadiene	ND	20	17.7	89	18.3	92	3	60-130/25
98-82-8	Isopropylbenzene	ND	20	22.2	111	21.8	109	2	60-130/25
99-87-6	p-Isopropyltoluene	ND	20	20.8	104	20.5	103	1	60-130/25
108-10-1	4-Methyl-2-pentanone	ND	80	85.4	107	87.2	109	2	60-130/25
74-83-9	Methyl bromide	ND	20	22.3	112	22.4	112	0	60-130/25
74-87-3	Methyl chloride	ND	20	19.6	98	19.1	96	3	60-130/25
74-95-3	Methylene bromide	ND	20	22.5	113	22.8	114	1	60-130/25
75-09-2	Methylene chloride	ND	20	22.0	110	21.9	110	0	60-130/25
78-93-3	Methyl ethyl ketone	ND	80	84.0	105	86.4	108	3	60-130/25
1634-04-4	Methyl Tert Butyl Ether	ND	20	22.2	111	22.5	113	1	60-130/25
91-20-3	Naphthalene	ND	20	19.3	97	20.3	102	5	60-130/25
103-65-1	n-Propylbenzene	ND	20	21.4	107	21.0	105	2	60-130/25
100-42-5	Styrene	ND	20	17.7	89	17.4	87	2	60-130/25
994-05-8	Tert-Amyl Methyl Ether	ND	20	21.1	106	21.2	106	0	60-130/25
75-65-0	Tert-Butyl Alcohol	ND	100	110	110	116	116	5	60-130/25
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	21.1	106	20.8	104	1	60-130/25
71-55-6	1,1,1-Trichloroethane	ND	20	22.2	111	21.7	109	2	60-130/25
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	21.1	106	21.4	107	1	60-130/25
79-00-5	1,1,2-Trichloroethane	ND	20	22.3	112	22.7	114	2	60-130/25
87-61-6	1,2,3-Trichlorobenzene	ND	20	18.1	91	19.4	97	7	60-130/25
96-18-4	1,2,3-Trichloropropane	ND	20	18.5	93	19.3	97	4	60-130/25
120-82-1	1,2,4-Trichlorobenzene	ND	20	18.2	91	18.9	95	4	60-130/25
95-63-6	1,2,4-Trimethylbenzene	ND	20	19.0	95	18.4	92	3	60-130/25
108-67-8	1,3,5-Trimethylbenzene	ND	20	20.6	103	20.2	101	2	60-130/25
127-18-4	Tetrachloroethylene	ND	20	19.0	95	18.7	94	2	60-130/25
108-88-3	Toluene	ND	20	22.4	112	22.0	110	2	60-130/25
79-01-6	Trichloroethylene	ND	20	21.8	109	21.7	109	0	60-130/25
75-69-4	Trichlorofluoromethane	ND	20	23.3	117	22.3	112	4	60-130/25
75-01-4	Vinyl chloride	ND	20	23.3	117	22.5	113	3	60-130/25
1330-20-7	Xylene (total)	ND	60	62.7	105	61.6	103	2	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C19415-1	Limits
1868-53-7	Dibromofluoromethane	104%	104%	102%	60-130%

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19415-1MS	R6767.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1MSD	R6768.D	1	12/22/11	BD	n/a	n/a	VR237
C19415-1	R6754.D	1	12/22/11	BD	n/a	n/a	VR237

4.4.1  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-1, C19437-2, C19437-4, C19437-6, C19437-7

CAS No.	Surrogate Recoveries	MS	MSD	C19415-1	Limits
2037-26-5	Toluene-D8	105%	104%	105%	60-130%
460-00-4	4-Bromofluorobenzene	106%	106%	105%	60-130%

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19472-1MS	R6795.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1MSD	R6796.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1	R6780.D	1	12/23/11	BD	n/a	n/a	VR238

4.4.2  
4

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

C19437-3, C19437-5

CAS No.	Compound	C19472-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		80	85.2	107	84.6	106	1	60-130/25
71-43-2	Benzene	ND		20	23.1	116	22.5	113	3	60-130/25
108-86-1	Bromobenzene	ND		20	20.7	104	20.1	101	3	60-130/25
74-97-5	Bromochloromethane	ND		20	22.9	115	22.6	113	1	60-130/25
75-27-4	Bromodichloromethane	ND		20	23.3	117	22.8	114	2	60-130/25
75-25-2	Bromoform	ND		20	19.6	98	19.3	97	2	60-130/25
104-51-8	n-Butylbenzene	ND		20	22.2	111	21.4	107	4	60-130/25
135-98-8	sec-Butylbenzene	ND		20	22.4	112	21.6	108	4	60-130/25
98-06-6	tert-Butylbenzene	ND		20	22.0	110	21.1	106	4	60-130/25
108-90-7	Chlorobenzene	ND		20	22.2	111	21.5	108	3	60-130/25
75-00-3	Chloroethane	ND		20	23.9	120	23.2	116	3	60-130/25
67-66-3	Chloroform	ND		20	23.4	117	22.6	113	3	60-130/25
95-49-8	o-Chlorotoluene	ND		20	21.8	109	21.1	106	3	60-130/25
106-43-4	p-Chlorotoluene	ND		20	22.1	111	21.5	108	3	60-130/25
56-23-5	Carbon tetrachloride	ND		20	22.3	112	21.4	107	4	60-130/25
75-34-3	1,1-Dichloroethane	ND		20	23.8	119	23.2	116	3	60-130/25
75-35-4	1,1-Dichloroethylene	ND		20	23.2	116	22.4	112	4	60-130/25
563-58-6	1,1-Dichloropropene	ND		20	23.3	117	22.5	113	3	60-130/25
96-12-8	1,2-Dibromo-3-chloropropane	ND		20	19.9	100	20.0	100	1	60-130/25
106-93-4	1,2-Dibromoethane	ND		20	22.3	112	22.1	111	1	60-130/25
107-06-2	1,2-Dichloroethane	0.41	J	20	22.7	111	22.2	109	2	60-130/25
78-87-5	1,2-Dichloropropane	ND		20	23.2	116	22.9	115	1	60-130/25
142-28-9	1,3-Dichloropropane	ND		20	23.2	116	22.8	114	2	60-130/25
108-20-3	Di-Isopropyl ether	ND		20	22.9	115	22.5	113	2	60-130/25
594-20-7	2,2-Dichloropropane	ND		20	21.3	107	20.5	103	4	60-130/25
124-48-1	Dibromochloromethane	ND		20	21.3	107	20.8	104	2	60-130/25
75-71-8	Dichlorodifluoromethane	ND		20	17.7	89	16.6	83	6	60-130/25
156-59-2	cis-1,2-Dichloroethylene	ND		20	22.6	113	22.0	110	3	60-130/25
10061-01-5	cis-1,3-Dichloropropene	ND		20	23.2	116	22.7	114	2	60-130/25
541-73-1	m-Dichlorobenzene	ND		20	21.3	107	20.8	104	2	60-130/25
95-50-1	o-Dichlorobenzene	ND		20	21.0	105	20.7	104	1	60-130/25
106-46-7	p-Dichlorobenzene	ND		20	21.4	107	21.0	105	2	60-130/25
156-60-5	trans-1,2-Dichloroethylene	ND		20	23.3	117	22.4	112	4	60-130/25
10061-02-6	trans-1,3-Dichloropropene	ND		20	19.3	97	18.8	94	3	60-130/25
100-41-4	Ethylbenzene	ND		20	23.1	116	22.4	112	3	60-130/25
637-92-3	Ethyl Tert Butyl Ether	ND		20	21.9	110	21.7	109	1	60-130/25

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19472-1MS	R6795.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1MSD	R6796.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1	R6780.D	1	12/23/11	BD	n/a	n/a	VR238

4.4.2  
4

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

C19437-3, C19437-5

CAS No.	Compound	C19472-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND	80	93.6	117	93.4	117	0	60-130/25
87-68-3	Hexachlorobutadiene	ND	20	18.4	92	18.4	92	0	60-130/25
98-82-8	Isopropylbenzene	ND	20	23.1	116	22.3	112	4	60-130/25
99-87-6	p-Isopropyltoluene	ND	20	21.5	108	20.8	104	3	60-130/25
108-10-1	4-Methyl-2-pentanone	ND	80	87.7	110	88.0	110	0	60-130/25
74-83-9	Methyl bromide	ND	20	23.1	116	22.6	113	2	60-130/25
74-87-3	Methyl chloride	ND	20	18.8	94	18.3	92	3	60-130/25
74-95-3	Methylene bromide	ND	20	23.4	117	23.4	117	0	60-130/25
75-09-2	Methylene chloride	ND	20	22.7	114	22.5	113	1	60-130/25
78-93-3	Methyl ethyl ketone	ND	80	87.7	110	87.3	109	0	60-130/25
1634-04-4	Methyl Tert Butyl Ether	1.2	20	23.9	114	23.8	113	0	60-130/25
91-20-3	Naphthalene	ND	20	20.3	102	20.6	103	1	60-130/25
103-65-1	n-Propylbenzene	ND	20	22.1	111	21.2	106	4	60-130/25
100-42-5	Styrene	ND	20	19.0	95	18.3	92	4	60-130/25
994-05-8	Tert-Amyl Methyl Ether	ND	20	21.7	109	21.4	107	1	60-130/25
75-65-0	Tert-Butyl Alcohol	ND	100	112	112	114	114	2	60-130/25
630-20-6	1,1,1,2-Tetrachloroethane	ND	20	21.9	110	21.5	108	2	60-130/25
71-55-6	1,1,1-Trichloroethane	ND	20	23.0	115	22.3	112	3	60-130/25
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	21.9	110	21.8	109	0	60-130/25
79-00-5	1,1,2-Trichloroethane	ND	20	23.2	116	22.9	115	1	60-130/25
87-61-6	1,2,3-Trichlorobenzene	ND	20	18.9	95	19.7	99	4	60-130/25
96-18-4	1,2,3-Trichloropropane	ND	20	19.9	100	19.6	98	2	60-130/25
120-82-1	1,2,4-Trichlorobenzene	ND	20	18.9	95	19.3	97	2	60-130/25
95-63-6	1,2,4-Trimethylbenzene	ND	20	20.4	102	19.7	99	3	60-130/25
108-67-8	1,3,5-Trimethylbenzene	ND	20	20.5	103	19.7	99	4	60-130/25
127-18-4	Tetrachloroethylene	ND	20	20.2	101	19.2	96	5	60-130/25
108-88-3	Toluene	ND	20	23.1	116	22.3	112	4	60-130/25
79-01-6	Trichloroethylene	ND	20	22.8	114	22.1	111	3	60-130/25
75-69-4	Trichlorofluoromethane	ND	20	22.9	115	22.0	110	4	60-130/25
75-01-4	Vinyl chloride	ND	20	22.6	113	21.9	110	3	60-130/25
1330-20-7	Xylene (total)	ND	60	64.5	108	62.1	104	4	60-130/25

CAS No.	Surrogate Recoveries	MS	MSD	C19472-1	Limits
1868-53-7	Dibromofluoromethane	104%	104%	101%	60-130%



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C19472-1MS	R6795.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1MSD	R6796.D	1	12/23/11	BD	n/a	n/a	VR238
C19472-1	R6780.D	1	12/23/11	BD	n/a	n/a	VR238

4.4.2  
4

The QC reported here applies to the following samples:

Method: SW846 8260B

C19437-3, C19437-5

CAS No.	Surrogate Recoveries	MS	MSD	C19472-1	Limits
2037-26-5	Toluene-D8	104%	104%	105%	60-130%
460-00-4	4-Bromofluorobenzene	107%	107%	105%	60-130%

## GC Semi-volatiles

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5

### QC Data Summaries

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Includes the following where applicable:

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

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5073-MB	HH19518.D	1	12/16/11	JH	12/15/11	OP5073	GHH627

5.1.1  
5

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

C19437-1

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.10	0.050	mg/l	
	TPH (Motor Oil)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	93% 45-140%

## Method Blank Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5078-MB	HH19515.D	1	12/16/11	JH	12/16/11	OP5078	GHH627

5.1.2  
5

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

C19437-2, C19437-3, C19437-4, C19437-5, C19437-6, C19437-1A

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (Diesel)	ND	0.10	0.050	mg/l	
	TPH (Motor Oil)	ND	0.20	0.10	mg/l	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	90% 45-140%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5073-BS	HH19519.D	1	12/16/11	JH	12/15/11	OP5073	GHH627
OP5073-BSD	HH19520.D	1	12/16/11	JH	12/15/11	OP5073	GHH627

5.2.1  
5

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

C19437-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	1	0.897	90	0.888	89	1	45-140/30
	TPH (Motor Oil)	1	0.755	76	0.787	79	4	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	87%	89%	45-140%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5078-BS	HH19516.D	1	12/16/11	JH	12/16/11	OP5078	GHH627
OP5078-BSD	HH19517.D	1	12/16/11	JH	12/16/11	OP5078	GHH627

5.2.2  
5

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

C19437-2, C19437-3, C19437-4, C19437-5, C19437-6, C19437-1A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	1	0.994	99	0.983	98	1	45-140/30
	TPH (Motor Oil)	1	0.847	85	0.833	83	2	45-140/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	95%	92%	45-140%

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5073-MS	HH19666.D	1	12/19/11	JH	12/15/11	OP5073	GHH630
OP5073-MSD	HH19667.D	1	12/19/11	JH	12/15/11	OP5073	GHH630
C19374-4	HH19525.D	1	12/16/11	JH	12/15/11	OP5073	GHH627

5.3.1  
5

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

C19437-1

CAS No.	Compound	C19374-4 mg/l	Spike Q	mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	0.0596	J	1.89	1.78	91	1.64	84	8	45-140/25
	TPH (Motor Oil)	ND		1.89	1.49	79	1.50	80	1	45-140/25

CAS No.	Surrogate Recoveries	MS	MSD	C19374-4	Limits
630-01-3	Hexacosane	88%	84%	86%	45-140%

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C19437  
**Account:** SGRPCAPH The Source Group  
**Project:** T0600101592-9201 San Leandro Street, Oakland CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5078-MS	HH19700.D	1	12/20/11	JH	12/16/11	OP5078	GHH630
OP5078-MSD	HH19701.D	1	12/20/11	JH	12/16/11	OP5078	GHH630
C19437-2	HH19533.D	1	12/17/11	JH	12/16/11	OP5078	GHH627

5.3.2  
5

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

C19437-2, C19437-3, C19437-4, C19437-5, C19437-6, C19437-1A

CAS No.	Compound	C19437-2 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (Diesel)	0.508	1.92	2.01	78	2.03	79	1	45-140/25
	TPH (Motor Oil)	ND	1.92	1.63	85	1.60	83	2	45-140/25

CAS No.	Surrogate Recoveries	MS	MSD	C19437-2	Limits
630-01-3	Hexacosane	90%	88%	84%	45-140%