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Ms. Karel Detterman  
Alameda County  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

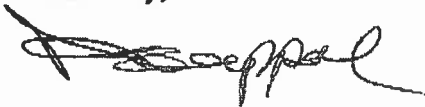
Re: Alaska Gas Service Station, 6211 San Pablo Avenue, Oakland, California  
(ACEHS Case No. RO0000127)

Dear Ms. Detterman:

Stratus Environmental, Inc. (Stratus) has recently prepared a *Groundwater Monitoring and Sampling Results Report* on my behalf. The report was prepared in regards to Alameda County Fuel Leak Case No. RO0000127, located at 6211 San Pablo Avenue, Oakland, California.

I have reviewed a copy of this report, sent to me by representatives of Stratus, and "I declare, under penalty of perjury, that the information and or/recommendations contained in the attached document or report is true and correct to the best of my knowledge."

Sincerely,



Pritpaul Sappal



3330 Cameron Park Drive, Ste 550  
Cameron Park, California 95682  
(530) 676-6004 ~ Fax: (530) 676-6005

October 24, 2014  
Project No. 2192-6211-01

Ms. Karel Detterman  
Alameda County Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

Re: Groundwater Monitoring and Sampling Results Report, Third Quarter 2014  
Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, California  
Fuel Leak Case No. RO0000127

Dear Ms. Detterman:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, on behalf of Pritpaul Sappal, for the Alaska Gas Service Station underground storage tank fuel leak case, located at 6211 San Pablo Avenue, Oakland, California. This report presents a summary of recent groundwater monitoring and sampling activities performed at the subject property. This report has been prepared in compliance with Alameda County Environmental Health Department and California Regional Water Quality Control Board (CRWQCB) requirements for underground storage tank (UST) investigations.

If you have any questions regarding this report, please contact Scott Bittinger at (530) 676-2062 or via email at [sbittinger@stratusinc.net](mailto:sbittinger@stratusinc.net).

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

Scott G. Bittinger, P.  
Project Manager



Gowri S. Kowtha, P.E.  
Principal Engineer

Attachment: Groundwater Monitoring and Sampling Results Report, Third Quarter 2014

cc: Mr. Pritpaul Sappal, Alaska Gas Service Station  
Ms. Cherie McCaulou, California Regional Water Quality Control Board (via GeoTracker only)

October 24, 2014

**ALASKA GAS SERVICE STATION  
GROUNDWATER MONITORING AND SAMPLING RESULTS REPORT**

Facility Address: 6211 San Pablo Avenue, Oakland, California  
Consulting Co. / Contact Person: Stratus Environmental, Inc. / Scott Bittinger, P.G.  
Consultant Project No: 2192-6211-01  
Primary Agency/Regulatory ID No: Ms. Karel Detterman, Alameda County Environmental Health  
Department (ACEHD), Fuel Leak Case No. RO0000127

**WORK PERFORMED THIS PERIOD (Third Quarter 2014):**

1. Stratus conducted a groundwater monitoring and sampling event on August 14, 2014. At this time 10 wells were gauged for depth to groundwater levels. Purge groundwater samples were subsequently collected from each of these wells.
2. On July 29, 2014, Stratus, ACEHD, and Mr. Sappal met to discuss the site's environmental case and issues that would be needed in order to manage this environmental case to closure. In the meeting, ACEHD requested that a Site Conceptual Model (SCM) report be prepared. It was also requested that a water supply well survey be updated. Due to shallow groundwater levels beneath the property, ACEHD has asked that Johnson and Ettinger modeling be performed to evaluate contaminant vapor intrusion risk, instead of performing direct soil vapor sampling. ACEHD also requested technical information regarding risks to the environment associated with residual tertiary butyl alcohol (TBA).

**WORK PROPOSED FOR NEXT PERIOD (Fourth Quarter 2014 and First Quarter 2015):**

1. Complete tasks discussed in the July 2014 meeting and submit Site Conceptual Model report. No deadline from the agency has been assigned for these tasks, however our intention is to prepare a report with the requested information by January 31, 2014.
2. A groundwater monitoring and sampling event will be conducted during the first quarter 2015, unless the site's environmental case can be closed before this time.

Current Phase of Project: Verification Monitoring (VM)  
Frequency of Groundwater Monitoring: All monitoring wells = Semi-annually (1<sup>st</sup> & 3<sup>rd</sup> quarters)  
Frequency of Groundwater Sampling: All monitoring wells = Semi-annually (1<sup>st</sup> & 3<sup>rd</sup> quarters)  
Groundwater Sampling Date: August 14, 2014  
Are Free Phase Petroleum Hydrocarbons Present: Yes; none observed in August 2014, however free product noted in MW-7 in March and May 2014  
Depth to Groundwater: 4.65 to 9.70 feet below the top of the well casing  
Groundwater Flow Direction : West-southwest  
Groundwater Gradient : 0.01 ft/ft

Stratus conducted third quarter groundwater monitoring and sampling activities on August 14, 2014. During this event, wells MW-1R, MW-2, MW-3R, MW-4R, and MW-5 through MW-10 were gauged for depth to groundwater and evaluated for the presence of free phase petroleum hydrocarbons. After well

gauging, purge groundwater samples were collected from the site's monitoring wells. Table 1 provides a summary of depth to water measurements and groundwater elevations corrected to mean sea level.

Groundwater samples were forwarded to a state-certified analytical laboratory to be analyzed for gasoline range organics (GRO) by EPA Method SW8015B/SW8260B, for benzene, toluene, ethylbenzene, and xylene (BTEX compounds), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method SW8260B. Table 2 provides depth to water measurements and groundwater elevations. Table 3 presents a summary of groundwater analytical data collected for the site's monitoring well network.

Field data sheets documenting measurements and observations collected by Stratus personnel are provided in Appendix A. A description of sampling and analysis procedures used by Stratus/laboratory personnel are provided in Appendix B. Certified analytical results provided by the analyzing laboratory (Alpha Analytical, Inc.) are presented in Appendix C. Analytical results of sampled wells and depth to groundwater measurements have been uploaded to the State of California's GeoTracker database. Documentation of these data uploads is attached in Appendix D.

#### **FINDINGS:**

Groundwater levels beneath the property are relatively shallow, ranging from 4.65 to 9.70 feet below the top of the well casing on August 14, 2014. Using the available data, groundwater levels were corrected to elevation mean sea level and used to prepare a groundwater elevation contour map (Figure 3). On August 14, 2014, west-southwest groundwater flow, at a gradient of approximately 0.01 ft/ft, was observed.

Figure 4 presents a summary of GRO, benzene, MTBE, and TBA concentrations in shallow groundwater using the August 2014 well sampling results. GRO was detected in only one onsite well sample (MW-1R), at a concentration of 560 micrograms per liter ( $\mu\text{g/L}$ ). GRO was also detected in offsite well samples MW-9 (64  $\mu\text{g/L}$ ) and MW-7 (8,800  $\mu\text{g/L}$ ). Benzene was detected in two onsite well samples, at a maximum level of 1.9  $\mu\text{g/L}$  (well MW-1R). Benzene was also reported in offsite well MW-7 (25  $\mu\text{g/L}$ ). MTBE was detected in 9 of the 10 well samples; offsite concentrations ranged from 21  $\mu\text{g/L}$  to 160  $\mu\text{g/L}$  and onsite MTBE concentrations ranged from 0.79  $\mu\text{g/L}$  to 5.2  $\mu\text{g/L}$ . TBA was detected in four of the ten well samples, with a maximum concentration of 20,000  $\mu\text{g/L}$  (well MW-8).

#### **DISCUSSION:**

In May and June 2011, a soil excavation project was performed onsite in order to remove petroleum hydrocarbon mass from the subsurface. The approximate limits of the excavation cavity are depicted on Figure 2. In order to facilitate the excavation, several monitoring wells and numerous remediation wells that had been historically installed at the site were destroyed. In order to facilitate excavation, de-watering was performed, which allowed the excavation to extend to depths of approximately 10 to 12 feet bgs. After backfilling the excavation area, two replacement groundwater monitoring wells (MW-3R and MW-4R) were installed, near the historical locations of MW-3 and MW-4, respectively.

A review of Table 3 data appears to indicate that excavation and de-watering work has resulted in a significant reduction in fuel contaminant concentrations in groundwater onsite, in particular at well(s) MW-3/3R and MW-4/4R. In the area of the excavation, no GRO or BTEX were detected in groundwater samples, and relatively low levels of MTBE remain onsite. However, TBA remains persistent, with maximum concentrations of 5,200  $\mu\text{g/L}$  onsite and 20,000  $\mu\text{g/L}$  offsite reported in the recent samples. It should be noted that California's Low Threat Closure Policy does not specify any target cleanup levels for TBA in groundwater. In the upcoming SCM document requested by ACEHD, Stratus will provide technical information regarding risks to the environment of residual/dissolved TBA, in order to provide a platform for decision making regarding future environmental work and the goal of managing the site's environmental case to closure.

#### **ATTACHMENTS:**

- Table 1            Monitoring Well Construction Detail Summary
- Table 2            Groundwater Elevation Data

- Table 3 Groundwater Analytical Data
- Figure 1 Site Location Map
- Figure 2 Site Vicinity Map
- Figure 3 Groundwater Elevation Contour Map, Third Quarter 2014
- Figure 4 Groundwater Analytical Summary, Third Quarter 2014
- Appendix A Field Data Sheets
- Appendix B Sampling and Analyses Procedures
- Appendix C Laboratory Analytical Reports and Chain-of-Custody Documentation
- Appendix D GeoTracker Electronic Submittal Confirmations

**TABLE 1**  
**MONITORING WELL CONSTRUCTION DETAIL**  
**SUMMARY**

Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, CA

Well I.D.	Installation Date	Well Diameter (inches)	Well Depth (feet)	Screen Interval (feet bgs)
MW-1*	Oct-1999	2	23	3-23
MW-1R	Jan-2004	2	23	3-23
MW-2	Oct-1999	2	21	6-21
MW-3**	Oct-1999	2	21	6-21
MW-3R	June-2011	2	15	5-15
MW-4**	Nov-2001	2	20	5-20
MW-4R	June-2011	2	15	5-15
MW-5	Nov-2001	2	25	5-25
MW-6	Nov-2001	2	25	5-25
MW-7	Feb-2010	2	16	6-16
MW-8	Feb-2010	2	15	5-15
MW-9	Feb-2010	2	15	5-15
MW-10	Feb-2010	2	15	5-15
EX-1**	Jan-2004	4	30	5-30

**Notes:**  
bgs = below ground surface  
\* = Monitoring well destroyed approximately 2004  
\*\* = Monitoring well was destroyed on May 17, 2011

Information from the AEI Consultants, *Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011*, dated October 6, 2011.

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

<b>Well ID</b>	<b>Date of Measurement</b>	<b>Well Casing Elevation (feet-MSL)</b>	<b>Depth to Groundwater (feet bgs)</b>	<b>Groundwater Elevation (feet-MSL)</b>
MW-1	11/07/99	34.70	8.53	26.17
	03/08/01		6.32	28.38
	11/17/01		8.09	26.61
	03/31/02		7.18	27.52
	09/09/03		8.54	26.16
	12/09/03		7.50	27.20
	<i>Well Destroyed May 17, 2011</i>			
MW-1R	02/19/04	36.67	5.45	31.22
	05/24/04		8.58	28.09
	09/03/04		9.15	27.52
	02/17/05		6.57	30.10
	08/15/05		8.55	28.12
	11/17/05		8.41	28.26
	02/08/06		6.81	29.86
	05/05/06		7.46	29.21
	08/18/06		8.58	28.09
	12/01/06		6.56	30.11
	08/16/07		9.33	27.34
	11/08/07		8.83	27.84
	02/14/08		6.89	29.78
	05/15/08		8.53	28.14
	09/10/08		9.36	27.31
	11/18/08		8.82	27.85
	02/17/09		5.67	31.00
	05/15/09		7.79	28.88
	08/13/09		9.20	27.47
	02/23/10		6.67	30.00
08/12/10	8.74	27.93		
02/17/11	6.51	30.16		
08/17/11	8.78	27.89		
03/28/14	8.18	28.49		
08/14/14	9.70	26.97		

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**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

<b>Well ID</b>	<b>Date of Measurement</b>	<b>Well Casing Elevation (feet-MSL)</b>	<b>Depth to Groundwater (feet bgs)</b>	<b>Groundwater Elevation (feet-MSL)</b>
MW-2	11/07/99	34.94	8.26	26.68
	03/08/01		5.89	29.05
	11/17/01		7.75	27.19
	03/31/02		6.68	28.26
	09/09/03		8.26	26.68
	12/09/03		7.20	27.74
	02/19/04		5.81	29.13
	05/24/04		7.79	27.15
	09/03/04		8.43	26.51
	11/02/04		7.65	27.29
	02/17/05		5.86	29.08
	05/26/05		6.39	28.55
	08/17/05		7.99	26.95
	11/17/05		7.88	27.06
	02/08/06		6.24	28.70
	05/05/06		6.89	28.05
	08/18/06		8.05	26.89
	12/01/06		7.58	27.36
	08/16/07		7.26	27.68
	11/08/07		7.81	27.13
	02/14/08	5.90	29.04	
	05/15/08	36.33	7.63	28.70
	09/10/08		8.43	27.90
	11/18/08		7.83	28.50
	02/17/09		4.92	31.41
	05/15/09		6.81	29.52
	08/13/09		8.23	28.10
02/23/10	6.06		30.27	
08/12/10	7.70		28.63	
02/17/11	6.16	30.17		
08/17/11	7.16	29.17		
03/28/14	7.60	28.73		
08/14/14	8.72	27.61		



**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date of Measurement	Well Casing Elevation (feet-MSL)	Depth to Groundwater (feet bgs)	Groundwater Elevation (feet-MSL)
MW-3	11/07/99	33.74	7.55	26.19
	03/08/01		5.36	28.38
	11/17/01		7.18	26.56
	03/31/02		6.27	27.47
	09/09/03		7.52	26.22
	12/09/03		6.45	27.29
	02/19/04		5.56	28.18
	05/24/04		6.99	26.75
	09/03/04		7.53	26.21
	11/02/04		6.88	26.86
	02/17/05		5.01	28.73
	08/15/05		7.71	26.03
	11/17/05		7.56	26.18
	02/08/06		6.00	27.74
	05/05/06		6.65	27.09
	08/18/06		7.73	26.01
	12/01/06		8.51	25.23
	08/16/07	7.62	26.12	
	11/08/07	7.52	26.22	
	02/14/08	5.60	28.14	
	05/15/08	35.12	7.23	27.89
	09/10/08		8.08	27.04
	11/18/08		7.52	27.60
02/17/09	4.36		30.76	
05/15/09	6.50		28.62	
08/13/09	7.96		27.16	
02/23/10	5.10		30.02	
08/12/10	7.40	27.72		
<i>Well Destroyed May 17, 2011</i>				
MW-3R	07/14/11	--	7.01	--
	08/17/11		7.48	--
	3828/14		7.68	--
	08/14/14		8.98	--

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date of Measurement	Well Casing Elevation (feet-MSL)	Depth to Groundwater (feet bgs)	Groundwater Elevation (feet-MSL)
MW-4	11/17/01	32.38	5.75	26.63
	03/31/02		5.40	26.98
	12/09/03		--	--
	09/09/03		--	--
	05/24/04*		5.70	26.91
	02/19/04*		3.56	29.00
	05/05/06		5.60	26.78
	08/18/06		6.45	25.93
	12/01/06		5.95	26.43
	11/18/07		6.60	25.78
	02/14/08	34.11	4.28	28.10
	05/15/08		5.43	28.68
	09/10/08		7.26	26.85
	11/18/08		5.84	28.27
	02/17/09		2.67	31.44
	05/15/09		4.90	29.21
	08/13/09		6.02	28.09
	02/23/10		3.84	30.27
	08/12/10		5.65	28.46
	02/17/11		3.19	30.92
<i>Well Destroyed May 17, 2011</i>				
MW-4R	07/14/11	--	5.31	--
	08/17/11	--	5.78	--
	03/28/14	--	5.90	--
	08/14/14	--	7.28	--

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<b>Well ID</b>	<b>Date of Measurement</b>	<b>Well Casing Elevation (feet-MSL)</b>	<b>Depth to Groundwater (feet bgs)</b>	<b>Groundwater Elevation (feet-MSL)</b>
MW-5	11/17/01	33.75	6.22	27.53
	03/31/02		6.35	27.40
	09/09/03		7.08	26.67
	12/09/03		6.13	27.62
	02/19/04		5.11	28.64
	05/24/04		6.57	27.18
	09/03/04		7.01	26.74
	11/02/04		6.43	27.32
	05/24/05		6.02	27.73
	08/17/05		6.75	27.00
	11/17/05		6.47	27.28
	02/08/06		5.53	28.22
	05/05/06		6.10	27.65
	08/18/06		6.77	26.98
	12/01/06		6.47	27.28
	08/16/07	6.79	26.96	
	11/08/07	6.43	27.32	
	02/14/08	5.31	28.44	
	05/15/08	35.17	6.29	28.88
	09/10/08		6.99	28.18
	11/18/08		6.41	28.76
	02/17/09		4.07	31.10
	05/15/09		5.59	29.58
	08/13/09		6.81	28.36
	02/23/10		5.05	30.12
	08/12/10		6.61	28.56
	02/17/11		5.03	30.14
	08/17/11		6.59	28.58
	03/28/14		6.97	28.20
	08/14/14		8.32	26.85

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**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

<b>Well ID</b>	<b>Date of Measurement</b>	<b>Well Casing Elevation (feet-MSL)</b>	<b>Depth to Groundwater (feet bgs)</b>	<b>Groundwater Elevation (feet-MSL)</b>
MW-6	11/17/01	34.68	7.19	27.49
	03/31/02		6.58	28.10
	09/09/03		8.21	26.47
	12/09/03		7.11	27.57
	02/19/04		5.61	29.07
	05/24/04		--	--
	09/03/04		8.25	26.43
	11/02/04		7.57	27.11
	02/17/05		5.70	28.98
	08/15/05		7.91	26.77
	11/17/05		7.80	26.88
	02/08/06		6.16	28.52
	05/05/06		6.81	27.87
	08/18/06		7.97	26.71
	12/01/06		7.60	27.08
	08/16/07	7.94	26.74	
	11/08/07	7.71	26.97	
	02/14/08	5.83	28.85	
	05/15/08	36.07	7.51	28.56
	09/10/08		8.32	27.75
	11/18/08		7.73	28.34
	02/17/09		4.64	31.43
	05/15/09		6.89	29.18
	08/13/09		8.26	27.81
	02/23/10		5.76	30.31
	08/12/10		7.71	28.36
	02/17/11		4.89	31.18
08/17/11	7.78		28.29	
03/28/14	7.20		28.87	
08/14/14	8.67		27.40	

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

<b>Well ID</b>	<b>Date of Measurement</b>	<b>Well Casing Elevation (feet-MSL)</b>	<b>Depth to Groundwater (feet bgs)</b>	<b>Groundwater Elevation (feet-MSL)</b>
MW-7	02/23/10	31.16	2.09	29.07
	08/12/10		4.14	27.02
	02/17/11		1.68	29.48
	08/17/11		4.01	27.15
	03/28/14		4.48	26.70*
	05/28/14		5.07	26.10*
	08/14/14		5.54	25.62
MW-8	02/23/10	30.92	2.66	28.26
	08/12/10		4.16	26.76
	02/17/11		1.01	29.91
	08/17/11		4.41	26.51
	03/28/14		3.87	27.05
	08/14/14		5.41	25.51
	MW-9		02/23/10	28.90
08/12/10		4.53	24.37	
02/17/11		1.93	26.97	
08/17/11		4.82	24.08	
03/28/14		4.65	24.25	
08/14/14		6.67	22.23	
MW-10		02/23/10	30.28	
	08/12/10	3.47		26.81
	02/17/11	0.95		29.33
	08/17/11	3.39		26.89
	03/28/14	2.50		27.78
	08/14/14	4.65		25.63

**TABLE 2**  
**GROUNDWATER ELEVATION DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date of Measurement	Well Casing Elevation (feet-MSL)	Depth to Groundwater (feet bgs)	Groundwater Elevation (feet-MSL)
EX-1	02/19/04	33.28	3.96	29.32
	05/24/04*		5.56	28.25
	02/08/06		4.92	28.36
	05/05/06		5.15	28.13
	08/18/06		5.85	27.43
	12/01/06		4.96	28.32
	11/08/07		5.10	28.18
	02/14/08		3.51	29.77
	05/15/08		4.69	28.59
	09/10/08		5.46	27.82
	11/18/08		4.79	28.49
	02/17/09		1.86	31.42
	05/15/09		4.16	29.12
	08/13/09		8.36	24.92
	02/23/10		3.09	30.19
08/12/10		4.91	28.37	
02/17/11			2.53	30.75
<i>Well Destroyed May 17, 2011</i>				

**Notes:**

\* = Corrected for the presence of free phase petroleum hydrocarbons by the following formula: casing elevation - depth to water + (0.7 \* free phase petroleum hydrocarbon thickness)

-- = Not measured or Not Available

MSL = mean sea level

bgs = below ground surface

Information prior to February 2014, taken from the AEI Consultants, *Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011*, dated October 6, 2011.

**TABLE 3**  
**GROUNDWATER ANALYTICAL DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-1	11/07/99	5,700	170	59	22	85	20,000	--	--	--	--	--	--
	03/08/01	17,000	480	150	52	170	38,000	--	--	--	--	--	--
	11/17/01	10,000	230	210	60	250	22,000	--	--	--	--	--	--
	03/31/02	12,000	61	ND	ND	29	35,000	--	--	--	--	--	--
	11/09/03	19,000	ND	ND	ND	ND	50,000	--	--	--	--	--	--
	12/09/03	22,000	150	ND	ND	ND	66,000	--	--	--	--	--	--
<i>Well Destroyed May 17, 2011</i>													
MW-1R	11/17/01	--	--	--	--	--	--	--	--	--	--	--	--
	03/31/02	--	--	--	--	--	--	--	--	--	--	--	--
	09/09/03	--	--	--	--	--	--	--	--	--	--	--	--
	12/09/03	--	--	--	--	--	--	--	--	--	--	--	--
	02/19/04	1,800	95	130	44	200	220	--	--	--	--	--	--
	05/24/04	210	12	10	5.4	23	79	ND	ND	2.1	37	ND	ND
	09/03/04	300	1.5	7.1	9.4	42	81	ND	ND	1.6	ND	ND	ND
	11/02/04	290	14	30	9.5	45	45	ND	ND	1.1	ND	--	--
	02/17/05	530	3.4	ND	ND	2.6	1,000	ND	ND	100	ND	--	--
	05/24/05	--	--	--	--	--	--	ND	ND	610	ND	ND	ND
	08/15/05	2,500	64	240	61	210	2,300	ND	ND	210	ND	ND	ND
	11/17/05	2,500	66	290	75	290	1,300	ND	ND	110	1,600	ND	ND
	02/08/06	3,300	100	310	86	470	1,400	ND	ND	130	1,400	ND	ND
	05/05/06	3,400	170	350	97	550	1,100	ND	ND	100	2,400	ND	ND
	08/18/06	5,800	190	1,000	230	1,000	490	ND	ND	36	2,900	ND	ND
	12/01/06	410	1.7	6.3	1.2	47	100	ND	ND	4.7	100	ND	ND
	02/23/07	ND	ND	0.51	ND	1.4	3	ND	ND	ND	ND	ND	ND
	05/10/07	ND	ND	ND	ND	2.0	5.9	ND	ND	ND	ND	ND	ND
	08/16/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/08/07	1,300	11	82	54	270	1.4	ND	ND	ND	ND	ND	ND
	02/14/08	800	7.6	31	23	150	1.7	ND	ND	ND	ND	ND	ND
	05/15/08	3,200	20	200	110	550	4.2	<0.50	<0.50	1.0	<20	<0.50	<0.50
	09/10/08	1,000	6.5	22	19	120	2.3	<0.50	<0.50	<0.50	4.0	<0.50	<0.50
	11/18/08	430	4.1	18	12	100	1.8	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
02/17/09	220	3.6	6.1	2.0	41	1.3	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	
05/15/09	890	6.0	17	27	110	1.8	<0.50	<0.50	<0.50	3.9	<0.50	<0.50	
08/13/09	2,000	17	23	73	350	2.1	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	
02/23/10	3,200	31	77	120	810	3.9	<1.7	<1.7	<1.7	<6.7	<1.7	<1.7	
08/12/10	1,300	13	16	40	280	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	
02/17/11	210	4.0	1.7	13	21	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	
08/17/11	670	6.1	13	26	200	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	
03/28/14	1,200	3.7	11	34	299	1.2	--	--	<2.0[1]	<20	--	--	
08/14/14	560	1.9	0.83	3.9	20	0.79	--	--	<1.0	<10	--	--	

**TABLE 3  
GROUNDWATER ANALYTICAL DATA  
Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-2	11/07/99	6,000	1,300	92	50	400	6,800	--	--	--	--	--	--
	03/08/01	41,000	8,100	870	2,000	4,100	26,000	--	--	--	--	--	--
	11/17/01	18,000	3,700	180	610	640	16,000	--	--	--	--	--	--
	03/31/02	32,000	6,500	270	1,700	2,700	19,000	--	--	--	--	--	--
	09/09/03	24,000	4,600	ND	1,200	440	19,000	--	--	--	--	--	--
	12/09/03	31,000	6,200	170	1,600	2,700	19,000	--	--	--	--	--	--
	02/19/04	21,000	4,600	120	970	2,000	15,000	--	--	--	--	--	--
	05/24/04	1,200	120	3	63	67	1,900	ND	ND	ND	ND	ND	ND
	09/03/04	2,300	120	ND	51	70	1,700	ND	ND	26	ND	ND	ND
	11/02/04	530	35	ND	17	30	520	ND	ND	28	100	--	--
	02/17/05	18,000	2,100	31	800	680	20,000	ND	ND	1,000	ND	--	--
	05/24/05	22,000	3,200	52	1,400	1,700	16,000	ND	ND	--	--	ND	ND
	08/15/05	2,000	66	ND	46	47	2,400	ND	ND	95	880	ND	ND
	11/17/05	760	19	0.64	15	13	1,000	ND	ND	26	810	ND	ND
	02/08/06	10,000	1,500	8	660	380	4,300	ND	ND	120	2,800	ND	ND
	05/05/06	15,000	1,800	ND	1,200	1,200	5,800	ND	ND	150	4,300	ND	ND
	08/18/06	360	11	ND	13	9.7	160	ND	ND	4.6	600	ND	ND
	12/01/06	11,000	1,000	ND	990	910	2,100	ND	ND	87	2,000	ND	ND
	02/23/07	3,200	210	ND	270	85	900	ND	ND	33	1,400	ND	ND
	05/10/07	590	31	ND	39	22	200	ND	ND	5.9	250	ND	ND
	08/16/07	650	49	ND	71	49	100	ND	ND	3.5	82	ND	ND
	11/08/07	110	1.6	ND	1.9	1.6	23	ND	ND	0.64	48	ND	ND
	02/14/08	350	24	ND	12	5.9	190	ND	ND	7.7	320	ND	ND
	05/15/08	81	0.59	<0.50	0.71	0.66	38	<0.50	<0.50	1.4	54	<0.50	<0.50
	09/10/08	150	6.4	<0.50	8.4	5.1	14	<0.50	<0.50	0.55	38	<0.50	<0.50
	11/18/08	420	25	0.70	46	47	29	<0.50	<0.50	1.3	60	<0.50	<0.50
	02/17/09	460	23	0.96	51	37	26	<0.50	<0.50	1.4	61	<0.50	<0.50
	05/15/09	220	13	0.93	26	13	21	<0.50	<0.50	0.87	60	<0.50	<0.50
	08/13/09	110	7.0	<0.50	13	5.0	7.7	<0.50	<0.50	<0.50	26	<0.50	<0.50
	02/23/10	170	9.4	0.65	27	5.6	14	<0.50	<0.50	<0.50	36	<0.50	<0.50
	08/12/10	<50	1.1	<0.50	1.8	0.63	3.7	<0.50	<0.50	<0.50	6.3	<0.50	<0.50
	02/17/11	<50	<0.5	<0.5	<0.5	<0.5	8.3	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	08/17/11	<50	<0.5	<0.5	<0.5	<0.5	150	<2.5	<2.5	<2.5	<10	<2.5	<2.5
	03/28/14	<50	<0.50	<0.50	<0.50	<0.50	0.51	--	--	<1.0	<10	--	--
	08/14/14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--	<1.0	<10	--	--



**TABLE 3  
GROUNDWATER ANALYTICAL DATA  
Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-3	11/07/99	43,000	860	70	ND	65	120,000	--	--	--	--	--	--
	03/08/01	90,000	1,800	ND	ND	ND	210,000	--	--	--	--	--	--
	11/17/01	110,000	1,600	ND	ND	ND	300,000	--	--	--	--	--	--
	03/31/02	130,000	2,400	670	300	390	300,000	--	--	--	--	--	--
	09/09/03	190,000	1,600	ND	ND	ND	420,000	--	--	--	--	--	--
	12/09/03	170,000	2,000	ND	ND	ND	4,500,000	--	--	--	--	--	--
	02/19/04	86,000	1,800	630	ND	ND	160,000	--	--	--	--	--	--
	05/24/04	120,000	2,200	ND	180	220	400,000	ND	ND	15,000	ND	ND	ND
	09/03/04	180,000	2,000	ND	ND	ND	510,000	ND	ND	14,000	ND	ND	ND
	11/02/04	150,000	1,700	ND	ND	ND	350,000	ND	ND	31,000	140,000	--	--
	02/17/05	130,000	2,100	420	210	730	290,000	ND	ND	11,000	ND	--	--
	05/24/05	--	--	--	--	--	--	--	--	--	--	--	--
	08/15/05	110,000	1,500	ND	ND	ND	260,000	ND	ND	21,000	25,000	ND	ND
	11/17/05	200,000	2,400	ND	ND	ND	580,000	ND	ND	24,000	49,000	ND	ND
	02/08/06	470,000	3,800	660	ND	790	490,000	ND	ND	26,000	49,000	ND	ND
	05/05/06	400,000	3,300	ND	ND	ND	590,000	ND	ND	21,000	86,000	ND	ND
	08/18/06	310,000	1,800	ND	ND	ND	440,000	ND	ND	23,000	79,000	ND	ND
	12/01/06	270,000	ND	ND	ND	ND	290,000	ND	ND	11,000	90,000	ND	ND
	02/23/07	220,000	ND	ND	ND	ND	260,000	ND	ND	15,000	33,000	ND	ND
	05/10/07	140,000	ND	ND	ND	ND	180,000	ND	ND	7,100	80,000	ND	ND
	08/16/07	69,000	ND	ND	ND	ND	85,000	ND	ND	3,400	180,000	ND	ND
	11/08/07	34,000	ND	ND	ND	ND	38,000	ND	ND	1,400	140,000	ND	ND
	02/14/08	41,000	ND	ND	ND	ND	44,000	ND	ND	1,900	110,000	ND	ND
	05/15/08	43,000	<100	<100	<100	<100	62,000	<100	<100	1,100	200,000	<100	<100
	09/10/08	1,600	14	8.6	7.7	23	21,000	<1,000	<1,000	<1,000	290,000	<1,000	<1,000
	11/18/08	4,500	86	150	100	590	29,000	<1,000	<1,000	<1,000	290,000	<1,000	<1,000
	02/17/09	2,500	45	53	35	160	16,000	<1,000	<1,000	<1,000	190,000	<1,000	<1,000
	05/15/09	2,000	15	21	13	35	13,000	<1,000	<1,000	<1,000	260,000	<1,000	<1,000
08/13/09	1,300	10	11	4.1	14	7,900	<1,200	<1,200	<1,200	250,000	<1,200	<1,200	
02/23/10	1,700	22	21	11	38	4,700	<1,700	<1,700	<1,700	260,000	<1,700	<1,700	
08/12/10	1,600	5.8	16	5.8	16	4,200	<1,200	<1,200	<1,200	250,000	<1,200	<1,200	
02/17/11	290	1.0	5.5	6.5	8.1	73	<50	<50	<50	8,500	<50	<50	
<i>Well Destroyed May 17, 2011</i>													
MW-3R	07/14/11	130	3.2	0.97	<0.5	1.2	1,200	<250	<250	<250	35,000	<250	<250
	08/17/11	64	<0.5	<0.5	<0.5	<0.5	260	<50	<50	<50	3,800	<50	<50
	03/28/14	<200[1]	<1.0[1]	<1.0[1]	<1.0[1]	<1.0[1]	28	--	--	5.3	1,400	--	--
	08/14/14	<800[1]	<4.0[1]	<4.0[1]	<4.0[1]	<4.0[1]	5.2	--	--	<8.0[1]	5,200	--	--

TABLE 3  
GROUNDWATER ANALYTICAL DATA  
Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, CA

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-4	11/17/01	64,000	960	1,400	360	1,600	140,000	--	--	--	--	--	--
	03/31/02	78,000	4,400	4,700	690	2,700	150,000	--	--	--	--	--	--
	09/06/07	49,000	710	840	ND	10,000	3,600	ND	ND	510	32,000	ND	ND
	11/08/07	64,000	1,300	2,600	1,000	8,500	1,500	ND	ND	360	14,000	ND	ND
	02/14/08	60,000	390	460	230	2,000	52,000	ND	ND	2,000	58,000	ND	ND
	05/15/08	22,000	670	130	740	2,700	3,300	<5.0	<5.0	340	35,000	<5.0	<5.0
	09/10/08	16,000	500	150	730	2,500	2,000	<250	<250	<250	65,000	<250	<250
	11/18/08	24,000	820	190	1,200	5,000	1,400	<50	<50	260	9,300	<50	<50
	02/17/09	17,000	350	170	620	2,600	360	<10	<10	82	2,100	<10	<10
	05/15/09	32,000	300	190	880	3,200	470	<10	<10	95	380	<10	<10
	08/13/09	29,000	320	250	980	3,400	350	<50	<50	61	10,000	<50	<50
	02/23/10	15,000	250	77	580	2,200	180	<5.0	<5.0	41	400	<5.0	<5.0
	08/12/10	17,000	200	47	580	1,400	150	<10	<10	28	1,800	<10	<10
02/17/11	7,600	190	15	260	440	130	<5.0	<5.0	29	790	<5.0	<5.0	
<i>Well Destroyed May 17, 2011</i>													
MW-4R	07/14/11	1,000	210	3.6	<2.5	32	7,800	<200	<200	390	41,000	<200	<200
	08/17/11	840	9.1	<5.0	<5.0	<5.0	4,500	<250	<250	310	26,000	<250	<250
	03/28/14	<50	<0.50	<0.50	<0.50	<0.50	3.6	--	--	<1.0	110	--	--
	08/14/14	<50	<0.50	<0.50	<0.50	<0.50	4.7	--	--	<1.0	<10	--	--

**TABLE 3**  
**GROUNDWATER ANALYTICAL DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-5	11/17/01	210	15	12	11	23	4.8	--	--	--	--	--	--
	03/31/02	120	11	7.4	6.1	16	4.2	--	--	--	--	--	--
	09/09/03	ND	1.5	ND	ND	ND	1.7	--	--	--	--	--	--
	12/09/03	130	32	ND	2.6	0.57	5	--	--	--	--	--	--
	02/19/04	ND	ND	ND	ND	ND	1.5	--	--	--	--	--	--
	05/24/04	ND	ND	ND	ND	ND	0.55	ND	ND	ND	ND	ND	ND
	09/03/04	100	6.4	ND	ND	0.79	4.2	ND	ND	ND	ND	ND	ND
	11/02/04	ND	2.6	ND	1.7	0.87	1	ND	ND	ND	ND	ND	ND
	02/17/05	51	0.74	ND	0.94	ND	1.5	ND	ND	ND	ND	ND	ND
	05/24/05	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
	08/15/05	ND	ND	ND	ND	ND	0.88	ND	ND	ND	ND	ND	ND
	11/17/05	71	0.81	ND	1.1	ND	1.4	ND	ND	ND	ND	ND	ND
	02/08/06	50	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
	05/05/06	ND	ND	ND	ND	ND	0.93	ND	ND	ND	ND	ND	ND
	08/18/06	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND
	12/01/06	ND	0.69	ND	ND	0.52	0.97	ND	ND	ND	ND	ND	ND
	02/23/07	73	ND	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND
	05/10/07	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND
	08/16/07	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND
	11/08/07	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND
	02/14/08	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND
	05/15/08	<50	<0.50	<0.50	<0.50	<0.50	1.7	<0.50	<0.50	<0.50	<20	<0.50	<0.50
	09/10/08	480	17	1.8	2.7	0.59	12	<0.50	<0.50	<0.50	4.4	<0.50	<0.50
	11/18/08	130	2.3	1.6	<0.50	<0.50	7.3	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	02/17/09	170	<0.50	2.7	<0.50	<0.50	4.2	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	05/15/09	<50	<0.50	<0.50	<0.50	<0.50	7.6	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	08/13/09	380	19	2.1	3.8	0.88	11	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	02/23/10	<50	<0.50	0.87	<0.50	<0.50	1.9	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	08/12/10	120	1.5	2.9	0.74	3.5	13	<0.50	<0.50	<0.50	3.0	<0.50	<0.50
	02/17/11	<50	<0.5	<0.5	<0.5	<0.5	3.7	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5
	08/17/11	160	2.3	1.1	<0.5	<0.5	5.4	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5
	03/28/14	77	0.52	<0.50	<0.50	<0.50	5.2	--	--	<1.0	<10	--	--
	08/14/14	<50	<0.50	<0.50	<0.50	<0.50	3.7	--	--	<1.0	<10	--	--

**TABLE 3**  
**GROUNDWATER ANALYTICAL DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

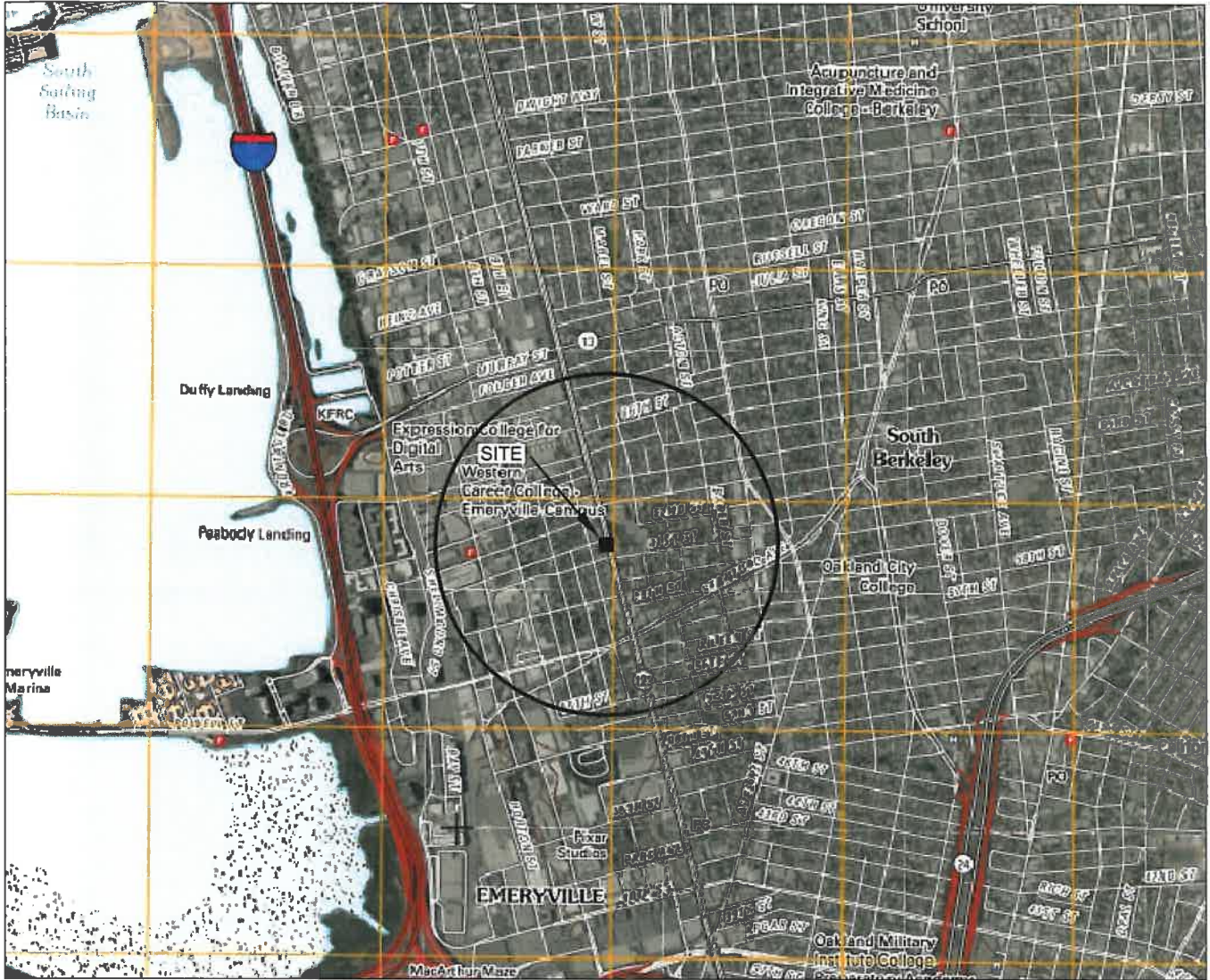
Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB	
		µg/L												
MW-6	11/17/01	3,500	160	260	95	420	1,500	--	--	--	--	--	--	
	03/31/02	3,200	410	170	82	280	3,000	--	--	--	--	--	--	
	09/09/03	800	49	ND	7.4	ND	1,700	--	--	--	--	--	--	
	12/09/03	970	150	9.9	31	83	1,200	--	--	--	--	--	--	
	02/19/04	1,900	280	58	17	160	2,700	--	--	--	--	--	--	
	09/03/04	1,100	27	ND	14	27	2,200	ND	ND	85	ND	ND	ND	
	11/02/04	1,800	32	ND	5	11	4,100	ND	ND	170	270	ND	ND	
	02/17/05	5,600	190	34	41	110	10,000	ND	ND	780	2,000	ND	ND	
	08/15/05	1,800	27	ND	6	23	3,800	ND	ND	300	3,500	ND	ND	
	11/17/05	1,100	30	ND	4	9	2,400	ND	ND	190	9,500	ND	ND	
	02/08/06	3,600	220	43	66	160	2,700	ND	ND	180	7,800	ND	ND	
	05/05/06	1,600	130	21	37	65	1,400	ND	ND	53	3,100	ND	ND	
	08/18/06	270	27	ND	3	4	240	ND	ND	11	2,400	ND	ND	
	12/01/06	1,700	ND	ND	ND	ND	1,700	ND	ND	92	800	ND	ND	
	02/23/07	ND	ND	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	
	05/10/07	ND	3.0	ND	ND	1.9	26	ND	ND	2	48	ND	ND	
	08/16/07	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	
	11/08/07	ND	ND	ND	ND	ND	5.3	ND	ND	ND	ND	ND	ND	
	02/14/08	ND	ND	ND	ND	ND	11	ND	ND	0.94	220	ND	ND	
	05/15/08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	13	<0.50	<0.50	1.0	130	<0.50	<0.50
	09/10/08	78	1.4	0.60	0.94	1.3	71	<1.0	<1.0	6.2	160	<1.0	<1.0	
	11/18/08	<50	2.4	<0.50	<0.50	0.70	72	<1.2	<1.2	7.2	180	<1.2	<1.2	
	02/17/09	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50	
	05/15/09	53	3.2	<0.50	<0.50	1.7	44	<1.0	<1.0	4.3	89	<1.0	<1.0	
	08/13/09	74	5.9	0.57	0.97	5.0	27	<0.50	<0.50	2.2	140	<0.50	<0.50	
	02/23/10	<50	0.66	<0.50	<0.50	0.57	5.7	<0.50	<0.50	<0.50	15	<0.50	<0.50	
	08/12/10	92	7.5	0.94	<0.50	1.0	32	<1.0	<1.0	2.7	180	<1.0	<1.0	
	02/17/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	
08/17/11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<1.2	<1.2	7.7	130	<1.2	<1.2		
03/28/14	110	6.0	<0.50	2.2	1.1	14	--	--	2.0	36	--	--		
08/14/14	<50	0.56	<0.50	<0.50	<0.50	<0.50	1.5	--	--	<1.0	14	--	--	

**TABLE 3**  
**GROUNDWATER ANALYTICAL DATA**  
**Alaska Gas Service Station**  
**6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
MW-7	02/23/10	29,000	410	380	2,100	6,100	410	<10	<10	19	1,500	<10	<10
	08/12/10	2,000	26	17	140	250	2,400	<50	<50	75	9,600	<50	<50
	02/17/11	2,400	35	17	160	190	670	<10	<10	24	1,300	<10	<10
	08/17/11	320	4.3	4.0	5.7	11	3.0	<0.5	<0.5	<0.5	110	<0.5	<0.5
	03/28/14	--	--	--	--	--	--	--	--	--	--	--	--
	05/28/14	8,300	43	8.5	520	490	340	--	--	9.7	420	--	--
	08/14/14	8,800	25	<5.0[1]	400	460	99	--	--	<10[1]	1,200	--	--
MW-8	02/23/10	690	3.5	2.8	29	40	1,600	<100	<100	<100	24,000	<100	<100
	08/12/10	260	4.1	1.4	6.9	7.2	2,100	<170	<170	<170	25,000	<170	<170
	02/17/11	500	3.6	5.1	7.8	2.1	1,300	<100	<100	<100	25,000	<100	<100
	08/17/11	3,000	30	23	96	85	320	<100	<100	<100	19,000	<100	<100
	03/28/14	<4,000[1]	<20[1]	<20[1]	<20[1]	<20[1]	200	--	--	<40[1]	33,000	--	--
	08/14/14	<3,000[1]	<15[1]	<15[1]	<15[1]	<15[1]	160	--	--	<30[1]	20,000	--	--
MW-9	02/23/10	<50	<0.50	0.70	<0.50	<0.50	260	<10	<10	<10	1,600	<10	<10
	08/12/10	<50	<0.50	1.6	<0.50	<0.50	85	<10	<10	<10	880	<10	<10
	02/17/11	<50	<0.5	<0.5	<0.5	<0.5	160	<5.0	<5.0	<5.0	1,300	<5.0	<5.0
	08/17/11	170	<0.5	7.0	<0.5	<0.5	10	<5.0	<5.0	<5.0	650	<5.0	<5.0
	03/28/14	55	<0.50	<0.50	<0.50	<0.50	74	--	--	<1.0	15	--	--
	08/14/14	64	<0.50	<0.50	<0.50	<0.50	130	--	--	3.5	<10	--	--
MW-10	02/23/10	1,300	<0.50	11	3.1	2.6	2.8	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
	08/12/10	61	<0.50	0.72	<0.50	<0.50	39	<0.50	<0.50	1.8	<2.0	<0.50	<0.50
	02/17/11	150	<0.5	1.6	<0.5	<0.5	6.9	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5
	08/17/11	<50	<0.5	<0.5	<0.5	<0.5	6.9	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5
	03/28/14	95	<0.50	<0.50	<0.50	<0.50	24	--	--	<1.0	<10	--	--
	08/14/14	<50	<0.50	<0.50	<0.50	<0.50	21	--	--	<1.0	<10	--	--

**TABLE 3  
GROUNDWATER ANALYTICAL DATA  
Alaska Gas Service Station  
6211 San Pablo Avenue, Oakland, CA**

Well ID	Date Collected	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
		µg/L											
EX-1	02/19/04	120,000	9,500	4,300	840	3,900	150,000	--	--	--	--	--	--
	02/14/08	84,000	2,300	4,900	1,800	14,000	3,900	ND	ND	ND	ND	ND	ND
	05/15/08	24,000	2,100	750	640	2,100	1,800	<0.50	<0.50	610	10,000	<0.50	<0.50
	09/10/08	9,200	1,000	160	300	1,000	780	<100	<100	380	11,000	<100	<100
	11/18/08	8,900	1,400	290	360	1,300	840	<100	<100	180	22,000	<100	<100
	02/17/09	70,000	2,700	3,600	1,900	13,000	1,400	<25	<25	230	20,000	<25	<25
	05/15/09	18,000	1,400	250	530	1,700	640	<25	<25	480	1,500	<25	<25
	08/13/09	10,000	1,100	150	410	940	520	<25	<25	200	5,500	<25	<25
	02/23/10	39,000	1,300	1,100	1,100	7,700	880	<25	<25	120	5,200	<25	<25
	08/12/10	12,000	1,000	160	470	1,200	660	<17	<17	250	670	<17	<17
	02/17/11	33,000	1,700	600	1,100	6,500	720	<12	<12	160	1,000	<12	<12
<i>Well Destroyed May 17, 2011</i>													
<b>Notes:</b>						<b>Analytical Methods:</b>							
µg/L = Micrograms per liter						GRO by EPA Method SW8015B/SW8260B							
GRO = Gasoline Range Organics (C4-C13)						All other analytes by EPA Method SW8260B.							
MTBE = Methyl Tertiary Butyl Ether						DIPE= Di-Isopropyl Ether							
TAME= Tertiary Amyl Methyl Ether						TBA = Tertiary Butyl Alcohol							
ETBE= Ethyl Tertiary Butyl Ether						1,2-DCA= 1,2-Dichloroethane							
						EDB = Ethylene dibromide							
1 = Reporting limits were increased due to high concentrations of target analytes.													
Information prior to February 2014, taken from the AEI Consultants, <i>Remedial Action Report / Groundwater Monitoring Report - 2nd Semester 2011</i> , dated October 6, 2011.													



GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 OAKLAND WEST, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 2012



SCALE 1:24,000



QUADRANGLE LOCATION

*STRATUS*  
 ENVIRONMENTAL, INC.

ALASKA GAS SERVICE STATION  
 6211 SAN PABLO AVENUE  
 OAKLAND, CALIFORNIA

FIGURE  
 1

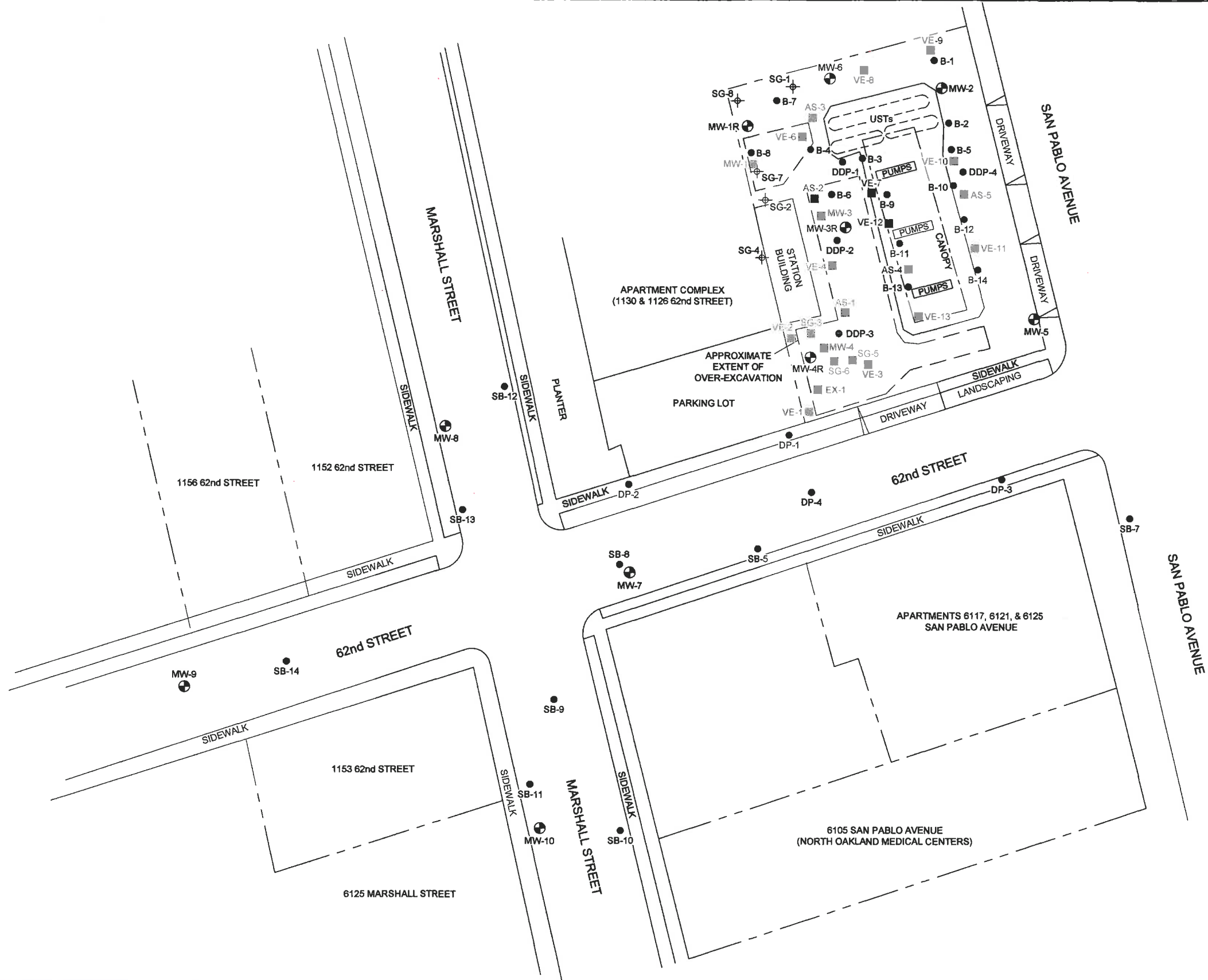
SITE LOCATION MAP

PROJECT NO.  
 2192-6211-01

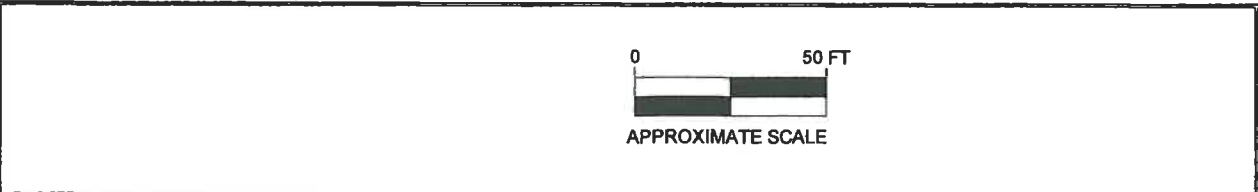


LEGEND

- MW-1 MONITORING WELL LOCATION
- SG-2 NESTED VAPOR PROBE LOCATIONS
- B-1 SOIL BORING LOCATION
- MW-1 ABANDONED WELL LOCATION



PATH NAME: Alaska Gas  
 DRAFTER INITIALS: JMP  
 DATE LAST REVISED: September 10, 2014  
 FILENAME: Alaska Site Vicinity Map



ALASKA GAS SERVICE STATION  
 6211 SAN PABLO AVENUE  
 OAKLAND, CALIFORNIA

SITE VICINITY MAP

FIGURE  
 2  
 PROJECT NO.  
 2192-6211-01

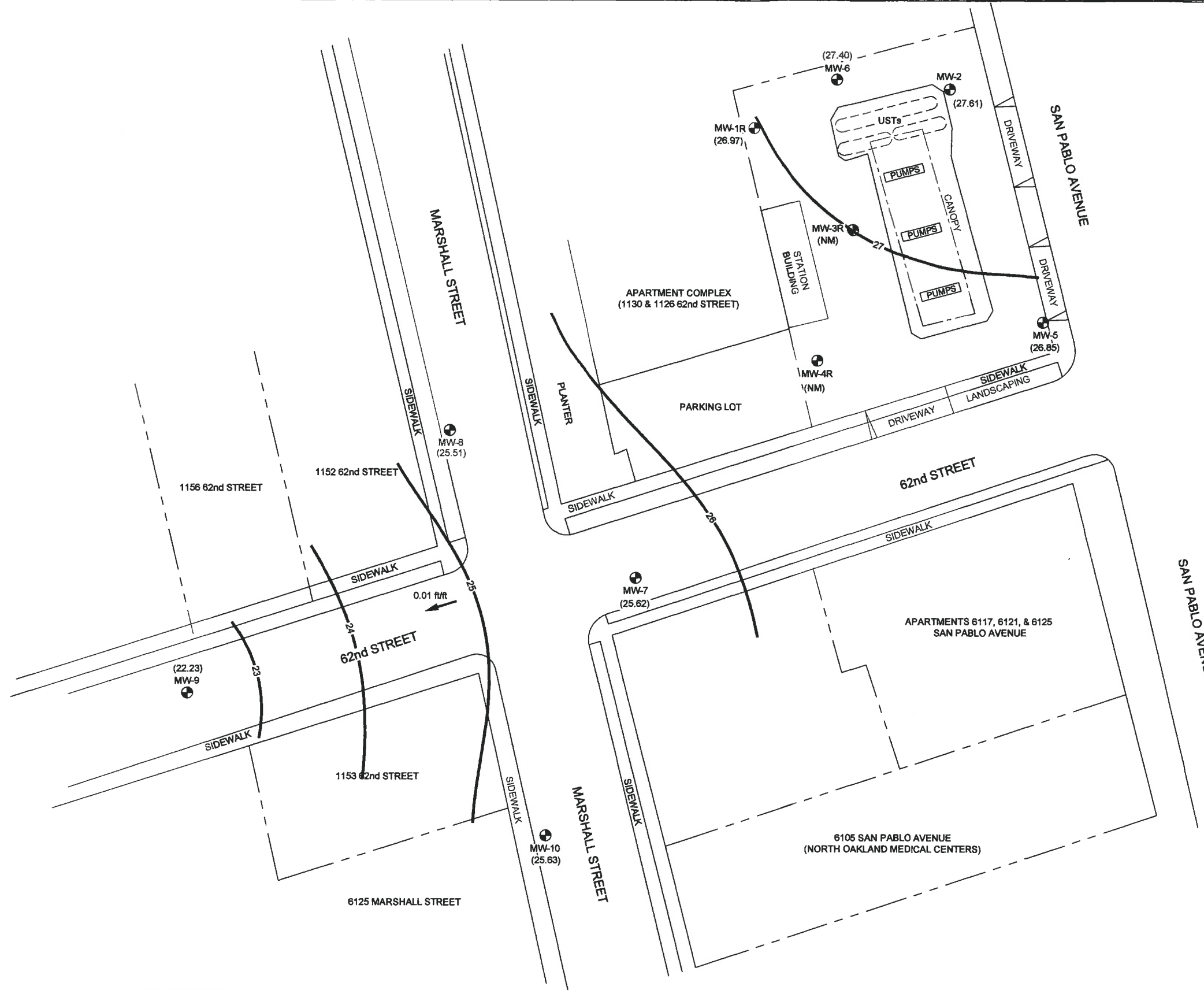




LEGEND

- MW-1 MONITORING WELL LOCATION
- (26.97) GROUNDWATER ELEVATION IN FEET RELATIVE TO MSL
- 26 GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MSL
- INFERRED GROUNDWATER FLOW DIRECTION

WELLS MEASURED ON 8/14/14  
 MSL = MEAN SEA LEVEL  
 (NM) = WELL NOT SURVEYED, GROUNDWATER ELEVATION UNKNOWN



**STRATUS**  
 ENVIRONMENTAL, INC.

PATH NAME: Alaska Gas Quarterly Figures  
 DRAFTER INITIALS: JMP  
 DATE LAST REVISED: September 10, 2014  
 FILENAME: Alaska Quarterly Figures



ALASKA GAS SERVICE STATION  
 6211 SAN PABLO AVENUE  
 OAKLAND, CALIFORNIA  
 GROUNDWATER ELEVATION CONTOUR MAP  
 SUMMER 2014

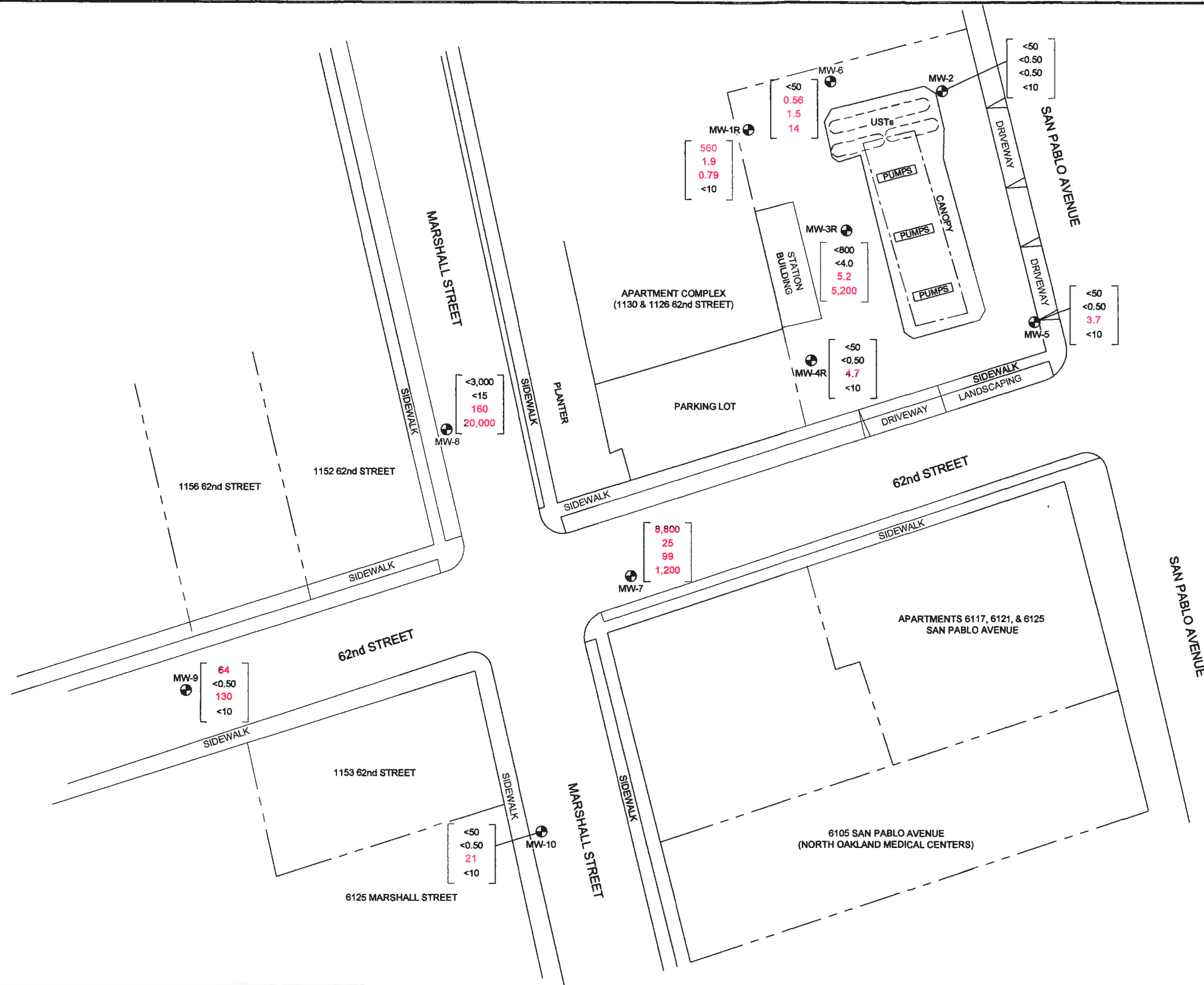
FIGURE  
**3**  
 PROJECT NO.  
 2192-6211-01



LEGEND

- ⊕ MW-1 MONITORING WELL LOCATION
- [ <50 ] GASOLINE RANGE ORGANICS (GRO) IN µg/L
- [ <0.50 ] BENZENE CONCENTRATION IN µg/L
- [ <0.50 ] METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L
- [ <10 ] TERTIARY BUTYL ALCOHOL (TBA) IN µg/L

ALL WELLS SAMPLED ON 8/14/14  
 GRO ANALYZED BY EPA METHOD SW8015B/SW8260B  
 TBA, MTBE, & BENZENE ANALYZED BY EPA METHOD SW8260B



**STRATUS**  
ENVIRONMENTAL, INC.

PATH NAME: Alaska Gas/Quarterly Figures  
 DRAFTER INITIALS: JMP  
 DATE LAST REVISED: September 10, 2014  
 FILENAME: Alaska Quarterly Figures



ALASKA GAS SERVICE STATION  
 6211 SAN PABLO AVENUE  
 OAKLAND, CALIFORNIA  
 GROUNDWATER ANALYTICAL SUMMARY  
 SUMMER 2014

FIGURE  
**4**  
 PROJECT NO.  
 2192-6211-01

**APPENDIX A**  
**FIELD DATA SHEETS**



Site Address 6211 Sea Poble Ave.  
 City Oakland  
 Sampled by: Carl Schwitz  
 Signature [Signature]

Site Number Alaska Gas  
 Project Number 2192-6211-01  
 Project PM S. B. Hinger  
 DATE 08/14/14

Water Level Data				Purge Volume Calculations					Purge Method			Sample Record			Field Data		
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-1R	0920		9.70	22.71	13.01	2"	0.5	6.51	6.5		X			9.71	MW-1R	1127	0.92
MW-2	0915		8.72	20.52	11.8	2"	0.5	5.90	6		X			8.72	MW-2	1105	1.34
MW-3R	0923		8.98	14.85	5.87	2"	0.5	2.94	3		X			8.98	MW-3R	1006	0.95
MW-4R	0905		7.28	19.63	7.35	2"	0.5	3.65	4		X			7.28	MW-4R	1046	0.78
MW-5	0902		8.32	24.11	15.79	2"	0.5	7.90	8		X			8.32	MW-5	1029	0.94
MW-6	0918		8.67	23.09	14.42	2"	0.5	7.21	7.5		X			8.72	MW-6	0950	1.08
MW-7	1153		5.54	15.74	10.20	2"	0.5	5.10	5		X			6.10	MW-7	1323	1.06
MW-8	1142		5.41	14.75	9.34	2"	0.5	4.67	4.5		X			7.99	MW-8	1157	0.88
MW-9	1150		6.67	17.87	8.20	2"	0.5	4.10	4		X			8.17	MW-9	1226	0.98
MW-10	1145		4.65	14.90	10.25	2"	0.5	5.13	5		X			5.32	MW-10	1257	0.99

Multiplier

2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures  
 pH/Conductivity/Temperature Meter - Oakton Model PC-10  
 DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE

pH 08/08/14  
 Conductivity             
 DO



Site Address 6211 San Pablo Ave  
 City Oakland  
 Sampled By: Carl Schwilke  
 Signature [Signature]

Site Number Alaska Gas  
 Project Number 2192-6211-01  
 Project PM S. B. Hinger  
 DATE 08/14/14

Well ID <u>MW-6</u>					Well ID <u>MW-3R</u>						
Purge start time			Odor Y <input checked="" type="checkbox"/> N		Purge start time			Odor Y <input checked="" type="checkbox"/> N			
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	0935	20.8	9.66	363 <sub>p</sub>	0	time	0957	21.9	9.11	321 <sub>p</sub>	0
time	0938	19.5	9.59	296	2	time	1000	22.2	9.00	301	2
time	0941	19.4	9.45	286	4	time	1006	22.0	8.85	195.5	3
time	0950	19.2	9.38	256	7.5	time					
purge stop time			DO: 1.08		ORP -1	purge stop time			DO:		ORP
Well ID <u>MW-5</u>					Well ID <u>MW-4R</u>						
Purge start time			Odor Y N		Purge start time			Odor Y <input checked="" type="checkbox"/> N			
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1014	21.1	8.71	303 <sub>p</sub>	0	time	1035	23.7	8.64	28 <sub>p</sub>	0
time	1018	20.2	8.67	199.3	3	time	1038	23.8	8.54	181.4	2
time	1021	20.4	8.61	305	6	time	1046	23.5	8.56	279	4
time	1029	20.0	8.63	196.0	8	time					
purge stop time			DO: 0.94		ORP 37	purge stop time			DO: 0.78		ORP -25
Well ID <u>MW-2</u>					Well ID <u>MW-1R</u>						
Purge start time			Odor Y <input checked="" type="checkbox"/> N		Purge start time			Odor <input checked="" type="checkbox"/> N			
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1052	22.2	8.45	181.8 <sub>p</sub>	0	time	1112	21.1	8.30	173.9 <sub>p</sub>	0
time	1055	21.4	8.34	185.8	2	time	1115	20.5	8.22	169.5	2
time	1058	20.4	8.33	183.9	4	time	1118	20.4	8.17	167.4	4
time	1105	19.9	8.38	275	6	time	1127	19.5	8.24	161.4	6.5
purge stop time			DO: 1.34		ORP 45	purge stop time			DO: 0.92		ORP -82
Well ID <u>MW-8</u>					Well ID <u>MW-9</u>						
Purge start time			Odor Y N		Purge start time			Odor Y N			
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1146	23.7	8.03	331 <sub>p</sub>	0	time	1215	24.6	8.22	199.8 <sub>p</sub>	0
time	1149	23.0	7.96	331	1.5	time	1218	23.7	8.13	195.8	2
time	1151	22.7	7.95	330	3	time	1226	23.1	8.16	186.5	4
time	1157	22.1	7.98	321	4.5	time					
purge stop time			DO: 0.88		ORP -42	purge stop time			DO: 0.98		ORP 30



Site Address 6211 San Pablo Ave  
 City Oakland  
 Sampled By: Carl Schulte  
 Signature [Signature]

Site Number Alaska Gas  
 Project Number 2192-6211-01  
 Project PM S. Billinger  
 DATE 08/14/14

Well ID <u>ML-16</u>					Well ID <u>ML-7</u>				
Purge start time			Odor Y N		Purge start time			Odor <input checked="" type="radio"/> N	
time	Temp C	pH	cond	gallons	time	Temp C	pH	cond	gallons
time <u>1245</u>	<u>21.5</u>	<u>8.28</u>	<u>293</u>	<u>0</u>	time <u>1309</u>	<u>25.5</u>	<u>8.20</u>	<u>182.5</u>	<u>0</u>
time <u>1248</u>	<u>20.3</u>	<u>8.25</u>	<u>183.4</u>	<u>2</u>	time <u>1312</u>	<u>23.7</u>	<u>8.14</u>	<u>266</u>	<u>2</u>
time <u>1251</u>	<u>20.1</u>	<u>8.22</u>	<u>182.0</u>	<u>4</u>	time <u>1316</u>	<u>23.4</u>	<u>8.15</u>	<u>174.9</u>	<u>4</u>
time <u>1257</u>	<u>20.2</u>	<u>8.21</u>	<u>184.0</u>	<u>5</u>	time <u>1323</u>	<u>22.6</u>	<u>8.15</u>	<u>175.0</u>	<u>5</u>
purge stop time <u>DO: 0.99</u>			ORP <u>36</u>		purge stop time <u>DO: 1.06</u>			ORP <u>-103</u>	
Well ID					Well ID				
Purge start time			Odor Y N		Purge start time			Odor Y N	
time	Temp C	pH	cond	gallons	time	Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time			ORP		purge stop time			ORP	
Well ID					Well ID				
Purge start time			Odor Y N		Purge start time			Odor Y N	
time	Temp C	pH	cond	gallons	time	Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time			ORP		purge stop time			ORP	
Well ID					Well ID				
Purge start time			Odor Y N		Purge start time			Odor Y N	
time	Temp C	pH	cond	gallons	time	Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time			ORP		purge stop time			ORP	

1/19/16

no: 002

MW-6	time	temp.	pH	cond.	
	0935	20.8	8.66	363 <sub>p</sub>	0
	0938	19.5	8.59	296	2
	0941	19.4	8.45	286	4
	0950	19.2	8.38	250	7.5
DO: 1.08		ORP: -1			

MW-3R	time	temp	pH	cond	
	0957	21.9	8.11	321 <sub>p</sub>	0
	1000	22.2	8.00	301 <sub>p</sub>	2
	1006	22.0	8.85	195.5	3
DO: 0.95		ORP: -29			

MW-5	time	temp	pH	cond	
	1014	21.1	8.71	503 <sub>p</sub>	0
	1018	20.2	8.67	199.3	3
	1021	20.1	8.61	305	6
	1029	20.0	8.63	196.0	8
DO: 0.94		ORP: 37			

MW-4R	time	temp	pH	cond	
	1035	23.7	8.64	281	0
	1038	23.8	8.54	181 <sub>p</sub>	2
	1046	23.5	8.56	279	4
DO: 0.78		ORP: -25			

MW-2	time	temp	pH	cond	
	1152	22.2	8.45	181 <sub>p</sub>	0
	1255	21.4	8.24	185.8	2
	1258	20.4	8.33	187.9	4
	1105	19.9	8.38	275	6
DO: 1.34		ORP: 45			

MW-1R	time	temp	pH	cond	
	1112	21.1	8.30	173.9	0
	1115	20.5	8.22	169.5	2
	1118	20.4	8.17	167.4	4
	1127	19.5	8.24	169.4	6.5
DO: 0.92		ORP: -82			

MW-8	time	temp	pH	cond	
	1146	23.7	8.03	331 <sub>p</sub>	0
	1149	23.0	7.96	331	1.5
	1151	22.7	7.95	330	3
	1157	22.1	7.98	321	7.5
DO: 0.88		ORP: -42			

MW-1P	time	temp	pH	cond	
	1215	24.6	8.22	199.8 <sub>p</sub>	0
	1218	23.7	8.13	195.8	2
	1226	23.1	8.16	186.5	4
DO: 0.98		ORP: 30			

MW-10	time	temp	pH	cond	
	1245	21.5	8.28	293 <sub>p</sub>	0
	1248	20.3	8.25	183.4	2
	1251	20.1	8.22	182.0	4
	1257	20.2	8.21	189.0	5
DO: 0.99		ORP: 36			

MW-7	time	temp	pH	cond	
	1309	25.5	8.20	182.5 <sub>p</sub>	0
	1312	23.7	8.14	266	2
	1316	23.4	8.11	174.9	4
	1323	22.6	8.15	175.0	5
DO: 1.06		ORP: -103			

**APPENDIX B**

**SAMPLING AND ANALYSES PROCEDURES**



## **SAMPLING AND ANALYSES PROCEDURES**

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The sampling and analyses procedures as well as the quality assurance plan are contained in this appendix. The procedures and adherence to the quality assurance plan will provide for consistent and reproducible sampling methods; proper application of analytical methods; accurate and precise analytical results; and finally, these procedures will provide guidelines so that the overall objectives of the monitoring program are achieved.

### **Ground Water and Liquid-Phase Petroleum Hydrocarbon Depth Assessment**

A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the ground water depth in monitoring wells that do not contain LPH. Depth to ground water or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

### **Subjective Analysis of Ground Water**

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

### **Monitoring Well Purging and Sampling**

Monitoring wells are purged using a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water have been removed. If three well volumes can not be removed in one half hour's time, the well is allowed to recharge to 80% of original level. After recharging, a ground water sample is then removed from each of the wells using a disposable bailer.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air from remaining in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped.

The water sample is collected, labeled, and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to regulatory accepted method pertaining to the site.

### **QUALITY ASSURANCE PLAN**

Procedures to provide data quality should be established and documented so that conditions adverse to quality, such as deficiencies, deviations, nonconformants, defective material, services, and/or equipment, can be promptly identified and corrected.

#### **General Sample Collection and Handling Procedures**

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of samples used on this project can be found in this section.

#### **Soil and Water Sample Labeling and Preservation**

Label information includes a unique sample identification number, job identification number, date, and time. After labeling all soil and water samples are placed in a Ziploc<sup>®</sup> type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon<sup>®</sup> sheeting and plastic caps. The sample is then placed in a Ziploc<sup>®</sup> type bag and sealed. The sample is labeled and refrigerated at approximately 4° Celsius for delivery, under strict chain-of-custody, to the analytical laboratory.

#### **Sample Identification and Chain-of-Custody Procedures**

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded on the borehole log or in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and

noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

### **Equipment Cleaning**

Sample bottles, caps, and septa used in sampling for volatile and semivolatile organics will be triple rinsed with high-purity deionized water. After being rinsed, sample bottles will be dried overnight at a temperature of 200°C. Sample caps and septa will be dried overnight at a temperature of 60°C. Sample bottles, caps, and septa will be protected from solvent contact between drying and actual use at the sampling site. Sampling containers will be used only once and discarded after analysis is complete.

Plastic bottles and caps used in sampling for metals will be soaked overnight in a 1-percent nitric acid solution. Next, the bottles and caps will be triple rinsed with deionized water. Finally, the bottles and caps will be air dried before being used at the site. Plastic bottles and caps will be constructed of linear polyethylene or polypropylene. Sampling containers will be used only once and discarded after analysis is complete. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Before the sampling event is started, equipment that will be placed in the well or will come in contact with groundwater will be disassembled and cleaned thoroughly with detergent water, and then steam cleaned with deionized water. Any parts that may absorb contaminants, such as plastic pump valves, etc. will be cleaned as described above or replaced.

During field sampling, equipment surfaces that are placed in the well or contact groundwater will be steam cleaned with deionized water before the next well is purged or sampled. Equipment blanks will be collected and analyzed from non-disposable sampling equipment that is used for collecting groundwater samples at the rate of one blank per twenty samples collected.

### **Internal Quality Assurance Checks**

Internal quality assurance procedures are designed to provide reliability of monitoring and measurement of data. Both field and laboratory quality assurance checks are necessary to evaluate the reliability of sampling and analysis results. Internal quality assurance procedures generally include:

#### - Laboratory Quality Assurance

- Documentation of instrument performance checks
- Documentation of instrument calibration
- Documentation of the traceability of instrument standards, samples, and data
- Documentation of analytical and QC methodology (QC methodology includes use of spiked samples, duplicate samples, split samples, use of reference blanks, and check standards to check method accuracy and precision)

#### - Field Quality Assurance

- Documentation of sample preservation and transportation
- Documentation of field instrument calibration and irregularities in performance

Internal laboratory quality assurance checks will be the responsibility of the contract laboratories. Data and reports submitted by field personnel and the contract laboratory will be reviewed and maintained in the project files.

#### **Types of Quality Control Checks**

Samples are analyzed using analytical methods outlined in EPA Manual SW 846 and approved by the California Regional Water Quality Control Board-Central Valley Region in the Leaking Underground Fuel Tanks (LUFT) manual and appendices. Standard contract laboratory quality control may include analysis or use of the following:

- Method blanks – reagent water used to prepare calibration standards, spike solutions, etc. is analyzed in the same manner as the sample to demonstrate that analytical interferences are under control.
- Matrix spiked samples – a known amount of spike solution containing selected constituents is added to the sample at concentrations at which the accuracy of the analytical method is to satisfactorily monitor and evaluate laboratory data quality.
- Split samples – a sample is split into two separate aliquots before analysis to assess the reproducibility of the analysis.
- Surrogate samples – samples are spiked with surrogate constituents at known concentrations to monitor both the performance of the analytical system and the effectiveness of the method in dealing with the sample matrix.
- Control charts – graphical presentation of spike or split sample results used to track the accuracy or precision of the analysis.
- Quality control check samples – when spiked sample analysis indicates atypical instrument performance, a quality check sample, which is prepared independently of the calibration standards and contains the constituents of interest, is analyzed to confirm that measurements were performed accurately.

- Calibration standards and devices – traceable standards or devices to set instrument response so that sample analysis results represent the absolute concentration of the constituent.

Field QA samples will be collected to assess sample handling procedures and conditions. Standard field quality control may include the use of the following, and will be collected and analyzed as outlined in EPA Manual SW 846.

- Field blanks – reagent water samples are prepared at the sampling location by the same procedure used to collect field groundwater samples and analyzed with the groundwater samples to assess the impact of sampling techniques on data quality. Typically, one field blank per twenty groundwater samples collected will be analyzed per sampling event.
- Field replicates – duplicate or triplicate samples are collected and analyzed to assess the reproducibility of the analytical data. One replicate groundwater sample per twenty samples collected will be analyzed per sampling event, unless otherwise specified. Triplicate samples will be collected only when specific conditions warrant and generally are sent to an alternate laboratory to confirm the accuracy of the routinely used laboratory.
- Trip blanks – reagent water samples are prepared before field work, transported and stored with the samples and analyzed to assess the impact of sample transport and storage for data quality. In the event that any analyte is detected in the field blank, a trip blank will be included in the subsequent groundwater sampling event.

Data reliability will be evaluated by the certified laboratory and reported on a cover sheet attached to the laboratory data report. Analytical data resulting from the testing of field or trip blanks will be included in the laboratory's report. Results from matrix spike, surrogate, and method blank testing will be reported, along with a statement of whether the samples were analyzed within the appropriate holding time.

Stratus will evaluate the laboratory's report on data reliability and note significant QC results that may make the data biased or unacceptable. Data viability will be performed as outlined in EPA Manual SW 846. If biased or unacceptable data is noted, corrective actions (including re-sample/re-analyze, etc.) will be evaluated on a site-specific basis.

## **APPENDIX C**

### **LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION**



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received : 08/15/14

Job: 2192-6211-01/Alaska Gas

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B / SW8260B  
Volatile Organic Compounds (VOCs) EPA Method SW8260B

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed		
Client ID :	<b>MW-1R</b>						
Lab ID :	STR14081504-01A	TPH-P (GRO)	560	50 µg/L	08/19/14	08/19/14	
Date Sampled	08/14/14 11:27	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14	
		Methyl tert-butyl ether (MTBE)	0.79	0.50 µg/L	08/19/14	08/19/14	
		Benzene	1.9	0.50 µg/L	08/19/14	08/19/14	
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14	
		Toluene	0.83	0.50 µg/L	08/19/14	08/19/14	
		Ethylbenzene	3.9	0.50 µg/L	08/19/14	08/19/14	
		m,p-Xylene	17	0.50 µg/L	08/19/14	08/19/14	
		o-Xylene	3.0	0.50 µg/L	08/19/14	08/19/14	
Client ID :	<b>MW-2</b>						
Lab ID :	STR14081504-02A	TPH-P (GRO)	ND	50 µg/L	08/19/14	08/19/14	
Date Sampled	08/14/14 11:05	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14	
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	08/19/14	08/19/14	
		Benzene	ND	0.50 µg/L	08/19/14	08/19/14	
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14	
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14	
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14	
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14	
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14	
Client ID :	<b>MW-3R</b>						
Lab ID :	STR14081504-03A	TPH-P (GRO)	ND	V	800 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 10:06	Tertiary Butyl Alcohol (TBA)	5,200	80 µg/L	08/19/14	08/19/14	
		Methyl tert-butyl ether (MTBE)	5.2	4.0 µg/L	08/19/14	08/19/14	
		Benzene	ND	V	4.0 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	ND	V	8.0 µg/L	08/19/14	08/19/14
		Toluene	ND	V	4.0 µg/L	08/19/14	08/19/14
		Ethylbenzene	ND	V	4.0 µg/L	08/19/14	08/19/14
		m,p-Xylene	ND	V	4.0 µg/L	08/19/14	08/19/14
		o-Xylene	ND	V	4.0 µg/L	08/19/14	08/19/14
Client ID :	<b>MW-4R</b>						
Lab ID :	STR14081504-04A	TPH-P (GRO)	ND	50 µg/L	08/19/14	08/19/14	
Date Sampled	08/14/20 10:46	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14	
		Methyl tert-butyl ether (MTBE)	4.7	0.50 µg/L	08/19/14	08/19/14	
		Benzene	ND	0.50 µg/L	08/19/14	08/19/14	
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14	
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14	
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14	
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14	
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14	



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Client ID :	MW-5					
Lab ID :	STR14081504-05A	TPH-P (GRO)	ND	50 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 10:29	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14
		Methyl tert-butyl ether (MTBE)	3.7	0.50 µg/L	08/19/14	08/19/14
		Benzene	ND	0.50 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
Client ID :	MW-6					
Lab ID :	STR14081504-06A	TPH-P (GRO)	ND	50 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 09:50	Tertiary Butyl Alcohol (TBA)	14	10 µg/L	08/19/14	08/19/14
		Methyl tert-butyl ether (MTBE)	1.5	0.50 µg/L	08/19/14	08/19/14
		Benzene	0.56	0.50 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
Client ID :	MW-7					
Lab ID :	STR14081504-07A	TPH-P (GRO)	8,800	1,000 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 13:23	Tertiary Butyl Alcohol (TBA)	1,200	100 µg/L	08/19/14	08/19/14
		Methyl tert-butyl ether (MTBE)	99	5.0 µg/L	08/19/14	08/19/14
		Benzene	25	5.0 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	ND	V 10 µg/L	08/19/14	08/19/14
		Toluene	ND	V 5.0 µg/L	08/19/14	08/19/14
		Ethylbenzene	400	5.0 µg/L	08/19/14	08/19/14
		m,p-Xylene	430	5.0 µg/L	08/19/14	08/19/14
		o-Xylene	30	5.0 µg/L	08/19/14	08/19/14
Client ID :	MW-8					
Lab ID :	STR14081504-08A	TPH-P (GRO)	ND	V 3,000 µg/L	08/20/14	08/20/14
Date Sampled	08/14/14 11:57	Tertiary Butyl Alcohol (TBA)	20,000	300 µg/L	08/20/14	08/20/14
		Methyl tert-butyl ether (MTBE)	160	15 µg/L	08/20/14	08/20/14
		Benzene	ND	V 15 µg/L	08/20/14	08/20/14
		Tertiary Amyl Methyl Ether (TAME)	ND	V 30 µg/L	08/20/14	08/20/14
		Toluene	ND	V 15 µg/L	08/20/14	08/20/14
		Ethylbenzene	ND	V 15 µg/L	08/20/14	08/20/14
		m,p-Xylene	ND	V 15 µg/L	08/20/14	08/20/14
		o-Xylene	ND	V 15 µg/L	08/20/14	08/20/14
Client ID :	MW-9					
Lab ID :	STR14081504-09A	TPH-P (GRO)	64	50 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 12:26	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14
		Methyl tert-butyl ether (MTBE)	130	0.50 µg/L	08/19/14	08/19/14
		Benzene	ND	0.50 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	3.5	1.0 µg/L	08/19/14	08/19/14
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14





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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	<b>MW-10</b>					
Lab ID :	STR14081504-10A	TPH-P (GRO)	ND	50 µg/L	08/19/14	08/19/14
Date Sampled	08/14/14 12:57	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	08/19/14	08/19/14
		Methyl tert-butyl ether (MTBE)	21	0.50 µg/L	08/19/14	08/19/14
		Benzene	ND	0.50 µg/L	08/19/14	08/19/14
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	08/19/14	08/19/14
		Toluene	ND	0.50 µg/L	08/19/14	08/19/14
		Ethylbenzene	ND	0.50 µg/L	08/19/14	08/19/14
		m,p-Xylene	ND	0.50 µg/L	08/19/14	08/19/14
		o-Xylene	ND	0.50 µg/L	08/19/14	08/19/14

### Gasoline Range Organics (GRO) C4-C13

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Reported in micrograms per Liter, per client request.



*Roger Scholl*     *Randy Gardner*     *Walter Hinchman*

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity: Alpha Analytical, Inc. attests that the data reported has not been altered in any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.



*8/22/14*

**Report Date**



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
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## VOC Sample Preservation Report

Work Order: STR14081504

Job: 2192-6211-01/Alaska Gas

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14081504-01A	MW-1R	Aqueous	2
14081504-02A	MW-2	Aqueous	2
14081504-03A	MW-3R	Aqueous	2
14081504-04A	MW-4R	Aqueous	2
14081504-05A	MW-5	Aqueous	2
14081504-06A	MW-6	Aqueous	2
14081504-07A	MW-7	Aqueous	2
14081504-08A	MW-8	Aqueous	2
14081504-09A	MW-9	Aqueous	2
14081504-10A	MW-10	Aqueous	2

8/22/14  
Report Date



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255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
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Date:  
21-Aug-14

## QC Summary Report

Work Order:  
14081504

### Method Blank

File ID: 14081905.D

Type MBLK

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS15W0819B

Analysis Date: 08/19/2014 11:34

Sample ID: MBLK MS15W0819B

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 11:34

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.18		10		92	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

### Laboratory Control Spike

File ID: 14081904.D

Type LCS

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS15W0819B

Analysis Date: 08/19/2014 11:04

Sample ID: GLCS MS15W0819B

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 11:04

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	415	50	400		104	70	130			
Surr: 1,2-Dichloroethane-d4	9.54		10		95	70	130			
Surr: Toluene-d8	9.43		10		94	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

### Sample Matrix Spike

File ID: 14081916.D

Type MS

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS15W0819B

Analysis Date: 08/19/2014 15:56

Sample ID: 14081504-01AGS

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 15:56

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2620	250	2000	556.4	103	54	143			
Surr: 1,2-Dichloroethane-d4	48.6		50		97	70	130			
Surr: Toluene-d8	47.5		50		95	70	130			
Surr: 4-Bromofluorobenzene	51.7		50		103	70	130			

### Sample Matrix Spike Duplicate

File ID: 14081917.D

Type MSD

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS15W0819B

Analysis Date: 08/19/2014 16:20

Sample ID: 14081504-01AGSD

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 16:20

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2420	250	2000	556.4	93	54	143	2625	8.2(23)	
Surr: 1,2-Dichloroethane-d4	48.2		50		96	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	52.3		50		105	70	130			

#### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per Liter, per client request.



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date:  
21-Aug-14

## QC Summary Report

Work Order:  
14081504

### Method Blank

File ID: 14081905.D

Type MBLK Test Code: EPA Method SW8260B

Batch ID: MS15W0819A

Analysis Date: 08/19/2014 11:34

Sample ID: MBLK MS15W0819A

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 11:34

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.18		10		92	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

### Laboratory Control Spike

File ID: 14081903.D

Type LCS Test Code: EPA Method SW8260B

Batch ID: MS15W0819A

Analysis Date: 08/19/2014 10:35

Sample ID: LCS MS15W0819A

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 10:35

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.33	0.5	10		93	63	137			
Benzene	11.3	0.5	10		113	70	130			
Toluene	10.2	0.5	10		102	80	120			
Ethylbenzene	11	0.5	10		110	80	120			
m,p-Xylene	11.5	0.5	10		115	65	139			
o-Xylene	11.4	0.5	10		114	70	130			
Surr: 1,2-Dichloroethane-d4	9.35		10		94	70	130			
Surr: Toluene-d8	9.63		10		96	70	130			
Surr: 4-Bromofluorobenzene	10		10		100	70	130			

### Sample Matrix Spike

File ID: 14081914.D

Type MS Test Code: EPA Method SW8260B

Batch ID: MS15W0819A

Analysis Date: 08/19/2014 15:09

Sample ID: 14081504-01AMS

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 15:09

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	60.6	1.3	50	0.79	120	56	140			
Benzene	60.3	1.3	50	1.9	117	67	134			
Toluene	50.7	1.3	50	0.83	99.8	38	130			
Ethylbenzene	57.3	1.3	50	3.93	107	70	130			
m,p-Xylene	73.1	1.3	50	16.97	112	65	139			
o-Xylene	60.3	1.3	50	2.98	115	69	130			
Surr: 1,2-Dichloroethane-d4	51.4		50		103	70	130			
Surr: Toluene-d8	46.5		50		93	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	70	130			

### Sample Matrix Spike Duplicate

File ID: 14081915.D

Type MSD Test Code: EPA Method SW8260B

Batch ID: MS15W0819A

Analysis Date: 08/19/2014 15:32

Sample ID: 14081504-01AMSD

Units: µg/L

Run ID: MSD\_15\_140819A

Prep Date: 08/19/2014 15:32

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	69.4	1.3	50	0.79	137	56	140	60.59	13.6(40)	
Benzene	65	1.3	50	1.9	126	67	134	60.27	7.5(21)	
Toluene	53.3	1.3	50	0.83	105	38	130	50.74	4.9(20)	
Ethylbenzene	58.4	1.3	50	3.93	109	70	130	57.29	1.9(20)	
m,p-Xylene	73.3	1.3	50	16.97	113	65	139	73.12	0.3(20)	
o-Xylene	62.5	1.3	50	2.98	119	69	130	60.25	3.6(20)	
Surr: 1,2-Dichloroethane-d4	51.2		50		102	70	130			
Surr: Toluene-d8	46.7		50		93	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	70	130			



# *Alpha Analytical, Inc.*

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

**Date:**  
21-Aug-14

## QC Summary Report

**Work Order:**  
14081504

**Comments:**

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Billing Information :

# CHAIN-OF-CUSTODY RECORD

**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778  
 TEL: (775) 355-1044 FAX: (775) 355-0406

# CA

**WorkOrder : STR14081504**  
**Report Due By : 5:00 PM On : 22-Aug-14**

Client:  
 Stratus Environmental  
 3330 Cameron Park Drive  
 Suite 550  
 Cameron Park, CA 95682-8861

Report Attention	Phone Number	E-Mail Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

EDD Required : Yes

Sampled by : Carl Schulze

PO :  
 Client's COC # : 16389 Job : 2192-6211-01/Alaska Gas

Cooler Temp	Samples Received	Date Printed
1 °C	15-Aug-14	15-Aug-14

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles			Requested Tests						Sample Remarks			
				Alpha	Sub	TAT	TPHP_W	VOC_W								
STR14081504-01A	MW-1R	AQ	08/14/14 11:27	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-02A	MW-2	AQ	08/14/14 11:05	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-03A	MW-3R	AQ	08/14/14 10:06	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-04A	MW-4R	AQ	08/14/20 10:46	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-05A	MW-5	AQ	08/14/14 10:29	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-06A	MW-6	AQ	08/14/14 09:50	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-07A	MW-7	AQ	08/14/14 13:23	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-08A	MW-8	AQ	08/14/14 11:57	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-09A	MW-9	AQ	08/14/14 12:26	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								
STR14081504-10A	MW-10	AQ	08/14/14 12:57	4	0	5	GAS-C	BTXE/M/TA ME/TBA_C								

Comments: Security seals intact. Frozen ice. :

Signature	Print Name	Company	Date/Time
	Morgan Lowery	Alpha Analytical, Inc.	8-15-14 12:51

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**Billing Information:**

Company: Stratus Environmental  
 Attn: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_



**Alpha Analytical, Inc.**

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431  
**Satellite Service Centers:**  
 Northern CA: 9891 Hom Road, Suite C, Rancho Cordova, CA 95827  
 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746  
 Northern NV: 1250 Lamolle Hwy., #310, Elko, NV 89601  
 Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120

Phone: 775-355-1044  
 Fax: 775-355-0406  
 Phone: 916-366-9089  
 Phone: 714-388-2801  
 Phone: 775-388-7043  
 Phone: 702-281-4848

16389

Page # 1 of 1

**Consultant/ Client Info:**

Company: Alaska Gas  
 Address: 6211 San Pablo Ave.  
 City, State, Zip: Oakland, CA

**Job and Purchase Order Info:**

Job # 2192-6211-01  
 Job Name: \_\_\_\_\_  
 P.O. #: \_\_\_\_\_

**Report Attention/Project Manager:**

Name: J. Bittinger  
 Email Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Cell #: \_\_\_\_\_

**QC Deliverable Info:**

EDD Required? Yes / No      EDF Required?  Yes / No  
 Global ID: T0600101804  
 Data Validation Packages: III or IV

Samples Collected from which State? (circle one) AR  CA KS NV OR WA DOD Site Other

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Analysis Requested					Remarks	
							Field Filtered?	GRO	BTEX	MTBE	TAME		TBA
							Yes	No					
1127	08/14	AQ	STR14081504-01A	MW-1R	std	4V	y	x	x	x	x	x	
1105			02A	MW-2									
1006			03A	MW-3R									
1046			04A	MW-4R									
1029			05A	MW-5									
0950			06A	MW-6									
1323			07A	MW-7									
1157			08A	MW-8									
1226			09A	MW-9									
1257			10A	MW-10									

**ADDITIONAL INSTRUCTIONS:**

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: <u>Carl Schulze</u>	Date: <u>08/14/14</u>	Time: <u>1530</u>	Received by: (Signature/Affiliation): <u>Maryssa T. Morgan Query Alpha</u>	Date: <u>8-14-14</u>	Time: <u>1530</u>
Relinquished by: (Signature/Affiliation): <u>[Signature]</u>	Date: _____	Time: _____	Received by: (Signature/Affiliation): _____	Date: <u>8-15-14</u>	Time: <u>1243</u>
Relinquished by: (Signature/Affiliation): _____	Date: _____	Time: _____	Received by: (Signature/Affiliation): _____	Date: _____	Time: _____

\* Key: AQ - Aqueous    WA - Waste    OT - Other    So-Soil    \*\*L - Liter    V - VOA    S-Soil Jar    O - Orbo    T - Tedlar    B - Brass    P - Plastic    OT - Other

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

**APPENDIX D**

**GEOTRACKER ELECTRONIC SUBMITTAL  
CONFIRMATIONS**



# STATE WATER RESOURCES CONTROL BOARD

# GEOTRACKER ESI

UPLOADING A EDF FILE

## SUCCESS

Processing is complete. No errors were found!  
Your file has been successfully submitted!

<b><u>Submittal Type:</u></b>	EDF
<b><u>Report Title:</u></b>	3Q14 Analytical
<b><u>Report Type:</u></b>	Monitoring Report - Semi-Annually
<b><u>Facility Global ID:</u></b>	T0600101804
<b><u>Facility Name:</u></b>	ALASKA GASOLINE
<b><u>File Name:</u></b>	14081504_EDF.zip
<b><u>Organization Name:</u></b>	Stratus Environmental, Inc.
<b><u>Username:</u></b>	STRATUS NOCAL
<b><u>IP Address:</u></b>	50.192.223.97
<b><u>Submittal Date/Time:</u></b>	10/16/2014 1:36:24 PM
<b><u>Confirmation Number:</u></b>	9608575046

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

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STATE WATER RESOURCES CONTROL BOARD  
**GEOTRACKER ESI**

UPLOADING A GEO\_WELL FILE

## SUCCESS

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Your file has been successfully submitted!

<b><u>Submittal Type:</u></b>	GEO_WELL
<b><u>Report Title:</u></b>	3Q14 QMR GEO WELL
<b><u>Facility Global ID:</u></b>	T0600101804
<b><u>Facility Name:</u></b>	ALASKA GASOLINE
<b><u>File Name:</u></b>	GEO_WELL.zip
<b><u>Organization Name:</u></b>	Stratus Environmental, Inc.
<b><u>Username:</u></b>	STRATUS NOCAL
<b><u>IP Address:</u></b>	50.192.223.97
<b><u>Submittal Date/Time:</u></b>	10/16/2014 1:36:47 PM
<b><u>Confirmation Number:</u></b>	4018952846

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