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*By Alameda County Environmental Health at 8:57 am, Apr 29, 2013*

Mr. Mark Detterman  
Alameda County Environmental Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Re: Former Olympic Service Station  
1436 Grant Avenue  
San Lorenzo, California  
ACEHD Case No. RO0000373, GeoTacker No. T0600102256

Dear Mr. Detterman:

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

Sincerely,  
George and Frida Jaber 1989 Family Trust



Philip Jaber, Trustee



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

April 23, 2013  
Project No. 2115-1436-01

Mr. Mark Detterman  
Alameda County Health Care Services Agency  
Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577


Re: **Semi-Annual Groundwater Monitoring Report – First Quarter 2013**  
Former Olympic Station  
1436 Grant Avenue  
San Lorenzo, California  
ACEHD Case No. RO0000373, GeoTracker No. T0600102256

Dear Mr. Detterman:


Stratus Environmental, Inc. (Stratus), on behalf of Mr. Philip Jaber and the George and Frida Jaber 1989 Family Trust, is submitting the attached report, for the former Olympic Station located at 1436 Grant Avenue in San Lorenzo, California (Figure 1). If you have any questions or comments concerning this report, please contact Steve Carter at [scarter@stratusinc.net](mailto:scarter@stratusinc.net) or (530) 676-6008.

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

  
Stephen J. Carter, P.G.  
Project Manager



  
Scott G. Bittinger, P.G.  
Project Geologist

Attachment: Semi Annual Groundwater Monitoring Report, First Quarter 2013

cc: Mr. Philip Jaber  
Ms. Cherie McCaulou, RWQCB

**FORMER OLYMPIC STATION  
SEMI-ANNUAL GROUNDWATER MONITORING REPORT**

Facility Address: 1436 Grant Avenue, San Lorenzo, CA  
Consulting Co. / Contact Person: Stratus Environmental, Inc. / Steve Carter, P.G.  
Consultant Project No: 2115-1436-01  
Primary Agency/Regulatory ID No: Mark Detterman, Alameda County Environmental Health Department (ACEHD) / Case No. RO0000373

**WORK PERFORMED THIS QUARTER (Fourth Quarter 2012 & First Quarter 2013):**

1. On February 27, 2013, Stratus conducted semi-annual groundwater monitoring and sampling activities. During this event, all wells (MW-1 through MW-4 and EX-1 through EX-3) were gauged for depth to water and evaluated for the presence of free product. Following gauging, all wells were purged, and groundwater samples were collected. Field data sheets, sampling procedures and laboratory analytical reports are included as Appendices A, B and C, respectively. Analytical results for 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.
2. Received ACEHD correspondence, dated March 5, 2013, regarding Stratus' *Corrective Action Plan* (CAP, dated September 30, 2012). The letter concurred in general with Stratus' recommendation to implement Dual Phase Extraction (DPE) at this site, but disagreed with the number of proposed additional monitoring wells and the proposed well screen intervals. The letter requested a draft Fact Sheet for public distribution, a revised draft CAP, a data gap work plan, and a proposed path to closure timeline.
3. Stratus submitted a draft Fact Sheet on Environmental Assessment to ACEHD on March 19, 2013.

**WORK PROPOSED FOR NEXT QUARTER (Second & Third Quarters 2013):**

1. In accordance with the ACEHD letter of January 28, 2011, routine groundwater monitoring and sampling activities are not scheduled for this site during second quarter 2013. Groundwater monitoring and sampling will be conducted in the third quarter 2013.
2. Stratus will submit the requested revised draft CAP. Upon completion of the public notification period and receipt of ACEHD's approval of the revised draft CAP, Stratus will initiate implementation of the scope of work outlined in the revised draft CAP.
3. Stratus will submit a data gap work plan and proposed path to closure timeline as requested in the ACEHD letter.

Current Phase of Project: CAP/REM (Start-up)  
Frequency of Groundwater Monitoring: All Wells = Semi-Annual (1<sup>st</sup> & 3<sup>rd</sup>)  
Frequency of Groundwater Monitoring and Sampling: All Wells = (Semi-Annual 1<sup>st</sup> and 3<sup>rd</sup>)  
Groundwater Sampling Date: February 27, 2013  
Is Free Product (FP) Present on Site: No  
Approximate Depth to Groundwater: 6.63 to 7.32 ft bgs

Groundwater Flow Direction: Southwest

Groundwater Gradient: 0.004 ft/ft

## DISCUSSION:

On February 27, 2013, first quarter 2013 groundwater monitoring and sampling activities were conducted at the site. During this event, all monitoring and extraction wells were gauged for depth to water and evaluated for the presence of free product. Following gauging, these wells were purged, and groundwater samples were collected. Well MW-4 purged dry before three casing volumes could be removed. Groundwater samples were analyzed at a state-certified analytical laboratory for gasoline range organics (GRO) by EPA Method SW/8015B/SW8260B and for benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method SW8260B. Well construction details are summarized in Table 1, and historical groundwater elevation and analytical data are summarized in Table 2.

At the time of the first quarter 2013 monitoring event, depth-to-water was measured between 6.63 and 7.32 feet below ground surface. Groundwater elevations increased between 0.48 and 0.55 feet in all wells since the previous monitoring event (August 28, 2012). Depth-to-water measurements were converted to feet above mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). Groundwater flow beneath the site was to the southwest with a calculated gradient of 0.004 ft/ft. Historically, groundwater flow beneath the site has been toward the west-southwest and southwest. Groundwater flow during the first quarter 2013 event was generally consistent with historical data.

Concentrations of GRO were reported in four of the wells, with the maximum concentration reported in well MW-4 ( 2,400 micrograms per liter [ $\mu\text{g/L}$ ]). Benzene was reported in three of the wells, with the maximum concentration reported in well MW-4 (160  $\mu\text{g/L}$ ). Concentrations of MTBE were reported in all wells, with a maximum concentration reported in well MW-4 (1,400  $\mu\text{g/L}$ ). Analytical results from the February 27, 2013, sampling event are generally consistent with historical analytical data. Figure 3 summarizes GRO, benzene and MTBE analytical results from the first quarter 2013 sampling event.

## ATTACHMENTS:

- Table 1 Well Construction Details
- Table 2 Groundwater Elevation and Analytical Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map (First Quarter 2013)
- Figure 3 Groundwater Analytical Summary (First Quarter 2013)
- 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**  
**WELL CONSTRUCTION DETAILS**

Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

<b>Boring/Well I.D.</b>	<b>Date</b>	<b>Boring Depth (feet)</b>	<b>Boring Diameter (inches)</b>	<b>Well Diameter (inches)</b>	<b>Well Depth (feet)</b>	<b>Screen Interval (feet bgs)</b>	<b>Slot Size (inches)</b>	<b>Drilling Method</b>	<b>Consultant</b>
<i><b>Groundwater Monitoring Wells</b></i>									
MW-1	09/24/99	26.5	8	2	26.5	5 - 26.5	0.020	HSA	Conestoga-Rovers & Associates
MW-2	09/24/99	20.0	8	2	20	5-20	0.020	HSA	Conestoga-Rovers & Associates
MW-3	09/24/99	21.5	8	2	21	5-21	0.020	HSA	Conestoga-Rovers & Associates
MW-4	02/09/10	10.0	10	4	10	5-10	0.020	Air Knife	Conestoga-Rovers & Associates
<i><b>Extraction Wells</b></i>									
EX-1	05/19/11	20.0	10	4	20	5-20	0.020	HSA	Stratus Environmental
EX-2	05/19/11	20.0	10	4	20	5-20	0.020	HSA	Stratus Environmental
EX-3	05/19/11	20.0	10	4	20	5-20	0.020	HSA	Stratus Environmental
<b>Notes:</b>									
HSA = Hollow Stem Auger									

**TABLE 2**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Well ID	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Grouwater Elevation (ft msl)	Oil & Grease (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	
MW-1	10/06/99	8.35	15.00	6.65	--	--	84**	3,900*	<25	<25	<25	<25	3,500	--	--	--	--	--	--	--	
	01/13/00	7.90		7.10	--	--	<50	<1,300	18	<13	<13	<13	1,700	--	--	--	--	--	--	--	
	04/12/00	7.08		7.92	--	--	56***	<1,000	66	<10	<10	<10	1,600	--	--	--	--	--	--	--	
	07/19/00	7.66		7.34	--	--	52**	<1,000	<10	<10	<10	<10	1,200	--	--	--	--	--	--	--	
	10/25/00	7.91		7.09	--	--	76***	4,100*	120	<25	<25	<25	6,100	--	--	--	--	--	--	--	
	02/16/07	6.32		8.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/01/07	5.88		9.12	--	<250	<50	<50	<1.2	<1.2	<1.2	<1.2	78	<1.2	<1.2	<1.2	<12	<120	<1.2	<1.2	
	05/01/07	7.24	15.71	8.47	--	<250	<50	<50	<5.0	<5.0	<5.0	<5.0	250	<5.0	<5.0	<5.0	<50	<500	<5.0	<5.0	
	08/01/07	7.77		7.94	--	--	<50	<50	<25	<25	<25	<25	520	<25	<25	<25	<250	<2,500	<25	<25	
	11/01/07	7.71		8.00	--	--	<50	<50	<12	<12	<12	<12	460	<12	<12	<12	<120	<1,200	<12	<12	
	02/01/08	5.71		10.00	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	110	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	
	05/02/08	7.52		8.19	--	<250	<50	<50	<5.0	<5.0	<5.0	<5.0	240	<5.0	<5.0	<5.0	<20	<500	<5.0	<5.0	
	08/01/08	8.02		7.69	--	--	<50	<50	<10	<10	<10	<10	500	<10	<10	<10	<40	<1,000	<10	<10	
	11/04/08	7.28		8.43	--	--	<50	<50	<5.0	<5.0	<5.0	<5.0	260	<5.0	<5.0	<5.0	26	<500	<5.0	<5.0	
	08/11/09	8.08		7.63	--	--	<50	<50	<5.0	<5.0	<5.0	<5.0	270	<5.0	<5.0	<5.0	<20	<500	<5.0	<5.0	
	02/03/10	6.14		9.57	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	39	--	--	--	--	--	--	--	
	05/18/10	7.09		8.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	08/05/10	7.65		8.06	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	350	--	--	--	--	--	--	--	
	02/04/11	7.20		8.51	--	--	<50	<50	0.90	<0.5	<0.5	<0.5	62	--	--	--	--	--	--	--	
	06/03/11	7.28	18.60	11.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	08/02/11	7.47		11.13	--	--	--	120	<0.50	<0.50	<0.50	<0.50	160	--	--	--	--	--	--	--	
	09/29/11	7.83		10.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/12/11	7.03		11.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	11/09/11	7.55		11.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	12/12/11	7.81		10.79	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	03/15/12	6.45		12.15	--	--	--	55	<0.50	<0.50	<0.50	<0.50	71	--	--	--	--	--	--	--	
	08/28/12	7.81		10.79	--	--	--	120	<0.50	<0.50	<0.50	<0.50	240	--	--	--	--	--	--	--	
	02/27/13	7.32		11.28	--	--	--	61	<0.50	<0.50	<0.50	<0.50	69	--	--	--	--	--	--	--	

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Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Well ID	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Grouwater Elevation (ft msl)	Oil & Grease (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)
MW-2	10/06/99	7.87	14.46	6.59	<1,000	500[3]	<50	70*	<0.5	<0.5	<0.5	<0.5	11	--	--	--	--	--	--	--
	01/13/00	7.46		7.00	<1,000	500[3]	<50	<50	<0.5	<0.5	<0.5	<0.5	6.2	--	--	--	--	--	--	--
	04/12/00	6.67		7.79	1,100	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	39	--	--	--	--	--	--	--
	07/19/00	7.23		7.23	1,300	<500	<50	<1,000	<10	<10	<10	<10	990	--	--	--	--	--	--	--
	10/25/00	7.52		6.94	--	<500	<50	370	<2.5	<2.5	<2.5	<2.5	690	--	--	--	--	--	--	--
	02/16/07	5.89		8.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/01/07	5.45		9.01	--	<250	<50	<50	<0.5	<0.5	<0.5	<0.5	9.8	<0.5	<0.5	<0.5	<5.0	<50	<0.5	<0.5
	05/01/07	6.83	15.17	8.34	--	<250	<50	<50	<5.0	<5.0	<5.0	<5.0	120	<5.0	<5.0	<5.0	<50	<500	<5.0	<5.0
	08/01/07	7.35		7.82	--	--	<50	<50	<5.0	<5.0	<5.0	<5.0	130	<5.0	<5.0	<5.0	<50	<500	<5.0	<5.0
	11/01/07	7.27		7.90	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	19	<0.5	<0.5	<0.5	<5.0	<50	<0.5	<0.5
	02/01/08	5.25		9.92	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	3.3	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5
	05/02/08	7.12		8.05	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	83	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5
	08/01/08	7.59		7.58	--	--	<50	<50	<1.0	<1.0	<1.0	<1.0	52	<1.0	<1.0	<1.0	<4.0	<100	<1.0	<1.0
	11/04/08	6.84		8.33	--	--	80	<50	<0.5	<0.5	<0.5	<0.5	5.9	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5
	08/11/09	7.65		7.52	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	9.4	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5
	02/03/10	5.75		9.42	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.86	--	--	--	--	--	--	--
	05/18/10	6.67		8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/05/10	7.25		7.92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	57	--	--	--	--	--	--	--
	02/04/11	6.79		8.38	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	4.4	--	--	--	--	--	--	--
	06/03/11	6.82	18.00	11.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/02/11	7.06		10.94	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	46	--	--	--	--	--	--	--
	09/29/11	7.39		10.61	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	41	<1.0	<1.0	<1.0	<10	--	--	<1.0
	10/12/11	6.62		11.38	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	37	<1.0	<1.0	<1.0	<10	--	--	<1.0
	11/09/11	7.11		10.89	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	33	<1.0	<1.0	<1.0	<10	--	--	<1.0
	12/12/11	7.35		10.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/15/12	5.98		12.02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	4.3	--	--	--	--	--	--	--
	08/28/12	7.39		10.61	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	35	--	--	--	--	--	--	--
	02/27/13	6.91		11.09	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	12	--	--	--	--	--	--	--

**TABLE 2**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Well ID	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl)	Oil & Grease (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)
MW-3	10/06/99	7.90	14.41	6.51	--	--	300**	3,900	900	89	160	560	790	--	--	--	--	--	--	--
	01/13/00	7.50		6.91	--	--	210**	740	110	4.8	35	18	290	--	--	--	--	--	--	--
	04/12/00	6.61		7.80	--	--	640***	2,200	650	9.7	180	24	140	--	--	--	--	--	--	--
	07/19/00	7.24		7.17	--	--	270**	2,700*	420	<2.5	160	<2.5	99	--	--	--	--	--	--	--
	10/25/00	7.52		6.89	--	--	150	710*	180	<2.5	24	<2.5	71	--	--	--	--	--	--	--
	02/16/07	5.90		8.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/01/07	5.44		8.97	--	<250	<50	82	20	<1.7	<1.7	<1.7	100	<1.7	<1.7	<1.7	<17	<170	<1.7	<1.7
	05/01/07	6.87	15.13	8.26	--	<250	<50	<50	<5.0	<5.0	<5.0	<5.0	88	<5.0	<5.0	<5.0	<50	<500	<5.0	<5.0
	08/01/07	7.40		7.73	--	--	<50	130	12	<2.5	<2.5	<2.5	98	<2.5	<2.5	<2.5	<25	<250	<2.5	<2.5
	11/01/07	7.35		7.78	--	--	<50	77	<2.5	<2.5	<2.5	<2.5	68	<2.5	<2.5	<2.5	<25	<250	<2.5	<2.5
	02/01/08	5.28		9.85	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	97	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5
	05/02/08	7.15		7.98	--	--	<50	68	2.3	<1.7	<1.7	<1.7	86	<1.7	<1.7	<1.7	7.2	<170	<1.7	<1.7
	08/01/08	7.66		7.47	--	--	<50	85	3.5	<1.0	<1.0	<1.0	66	<1.0	<1.0	<1.0	7.2	<100	<1.0	<1.0
	11/04/08	6.96		8.17	--	--	<50	<50	<1.0	<1.0	<1.0	<1.0	40	<1.0	<1.0	<1.0	<4.0	<100	<1.0	<1.0
	08/11/09	7.72		7.41	--	--	<50	110	33	<0.50	<0.50	<0.50	28	<0.50	<0.50	<0.50	<2.0	<50	<0.50	<0.50
	02/03/10	5.72		9.41	--	--	--	<50	0.55	<0.50	<0.50	<0.50	25	--	--	--	--	--	--	--
	05/18/10	6.73		8.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/05/10	7.31		7.82	--	--	--	450	110	2.2	0.76	0.64	32	--	--	--	--	--	--	--
	02/04/11	6.80		8.33	--	--	--	220[1]	64	1.6	<0.5	<0.5	36	--	--	--	--	--	--	--
	06/03/11	6.87	17.95	11.08	--	--	--	200	26	<0.50	<0.50	<0.50	34	--	--	--	--	--	--	--
	08/02/11	7.07		10.88	--	--	--	<50	2.5	<0.50	<0.50	<0.50	36	--	--	--	--	--	--	--
	09/29/11	7.43		10.52	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	28	<1.0	<1.0	<1.0	<10	--	--	<1.0
	10/12/11	6.67		11.28	--	--	--	<50	0.91	<0.50	<0.50	<0.50	32	<1.0	<1.0	<1.0	<10	--	--	<1.0
11/09/11	7.16		10.79	--	--	--	<50	1.8	<0.50	<0.50	<0.50	31	<1.0	<1.0	<1.0	<10	--	--	<1.0	
12/12/11	7.42		10.53	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/15/12	6.21		11.74	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	24	--	--	--	--	--	--	--	
08/28/12	7.44		10.51	--	--	--	<50	6.5	<0.50	<0.50	<0.50	24	--	--	--	--	--	--	--	
02/27/13	6.90		11.05	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	18	--	--	--	--	--	--	--	
MW-4	05/18/10	6.68	15.15	8.47	--	--	--	13,000	620	36	170	12	1,200	--	--	--	--	--	--	--
	08/05/10	7.25		7.90	--	--	--	9,200	780	13	230	4.3	1,800	--	--	--	--	--	--	--
	02/04/11	6.71		8.44	--	--	--	4,800[1]	350	7.1	23	<2.5	440	--	--	--	--	--	--	--
	06/03/11	6.78	17.99	11.21	--	--	--	4,700	350	2.6	19	<2.5[2]	670	--	--	--	--	--	--	--
	08/02/11	7.01		10.98	--	--	--	4,700	290	<2.5[2]	12	<2.5[2]	970	--	--	--	--	--	--	--
	09/29/11	7.37		10.62	--	--	--	8,700	590	<5.0[2]	34	<5.0[2]	1,500	<10[2]	28	<10[2]	<100[2]	--	--	<10[2]
	10/12/11	6.61		11.38	--	--	--	1,500	160	<1.0[2]	1.8	<1.0[2]	1,300	<2.0[2]	8.6	<2.0[2]	42	--	--	<2.0[2]
	11/09/11	7.18		10.81	--	--	--	2,800	190	1.4	9.6	1.3	720	<2.0[2]	3.6	<2.0[2]	270	--	--	<2.0[2]
	12/12/11	7.36		10.63	--	--	--	3,800	300	2.4	11	2.5	1,200	--	--	--	--	--	--	--
	03/15/12	6.15		11.84	--	--	--	8,300	530	<5.0[2]	120	72	3,700	--	--	--	--	--	--	--
	08/28/12	7.40		10.59	--	--	--	2,400	250	<4.0[2]	14	<4.0[2]	1,400	--	--	--	--	--	--	--
02/27/13	6.85		11.14	--	--	--	2,400	160	2.5	8.2	<2.0[2]	1,400	--	--	--	--	--	--	--	

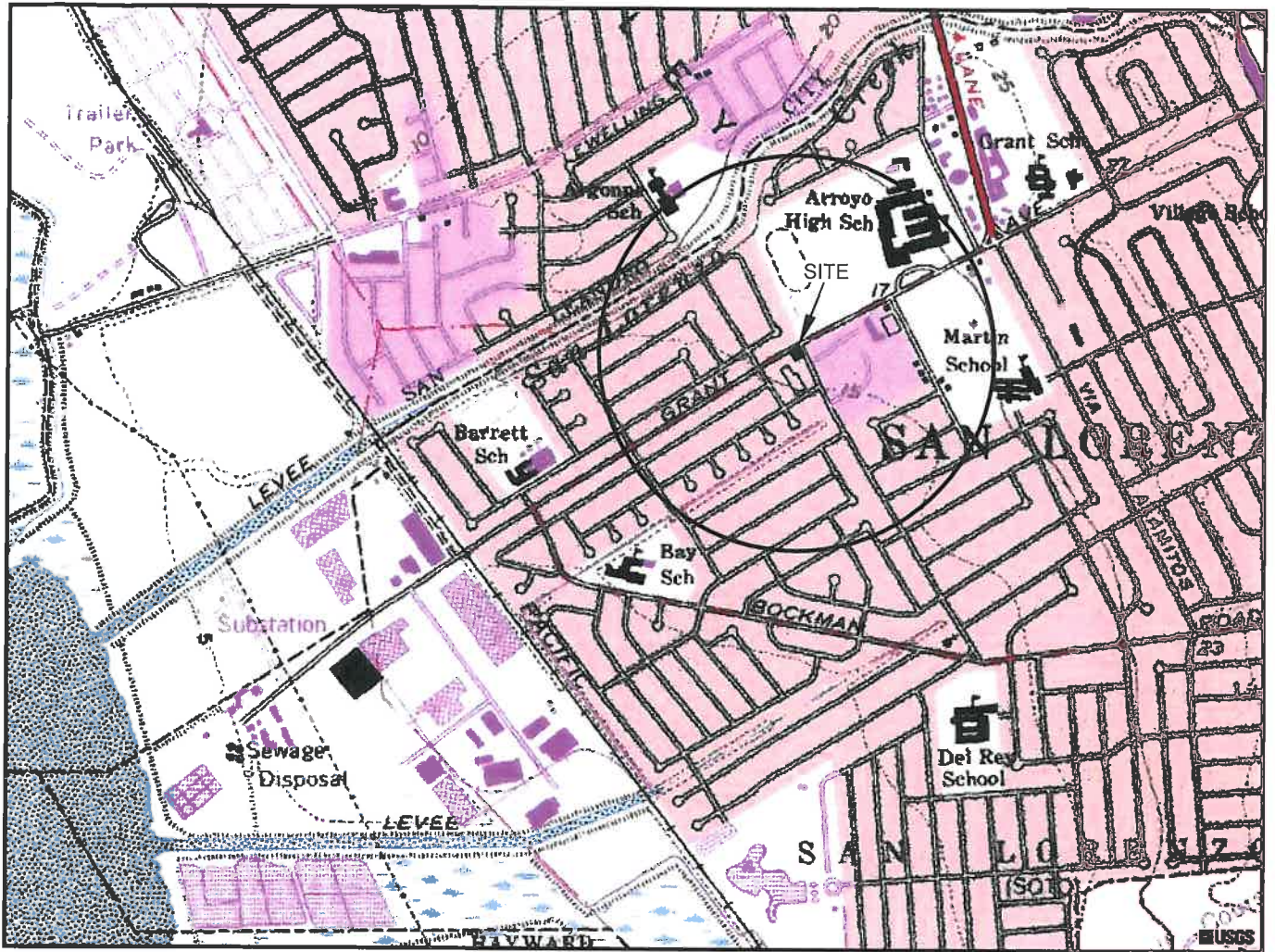


**TABLE 2**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Well ID	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Grouwater Elevation (ft msl)	Oil & Grease (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	ETBE (µg/L)	TBA (µg/L)	Ethanol (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)
EX-1	06/03/11	6.96	18.14	11.18	--	--	--	76	8.3	<0.50	<0.50	0.99	37	--	--	--	--	--	--	--
	08/02/11	7.20		10.94	--	--	--	420	37	0.65	3.5	2.9	32	--	--	--	--	--	--	--
	09/29/11	7.53		10.61	--	--	--	150	13	<0.50	3.2	1.1	23	<1.0	1.2	<1.0	<10	--	--	<1.0
	10/12/11	6.63		11.51	--	--	--	180	23	0.51	2.8	0.97	27	<1.0	1.0	<1.0	<10	--	--	<1.0
	11/09/11	7.28		10.86	--	--	--	<50	4.3	<0.50	<0.50	<0.50	34	<1.0	<1.0	<1.0	<10	--	--	<1.0
	12/12/11	7.50		10.64	--	--	--	520	32	1.3	13	5.58	20	--	--	--	--	--	--	--
	03/15/12	6.19		11.95	--	--	--	<50	2.6	<0.50	<0.50	<0.50	8.4	--	--	--	--	--	--	--
	08/28/12	7.53		10.61	--	--	--	410	88	1.2	36	1.4	42	--	--	--	--	--	--	--
	02/27/13	7.02		11.12	--	--	--	<50	0.75	<0.50	<0.50	<0.50	14	--	--	--	--	--	--	--
EX-2	06/03/11	6.81	18.14	11.33	--	--	--	760	<1.5[2]	<1.5[2]	<1.5[2]	<1.5[2]	1,100	--	--	--	--	--	--	--
	08/02/11	7.03		11.11	--	--	--	920	8.7	<1.0[2]	<1.0[2]	<1.0[2]	920	--	--	--	--	--	--	--
	09/29/11	7.37		10.77	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/11	6.65		11.49	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/09/11	7.08		11.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/11	7.35		10.79	--	--	--	590	5.6	<1.0[2]	<1.0[2]	<1.0[2]	920	--	--	--	--	--	--	--
	03/15/12	6.58		11.56	--	--	--	100	<0.50	<0.50	<0.50	<0.50	130	--	--	--	--	--	--	--
	08/28/12	7.35		10.79	--	--	--	<300[2]	2.5	<1.5[2]	<1.5[2]	<1.5[2]	540	--	--	--	--	--	--	--
	02/27/13	6.82		11.32	--	--	--	320	0.51	<0.50	<0.50	<0.50	420	--	--	--	--	--	--	--
EX-3	06/03/11	6.55	17.63	11.08	--	--	--	95	0.93	<0.50	<0.50	<0.50	78	--	--	--	--	--	--	--
	08/02/11	6.82		10.81	--	--	--	130	1.5	<0.50	<0.50	<0.50	150	--	--	--	--	--	--	--
	09/29/11	7.15		10.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/12/11	6.37		11.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/19/11	6.89		10.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/11	7.12		10.51	--	--	--	100	2.4	<0.50	<0.50	<0.50	84	--	--	--	--	--	--	--
	03/15/12	5.70		11.93	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	30	--	--	--	--	--	--	--
	08/28/12	7.15		10.48	--	--	--	100	<0.50	<0.50	<0.50	<0.50	190	--	--	--	--	--	--	--
	02/27/13	6.63		11.00	--	--	--	84	<0.50	<0.50	<0.50	<0.50	93	--	--	--	--	--	--	--

**Legend/Key:**  
ft msl = feet above mean sea level      TPH - mo = total petroleum hydrocarbons as motor oil      MTBE = methyl tertiary butyl ether      TAME = tert amyl methyl ether      **Analytical Methods:**  
µg/L = micrograms per liter      TPHd = total petroleum hydrocarbons as diesel      DIPE = di isopropyl ether      TBA = tert butyl ether      GRO analyzed by EPA Method  
NM = Not measured      GRO = gasoline range organics C6-C12      ETBE = ethyl tertiary butyl ether      EDB = 1,2-dibromoethane      SW8015B/SW8260B, all other analytes analyzed by  
SW8260B.  
\* = Hydrocarbon reported in the gasoline range does not match the gasoline standard.      Analytical methods prior to February 2011, are available in  
various reports on the Alameda County Environmental Health  
\*\* = Hydrocarbon reported is in the early diesel range and does not match the diesel standard.      Department files.  
\*\*\* = Hydrocarbon reported does not match the pattern of the diesel standard.

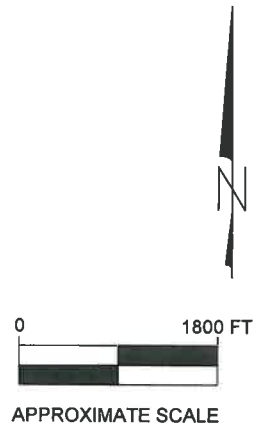
[1] Weakly modified or unmodified gasoline is significant.      Analytical data for samples collected prior to 2011 are obtained from documents available  
in the Alameda County Environmental Health Department files.  
[2] = Reporting limits were increased due to high concentrations of target analytes.  
[3] = Sample also analyzed for halogenated volatile organic compounds (EPA Method 8010) and semivolatile organic compounds (EPA Method 8270A); all analytes reported as  
none detected.      \*Well elevations and locations surveyed by Morrow Surveying on June 15, 2011.



GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 SAN LORENZO, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1978



QUADRANGLE LOCATION



*STRATUS*  
 ENVIRONMENTAL, INC.

FORMER OLYMPIC SERVICE STATION  
 1436 GRANT AVENUE  
 SAN LORENZO, CALIFORNIA

FIGURE

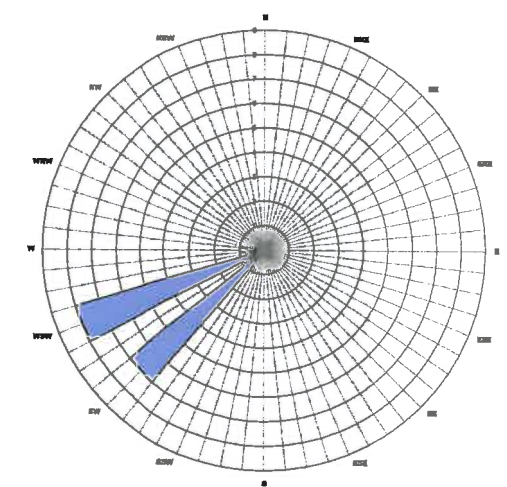
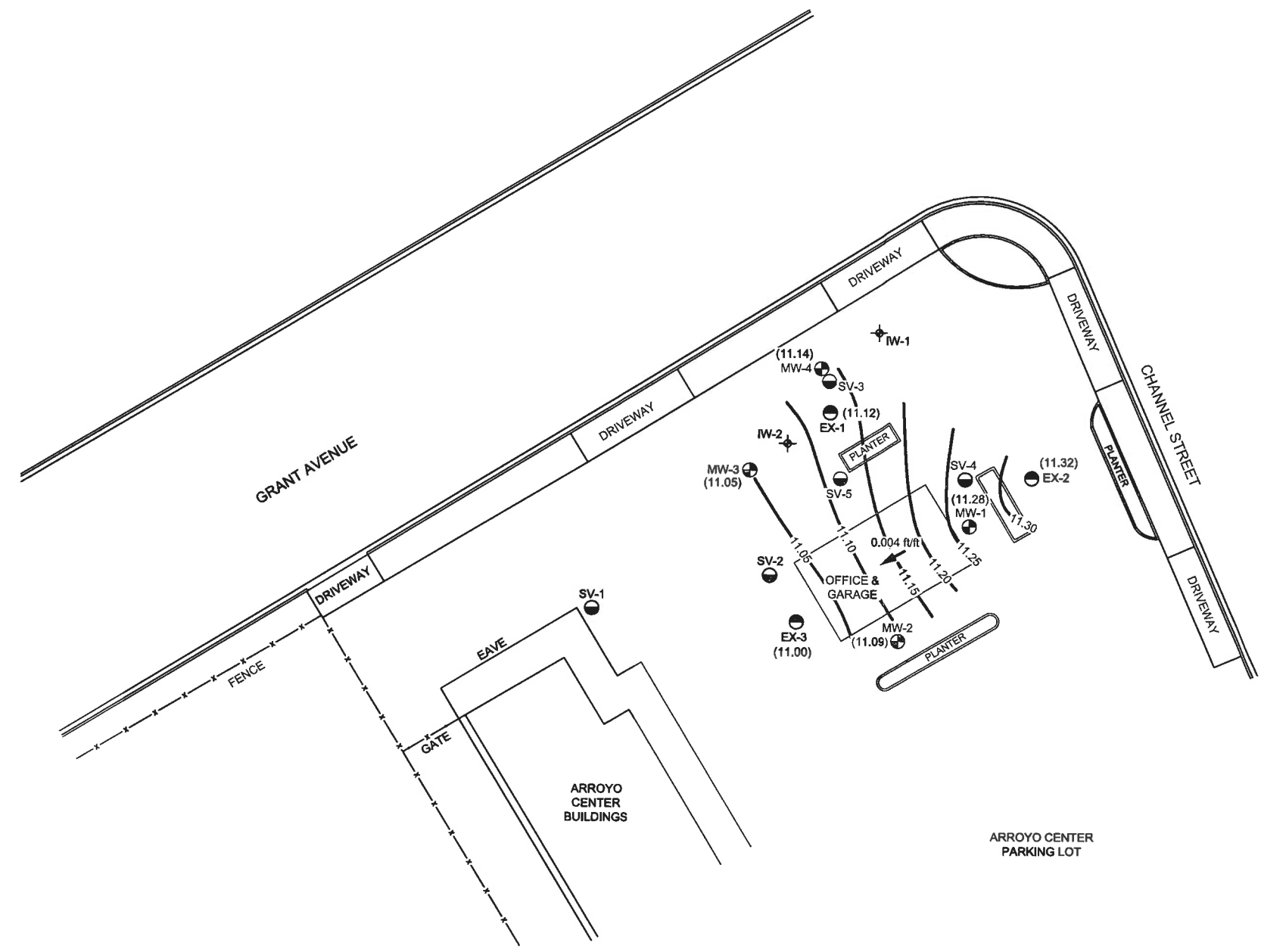
1

PROJECT NO.  
 2115-1436-01

SITE LOCATION MAP

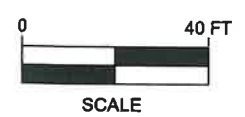
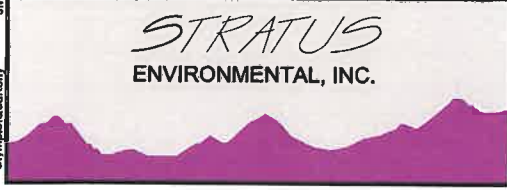


- LEGEND**
- MW-1 MONITORING WELL LOCATION
  - SV-1 VAPOR EXTRACTION WELL LOCATION
  - EX-1 EXTRACTION WELL LOCATION
  - IW-1 OZONE INJECTION WELL LOCATION
  - (11.28) GROUNDWATER ELEVATION IN FEET RELATIVE TO MSL
  - 11.20— GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MSL
  - ➔ INFERRED GROUNDWATER FLOW DIRECTION
- WELLS MEASURED ON 2/27/13  
MSL = MEAN SEA LEVEL



Olympic Quarterly Figures  
March 8, 2013  
REV  
JMP

BASED ON SURVEY PREPARED BY MORROW SURVEYING 6/15/11



FORMER OLYMPIC SERVICE STATION  
1436 GRANT AVENUE  
SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP  
1st QUARTER 2013

FIGURE  
**2**  
PROJECT NO.  
2115-1436-01



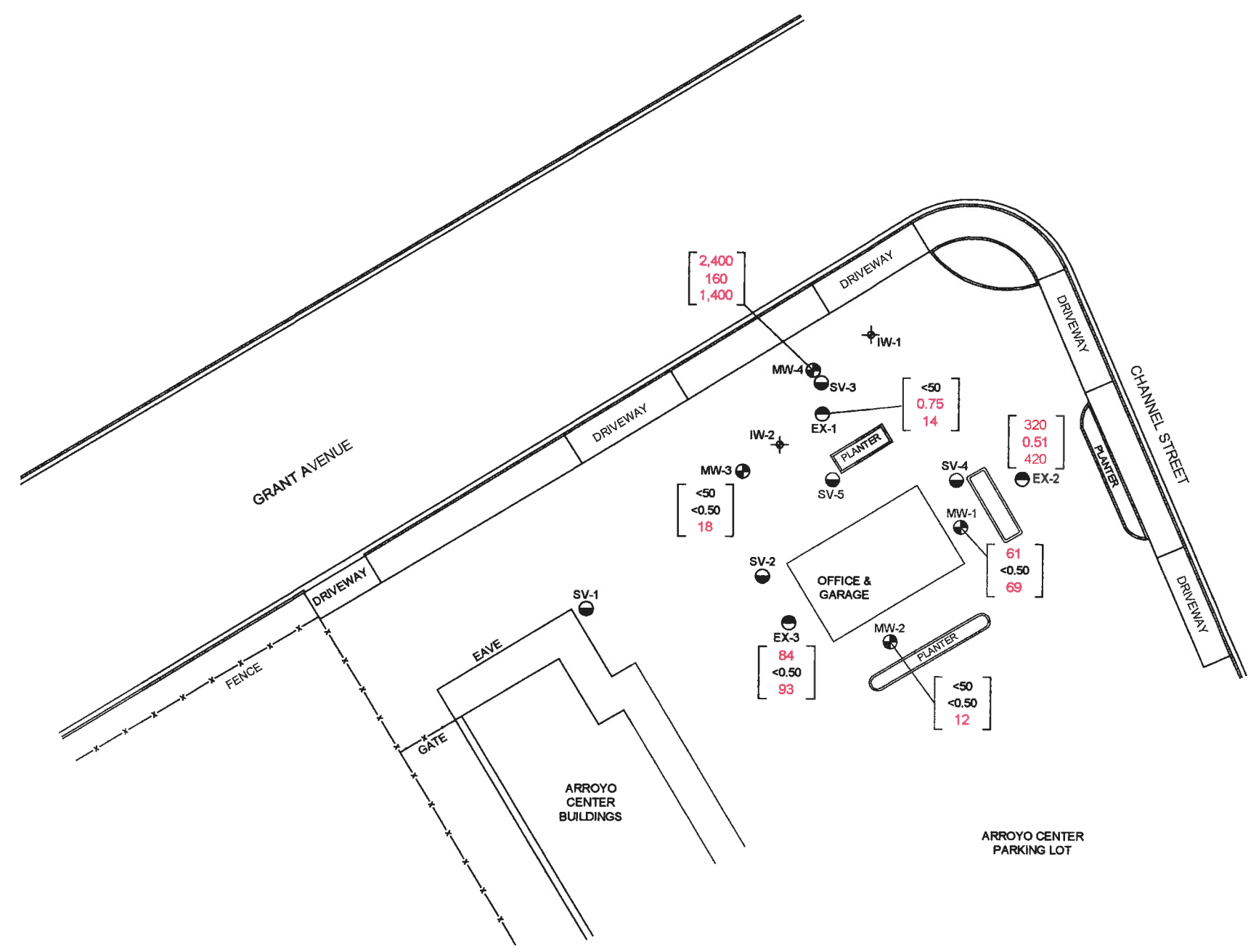


**LEGEND**

- MW-1 MONITORING WELL LOCATION
- SV-1 VAPOR EXTRACTION WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION

61 GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN  $\mu\text{g/L}$   
<0.50 BENZENE CONCENTRATION IN  $\mu\text{g/L}$   
69 METHYL TERTIARY BUTYL ETHER (MTBE) IN  $\mu\text{g/L}$

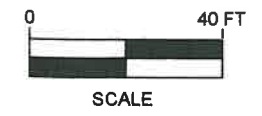
WELLS SAMPLED ON 2/27/13  
 GRO ANALYZED BY EPA METHOD SW8015B/SW8260B  
 MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B



Olympic Quarterly Figures  
 REV March 8, 2013  
 JMP  
 Olympic Quarterly

BASED ON SURVEY PREPARED BY MORROW SURVEYING 6/15/11

**STRATUS**  
ENVIRONMENTAL, INC.



FORMER OLYMPIC SERVICE STATION  
 1436 GRANT AVENUE  
 SAN LORENZO, CALIFORNIA  
 GROUNDWATER ANALYTICAL SUMMARY  
 1st QUARTER 2013

FIGURE  
**3**  
 PROJECT NO.  
 2115-1436-01

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





Site Address 1436 Grant Ave  
 City San Lorenzo  
 Sampled By: Carl Schulze  
 Signature Carl Schulze

Site Number Olympic Jaber  
 Project Number 2115-1436-01  
 Project PM S. Carter  
 DATE 02/27/13

Well ID MW-3					Well ID MW-4				
Purge start time		Odor Y <input checked="" type="radio"/> N			Purge start time		Odor <input checked="" type="radio"/> N		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time 0708	17.2	7.63	825 $\mu$	0	time 0740	14.9	7.48	765 $\mu$	0
time 0712	18.8	7.61	859	2	time 0733	15.7	7.38	740	2.5
time 0715	18.8	7.62	871	4	time 0842	14.6	7.72	734	4.5 dry
time 0718	17.9	7.74	877	6	time				
purge stop time DO: 3.01		ORP 94			purge stop time DO: 2.78		ORP 68		
Well ID EX-2					Well ID EX-1				
Purge start time		Odor <input checked="" type="radio"/> N			Purge start time		Odor <input checked="" type="radio"/> N		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time 0810	16.6	7.95	776 $\mu$	0	time 0900	16.8	7.80	804 $\mu$	0
time 0815	17.0	7.61	797	8	time 0905	18.4	7.66	812	9
time 0818	16.5	7.67	796	16	time 0909	18.6	7.70	826	18
time 0825	16.8	7.58	807	25	time 0925	17.8	8.08	837	26
purge stop time DO: 1.97		ORP 60			purge stop time DO: 1.97		ORP 46		
Well ID MW-1					Well ID MW-2				
Purge start time		Odor Y <input checked="" type="radio"/> N			Purge start time		Odor Y <input checked="" type="radio"/> N		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time 0942	17.7	7.83	836 $\mu$	0	time 1011	18.0	7.69	839 $\mu$	0
time 0945	19.1	7.62	835	2	time 1015	19.0	7.58	837	2
time 0950	19.2	7.58	838	5	time 1018	19.2	7.58	838	4
time 0954	18.8	7.82	835	8.5	time 1021	18.9	7.76	837	6
purge stop time DO: 1.62		ORP 30			purge stop time DO: 1.66		ORP 33		
Well ID EX-3					Well ID				
Purge start time		Odor Y N			Purge start time		Odor Y N		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time 1057	19.5	7.78	846 $\mu$	0	time				
time 1059	19.6	7.63	847	9	time				
time 1103	19.6	7.59	851	18	time				
time 1108	19.7	7.53	844	27	time				
purge stop time DO: 1.84		ORP 33			purge stop time		ORP		

SC

## **APPENDIX B**

### **SAMPLING AND ANALYSES PROCEDURES**



## **SAMPLING AND ANALYSIS PROCEDURES**

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The sampling and analysis 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® 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® sheeting and plastic caps. The sample is then placed in a Ziploc® 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: Steve Carter  
Phone: (530) 676-6008  
Fax: (530) 676-6005  
Date Received : 02/28/13

Job: 2115-1436-01/Olympic Station

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 :	MW-1				
Lab ID :	STR13022843-01A	TPH-P (GRO)	61	50 µg/L	03/04/13
Date Sampled	02/27/13 09:54	Methyl tert-butyl ether (MTBE)	69	0.50 µg/L	03/04/13
		Benzene	ND	0.50 µg/L	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13
Client ID :	MW-2				
Lab ID :	STR13022843-02A	TPH-P (GRO)	ND	50 µg/L	03/04/13
Date Sampled	02/27/13 10:21	Methyl tert-butyl ether (MTBE)	12	0.50 µg/L	03/04/13
		Benzene	ND	0.50 µg/L	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13
Client ID :	MW-3				
Lab ID :	STR13022843-03A	TPH-P (GRO)	ND	50 µg/L	03/04/13
Date Sampled	02/27/13 07:18	Methyl tert-butyl ether (MTBE)	18	0.50 µg/L	03/04/13
		Benzene	ND	0.50 µg/L	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13
Client ID :	MW-4				
Lab ID :	STR13022843-04A	TPH-P (GRO)	2,400	400 µg/L	03/04/13
Date Sampled	02/27/13 08:42	Methyl tert-butyl ether (MTBE)	1,400	2.0 µg/L	03/04/13
		Benzene	160	2.0 µg/L	03/04/13
		Toluene	2.5	2.0 µg/L	03/04/13
		Ethylbenzene	8.2	2.0 µg/L	03/04/13
		m,p-Xylene	ND	2.0 µg/L	03/04/13
		o-Xylene	ND	2.0 µg/L	03/04/13
Client ID :	EX-1				
Lab ID :	STR13022843-05A	TPH-P (GRO)	ND	50 µg/L	03/04/13
Date Sampled	02/27/13 09:25	Methyl tert-butyl ether (MTBE)	14	0.50 µg/L	03/04/13
		Benzene	0.75	0.50 µg/L	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13



# Alpha Analytical, Inc.

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

Client ID :	EX-2					
Lab ID :	STR13022843-06A	TPH-P (GRO)	320	100 µg/L	03/04/13	03/04/13
Date Sampled	02/27/13 08:25	Methyl tert-butyl ether (MTBE)	420	0.50 µg/L	03/04/13	03/04/13
		Benzene	0.51	0.50 µg/L	03/04/13	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13	03/04/13
Client ID :	EX-3					
Lab ID :	STR13022843-07A	TPH-P (GRO)	84	50 µg/L	03/04/13	03/04/13
Date Sampled	02/27/13 11:08	Methyl tert-butyl ether (MTBE)	93	0.50 µg/L	03/04/13	03/04/13
		Benzene	ND	0.50 µg/L	03/04/13	03/04/13
		Toluene	ND	0.50 µg/L	03/04/13	03/04/13
		Ethylbenzene	ND	0.50 µg/L	03/04/13	03/04/13
		m,p-Xylene	ND	0.50 µg/L	03/04/13	03/04/13
		o-Xylene	ND	0.50 µg/L	03/04/13	03/04/13

### 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.



*PS*  
 3/7/13

**Report Date**

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.





# Alpha Analytical, Inc.

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

## VOC Sample Preservation Report

Work Order: STR13022843

Job: 2115-1436-01/Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
13022843-01A	MW-1	Aqueous	2
13022843-02A	MW-2	Aqueous	2
13022843-03A	MW-3	Aqueous	2
13022843-04A	MW-4	Aqueous	2
13022843-05A	EX-1	Aqueous	2
13022843-06A	EX-2	Aqueous	2
13022843-07A	EX-3	Aqueous	2

3/7/13

Report Date

Page 1 of 1



# Alpha Analytical, Inc.

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

Date:  
07-Mar-13

## QC Summary Report

Work Order:  
13022843

### Method Blank

File ID: 13030404.D

Type MBLK Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0304B

Analysis Date: 03/04/2013 10:26

Sample ID: MBLK MS09W0304B

Units: µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 10:26

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.25		10		93	70	130			
Surr: Toluene-d8	11.2		10		112	70	130			
Surr: 4-Bromofluorobenzene	9.81		10		98	70	130			

### Laboratory Control Spike

File ID: 13030405.D

Type LCS Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0304B

Analysis Date: 03/04/2013 10:49

Sample ID: GLCS MS09W0304B

Units: µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 10:49

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	452	50	400		113	70	130			
Surr: 1,2-Dichloroethane-d4	9.09		10		91	70	130			
Surr: Toluene-d8	11.2		10		112	70	130			
Surr: 4-Bromofluorobenzene	9.92		10		99	70	130			

### Sample Matrix Spike

File ID: 13030417.D

Type MS Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0304B

Analysis Date: 03/04/2013 15:46

Sample ID: 13022843-01AGS

Units: µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 15:46

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2460	250	2000	60.58	120	54	143			
Surr: 1,2-Dichloroethane-d4	47.2		50		94	70	130			
Surr: Toluene-d8	54.4		50		109	70	130			
Surr: 4-Bromofluorobenzene	49		50		98	70	130			

### Sample Matrix Spike Duplicate

File ID: 13030418.D

Type MSD Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0304B

Analysis Date: 03/04/2013 16:10

Sample ID: 13022843-01AGSD

Units: µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 16:10

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2500	250	2000	60.58	122	54	143	2463	1.4(23)	
Surr: 1,2-Dichloroethane-d4	46.3		50		93	70	130			
Surr: Toluene-d8	54.9		50		110	70	130			
Surr: 4-Bromofluorobenzene	47.1		50		94	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:  
05-Mar-13

## QC Summary Report

Work Order:  
13022843

### Method Blank

File ID: 13030404.D

Type MBLK Test Code: EPA Method SW8260B

Batch ID: MS09W0304A

Analysis Date: 03/04/2013 10:26

Sample ID: MBLK MS09W0304A

Units : µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 10:26

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.25		10		93	70	130			
Surr: Toluene-d8	11.2		10		112	70	130			
Surr: 4-Bromofluorobenzene	9.81		10		98	70	130			

### Laboratory Control Spike

File ID: 13030402.D

Type LCS Test Code: EPA Method SW8260B

Batch ID: MS09W0304A

Analysis Date: 03/04/2013 09:40

Sample ID: LCS MS09W0304A

Units : µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 09:40

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	7.29	0.5	10		73	63	137			
Benzene	9.36	0.5	10		94	70	130			
Toluene	10.2	0.5	10		102	80	120			
Ethylbenzene	10.3	0.5	10		103	80	120			
m,p-Xylene	10.4	0.5	10		104	65	139			
o-Xylene	10.9	0.5	10		109	70	130			
Surr: 1,2-Dichloroethane-d4	9.58		10		96	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	8.46		10		85	70	130			

### Sample Matrix Spike

File ID: 13030415.D

Type MS Test Code: EPA Method SW8260B

Batch ID: MS09W0304A

Analysis Date: 03/04/2013 14:59

Sample ID: 13022843-01AMS

Units : µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 14:59

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	87.2	1.3	50	69.09	36	56	140			M2
Benzene	50.5	1.3	50	0	101	67	134			
Toluene	50.4	1.3	50	0	101	38	130			
Ethylbenzene	53	1.3	50	0	106	70	130			
m,p-Xylene	52.7	1.3	50	0	105	65	139			
o-Xylene	53	1.3	50	0	106	69	130			
Surr: 1,2-Dichloroethane-d4	50.7		50		101	70	130			
Surr: Toluene-d8	50.7		50		101	70	130			
Surr: 4-Bromofluorobenzene	41.8		50		84	70	130			

### Sample Matrix Spike Duplicate

File ID: 13030416.D

Type MSD Test Code: EPA Method SW8260B

Batch ID: MS09W0304A

Analysis Date: 03/04/2013 15:23

Sample ID: 13022843-01AMSD

Units : µg/L

Run ID: MSD\_09\_130304A

Prep Date: 03/04/2013 15:23

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	94.1	1.3	50	69.09	50	56	140	87.2	7.6(40)	M2
Benzene	50.8	1.3	50	0	102	67	134	50.45	0.6(21)	
Toluene	51.1	1.3	50	0	102	38	130	50.43	1.2(20)	
Ethylbenzene	51.9	1.3	50	0	104	70	130	52.98	2.1(20)	
m,p-Xylene	52.8	1.3	50	0	106	65	139	52.65	0.2(20)	
o-Xylene	53.5	1.3	50	0	107	69	130	52.99	0.9(20)	
Surr: 1,2-Dichloroethane-d4	50		50		100	70	130			
Surr: Toluene-d8	51.4		50		103	70	130			
Surr: 4-Bromofluorobenzene	42.1		50		84	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:**  
05-Mar-13

## QC Summary Report

**Work Order:**  
13022843

**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.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

# 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 : STR13022843**  
**Report Due By : 5:00 PM On : 07-Mar-13**

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

Report Attention	Phone Number	EMail Address
Steve Carter	(530) 676-6008 x	scarter@stratusinc.net

EDD Required : Yes

Sampled by : Carl Schulze

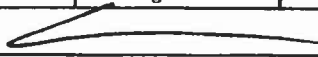
**PO :**  
 Client's COC # : 61314 Job : 2115-1436-01/Olympic Station

Cooler Temp	Samples Received	Date Printed
0 °C	28-Feb-13	28-Feb-13

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									
STR13022843-01A	MW-1	AQ	02/27/13 09:54	4	0	5	GAS-C	BTXE/M_C									
STR13022843-02A	MW-2	AQ	02/27/13 10:21	4	0	5	GAS-C	BTXE/M_C									
STR13022843-03A	MW-3	AQ	02/27/13 07:18	4	0	5	GAS-C	BTXE/M_C									
STR13022843-04A	MW-4	AQ	02/27/13 08:42	4	0	5	GAS-C	BTXE/M_C									
STR13022843-05A	EX-1	AQ	02/27/13 09:25	4	0	5	GAS-C	BTXE/M_C									
STR13022843-06A	EX-2	AQ	02/27/13 08:25	4	0	5	GAS-C	BTXE/M_C									
STR13022843-07A	EX-3	AQ	02/27/13 11:08	4	0	5	GAS-C	BTXE/M_C									

Comments: Security seals intact. Frozen ice.:

Signature	Print Name	Company	Date/Time
	Sarah Neri	Alpha Analytical, Inc.	2/28/13 10:35

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 Name Stratus Environmental  
 Attn: \_\_\_\_\_  
 Address 3330 Cameron Park Dr.  
 City, State, Zip Cameron Park CA 95682  
 Phone Number \_\_\_\_\_ Fax \_\_\_\_\_



**Samples Collected From Which State?**

AZ \_\_\_\_\_ CA  NV \_\_\_\_\_ WA \_\_\_\_\_ DOD Site \_\_\_\_\_  
 ID \_\_\_\_\_ OR \_\_\_\_\_ OTHER \_\_\_\_\_ Page # 1 of 1

Consultant / Client Name <u>Olympic Station</u>			Job # <u>2115 - 1436 - 01</u>		Job Name		Analyses Required					Data Validation Level: III or IV	
Address <u>1436 Grant Avenue</u>			Name: <u>Steve Carter</u>		Report Attention / Project Manager		GRO 8015M BTEX 8260B MTBE					EDD / EDF? <input checked="" type="checkbox"/> NO _____	
City, State, Zip <u>San Lorenzo CA</u>			Email: <u>scarter@stratusinc.net</u>		Phone: _____ Mobile: _____							Global ID # <u>T0600102256</u>	
Time Sampled	Date Sampled	Matrix* See Key Below	P.O. #	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**					
0954	02/27	AQ		<u>STR13022843-01A</u>	<u>MW-1</u>	<u>Std</u>	<u>n</u>	<u>4V</u>	<u>x</u>	<u>x</u>	<u>x</u>		
1021	02/27	AQ		<u>FOR</u>	<u>MW-2</u>								
0718	02/27	AQ		<u>02A</u>	<u>MW-3</u>								
0842	02/27	AQ		<u>04A</u>	<u>MW-4</u>								
0925	02/27	AQ		<u>05A</u>	<u>EX-1</u>								
0825	02/27	AQ		<u>06A</u>	<u>EX-2</u>								
1108	02/27	AQ		<u>07A</u>	<u>EX-3</u>								
<b>USE ONLY</b>													

**ADDITIONAL INSTRUCTIONS:**

I, (field sampler), attest to the validity and authenticity of this sample. 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. Sampled By: Carl Schulze

Relinquished by: (Signature/Affiliation) <u>[Signature]</u>	Received by: (Signature/Affiliation) <u>E. P. Luciano</u>	Date: <u>02/27/13</u>	Time: <u>14:41</u>
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation) <u>[Signature]</u>	Date: <u>2/28/13</u>	Time: <u>1026</u>
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other  
 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.

**APPENDIX D**

**GEOTRACKER ELECTRONIC SUBMITTAL  
CONFIRMATIONS**

---

STATE WATER RESOURCES CONTROL BOARD  
**GEOTRACKER ESI**

UPLOADING A GEO\_WELL FILE

**SUCCESS**

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

<b><u>Submission Type:</u></b>	GEO_WELL
<b><u>Report Title:</u></b>	1Q13 QMR Geowell 2-27-13
<b><u>Facility Global ID:</u></b>	T0600102256
<b><u>Facility Name:</u></b>	OLYMPIC STATION
<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>Submission Date/Time:</u></b>	3/8/2013 1:39:14 PM
<b><u>Confirmation Number:</u></b>	<b>7242490649</b>

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STATE WATER RESOURCES CONTROL BOARD  
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<b><u>Report Title:</u></b>	Analytical 1Q13 QMR
<b><u>Report Type:</u></b>	Monitoring Report - Quarterly
<b><u>Facility Global ID:</u></b>	T0600102256
<b><u>Facility Name:</u></b>	OLYMPIC STATION
<b><u>File Name:</u></b>	13022843_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
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