RECEIVED
By Alameda County Environmental Health 10:25 am, Feb 17, 2016

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

STRATUS
ENVIRONMENTAL, INC.

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

February 10, 2016
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: **Remediation Status Report and Results of Fourth Quarter 2015 Groundwater Monitoring and Sampling Event**
Former Olympic Station
1436 Grant Avenue
San Lorenzo, California
ACEHD Case No. RO0000373, GeoTracker No. T0600102256

Dear Mr. Detterman:

On behalf of Mr. Philip Jaber and the George and Frida Jaber 1989 Family Trust, Stratus Environmental, Inc. (Stratus) is submitting the attached report, for the Former Olympic Station located at 1436 Grant Avenue in San Lorenzo, California (the site, see Figures 1 and 2). If you have any questions or comments concerning this report, please contact Gowri Kowtha at gkowtha@stratusinc.net or (530) 676-6001 or Scott Bittinger at (530) 676-2062.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

REGISTERED GEOLOGIST
Scott G Bittinger
No. 7477

Scott G. Bittinger, P.G.
Project Geologist

Gowri S. Kowtha, P.E.
Project Manager

Attachment: Remediation Status Report and Results for Fourth Quarter 2015 Groundwater Monitoring and Sampling Event

cc: Mr. Philip Jaber

FORMER OLYMPIC STATION
REMEDIATION STATUS REPORT AND RESULTS OF FOURTH QUARTER 2015 GROUNDWATER MONITORING AND SAMPLING EVENT

Facility Address:	1436 Grant Avenue, San Lorenzo, CA
Consulting Co. / Contact Person:	Stratus Environmental, Inc. / Gowri Kowtha, P.E.
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 PERIOD (Fourth Quarter 2015):

1. On October 20, 2015, Stratus performed the fourth quarter 2015 groundwater monitoring and sampling event, which consisted of sampling the site's monitoring and extraction wells.

2. Stratus began implementing *Work Plan for Additional Site Assessment and Expanded Water Supply Well Survey*. During the fourth quarter 2015, these activities included installing, developing, and sampling two additional groundwater monitoring wells (MW-7A and MW-8A), installing two soil vapor probe wells (SV-6 and SV-7), and conducting a door-to-door reconnaissance in order to locate any previously undocumented wells located in close proximity (downgradient) to the site.

2. Stratus continued use of dual phase extraction (DPE) remediation at the property, on an intermittent (pulsed) basis, as has been requested by ACEHD. Operation and maintenance (O&M) visits were conducted on October 6, November 17, and December 2, 17, and 29, 2015. The system was temporarily shut down on December 29, 2015, for the upcoming scheduled soil gas sampling and first quarter 2016 groundwater monitoring event.

WORK PROPOSED FOR NEXT PERIOD (First Quarter 2016):

1. Stratus will continue to implement *Work Plan for Additional Site Assessment and Expanded Water Supply Well Survey*. Remaining activities include collecting soil gas samples from SV-1 through SV-7. Frequent rainfall in December 2015 and January 2016 has delayed collection of these samples. Once the samples have been collected and available data compiled, a report will be prepared and submitted for agency review.

2. Stratus will conduct the first quarter 2016 groundwater monitoring and sampling event.

3. Operation of the DPE system is expected to be discontinued, unless results of soil gas sampling suggest that additional future DPE is needed (discussed further below).

Current Phase of Project:	CAP/REM (Start-up)
Frequency of Groundwater Monitoring:	All Wells = Semi-Annual (second and fourth calendar quarters); Wells MW-5A and MW-6A also gauged during the first and third calendar quarters to assess purge volumes for sampling

Frequency of Groundwater Monitoring and Sampling:	All Wells (except MW-5A and MW-6A) = Semi-Annual (second and fourth calendar quarters); Wells MW-5A and MW-6A sampled quarterly per 9/17/14 directive from ACEHD
Groundwater Sampling Date:	October 20, 2015 (newly installed wells MW-7A and MW-8A sampled on December 17, 2015)
Is Free Product (FP) Present on Site:	No
Approximate Depth to Groundwater:	7.83 to 8.53 feet below top of well casing
Groundwater Flow Direction:	West-Southwest
Groundwater Gradient:	0.003 ft/ft

DPE SYSTEM QUARTERLY OPERATION AND PERFORMANCE:

Equipment Inventory:	350 cubic feet per minute (cfm) thermal oxidizer, and two 1,000 pound liquid-phase granular activated carbon vessels, connected in-series.
Extraction Wells:	EX-1 through EX-7, MW-5A, MW-6A
Operating Mode:	Thermal
BAAQMD Permit Nos.:	Plant No. 21776
Influent Air: GRO End of Period (lab):	51 milligrams per cubic meter (mg/m^3) (12/2/15)
Influent Air: Benzene End of Period (lab):	0.20 mg/m^3 (12/2/15)
Influent Air: MTBE End of Period (lab):	0.20 mg/m^3 (12/2/15)
Flow Rate End of Period:	49.1 acfm (12/17/15)
Applied Vacuum End of Period:	20 inches of water column ("WC) (12/17/15)
GRO Removed this Period in Soil Vapor:	28.0 lbs (between 9/1/15 and 12/29/15)
Cumulative GRO Removed in Soil Vapor:	982.9 lbs (between 7/21/14 and 12/29/15)
Influent Groundwater: GRO End of Period (lab):	<100 µg/L (12/2/15)
Influent Groundwater: Benzene End of Period (lab):	0.85 µg/L (12/2/15)
Influent Groundwater: MTBE End of Period (lab):	6.2 µg/L (12/2/15)
Average Groundwater Extraction Rate :	2.9 gpm (between 9/1/15 and 12/29/15)
GRO Removed this Period in Groundwater:	0.12 lbs (between 9/1/15 and 12/29/15)
Cumulative GRO Removed in Groundwater:	0.95 lbs (between 7/21/14 and 12/29/15)
Groundwater Removed this Period:	251,820 gallons (between 9/1/15 and 12/29/15)
Cumulative Groundwater Removed:	1,491,070 gallons (between 7/21/14 and 12/29/15)
Operating Hours This Period:	706 hours (between 9/22/15 and 12/29/15)
Number of Shutdowns:	5

GROUNDWATER MONITORING AND SAMPLING EVENT:

An electronic water level sounder was used to gauge depth to water levels in the site's monitoring and extraction wells. Following gauging, purge groundwater samples were collected from the monitoring and extraction wells. Groundwater samples collected from the wells were analyzed at a state-certified analytical laboratory for gasoline range organics (GRO) by EPA Method SW8015B/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. Field data sheets documenting measurements and observations obtained by Stratus personnel, a description of sampling and analyses procedures utilized, and laboratory analytical reports with chain-of-custody records are included in Appendix A, B, and C, respectively.

Depth to groundwater ranged from 7.83 to 8.53 feet below the top of the well casing on October 20, 2015. These depth to groundwater measurements have been corrected to elevation mean sea level and used to prepare a groundwater elevation contour map (Figure 3). West-southwest groundwater flow was observed on October 20, 2015, generally consistent with the findings of historical work.

The highest concentrations of fuel contaminants in groundwater have recently detected in monitoring wells installed to a depth of 10 to 12 feet below ground surface (bgs), approximately 3 to 5 feet below the current groundwater table at the site. Lower concentrations of fuel contaminants are consistently reported in samples collected from the other monitoring/remediation wells, which have been installed to depths ranging from approximately 20 to 26 feet bgs. Figures 4 and 5 present a summary of GRO, benzene, and MTBE concentrations in well samples collected from the shallow monitoring wells (10-12 feet in depth) and the deeper wells (20 to 26 feet in depth), respectively.

GRO, benzene, and MTBE were detected at concentrations of 1,300 micrograms per liter (µg/L), 310 µg/L, and 13 µg/L, respectively in the MW-5A sample, and 5,700 µg/L, 1,300 µg/L, and 110 µg/L, respectively in the MW-6A sample. GRO and MTBE were also detected in the samples collected from newly installed wells MW-7A (350 µg/L and 37 µg/L, respectively) and MW-8A (210 µg/L and 0.63 µg/L, respectively).

MTBE was detected in all of the deeper-screened monitoring and remediation wells, with the highest concentrations reported in wells EX-6 (210 µg/L) and MW-1 (450 µg/L). GRO was detected in 3 of the deeper well samples, at concentrations ranging from 67 µg/L to 330 µg/L. Benzene was detected in 2 of the deeper well samples, at a maximum concentration of 10 µg/L (EX-6).

REMEDIAL ACTION SUMMARY:

The DPE system consists of a portable 350 cubic feet per minute (cfm) thermal oxidizer owned by CBA Equipment, LLC and permitted to operate by the Bay Area Air Quality Management District (BAAQMD). Soil vapors and groundwater are extracted from the subsurface and then conveyed to the remediation system through above ground piping protected by traffic rated speed bumps. Initially wells EX-1 through EX-7 were connected to the remediation system through a manifold; the system has since been expanded to accommodate wells MW-5A and MW-6A (discussed below). During remediation, to optimize the system and maximize the effectiveness of removing petroleum hydrocarbons from the subsurface, select wells have been rotated intermittingly to extract both groundwater and soil vapors. In-well drop tubes (stingers) are used to extract soil vapors and groundwater from each well. Soil vapors are abated on-site through the thermal oxidizer and discharged to the atmosphere. Groundwater is extracted from the subsurface and treated on-site using two 1,000-pound granular activated carbon (GAC) vessels, and then discharged to the sanitary sewer under an approved discharge permit (Oro Loma Sanitary Sewer District). The remediation system is equipped to measure the extraction rates (soil vapor and groundwater flow rates). A flow totalizer is installed to record the volume of treated water extracted and discharged to the sanitary sewer. Influent and effluent soil vapor concentrations are also monitored using a photo-ionization

detector (PID). The approximate locations of the remedial equipment, above ground conveyance piping, and sewer discharge point are depicted on Figure 2. A process flow diagram of the remediation equipment is presented in Figure 6.

During the fourth quarter 2015, Stratus technicians conducted five O&M site visits on October 6, November 17, and December 2, 17, and 29, 2015. Stratus personnel modified the system on October 6 and November 17, extracting from select wells EX-1, EX-6, MW-5A and MW-6A, in an attempt to further reduce the contamination in groundwater and shallow soil vapor in this area of the site. During this period (September 22 through December 29, 2015), the remediation system operated for approximately 706 hours. Influent soil vapor extraction flow rates were observed between 49.1 and 83.4 cubic feet per minute (cfm) under an applied vacuum ranging between 12 to 20 inches of mercury ("Hg). Field data sheets documenting measurements and observations collected during each visit are included in Appendix A. Tables 3 through 9 provide a summary of data pertaining to the use of the DPE system.

Soil vapor samples were collected from the system in laboratory-supplied 1-liter Tedlar bags, placed in protective containers, and stored at ambient air temperature. Groundwater samples were collected in laboratory supplied glass VOAs and stored in ice-chilled coolers. Strict chain-of-custody procedures were followed from the time samples were collected, until the time samples were relinquished to the state-certified analytical laboratory. Soil vapor and groundwater samples were analyzed by Alpha Analytical, Inc (ELAP No. 2019). Both soil vapor and groundwater samples were analyzed for GRO using USEPA Method SW8015B/SW8260B, and for BTEX and MTBE using USEPA Method SW8260B. Analytical data for these samples is included in Appendix C.

During the fourth quarter 2015, influent GRO and benzene concentrations in the vapor phase ranged between non-detect (less than 20 mg/m^3) and 410 mg/m^3, and less than 0.20 and 0.33 mg/m^3, respectively. Influent MTBE concentrations were observed to range from less than 0.20 to 0.22 mg/m^3. No petroleum hydrocarbons or MTBE were detected in the effluent air samples; therefore, the remediation system is operating in compliance with the BAAQMD permit for the equipment. Using the available analytical data and information collected during O&M site visits (air flow rates, hour meter readings, etc.), Stratus estimates that approximately 28.0 pounds of GRO were removed from the subsurface, in the vapor phase, between September 1 and December 29, 2015, and a total of 982.9 pounds of GRO has been removed from the subsurface, in the vapor phase, since startup July 21, 2014, through December 29, 2015 (see Table 6).

Between September 1 and December 29, 2015, approximately 251,820 gallons of groundwater were extracted from the subsurface, treated on-site, and discharged to the sanitary sewer system. Based on flow totalizer measurements, groundwater is being extracted at a rate of approximately 2.9 gallons per minute (gpm; see Table 9). Influent concentrations of fuel contaminants in groundwater are relatively low, and therefore, contaminant mass removal in the dissolved phase is low (see Tables 7 and 9). No petroleum hydrocarbons or MTBE were detected in effluent groundwater, and the GAC groundwater treatment system appears to be operating in compliance with Oro Loma Sanitary Sewer District discharge requirements.

DISCUSSION:

Figures 7 through12 provide data that illustrate GRO, benzene, and MTBE concentrations in groundwater over time. In general, the data shows declines in contaminant concentrations over time, with enhanced declines in contaminant concentrations in groundwater following initiation of DPE. Figures 13 and 14 illustrate influent concentrations of GRO, benzene, and groundwater in soil vapor and groundwater, respectively, over time during operation of the DPE system. In general, the data show declines in influent concentrations over time, although periodic fluctuations are observed, typically when select wells are added or removed from the active extraction well network. During much of 2015, contaminant mass extraction rates were relatively low; however, despite this condition, concentrations of fuel contaminants in groundwater appear to be declining due to DPE. During the first quarter 2016, Stratus will conduct a soil

gas survey at the site and issue a report that includes the findings of this work. Data from this soil gas sampling event, will, in part, be used to evaluate whether continued use of DPE at the site is justified.

LIMITATIONS:

This document was prepared in general accordance with accepted standards of care that existed at the time this work was performed. No other warranty, expressed or implied, is made. Conclusions and recommendations are based on field observations and data obtained from this work and previous investigations. It should be recognized that definition and evaluation of geologic conditions is a difficult and somewhat inexact science. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the subsurface conditions present. More extensive studies may be performed to reduce uncertainties. This document is solely for the use and information of our client unless otherwise noted.

ATTACHMENTS:

- Table 1 Well Construction Detail Summary
- Table 2 Groundwater Elevation and Analytical Summary
- Table 3 Operational Uptime and Flow Summary – DPE Remediation Event
- Table 4 Induced Vacuum and Depth to Water Measurement Summary – DPE Remediation Event
- Table 5 SVE Component – Analytical Results and Flow Rates – DPE Remediation Event
- Table 6 SVE Component – Extraction and Emission Rates – DPE Remediation Event
- Table 7 Groundwater Extraction Component – Groundwater Analytical Data Summary - DPE Remediation Event (Petroleum Hydrocarbons and MTBE)
- Table 8 Groundwater Extraction Component – Groundwater Analytical Data Summary - DPE Remediation Event (Non-Fuel Contaminant Analyses Required for Sewer Discharge Permit)
- Table 9 Groundwater Extraction Component – Operational Performance and Mass Removal Summary - DPE Remediation Event
- Figure 1 Site Location Map
- Figure 2 Site Plan
- Figure 3 Groundwater Elevation Contour Map, Fourth Quarter 2015
- Figure 4 Groundwater Analytical Summary, 10-12' Depth Monitoring Wells, Fourth Quarter 2015
- Figure 5 Groundwater Analytical Summary, 20-26' Depth Monitoring Wells, Fourth Quarter 2015
- Figure 6 Process Flow Diagram
- Figure 7 Wells MW-1, MW-2, MW-3, GRO Concentration vs. Time
- Figure 8 Wells MW-1, MW-2, MW-3, Benzene Concentration vs. Time
- Figure 9 Wells MW-1, MW-2, MW-3, MTBE Concentration vs. Time
- Figure 10 Well MW-4, Concentration vs. Time
- Figure 11 Well MW-5A, Concentration vs. Time
- Figure 12 Well MW-6A, Concentration vs. Time
- Figure 13 SVE Component: Influent Concentration vs. Time
- Figure 14 Groundwater Extraction Component: Influent Concentration vs. Time
- 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 DETAIL SUMMARY
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

Boring/Well I.D.	Date	Boring Depth (feet)	Boring Diameter (inches)	Well Diameter (inches)	Screen Interval (feet bgs)	Slot Size (inches)	Drilling Method	Consultant
Groundwater Monitoring Wells								
MW-1	09/24/99	26.5	8	2	5 - 26.5	0.020	HSA	Aqua Science Engineers
MW-2	09/24/99	20	8	2	5-20	0.020	HSA	Aqua Science Engineers
MW-3	09/24/99	21.5	8	2	5-21	0.020	HSA	Aqua Science Engineers
MW-4	02/09/10	10	10	4	5-10	0.020	Air Knife	Conestoga-Rovers & Associates
MW-5A	05/28/14	10	8	2	5-10	0.020	HSA	Stratus Environmental
MW-5B	05/28/14	20	8	2	15-20	0.020	HSA	Stratus Environmental
MW-6A	05/28/14	10	8	2	5-10	0.020	HSA	Stratus Environmental
MW-6B	05/28/14	20	8	2	15-20	0.020	HSA	Stratus Environmental
MW-7A	12/04/15	12	8	2	4-12	0.020	HSA	Stratus Environmental
MW-8A	12/04/15	12	8	2	4-12	0.020	HSA	Stratus Environmental
Extraction Wells								
EX-1	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-2	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-3	05/19/11	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-4	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-5	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-6	02/21/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
EX-7	02/20/14	20	10	4	5-20	0.020	HSA	Stratus Environmental
Injection Wells								
IW-1	05/20/11	11.5	8	0.75	9.5-11.5	microporous	HSA	Stratus Environmental
IW-2	05/20/11	16	8	0.75	14-16	microporous	HSA	Stratus Environmental

Notes:
HSA = Hollow Stem Auger
Data regarding the construction of wells MW-1 through MW-4 obtained from groundwater monitoring reports prepared by Conestoga-Rovers & Associates

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)	Ethyl-benzene (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	<0.5	<0.5	<0.5	<0.5	39	--	--	--	--	--	--	--
	05/18/10	7.09		8.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/05/10	7.65		8.06	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	350	--	--	--	--	--	--	--
	02/04/11	7.20		8.51	--	--	--	<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	--	--	--	--	--	--	--
	08/26/13	8.05		10.55	--	--	--	470	<0.50	<0.50	<0.50	<0.50	590	--	--	--	--	--	--	--
	06/19/14	7.86		10.74	--	--	--	190	<0.50	<0.50	<0.50	<0.50	230	--	--	--	--	--	--	--
	11/25/14	7.45		11.15	--	--	--	51	<0.50	<0.50	<0.50	<0.50	100	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	7.24		11.36	--	--	--	68	<0.50	<0.50	<0.50	<0.50	120	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.53		10.07	--	--	--	330	<0.50	<0.50	<0.50	<0.50	450	--	--	--	--	--	--	--

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)	Ethyl-benzene (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	--	--	--	--	--	--	--
	08/26/13	7.61		10.39	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	6.2	--	--	--	--	--	--	--
	06/19/14	7.73		10.27	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	13	--	--	--	--	--	--	--
	11/25/14	7.03		10.97	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	0.67	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.83		11.17	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	2.1	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.00		10.00	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	1.0	--	--	--	--	--	--	--

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)	Ethyl-benzene (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	--	--	--	--	--	--	--
	08/26/13	7.72		10.23	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	34	--	--	--	--	--	--	--
	06/19/14	7.50		10.45	--	--	--	<50	2.3	<0.50	<0.50	<0.50	16	--	--	--	--	--	--	--
	11/25/14	7.11		10.84	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	20	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.85		11.10	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	43	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.11		9.84	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	39	--	--	--	--	--	--	--

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)	Ethyl-benzene (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-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	--	--	--	--	--	--	--
	08/26/13	7.69		10.30	--	--	--	4,900	220	<2.5[2]	5.7	<2.5[2]	2,400	--	--	--	--	--	--	--
	06/19/14	7.48		10.51	--	--	--	6,000	260	<4.0[2]	8.8	<4.0[2]	1,600	--	--	--	--	--	--	--
	11/25/14	7.00		10.99	--	--	--	2,900	72	<5.0[2]	<5.0[2]	<5.0[2]	4,500	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	7.00		10.99	--	--	--	460	33	<1.0[4]	<1.0[4]	<1.0[4]	730	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.07		9.92	--	--	--	1,100	14	<2.0[2]	2.0	<2.0[2]	1,400	--	--	--	--	--	--	--
MW-5A	06/19/14	7.53	17.94	10.41	--	--	--	21,000	2,000	<25[2]	1,400	650	<25[2]	--	--	--	--	--	--	--
	09/19/14	8.61		9.33				18,000	1,900	11	1,200	839.9	<5[2]	--	--	--	--	--	--	--
	11/25/14	7.47		10.47	--	--	--	14,000	1,500	<10[2]	1,100	570	<10[2]	--	--	--	--	--	--	--
	02/02/15	6.90		11.04	--	--	--	10,000	970	<20[2]	480	180	<20[2]	--	--	--	--	--	--	--
	04/14/15	6.81		11.13	--	--	--	12,000	1,600	5.2	940	270	7.0	--	--	--	--	--	--	--
	07/14/15	7.85		10.09	--	--	--	2,800	390	<2.0[2]	130	40	13	--	--	--	--	--	--	--
	10/20/15	8.21		9.73	--	--	--	1,300	310	<1.5[2]	55	4.5	13	--	--	--	--	--	--	--
MW-5B	06/19/14	7.52	17.92	10.40	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	32	--	--	--	--	--	--	--
	11/25/14	7.18		10.74	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	10	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.88		11.04	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	2.1	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.10		9.82	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	1.7	--	--	--	--	--	--	--

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)	Ethyl-benzene (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-6A	06/19/14	7.66	18.05	10.39	--	--	--	43,000	3,300	<50[2]	2,000	3,100	77	--	--	--	--	--	--	--
	09/19/14	8.80		9.25				28,000	3,400	19	2,000	1,900	45	--	--	--	--	--	--	--
	11/25/14	7.56		10.49	--	--	--	23,000	2,800	16	1,500	1,730	160	--	--	--	--	--	--	--
	02/02/15	7.13		10.92	--	--	--	14,000	1,100	<20[2]	490	350	35	--	--	--	--	--	--	--
	04/14/15	6.98		11.07	--	--	--	12,000	2,100	<10[2]	880	190	61	--	--	--	--	--	--	--
	07/14/15	8.00		10.05	--	--	--	4,400	930	<5.0[2]	200	263	99	--	--	--	--	--	--	--
	10/20/15	8.34		9.71	--	--	--	5,700	1,300	<10[2]	170	380	110	--	--	--	--	--	--	--
MW-6B	06/19/14	7.32	17.69	10.37	--	--	--	86	<0.50	<0.50	<0.50	<0.50	82	--	--	--	--	--	--	--
	11/25/14	6.98		10.71	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	51	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.68		11.01	--	--	--	85	<0.50	<0.50	<0.50	<0.50	150	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	7.91		9.78	--	--	--	<100	<0.50	<0.50	<0.50	<0.50	40	--	--	--	--	--	--	--
MW-7A	12/17/15	8.04	17.65	9.61	--	--	--	350	<0.50	<0.50	1.2	<0.50	37	--	--	--	--	--	--	--
MW-8A	12/17/15	7.25	18.08	10.83	--	--	--	210	<0.50	<0.50	<0.50	<0.50	0.63	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
	08/26/13	NM		NM	Well Covered by Car - No Sample Collected															
	06/19/14	7.59		10.55	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	19	--	--	--	--	--	--	--
	11/25/14	6.95		11.19	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	15	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	NM		NM	--	--	--	64	1.5	<0.50	<0.50	<0.50	49	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.25		9.89	--	--	--	67	4.3	<0.50	1.2	<0.50	36	--	--	--	--	--	--	--

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)	Ethyl-benzene (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-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	--	--	--	--	--	--	--
	08/26/13	7.56		10.58	--	--	--	270	<0.50	<0.50	<0.50	<0.50	340	--	--	--	--	--	--	--
	06/19/14	7.37		10.77	--	--	--	150	<0.50	<0.50	<0.50	<0.50	170	--	--	--	--	--	--	--
	11/25/14	7.02		11.12	--	--	--	72	<0.50	<0.50	<0.50	<0.50	130	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.77		11.37	--	--	--	70	<0.50	<0.50	<0.50	<0.50	120	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.03		10.11	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	37	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
	08/26/13	7.41		10.22	--	--	--	120	<0.50	<0.50	<0.50	<0.50	120	--	--	--	--	--	--	--
	06/19/14	7.20		10.43	--	--	--	96	<0.50	<0.50	<0.50	<0.50	110	--	--	--	--	--	--	--
	11/25/14	6.85		10.78	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	6.9	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.57		11.06	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	13	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	7.83		9.80	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	1.7	--	--	--	--	--	--	--

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)	Ethyl-benzene (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-4	06/19/14	7.64	18.30	10.66	--	--	--	210	9.5	<0.50	0.55	0.74	10	--	--	--	--	--	--	--
	11/25/14	7.21		11.09	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	8.5	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	7.00		11.30	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	1.1	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.29		10.01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	4.2	--	--	--	--	--	--	--
EX-5	06/19/14	7.84	18.41	10.57	--	--	--	110	6.0	<0.50	<0.50	<0.50	14	--	--	--	--	--	--	--
	11/25/14	7.42		10.99	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	40	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	NM		NM	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	15	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.49		9.92	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	8.9	--	--	--	--	--	--	--
EX-6	06/19/14	7.81	18.29	10.48	--	--	--	190	25	<0.50	5.9	<0.50	18	--	--	--	--	--	--	--
	11/25/14	7.44		10.85	--	--	--	250	36	<0.50	7.1	<0.50	160	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	7.17		11.12	--	--	--	180	25	<0.50	3.1	<0.50	110	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.45		9.84	--	--	--	180	10	<0.50	<0.50	<0.50	210	--	--	--	--	--	--	--
EX-7	06/19/14	7.44	18.06	10.62	--	--	--	56	0.79	<0.50	<0.50	<0.50	50	--	--	--	--	--	--	--
	11/25/14	7.04		11.02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	3.3	--	--	--	--	--	--	--
	02/02/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	04/14/15	6.81		11.25	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	24	--	--	--	--	--	--	--
	07/14/15	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/20/15	8.13		9.93	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	5.2	--	--	--	--	--	--	--

Legend/Key:

ft msl = feet above mean sea level
µg/L = micrograms per liter
NM = Not measured

TPH - mo = total petroleum hydrocarbons as motor oil
TPHd = total petroleum hydrocarbons as diesel
GRO = gasoline range organics C6-C12

MTBE - methyl tertiary butyl ether
DIPE = di isopropyl ether
ETBE = ethyl tertiary butyl ether

TAME = tert amyl methyl ether
TBA = tert butyl ether
EDB = 1,2-dibromoethane
1,2-DCA = 1,2-dichloroethane

Analytical Methods:
GRO analyzed by EPA Method SW8015B/SW8260B, all other analytes analyzed by SW8260B.

Analytical methods prior to February 2011, are available in various reports on the Alameda County Environmental Health Department files.

* = Hydrocarbon reported in the gasoline range does not match the gasoline standard.
** = Hydrocarbon reported is in the early diesel range and does not match the diesel standard.

*** = Hydrocarbon reported does not match the pattern of the diesel standard.
-- = No sample collected

[1] Weakly modified or unmodified gasoline is significant.
[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 non-detect.
[4] = Repoting Limits were increaased due to sample foaming.

Analytical data for samples collected prior to 2011 are obtained from documents available in the Alameda County Environmental Health Department files.

Well elevations and locations surveyed by Morrow Surveying on June 15, 2011. Monitoring wells MW-5A/B, MW-6A/B, and extraction wells EX-4 through EX-7 surveyed by Morrow Surveying on June 2, 2014.

TABLE 3
OPERATIONAL UPTIME AND FLOW SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Hour Meter Reading	Applied Vac	Area	Sys Inf Temp	Sys Inf Air Velocity	Sys Inf Air Flowrate	Control Temp	Effluent Air Temp	Area	Dilution Air Temp	Dilution Air Velocity	Dilution Air Flowrate	pH		PID	
														Inf	Eff	Sys Inf	Eff
			"Hg	ft^2	°F	fpm	acfm	°F	°F	ft^2	°F	fpm	acfm	pH	°F	ppmv	ppmv
7/21/14 6:00	1	3,478.1	16.0	0.0491	95	2,000	98.2	1,452	1,411	0.0218	76	680	15	7.69	7.60	310	1.6
7/24/14 6:00	2	3,480.0	19.0	0.0491	95	2,000	98.2	1,460	1,410	0.0218	75	800	17	--	--	350	2.1
7/29/14 5:30	3	3,599.7	16.0	0.0491	90	2,200	108.0	1,465	1,425	0.0218	76	720	16	--	8.01	310	1.1
8/4/14 7:10	4	3,600.4	15.0	0.0491	85	2,000	98.2	1,493	1,430	0.0218	69	840	18	--	--	300	1.2
8/18/14 6:30	5	3,862.0	13.0	0.0491	90	2,350	115.4	1,475	1,426	--	--	--	--	7.87	7.89	110	2.3
9/8/14 7:30		4,247.0	12.0	0.0491	100	2,600	127.6	1,463	1,422	--	--	--	--	7.81	7.87	90	2.1
9/19/14 5:00		4,509.0	12.0	0.0491	100	2,700	132.5	1,464	1,425	--	--	--	--	--	--	150	1.7
10/2/14 6:48	6	4,823.0	12.0	0.0491	98	2,800	137.4	1,467	1,429	--	--	--	--	7.91	7.93	25	2.3
10/20/14 10:00	7	5,039.0	14.0	0.0491	90	2,500	122.7	1,460	1,389	--	--	--	--	--	--	45	2.6
11/3/14 7:00	8	5,265.0	14.0	0.0491	90	2,600	127.6	1,426	1,471	--	--	--	--	8.17	8.31	50	2.1
11/18/14 6:00	9	5,269.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/4/14 5:45	10	5,271.0	20.0	0.0491	90	2,000	98.2	1,468	1,310	0.0218	63	3096	68	8.13	8.36	16	2.4
12/16/14 5:30		5,557.0	16.0	0.0491	80	2,500	122.7	1,463	1,420	0.0218	55	2910	63	--	--	50	1.2
1/5/15 7:15	8	5,873.0	19.0	0.0491	72	1,500	73.6	1,534	1,400	0.0218	50	1534	33	8.19	8.41	10	1.8
1/19/15 6:00	8	5,888.0	18.0	0.0491	80	1,800	88.4	1,460	1,365	0.0218	50	1484	32	--	--	10	1.3
2/2/15 5:55	8	5,926.0	17.0	0.0491	80	1,750	85.9	1,467	1,413	0.0218	60	1987	43	8.05	8.13	5	1.3
2/16/15 6:00	8	5,930.0	19.0	0.0491	75	1,500	73.6	1,474	1,350	0.0218	63	1348	29	--	--	6	0.8
3/10/15 5:05	8	5,941.0	20.0	0.0491	78	1,500	73.6	1,463	1,350	0.0218	67	1771	39	8.13	8.21	10	0.9
3/23/15 7:00	11	6,015.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 3
OPERATIONAL UPTIME AND FLOW SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Hour Meter Reading	Applied Vac	Area	Sys Inf Temp	Sys Inf Air Velocity	Sys Inf Air Flowrate	Control Temp	Effluent Air Temp	Area	Dilution Air Temp	Dilution Air Velocity	Dilution Air Flowrate	pH		PID	
														Inf	Eff	Sys Inf	Eff
			"Hg	ft^2	°F	fpm	acfm	°F	°F	ft^2	°F	fpm	acfm	pH	°F	ppmv	ppmv
5/5/15 5:00	12	6,018.0	14.5	0.0491	80	1,600	78.5	1494	1400	0.0218	55	2319	51	7.49	7.96	25	2.5
5/20/15 5:45	13	6,059.0	15.0	0.0491	80	1,450	71.2	1450	--	0.0218	65	685	15	--	--	40	1.3
5/21/15 5:10	14	6,083.0	15.0	0.0491	90	1,500	73.6	1450	--	0.0218	--	--	--	--	--	--	--
6/2/15 4:45	15	6,233.0	15.0	0.0491	90	1,500	73.6	1450	1380	0.0218	--	--	--	8.01	7.81	6	0.3
6/22/15 4:00		6,712.0	14.0	0.0491	85	1,500	73.6	1450	1310	0.0218	--	--	--	--	--	10	0.2
7/1/15 5:30	16	6,929.0	14.0	0.0491	95	1,600	78.5	1456	--	0.0218	--	--	--	--	--	5	0.4
7/14/15 5:15	13	6,930.0	15.0	0.0491	80	1,450	71.2	1450	1376	0.0218	--	--	--	--	--	75	1.2
8/3/15 6:00	17	7,410.0	12.0	0.0491	96	1,600	78.5	1450	1125	0.0218	--	--	--	7.74	7.50	5	0.8
8/18/15 5:00	18	7,725.0	12.0	0.0491	90	1,500	73.6	1460	1105	0.0218	--	--	--	--	--	3	0.8
9/1/15 5:00	19	7,903.0	12.5	0.0491	90	1,500	73.6	1460	1360	0.0218	--	--	--	7.74	7.38	2	0.5
9/22/15 4:45	20	8,407.0	12.0	0.0491	90	1,600	78.5	1450	1125	0.0218	--	--	--	--	--	30	0.9
10/6/15 5:30	16	8,744.0	14.0	0.0491	92	1,700	83.4	1452	1011	0.0218	--	--	--	7.85	7.56	9	2.5
11/17/15 5:00	21	8,745.0	20.0	0.0491	78	1,500	73.6	1500	1102	0.0218	--	--	--	7.92	7.73	114	0.2
12/2/15 5:00	13	8,783.0	20.0	0.0491	80	1,500	73.6	1450	1090	0.0218	--	--	--	7.86	7.61	13	0.9
12/17/15 4:00	13	8,983.0	20.0	0.0491	80	1,000	49.1	1450	--	0.0218	--	--	--	--	--	14	0.3
12/29/15 4:45	22	9,113.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Average			15.5		87	1,838	90.2	1,463	1,330		63	1552	34	7.9	7.9	70.9	1.3

TABLE 3
OPERATIONAL UPTIME AND FLOW SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Hour Meter Reading	Applied Vac	Area	Sys Inf Temp	Sys Inf Air Velocity	Sys Inf Air Flowrate	Control Temp	Effluent Air Temp	Area	Dilution Air Temp	Dilution Air Velocity	Dilution Air Flowrate	pH		PID	
														Inf	Eff	Sys Inf	Eff
			"Hg	ft^2	°F	fpm	acfm	°F	°F	ft^2	°F	fpm	acfm	pH	°F	ppmv	ppmv

Legend / Key:

Vac = Vacuum
"Hg = inches mercury
ft^2 = square feet
Temp = temperature
°F = Fahrenheit
Inf = Influent
-- = not applicable/ not measured
fpm = feet per minute
acfm = actual cubic feet per minute
ppmv = parts per million by volume
PID = Photoionization Detector
Sys Inf = System Influent (includes dilution air)
Eff = Effluent

Sample Calculation:

air flow = area of pipe (0.0491 ft^2) × air velocity (fpm) = flowrate (acfm)

Notes:

Influent pipe diameter = 3.0 inches

1 System briefly started to conduct an initial sampling event, extracting from wells EX-2 through EX-7. Stingers placed at 13-feet (EX-2), 10-feet (EX-3, EX-4, and EX-6),13-feet (EX-5), and 8-feet bgs (EX-7). System down upon departure, waiting for results.

2 System down upon arrival. System restarted for 1-week operation per groundwater discharge permit. System modified to extract from extraction wells EX-2 through EX-6.

3 Samples obtained per discharge permit. System shut down upon departure pending approval of analytical results to begin discharging treated groundwater into on-site sewer cleanout.

4 System down upon arrival; groundwater discharge permit approved. System restarted upon departure for continuous operation. Extracting from wells EX-2 through EX-7, with stinger placed at 6-feet bgs (EX-7).

5 System down upon arrival. Stinger depths modified: EX-2 through EX-4 and EX-6 placed at 10-feet, EX-5 at 13-feet, and EX-7 at 5-feet bgs.

6 System down upon arrival. System modified to extract from wells EX-1 through EX-7. System restarted upon departure.

7 System down upon arrival. Replaced switch on combustion blower. System restarted upon departure.

8 System down upon arrival. System restarted upon departure.

9 System down upon arrival, due to scheduled groundwater sampling event. System remained down upon departure.

10 System down upon arrival. System modified to extract from wells EX-1, EX-5, and EX-6. System restarted upon departure.

11 System down upon arrival. System remained down upon departure to evaluate pulse operation and second quarter groundwater sampling.

12 System down upon arrival. System restarted to obtain air and water samples. System modified to extract from wells EX-3, EX-6, MW-5A, and MW-6A. Sewer system oserved to be backed up; therefore, maintenance to be completed prior to continuous system operation. System manually shut down upon departure.

13 System down upon arrival. System restarted for continuous operation.

14 System modified to extract from wells EX-1, EX-6, MW-5A, and MW-6A.

15 System modified to extract from wells EX-1, MW-5A, and MW-6A.

16 System manually shut down (temporarily) for upcoming sampling event.

17 System modified (well EX-6 brought on-line), valve open 10%.

18 System down upon arrival (flame off). System modified, well EX-6 open 25%. System restarted upon departure.

19 System modified, well EX-6 open 10%.

20 System modified, well EX-6 open 30%.

21 System down upon arrival. System restarted for continuous operation, extracting from wells EX-1, MW-5A, and MW-6A. New totalizer installed during site visit.

22 System down upon arrival. System remained down upon departure due to scheduled sampling event.

TABLE 4
INDUCED VACUUM AND DEPTH TO WATER MEASUREMENT SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Induced Vacuum ("WC) &/or Depth to Water (feet bgs)											
		MW-1		MW-2		MW-3		MW-4		MW-5A		MW-6A	
		"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs
7/21/14 6:00	1	0.00	7.80	0.00	7.38	0.00	7.45	0.0	7.40	0.0	7.48	0.0	7.60
7/24/14 6:00	2	--	--	0.10	8.61	1.00	9.32	0.52	7.86	0.65	7.70	0.50	7.73
7/29/14 5:30		0.01	9.10	0.14	8.98	2.35	9.62	0.75	8.74	0.75	8.80	0.57	8.45
8/4/14 7:10	3	--	--	0.30	8.44	1.37	8.83	0.42	7.73	0.41	8.25	0.39	8.21
8/18/14 6:30	4	--	--	0.55	8.47	0.04	8.95	0.30	8.03	0.36	8.50	0.32	8.52
9/8/14 7:30		0.01	9.09	0.49	8.87	1.19	9.37	--	--	0.40	8.53	0.34	8.69
9/19/14 5:00		0.00	9.16	0.50	8.98	3.33	9.47	--	--	0.40	8.61	0.37	8.80
10/2/14 6:48	5	0.02	9.02	0.56	8.82	3.39	9.35	0.40	8.71	0.10	9.09	0.37	9.14
10/20/14 10:00	6	--	--	--	--	--	--	--	--	--	--	--	--
11/3/14 7:00	7	0.01	8.71	0.50	8.43	12.12	8.91	0.75	7.94	0.60	8.48	0.34	8.55
11/18/14 6:00	8	--	--	--	--	--	--	--	--	--	--	--	--
12/4/14 5:45	9	0.00	6.42	0.07	6.11	1.50	7.63	0.65	6.29	0.70	7.08	0.95	--
12/16/14 5:30		0.00	5.12	0.34	4.77	9.40	6.33	--	--	1.65	5.65	*0.35	5.12
1/5/15 7:15	7	0.00	7.10	0.11	6.79	4.40	8.17	0.99	6.23	1.75	6.11	0.47	6.44
1/19/15 6:00	7	--	--	--	--	--	--	--	--	--	--	--	--
2/2/15 5:55	7	0.00	7.71	0.10	7.38	4.77	8.65	0.85	6.99	0.31	6.90	0.45	7.13
2/16/15 6:00	10	0.00	6.95	0.10	6.62	3.30	7.89	1.05	6.07	1.68	5.58	0.59	6.01
3/10/15 5:05	11	0.00	7.66	0.05	7.27	1.93	7.88	--	--	0.99	6.71	0.16	7.06
3/23/15 7:00	12	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 4
INDUCED VACUUM AND DEPTH TO WATER MEASUREMENT SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Induced Vacuum ("WC) &/or Depth to Water (feet bgs)											
		MW-1		MW-2		MW-3		MW-4		MW-5A		MW-6A	
		"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs
5/5/15 5:00	13	--	--	--	--	--	--	--	--	--	--	--	--
5/20/15 5:45	14	--	--	--	--	--	--	--	--	--	--	--	--
5/21/15 5:10		--	--	--	--	--	--	--	--	--	--	--	--
6/2/15 4:45	15	0.00	8.29	0.00	7.88	0.00	8.40	--	--	--	--	--	--
6/22/15 4:00		0.00	8.45	0.28	8.05	0.02	8.54	0.66	8.95	--	--	--	--
7/1/15 5:30	16	0.00	8.52	0.28	8.10	0.03	8.61	--	--	--	--	--	--
7/14/15 5:15	14	--	--	--	--	--	--	--	--	--	--	--	--
8/3/15 6:00	17	0.00	8.72	0.22	8.40	0.19	9.38	--	--	--	--	--	--
9/1/15 5:00		0.01	8.75	0.20	8.37	0.18	9.13	0.57	9.00	--	--	--	--
9/22/15 4:45		0.00	8.98	0.17	8.62	0.15	9.38	0.57	9.03	--	--	--	--
10/6/15 5:30	16	0.00	9.06	0.20	8.71	0.20	9.74	0.73	9.04	--	--	--	--
11/17/15 5:00	18	--	--	--	--	--	--	--	--	--	--	--	--
12/2/15 5:00		--	--	--	--	--	--	--	--	--	--	--	--
12/17/15 4:00		--	--	--	--	--	--	--	--	--	--	--	--
12/29/15 4:45	19	--	--	--	--	--	--	--	--	--	--	--	--
Average		0.00		0.24		2.31		0.61		0.72		0.42	
Nearest Extraction well & approx. distance (feet)		EX-2	22'	EX-7	11'	EX-6	9'	EX-1	13'	EX-3	28'	EX-6	54'

TABLE 4
INDUCED VACUUM AND DEPTH TO WATER MEASUREMENT SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date & Time	Notes	Induced Vacuum ("WC) &/or Depth to Water (feet bgs)											
		MW-1		MW-2		MW-3		MW-4		MW-5A		MW-6A	
		"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs	"WC	feet bgs

Legend / Key:

"WC = Inches of water column
bgs = below ground surface
* Positive pressure
-- = not applicable/ not measured

Notes:

1 System extracting from wells EX-2 through EX-7. Stinger depths placed at 13-feet bgs (EX-2 and EX-5), 10-feet bgs (EX-3, EX-4 and EX-6), and 8-feet bgs (EX-7).

2 System modified, extracting from wells EX-2 through EX-6.

3 System modified, extracting from wells EX-2 through EX-7; stinger placed in well EX-7 at 5-feet bgs.

4 System modified, stingers placed at 10-feet bgs (EX-2, EX-4, and EX-6), 13-feet bgs (EX-5), and 5-feet bgs (EX-7).

5 System down upon arrival. System modified to extract from wells EX-1 through EX-7. System restarted upon departure.

6 System down upon arrival. Switch to combustion blower repaired. System restarted upon departure.

7 System down upon arrival. System restarted upon departure.

8 System down upon arrival. System remained down upon departure, due to a scheduled groundwater monitoring event.

9 System modified to extract from wells EX-1, EX-5, and EX-6. System down upon arrival and restarted upon departure.

10 System down upon arrival and restarted upon departure. System modified to extract from wells EX-1 and EX-6 (both valves modified to 50% open); well EX-5 remained 100% open.

11 System down upon arrival. System modified to extract from wells EX-1 and EX-5, with valves 100% open. System restarted upon departure.

12 System temporarily shut down due to lack of project funding.

13 System down upon arrival. Site visit completed to set up the system to extract from EX-3, EX-6, MW-5A, and MW-6A. Sewer backed up; therefore, maintenance to be completed and system remained down upon departure.

14 System down upon arrival. System restarted for continuous operation.

15 System modified to extract from wells EX-1, MW-5A, and MW-6A; therefore, no induced vacuum readings were obtained on those wells.

16 System manually shut down for sampling event.

17 System down upon arrival. System modified, EX-6 brought on-line. System restarted upon departure.

18 System down upon arrival. System restarted for continuous operation, extracting from wells EX-1, MW-5A, and MW-6A.

19 System down upon arrival. System remained down for scheduled groundwater sampling event.

TABLE 5
SVE COMPONENT - ANALYTICAL RESULTS AND FLOW RATES
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Flowrate * (acfm)	Flowrate * (scfm)	Influent Temp. (°F)	Vacuum "Hg	Sample Location	Lab Sample Number	Analyses (mg/m^3) GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
07/21/14	1	7:30	98.2	93.4	95	16.0	ASYS INF	88741-01	**5,900**	**1.0**	<0.70	<0.70	<0.70	**1.8**
							A EFF	88741-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
08/04/14		7:40	98.2	95.1	85	15.0	ASYS INF	88839-01	**3,800**	**4.0**	<0.50	**0.71**	<0.50	**1.4**
							A EFF	88839-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
09/08/14		8:10	127.6	120.3	100	12.0	ASYS INF	89089-01	**410**	**0.45**	<0.20	<0.25	<0.20	**0.80**
							A EFF	89089-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
10/02/14	2	7:30	137.4	130.1	98	12.0	ASYS INF	89311-01	**140**	**0.36**	<0.20	<0.25	<0.20	**0.64**
							A EFF	89311-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
11/03/14		7:40	127.6	122.5	90	14.0	ASYS INF	89569-01	**150**	**0.38**	<0.20	<0.25	<0.20	**0.48**
							A EFF	89569-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
12/04/14		7:05	98.2	94.2	90	20.0	ASYS INF	89811-01	**85**	<0.20	<0.20	<0.25	<0.20	<0.20
							A EFF	89811-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
01/05/15		15:15	73.6	73.1	72	19.0	ASYS INF	90047-01	<20	**0.45**	<0.20	<0.25	<0.20	**0.39**
							A EFF	90047-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
02/02/15		6:53	85.9	84.0	80	17.0	ASYS INF	90256-01	**24**	**0.38**	<0.20	<0.25	<0.20	**0.40**
							A EFF	90256-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
03/10/15		7:25	73.6	72.3	78	20.0	ASYS INF	90502-01	**22**	<0.20	<0.20	<0.25	<0.20	**0.52**
							A EFF	90502-02	<20	<0.20	<0.20	<0.25	<0.20	<0.20
05/05/15	3	7:07	78.5	76.8	80	14.5	ASYS INF	STR15050647-01A	**110**	**0.56**	<0.20	**0.20**	<0.20	<0.20
							A EFF	STR15050646-01A	<20	<0.20	<0.20	<0.20	<0.20	<0.20
06/02/15	4	5:35	73.6	70.7	90	15.0	ASYS INF	STR15060351-04A	<20	**0.20**	<0.20	<0.20	<0.20	**0.24**
							A EFF	STR15060343-02A	<20	<0.20	<0.20	<0.20	<0.20	<0.20

TABLE 5
SVE COMPONENT - ANALYTICAL RESULTS AND FLOW RATES
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Flowrate * (acfm)	Flowrate * (scfm)	Influent Temp. (°F)	Vacuum "Hg	Sample Location	Lab Sample Number	Analyses (mg/m³) GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
07/01/15		6:03	78.5	74.7	95	14.0	ASYS INF	STR15070246-01A	<20	<0.20	<0.20	<0.20	<0.20	**0.28**
							A EFF	STR15070242-01A	<20	<0.20	<0.20	<0.20	<0.20	<0.20
08/03/15	5	6:29	78.5	74.6	96	12.0	ASYS INF	STR15080445-01A	<15	<0.15	<0.15	<0.15	<0.15	**0.35**
							A EFF	STR15080443-01A	<15	<0.15	<0.15	<0.15	<0.15	<0.15
09/01/15		5:20	73.6	70.7	90	12.5	ASYS INF	STR15090248-04A	<20	<0.20	<0.20	<0.20	<0.20	<0.20
							A EFF	STR15090240-02A	<15	<0.15	<0.15	<0.15	<0.15	<0.15
10/06/15		6:08	83.4	79.8	92	14.0	ASYS INF	STR15100747-01A	<20	<0.20	<0.20	<0.20	<0.20	**0.22**
							A EFF	STR15100743-01A	<20	<0.20	<0.20	<0.20	<0.20	<0.20
11/17/15		6:08	73.6	72.3	78	20.0	ASYS INF	STR15111827-01A	**410**	<0.33	<0.33	<0.33	<0.33	<0.33
							A EFF	STR15111826-01A	<15	<0.15	<0.15	<0.15	<0.15	<0.15
12/02/15		5:38	73.6	72.0	80	20.0	ASYS INF	STR15120323-01A	**51**	<0.20	<0.20	<0.20	<0.20	<0.20
							A EFF	STR15120322-01A	<15	<0.15	<0.15	<0.15	<0.15	<0.15

Legend / Key:

acfm = actual cubic feet per minute

scfm = standard cubic feet per minute

Temp. (°F) = temperature in degrees Fahrenheit

"Hg = inches mercury

GRO = gasoline range organics (C4-C13)

BTEX = benzene, toluene, ethylbenzene, and xylenes

MTBE = methyl tertiary butyl ether

ASys Inf = system influent

A Eff = effluent

mg/m^3 = milligrams per cubic meter

* Flowrate used based on most representative field data at time of sampling.

Laboratory Analytical Methods and Facility:

GRO analyzed using EPA Method 8260B

BTEX and MTBE analyzed using EPA Method 8260B

Kiff Analytical LLC (ELAP #08263CA)

Calculations:

Actual flow rate (acfm) is converted to standard flow rate (scfm) using the following formulas:

Pressure corrected influent flow rate = Flow was taken on positive side of blower, no pressure correction factor needed.

Temperature Corrected influent flow rate = Pressure corrected flow rate * {(460 R + 68deg F)/(deg F+ 460 R)}

TABLE 5
SVE COMPONENT - ANALYTICAL RESULTS AND FLOW RATES
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Flowrate * (acfm)	Flowrate * (scfm)	Influent Temp. (°F)	Vacuum "Hg	Sample Location	Lab Sample Number	Analyses (mg/m^3) GRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE

Notes:

1 DPE extracting from extraction wells EX-2 through EX-7.

2 DPE extracting from extraction wells EX-1 through EX-7.

3 DPE extracting from extraction wells EX-3, EX-6, MW-5A, and MW-6A.

4 DPE extracting from extraction wells EX-1, MW-5A, and MW-6A.

5 DPE extracting from extraction wells EX-1, EX-6, MW-5A, and MW-6A.

TABLE 6
SVE COMPONENT - EXTRACTION AND EMISSION RATES
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Influent Sample Time	Hour Meter Reading[1]	Sys. Influent Flowrate (scfm)	Effluent Flowrate[2] (scfm)	Sys. Influent Conc. (mg/m^3)			Effluent Conc. (mg/m^3)			Extraction Rate from Wells (lbs/day)[3]			Emissions Rate to Atmosphere (lbs/day)			Destruction Removal Efficiency (%)	Cumulative GRO Removal (lbs)	
						GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Benzene	MTBE	GRO	Period	Total
7/21/14	1	7:30	3,478.1	93.4	173.4	5,900	1.0	1.8	<20	<0.20	<0.20	49.54	0.01	0.015	<0.31	<0.003	<0.003	99.4	3.1	3.1
8/4/14		7:40	3,600.4	95.1	175.1	3,800	4.0	1.4	<20	<0.20	<0.20	41.47	0.02	0.014	<0.31	<0.003	<0.003	99.2	208.7	211.8
9/8/14		8:10	4,247.0	120.3	200.3	410	0.45	0.80	<20	<0.20	<0.20	22.77	0.02	0.012	<0.36	<0.004	<0.004	98.4	613.5	825.3
10/2/14	2	7:30	4,823.0	130.1	210.1	140	0.36	0.64	<20	<0.20	<0.20	3.22	0.005	0.008	<0.38	<0.004	<0.004	88.3	77.2	902.5
11/3/14		7:40	5,265.0	122.5	202.5	150	0.38	0.48	<20	<0.20	<0.20	1.60	0.004	0.006	<0.36	<0.004	<0.004	77.2	29.4	931.9
12/4/14	3	7:05	5,271.0	94.2	174.2	85	<0.20	<0.20	<20	<0.20	<0.20	1.00	<0.002	<0.003	<0.31	<0.003	<0.003	68.5	0.2	932.1
1/5/15			5,873.0	73.1	153.1	<20	0.45	0.39	<20	<0.20	<0.20	<0.34	0.002	0.002	<0.28	<0.003	<0.003	--	8.7	940.8
2/2/15		6:53	5,926.0	84.0	164.0	24	0.38	0.40	<20	<0.20	<0.20	0.17	0.003	0.003	<0.29	<0.003	<0.003	--	0.4	941.2
3/10/15	4	7:25	5,941.0	72.3	152.3	22	<0.20	0.52	<20	<0.20	<0.20	0.15	<0.002	0.003	<0.27	<0.003	<0.003	--	0.1	941.3
5/5/15	5	7:07	6,018.0	76.8	156.8	110	0.56	<0.20	<20	<0.20	<0.20	0.46	0.003	<0.002	<0.28	<0.003	<0.003	--	1.5	942.7
6/2/15	6	5:35	6,233.0	70.7	150.7	<20	0.20	0.24	<20	<0.20	<0.20	<0.41	0.002	0.001	<0.27	<0.003	<0.003	--	3.7	946.4
7/1/15		6:03	6,929.0	74.7	154.7	<20	<0.20	0.28	<20	<0.20	<0.20	<0.13	<0.001	0.002	<0.28	<0.003	<0.003	--	3.9	950.3
8/3/15	7	6:29	7,410.0	74.6	154.6	<15	<0.15	0.35	<15	<0.15	<0.15	<0.12	<0.001	0.002	<0.24	<0.002	<0.002	--	2.4	952.7
9/1/15		5:20	7,903.0	70.7	150.7	<20	<0.20	<0.20	<15	<0.15	<0.15	<0.11	<0.001	<0.002	<0.20	<0.002	<0.002	--	2.3	954.9
10/6/15		6:08	8,744.0	79.8	159.8	<20	<0.20	<0.22	<20	<0.20	<0.20	<0.14	<0.001	<0.002	<0.25	<0.003	<0.003	--	5.0	960.0
11/17/15		6:08	8,745.0	72.3	152.3	410	<0.33	<0.33	<15	<0.15	<0.15	<1.40	<0.002	<0.002	<0.24	<0.002	<0.002	--	0.1	960.0
12/2/15	8	5:38	8,783.0	72.0	152.0	51	<0.20	<0.20	<15	<0.15	<0.15	<1.49	<0.002	<0.002	<0.20	<0.002	<0.002	--	22.9	982.9

Legend / Key:

acfm = actual cubic feet per minute
scfm = standard cubic feet per minute
GRO = gasoline range organics
MTBE = methyl tertiary butyl ether
Conc. = concentration
lbs/day = pounds per day
Sys. = system
mg/m^3 = milligrams per cubic meter

[1] Hour meter readings are approximate based on the generator hours recorded on the field data sheets. Hour meter readings were not taken at exact sampling times, therefore, times noted are readings obtained closest to the actual sampling times.

[2] Effluent Flow rate = System Influent flow rate + combustion air flow rate (80 cfm per manufacturer)

[3] To calculate the extraction rate, the system influent concentrations are averaged between the sampling dates.

Sample Calculations:

Extraction Rate from Wells (lbs/day) = Sys Inf Flowrate (ft^3/min) x Avg. Inf Conc (mg/m^3) x (1 lb/453,593mg) x (1,440 min/day) x ($1\ m^3/35.314 ft^3$)

Destruction Removal Efficiency, % = $\frac{\text{(Extraction Rate - Emission Rate)} \times 100}{\text{Extraction Rate}}$

Notes:

1 DPE extracting from extraction wells EX-2 through EX-7. GRO removed is calculated based on assuming 1.5 hours of operation occurred from start of test to first sample time.

2 DPE extracting from extraction wells EX-1 through EX-7.

3 DPE extracting from extraction wells EX-1, EX-5, and EX-6.

4 DPE extracting from extraction wells EX-1 and EX-5. Cummulative GRO removed is through 3/23/15, using analytical results obtained on 3/10/15.

5 DPE extracting from wells EX-3, EX-6, MW-5A, and MW-6A.

6 DPE extracting from wells EX-1, MW-5A, and MW-6A.

7 DPE extracting from wells EX-1, EX-6, MW-5A, and MW-6A.

8 Cummulative mass removed calculated based on uptime through December 29, 2015, with a totalizer reading of 82,110 and hour reading of 9,113.

TABLE 7
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
07/21/14	1	7:43	WINF	STR14072144-01A	**310**	**3.3**	<0.50	<0.50	<0.50	**37**
		7:54	WGAC1	STR14072240-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:47	WGAC2	STR14072240-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		9:00	WEFF	STR14072145-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
07/29/14		5:55	WEFF	STR14072940-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
08/18/14		7:15	WINF	STR14081941-01A	**170**	**3.4**	<0.50	**0.97**	<0.50	**39**
		7:10	WGAC1	STR14081942-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:05	WGAC2	STR14081942-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:00	WEFF	STR14081940-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
09/08/14		7:55	WINF	STR14090941-01A	<50	**0.89**	<0.50	<0.50	<0.50	**12**
		7:50	WGAC1	STR14090942-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:45	WGAC2	STR14090942-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:40	WEFF	STR14090940-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
10/02/14	2	7:25	WINF	STR14100342-01A	<50	**0.77**	<0.50	<0.50	<0.50	**11**
		7:19	WGAC1	STR14090942-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:14	WGAC2	STR14090942-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:09	WEFF	STR14100341-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
11/03/14		7:58	WINF	STR14110443-01A	<50	<0.50	<0.50	<0.50	<0.50	**13**
		7:55	WGAC1	STR14100344-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:50	WGAC2	STR14100344-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:45	WEFF	STR14110441-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 7
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
12/04/14		6:55	WINF	STR14120542-01A	<50	**0.98**	<0.50	<0.50	<0.50	**21**
		6:48	WGAC1	STR14120543-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:44	WGAC2	STR14120543-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:40	WEFF	STR14120541-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
01/05/15		7:46	WINF	STR15010644-01A	<50	**5.4**	<0.50	<0.50	<0.50	**29**
		7:44	WGAC1	STR15010647-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:41	WGAC2	STR15010647-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:37	WEFF	STR15010641-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
02/02/15		6:47	WINF	STR15020348-01A	<50	**2.4**	<0.50	<0.50	<0.50	**22**
		6:44	WGAC1	STR15020349-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:40	WGAC2	STR15020349-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:37	WEFF	STR15020344-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
03/10/15		7:05	WINF	STR15031148-01A	<50	**1.5**	<0.50	<0.50	<0.50	**21**
		7:00	WGAC1	STR15031149-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:55	WGAC2	STR15031149-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:52	WEFF	STR15031147-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
05/05/15	3	7:32	WINF	STR15050650-01A	**96**	**5.0**	<0.50	**2.2**	**2.16**	**19**
		7:28	WGAC1	STR15050650-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:25	WGAC2	STR15050650-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		7:22	WEFF	STR15050645-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 7
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
06/02/15	4	5:30	WINF	STR15060351-01A	<50	<0.50	<0.50	<0.50	<0.50	**7.7**
		5:21	WGAC1	STR15060351-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:17	WGAC2	STR15060351-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:15	WEFF	STR15060343-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
07/01/15		5:55	WINF	STR15070246-02A	<50	<0.50	<0.50	<0.50	<0.50	**6.9**
		5:50	WGAC1	STR15070246-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:43	WGAC2	STR15070246-04A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:40	WEFF	STR15070242-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
08/03/15	5	6:23	WINF	STR15080445-02A	<50	<0.50	<0.50	<0.50	<0.50	**9.6**
		6:20	WGAC1	STR15080445-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:15	WGAC2	STR15080445-04A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:10	WEFF	STR15080443-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
09/01/15		5:28	WINF	STR15090248-01A	<50	<0.50	<0.50	<0.50	<0.50	**9.7**
		5:26	WGAC1	STR15090248-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:23	WGAC2	STR15090248-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:21	WEFF	STR15090240-01A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
10/06/15		5:55	WINF	STR15100747-02A	<50	<0.50	<0.50	<0.50	<0.50	**5.9**
		5:50	WGAC1	STR15100747-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:45	WGAC2	STR15100747-04A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:40	WEFF	STR15100743-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 7
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
11/17/15	4	6:04	WINF	STR1511827-02A	<50	**0.88**	<0.50	<0.50	<0.50	**4.6**
		6:02	WGAC1	STR1511827-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		6:00	WGAC2	STR1511827-04A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:57	WEFF	STR1511826-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
12/02/15		5:34	WINF	STR15120323-02A	<100*	**0.85**	<0.50	<0.50	<0.50	**6.2**
		5:31	WGAC1	STR15120323-03A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:28	WGAC2	STR15120323-04A	<50	<0.50	<0.50	<0.50	<0.50	<0.50
		5:25	WEFF	STR15120322-02A	<50	<0.50	<0.50	<0.50	<0.50	<0.50

Legend / Key:

GRO = Gasoline Range Organics C4-C13

MTBE = Methyl tertiary butyl ether

BTEX = Benzene, toluene, ethylbenzene, xylenes

µg/L = micrograms per liter

-- = Not analyzed

* Reporting limits were increased due to sample foaming.

Analytical Methods /Laboratory:

GRO analyzed using EPA Method SW8015B/SW8260B

BTEX and MTBE analyzed using EPA Method SW8260B

Samples analyzed by Alpha Analytical, Inc. (ELAP #2019)

Notes:

1 DPE extracting from extraction wells EX-2 through EX-7.
2 DPE extracting from extraction wells EX-1 through EX-7.
3 DPE extracting from extraction wells EX-3, EX-6, MW-5A, and MW-6A.
4 DPE extracting from extraction wells EX-1, MW-5A, and MW-6A.
5 DPE extracting from extraction wells EX-1, EX-6, MW-5A, and MW-6A.

TABLE 8
GROUNDWATER EXTRACTION COMPONENT - GROUNDWATER ANALYTICAL DATA SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Sample Location	Laboratory Sample ID	Mercury µg/L	Cyanide µg/L	Cr µg/L	Ni µg/L	Cu µg/L	Zn µg/L	As µg/L	Se µg/L	Ag µg/L	Cd µg/L	Pb µg/L	Phenols µg/L
07/21/14	1	7:43	WINF	STR14072144-01A	<0.20	<0.0001	<10	<10	<20	<100	<5.0	**5.8**	<5.0	<2.0	**6.7**	<5.0
		7:54	WGAC1	STR14072240-01A	--	--	--	--	--	--	--	--	--	--	--	--
		7:47	WGAC2	STR14072240-02A	--	--	--	--	--	--	--	--	--	--	--	--
		9:00	WEFF	STR14072145-01A	<0.20	<0.0001	<10	<10	<20	<100	**7.7**	<5.0	<5.0	<2.0	<5.0	<5.0

Legend / Key:

Phenols = Pentachlorophenol and 2,3,4,6-Tetrachlorophenol

µg/L = micrograms per liter

-- = Not analyzed

Analytical Methods /Laboratory:

Metals analyzed using EPA Method 200.8

Mercury analyzed using EPA Method 245.1

Phenols analyzed using EPA Method SW8270C-SIM

Cyanide analyzed using EPA Method SM4500-CNE

Alpha Analytical, Inc. (Califrnia #2019; NELAC #01154CA)

Notes:

1 DPE test, extracting from extraction wells EX-2 through EX-7. Extended analytical results obtained to comply with groundwater discharge permit requirements.

TABLE 9
GROUNDWATER EXTRACTION COMPONENT - OPERATIONAL PERFORMANCE AND MASS REMOVAL SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Date	Notes	Sample Time	Hour Meter Reading[1]	Sewer Discharge Data				Analytical Results Influent			Mass Removed This Period			Cumulative Mass Removed		
				Totalizer Reading (gallons)	Period (gallons)	Cumulative Flow (gallons)	Average Sewer Discharge Flow Rate (gpm)[a]	GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)
7/21/14	1	7:43	3,478.1	60,440	--	--	--	Start of Test								
07/29/14		5:55	3,599.7	110,120	49,680	49,680	6.81	310	3.3	37	0.13	0.0014	0.015	0.13	0.0014	0.015
08/18/14		7:15	3,862.0	196,310	86,190	135,870	5.48	170	3.4	39	0.17	0.0024	0.027	0.30	0.0038	0.043
09/08/14		7:55	4,247.0	305,370	109,060	244,930	4.72	<50	0.89	12	<0.10	0.0020	0.023	<0.40	0.0057	0.066
10/02/14	2	7:25	4,823.0	458,740	153,370	398,300	4.44	<50	0.77	11	<0.06	0.0011	0.015	<0.47	0.0068	0.081
11/03/14		7:58	5,265.0	618,930	160,190	558,490	6.04	<50	<0.50	13	<0.07	<0.001	0.016	<0.53	<0.008	0.097
12/04/14	3	6:55	5,271.0	621,440	2,510	561,000	6.97	<50	0.98	21	<0.001	<0.00002	0.0004	<0.53	<0.008	0.097
01/05/15		7:46	5,873.0	875,710	254,270	815,270	7.04	<50	5.4	29	<0.106	<0.00677	0.0530	<0.64	<0.014	0.150
02/02/15		6:47	5,926.0	898,290	22,580	837,850	7.10	<50	2.4	22	<0.009	<0.00073	0.0048	<0.65	<0.015	0.155
03/10/15	4	7:05	5,941.0	904,000	5,710	843,560	6.34	<50	1.5	21	<0.002	<0.00009	0.0010	<0.65	<0.015	0.156
03/23/15	5	--	6,015.0	927,780	23,780	867,340	5.36	--	--	--	<0.010	<0.00030	0.0042	<0.66	<0.016	0.160
05/05/15	6	7:32	6,018.0	929,200	1,420	868,760	7.89	96	5.0	19	<0.001	<0.00006	0.0002	<0.66	<0.016	0.160
06/02/15	7	5:35	6,233.0	979,100	49,900	918,660	3.87	<50	<0.50	7.7	<0.030	<0.00115	0.0056	<0.69	<0.017	0.166
07/01/15		5:55	6,929.0	1,122,860	143,760	1,062,420	3.44	<50	<0.50	6.9	<0.060	<0.00060	0.0088	<0.75	<0.017	0.175
08/03/15	8	6:23	7,410.0	1,220,100	97,240	1,159,660	3.37	<50	<0.50	9.6	<0.041	<0.00041	0.0067	<0.79	<0.018	0.181
09/01/15		5:28	7,903.0	1,299,690	79,590	1,239,250	2.69	<50	<0.50	9.7	<0.033	<0.00033	0.0064	<0.83	<0.018	0.188
10/06/15		5:55	8,744.0	1,469,360	169,670	1,408,920	3.36	<50	<0.50	5.9	<0.071	<0.00071	0.0110	<0.90	<0.019	0.199
11/17/15	9	6:04	8,745.0	1,469,400	40	1,408,960	0.67	<50	0.88	4.6	<0.000	<0.00000	0.0000	<0.90	<0.019	0.199
12/02/15		5:34	8,783.0	8,660	8,660	1,417,620	3.80	<100	0.85	6.2	<0.005	<0.00031	0.0002	<0.90	<0.019	0.199
12/29/15	10	--	9,113.0	82,110	73,450	1,491,070	3.71	--	--	--	<0.046	<0.00013	0.0021	<0.95	<0.019	0.201

TABLE 9
GROUNDWATER EXTRACTION COMPONENT - OPERATIONAL PERFORMANCE AND MASS REMOVAL SUMMARY
DPE REMEDIATION EVENT
Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

Legend / Key:

GRO = Gasoline Range Organics C4-C13
MTBE = Methyl tertiary butyl ether
µg/L = micrograms per liter
gpm = gallons per minute
lbs = pounds
-- = data not collected/not calculated

Analytical Methods /Laboratory:

GRO analyzed using EPA Method SW8015B/SW8260B
Benzene and MTBE analyzed using EPA Method SW8260B
Alpha Analytical, Inc. (ELAP # 2019)

[a] Not representative of actual flow rate, calculation affected by system down time.

[b] Mass removed this period (pounds) = Average concentration (µg/L)[between the sample dates] x Period gallons x (2.2046×10^{-9})(lb/µg) / 0.26418 (gal/L)

[1] Hour meter readings were not taken at exact sampling times; therefore, times noted are readings obtained closest to the actual sampling times.

Notes:

1 DPE extracting from extraction wells EX-2 through EX-7.

2 DPE extracting from extraction wells EX-1 through EX-7.

3 DPE extracting from extraction wells EX-1, EX-5, and EX-6.

4 DPE extracting from extraction wells EX-1 and EX-5.

5 Mass removed is based on analytical results obtained during March 10, 2015, sampling event.

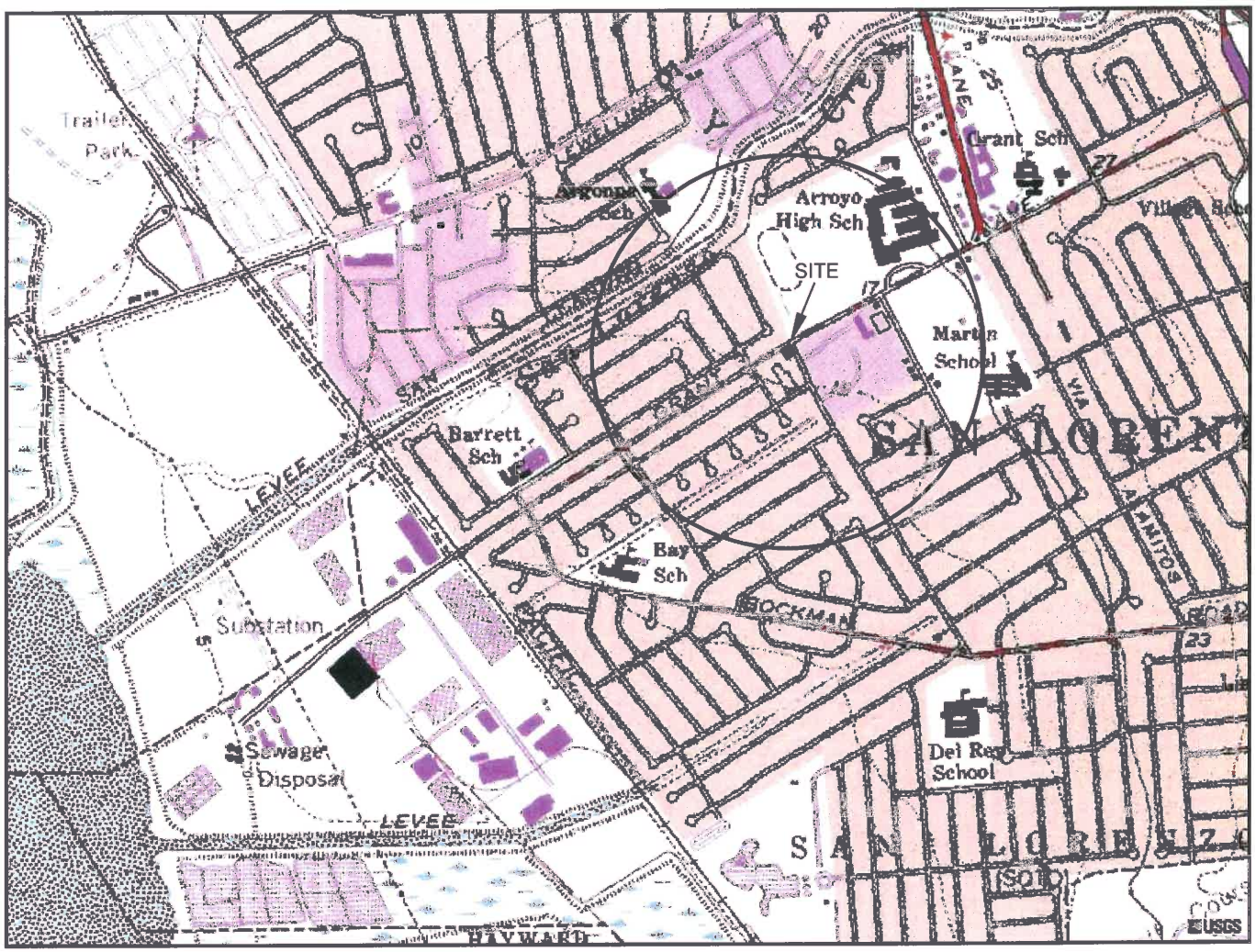
6 System was non-operational between March 23 and May 5, 2015, due to budget constraints. After maintenance, the system was restarted for continuous operation on May 20, 2015, extracting from wells EX-3, EX-6, MW-5A, and MW-6A.

7 DPE extracting from extraction wells EX-1, MW-5A, and MW-6A.

8 DPE extracting from extraction wells EX-1, EX-6, MW-5A, and MW-6A.

9 New totalizer installed; therefore, totalizer reading restarted back to zero.

10 System temporarily shut down. Sampling not completed during this site visit; therefore, the year end mass removed is calculated based on analytical results averaged from prior two sampling visits.



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

QUADRANGLE LOCATION

0 1800 FT

APPROXIMATE SCALE

STRATUS ENVIRONMENTAL, INC.

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

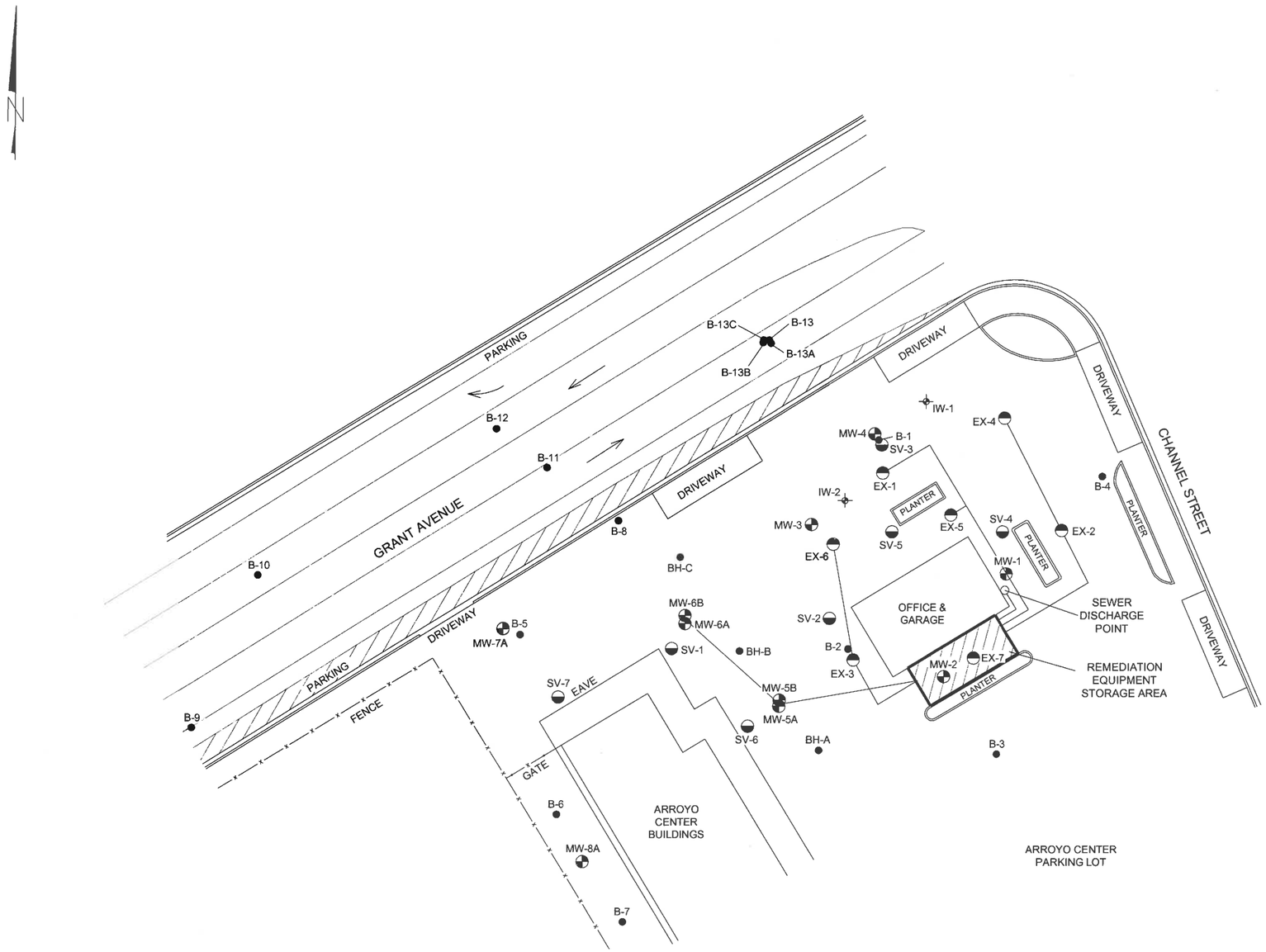
SITE LOCATION MAP

FIGURE
1

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
- B-1 SOIL BORING LOCATION
- APPROXIMATE LOCATIONS OF ABOVE GROUND CONVEYANCE PIPING



BASED ON SURVEY PREPARED BY MORROW SURVEYING ON 6/15/11 & UPDATED IN JUNE 2014 & DECEMBER 2015.

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic
DRAFTER INITIALS: DMG
DATE LAST REVISED: January 05, 2015
FILENAME: Olympic Siteplan

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

SITE PLAN

FIGURE
2

PROJECT NO.
2115-1436-01

LEGEND

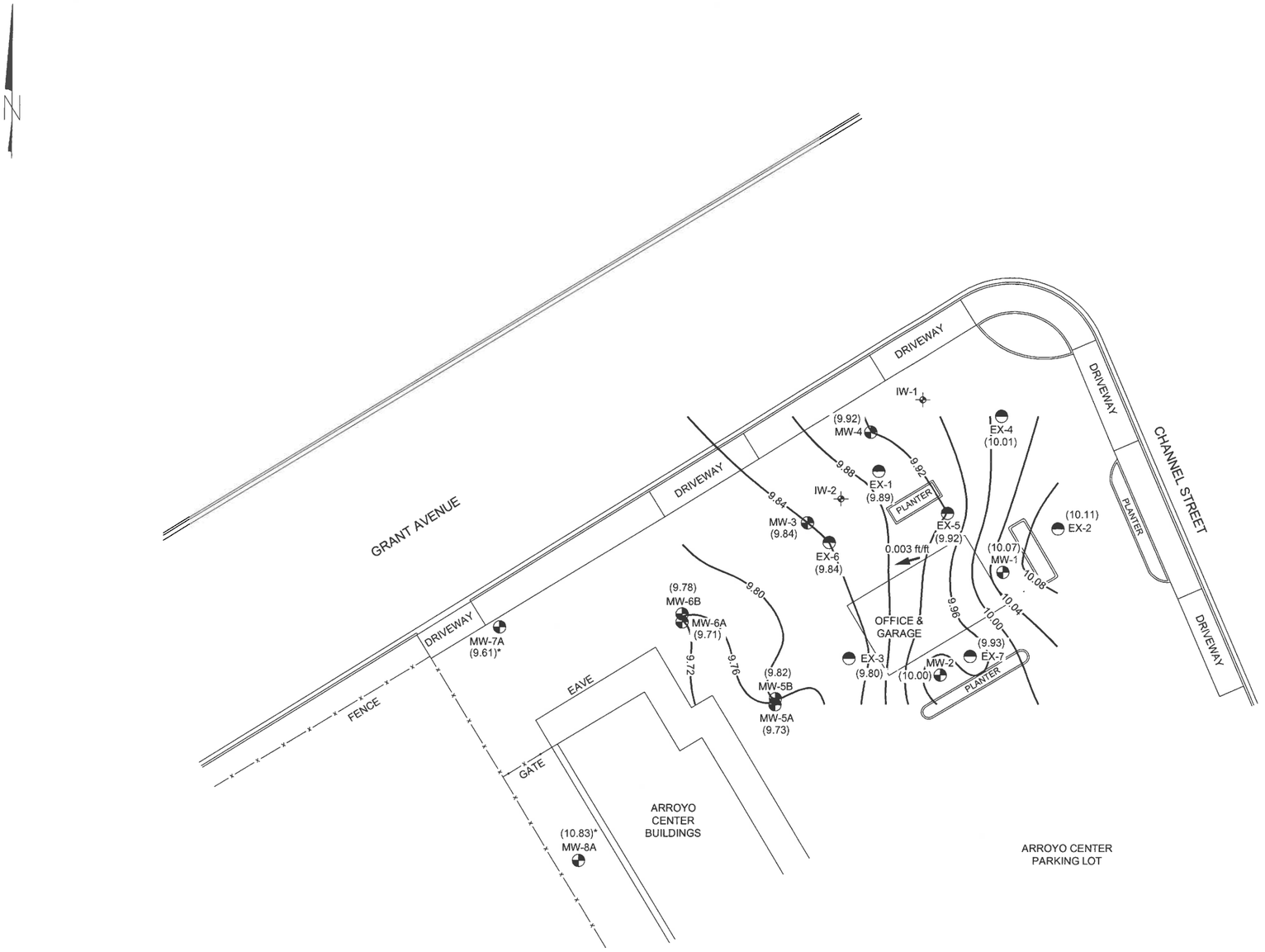
- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION
- (11.36) GROUNDWATER ELEVATION IN FEET RELATIVE TO MSL
- —11.15— GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MSL
- INFERRED GROUNDWATER FLOW DIRECTION

WELLS MEASURED ON 10/20/15

MSL = MEAN SEA LEVEL

NOTE: THE DPE SYSTEM WAS INACTIVE AT THE TIME OF WELL GAUGING.

* NOT USED FOR CONTOURING, WELLS INSTALLED ON 12/4/15 AND MEASURED ON 12/17/15



BASED ON SURVEY PREPARED BY MORROW SURVEYING ON 6/15/11 & UPDATED IN JUNE 2014 & DECEMBER 2015.

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: DMG
DATE LAST REVISED: January 22, 2016
FILENAME: Olympic Quarterly Figures

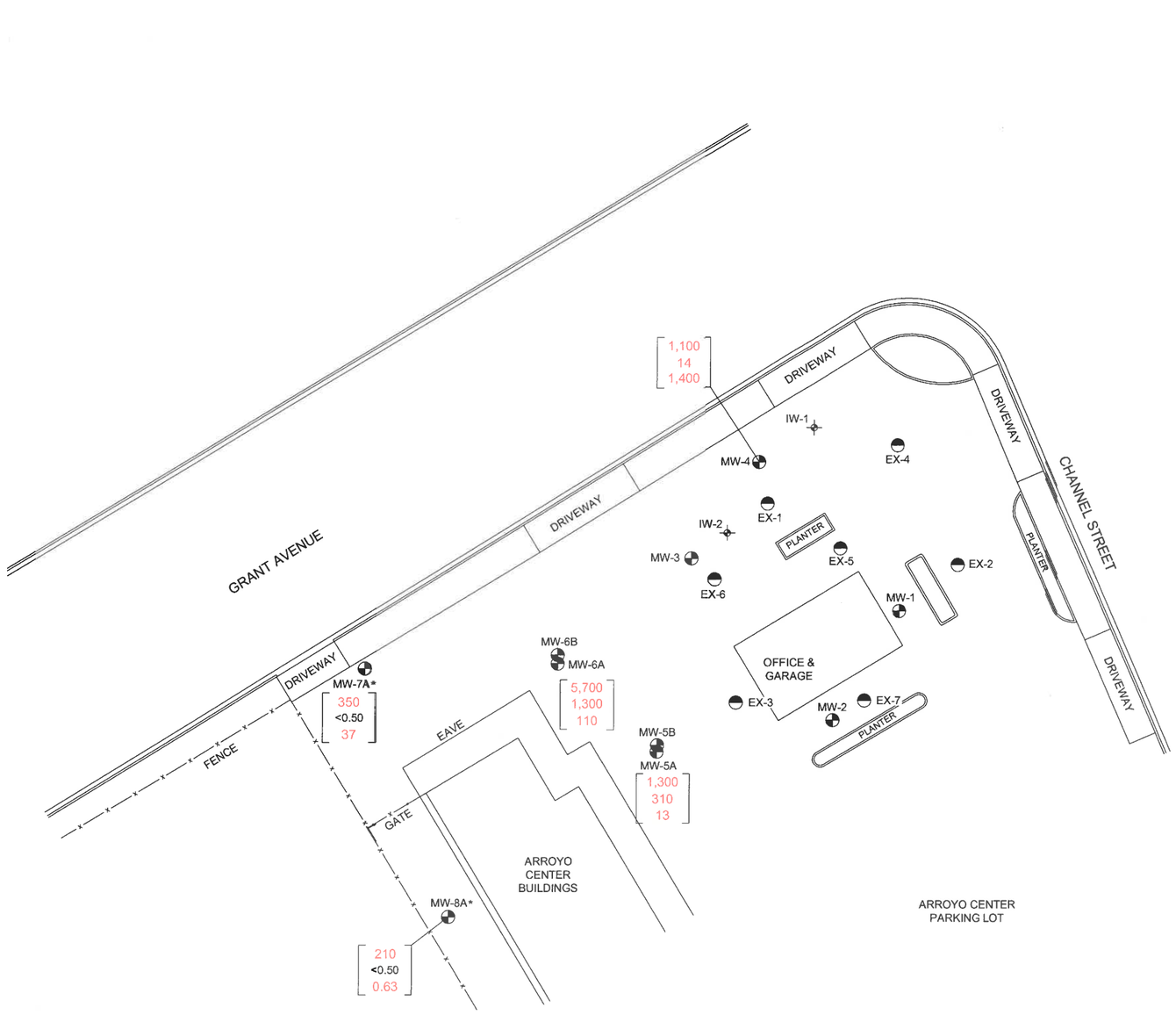
0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
4th QUARTER 2015

FIGURE
3

PROJECT NO.
2115-1436-01



LEGEND

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

[460] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L
[33] BENZENE CONCENTRATION IN µg/L
[730] METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 10/20/15
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B
* WELLS INSTALLED ON 12/4/15 AND SAMPLED ON 12/17/15

BASED ON SURVEY PREPARED BY MORROW SURVEYING ON 6/15/11 & UPDATED IN JUNE 2014 & DECEMBER 2015.

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: DMG
DATE LAST REVISED: January 22, 2016
FILENAME: Olympic Quarterly Figures

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
GROUNDWATER ANALYTICAL SUMMARY
10' - 12' DEPTH MONITORING WELLS
4th QUARTER 2015

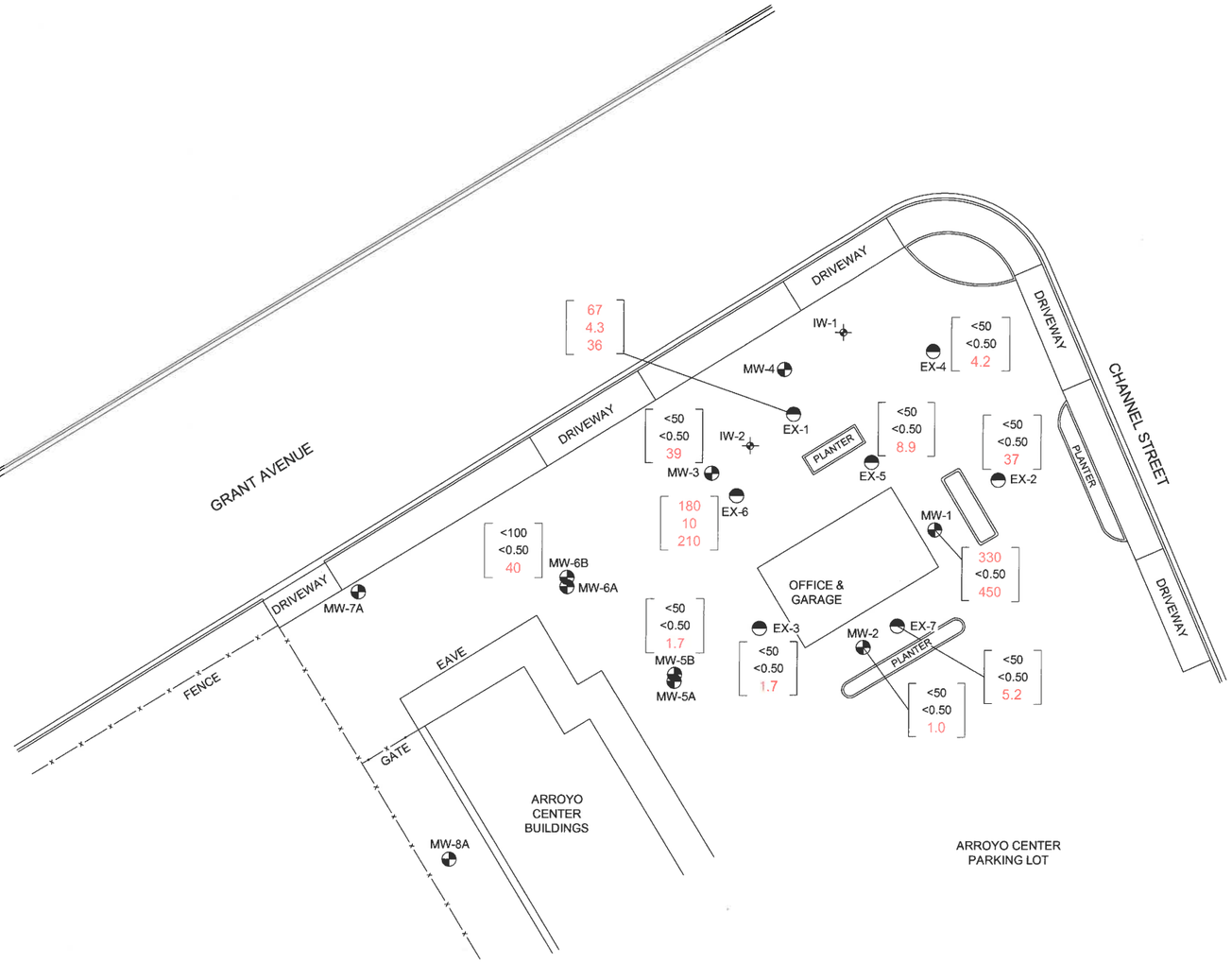
FIGURE
4
PROJECT NO.
2115-1436-01

LEGEND

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

[68] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L
[<0.50] BENZENE CONCENTRATION IN µg/L
[120] METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 10/20/15
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B



BASED ON SURVEY PREPARED BY MORROW SURVEYING ON 6/15/11 & UPDATED IN JUNE 2014 & DECEMBER 2015.

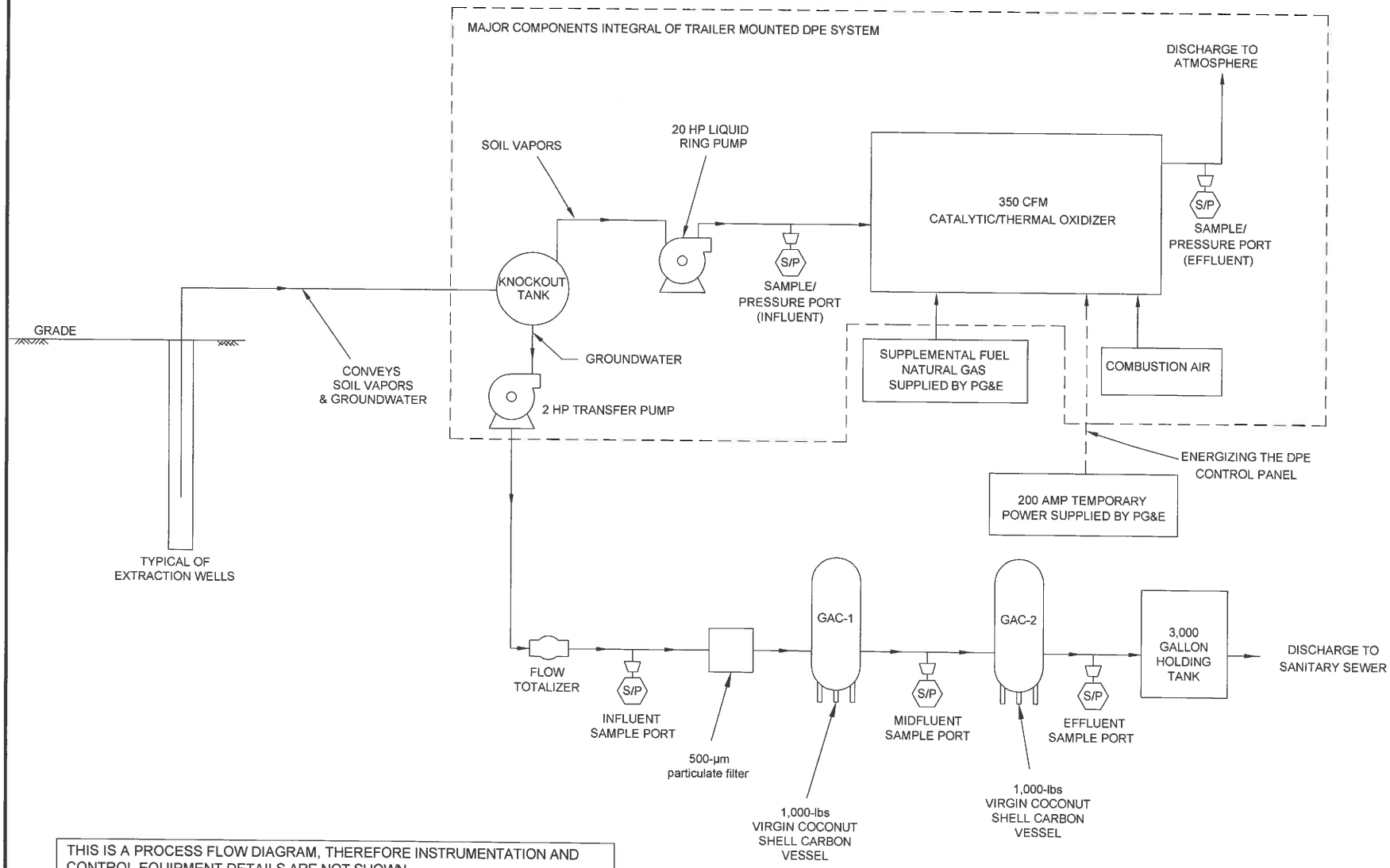
STRATUS
ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: DMG
DATE LAST REVISED: January 22, 2016
FILENAME: Olympic Quarterly Figures

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
GROUNDWATER ANALYTICAL SUMMARY
20' - 26' DEPTH MONITORING WELLS
4th QUARTER 2015

FIGURE
5
PROJECT NO.
2115-1436-01



THIS IS A PROCESS FLOW DIAGRAM, THEREFORE INSTRUMENTATION AND CONTROL EQUIPMENT DETAILS ARE NOT SHOWN.
INSTRUMENT FUNCTIONS AND INTERACTIONS ARE ALSO NOT SHOWN.
EQUIPMENT SIZES ARE NOT PROPORTIONAL AND ARE NOT INDICATIVE OF FINAL SIZES.

DUAL PHASE EXTRACTION SYSTEM
NOT TO SCALE

STRATUS ENVIRONMENTAL, INC.

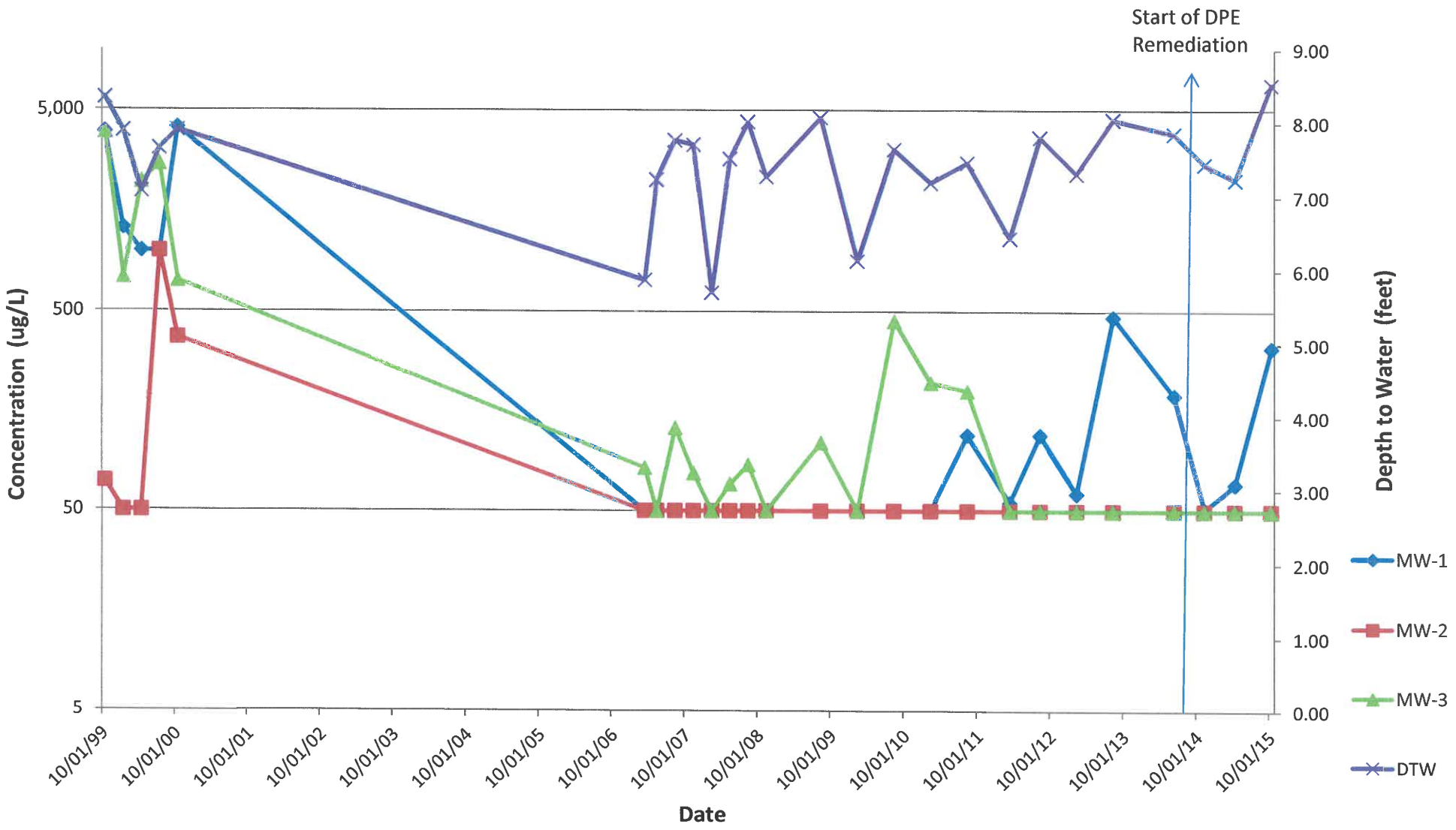
FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

PROCESS FLOW DIAGRAM

FIGURE
6

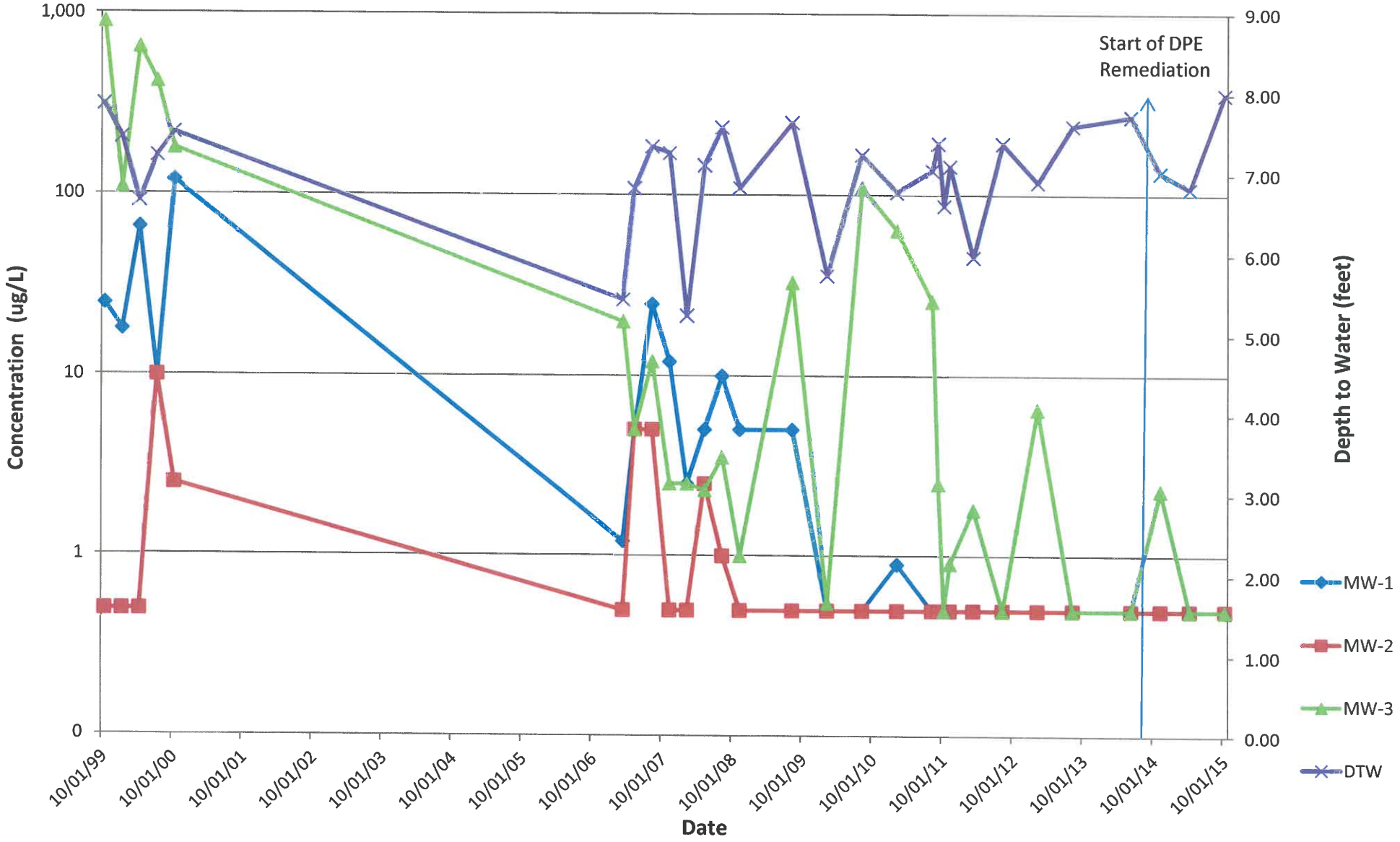
PROJECT NO.
2153-14930-011

Figure 7
Wells MW-1, MW-2 MW-3
GRO Concentration vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

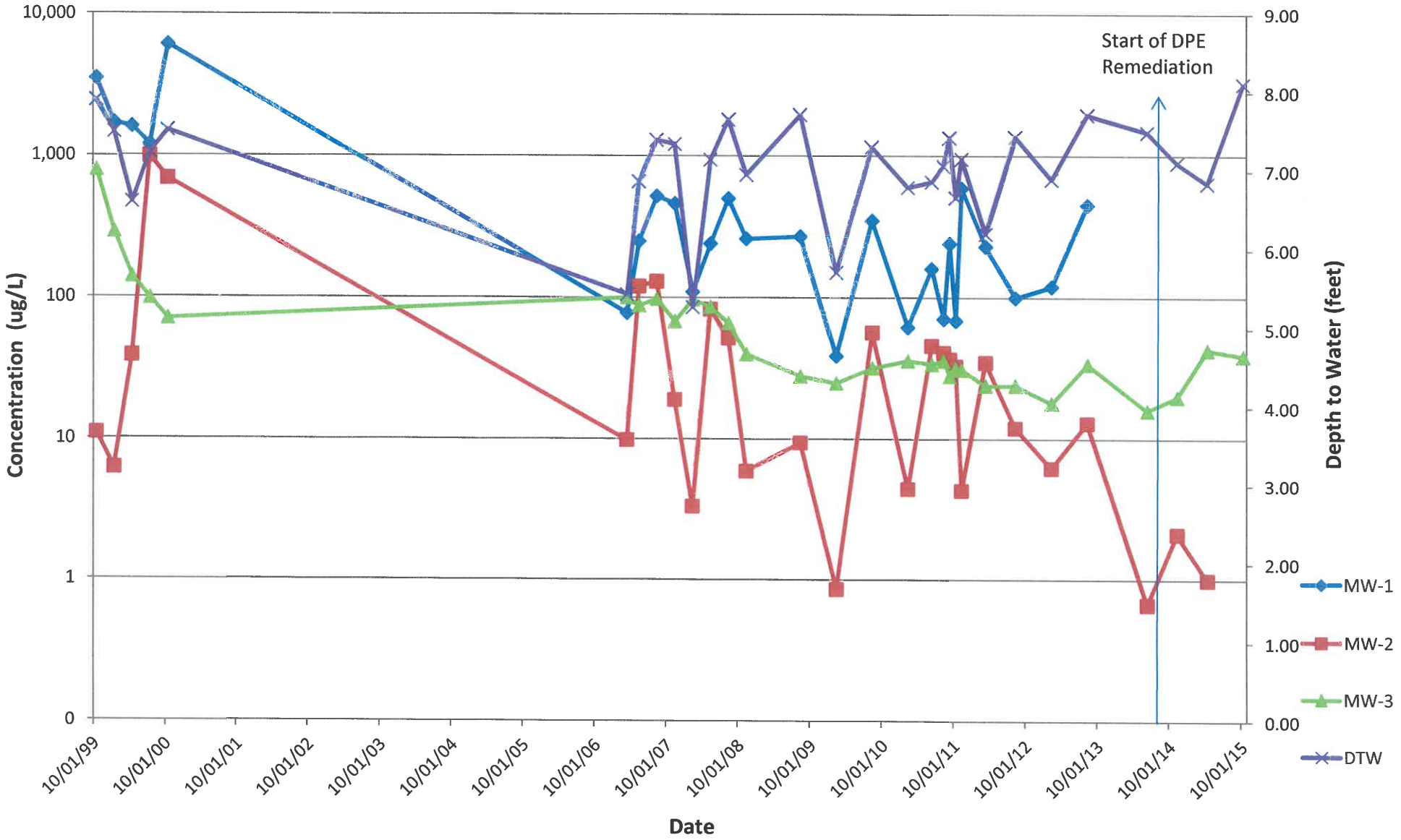
Figure 8
Wells MW-1, MW-2 MW-3
Benzene Concentration vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

T:\Olympic\Copy of Olympic Service Station Quarterly Data

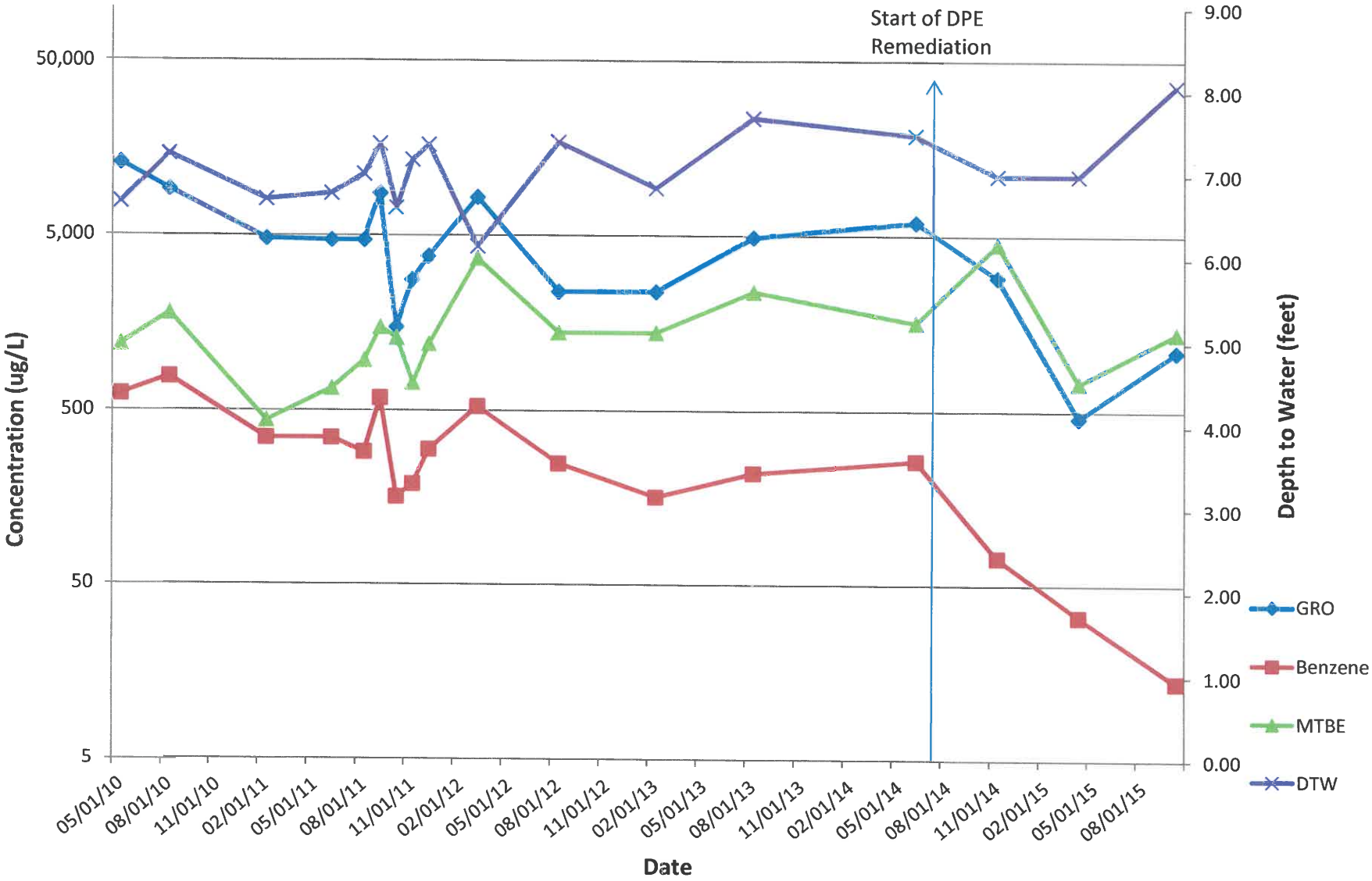
Figure 9
Wells MW-1, MW-2 MW-3
MTBE Concentration vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

T:\Olympic\Copy of Olympic Service Station Quarterly Data

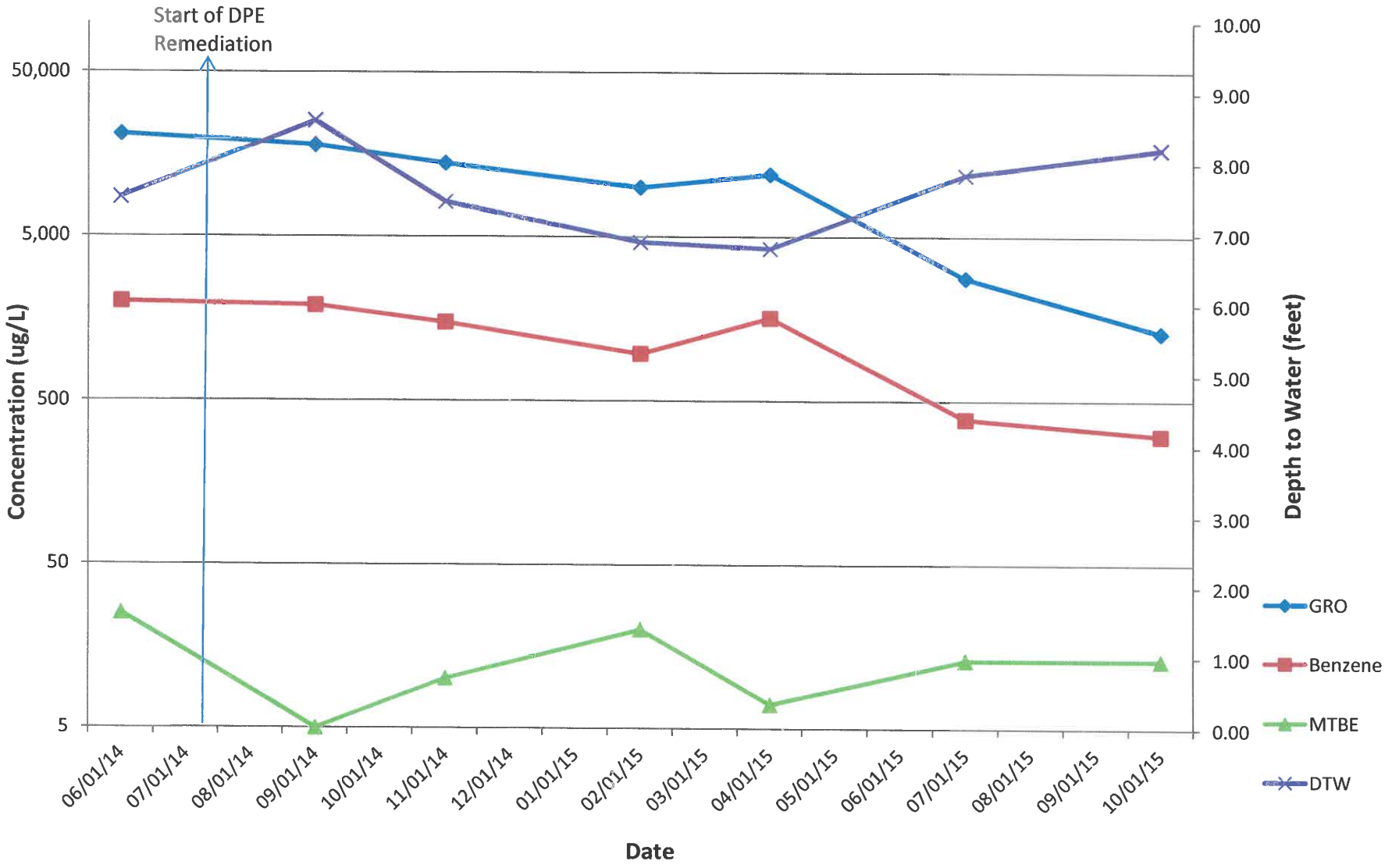
Figure 10
Well MW-4: Concentration vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

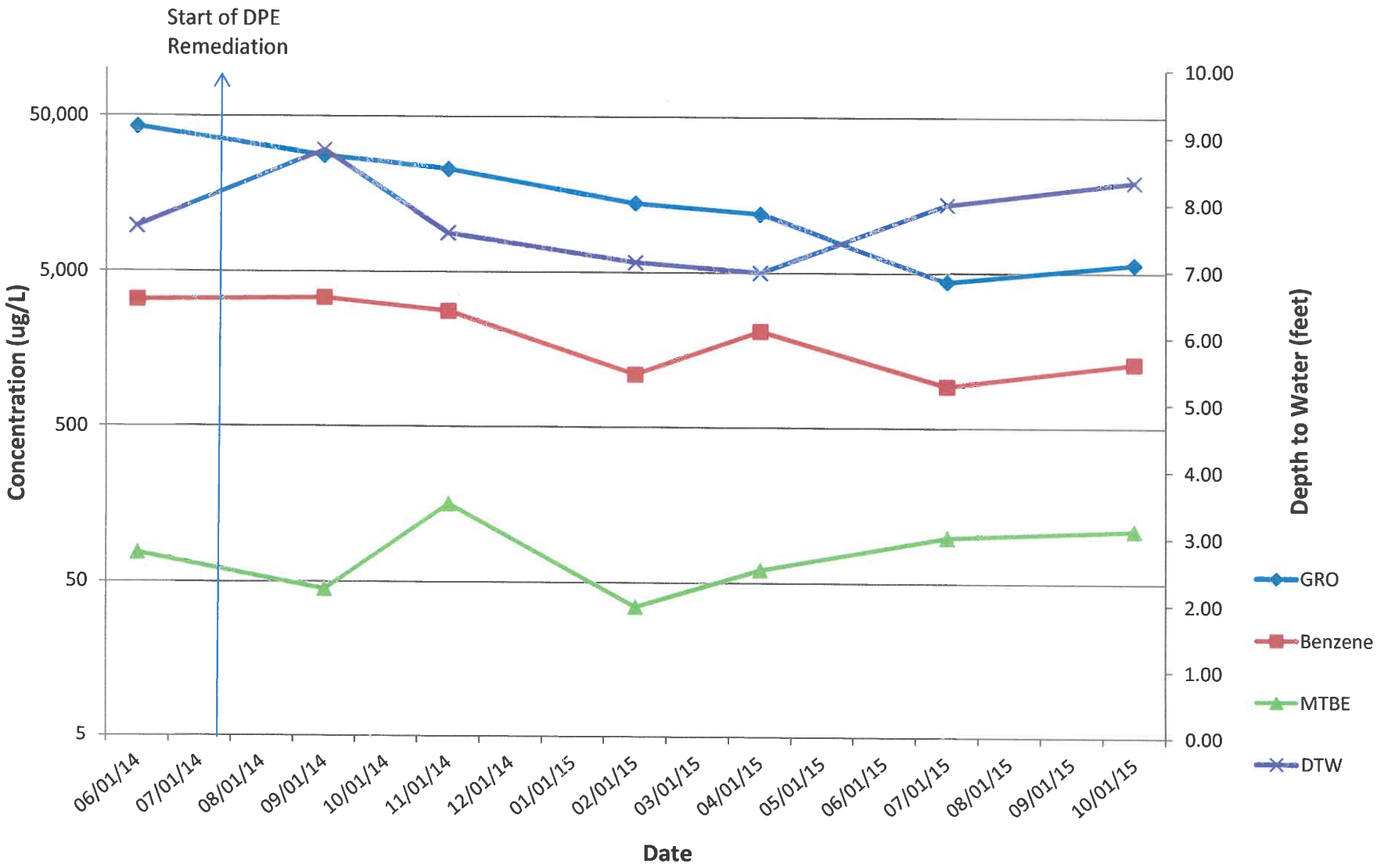
T:\Olympic\Copy of Olympic Service Station Quarterly Data

Figure 11
Well MW-5A: Concentration vs. Time



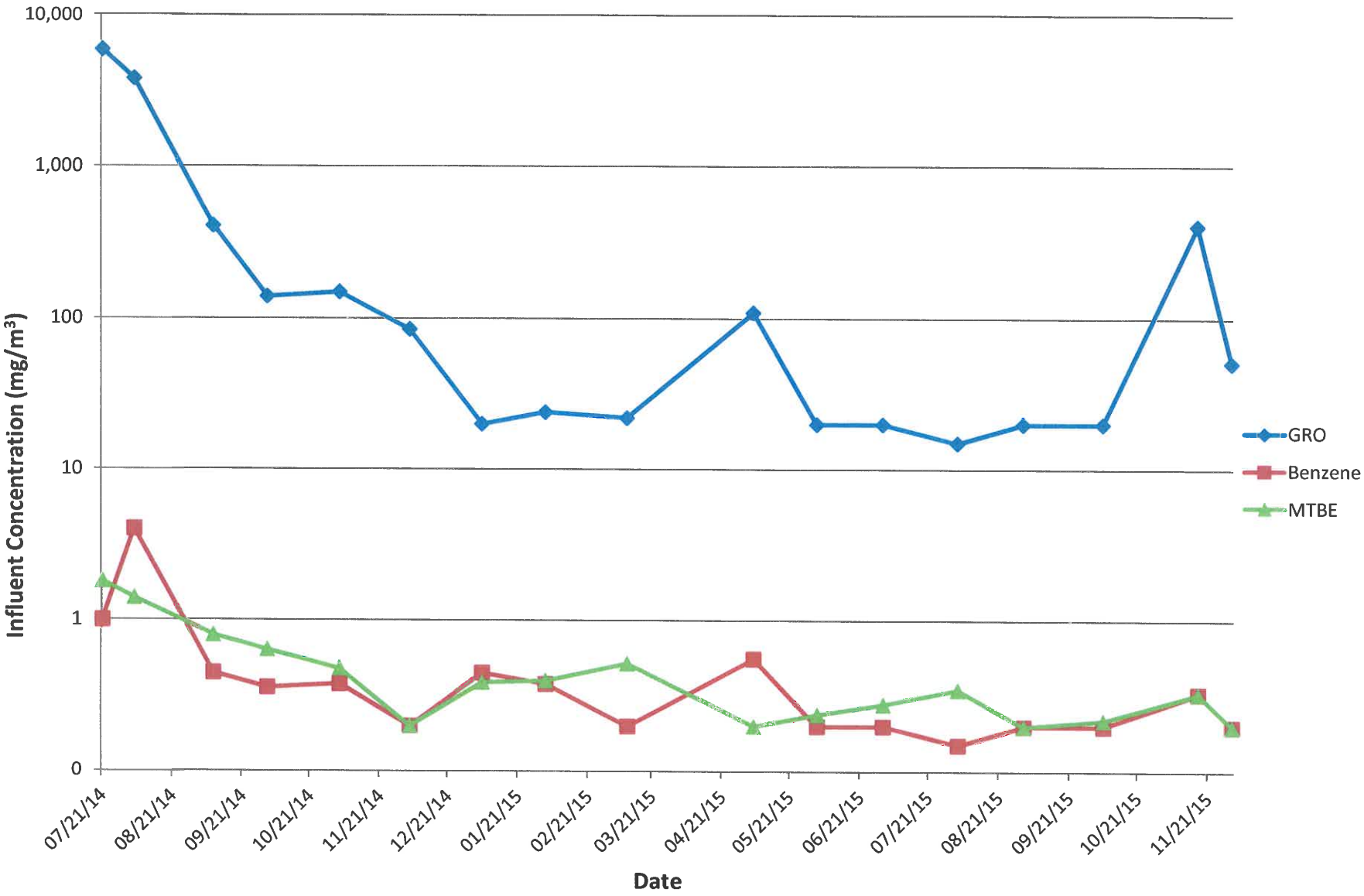
Note: Concentration reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

Figure 12
Well MW-6A: Concentration vs. Time



Note: Concentration reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

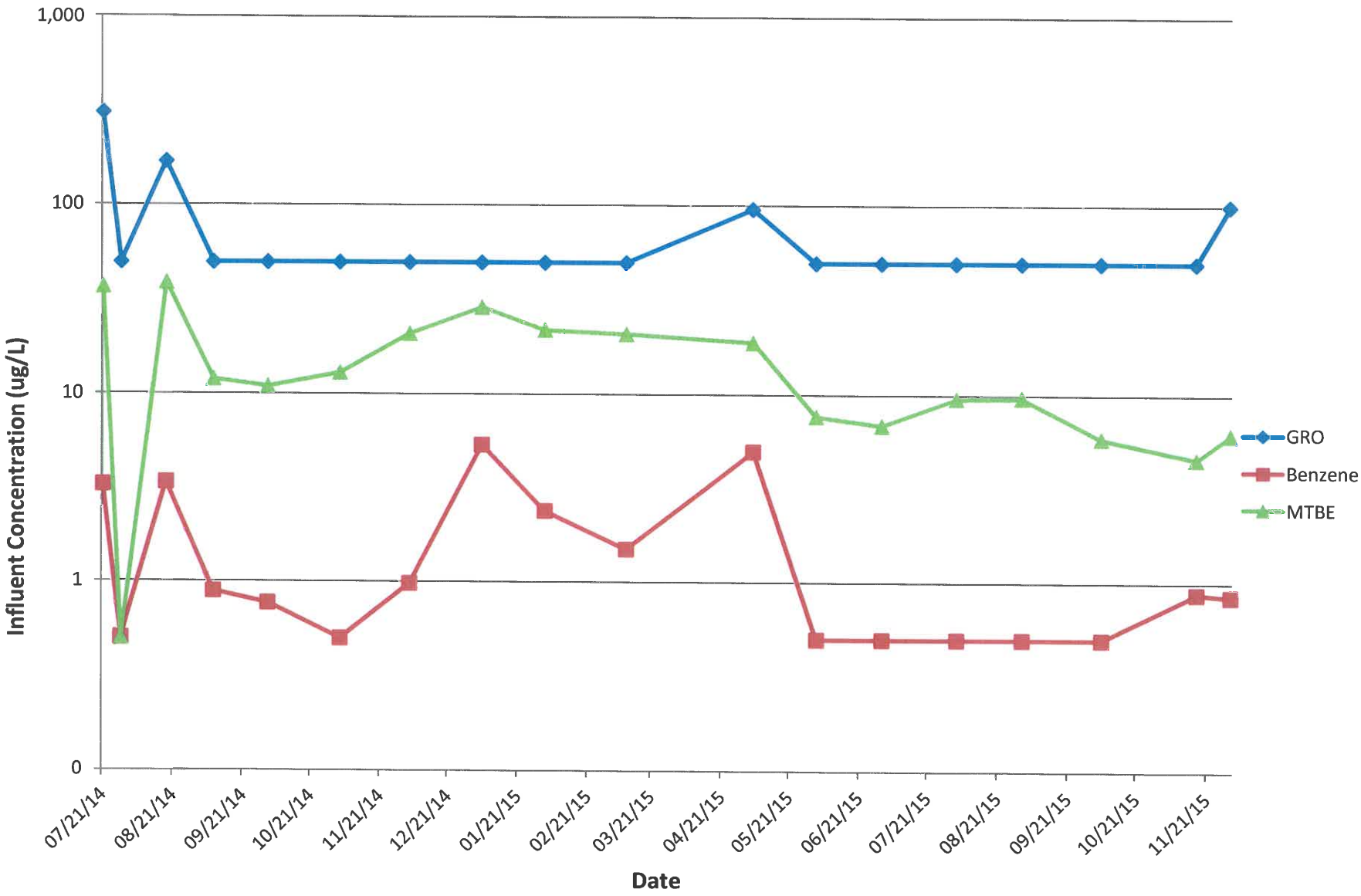
Figure 13
SVE Component: Influent Concentration (mg/m^3) vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

T:\Olympic\Engineering\Olympic_O&M DPE test tables

Figure 14
Groundwater Extraction Component: Influent Concentration (ug/L) vs. Time



Note: Concentrations reported as non-detect (below reporting limits) are graphed with the reporting limit as the actual value for illustration purposes.

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address 1436 Grant Ave
City San Lorenzo
Sampled by:
Signature

Site Number Olympic station
Project Number
Project PM Scott
DATE 10-20-15

ORIGINAL

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 1	0638		8.53	24.14	15.66	2	.5	8	8		X			8.81	1	0658	1.27
MW 2	0340		8.00	18.85	10.85	2	.5	5	5		X			8.16	2	0513	1.22
MW-3	0343		8.11	16.20	10.09	2	.5	5	5		X			8.20	3	0530	1.19
MW-4	0835		8.07	9.35	1.28	4	2.0	2	1.5 DW		X	grab		8.40	4	0919	1.69
MW5A	0344		8.21	9.82	1.61	2	.5	1	.5 DW		X			8.88	5A	0413	1.22
MW5B	0345		8.10	19.44	11.34	2	.5	6	6		X			8.15	5B	0418	2.56
MW6A	0347		8.34	9.89	1.55	2	.5	1	.5 DW		X			8.92	6A	0444	1.66
MW6B	0346		7.91	19.80	11.89	2	.5	6	6		X			7.98	6B	0448	1.19
EX-1	0534		8.25	19.80	11.55	4	2.0	23	23		X	X		8.32	EX 1	0635	1.11
EX-2	0700		8.03	19.30	11.27	4		22	22		X	X		7.90	2	0730	1.30
EX-3	0342		7.83	19.80	11.97	4		24	24		X	X		7.99	3	0616	1.10
EX-4	0702		8.29	18.27	9.98	4		20	20		X	X		8.75	4	0734	1.00
EX-5	0845		8.45	18.97	10.48	4		21	21		X	X		8.71	5	0900	1.13
EX-6	0341		8.45	19.07	10.62	4		21	21		X	X		8.53	6	0600	1.24
EX-7	0740		8.13	19.48	11.35	4	2.0	23	23		X	X		8.25	EX 7	0800	1.23

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 10-1-15
Conductivity
DO

T:\Forms

STRATUS ENVIRONMENTAL, INC.

ORIGINAL

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

Site Number Olympic station
Project Number
Project PM Scott
DATE 10/29/15

Well ID EX-1				23
Purge start time 0621			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0623	22.6	7.32	690.8	3
time 0626	22.2	7.25	694.3	12
time 0630	21.9	7.32	697.5	23
time				
purge stop time			ORP -46.3	

Well ID MW-1				8
Purge start time			Odor Y (N)	
	Temp C	pH	cond	gallons
time 0642	21.9	7.11	704.7	0
time 0648	21.3	7.20	694.7	4
time 0652	21.7	7.22	684.3	8
time				
purge stop time 1:27			ORP -35.0	

Well ID EX-4				20
Purge start time 0707			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0708	22.8	7.33	674.6	3
time 0712	21.9	7.32	672.2	10
time 0715	22.3	7.31	668.9	20
time				
purge stop time			ORP -47.5	

Well ID EX-2				22
Purge start time 0718			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0719	22.6	7.31	667.4	3
time 0721	23.0	7.27	664.0	11
time 0724	22.5	7.27	660.4	22
time				
purge stop time			ORP -45.6	

Well ID EX-7				23
Purge start time 0744			Odor Y (N)	
	Temp C	pH	cond	gallons
time 0745	26.3	7.48	692.3	3
time 0748	24.6	7.34	697.3	11
time 0753	24.8	7.31	698.1	23
time				
purge stop time			ORP -56.7	

Well ID				
Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID MW-4				2
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0834	22.8	6.95	564.4	0
time 0835	23.3	6.94	564.4	1.5 DRY
time				
time				
purge stop time 1.69			ORP -25.8	

Well ID EX-5				21
Purge start time 0845			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0847	25.9	7.54	712.4	3
time 0852	22.6	7.24	701.2	10
time 0855	22.2	7.32	699.5	21
time				
purge stop time			ORP -57.1	

145

ORIGINAL

STRATUS ENVIRONMENTAL, INC.

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

Site Number Olympic Station
Project Number
Project PM Scott
DATE 10/20/15

Well ID MW 5A				1
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0355	22.9	7.24	1079	0
time 0357	23.6	7.16	1063	.5DTG
time				
time				
purge stop time 1.22			ORP -42.0	

Well ID MW 5B				6
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0400	23.2	7.22	731.8	0
time 0403	21.6	7.22	712.3	3
time 0407	21.9	7.24	695.1	6
time				
purge stop time 2.06			ORP -40.7	

Well ID MW6A				1
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0425	24.1	7.09	1112	0
time 0428	24.8	7.05	1154	.5DTG
time				
time				
purge stop time 1.16			ORP -33.2	

Well ID MW6B				6
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0430	24.3	7.23	772.7	0
time 0433	22.6	7.15	730.2	3
time 0438	22.5	7.19	723.0	6
time				
purge stop time 1.19			ORP -41.2	

Well ID MW2				5
Purge start time			Odor Y (N)	
	Temp C	pH	cond	gallons
time 0502	22.5	7.17	696.3	0
time 0505	21.9	7.21	701.3	3
time 0508	22.2	7.24	697.4	5
time				
purge stop time 1.22			ORP -37.6	

Well ID MW3				5
Purge start time			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0517	23.8	6.98	744.6	0
time 0522	23.7	7.14	746.3	3
time 0525	23.6	7.13	749.5	5
time				
purge stop time 1.19			ORP -27.1	

Well ID EX-6				21
Purge start time 0543			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0546	21.1	7.40	624.5	7
time 0550	22.6	7.11	688.2	11
time 0554	22.7	7.16	696.8	21
time				
purge stop time 1.24			ORP -51.5	

Well ID MW EX-7				24
Purge start time 0604			Odor (Y) N	
	Temp C	pH	cond	gallons
time 0606	23.2	7.37	701.1	3
time 0609	22.3	7.27	689.0	12
time 0612	22.3	7.36	686.7	24
time				
purge stop time			ORP -49.5	

Billing Information:

Company: Stantec

Attn:

Address:

City, State, Zip:

Phone Number: _____ Fax: _____

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431

Phone: 775-355-1044

Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089

Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043

Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

04513

Page # 1 of 2

Consultant/ Client Info:

Company: Stantec

Address:

City, State, Zip:

Job and Purchase Order Info:

Job #

Job Name: Olympic Stations

P.O. #:

Report Attention/Project Manager:

Name: Scott

Email Address:

Phone #:

Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No

Global ID: T0600102256

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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: GRO 8015M	BTEX 8260B	MTBE	Remarks
0636	11/22/17	Air		EX-1	STD	3		X	X	X	X	
0734	"	"		EX-2	"	3		"	"	"	"	
0616	"	"		EX-3	"	3		"	"	"	"	
0734	"	"		EX-4	"	3		"	"	"	"	
0900	"	"		EX-5	"	3		"	"	"	"	
0643	"	"		EX-6	"	3		"	"	"	"	
0820	"	Air		EX-7	STD	3		X	X	X	X	

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: Chris C

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
Chris Stantec					
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

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

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.

Billing Information:

Company: Stantec

Attn:

Address:

City, State, Zip:

Phone Number: Fax:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089

Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043

Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

04514

Page # 2 of 2

Consultant/ Client Info:

Company: Stantec

Address:

City, State, Zip:

Job and Purchase Order Info:

Job #

Job Name: Olympic Station

P.O. #:

Report Attention/Project Manager:

Name: Scott

Email Address:

Phone #:

Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No

Global ID: T0600102256

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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: 8260 BTEX	Analysis Requested: BTEX 8260B	Analysis Requested: MTBE	Remarks
0658	10/21/15	AQ		MW-1	STD	3		X	X	X	X	
0513				MW-2		3						
0430				MW-3		3						
0515				MW-4		3						
0413				MW-5A		3						
0444				MW-6A		3						
0445				MW-6B		3						
0415		AQ		MW-5B	STD	3		X	X	X	X	

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: BNILL

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

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

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.

STRATUS ENVIRONMENTAL, INC.

Site Address 1436 Grant Ave
City San Lorenzo
Sampled by:
Signature

Site Number Olympic
Project Number
Project PM Scott
DATE 12-17-15

ORIGINAL

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)
MW7A	0412		8.04	11.95	3.91	2	.5	2	2		X			10.11	7A	0437	NM
MW8A	0410		7.25	12.00	4.25	2	.5	2	2		X			10.20	8A	0444	NM

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
Conductivity
DO

T:\Forms

ORIGINAL

STRATUS ENVIRONMENTAL, INC.

Site Address 1436 Grant
City San Lorenzo
Sampled By:
Signature [illegible]

Site Number Olympic
Project Number
Project PM Scott
DATE 12-17-05

Well ID MW7A

Purge start time			Odor Y (N)	
	Temp C	pH	cond	gallons
time 0415	19.6	7.73	483.7	0
time 0417	20.8	7.64	480.5	2
time				
time				
purge stop time			ORP -69.4	

Well ID MW8A

Purge start time			Odor Y (N)	
	Temp C	pH	cond	gallons
time 0425	20.6	7.41	466.7	0
time 0427	21.1	7.35	463.1	2
time				
time				
purge stop time			ORP -50.6	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Well ID

Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time			ORP	

Billing Information:
Company Name: Stantec
Attn:
Address
City, State, Zip
Phone Number ____ Fax ____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 1 of 1

Consultant / Client Name: Olympic	Job #:	Job Name: Olympic	Analyses Required
Address:	Report Attention / Project Manager		Data Validation Level: III or IV
City, State, Zip: San Lorenzo	Name: Scott		
	Email:		EDD / EDF? YES ____ NO ____
	Phone: ____ Mobile: ____		Global ID # T0600102253

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	GRO	BTEX	MTBE	REMARKS
0437	12/6	AQ		MW-7A	STD	N	3	X	X	X	
0444	1	AQ		MW-8A	STD	N	3	X	X	X	

FOR LAB USE ONLY

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: CHRIS

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Stantec			
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
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.

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Date: 11-6-15
Onsite Time: 0530
Offsite Time: 0635

Technician: CHILL
Project Engineer: Debbie
Weather Conditions: Chy
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational ☒ Non-Operational ☐
System Status Upon Departure: Operational ☐ Non-Operational ☒ Turned OFF To sample wells in 2 weeks
Hour Meter Reading: 8744

Totalizer Reading on DPE Unit: 1469360
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 8

Combustion Chamber Operating Temperature: 1452
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):
pH Meter Calibration 10-1-15

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		1700		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	14" Hg			
Temperature, deg F		92	1011	
PID Readings, ppmv		9.0	2.6	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1	0	9.06
EX-2					MW-2	-.20	8.71
EX-3					MW-3	-.20	9.74
EX-4					MW-4	-.23	9.04
EX-5					MW-5A	—	—
EX-6	20				MW-6A	—	—
EX-7							
MW5A	100						
MW6A	100						

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF	10615 0608	W INF	10615 0555
A EFF	" 0605	W GAC1	" 0550
		W GAC2	" 0545
		W EFF	" 0540

T

Operation & Maintenance Notes			
Notes:			
Notify air board a minimum of 5-days prior to initial start up			
Twice a month monitor/recorded LEL readings(hexane calibration) and vapor flow rate per air permit			
Notify District's Industrial Waste Inspector a minimum of 24 hours prior to any sampling event (510) 276-4700			
Calibrate all instruments (e.g. pH meter)			
Flow meter specifications to be approved by District and include a non-resetable totalizer			
Collect initial water sample after minimum of 508 gallons			
Max discharge rate not to exceed 20gpm			
	pH	Temp	Cond
INF	7.85	20.8	765.1
EFF	7.56	20.2	771.1

Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
TPH	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
BTEX/MTBE	Start-up/Monthly	AINF/AEFF	EPA Method 8260
Lead	Start-up	WINF/WEFF	EPA 200.8
Metals (As, Cd, Cu, Hg, Ni, Se, Ag, Cr, Zn)	Start-up	WINF/WEFF	EPA 200.8
Cyanide	Start-up	WINF//WEFF	SM 4500 CN C,E
Phenols	Start-up	WINF/WEFF	EPA 420.1
pH	Start-up/Monthly	WINF, WEFF	Field measured

* Upon initial start-up of system and prior to discharge of groundwater to the sewer cleanout, obtain samples for groundwater discharge approval from the holding tank. Once approved, the system may be started for continuous operation.

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Date: 11-17-15
Onsite Time: 0500
Offsite Time: 0630

Technician: CHILL
Project Engineer: Debbie
Weather Conditions: Clear
Ambient Temperature: 48

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 8745
Totalizer Reading on DPE Unit: 1469400 old / 0000250 new
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 0
Combustion Chamber Operating Temperature: 1500
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):
pH Meter Calibration 11-12-15

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		1500		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	20"Hg			
Temperature, deg F		78	1102	
PID Readings, ppmv		114	8.2	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1		
EX-2					MW-2		
EX-3					MW-3		
EX-4					MW-4		
EX-5					MW-5A		
EX-6					MW-6A		
EX-7							
5A	100						
6A	100						

Had To install New Totalizer stopped working

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF	111715 0808	W INF	111715 0604
A EFF	1 0830	W GAC1	0602
		W GAC2	0600
		W EFF	0557

Operation & Maintenance Notes
Notes:
Notify air board a minimum of 5-days prior to initial start up
Twice a month monitor/recorded LEL readings(hexane calibration) and vapor flow rate per air permit
Notify District's Industrial Waste Inspector a minimum of 24 hours prior to any sampling event (510) 276-4700
Calibrate all instruments (e.g. pH meter)
Flow meter specifications to be approved by District and include a non-resetable totalizer
Collect initial water sample after minimum of 508 gallons
Max discharge rate not to exceed 20gpm PH
INF 7.92
EFF 7.73

Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
TPH	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
BTEX/MTBE	Start-up/Monthly	AINF/AEFF	EPA Method 8260
Lead	Start-up	WINF/WEFF	EPA 200.8
Metals (As, Cd, Cu, Hg, Ni, Se, Ag, Cr, Zn)	Start-up	WINF/WEFF	EPA 200.8
Cyanide	Start-up	WINF//WEFF	SM 4500 CN C,E
Phenols	Start-up	WINF/WEFF	EPA 420.1
pH	Start-up/Monthly	WINF, WEFF	Field measured

* Upon initial start-up of system and prior to discharge of groundwater to the sewer cleanout, obtain samples for groundwater discharge approval from the holding tank. Once approved, the system may be started for continuous operation.

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Date: 12/2/15
Onsite Time: 0500
Offsite Time: 0605

Technician: CHILL
Project Engineer: Debra
Weather Conditions: Clear
Ambient Temperature: 40

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 8783

Totalizer Reading on DPE Unit: 8660
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 80

Combustion Chamber Operating Temperature: 1450
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):
pH Meter Calibration 11-15-15

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		1500		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	20" Hg			
Temperature, deg F		80	1090	
PID Readings, ppmv		13	8.9	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1		
EX-2					MW-2		
EX-3					MW-3		
EX-4					MW-4		
EX-5					MW-5A		
EX-6					MW-6A		
EX-7							
MW-5A	100						
MW-6A	100						

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF	12215 0930	W INF	12215 0534
A EFF	0536	W GAC1	0531
		W GAC2	0528
		W EFF	0525

pH
INF 7.80
EFF 7.61

Operation & Maintenance Notes
Notes:
Notify air board a minimum of 5-days prior to initial start up
Twice a month monitor/recorded LEL readings(hexane calibration) and vapor flow rate per air permit
Notify District's Industrial Waste Inspector a minimum of 24 hours prior to any sampling event (510) 276-4700
Calibrate all instruments (e.g. pH meter)
Flow meter specifications to be approved by District and include a non-resetable totalizer
Collect initial water sample after minimum of 508 gallons
Max discharge rate not to exceed 20gpm

Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
TPH	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
BTEX/MTBE	Start-up/Monthly	AINF/AEFF	EPA Method 8260
Lead	Start-up	WINF/WEFF	EPA 200.8
Metals (As, Cd, Cu, Hg, Ni, Se, Ag, Cr, Zn)	Start-up	WINF/WEFF	EPA 200.8
Cyanide	Start-up	WINF//WEFF	SM 4500 CN C,E
Phenols	Start-up	WINF/WEFF	EPA 420.1
pH	Start-up/Monthly	WINF, WEFF	Field measured

* Upon initial start-up of system and prior to discharge of groundwater to the sewer cleanout, obtain samples for groundwater discharge approval from the holding tank. Once approved, the system may be started for continuous operation.

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Date: 12/17/15
Onsite Time: 0400
Offsite Time: 0500

Technician: Cahill
Project Engineer: Dibley
Weather Conditions: Cloudy
Ambient Temperature: 40

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☑ Storm?
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 8983

Totalizer Reading on DPE Unit: 51230
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 0
Combustion Chamber Operating Temperature: 1450
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):
pH Meter Calibration

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		1000		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	29"Hg			
Temperature, deg F		80		
PID Readings, ppmv		14	0.3	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1		
EX-2					MW-2		
EX-3					MW-3		
EX-4					MW-4		
EX-5					MW-5A		
EX-6					MW-6A		
EX-7							
MW-5A	100						
MW-6A	100						

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF		W INF	
A EFF		W GAC1	
		W GAC2	
		W EFF	

Operation & Maintenance Notes
Notes:
Notify air board a minimum of 5-days prior to initial start up
Twice a month monitor/recorded LEL readings(hexane calibration) and vapor flow rate per air permit
Notify District's Industrial Waste Inspector a minimum of 24 hours prior to any sampling event (510) 276-4700
Calibrate all instruments (e.g. pH meter)
Flow meter specifications to be approved by District and include a non-resetable totalizer
Collect initial water sample after minimum of 508 gallons
Max discharge rate not to exceed 20gpm

Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
TPH	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
BTEX/MTBE	Start-up/Monthly	AINF/AEFF	EPA Method 8260
Lead	Start-up	WINF/WEFF	EPA 200.8
Metals (As, Cd, Cu, Hg, Ni, Se, Ag, Cr, Zn)	Start-up	WINF/WEFF	EPA 200.8
Cyanide	Start-up	WINF//WEFF	SM 4500 CN C,E
Phenols	Start-up	WINF/WEFF	EPA 420.1
pH	Start-up/Monthly	WINF, WEFF	Field measured

* Upon initial start-up of system and prior to discharge of groundwater to the sewer cleanout, obtain samples for groundwater discharge approval from the holding tank. Once approved, the system may be started for continuous operation.

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Date: 12-29-15
Onsite Time: 0445
Offsite Time: 0510

Technician: CHILC
Project Engineer: Debbie
Weather Conditions: Clear
Ambient Temperature: 35

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒

System Status Upon Departure: Operational ☐ Non-Operational ☒ For sampling wells for TPH analysis

Hour Meter Reading: 9113

Totalizer Reading on DPE Unit: 82110

Chart Recorder Paper Replaced ☐ Yes ☐ No

% Dilution Valve Open:

Combustion Chamber Operating Temperature: 33

If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):

pH Meter Calibration

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM				
Pipe Diameter, inches				
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg				
Temperature, deg F				
PID Readings, ppmv				

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1					MW-1		
EX-2					MW-2		
EX-3					MW-3		
EX-4					MW-4		
EX-5					MW-5A		
EX-6					MW-6A		
EX-7							

Former Olympic Service Station
DPE Mass Extraction Event
1436 Grant Avenue
San Lorenzo, California

ORIGINAL

Sampling Information			
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF		W INF	
A EFF		W GAC1	
		W GAC2	
		W EFF	

Operation & Maintenance Notes
Notes:
Notify air board a minimum of 5-days prior to initial start up
Twice a month monitor/recorded LEL readings(hexane calibration) and vapor flow rate per air permit
Notify District's Industrial Waste Inspector a minimum of 24 hours prior to any sampling event (510) 276-4700
Calibrate all instruments (e.g. pH meter)
Flow meter specifications to be approved by District and include a non-resetable totalizer
Collect initial water sample after minimum of 508 gallons
Max discharge rate not to exceed 20gpm

Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
TPH	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
BTEX/MTBE	Start-up/Monthly	AINF/AEFF	EPA Method 8260
Lead	Start-up	WINF/WEFF	EPA 200.8
Metals (As, Cd, Cu, Hg, Ni, Se, Ag, Cr, Zn)	Start-up	WINF/WEFF	EPA 200.8
Cyanide	Start-up	WINF//WEFF	SM 4500 CN C,E
Phenols	Start-up	WINF/WEFF	EPA 420.1
pH	Start-up/Monthly	WINF, WEFF	Field measured

* Upon initial start-up of system and prior to discharge of groundwater to the sewer cleanout, obtain samples for groundwater discharge approval from the holding tank. Once approved, the system may be started for continuous operation.

APPENDIX B

SAMPLING AND ANALYSES PROCEDURES

APPENDIX B

SAMPLING AND ANALYSIS PROCEDURES

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 typical 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 accruing 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, nonconforments, 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: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received : 10/21/15

Job: 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 :	**EX-1**					
Lab ID :	STR15102137-01A	TPH-P (GRO)	67	50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 06:35	Methyl tert-butyl ether (MTBE)	36	0.50 µg/L	10/23/15	10/23/15
		Benzene	4.3	0.50 µg/L	10/23/15	10/23/15
		Toluene	ND	0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	1.2	0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
Client ID :	**EX-2**					
Lab ID :	STR15102137-02A	TPH-P (GRO)	ND	50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 07:30	Methyl tert-butyl ether (MTBE)	37	0.50 µg/L	10/23/15	10/23/15
		Benzene	ND	0.50 µg/L	10/23/15	10/23/15
		Toluene	ND	0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND	0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
Client ID :	**EX-3**					
Lab ID :	STR15102137-03A	TPH-P (GRO)	ND	50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 06:16	Methyl tert-butyl ether (MTBE)	1.7	0.50 µg/L	10/23/15	10/23/15
		Benzene	ND	0.50 µg/L	10/23/15	10/23/15
		Toluene	ND	0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND	0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
Client ID :	**EX-4**					
Lab ID :	STR15102137-04A	TPH-P (GRO)	ND	50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 07:34	Methyl tert-butyl ether (MTBE)	4.2	0.50 µg/L	10/23/15	10/23/15
		Benzene	ND	0.50 µg/L	10/23/15	10/23/15
		Toluene	ND	0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND	0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
Client ID :	**EX-5**					
Lab ID :	STR15102137-05A	TPH-P (GRO)	ND	50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 09:00	Methyl tert-butyl ether (MTBE)	8.9	0.50 µg/L	10/23/15	10/23/15
		Benzene	ND	0.50 µg/L	10/23/15	10/23/15
		Toluene	ND	0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND	0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND	0.50 µg/L	10/23/15	10/23/15

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Client ID :	**EX-6**						
Lab ID :	STR15102137-06A	TPH-P (GRO)	180		50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 06:00	Methyl tert-butyl ether (MTBE)	210		0.50 µg/L	10/23/15	10/23/15
		Benzene	10		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**EX-7**						
Lab ID :	STR15102137-07A	TPH-P (GRO)	ND		50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 08:00	Methyl tert-butyl ether (MTBE)	5.2		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**MW-1**						
Lab ID :	STR15102137-08A	TPH-P (GRO)	330		100 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 06:58	Methyl tert-butyl ether (MTBE)	450		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**MW-2**						
Lab ID :	STR15102137-09A	TPH-P (GRO)	ND		50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 05:13	Methyl tert-butyl ether (MTBE)	1.0		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**MW-3**						
Lab ID :	STR15102137-10A	TPH-P (GRO)	ND		50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 05:30	Methyl tert-butyl ether (MTBE)	39		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**MW-4**						
Lab ID :	STR15102137-11A	TPH-P (GRO)	1,100		400 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 09:15	Methyl tert-butyl ether (MTBE)	1,400		2.0 µg/L	10/23/15	10/23/15
		Benzene	14		2.0 µg/L	10/23/15	10/23/15
		Toluene	ND	V	2.0 µg/L	10/23/15	10/23/15
		Ethylbenzene	2.0		2.0 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND	V	2.0 µg/L	10/23/15	10/23/15
		o-Xylene	ND	V	2.0 µg/L	10/23/15	10/23/15
Client ID :	**MW-5A**						
Lab ID :	STR15102137-12A	TPH-P (GRO)	1,300		300 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 04:13	Methyl tert-butyl ether (MTBE)	13		1.5 µg/L	10/23/15	10/23/15
		Benzene	310		1.5 µg/L	10/23/15	10/23/15
		Toluene	ND	V	1.5 µg/L	10/23/15	10/23/15
		Ethylbenzene	55		1.5 µg/L	10/23/15	10/23/15
		m,p-Xylene	4.5		1.5 µg/L	10/23/15	10/23/15
		o-Xylene	ND	V	1.5 µg/L	10/23/15	10/23/15

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Client ID :	**MW-6A**						
Lab ID :	STR15102137-13A	TPH-P (GRO)	5,700		2,000 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 04:44	Methyl tert-butyl ether (MTBE)	110		10 µg/L	10/23/15	10/23/15
		Benzene	1,300		10 µg/L	10/23/15	10/23/15
		Toluene	ND	V	10 µg/L	10/23/15	10/23/15
		Ethylbenzene	170		10 µg/L	10/23/15	10/23/15
		m,p-Xylene	280		10 µg/L	10/23/15	10/23/15
		o-Xylene	100		10 µg/L	10/23/15	10/23/15
Client ID :	**MW-6B**						
Lab ID :	STR15102137-14A	TPH-P (GRO)	ND		100 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 04:48	Methyl tert-butyl ether (MTBE)	40		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
Client ID :	**MW-5B**						
Lab ID :	STR15102137-15A	TPH-P (GRO)	ND		50 µg/L	10/23/15	10/23/15
Date Sampled	10/20/15 04:18	Methyl tert-butyl ether (MTBE)	1.7		0.50 µg/L	10/23/15	10/23/15
		Benzene	ND		0.50 µg/L	10/23/15	10/23/15
		Toluene	ND		0.50 µg/L	10/23/15	10/23/15
		Ethylbenzene	ND		0.50 µg/L	10/23/15	10/23/15
		m,p-Xylene	ND		0.50 µg/L	10/23/15	10/23/15
		o-Xylene	ND		0.50 µg/L	10/23/15	10/23/15

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

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

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 an 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.

10/28/15

Report Date

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: STR15102137 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15102137-01A	EX-1	Aqueous	2
15102137-02A	EX-2	Aqueous	2
15102137-03A	EX-3	Aqueous	2
15102137-04A	EX-4	Aqueous	2
15102137-05A	EX-5	Aqueous	2
15102137-06A	EX-6	Aqueous	2
15102137-07A	EX-7	Aqueous	2
15102137-08A	MW-1	Aqueous	2
15102137-09A	MW-2	Aqueous	2
15102137-10A	MW-3	Aqueous	2
15102137-11A	MW-4	Aqueous	2
15102137-12A	MW-5A	Aqueous	2
15102137-13A	MW-6A	Aqueous	2
15102137-14A	MW-6B	Aqueous	2
15102137-15A	MW-5B	Aqueous	2

10/28/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *28-Oct-15*

QC Summary Report

Work Order: 15102137

Method Blank

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

File ID: **15102304.D** Batch ID: **MS08W1023B** Analysis Date: **10/23/2015 12:02**

Sample ID: **MBLK MS08W1023B** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 12:02**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.1		10		111	70	130			
Surr: Toluene-d8	9.95		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.49		10		95	70	130			

Laboratory Control Spike

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

File ID: **15102303.D** Batch ID: **MS08W1023B** Analysis Date: **10/23/2015 11:39**

Sample ID: **GLCS MS08W1023B** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 11:39**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	390	50	400		97	70	130			
Surr: 1,2-Dichloroethane-d4	10.3		10		103	70	130			
Surr: Toluene-d8	10.9		10		109	70	130			
Surr: 4-Bromofluorobenzene	9.66		10		97	70	130			

Sample Matrix Spike

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

File ID: **15102327.D** Batch ID: **MS08W1023B** Analysis Date: **10/23/2015 21:22**

Sample ID: **15102137-01AGS** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 21:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1840	250	2000	66.67	89	54	143			
Surr: 1,2-Dichloroethane-d4	49.2		50		98	70	130			
Surr: Toluene-d8	59.8		50		120	70	130			
Surr: 4-Bromofluorobenzene	48.2		50		96	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15102328.D** Batch ID: **MS08W1023B** Analysis Date: **10/23/2015 21:46**

Sample ID: **15102137-01AGSD** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 21:46**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1700	250	2000	66.67	82	54	143	1840	7.8(23)	
Surr: 1,2-Dichloroethane-d4	48.5		50		97	70	130			
Surr: Toluene-d8	59.4		50		119	70	130			
Surr: 4-Bromofluorobenzene	51.3		50		103	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: 28-Oct-15

QC Summary Report

Work Order: 15102137

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15102304.D** Batch ID: **MS08W1023A** Analysis Date: **10/23/2015 12:02**

Sample ID: **MBLK MS08W1023A** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 12:02**

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	11.1		10		111	70	130			
Surr: Toluene-d8	9.95		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.49		10		95	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15102302.D** Batch ID: **MS08W1023A** Analysis Date: **10/23/2015 11:12**

Sample ID: **LCS MS08W1023A** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 11:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.2	0.5	10		122	63	137			
Benzene	9.72	0.5	10		97	70	130			
Toluene	9.6	0.5	10		96	70	130			
Ethylbenzene	9.68	0.5	10		97	70	130			
m,p-Xylene	9.69	0.5	10		97	65	139			
o-Xylene	9.4	0.5	10		94	70	130			
Surr: 1,2-Dichloroethane-d4	10.1		10		101	70	130			
Surr: Toluene-d8	9.89		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15102325.D** Batch ID: **MS08W1023A** Analysis Date: **10/23/2015 20:34**

Sample ID: **15102137-01AMS** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 20:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	78.5	1.3	50	35.73	86	56	140			
Benzene	47.9	1.3	50	4.29	87	67	134			
Toluene	46.1	1.3	50	0	92	38	130			
Ethylbenzene	45.3	1.3	50	1.17	88	70	130			
m,p-Xylene	44.6	1.3	50	0	89	65	139			
o-Xylene	42.2	1.3	50	0	84	69	130			
Surr: 1,2-Dichloroethane-d4	48.3		50		97	70	130			
Surr: Toluene-d8	46.5		50		93	70	130			
Surr: 4-Bromofluorobenzene	54.4		50		109	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15102326.D** Batch ID: **MS08W1023A** Analysis Date: **10/23/2015 20:58**

Sample ID: **15102137-01AMSD** Units : **µg/L** Run ID: **MSD_08_151023A** Prep Date: **10/23/2015 20:58**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	90.1	1.3	50	35.73	109	56	140	78.52	13.7(40)	
Benzene	53.5	1.3	50	4.29	98	67	134	47.93	10.9(21)	
Toluene	51.8	1.3	50	0	104	38	130	46.1	11.5(20)	
Ethylbenzene	51.6	1.3	50	1.17	101	70	130	45.34	12.9(20)	
m,p-Xylene	49.6	1.3	50	0	99	65	139	44.55	10.7(20)	
o-Xylene	48.4	1.3	50	0	97	69	130	42.2	13.6(20)	
Surr: 1,2-Dichloroethane-d4	49.9		50		99.9	70	130			
Surr: Toluene-d8	46.9		50		94	70	130			
Surr: 4-Bromofluorobenzene	50.8		50		102	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: *28-Oct-15*

QC Summary Report

Work Order: 15102137

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 : STR15102137

Report Due By : 5:00 PM On : 28-Oct-15

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

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 04513, 04514 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
4 °C	21-Oct-15	21-Oct-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR15102137-01A	EX-1	AQ	10/20/15 06:35	3	0	5	GAS-C	BTEX/M_C							
STR15102137-02A	EX-2	AQ	10/20/15 07:30	3	0	5	GAS-C	BTEX/M_C							
STR15102137-03A	EX-3	AQ	10/20/15 06:16	3	0	5	GAS-C	BTEX/M_C							
STR15102137-04A	EX-4	AQ	10/20/15 07:34	3	0	5	GAS-C	BTEX/M_C							
STR15102137-05A	EX-5	AQ	10/20/15 09:00	3	0	5	GAS-C	BTEX/M_C							
STR15102137-06A	EX-6	AQ	10/20/15 06:00	3	0	5	GAS-C	BTEX/M_C							
STR15102137-07A	EX-7	AQ	10/20/15 08:00	3	0	5	GAS-C	BTEX/M_C							
STR15102137-08A	MW-1	AQ	10/20/15 06:58	3	0	5	GAS-C	BTEX/M_C							
STR15102137-09A	MW-2	AQ	10/20/15 05:13	3	0	5	GAS-C	BTEX/M_C							
STR15102137-10A	MW-3	AQ	10/20/15 05:30	3	0	5	GAS-C	BTEX/M_C							

Comments: Security seals intact. Frozen ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	10/21/15 1330

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 :

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 : STR15102137

Report Due By : 5:00 PM On : 28-Oct-15

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

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

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 04513, 04514 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
4 °C	21-Oct-15	21-Oct-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR15102137-11A	MW-4	AQ	10/20/15 09:15	3	0	5	GAS-C	BTEX/M_C							
STR15102137-12A	MW-5A	AQ	10/20/15 04:13	3	0	5	GAS-C	BTEX/M_C							
STR15102137-13A	MW-6A	AQ	10/20/15 04:44	3	0	5	GAS-C	BTEX/M_C							
STR15102137-14A	MW-6B	AQ	10/20/15 04:48	3	0	5	GAS-C	BTEX/M_C							
STR15102137-15A	MW-5B	AQ	10/20/15 04:18	3	0	5	GAS-C	BTEX/M_C							

Comments: Security seals intact. Frozen ice. ;

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	10/21/15 1330

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: Stantec
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431
Phone: 775-355-1044
Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

04513

Consultant/Client Info:
Company: Stantec
Address:
City, State, Zip:

Job and Purchase Order Info:
Job #
Job Name: Olympic Station
P.O. #:

Report Attention/Project Manager:
Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: GRO 8015M	Analysis Requested: BTEX 8260B	Analysis Requested: MTBE	Remarks
0635	10/20/15	AQ	STR1510213 7-01	EX-1	STD	3		X	X	X	X	
0730			02	EX-2		3						
0616			03	EX-3		3						
0734			04	EX-4		3						
0900			05	EX-5		3						
0600			06	EX-6		3						
0800		AQ	07	EX-7	STD	3		X	X	X	X	

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: Caleb

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Caleb Stantec	102015	1350	E.R	102015	1350
			Kathryn/AAI	10/21/15	1325

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

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.

Billing Information:

Company: Stratus

Attn:

Address:

City, State, Zip:

Phone Number: Fax:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089

Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043

Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

04514

Consultant/ Client Info:

Company: Stratus

Address:

City, State, Zip:

Job and Purchase Order Info:

Job #

Job Name: Olympic Station

P.O. #:

Report Attention/Project Manager:

Name: Scott

Email Address:

Phone #:

Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No

Global ID: T0600102256

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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: GRO 8015M	BTEX 8260B	MTBE 8260B	Remarks
0658	10/20/15	AQ	STR1510213708	MW-1	STD	3		X	X	X	X	
0513			09	MW-2		3						
0530			10	MW-3		3						
0517			11	MW-4		3						
0413			12	MW-5A		3						
0444			13	MW-6A		3						
0445			14	MW-6B		3						
0415		AQ	15	MW-5B	STD	3		X	X	X	X	
				MW								

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: RYILC

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Chad Stratus	102015	1350	E.F	102015	1350
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

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

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.

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 : 12/18/15

Job: Olympic

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-7A**					
Lab ID :	STR15121807-01A	TPH-P (GRO)	350	50 µg/L	12/23/15	12/23/15
Date Sampled	12/17/15 04:37	Methyl tert-butyl ether (MTBE)	37	0.50 µg/L	12/23/15	12/23/15
		Benzene	ND	0.50 µg/L	12/23/15	12/23/15
		Toluene	ND	0.50 µg/L	12/23/15	12/23/15
		Ethylbenzene	1.2	0.50 µg/L	12/23/15	12/23/15
		m,p-Xylene	ND	0.50 µg/L	12/23/15	12/23/15
		o-Xylene	ND	0.50 µg/L	12/23/15	12/23/15
Client ID :	**MW-8A**					
Lab ID :	STR15121807-02A	TPH-P (GRO)	210	50 µg/L	12/23/15	12/23/15
Date Sampled	12/17/15 04:44	Methyl tert-butyl ether (MTBE)	0.63	0.50 µg/L	12/23/15	12/23/15
		Benzene	ND	0.50 µg/L	12/23/15	12/23/15
		Toluene	ND	0.50 µg/L	12/23/15	12/23/15
		Ethylbenzene	ND	0.50 µg/L	12/23/15	12/23/15
		m,p-Xylene	ND	0.50 µg/L	12/23/15	12/23/15
		o-Xylene	ND	0.50 µg/L	12/23/15	12/23/15

Gasoline Range Organics (GRO) C4-C13

ND = Not Detected
Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager
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 an any way.
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV00016.

NELAP ACCREDITED LABORATORY

12/29/15
Report Date

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: STR15121807 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15121807-01A	MW-7A	Aqueous	2
15121807-02A	MW-8A	Aqueous	2

12/29/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 29-Dec-15

QC Summary Report

Work Order: 15121807

Method Blank

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

File ID: 15122305.D Batch ID: MS09W1223B Analysis Date: 12/23/2015 11:26

Sample ID: MBLK MS09W1223B Units : µg/L Run ID: MSD_09_151223A Prep Date: 12/23/2015 11:26

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	10.6		10		106	70	130			
Surr: 4-Bromofluorobenzene	9.33		10		93	70	130			

Laboratory Control Spike

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

File ID: 15122303.D Batch ID: MS09W1223B Analysis Date: 12/23/2015 10:22

Sample ID: GLCS MS09W1223B Units : µg/L Run ID: MSD_09_151223A Prep Date: 12/23/2015 10:22

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	436	50	400		109	70	130			
Surr: 1,2-Dichloroethane-d4	12.1		10		121	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.01		10		90	70	130			

Sample Matrix Spike

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

File ID: 15122326.D Batch ID: MS09W1223B Analysis Date: 12/23/2015 19:57

Sample ID: 15121807-01AGS Units : µg/L Run ID: MSD_09_151223A Prep Date: 12/23/2015 19:57

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2500	250	2000	354.9	107	54	143			
Surr: 1,2-Dichloroethane-d4	60.7		50		121	70	130			
Surr: Toluene-d8	50.9		50		102	70	130			
Surr: 4-Bromofluorobenzene	45.2		50		90	70	130			

Sample Matrix Spike Duplicate

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

File ID: 15122327.D Batch ID: MS09W1223B Analysis Date: 12/23/2015 20:21

Sample ID: 15121807-01AGSD Units : µg/L Run ID: MSD_09_151223A Prep Date: 12/23/2015 20:21

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2580	250	2000	354.9	111	54	143	2502	3.1(23)	
Surr: 1,2-Dichloroethane-d4	61.4		50		123	70	130			
Surr: Toluene-d8	51.3		50		103	70	130			
Surr: 4-Bromofluorobenzene	47.4		50		95	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: 29-Dec-15

QC Summary Report

Work Order: 15121807

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15122305.D** Batch ID: **MS09W1223A** Analysis Date: **12/23/2015 11:26**

Sample ID: **MBLK MS09W1223A** Units : µg/L Run ID: **MSD_09_151223A** Prep Date: **12/23/2015 11:26**

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	11.3		10		113	70	130			
Surr: Toluene-d8	10.6		10		106	70	130			
Surr: 4-Bromofluorobenzene	9.33		10		93	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15122302.D** Batch ID: **MS09W1223A** Analysis Date: **12/23/2015 09:58**

Sample ID: **LCS MS09W1223A** Units : µg/L Run ID: **MSD_09_151223A** Prep Date: **12/23/2015 09:58**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.91	0.5	10		99	63	137			
Benzene	8.23	0.5	10		82	70	130			
Toluene	9.21	0.5	10		92	70	130			
Ethylbenzene	9.86	0.5	10		99	70	130			
m,p-Xylene	9.64	0.5	10		96	65	139			
o-Xylene	9.37	0.5	10		94	70	130			
Surr: 1,2-Dichloroethane-d4	12.1		10		121	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	8.86		10		89	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15122324.D** Batch ID: **MS09W1223A** Analysis Date: **12/23/2015 19:09**

Sample ID: **15121807-01AMS** Units : µg/L Run ID: **MSD_09_151223A** Prep Date: **12/23/2015 19:09**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	86.7	1.3	50	37.01	99	56	140			
Benzene	40.4	1.3	50	0	81	67	134			
Toluene	44.5	1.3	50	0	89	38	130			
Ethylbenzene	50.1	1.3	50	1.22	98	70	130			
m,p-Xylene	47.5	1.3	50	0	95	65	139			
o-Xylene	46.6	1.3	50	0	93	69	130			
Surr: 1,2-Dichloroethane-d4	63		50		126	70	130			
Surr: Toluene-d8	49.3		50		99	70	130			
Surr: 4-Bromofluorobenzene	44		50		88	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15122325.D** Batch ID: **MS09W1223A** Analysis Date: **12/23/2015 19:33**

Sample ID: **15121807-01AMSD** Units : µg/L Run ID: **MSD_09_151223A** Prep Date: **12/23/2015 19:33**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	89.4	1.3	50	37.01	105	56	140	86.69	3.1(40)	
Benzene	41.3	1.3	50	0	83	67	134	40.4	2.3(21)	
Toluene	45.8	1.3	50	0	92	38	130	44.53	2.7(20)	
Ethylbenzene	51.6	1.3	50	1.22	101	70	130	50.14	3.0(20)	
m,p-Xylene	48.7	1.3	50	0	97	65	139	47.45	2.7(20)	
o-Xylene	47.8	1.3	50	0	96	69	130	46.61	2.5(20)	
Surr: 1,2-Dichloroethane-d4	62.7		50		125	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	43.9		50		88	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: *29-Dec-15*

QC Summary Report

Work Order: 15121807

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

NV

WorkOrder : STR15121807

Report Due By : 5:00 PM On : 28-Dec-15

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

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

PO :

Client's COC # : 54889 Job : Olympic

EDD Required : Yes

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
1 °C	18-Dec-15	18-Dec-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W							Sample Remarks
STR15121807-01A	MW-7A	AQ	12/17/15 04:37	3	0	5	GAS-C	BTEX/M_C							
STR15121807-02A	MW-8A	AQ	12/17/15 04:44	3	0	5	GAS-C	BTEX/M_C							

Comments: Security Seals Intact. Frozen Ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:		Nathalia Pidinhouse	Alpha Analytical, Inc.	12/17 14:32

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

34007

Billing Information: Stantec

Company Name

Attn:

Address

City, State, Zip

Phone Number ____ Fax ____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ____ CA X NV ____ WA ____ DOD Site ____
ID ____ OR ____ OTHER ____ Page # 1 of 1

Consultant / Client Name: Olympic
Address:
City, State, Zip: San Lorenzo

Job #:
Job Name: Olympic

Report Attention / Project Manager
Name: Scott
Email:
Phone: ____ Mobile: ____

Analyses Required: GRO | BTEX | MTBE

Data Validation Level: III or IV

EDD / EDF? YES ____ NO ____
Global ID # T0600102254

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	GRO	BTEX	MTBE	REMARKS
0437	12/15	AQ	STR1512807-01A	MW-7A	STD	N	3	X	X	X	
0444	"	AQ	STR1512807-02A	MW-8A	STD	N	3	X	X	X	

FOR LAB USE ONLY

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: Collin

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Collin Stanley	E. Fruciano	12/17/15	0927
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date: 12/18	Time: 14:17
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.

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 : 10/07/15

Job: 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 :	**Oly A SYS INF**					
Lab ID :	STR15100747-01A	TPH-P (GRO)	ND	20 mg/m³	10/07/15 16:05	10/12/15
Date Sampled	10/06/15 06:08	Methyl tert-butyl ether (MTBE)	0.22	0.20 mg/m³	10/07/15 16:05	10/12/15
		Benzene	ND	0.20 mg/m³	10/07/15 16:05	10/12/15
		Toluene	ND	0.20 mg/m³	10/07/15 16:05	10/12/15
		Ethylbenzene	ND	0.20 mg/m³	10/07/15 16:05	10/12/15
		m,p-Xylene	ND	0.20 mg/m³	10/07/15 16:05	10/12/15
		o-Xylene	ND	0.20 mg/m³	10/07/15 16:05	10/12/15
Client ID :	**Oly W INF**					
Lab ID :	STR15100747-02A	TPH-P (GRO)	ND	50 µg/L	10/14/15	10/14/15
Date Sampled	10/06/15 05:55	Methyl tert-butyl ether (MTBE)	5.9	0.50 µg/L	10/14/15	10/14/15
		Benzene	ND	0.50 µg/L	10/14/15	10/14/15
		Toluene	ND	0.50 µg/L	10/14/15	10/14/15
		Ethylbenzene	ND	0.50 µg/L	10/14/15	10/14/15
		m,p-Xylene	ND	0.50 µg/L	10/14/15	10/14/15
		o-Xylene	ND	0.50 µg/L	10/14/15	10/14/15
Client ID :	**Oly W GAC1**					
Lab ID :	STR15100747-03A	TPH-P (GRO)	ND	50 µg/L	10/14/15	10/14/15
Date Sampled	10/06/15 05:50	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/14/15	10/14/15
		Benzene	ND	0.50 µg/L	10/14/15	10/14/15
		Toluene	ND	0.50 µg/L	10/14/15	10/14/15
		Ethylbenzene	ND	0.50 µg/L	10/14/15	10/14/15
		m,p-Xylene	ND	0.50 µg/L	10/14/15	10/14/15
		o-Xylene	ND	0.50 µg/L	10/14/15	10/14/15
Client ID :	**Oly W GAC2**					
Lab ID :	STR15100747-04A	TPH-P (GRO)	ND	50 µg/L	10/14/15	10/14/15
Date Sampled	10/06/15 05:45	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/14/15	10/14/15
		Benzene	ND	0.50 µg/L	10/14/15	10/14/15
		Toluene	ND	0.50 µg/L	10/14/15	10/14/15
		Ethylbenzene	ND	0.50 µg/L	10/14/15	10/14/15
		m,p-Xylene	ND	0.50 µg/L	10/14/15	10/14/15
		o-Xylene	ND	0.50 µg/L	10/14/15	10/14/15

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Gasoline Range Organics (GRO) C4-C13

Note: For sample -01A concentrations of air in a Tedlar Bag are at 28 degrees Celsius and 25.75 inches of mercury.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

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 an 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.

10/15/15

Report Date

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: STR15100747 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15100747-02A	Oly W INF	Aqueous	2
15100747-03A	Oly W GAC1	Aqueous	2
15100747-04A	Oly W GAC2	Aqueous	2

10/15/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *15-Oct-15*

QC Summary Report

Work Order: 15100747

Method Blank

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

File ID: **15101206.D** Batch ID: **MS08A1012B** Analysis Date: **10/12/2015 12:36**

Sample ID: **MBLK MS08A1012B** Units : **mg/m³** Run ID: **MSD_08_151012A** Prep Date: **10/12/2015 12:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	1.52		2		76	70	130			
Surr: Toluene-d8	2.37		2		119	70	130			
Surr: 4-Bromofluorobenzene	2.14		2		107	70	130			

Laboratory Control Spike

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

File ID: **15101203.D** Batch ID: **MS08A1012B** Analysis Date: **10/12/2015 11:07**

Sample ID: **GLCS MS08A1012B** Units : **mg/m³** Run ID: **MSD_08_151012A** Prep Date: **10/12/2015 11:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	423	10	400		106	70	130			
Surr: 1,2-Dichloroethane-d4	8.71		10		87	70	130			
Surr: Toluene-d8	9.55		10		96	70	130			
Surr: 4-Bromofluorobenzene	12.7		10		127	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *15-Oct-15*

QC Summary Report

Work Order: 15100747

Method Blank

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

File ID: **15101404.D** Batch ID: **MS15W1014B** Analysis Date: **10/14/2015 12:10**

Sample ID: **MBLK MS15W1014B** Units : **µg/L** Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 12:10**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.5		10		105	70	130			
Surr: Toluene-d8	9.91		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Laboratory Control Spike

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

File ID: **15101403.D** Batch ID: **MS15W1014B** Analysis Date: **10/14/2015 11:33**

Sample ID: **GLCS MS15W1014B** Units : **µg/L** Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 11:33**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	367	50	400		92	70	130			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	70	130			
Surr: Toluene-d8	9.87		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.5		10		105	70	130			

Sample Matrix Spike

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

File ID: **15101426.D** Batch ID: **MS15W1014B** Analysis Date: **10/14/2015 20:59**

Sample ID: **15100848-03AGS** Units : **µg/L** Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 20:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1930	250	2000	0	96	54	143			
Surr: 1,2-Dichloroethane-d4	57.1		50		114	70	130			
Surr: Toluene-d8	48.2		50		96	70	130			
Surr: 4-Bromofluorobenzene	50.8		50		102	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15101429.D** Batch ID: **MS15W1014B** Analysis Date: **10/14/2015 22:12**

Sample ID: **15100848-03AGSD** Units : **µg/L** Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 22:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1940	250	2000	0	97	54	143	1926	0.9(23)	
Surr: 1,2-Dichloroethane-d4	55.5		50		111	70	130			
Surr: Toluene-d8	48.5		50		97	70	130			
Surr: 4-Bromofluorobenzene	50.6		50		101	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: *15-Oct-15*

QC Summary Report

Work Order: 15100747

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **15101206.D** Batch ID: **MS08A1012A** Analysis Date: **10/12/2015 12:36**

Sample ID: **MBLK MS08A1012A** Units : **mg/m³** Run ID: **MSD_08_151012A** Prep Date: **10/12/2015 12:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	1.52		2		76	70	130			
Surr: Toluene-d8	2.37		2		119	70	130			
Surr: 4-Bromofluorobenzene	2.14		2		107	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **15101202.D** Batch ID: **MS08A1012A** Analysis Date: **10/12/2015 10:38**

Sample ID: **LCS MS08A1012A** Units : **mg/m³** Run ID: **MSD_08_151012A** Prep Date: **10/12/2015 10:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	13.7	0.1	10		137	63	137			
Benzene	10.3	0.1	10		103	70	130			
Toluene	10.6	0.1	10		106	70	130			
Ethylbenzene	9.94	0.1	10		99	70	130			
m,p-Xylene	10	0.1	10		100	65	139			
o-Xylene	9.97	0.1	10		99.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.13		10		91	70	130			
Surr: Toluene-d8	9.56		10		96	70	130			
Surr: 4-Bromofluorobenzene	11.9		10		119	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 15-Oct-15

QC Summary Report

Work Order: 15100747

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15101404.D** Batch ID: **MS15W1014A** Analysis Date: **10/14/2015 12:10**

Sample ID: **MBLK MS15W1014A** Units : µg/L Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 12:10**

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	10.5		10		105	70	130			
Surr: Toluene-d8	9.91		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15101402.D** Batch ID: **MS15W1014A** Analysis Date: **10/14/2015 11:05**

Sample ID: **LCS MS15W1014A** Units : µg/L Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 11:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	10.8	0.5	10		108	63	137			
Benzene	8.85	0.5	10		89	70	130			
Toluene	8.94	0.5	10		89	70	130			
Ethylbenzene	8.53	0.5	10		85	70	130			
m,p-Xylene	8.55	0.5	10		86	65	139			
o-Xylene	8.44	0.5	10		84	70	130			
Surr: 1,2-Dichloroethane-d4	11		10		110	70	130			
Surr: Toluene-d8	9.67		10		97	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15101427.D** Batch ID: **MS15W1014A** Analysis Date: **10/14/2015 21:23**

Sample ID: **15100848-03AMS** Units : µg/L Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 21:23**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	59.5	1.3	50	0	119	56	140			
Benzene	45.4	1.3	50	0	91	67	134			
Toluene	43.5	1.3	50	0	87	38	130			
Ethylbenzene	40.8	1.3	50	0	82	70	130			
m,p-Xylene	40.8	1.3	50	0	82	65	139			
o-Xylene	41.3	1.3	50	0	83	69	130			
Surr: 1,2-Dichloroethane-d4	56.2		50		112	70	130			
Surr: Toluene-d8	47.2		50		94	70	130			
Surr: 4-Bromofluorobenzene	50.5		50		101	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15101428.D** Batch ID: **MS15W1014A** Analysis Date: **10/14/2015 21:48**

Sample ID: **15100848-03AMSD** Units : µg/L Run ID: **MSD_15_151014A** Prep Date: **10/14/2015 21:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	63.4	1.3	50	0	127	56	140	59.48	6.4(40)	
Benzene	48.3	1.3	50	0	97	67	134	45.39	6.3(21)	
Toluene	46.1	1.3	50	0	92	38	130	43.48	5.9(20)	
Ethylbenzene	43.3	1.3	50	0	87	70	130	40.78	6.0(20)	
m,p-Xylene	43	1.3	50	0	86	65	139	40.79	5.3(20)	
o-Xylene	44.1	1.3	50	0	88	69	130	41.3	6.6(20)	
Surr: 1,2-Dichloroethane-d4	54.9		50		110	70	130			
Surr: Toluene-d8	47.6		50		95	70	130			
Surr: 4-Bromofluorobenzene	49.9		50		99.8	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: *15-Oct-15*

QC Summary Report

Work Order: 15100747

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

CA

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

WorkOrder : STR15100747

Report Due By : 5:00 PM On : 15-Oct-15

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

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 01911 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
4 °C	07-Oct-15	07-Oct-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15100747-01A	Oly A SYS INF	AR	10/06/15 06:08	1	0	6	GAS-N/C		BTEX/MTBE						Tedlar.
STR15100747-02A	Oly W INF	AQ	10/06/15 05:55	3	0	6		GAS-C		BTEX/M_C					
STR15100747-03A	Oly W GAC1	AQ	10/06/15 05:50	3	0	6		GAS-C		BTEX/M_C					
STR15100747-04A	Oly W GAC2	AQ	10/06/15 05:45	3	0	6		GAS-C		BTEX/M_C					

Comments: No security seals intact. Frozen ice. Chain split due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:		JESSICA ALVARADO	Alpha Analytical, Inc.	10/7/15 1150

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

Attn:

Address:

City, State, Zip:

Phone Number: Fax:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089

Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043

Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

01911

Page # 1 of 1

Consultant/ Client Info:

Company: Stratus

Address:

City, State, Zip:

Job and Purchase Order Info:

Job #

Job Name: Olympic station

P.O. #:

Report Attention/Project Manager:

Name:

Email Address: Scott

Phone #:

Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No

Global ID:

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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: GRO	BTEX	MTBE	TPH 8015B	Remarks
0608	10/5	AR		Oly A Sys Inf	STD	1		X	X	X	X		
0605	10/5	AR		Oly A EFI	24	1		X	X	X	X		
0555	10/5	AQ		Oly W Inf	STD	3		X	X	X	X	X	
0550				Oly W GAC1	STD	3		X	X	X	X	X	
0545				Oly W GAC2	STD	3		X	X	X	X	X	
0540	10/5	AQ		Oly W EFI	24	3		X	X	X	X	X	

ADDITIONAL INSTRUCTIONS: Fed Ex

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: ACHILL

Relinquished by: (Signature/Affiliation): Stratus	Date:	Time:	Received by: (Signature/Affiliation):	Date: 10/7/15	Time: 1145
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:

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

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.

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 : 10/07/15

Job: 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 :	**Oly A EFF**					
Lab ID :	STR15100743-01A	TPH-P (GRO)	ND	20 mg/m³	10/07/15 11:20	10/08/15
Date Sampled	10/06/15 06:05	Methyl tert-butyl ether (MTBE)	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
		Benzene	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
		Toluene	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
		Ethylbenzene	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
		m,p-Xylene	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
		o-Xylene	ND	0.20 mg/m³	10/07/15 11:20	10/08/15
Client ID :	**Oly W EFF**					
Lab ID :	STR15100743-02A	TPH-P (GRO)	ND	50 µg/L	10/08/15	10/08/15
Date Sampled	10/06/15 05:40	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/08/15	10/08/15
		Benzene	ND	0.50 µg/L	10/08/15	10/08/15
		Toluene	ND	0.50 µg/L	10/08/15	10/08/15
		Ethylbenzene	ND	0.50 µg/L	10/08/15	10/08/15
		m,p-Xylene	ND	0.50 µg/L	10/08/15	10/08/15
		o-Xylene	ND	0.50 µg/L	10/08/15	10/08/15

Gasoline Range Organics (GRO) C4-C13

Note: For sample -01A concentrations of air in a Tedlar Bag are at 25 degrees Celsius and 25.79 inches of mercury.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger Scholl — Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

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 an 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.

ACLASS ACCREDITED DoD ELAP

10/9/15
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *13-Oct-15*

QC Summary Report

Work Order: 15100743

Method Blank

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

File ID: **15100807.D** Batch ID: **MS08A1008B** Analysis Date: **10/08/2015 13:13**

Sample ID: **MBLK MS08A1008B** Units : **mg/m³** Run ID: **MSD_08_151008A** Prep Date: **10/08/2015 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.08		2		104	70	130			
Surr: Toluene-d8	2.04		2		102	70	130			
Surr: 4-Bromofluorobenzene	1.89		2		95	70	130			

Laboratory Control Spike

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

File ID: **15100805.D** Batch ID: **MS08A1008B** Analysis Date: **10/08/2015 12:17**

Sample ID: **GLCS MS08A1008B** Units : **mg/m³** Run ID: **MSD_08_151008A** Prep Date: **10/08/2015 12:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	431	10	400		108	70	130			
Surr: 1,2-Dichloroethane-d4	8.06		10		81	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	12.5		10		125	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *13-Oct-15*

QC Summary Report

Work Order: 15100743

Method Blank

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

File ID: **15100804.D** Batch ID: **MS15W1008B** Analysis Date: **10/08/2015 11:36**

Sample ID: **MBLK MS15W1008B** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/08/2015 11:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.5		10		105	70	130			
Surr: Toluene-d8	9.24		10		92	70	130			
Surr: 4-Bromofluorobenzene	10.6		10		106	70	130			

Laboratory Control Spike

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

File ID: **15100803.D** Batch ID: **MS15W1008B** Analysis Date: **10/08/2015 11:04**

Sample ID: **GLCS MS15W1008B** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/08/2015 11:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	378	50	400		94	70	130			
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	9		10		90	70	130			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Sample Matrix Spike

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

File ID: **15100941.D** Batch ID: **MS15W1008B** Analysis Date: **10/10/2015 01:12**

Sample ID: **15100240-03AGS** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/10/2015 01:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1250	250	2000	0	63	54	143			
Surr: 1,2-Dichloroethane-d4	55.8		50		112	70	130			
Surr: Toluene-d8	49.1		50		98	70	130			
Surr: 4-Bromofluorobenzene	50.8		50		102	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15100942.D** Batch ID: **MS15W1008B** Analysis Date: **10/10/2015 01:36**

Sample ID: **15100240-03AGSD** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/10/2015 01:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1140	250	2000	0	57	54	143	1250	9.6(23)	
Surr: 1,2-Dichloroethane-d4	56.2		50		112	70	130			
Surr: Toluene-d8	48.9		50		98	70	130			
Surr: 4-Bromofluorobenzene	49.3		50		99	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: *13-Oct-15*

QC Summary Report

Work Order: 15100743

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **15100807.D** Batch ID: **MS08A1008A** Analysis Date: **10/08/2015 13:13**

Sample ID: **MBLK MS08A1008A** Units : **mg/m³** Run ID: **MSD_08_151008A** Prep Date: **10/08/2015 13:13**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.08		2		104	70	130			
Surr: Toluene-d8	2.04		2		102	70	130			
Surr: 4-Bromofluorobenzene	1.89		2		95	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **15100804.D** Batch ID: **MS08A1008A** Analysis Date: **10/08/2015 11:51**

Sample ID: **LCS MS08A1008A** Units : **mg/m³** Run ID: **MSD_08_151008A** Prep Date: **10/08/2015 11:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	11.7	0.1	10		117	63	137			
Benzene	9.17	0.1	10		92	70	130			
Toluene	9.81	0.1	10		98	70	130			
Ethylbenzene	9.1	0.1	10		91	70	130			
m,p-Xylene	9.29	0.1	10		93	65	139			
o-Xylene	9.12	0.1	10		91	70	130			
Surr: 1,2-Dichloroethane-d4	8.63		10		86	70	130			
Surr: Toluene-d8	9.94		10		99	70	130			
Surr: 4-Bromofluorobenzene	12.2		10		122	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 13-Oct-15

QC Summary Report

Work Order: 15100743

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15100804.D** Batch ID: **MS15W1008A** Analysis Date: **10/08/2015 11:36**

Sample ID: **MBLK MS15W1008A** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/08/2015 11:36**

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	10.5		10		105	70	130			
Surr: Toluene-d8	9.24		10		92	70	130			
Surr: 4-Bromofluorobenzene	10.6		10		106	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15100802.D** Batch ID: **MS15W1008A** Analysis Date: **10/08/2015 10:40**

Sample ID: **LCS MS15W1008A** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/08/2015 10:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.5	0.5	10		125	63	137			
Benzene	10.3	0.5	10		103	70	130			
Toluene	9.02	0.5	10		90	70	130			
Ethylbenzene	8.69	0.5	10		87	70	130			
m,p-Xylene	8.69	0.5	10		87	65	139			
o-Xylene	8.68	0.5	10		87	70	130			
Surr: 1,2-Dichloroethane-d4	10.5		10		105	70	130			
Surr: Toluene-d8	8.96		10		90	70	130			
Surr: 4-Bromofluorobenzene	9.83		10		98	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15100939.D** Batch ID: **MS15W1008A** Analysis Date: **10/10/2015 00:23**

Sample ID: **15100240-03AMS** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/10/2015 00:23**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	66.7	1.3	50	0.52	132	56	140			
Benzene	47.8	1.3	50	0	96	67	134			
Toluene	45.4	1.3	50	0	91	38	130			
Ethylbenzene	41.5	1.3	50	0	83	70	130			
m,p-Xylene	40.9	1.3	50	0	82	65	139			
o-Xylene	42.7	1.3	50	0	85	69	130			
Surr: 1,2-Dichloroethane-d4	53.2		50		106	70	130			
Surr: Toluene-d8	48.7		50		97	70	130			
Surr: 4-Bromofluorobenzene	48.6		50		97	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15100940.D** Batch ID: **MS15W1008A** Analysis Date: **10/10/2015 00:47**

Sample ID: **15100240-03AMSD** Units : **µg/L** Run ID: **MSD_15_151008A** Prep Date: **10/10/2015 00:47**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	60.8	1.3	50	0.52	121	56	140	66.72	9.3(40)	
Benzene	44.3	1.3	50	0	89	67	134	47.78	7.5(21)	
Toluene	42.6	1.3	50	0	85	38	130	45.39	6.3(20)	
Ethylbenzene	38.9	1.3	50	0	78	70	130	41.45	6.5(20)	
m,p-Xylene	38.7	1.3	50	0	77	65	139	40.89	5.6(20)	
o-Xylene	40.2	1.3	50	0	80	69	130	42.65	6.0(20)	
Surr: 1,2-Dichloroethane-d4	51.3		50		103	70	130			
Surr: Toluene-d8	49		50		98	70	130			
Surr: 4-Bromofluorobenzene	50.7		50		101	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: *13-Oct-15*

QC Summary Report

Work Order: 15100743

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

RUSH CA

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

WorkOrder : STR15100743

Report Due By : 5:00 PM On : 08-Oct-15

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

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

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 01911 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
4 °C	07-Oct-15	07-Oct-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15100743-01A	Oly A EFF	AR	10/06/15 06:05	1	0	1	GAS-N/C		BTEX/MTBE						Tedlar.
STR15100743-02A	Oly W EFF	AQ	10/06/15 05:40	3	0	1		GAS-C		BTEX/M_C					

Comments: 24hr TAT. No security seals intact. Frozen ice. Chain split due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:		JESSICA ALVARADO	Alpha Analytical, Inc.	10/7/15 1050

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

Attn:

Address:

City, State, Zip:

Phone Number: _____ Fax: _____

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431

Phone: 775-355-1044

Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089

Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043

Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

01911

Page # 1 of 1

Consultant/ Client Infor

Company: Stratus

Address:

City, State, Zip:

Job and Purchase Order Info:

Job #

Job Name: Olympic station

P.O. #:

Report Attention/Project Manager:

Name: Scott

Email Address:

Phone #:

Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No

Global ID:

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)	Field Filtered? Yes	Field Filtered? No	GRO	BTEX	MTBE	TPH 8015B	Remarks
0608	10/5	AR		Oly A Sys Inf	STD	1		X	X	X	X		
0605	10/5	AR	STR5100743-01	Oly A Eff	24	1		X	X	X	X		
0555	10/5	AQ		Oly W Inf	STD	3		X	X	X	X	X	
0550	"	"		Oly W Gac 1	STD	3		X	X	X	X	X	
0545	"	"		Oly W Gac 2	STD	3		X	X	X	X	X	
0540	10/5	AQ	-02A	Oly W Eff	24	3		X	X	X	X	X	

ADDITIONAL INSTRUCTIONS: Fed Ex

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: CHLC

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
Stratus				10/7/15	1020

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

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.

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 : 11/18/15

Job: Olympic

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 :	**Oly A Sys INF**					
Lab ID :	STR15111827-01A	TPH-P (GRO)	410	33 mg/m³	11/18/15 12:20	11/23/15
Date Sampled	11/17/15 06:08	Methyl tert-butyl ether (MTBE)	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
		Benzene	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
		Toluene	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
		Ethylbenzene	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
		m,p-Xylene	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
		o-Xylene	ND	0.33 mg/m³	11/18/15 12:20	11/23/15
Client ID :	**Oly W INF**					
Lab ID :	STR15111827-02A	TPH-P (GRO)	ND	50 µg/L	11/24/15	11/24/15
Date Sampled	11/17/15 06:04	Methyl tert-butyl ether (MTBE)	4.6	0.50 µg/L	11/24/15	11/24/15
		Benzene	0.88	0.50 µg/L	11/24/15	11/24/15
		Toluene	ND	0.50 µg/L	11/24/15	11/24/15
		Ethylbenzene	ND	0.50 µg/L	11/24/15	11/24/15
		m,p-Xylene	ND	0.50 µg/L	11/24/15	11/24/15
		o-Xylene	ND	0.50 µg/L	11/24/15	11/24/15
Client ID :	**Oly W GAC 1**					
Lab ID :	STR15111827-03A	TPH-P (GRO)	ND	50 µg/L	11/24/15	11/24/15
Date Sampled	11/17/15 06:02	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/24/15	11/24/15
		Benzene	ND	0.50 µg/L	11/24/15	11/24/15
		Toluene	ND	0.50 µg/L	11/24/15	11/24/15
		Ethylbenzene	ND	0.50 µg/L	11/24/15	11/24/15
		m,p-Xylene	ND	0.50 µg/L	11/24/15	11/24/15
		o-Xylene	ND	0.50 µg/L	11/24/15	11/24/15
Client ID :	**Oly W GAC 2**					
Lab ID :	STR15111827-04A	TPH-P (GRO)	ND	50 µg/L	11/24/15	11/24/15
Date Sampled	11/17/15 06:00	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/24/15	11/24/15
		Benzene	ND	0.50 µg/L	11/24/15	11/24/15
		Toluene	ND	0.50 µg/L	11/24/15	11/24/15
		Ethylbenzene	ND	0.50 µg/L	11/24/15	11/24/15
		m,p-Xylene	ND	0.50 µg/L	11/24/15	11/24/15
		o-Xylene	ND	0.50 µg/L	11/24/15	11/24/15

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Gasoline Range Organics (GRO) C4-C13

Note: For sample -01A concentrations of air in a Tedlar Bag are at 22 degrees Celsius and 25.74 inches of mercury.

ND = Not Detected

Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

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 an 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.

11/25/15

Report Date

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: STR15111827 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15111827-02A	Oly W INF	Aqueous	2
15111827-03A	Oly W GAC 1	Aqueous	2
15111827-04A	Oly W GAC 2	Aqueous	2

11/25/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *30-Nov-15*

QC Summary Report

Work Order: 15111825

Method Blank

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

File ID: **C:\HPCHEM\MS10\DATA\151124\15112405.D** Batch ID: **MS10A1124B** Analysis Date: **11/24/2015 10:51**

Sample ID: **MBLK MS10A1124B** Units : **mg/m³** Run ID: **MSD_10_151124A** Prep Date: **11/24/2015 10:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	1.69		2		85	70	130			
Surr: Toluene-d8	2.12		2		106	70	130			
Surr: 4-Bromofluorobenzene	1.66		2		83	70	130			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS10\DATA\151124\15112403.D** Batch ID: **MS10A1124B** Analysis Date: **11/24/2015 10:05**

Sample ID: **GLCS MS10A1124B** Units : **mg/m³** Run ID: **MSD_10_151124A** Prep Date: **11/24/2015 10:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	357	10	400		89	70	130			
Surr: 1,2-Dichloroethane-d4	8.78		10		88	70	130			
Surr: Toluene-d8	10.4		10		104	70	130			
Surr: 4-Bromofluorobenzene	8.08		10		81	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.

Alpha Analytical, Inc.

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

Date: *01-Dec-15*

QC Summary Report

Work Order: 15111827

Method Blank

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

File ID: **15112343.D** Batch ID: **MS15W1123B** Analysis Date: **11/24/2015 02:31**

Sample ID: **MBLK MS15W1123B** Units : µg/L Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 02:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.9		10		109	70	130			
Surr: Toluene-d8	10		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.96		10		99.6	70	130			

Laboratory Control Spike

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

File ID: **15112341.D** Batch ID: **MS15W1123B** Analysis Date: **11/24/2015 01:43**

Sample ID: **GLCS MS15W1123B** Units : µg/L Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 01:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	409	50	400		102	70	130			
Surr: 1,2-Dichloroethane-d4	10.8		10		108	70	130			
Surr: Toluene-d8	9.97		10		99.7	70	130			
Surr: 4-Bromofluorobenzene	9.41		10		94	70	130			

Sample Matrix Spike

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

File ID: **15112366.D** Batch ID: **MS15W1123B** Analysis Date: **11/24/2015 11:32**

Sample ID: **15111827-04AGS** Units : µg/L Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 11:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1740	250	2000	0	87	54	143			
Surr: 1,2-Dichloroethane-d4	60		50		120	70	130			
Surr: Toluene-d8	50.2		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.9		50		98	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15112367.D** Batch ID: **MS15W1123B** Analysis Date: **11/24/2015 11:55**

Sample ID: **15111827-04AGSD** Units : µg/L Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1670	250	2000	0	84	54	143	1741	3.9(23)	
Surr: 1,2-Dichloroethane-d4	58.5		50		117	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.5		50		97	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: *30-Nov-15*

QC Summary Report

Work Order: 15111825

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\151124\15112405.D** Batch ID: **MS10A1124A** Analysis Date: **11/24/2015 10:51**

Sample ID: **MBLK MS10A1124A** Units : **mg/m³** Run ID: **MSD_10_151124A** Prep Date: **11/24/2015 10:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	1.69		2		85	70	130			
Surr: Toluene-d8	2.12		2		106	70	130			
Surr: 4-Bromofluorobenzene	1.66		2		83	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **C:\HPCHEM\MS10\DATA\151124\15112402.D** Batch ID: **MS10A1124A** Analysis Date: **11/24/2015 09:43**

Sample ID: **LCS MS10A1124A** Units : **mg/m³** Run ID: **MSD_10_151124A** Prep Date: **11/24/2015 09:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.09	0.1	10		91	63	137			
Benzene	10.1	0.1	10		101	70	130			
Toluene	8.72	0.1	10		87	70	130			
Ethylbenzene	9.22	0.1	10		92	70	130			
m,p-Xylene	9.11	0.1	10		91	65	139			
o-Xylene	9.51	0.1	10		95	70	130			
Surr: 1,2-Dichloroethane-d4	9		10		90	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	7.86		10		79	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *01-Dec-15*

QC Summary Report

Work Order: 15111827

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15112343.D** Batch ID: **MS15W1123A** Analysis Date: **11/24/2015 02:31**

Sample ID: **MBLK MS15W1123A** Units : **µg/L** Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 02:31**

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	10.9		10		109	70	130			
Surr: Toluene-d8	10		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.96		10		99.6	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15112338.D** Batch ID: **MS15W1123A** Analysis Date: **11/24/2015 00:32**

Sample ID: **LCS MS15W1123A** Units : **µg/L** Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 00:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	14.3	0.5	10		143	63	137			L51
Benzene	10.4	0.5	10		104	70	130			
Toluene	10.5	0.5	10		105	70	130			
Ethylbenzene	9.52	0.5	10		95	70	130			
m,p-Xylene	9.83	0.5	10		98	65	139			
o-Xylene	10.2	0.5	10		102	70	130			
Surr: 1,2-Dichloroethane-d4	11.2		10		112	70	130			
Surr: Toluene-d8	9.88		10		99	70	130			
Surr: 4-Bromofluorobenzene	9.46		10		95	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15112364.D** Batch ID: **MS15W1123A** Analysis Date: **11/24/2015 10:45**

Sample ID: **15111827-04AMS** Units : **µg/L** Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 10:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	62.1	1.3	50	0	124	56	140			
Benzene	45.7	1.3	50	0	91	67	134			
Toluene	49.8	1.3	50	0	99.6	38	130			
Ethylbenzene	46	1.3	50	0	92	70	130			
m,p-Xylene	47	1.3	50	0	94	65	139			
o-Xylene	47.9	1.3	50	0	96	69	130			
Surr: 1,2-Dichloroethane-d4	55.1		50		110	70	130			
Surr: Toluene-d8	50.2		50		100	70	130			
Surr: 4-Bromofluorobenzene	48.8		50		98	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15112365.D** Batch ID: **MS15W1123A** Analysis Date: **11/24/2015 11:08**

Sample ID: **15111827-04AMSD** Units : **µg/L** Run ID: **MSD_15_151123B** Prep Date: **11/24/2015 11:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	65.9	1.3	50	0	132	56	140	62.13	5.9(40)	
Benzene	47.5	1.3	50	0	95	67	134	45.71	3.8(21)	
Toluene	50.6	1.3	50	0	101	38	130	49.78	1.6(20)	
Ethylbenzene	46.3	1.3	50	0	93	70	130	45.96	0.7(20)	
m,p-Xylene	47	1.3	50	0	94	65	139	47.04	0.1(20)	
o-Xylene	48.9	1.3	50	0	98	69	130	47.92	2.1(20)	
Surr: 1,2-Dichloroethane-d4	55.9		50		112	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	49.2		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: *01-Dec-15*

QC Summary Report

Work Order: 15111827

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.

L51 = Analyte recovery was above acceptance limits for the LCS, but was acceptable in the MS/MSD.

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 : STR15111827

Report Due By : 5:00 PM On : 25-Nov-15

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

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

PO :

Client's COC # : 01919 Job : Olympic

EDD Required : **Yes**

Sampled by : C. Hill

Cooler Temp	Samples Received	Date Printed
0 °C	18-Nov-15	18-Nov-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15111827-01A	Oly A Sys INF	AR	11/17/15 06:08	1	0	5	GAS-N/C		BTEX/MTBE						Tedlar
STR15111827-02A	Oly W INF	AQ	11/17/15 06:04	3	0	5		GAS-C		BTEX/M_C					
STR15111827-03A	Oly W GAC 1	AQ	11/17/15 06:02	3	0	5		GAS-C		BTEX/M_C					
STR15111827-04A	Oly W GAC 2	AQ	11/17/15 06:00	3	0	5		GAS-C		BTEX/M_C					

Comments: Security seals intact. Frozen ice. Chain split into two separate work orders due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	11/18/15 1000

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
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 — Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 — Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 — Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 — Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 — Phone: 702-281-4848

01919

Page # 1 of 1

Consultant/Client Info:
Company: Stratus
Address:
City, State, Zip:

Job and Purchase Order Info:
Job #
Job Name: Olympic
P.O. #:

Report Attention/Project Manager:
Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
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)	Field Filtered? Yes	Field Filtered? No	ORO	BTEX	MTBE	TPH SN 8015B						Remarks
0608	11/12 15	AR	STR15111827-01	Oly A Sys INF	STD	1		X	X	X	X							
0606	11/12 15	AR	-	Oly A EFF	24	1		X	X	X	X							
0604	11/12 15	AQ	02	Oly W INF	STD	3		X	X	X	X	X						
0602		AQ	03	Oly W GAC 1	STD	3		X	X	X	X	X						
0600		AQ	04	Oly W GAC 2	STD	3		X	X	X	X	X						
0557	11/12 15	AQ	-	Oly W EFF	24	3		X	X	X	X	X						

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: Carl

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Carl Stratus	11/17/15	1052	E Fugiano	11/17/15	1052
			Kummer	11/18/15	0955

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

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.

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 : 11/18/15

Job: Olympic

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 :	**Oly A EFF**					
Lab ID :	STR15111826-01A	TPH-P (GRO)	ND	15 mg/m³	11/18/15 10:30	11/18/15
Date Sampled	11/17/15 06:06	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
		Benzene	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
		Toluene	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
		Ethylbenzene	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
		m,p-Xylene	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
		o-Xylene	ND	0.15 mg/m³	11/18/15 10:30	11/18/15
Client ID :	**Oly W EFF**					
Lab ID :	STR15111826-02A	TPH-P (GRO)	ND	50 µg/L	11/18/15	11/18/15
Date Sampled	11/17/15 05:57	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/18/15	11/18/15
		Benzene	ND	0.50 µg/L	11/18/15	11/18/15
		Toluene	ND	0.50 µg/L	11/18/15	11/18/15
		Ethylbenzene	ND	0.50 µg/L	11/18/15	11/18/15
		m,p-Xylene	ND	0.50 µg/L	11/18/15	11/18/15
		o-Xylene	ND	0.50 µg/L	11/18/15	11/18/15

Gasoline Range Organics (GRO) C4-C13
Note: For sample -01A concentrations of air in a Tedlar Bag are at 22 degrees Celsius and 25.78 inches of mercury.
ND = Not Detected
Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager
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 an 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.

11/18/15
Report Date

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: STR15111826 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15111826-02A	Oly W EFF	Aqueous	2

11/18/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *25-Nov-15*

QC Summary Report

Work Order: 15111826

Method Blank

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

File ID: **15111806.D** Batch ID: **MS08A1118B** Analysis Date: **11/18/2015 13:09**

Sample ID: **MBLK MS08A1118B** Units : **mg/m³** Run ID: **MSD_08_151118B** Prep Date: **11/18/2015 13:09**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	1.76		2		88	70	130			
Surr: Toluene-d8	2.18		2		109	70	130			
Surr: 4-Bromofluorobenzene	1.84		2		92	70	130			

Laboratory Control Spike

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

File ID: **15111805.D** Batch ID: **MS08A1118B** Analysis Date: **11/18/2015 12:29**

Sample ID: **GLCS MS08A1118B** Units : **mg/m³** Run ID: **MSD_08_151118B** Prep Date: **11/18/2015 12:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	439	10	400		110	70	130			
Surr: 1,2-Dichloroethane-d4	8.83		10		88	70	130			
Surr: Toluene-d8	9.96		10		99.6	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 25-Nov-15

QC Summary Report

Work Order: 15111826

Method Blank

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

File ID: **15111804.D** Batch ID: **MS15W1118B** Analysis Date: **11/18/2015 11:52**

Sample ID: **MBLK MS15W1118B** Units : **µg/L** Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 11:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.37		10		94	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.86		10		99	70	130			

Laboratory Control Spike

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

File ID: **15111803.D** Batch ID: **MS15W1118B** Analysis Date: **11/18/2015 11:17**

Sample ID: **GLCS MS15W1118B** Units : **µg/L** Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 11:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	416	50	400		104	70	130			
Surr: 1,2-Dichloroethane-d4	9.54		10		95	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			
Surr: 4-Bromofluorobenzene	9.82		10		98	70	130			

Sample Matrix Spike

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

File ID: **15111829.D** Batch ID: **MS15W1118B** Analysis Date: **11/18/2015 21:41**

Sample ID: **15111826-02AGS** Units : **µg/L** Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 21:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1740	250	2000	0	87	54	143			
Surr: 1,2-Dichloroethane-d4	49.8		50		99.7	70	130			
Surr: Toluene-d8	49.2		50		98	70	130			
Surr: 4-Bromofluorobenzene	46.6		50		93	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15111830.D** Batch ID: **MS15W1118B** Analysis Date: **11/18/2015 22:05**

Sample ID: **15111826-02AGSD** Units : **µg/L** Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 22:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1950	250	2000	0	97	54	143	1741	11.3(23)	
Surr: 1,2-Dichloroethane-d4	48.9		50		98	70	130			
Surr: Toluene-d8	49.8		50		99.6	70	130			
Surr: 4-Bromofluorobenzene	46		50		92	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: 25-Nov-15

QC Summary Report

Work Order: 15111826

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **15111806.D** Batch ID: **MS08A1118A** Analysis Date: **11/18/2015 13:09**

Sample ID: **MBLK MS08A1118A** Units : **mg/m³** Run ID: **MSD_08_151118B** Prep Date: **11/18/2015 13:09**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	1.76		2		88	70	130			
Surr: Toluene-d8	2.18		2		109	70	130			
Surr: 4-Bromofluorobenzene	1.84		2		92	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **15111810.D** Batch ID: **MS08A1118A** Analysis Date: **11/18/2015 14:43**

Sample ID: **LCS MS08A1118A** Units : **mg/m³** Run ID: **MSD_08_151118B** Prep Date: **11/18/2015 14:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.37	0.1	10		94	63	137			
Benzene	10.8	0.1	10		108	70	130			
Toluene	10.5	0.1	10		105	70	130			
Ethylbenzene	10.8	0.1	10		108	70	130			
m,p-Xylene	10.7	0.1	10		107	65	139			
o-Xylene	10.5	0.1	10		105	70	130			
Surr: 1,2-Dichloroethane-d4	9.31		10		93	70	130			
Surr: Toluene-d8	9.89		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.3		10		103	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 25-Nov-15

QC Summary Report

Work Order: 15111826

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15111804.D** Batch ID: **MS15W1118A** Analysis Date: **11/18/2015 11:52**

Sample ID: **MBLK MS15W1118A** Units : µg/L Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 11:52**

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	9.37		10		94	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.86		10		99	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15111802.D** Batch ID: **MS15W1118A** Analysis Date: **11/18/2015 10:48**

Sample ID: **LCS MS15W1118A** Units : µg/L Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 10:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.4	0.5	10		124	63	137			
Benzene	10.1	0.5	10		101	70	130			
Toluene	10.8	0.5	10		108	70	130			
Ethylbenzene	9.83	0.5	10		98	70	130			
m,p-Xylene	10.4	0.5	10		104	65	139			
o-Xylene	10.2	0.5	10		102	70	130			
Surr: 1,2-Dichloroethane-d4	10.2		10		102	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.63		10		96	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15111827.D** Batch ID: **MS15W1118A** Analysis Date: **11/18/2015 20:54**

Sample ID: **15111104-01AMS** Units : µg/L Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 20:54**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	65.6	1.3	50	0	131	56	140			
Benzene	52.1	1.3	50	0	104	67	134			
Toluene	53.7	1.3	50	0	107	38	130			
Ethylbenzene	47.9	1.3	50	0	96	70	130			
m,p-Xylene	50.1	1.3	50	0	100	65	139			
o-Xylene	51.1	1.3	50	0	102	69	130			
Surr: 1,2-Dichloroethane-d4	49.8		50		100	70	130			
Surr: Toluene-d8	49.8		50		99.6	70	130			
Surr: 4-Bromofluorobenzene	47.3		50		95	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15111828.D** Batch ID: **MS15W1118A** Analysis Date: **11/18/2015 21:18**

Sample ID: **15111104-01AMSD** Units : µg/L Run ID: **MSD_15_151118A** Prep Date: **11/18/2015 21:18**

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	139	56	140	65.57	5.7(40)	
Benzene	54.8	1.3	50	0	110	67	134	52.13	5.0(21)	
Toluene	56.1	1.3	50	0	112	38	130	53.67	4.4(20)	
Ethylbenzene	50.7	1.3	50	0	101	70	130	47.9	5.6(20)	
m,p-Xylene	52.4	1.3	50	0	105	65	139	50.11	4.4(20)	
o-Xylene	53.5	1.3	50	0	107	69	130	51.12	4.6(20)	
Surr: 1,2-Dichloroethane-d4	48.4		50		97	70	130			
Surr: Toluene-d8	50.4		50		101	70	130			
Surr: 4-Bromofluorobenzene	47.6		50		95	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: *25-Nov-15*

QC Summary Report

Work Order: 15111826

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

CA RUSH

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

WorkOrder : STR15111826

Report Due By : 5:00 PM On : 18-Nov-15

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

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 01919 Job : Olympic

Cooler Temp	Samples Received	Date Printed
0 °C	18-Nov-15	18-Nov-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15111826-01A	Oly A EFF	AR	11/17/15 06:06	1	0	0	GAS-N/C		BTEX/MTBE						Tedlar
STR15111826-02A	Oly W EFF	AQ	11/17/15 05:57	3	0	0		GAS-C		BTEX/M_C					

Comments: ASAP TAT. Security seals intact. Frozen ice. Chain split into two separate work orders due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	11/18/15 0955

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
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc. (Alpha Analytical, Inc. Environmental Lab)

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 — Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 — Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 — Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 — Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 — Phone: 702-281-4848

01919

Page # 1 of 1

Consultant/Client Info:
Company: Stratus
Address:
City, State, Zip:

Job and Purchase Order Info:
Job #
Job Name: Olympic
P.O. #:

Report Attention/Project Manager:
Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
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)	STR15111826 Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filtered? Yes	Field Filtered? No	ORO	BTEX	MTBE	TPH SN 8015B						Remarks
-	0608	11/17 15	AR	[redacted]	Oly A Sys INF	STD	1		X	X	X	X							
01	0606	11/17 15	AR		Oly A EFF	24	1		X	X	X	X							
-	0604	11/17	AQ		Oly W INF	STD	3		X	X	X	X	X						
-	0602		AQ		Oly W GAC 1	STD	3		X	X	X	X	X						
-	0600		AQ		Oly W GAC 2	STD	3		X	X	X	X	X						
02	557	11/17	AQ		Oly W EFF	24	3		X	X	X	X	X						

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: Chill

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Chill Stratus	11/17/15	1052	E.F. Mariano	11/17/15	1052
			K. Murray	11/18/15	0955

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

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.

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 : 12/03/15

Job: Olympic

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 :	**Oly A SYSINF**						
Lab ID :	STR15120323-01A	TPH-P (GRO)	51		20 mg/m³	12/03/15 13:00	12/04/15
Date Sampled	12/02/15 05:38	Methyl tert-butyl ether (MTBE)	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
		Benzene	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
		Toluene	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
		Ethylbenzene	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
		m,p-Xylene	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
		o-Xylene	ND		0.20 mg/m³	12/03/15 13:00	12/04/15
Client ID :	**Oly W INF**						
Lab ID :	STR15120323-02A	TPH-P (GRO)	ND	O	100 µg/L	12/04/15	12/04/15
Date Sampled	12/02/15 05:34	Methyl tert-butyl ether (MTBE)	6.2		0.50 µg/L	12/04/15	12/04/15
		Benzene	0.85		0.50 µg/L	12/04/15	12/04/15
		Toluene	ND		0.50 µg/L	12/04/15	12/04/15
		Ethylbenzene	ND		0.50 µg/L	12/04/15	12/04/15
		m,p-Xylene	ND		0.50 µg/L	12/04/15	12/04/15
		o-Xylene	ND		0.50 µg/L	12/04/15	12/04/15
Client ID :	**Oly W GAC1**						
Lab ID :	STR15120323-03A	TPH-P (GRO)	ND		50 µg/L	12/04/15	12/04/15
Date Sampled	12/02/15 05:31	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	12/04/15	12/04/15
		Benzene	ND		0.50 µg/L	12/04/15	12/04/15
		Toluene	ND		0.50 µg/L	12/04/15	12/04/15
		Ethylbenzene	ND		0.50 µg/L	12/04/15	12/04/15
		m,p-Xylene	ND		0.50 µg/L	12/04/15	12/04/15
		o-Xylene	ND		0.50 µg/L	12/04/15	12/04/15
Client ID :	**Oly W GAC2**						
Lab ID :	STR15120323-04A	TPH-P (GRO)	ND		50 µg/L	12/04/15	12/04/15
Date Sampled	12/02/15 05:28	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	12/04/15	12/04/15
		Benzene	ND		0.50 µg/L	12/04/15	12/04/15
		Toluene	ND		0.50 µg/L	12/04/15	12/04/15
		Ethylbenzene	ND		0.50 µg/L	12/04/15	12/04/15
		m,p-Xylene	ND		0.50 µg/L	12/04/15	12/04/15
		o-Xylene	ND		0.50 µg/L	12/04/15	12/04/15

Alpha Analytical, Inc.

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

Gasoline Range Organics (GRO) C4-C13

Note: For sample -01A concentrations of air in a Tedlar Bag are at 23 degrees Celsius and 25.40 inches of mercury.

O = Reporting Limits were increased due to sample foaming.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager

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 an 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.

12/14/15

Report Date

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: STR15120323 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15120323-02A	Oly W INF	Aqueous	2
15120323-03A	Oly W GAC1	Aqueous	2
15120323-04A	Oly W GAC2	Aqueous	2

12/14/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *14-Dec-15*

QC Summary Report

Work Order: 15120323

Method Blank

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

File ID: **15120406.D** Batch ID: **MS15A1204B** Analysis Date: **12/04/2015 12:59**

Sample ID: **MBLK MS15A1204B** Units : **mg/m³** Run ID: **MSD_15_151204A** Prep Date: **12/04/2015 12:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.06		2		103	70	130			
Surr: Toluene-d8	1.94		2		97	70	130			
Surr: 4-Bromofluorobenzene	2.12		2		106	70	130			

Laboratory Control Spike

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

File ID: **15120407.D** Batch ID: **MS15A1204B** Analysis Date: **12/04/2015 13:23**

Sample ID: **GLCS MS15A1204B** Units : **mg/m³** Run ID: **MSD_15_151204A** Prep Date: **12/04/2015 13:23**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	425	10	400		106	70	130			
Surr: 1,2-Dichloroethane-d4	10.9		10		109	70	130			
Surr: Toluene-d8	9.59		10		96	70	130			
Surr: 4-Bromofluorobenzene	10.3		10		103	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.

Alpha Analytical, Inc.

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

Date: *14-Dec-15*

QC Summary Report

Work Order: 15120323

Method Blank

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

File ID: **15120404.D** Batch ID: **MS08W1204B** Analysis Date: **12/04/2015 12:15**

Sample ID: **MBLK MS08W1204B** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 12:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.41		10		94	70	130			
Surr: Toluene-d8	10.6		10		106	70	130			
Surr: 4-Bromofluorobenzene	9.72		10		97	70	130			

Laboratory Control Spike

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

File ID: **15120403.D** Batch ID: **MS08W1204B** Analysis Date: **12/04/2015 11:49**

Sample ID: **GLCS MS08W1204B** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 11:49**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	431	50	400		108	70	130			
Surr: 1,2-Dichloroethane-d4	9.18		10		92	70	130			
Surr: Toluene-d8	10		10		100	70	130			
Surr: 4-Bromofluorobenzene	10.9		10		109	70	130			

Sample Matrix Spike

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

File ID: **15120426.D** Batch ID: **MS08W1204B** Analysis Date: **12/04/2015 21:04**

Sample ID: **15120422-01AGS** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 21:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1650	250	2000	0	83	54	143			
Surr: 1,2-Dichloroethane-d4	48.6		50		97	70	130			
Surr: Toluene-d8	49.8		50		99.6	70	130			
Surr: 4-Bromofluorobenzene	53.4		50		107	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15120427.D** Batch ID: **MS08W1204B** Analysis Date: **12/04/2015 21:27**

Sample ID: **15120422-01AGSD** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 21:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1690	250	2000	0	84	54	143	1653	2.0(23)	
Surr: 1,2-Dichloroethane-d4	48.4		50		97	70	130			
Surr: Toluene-d8	49.7		50		99	70	130			
Surr: 4-Bromofluorobenzene	53		50		106	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: *14-Dec-15*

QC Summary Report

Work Order: 15120323

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **15120406.D** Batch ID: **MS15A1204A** Analysis Date: **12/04/2015 12:59**

Sample ID: **MBLK MS15A1204A** Units : **mg/m³** Run ID: **MSD_15_151204A** Prep Date: **12/04/2015 12:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.06		2		103	70	130			
Surr: Toluene-d8	1.94		2		97	70	130			
Surr: 4-Bromofluorobenzene	2.12		2		106	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **15120403.D** Batch ID: **MS15A1204A** Analysis Date: **12/04/2015 11:46**

Sample ID: **LCS MS15A1204A** Units : **mg/m³** Run ID: **MSD_15_151204A** Prep Date: **12/04/2015 11:46**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.69	0.1	10		97	63	137			
Benzene	8.77	0.1	10		88	70	130			
Toluene	8.93	0.1	10		89	70	130			
Ethylbenzene	8.51	0.1	10		85	70	130			
m,p-Xylene	8.65	0.1	10		87	65	139			
o-Xylene	8.6	0.1	10		86	70	130			
Surr: 1,2-Dichloroethane-d4	10.5		10		105	70	130			
Surr: Toluene-d8	9.86		10		99	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *14-Dec-15*

QC Summary Report

Work Order: 15120323

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15120404.D** Batch ID: **MS08W1204A** Analysis Date: **12/04/2015 12:15**

Sample ID: **MBLK MS08W1204A** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 12:15**

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	9.41		10		94	70	130			
Surr: Toluene-d8	10.6		10		106	70	130			
Surr: 4-Bromofluorobenzene	9.72		10		97	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15120402.D** Batch ID: **MS08W1204A** Analysis Date: **12/04/2015 11:25**

Sample ID: **LCS MS08W1204A** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 11:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	10.7	0.5	10		107	63	137			
Benzene	10.2	0.5	10		102	70	130			
Toluene	10	0.5	10		100	70	130			
Ethylbenzene	10.2	0.5	10		102	70	130			
m,p-Xylene	10.1	0.5	10		101	65	139			
o-Xylene	9.97	0.5	10		99.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.68		10		97	70	130			
Surr: Toluene-d8	9.83		10		98	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15120424.D** Batch ID: **MS08W1204A** Analysis Date: **12/04/2015 20:16**

Sample ID: **15120422-01AMS** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 20:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	46.9	1.3	50	0	94	56	140			
Benzene	49.7	1.3	50	0	99	67	134			
Toluene	47.3	1.3	50	0	95	38	130			
Ethylbenzene	48.6	1.3	50	0	97	70	130			
m,p-Xylene	47.1	1.3	50	0	94	65	139			
o-Xylene	46.1	1.3	50	0	92	69	130			
Surr: 1,2-Dichloroethane-d4	49.6		50		99	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	52.8		50		106	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15120425.D** Batch ID: **MS08W1204A** Analysis Date: **12/04/2015 20:40**

Sample ID: **15120422-01AMSD** Units : µg/L Run ID: **MSD_08_151204A** Prep Date: **12/04/2015 20:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	52.1	1.3	50	0	104	56	140	46.89	10.5(40)	
Benzene	54.6	1.3	50	0	109	67	134	49.72	9.3(21)	
Toluene	52.2	1.3	50	0	104	38	130	47.3	9.8(20)	
Ethylbenzene	54.2	1.3	50	0	108	70	130	48.55	10.9(20)	
m,p-Xylene	52.2	1.3	50	0	104	65	139	47.12	10.1(20)	
o-Xylene	51.2	1.3	50	0	102	69	130	46.07	10.5(20)	
Surr: 1,2-Dichloroethane-d4	51.6		50		103	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	51.8		50		104	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: *14-Dec-15*

QC Summary Report

Work Order: 15120323

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 : STR15120323

Report Due By : 5:00 PM On : 11-Dec-15

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

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

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 01589 Job : Olympic

Cooler Temp	Samples Received	Date Printed
6 °C	03-Dec-15	03-Dec-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15120323-01A	Oly A SYSINF	AR	12/02/15 05:38	1	0	6	GAS-N/C		BTEX/MTBE						Tedlar
STR15120323-02A	Oly W INF	AQ	12/02/15 05:34	3	0	6		GAS-C		BTEX/M_C					
STR15120323-03A	Oly W GAC1	AQ	12/02/15 05:31	3	0	6		GAS-C		BTEX/M_C					
STR15120323-04A	Oly W GAC2	AQ	12/02/15 05:28	3	0	6		GAS-C		BTEX/M_C					

Comments: No security seals. Frozen ice. Chain split into two separate work orders due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	12/3/15 1035

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: Stantec
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.
Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:
Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

01589

Page # 1 of 1

Consultant/ Client Info:
Company: Stantec
Address:
City, State, Zip:

Job and Purchase Order Info:
Job #
Job Name: Olympic
P.O. #:

Report Attention/Project Manager:
Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
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)	Field Filtered? Yes	Field Filtered? No	Analysis Requested: GRO	BTEX	MTBE	BTEX MTBE TPH 8015B	Remarks
0538	12/3	AIR	[illegible]-01	Oly A Sys INF	STD	1		X	X	X	X		
0536	"	AIR	[illegible]-	Oly A EFF	24	1		X	X	X	X		
0534	12/3	AQ	02	Oly W INF	STD	3		X	X	X	X	X	
0531	"	AQ	03	Oly W GAC1	STD	3		X	X	X	X	X	
0528	"	AQ	04	Oly W GAC2	STD	3		X	X	X	X	X	
0525	"	AQ	[illegible]-	Oly W EFF	24	3		X	X	X	X	X	

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: CMLL

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
Cyndi Stanley			K Murray	12/3/15	1030

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

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.

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 : 12/03/15

Job: Olympic

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 :	**Oly A EFF**					
Lab ID :	STR15120322-01A	TPH-P (GRO)	ND	15 mg/m³	12/03/15 10:50	12/03/15
Date Sampled	12/02/15 05:36	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
		Benzene	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
		Toluene	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
		Ethylbenzene	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
		m,p-Xylene	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
		o-Xylene	ND	0.15 mg/m³	12/03/15 10:50	12/03/15
Client ID :	**Oly W EFF**					
Lab ID :	STR15120322-02A	TPH-P (GRO)	ND	50 µg/L	12/03/15	12/03/15
Date Sampled	12/02/15 05:25	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/03/15	12/03/15
		Benzene	ND	0.50 µg/L	12/03/15	12/03/15
		Toluene	ND	0.50 µg/L	12/03/15	12/03/15
		Ethylbenzene	ND	0.50 µg/L	12/03/15	12/03/15
		m,p-Xylene	ND	0.50 µg/L	12/03/15	12/03/15
		o-Xylene	ND	0.50 µg/L	12/03/15	12/03/15

Gasoline Range Organics (GRO) C4-C13
Note: For sample -01A concentrations of air in a Tedlar Bag are at 22 degrees Celsius and 25.47 inches of mercury.
ND = Not Detected

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager
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 an 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.

12/4/15
Report Date

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: STR15120322 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
15120322-02A	Oly W EFF	Aqueous	2

12/4/15

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *08-Dec-15*

QC Summary Report

Work Order: 15120322

Method Blank

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

File ID: **15120305.D** Batch ID: **MS15A1203B** Analysis Date: **12/03/2015 12:35**

Sample ID: **MBLK MS15A1203B** Units : **mg/m³** Run ID: **MSD_15_151203A** Prep Date: **12/03/2015 12:35**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	2.15		2		108	70	130			
Surr: Toluene-d8	1.91		2		96	70	130			
Surr: 4-Bromofluorobenzene	2.04		2		102	70	130			

Laboratory Control Spike

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

File ID: **15120303.D** Batch ID: **MS15A1203B** Analysis Date: **12/03/2015 11:42**

Sample ID: **GLCS MS15A1203B** Units : **mg/m³** Run ID: **MSD_15_151203A** Prep Date: **12/03/2015 11:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	448	10	400		112	70	130			
Surr: 1,2-Dichloroethane-d4	11.2		10		112	70	130			
Surr: Toluene-d8	9.61		10		96	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: *08-Dec-15*

QC Summary Report

Work Order: 15120322

Method Blank

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

File ID: **15120304.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2015 12:15**

Sample ID: **MBLK MS08W1203B** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 12:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.53		10		95	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.79		10		98	70	130			

Laboratory Control Spike

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

File ID: **15120303.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2015 11:46**

Sample ID: **GLCS MS08W1203B** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 11:46**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	445	50	400		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.45		10		95	70	130			
Surr: Toluene-d8	9.75		10		98	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Sample Matrix Spike

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

File ID: **15120325.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2015 20:28**

Sample ID: **15120322-02AGS** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 20:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1770	250	2000	0	88	54	143			
Surr: 1,2-Dichloroethane-d4	47.1		50		94	70	130			
Surr: Toluene-d8	50.3		50		101	70	130			
Surr: 4-Bromofluorobenzene	53.9		50		108	70	130			

Sample Matrix Spike Duplicate

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

File ID: **15120326.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2015 20:52**

Sample ID: **15120322-02AGSD** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 20:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1810	250	2000	0	91	54	143	1769	2.6(23)	
Surr: 1,2-Dichloroethane-d4	47.7		50		95	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	53		50		106	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: *08-Dec-15*

QC Summary Report

Work Order: 15120322

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **15120305.D** Batch ID: **MS15A1203A** Analysis Date: **12/03/2015 12:35**

Sample ID: **MBLK MS15A1203A** Units : **mg/m³** Run ID: **MSD_15_151203A** Prep Date: **12/03/2015 12:35**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	2.15		2		108	70	130			
Surr: Toluene-d8	1.91		2		96	70	130			
Surr: 4-Bromofluorobenzene	2.04		2		102	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **15120302.D** Batch ID: **MS15A1203A** Analysis Date: **12/03/2015 11:16**

Sample ID: **LCS MS15A1203A** Units : **mg/m³** Run ID: **MSD_15_151203A** Prep Date: **12/03/2015 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	11	0.1	10		110	63	137			
Benzene	8.51	0.1	10		85	70	130			
Toluene	8.62	0.1	10		86	70	130			
Ethylbenzene	8.04	0.1	10		80	70	130			
m,p-Xylene	8.37	0.1	10		84	65	139			
o-Xylene	8.33	0.1	10		83	70	130			
Surr: 1,2-Dichloroethane-d4	11.2		10		112	70	130			
Surr: Toluene-d8	9.63		10		96	70	130			
Surr: 4-Bromofluorobenzene	10		10		100	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.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date: 08-Dec-15

QC Summary Report

Work Order: 15120322

Method Blank

Type **MBLK** Test Code: **EPA Method 624/8260**

File ID: **15120304.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2015 12:15**

Sample ID: **MBLK MS08W1203A** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 12:15**

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	9.53		10		95	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	9.79		10		98	70	130			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 624/8260**

File ID: **15120302.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2015 11:22**

Sample ID: **LCS MS08W1203A** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	8.89	0.5	10		89	63	137			
Benzene	9.68	0.5	10		97	70	130			
Toluene	9.42	0.5	10		94	70	130			
Ethylbenzene	9.77	0.5	10		98	70	130			
m,p-Xylene	9.68	0.5	10		97	65	139			
o-Xylene	9.5	0.5	10		95	70	130			
Surr: 1,2-Dichloroethane-d4	9.97		10		99.7	70	130			
Surr: Toluene-d8	9.73		10		97	70	130			
Surr: 4-Bromofluorobenzene	10.9		10		109	70	130			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 624/8260**

File ID: **15120323.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2015 19:40**

Sample ID: **15120322-02AMS** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 19:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	54.7	1.3	50	0	109	56	140			
Benzene	50.5	1.3	50	0	101	67	134			
Toluene	49.5	1.3	50	0	99	38	130			
Ethylbenzene	49.6	1.3	50	0	99	70	130			
m,p-Xylene	48.5	1.3	50	0	97	65	139			
o-Xylene	47.8	1.3	50	0	96	69	130			
Surr: 1,2-Dichloroethane-d4	49.6		50		99	70	130			
Surr: Toluene-d8	48.4		50		97	70	130			
Surr: 4-Bromofluorobenzene	52.9		50		106	70	130			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 624/8260**

File ID: **15120324.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2015 20:04**

Sample ID: **15120322-02AMSD** Units : µg/L Run ID: **MSD_08_151203A** Prep Date: **12/03/2015 20:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	54.3	1.3	50	0	109	56	140	54.65	0.6(40)	
Benzene	50	1.3	50	0	99.9	67	134	50.47	1.0(21)	
Toluene	49.9	1.3	50	0	99.7	38	130	49.51	0.7(20)	
Ethylbenzene	51.4	1.3	50	0	103	70	130	49.62	3.4(20)	
m,p-Xylene	50	1.3	50	0	100	65	139	48.47	3.2(20)	
o-Xylene	49	1.3	50	0	98	69	130	47.76	2.5(20)	
Surr: 1,2-Dichloroethane-d4	49.1		50		98	70	130			
Surr: Toluene-d8	48.7		50		97	70	130			
Surr: 4-Bromofluorobenzene	54.1		50		108	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: *08-Dec-15*

QC Summary Report

Work Order: 15120322

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

CA RUSH

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

WorkOrder : STR15120322

Report Due By : 5:00 PM On : 04-Dec-15

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

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 01589 Job : Olympic

Cooler Temp	Samples Received	Date Printed
6 °C	03-Dec-15	03-Dec-15

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_A	TPH/P_W	VOC_A	VOC_W					Sample Remarks
STR15120322-01A	Oly A EFF	AR	12/02/15 05:36	1	0	1	GAS-N/C		BTEX/MTBE						Tedlar
STR15120322-02A	Oly W EFF	AQ	12/02/15 05:25	3	0	1		GAS-C		BTEX/M_C					

Comments: 24 HR TAT. No security seals. Frozen ice. Chain split into two separate work orders due to different TATs. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	12/3/15 1020

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
Attn:
Address:
City, State, Zip:
Phone Number: Fax:

Alpha Analytical, Inc.

Main Laboratory: 255 Glendale Ave, Suite 21 Sparks, NV 89431 Phone: 775-355-1044 Fax: 775-355-0406

Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Phone: 916-366-9089
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901
Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Phone: 775-388-7043
Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848

01589

Page # 1 of 1

Consultant/ Client Info:

Company: Stratus
Address:
City, State, Zip:

Job and Purchase Order Info:

Job #
Job Name: Olympic
P.O. #:

Report Attention/Project Manager:

Name: Scott
Email Address:
Phone #:
Cell #:

QC Deliverable Info:

EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
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)	Field Filtered? Yes	Field Filtered? No	GRO	BTEX	MTBE	TPH 8015B							Remarks
0538	12/3 15	AR	-	Oly A Sys INF	STD	1		X	X	X	X								
0536	)	AR	STR15120322-01	Oly A EFF	24	1		X	X	X	X								
0534	12/2 15	AQ	-	Oly W INF	STD	3		X	X	X	X	X							
0531	)	AQ	-	Oly W GAC 1	STD	3		X	X	X	X	X							
0528	)	AQ	-	Oly W GAC 2	STD	3		X	X	X	X	X							
0525	)	AQ	02	Oly W EFF	24	3		X	X	X	X	X							

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: CHILL

Relinquished by: (Signature/Affiliation):	Date:	Time:	Received by: (Signature/Affiliation):	Date:	Time:
[signature] Stratus			Killmary	12/3/15	1010

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

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!

Submittal Type:	**EDF**
Report Title:	**4th Quarter 2015 Groundwater Monitoring Results**
Report Type:	**Monitoring Report - Semi-Annually**
Facility Global ID:	**T0600102256**
Facility Name:	**OLYMPIC STATION**
File Name:	**15102137_EDF.zip**
Organization Name:	**Stratus Environmental, Inc.**
Username:	**STRATUS NOCAL**
IP Address:	**50.192.223.97**
Submittal Date/Time:	**2/10/2016 3:36:33 PM**
Confirmation Number:	**5358430862**

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4th Quarter 2015 Groundwater Monitoring Results - MW-7A & MW-8A
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15121807_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	2/10/2016 3:39:55 PM
Confirmation Number:	2437830328

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	GEO_WELL
Report Title:	4th Quarter 2015 Geo Well
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	GEO_WELL.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	2/10/2016 3:42:08 PM
Confirmation Number:	9002569615

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!

Submittal Type:	GEO_WELL
Report Title:	4th Quarter 2015 Geo Well - MW-7A & MW-8A
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	GEO_WELL.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	2/10/2016 3:43:47 PM
Confirmation Number:	2065931856

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 10-6-15 AINF-WINF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15100747_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	10/30/2015 12:06:20 PM
Confirmation Number:	6942176580

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 10-6-15 AEFF-WEFF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15100743_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	10/30/2015 1:08:02 PM
Confirmation Number:	9023459732

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 11-17-15 AINF-WINF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15111827_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/13/2016 9:22:06 AM
Confirmation Number:	5236472427

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 11-17-15 AEFF-WEFF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15111826_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/8/2016 3:14:29 PM
Confirmation Number:	3908209264

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 12-2-15 AINF-WINF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15120323_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/13/2016 9:23:17 AM
Confirmation Number:	3067061007

VIEW QC REPORT

VIEW DETECTIONS REPORT

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!

Submittal Type:	EDF
Report Title:	4Q15 QMR 12-2-15 AEFF-WEFF
Report Type:	Monitoring Report - Semi-Annually
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	15120322_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	1/8/2016 3:15:10 PM
Confirmation Number:	3988134801

VIEW QC REPORT

VIEW DETECTIONS REPORT