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By Alameda County Environmental Health at 10:00 am, Jan 21, 2015

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

January 14, 2015
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 2014 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 Figure 1). 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.

Deborah Barr, P.E.
Project Engineer

Gowri S. Kowtha, P.E.
Principal Engineer

Attachment: Remediation Status Report and Results of Fourth Quarter 2014 Groundwater Monitoring and Sampling Event

cc: Mr. Philip Jaber

January 14, 2015

FORMER OLYMPIC STATION
REMEDIATION STATUS REPORT AND RESULTS OF FOURTH QUARTER 2014 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 (October to mid December 2014):

1. A Remediation Status Report was prepared and submitted on October 2, 2014. This report documented data collected for the dual phase extraction (DPE) system since initial start-up in July 2014. Data for samples collected from two wells (MW-5A and MW-6A, which are the only wells being sampled at the site on a quarterly interval) were also included in this report.

2. Stratus continued operation of the DPE remediation system. Operation and maintenance (O&M) visits for the DPE system were performed on October 2 and 20, November 3 and 18, and December 4 and 16, 2014.

3. Between November 18 and December 4, 2014, the DPE system was not active. This period of inactivity allowed for completion of the fourth quarter 2014 groundwater monitoring and sampling event after recovery of groundwater to static levels, and will also allow for evaluation of remediation performance after a one-time 'pulse'. Groundwater monitoring and sampling was performed on November 25, 2014 using wells EX-1 through EX-7, MW-1 through MW-4, MW-5A/B, and MW-6A/B.

4. On November 25, 2014, the fourth quarter groundwater monitoring and sampling event was performed.

WORK PROPOSED FOR NEXT PERIOD (Mid December 2014, Early 2015):

1. DPE remediation will continue in December 2014, and likely into first quarter 2015. After a review of this report, Stratus will be in communication with ACEHD personnel in order to evaluate a mutually agreeable eventual shut down date for DPE remediation.

2. Per a request by ACEHD, in a letter dated November 19, 2014, and after evaluation of groundwater concentrations in all wells at the end of 1st quarter 2015, Stratus will prepare and submit a work plan to complete additional subsurface site assessment work. In developing the work scope, ACEHD has requested that historical site data be summarized in a focused 'Site Conceptual Model', and that the proposed scope of work be developed to address 'data gaps' identified in the SCM.

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:	November 25, 2014
Is Free Product (FP) Present on Site:	No
Approximate Depth to Groundwater:	6.85 to 7.47 feet below top of well casing under inactive DPE conditions
Groundwater Flow Direction:	Southwest
Groundwater Gradient:	0.007 ft/ft

DPE SYSTEM QUARTERLY OPERATION AND PERFORMANCE:

Equipment Inventory:	350 cubic feet per minute (cfm) thermal oxidizer, and two 2,000 pound liquid-phase granular activated carbon vessels, connected in-series.
Extraction Wells:	EX-1 through EX-7
Operating Mode:	Thermal
BAAQMD Permit Nos.:	Plant No. 21776
Influent Air: GRO End of Period (lab):	85 milligrams per cubic meter (mg/m^3) (12/4/14)
Influent Air: Benzene End of Period (lab):	<0.20 mg/m^3 (12/4/14)
Influent Air: MTBE End of Period (lab):	<0.20 mg/m^3 (12/4/14)
Flow Rate End of Period:	122.7 acfm (12/16/14)
Applied Vacuum End of Period:	16 inches of water column ("WC) (12/16/14)
Soil vapor: GRO Removed this Period:	106.8 lbs (between 9/8/14 and 12/4/14)
Cumulative GRO Removed in Soil Vapor:	932.1 lbs (between 7/21/14 and 12/4/14)
Influent Groundwater: GRO End of Period (lab):	<50 µg/L (12/4/14)
Influent Groundwater: Benzene End of Period (lab):	0.98 µg/L (12/4/14)
Influent Groundwater: MTBE End of Period (lab):	21 µg/L (12/4/14)
Average Groundwater Extraction Rate :	5.8 gpm (between 9/8/14 and 12/4/14)
Groundwater: GRO Removed this Period:	0.002 lbs (between 9/8/14 and 12/4/14)
Cumulative GRO Removed in Groundwater:	0.53lbs (between 7/21/14 and 12/4/14)
Groundwater Removed this Period:	316,070 gallons (between 9/8/14 and 12/4/14)
Cumulative Groundwater Removed:	561,000 gallons (between 7/21/14 and 12/4/14)
Operating Hours This Period:	1,048.0 hours (between 9/19/14 and 12/16/14)
Number of Shutdowns:	1-manual; 3-automatic

GROUNDWATER MONITORING AND SAMPLING EVENT:

The DPE system was inactive for approximately 16 days prior to performing the fourth quarter 2014 groundwater monitoring and sampling event. Before initiating well gauging and sampling, stingers/drop tubes used for DPE at wells EX-1 through EX-7 were removed. An electronic water level sounder was

subsequently used to gauge depth to water levels in each well. After gauging, approximately three well casing volumes were purged and samples were collected from the wells (EX-1 through EX-7, MW-1 through MW-4, MW-5A, MW-5B, MW-6A, and MW-6B). A smaller purge was conducted at well MW-4 due to slow groundwater recharge.

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 measurements and sample analytical results have been uploaded to the State of California's GeoTracker database and documentation of this data uploading is provided in Appendix D.

Groundwater levels in the monitoring/remediation wells were within historical fluctuation ranges. These groundwater measurements were converted to feet mean sea level and used to prepare a groundwater elevation contour map (Figure 2). On November 25, 2014, the groundwater flow direction was calculated to be towards the southwest, at an average gradient of approximately 0.007 ft/ft. In order to illustrate the effect of the DPE system on the groundwater flow at the site, Figure 2a shows the groundwater conditions at a time when the DPE system was running full-time. On October 2, 2014 it appears that the groundwater flow was shifted towards well MW-3, with an increased groundwater flow gradient of 0.01 ft/ft.

The highest concentrations of fuel contaminants in groundwater were detected in monitoring wells installed to a depth of 10 feet bgs, approximately 2.5 to 3 feet below the current groundwater table at the site. Lower concentrations of fuel contaminants were 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 3 and 4 present a summary of GRO, benzene, and MTBE concentrations in groundwater for samples collected from the 10-foot depth wells, and from the deeper monitoring wells, respectively, collected on June 19, 2014 and November 25, 2015.

The highest concentrations of GRO and BTEX are detected in wells MW-5A and MW-6A, located southwest of the site, and the highest concentration of MTBE was detected in well MW-4, located north of the site's former fuel dispenser islands. In the 10-foot depth monitoring well samples, GRO concentrations ranged from 2,900 micrograms per liter (µg/L) to 23,000 µg/L, benzene concentrations ranged from 72 µg/L to 2,800 µg/L, and MTBE concentrations ranged from <10 µg/L to 4,500 µg/L.

GRO was only detected in samples collected from two of the site's wells that are deeper than 10-feet bgs (EX-2, at 72 µg/L and EX-6, at 250 µg/L), and benzene was only detected in samples collected from one of these deeper wells (EX-6, at 36 µg/L). MTBE was detected in samples collected from all of the deeper wells, at relatively low concentrations. MTBE concentrations only exceeded 100 µg/L at three of these well locations (MW-1 at 100 µg/L, EX-2 at 130 µg/L, and EX-6, at 160 µg/L).

REMEDIAL ACTION SUMMARY

Stratus is performing DPE at the site using a portable CBA Equipment, LLC 350 cubic feet per minute (cfm) thermal oxidizer 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. Wells EX-1 through EX-7 are manifold to the remediation system. Groundwater and soil vapors are extracted from a combination of wells intermittently to maximize the systems efficiency. In-well drop tubes (stingers) are being used for extraction of soil vapors and groundwater at 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 onsite using two 1,000-pound GAC vessels, and then discharged to the sanitary sewer under approved discharge permit (Oro Loma Sanitary Sewer District). 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 5.

During the fourth quarter 2014, Stratus technicians conducted six O&M site visits between July 21, and December 16, 2014. Field data sheets documenting measurements and observations collected during each visit are included in Appendix A. Stratus personnel optimized the system performance by adjusting the depth of the drop tubes (stinger) and extracting from various select wells. Magnahelic gauges are placed within wells MW-1 through MW-4, MW-5A, and MW-6A to measure induced vacuum, and a hand-operated electric water-level sounder was used to measure depth to groundwater in each of these six wells. 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 disposed to the sanitary sewer. Influent and effluent soil vapor concentrations are also monitored using a photo-ionization detector (PID).

Stratus initiated continuous operation of the remedial equipment on August 4 2014, after collecting compliance air and treated groundwater discharge samples per permits. The system was shut down to allow for completion of the groundwater monitoring event under a 'steady state' condition and also remediation 'pulse' discussed verbally by Stratus and ACEHD) between November 18 and December 4, 2014. . Between August 4 and December 16, 2014, the remediation system had an operational uptime of approximately 69.06 percent (operation days available was 118 and uptime was 8105 days). Operational uptime was not very good, and this is typical in bay muds, with low groundwater yield, while operating a DPE system with stingers in the extraction wells.

Influent soil vapor extraction flow rates ranging between approximately 90 and 98 cubic feet per minute (cfm) under an applied vacuum ranging from approximately 12 to 20 inches of mercury ("Hg). Induced vacuum up to 12 inches water column (WC) was measured in MW-3 and as high as 0.95 inches WC was measured in well MW-6 located approximately 50 feet from the closest extraction well. Significant draw down was also observed in extraction wells indicating a very good radius of influence for the DPE system. Tables 3 through 9 provide an operational uptime and summary of data available as a result of 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 was collected until the time samples were relinquished to the state-certified analytical laboratory. Soil vapor samples were analyzed by Kiff Analytical, LLC/Pace Analytical (ELAP No. 08263CA), and groundwater samples were analyzed by Alpha Analytical, Inc (ELAP No. 2019). The soil vapor samples were analyzed for GRO, BTEX, and MTBE using USEPA Method 8260B. Groundwater samples were analyzed for GRO using USEPA Method SW8015B/SW8260B and for BTEX and MTBE using USEPA Method SW8260B. Select groundwater samples were also initially analyzed, as required by the Oro Loma Sanitary Sewer District, for select metals using USEPA Method 200.8, for mercury using USEPA Method 245.1, for cyanide using USEPA Method SM4500-CNE, and for phenols using USEPA Method SW8270C-SIM. Analytical data for these samples is included in Appendix C and documentation of GeoTracker data uploading is provided in Appendix D.

Influent air concentrations of fuel contaminants in soil vapor declined appreciably since startup of DPE. Initially, GRO, benzene, and MTBE were all detected, however, since September 8, 2014, influent concentrations of GRO have been below detection limits of less than 50 µg/L. Between October 2 and December 4 influent benzene concentrations have fluctuated between less than 0.50 and 0.98 µg/L. Influent MTBE concentrations have been observed to increase from 11 to 21 µg/L. No petroleum hydrocarbons or MTBE were detected in the effluent air samples, and thus 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 106.8 pounds of GRO were removed from the subsurface in the vapor phase between September 8 and December 4, 2014, and a total of 932.1 pounds of GRO has been removed from the subsurface in the vapor phase between since startup July 21, 2014 through December 4, 2014 (see Table 6).

Between September 8, 2014 and December 4, 2014, approximately 316,070 gallons of groundwater were

extracted from the subsurface, treated onsite, and discharged to the sanitary sewer system. Based on flow totalizer measurements, groundwater is being extracted at a rate of approximately 5.8 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:

The operation of the DPE system has been very effective since the July 2014 startup. Between system startup and the current monitoring event, concentration of petroleum hydrocarbon in 14 of the 15 wells have either reduced or remained at non-detectable levels. These 14 wells had either reduced concentrations of benzene or non-detectable levels, and 10 of 15 wells had reduced concentrations of MTBE or non-detectable levels. Figures 3 and 4 illustrate the pre-remediation concentrations and current concentrations. In addition, the influence of the DPE system appears to be extending beyond the current network of monitoring wells and is estimated to be 30 feet. The ROI estimate is based on observations of induced vacuum and draw down observations during combined extraction. Wells MW-5A and MW-6A are more than 45 feet from any extraction well, but show induced vacuums and draw downs. A map of the DPE influence zone is included as Figure 5.

MTBE concentrations in groundwater at well MW-4 and benzene concentration in well MW- 6A remain above levels specified for potential environmental case closure in the State Water Resources Control Board's 'Low Threat Closure Policy'. Although the influent concentrations of soil vapors and extracted groundwater are low, and mass extraction rates are not good, the effectiveness of this remediation system has to be measured by the reduction in petroleum hydrocarbon concentrations in the observation wells. Stratus recommends operating the DPE system for a minimum of three more months. The exact length of time that remediation will be performed will be evaluated on an ongoing basis, and will be discussed with ACEHD upon submittal of this report.

Based on influent concentrations of GRO in soil vapor an estimated 932 pounds of GRO have been removed from the subsurface compared to 955 pounds of GRO was estimated to be present beneath the site in the September 2012 Corrective Action Plan (CAP).

As stated earlier, ACEHD has requested a work plan to perform additional environmental site assessment work, in particular west-southwest of wells MW-5A and MW-6A, where the highest GRO and BTEX concentrations are detected in shallow groundwater. Since initiation of DPE in July 2014, concentrations of GRO and BTEX have generally declined at MW-5A and MW-6A; however contaminant levels at these two wells remain higher than in other areas of the site. After operation of the system for three additional months and evaluating concentrations in all wells, Stratus will evaluate the need for additional wells down gradient of wells MW-5A/MW-6A.

ATTACHMENTS:

- Table 1 Well Construction Details
- 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 Groundwater Elevation Contour Map, Fourth Quarter 2014
- Figure 2A Groundwater Elevation Contour Map, October 2, 2014
- Figure 3 Groundwater Analytical Summary 10' Depth Monitoring Wells, Fourth Quarter 2014
- Figure 4 Groundwater Analytical Summary 20'-26' Depth Monitoring Wells, Fourth Quarter 2014
- Figure 5 DPE Influence Map
- Figure 6 Process Flow Diagram
- 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
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	--	--	--	--	--	--	--

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	--	--	--	--	--	--	--

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	--	--	--	--	--	--	--

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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	--	--	--	--	--	--	--
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]	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--

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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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--

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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--

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.

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	Dilution Air Flowrate	pH		PID	
											Inf	Eff	Sys Inf	Eff
			"Hg	ft^2	°F	fpm	acfm	°F	°F	acfm	pH	°F	ppmv	ppmv
7/21/14 6:00	1	3,478.1	16	0.0491	95	2,000	98.2	1,452	1,411	15	7.69	7.60	310	1.6
7/24/14 6:00	2	3,480.0	19	0.0491	95	2,000	98.2	1,460	1,410	17	--	--	350	2.1
7/29/14 5:30	3	3,599.7	16	0.0491	90	2,200	108.0	1,465	1,425	16	--	8.01	310	1.1
8/4/14 7:10	4	3,600.4	15	0.0491	85	2,000	98.2	1,493	1,430	18	--	--	300	1.2
8/18/14 6:30	5	3,862.0	13	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	0.0491	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	0.0491	100	2,700	132.5	1,464	1,425	--	--	--	150	1.7
10/2/14 6:48	6	4,823.0	12	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	0.0491	90	2,500	122.7	1,460	1,389	--	--	--	45	2.6
11/3/14 7:00	8	5,265.0	14	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	0.0491	90	2,000	98.2	1,468	1,310	68	8.13	8.36	16	2.4
12/16/14 5:30		5,557.0	16	0.0491	80	2,500	122.7	1,463	1,420	63	--	--	50	1.2
1/5/15 7:15		5,873.0	19	0.0491	72	1,500	73.6	1,534	1,400	33	8.19	8.41	10	1.8
Average			15		90	2,288	112.3	1,468	1,413	33	7.9	8.0	139.7	1.9

Legend / Key:
Vac = Vacuum
"Hg = inches mercury
ft^2 = square feet
Temp = temperature
°F = Fahrenheit
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)

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

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

Inf = Influent Eff = Effluent
-- = not applicable/ not measured

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 results.

2 System down upon arrival, system re-started 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 shutdown 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 re-started 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 re-started upon departure.

7 System down upon arrival, replaced switch on combustion blower, system re-started upon departure.

8 System down upon arrival, system re-started 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 re-started upon departure.

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	5.1
Average		0.01		0.31		3.34		0.53		0.65		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'

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

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

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 re-started upon departure.
6 System down upon arrival, switch to combustion blower repaired, system re-started upon departure.
7 System down upon arrival system re-started upon departure.
8 System down upon arrival system remained down upon departure due to scheduled groundwater monitoring event.
9 System modified to extract from wells EX-1, EX-5 and EX-6, system down upon arrival and re-started upon departure.

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
07/21/14	1	7:30	98.2	93.4	95	16	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	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	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	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	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	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

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/m³ = 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)}

Notes:

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

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	0.02	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	0.01	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	0.01	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	0.01	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	0.01	0.36	0.004	0.004	77.2	29.4	931.9
12/4/14		7:05	5,271.0	94.2	174.2	85	0.20	0.20	<20	<0.20	<0.20	1.00	0.002	0.00	0.31	0.003	0.003	68.5	0.2	932.1

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^3/35.314ft^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.

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

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

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.

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	Cyanide	Cr	Ni	Cu	Zn	As	Se	Ag	Cd	Pb	Phenols
					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	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 compy 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[b]			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	0.0076	0.097
12/04/14		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	0.0077	0.097

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.

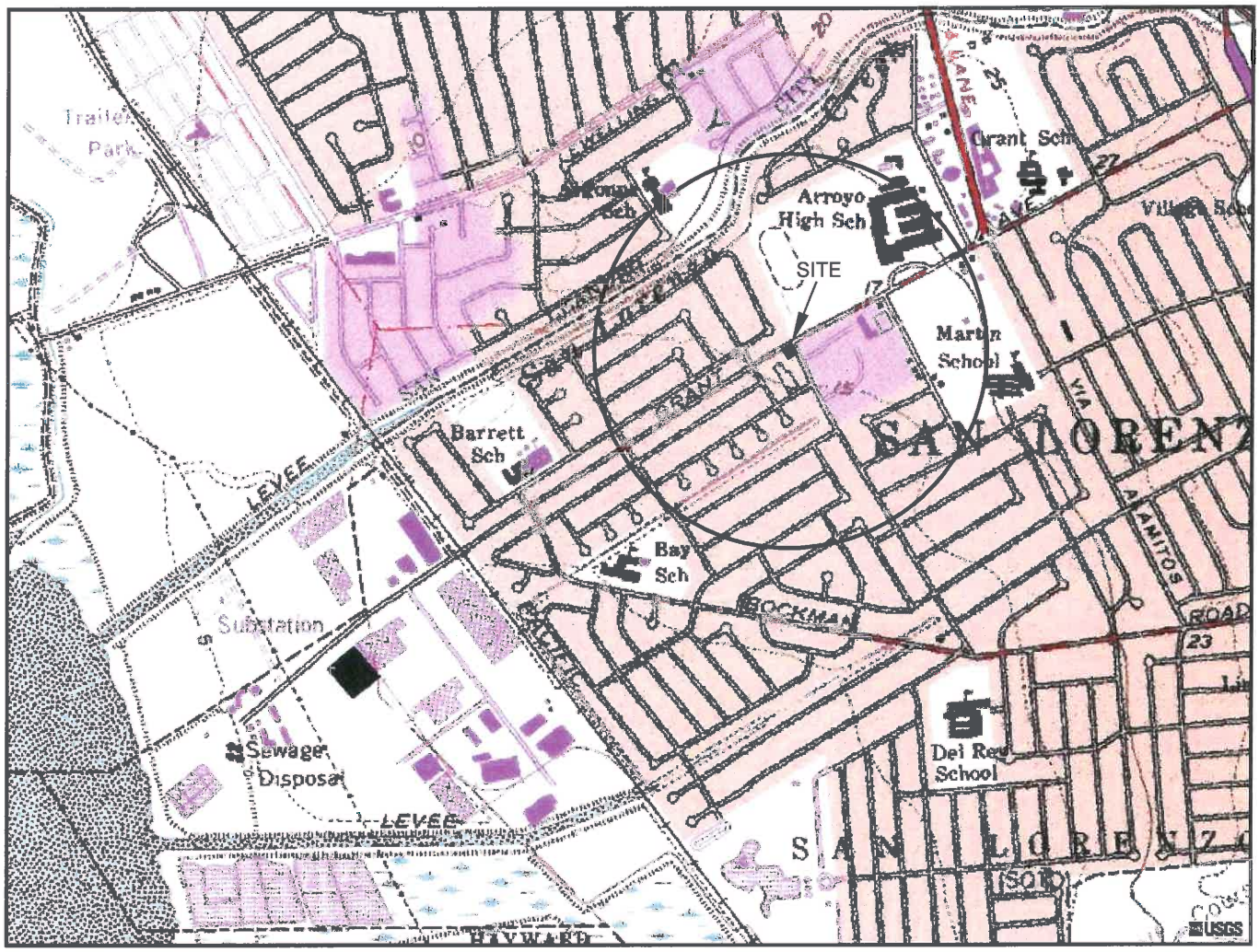
[b] Mass removed this period (pounds) = Average concentration (µg/L)[between the sample dates] x Period gallons x (2.2046×10^{-9})(lb/µg) / 0.26418 (gal/L)

[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.



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

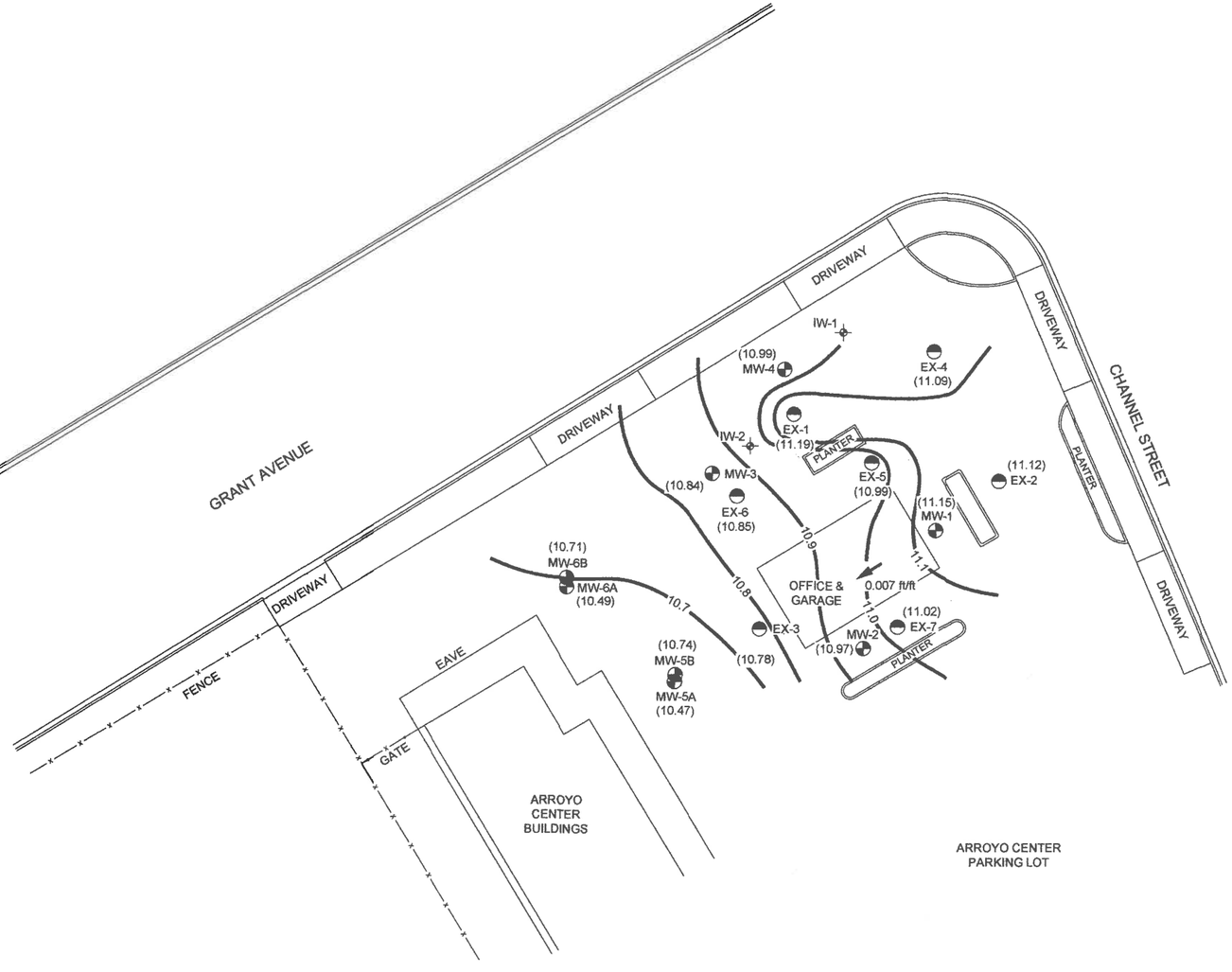
FIGURE
1

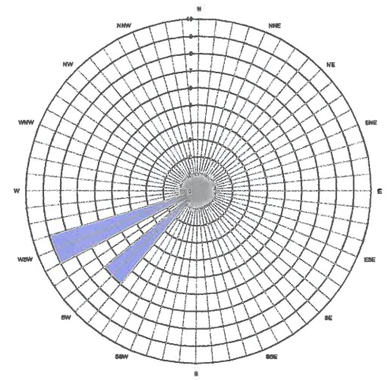
PROJECT NO.
2115-1436-01

LEGEND

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

WELLS MEASURED ON 11/25/14
MSL = MEAN SEA LEVEL
(NM) = NOT MEASURED
NOTE: THE DPE SYSTEM WAS INACTIVE AT THE TIME OF WELL GAUGING.





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

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 15, 2015
FILENAME: Olympic Quarterly Figures

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
4th QUARTER 2014

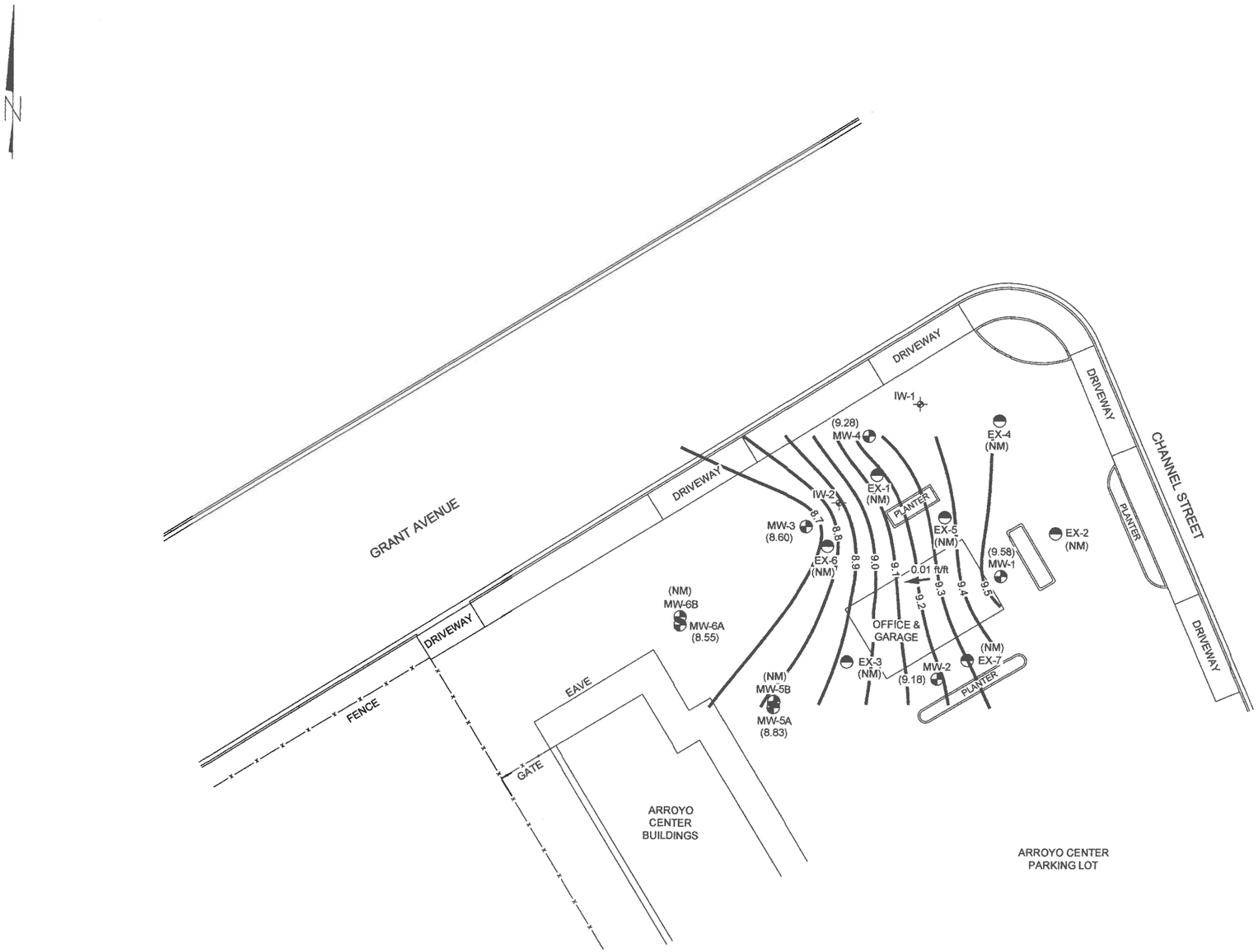
FIGURE
2

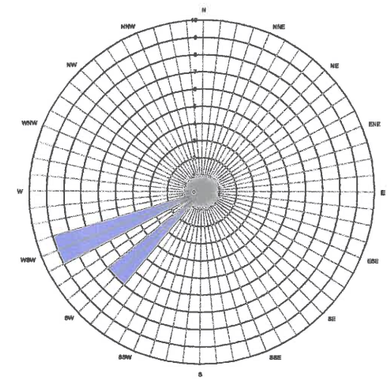
PROJECT NO.
2115-1436-01

LEGEND

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

WELLS MEASURED ON 10/02/14
MSL = MEAN SEA LEVEL
(NM) = NOT MEASURED





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

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 15, 2015
FILENAME: Olympic Quarterly Figures

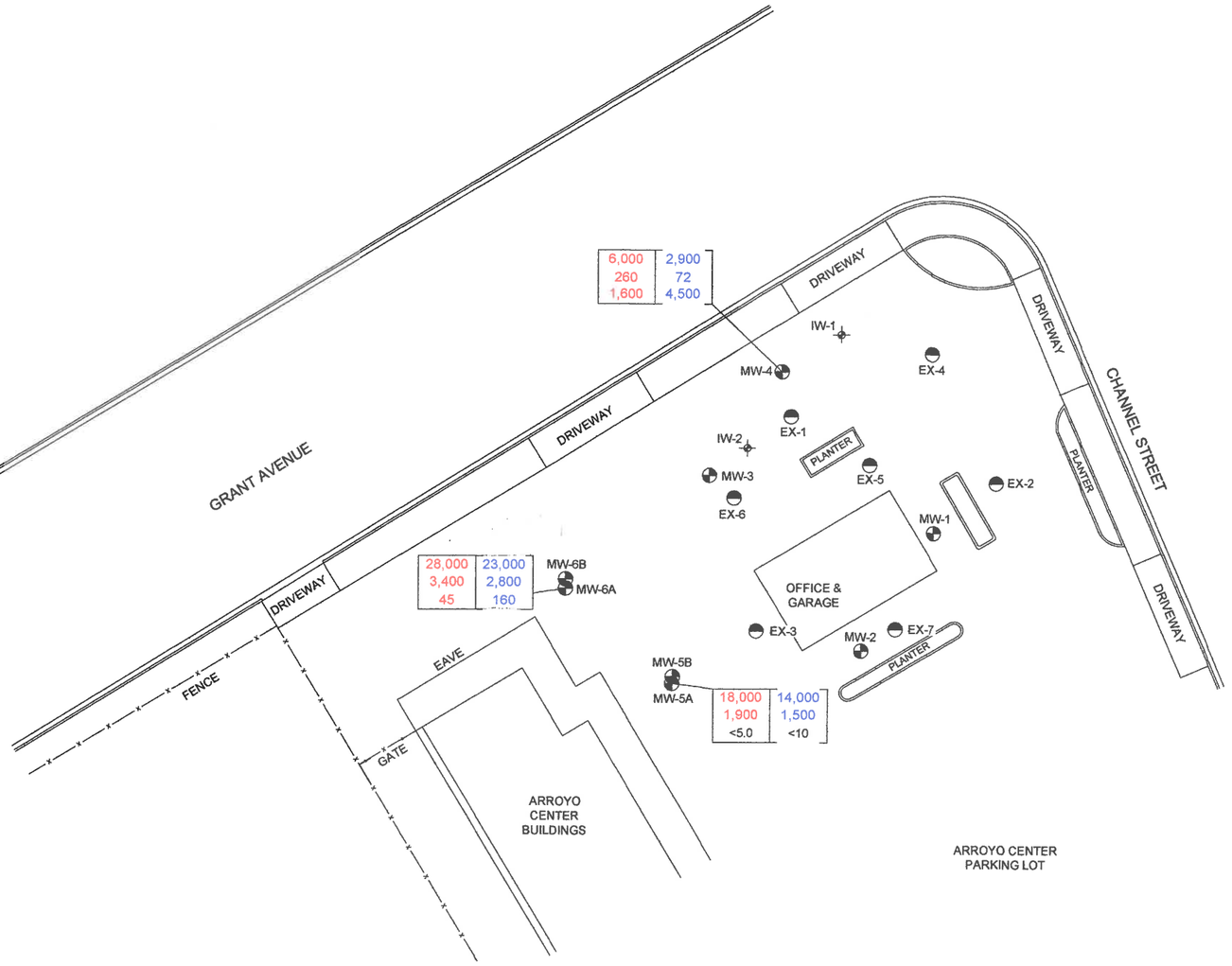
0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
OCTOBER 2, 2014

FIGURE
2A

PROJECT NO.
2115-1436-01



LEGEND

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

6,000 GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L
260 BENZENE CONCENTRATION IN µg/L
1,600 METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 6/19/14, PRE-REMEDIATION
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B

2,900 GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L
72 BENZENE CONCENTRATION IN µg/L
4,500 METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 11/25/14
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B
NOTE: THE DPE SYSTEM WAS INACTIVE AT THE TIME OF SAMPLING.

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

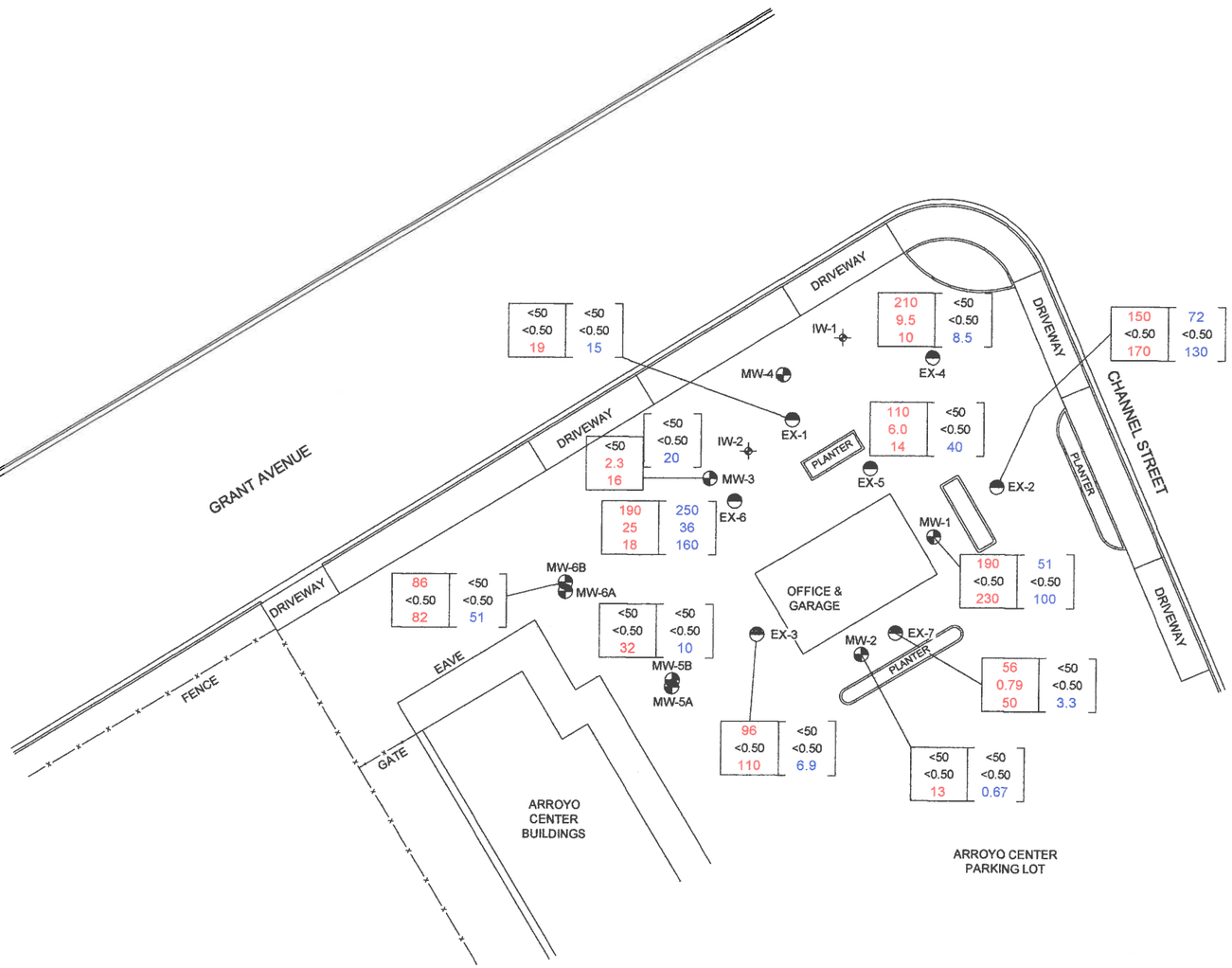
STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 14, 2015
FILENAME: Olympic Quarterly Figures

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA
GROUNDWATER ANALYTICAL SUMMARY
10' DEPTH MONITORING WELLS
4th QUARTER 2014

FIGURE
3
PROJECT NO.
2115-1436-01



LEGEND

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

[150 / <0.50 / 170] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L; BENZENE CONCENTRATION IN µg/L; METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 6/19/14, PRE-REMEDIATION
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B

[51 / <0.50 / 100] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L; BENZENE CONCENTRATION IN µg/L; METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 11/25/14
GRO ANALYZED BY EPA METHOD SW8015B/SW8260B
MTBE & BENZENE ANALYZED BY EPA METHOD SW8260B
NOTE: THE DPE SYSTEM WAS INACTIVE AT THE TIME OF SAMPLING.

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

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 14, 2015
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 2014

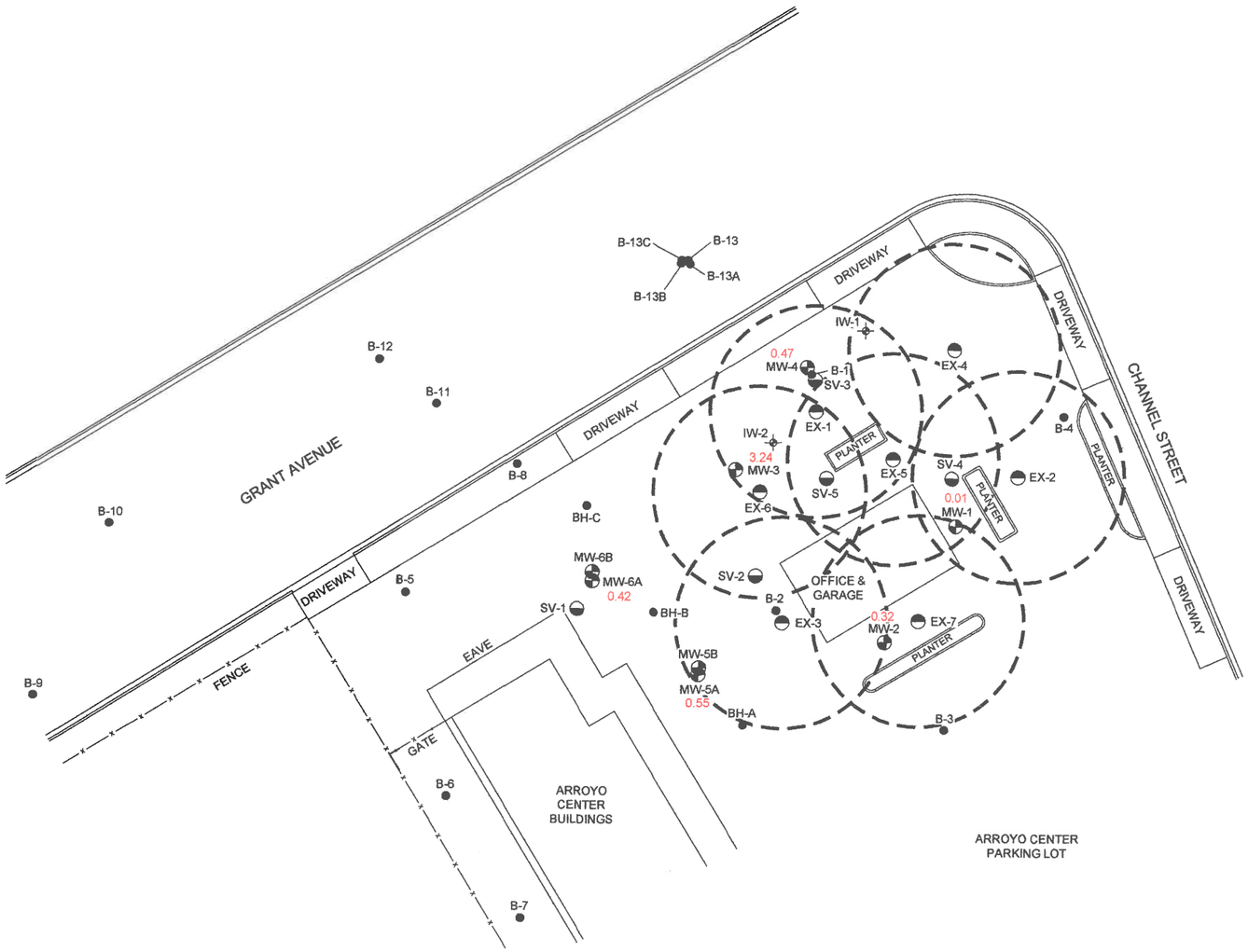
FIGURE
4

PROJECT NO.
2115-1436-01

N

LEGEND

- MW-1 MONITORING WELL LOCATION
- EX-1 EXTRACTION WELL LOCATION
- IW-1 OZONE INJECTION WELL LOCATION
- SV-1 VAPOR EXTRACTION WELL LOCATION
- B-1 SOIL BORING LOCATION
- ESTIMATED RADIUS OF INFLUENCE = 30'
- 3.24 AVERAGE INDUCED VACUUM, INCHES OF WATER COLUMN



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

STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 15, 2015
FILENAME: Olympic Quarterly Figures

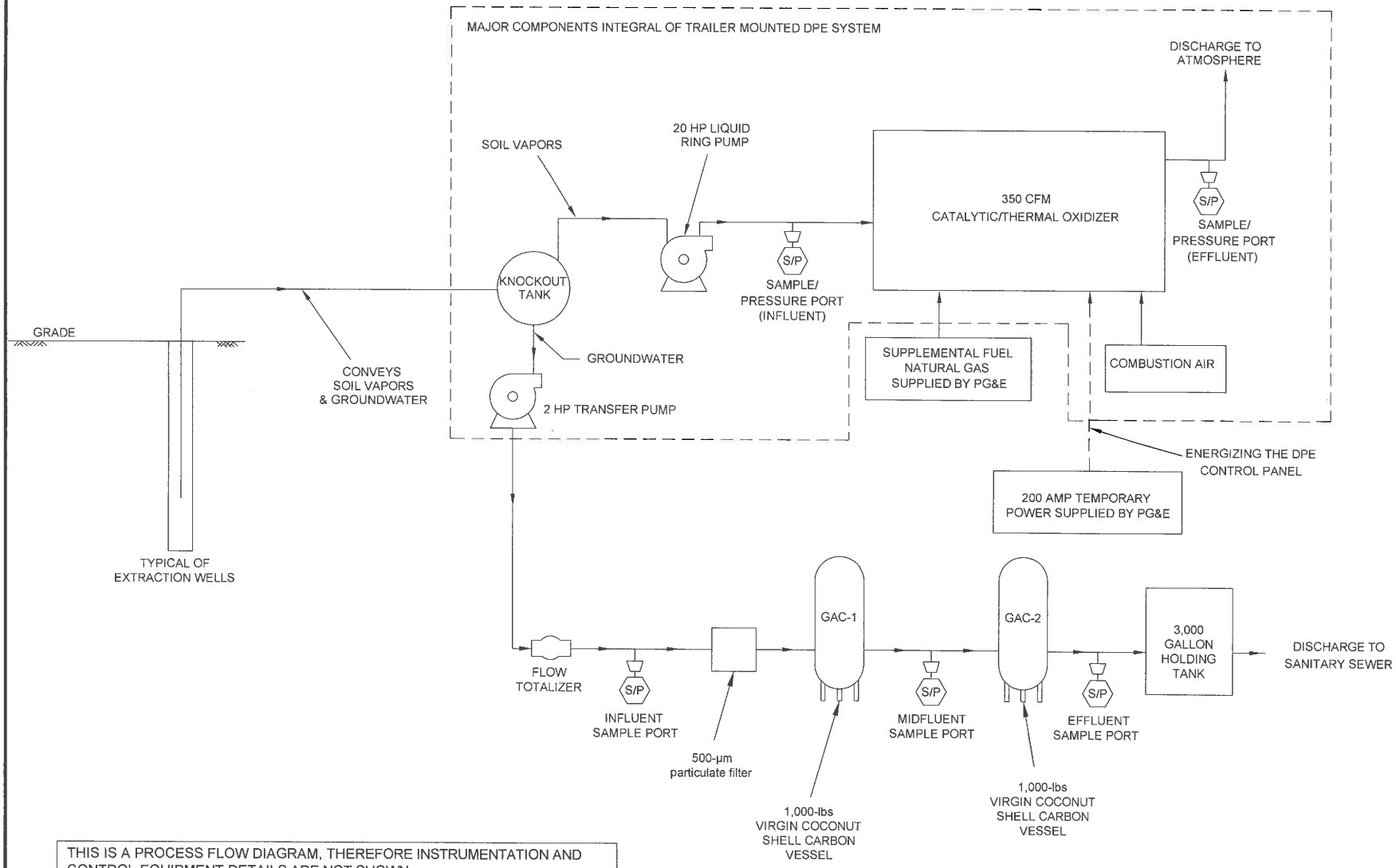
0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

DPE INFLUENCE MAP

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

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

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

Site Number 211 S-1436-01
Project Number Former Olympic
Project PM Scott Bittinger
DATE 11-25-14

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW 1	0448		7.45	24.20	16.85	2	.5	8	8		X			7.52	MW 1	0847	1.93
2	0457		7.03	18.85	11.82	2		6	6		X			7.35	2	0710	1.49
3	0500		7.11	18.14	11.06	2		6	6		X			7.12	3	0730	1.93
4	0503		7.00	9.31	2.31	4		5	3 DRY		X			7.50	4	0625	1.42
5A	0509		7.47	9.65	2.18	2		1.09	1		X			9.05	5A	0940	1.89
5B	0508		7.18	19.45	12.27	2		6.14	6		X			7.32	5B	0827	2.85
6A	0511		7.56	9.89	2.33	2		1.17	1		X			8.89	6A	0955	2.24
6B	0512		6.98	19.80	12.82	2	.5	6.41	6.5		X			7.15	MW 6B	0906	3.02
EX 1	0500		6.95	19.80	12.85	4	2.0	25	25			X		7.43	EX-1	0917	~~1.77~~
2	0451		7.02	19.30	12.28	4		24	24		X	X		7.09	2	0815	1.51
3	0459		6.85	19.60	12.85	4 1295		26	26		X	X		6.92	3	0635	1.62
4	0452		7.21	18.26	11.05	4		22	22		X	X		7.41	4	0810	1.38
5	0454		7.42	18.97	11.55	4		23	23		X	X		7.71	5	0805	1.37
6	0502		7.44	19.07	11.63	4		23	23		X	X		7.91	6	0613	2.41
EX 7	0447		7.04	19.48	12.44	4		25	25		X	X		7.36	EX. 7	0715	1.64

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 11-15-14
Conductivity
DO

T:\Forms

EX-1 Pumped with System

STRATUS ENVIRONMENTAL, INC.

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

Site Number: Former Olympic
Project Number: 211.5-1436V-01
Project PM: Scott Hunter
DATE 11-25-14

Well ID MW3				
Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time 0522	19.3	8.08	119.7	0
time 0527	20.2	8.10	133.5	3
time 0532	21.1	7.90	136.6	6
time				
purge stop time 1.9300			ORP 361	

Well ID MW4				5
Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time 0543	20.5	7.53	133.2	0
time 0546	21.3	7.49	133.5	2
time 0550	22.1	7.40	132.9	3 DRY
time				
purge stop time 1.4200			ORP 371	

Well ID EX-6			sheen	23
Purge start time 0600			Odor Y N	
	Temp C	pH	cond	gallons
time 0600	17.6	7.02	110.2	0
time 0603	20.3	6.95	129.0	12
time 0612	20.1	7.03	139.3	23
time				
purge stop time 2.1100			ORP 366	

Well ID EX.3				26
Purge start time 0622			Odor Y N	
	Temp C	pH	cond	gallons
time 0622	20.1	7.03	159.2	0
time 0625	20.6	7.02	155.4	13
time 0629	20.8	7.04	156.3	26
time				
purge stop time 1.62			ORP 350	

Well ID MW2				6
Purge start time			Odor Y N	
	Temp C	pH	cond	gallons
time 0642	19.9	7.02	160.3	0
time 0645	19.5	6.82	158.0	3
time 0650	20.8	6.96	164.9	6
time				
purge stop time 1.4900			ORP 346	

Well ID EX.7				25
Purge start time 0655			Odor Y N	
	Temp C	pH	cond	gallons
time 0655	19.6	6.99	163.2	0
time 0659	20.8	6.98	172.4	12
time 0703	20.5	6.96	168.7	25
time				
purge stop time 1.63			ORP 340	

Well ID EX.5				23
Purge start time 0721			Odor Y N	
	Temp C	pH	cond	gallons
time 0721	19.5	6.79	168.5	0
time 0725	19.9	6.91	172.8	12
time 0730	19.6	6.89	170.2	23
time				
purge stop time 1.37			ORP 332	

Well ID EX.4				22
Purge start time 0738			Odor Y N	
	Temp C	pH	cond	gallons
time 0738	20.1	6.41	176.2	0
time 0741	21.4	6.89	183.9	11
time 0745	21.6	6.87	184.3	22
time				
purge stop time			ORP 333	

STRATUS
ENVIRONMENTAL, INC.

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

Site Number Former Olympic
Project Number 2115-1436-01
Project PM Scott Bittinger
DATE 11 25 14

Well ID Ex-2 24

Purge start time 0741 Odor Y [✓ N]

	Temp C	pH	cond	gallons
time 0751	20.1	6.90	173.5	0
time 0744	20.9	6.90	179.6	12
time 0757	20.8	6.40	129.3	24
time				

purge stop time ORP 331

Well ID MW 1 8

Purge start time Odor Y [✓ N]

	Temp C	pH	cond	gallons
time 0830	19.7	6.79	173.1	0
time 0835	19.7	6.81	175.3	4
time 0838	20.1	6.83	176.9	8
time				

purge stop time 1.93 ORP 327

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

STRATUS
ENVIRONMENTAL INC

Site Address 1476 Grant Ave
City San Lorenzo
Sampled By: Ben
Signature

Site Number Former Olympic
Project Number 2115-1436-01
Project PM Scott Bittinger
DATE 11/25/14

Well ID 5A DTW: 9.05
Purge start time
Odor [✓ Y] N

	Temp C	pH	cond	gallons
time 0751	21.3	7.21	2.67m	0
time 0754	22.2	7.18	2.71m	.5
time ~~0808~~				
time 0940	21.3	7.24	2.72m	1

purge stop time DO 1.89
ORP 79

Well ID 5B DTW 7.32
Purge start time
Odor Y [✓ N]

	Temp C	pH	cond	gallons
time 0810	21.0	7.81	1225	0
time 0814	21.4	7.48	1236	2
time 0818	21.4	7.47	1256	4
time 0827	20.2	7.55	1241	6

purge stop time DO 2.85
ORP 79

Well ID 6A DTW 8.89
Purge start time
Odor [✓ Y] N

	Temp C	pH	cond	gallons
time 0840	21.4	7.01	2.62m	0
time 0843	22.7	7.13	2.64m	.5
time 0955	22.2	7.04	2.62	1
time				

purge stop time DO 2.24
ORP 87

Well ID 6B DTW: 7.15
Purge start time
Odor Y [✓ N]

	Temp C	pH	cond	gallons
time 0850	21.5	7.65	1226	0
time 0853	22.1	7.45	1210	2
time 0857	22.3	7.47	1208	4
time 0906	20.9	7.49	1192	6.5

purge stop time DO: 3.02
ORP 74

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

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

ORIGINAL

Date: 10-2-14
Onsite Time: 0648
Offsite Time: 0910

Technician: C.HILL
Project Engineer: DUBBE
Weather Conditions: CLEAR
Ambient Temperature: 55

System Information

System Status Upon Arrival: Operational ☒ Non-Operational ☐
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 4823
Totalizer Reading on DPE Unit: 458740
Combustion Chamber Operating Temperature: 1467
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 0
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):
pH Meter Calibration 9-26-14

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		2800		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	12"H2O			
Temperature, deg F		98	1429	
PID Readings, ppmv		25	2.3	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100		58	11	MW-1	-.02	9.02
EX-2	100			10	MW-2	-.56	8182
EX-3	100			10	MW-3	-3.39	9.35
EX-4	100			10	MW-4	-.40	8.71
EX-5	100			13	MW-5A	-.10	9.09
EX-6	100			10	MW-6A	-.37	9.14
EX-7	100			5			

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 1025349.20	10214 0730	W INF	10214 0725
A EFF 1025349-16	) 0729	W GAC1	0719
		W GAC2	) 0714
		W EFF	0709

PH
INF 7.91
EFF 7.93

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: 10 2 14
Onsite Time: 1000
Offsite Time: 1100

Technician: CHILL
Project Engineer: Bobbie
Weather Conditions: Rain
Ambient Temperature: 63

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 5039

Totalizer Reading on DPE Unit: 53264

Chart Recorder Paper Replaced ☐ Yes ☒ No

% Dilution Valve Open: 2

Combustion Chamber Operating Temperature: 1460

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				Replace
Air Velocity, FPM		2500		Air Probe
Pipe Diameter, inches		3		Switch
Air Flow Rate, cfm				Combustion Blower
Applied Vacuum, "WC/"Hg	14"/46			
Temperature, deg F		90	1389	
PID Readings, ppmv		45	2.6	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100			11	MW-1		
EX-2	100			10	MW-2	n/a	
EX-3	100			10	MW-3		
EX-4	100			10	MW-4	Reading	
EX-5	100			13	MW-5A	5	
EX-6	100			10	MW-6A		
EX-7	100			5			

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: ~~10~~ 11/3/14
Onsite Time: 0700
Offsite Time: 0805

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: 5265

Totalizer Reading on DPE Unit: 618930
Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 0

Combustion Chamber Operating Temperature: 1471
If open, dilution air flowrate, (fpm/cfm) and Temp.(deg F):
pH Meter Calibration 10-29-14

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		2600		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/~~"Hg~~	14" Hg			
Temperature, deg F		90	1426	
PID Readings, ppmv		50	2.1	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1	-.01	8.71
EX-2					MW-2	-.50	8.43
EX-3					MW-3	-12.12	8.91
EX-4					MW-4	-.75	7.94
EX-5					MW-5A	-.60	8.48
EX-6					MW-6A	-.34	8.55
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 1026153-01	11-3-14 0740	W INF	11-3-14 0758
A EFF 1026153-10	11-3-14 0735	W GAC1	0750
		W GAC2	0750
		W EFF pH Temp	0745
		EFF 8.31 12.5°C	
		INF 8.17 17.1°	

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: 11-18-14
Onsite Time: 0600
Offsite Time: 0640

Technician: CHLC
Project Engineer: Deeba
Weather Conditions: Cloudy
Ambient Temperature: 45

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒

System Status Upon Departure: Operational ☐ Non-Operational ☒ Sampled wells Next week

Hour Meter Reading: 5269

Totalizer Reading on DPE Unit: 620670

Chart Recorder Paper Replaced ☐ Yes ☐ No

% Dilution Valve Open: _____

Combustion Chamber Operating Temperature: _____

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.

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

ORIGINAL

Date: 12/4/14
Onsite Time: 0545
Offsite Time: 0800

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

System Information

System Status Upon Arrival: Operational ☐ Non-Operational ☒ Restart
System Status Upon Departure: Operational ☒ Non-Operational ☐
Hour Meter Reading: 5271

Totalizer Reading on DPE Unit: 621440
Combustion Chamber Operating Temperature: 1468

Chart Recorder Paper Replaced ☐ Yes ☒ No
% Dilution Valve Open: 25%
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F): 2" 3096 - 63°F
pH Meter Calibration 12-1-14

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		2000		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	20"Hg	90	1310	
Temperature, deg F		16	2.4	
PID Readings, ppmv				

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1	0	6.42
EX-2	0				MW-2	-.07	6.11
EX-3	0				MW-3	-1.50	7.63
EX-4	0				MW-4	-.65	6.29
EX-5	100				MW-5A	-0.70	7.08
EX-6	100				MW-6A	0.95	
EX-7	0						

Lots of water coming in

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 -14	12414 0715	W INF	12-4 14 0655
A EFF 1026493-13	/ 0700	W GAC1	0648
		W GAC2	0644
	/	W EFF	0640
		pH Temp	
		EFF 8.36 19.4	
		INF 8.13 18.5	

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: 12-16-14
Onsite Time: 0530
Offsite Time: 0630

Technician: CHILC
Project Engineer: Dubbe
Weather Conditions: Rain
Ambient Temperature: 50

System Information

System Status Upon Arrival: Operational [X] Non-Operational [ ]
System Status Upon Departure: Operational [X] Non-Operational [ ]
Hour Meter Reading: 5557

Totalizer Reading on DPE Unit: 741070
Combustion Chamber Operating Temperature: 1463

Chart Recorder Paper Replaced [ ] Yes [X] No
% Dilution Valve Open: 10
If open, dilution air flowrate, (fpm/cfm) and Temp (deg F): ~~2910~~ 2910/55
pH Meter Calibration 12714

Field Measurements

Parameter	Influent (Total)	System-Influent	Effluent	Comments
Differential Pressure, "wc				
Air Velocity, FPM		2500		
Pipe Diameter, inches		3		
Air Flow Rate, cfm				
Applied Vacuum, "WC/"Hg	16" Hg			
Temperature, deg F		80	1420	
PID Readings, ppmv		50	1.2	

Other Readings/Measurements

Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1	0	5.12
EX-2	0				MW-2	-.34	4.77
EX-3	0				MW-3	-9.40	6.35
EX-4	0				MW-4	CAP	
EX-5	100				MW-5A	-1.65	5.65
EX-6	100				MW-6A	+.35	5.12
EX-7	0						

Lots of water
water up

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

SAMPLING AND ANALYSES PROCEDURES

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

Ground Water and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

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(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 : 11/26/14

Job: 2115-1436-01/Former Olympic Station

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

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-1**						
Lab ID :	STR14112642-01A	TPH-P (GRO)	51		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 08:38	Methyl tert-butyl ether (MTBE)	100		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**MW-2**						
Lab ID :	STR14112642-02A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 06:50	Methyl tert-butyl ether (MTBE)	0.67		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**MW-3**						
Lab ID :	STR14112642-03A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 05:32	Methyl tert-butyl ether (MTBE)	20		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**MW-4**						
Lab ID :	STR14112642-04A	TPH-P (GRO)	2,900		1,000 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 05:50	Methyl tert-butyl ether (MTBE)	4,500		5.0 µg/L	12/03/14	12/03/14
		Benzene	72		5.0 µg/L	12/03/14	12/03/14
		Toluene	ND	V	5.0 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND	V	5.0 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND	V	5.0 µg/L	12/03/14	12/03/14
		o-Xylene	ND	V	5.0 µg/L	12/03/14	12/03/14
Client ID :	**EX-1**						
Lab ID :	STR14112642-05A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 09:15	Methyl tert-butyl ether (MTBE)	15		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14

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Client ID :	**EX-2**						
Lab ID :	STR14112642-06A	TPH-P (GRO)	72		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 07:57	Methyl tert-butyl ether (MTBE)	130		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**EX-3**						
Lab ID :	STR14112642-07A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 06:29	Methyl tert-butyl ether (MTBE)	6.9		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**MW-5A**						
Lab ID :	STR14112642-08A	TPH-P (GRO)	14,000		2,000 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 09:40	Methyl tert-butyl ether (MTBE)	ND	V	10 µg/L	12/03/14	12/03/14
		Benzene	1,500		10 µg/L	12/03/14	12/03/14
		Toluene	ND	V	10 µg/L	12/03/14	12/03/14
		Ethylbenzene	1,100		10 µg/L	12/03/14	12/03/14
		m,p-Xylene	570		10 µg/L	12/03/14	12/03/14
		o-Xylene	ND	V	10 µg/L	12/03/14	12/03/14
Client ID :	**MW-5B**						
Lab ID :	STR14112642-09A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 08:27	Methyl tert-butyl ether (MTBE)	10		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**MW-6A**						
Lab ID :	STR14112642-10A	TPH-P (GRO)	23,000		3,000 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 09:55	Methyl tert-butyl ether (MTBE)	160		15 µg/L	12/03/14	12/03/14
		Benzene	2,800		15 µg/L	12/03/14	12/03/14
		Toluene	16		15 µg/L	12/03/14	12/03/14
		Ethylbenzene	1,500		15 µg/L	12/03/14	12/03/14
		m,p-Xylene	1,500		15 µg/L	12/03/14	12/03/14
		o-Xylene	230		15 µg/L	12/03/14	12/03/14
Client ID :	**MW-6B**						
Lab ID :	STR14112642-11A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 09:06	Methyl tert-butyl ether (MTBE)	51		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
Client ID :	**EX-4**						
Lab ID :	STR14112642-12A	TPH-P (GRO)	ND		50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 07:45	Methyl tert-butyl ether (MTBE)	8.5		0.50 µg/L	12/03/14	12/03/14
		Benzene	ND		0.50 µg/L	12/03/14	12/03/14
		Toluene	ND		0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND		0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND		0.50 µg/L	12/03/14	12/03/14

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Client ID :	**EX-5**					
Lab ID :	STR14112642-13A	TPH-P (GRO)	ND	50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 07:30	Methyl tert-butyl ether (MTBE)	40	0.50 µg/L	12/03/14	12/03/14
		Benzene	ND	0.50 µg/L	12/03/14	12/03/14
		Toluene	ND	0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND	0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND	0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND	0.50 µg/L	12/03/14	12/03/14
Client ID :	**EX-6**					
Lab ID :	STR14112642-14A	TPH-P (GRO)	250	50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 06:12	Methyl tert-butyl ether (MTBE)	160	0.50 µg/L	12/03/14	12/03/14
		Benzene	36	0.50 µg/L	12/03/14	12/03/14
		Toluene	ND	0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	7.1	0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND	0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND	0.50 µg/L	12/03/14	12/03/14
Client ID :	**EX-7**					
Lab ID :	STR14112642-15A	TPH-P (GRO)	ND	50 µg/L	12/03/14	12/03/14
Date Sampled	11/25/14 07:03	Methyl tert-butyl ether (MTBE)	3.3	0.50 µg/L	12/03/14	12/03/14
		Benzene	ND	0.50 µg/L	12/03/14	12/03/14
		Toluene	ND	0.50 µg/L	12/03/14	12/03/14
		Ethylbenzene	ND	0.50 µg/L	12/03/14	12/03/14
		m,p-Xylene	ND	0.50 µg/L	12/03/14	12/03/14
		o-Xylene	ND	0.50 µg/L	12/03/14	12/03/14

Gasoline Range Organics (GRO) C4-C13

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

ND = Not Detected

Reported in micrograms per Liter, per client request.

ACCLASS ACCREDITED
DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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

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

12/5/14

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: STR14112642 **Job:** 2115-1436-01/Former Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14112642-01A	MW-1	Aqueous	2
14112642-02A	MW-2	Aqueous	2
14112642-03A	MW-3	Aqueous	2
14112642-04A	MW-4	Aqueous	2
14112642-05A	EX-1	Aqueous	2
14112642-06A	EX-2	Aqueous	2
14112642-07A	EX-3	Aqueous	2
14112642-08A	MW-5A	Aqueous	3
14112642-09A	MW-5B	Aqueous	2
14112642-10A	MW-6A	Aqueous	4
14112642-11A	MW-6B	Aqueous	2
14112642-12A	EX-4	Aqueous	2
14112642-13A	EX-5	Aqueous	2
14112642-14A	EX-6	Aqueous	2
14112642-15A	EX-7	Aqueous	2

12/5/14

Report Date

Alpha Analytical, Inc.

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Date: *08-Dec-14*

QC Summary Report

Work Order: 14112642

Method Blank

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

File ID: **14120308.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2014 13:22**

Sample ID: **MBLK MS08W1203B** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 13:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.2		10		112	70	130			
Surr: Toluene-d8	8.94		10		89	70	130			
Surr: 4-Bromofluorobenzene	8.84		10		88	70	130			

Laboratory Control Spike

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

File ID: **14120307.D** Batch ID: **MS08W1203B** Analysis Date: **12/03/2014 12:51**

Sample ID: **GLCS MS08W1203B** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 12:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	385	50	400		96	70	130			
Surr: 1,2-Dichloroethane-d4	11.1		10		111	70	130			
Surr: Toluene-d8	8.88		10		89	70	130			
Surr: 4-Bromofluorobenzene	12		10		120	70	130			

Sample Matrix Spike

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

File ID: **14120514.D** Batch ID: **MS08W1203B** Analysis Date: **12/05/2014 15:31**

Sample ID: **14112642-09AGS** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/05/2014 15:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1750	250	2000	0	87	54	143			
Surr: 1,2-Dichloroethane-d4	54		50		108	70	130			
Surr: Toluene-d8	45.2		50		90	70	130			
Surr: 4-Bromofluorobenzene	62.8		50		126	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120515.D** Batch ID: **MS08W1203B** Analysis Date: **12/05/2014 15:54**

Sample ID: **14112642-09AGSD** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/05/2014 15:54**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1810	250	2000	0	90	54	143	1746	3.5(23)	
Surr: 1,2-Dichloroethane-d4	53.9		50		108	70	130			
Surr: Toluene-d8	44.8		50		90	70	130			
Surr: 4-Bromofluorobenzene	61.8		50		124	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.

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

Date: *08-Dec-14*

QC Summary Report

Work Order: 14112642

Method Blank

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

File ID: **14120308.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2014 13:22**

Sample ID: **MBLK MS08W1203A** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 13:22**

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	11.2		10		112	70	130			
Surr: Toluene-d8	8.94		10		89	70	130			
Surr: 4-Bromofluorobenzene	8.84		10		88	70	130			

Laboratory Control Spike

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

File ID: **14120303.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2014 11:08**

Sample ID: **LCS MS08W1203A** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 11:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	12.3	0.5	10		123	63	137			
Benzene	9.5	0.5	10		95	70	130			
Toluene	9.82	0.5	10		98	80	120			
Ethylbenzene	9.98	0.5	10		99.8	80	120			
m,p-Xylene	10.4	0.5	10		104	65	139			
o-Xylene	8.65	0.5	10		87	70	130			
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	9.29		10		93	70	130			
Surr: 4-Bromofluorobenzene	11.5		10		115	70	130			

Sample Matrix Spike

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

File ID: **14120329.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2014 21:44**

Sample ID: **14112642-09AMS** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 21:44**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	86.1	1.3	50	10.15	152	56	140			M1
Benzene	45.2	1.3	50	0	90	67	134			
Toluene	45.5	1.3	50	0	91	38	130			
Ethylbenzene	44.6	1.3	50	0	89	70	130			
m,p-Xylene	46.5	1.3	50	0	93	65	139			
o-Xylene	45.4	1.3	50	0	91	69	130			
Surr: 1,2-Dichloroethane-d4	59.4		50		119	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	56		50		112	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120330.D** Batch ID: **MS08W1203A** Analysis Date: **12/03/2014 22:08**

Sample ID: **14112642-09AMSD** Units : µg/L Run ID: **MSD_08_141203B** Prep Date: **12/03/2014 22:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	74.1	1.3	50	10.15	128	56	140	86.06	14.9(40)	
Benzene	39.8	1.3	50	0	80	67	134	45.2	12.8(21)	
Toluene	40.8	1.3	50	0	82	38	130	45.45	10.8(20)	
Ethylbenzene	40.9	1.3	50	0	82	70	130	44.6	8.7(20)	
m,p-Xylene	41.5	1.3	50	0	83	65	139	46.51	11.5(20)	
o-Xylene	40.2	1.3	50	0	80	69	130	45.4	12.3(20)	
Surr: 1,2-Dichloroethane-d4	58.3		50		117	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	57.1		50		114	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-14*

QC Summary Report

Work Order: 14112642

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.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

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 : STR14112642

Report Due By : 5:00 PM On : 04-Dec-14

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 # : 13616, 16623 Job : 2115-1436-01/Former Olympic Station

EDD Required : Yes

Sampled by : Ben Gooding

Cooler Temp	Samples Received	Date Printed
3 °C	26-Nov-14	26-Nov-14

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
STR14112642-01A	MW-1	AQ	11/25/14 08:38	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 08:47; logged in per COC
STR14112642-02A	MW-2	AQ	11/25/14 06:50	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 07:10; logged in per COC
STR14112642-03A	MW-3	AQ	11/25/14 05:32	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 05:38; logged in per COC
STR14112642-04A	MW-4	AQ	11/25/14 05:50	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 08:25; logged in per COC
STR14112642-05A	EX-1	AQ	11/25/14 09:15	3	0	5	GAS-C	BTXE/M_C							
STR14112642-06A	EX-2	AQ	11/25/14 07:57	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 08:15; logged in per COC
STR14112642-07A	EX-3	AQ	11/25/14 06:29	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 06:35; logged in per COC
STR14112642-08A	MW-5A	AQ	11/25/14 09:40	3	0	5	GAS-C	BTXE/M_C							
STR14112642-09A	MW-5B	AQ	11/25/14 08:27	4	0	5	GAS-C	BTXE/M_C							Client provided 4 VOAs
STR14112642-10A	MW-6A	AQ	11/25/14 09:55	3	0	5	GAS-C	BTXE/M_C							

Comments: Security seals intact. Frozen ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	11/26/14 1227

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

CA

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

WorkOrder : STR14112642

Report Due By : 5:00 PM On : 04-Dec-14

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 : Ben Gooding

PO :

Client's COC # : 13616, 16623 Job : 2115-1436-01/Former Olympic Station

Cooler Temp	Samples Received	Date Printed
3 °C	26-Nov-14	26-Nov-14

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
STR14112642-11A	MW-6B	AQ	11/25/14 09:06	3	0	5	GAS-C	BTXE/M_C							
STR14112642-12A	EX-4	AQ	11/25/14 07:45	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 08:10; logged in per COC
STR14112642-13A	EX-5	AQ	11/25/14 07:30	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 08:05; logged in per COC
STR14112642-14A	EX-6	AQ	11/25/14 06:12	3	0	5	GAS-C	BTXE/M_C							Sampling time on VOAs is 06:15; logged in per COC
STR14112642-15A	EX-7	AQ	11/25/14 07:03	3	0	5	GAS-C	BTXE/M_C							

Comments: Security seals intact. Frozen ice.

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHAVEZ	Alpha Analytical, Inc.	11/26/14 1222

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 Env
Attn:
Address: 3330 Cameron Park Dr, Suite 800
City, State, Zip: Cameron Park, CA
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 NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

13616

Page # 1 of 2

Consultant/ Client Info:
Company: Former Olympic Station
Address: 1436 Grant Avenue
City, State, Zip: San Lorenzo, CA

Job and Purchase Order Info:
Job # 2115-1436-01
Job Name:
P.O. #:

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

QC Deliverable Info:
EDD Required? Yes / No EDF Required? Yes / No
Global ID: T0600102256
Data Validation Level: III or IV

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

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	Analysis Requested: GRO	DTEX	MTBE	Remarks
0838	11/25	AQ	STR1411264 2-01	MW-1	~~5D~~	No	3V	X	X	X	
0850			02	MW-2							
0532			03	MW-3							
0550			04	MW-4							
0915			05	EX-1							
0757			06	EX-2							
0629			07	EX-3							
0940			08	MW-5A							
0827			09	MW-5B							
0855			10	MW-6A							
0900			11	MW-6B							
0745			12	EX-4							

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 445.0638 (c) (2).

Sampled By: Ben Gooden

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
	11/25/14	1250	E.FM Guano	112514	1250
				11-26-14	0930

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

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

Billing Information:
Company: 3330 Cameron Stratos
Attn:
Address: 3330 Cameron Park Drv. Suite 500
City, State, Zip: Cameron Park, CA
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

16623

Consultant/ Client Info:
Company: Former Olympic Station
Address: 1436 Grant Ave.
City, State, Zip: San Lorenzo, CA

Job and Purchase Order Info:
Job #: 2115-1436-01
Job Name:
P.O. #:

Report Attention/Project Manager:
Name: Scott Bittinger
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	Remarks
0730	11/25	AQ	STR1411264 2-13A	Ex-5	STD	3V		X	X	X	X	
0612	↓	↓	↓ 14	Ex-6	↓	↓		↓	↓	↓	↓	
0703	↓	↓	↓ 15	Ex-7	↓	↓		↓	↓	↓	↓	

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: Ben Goodling

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature]	11/25/14	1250	Eftmiano	11/25/14	1250
[signature]			[signature]	11-26-14	0930

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

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

KIFF Analytical LLC

Report Number : 89311
Date : 10/03/2014

Laboratory Results

Debbie Barr
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 2 Vapor Samples
Project Name : Olympic Station
Project Number :

Dear Ms. Barr,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC.
Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 89311
Date : 10/03/2014

Project Name : **Olympic Station**
Project Number :

Sample : **Oly A SYS INF** Matrix : Air Lab Number : 89311-01
Sample Date :10/02/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**0.36**	0.20	mg/m3	EPA 8260B	10/02/14 16:59
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 16:59
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	10/02/14 16:59
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 16:59
Methyl-t-butyl ether (MTBE)	**0.64**	0.20	mg/m3	EPA 8260B	10/02/14 16:59
TPH as Gasoline	**140**	20	mg/m3	EPA 8260B	10/02/14 16:59
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/02/14 16:59
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	10/02/14 16:59

Sample : **Oly A EFF** Matrix : Air Lab Number : 89311-02
Sample Date :10/02/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 18:05
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 18:05
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	10/02/14 18:05
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 18:05
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	10/02/14 18:05
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	10/02/14 18:05
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/02/14 18:05
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	10/02/14 18:05

Report Number : 89311

Date : 10/03/2014

QC Report : Method Blank Data

Project Name : **Olympic Station**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	10/02/2014
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	10/02/2014
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	10/02/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	10/02/2014
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	10/02/2014
Toluene - d8 (Surr)	98.4		%	EPA 8260B	10/02/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 89311

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Send Report To: Debbie
Email Address:
Company: Stratus
Address: 3330 Cameron Park Dr
Phone Number: 530676 6004
Fax Number: 530676 6005
Project #:
P.O. #:
Project Name: Olympic Station
Project Address: San Lorenzo

Electronic Data Deliverable (EDD):
☐ CA EDF ☐ CA WriteOn ☐ WA EIM
☐ Excel ☐ EQuIS _____ (format) ☐ Other _____
Global ID (for CA EDF use):
EDD Deliverable To (Email Address):
Sampling Company: Stratus
Sampler Signature: CHILL
Invoice To: Stratus

Sample Identification	Sampling: Date	Sampling: Time	# of Containers: 40 ml VOA	Sleeve	Poly	Glass	Tedlar	# Preserved: HCl	HNO_3	None			Matrix: Water	Soil	Air	Other (specify)	TPH: Gas (8260)	Other (specify)	Motor Oil	Diesel	Gas (8015)	8260B: BTEX: Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	5 Oxygenates: MTBE	DIPE	ETBE	TAME	TBA	7 Oxygenates (5 Oxygenates plus): Ethanol	Methanol	Lead Scavengers: 1,2 DCA	1,2 EDB	Halogenated Volatile Organic Compounds (former 8010 list)	Volatile Organic Compounds Full List	524: Volatile Organics by EPA Method 524.2	Metals: Metals Group (Method: ____): ☐ CAM 17 ☐ LUFT 5	Individual Metals (list and enter method):	SPECIAL: ☐ Nitrate as N ☐ Ferrous Iron	☐ Nitrate as N ☐ Nitrite as NO_2	☐ Nitrate as NO_3 ☐ Nitrite as NO_2	Chromium VI by EPA 7199	Other	For Lab Use Only
Oly A SYS INF	10214	0736					X			X					X		X					X	X																									01
Oly A EFF	10214	0727					X			X					X		X					X	X																									02

Relinquished by (signature/affiliation)	Date & Time	Received by (signature/affiliation)	Date & Time
Chill Stratus	10/2/14 1105		

Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):
24 HR TAT ON EFF
STD TAT ON Sys Inf

Relinquished by (signature/affiliation):
Date & Time
Received by Kiff Analytical (signature): Michelle Spencer
Date & Time: 100214 1105

Turnaround Time (TAT - Circle One):
Standard 4-Day 3-Day 2-Day 1-Day Other: _____
TAT in business days. Surcharge may apply. TAT for subcontracted work may vary.

Page 4 of 5

Distribution: Original - Lab; Copy - Originator
Rev: 052113

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

MAS 100214
SRG #: ~~83~~ 89311

Sample Receipt	**Initials/Date:** MAS 100214	**Storage Time:** 1105	**Sample Login**	**Initials/Date:** MAS 100214	
TAT: ☐ Standard	☐ Rush	☒ Split	☐ None	**Method of Receipt:** ☐ Courier	☒ Over-the-counter ☐ Shipped
Temp °C ☒ N/A	Therm ID	Time	Coolant present ☐ Yes ☐ No	☐ Water	☐ Temp Excursion
For Shipments Only:	Cooler Receipt Initials/Date/Time:		Custody Seals ☐ N/A	☐ Intact	☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	✓	
Is COC signed by relinquisher?	✓	
Is COC dated by relinquisher?	✓	
Is the sampler's name on the COC?	✓	
Are there analyses or hold for all samples?	✓	

Documented on	**COC**	**Labels**	**Discrepancies:**
Sample ID	✓	✓	
Project ID	✓		
Sample Date	✓	✓	
Sample Time	✓	✓	
Does COC match project history?	☐ N/A	☒ Yes	☐ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	✓		
Are sample containers intact?		✓	
Is preservation documented?	✓		
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?	✓		
Are samples within holding time?		✓	
Are sample container types correct?		✓	
Is there adequate sample volume?		✓	

Comments: Tedlars 1025349-16#-20
MAS 100214 1309

Receipt Details:

Matrix	Container Type	# of Containers
AR	Tedlar	2

CS Required: ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:
Client Communication:

KIFF Analytical LLC

Report Number : 89569
Date : 11/04/2014

Laboratory Results

Debbie Barr
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 2 Vapor Samples
Project Name : Olympic Station
Project Number :

Dear Ms. Barr,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC.
Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 89569
Date : 11/04/2014

Project Name : **Olympic Station**
Project Number :

Sample : **Oly A SYS INF** Matrix : Air Lab Number : 89569-01
Sample Date :11/03/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**0.38**	0.20	mg/m3	EPA 8260B	11/03/14 20:51
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:51
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	11/03/14 20:51
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:51
Methyl-t-butyl ether (MTBE)	**0.48**	0.20	mg/m3	EPA 8260B	11/03/14 20:51
TPH as Gasoline	**150**	20	mg/m3	EPA 8260B	11/03/14 20:51
1,2-Dichloroethane-d4 (Surr)	96.7		% Recovery	EPA 8260B	11/03/14 20:51
Toluene - d8 (Surr)	89.4		% Recovery	EPA 8260B	11/03/14 20:51

Sample : **Oly A EFF** Matrix : Air Lab Number : 89569-02
Sample Date :11/03/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:19
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:19
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	11/03/14 20:19
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:19
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/03/14 20:19
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	11/03/14 20:19
1,2-Dichloroethane-d4 (Surr)	96.7		% Recovery	EPA 8260B	11/03/14 20:19
Toluene - d8 (Surr)	88.5		% Recovery	EPA 8260B	11/03/14 20:19

Report Number : 89569

Date : 11/04/2014

QC Report : Method Blank Data

Project Name : **Olympic Station**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	11/03/2014
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	11/03/2014
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	11/03/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	11/03/2014
1,2-Dichloroethane-d4 (Surr)	97.4		%	EPA 8260B	11/03/2014
Toluene - d8 (Surr)	90.6		%	EPA 8260B	11/03/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 89569

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Send Report To: Debbie
Email Address:
Company: Stantec
Address: 3330 Cameron Pk Dr
Phone Number: 530676 6004
Fax Number: 530676 6005
Project #:
P.O. #:
Project Name: Olympic Station
Project Address: San Lorenzo

Electronic Data Deliverable (EDD):
☐ CA EDF ☐ CA WriteOn ☐ WA EIM
☐ Excel ☐ EQuIS _____ (format) ☐ Other _____
Global ID (for CA EDF use):
EDD Deliverable To (Email Address):
Sampling Company: Stantec
Sampler Signature:
Invoice To: Stantec

Sample Identification	Sampling: Date	Sampling: Time	# of Containers: 40 ml VOA	Sleeve	Poly	Glass	Tedlar	# Preserved: HCl	HNO_3	None	Matrix: Water	Soil	Air	Other (specify)	TPH: Gasoline (8015)	Motor Oil	Diesel	Other (specify):	8260B: Gasoline (8260)	BTEX: Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	5 Oxygenates: MTBE DIPE ETBE TAME TBA	7 Oxygenates (5 Oxygenates plus): Ethanol Methanol	Lead Scavengers: 1,2 DCA 1,2 EDB	Halogenated Volatile Organic Compounds (former 8010 list)	Volatile Organic Compounds Full List	524: Volatile Organics by EPA Method 524.2	Metals: Metals Group (Method: ____): ☐ CAM 17 ☐ LUFT 5	Individual Metals (list and enter method):	SHORT HOLD: ☐ Nitrate as N ☐ Nitrite as N ☐ Ferrous Iron	☐ Nitrate as NO_3 ☐ Nitrite as NO_2	Chromium VI by (circle one): EPA 7199 EPA 7196 (EPA 7199 is the default)	Other	For Lab Use Only
Oly A SysInf	11-13	0740					X			X			X		X				X	X																	01
Oly A Eff	11-13	0735					X			X			X		X				X	X																			02

Relinquished by (signature/affiliation)	Date & Time	Received by (signature/affiliation)	Date & Time
Stantec	11/13 1116		
		Received by Kiff Analytical (signature):	11/13/14 1116

Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):
24 HR TAT on Eff
STD TAT on Sys Inf

Turnaround Time (TAT - Circle One):
Standard 4-Day 3-Day 2-Day 1-Day Other: _____
TAT in business days. Surcharge may apply. TAT for subcontracted work may vary. Advance notice to Kiff of your sampling event is recommended or Short Hold or expedited TAT cannot be guaranteed.

Distribution: Original - Lab; Copy - Originator
Rev: 071514

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 89569

Sample Receipt	Initials/Date: 110314	Storage Time: 1116	Sample Login	Initials/Date: 110314

TAT: ☐ Standard ☐ Rush ☒ Split ☐ None

Method of Receipt: ☐ Courier ☒ Over-the-counter ☐ Shipped

Temp °C ☒ N/A | Therm ID | Time | Coolant present ☐ Yes ☐ No ☐ Water | ☐ Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time: | Custody Seals ☐ N/A ☐ Intact ☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	/	
Is COC signed by relinquisher?	/	
Is COC dated by relinquisher?	/	
Is the sampler's name on the COC?	/	
Are there analyses or hold for all samples?	/	

Documented on	COC	Labels	Discrepancies:
Sample ID	/	/	
Project ID	/		
Sample Date	/	/	
Sample Time	/	/	
Does COC match project history?	☐ N/A	☒ Yes ☐ No	

Samples:	N/A	Yes	No
Are sample custody seals intact?	/	~~/~~ 110314	
Are sample containers intact?		/	
Is preservation documented?	/		
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?	/		
Are samples within holding time?		/	
Are sample container types correct?		/	
Is there adequate sample volume?		/	

Comments: Bags: 1026153-01, -10. Left in Analytical 110314 1116

Receipt Details:

Matrix	Container Type	# of Containers
AR	Tedlar	02

CS Required: ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:

Client Communication:

Pace Analytical®

Report Number : 89811
Date : 12/05/2014

Laboratory Results

Scott Bittinger
Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682

Subject : 2 Vapor Samples
Project Name : Olympic Station
Project Number :

Dear Mr. Bittinger,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the TNI 2009 standards.
Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Pace Analytical Services, Inc.
Pace Analytical Services, Inc. is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.
If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

Pace Analytical®

Report Number : 89811
Date : 12/05/2014

Project Name : **Olympic Station**
Project Number :

Sample : **Oly A SYS INF** Matrix : Air Lab Number : 89811-01
Sample Date :12/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 14:35
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 14:35
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	12/04/14 14:35
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 14:35
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 14:35
TPH as Gasoline	**85**	20	mg/m3	EPA 8260B	12/04/14 14:35
1,2-Dichloroethane-d4 (Surr)	96.5		% Recovery	EPA 8260B	12/04/14 14:35
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	12/04/14 14:35

Sample : **Oly A EFF** Matrix : Air Lab Number : 89811-02
Sample Date :12/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 15:08
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 15:08
Ethylbenzene	< 0.25	0.25	mg/m3	EPA 8260B	12/04/14 15:08
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 15:08
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	12/04/14 15:08
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	12/04/14 15:08
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	12/04/14 15:08
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	12/04/14 15:08

Report Number : 89811

Date : 12/05/2014

QC Report : Method Blank Data

Project Name : **Olympic Station**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/2014
Ethylbenzene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/2014
Toluene	< 0.20	0.20	mg/m3	EPA 8260B	12/04/2014
Total Xylenes	< 0.20	0.20	mg/m3	EPA 8260B	12/04/2014
Methyl-t-butyl ether (MTBE)	< 0.20	0.20	mg/m3	EPA 8260B	12/04/2014
TPH as Gasoline	< 20	20	mg/m3	EPA 8260B	12/04/2014
1,2-Dichloroethane-d4 (Surr)	98.2		%	EPA 8260B	12/04/2014
Toluene - d8 (Surr)	106		%	EPA 8260B	12/04/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Pace Analytical Services, Inc.

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95618
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 89811

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Send Report To: Debbie
Email Address:
Company: Stantec
Address: 3330 Cameron Pk Dr.
Phone Number: 530 676 6004
Fax Number: 530 676 6005
Project #:
P.O. #:
Project Name: Olympic Station
Project Address: San Lorenzo

Electronic Data Deliverable (EDD):
☐ CA EDF ☐ CA WriteOn ☐ WA EIM
☐ Excel ☐ EQuIS _____ (format) ☐ Other _____
Global ID (for CA EDF use):
EDD Deliverable To (Email Address):
Sampling Company: Stantec
Sampler Signature:
Invoice To: Stantec

Sample Identification	Sampling: Date	Sampling: Time	# of Containers: 40 ml VOA	Sleeve	Poly	Glass	Tedlar		# Preserved: HCl	HNO_3	None			Matrix: Water	Soil	Air	Other (specify)	TPH: ☒ Gasoline (8015)	☐ Motor Oil	☐ Diesel	☐ Other (specify):	8260B: BTEX: Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	5 Oxygenates: MTBE	7 Oxygenates (5 Oxygenates plus): Ethanol	Methanol	Lead Scavengers: 1,2 DCA	1,2 EDB	Halogenated Volatile Organic Compounds (former 8010 list)	Volatile Organic Compounds Full List	524: Volatile Organics by EPA Method 524.2	Metals: Metals Group (Method: _____): ☐ CAM 17 ☐ LUFT 5	Individual Metals (list and enter method):	SHORT HOLD: ☐ Nitrate as N ☐ Ferrous Iron	☐ Nitrate as NO_3 ☐ Nitrite as NO_2	Chromium VI by (circle one): EPA 7199 EPA 7196 (EPA 7196 is the default)	Other	For Lab Use Only
Oly A Sys Inf	12/4	0705					X				X					X		X				X	X																							01
Oly A Eff	12/4	0700					X				X					X		X				X	X																							02

Relinquished by (signature/affiliation): Stantec — Date & Time: 12/4/14 0937
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 TAT Analytical (signature): — Date & Time: 12/4/14 0937

Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):
24 HR TAT on Eff
STD on Sys Inf

Turnaround Time (TAT - Circle One):
(Standard) 4-Day 3-Day 2-Day (1-Day) Other: _____
TAT in business days. Surcharge may apply. TAT for subcontracted work may vary. Advance notice to Kiff of your sampling event is recommended or Short Hold or expedited TAT cannot be guaranteed.

Distribution: Original - Lab; Copy - Originator
Rev: 071514

SAMPLE RECEIPT CHECKLIST

SRG #: 89811

Sample Receipt	Initials/Date: Eng 120414	Storage Time: 0937	Sample Login	Initials/Date: Eng 120414

TAT: ☐ Standard ☐ Rush ☒ Split ☐ None | Method of Receipt: ☐ Courier ☐ Over-the-counter ☐ Shipped

Temp °C ☐ N/A | Therm ID | Time | Coolant present ☐ Yes ☐ No ☐ Water | ☐ Temp Excursion

For Shipments Only: Cooler Receipt Initials/Date/Time: | Custody Seals ☐ N/A ☐ Intact ☐ Broken

Chain-of-Custody:	Yes	No
Is COC present?	/	
Is COC signed by relinquisher?	/	
Is COC dated by relinquisher?	/	
Is the sampler's name on the COC?	/	
Are there analyses or hold for all samples?	/	

Documented on	COC	Labels	Discrepancies:
Sample ID	/	/	
Project ID	/		
Sample Date	/	/	
Sample Time	/	/	
Does COC match project history?	☐ N/A	☒ Yes	☐ No

Samples:	N/A	Yes	No
Are sample custody seals intact?	/		
Are sample containers intact?		/	
Is preservation documented?	/		
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?	/		
Are samples within holding time?		/	
Are sample container types correct?		/	
Is there adequate sample volume?		/	

Comments: Tedlar bags: 1026493-14, -13. Eng 120414 1049

Receipt Details:

Matrix	Container Type	# of Containers
AR	Tedlar	02

Requires client: Clarification ☐ Approval ☐ Notification ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:
Client Communication:

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: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 10/03/14

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 W INF**					
Lab ID :	STR14100342-01A	TPH-P (GRO)	ND	50 µg/L	10/07/14	10/07/14
Date Sampled	10/02/14 07:25	Methyl tert-butyl ether (MTBE)	11	0.50 µg/L	10/07/14	10/07/14
		Benzene	0.77	0.50 µg/L	10/07/14	10/07/14
		Toluene	ND	0.50 µg/L	10/07/14	10/07/14
		Ethylbenzene	ND	0.50 µg/L	10/07/14	10/07/14
		m,p-Xylene	ND	0.50 µg/L	10/07/14	10/07/14
		o-Xylene	ND	0.50 µg/L	10/07/14	10/07/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

10/7/14
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: STR14100342 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14100342-01A	Oly W INF	Aqueous	2

10/7/14

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: *10-Oct-14*

QC Summary Report

Work Order: 14100342

Method Blank

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

File ID: **14100709.D** Batch ID: **MS15W1007B** Analysis Date: **10/07/2014 14:02**

Sample ID: **MBLK MS15W1007B** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 14:02**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.8		10		108	70	130			
Surr: Toluene-d8	9.83		10		98	70	130			
Surr: 4-Bromofluorobenzene	11.1		10		111	70	130			

Laboratory Control Spike

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

File ID: **14100707.D** Batch ID: **MS15W1007B** Analysis Date: **10/07/2014 13:07**

Sample ID: **GLCS MS15W1007B** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	401	50	400		100	70	130			
Surr: 1,2-Dichloroethane-d4	10.7		10		107	70	130			
Surr: Toluene-d8	9.57		10		96	70	130			
Surr: 4-Bromofluorobenzene	11		10		110	70	130			

Sample Matrix Spike

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

File ID: **14100725.D** Batch ID: **MS15W1007B** Analysis Date: **10/07/2014 20:25**

Sample ID: **14100343-01AGS** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 20:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2150	250	2000	109.8	102	54	143			
Surr: 1,2-Dichloroethane-d4	56.2		50		112	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.8		50		108	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14100726.D** Batch ID: **MS15W1007B** Analysis Date: **10/07/2014 20:49**

Sample ID: **14100343-01AGSD** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 20:49**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2540	250	2000	109.8	121	54	143	2152	16.5(23)	
Surr: 1,2-Dichloroethane-d4	55.1		50		110	70	130			
Surr: Toluene-d8	47.8		50		96	70	130			
Surr: 4-Bromofluorobenzene	54.9		50		110	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: *10-Oct-14*

QC Summary Report

Work Order: 14100342

Method Blank

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

File ID: **14100709.D** Batch ID: **MS15W1007A** Analysis Date: **10/07/2014 14:02**

Sample ID: **MBLK MS15W1007A** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 14:02**

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	10.8		10		108	70	130			
Surr: Toluene-d8	9.83		10		98	70	130			
Surr: 4-Bromofluorobenzene	11.1		10		111	70	130			

Laboratory Control Spike

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

File ID: **14100706.D** Batch ID: **MS15W1007A** Analysis Date: **10/07/2014 12:41**

Sample ID: **LCS MS15W1007A** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 12:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	8.96	0.5	10		90	63	137			
Benzene	10.1	0.5	10		101	70	130			
Toluene	9.58	0.5	10		96	80	120			
Ethylbenzene	10.5	0.5	10		105	80	120			
m,p-Xylene	9.96	0.5	10		99.6	65	139			
o-Xylene	9.59	0.5	10		96	70	130			
Surr: 1,2-Dichloroethane-d4	10		10		100	70	130			
Surr: Toluene-d8	9.59		10		96	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Sample Matrix Spike

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

File ID: **14100723.D** Batch ID: **MS15W1007A** Analysis Date: **10/07/2014 19:37**

Sample ID: **14100343-01AMS** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 19:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	65.2	1.3	50	0	130	56	140			
Benzene	59.3	1.3	50	0	119	67	134			
Toluene	52.4	1.3	50	0	105	38	130			
Ethylbenzene	56.1	1.3	50	0	112	70	130			
m,p-Xylene	56.3	1.3	50	3.34	106	65	139			
o-Xylene	54.3	1.3	50	1.23	106	69	130			
Surr: 1,2-Dichloroethane-d4	55.8		50		112	70	130			
Surr: Toluene-d8	45.9		50		92	70	130			
Surr: 4-Bromofluorobenzene	51.5		50		103	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14100724.D** Batch ID: **MS15W1007A** Analysis Date: **10/07/2014 20:01**

Sample ID: **14100343-01AMSD** Units : **µg/L** Run ID: **MSD_15_141007A** Prep Date: **10/07/2014 20:01**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	61.7	1.3	50	0	123	56	140	65.15	5.4(40)	
Benzene	57.2	1.3	50	0	114	67	134	59.34	3.7(21)	
Toluene	52.3	1.3	50	0	105	38	130	52.41	0.3(20)	
Ethylbenzene	57.2	1.3	50	0	114	70	130	56.06	1.9(20)	
m,p-Xylene	57.4	1.3	50	3.34	108	65	139	56.32	1.9(20)	
o-Xylene	55.3	1.3	50	1.23	108	69	130	54.33	1.8(20)	
Surr: 1,2-Dichloroethane-d4	56.2		50		112	70	130			
Surr: Toluene-d8	45.8		50		92	70	130			
Surr: 4-Bromofluorobenzene	51.4		50		103	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: *10-Oct-14*

QC Summary Report

Work Order: 14100342

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 : STR14100342

Report Due By : 5:00 PM On : 07-Oct-14

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@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 # : 16731 Job : Olympic

Cooler Temp	Samples Received	Date Printed
3 °C	03-Oct-14	03-Oct-14

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
STR14100342-01A	Oly W INF	AQ	10/02/14 07:25	3	0	2	GAS-C	BTXE/M_C							

Comments: 48hr TAT. Security seals intact. Frozen ice. Chain split into three separate work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARLIADNA CHACON	Alpha Analytical, Inc.	10/03/14 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: Stantec
Attn: Debbie
Address: 3330 Cameron Park
City, State, Zip: Cameron
Phone Number: 530 626 4444 530 626 6005

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

16731

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: Debbie
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	Analysis Requested: TPH	BTEX	MTBE	Remarks
0725	10/2 14	AQ	[redacted]	Olx W INF	72	3		X	X	X	X	
0719	"	"		Olx W GAC1	STD	3		X	X	X	X	
0714	"	"		Olx W GAC2	STD	3		X	X	X	X	
0709	"	AQ		Olx W EFF	24	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: DMH

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
DMH Stantec	100214	1150	E. Fabiano	100214	1150
				10-03-14	0930

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

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

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: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 10/03/14

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 W GAC 1**					
Lab ID :	STR14100344-01A	TPH-P (GRO)	ND	50 µg/L	10/03/14	10/03/14
Date Sampled	10/02/14 07:19	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/03/14	10/03/14
		Benzene	ND	0.50 µg/L	10/03/14	10/03/14
		Toluene	ND	0.50 µg/L	10/03/14	10/03/14
		Ethylbenzene	ND	0.50 µg/L	10/03/14	10/03/14
		m,p-Xylene	ND	0.50 µg/L	10/03/14	10/03/14
		o-Xylene	ND	0.50 µg/L	10/03/14	10/03/14
Client ID :	**Oly W GAC 2**					
Lab ID :	STR14100344-02A	TPH-P (GRO)	ND	50 µg/L	10/03/14	10/03/14
Date Sampled	10/02/14 07:14	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/03/14	10/03/14
		Benzene	ND	0.50 µg/L	10/03/14	10/03/14
		Toluene	ND	0.50 µg/L	10/03/14	10/03/14
		Ethylbenzene	ND	0.50 µg/L	10/03/14	10/03/14
		m,p-Xylene	ND	0.50 µg/L	10/03/14	10/03/14
		o-Xylene	ND	0.50 µg/L	10/03/14	10/03/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

10/10/14
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: STR14100344 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14100344-01A	Oly W GAC 1	Aqueous	2
14100344-02A	Oly W GAC 2	Aqueous	2

10/10/14

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: 06-Oct-14

QC Summary Report

Work Order: 14100344

Method Blank

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

File ID: C:\HPCHEM\MS10\DATA\141002\14100209.D Batch ID: MS10W1002B Analysis Date: 10/02/2014 18:50

Sample ID: MBLK MS10W1002B Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 18:50

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	9.35		10		94	70	130			
Surr: Toluene-d8	9.7		10		97	70	130			
Surr: 4-Bromofluorobenzene	9.36		10		94	70	130			

Laboratory Control Spike

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

File ID: C:\HPCHEM\MS10\DATA\141002\14100107.D Batch ID: MS10W1002B Analysis Date: 10/02/2014 17:19

Sample ID: GLCS MS10W1002B Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 17:19

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	353	50	400		88	70	130			
Surr: 1,2-Dichloroethane-d4	9.97		10		99.7	70	130			
Surr: Toluene-d8	9.55		10		96	70	130			
Surr: 4-Bromofluorobenzene	10		10		100	70	130			

Sample Matrix Spike

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

File ID: C:\HPCHEM\MS10\DATA\141002\14100221.D Batch ID: MS10W1002B Analysis Date: 10/02/2014 23:04

Sample ID: 14092621-01AGS Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 23:04

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1850	250	2000	0	92	54	143			
Surr: 1,2-Dichloroethane-d4	47		50		94	70	130			
Surr: Toluene-d8	49.6		50		99	70	130			
Surr: 4-Bromofluorobenzene	49		50		98	70	130			

Sample Matrix Spike Duplicate

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

File ID: C:\HPCHEM\MS10\DATA\141002\14100222.D Batch ID: MS10W1002B Analysis Date: 10/02/2014 23:25

Sample ID: 14092621-01AGSD Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 23:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2000	250	2000	0	100	54	143	1845	8.1(23)	
Surr: 1,2-Dichloroethane-d4	48.8		50		98	70	130			
Surr: Toluene-d8	48.2		50		96	70	130			
Surr: 4-Bromofluorobenzene	49.8		50		99.6	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: 06-Oct-14

QC Summary Report

Work Order: 14100344

Method Blank

Type MBLK Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\141002\14100209.D Batch ID: MS10W1002A Analysis Date: 10/02/2014 18:50

Sample ID: MBLK MS10W1002A Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 18:50

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	9.35		10		94	70	130			
Surr: Toluene-d8	9.7		10		97	70	130			
Surr: 4-Bromofluorobenzene	9.36		10		94	70	130			

Laboratory Control Spike

Type LCS Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\141002\14100108.D Batch ID: MS10W1002A Analysis Date: 10/02/2014 17:41

Sample ID: LCS MS09W1002A Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 17:41

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.61	0.5	10		96	63	137			
Benzene	9.85	0.5	10		99	70	130			
Toluene	9.01	0.5	10		90	80	120			
Ethylbenzene	10.9	0.5	10		109	80	120			
m,p-Xylene	10.8	0.5	10		108	65	139			
o-Xylene	11.1	0.5	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.67		10		97	70	130			
Surr: Toluene-d8	9.75		10		98	70	130			
Surr: 4-Bromofluorobenzene	9.94		10		99	70	130			

Sample Matrix Spike

Type MS Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\141003\14100307.D Batch ID: MS10W1002A Analysis Date: 10/03/2014 15:49

Sample ID: 14092621-01AMS Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/03/2014 15:49

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	52.4	1.3	50	2.63	99.6	56	140			
Benzene	53.8	1.3	50	0	108	67	134			
Toluene	48.2	1.3	50	0	96	38	130			
Ethylbenzene	59.1	1.3	50	0	118	70	130			
m,p-Xylene	59	1.3	50	0	118	65	139			
o-Xylene	60.5	1.3	50	0	121	69	130			
Surr: 1,2-Dichloroethane-d4	48		50		96	70	130			
Surr: Toluene-d8	48.6		50		97	70	130			
Surr: 4-Bromofluorobenzene	51.4		50		103	70	130			

Sample Matrix Spike Duplicate

Type MSD Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\141002\14100220.D Batch ID: MS10W1002A Analysis Date: 10/02/2014 22:43

Sample ID: 14092621-01AMSD Units : µg/L Run ID: MSD_10_141002A Prep Date: 10/02/2014 22:43

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	53.5	1.3	50	2.63	102	56	140	52.44	2.1(40)	
Benzene	55.6	1.3	50	0	111	67	134	53.79	3.4(21)	
Toluene	50.4	1.3	50	0	101	38	130	48.2	4.4(20)	
Ethylbenzene	60.9	1.3	50	0	122	70	130	59.09	3.0(20)	
m,p-Xylene	60.2	1.3	50	0	120	65	139	58.99	2.0(20)	
o-Xylene	62.1	1.3	50	0	124	69	130	60.48	2.6(20)	
Surr: 1,2-Dichloroethane-d4	49.8		50		99.6	70	130			
Surr: Toluene-d8	49.3		50		99	70	130			
Surr: 4-Bromofluorobenzene	50.6		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: *06-Oct-14*

QC Summary Report

Work Order: 14100344

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 : STR14100344

Report Due By : 5:00 PM On : 10-Oct-14

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

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@stratusinc.net

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 16731 Job : Olympic

Cooler Temp	Samples Received	Date Printed
3 °C	03-Oct-14	03-Oct-14

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
STR14100344-01A	Oly W GAC 1	AQ	10/02/14 07:19	3	0	5	GAS-C	BTXE/M_C							
STR14100344-02A	Oly W GAC 2	AQ	10/02/14 07:14	3	0	5	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	10/03/14 1021

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: Debbie
Address: 3338 Cameron Park
City, State, Zip: Cameron
Phone Number: 530 626 1616 530 626 0693

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

16731

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: Debbie
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	TPH	BTEX	MTBE	Remarks
0725	10/14	AQ		01x W INF	72	3		X	X	X	X	
0719				01x W GAC1	STD	3		X	X	X	X	
0714				01x W GAC2	STD	3		X	X	X	X	
0709		AQ		01x W EFF	24	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: DHL

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
DHL Stanton	100214	1150	E. Fonseca	100214	1150
				10-03-14	0930

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 10/03/14

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 W EFF**					
Lab ID :	STR14100341-01A	TPH-P (GRO)	ND	50 µg/L	10/03/14	10/03/14
Date Sampled	10/02/14 07:09	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/03/14	10/03/14
		Benzene	ND	0.50 µg/L	10/03/14	10/03/14
		Toluene	ND	0.50 µg/L	10/03/14	10/03/14
		Ethylbenzene	ND	0.50 µg/L	10/03/14	10/03/14
		m,p-Xylene	ND	0.50 µg/L	10/03/14	10/03/14
		o-Xylene	ND	0.50 µg/L	10/03/14	10/03/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

10/3/14
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: STR14100341 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14100341-01A	Oly W EFF	Aqueous	2

10/3/14

Report Date

Alpha Analytical, Inc.

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

Date: *10-Oct-14*

QC Summary Report

Work Order: 14100341

Method Blank

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

File ID: **14100312.D** Batch ID: **MS09W1003B** Analysis Date: **10/03/2014 14:45**

Sample ID: **MBLK MS09W1003B** Units : **µg/L** Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 14:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	8.62		10		86	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	12.7		10		127	70	130			

Laboratory Control Spike

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

File ID: **14100311.D** Batch ID: **MS09W1003B** Analysis Date: **10/03/2014 13:45**

Sample ID: **GLCS MS09W1003B** Units : **µg/L** Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 13:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	415	50	400		104	70	130			
Surr: 1,2-Dichloroethane-d4	9.04		10		90	70	130			
Surr: Toluene-d8	9.82		10		98	70	130			
Surr: 4-Bromofluorobenzene	12.1		10		121	70	130			

Sample Matrix Spike

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

File ID: **14100327.D** Batch ID: **MS09W1003B** Analysis Date: **10/03/2014 20:39**

Sample ID: **14100340-01AGS** Units : **µg/L** Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 20:39**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2310	250	2000	0	116	54	143			
Surr: 1,2-Dichloroethane-d4	51.8		50		104	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	62.2		50		124	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14100328.D** Batch ID: **MS09W1003B** Analysis Date: **10/03/2014 21:02**

Sample ID: **14100340-01AGSD** Units : **µg/L** Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 21:02**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1780	250	2000	0	89	54	143	2313	26.1(23)	R5
Surr: 1,2-Dichloroethane-d4	47.9		50		96	70	130			
Surr: Toluene-d8	47.4		50		95	70	130			
Surr: 4-Bromofluorobenzene	61.4		50		123	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.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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Date: 10-Oct-14

QC Summary Report

Work Order: 14100341

Method Blank

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

File ID: **14100312.D** Batch ID: **MS09W1003A** Analysis Date: **10/03/2014 14:45**

Sample ID: **MBLK MS09W1003A** Units : µg/L Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 14:45**

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	8.62		10		86	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	12.7		10		127	70	130			

Laboratory Control Spike

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

File ID: **14100310.D** Batch ID: **MS09W1003A** Analysis Date: **10/03/2014 13:21**

Sample ID: **LCS MS09W1003A** Units : µg/L Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 13:21**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.15	0.5	10		92	63	137			
Benzene	9.72	0.5	10		97	70	130			
Toluene	9.29	0.5	10		93	80	120			
Ethylbenzene	9.84	0.5	10		98	80	120			
m,p-Xylene	8.53	0.5	10		85	65	139			
o-Xylene	8.04	0.5	10		80	70	130			
Surr: 1,2-Dichloroethane-d4	9.29		10		93	70	130			
Surr: Toluene-d8	9.64		10		96	70	130			
Surr: 4-Bromofluorobenzene	11		10		110	70	130			

Sample Matrix Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141009\14100905.D** Batch ID: **MS09W1003A** Analysis Date: **10/09/2014 17:00**

Sample ID: **14100340-01AMS** Units : µg/L Run ID: **MSD_09_141003A** Prep Date: **10/09/2014 17:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	51.9	1.3	50	0	104	56	140			
Benzene	49.3	1.3	50	0	99	67	134			
Toluene	42.7	1.3	50	0	85	38	130			
Ethylbenzene	53.2	1.3	50	0	106	70	130			
m,p-Xylene	53.7	1.3	50	0	107	65	139			
o-Xylene	54.3	1.3	50	0	109	69	130			
Surr: 1,2-Dichloroethane-d4	54.1		50		108	70	130			
Surr: Toluene-d8	47.2		50		94	70	130			
Surr: 4-Bromofluorobenzene	47.1		50		94	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14100326.D** Batch ID: **MS09W1003A** Analysis Date: **10/03/2014 20:15**

Sample ID: **14100340-01AMSD** Units : µg/L Run ID: **MSD_09_141003A** Prep Date: **10/03/2014 20:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	58.5	1.3	50	0	117	56	140	51.88	12.1(40)	
Benzene	61	1.3	50	0	122	67	134	49.33	21.1(21)	R5
Toluene	51.4	1.3	50	0	103	38	130	42.7	18.5(20)	
Ethylbenzene	54.8	1.3	50	0	110	70	130	53.18	2.9(20)	
m,p-Xylene	45.2	1.3	50	0	90	65	139	53.69	17.1(20)	
o-Xylene	44.3	1.3	50	0	89	69	130	54.26	20.2(20)	R5
Surr: 1,2-Dichloroethane-d4	55.5		50		111	70	130			
Surr: Toluene-d8	42.9		50		86	70	130			
Surr: 4-Bromofluorobenzene	54.8		50		110	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: *10-Oct-14*

QC Summary Report

Work Order: 14100341

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.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

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 : STR14100341

Report Due By : 5:00 PM On : 03-Oct-14

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

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@stratusinc.net

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Client's COC # : 16731 Job : Olympic

Cooler Temp	Samples Received	Date Printed
3 °C	03-Oct-14	03-Oct-14

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
STR14100341-01A	Oly W EFF	AQ	10/02/14 07:09	3	0	0	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIANA CHACON	Alpha Analytical, Inc.	10/03/14 0957

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: Debbie
Address: 3330 Cameron Park
City, State, Zip: Cameron
Phone Number: 530 626 1044 Fax: 530 626 0005

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

16731

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: Debbie
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 (MMDD)	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: TPH	BTEX	MTBE	Remarks
0725	10/3/14	AQ		01y W INF	72	3		X	X	X	X	
0719	"	"		01y W GAC1	STD	3		X	X	X	X	
0714	"	"		01y W GAC2	STD	3		X	X	X	X	
0709	"	AQ	STR1410D341-01A	01y W EFF	24	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: CHC

Relinquished by: (Signature/Affiliation)	Date:	Time:	Received by: (Signature/Affiliation)	Date:	Time:
[signature]	100214	1150	[signature]	100214	1150
			[signature]	100314	0936

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 11/04/14

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 W INF**					
Lab ID :	STR14110443-01A	TPH-P (GRO)	ND	50 µg/L	11/05/14	11/05/14
Date Sampled	11/03/14 07:58	Methyl tert-butyl ether (MTBE)	13	0.50 µg/L	11/05/14	11/05/14
		Benzene	ND	0.50 µg/L	11/05/14	11/05/14
		Toluene	ND	0.50 µg/L	11/05/14	11/05/14
		Ethylbenzene	ND	0.50 µg/L	11/05/14	11/05/14
		m,p-Xylene	ND	0.50 µg/L	11/05/14	11/05/14
		o-Xylene	ND	0.50 µg/L	11/05/14	11/05/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

11/6/14
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: STR14110443 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14110443-01A	Oly W INF	Aqueous	2

11/6/14

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: *11-Nov-14*

QC Summary Report

Work Order: 14110443

Method Blank

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

File ID: **14110505.D** Batch ID: **MS08W1105B** Analysis Date: **11/05/2014 11:38**

Sample ID: **MBLK MS08W1105B** Units : **µg/L** Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 11:38**

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		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.95		10		100	70	130			

Laboratory Control Spike

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

File ID: **14110504.D** Batch ID: **MS08W1105B** Analysis Date: **11/05/2014 11:10**

Sample ID: **GLCS MS08W1105B** Units : **µg/L** Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 11:10**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	345	50	400		86	70	130			
Surr: 1,2-Dichloroethane-d4	10.8		10		108	70	130			
Surr: Toluene-d8	9.12		10		91	70	130			
Surr: 4-Bromofluorobenzene	11.7		10		117	70	130			

Sample Matrix Spike

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

File ID: **14110514.D** Batch ID: **MS08W1105B** Analysis Date: **11/05/2014 15:12**

Sample ID: **14110443-01AGS** Units : **µg/L** Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 15:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1550	250	2000	0	78	54	143			
Surr: 1,2-Dichloroethane-d4	52.6		50		105	70	130			
Surr: Toluene-d8	46.6		50		93	70	130			
Surr: 4-Bromofluorobenzene	57.9		50		116	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14110515.D** Batch ID: **MS08W1105B** Analysis Date: **11/05/2014 15:36**

Sample ID: **14110443-01AGSD** Units : **µg/L** Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 15:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1690	250	2000	0	85	54	143	1552	8.7(23)	
Surr: 1,2-Dichloroethane-d4	53.2		50		106	70	130			
Surr: Toluene-d8	45.9		50		92	70	130			
Surr: 4-Bromofluorobenzene	58.7		50		117	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.

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Date: *11-Nov-14*

QC Summary Report

Work Order: 14110443

Method Blank

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

File ID: **14110505.D** Batch ID: **MS08W1105A** Analysis Date: **11/05/2014 11:38**

Sample ID: **MBLK MS08W1105A** Units : µg/L Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 11:38**

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		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.95		10		100	70	130			

Laboratory Control Spike

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

File ID: **14110503.D** Batch ID: **MS08W1105A** Analysis Date: **11/05/2014 10:42**

Sample ID: **LCS MS08W1105A** Units : µg/L Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 10:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	11.5	0.5	10		115	63	137			
Benzene	9.31	0.5	10		93	70	130			
Toluene	10.2	0.5	10		102	80	120			
Ethylbenzene	10.2	0.5	10		102	80	120			
m,p-Xylene	10.8	0.5	10		108	65	139			
o-Xylene	10.6	0.5	10		106	70	130			
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	9.46		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Sample Matrix Spike

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

File ID: **14110512.D** Batch ID: **MS08W1105A** Analysis Date: **11/05/2014 14:25**

Sample ID: **14110443-01AMS** Units : µg/L Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 14:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	58.9	1.3	50	12.59	93	56	140			
Benzene	38.8	1.3	50	1.05	76	67	134			
Toluene	41.6	1.3	50	0	83	38	130			
Ethylbenzene	40.1	1.3	50	0	80	70	130			
m,p-Xylene	43.9	1.3	50	0	88	65	139			
o-Xylene	43.8	1.3	50	0	88	69	130			
Surr: 1,2-Dichloroethane-d4	52		50		104	70	130			
Surr: Toluene-d8	48.2		50		96	70	130			
Surr: 4-Bromofluorobenzene	56		50		112	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14110513.D** Batch ID: **MS08W1105A** Analysis Date: **11/05/2014 14:48**

Sample ID: **14110443-01AMSD** Units : µg/L Run ID: **MSD_08_141105A** Prep Date: **11/05/2014 14:48**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	59.1	1.3	50	12.59	93	56	140	58.88	0.4(40)	
Benzene	40.8	1.3	50	1.05	80	67	134	38.81	5.1(21)	
Toluene	43.2	1.3	50	0	86	38	130	41.55	3.8(20)	
Ethylbenzene	42.3	1.3	50	0	85	70	130	40.1	5.2(20)	
m,p-Xylene	45.6	1.3	50	0	91	65	139	43.89	3.8(20)	
o-Xylene	44.7	1.3	50	0	89	69	130	43.82	1.9(20)	
Surr: 1,2-Dichloroethane-d4	53.5		50		107	70	130			
Surr: Toluene-d8	48.2		50		96	70	130			
Surr: 4-Bromofluorobenzene	57		50		114	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: *11-Nov-14*

QC Summary Report

Work Order: 14110443

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.

RUSH

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 : STR14110443

Report Due By : 5:00 PM On : 06-Nov-14

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@stratusinc.net

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

EDD Required : **Yes**

Sampled by : C. Hill

PO :

Cooler Temp	Samples Received	Date Printed
3 °C	04-Nov-14	04-Nov-14

Client's COC # : 16507 Job : Olympic Station

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
STR14110443-01A	Oly W INF	AQ	11/03/14 07:58	3	0	2	GAS-C	BTXE/M_C							

Comments: 48hr TAT. Security seals intact. ~~Frozen~~ ice. Chain split into three separate work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	11/04/14 1107

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: Debbie
Address: 3330 Cameron Pk DR
City, State, Zip: Cameron P
Phone Number: 5306766004 Fax: 5306766005

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

16507

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: Debbie
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 circled) 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	TPH	BTEX	MTBE							Remarks
0758	11-3-14	AQ	STR14110443-01A	Oly W INF	72	3		X	X	X	X							
0755	)	)		Oly W GW-1	STD	3		X	X	X	X							
0750	)	)		Oly W GW-2	STD	3		X	X	X	X							
0745	)	AQ		Oly W EFF	24	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: CHILL

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] Stratus	110214	1148	E. Encinciano	110214	1148
			[signature]	11-04-14	0930

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 11/04/14

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 W GAC 1**					
Lab ID :	STR14110447-01A	TPH-P (GRO)	ND	50 µg/L	11/07/14	11/07/14
Date Sampled	11/03/14 07:55	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/07/14	11/07/14
		Benzene	ND	0.50 µg/L	11/07/14	11/07/14
		Toluene	ND	0.50 µg/L	11/07/14	11/07/14
		Ethylbenzene	ND	0.50 µg/L	11/07/14	11/07/14
		m,p-Xylene	ND	0.50 µg/L	11/07/14	11/07/14
		o-Xylene	ND	0.50 µg/L	11/07/14	11/07/14
Client ID :	**Oly W GAC 2**					
Lab ID :	STR14110447-02A	TPH-P (GRO)	ND	50 µg/L	11/07/14	11/07/14
Date Sampled	11/03/14 07:50	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/07/14	11/07/14
		Benzene	ND	0.50 µg/L	11/07/14	11/07/14
		Toluene	ND	0.50 µg/L	11/07/14	11/07/14
		Ethylbenzene	ND	0.50 µg/L	11/07/14	11/07/14
		m,p-Xylene	ND	0.50 µg/L	11/07/14	11/07/14
		o-Xylene	ND	0.50 µg/L	11/07/14	11/07/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

11/11/14
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: STR14110447 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14110447-01A	Oly W GAC 1	Aqueous	2
14110447-02A	Oly W GAC 2	Aqueous	2

11/11/14
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: *11-Nov-14*

QC Summary Report

Work Order: 14110447

Method Blank

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

File ID: **14110604.D** Batch ID: **MS08W1106B** Analysis Date: **11/06/2014 10:49**

Sample ID: **MBLK MS08W1106B** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/06/2014 10:49**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.7		10		117	70	130			
Surr: Toluene-d8	9.77		10		98	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

Laboratory Control Spike

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

File ID: **14110603.D** Batch ID: **MS08W1106B** Analysis Date: **11/06/2014 10:21**

Sample ID: **GLCS MS08W1106B** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/06/2014 10:21**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	410	50	400		102	70	130			
Surr: 1,2-Dichloroethane-d4	11.7		10		117	70	130			
Surr: Toluene-d8	8.88		10		89	70	130			
Surr: 4-Bromofluorobenzene	12		10		120	70	130			

Sample Matrix Spike

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

File ID: **14111031.D** Batch ID: **MS08W1106B** Analysis Date: **11/10/2014 21:45**

Sample ID: **14110444-01AGS** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/10/2014 21:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1750	250	2000	0	87	54	143			
Surr: 1,2-Dichloroethane-d4	54.9		50		110	70	130			
Surr: Toluene-d8	45.9		50		92	70	130			
Surr: 4-Bromofluorobenzene	57.9		50		116	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14111032.D** Batch ID: **MS08W1106B** Analysis Date: **11/10/2014 22:09**

Sample ID: **14110444-01AGSD** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/10/2014 22:09**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1630	250	2000	0	82	54	143	1750	7.1(23)	
Surr: 1,2-Dichloroethane-d4	54.4		50		109	70	130			
Surr: Toluene-d8	45.8		50		92	70	130			
Surr: 4-Bromofluorobenzene	59.7		50		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.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

Date: *11-Nov-14*

QC Summary Report

Work Order: 14110447

Method Blank

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

File ID: **14110604.D** Batch ID: **MS08W1106A** Analysis Date: **11/06/2014 10:49**

Sample ID: **MBLK MS08W1106A** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/06/2014 10:49**

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	11.7		10		117	70	130			
Surr: Toluene-d8	9.77		10		98	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

Laboratory Control Spike

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

File ID: **14110602.D** Batch ID: **MS08W1106A** Analysis Date: **11/06/2014 09:57**

Sample ID: **LCS MS08W1106A** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/06/2014 09:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	10.9	0.5	10		109	63	137			
Benzene	8.73	0.5	10		87	70	130			
Toluene	9.42	0.5	10		94	80	120			
Ethylbenzene	9.64	0.5	10		96	80	120			
m,p-Xylene	10	0.5	10		100	65	139			
o-Xylene	9.75	0.5	10		98	70	130			
Surr: 1,2-Dichloroethane-d4	12.4		10		124	70	130			
Surr: Toluene-d8	9.33		10		93	70	130			
Surr: 4-Bromofluorobenzene	11.5		10		115	70	130			

Sample Matrix Spike

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

File ID: **14110707.D** Batch ID: **MS08W1106A** Analysis Date: **11/07/2014 13:06**

Sample ID: **14110444-01AMS** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/07/2014 13:06**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	51.2	1.3	50	0	102	56	140			
Benzene	32	1.3	50	0	64	67	134			M2
Toluene	33.2	1.3	50	0	66	38	130			
Ethylbenzene	29.5	1.3	50	0	59	70	130			M2
m,p-Xylene	31.1	1.3	50	0	62	65	139			M2
o-Xylene	30.5	1.3	50	0	61	69	130			M2
Surr: 1,2-Dichloroethane-d4	60.9		50		122	70	130			
Surr: Toluene-d8	46.7		50		93	70	130			
Surr: 4-Bromofluorobenzene	55.3		50		111	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14110708.D** Batch ID: **MS08W1106A** Analysis Date: **11/07/2014 13:29**

Sample ID: **14110444-01AMSD** Units : µg/L Run ID: **MSD_08_141106A** Prep Date: **11/07/2014 13:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	48.8	1.3	50	0	98	56	140	51.19	4.8(40)	
Benzene	40.8	1.3	50	0	82	67	134	32.03	24.0(21)	R58
Toluene	44.6	1.3	50	0	89	38	130	33.19	29.3(20)	R5
Ethylbenzene	44.7	1.3	50	0	89	70	130	29.45	41.1(20)	R58
m,p-Xylene	47.1	1.3	50	0	94	65	139	31.06	41.0(20)	R58
o-Xylene	46.5	1.3	50	0	93	69	130	30.45	41.7(20)	R58
Surr: 1,2-Dichloroethane-d4	55.3		50		111	70	130			
Surr: Toluene-d8	46.4		50		93	70	130			
Surr: 4-Bromofluorobenzene	57.8		50		116	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: *11-Nov-14*

QC Summary Report

Work Order: 14110447

Comments:

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

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

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

R58 = MS/MSD RPD exceeded the laboratory control limit.

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 : STR14110447

Report Due By : 5:00 PM On : 11-Nov-14

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@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 # : 16507 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
3 °C	04-Nov-14	04-Nov-14

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
STR14110447-01A	Oly W GAC 1	AQ	11/03/14 07:55	3	0	5	GAS-C	BTXE/M_C							
STR14110447-02A	Oly W GAC 2	AQ	11/03/14 07:50	3	0	5	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	11/04/14 1158

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: Debbie
Address: 3337 Cameron Park Dr
City, State, Zip: Cameron P
Phone Number: 530 672 6077 Fax: 530 672 6075

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

16507

Page # 1 of 1

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: Debbie
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	TPH	BTEX	MTBE	Remarks
0750	11/3/14	AQ		Oly W INF	72	3		X	X	V	V	
0755				Oly W GWC1	STD	3		X	X	X	X	
0750				Oly W GWC2	STD	3		X	X	X	X	
0745		AQ		Oly W EFF	24	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: CHILC

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Stantec	11/02/14	1148	E. Mariano	11/02/14	1148
				11-04-14	0930

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Debbie Barr
Phone: (530) 676-6000
Fax: (530) 676-6005
Date Received : 11/04/14

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 W EFF**					
Lab ID :	STR14110441-01A	TPH-P (GRO)	ND	50 µg/L	11/04/14	11/04/14
Date Sampled	11/03/14 07:45	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	11/04/14	11/04/14
		Benzene	ND	0.50 µg/L	11/04/14	11/04/14
		Toluene	ND	0.50 µg/L	11/04/14	11/04/14
		Ethylbenzene	ND	0.50 µg/L	11/04/14	11/04/14
		m,p-Xylene	ND	0.50 µg/L	11/04/14	11/04/14
		o-Xylene	ND	0.50 µg/L	11/04/14	11/04/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

11/4/14
Report Date

Alpha Analytical, Inc.

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

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VOC Sample Preservation Report

Work Order: STR14110441 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14110441-01A	Oly W EFF	Aqueous	2

11/4/14

Report Date

Alpha Analytical, Inc.

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Date: *07-Nov-14*

QC Summary Report

Work Order: 14110441

Method Blank

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110405.D** Batch ID: **MS10W1104B** Analysis Date: **11/04/2014 12:01**

Sample ID: **MBLK MS10W1104B** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 12:01**

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	9.69		10		97	70	130			
Surr: 4-Bromofluorobenzene	9.45		10		95	70	130			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110403.D** Batch ID: **MS10W1104B** Analysis Date: **11/04/2014 11:19**

Sample ID: **GLCS MS10W1104B** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 11:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	412	50	400		103	70	130			
Surr: 1,2-Dichloroethane-d4	10.9		10		109	70	130			
Surr: Toluene-d8	9.29		10		93	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Sample Matrix Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110419.D** Batch ID: **MS10W1104B** Analysis Date: **11/04/2014 17:31**

Sample ID: **14110441-01AGS** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 17:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1900	250	2000	0	95	54	143			
Surr: 1,2-Dichloroethane-d4	52.5		50		105	70	130			
Surr: Toluene-d8	47.8		50		96	70	130			
Surr: 4-Bromofluorobenzene	52.1		50		104	70	130			

Sample Matrix Spike Duplicate

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110420.D** Batch ID: **MS10W1104B** Analysis Date: **11/04/2014 17:53**

Sample ID: **14110441-01AGSD** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 17:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2000	250	2000	0	99.8	54	143	1899	5.0(23)	
Surr: 1,2-Dichloroethane-d4	53		50		106	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	51		50		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.

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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Date: 07-Nov-14

QC Summary Report

Work Order: 14110441

Method Blank

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110405.D** Batch ID: **MS10W1104A** Analysis Date: **11/04/2014 12:01**

Sample ID: **MBLK MS10W1104A** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 12:01**

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	9.69		10		97	70	130			
Surr: 4-Bromofluorobenzene	9.45		10		95	70	130			

Laboratory Control Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110402.D** Batch ID: **MS10W1104A** Analysis Date: **11/04/2014 10:56**

Sample ID: **LCS MS10W1104A** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 10:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	8.5	0.5	10		85	63	137			
Benzene	8.99	0.5	10		90	70	130			
Toluene	9.12	0.5	10		91	80	120			
Ethylbenzene	9.66	0.5	10		97	80	120			
m,p-Xylene	9.32	0.5	10		93	65	139			
o-Xylene	9.51	0.5	10		95	70	130			
Surr: 1,2-Dichloroethane-d4	10.8		10		108	70	130			
Surr: Toluene-d8	9.74		10		97	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

Sample Matrix Spike

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110417.D** Batch ID: **MS10W1104A** Analysis Date: **11/04/2014 16:46**

Sample ID: **14110441-01AMS** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 16:46**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	47.1	1.3	50	0	94	56	140			
Benzene	51.1	1.3	50	0	102	67	134			
Toluene	51.9	1.3	50	0	104	38	130			
Ethylbenzene	54.6	1.3	50	0	109	70	130			
m,p-Xylene	53.3	1.3	50	0	107	65	139			
o-Xylene	54.5	1.3	50	0	109	69	130			
Surr: 1,2-Dichloroethane-d4	52.9		50		106	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.4		50		107	70	130			

Sample Matrix Spike Duplicate

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

File ID: **C:\HPCHEM\MS10\DATA\141104\14110418.D** Batch ID: **MS10W1104A** Analysis Date: **11/04/2014 17:08**

Sample ID: **14110441-01AMSD** Units : **µg/L** Run ID: **MSD_10_141104A** Prep Date: **11/04/2014 17:08**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	41.7	1.3	50	0	83	56	140	47.12	12.3(40)	
Benzene	45.9	1.3	50	0	92	67	134	51.07	10.8(21)	
Toluene	46.1	1.3	50	0	92	38	130	51.92	11.8(20)	
Ethylbenzene	49.2	1.3	50	0	98	70	130	54.61	10.4(20)	
m,p-Xylene	47.9	1.3	50	0	96	65	139	53.34	10.8(20)	
o-Xylene	48.7	1.3	50	0	97	69	130	54.47	11.3(20)	
Surr: 1,2-Dichloroethane-d4	52.5		50		105	70	130			
Surr: Toluene-d8	48.4		50		97	70	130			
Surr: 4-Bromofluorobenzene	54.3		50		109	70	130			

Alpha Analytical, Inc.

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

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Date: *07-Nov-14*

QC Summary Report

Work Order: 14110441

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 : STR14110441

Report Due By : 5:00 PM On : 04-Nov-14

Report Attention	Phone Number	EMail Address
Debbie Barr	(530) 676-6000 x	dbarr@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 # : 16507 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
3 °C	04-Nov-14	04-Nov-14

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
STR14110441-01A	Oly W EFF	AQ	11/03/14 07:45	3	0	0	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	11/04/14 1012

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: Debbie
Address: 3301 Coronado Pkwy DR
City, State, Zip: Corrales, NM
Phone Number: 530626 6004 Fax: 530626 6005

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: 8255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-261-4848

16507

Page # 1 of 1

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: Debbie
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	TPH	BTEX	MTBE	Remarks
0758	11-3-14	AQ		Oly W INF	72	3		X	X	X	X	
0755				Oly W GWC1	STD	3		X	X	X	X	
0750				Oly W GWC2	STD	3		X	X	X	X	
0745		AQ	STR1411044-01A	Oly W EFF	24	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: CHILL

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Chris Stanley	11-02-14	1148	E. Fregoso	11-02-14	1148
				11-04-14	0930

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

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

Alpha Analytical, Inc.

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(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 : 12/05/14

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 W INF**					
Lab ID :	STR14120542-01A	TPH-P (GRO)	ND	50 µg/L	12/09/14	12/09/14
Date Sampled	12/04/14 06:55	Methyl tert-butyl ether (MTBE)	21	0.50 µg/L	12/09/14	12/09/14
		Benzene	0.98	0.50 µg/L	12/09/14	12/09/14
		Toluene	ND	0.50 µg/L	12/09/14	12/09/14
		Ethylbenzene	ND	0.50 µg/L	12/09/14	12/09/14
		m,p-Xylene	ND	0.50 µg/L	12/09/14	12/09/14
		o-Xylene	ND	0.50 µg/L	12/09/14	12/09/14

Gasoline Range Organics (GRO) C4-C13
This replaces the report signed 12/10/14 due to a change in the date sampled, due to lab error.
ND = Not Detected
Reported in micrograms per Liter, per client request.

ACLASS ACCREDITED DoD ELAP

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

NELAP ACCREDITED TNI LABORATORY

12/10/14
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: 12-Dec-14

QC Summary Report

Work Order: 14120542

Method Blank

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

File ID: **14120905.D** Batch ID: **MS12W1209B** Analysis Date: **12/09/2014 17:47**

Sample ID: **MBLK MS12W1209B** Units : **µg/L** Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 17:47**

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	8.67		10		87	70	130			
Surr: 4-Bromofluorobenzene	8.71		10		87	70	130			

Laboratory Control Spike

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

File ID: **14120903.D** Batch ID: **MS12W1209B** Analysis Date: **12/09/2014 17:04**

Sample ID: **GLCS MS12W1209B** Units : **µg/L** Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 17:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	443	50	400		111	70	130			
Surr: 1,2-Dichloroethane-d4	10.1		10		101	70	130			
Surr: Toluene-d8	8.42		10		84	70	130			
Surr: 4-Bromofluorobenzene	10.6		10		106	70	130			

Sample Matrix Spike

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

File ID: **14120918.D** Batch ID: **MS12W1209B** Analysis Date: **12/09/2014 22:24**

Sample ID: **14120503-02AGS** Units : **µg/L** Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 22:24**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1640	250	2000	0	82	54	143			
Surr: 1,2-Dichloroethane-d4	50.1		50		100	70	130			
Surr: Toluene-d8	47.5		50		95	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: **14120919.D** Batch ID: **MS12W1209B** Analysis Date: **12/09/2014 22:45**

Sample ID: **14120503-02AGSD** Units : **µg/L** Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 22:45**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1990	250	2000	0	99.6	54	143	1641	19.3(23)	
Surr: 1,2-Dichloroethane-d4	50.2		50		100	70	130			
Surr: Toluene-d8	47.1		50		94	70	130			
Surr: 4-Bromofluorobenzene	52.5		50		105	70	130			

Comments:

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

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

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

Date: 12-Dec-14

QC Summary Report

Work Order: 14120542

Method Blank

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

File ID: **14120905.D** Batch ID: **MS12W1209A** Analysis Date: **12/09/2014 17:47**

Sample ID: **MBLK MS12W1209A** Units : µg/L Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 17:47**

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	8.67		10		87	70	130			
Surr: 4-Bromofluorobenzene	8.71		10		87	70	130			

Laboratory Control Spike

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

File ID: **14120904.D** Batch ID: **MS12W1209A** Analysis Date: **12/09/2014 17:26**

Sample ID: **LCS MS12W1209A** Units : µg/L Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 17:26**

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	12.4	0.5	10		124	70	130			
Toluene	11.9	0.5	10		119	80	120			
Ethylbenzene	8.74	0.5	10		87	80	120			
m,p-Xylene	8.87	0.5	10		89	65	139			
o-Xylene	8.59	0.5	10		86	70	130			
Surr: 1,2-Dichloroethane-d4	10.2		10		102	70	130			
Surr: Toluene-d8	8.78		10		88	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Sample Matrix Spike

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

File ID: **14120916.D** Batch ID: **MS12W1209A** Analysis Date: **12/09/2014 21:41**

Sample ID: **14120503-02AMS** Units : µg/L Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 21:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	51.1	1.3	50	0	102	56	140			
Benzene	56.1	1.3	50	0	112	67	134			
Toluene	54.3	1.3	50	0	109	38	130			
Ethylbenzene	49.6	1.3	50	0	99	70	130			
m,p-Xylene	48.9	1.3	50	0	98	65	139			
o-Xylene	47.3	1.3	50	0	95	69	130			
Surr: 1,2-Dichloroethane-d4	53.8		50		108	70	130			
Surr: Toluene-d8	46.4		50		93	70	130			
Surr: 4-Bromofluorobenzene	48.8		50		98	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120917.D** Batch ID: **MS12W1209A** Analysis Date: **12/09/2014 22:02**

Sample ID: **14120503-02AMSD** Units : µg/L Run ID: **MSD_12_141209A** Prep Date: **12/09/2014 22:02**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	52.3	1.3	50	0	105	56	140	51.13	2.3(40)	
Benzene	57.1	1.3	50	0	114	67	134	56.1	1.7(21)	
Toluene	54.5	1.3	50	0	109	38	130	54.26	0.4(20)	
Ethylbenzene	50.2	1.3	50	0	100	70	130	49.58	1.3(20)	
m,p-Xylene	50	1.3	50	0	100	65	139	48.88	2.2(20)	
o-Xylene	48.7	1.3	50	0	97	69	130	47.26	2.9(20)	
Surr: 1,2-Dichloroethane-d4	54.3		50		109	70	130			
Surr: Toluene-d8	47.4		50		95	70	130			
Surr: 4-Bromofluorobenzene	49		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: *12-Dec-14*

QC Summary Report

Work Order: 14120542

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.

AMENDED

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 : STR14120542

Report Due By : 5:00 PM On : 09-Dec-14

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 # : 12347 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
1 °C	05-Dec-14	17-Dec-14

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
STR14120542-01A	Oly W INF	AQ	12/04/14 06:55	3	0	2	GAS-C	BTXE/M_C							

Comments: 48hr TAT. Security seals intact. Frozen ice. Chain split into three separate work orders due to different TAT. Amended on 12/17/14 in order to correct sampling date due to login error. AC :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIANA CHACON	Alpha Analytical, Inc.	12/17/14 1147

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

RUSH!

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 : STR14120542

Report Due By : 5:00 PM On : 09-Dec-14

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 # : 12347 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
1 °C	05-Dec-14	05-Dec-14

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
STR14120542-01A	Oly W INF	AQ	12/05/14 06:55	3	0	2	GAS-C	BTXE/M_C							

Comments: 48hr TAT. Security seals intact. Frozen ice. Chain split into three separate work orders due to different TAT. :

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIADNA CHACON	Alpha Analytical, Inc.	12/05/14 1011

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: Debbie
Address: 3310 Cameron Park Dr
City, State, Zip: Cameron Park
Phone Number: 5306626004 Fax: 5306626005

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 NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-261-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

12347

Page # 1 of 1

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:
Data Validation Level: III or IV

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

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	Analysis Requested: TPH SW8015D	BTEX 8020	MTBE 8260	Remarks
0955	12/4	WA	STL141205412-01	Olym W INF	72	N	3	X	X	X	
0945				Olym W GWE1	STD	N	3	X	X	X	
0944				Olym W GWE2	STD	N	3	X	X	X	
0940		WA		Olym W EFF	24	N	3	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: CMH

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Stantec	12-4-14	1008	Alpha	12-4-14	1008
				12-05-14	1000

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

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

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 : 12/05/14

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 W GAC 1**					
Lab ID :	STR14120543-01A	TPH-P (GRO)	ND	50 µg/L	12/08/14	12/08/14
Date Sampled	12/04/14 06:48	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/08/14	12/08/14
		Benzene	ND	0.50 µg/L	12/08/14	12/08/14
		Toluene	ND	0.50 µg/L	12/08/14	12/08/14
		Ethylbenzene	ND	0.50 µg/L	12/08/14	12/08/14
		m,p-Xylene	ND	0.50 µg/L	12/08/14	12/08/14
		o-Xylene	ND	0.50 µg/L	12/08/14	12/08/14
Client ID :	**Oly W GAC 2**					
Lab ID :	STR14120543-02A	TPH-P (GRO)	ND	50 µg/L	12/08/14	12/08/14
Date Sampled	12/04/14 06:44	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/08/14	12/08/14
		Benzene	ND	0.50 µg/L	12/08/14	12/08/14
		Toluene	ND	0.50 µg/L	12/08/14	12/08/14
		Ethylbenzene	ND	0.50 µg/L	12/08/14	12/08/14
		m,p-Xylene	ND	0.50 µg/L	12/08/14	12/08/14
		o-Xylene	ND	0.50 µg/L	12/08/14	12/08/14

Gasoline Range Organics (GRO) C4-C13

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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

12/12/14
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: STR14120543 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14120543-01A	Oly W GAC 1	Aqueous	2
14120543-02A	Oly W GAC 2	Aqueous	2

12/12/14

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: *12-Dec-14*

QC Summary Report

Work Order: 14120543

Method Blank

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

File ID: **14120804.D** Batch ID: **MS09W1208B** Analysis Date: **12/08/2014 11:55**

Sample ID: **MBLK MS09W1208B** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	7.84		10		78	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Laboratory Control Spike

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

File ID: **14120803.D** Batch ID: **MS09W1208B** Analysis Date: **12/08/2014 11:28**

Sample ID: **GLCS MS09W1208B** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 11:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	439	50	400		110	70	130			
Surr: 1,2-Dichloroethane-d4	8.08		10		81	70	130			
Surr: Toluene-d8	9.8		10		98	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: **14120817.D** Batch ID: **MS09W1208B** Analysis Date: **12/08/2014 17:16**

Sample ID: **14120543-01AGS** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 17:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2170	250	2000	0	108	54	143			
Surr: 1,2-Dichloroethane-d4	42.2		50		84	70	130			
Surr: Toluene-d8	48.4		50		97	70	130			
Surr: 4-Bromofluorobenzene	52.7		50		105	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120818.D** Batch ID: **MS09W1208B** Analysis Date: **12/08/2014 17:40**

Sample ID: **14120543-01AGSD** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 17:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2310	250	2000	0	115	54	143	2166	6.4(23)	
Surr: 1,2-Dichloroethane-d4	42		50		84	70	130			
Surr: Toluene-d8	48.5		50		97	70	130			
Surr: 4-Bromofluorobenzene	50.9		50		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.

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: 12-Dec-14

QC Summary Report

Work Order: 14120543

Method Blank

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

File ID: **14120804.D** Batch ID: **MS09W1208A** Analysis Date: **12/08/2014 11:55**

Sample ID: **MBLK MS09W1208A** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 11:55**

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	7.84		10		78	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Laboratory Control Spike

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

File ID: **14120802.D** Batch ID: **MS09W1208A** Analysis Date: **12/08/2014 11:04**

Sample ID: **LCS MS09W1208A** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 11:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	6.49	0.5	10		65	63	137			
Benzene	10.2	0.5	10		102	70	130			
Toluene	9.16	0.5	10		92	80	120			
Ethylbenzene	9.46	0.5	10		95	80	120			
m,p-Xylene	9.11	0.5	10		91	65	139			
o-Xylene	8.75	0.5	10		88	70	130			
Surr: 1,2-Dichloroethane-d4	8.01		10		80	70	130			
Surr: Toluene-d8	9.83		10		98	70	130			
Surr: 4-Bromofluorobenzene	9.99		10		99.9	70	130			

Sample Matrix Spike

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

File ID: **14120815.D** Batch ID: **MS09W1208A** Analysis Date: **12/08/2014 16:28**

Sample ID: **14120543-01AMS** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 16:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	34.5	1.3	50	0	69	56	140			
Benzene	50.7	1.3	50	0	101	67	134			
Toluene	46.3	1.3	50	0	93	38	130			
Ethylbenzene	46.1	1.3	50	0	92	70	130			
m,p-Xylene	43.6	1.3	50	0	87	65	139			
o-Xylene	42.3	1.3	50	0	85	69	130			
Surr: 1,2-Dichloroethane-d4	45.8		50		92	70	130			
Surr: Toluene-d8	46.9		50		94	70	130			
Surr: 4-Bromofluorobenzene	49.5		50		99	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120816.D** Batch ID: **MS09W1208A** Analysis Date: **12/08/2014 16:52**

Sample ID: **14120543-01AMSD** Units : µg/L Run ID: **MSD_09_141208A** Prep Date: **12/08/2014 16:52**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	41.5	1.3	50	0	83	56	140	34.5	18.4(40)	
Benzene	61.3	1.3	50	0	123	67	134	50.71	18.8(21)	
Toluene	55.9	1.3	50	0	112	38	130	46.28	18.8(20)	
Ethylbenzene	56.2	1.3	50	0	112	70	130	46.1	19.8(20)	
m,p-Xylene	53.7	1.3	50	0	107	65	139	43.55	20.9(20)	R5
o-Xylene	51.9	1.3	50	0	104	69	130	42.25	20.5(20)	R5
Surr: 1,2-Dichloroethane-d4	44.2		50		88	70	130			
Surr: Toluene-d8	48		50		96	70	130			
Surr: 4-Bromofluorobenzene	48.9		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: *12-Dec-14*

QC Summary Report

Work Order: 14120543

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.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

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 : STR14120543

Report Due By : 5:00 PM On : 12-Dec-14

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 # : 12347 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
1 °C	05-Dec-14	05-Dec-14

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
STR14120543-01A	Oly W GAC 1	AQ	12/04/14 06:48	3	0	5	GAS-C	BTXE/M_C							
STR14120543-02A	Oly W GAC 2	AQ	12/04/14 06:44	3	0	5	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIANNA OLIVARES	Alpha Analytical, Inc.	12/05/14 1032

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: Debbie
Address: 3330 Cameron Park Dr
City, State, Zip: Cameron Pk
Phone Number: 5306626004 Fax: 5306626005

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 NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

12347

Page # 1 of 1

Consultant/ Client Info:

Company: 3 Trees
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 Level: III or IV

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

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	Analysis Requested: TPH SW8015B	BTEX 8020	MTBE 8260	Remarks
0955	12/4	AQ		Oly W INF	72	N	3	X	X	X	
0646			SR14120543-01	Oly W GAC1	STD	N	3	X	X	X	
0644			SR14120543-02	Oly W GAC2	STD	N	3	X	X	X	
0640		AQ		Oly W EFF	24	N	3	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 445.0836 (c) (2).

Sampled By: CHJL

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Stratus	12-4-14	1008	Maysaa T	12-4-14	1008
				12-05-14	1000

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

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

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 : 12/05/14

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 W EFF**					
Lab ID :	STR14120541-01A	TPH-P (GRO)	ND	50 µg/L	12/05/14	12/05/14
Date Sampled	12/04/14 06:40	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	12/05/14	12/05/14
		Benzene	ND	0.50 µg/L	12/05/14	12/05/14
		Toluene	ND	0.50 µg/L	12/05/14	12/05/14
		Ethylbenzene	ND	0.50 µg/L	12/05/14	12/05/14
		m,p-Xylene	ND	0.50 µg/L	12/05/14	12/05/14
		o-Xylene	ND	0.50 µg/L	12/05/14	12/05/14

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 Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com
Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.
Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered 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.

12/8/14
Report Date

Alpha Analytical, Inc.

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

VOC Sample Preservation Report

Work Order: STR14120541 **Job:** Olympic Station

Alpha's Sample ID	Client's Sample ID	Matrix	pH
14120541-01A	Oly W EFF	Aqueous	2

12/8/14

Report Date

Alpha Analytical, Inc.

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Date: *12-Dec-14*

QC Summary Report

Work Order: 14120541

Method Blank

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

File ID: **14120505.D** Batch ID: **MS09W1205B** Analysis Date: **12/05/2014 12:38**

Sample ID: **MBLK MS09W1205B** Units : **µg/L** Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 12:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	7.19		10		72	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Laboratory Control Spike

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

File ID: **14120504.D** Batch ID: **MS09W1205B** Analysis Date: **12/05/2014 12:01**

Sample ID: **GLCS MS09W1205B** Units : **µg/L** Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 12:01**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	433	50	400		108	70	130			
Surr: 1,2-Dichloroethane-d4	6.99		10		70	70	130			
Surr: Toluene-d8	10.5		10		105	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Sample Matrix Spike

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

File ID: **14120517.D** Batch ID: **MS09W1205B** Analysis Date: **12/05/2014 17:40**

Sample ID: **14120541-01AGS** Units : **µg/L** Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 17:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2180	250	2000	0	109	54	143			
Surr: 1,2-Dichloroethane-d4	41.4		50		83	70	130			
Surr: Toluene-d8	49.1		50		98	70	130			
Surr: 4-Bromofluorobenzene	52.3		50		105	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120518.D** Batch ID: **MS09W1205B** Analysis Date: **12/05/2014 18:04**

Sample ID: **14120541-01AGSD** Units : **µg/L** Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 18:04**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2740	250	2000	0	137	54	143	2184	22.5(23)	
Surr: 1,2-Dichloroethane-d4	41.1		50		82	70	130			
Surr: Toluene-d8	49.5		50		99	70	130			
Surr: 4-Bromofluorobenzene	51.4		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.

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Date: 12-Dec-14

QC Summary Report

Work Order: 14120541

Method Blank

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

File ID: **14120505.D** Batch ID: **MS09W1205A** Analysis Date: **12/05/2014 12:38**

Sample ID: **MBLK MS09W1205A** Units : µg/L Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 12:38**

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	7.19		10		72	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

Laboratory Control Spike

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

File ID: **14120502.D** Batch ID: **MS09W1205A** Analysis Date: **12/05/2014 10:59**

Sample ID: **LCS MS09W1205A** Units : µg/L Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 10:59**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	6.96	0.5	10		70	63	137			
Benzene	10.3	0.5	10		103	70	130			
Toluene	9.17	0.5	10		92	80	120			
Ethylbenzene	9.7	0.5	10		97	80	120			
m,p-Xylene	9.53	0.5	10		95	65	139			
o-Xylene	9.2	0.5	10		92	70	130			
Surr: 1,2-Dichloroethane-d4	7.75		10		78	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.91		10		99	70	130			

Sample Matrix Spike

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

File ID: **14120515.D** Batch ID: **MS09W1205A** Analysis Date: **12/05/2014 16:53**

Sample ID: **14120541-01AMS** Units : µg/L Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 16:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	35.6	1.3	50	0	71	56	140			
Benzene	52.9	1.3	50	0	106	67	134			
Toluene	48.7	1.3	50	0	97	38	130			
Ethylbenzene	50.1	1.3	50	0	100	70	130			
m,p-Xylene	48	1.3	50	0	96	65	139			
o-Xylene	46.8	1.3	50	0	94	69	130			
Surr: 1,2-Dichloroethane-d4	43.7		50		87	70	130			
Surr: Toluene-d8	48		50		96	70	130			
Surr: 4-Bromofluorobenzene	48.9		50		98	70	130			

Sample Matrix Spike Duplicate

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

File ID: **14120516.D** Batch ID: **MS09W1205A** Analysis Date: **12/05/2014 17:17**

Sample ID: **14120541-01AMSD** Units : µg/L Run ID: **MSD_09_141205A** Prep Date: **12/05/2014 17:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	38.1	1.3	50	0	76	56	140	35.55	6.9(40)	
Benzene	57.5	1.3	50	0	115	67	134	52.93	8.3(21)	
Toluene	52.9	1.3	50	0	106	38	130	48.72	8.2(20)	
Ethylbenzene	55.4	1.3	50	0	111	70	130	50.09	10.0(20)	
m,p-Xylene	53.9	1.3	50	0	108	65	139	47.99	11.5(20)	
o-Xylene	52	1.3	50	0	104	69	130	46.75	10.7(20)	
Surr: 1,2-Dichloroethane-d4	42.1		50		84	70	130			
Surr: Toluene-d8	49.1		50		98	70	130			
Surr: 4-Bromofluorobenzene	49.5		50		99	70	130			

Alpha Analytical, Inc.

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Date: *12-Dec-14*

QC Summary Report

Work Order: 14120541

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.

RUSH!

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 : STR14120541

Report Due By : 5:00 PM On : 05-Dec-14

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 # : 12347 Job : Olympic Station

Cooler Temp	Samples Received	Date Printed
1 °C	05-Dec-14	05-Dec-14

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
STR14120541-01A	Oly W EFF	AQ	12/04/14 06:40	3	0	0	GAS-C	BTXE/M_C							

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

	Signature	Print Name	Company	Date/Time
Logged in by:		ARIANA CHACON	Alpha Analytical, Inc.	12/05/14 1002

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: Debbie
Address: 3330 Cameron Park Dr
City, State, Zip: Cameron Pk
Phone Number: 5306626600 Fax: 5306626605

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 NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 702-281-4848
Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Phone: 714-386-2901

12347

Page # 1 of 1

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

Job and Purchase Order Info:
Job #
Job Name: Olympic Stantec
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 Level: III or IV

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

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	Field Filtered?	# Containers** (See Key Below)	Analysis Requested: TPH Suboxys	Analysis Requested: BTEX 8020	Analysis Requested: MTBE 8260	Remarks
0655	12/4	WW		Oly W INF	72	N	3	X	X	X	
0648				Oly W GAC1	STD	N	3	X	X	X	
0644				Oly W GAC2	STD	N	3	X	X	X	
0640		WW	STR1411-0541-01	Oly W EFF	24	N	3	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: CHLS

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Stantec	12-4-14	1008	Meyssat	12-4-14	1008
				12-05-14	1000

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

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

APPENDIX D

GEOTRACKER ELECTRONIC SUBMITTAL CONFIRMATIONS

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

Submittal Type:	**GEO_WELL**
Report Title:	**4Q14 QMR 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:	**12/12/2014 9:23:23 AM**
Confirmation Number:	**6078255832**

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:	**4Q14 Analytical**
Report Type:	**Monitoring Report - Other**
Facility Global ID:	**T0600102256**
Facility Name:	**OLYMPIC STATION**
File Name:	**14112642_EDF.zip**
Organization Name:	**Stratus Environmental, Inc.**
Username:	**STRATUS NOCAL**
IP Address:	**50.192.223.97**
Submittal Date/Time:	**12/12/2014 9:23:01 AM**
Confirmation Number:	**2830644130**

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:	4Q14 QMR 10-2-14 AINF-AEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	EDF_OlympicStation_89311.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:11:22 AM
Confirmation Number:	1860636115

VIEW QC REPORT

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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:	4Q14 QMR 11-3-14 AINF-AEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	EDF_OlympicStation_89569.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:12:28 AM
Confirmation Number:	7504259228

VIEW QC REPORT

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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:	4Q14 QMR 12-4-14 AINF-AEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	EDF_OlympicStation_89811.ZIP
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:13:16 AM
Confirmation Number:	9941032171

VIEW QC REPORT

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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:	4Q14 QMR 10-2-14 WINF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14100342_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:17:06 AM
Confirmation Number:	8002219915

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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:	4Q14 QMR 10-2-14 WGAC
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14100344_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:18:45 AM
Confirmation Number:	8744346380

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:	4Q14 QMR 10-2-14 WEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14100341_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 11:20:17 AM
Confirmation Number:	7596841037

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:	4Q14 QMR 11-3-14 WINF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14110443_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 12:07:35 PM
Confirmation Number:	7563102066

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:	4Q14 QMR 11-3-14 WGAC
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14110447_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 12:09:58 PM
Confirmation Number:	8507086217

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:	4Q14 QMR 11-3-14 WEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14110441_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 12:11:52 PM
Confirmation Number:	5840659856

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Submittal Type:	EDF
Report Title:	4Q14 QMR 12-4-14 WINF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14120542_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 1:10:26 PM
Confirmation Number:	1521401584

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Submittal Type:	EDF
Report Title:	4Q14 QMR 12-4-14 WGAC
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14120543_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 12:21:46 PM
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Submittal Type:	EDF
Report Title:	4Q14 QMR 12-4-14 WEFF
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	T0600102256
Facility Name:	OLYMPIC STATION
File Name:	14120541_EDF.zip
Organization Name:	Stratus Environmental, Inc.
Username:	STRATUS NOCAL
IP Address:	50.192.223.97
Submittal Date/Time:	12/18/2014 12:22:54 PM
Confirmation Number:	1260871648

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