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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, Tractee



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

Principal Engineer

Gowri S. Kowtha, P.E.

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

Monitoring and Sampling Event

cc: Mr. Philip Jaber

## 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.
- 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 MW6A/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 1<sup>st</sup> 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/m³) (12/4/14)
Influent Air: Benzene End of Period (lab):	<0.20 mg/m <sup>3</sup> (12/4/14)
Influent Air: MTBE End of Period (lab):	<0.20 mg/m <sup>3</sup> (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/ <b>4</b> /1 <b>4</b> )
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 ( $\mu$ g/L) to 23,000  $\mu$ g/L, benzene concentrations ranged from 72  $\mu$ g/L to 2,800  $\mu$ g/L, and MTBE concentrations ranged from <10  $\mu$ g/L to 4,500  $\mu$ g/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  $\mu$ g/L and EX-6, at 250  $\mu$ g/L), and benzene was only detected in samples collected from one of these deeper wells (EX-6, at 36  $\mu$ g/L). MTBE was detected in samples collected from all of the deeper wells, at relatively low concentrations. MTBE concentrations only exceeded 100  $\mu$ g/L at three of these well locations (MW-1 at 100  $\mu$ g/L, EX-2 at 130  $\mu$ g/L, and EX-6, at 160  $\mu$ g/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  $\mu$ g/L. Between October 2 and December 4 influent benzene concentrations have fluctuated between less than 0.50 and 0.98  $\mu$ g/L. Influent MTBE concentrations have been observed to increase from 11 to 21  $\mu$ g/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	Boring Diameter	Well Diameter	Screen Interval	Slot Size	Drilling Method	Consultant
		(feet)	(inches)	(inches)	(feet bgs)	(inches)		
Groundwater	Monitorin	g Wells				5		
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 W	ells							
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 Well	ls							
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)			Ethanol (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		441	< 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		<del>***</del>		< 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										100						
	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		277		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 11/25/14	7.86 7.45		10.74				190	< 0.50	< 0.50	< 0.50	< 0.50	230							
	11/23/14	7.43		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)		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)		Ethanol (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		22					
	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	(max)	<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	22		< 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		22		< 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			44		_		
	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										94						
	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		(100					
	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)		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)			Ethanol (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	144					-	
	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							-0.50
	05/18/10	6.73		8.40												22				
	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																-1.0
	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		-					

## 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)	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)		1,2- DCA (μg/L)
MW-4	05/18/10	6.68	15.15	8.47			 13,000	620	36	170	12	1,200							
	08/05/10	7.25		7.90			 9,200	780	13	230	4.3	1,800							
	02/04/11	6.71		8.44			 4,800[1]	350	7.1	23	<2.5	440							
	06/03/11	6.78	17.99	11.21			 4,700	350	2.6	19	<2.5[2]	670							
	08/02/11	7.01		10.98			 4,700	290	<2.5[2]	12	<2.5[2]	970							
	09/29/11	7.37		10.62			 8,700	590	<5.0[2]	34	<5.0[2]	1,500	<10[2]	28	<10[2]	<100[2]			<10[2]
	10/12/11	6.61		11.38	~~		 1,500	160	<1.0[2]	1.8	<1.0[2]	1,300	<2.0[2]	8.6	<2.0[2]	42			<2.0[2]
	11/09/11	7.18		10.81			 2,800	190	1.4	9.6	1.3	720	<2.0[2]	3.6	<2.0[2]	270			<2.0[2]
	12/12/11	7.36		10.63			 3,800	300	2.4	11	2.5	1,200			[]				
	03/15/12	6.15		11.84			 8,300	530	<5.0[2]	120	72	3,700						**	
	08/28/12	7.40		10.59			 2,400	250	<4.0[2]	14	<4.0[2]	1,400		*-					
	02/27/13	6.85		11.14			 2,400	160	2.5	8.2	<2.0[2]	1,400							
	08/26/13	7.69		10.30			 4,900	220	<2.5[2]	5.7	<2.5[2]	2,400							
	06/19/14	7.48		10.51			 6,000	260	<4.0[2]	8.8	<4.0[2]	1,600							
	11/25/14	7.00		10.99			 2,900	72	<5.0[2]	<5.0[2]	<5.0[2]	4,500							
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							
							25,500	2,000	10	1,500	1,750	100						-	
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		***					

### 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)		Ethanol (µg/L)	EDB (µg/L)	1,2- DCA (μg/L)
EX-1	06/03/11	6.96	18.14	11.18		200		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		777		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							overed by C			cted						
	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	1444															
	10/12/11	6.65		11.49													**			
	11/09/11	7.08		11.06										22						
	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	57.			270	< 0.50	< 0.50	< 0.50	< 0.50	340	44						
	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)	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)		Ethanol (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

TPH - mo = total petroleum hydrocarbons as motor oil

μg/L = micrograms per liter
NM = Not measured

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.

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

<sup>\* =</sup> Hydrocarbon reported in the gasoline range does not match the gasoline standard.

<sup>\*\* =</sup> Hydrocarbon reported is in the early diesel range and does not match the diesel standard.

<sup>\*\*\* =</sup> Hydrocarbon reported does not match the pattern of the diesel standard.

<sup>-- =</sup> No sample collected

<sup>[1]</sup> Weakly modified or unmodified gasoline is significant

<sup>[2] =</sup> Reporting limits were increased due to high concentrations of target analytes.

<sup>[3] =</sup> Sample also analyzed for halogenated volatile organic compounds (EPA Method 8010) and semivolatile organic compounds (EPA Method 8270A); all analytes reported as non-detect.

## TABLE 3 OPERATIONAL UPTIME AND FLOW SUMMARY

#### **DPE REMEDIATION EVENT**

Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

	es	Hour	Applied	Area	1 *	Sys Inf Air	Sys Inf Air	Control	Effluent	Dilution Air	ŗ	Н	PI	D
Date & Time	Notes	Meter Reading	Vac		Temp	Velocity	Flowrate	Temp	Air Temp	Flowrate	Inf	Eff	Sys Inf	Eff
		- Troubing	"Hg	ft <sup>2</sup>	°F	fpm	acfm	°F	°F	acfm	рН	°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  $(0.0491 \text{ ft}^2) \times \text{air velocity (fpm)} = \text{flowrate (acfm)}$ 

### 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

	S				Induced \	√acuum (	("WC) &/	or Depth	to Water	(feet bg	s)		
	Notes	M\	W-1	M	W-2	M	W-3	M	W-4	MV	V-5A	MV	V-6A
Date & Time		"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	es	Sample	Flowra	te *	Influent	Vacuum	Sample	Lab Sample			Analys	es (mg/m <sup>3</sup> )		
	Notes												Total	
		Time	(acfm)	(scfm)	Temp. (°F)	"Hg	Location	Number	GRO	Benzene	Toluene	Ethylbenzene	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 A EFF	89311-01	140	0.36	<0.20	<0.25	<0.20	0.64
							AEFF	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
			L			L	A EFF	89811-02	<20	<0.20	< 0.20	< 0.25	< 0.20	< 0.20

BTEX = benzene, toluene, ethylbenzene, and xylenes

MTBE = methyl tertiary butyl ether

ASys Inf = system influent

A Eff = effluent

#### 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)

 $mg/m^3 = milligrams per cubic meter$ \* Flowrate used based on most representative field data at time of sampling.

#### 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  $* \{(460 R + 68 \text{deg F})/(\text{deg F} + 460 R)\}$ 

#### Notes:

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

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

#### **Laboratory Analytical Methods and Facility:**

GRO analyzed using EPA Method 8260B

BTEX and MTBE analyzed using EPA Method 8260B

Kiff Analytical LLC (ELAP #08263CA)

## TABLE 6 SVE COMPONENT - EXTRACTION AND EMISSION RATES DPE REMEDIATION EVENT

Former Olympic Station, 1436 Grant Avenue, San Lorenzo, California

	· (a	Influent	Hour Meter	Sys. Influent	Effluent	Sys	. Influent C	Conc.	Е	ffluent Cor	ıc.	Extr	action Rate	from	En	nissions Ra	te to	Destruction Removal	Cumulat	tive GRO
Date	Notes	Sample		Flowrate	Flowrate <sup>2</sup>		$(mg/m^3)$			$(mg/m^3)$		V	ells (lbs/da	y) <sup>3</sup>	Atm	osphere (lb	s/day)	Efficiency (%)	Remov	al (lbs)
	z	Time	Reading	(scfm)	(scfm)	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/m3 = milligrams per cubic meter

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.

<sup>2</sup> Effluent Flow rate = System Influent flow rate + combustion air flow rate (80 cfm per manufacturer)

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

#### Sample Calculations:

Extraction Rate from

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<sup>3</sup>/35.314ft<sup>3</sup>)

Wells (lbs/day)

Destruction Removal =

(Extraction Rate - Emission Rate) x 100

Efficiency, %

Extraction Rate

#### Notes:

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 μg/L	Benzene μg/L	Toluene μg/L	Ethyl- benzene μg/L	Total Xylenes μg/L	MTBE 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
i.		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	Sample Location	Laboratory Sample ID	GRO	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
		Time	Location		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:

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

D-4-	tes	Sample	Sample	I do I ID	Mercury	Cyanide	Cr	Ni	Cu	Zn	As	Se	Ag	Cd	Pb	Phenols
Date	Not	Time	Location	Laboratory Sample ID	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

#### **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)

 $\mu$ g/L = micrograms per liter

-- = Not analyzed

#### Notes:

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

					Sewer Di	ischarge Dat	a	Ana	lytical Re	sults	Mass Removed This Period <sup>b</sup>			Cumulative			
									Influent			This Period	<b>1</b> ⁰		Mass Ren	Mass Removed	
Date	Notes	Sample Time	Hour Meter Reading <sup>1</sup>	Totalizer Reading (gallons)	Period (gallons)	Cumulative Flow (gallons)	Discharge Flow Rate	GRO (μg/L)	Benzene (μg/L)	MTBE (μg/L)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)	
							(gpm) <sup>a</sup>										
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	
Logond / Mo		gord / You															

Legend / Key:

GRO = Gasoline Range Organics C4-C13

MTBE = Methyl tertiary butyl ether

 $\mu$ g/L = micrograms per liter gpm = gallons per minute

lbs = pounds

1 of 1

-- = 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)

#### Notes:

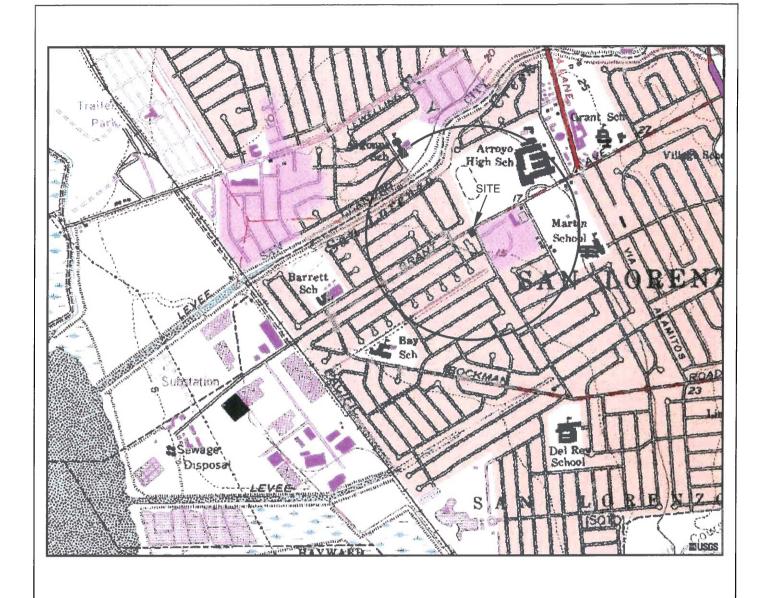
DPE extracting from extraction wells EX-2 through EX-7.

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

<sup>&</sup>lt;sup>a</sup> 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 x 10<sup>-9</sup>)(lb/μg) / 0.26418 (gal/L)

<sup>&</sup>lt;sup>1</sup> Hour meter readings were not taken at exact sampling times, therefore, times noted are readings obtained closest to the actual sampling times.



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





QUADRANGLE LOCATION

APPROXIMATE SCALE

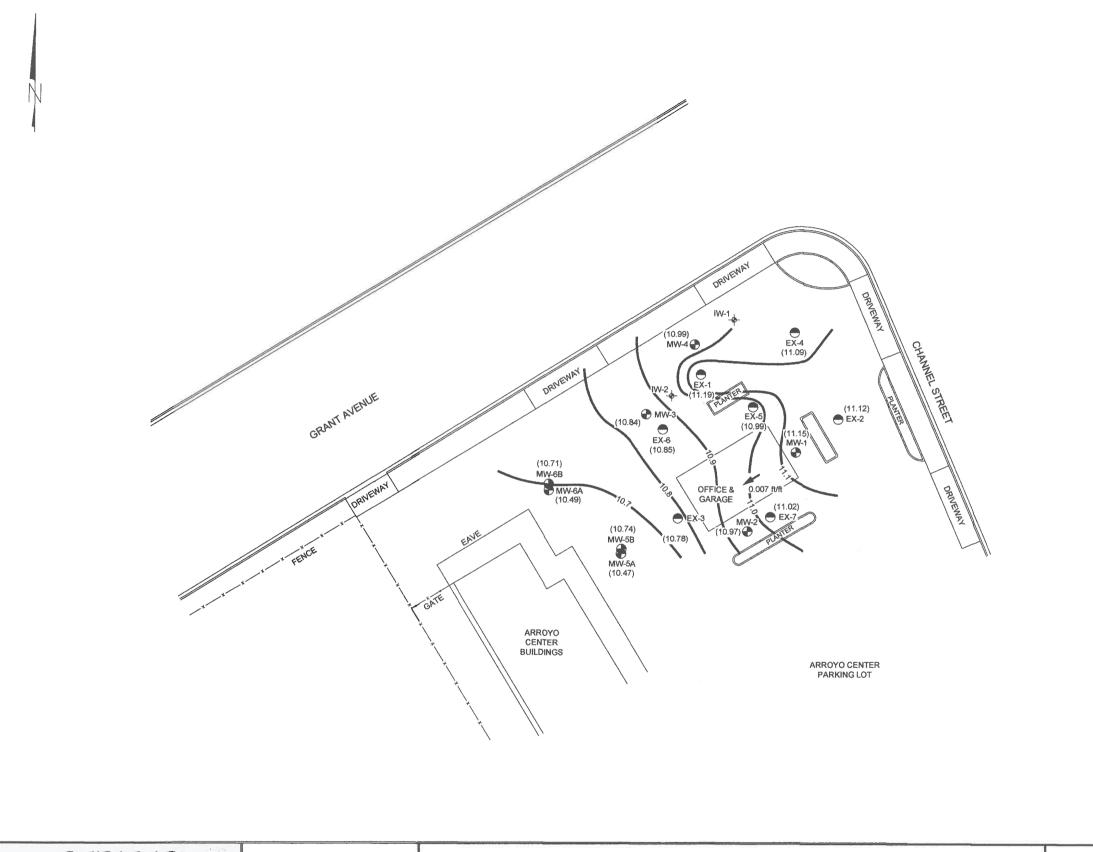


FORMER OLYMPIC SERVICE STATION 1436 GRANT AVENUE SAN LORENZO, CALIFORNIA

SITE LOCATION MAP

**FIGURE** 

1



#### LEGEND

MW-1 MONITORING WELL LOCATION

EX-1 EXTRACTION WELL LOCATION

OZONE INJECTION WELL LOCATION

(11.15) GROUNDWATER ELEVATION IN FEET RELATIVE TO MSL

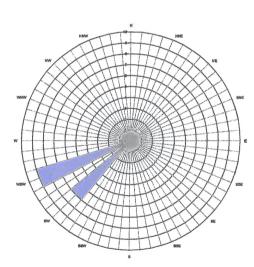
-10.9 - GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MSL

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.

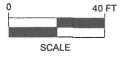
STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly

DRAFTER INITIALS: JMP

DATE LAST REVISED: January 15, 2015

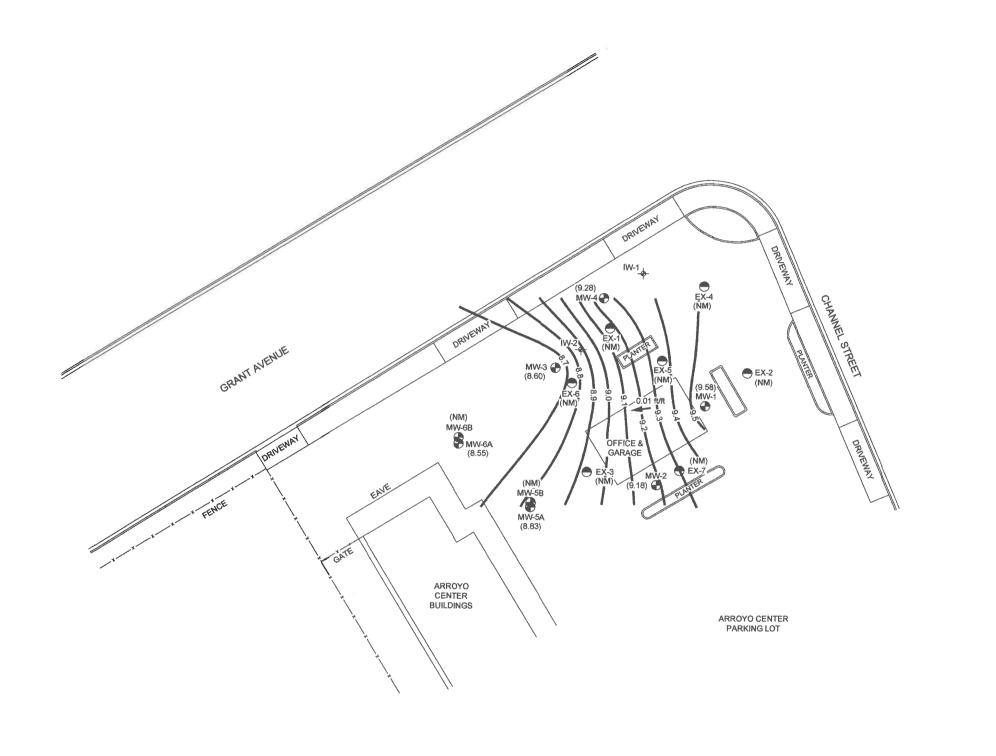
FILENAME: Olympic Quarterly Figures



FORMER OLYMPIC SERVICE STATION 1436 GRANT AVENUE SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
4th QUARTER 2014

FIGURE 2



#### LEGEND

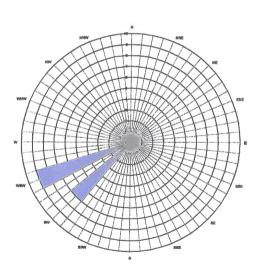
₩W-1 MONITORING WELL LOCATION
 EX-1 EXTRACTION WELL LOCATION
 W-1 OZONE INJECTION WELL LOCATION

(9.58) GROUNDWATER ELEVATION IN FEET RELATIVE TO MSL

- 9.2 - GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MSL

INFERRED GROUNDWATER FLOW DIRECTION

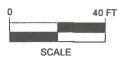
WELLS MEASURED ON 10/02/14 MSL = MEAN SEA LEVEL (NM) = NOT MEASURED



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



FORMER OLYMPIC SERVICE STATION 1436 GRANT AVENUE SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP OCTOBER 2, 2014 FIGURE 2A

6,000 2,900 260 72 1,600 4,500 → MW-3 EX-6 28,000 23,000 3,400 2,800 MW-6B 3,400 45 OFFICE & GARAGE 1,900 1,500 <5.0 ARROYO CENTER ARROYO CENTER PARKING LOT LEGEND

MW-1 MONITORING WELL LOCATION
 EX-1 EXTRACTION WELL LOCATION

W-1 OZONE INJECTION WELL LOCATION

6,000 260 1,600

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

2,900 72 4,500 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.

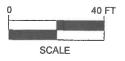
STRATUS ENVIRONMENTAL, INC.

PATH NAME: Olympic\Quarterly

DRAFTER INITIALS: JMP

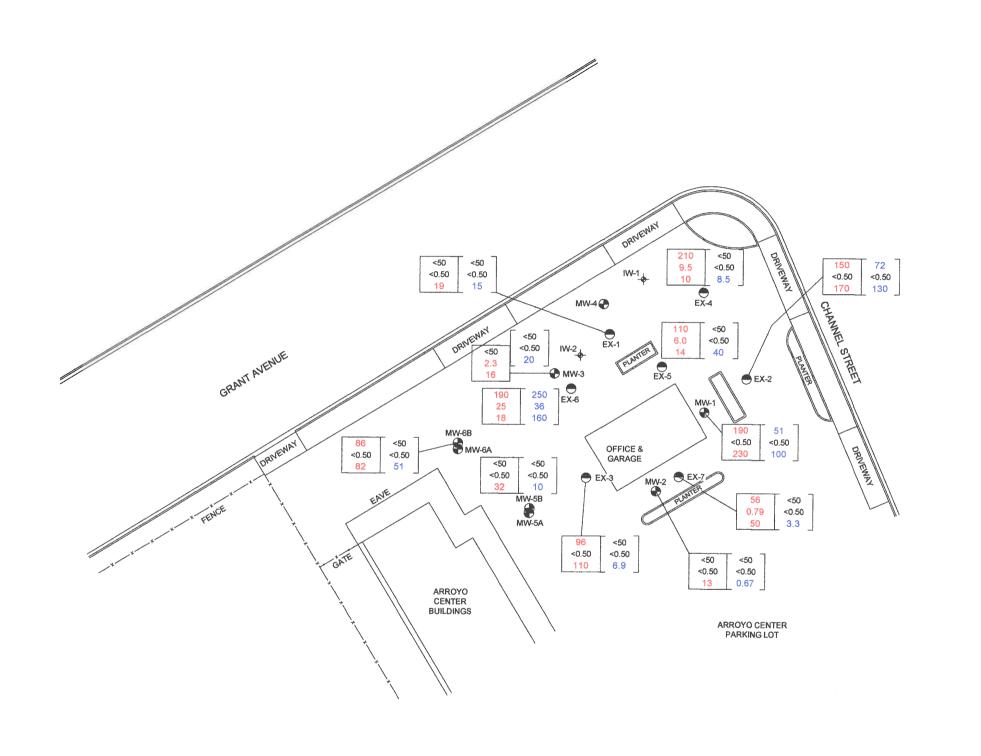
DATE LAST REVISED: January 14, 2015

FILENAME: Olympic Quarterly Figures



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

FIGURE 3



LEGEND

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

< 0.50

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

< 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



FORMER OLYMPIC SERVICE STATION 1436 GRANT AVENUE SAN LORENZO, CALIFORNIA

**GROUNDWATER ANALYTICAL SUMMARY** 20' - 26' DEPTH MONITORING WELLS 4th QUARTER 2014

**FIGURE** 

MW-6B MW-6A 0.42 ARROYO CENTER BUILDINGS ARROYO CENTER PARKING LOT LEGEND

WW-1 MONITORING WELL LOCATION
EX-1 EXTRACTION WELL LOCATION
W-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.

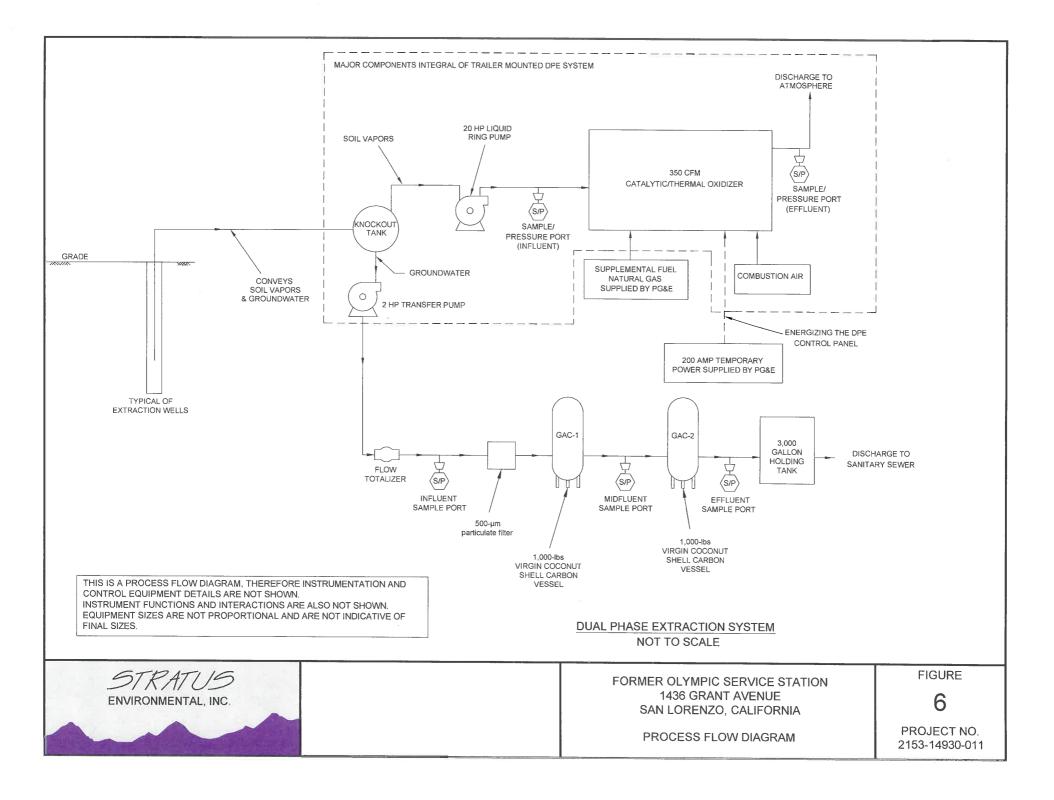
PATH NAME: Olympic\Quarterly
DRAFTER INITIALS: JMP
DATE LAST REVISED: January 15, 2015
FILENAME: Olympic Quarterly Figures



FORMER OLYMPIC SERVICE STATION 1436 GRANT AVENUE SAN LORENZO, CALIFORNIA

DPE INFLUENCE MAP

FIGURE 5



# APPENDIX A FIELD DATA SHEETS



Site Address 14 36 Grant	Ave
City Son Loner 20	
Sampled by: Gm. 4	
Signature B	

Site Number 211 5 - 1436 - 61
Project Number Form Olympic
Project PM Scott. 13: Hingy
DATE 11-25-14

	W	ater Level [	Data			Purge \	/olume Cal	culations		T	Purgo	Metho	d				
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	No Purge		Pump		DTW at sample time	Sample Reco	Cample	Field Da  DO  (mg/L)
2	0448		7.45	24.20	16.75	2	. 2	8	(gallons)		K			(feet) 7.52	ime i	0847	1-9
4	0503		7.11	18.19	11.0%	7 4		6	6 0 3 My	•	义义			7.12		0710	1.49
53	0508		7.47	9.65	218	2		1.09	1 6		<u>人</u>			7.50 9.05	54	0940	1.89
6B	0512		7.56 6.98		2.33	2	15	1.17	6.5		X X			7.32 8.89 7.15	) 5B ) 64 mu 6B	6827 0955 0906	2.85 7.24 3.02
2	0451		6.97 7.02 6.85	19.80 19.30	12.85 12.28 11.83	4	2.0	24	25 2 4		1	X K		7.43	Bx - 1 1 2	0917	1.51
4	0452		7.2( 7.42	18.24	11.05	H1295 H		26	24		X	X X		6.9Z 7.41	3 4	0635	1.02
	0447	ľ		19.07	11.63	4	-	23 23 25	23 23 25		у.	X X	•	7.75	14	0805	1.37
							*				2	K		7.36	EX. 7	0715	1.44
												-					

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)

C/	ALIBRATION DATE
pН	11-15-14
Conductivity	1
DO	



Site Address 147 6 from the City Son Comments
Sampled By: Signature D

Project PM Sy H DATE

Well ID MU	13				Well ID MW	H			
Purge start time	-		Odor	Y				Odor	6 N
	Temp C	рН	cond	gallons		Temp C	pH	cond	gallons
time 0522	19.3	8.08	119.7	8	time 0543	20.5	· ·		+
timeのランフ	20-2	8.10	133,5	3	time()54 (/	21,3	777	1336	
time 0532	21.1	7.90	136.6		time 850	22.1	7.40	132.9	3074
time					time			1/2-1	
purge stop time	1.93D	9	ORP _	361	purge stop time	1.42	00	ORP	371
Well ID EX-	1		Sheen		Well ID AX.	3			20
Purge start time (	DOU		Odor	Ø N	Purge start time			Odor	Ø N
	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons
time 0600	176	7.02	110-2	8	time 0022	20.1	7.03	1222	8
time <i>0103</i>	2013	6-95	129,0	12	time 0625	20.6	7.07	155.4	13
time <i>061</i> 2	20.1	7.43	139.3	23	time 0629	20.8	7.84	156.3	24
time					time		٠.		
purge stop time		7	ORP	366	purge stop time	1.62		ORP 3	50
Well ID MW	2				Well ID KY.	7			25
Purge start time	1		Odor	Y CSY	Purge start time	0655		Odor	Y GP
4. 1	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons
ime 0142	19.9	7.02	160,3	0	time Cugy	19.0	4.59	163.2	0
ime 0045	19.5	0.52			time <i>0059</i>	20.8	6-98	177.4	12
	28.8	6-96	KH.9	6	time 0703	20.5	0-96	268.7	22
ime	1				time				
	1.49 P		ORP _		purge stop time	1.63		ORP 3	10
Vell ID EX. 5					Well ID EXIC				<b>ح</b> ر
Purge start time			Odor	Ø N	Purge start time 💋	738		Odor	YN
	Temp C	pH	cond	gallons		Temp C	рН	cond	gallons
me 0721		1.79	168.5	8	time 0738	20.1	6.41	176-2	Ð
me 0725	19.9	6.91	177.8		time 0741	21.4	19.89	185.9	11
	13.6	0.89	170-2	23	ime 0)45	21.4	1.87	184.3	22
me					ime				
urge stop time 🏌	.37		ORP 3	32	ourge stop time			ORP 3	33



Site Address	1436 Grat fre
	Sur Lone Za
Sampled By	Ben
Signature	Q 425

Site Number	Forme Olympic
Project Number	2115-1478-01
Project PM	Sc. 4 Bitting
DATE	112514

Purge start time		0.1	Z4 Well ID Mh 1							
	Temp C	T	Odor	Y	Purge start tim	ie .		Odor	Y	
time 075(	20.(	pH /	cond	gallor		Temp C	рН	cond	gal	
time /1 741	20.9	60190	173,5		time 033		0.79	173	18	
time / 76 >		6.70	179.0		time 083	5 19.1	6.81	175.	3 4	
time	70.8	650	129-3	24	time 0838	201	6.83	176.9		
					time			110.1		
purge stop time		ORP	37/	purge stop time	1.93	,	ORP	32		
Well ID			=		Well ID					
Purge start time		Odor Y N		Purge start time	Purge start time			Odor Y		
	Temp C	рН	cond	gallons		Temp C	рН	cond		
me					time			Cond	gallo	
me					time				-	
me					time					
me		: .			time				-	
urge stop time			ORP		purge stop time	,				
Vell ID					Well ID	ORP				
urge start time			Odor	YN	Purge start time					
	Temp C	рН	cond	gallons	orge start time			Odor	YN	
ne				34.101.13	time	Temp C	рН	cond	gallons	
ie .										
e			•		time					
e			-		time					
ge stop time			000		time					
MID.					purge stop time				ORP	
				Well ID						
go otalit lillic	Temp C		Odor '	YN	Purge start time				YN	
	Temp C	pH	cond	gailons		Temp C	рН	cond	gallons	
	-				time					
					time			7 .		
				lt	ime					
				t	ime					
e stop time			ORP		ourge stop time					



Site Address 1476 17mt Ave	
City Sen Lone 2.	
Sampled By: Ben	
Signature B	

Site Number Form olympic
Project Number 2115-1436-01
Project PM Sutt Bittingue
DATE 11/25/14

								-1162/	1
1	A	PTW:	9.05	5	Well ID SC			· · · · · · · · · · · · · · · · · · ·	/
Purge start ti	me		Odor	2	V Purge start time		7	.32	
transaction and the second	Temp	C pH	cond	gation	- Se etail (mile			Odor	Y
lime 075	21.3	7.21	2.67.			Temp C		cond	gallo
time 075	4 22.2				time 0810		7.8	1225	0
time 080			6-110		time 0814	_	7.48	1236	2
time 094	021.3	7.24	2.72w	++	time 0618	101.01	7.47	1256	
purge stop tim		89			time 0827	1	7.55		6
Well ID CA	- (		ORP	79	purge stop time	DU 2	85	ORP	79
Purge start tim		700	8.80	/	Well ID L B	DTC	»: 7. (	S	
			Odar	(A) M	Purge start time			Odor	Y (
time 084	Temp (		cond	gallons		Temp C	рН	cond	gallon
time 084		7.01	2.62m		time 0850	21.5	7.65	1226	-
time 0955			2.64		time 0853	22.1	7.45	0121	10
ime	22.2	-7.04	2-62	3 1	time 0857		7.47	1208	2
					time 0906		7.49	1192	+
ourge stop time	1022	4	ORP	87	purge stop time (	70: 3.07		ORP *	6.5
Vell ID					Well ID			URP	74
urge start time			Odor	ΥN	Purge start time				
	Temp C	pН	cond	gallons		Temp C	-1.1	Odor	YN
me					lime	7.5,113.0	Hq	cond	gallons
ne 					time				
ne					time				
ne					time				
rge stop time			ORP						
ell ID					purge stop time Well ID			ORP	
rge start time			Odor			· · · · · · · · · · · · · · · · · · ·		4.5	
	Temp C	pН	cond		Purge start time			Odor	YN
e				gallons		Temp C	рН	cond	gallons
3					ime				
2				1	me				
				The state of the s	me				
je stop time					me				
			ORP	pi	urge stop time			ORP	

1436 Grant Avenue San Lorenzo, California

MA	
A.A.	Calara
	THE PROPERTY OF

Onsite Time: 0910	- -	Technician: Project Engineer: Weather Conditions: Ambient Temperature:	DUBBE Cher 58
	System	Information	
System Status Upon Arrival:	Operational	Non-Operational	
System Status Upon Departure:	Operational	Non-Operational	
Hour Meter Reading: 483	23	-	_
Totalizer Reading on DPE 458 2	740	Chart Recorder Paper Replaced	Yes No
	, -,	% Dilution Valve Open:	&
Combustion Chamber Operating Temperature:	67	If open, dilution air flowrate, (fpm/cfm) and Temp (deg F):	
		pH Meter Calibration	9-26-14
		¥	

			Field Me	asurements	;	V.	
Para	ameter	Influent (Total)	System- Influent	Effluent	Comments		
Differential F	Pressure, "wc						
Air Velocity,	FPM	e ja	2800				
Pipe Diamet	er, inches		3				
Air Flow Rat	e, cfm						
Applied Vac	uum, "WC"Hg	12"HZ					
Temperature			98	1429			
PID Reading	gs, ppmv		マグ	2.3			
			Other Reading	gs/Measurer	ments		
Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100		Ed.	31	MVV-1	-102	9.02
EX-2	100			10	MW-2	56	8182
EX-3	100			10	MVV-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			
					I	1	1

1436 Grant Avenue San Lorenzo, California



		Sampli	ng Information	1		
Sample ID	Date 8	& Time	Sa	mple ID	Date	& Time
A SYS INF ( ) 25341.10	10214	0730	W INF		11214	0725
A EFF 1025349-16		0727	W GAC1		\	0719
			W GAC2			0714
			W EFF	PH		0739
			ThAF	7.41		

EFF 7.93

F11 7.72
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
рН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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.

1436 Grant Avenue San Lorenzo, California OFICHMAL

Onsite Time: 1000 Offsite Time: 1000	4	Technician: Project Engineer: Weather Conditions: Ambient Temperature:	CHILL Debbic Rust 65
	System	Information	
System Status Upon Arrival	: Operational	Non-Operational	図
System Status Upon Depar		Non-Operational	
Hour Meter Reading:	5039		
Totalizer Reading on DPE Unit:	53264	Chart Recorder Paper Replaced	Yes
		% Dilution Valve Open:	<u> </u>
Combustion Chamber Operating Temperature:	1460	If open, dilution air flowrate, (fpm/cfm) and Temp (deg F): pH Meter Calibration	

	i e		Field Me	asurements	3		
Para	ameter	Influent (Total)	System- Influent	Effluent	Comments		
Differential F	Pressure, "wc					Repl	nt L
Air Velocity,	FPM		2500			1910	proox
Pipe Diamet	er, inches		3			Swit	ch
Air Flow Rat	e, cfm						rustion B
Applied Vac	uum, "WC/"Hg	14"146					
Temperature			90	1389			
PID Reading			45	2.6		=	
		C	Other Reading	gs/Measurer	nents		
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	NO	
EX-3	100			10	MW-3	<i>&gt;</i>	
EX-4	100			10	MW-4	Religion	
EX-5	100			13	MW-5A	7	5
EX-6	100			10	MW-6A		
EX-7	100			5			



1436 Grant Avenue San Lorenzo, California

	Samp	ling Information	
Sample ID	Date & Time	Sample ID	Date & Time
A SYS INF		WINF	
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) 276-470
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
рН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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.

1436 Grant Avenue San Lorenzo, California



	<u> </u>	14	- - -	Technician: Project Eng Weather Co Ambient Te	gineer: Dulbae			
			System	Information	า			
System Sta	tus Upon Arriva	l:	Operational		Non-Operation	al 🔯		
System Sta	tus Upon Depar	ture:	Operational	风	Non-Operation		7	
Hour Meter		526		_	Won Operation	<u> </u>	_	
Totalizer Reading on DPE Unit:  Combustion Chamber Operating Temperature			930	Chart Reco Replaced % Dilution \	·	Yes No	<u>)                                    </u>	
Combustion Operating T	n Chamber emperature:	147	7 (	If open, dilution air flowrate,  (fpm/cfm) and Temp,(deg F):				
				pH Meter C		10-29-1	4	
			Field Me	easurements	5			
Par	ameter	Influent (Total)	System- Influent	Effluent		Comments		
Differential I	Pressure, "wc							
Air Velocity,	FPM		2600					
Pipe Diame	ter, inches		3			· · · · · · · · · · · · · · · · · · ·		
Air Flow Rat	te, cfm							
Applied Vac	uum, "WC/"/Ag	14"HG						
Temperatur	Control of the Contro		90	1426				
PID Reading			50	2.1				
			Other Readin		ments			
Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW	
EX-1	1100	,			MW-1	- EU1	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					M\\\-64	34	er , -6	

EX-7

1436 Grant Avenue San Lorenzo, California



		Samplir	ng Information			
Sample ID	Date	& Time	San	nple ID	Date d	& Time
A SYS INF/07/193-01	11314	0740	WINF		11-3-14	0758
A EFF 1020153-10	11314	0735	W GAC1		\	07568
			W GAC2			0748
			W EFF Ph	TEMP		0745
		EFF	8.31	1286		

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

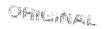
Lab Parameters	Sampling Frequency*	Sample Location	Analytical Method
ТРН	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method SW8015B
GRO	Start-up/Monthly	AINF/AEFF	EPA Method SW8015B
BTEX	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8020
MTBE	Start-up/Monthly	WINF/WGAC1/WGAC2/WEFF	EPA Method 8260
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
рН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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.

1436 Grant Avenue San Lorenzo, California

			San Lorer	nzo, Californi	a <sup>r</sup>	()e	far the	
Date: Onsite Time Offsite Time	11-18-14	<del>f</del>	- - -	Weather Co	chnician: ject Engineer: ather Conditions: bient Temperature:  CHILC  CH			
			System	Information	1			
System Stat	tus Upon Arrival	l:	Operational		Non-Operation	al 🔀	]	
System Stat	tus Upon Depar	ture:	Operational		Non-Operationa	al 🗷	Somple	
Hour Meter	Reading:	526	9	-			Wext acc	1 G
Totalizer Re Unit:	ading on DPE	6206	670	Replaced	rder Paper	Yes No		
				% Dilution \	/alve Open:			
Combustion Operating T	Chamber emperature:				ation air flowrate, and Temp (deg F):			
			Field Me	easurements				
Par	ameter	Influent (Total)	System- Influent	Effluent		Comments		
Differential F	Pressure, "wc							
Air Velocity,								
Pipe Diamet								
Air Flow Rat								
	uum, "WC/"Hg					· · · · · · · · · · · · · · · · · · ·		
Temperature								
PID Reading	js, ppmv							
		. (	Other Reading	gs/Measure	ments			
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 EX-6					MW-5A			
EX-7					MW-6A			

1436 Grant Avenue San Lorenzo, California



	Samp	ling 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) 276-470
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*	Sampling Frequency* Sample Location Analytical I	
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
рН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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.

1436 Grant Avenue San Lorenzo, California



Onsite Time: 0545 Offsite Time: 0800		Technician: Project Engineer: Weather Conditions: Ambient Temperature:	PHIL PESSIC Run 50
	System	Information	DIT
System Status Upon Arrival:	Operational	Non-Operational	D Festival
System Status Upon Depart	•	Non-Operational	
Hour Meter Reading:	5271		
Totalizer Reading on DPE Unit:	621440	Chart Recorder Paper Replaced	Yes No
		% Dilution Valve Open:	25%
Combustion Chamber Operating Temperature:	1468	If open, dilution air flowrate, (fpm/cfm) and Temp (deg F): pH Meter Calibration	Z" 3096-63°E

			Field Me	asurements			
Para	ameter	Influent (Total)	System- Influent	Effluent	Comments		
Differential F	Pressure, "wc						
Air Velocity,	FPM		2000				
Pipe Diamet	er, inches		3				
Air Flow Rat	e, cfm						
Applied Vac	uum, "WC/"/fg	Zonto	90	1310			
Temperature	e, deg F		16	2.4			
PID Reading	js, ppmv						
		(	Other Reading	gs/Measurer	nents		
Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100			. # <u>1</u>	MVV-1	0	6.42
EX-2	8		·		MW-2	-107	bill
EX-3	Ø			·	MW-3	-1,50	7.43
EX-4	8				MW-4	-,65	6.29
EX-5	100				MW-5A	-6-70	7.08
EX-6	100				MW-6A	5.95	
EX-7	- O						

Lots of water Coming IN

1436 Grant Avenue San Lorenzo, California



			Samplin	g Informati	on			
Samp	le ID	Date	& Time	5	Sample II	D	Date 8	& Time
A SYS INF	-14	12414	0215	W INF			12-414	0655
A EFF102649	3-13		000	W GAC1				0648
				W GAC2				0644
		The same of the sa		W EFF	P6+	Tunz		0640
				EFF	8.36	17.4		
				INT	8-13	18.5	¢*	

201 645 100
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	Lab Parameters Sampling Frequency*		Analytical Method
ТРН	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
Phenois	Start-up	WINF/WEFF	EPA 420.1
pН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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.

1436 Grant Avenue San Lorenzo, California

9-81	Se L
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Date: 12-161 Onsite Time: 6530 Offsite Time: 7630	<u>4</u>	Technician: Project Engineer: Weather Conditions: Ambient Temperature:	CHILC Russia 50
	System	Information	
System Status Upon Arrival:	Operational	Non-Operational	
System Status Upon Departu	re: Operational	Non-Operational	
Hour Meter Reading:	5337		
Totalizer Reading on DPE Unit:	741070	Chart Recorder Paper Replaced	Yes
Combustion Chamber	14/5	% Dilution Valve Open:	10
Operating Temperature: —	J 8 6 2	If open, dilution air flowrate, (fpm/cfm) and Temp (deg F): pH Meter Calibration	12714

			Field Me	asurements	3		
Para	ameter	Influent (Total)	System- Influent	Effluent	Comments		
Differential F	Pressure, "wc					<del></del>	
Air Velocity,	FPM		2500				
Pipe Diamet	er, inches		3				
Air Flow Rat	e, cfm						
Applied Vac	uum, "WC/"Hg	16" HO					
Temperature, deg F			80	1420			11
PID Reading	ıs, ppmv		50	112			
		C	Other Reading	gs/Measurer	ments /		
Well ID	% Open	PID	Vacuum @ Wellhead	Stinger Depth	Well ID	Induced Vacuum "WC/"Hg	DTW
EX-1	100				MW-1	8	5.12
EX-2	8				MW-2	-134	4.77
EX-3	8				MW-3	-9.40	6.35
EX-4	Ó				MW-4	CAR	
EX-5	100				MW-5A	-1.65	5.65
EX-6	100				MW-6A	+,35	5112
EX-7	8						
		,					

Lots of water water up



1436 Grant Avenue San Lorenzo, California

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) 276-470
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
Phenois	Start-up	WINF/WEFF	EPA 420.1
рН	Start-up/Monthly	WINF, WEFF	Field measured

<sup>\*</sup> 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<sup>®</sup> type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon® 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



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

#### **ANALYTICAL REPORT**

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861 Attn: Scott Bittinger
Phone: (530) 676-2062
Fax: (530) 676-6005
Date Received: 11/26/14

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	on	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	0.20	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						45100/14
Lab ID:	STR14112642-02A	TPH-P (GRO)	ND		50 μ <b>g/L</b>	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 μ <b>g/</b> 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
	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	<b>,</b>					
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 μ <b>g/</b> L	12/03/14	12/03/14
		m,p-Xylene	ND		0.50 μ <b>g/</b> L	12/03/14	12/03/14
		o-Xylene	ND		0.50 μg/L	12/03/14	12/03/14
2115-1436-	01/Former Olympi	ic Station					Page 2 of



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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 <b>μg/</b> 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.



Roger Scholl Kandge Santau

Walter Atrihan

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** 



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### **VOC Sample Preservation Report**

Work Order: STR14112642

Job:

2115-1436-01/Former Olympic Station

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

12/5/14



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Date: 08-Dec-14	(	QC S	ummar	y Repor	t			Work Ord 1411264	
Method Blank File ID: 14120308.D		Type N		est Code: E			015B/C / SW826 Analysis D	ate: 12/03/2014 13:22	
Sample ID: MBLK MS08W1203B Analyte	Units : µg/L Result	PQL		SD_08_141 SpkRefVal		LCL(ME)	Prep Date: UCL(ME) RPD	12/03/2014 13:22 RefVal %RPD(Limit)	Qua
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 11.2 8.94 8.84	50			112 89 88	70 70 70	130 130 130		
Laboratory Control Spike		Type L	CS Te	est Code: E	PA Met	hod SW8	15B/C / SW826	50B	
File ID: 14120307.D			Ba	atch ID: MS	08W120	)3B	Analysis Da	ate: 12/03/2014 12:51	
Sample ID: GLCS MS08W1203B	Units : µg/L			SD_08_141:			Prep Date:		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVal %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	385 11.1 8.88 12	50	400 10 10 10		96 111 89 120	70 70 70 70	130 130 130 130		
Sample Matrix Spike		Type N	IS Te	est Code: El	PA Met	hod SW80	15B/C / SW826	60B	
File ID: 14120514.D			Ва	atch ID: MS	)8W120	)3B	Analysis Da	ate: 12/05/2014 15:31	
Sample ID: 14112642-09AGS	Units : µg/L			SD_08_141			Prep Date:	12/05/2014 15:31	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDI	RefVal %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	1750 54 45.2 62.8	250	2000 50 50 50	0	87 108 90 126	54 70 70 70	143 130 130 130		
Sample Matrix Spike Duplicate		Type M	ISD Te	est Code: El	A Met	hod SW80	15B/C / SW826	60B	
File ID: 14120515.D			Ba	itch ID: MS0	8W120	3B	Analysis Da	ate: 12/05/2014 15:54	
Sample ID: 14112642-09AGSD	Units : µg/L			SD_08_1412			Prep Date:	12/05/2014 15:54	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDI	RefVal %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	1810 53.9 44.8 61.8	250	2000 50 50 50	0	90 108 90 124	54 70 70 70	143 1 130 130 130	746 3.5(23)	

#### 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.



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<b>Date:</b> 08-Dec-14	(	QC Sı	ımmar	y Repor	t				<b>Work Ord</b> 1411264	
Method Blank File ID: 14120308.D		Туре М	В	est Code: E atch ID: MS	08W12		Analy	•	12/03/2014 13:22	
Sample ID: MBLK MS08W1203A	Units: µg/L			SD_08_141:				Date:	12/03/2014 13:22	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene Toluene	ND	0.5								
Ethylbenzene	ND ND	0.5 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 Lo	CS T	est Code: El	PA Met	hod SW8				
File ID: 14120303.D			В	atch ID: MS	08W120	03A	Analy	/sis Date:	12/03/2014 11:08	
Sample ID: LCS MS08W1203A	Units: µg/L			SD_08_141				Date:	12/03/2014 11:08	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %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 m,p-Xylene	9.98 10.4	0.5	10		99.8 104	80 65	120 139			
o-Xylene	8.65	0.5 0.5	10 10		87	70	130			
Surr: 1,2-Dichloroethane-d4	11.3	0.0	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 M	S Te	est Code: El	PA Met	hod SW82	260B			
File ID: 14120329.D			Ba	atch ID: MS0	)8W120	3A	Analy	sis Date:	12/03/2014 21:44	
Sample ID: 14112642-09AMS	Units : µg/L	1	Run ID: M	SD_08_1412	203B		Prep	Date:	12/03/2014 21:44	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %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 91	65 69	139 130			
o-Xylene Surr: 1,2-Dichloroethane-d4	45.4 59.4	1.3	50 50	Ų	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 M	SD Te	est Code: EF	A Met	hod SW82	260B			
File ID: 14120330.D				tch ID: MS0	8W120	3A	Analy	sis Date:	12/03/2014 22:08	
Sample ID: 14112642-09AMSD	Units : µg/L			SD_08_1412			Prep	Date:	12/03/2014 22:08	
Analyte	Result	PQL				LCL(ME)			/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	74.1	1.3	50	10.15	128	56	140	86.06		
Benzene	39.8	1.3	50	10.15	80	67	134	45.2		
Toluene	40.8	1.3	50	Ö	82	38	130	45.45	10.8(20)	
Ethylbenzene	40.9	1.3	50	0	82	70	130	44.6		
m,p-Xylene	41.5	1.3	50	0	83	65	139	46.51		
o-Xylene Surr: 1,2-Dichloroethane-d4	40.2	1.3	50	0	80 117	69 70	130 130	45.4	12.3(20)	
Surr: Toluene-d8	58.3 46.8		50 50		94	70	130			
Surr: 4-Bromofluorobenzene	57.1		50		114	70	130			



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**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
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#### CHAIN-OF-CUSTODY RECORD

#### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Phone Number

Report Attention

Client:

Stratus Environmental 3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

**EMail Address** (530) 676-2062 x sbittinger@stratusinc.net Scott Bittinger EDD Required: Yes

Sampled by: Ben Gooding

WorkOrder: STR14112642

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

Samples Received

Cooler Temp

PO: 26-Nov-14 26-Nov-14 3°C Client's COC #: 13616, 16623 Job: 2115-1436-01/Former Olympic Station

QC Level: S3 = Final Rot, MBLK, LCS, MS/MSD With Surrogates Requested Tests **Alpha** Client Collection No. of Bottles VOC W Alpha Sub TAT Sample Remarks Sample ID Sample ID Matrix Date Sampling time on VOAs is GAS-C BTXE/M C MW-1 11/25/14 5 STR14112642-01A AQ 0 08:47: logged in per COC 08:38 Sampling time on VOAs is втхе/м с STR14112642-02A MW-2 AQ 11/25/14 3 0 5 GAS-C 07:10; logged in per COC 06:50 Sampling time on VOAs is GAS-C BTXE/M C STR14112642-03A MW-3 AQ 11/25/14 3 ۵ 5 05:38; logged in per COC 05:32 Sampling time on VOAs is GAS-C BTXE/M C 11/25/14 STR14112642-04A MW-4 AQ 3 0 5 08:25; logged in per COC 05:50 BTXE/M C GAS-C STR14112642-05A EX-1 AQ 11/25/14 3 0 5 09:15 Sampling time on VOAs is BTXE/M C 11/25/14 3 GAS-C STR14112642-06A EX-2 AQ 0 5 08:15; logged in per COC 07:57 GAS-C BTXE/M C Sampling time on VOAs is STR14112642-07A EX-3 AQ 11/25/14 3 0 5 06:35; logged in per COC 06:29 BTXE/M C 11/25/14 GAS-C STR14112642-08A MW-5A AQ 3 0 5 09:40 BTXE/M\_C Client provided 4 VOAs STR14112642-09A MW-5B AQ 11/25/14 0 5 GAS-C 08:27 BTXE/M C STR14112642-10A GAS-C MW-6A AQ 11/25/14 3 0 5 09:55

Comments:
-----------

Security seals intact. Frozen ice. :

Date/Time Company **Print Name** Signature OHACON ACM Alpha Analytical, Inc. Logged in by:

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

Page: 1 of 2

**Date Printed** 

	ing Information:
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#### **CHAIN-OF-CUSTODY RECORD**

#### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Client:

PO:

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 : Ben Gooding

WorkOrder: STR14112642

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

Cooler Temp

Samples Received

**Date Printed** 

Page: 2 of 2

3°C

26-Nov-14

26-Nov-14

Client's COC #: 13616, 16623

Job: 2115-1436-01/Former Olympic Station

OC Level : S3 = Final Pot MRLK LCS MS/MSD With Surrogates

								Requested	Tests	
Alpha	Client	Collection	No. of	Bottles	i	TPH/P_W	VOC_W			
Sample ID	Sample ID	Matrix Date	Alpha	Sub	TAT					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:		ARU ADNA CHAWN	Alpha Analytical, Inc.	11/26/14 125

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

Company: Attn: Address: 3. City, State, Zip: Phone Number:	Billing Information: Stratus Chu  330 Cam non Park or S Camoren Ark, CA Fax:	wile \$ 00 Range Analytical Inc.	)	Nor So	thern CA: {	Satellit 9891 Horn R 6255 McLe	endale A  e Servi  pad, Suit  od Ave, 8	<b>ce Centers:</b> e C, Rancho Co Suite 24, Las V	oarks, NV 89431 ordova, CA 9582 /egas, NV 89120 arson, CA 90748	)	Fa Pho	one: 702	5-355-1044 5-355-0406 5-366-9089 2-281-4848 4-386-2901		136 Page#_	16 ! or	2
Company: Address: City, State, Zip:	Consultant Client Info: Former Olympic Status IH36 Gyrant Avenue San Lorenzo, CA  ted from which State? (circle one) AZ CA NV		er Info:		- -	Re Name: Email Addre Phone #: Cell #:	port At	tention/Proje	ect Manager: Bi Hing	sis Requests	od.	Glo	D Required?	0600	E	DF Required	$\smile$
Time Sampled Sampled (HHMM) (MM/C C\$ 38 11 12 0.50 0.532 0.550 0.757 0.7	led (See Key) Below) Lab ID Number (For Lab Use Only)  Ard  Lab ID Number (For Lab Use Only)	Sample Description  MW - 1  MW - 2  MW - 3  MW - 4  EK-1  EK-1  EK-2  EX - 3  MW - 54  MW - 54  MW - 64  MW - 68  EX - 4	97D	Sent Flend?	C # Containers** (See Key Below)	4 4 KO	X OTEX	K MBE									
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received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

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Company: Address: City, State, 2	Con For IUS	isultant/ Communication in the	Client Info: Olympic why fre enzo, C	Show	Job# Job Name P.O.#:	211	Purchase 5 =	Order Info: 1436 - 01		Name: Email Add Phone #: Cell #:		itention/f	Project N	Aanager: Hivg	n		Glo	obal ID:	d? Yes / N		EDF Requi	redi? Yes No
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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.



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 Turpen

Troy G. Turpen



Project Name: Olympic Station

Project Number :

Sample: Oly A SYS INF

Sample Date :10/02/2014

Matrix : Air

Lab Number: 89311-01

Report Number: 89311 Date: 10/03/2014

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) Toluene - d8 (Surr)	101 97.8		% Recovery % Recovery	EPA 8260B EPA 8260B	10/02/14 16:59 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) Toluene - d8 (Surr)	102 98.4		% Recovery % Recovery	EPA 8260B EPA 8260B	10/02/14 18:05 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	g 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) Toluene - d8 (Surr)	102 98.4		% %	EPA 8260B EPA 8260B	10/02/2014 10/02/2014

		Method			
	Measured	Reporting	9	Analysis	Date
<u>Parameter</u>	Value	Limit	Units	Method	Analyzed

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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 Turpen

Troy D. Turpen



Project Name: Olympic Station

Project Number :

Sample: Oly A SYS INF

Sample Date :11/03/2014

Matrix : Air

Lab Number: 89569-01

Report Number: 89569 Date: 11/04/2014

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) Toluene - d8 (Surr)	96.7 89.4		% Recovery % Recovery	EPA 8260B EPA 8260B	11/03/14 20:51 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) Toluene - d8 (Surr)	96.7 88.5		% Recovery % Recovery	EPA 8260B EPA 8260B	11/03/14 20:19 11/03/14 20:19

Date: 11/04/2014

QC Report : Method Blank Data

Project Name: Olympic Station

Project Number:

Parameter	Method Measured Reporti Value Limit		g 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

		Method			
Parameter	Measured	Reportir	ng	Analysis	Date
	Value	Limit	Units	Method	Analyzed

<b>KIFF</b>	
Analytical цс	

2795 2nd Street, Suite 300 Davis, CA 95618

Lab: 530.297.4800

SRG # / Lab No

89569

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Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.		<del></del>	<del></del>
Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.			
Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.			
Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.			
Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.			
Relifiquished by (signature/affiliation):  Date & Time  Received by (signature/affiliation):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  Date & Time  Turnaround Time (TAT - Circle One):  Standard 4-Day 3-Day 2-Day (-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.			
Received by Kiff Analytical (signature):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  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.			Remarks and Special Instructions (composite, filter, MS/MSD, return samples, Silica Gel, etc.):  24 H2 TAY IVI EFF  510 TA OVI 5y3 IWE
Received by Kiff Analytical (signature):  Date & Time  Received by Kiff Analytical (signature):  Date & Time  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.	D .		
Octor Constitution: Original - Lab; Copy - Originator Constitution: Originator	Minguished by (signature/affiliation): Data & Time	Description of the Wife Academic Control of the Con	
On Indicated work may vary. Advance notice to Kiff of your sampling event is recommended or Short Hold or expedited TAT cannot be guaranteed.	44	Date & Time	
Distribution: Original - Lab; Copy - Originator	of 5		TAT in business days. Surcharge may apply, TAT for subcontracted work may vary. Advance notice
	Distribution: Original - Lab; Copy - Originator Rev: 071514		of expedited TAT callifut be guaranteed.

KIFF (2)	-					
Analytical μc		ECEIPT CHECK	KLIST		SR	g#: 89569
Sample Receipt Initials/Date: 410	314 Storage Time	e: ///b Sample	e Login	Initials	s/Date:	110314
	Split None	Method of Receipt	Со		Over-the-cour	nter Shipped
Temp °C  N/A Therm ID	Time	Coolant present	Yes	□No		☐ Temp Excursion
For Shipments Only: Cooler Receipt Initials	/Date/Time:		Custo	dy Seals	□ N/A □	Intact Broken
Chain-of-Custody:	Yes No	Documented on	coc	Labels	Di	screpancies:
Is COC present?		Sample ID	1	/		
Is COC signed by relinquisher?		Project ID	/			
Is COC dated by relinquisher?		Sample Date				
Is the sampler's name on the COC?		Sample Time	1	/		
Are there analyses or hold for all samples?	7	Does COC match p	roject his	story?	□ N/A	☑ Yes □ No
Samples:	N/A Yeş No	Comments: Bag	5: 10	26153.0	1,-10. 6	to hip Andyfuel 11031
Are sample custody seals intact?	1 1 1314					n int
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?	/					
Receipt Details:	/					
Matrix Container Type	# of Containers					
AR hedlar	02					
						CS Required:
To a second		Proceed With Analy	,	YES   1	NO Init/Da	ate:
G G G		Client Communicat	ion:			



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 Turpen

Troy D. Turpen



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

Sample Date :12/04/2014		ue         Limit         Unit           .20         0.20         mg/           .20         0.20         mg/			
Parameter	Measured Value	Reporting	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) Toluene - d8 (Surr)	96.5 107		% Recovery % Recovery	EPA 8260B EPA 8260B	12/04/14 14:35 12/04/14 14:35

Sample: Oly A EFF

Matrix : Air

Lab Number: 89811-02

Sample Date :12/04/2014

Sample Date :12/04/2014		Method			
Parameter	Measured Value	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) Toluene - d8 (Surr)	98.8 105		% Recovery % Recovery	EPA 8260B EPA 8260B	12/04/14 15:08 12/04/14 15:08

Date: 12/05/2014

QC Report : Method Blank Data

Project Name : Olympic Station

Project Number:

Parameter	Method Measured Reportin Value Limit		J 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

		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed

2795 2nd Street, Davis, CA 95618 Lab: 530.297.48 Fax: 530.297.48	300	SRG # / Lab No	).		89	811							Pag	je			of	۷
Send Report To: DUBBLE	Electronic Data Deliverable (EDD):				С	hain-d	of-Cus	stody	Re	ecord and	An	alys	sis F	Requ	ıest			
Email Address:	CA EDF CA WriteOn W		TPH			8260			524			ORT H				her		
Company Strutus	Excel EQuIS O	other			φ		£		П	15				П				
Address: 330 Camera Ptz DR	Global ID (for CA EDF use):			,	<b>KI</b> I	Methanol	(former 8010 list)			LUFT	lo Lo		EPA 7196)					
Address:  330 Camwa Pt DR  Phone Number:  530 U7U U004 530 U7U 600 9  Project #:  P.O. #:	EDD Deliverable To (Email Address):		e (8015)			۱ ۲			.2	CAM 17 lod):	errous		8					e Only
	Sampling Company: Sampler Signal	ture:	Gasoline		yibenze	Ethanol	1,2 EDB	Full List	hod 524	in method	N N	as NO <sub>2</sub>	EPA 7199					Lab Use Only
Project Name: Olympic Station	Invoice To: 5 tentes		Gas Motor Oil		uene Etn	w l	1,2 DCA 1,	spunodu	Organics by EPA Method 524.2	t and ente	☐Nitrite as N ☐ Ferrous Iron	☐ Nitrite as NO <sub>2</sub>	1					For
Project Address: Sampling	# of Containers # Preserved	Matrix	1 3 2 8 2 8 1	cify):		MTBE	1,2 l	c Cor	cs by	ethod:	Ľ	ပို့	y (cir					
San Lovenzo  Sample Identification  Data  Time	40 ml VOA Sleeve Poly Glass Tedlar HCI HNO <sub>3</sub>	Water Soil Air Other (specify)	Gasoline (8260)	Other (specify):	BTEX: Benzene loluene Ethylbenzene MTBE	5 Oxygenates: MTBE DIP 7 Oxygenates (5 Oxygenates plus):	Lead Scavengers: 1,2 DCA 1,2 EDB Halonensted Volatile Organic Compounds	Volatile Organic Compounds Full List	Volatile Organi	Metals Group (Method: : CA Individual Metals (list and enter method)	Nitrate as N	☐ Nitrate as NO <sub>3</sub>	Chromium VI by (circle one:					
Date Time			図口		<u></u>	3 5	2 2	\$	<u>%</u>	₩ Ľ	早	屵	5		$\vdash$	+	+-	01
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Relinquished by standard affiliation):  Date & Time (124)  Shorts  Date & Time (124)	Received by (signature/affiliation):	Date & Time		Rema	rks and	Special 14	Instruction	ons (co	mpos FF	site, filter, MS	S/MSD,	, retu	m sar	mples,	Silica	Gel, e	rtc.):	
Relinquished by (signature/affiliation): Date & Time	Received by (signature/affiliation):	Date & Time		157	V B	'n	272	LN.	, ,-									
Date & Time  Characteristic Copy - Originator	Received by Apalytical (signature)	Date & Time	H14 137	TATI	n busine	4-D	ay 3-	Day	2-[ y app	Day (-Da bly. TAT for sended or Short	ubcont	tracte	d wor					

Rev: 071514

		SA	MPLE F	RECEIPT C	HEC	KLIS'	Γ	s	RG#: 8	9811
Sample Receipt In	itials/Date: 4	20414 s	torage Tin	ne: 0937	Sampl	e Login	Initia	ls/Date:	41204	-14
TAT: Standard	☐ Rush	Split	None	Method of R	eceipt:	C	ourier [	Over-the-co	unter [	] Shipped
Temp °C	N/A Therm ID	Tim	е	Coolant pres	ent	Yes	□No	□ Wate		emp Excursion
For Shipments Only:	Cooler Receipt Initia	ls/Date/Tir	ne:			Custo	ody Seals	□ N/A	☐ Intact	Broken
Chain-of-Custody:		Yes	No	Document	ed on	COC	Labels		Discrepand	ies:
Is COC present?			/	Sample ID		1	1			
Is COC signed by relir	nquisher?			Project ID						
Is COC dated by reline	quisher?		Sample Da	te		/				
Is the sampler's name	on the COC?	/		Sample Tin	ne	/	1			
Are there analyses or	hold for all samples?		<u> </u>	Does COC	match p	oroject h	nistory?	□ N/A	Yes	□No
Samples: Are sample custody set Are sample containers Is preservation document In-house Analysis: Are preservatives accordance Are samples within how Are sample container Is there adequate samples Receipt Details:	eptable? elding time? types correct? nple volume?	N/A N/A	Yes No		3: Je	dar	bros:	1026453	-14, -1	3. in 120414
Matrix	Container Type	# of Co	ontainers				- · · · · · · · · · · · · · · · · · · ·			
AR	Jedlar		<u></u>	Requi			Clarificat		roval 🔲 I	Notification
Page 5- of				Client Com			J1120 L	1140 11110		
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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: O

Olympic

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

Client ID. OL W. D. D.	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: Oly W INF  Lab ID: STR14100342-01A	TPH-P (GRO)	ND	50 μ <b>g/</b> 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

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Dalter Hindrey

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.

Report Date



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## **VOC Sample Preservation Report**

Work Order: STR14100342	Job: Olympic			
Alpha's Sample ID	Client's Sample ID	Matrix	pН	
14100342-01A	Oly W INF	Aqueous	2	

10/7/14

Report Date



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									
Method Blank File ID: 14100709.D		Туре М	Ва	itch ID: MS1	5W100		•	10/07/2014 14:02			
Sample ID: MBLK MS15W1007B Analyte	Units : µg/L Result	PQL		SD_15_1410 SpkRefVal		LCL(ME)	Prep Date: UCL(ME) RPDRef	10/07/2014 14:02 Val %RPD(Limit)	Qual		
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 10.8 9.83 11.1	50	10 10 10		108 98 111	70 70 70	130 130 130				
Laboratory Control Spike		Type Lo	CS Te	st Code: EP	A Met	hod SW80	15B/C / SW8260B				
File ID: 14100707.D			Ва	itch ID: MS1	5W100	)7B	Analysis Date:	10/07/2014 13:07			
Sample ID: GLCS MS15W1007B	Units : µg/L			SD_15_1410			Prep Date:	10/07/2014 13:07			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Quai		
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	401 10.7 9.57 11	50	400 10 10 10		100 107 96 110	70 70 70 70	130 130 130 130				
Sample Matrix Spike		Туре М	S Te	st Code: EP	A Met	hod SW80	15B/C / SW8260B				
File ID: 14100725.D			Ва	tch ID: MS1	5W100	)7B	Analysis Date:	10/07/2014 20:25			
Sample ID: 14100343-01AGS	Units : µg/L			SD_15_1410			Prep Date:	10/07/2014 20:25			
Analyte	Result	PQL	SpkVal	SpkRefVal '	%REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qual		
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2150 56.2 47.9 53.8	250	2000 50 50 50	109.8	102 112 96 108	54 70 70 70	143 130 130 130				
Sample Matrix Spike Duplicate		Туре М	SD Te	st Code: EP	A Met	hod SW80	15B/C / SW8260B				
File ID: 14100726.D			Ва	tch ID: MS1	5W100	7B	Analysis Date:	10/07/2014 20:49			
Sample ID: 14100343-01AGSD	Units : µg/L			SD_15_1410			Prep Date:	10/07/2014 20:49			
Analyte	Result	PQL	SpkVal	SpkRefVal 1	%REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qual		
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2540 55.1 47.8 54.9	250	2000 50 50 50	109.8	121 110 96 110	54 70 70 70	143 2152 130 130 130	2 16.5(23)			

#### 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.



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Date: 10-Oct-14	(	QC Sun	nmary	Repor	t				<b>Work Ord</b> 14100342	
Method Blank File ID: 14100709.D		Type MBL		st Code: EF				sis Date:	10/07/2014 14:02	
Sample ID: MBLK MS15W1007A Analyte	Units : µg/L Result			D_15_1410 SpkRefVal		LCL(ME)	Prep UCL(ME)		10/07/2014 14:02 /al %RPD(Limit)	Qua
Methyl tert-butyl ether (MTBE)	ND	0.5				,				
Benzene Toluene	ND	0.5								
Ethylbenzene	ND ND	0.5 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 Surr: 4-Bromofluorobenzene	9.83 11.1		10 10		98 111	70 70	130 130			
	11.1	T 1 00		at Cada: EE						
Laboratory Control Spike File ID: 14100706.D		Type LCS		st Code: EP				eie Date:	10/07/2014 12:41	
	Haita conff	D		tch ID: MS1		)/A	Prep		10/07/2014 12:41	
•	Units : µg/L			D_15_1410		LOLAMEN				Qua
Analyte	Result			Spkkerval				RPDReiv	/al %RPD(Limit)	
Methyl tert-butyl ether (MTBE)	8.96	0.5	10		90	63	137			
Benzene Toluene	10.1 9.58	0.5 0.5	10 10		101 96	70 80	130 120			
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		st Code: EP						
File ID: 14100723.D				tch ID: MS1		)7A	•		10/07/2014 19:37	
Sample ID: 14100343-01AMS	Units : µg/L			D_15_1410		101/15	Prep		10/07/2014 19:37	·
Analyte	Result		•	· · · · · · · · · · · · · · · · · · ·				RPDRetv	al %RPD(Limit)	Qua
Methyl tert-butyl ether (MTBE)	65.2	1.3	50	0	130	56 67	140 134			
Benzene Toluene	59.3 52.4	1.3 1.3	50 50	0	119 105	67 38	134			
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	<del></del> -	103	70	130			
Sample Matrix Spike Duplicate		Type MSD		st Code: EP				oie Deto:	10/07/2014 20:01	
File ID: 14100724.D	Haika	D		tch ID: MS1		J/A				
Sample ID: 14100343-01AMSD Analyte	Units : µg/L Result			D_15_1410		LCL(ME)	Prep i		10/07/2014 20:01 al %RPD(Limit)	Qua
<u> </u>					123	56	140	65.15		
Methyl tert-butyl ether (MTBE) Benzene	61.7 57.2	1.3 1.3	50 50	0	123 114	56 67	134	59.34		
Toluene	52.3	1.3	50	0	105	38	130	52.41		
Ethylbenzene	57.2	1.3	50	Ö	114	70	130	56.06		
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			



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	······································	
Date:	OC Cyman arry Donart	Work Order:
10-Oct-14	QC Summary Report	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:

Suite 550

## **CHAIN-OF-CUSTODY RECORD**

## Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention **Phone Number** Debbie Barr (530) 676-6000 x

dbarr@stratusinc.net

Sampled by : C. Hill

WorkOrder: STR14100342

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

EDD Required: Yes

**EMail Address** 

PO:

Client:

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

Client's COC #: 16731

Job: Olympic

Cooler Temp 3°C

Samples Received

**Date Printed** 

03-Oct-14

03-Oct-14

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

									Request	ted Tests				
Alpha	Client		Collection	No. of	Bottles	•	TPH/P_W	VOC_W						
Sample ID	Sample ID	Matri	x Date	Alpha	Sub	TAT								Sample Remarks
STR14100342-01A	Oly W INF	AQ	10/02/14	3	0	2	GAS-C	BTXE/M_C						
			07:25	<u> </u>			<u> </u>	1	 	<u> </u>	<u> </u>	1	<u> </u>	

**Comments:** 

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

Signature

Logged in by:

**Print Name** 

Company

Date/Time

6

ADNA CHALON

Alpha Analytical, Inc.

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

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

Billian Information:
Advisor:
Adviso

received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.



#### Alpha Analytical, Inc.

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

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Southern NV: 6255 McLeod Ave Suite 24. Las Vegas, NV 89120 Phone: 775-355-1044 Fax: 775-355-0406 16731

Phone: 916-366-9089

Phone: 714-386-2901

Phone: 775-388-7043

	4005	conmentar	Southern NV: 6255 Mo	Leod Ave, Suite 24	, Las Vegas, NV 89120	Phone	702-281-4848	Page #	of
			*** **********************************	Marine Comment	(t, 50x - 5 x )			14 <b>3</b> 1	
Company: Company:	Job	and Purchase Order Info:		Report Attention	Project Manager:		QC Delive	erable inf	io:
	Job #	Alvmoll	Name: Email Add		edanc	<del></del>	EDD Required? Yes / No		EDF Required? Yes / No
Address:  City, State, Zip:	Job Name: P.O. #:	Digingio	Phone #:	iress:			Global ID:		
		00 W4 D0D 64-	Cell #:				Data Validation Packages:		or fV
Samples Collected from which State?	(circle one) AR CA KS	NV OR WA DOD Site			Analysis Re	quested			Remarks
								T	
			Below)						
	= =		e Key		J.,				
			ees)	Field Filtered?	37ex MT134				
			Container **	# V	RE				
Time Date Matrix" Sampled Sampled (See Key			oute	in in	3 m				
(HHMM) (MMOD) Below) Lab ID Nu	mber (For Lab Use Only)	Sample Description		Yes No					
6725 194 HQ 310	00342-01A DIY	WINF	72 3	XX					
0)19 5	Alx	w GALI	STO 3	) N	XX				
0714	ni	w GALZ	3rd 3	111	V P				
	The state of the s	LA EGG		12	2 2	+-+-			
0709 / Acc	Oly	W FFI	24 3	///					
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ADDITIONAL INSTRUCTIONS:	And the second of the second o			<del></del>				<del>-                                    </del>	
3 1									
I (field sampler) attest to the validity and authenti	icity of this sample(s). I am aware that tamp	ering with or intentionally mislabelin	g the sample location, (	late or time of colle	ection is considered fraud a	nd may be grounds	for legal action. NAC 445.06	36 (c) (2).	
Sampled By:  Relinquished by: (Signatur) / Affiliation)	Date:	Time: Rec	eived by: (Signature/A#II	ation):			Date:		Time:
MINE STATE	2 Date: 100244	1/50	E. Eny	your	10		Date: /002	14	1150
atinquished by: (Signature/Affiliation):	Oate:	Rec	eived by: Signature Afili	ation):	\ _		lo -03		Time:
Relinquished by: (Signature/Affiliation):	Date:	Time: Rec	eived by: (Signature/Affili	ation).	T		0 203	514	Time:
			, , ,	,	$\cup$				
* Key: A	AQ - Aqueous WA - Waste	OT - Other So-Soil ** L	- Liter V - VOA	S-Soil Jar	O - Orbo T - Tedia	ar B - Brass	P - Plastic OT - Oth	ner	
NOTE: Samples are discarded 60 days after sample	e receipt unless other arrangements are made	Hazardous samples will be returned	to client or disposed of at	client expense. Ti	he report for the analysis of th	e above samples is	annicable only to those sample		



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### **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 μ <b>g/</b> L	10/03/14	10/03/14
Client ID:	Oly W GAC 2					
Lab ID:	STR14100344-02A	TPH-P (GRO)	ND	50 μ <b>g/</b> 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 μ <b>g/</b> 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
ACCRECITED
DOO BLAP

Roger Scholl

KandySalm

Walter Hinkow

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.

Report Date

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



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## **VOC Sample Preservation Report**

Work Order: STR14100344

Job: Olympic

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

10/10/14

Report Date



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

<b>Date:</b> 06-Oct-14	(	QC S	ummar	y Repor	t			<b>Work Orde</b> 14100344	
Method Blank		Type N	IBLK Te	est Code: El	PA Met	hod SW80	15B/C / SW8260E	}	
File ID: C:\HPCHEM\MS10\DATA\141002\14	100209.D	••	Ва	atch ID: MS	IOW100	)2B	Analysis Date	10/02/2014 18:50	
Sample ID: MBLK MS10W1002B	Units : µg/L		Run ID: MS	SD_10_1410	102A		Prep Date:	10/02/2014 18:50	
Analyte	Result	PQL				LCL(ME)	UCL(ME) RPDRef		Quai
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 L	CS Te	est Code: El	PA Met	hod SW80	15B/C / SW8260B		
File ID: C:\HPCHEM\MS10\DATA\141002\14	100107.D		Ва	tch ID: MS1	0W100	)2B	Analysis Date:	10/02/2014 17:19	
Sample ID: GLCS MS10W1002B	Units : µg/L		Run ID: MS	SD_10_1416	002A		Prep Date:	10/02/2014 17:19	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRe	Val %RPD(Limit)	Quai
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 №	IS Te	est Code: El	PA Met	hod SW80	15B/C / SW8260B	}	
File ID: C:\HPCHEM\MS10\DATA\141002\14	100221.D		Ba	atch ID: MS1	0W100	)2B	Analysis Date:	10/02/2014 23:04	
Sample ID: 14092621-01AGS	Units : µg/L		Run ID: MS	SD_10_1410	)02A		Prep Date:	10/02/2014 23:04	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Quai
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 N	ISD Te	est Code: El	A Met	hod SW80	15B/C / SW8260B		
File ID: C:\HPCHEM\MS10\DATA\141002\14	100222.D		Ba	atch ID: MS1	0W100	)2B	Analysis Date:	10/02/2014 23:25	
Sample ID: 14092621-01AGSD	Units: µg/L		Run ID: MS	SD_10_1410	002A		Prep Date:	10/02/2014 23:25	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qual
TPH-P (GRO)	2000	250	2000	0	100	54	143 184	5 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.



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Date: 06-Oct-14	(	QC Sui	mmar	y Repor	t				Work Orde 14100344	
Method Blank File ID: C:\HPCHEM\MS10\DATA\141002\ Sample ID: MBLK MS10W1002A	Units : μg/L		Ba tun ID: Mi	est Code: EF atch ID: MS1 SD_10_1410	0W10 02A	02A	Analysis D Prep Date:	1	10/02/2014 18:50 10/02/2014 18:50	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVa	il %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE) Benzene	ND	0.5								
Toluene	ND ND	0.5 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 Surr: 4-Bromofluorobenzene	9.7		10		97 94	70 70	130 130			
Sun. 4-bromoliuoropenzene	9.36		10							
Laboratory Control Spike		Type LC:	S Te	est Code: EF	'A Met	hod SW82				
File ID: C:\HPCHEM\MS10\DATA\141002\	14100108.D		Ва	atch ID: MS1	0W10	D2A			0/02/2014 17:41	
Sample ID: LCS MS09W1002A	Units : µg/L	R	un ID: MS	SD_10_1410	02A		Prep Date:	1	0/02/2014 17:41	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVa	l %RPD(Limit)	Quai
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 m.p-Xylene	10.9 10.8	0.5 0.5	10 10		109 108	80 65	120 139			
o-Xylene	11.1	0.5	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.67	0.0	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	4.4.4.4.4.4.4.4.	Type MS		est Code: EF				nder d	0000004445.40	
File ID: C:\HPCHEM\MS10\DATA\141003\		_		atch ID: MS1		JZA			0/03/2014 15:49	
Sample ID: 14092621-01AMS	Units : µg/L			SD_10_1410			Prep Date:		0/03/2014 15:49	Our
Analyte	Result	PQL					UCL(ME) RPD	Retva	i %RPD(LIMIT)	Qual
Methyl tert-butyl ether (MTBE)	52.4	1.3	50	2.63	99.6	56	140			
Benzene Toluene	53.8	1.3	50	0	108 96	67 38	134 130			
Ethylbenzene	48.2 59.1	1.3 1.3	50 50	0	118	70	130			
m,p-Xylene	59	1.3	50	Ō	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 Surr: 4-Bromofluorobenzene	48.6 51.4		50 50		97 103	70 70	130 130			
Sull. 4-Biolifoligolobelizelle	31.4									_
Sample Matrix Spike Duplicate		Type MS		est Code: EF			260B			
File ID: C:\HPCHEM\MS10\DATA\141002\			Ba	atch ID: MS1	0W100	)2A	-		0/02/2014 22:43	
Sample ID: 14092621-01AMSD	Units : µg/L	R		SD_10_1410			Prep Date:		0/02/2014 22:43	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVa	I %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	53.5	1.3	50	2.63	102	56		2.44	2.1(40)	
Benzene	55.6	1.3	50	0	111	67		3.79	3.4(21)	
Toluene	50.4	1.3	50	0	101	38		48.2	4.4(20) 3.0(20)	
Ethylbenzene m.p-Xylene	60.9 60.2	1.3 1.3	50 50	0	122 120	70 65		9.09 8.99	3.0(20) 2.0(20)	
o-Xylene	62.1	1.3	50	0	124	69		0.48	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			



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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.

## CHAIN-OF-CUSTODY RECORD

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention **Phone Number EMail Address** Debbie Barr (530) 676-6000 x

Suite 550

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

EDD Required: Yes

WorkOrder: STR14100344

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

Sampled by : C. Hill Cooler Temp

3°C

Samples Received 03-Oct-14

**Date Printed** 03-Oct-14

1 of 1

PO:

Client:

Client's COC #: 16731

QC Level: S3

Job: Olympic

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

							Requested *	Tests		
Alpha	Client		No. of Bottle	8	TPH/P_W	VOC_W				
Sample ID	Sample ID	Matrix Date	Alpha Sub	TAT						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				

dbarr@stratusinc.net

Comments:

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

Signature

Logged in by:

**Print Name** 

Company

Date/Time

Alpha Analytical, Inc.

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 8-Brass P-Plastic OT-Other

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

Billing Information:
Solution:
Solution



#### Alpha Analytical, Inc.

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

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Southern NV: 6255 McLeod Ave, Suite 24, Les Vegas, NV 89120 Phone: 775-355-1044 Fax: 775-355-0406

Phone: 916-366-9089

Phone: 714-386-2901

Phone: 775-388-7043

Phone: 702-281-4848

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16731

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Company: Address:	_>	164	707		ob # ob Name:	19	Vm B	11		Name: Email Ad	Irleane.	المصلي	200	n/				EDD Req	uired? Yo	es / No		EDF Requir	ed? Yes / No
City, State, Zip:				_	.O. #:		1			Phone #								Global ID:	:				
Samples Col	llected 1	from whi	ich State? (circle one)	AR C	KS KS	NV OR	WA I	DOD Site	Other	Cell #:								Oata Valid	fation Pec	:kages:	113	OF	IV
														Analy	sis Requ	ested						Re	marks
Time Sampled (HHMM) (MI	Date mpled (VOD)	Matrix See Key Below)  HCQ  ACA	Lab ID Number (For Lab t		19/4		Description IN COME GAC FF	1 - 1 - 2	72 570 570 24	W W (See Key Below)	Acs No X	大人人メソソト	メイストのアメ	Analy JYOLW LXPY	sis Requ	ested						Re	marks
I (field sampler) Sampled By: Relinquished by: Relinquished by:	Signature (Signature	(Affiliation)	:	Date:	214	Time:	150	Recei Recei	ved by: (Sign	ature/Affili ature/Affili	ation):	an )	0						Date:	021	(c) (2). 4	Time:	<u>o</u> 30
NOTE: Samples	are discer	rded 60 day	* Key: AQ - Aqueous	WA - I		OT - Other				/ - VOA	S-Sc		O - Orbo		Tedlar	B - Bra	ass	P - Plast	ic O	T - Other			·
received by the la	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.																						



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### **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 μ <b>g/</b> L	10/03/14	10/03/14
		m,p-Xylene	ND	0.50 μ <b>g/</b> 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

Roger Scholl Kandy Souline D

Dalter Amilia

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

Dod ELAP 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

Report Date



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## **VOC Sample Preservation Report**

Work Order: STR14100341	Job: Olympic		
Alpha's Sample ID	Client's Sample ID	Matrix	рН
14100341-01A	Oly W EFF	Aqueous	2

10/3/14 Report Date



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<b>Date:</b> 10-Oct-14	(	QC Sı	ımmar	y Report				Work Orde 14100341	
Method Blank File ID: 14100312.D Sample ID: MBLK MS09W1003B Analyte	Units : µg/L Result	Type M	Ba Run ID: <b>M</b> a	atch ID: MS09 SD_09_14100	W1003 3A	B	15B/C / SW8260B Analysis Date: Prep Date: UCL(ME) RPDRef	10/03/2014 14:45 10/03/2014 14:45	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 8.62 10.7 12.7	50			86 107 127	70 70 70	130 130 130		
Laboratory Control Spike		Type L	CS To	est Code: EPA	Meth	od SW80	15B/C / SW8260B		
File ID: 14100311.D			Ba	atch ID: MS09	W1003	В		10/03/2014 13:45	
Sample ID: GLCS MS09W1003B	Units : µg/L			SD_09_14100			Prep Date:	10/03/2014 13:45	0
Analyte	Result	PQL			-	·····	UCL(ME) RPDRef	Val %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	415 9.04 9.82 12.1	50	400 10 10 10		104 90 98 121	70 70 70 70	130 130 130 130		_
Sample Matrix Spike		Type M	S Te	est Code: EPA	Meth	od SW80	15B/C / SW8260B		
File ID: 14100327.D			Ва	atch ID: MS09	W1003	В	Analysis Date:	10/03/2014 20:39	
Sample ID: 14100340-01AGS	Units : µg/L			SD_09_14100			Prep Date:	10/03/2014 20:39	
Analyte	Result	PQL	SpkVal	SpkRefVal %	REC !	CL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2310 51.8 46.8 62.2	250	2000 50 50 50		116 104 94 124	54 70 70 70	143 130 130 130		
Sample Matrix Spike Duplicate		Type M	SD Te	est Code: EPA	Meth	od SW80	15B/C / SW8260B		
File ID: 14100328.D			Ва	atch ID: MS09	W1003	В	•	10/03/2014 21:02	
Sample ID: 14100340-01AGSD	Units : µg/L			SD_09_14100			Prep Date:	10/03/2014 21:02	J.
Analyte	Result	PQL	SpkVal				UCL(ME) RPDRef		Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	1780 47.9 47.4 61.4	250	2000 50 50 50	-	89 96 95 123	54 70 70 70	143 231 130 130 130	3 26.1(23)	R5

#### 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.



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Date: 10-Oct-14		. (	QC S	ummar	y Repor	t	-			<b>Work Orde</b> 14100341	
Method Blas File ID: 14100 Sample ID:		Units : µg/L	Type N	В	est Code: E atch ID: MS SD_09_141	09W10				10/03/2014 14:45 10/03/2014 14:45	
Analyte	,	Result	PQL				LCL(ME)			/al %RPD(Limit)	Qual
Methyl tert-but Benzene Toluene Ethylbenzene m,p-Xylene o-Xylene	yl ether (MTBE)	ND ND ND ND ND	0.5 0.5 0.5 0.5 0.5 0.5			c	70	130		•	
Surr: 1,2-Dichl Surr: Toluene-		8.62 10.7		10 10		86 107	70	130			
Surr: 4-Bromot	fluorobenzene	12.7		10		127	70	130			
Laboratory	Control Spike	,	Type L	CS T	est Code: E	PA Met	hod SW82	260B			
File ID: 14100				В	atch ID: MS	09W100	3A			10/03/2014 13:21	
Sample ID:	LCS MS09W1003A	Units : µg/L			SD_09_141			Prep I		10/03/2014 13:21	Ounl
Analyte		Result	PQL		SpkRefVal				RPDRetv	/al %RPD(Limit)	Qual
Benzene Toluene	yl ether (MTBE)	9.15 9.72 9.29	0.5 0.5 0.5	10 10		92 97 93	63 70 80	137 130 120			
Ethylbenzene m,p-Xylene		9.84 8.53	0.5 0.5	-		98 85	80 65	120 139			
o-Xylene		8.04	0.5			80	70	130			
Surr: 1,2-Dichl		9.29		10		93	70	130			
Surr: Toluene- Surr: 4-Bromot		9.64 11		10 10		96 110	70 70	130 130			
			Type N		est Code: E		had SW82	260B			
Sample Mat	.11x	4100905 D	Type II		atch ID: MS				sis Date:	10/09/2014 17:00	
Sample ID:	14100340-01AMS	Units : µg/L			SD_09_141			Prep I		10/09/2014 17:00	
Analyte		Result	PQL				LCL(ME)	UCL(ME)	RPDRef\	al %RPD(Limit)	Qual
Methyl tert-but	yl ether (MTBE)	51.9	1.3		0		56	140			
Benzene	ī	49.3	1.3		0		67	134			
Toluene Ethylbenzene		42.7 53.2	1.3 1.3		0		38 70	130 130			
m,p-Xylene		53.7	1.3		Ō		65	139			
o-Xylene	lavaathana dd	54.3	1.3	50 50	0	109 108	69 70	130 130			
Surr: 1,2-Dichl Surr: Toluene-		54.1 47.2		50		94	70	130			
Surr: 4-Bromo	fluorobenzene	47.1		50		94	70	130			
Sample Mat	rix Spike Duplicate		Type N	ISD T	est Code: E	PA Met	hod SW82	260B			
File ID: 14100				В	atch ID: MS	09W10	D3A	-		10/03/2014 20:15	
Sample ID:	14100340-01AMSD	Units : µg/L			SD_09_141				Date:	10/03/2014 20:15	01
Analyte		Result	PQL							/ai %RPD(Limit)	Qual
Benzene	yl ether (MTBE)	58.5 61	1.3 1.3	50	0	122	56 67	140 134	51.88 49.33	21.1(21)	R5
Toluene Ethylbenzene		51.4 54.8	1.3 1.3		0		38 70	130 130	42.7 53.18		
m,p-Xylene		45.2	1.3		0		65	139	53.69	17.1(20)	
o-Xylene		44.3	1.3	50	0		69	130	54.26	20.2(20)	R5
Surr: 1,2-Dichl Surr: Toluene-		55.5 42.9		50 50		111 86	70 70	130 130			
Surr: 4-Bromo		42.9 54.8		50		110	70	130			
A1											



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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:

Client:

PO:

## CHAIN-OF-CUSTODY RECORD

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

**EMail Address** 

Debbie Barr (530) 676-6000 x dbarr@stratusinc.net

**Phone Number** 

Sampled by : C. Hill

EDD Required: Yes

WorkOrder: STR14100341

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

Samples Received

03-Oct-14

Cooler Temp 3°C

**Date Printed** 03-Oct-14

RUSH

Client's COC #: 16731

Suite 550

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

Job: Olympic

QC Level: S3

Report Attention

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

									Request	ed Tests			
Aipha	Client		Collection	No. of	Bottles		TPH/P_W	VOC_W					
Sample ID	Sample ID	Matri	x Date	Alpha	Sub	TAT					1		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 Logged in by:

ARIADNA CHACON

**Print Name** 

Company Alpha Analytical, Inc.

Date/Time 10/03/14 19

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

Company:	Billing Information:	
Attn:	DEBBR	
Address:	3330 Cance	10/2
City, State, Zip:	Canrun	
Phone Number:	530474 1084	530474



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

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 775-355-1044 Fax: 775-355-0406 1673

Phone: 916-366-9089

Phone: 714-386-2901

Phone: 775-388-7043

Phone: 702-281-4848

16731

Company: Address: City, State, Zip:		~	lient Info;	Jo	b # b Name: O. #:	and Purch	lym j	ri.		Name: Email Ad Phone #: Cell #:	ldress:	ittention/	Project/A				Global II	quired? Ye				red? Yes / No
Samples C	ollected	trom wr	ilch State? (circle one)	AR C	KS	NV OR	WA	DOD Site	Other		THE STATE OF THE S			Analys	is Request	ted					R	emarks
Time Sampled (HHMM) (1) (HHMM) (1) (1) (HHMM) (1) (1) (HHMM) (1) (	Date Sampled MAVDD)		Lab ID Number (For Lab	Use Only)	191 y 01 y 01 y	Sample! W	Description IV		72 510 310 24	W #Containers" (See Key Below)	Aes No X	大い人ソメア	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	JASIM YARY								
I (field sample Sampled By: Relinquished	9 th I signal	tuffiAffiliation	thtn-	Date:	ware that tan		or intention	Rec	ceived by: (Sig	nature/Affi	iliation):	me of colle		ensidered f	raud and m	ay be groun	ds for legal a	Date:	02/		Time:	50 736
Relinquished	by: (Signa	ture/Affiliatio	n):	Date:		Time:		Rec	ceived by: (Sig	pature/Affi	iliation):		-					Date:		-	Time:	
ļ			* Key: AQ - Aqueous	WA -	Waste	OT - Othe	r Şo-		L - Liter	V - VOA	S-S	oil Jar	O - Orb	o T-	Tedlar	B - Brass	P - Pla	stic O	T - Other		1	
	TE: 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 between by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.																					



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### 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			Limit	Extracted	Allalyzou
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 μ <b>g</b> /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

Roger Scholl Kandy Soulun

Walter Hinchman, Quality Assurance Officer

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



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## **VOC Sample Preservation Report**

Work Order: STR14110443

Job:

Olympic Station

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

11/6/14

Report Date

Page 1 of 1



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Date: 11-Nov-14	QC Summary Report								ork Ord		
Method Blank File ID: 14110505.D		Type M		est Code: E							
			В	atch ID: MS	08W11	05B	Analy	sis Date:	11/05/201	4 11:38	
Sample ID: MBLK MS08W1105B	Units : µg/L			SD_08_141				Date:	11/05/201		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD	(Limit)	Qua
TPH-P (GRO)	ND	50									
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			1	
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	10		10		100	70	130				
Sun: 4-Bromonuorobenzene	9.95		10		100	70	130			1	
Laboratory Control Spike	Type LCS Test Code: EPA Method SW8015B/C / SW8260B										
File ID: 14110504.D		Batch ID: MS08W1105B Analysis Date:						11/05/201	4 11:10		
Sample ID: GLCS MS08W1105B	Units : µg/L.		Run ID: M	SD_08_141	105A		Prep	Date:	11/05/201	4 11:10	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	/al %RPD(	Limit)	Quai
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 M	S Te	est Code: El	PA Met	hod SW80	15B/C / S	W8260B			
File ID: 14110514.D			Ba	atch ID: MS(	08W110	5B	Analy	sis Date:	11/05/201	15:12	
Sample ID: 14110443-01AGS	Units : µg/L	1	Run ID: MS	SD_08_1411	105A		Prep l	Date:	11/05/201	15:12	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %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 M:	SD Te	st Code: EF	A Meti	nod SW80	15B/C / S	W8260B			
File ID: 14110515.D			Ba	tch ID: MS0	8W110	5B	Analys	sis Date:	11/05/2014	15:36	
Sample ID: 14110443-01AGSD	Units: µg/L	F	Run ID: MS	SD_08_1411	05A		Prep I	Date:	11/05/2014	15:36	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	al %RPD(I	imit)	Qual
TPH-P (GRO)	1690	250	2000	0	85	54	143	1552		-	_
Surr: 1,2-Dichloroethane-d4	53.2		50		106	70	130		(	,	
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	45.9		50		92	70	130 130				
	58.7		50		117	70					

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

Reported in micrograms per Liter, per client request.

values may differ slightly.



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<b>Date:</b> 11-Nov-14	QC Summary Report									ork Orde 1110443	
Method Blank	Type MBLK Test Code: EPA Method SW8260B										
File ID: 14110505.D			В	atch ID: MS	08W11	05A	Analy	/sis Date:	11/05/201	4 11:38	
Sample ID: MBLK MS08W1105A	Units : µg/L		Run ID: M	SD_08_141	105A		Prep	Date:	11/05/201	4 11:38	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(	Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5			ų.		1				
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene m,p-Xylene	ND ND	0.5									
o-Xylene	ND ND	0.5 0.5									
Surr: 1,2-Dichloroethane-d4	11.3	0.5	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 L	CS To	est Code: El	PA Met	hod SW8	260B				
File ID: 14110503.D			В	atch ID: MS	08W11	05A	Analy	sis Date:	11/05/2014	10:42	
Sample ID: LCS MS08W1105A	Units : µg/L			SD_08_141			Prep		11/05/2014		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(	imit)	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			102	80	120				
Ethylbenzene	10.2	0.5			102	80	120 139				
m,p-Xylene o-Xylene	10.8 10.6	0.5 0.5	10 10		108 106	65 70	139				
Surr: 1,2-Dichloroethane-d4	11.3	0.5	10		113	70	130				
Surr: Toluene-d8	9.46		10		95	70	130			1	
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130				<
Sample Matrix Spike		Туре М	S Te	est Code: El	PA Met	hod SW82	260B	H			-
File ID: 14110512.D			Ba	atch ID: MSC	)8W110	05A	Analy	sis Date:	11/05/2014	14:25	
Sample ID: 14110443-01AMS	Units : µg/L			SD_08_1411			Prep		11/05/2014	1	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(I	imit)	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 Ethylbenzene	41.6 40.1	1.3	50 50	0	83 80	38 70	130 130				
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			i	
Surr: 4-Bromofluorobenzene	56		50		112	70	130				
Sample Matrix Spike Duplicate		Type M	SD Te	est Code: EF	A Met	hod SW82	260B				
File ID: 14110513.D				itch ID: MS0		)5A			11/05/2014		
Sample ID: 14110443-01AMSD	Units: µg/L			SD_08_1411					11/05/2014		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\		,	Qual
Methyl tert-butyl ether (MTBE)	59.1	1.3	50	12.59	93	56	140	58.88		40)	
Benzene	40.8	1.3	50	1.05	80	67	134	38.81		k1)	
Toluene Ethylbenzene	43.2	1.3	50	0	86 85	38	130 130	41.55 40.1		50) 50)	
m,p-Xylene	42.3 45.6	1.3 1.3	50 50	0	91	70 65	130	43.89		50)	
o-Xylene	44.7	1.3	50	0	89	69	130	43.82		20)	
Surr: 1,2-Dichloroethane-d4	53.5	1.0	50	v	107	70	130		(		
Surr: Toluene-d8	48.2		50		96	70	130				
Surr: 4-Bromofluorobenzene	57		50		114	70	130				



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

Date:	
11-Nov-	11

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.

Billing Information:

### **CHAIN-OF-CUSTODY RECORD**

Alpha Analytical, Inc.

**EMail Address** 

dbarr@stratusinc.net

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

**Phone Number** 

(530) 676-6000 x

WorkOrder: STR14110443

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

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

Report Attention

Debbie Barr

Cooler Temp

Samples Received 04-Nov-14

**Date Printed** 04-Nov-14

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

3°C

Alpha	Cilent		Collection	No. of	Bottles	•	TPH/P_W	VOC_W	Request	ed lests	1	T	
Sample ID	Sample ID	Matr	x Date	Alpha	Sub	TAT							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 Logged in by:

**Print Name** 

Company

Date/Time

Alpha Analytical, Inc.

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

STVNYUS Company: Attn: Address:

City, State, Zip: Phone Number



#### Alpha Analytical, Inc.

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

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801

Phone: 775-355-1044 16507 Fax: 775-355-0406

Phone: 714-386-2901

Phone: 916-366-9089

							147	conmental	-				ille Hwy., #3 ve, Suite 24			20 .			775-388 702-281			Page #		of
Company: Address: City, State, 2	Co	nsyltanti (3 T/KC)	llent Info:			Job # Job Name: P.O. #:		Purchase Orc	ler Info:	,	Name: Email A Phone #	Report	Attention		Manager				EDD Re	quired? Y	C Deliver	able Info		red? Yes / No
Samples	Collecte	d from w	hich State?	(circle one	) AR (	CA) KS	NV		DOD Site		Cell #:	t.							Data Val	idation Pa	ckages:	Iti	or	IV .
				L. S. P.E. Buch				100		1000					Anal	/sis Reque	sted		1	1	T		Re	marks
Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab JD N	lumber (For Lat	) Use Only)	A (	S	ample Descriptio		TAT	#Containers** (See Key Below)	s Field Filtered?		Brex	MTBE									
9122	14	Ad	7-74		10.47	11/14	W	INF		72	3			y	1									
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ADDITIONA	LINSTRUC	TIONS:			Ф.,				<del></del>															
. 65-14																								
Sampled By	CH	LL Vallan	y and authent	icity of this sai	npie(s). I am	ware that ta	mpering	with or intention	ally mislabeling	the sample	location,	date or ti	me of colle	ction Is co	nsidered f	raud and r	nay be g	rounds fo	r legal ac	tion. NAC	445.0636	(c) (2).		
Refinguished	hy (Signal	ure/Affiliation	STOW	ay	Date:	12/4	F	"1148	Rece	EIR	Pature/Affili	iation).	ger	0						Date:	021	4	Time:	2
Relinquished	, , ,				Date:		Tir	me: me:	(	ved by: (Sign	nature/Affili	iation):	7	5						Date:	04-	14	Time:	30
			* Key: /	Q - Aqueous	WA -	Waste	OT - 0	Other So-	Soil **L-	Liter	/ - VOA	S-S	oil Jar	O - Orbi	o T-	Tedlar	B - Br	200	P - Plasi	<u> </u>	T 011			<del></del>
NOTE: Sam received by the	ples are disc se laborator	arded 60 da with this Cl	ys after sample OC. The liability	receipt unless of the laborato	other arrange ry is limited to	ments are ma	ide. Haza	erdous samples v	vill be returned to	client or dis	oosed of al	t client ex	pense. The	e report for	the analys	is of the ab	ove sam	ples is app	olicable or	ly to those	T - Other samples			



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### **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	Date	Date
				Limit	Extracted	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
DOTE 149

Roger Scholl

Kandy Saulun

Walter Hiriham

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



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### **VOC Sample Preservation Report**

Work Order: STR14110447

Job:

Olympic Station

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

11/11/14

Report Date



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 S	ummar	y Repor	t			Work Ord 1411044	
Method Blank		Type I	IBLK TO	est Code: El	PA Met	hod SW8	015B/C / SW82	60B	
File ID: 14110604.D			Ва	atch ID: MS(	8W11	06B	Analysis D	ate: 11/06/2014 10:49	
Sample ID: MBLK MS08W1106B	Units : µg/L		Run ID: MS	SD_08_1411	06A		Prep Date:	11/06/2014 10:49	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVal %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 L	CS Te	est Code: EF	A Met	hod SW80	)15B/C / SW826	60B	
File ID: 14110603.D			Ba	tch ID: MS0	8W110	06B	Analysis D	ate: 11/06/2014 10:21	
Sample ID: GLCS MS08W1106B	Units : µg/L		Run ID: MS	SD_08_1411	06A		Prep Date:	11/06/2014 10:21	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVal %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 N					15B/C / SW826		
File ID: 14111031.D			Ba	tch ID: MS0	8W110	6B	Analysis Da	ate: 11/10/2014 21:45	
Sample ID: 14110444-01AGS	Units : µg/L			SD_08_1411			Prep Date:		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefVal %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 Surr: 4-Bromofluorobenzene	45.9		50		92	70	130		
Surr: 4-Bromonuorobenzene	57.9		50		116	70.	130		
Sample Matrix Spike Duplicate		Type N					15B/C / SW826		
File ID: 14111032.D			Ва	tch ID: MS0	8W110	6B	Analysis Da	ate: 11/10/2014 22:09	
Sample ID: 14110444-01AGSD	Units : µg/L		Run ID: MS	D_08_1411	06A		Prep Date:	11/10/2014 22:09	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDI	RefVal %RPD(Limit)	Qual
TPH-P (GRO)	1630	250	2000	0	82	54	143 1	750 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.



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Date: 11-Nov-14	(	QC Su	mmar	y Repor	t				Work Ord 14110447	
Method Blank		Туре М		est Code: EF					441001004444	
File ID: 14110604.D			B	atch ID: MS0	8W11	06A	-		11/06/2014 10:49	
Sample ID: MBLK MS08W1106A	Units: µg/L	I		SD_08_1411				Date:	11/06/2014 10:49	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene m,p-Xylene	ND ND	0.5 0.5								
o-Xviene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	11.7	0.0	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 LC	S Te	est Code: EF	A Me	thod SW82				
File ID: 14110602.D			Ba	atch ID: MS0	8W11	06A	Analy	sis Date:	11/06/2014 09:57	
Sample ID: LCS MS08W1106A	Units: µg/L	1		SD_08_1411				Date:	11/06/2014 09:57	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %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	120 120			
Ethylbenzene m,p-Xylene	9.64 10	0.5 0.5	10		96 100	80 65	139			
o-Xviene	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	S Te	est Code: EF	A Met	thod SW82				
File ID: 14110707.D			Ва	atch ID: MS0	8W11	06A	Analy	sis Date:	11/07/2014 13:06	
Sample ID: 14110444-01AMS	Units : µg/L			SD_08_1411				Date:	11/07/2014 13:06	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %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		16	M2
Toluene	33.2	1.3	50	0	66	38	130			M2
Ethylbenzene	29.5	1.3	50	0	59	70	130 139	*)		M2
m,p-Xylene	31.1	1.3	50	0	62	65				M2
o-Xylene	30.5	1.3	50	0	61	69 70	130 130			1912
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	60.9 46.7		50 50		122 93	70	130			
Surr: 4-Bromofluorobenzene	55.3		50		111	70	130			
Sample Matrix Spike Duplicate		Type M	SD To	est Code: EF	A Me	thod SW8	260B			
File ID: 14110708.D		. , , , , , , , , , , , , , , , , , , ,		atch ID: MS0				sis Date:	11/07/2014 13:29	
Sample ID: 14110444-01AMSD	Units : µg/L	1		SD_08_1411			Prep	Date:	11/07/2014 13:29	
Analyte	Result	PQL				LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	48.8	1.3	50	0	98	56	140	51.19		
Benzene	40.8	1.3	50	0	82	67	134	32.03		R58
Toluene	44.6	1.3	50	0	89	38	130	33.19		R5
Ethylbenzene	44.7	1.3	50	0	89	70	130	29.45		R58
m,p-Xylene	47.1	1.3	50	0	94	65	139	31.06		R58
o-Xylene	46.5	1.3	50	0	93	69	130	30.45	5 41.7(20)	R58
Surr: 1,2-Dichloroethane-d4	55.3		50		111	70	130			
Surr: Toluene-d8	46.4		50 50		93 116	70 70	130 130			
Surr: 4-Bromofluorobenzene	57.8		50		110	70	130			



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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	1
---------	-------------	---

Suite 550

### **CHAIN-OF-CUSTODY RECORD**

### Alpha Analytical, Inc. WorkOrder: STR14110447

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention **Phone Number** (530) 676-6000 x **EMail Address** 

Debbie Barr

dbarr@stratusinc.net

EDD Required: Yes

Sampled by : C. Hill

Cooler Temp

**Date Printed** 

3°C

Samples Received 04-Nov-14

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

04-Nov-14

Page: 1 of 1

PO:

Client:

Client's COC #: 16507

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

Olympic Station

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

									Requ	ested Tes	ts		
Alpha	Client		Collection	No. of	<b>Bottles</b>	i	TPH/P_W	VOC_W					7
Sample ID	Sample ID	Matri	x Date	Alpha	Sub	TAT							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:

ARIADA

Alpha Analytical, Inc.

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

Company:	Billing Information:	
Attn:	Debbre	
Address:	3330 CANCOUN Phil	DE
City, State, Zip:	Courseur ?	
Phone Number:	53044 400 4 Fax: 530	6 20 600 5
Company:	Consultant Client Info:	Job #
Address:		Job Name:



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

#### Satellite Service Centers:

Northern CA: 9891 Hom Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120

Phone: 775-355-1044 Fax: 775-355-0406 Phone: 916-366-9089

16507 Phone: 714-386-2901 Phone: 775-388-7043 Phone: 702-281-4848

				Piwa4e	Transit		-			177. 1887	132 js			78		V.	Partie	¥	401				are talk		
Company: Address: City, State, Zip:		Im)	ilient Info:			ob # ob Name: !.O. #:	ob and I	Purchase Or	der into:	Fre	5,11	Name: Email Ad Phone #:		Do	Project	Manager		· -		EDD Req	uired? Ye	C Deliver	able Info		uired? Yes / No
Samples Co	ollected	from wi	hich State? (c	ircle one)		A) KS	NV.	OR WA	DOD Si	ite Oth		Cell #:									dation Pac	kages:	BIT	Of	IV .
2 - F				145000			Sec. 0					18 18				Analy	sis Requ	ested						. 1	Remarks
	MMOD)	Matrix* (See Key Below)  AR  AR	Lab ID Nurr	iber (For Lab U	se Only)		s W W	ample Description  INI  GUL  CHCI  EFF	ະ (	51 51	722 HD HD Y	C. C # Containers" (See Key Below)	Cosselli Dieri	人	XXX VY XX	RX XX MTBE									
		2110																							
ADDITIONAL H	NSTRUCT	UNS:	· · · · · · · · · · · · · · · · · · ·	=					· · · · · · · · · · · · · · · · · · ·																
i (field sampler Sampled By: (		the validit	ly and authenticit	y of this samp	le(s). I am av	ware that tar	npering	with or intention						ne of colle	ction is co	nsidered f	raud and	may be gr	ounds fo	er legal ac	tion. NAC	445.0636	(c) {2}.		
	JA	er amiauor	5 Town	ez,	110	2/4	$\mathcal{L}\mid^{n}$	TE 1149	P	Received by	(Signat	ure/Affili		m	()						Date:	102	11/	Time.	10
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Relinquished by	y: (Signatui	e/Affiliation	n):		Oate:		Ti	me:	R	Received by	r (Signat	ure/Amii	ation).		1						Date:		•	Time:	
				- Aqueous		Waste	OT - (		o-Soil •	L - Liter	V -	VOA	 S-S	oil Jar	O - Orb	o T -	Tedlar	B - Br	ess	P - Plast	lic O	T - Other		ı	
NOTE: Sample received by the	s are disca laboratory	irded 60 da with this C	oys after sample re OC. The liability o	eceipt unless of I the laboratory	her arrangen is limited to t	nents are ma he amount p	de. Hazi aid for th	erdous samples e report	will be returne	ed to client	or dispo	sed of at	client ex	pense. Yr	e report for	the analys	is of the a	bove sam	oles is ag	plicable on	nly to those	samples			



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### **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

Roger Scholl Kandy Sarbur

Oalter Ambrew • Walter Hinchman, Quality Assurance Officer

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.

A JOHN

11/4/14 Report Date



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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



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

<b>Date:</b> 07-Nov-14	QC S	ummar	y Report			Work Orde 14110441	
Method Blank	Type	MBLK To	est Code: EPA Meti	nod SW80	15B/C / SW8260B		
File ID: C:\HPCHEM\MS10\DATA\141104\1411040	5.D	Ва	atch ID: MS10W110	4B	Analysis Date:	11/04/2014 12:01	
Sample ID: MBLK MS10W1104B Unit	s: μg/L	Run ID: MS	SD_10_141104A		Prep Date:	11/04/2014 12:01	
	esult PQL		SpkRefVal %REC	LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qual
TPH-P (GRO)	5						
	10.9	10	109	70	130		
	9.69	10	97	70	130		
Surr: 4-Bromofluorobenzene	9.45	10	95	70	130		
Laboratory Control Spike	Type I	LCS Te	est Code: EPA Meti	nod SW80	15B/C / SW8260B		
File ID: C:\HPCHEM\MS10\DATA\141104\1411040	3.D	Ва	atch ID: MS10W110	4B	Analysis Date:	11/04/2014 11:19	
Sample ID: GLCS MS10W1104B Units	s∶µg/L	Run ID: MS	SD_10_141104A		Prep Date:	11/04/2014 11:19	
Analyte	sult PQL	SpkVal	SpkRefVal %REC	LCL(ME)	UCL(ME) RPDRef	/al %RPD(Limit)	Qual
TPH-P (GRO)	412 50	0 400	103	70	130		
	10.9	10	109	70	130		
	9.29	10	93	70	130		
Surr: 4-Bromofluorobenzene	10.7	10	107	70	130		
Sample Matrix Spike	Type I	VIS Te	est Code: EPA Metr	od SW80	15B/C / SW8260B		
File ID: C:\HPCHEM\MS10\DATA\141104\1411041	9.D	Ba	ntch ID: MS10W110	4B	Analysis Date:	11/04/2014 17:31	
Sample ID: 14110441-01AGS Units	i : μg/L	Run ID: MS	3D_10_141104A		Prep Date:	11/04/2014 17:31	
Analyte Re	sult PQL	SpkVal	SpkRefVal %REC	LCL(ME)	UCL(ME) RPDRef\	/al %RPD(Limit)	Qual
TPH-P (GRO) 1	900 250	2000	0 95	54	143		
	52.5	50	105	70	130		
	17.8	50	96	70	130		
Surr: 4-Bromofluorobenzene	52.1	50	104	70	130		
Sample Matrix Spike Duplicate	Type N	WSD Te	est Code: EPA Meth	od SW80	15B/C / SW8260B		
File 1D: C:\HPCHEM\MS10\DATA\141104\1411042	).D	Ва	itch ID: MS10W110	4B	Analysis Date:	11/04/2014 17:53	
Sample ID: 14110441-01AGSD Units	i: μg/L	Run ID: MS	SD_10_141104A		Prep Date:	11/04/2014 17:53	
Analyte Re	suit PQL		SpkRefVal %REC	LCL(ME)	UCL(ME) RPDRef\	/al %RPD(Limit)	Qual
	000 250	2000	0 99.8	54	143 1899	5.0(23)	
Surr: 1,2-Dichloroethane-d4	53	50	106	70	130		
	7.9	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.



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Date: 07-Nov-14	(	QC Sui	mmar	y Report		,			<b>Work Ord</b> 14110441	
Method Blank File ID: C:\HPCHEM\MS10\DATA\141104\1		Туре МВ	В	est Code: EP	)W110				11/04/2014 12:01 11/04/2014 12:01	
Sample ID: MBLK MS10W1104A Analyte	Units : µg/L Result	PQL		SD_10_14110  SpkRefVal 9		LCL(ME)	•		/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene Toluene	ND	0.5								
Ethylbenzene	ND ND	0.5 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 LC	S To	est Code: EP	A Met	hod SW82	260B			
File ID: C:\HPCHEM\MS10\DATA\141104\1	4110402.D		Bi	atch ID: MS10	)W110	)4A	Analysis	Date:	11/04/2014 10:56	
Sample ID: LCS MS10W1104A	Units : µg/L	R	un ID: M	SD_10_14110	)4A		Prep Da	te:	11/04/2014 10:56	
Analyte	Result	PQL				LCL(ME)	UCL(ME) RI	PDRefv	/ai %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 Surr: 4-Bromofluorobenzene	9.74 10.8		10 10		97 108	70 70	130 130			
	10.0							-		
Sample Matrix Spike File ID: C:\HPCHEM\MS10\DATA\141104\1	14440447 D	Type MS		est Code: EP				Date	11/04/2014 16:46	
Sample ID: 14110441-01AMS	Units : µg/L	Ь		atch ID: MS10 SD_10_14110		J4A	Prep Da		11/04/2014 16:46	
Analyte	Result	PQL				LCL(ME)	,		/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	47.1	1.3	50	0	94	56	140			
Benzene	51.1	1.3	50	ō	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 Surr: Toluene-d8	52.9		50		106 96	70 70	130 130			
Surr: 4-Bromofluorobenzene	47.9 53.4		50 50		107	70 70	130			
Sample Matrix Spike Duplicate		Type MS		est Code: EP						_
File ID: C:\HPCHEM\MS10\DATA\141104\1	4110418.D	. , , , , , , , , , , , , , , , , , , ,		atch ID: MS10				Date:	11/04/2014 17:08	
Sample ID: 14110441-01AMSD	Units : µg/L	R		SD_10_14110			Prep Da		11/04/2014 17:08	
Analyte	Result	PQL				LCL(ME)			al %RPD(Limit)	Quai
Methyl tert-butyl ether (MTBE)	41.7	1.3	50	0	83	56	140	47.12		
Benzene	45.9	1.3	50	0	92	67	134	51.07		
Toluene	46.1	1.3	50	0	92	38	130	51.92		
Ethylbenzene	49.2	1.3	50	0	98	70	130	54.61		
m,p-Xylene	47.9	1.3	50	0	96	65	139	53.34		
o-Xylene Surr: 1,2-Dichloroethane-d4	48.7 53.5	1.3	50	0	97 105	69 70	130 130	54.47	11.3(20)	
Surr: Toluene-d8	52.5 48.4		50 50		97	70	130			
Surr: 4-Bromofluorobenzene	54.3		50		109	70	130			
	07.0		50							



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Date:	QC Summary Report	Work Order
07-Nov-14	Qe bullinary Keport	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 Info	mation:	
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### **CHAIN-OF-CUSTODY RECORD**

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention Phone Number EMail Address

Debbie Barr (530) 676-6000 x

dbarr@stratusinc.net

EDD Required: Yes

Sampled by : C. Hill

3°C

Requested Tests

Cooler Temp Samples Received

WorkOrder: STR14110441

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

04-Nov-14

RUSH

Date Printed 04-Nov-14

PO:

Alpha

Client:

Client's COC #: 16507

Suite 550

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

Job: Olympic Station

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

Client Collection No. of Bottles

 Sample ID
 Sample ID
 Matrix
 Date
 Alpha
 Sub
 TAT

 STR14110441-01A
 Oly W EFF
 AQ
 11/03/14
 3
 0
 0

GAS-C BTXE/M\_C

TPH/P\_W

VOC\_W

Sample Remarks

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

Company:
Attn:
Address:
City, State, Zip:

Billing, Information:
S (NN/US)

Debbie
333V Commun Ph DR
Commun Ph



#### Alpha Analytical, inc.

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

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746 Northern NV: 1250 Lamoille Hwy., #310, Elko, NV 89801 Southern NV: 8255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Phone: 775-355-1044 Fax: 775-355-0406 1650

Phone: 916-366-9089

Phone: 714-386-2901

Phone: 775-388-7043

Phone: 702-281-4848

16507

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Company:	Con	syltant/ C	Hent Info:			Jo lob#	b and Po	urchase Ord	er Info:		Name:	Report A	tention/	Project N	lanager:			FDC	Required?	QC Deliver:			uired? Yes / No
Address:					•	Job Name:	0	14mpil	State	Re	Email Ad	idress:										aor roqu	100, 100, 110
City, State,					P	P.O. #:	-				Phone # Cell #:	:							eal ID: Validation	Packages:	HI	or	īV
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l (field san	pler) attest 1	to the validit	ty and authenticity	y of this sampl	ie(s), I am a	ware that ta	mpering v	with or intentio	nally mistabeline	the sample	location.	date or tim	e of collec	tion is co	nsidered fr	aud and n	nav be grou	nds for lec	al action	VAC 445 0636	(c) (2)		
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			*Key: AQ	- Aqueous	WA-	Waste	OT - 0	Other So-	Soil **L	- Liter \	√ - VOA	S-Sc	oil Jar	O - Orbo	) T-	Tedlar	B - Brass	Р-	Plastic	OT - Other		<u> </u>	
NOTE: Sar	nples are dis-	carded 60 day	ays after sample re	ceipt unless oth	her arrangen	ments are ma	ade. Haza	rdous samples															



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### **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: Olvn

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 Roger Scholl

Kandy Sadur

Walter Hirihour

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

PS 12/10/

Report Date



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(	Work Order: 14120542							
	Type N							
Units : ua/I						•		
	POL				LCL(ME)			Qual
			ор		,		,	
11.3		10		113	70	130-		
8.67		10		87	70	130		
8.71		10		87	70	130		
	Type L	CS Te	est Code: EP	A Met	hod SW80	15B/C / SW8260	В	
		Ва	atch ID: MS1	2W120	19B	Analysis Date	e: 12/09/2014 17:04	
Units : µg/L		Run ID: MS	SD_12_1412	09A		Prep Date:	12/09/2014 17:04	
Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDR	efVal %RPD(Limit)	Qual
443	50	400		111	70	130		
10.1		10		101	70	130		
10.6								
	Type N	IS Te	est Code: EP	A Met	hod SW80			
		Ва	atch ID: MS1	2W120	9B	•	e: 12/09/2014 22:24	
Units : µg/L		Run ID: MS	SD_12_1412	09A		Prep Date:	12/09/2014 22:24	
Result	PQL	SpkVal	SpkRefVal <sup>9</sup>	%REC	LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Qual
1640	250	2000	0	82	54	143		
50.1		50		100	70	130		
47.5		50						
53.4		50		107	70	130		
	Type N	ISD Te	est Code: EP	A Met	hod SW80	15B/C / SW8260	В	
		Ba	atch ID: MS1:	2W120	19B	Analysis Date	e: 12/09/2014 22:45	
Units : µg/L		Run ID: MS	SD_12_1412	09A		Prep Date:	12/09/2014 22:45	
Result	PQL	SpkVal	SpkRefVal S	%REC	LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Quai
1990	250	2000	0	99.6	54	143 16	41 19.3(23)	
50.2		50		100	70	130		
47.1	•	50		94	70	130		
52.5		50		105	70	130		
	Units: µg/L Result  ND 11.3 8.67 8.71  Units: µg/L Result 443 10.1 8.42 10.6  Units: µg/L Result 1640 50.1 47.5 53.4  Units: µg/L Result 1990 50.2	Type N  Units: µg/L Result PQL  ND 50 11.3 8.67 8.71  Type L  Units: µg/L Result PQL  443 10.1 8.42 10.6  Type N  Units: µg/L Result PQL  1640 250 50.1 47.5 53.4  Type N  Units: µg/L Result PQL  1990 250 50.2 47.1	Type MBLK To Base Units: μg/L Run ID: MS Result PQL SpkVal	Type MBLK Test Code: EF Batch ID: MS1  Units: μg/L Result PQL SpkVal SpkRefVal  ND 50  11.3 10 8.67 10 8.71 10  Type LCS Test Code: EF Batch ID: MS1  Units: μg/L Result PQL SpkVal SpkRefVal  443 50 400 10.1 10 8.42 10 10.6 10  Type MS Test Code: EP Batch ID: MS1  Units: μg/L Run ID: MSD_12_1412 Result PQL SpkVal SpkRefVal  10.1 10 8.42 10 10.6 10  Type MS Test Code: EP Batch ID: MS1  Units: μg/L Run ID: MSD_12_1412 Result PQL SpkVal SpkRefVal  1640 250 2000 0 50.1 50 47.5 50 53.4 50  Type MSD Test Code: EP Batch ID: MS1  Units: μg/L Run ID: MSD_12_1412 Result PQL SpkVal SpkRefVal  1640 250 2000 0 50.1 50 47.5 50 53.4 50  Type MSD Test Code: EP Batch ID: MS1  Units: μg/L Run ID: MSD_12_1412 Result PQL SpkVal SpkRefVal  1990 250 2000 0 50.2 50 47.1 50	Batch ID: MS12W120	Type MBLK   Test Code: EPA Method SW80 Batch ID: MS12W1209B	Type MBLK   Test Code: EPA Method SW8015B/C / SW8260   Batch ID: MS12W1209B   Analysis Date	Type MBLK   Test Code: EPA Method SW8015B/C / SW8260B   Batch ID: MS12W1209B   Analysis Date: 12/09/2014 17:47

### 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.



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 Su	mmar	y Report	t .				Work Orde 14120542	
Method Blank		Туре МЕ		est Code: EP				- D-4-	401001004447.47	
File ID: 14120905.D				atch ID: MS1:		<b>J9A</b>	•		12/09/2014 17:47	
Sample ID: MBLK MS12W1209A	Units : µg/L	F		SD_12_1412			Prep Da		12/09/2014 17:47	<u>.</u>
Analyte	Result	PQL	SpkVal	SpkRefVal <sup>1</sup>	%REC	LCL(ME)	UCL(ME) R	RPDRefV	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene m,p-Xylene	ND ND	0.5 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 LC	S To	est Code: EP	A Met	hod SW82	260B			
File ID: 14120904.D				atch ID: MS1	2W120	19A	Analysi	is Date:	12/09/2014 17:26	
Sample ID: LCS MS12W1209A	Units : µg/L	F		SD_12_1412			Prep Da	ate:	12/09/2014 17:26	
Analyte	Result	PQL				LCL(ME)	UCL(ME) R	RPDRef\	/al %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		86 102	70 70	130 130			
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	10.2 8.78		10 10		88	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			
		Type MS	T	est Code: EP	A Mot	had SW83	SOR			
Sample Matrix Spike		Type mia						e Date:	12/09/2014 21:41	
File ID: 14120916.D		_		atch ID: MS1		JJA	-			
Sample ID: 14120503-02AMS	Units : µg/L			SD_12_1412		10145	Prep Da		12/09/2014 21:41	Qual
Analyte	Result	PQL						RPDReiv	/al %RPD(Limit)	Quai
Methyl tert-butyl ether (MTBE)	51.1	1.3	50	0	102	56	140			
Benzene	56.1	1.3	50 50	0	112 109	67 38	134 130			
Toluene Ethylbenzene	54.3 49.6	1.3 1.3	50	0	99	70	130			
m.p-Xylene	48.9	1.3	50	ŏ	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 98	70 70	130 130			
Surr: 4-Bromofluorobenzene	48.8		50							_
Sample Matrix Spike Duplicate		Type MS	D Te	est Code: EP	A Met	hod SW82				
File ID: 14120917.D				atch ID: MS1		)9A	-		12/09/2014 22:02	
Sample ID: 14120503-02AMSD	Units : µg/L	F		SD_12_1412			Prep Da		12/09/2014 22:02	
Analyte	Result	PQL	SpkVal	SpkRefVal (	%REC	LCL(ME)	UCL(ME) R	RPDRefV	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	52.3	1.3	50	0	105	56	140	51.13		
Benzene	57.1	1.3	50	0	114	67	134	56.1		
Toluene	54.5	1.3	50	0	109	38	130	54.26		
Ethylbenzene m.p-Xylene	50.2 50	1.3 1.3	50 50	0	100 100	70 65	130 139	49.58 48.88		
o-Xylene	48.7	1.3	50 50	0	97	69	130	47.26		
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			



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.

Billing I	Information	:
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### **CHAIN-OF-CUSTODY RECORD**

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

**EMail Address** 

sbittinger@stratusinc.net

**Phone Number** 

(530) 676-2062 x

Report Attention

Scott Bittinger

Olympic Station

WorkOrder: STR14120542

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

AMENDED CA

Client:

PO:

Stratus Environmental 3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Client's COC #: 12347

EDD Required: Yes

Sampled by : C. Hill

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

					· · · · · · · · · · · · · · · · · · ·				· · · · · ·	Request	ed Tests				
Alpha	Client	(	Collection	No. of	Bottles	3	TPH/P_W	VOC_W							
Sample ID	Sample ID	Matrix	Date	Alpha	Sub	TAT									Sample Remarks
STR14120542-01A	Olv W INF	AQ	12/04/14	3	0	2	GAS-C	BTXE/M_C			1				
311114120042-017	O.,	1	06:55			<u> </u>	1			<u> </u>	1	l	l	<u> 1</u>	l

Comments: 48hr TAT. Security seals intest. 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:

W.

CHAU

Alpha Analytical, Inc.

12/11/14/14

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

RUSH

### Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Phone Number

(530) 676-2062 x

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

**EDD Required: Yes** 

Sampled by : C. Hill

PO:

Client's COC #: 12347

Job: Olympic Station

Report Attention

Scott Bittinger

Cooler Temp 1°C

Samples Received 05-Dec-14

**Date Printed** 05-Dec-14

**EMail Address** 

sbittinger@stratusinc.net

QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

**Requested Tests** 

Alpha Client Collection No. of Bottles TPH/P W VOC\_W Sample ID Sample ID **Matrix** Date Alpha Sub TAT Sample Remarks GAS-C BTXE/M C STR14120542-01A Oly W INF 12/05/14 2 06:55

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:

Alpha Analytical, Inc.

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

Company:	Billing Information:	tica
Attn:	Debbie St.	1/3/
Address:	3330 Camerun 1th VIZ	i ( 4
City, State, Zip:	Camerus Ph	12
hone Number:	530 676 600 Fax: 530 676 9005 Page	
	Tronmer	Mai

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 Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746

Phone: 916-366-9089 Phone: 702-281-4848 Phone: 714-386-2901

Company		Consult	tanti Clievit Info:			Job and Purchase Or	der Info:	1 (	<i>•</i>		Report A	ttention/Pr	pjett Manag	related to a				QC Delive	rable Info	);	
Address:	:		• • • • • • • • • • • • • • • • • • • •		ob # ob Name:	C/ympi	U51	utu	14	Name: Email Add		340	//		-	EDO	Required?	Yes / No		EDF Requi	ired? Yes / No
City, State	e, Zip:			. Р	.O. #:	71			-	Phone #:					_	Glob	bai (D:				
Samples	Collected	from whi	ich State? (circle one) AZ (A) NV	/ WA II	OR	DOD Site Other				Cell #:					_	Date	a Validation	Level:	111	10	IV
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Time	Date	Matrix*						ield Filtered?	Containers**	PH	日本	MTBE									
Sampled (HHMM)	Sampled (MM/DD)	(See Key	Lab ID Number (For Lab Use Only)		Sampl	e Description	TAT	Pe	Co	1	D	2									
2695	124	MX	Lab ID Number (For Lab Use Only)	014	W	INF	72	W	3	X	X	1		<b>†</b>		-	-		<b></b>		
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7844				19/4	W	BULZ	STD	N	3	X	٦	X		1					<del> </del>		
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45.44																					
Sampled		116	validity and authenticity of this sample	(s). I am aw	are that t	ampering with or intentio	nally mislat	beling the	sample l	ocation, da	ite or time	of collection	is considered	fraud and	may be grou	unds for lega	al action. N	AC 445.0636	(c) (2).		
Relinquis	by by	gnature At	(Mation): 5 /2 /21	Date:		Time:	^	Received	by: (S/gha	ature/Affilial	tion):			-			Date:			Time:	<del></del>
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Relinquish				Date:		Time:		C	<u> </u>	atura/A#filial		_)_	***				Date:	2-05	544	rime:	$\infty$
		J. 2.2. 2// 11				I BIIG.		received	uy. (Signa	ature/Affiliat	uon).						Date:			Time:	
			* Key: AQ - Aqueou ed 60 days after sample receipt unless oth	s W	A - Wast	e OT - Other	**: L-L	iter \	V - VOA	S-S	oil Jar	O - Orbo	T - Tedla	r 8-	Brass F	P - Plastic	OT - 0	ther			
	ampies an	e discarde	ed ou days after sample receipt unless oth	er arrangem	ents are n	nade Hazardous samples	will be retur	road to clic			-17										



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### 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 μ <b>g/</b> 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.

ACLASS

Roger Scholl Kandy

Oalter Amehrur

Walter Hinchman, Quality Assurance Officer

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

12/12/14

**Report Date** 



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### **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



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

<b>Date:</b> 12-Dec-14	(	Work Order: 14120543								
Method Blank File ID: 14120804.D		Type M		est Code: E					12/08/2014 11:55	
Sample ID: MBLK MS09W1208B Analyte	Units : µg/L Result	PQL		SD_09_141 SpkRefVal		LCL(ME)	Prep I UCL(ME)		12/08/2014 11:55 /al %RPD(Limit)	Qua
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 7.84 10.3 10.4	50		.1	78 103 104	70 70 70	130 130 130			
Laboratory Control Spike		Type L	CS Te	est Code: E	PA Met	hod SW80				
File ID: 14120803.D			Ba	atch ID: MS	09W120	8B	•		12/08/2014 11:28	
Sample ID: GLCS MS09W1208B	Units: µg/L			SD_09_141			Prep (		12/08/2014 11:28	01
Analyte	Result	PQL		SpkRefVal				RPDRef	/ai %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	439 8.08 9.8 10.5	50	400 10 10 10		110 81 98 105	70 70 70 70	130 130 130 130			
Sample Matrix Spike		Type M	S Te	est Code: E	PA Met	nod SW80	15B/C / S	W8260B	2	
File ID: 14120817.D			Ва	atch ID: MS	)9W120	8B	Analy:	sis Date:	12/08/2014 17:16	
Sample ID: 14120543-01AGS	Units : µg/L			SD_09_141			Prep I		12/08/2014 17:16	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2170 42.2 48.4 52.7	250	2000 50 50 50	0	108 84 97 105	54 70 70 70	143 130 130 130		e	
Sample Matrix Spike Duplicate File ID: 14120818.D		Type M		est Code: El					12/08/2014 17:40	
Sample ID: 14120543-01AGSD	Units : µg/L			SD_09_141			Prep I		12/08/2014 17:40	
Analyte	Result	PQL				LCL(ME)			/ai %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2310 42 48.5 50.9	250		0		54 70 70 70	143 130 130 130	2166		

#### 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.



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Date: 12-Dec-14	. (	QC S	ummar	y Repo	rt			10 1 1	<b>Work Ord</b> 14120543	
Method Blank		Type N	IBLK T	est Code: E	PA Met	hod SW8	260B			
File ID: 14120804.D			В	atch ID: MS	09W120	A80	Analy	/sis Date:	12/08/2014 11:55	
Sample ID: MBLK MS09W1208A	Units : µg/L		Run ID: M	SD_09_141	208A		Prep	Date:	12/08/2014 11:55	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5		ė.						
Benzene	ND	0.5								
Toluene Ethylbenzene	ND ND	0.5 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 Surr: 4-Bromofluorobenzene	10.3 10.4		10 10		103 104	70 70	130 130			
	10.4	<b>7</b> 1						<u>-</u>		
Laboratory Control Spike		Type L		est Code: E				olo Deter	40/00/0044 44.04	
File ID: 14120802.D				atch ID: MS		JBA	•		12/08/2014 11:04	
Sample ID: LCS MS09W1208A	Units : µg/L			SD_09_141		1.01.015		Date:	12/08/2014 11:04	Ound
Analyte	Result	PQL		SpkRetVal				RPDRei	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE) Benzene	6.49 10.2	0.5			65 102	63 70	137 130			
Toluene	9.16	0.5 0.5			92	80	120			
Ethylbenzene	9.46	0.5			95	80	120			
m,p-Xylene	9.11	0.5			91	65	139			
o-Xylene	8.75	0.5			88 80	= 70 70	130 130			
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	8.01 9.83		10 10		98	70	130			
Surr: 4-Bromofluorobenzene	9.99		10		99.9	70	130			
Sample Matrix Spike		Type M	IS Te	est Code: E	PA Met	hod SW82	260B			
File ID: 14120815.D		••	Bá	atch ID: MS	09W120	)8A	Analy	sis Date:	12/08/2014 16:28	
Sample ID: 14120543-01AMS	Units : µg/L		Run ID: MS	SD_09_141:	208A		Prep	Date:	12/08/2014 16:28	
Analyte	Result	PQL				LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	34.5	1.3	50	0	69	56	140			
Benzene	50.7	1.3		0	101	67	134			
Toluene	46.3	1.3	50	0	93	38	130			
Ethylbenzene m,p-Xylene	46.1 43.6	1.3 1.3	50 50	0. 0	92 87	70 65	130 139			
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 Surr: 4-Bromofluorobenzene	46.9		50		94	70 70	130 130			
Surr: 4-Bromonuorobenzene	49.5		50		99					-
Sample Matrix Spike Duplicate File ID: 14120816.D		Type M		est Code: El itch ID: MSI				sis Date:	12/08/2014 16:52	
Sample ID: 14120543-01AMSD	Units : µg/L			SD_09_141			Prep		12/08/2014 16:52	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %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		
Toluene Ethylbenzene	55.9 56.2	1.3	50 50	0	112 112	38 70	130 130	46.28 46.1		
m,p-Xylene	53.7	1.3 1.3	50 50	0	107	65	139	43.55		R5
o-Xylene	51.9	1.3	50	0	104	69	130	42.25		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			



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

Page: 1 of 1

WorkOrder: STR14120543

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

Client:

Stratus Environmental 3330 Cameron Park Drive Suite 550

Cameron Park, CA 95682-8861

Report Attention **Phone Number EMail Address** 

(530) 676-2062 x sbittinger@stratusinc.net

EDD Required: Yes

Sampled by : C. Hill

PO:

Client's COC #: 12347

Olympic Station

Scott Bittinger

Cooler Temp 1°C

Samples Received 05-Dec-14

**Date Printed** 05-Dec-14

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

								Reques	ted Tests		
Alpha	Client	Collection	No. of	<b>Bottles</b>		TPH/P_W	AOC_M				
Sample ID	Sample ID	Matrix Date	Alpha	Sub	TAT						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:

Alpha Analytical, Inc.

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: Address:

#### Alpha Analytical, Inc.

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

Phone: 775-355-1044

Fax: 775-355-0406

12347

#### Satellite Service Centers:

Northern CA: 9891 Horn Road, Suite C, Rancho Cordova, CA 95827 Southern NV: 6255 McLeod Ave, Suite 24, Las Vegas, NV 89120 Southern CA: 1007 E. Dominguez St., Suite O, Carson, CA 90746

Phone: 916-366-9089 Phone: 702-281-4848 Phone: 714-386-2901

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Company:	Consu	tant Client Info:		Job#	Job and F	Purchase Or	der info:	11		Name:	Report A	ttention/	Project I	Manage	r:					Deliver	able Inf		
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field sampler)	attent to the	validity and authenticity of this san	ple(s). I am av	ware that ta	ampering w	with or intentio	nally mistat	eling the	sample l	cation, da	ite or time	of collect	ion is con	sidered f	raud and	may be gi	rounds fo	or legal act	ion. NAC	445.0636	(c) (2).		
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		* Kou : 00 . 4		44 104 :		T 0#																L	
		* Key: AQ - Aque ed 60 days after sample receipt unless	ous W	/A - Waste	e ()	T - Other	**: L-L	ner '	V - VOA	2.2	oil tar	0.04	v ⊤	Tadler	B - E	·	P - Pla	-41- 4	OT - Othe				



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### **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	Date	Date
				Limit	Extracted	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 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.

Report Date



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### **VOC Sample Preservation Report**

work Order: STR14120541	Job: Olympic Station	3	
Alpha's Sample ID	Client's Sample ID	Matrix	рН
14120541-01A	Oly W EFF	Aqueous	2

12/8/14

Report Date



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 Su	ımmary	Report				Work Orde 14120541	r:
Method Blank File ID: 14120505.D Sample ID: MBLK MS09W1205B Analyte	Units : µg/L Result	Type M	Ba Run ID: <b>MS</b>	tch ID: MS09	9W120 05A	5B	15B/C / SW8260B Analysis Date: Prep Date: UCL(ME) RPDRef	12/05/2014 12:38 12/05/2014 12:38 Val %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	ND 7.19 10.7 10.4	50	10 10 10		72 107 104	70 70 70	130 130 130		
Laboratory Control Spike File ID: 14120504.D Sample ID: GLCS MS09W1205B	Units : µg/L	Type L	Ba Run ID: MS	ntch ID: MS0 SD_09_1412	9W120	5B	Prep Date:	12/05/2014 12:01 12/05/2014 12:01	Our
Analyte TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	433 6.99 10.5 10.7	PQL 50		SpkRefVal	%REC 108 70 105 107	70 70 70 70 70 70	UCL(ME) RPDRef 130 130 130 130	Val %RPD(LIMIT)	Quai
Sample Matrix Spike File ID: 14120517.D Sample ID: 14120541-01AGS Analyte	Units : µg/L Result	Type N	Ba Run ID: M	atch ID: MS0 SD 09 1412	9W120 205A	)5B	015B/C / SW8260B Analysis Date: Prep Date: UCL(ME) RPDRef	12/05/2014 17:40 12/05/2014 17:40	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2180 41.4 49.1 52.3	250	2000 50 50 50	0	109 83 98 105	54 70 70 70	143 130 130 130		
Sample Matrix Spike Duplicate File ID: 14120518.D Sample ID: 14120541-01AGSD Analyte	Units : <b>µg/L</b> Result	Type N	Ba Run ID: M	atch ID: MS0 SD 09 1412	9W120 205A	)5B	Prep Date: UCL(ME) RPDRe	12/05/2014 18:04 12/05/2014 18:04 Val %RPD(Limit)	Qual
TPH-P (GRO) Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	2740 41.1 49.5 51.4	250	2000 50 50 50	0	137 82 99 103	54 70 70 70	143 218 130 130 130	4 22.5(23)	

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.



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

Date: 12-Dec-14	(	Work Ord 1412054						
Method Blank File ID: 14120505.D	11-24-	Type MBL	Batch I	D: MS09W1		Analysis Da	ate: 12/05/2014 12;38	
Sample ID: MBLK MS09W1205A Analyte	Units : µg/L Result		_	9_141205A		Prep Date:	12/05/2014 12:38 RefVal %RPD(Limit)	Quai
Methyl tert-butyl ether (MTBE)	· · · · · · · · · · · · · · · · · · ·		pkval Spk	Telval 70KE	C LUL(ME)	OCL(ME) RPDI	Reival WINFD(Lillill)	Qual
Benzene	ND ND	0.5 0.5						
Toluene	ND	0.5						
Ethylbenzene	ND	0.5						
m,p-Xylene o-Xylene	ND	0.5						
Surr: 1,2-Dichloroethane-d4	ND 7.19	0.5	10	72	70	130		
Surr: Toluene-d8	10.7		10	107		130		
Surr: 4-Bromofluorobenzene	10.4		10	104	70	130		
Laboratory Control Spike		Type LCS	Test C	ode: EPA M	ethod SW8	260B	***************************************	
File ID: 14120502.D			Batch I	D: MS09W1	205A	Analysis Da	ite: 12/05/2014 10:59	
Sample ID: LCS MS09W1205A	Units : µg/L	Run	ID: MSD_0	9_141205A		Prep Date:	12/05/2014 10:59	
Analyte	Result		_		C LCL(ME)	UCL(ME) RPDF	RefVal %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	6.96	0.5	10	70	63	137		
Benzene	10.3	0.5	10	103	3 70	130		
Toluene	9.17	0.5	10	92		120		
Ethylbenzene m,p-Xylene	9.7 9.53	0.5 0.5	10 10	97 95		120 139		
o-Xviene	9.53	0.5	10	92		130		
Sun: 1,2-Dichloroethane-d4	7.75	0.0	10	78		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 Co	ode: EPA M	ethod SW8	260B		
File ID: 14120515.D			Batch I	D: MS09W1	205A	Analysis Da	te: 12/05/2014 16:53	
Sample ID: 14120541-01AMS	Units : µg/L		_	9_141205A		Prep Date:	12/05/2014 16:53	
Analyte	Result	PQL S	pkVal Spkl	RefVal %RE	C LCL(ME)	UCL(ME) RPDF	RefVal %RPD(Limit)	Quai
Methyl tert-butyl ether (MTBE)	35.6	1.3	50	0 71		140		
Benzene Toluene	52.9	1.3	50	0 106		134		
Ethylbenzene	· 48.7 50.1	1.3 1.3	50 50	0 97 0 100		130 130		
m,p-Xylene	48	1.3	50	0 96		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 Surr: 4-Bromofluorobenzene	48 48.9		50 50	96 98	70 70	130 130		
	40.9	Turne MCD			ethod SW8			
Sample Matrix Spike Duplicate File ID: 14120516.D		Type MSD		D: <b>MS09W1</b>			te: 12/05/2014 17:17	
Sample ID: 14120541-01AMSD	Units : µg/L	Run	ID: MSD_0		2007	Prep Date:	12/05/2014 17:17	
Analyte	Result				C LCL(ME)	•	RefVal %RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	38.1	1.3	50	0 76			5.55 6.9(40)	
Benzene	57.5	1.3	50	0 115			2.93 8.3(21)	
Toluene	52.9	1.3	50	0 106	38		8.2(20)	
Ethylbenzene	55.4	1.3	50	0 111			0.09 10.0(20)	
m,p-Xylene o-Xylene	53.9 52	1.3	50 50	0 108 0 104			7.99 11.5(20) 5.75 10.7(20)	
Surr: 1,2-Dichloroethane-d4	42.1	1,3	50 50	84		130	3.74	
Surr: Toluene-d8	49.1		50	98	70	130		
Surr: 4-Bromofluorobenzene	49.5		50	99	70	130		



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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.

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

**Phone Number** 

(530) 676-2062 x

WorkOrder: STR14120541

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

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

Report Attention

Scott Bittinger

Cooler Temp

Samples Received 05-Dec-14 Date Printed 05-Dec-14

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

									Request	ted Tests		
Alpha	Client	Collection	No. of	<b>Bottles</b>		TPH/P_W	VOC_W	····				1
Sample ID	Sample ID	Matrix Date	Alpha	Sub	TAT							Sample Remarks
STR14120541-01A	Oly W EFF	AQ 12/04/14 06:40	3	0	0	GAS-C	BTXE/M_C					

**EMail Address** 

sbittinger@stratusinc.net

Comments:

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

Signature

Logged in by:

ANAONA C

CHALO

Company

Alpha Analytical, Inc.

Date/Time

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

Company: Attn: Address: City, State, Zip: Phone Number:	Billing Information: 31 ra (V5 Debb) V 3330 Camevum (*) CAMBILLY FT 530 VIVIN FEX: 530	Analytical Estate of the Comments of the Comme	Main Laboratory: 255 Gler  Satellite  Northern CA: 9891 Horn Roa  Southern NV: 6255 McLeod	Analytical, Inc. dale Ave, Suite 21 Sparks, NV 89431  Service Centers; d, Suite C, Rancho Cordova, CA 95827  Ave, Suite 24, Las Vegas, NV 89120  nguez St., Suite O, Carson, CA 90748	Phone: 775-355-1044 Fax: 775-355-0406  Phone: 916-366-9089 Phone: 702-281-4848 Phone: 714-386-2901	12347 Page#
Company: Address: City, State, Zip: Samples Collect	Consultant/ Client Info:	Job and Purchase Order I  Job #  Job Name: P.O. #:  NV WA ID OR DOD Site Other	Info: Report Name: Email Address Phone #: Cell #:		EDD Required? Ye Global ID: Data Validation Leve	3
Time Sample (IHMM) (IMM)	d (See Key	Oly W INF  Oly W GHE ( 2  Oly W GHE Z 3  MOLY W EFF 7	TAT W St Continers. (See Key Bal	Analysis Requested		Remarks
ADDITIONAL INS	TRUCTIONS:					
(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:						
Relinquished by:	Signature/Affiliation):	Date: 12 - 4 - 1 4 Time: 1008	Received by: (Signature/Affiliation)  Received by: (Signature/Affiliation):	PT	Date:	-4-14 Time: 1008
Relinquished by: (	Signature/Affiliation)	Date: Time:				-0514 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.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

Submittal Date/Time: 12/18/2014 11:11:22 AM

Confirmation Number: 1860636115

**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 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.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

**Submittal Date/Time:** 12/18/2014 11:12:28 AM

**Confirmation Number:** 7504259228

**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 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.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

**Submittal Date/Time:** 12/18/2014 11:13:16 AM

Confirmation Number: 9941032171

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## **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.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

<u>Submittal Date/Time:</u> 12/18/2014 11:18:45 AM

Confirmation Number: 8744346380

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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 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

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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 WINF

Report Type: Monitoring Report - Quarterly

Facility Global ID: T0600102256

Facility Name: OLYMPIC STATION
File Name: 14110443\_EDF.zip

Organization Name: Stratus Environmental, Inc.

<u>Username:</u> STRATUS NOCAL IP Address: 50.192.223.97

Submittal Date/Time: 12/18/2014 12:07:35 PM

Confirmation Number: 7563102066

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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 WGAC

Report Type: Monitoring Report - Quarterly

Facility Global ID: T0600102256

Facility Name: OLYMPIC STATION
File Name: 14110447 EDF.zip

Organization Name: Stratus Environmental, Inc.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

Submittal Date/Time: 12/18/2014 12:09:58 PM

**Confirmation Number:** 8507086217

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GeoTracker ESI

## **GEOTRACKER ESI**

STATE WATER RESOURCES CONTROL BOARD

UPLOADING A EDF FILE

12/18/2014

### **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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#### 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: EDI

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.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

Submittal Date/Time: 12/18/2014 1:10:26 PM

Confirmation Number: 1521401584

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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 WGAC

Report Type: Monitoring Report - Quarterly

Facility Global ID: T0600102256

Facility Name: OLYMPIC STATION
File Name: 14120543 EDF.zip

Organization Name: Stratus Environmental, Inc.

<u>Username:</u> STRATUS NOCAL

<u>IP Address:</u> 50.192.223.97

<u>Submittal Date/Time:</u> 12/18/2014 12:21:46 PM

Confirmation Number: 7501715958

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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 WEFF

Report Type: Monitoring Report - Quarterly

Facility Global ID: T0600102256

Facility Name: OLYMPIC STATION
File Name: 14120541\_EDF.zip

Organization Name: Stratus Environmental, Inc.

<u>Username:</u> 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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