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11:19 am, Nov 02, 2011

Alameda County
Environmental Health

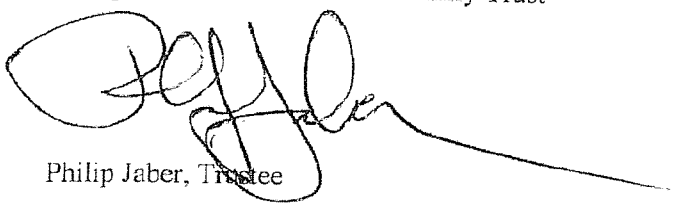
Mr. Mark Detterman
Alameda County Environmental Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

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

Dear Mr. Detterman:

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

Sincerely,
George and Frida Jaber 1989 Family Trust



Philip Jaber, Trustee

STRATUS
ENVIRONMENTAL, INC.

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

October 26, 2011
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: **Quarterly Groundwater Monitoring Report – Third Quarter 2011**
Former Olympic Station
1436 Grant Avenue
San Lorenzo, California
ACEHD Case No. RO0000373, GeoTracker No. T0600102256

Dear Mr. Detterman:

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

PROFESSIONAL GEOLOGIST
Stephen J. Carter
No. 5577
STATE OF CALIFORNIA

Stephen J. Carter, P.G.
Project Manager

Gowri S. Kowtha, P.E.
Principal Engineer

Attachment: Quarterly Groundwater Monitoring Report, Third Quarter 2011

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

October 26, 2011

FORMER OLYMPIC STATION
QUARTERLY GROUNDWATER MONITORING REPORT

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

WORK PERFORMED THIS QUARTER (Third Quarter 2011):

1. On August 2, 2011, Stratus conducted quarterly groundwater monitoring and sampling activities. During this event, wells MW-1 through MW-4 and EX-1 through EX-3 were gauged for depth to water and evaluated for the presence of free product. Following gauging, all wells were purged and groundwater samples were collected. Groundwater samples were analyzed at a state-certified analytical laboratory. Well construction details and tabulated historical groundwater elevation and analytical data are summarized in Tables 1 and 2. Field data sheets, sampling procedures and laboratory analytical reports are included as Attachments A, B, and C respectively.

2. Stratus completed the utility lateral preferential pathway survey on September 20, 2011.

3. Stratus implemented the ozone injection pilot study on September 29, 2011. Ozone is currently being injected at wells IW-1 and IW-2.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2011):

1. In accordance with the ACEHD letter of January 28, 2011, all wells will be gauged for depth to water and wells MW-4 and EX-1 through EX-3 will be sampled during fourth quarter 2011. Other wells may also be sampled to assess the effectiveness of the pilot test.

2. Stratus will submit a report documenting the findings from the DPE pilot test. This report will also document installation of remediation wells EX-1 through EX-3 and IW-1 and IW-2, and soil gas sampling point SV-5.

3. Stratus will submit a report of findings for the utility lateral survey.

4. Stratus will prepare and submit a ozone injection report of the findings from the ozone sparge pilot study.

Current Phase of Project:	Monitoring / Assessment
Frequency of Groundwater Monitoring:	All Wells = Quarterly
Frequency of Groundwater Monitoring and Sampling:	Wells = MW-4, EX-1, EX-2 & EX-3 (Quarterly) Wells MW-1 through MW-3 (Semi-Annual 1st and 3rd)
Groundwater Sampling Date:	August 2, 2011
Is Free Product (FP) Present on Site:	No; Sheen noted in MW-4 (3Q11)

Approximate Depth to Groundwater:	6.82 to 7.47 ft bgs
Groundwater Flow Direction:	Southwest
Groundwater Gradient:	0.003 to 0.006 ft/ft

DISCUSSION:

On August 2, 2011, third quarter 2011 groundwater monitoring and sampling activities were conducted at the site. During this event, all wells were gauged for depth to water and evaluated for the presence of free product; sheen was noted in well MW-4. Following gauging, wells MW-1 through MW-4, and EX-1 through EX-3 were purged and sampled. Groundwater samples were analyzed at a state-certified analytical laboratory for gasoline range organics (GRO) by EPA Method SW/8015B 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, sampling procedures and laboratory analytical reports are included as Attachments A, B and C. GeoWell and analytical data has been uploaded to the GeoTracker database and confirmation is included in Attachment D.

At the time of the third quarter 2011 monitoring event, depth-to-water was measured between 6.82 and 7.47 feet below ground surface. Depth-to-water measurements were converted to feet above mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). The groundwater flow direction was to the southwest with a calculated gradient of 0.003 to 0.006 ft/ft. This is consistent with historical data.

GRO and benzene were reported in five of the seven wells sampled during third quarter 2011, at maximum concentrations of 4,700 micrograms per liter (µg/L) and 290 µg/L, respectively. MTBE was reported in all seven of the wells sampled with a maximum concentrations of 970 µg/L. Maximum GRO, benzene, and MTBE concentrations were all reported in well MW-4. Figure 3 presents GRO, benzene and MTBE analytical results from the third quarter 2011 sampling event.

ATTACHMENTS:

- Table 1 Well Construction Details
- Table 2 Groundwater Elevation and Analytical Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map (Third Quarter 2011)
- Figure 3 Groundwater Analytical Summary (Third Quarter 2011)
- 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
- Appendix E Historical Groundwater Analytical Data

TABLE 1
WELL CONSTRUCTION DETAILS
Former Olympic Service Station, 1436 Grant Avenue, San Lorenzo, CA

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

Notes:
HSA = Hollow Stem Auger

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

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)*	Grouwater Elevation (ft msl)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	02/04/11	7.20	15.71	8.51	<50	0.90	<0.5	<0.5	<0.5	62
	06/03/11	7.28	18.60	11.32			Not Sampled			
	08/02/11	7.47		11.13	120	<0.50	<0.50	<0.50	<0.50	160
MW-2	02/04/11	6.79	15.17	8.38	<50	<0.50	<0.50	<0.50	<0.50	4.4
	06/03/11	6.82	18.00	11.18			Not Sampled			
	08/02/11	7.06		10.94	<50	<0.50	<0.50	<0.50	<0.50	46
MW-3	2/4/2011[1]	6.80	15.13	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
MW-4	2/4/2011[1]	6.71	15.15	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
EX-1	06/03/11	6.96	18.14	11.18	76	8.3	<0.50	<0.50	0.99	37
	08/02/11	7.20		10.94	420	37	0.65	3.5	2.9	32
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
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

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

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)*	Grouwater Elevation (ft msl)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)

Legend/Key:

NM = Not measured

GRO = Gasoline Range Organics C6-C12

MTBE = Methyl tertiary butyl ether

[1] Weakly modified or unmodified gasoline is significant.

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

ft msl = feet above mean sea level

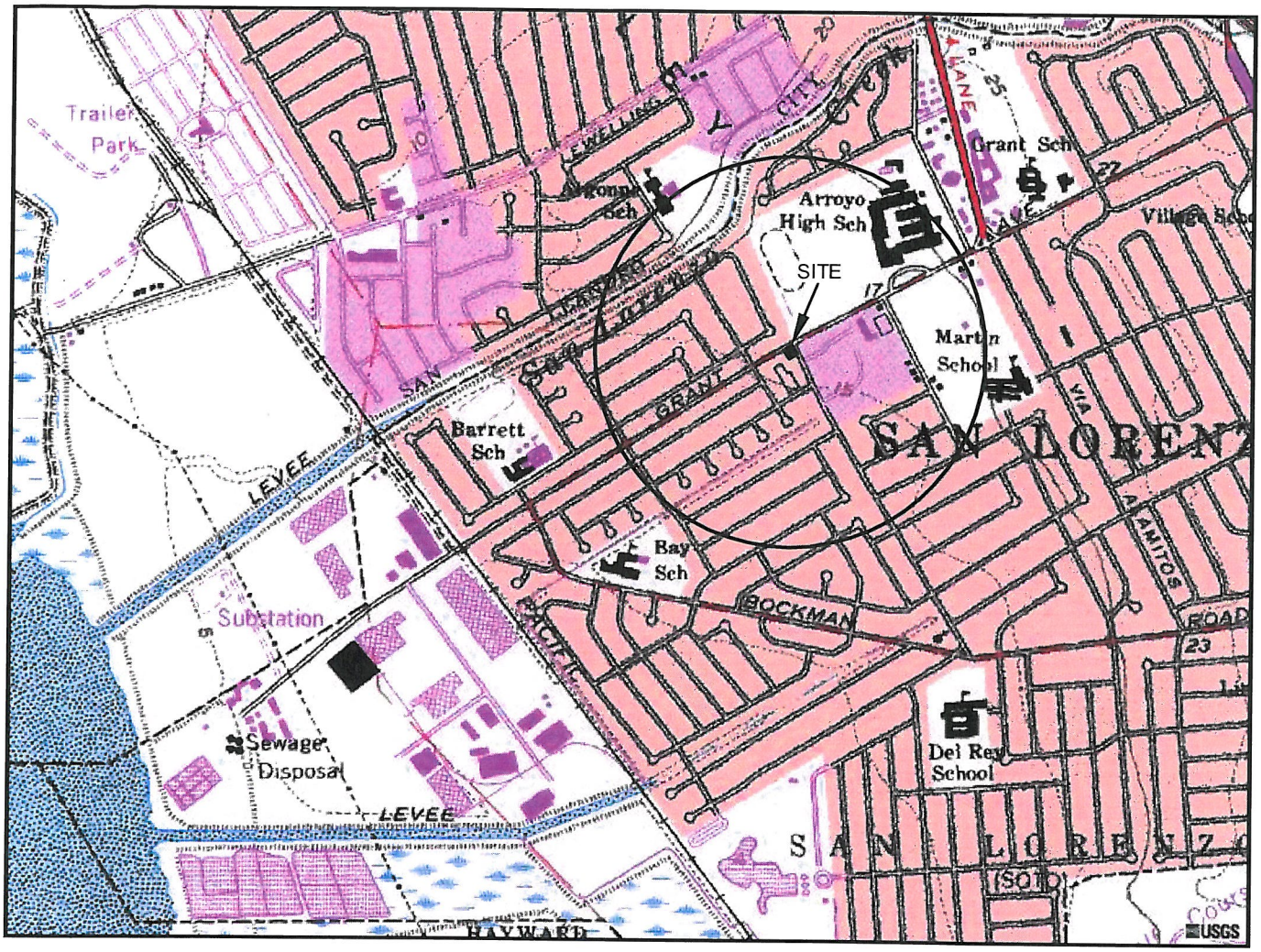
µg/L = micrograms per liter

*Well elevations and locations surveyed by Morrow Surveying on June 15, 2011.

Analytical Methods:

GRO and BTEX analyzed according to EPA Method 8021B/8015Bm.

MTBE analyzed according to EPA Method SW8260B



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

N

QUADRANGLE LOCATION

0 1800 FT

APPROXIMATE SCALE

STRATUS
ENVIRONMENTAL, INC.

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

SITE LOCATION MAP

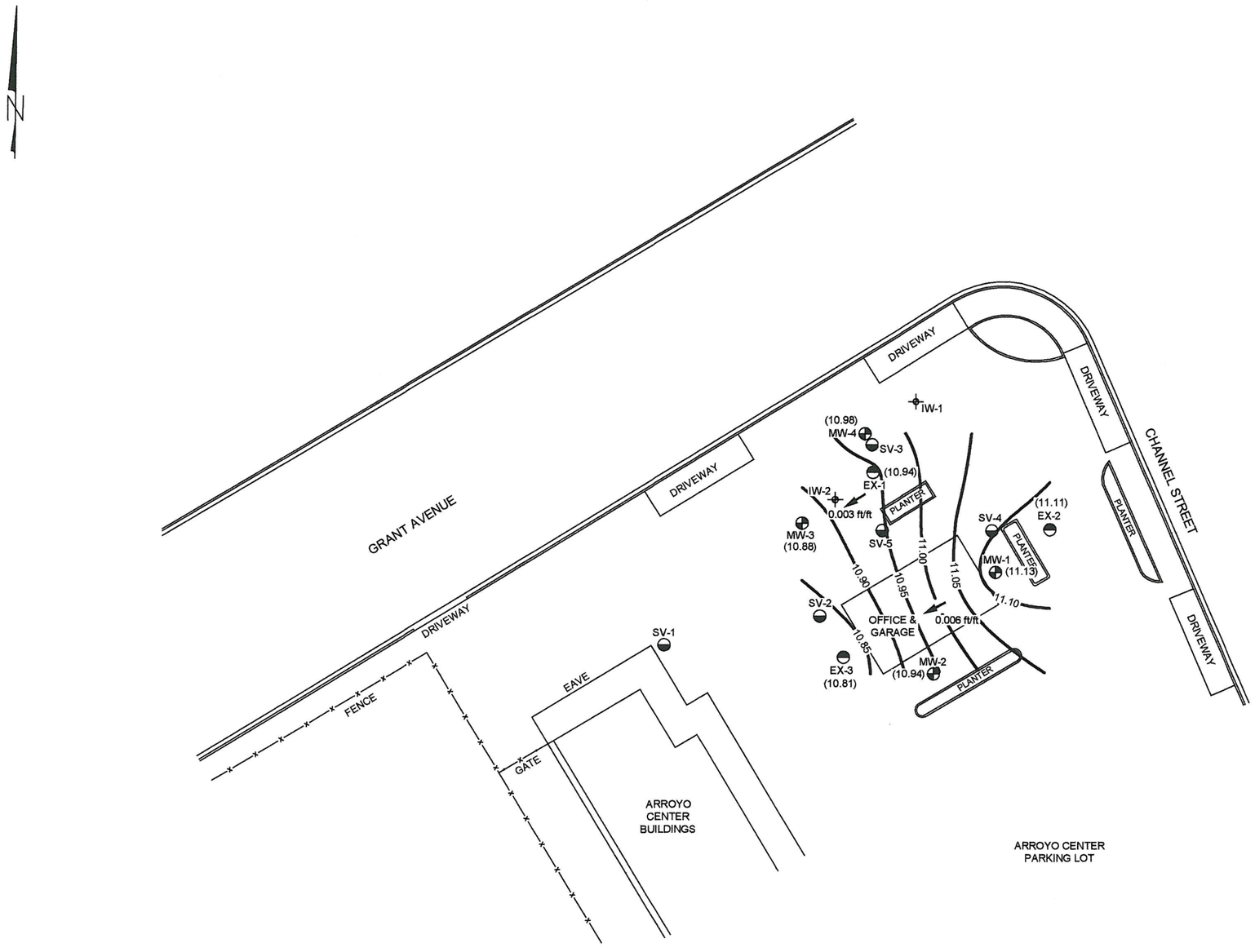
FIGURE
1

PROJECT NO.
2115-1436-01

LEGEND

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

WELLS MEASURED ON 8/02/11
MSL = MEAN SEA LEVEL



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

STRATUS
ENVIRONMENTAL, INC.

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
3rd QUARTER 2011

FIGURE
2

PROJECT NO.
2115-1436-01

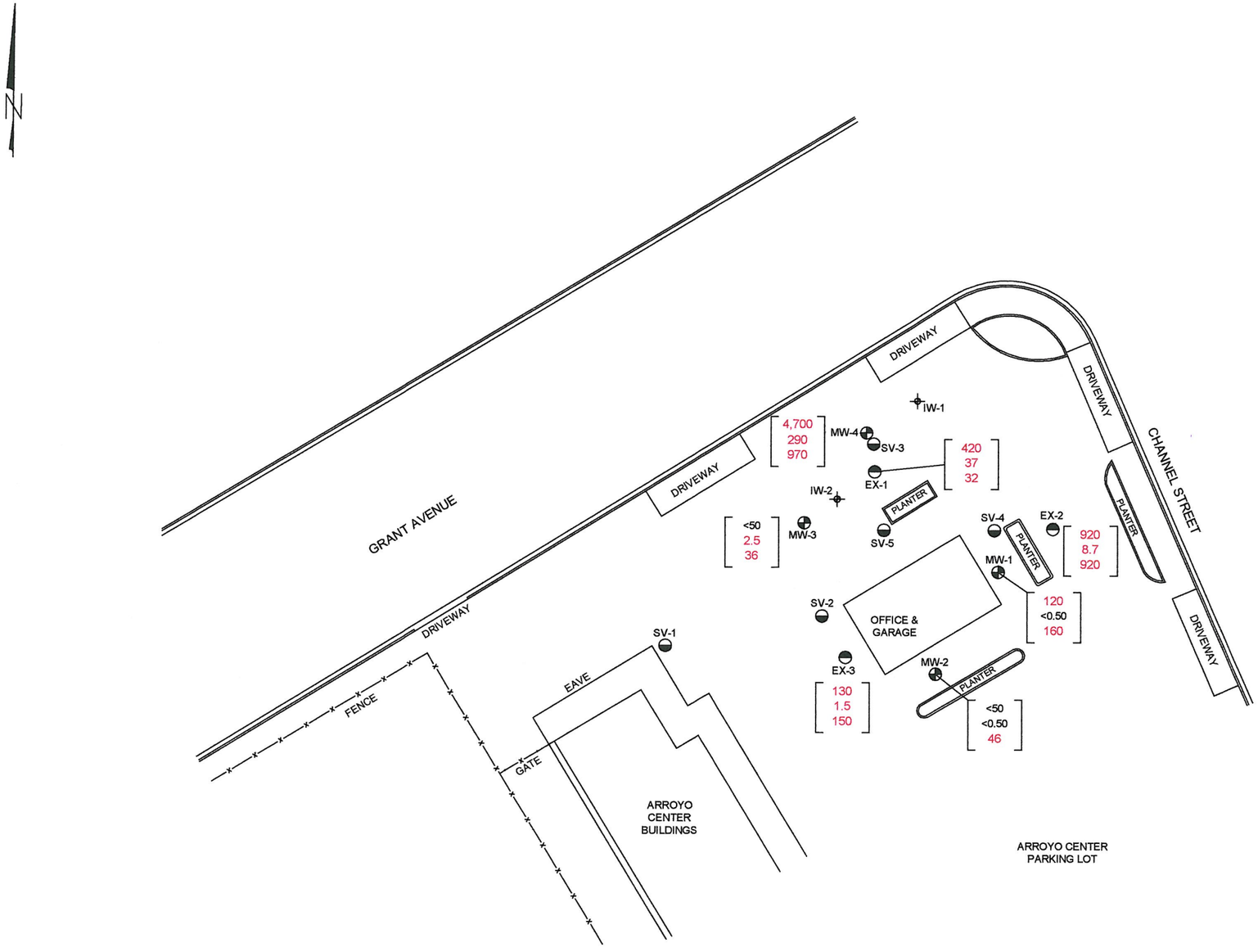
JMP REV August 12, 2011 Olympic Quarterly Figures
Olympic\Quarterly

LEGEND

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

[<50 / <0.50 / 46] GASOLINE RANGE ORGANICS (GRO) CONCENTRATION IN µg/L; BENZENE CONCENTRATION IN µg/L; METHYL TERTIARY BUTYL ETHER (MTBE) IN µg/L

WELLS SAMPLED ON 8/02/11
GRO ANALYZED BY EPA METHOD 8015B
MTBE & BENZENE ANALYZED BY EPA METHOD 8260B



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

STRATUS ENVIRONMENTAL, INC.

0 40 FT
SCALE

FORMER OLYMPIC SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
3rd QUARTER 2011

FIGURE
3

PROJECT NO.
2115-1436-01

JMP REV August 12, 2011 Olympic Quarterly Figures
Olympic\Quarterly

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address: 1436 GRANT
City: LORENZO
Sampled by: Vince Z
Signature: VZ

Site Number: Olympic
Project Number: 2115-1436-01
Project PM: Steve Carter
DATE: 8-2-11

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-1	0644		7.47	24.20	16.73	2	.5	8.37	8.50		X			7.60	MW-1	0954	1.28
2	0657		7.06	18.50	11.44	2	.5	5.72	6.00					7.09	2	0717	1.95
3	0651		7.07	18.85	11.78	2	.5	5.89	6.00					7.25	3	0812	1.19
4	0646	Sheen	7.01	9.30	2.29	4	2	4.58	2.50				Dry	7.23	4	1003	1.43
EX-1	0838		7.20	19.80	12.60	4	2	25.20	25.00					7.42	EX-1	0859	1.37
2	0640		7.03	18.60	11.57	4	2	23.14	23.00					7.03	2	0930	1.23
3	0554		6.82	19.75	12.83	4	2	25.66	25.50					6.95	3	0748	1.65

96.50

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

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

CALIBRATION DATE
pH VZ 8-2-11
Conductivity
DO

T:\Forms

NAL

STRATUS ENVIRONMENTAL, INC.

Site Address 1436 GRANT
City San Lorenzo
Sampled By: Vince
Signature VZ

Site Number Olympic
Project Number
Project PM Steve C
DATE 8-2-11

Well ID	MW-2			
Purge start time	0703	Odor	Y (N)	
Bail	Temp C	pH	cond	gallons
time 0703	18.4	6.99	648	X
time 0710	18.3	7.18	824	3
time 0717	18.6	7.27	808	6
time				
purge stop time	0717	ORP	54	

Well ID	EX-3			
Purge start time	0728	Odor	Y (N)	
Bail	Temp C	pH	cond	gallons
time 0728	18.5	7.12	862	X
time 0738	18.8	7.18	866	12.5
time 0748	18.6	7.20	866	25.5
time				
purge stop time	0748	ORP	60	

Well ID	MW-3			
Purge start time	0801	Odor	(Y) N	
Bail	Temp C	pH	cond	gallons
time 0801	19.4	7.02	823	X
time 0806	19.3	7.09	821	3
time 0812	19.0	7.14	821	6
time				
purge stop time	0812	ORP	67	

Well ID	MW-4			sheen
Purge start time	0822	Odor	(Y) N	
Bail	Temp C	pH	cond	gallons
time 0822	19.6	6.78	573	X
time 0826	19.7	6.83	557	2
time 0827	Dry @		2.5 gal	
time 1803	19.8	6.83	532	2.5
purge stop time	0827	ORP	41	

Well ID	EX-1			
Purge start time	0843	Odor	Y (N)	
Bail	Temp C	pH	cond	gallons
time 0843	18.4	7.15	763	X
time 0850	18.3	7.18	769	12.5
time 0859	18.4	7.25	763	25
time				
purge stop time	0859	ORP	36	

Well ID	EX-2			
Purge start time	0914	Odor	Y (N)	
Bail	Temp C	pH	cond	gallons
time 0914	20.4	6.91	752	X
time 0920	20.8	6.97	738	12.5
time 0930	20.7	7.01	740	23.0
time				
purge stop time	0930	ORP	45	

Well ID	MW-1			
Purge start time	0939	Odor	Y (N)	
Bail	Temp C	pH	cond	gallons
time 0939	18.8	7.16	745	X
time 0946	18.8	7.17	749	4
time 0954	19.0	7.17	753	8.5
time				
purge stop time	0954	ORP	41	

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

GC

APPENDIX B

SAMPLING AND ANALYSES PROCEDURES

SAMPLING AND ANALYSIS PROCEDURES

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

Ground Water and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

Subjective Analysis of Ground Water

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

Monitoring Well Purging and Sampling

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

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

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

QUALITY ASSURANCE PLAN

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

General Sample Collection and Handling Procedures

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

Soil and Water Sample Labeling and Preservation

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

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

Sample Identification and Chain-of-Custody Procedures

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

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

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

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

Equipment Cleaning

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

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

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

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

Internal Quality Assurance Checks

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

- Laboratory Quality Assurance

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

- Field Quality Assurance

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

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

Types of Quality Control Checks

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

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

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

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

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

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

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

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Steve Carter
Phone: (530) 676-6008
Fax: (530) 676-6005
Date Received : 08/03/11

Job: Olympic

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

		Parameter	Concentration		Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-1**						
Lab ID :	STR11080347-01A	TPH-P (GRO)	120		50 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 09:54	Methyl tert-butyl ether (MTBE)	160		0.50 µg/L	08/04/11	08/04/11
		Benzene	ND		0.50 µg/L	08/04/11	08/04/11
		Toluene	ND		0.50 µg/L	08/04/11	08/04/11
		Ethylbenzene	ND		0.50 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
		o-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
Client ID :	**MW-2**						
Lab ID :	STR11080347-02A	TPH-P (GRO)	ND		50 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 07:17	Methyl tert-butyl ether (MTBE)	46		0.50 µg/L	08/04/11	08/04/11
		Benzene	ND		0.50 µg/L	08/04/11	08/04/11
		Toluene	ND		0.50 µg/L	08/04/11	08/04/11
		Ethylbenzene	ND		0.50 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
		o-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
Client ID :	**MW-3**						
Lab ID :	STR11080347-03A	TPH-P (GRO)	ND		50 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 08:12	Methyl tert-butyl ether (MTBE)	36		0.50 µg/L	08/04/11	08/04/11
		Benzene	2.5		0.50 µg/L	08/04/11	08/04/11
		Toluene	ND		0.50 µg/L	08/04/11	08/04/11
		Ethylbenzene	ND		0.50 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
		o-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
Client ID :	**MW-4**						
Lab ID :	STR11080347-04A	TPH-P (GRO)	4,700		500 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 10:03	Methyl tert-butyl ether (MTBE)	970		2.5 µg/L	08/04/11	08/04/11
		Benzene	290		2.5 µg/L	08/04/11	08/04/11
		Toluene	ND	V	2.5 µg/L	08/04/11	08/04/11
		Ethylbenzene	12		2.5 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND	V	2.5 µg/L	08/04/11	08/04/11
		o-Xylene	ND	V	2.5 µg/L	08/04/11	08/04/11
Client ID :	**EX-1**						
Lab ID :	STR11080347-05A	TPH-P (GRO)	420		50 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 08:59	Methyl tert-butyl ether (MTBE)	32		0.50 µg/L	08/04/11	08/04/11
		Benzene	37		0.50 µg/L	08/04/11	08/04/11
		Toluene	0.65		0.50 µg/L	08/04/11	08/04/11
		Ethylbenzene	3.5		0.50 µg/L	08/04/11	08/04/11
		m,p-Xylene	2.9		0.50 µg/L	08/04/11	08/04/11
		o-Xylene	ND		0.50 µg/L	08/04/11	08/04/11

Alpha Analytical, Inc.

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Client ID :	**EX-2**						
Lab ID :	STR11080347-06A	TPH-P (GRO)	920		200 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 09:30	Methyl tert-butyl ether (MTBE)	920		1.0 µg/L	08/04/11	08/04/11
		Benzene	8.7		1.0 µg/L	08/04/11	08/04/11
		Toluene	ND	V	1.0 µg/L	08/04/11	08/04/11
		Ethylbenzene	ND	V	1.0 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND	V	1.0 µg/L	08/04/11	08/04/11
		o-Xylene	ND	V	1.0 µg/L	08/04/11	08/04/11
Client ID :	**EX-3**						
Lab ID :	STR11080347-07A	TPH-P (GRO)	130		50 µg/L	08/04/11	08/04/11
Date Sampled	08/02/11 07:48	Methyl tert-butyl ether (MTBE)	150		0.50 µg/L	08/04/11	08/04/11
		Benzene	1.5		0.50 µg/L	08/04/11	08/04/11
		Toluene	ND		0.50 µg/L	08/04/11	08/04/11
		Ethylbenzene	ND		0.50 µg/L	08/04/11	08/04/11
		m,p-Xylene	ND		0.50 µg/L	08/04/11	08/04/11
		o-Xylene	ND		0.50 µg/L	08/04/11	08/04/11

Gasoline Range Organics (GRO) C4-C13

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

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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

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

8/10/11
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: STR11080347 **Job:** Olympic

Alpha's Sample ID	Client's Sample ID	Matrix	pH
11080347-01A	MW-1	Aqueous	2
11080347-02A	MW-2	Aqueous	2
11080347-03A	MW-3	Aqueous	2
11080347-04A	MW-4	Aqueous	2
11080347-05A	EX-1	Aqueous	2
11080347-06A	EX-2	Aqueous	2
11080347-07A	EX-3	Aqueous	2

8/10/11

Report Date

Alpha Analytical, Inc.

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

Date: 08-Aug-11

QC Summary Report

Work Order: 11080347

Method Blank

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

File ID: **11080404.D** Batch ID: **MS09W0804B** Analysis Date: **08/04/2011 12:55**

Sample ID: **MBLK MS09W0804B** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 12:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.4		10		104	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	12.4		10		124	70	130			

Laboratory Control Spike

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

File ID: **11080403.D** Batch ID: **MS09W0804B** Analysis Date: **08/04/2011 12:33**

Sample ID: **GLCS MS09W0804B** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 12:33**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	361	50	400		90	70	130			
Surr: 1,2-Dichloroethane-d4	10.6		10		106	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	11.9		10		119	70	130			

Sample Matrix Spike

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

File ID: **11080420.D** Batch ID: **MS09W0804B** Analysis Date: **08/04/2011 19:42**

Sample ID: **11080347-01AGS** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 19:42**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1650	250	2000	115.6	77	51	144			
Surr: 1,2-Dichloroethane-d4	47.2		50		94	70	130			
Surr: Toluene-d8	51.3		50		103	70	130			
Surr: 4-Bromofluorobenzene	58.7		50		117	70	130			

Sample Matrix Spike Duplicate

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

File ID: **11080421.D** Batch ID: **MS09W0804B** Analysis Date: **08/04/2011 20:05**

Sample ID: **11080347-01AGSD** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 20:05**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1680	250	2000	115.6	78	51	144	1646	2.2(29)	
Surr: 1,2-Dichloroethane-d4	46.9		50		94	70	130			
Surr: Toluene-d8	51.4		50		103	70	130			
Surr: 4-Bromofluorobenzene	57		50		114	70	130			

Comments:

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

Reported in micrograms per Liter, per client request.

Alpha Analytical, Inc.

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

Date: 08-Aug-11

QC Summary Report

Work Order: 11080347

Method Blank

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

File ID: **11080404.D** Batch ID: **MS09W0804A** Analysis Date: **08/04/2011 12:55**

Sample ID: **MBLK MS09W0804A** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 12:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	10.4		10		104	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	12.4		10		124	70	130			

Laboratory Control Spike

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

File ID: **11080402.D** Batch ID: **MS09W0804A** Analysis Date: **08/04/2011 12:10**

Sample ID: **LCS MS09W0804A** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 12:10**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.01	0.5	10		90	65	140			
Benzene	8.9	0.5	10		89	70	130			
Toluene	8.37	0.5	10		84	80	120			
Ethylbenzene	8.86	0.5	10		89	80	120			
m,p-Xylene	7.92	0.5	10		79	70	130			
o-Xylene	7.98	0.5	10		80	70	130			
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	9.58		10		96	70	130			
Surr: 4-Bromofluorobenzene	11.4		10		114	70	130			

Sample Matrix Spike

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

File ID: **11080418.D** Batch ID: **MS09W0804A** Analysis Date: **08/04/2011 18:57**

Sample ID: **11080347-01AMS** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 18:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	207	1.3	50	163.8	87	47	150			
Benzene	44.9	1.3	50	0	90	59	138			
Toluene	43.4	1.3	50	0	87	68	130			
Ethylbenzene	43.4	1.3	50	0	87	68	130			
m,p-Xylene	39.8	1.3	50	0	80	68	131			
o-Xylene	40.2	1.3	50	0	80	70	130			
Surr: 1,2-Dichloroethane-d4	48.1		50		96	70	130			
Surr: Toluene-d8	51		50		102	70	130			
Surr: 4-Bromofluorobenzene	54.9		50		110	70	130			

Sample Matrix Spike Duplicate

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

File ID: **11080419.D** Batch ID: **MS09W0804A** Analysis Date: **08/04/2011 19:19**

Sample ID: **11080347-01AMSD** Units : **µg/L** Run ID: **MSD_09_110804A** Prep Date: **08/04/2011 19:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	206	1.3	50	163.8	84	47	150	207.3	0.6(40)	
Benzene	44.3	1.3	50	0	89	59	138	44.91	1.4(21)	
Toluene	42.1	1.3	50	0	84	68	130	43.4	3.0(20)	
Ethylbenzene	42.2	1.3	50	0	84	68	130	43.41	2.8(20)	
m,p-Xylene	39	1.3	50	0	78	68	131	39.78	1.9(20)	
o-Xylene	39	1.3	50	0	78	70	130	40.17	2.9(20)	
Surr: 1,2-Dichloroethane-d4	49.6		50		99	70	130			
Surr: Toluene-d8	50.2		50		100	70	130			
Surr: 4-Bromofluorobenzene	54.2		50		108	70	130			

Comments:

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : STR11080347

Report Due By : 5:00 PM On : 10-Aug-11

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

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

EDD Required : **Yes**

Sampled by : Vince Z.

PO :

Client's COC # : 57014 Job : Olympic

Cooler Temp	Samples Received	Date Printed
3 °C	03-Aug-11	03-Aug-11

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests TPH/P_W	VOC_W	Sample Remarks
STR11080347-01A	MW-1	AQ	08/02/11 09:54	5	0	5	GAS-C	BTXE/M_C	
STR11080347-02A	MW-2	AQ	08/02/11 07:17	5	0	5	GAS-C	BTXE/M_C	
STR11080347-03A	MW-3	AQ	08/02/11 08:12	5	0	5	GAS-C	BTXE/M_C	
STR11080347-04A	MW-4	AQ	08/02/11 10:03	5	0	5	GAS-C	BTXE/M_C	
STR11080347-05A	EX-1	AQ	08/02/11 08:59	5	0	5	GAS-C	BTXE/M_C	
STR11080347-06A	EX-2	AQ	08/02/11 09:30	5	0	5	GAS-C	BTXE/M_C	
STR11080347-07A	EX-3	AQ	08/02/11 07:48	5	0	5	GAS-C	BTXE/M_C	

Comments: Security seals intact. Frozen Ice. :

	Signature	Print Name	Company	Date/Time
Logged in by:		Cheryl Gamble	Alpha Analytical, Inc.	8/3/11 14:55

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

57014

Billing Information:
Company Name: Stratus Env.
Attn: Steve C.
Address: 3330 Cameron Park Dr. #550
City, State, Zip: Cameron Park, CA
Phone Number: 530-676-6001 Fax: 530-676-6005

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

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

Consultant / Client Name: Olympic
Address: 1436 Grant
City, State, Zip: SAN LORENZO
Job #: ___ Job Name: ___
Report Attention / Project Manager
Name: Steve Carter
Email: ___
Phone: ___ Mobile: ___

Data Validation Level: III or IV
EDD / EDF? YES X NO ___
Global ID # T0600102256

Time Sampled	Date Sampled 2011	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**	GRO 8015M	BTEX 8260	MTBE	Analyses Required	REMARKS
0954	8-02	AQ	STR1080347-01A	MW-1	std		5V	X	X	X		
0717			-02A	MW-2								
0812			-03A	MW-3								
1003			-04A	MW-4								
0859			-05A	EX-1								
0930			-06A	EX-2								
0748			-07A	EX-3								

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: Vince Zaballos

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Vince Zaballos		8-2-11	1245
Relinquished by: (Signature/Affiliation) 8-2-11 1500	Received by: (Signature/Affiliation) Alpha	Date: 8/3/11	Time: 14:45
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

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

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

APPENDIX D

GEOTRACKER ELECTRONIC SUBMITTAL CONFIRMATIONS

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

Submittal Type:	**GEO_WELL**
Submittal Title:	**GeoWell 8-2-11**
Facility Global ID:	**T0600102256**
Facility Name:	**OLYMPIC STATION**
File Name:	**GEO_WELL.zip**
Organization Name:	**Stratus Environmental, Inc.**
Username:	**STRATUS NOCAL**
IP Address:	**12.186.106.98**
Submittal Date/Time:	**8/15/2011 2:38:00 PM**
Confirmation Number:	**1601795971**

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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 - Monitoring Report - Quarterly**
Submittal Title:	**Analytical 8-2-11**
Facility Global ID:	**T0600102256**
Facility Name:	**OLYMPIC STATION**
File Name:	**11080347_EDF.zip**
Organization Name:	**Stratus Environmental, Inc.**
Username:	**STRATUS NOCAL**
IP Address:	**12.186.106.98**
Submittal Date/Time:	**8/23/2011 9:04:43 AM**
Confirmation Number:	**2435246288**

VIEW QC REPORT

VIEW DETECTIONS REPORT

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APPENDIX E

HISTORICAL GROUNDWATER ANALYTICAL DATA

TABLE 2

GROUNDWATER ANALYTICAL DATA
ENCINAL PROPERTIES
FORMER OLYMPIAN SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

Well ID / TOC (ft above msl)	Date Sampled	DTW (ft)	GWE (ft above msl)	Oil & Grease	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	SVOCs & HVOCs	DIPE	TAME	ETBE	TBA	Ethanol	EDB	1,2-DCA	Notes
				← Concentrations in micrograms per liter (µg/L) →																	
ESL: Groundwater is not a current or potential drinking water resource				NE	NE	210	210	46	130	43	100	1800	--	NE	NE	NE	18,000	NE	NE	200	
Grab Groundwater Samples																					
Fit Water	9/13/1998	--	--	--	--	2,100	3,600	350	130	39	380	17,000	--	--	--	--	--	--	--	--	
BH-A	4/30/2002	17/8	--	--	<100	<100	180	<0.50	<0.50	8.8	<0.50	82	--	<0.50	<0.50	<0.50	<5.0	--	--	--	
BH-B	4/30/2002	16/8	--	--	<100	<200	2,300	120	11	60	150	2,000	--	<5.0	<5.0	<5.0	<50	--	--	--	
BH-C	4/30/2002	16/8	--	--	<100	<150	1,200	57	0.72	43	87	240	--	<0.50	1.0	<0.50	<5.0	--	--	--	
B-1-gw	2/25/2008	3/3.95	--	--	--	260,000	4,600	330	<5.0	33	<5.0	370	--	<5.0	<5.0	<5.0	<20	<500	<5.0	<5.0	*
B-2-gw	2/25/2008	7.5/5.95	--	--	--	1,900	540	12	<2.5	<2.5	<2.5	220	--	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	*
B-3-gw	2/26/2008	8/NA	--	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	4.0	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	*
B-4-gw	2/25/2008	7.5/7.80	--	--	--	6,800	7,300	150	<50	150	<50	2,700	--	<50	<50	<50	1,700	<5,000	<50	<50	*
B-5-gw	2/26/2008	8/6.40	--	--	--	250	320	<10	<10	13	<10	630	--	<10	<10	<10	<40	<1,000	<10	<10	*
B-6-gw	2/26/2008	8/6.95	--	--	--	120	<50	<5.0	<5.0	<5.0	<5.0	240	--	<5.0	<5.0	<5.0	<20	<500	<5.0	<5.0	*
B-7-gw	2/26/2008	8/6.55	--	--	--	84	<50	<0.5	<0.5	<0.5	<0.5	27	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	*
B-8-gw	2/25/2008	8/6.10	--	--	--	1,000	930	37	<2.5	64	23	160	--	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	*
B-9	2/11/2010	6.33	--	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	160	--	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	*
B-10	2/11/2010	6.89	--	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	5.1	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	*
B-11	2/10/2010	5.20	--	--	--	3,700	130	0.69	<0.5	<0.5	<0.5	25	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	*
B-12	2/11/2010	6.65	--	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	1.2	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	*
B-13C	2/12/2010	8.97	--	--	--	3,400	2,300	<2.5	<2.5	<2.5	<2.5	92	--	<2.5	<2.5	<2.5	92	<250	<2.5	<2.5	*
Quarterly Groundwater Samples																					*
MW-1	10/6/1999	8.35	6.65	--	--	84	3,900	<25	<25	<25	<25	3,500	--	--	--	--	--	--	--	--	*
15.00	1/13/2000	7.90	7.10	--	--	<50	<1,300	18	<13	<13	<13	1,700	--	--	--	--	--	--	--	--	
	4/12/2000	7.08	7.92	--	--	56	<1,000	66	<10	<10	<10	1,600	--	--	--	--	--	--	--	--	*
	7/19/2000	7.66	7.34	--	--	52	<1,000	<10	<10	<10	<10	1,200	--	--	--	--	--	--	--	--	*
	10/25/2000	7.91	7.09	--	--	76	4,100	120	<25	<25	<25	6,100	--	--	--	--	--	--	--	--	*
	2/16/2007	6.32	8.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	3/1/2007	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	*
15.71	5/1/2007	7.24	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	*
	8/1/2007	7.77	7.94	--	--	<50	<50	<25	<25	<25	<25	520	--	<25	<25	<25	<250	<2500	<25	<25	*
	11/1/2007	7.71	8.00	--	--	<50	<50	<12	<12	<12	<12	460	--	<12	<12	<12	<120	<1,200	<12	<12	
	2/1/2008	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	*
	5/2/2008	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	
	8/1/2008	8.02	7.69	--	--	<50	<50	<10	<10	<10	<10	500	--	<10	<10	<10	<40	<1,000	<10	<10	*
	11/4/2008	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	-
	8/11/2009	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	-
	2/3/2010	6.14	9.57	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	39	--	--	--	--	--	--	--	--	-
	5/18/2010	7.09	8.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL DATA
ENCINAL PROPERTIES
FORMER OLYMPIAN SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

Well ID TOC (ft above msl)	Date Sampled	DTW (ft)	GWE (ft above msl)	Oil & Grease	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	SVOCs & HVOCs	DIPE	TAME	ETBE	TBA	Ethanol	EDB	1,2- DCA	Notes
				← Concentrations in micrograms per liter (µg/L) →									→								
ESL: Groundwater is not a current or potential drinking water resource				NE	NE	210	210	46	130	43	100	1,800	–	NE	NE	NE	18,000	NE	NE	200	
	8/5/2010	7.65	8.06		--	--	<50	<0.5	<0.5	<0.5	<0.5	350	--	--	--	--	--	--	--	--	-
MW-2	10/6/1999	7.87	6.59	<1,000	<500	<50	70	<0.5	<0.5	<0.5	<0.5	11	ND	--	--	--	--	--	--	--	
14.46	1/13/2000	7.46	7.00	<1,000	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	6.2	ND	--	--	--	--	--	--	--	+
	4/12/2000	6.67	7.79	1,100	<500	<50	<50	<0.5	<0.5	<0.5	<0.5	39	--	--	--	--	--	--	--	--	
	7/19/2000	7.23	7.23	1,300	<500	<50	<1,000	<10	<10	<10	<10	990	--	--	--	--	--	--	--	--	
	10/25/2000	7.52	6.94	--	<500	<50	370	<2.5	<2.5	<2.5	<2.5	690	--	--	--	--	--	--	--	--	
	2/16/2007	5.89	8.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	3/1/2007	5.45	9.01	--	<250	<50	<50	<0.5	<0.5	<0.5	<0.5	9.8	--	<0.5	<0.5	<0.5	<5.0	<50	<0.5	<0.5	+
15.17	5/1/2007	6.83	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	+
	8/1/2007	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	+
	11/1/2007	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	
	2/1/2008	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	+
	5/2/2008	7.12	8.05	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	83.0	--	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	
	8/1/2008	7.59	7.58	--	--	<50	<50	<1.0	<1.0	<1.0	<1.0	52	--	<1.0	<1.0	<1.0	<4.0	<100	<1.0	<1.0	+
MW-2	11/4/2008	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	+
cont.	8/11/2009	7.65	7.52	--	--	<50	<50	<0.5	<0.5	<0.5	<0.5	0.4	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	--
	2/3/2010	5.75	9.42	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	0.86	--	--	--	--	--	--	--	--	--
	5/18/2010	6.67	8.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/5/2010	7.25	7.92	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	57	--	--	--	--	--	--	--	--	--
MW-3	10/6/1999	7.90	6.51	--	--	300	3,900	900	89	160	560	790	--	--	--	--	--	--	--	--	
14.41	1/13/2000	7.50	6.91	--	--	210	740	110	4.8	35	18	290	--	--	--	--	--	--	--	--	
	4/12/2000	6.61	7.80	--	--	640	2,200	650	9.7	180	24	140	--	--	--	--	--	--	--	--	
	7/19/2000	7.24	7.17	--	--	270	2,700	420	<2.5	160	<2.5	99	--	--	--	--	--	--	--	--	
	10/25/2000	7.52	6.89	--	--	150	710	180	<2.5	24	<2.5	71	--	--	--	--	--	--	--	--	+
	2/16/2007	5.90	8.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	+
	3/1/2007	5.44	8.97	--	<250	<50	82	20	<1.7	<1.7	<1.7	100	--	--	--	--	--	--	--	--	
15.13	5/1/2007	6.87	8.26	--	<250	<50	<50	<5.0	<5.0	<5.0	<5.0	88	--	<1.7	<1.7	<1.7	<17	<170	<1.7	<1.7	+
	8/1/2007	7.40	7.73	--	--	<50	130	12	<2.5	<2.5	<2.5	98	--	<5.0	<5.0	<5.0	<50	<500	<5.0	<5.0	+
	11/1/2007	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	+
	2/1/2008	5.28	9.85	--	--	<50	<50	<2.5	<2.5	<2.5	<2.5	97	--	<2.5	<2.5	<2.5	<25	<250	<2.5	<2.5	+
	5/2/2008	7.15	7.98	--	--	<50	68	2.3	<1.7	<1.7	<1.7	86	--	<2.5	<2.5	<2.5	<10	<250	<2.5	<2.5	
	8/1/2008	7.66	7.47	--	--	<50	85	3.5	<1.0	<1.0	<1.0	66	--	<1.7	<1.7	<1.7	7.20	<170	<1.7	<1.7	
	11/4/2008	6.96	8.17	--	--	<50	<50	<1.0	<1.0	<1.0	<1.0	40	--	<1.0	<1.0	<1.0	2.2	<100	<1.0	<1.0	+
	8/11/2009	7.72	7.41	--	--	<50	110	33	<0.5	<0.5	<0.5	23	--	<1.0	<1.0	<1.0	<4.0	<100	<1.0	<1.0	
	2/3/2010	5.72	9.41	--	--	--	<50	0.55	<0.5	<0.5	<0.5	25	--	<0.5	<0.5	<0.5	<2.0	<50	<0.5	<0.5	+
	5/18/2010	6.73	8.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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ENCINAL PROPERTIES
FORMER OLYMPIAN SERVICE STATION
1436 GRANT AVENUE
SAN LORENZO, CALIFORNIA

Well ID / TOC (ft above msl)	Date Sampled	DTW (ft)	GWE (ft above msl)	Oil & Grease	TPHmo	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	SVOCs & HVOCs	DIPE	TAME	ETBE	TBA	Ethanol	EDB	1,2- DCA	Notes
				← Concentrations in micrograms per liter (µg/L) →																	
ESL*: Groundwater is not a current or potential drinking water resource				NE	NE	210	210	46	130	43	100	1800	–	NE	NE	NE	16,000	NE	NE	200	
	8/5/2010	7.31	7.82	--	--	--	450	110	2.2	0.76	0.64	32	--	--	--	--	--	--	--	--	*
MW-4	5/18/2010	6.68	8.47	--	--	--	13,000	620	36	170	12	1,200	--	--	--	--	--	--	--	--	*
15.15	8/5/2010	7.25	7.90	--	--	--	9,200	780	13	230	4.3	1,800	--	--	--	--	--	--	--	--	*

Abbreviations / Notes

* = San Francisco Bay Regional Water Quality Control Board ESL for groundwater where groundwater is not a current or potential drinking water resource

NE = Not Evaluated
TOC = Top of casing
DTW = Depth to water
GWE = Groundwater elevation in feet above mean sea level
ft above msl = feet above mean sea level
17/8 = Depth to first encountered groundwater/depth of static groundwater
<n = Not detected above laboratory reporting limit
-- = Not sampled, not analyzed, not available
ND = Not detected above laboratory reporting limit
Oil and grease by EPA Method 5520 E&F
TPHd = Total Petroleum Hydrocarbons as diesel range by EPA Method 8015
TPHg = Total Petroleum Hydrocarbons as gasoline range by EPA Method 8015
TPHmo = Total Petroleum Hydrocarbons as motor oil by EPA Method 8015
Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020
MTBE = Methyl tertiary butyl ether by EPA Method 8260
Di-isopropyl ether (DIPE), tertiary-amyl methyl ether (TAME), ethyl tertiary-butyl ether (ETBE), tertiary-butyl alcohol (TBA) by EPA Method 8260B
SVOCs = Semi-volatile organic compounds by EPA Method 8270, refer to corresponding analytical laboratory report for a full list of compounds
HVOCs = Halogenated volatile organic compounds by EPA Method 8010, refer to corresponding analytical laboratory report for a full list of compounds
1,2 DCA = 1,2 dichloroethane
EDB = 1,2-dibromoethane
* = See Analytical Laboratory Report for laboratory sample description and TPH chromatogram interpretation.
TOC elevations were surveyed on March 8, 2007 by Virgil Chavez Land Surveying. Prior to this date, TOC elevation were relative to a project datum determined by Aqua Science Engineers, Inc. in 1998.