

**RECEIVED**

By Alameda County Environmental Health 9:56 am, Oct 07, 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. R00000373, GeoTracker No. T0600102256

Dear Mr. Detterman:

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

Sincerely,  
George and Frida Jaber 1989 Family Trust



Philip Jaber, Trustee



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

TRANSMITTAL

Date September 10, 2015  
Project Former Olympic Station

To:  
Oro Loma Sanitary District (OLSD)  
Industrial Waste Inspector  
2600 Grant Avenue, San Lorenzo, CA 94580  
Attn: Rodney Smith

Re: Wastewater Discharge Monthly Report (Permit #SDP-2014147)

Item	Description
1	Analytical Report (Effluent sample collected on 8/3/15)
2	Operational Uptime and Flow Summary Table (Table 3)
3	Operational Performance and Mass Removal Summary Table (Table 9: GW Extraction Component)

Dear Mr. Smith:

Please find attached for your review the analytical results for the effluent water sample collected on August 3, 2015, the pH readings (Table 3), and groundwater discharge flow rates (Table 9) observed from the dual-phase extraction and groundwater remediation system at the Former Olympic Station Facility, located at 1436 Grant Avenue, San Lorenzo, California. Between August 3 and September 1, 2015, all extracted groundwater was treated using carbon vessels, and discharged into the sanitary sewer. The approximate monthly discharge and extraction rates are as follows:

- August 3 – September 1, 2015: 79,590 gallons (2.69 gpm)

The system operated in compliance with permit conditions and all effluent sample results were below laboratory reporting limits, and within the permit limitations.

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate,

and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

If you have any questions, or need more information, please contact me at (530) 313-9974 or [dbarr@stratusinc.net](mailto:dbarr@stratusinc.net).

Sincerely,



Deborah L. Barr, P.E.





# Alpha Analytical, Inc.

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

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received : 08/04/15

Job: Olympic Station

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

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID : Oly A EFF				
Lab ID : STR15080443-01A	TPH-P (GRO)	ND	15 mg/m <sup>3</sup>	08/04/15 11:34
Date Sampled 08/03/15 06:27	Methyl tert-butyl ether (MTBE)	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
	Benzene	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
	Toluene	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
	Ethylbenzene	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
	m,p-Xylene	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
	o-Xylene	ND	0.15 mg/m <sup>3</sup>	08/04/15 11:34
Client ID : Oly W EFF				
Lab ID : STR15080443-02A	TPH-P (GRO)	ND	50 µg/L	08/04/15
Date Sampled 08/03/15 06:10	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	08/04/15
	Benzene	ND	0.50 µg/L	08/04/15
	Toluene	ND	0.50 µg/L	08/04/15
	Ethylbenzene	ND	0.50 µg/L	08/04/15
	m,p-Xylene	ND	0.50 µg/L	08/04/15
	o-Xylene	ND	0.50 µg/L	08/04/15

### Gasoline Range Organics (GRO) C4-C13

Note: For sample -01A concentrations of air in a Tedlar Bag are at 29 degrees Celsius and 25.60 inches of mercury.

ND = Not Detected

Reported in micrograms per Liter, per client request.



*Roger Scholl*

*Randy Gardner*

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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

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



*RS*  
8/6/15

Report Date



# Alpha Analytical, Inc.

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

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## VOC Sample Preservation Report

**Work Order:** STR15080443

**Job:** Olympic Station

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Alpha's Sample ID	Client's Sample ID	Matrix	pH
15080443-02A	Oly W EFF	Aqueous	2

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8/6/15  
**Report Date**



# Alpha Analytical, Inc.

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Date:  
06-Aug-15

## QC Summary Report

Work Order:  
15080443

### Method Blank

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

File ID: C:\HPCHEMMS10\DATA\150804\15080405.D

Batch ID: MS10A0804B

Analysis Date: 08/04/2015 13:06

Sample ID: MBLK MS10A0804B

Units : mg/m<sup>3</sup>

Run ID: MSD\_10\_150804A

Prep Date: 08/04/2015 13:06

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	1.79		2		90	70	130			
Surr: Toluene-d8	1.91		2		96	70	130			
Surr: 4-Bromofluorobenzene	2.05		2		103	70	130			

### Laboratory Control Spike

Type LCS

Test Code: EPA Method SW8015B/C / SW8260B

File ID: C:\HPCHEMMS10\DATA\150804\15080403.D

Batch ID: MS10A0804B

Analysis Date: 08/04/2015 11:51

Sample ID: GLCS MS10A0804B

Units : mg/m<sup>3</sup>

Run ID: MSD\_10\_150804A

Prep Date: 08/04/2015 11:51

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	423	10	400		106	70	130			
Surr: 1,2-Dichloroethane-d4	9.83		10		98	70	130			
Surr: Toluene-d8	9.03		10		90	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	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.



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Date:  
06-Aug-15

## QC Summary Report

Work Order:  
15080443

### Method Blank

File ID: 15080404.D

Type MBLK

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0804B

Analysis Date: 08/04/2015 11:30

Sample ID: MBLK MS09W0804B

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 11:30

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	8.02		10		80	70	130			
Surr: Toluene-d8	11.3		10		113	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

### Laboratory Control Spike

File ID: 15080403.D

Type LCS

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0804B

Analysis Date: 08/04/2015 10:44

Sample ID: GLCS MS09W0804B

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 10:44

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	393	50	400		98	70	130			
Surr: 1,2-Dichloroethane-d4	8.84		10		88	70	130			
Surr: Toluene-d8	11.3		10		113	70	130			
Surr: 4-Bromofluorobenzene	10.9		10		109	70	130			

### Sample Matrix Spike

File ID: 15080418.D

Type MS

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0804B

Analysis Date: 08/04/2015 17:13

Sample ID: 15080442-01AGS

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 17:13

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2100	250	2000		0	105	54	143		
Surr: 1,2-Dichloroethane-d4	48.7		50		97	70	130			
Surr: Toluene-d8	53.6		50		107	70	130			
Surr: 4-Bromofluorobenzene	54		50		108	70	130			

### Sample Matrix Spike Duplicate

File ID: 15080419.D

Type MSD

Test Code: EPA Method SW8015B/C / SW8260B

Batch ID: MS09W0804B

Analysis Date: 08/04/2015 17:37

Sample ID: 15080442-01AGSD

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 17:37

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2120	250	2000		0	106	54	143	2100	0.9(23)
Surr: 1,2-Dichloroethane-d4	49.2		50		98	70	130			
Surr: Toluene-d8	54.3		50		109	70	130			
Surr: 4-Bromofluorobenzene	54.8		50		110	70	130			

### Comments:

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Date:  
06-Aug-15

## QC Summary Report

Work Order:  
15080443

### Method Blank

Type MBLK Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\150804\15080405.D

Batch ID: MS10A0804A

Analysis Date: 08/04/2015 13:06

Sample ID: MBLK MS10A0804A

Units: mg/m<sup>3</sup>

Run ID: MSD\_10\_150804A

Prep Date: 08/04/2015 13:06

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1								
Benzene	ND	0.1								
Toluene	ND	0.1								
Ethylbenzene	ND	0.1								
m,p-Xylene	ND	0.1								
o-Xylene	ND	0.1								
Surr: 1,2-Dichloroethane-d4	1.79		2		90	70	130			
Surr: Toluene-d8	1.91		2		96	70	130			
Surr: 4-Bromofluorobenzene	2.05		2		103	70	130			

### Laboratory Control Spike

Type LCS Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS10\DATA\150804\15080402.D

Batch ID: MS10A0804A

Analysis Date: 08/04/2015 11:30

Sample ID: LCS MS10A0804A

Units: mg/m<sup>3</sup>

Run ID: MSD\_10\_150804A

Prep Date: 08/04/2015 11:30

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	10.2	0.1	10		102	63	137			
Benzene	11.4	0.1	10		114	70	130			
Toluene	9.39	0.1	10		94	70	130			
Ethylbenzene	10.3	0.1	10		103	70	130			
m,p-Xylene	10.2	0.1	10		102	65	139			
o-Xylene	10.6	0.1	10		106	70	130			
Surr: 1,2-Dichloroethane-d4	9.75		10		98	70	130			
Surr: Toluene-d8	8.93		10		89	70	130			
Surr: 4-Bromofluorobenzene	9.89		10		99	70	130			

### Comments:

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





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Date:  
06-Aug-15

## QC Summary Report

Work Order:  
15080443

### Method Blank

Type MBLK Test Code: EPA Method 624/8260

File ID: 15080404.D

Batch ID: MS09W0804A

Analysis Date: 08/04/2015 11:30

Sample ID: MBLK MS09W0804A

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 11:30

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	8.02		10		80	70	130			
Surr: Toluene-d8	11.3		10		113	70	130			
Surr: 4-Bromofluorobenzene	10.4		10		104	70	130			

### Laboratory Control Spike

Type LCS Test Code: EPA Method 624/8260

File ID: 15080402.D

Batch ID: MS09W0804A

Analysis Date: 08/04/2015 10:18

Sample ID: LCS MS09W0804A

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 10:18

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	10.3	0.5	10		103	63	137			
Benzene	11.6	0.5	10		116	70	130			
Toluene	11.4	0.5	10		114	70	130			
Ethylbenzene	11.6	0.5	10		116	70	130			
m,p-Xylene	11.7	0.5	10		117	65	139			
o-Xylene	12.3	0.5	10		123	70	130			
Surr: 1,2-Dichloroethane-d4	8.68		10		87	70	130			
Surr: Toluene-d8	11		10		110	70	130			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

### Sample Matrix Spike

Type MS Test Code: EPA Method 624/8260

File ID: 15080416.D

Batch ID: MS09W0804A

Analysis Date: 08/04/2015 16:25

Sample ID: 15080442-01AMS

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 16:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	54	1.3	50	0	108	56	140			
Benzene	59.1	1.3	50	0	118	67	134			
Toluene	57	1.3	50	0	114	38	130			
Ethylbenzene	54.8	1.3	50	0	110	70	130			
m,p-Xylene	52.9	1.3	50	0	106	65	139			
o-Xylene	56.8	1.3	50	0	114	69	130			
Surr: 1,2-Dichloroethane-d4	51.1		50		102	70	130			
Surr: Toluene-d8	51.5		50		103	70	130			
Surr: 4-Bromofluorobenzene	52.7		50		105	70	130			

### Sample Matrix Spike Duplicate

Type MSD Test Code: EPA Method 624/8260

File ID: 15080417.D

Batch ID: MS09W0804A

Analysis Date: 08/04/2015 16:49

Sample ID: 15080442-01AMSD

Units: µg/L

Run ID: MSD\_09\_150804A

Prep Date: 08/04/2015 16:49

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	55.1	1.3	50	0	110	56	140	53.96	2.0(40)	
Benzene	57.8	1.3	50	0	116	67	134	59.11	2.2(21)	
Toluene	56.4	1.3	50	0	113	38	130	57	1.0(20)	
Ethylbenzene	54.4	1.3	50	0	109	70	130	54.8	0.8(20)	
m,p-Xylene	52.8	1.3	50	0	106	65	139	52.94	0.3(20)	
o-Xylene	58.1	1.3	50	0	116	69	130	56.77	2.4(20)	
Surr: 1,2-Dichloroethane-d4	50.1		50		100	70	130			
Surr: Toluene-d8	51.7		50		103	70	130			
Surr: 4-Bromofluorobenzene	51.4		50		103	70	130			



# *Alpha Analytical, Inc.*

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

Date:  
*06-Aug-15*

## QC Summary Report

Work Order:  
15080443

**Comments:**

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

Billing Information :

# CHAIN-OF-CUSTODY RECORD

# RUSH CA

Page: 1 of 1

## Alpha Analytical, Inc.

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

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

WorkOrder : STR15080443

Report Due By : 5:00 PM On : 04-Aug-15

Client:

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

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

EDD Required : Yes

Sampled by : C. Hill

PO :

Client's COC # : 04321

Job : Olympic Station

Cooler Temp

Samples Received

Date Printed

0 °C

04-Aug-15


04-Aug-15

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

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles			Requested Tests						Sample Remarks		
				Alpha	Sub	TAT	TPHP_A	TPHP_W	VOC_A	VOC_W					
STR15080443-01A	Oly A EFF	AR	08/03/15 06:27	1	0	0	GAS-N/C		BTEX/MTB E						Tedlar.
STR15080443-02A	Oly W EFF	AQ	08/03/15 06:10	3	0	0		GAS-C	BTEX/M_C						

Comments:

ASAP TAT. Security seals intact. Frozen ice. Chain split due to different TATs. :

Signature	Print Name	Company	Date/Time
	JESSICA ALVARADO	Alpha Analytical, Inc.	8/4/15 10:30

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: Stratus  
 Attn: Debbin  
 Address: 3330 Cummins Pl  
Reno NV  
 City, State, Zip: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_



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 Lamolle 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  
 Phone: 714-366-2901  
 Phone: 775-388-7043  
 Phone: 702-281-4848

04321

Page # 1 of 1

Company: Stratus  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_

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

Report Attention/Project Manager:  
 Name: SLUW  
 Email Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Cell #: \_\_\_\_\_

QC Deliverable Info:  
 EDD Required? Yes / No \_\_\_\_\_ EDF Required? Yes / No \_\_\_\_\_  
 Global ID: \_\_\_\_\_  
 Data Validation Packages: III or IV \_\_\_\_\_

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

Time Sampled (HHMM)	Date Sampled (MM/DD)	Matrix* (See Key Below)	Lab ID Number (For Lab Use Only)	Sample Description	TAT	# Containers** (See Key Below)	Field Filled?		Analysis Requested				Remarks
							Yes	No	GRO	BTEX	MTBE	TPH SOIB	
8:35	0629	AIR		Oly A Sys IMI-STD	24	1	X	X	X				
8:35	0627	AIR	STR15080443-01	Oly A EFF	24	1	X	X	X				
8:35	0623	AIR		Oly W IMI-STD	24	3	X	X	X	X			
	0620			Oly W GAE1	24	3	X	X	X	X			
	0615			Oly W GAE2	24	3	X	X	X	X			
8:35	0610	AIR		Oly W EFF	24	3	X	X	X	X			

ADDITIONAL INSTRUCTIONS:

I (field sampler) attest to the validity and authenticity of this sample(s). I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. NAC 445.0636 (c) (2).

Sampled By: <u>GHWC</u>	Date: <u>8-3-15</u>	Time: <u>1020</u>	Received by: (Signature/Affiliation): <u>Manissa T</u>	Date: <u>8-3-15</u>	Time: <u>1020</u>
Relinquished by: (Signature/Affiliation): <u>Stratus</u>	Date: _____	Time: _____	Received by: (Signature/Affiliation): <u>[Signature]</u>	Date: <u>8/4/15</u>	Time: <u>0930</u>
Relinquished by: (Signature/Affiliation): _____	Date: _____	Time: _____	Received by: (Signature/Affiliation): _____	Date: _____	Time: _____

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

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

**TABLE 3  
OPERATIONAL UPTIME AND FLOW SUMMARY**

**DPE REMEDIATION EVENT**

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

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

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

Date & Time	Notes	Hour Meter Reading	Applied Vac "Hg	Area ft <sup>2</sup>	Sys Inf Temp °F	Sys Inf Air Velocity fpm	Sys Inf Air Flowrate acfm	Control Temp °F	Effluent Air Temp °F	Area ft <sup>2</sup>	Dilution Air Temp °F	Dilution Air Velocity fpm	Dilution Air Flowrate acfm	pH		PID	
														Inf pH	Eff °F	Sys Inf ppmv	Eff ppmv
														5/5/15 5:00	12	6,018.0	14.5
5/20/15 5:45	13	6,059.0	15.0	0.0491	80	1,450	71.2	1450	--	0.0218	65	685	15	--	--	40	1.3
5/21/15 5:10	14	6,083.0	15.0	0.0491	90	1,500	73.6	1450	--	0.0218	--	--	--	--	--	--	--
6/2/15 4:45	15	6,233.0	15.0	0.0491	90	1,500	73.6	1450	1380	0.0218	--	--	--	8.01	7.81	6	0.3
6/22/15 4:00		6,712.0	14.0	0.0491	85	1,500	73.6	1450	1310	0.0218	--	--	--	--	--	10	0.2
7/1/15 5:30	16	6,929.0	14.0	0.0491	95	1,600	78.5	1456	--	0.0218	--	--	--	--	--	5	0.4
7/14/15 5:15	13	6,930.0	15.0	0.0491	80	1,450	71.2	1450	1376	0.0218	--	--	--	--	--	75	1.2
8/3/15 6:23		7,410.0	12.0	0.0491	96	1,600	78.5	1450	1125	0.0218	--	--	--	7.74	7.50	5	0.8
8/18/15 5:00	17	7,725.0	12.0	0.0491	90	1,500	73.6	1460	1105	0.0218	--	--	--	--	--	3	0.8
9/1/15 5:00		7,903.0	12.5	0.0491	90	1,500	73.6	1460	1360	0.0218	--	--	--	7.74	7.38	2	0.5
Average			15.2		88	1,907	93.6	1,464	1,371		63	1552	34	7.9	8.0	77.6	1.4

**Legend / Key:**

Vac = Vacuum  
"Hg = inches mercury  
ft<sup>2</sup> = square feet  
Temp = temperature  
°F = Fahrenheit  
Inf = Influent  
-- = not applicable/ not measured

fpm = feet per minute  
acfm = actual cubic feet per minute  
ppmv = parts per million by volume  
PID = Photoionization Detector  
Sys Inf = System Influent (includes dilution air)  
Eff = Effluent

**Sample Calculation:**

air flow = area of pipe (0.0491 ft<sup>2</sup>) × air velocity (fpm) = flowrate (acfm)

**Notes:**

Influent pipe diameter = 3.0 inches

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

**TABLE 3  
OPERATIONAL UPTIME AND FLOW SUMMARY  
DPE REMEDIATION EVENT**

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

Date & Time	Notes	Hour Meter Reading	Applied Vac	Area	Sys Inf Temp	Sys Inf Air Velocity	Sys Inf Air Flowrate	Control Temp	Effluent Air Temp	Area	Dilution Air Temp	Dilution Air Velocity	Dilution Air Flowrate	pH		PID		
			"Hg	ft <sup>2</sup>	°F	fpm	acfm	°F	°F	ft <sup>2</sup>	°F	fpm	acfm	Inf	Eff	Sys Inf	Eff	
														pH	°F	ppmv	ppmv	
	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-foot 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.																	
	11 System down upon arrival, system remained down upon departure to evaluate pulse operation and second quarter groundwater sampling.																	
	12 System down upon arrival, system re-started to obtain air and water samples. System modified to extract from wells EX-3, EX-6, MW-5A, and MW-6A. Sewer system observed to be backed up, therefore, maintenance to be completed prior to continuous system operation. System manually shutdown upon departure.																	
	13 System down upon arrival, system re-started for continuous operation.																	
	14 System modified to extract from wells EX-1, EX-6, MW-5A and MW-6A.																	
	15 System modified to extract from wells EX-1, MW-5A and MW-6A.																	
	16 System manually shutdown temporarily for upcoming sampling event.																	
	17 System down upon arrival, flame off, system re-started upon departure.																	

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

Date	Notes	Sample Time	Hour Meter Reading <sup>1</sup>	Sewer Discharge Data				Analytical Results			Mass Removed			Cumulative		
				Totalizer Reading (gallons)	Period (gallons)	Cumulative Flow (gallons)	Average Sewer Discharge Flow Rate (gpm) <sup>a</sup>	Influent			This Period			Mass Removed		
								GRO (µg/L)	Benzene (µg/L)	MTBE (µg/L)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)	GRO (lbs)	Benzene (lbs)	MTBE (lbs)
7/21/14	1	7:43	3,478.1	60,440	--	--	--	Start of Test								
07/29/14		5:55	3,599.7	110,120	49,680	49,680	6.81	310	3.3	37	0.13	0.0014	0.015	0.13	0.0014	0.015
08/18/14		7:15	3,862.0	196,310	86,190	135,870	5.48	170	3.4	39	0.17	0.0024	0.027	0.30	0.0038	0.043
09/08/14		7:55	4,247.0	305,370	109,060	244,930	4.72	<50	0.89	12	<0.10	0.0020	0.023	0.40	0.0057	0.066
10/02/14	2	7:25	4,823.0	458,740	153,370	398,300	4.44	<50	0.77	11	<0.06	0.0011	0.015	0.47	0.0068	0.081
11/03/14		7:58	5,265.0	618,930	160,190	558,490	6.04	<50	<0.50	13	<0.07	<0.001	0.016	0.53	0.0076	0.097
12/04/14	3	6:55	5,271.0	621,440	2,510	561,000	6.97	<50	0.98	21	<0.001	<0.00002	0.0004	0.53	0.0077	0.097
01/05/15		7:46	5,873.0	875,710	254,270	815,270	7.04	<50	5.4	29	<0.106	<0.00677	0.0530	0.64	0.0144	0.150
02/02/15		6:47	5,926.0	898,290	22,580	837,850	7.10	<50	2.4	22	<0.009	<0.00073	0.0048	0.65	0.0152	0.155
03/10/15	4	7:05	5,941.0	904,000	5,710	843,560	6.34	<50	1.5	21	<0.002	<0.00009	0.0010	0.65	0.0153	0.156
03/23/15	5	--	6,015.0	927,780	23,780	867,340	5.36	--	--	--	<0.010	<0.00030	0.0042	0.66	0.0156	0.160
05/05/15	6	7:32	6,018.0	929,200	1,420	868,760	7.89	96	5.0	19	<0.001	<0.00006	0.0002	0.66	0.0156	0.160
06/02/15	7	5:35	6,233.0	979,100	49,900	918,660	3.87	50	<0.50	7.7	<0.030	<0.00115	0.0056	0.69	0.0168	0.166
07/01/15		5:55	6,929.0	1,122,860	143,760	1,062,420	3.44	50	<0.50	6.9	<0.060	<0.00060	0.0088	0.75	0.0174	0.175
08/03/15		6:23	7,410.0	1,220,100	97,240	1,159,660	3.37	50	<0.50	9.6	<0.041	<0.00041	0.0067	0.79	0.0178	0.181
09/01/15		5:28	7,903.0	1,299,690	79,590	1,239,250	2.69	Pending Analytical Results								

**Legend / Key:**

GRO = Gasoline Range Organics C4-C13

µg/L = micrograms per liter

lbs = pounds

**Analytical Methods / Laboratory:**

GRO analyzed using EPA Method SW8015B/SW8260B

MTBE = Methyl tertiary butyl ether

gpm = gallons per minute

-- = data not collected/not calculated

Benzene and MTBE analyzed using EPA Method SW8260B

Alpha Analytical, Inc. (ELAP # 2019)

<sup>a</sup> Not representative of actual flow rate, calculation affected by system down time.

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

**Notes:**

<sup>1</sup> DPE extracting from extraction wells EX-2 through EX-7.

<sup>2</sup> DPE extracting from extraction wells EX-1 through EX-7.



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

3	DPE extracting from extraction wells EX-1, EX-5 and EX-6.
4	DPE extracting from extraction wells EX-1 and EX-5.
5	Mass removed is based on analytical results obtained during March 10, 2015 sampling event.
6	System was non-operational between March 23 and May 5, 2015 due to budget constraints. After maintenance, the system was re-started for continuous operation on May 20, 2015, extracting from wells EX-3, EX-6, MW-5A and MW-6A.
7	DPE extracting from extraction wells EX-1, MW-5A and MW-6A.