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By Alameda County Environmental Health 3:45 pm, Oct 24, 2017

ACKNOWLEDMENT STATEMENT

Subject: **1395 MacArthur Boulevard, San Leandro, California**
Remediation Status Report – Third Quarter 2017

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's Geotracker Website.

Mr. Sayed Hussain, agent for
ESC PARTNERS, L. P. and
Mr. William Matthew Brooks
4725 Thornton Avenue
Fremont, CA, 94536

Remediation Status Report – Third Quarter 2017

SWISS VALLEY CLEANERS
1395 MacArthur Boulevard, San Leandro, California

10 October 2017
AGE-Project No. 12-2461

PREPARED FOR:

Mr. William Mathews Brooks
ARDENBROOK

PREPARED BY:

AdvancedGeo Environmental
An Employee-Owned Company

Environmental • Compliance • Industrial Hygiene • Geotechnical
Phone: 800-511-9300
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"Working in Partnership with People, Business and the Environment"

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Remediation Status Report – Third Quarter 2017
SWISS VALLEY CLEANERS
1395 MacArthur Boulevard, San Leandro, California

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Remediation Status Report – Third Quarter 2017
SWISS VALLEY CLEANERS
1395 MacArthur Boulevard, San Leandro, California

1.0. INTRODUCTION

At the request of Mr. William Mathews Brooks of Ardenbrook, Inc., Advanced GeoEnvironmental, Inc. (AGE) has prepared this, *Remediation Status Report – Third Quarter 2017,* for the Swiss Valley Cleaners site located at 1395 MacArthur Boulevard, San Leandro, California (site). This report documents remedial operation and maintenance of the soil-vapor extraction during the third quarter 2017. The location of the site is illustrated in Figure 1. A plot plan of the site, SVE wells and trenching locations are illustrated in Figure 2. Well construction details are included as Table 1.

On 11 November 2016, the SVE system began operation under Bay Area Air Quality Management District (BAAQMD) permit application number 28042, plant number 23608. SVE commenced on 11 November 2016 utilizing a network of soil-vapor wells VW-1 through VW-21.

2.0. REMEDIAL OPERATION PROCEDURES

Remedial piping is routed to a moisture knockout vessel and two 1,000-pound granular activated carbon (GAC) vessels and then to a positive displacement blower capable of producing 150 standard cubic feet per minute (scfm). Sampling ports have been installed upstream of the vacuum blower inlet to recover influent soil-vapor stream samples, and downstream of the GAC vessels to recover effluent vapor stream samples to monitor the efficiency of contaminant destruction.

The SVE system was typically monitored on a weekly basis and sampled on a monthly basis. During startup activities the remedial system was monitored daily for the first week of operation.

In order to monitor efficiency of the SVE petroleum vapor recovery system, the following steps were taken: 1) a Magnehelic® vacuum gauge and Dwyer® DS-200 differential pressure sensor were installed before the blower so that the total air flow rate was monitored; the flow rate was determined from the measured differential pressure and the piping diameter using a nomograph; 2) SVE air flow of the influent and effluent streams were monitored routinely for the presence of organic vapor using a Rae® Systems MiniRae3000 organic vapor meter (OVM) equipped with a photo ionization detector (PID-10.6 eV lamp); and 3) influent and effluent vapor flow vapor stream samples were collected from sampling ports installed upstream (influent) of the SVE blower and downstream (effluent) of the carbon treatment system and submitted for laboratory analysis as required by the BAAQMD Permit to Operate (PTO).

Numerous operational parameters are recorded or displayed on the system, including: operational and cumulative system hours (SVE); air temperature after the blower; vacuum

generated by the blower; flow of SVE vapor stream; influent OVM readings taken before and after the blower, at each of the carbon vessels, and effluent readings downstream of the carbon treatment system. Table 2 lists each of the parameters measured evaluate system performance and trends.

Additionally, the SVE well network consists of twenty-one shallow screened SVE wells (VW-1 through VW-21) screened from 2 feet to 7 feet bsg. Each well is fitted with a ball valve to allow individual well adjustments. During this operational period all wells were utilized for SVE remediation (Table 2).

During this operational period influent and effluent vapor samples were collected on 17 July, 17 August and 28 September 2017. Samples were collected using a vacuum pump and lung box into Tedlar bags. Samples were submitted to a California Department of Public Health certified laboratory for analysis of full-scan Volatile Organic Compounds (VOCs) in accordance with EPA Method 8260. Analytical results are included as Appendix A.

3.0. REMEDIAL OPERATION FINDINGS

Data collected during the third quarter 2017 operation and monitoring events as well as vapor stream sampling was used to determine the efficiency and effectiveness of the on-site remedial SVE system. The following is a summary of findings from the third quarter 2017 operational period.

As of 27 September 2017, the SVE system has been in operation for 5,674.1 hours (equivalent to 263.4 days). During the third quarter 2017 (17 July to 27 September, the system operated for 1,733.8 hours.

The SVE system flow ranged from 172 standard cubic feet per min (scfm) to 180 scfm. System vacuum has been regulated between 9 inches of water to 20.5 inches of water during the quarter. PID system influent readings were collected from sampling ports before (influent) and after (effluent) the blower during this quarter. Influent readings ranged from 0 parts per million by volume (ppmv) to 0.2 ppmv. Effluent readings were measured at 0.0 ppmv. SVE system parameters are summarized in Table 2.

Influent and effluent vapor samples were collected on 17 July, 17 August and 27 September 2017. Tetrachloroethene (PCE) was detected in all influent samples at concentrations ranging from 960 micrograms per cubic meter (µg/m^3) to 2,100 µg/m^3. Constituents of concern were not reported above laboratory reporting limits in any of the effluent samples collected during the third quarter 2017.

No other analytes of concern were reported above laboratory detection limits in the samples collected during the third quarter 2017 operational period. SVE influent and effluent samples collected this quarter are summarized in Table 3. The laboratory reports (McCampbell Analytical Work Order Nos. 1707527, 170878 and 1709B98), QA/QC report

and chain of custody form are included in Appendix A. The laboratory electronic deliverable format files were QA/QC checked and uploaded to the State Water Board GeoTracker site under confirmation numbers 1336509406, 8380668342 and 5582862555.

MASS REMOVAL

Between 26 June and 27 September 2017, the SVE unit operated a total of 2,235.4 hours, for the estimation of contaminate mass removal (Table 2). The average analytical results of the influent SVE flow samples, average influent flow rates and the operational periods (i.e. between sampling events) were used to calculate the approximate mass of extracted PCE during this period. During the third quarter 2017, approximately 1.77 pounds of PCE were removed from the soil vapor at the site using SVE remediation. Mass and volume calculations are included in Appendix B.

4.0. CONCLUSIONS

Based upon the data presented in this report, AGE concludes:

- SVE remediation generally operated without down-time during the third quarter 2017 (Table 2);
- PCE was detected at low concentrations in all influent samples during the third quarter 2017 remediation period. Influent concentrations still appear to be reaching asymptotic levels (see trend graph in Appendix C). However, slight rebound was observed in recently performed indoor air and sub-slab samples and the system should continue to be run until constituents of concern are mitigated.
- The total system flow and vacuum observed during the third quarter 2017 is adequate to remove the chlorinated hydrocarbon mass present at the site; and
- Between 26 June and 27 September 2017, approximately 1.77 pounds of PCE were removed from the shallow subsurface (Appendix B).
- Field measurements of influent sampling and from individual soil-vapor wells indicate that a sufficient PCE mass has been removed as a result of SVE operations conducted at the site since it's initiation.

5.0. RECOMMENDATIONS

Based on the findings of the environmental activities performed to date at the site, AGE recommends continued operation of the SVE system with an effort to optimize mass removal from the well network, until indoor air and sub-slab concentrations have been adequately mitigated.

6.0. LIMITATIONS

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. Findings were based upon analytical results provided by an independent laboratory. Evaluation of the geologic/hydrogeologic conditions at the site for the purpose of this investigation was made from a limited number of available data points (soil-vapor samples) and subsurface conditions may vary away from these data points. No other warranty, expressed or implied, is made as to the professional interpretations, opinions, and recommendations contained in this report.

FIGURES

N

SCALE
0 2000 4000
FEET

SAN LEANDRO QUADRANGLE, CALIFORNIA
7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)

LOCATION MAP

SWISS VALLEY CLEANERS
1395 MacArthur Boulevard
SAN LEANDRO, CALIFORNIA

Advanced GeoEnvironmental, Inc.
www.advgeoenv.com

PROJECT NO. AGE-NC-12-2461	FILE: LOCATION	FIGURE: 1
DATE: 21 MAY, 2013	DRAWN BY: MAC	

AdvancedGeo Environmental

(800) 511-9300 www.advgeoenv.com

SOIL-VAPOR WELLS & TRENCHING LOCATIONS

SWISS VALLEY CLEANERS
1395 MACARTHUR BOULEVARD
SAN LEANDRO, CALIFORNIA

DATE: JULY 2017
FILE: SVW
DRAWN BY: DJV
PROJECT NO. PROJ. AGE-12-2461
FIGURE: 2

TABLES

TABLE 1

WELL CONSTRUCTION DETAILS
Swiss Valley Cleaners
1395 MacArthur Boulevard, San Leandro, California

Well ID	Installation Date	Borehole Diameter (inch)	Total Drilled Depth (feet bsg)	Total Well Depth (feet bsg)	Casing Elevation (ft MSL)	Well Casing Material	Slot Size (inch)	Screen Interval (feet)	Filter Pack Interval (feet bsg)	Bentonite Interval (feet bsg)	Grout Interval (feet bsg)	Well Location
VW-1	08-21-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-2	08-21-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-3	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-4	08-22-2014	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-5	05-08-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-6	05-08-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-7	05-08-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-8	05-08-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1369 MacArthur (Former Jazzercise)
VW-9	08-25-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-10	08-25-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-11	08-25-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-12	08-25-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-13	08-25-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-14	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-15	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-16	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-17	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Front of Facility
VW-18	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-19	08-26-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	Rear of Facility
VW-20	08-27-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)
VW-21	08-27-2015	7	7	7	NM	PVC	0.020	2 to 7	2 to 7	0.5 to 2	none	1395 MacArthur (Swiss Valley Cleaners)

Notes:

bsg: below surface grade
NM: Not measured

TABLE 2

SVE FIELD PARAMETERS

Swiss Valley Cleaners

1395 MacArthur Boulevard, San Leandro, California

Date	Time	System Hours	Flow (IOW in 3" Pipe)	Flow (SCFM)	Vacuum (IOW)	Influent PID (ppm)	Effluent PID (ppm)	Wells Operational	Total Air Temp (F°)	Total Air Pressure (IOW)
11/11/2016	10:00	22,835.8	1.6	164	7.6	16	0	VW-1 through VW-21	121	24
11/14/2016	13:30	22,910.5	1.75	170	8.0	4	0	VW-1 through VW-21	123	23
11/15/2016	13:40	22,934.4	1.8	172	8.7	10	0	VW-1 through VW-21	120	24
11/16/2016	13:05	22,957.8	1.8	172	9.4	10	0	VW-1 through VW-21	120	24
11/17/2016	12:10	22,981.0	1.8	172	9.8	11	0	VW-1 through VW-21	118	24
11/22/2016	12:10	23,100.9	1.8	172	9.8	8	0	VW-1 through VW-21	118	24
12/1/2016	10:40	23,315.5	1.8	172	9.8	9	0	VW-1 through VW-21	116	24
12/6/2016	10:25	23,435.9	1.8	172	9.8	8	0	VW-1 through VW-21	112	23
12/15/2016	11:00	23,651.9	1.8	172	9.8	5.1	0	VW-1 through VW-21	114	23
12/20/2016	9:10	23,767.1	-	-	-	-	-	-	-	-
12/27/2016	11:40	23,767.1	1.6	164	-	5.4	0	VW-1 through VW-21	-	25
1/5/2017	9:30	23,982.0	1.7	168	14	5	0	VW-1 through VW-21	114	26
1/10/2017	15:50	24,101.8	1.75	170	15	4	0	VW-1 through VW-21	112	25
1/19/2017	10:10	24,114.0	2.1	185	13	8	0	VW-1 through VW-21	112	28
2/1/2017	10:35	24,426.4	2.4	200	12	1.3	0	VW-1 through VW-21	120	-
2/13/2017	12:15	24,715.9	2.4	200	6	1.7	0	VW-1 through VW-21	120	-
2/21/2017	10:30	24,906.2	2.4	200	6	1.5	0	VW-1 through VW-21	120	-
2/24/2017	11:17	24,979.0	2.1	185	10	1.6	0	VW-1 through VW-21	115	28
3/1/2017	10:15	25,097.5	2.1	185	10	1.6	0	VW-1 through VW-21	117	26
3/7/2017	11:15	25,146.3	2.1	185	8	2.7	0	VW-1 through VW-21	112	25
3/15/2017	11:01	25,337.0	2.1	185	8.4	1.1	0	VW-1 through VW-21	124	27
3/22/2017	10:20	25,504.3	2.1	185	8	2.8	0	VW-1 through VW-21	116	26
4/5/2017	10:58	25,840.4	2.0	180	9.4	0.2	0	VW-1 through VW-21	128	26
4/19/2017	10:10	25,962.0	2.0	180	9.5	1	0	VW-1 through VW-21	-	24
5/2/2017	11:25	26,274.3	2.0	180	6	0	0	VW-1 through VW-21	145	-
6/26/2017	12:40	26,274.5	1.8	172	8.8	0	0	VW-1 through VW-21	135	23
7/17/2017	10:25	26,776.1	2.0	180	9	0	0	VW-1 through VW-21	136	26
8/8/2017	11:00	27,305.2	2.0	180	22	0	0	VW-1 through VW-21	134	29
8/17/2017	9:25	27,519.2	1.9	176	20	0	0	VW-1 through VW-21	128	27
9/1/2017	11:42	27,881.4	1.8	172	19	0	0	VW-1 through VW-21	149	25
9/7/2017	12:20	28,026.1	1.9	176	20	0	0	VW-1 through VW-21	130	-

TABLE 2

SVE FIELD PARAMETERS

Swiss Valley Cleaners

1395 MacArthur Boulevard, San Leandro, California

Date	Time	System Hours	Flow (IOW in 3" Pipe)	Flow (SCFM)	Vacuum (IOW)	Influent PID (ppm)	Effluent PID (ppm)	Wells Operational	Total Air Temp (F°)	Total Air Pressure (IOW)
9/12/2017	10:40	28,144.7	1.9	176	20.5	0	0	VW-1 through VW-21	138	29
9/22/2017	8:50	28,382.6	2.0	180	20	0.2	0	VW-1 through VW-21	120	28
9/27/2017	16:15	28,509.9	2.0	180	20	0	0	VW-1 through VW-21	145	-

Notes:
IOW: Inches of Water
SCFM: standard cubic feet per minute
ppm: parts per million
F°: Degrees Fehrenheit

TABLE 3

SOIL VAPOR EXTRACTION ANALYTICAL DATA
Swiss Valley Cleaners
1395 MacArthur Boulevard, San Leandro, California

Sample ID	Date	EPA 8260B					
		Tetrachloroethene (PCE)	Trichloroethene (TCE)	1,1- Dichloroethene (1,1-DCE)	Trans 1,2-Dichloroethene (Trans 1,2-DCE)	Cis 1,2-Dichloroethene (Cis 1,2-DCE)	Vinyl Chloride (VC)
Influent/Vapor	11-11-2016	**20,000**	<250	<250	<250	<250	<250
	11-14-2016	**13,000**	<1,000	<1,000	<1,000	<1,000	<1,000
	11-15-2016	**5,000**	<1,000	<1,000	<1,000	<1,000	<1,000
	11-16-2016	**6,000**	<1,000	<1,000	<1,000	<1,000	<1,000
	11-17-2016	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
	12-15-2016	**3,400**	<250	<250	<250	<250	<250
	01-19-2017	**8,900**	<250	<250	<250	<250	<250
	02-21-2017	**2,100**	<250	<250	<250	<250	<250
	03-15-2017	**2,000**	<250	<250	<250	<250	<250
	04-19-2017	**1,600**	<250	<250	<250	<250	<250
	06-26-2017	**2,100**	<250	<250	<250	<250	<250
	07-17-2017	**2,100**	<250	<250	<250	<250	<250
	08-17-2017	**960**	<250	<250	<250	<250	<250
	09-27-2017	**1,200**	<250	<250	<250	<250	<250
Effluent	11-11-2016	<250	<250	<250	<250	<250	<250
	11-14-2016	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
	11-15-2016	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
	11-16-2016	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
	11-17-2016	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
	12-15-2016	<250	<250	<250	<250	<250	<250
	01-19-2017	<250	<250	<250	<250	<250	<250
	02-21-2017	<250	<250	<250	<250	<250	<250
	03-15-2017	<250	<250	<250	<250	<250	<250
	04-19-2017	<250	<250	<250	<250	<250	<250
	06-26-2017	<250	<250	<250	<250	<250	<250
	07-17-2017	<250	<250	<250	<250	<250	<250
	08-17-2017	<250	<250	<250	<250	<250	<250
	09-27-2017	<250	<250	<250	<250	<250	<250

Notes:

All sample concentrations reported in micrograms per cubic meter

<: Indicates constituents were not detected at a concentration greater than the reporting limit shown.

APPENDIX A

McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1709B98

Report Created for: Advanced GeoEnvironmental, Inc.

837 Shaw Road
Stockton, CA 95215

Project Contact: Daniel Villanueva
Project P.O.:
Project Name: Swiss Valley Cleaners

Project Received: 09/28/2017

Analytical Report reviewed & approved for release on 10/04/2017 by:

Angela Rydelius,
Laboratory Manager

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: Advanced GeoEnvironmental, Inc.
Project: Swiss Valley Cleaners
WorkOrder: 1709B98

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

H	Samples were analyzed out of holding time

McCampbell Analytical, Inc.
"When Quality Counts"

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Glossary of Terms & Qualifier Definitions

Client: Advanced GeoEnvironmental, Inc.
Project: Swiss Valley Cleaners
WorkOrder: 1709B98

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.

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"When Quality Counts"

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Received:	9/28/17 8:35	**Extraction Method:**	SW5030B
Date Prepared:	9/29/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	1709B98-001A	Air	09/27/2017 14:25	GC10 09291709.D	146312

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	09/29/2017 12:23
Benzene	ND	H	250	1	09/29/2017 12:23
Bromobenzene	ND	H	250	1	09/29/2017 12:23
Bromochloromethane	ND	H	250	1	09/29/2017 12:23
Bromodichloromethane	ND	H	250	1	09/29/2017 12:23
Bromoform	ND	H	250	1	09/29/2017 12:23
Bromomethane	ND	H	250	1	09/29/2017 12:23
t-Butyl alcohol (TBA)	ND	H	2500	1	09/29/2017 12:23
n-Butyl benzene	ND	H	250	1	09/29/2017 12:23
sec-Butyl benzene	ND	H	250	1	09/29/2017 12:23
tert-Butyl benzene	ND	H	250	1	09/29/2017 12:23
Carbon Disulfide	ND	H	250	1	09/29/2017 12:23
Carbon Tetrachloride	ND	H	250	1	09/29/2017 12:23
Chlorobenzene	ND	H	250	1	09/29/2017 12:23
Chloroethane	ND	H	250	1	09/29/2017 12:23
Chloroform	ND	H	250	1	09/29/2017 12:23
Chloromethane	ND	H	250	1	09/29/2017 12:23
2-Chlorotoluene	ND	H	250	1	09/29/2017 12:23
4-Chlorotoluene	ND	H	250	1	09/29/2017 12:23
Dibromochloromethane	ND	H	250	1	09/29/2017 12:23
1,2-Dibromo-3-chloropropane	ND	H	250	1	09/29/2017 12:23
1,2-Dibromoethane (EDB)	ND	H	250	1	09/29/2017 12:23
Dibromomethane	ND	H	250	1	09/29/2017 12:23
1,2-Dichlorobenzene	ND	H	250	1	09/29/2017 12:23
1,3-Dichlorobenzene	ND	H	250	1	09/29/2017 12:23
1,4-Dichlorobenzene	ND	H	250	1	09/29/2017 12:23
Dichlorodifluoromethane	ND	H	250	1	09/29/2017 12:23
1,1-Dichloroethane	ND	H	250	1	09/29/2017 12:23
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	09/29/2017 12:23
1,1-Dichloroethene	ND	H	250	1	09/29/2017 12:23
cis-1,2-Dichloroethene	ND	H	250	1	09/29/2017 12:23
trans-1,2-Dichloroethene	ND	H	250	1	09/29/2017 12:23
1,2-Dichloropropane	ND	H	250	1	09/29/2017 12:23
1,3-Dichloropropane	ND	H	250	1	09/29/2017 12:23
2,2-Dichloropropane	ND	H	250	1	09/29/2017 12:23
1,1-Dichloropropene	ND	H	250	1	09/29/2017 12:23
cis-1,3-Dichloropropene	ND	H	250	1	09/29/2017 12:23

(Cont.)

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Received:	9/28/17 8:35	**Extraction Method:**	SW5030B
Date Prepared:	9/29/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	**1709B98-001A**	**Air**	**09/27/2017 14:25**	**GC10 09291709.D**	**146312**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	09/29/2017 12:23
Diisopropyl ether (DIPE)	ND	H	250	1	09/29/2017 12:23
Ethylbenzene	ND	H	250	1	09/29/2017 12:23
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	09/29/2017 12:23
Freon 113	ND	H	5000	1	09/29/2017 12:23
Hexachlorobutadiene	ND	H	250	1	09/29/2017 12:23
Hexachloroethane	ND	H	250	1	09/29/2017 12:23
2-Hexanone	ND	H	250	1	09/29/2017 12:23
Isopropylbenzene	ND	H	250	1	09/29/2017 12:23
4-Isopropyl toluene	ND	H	250	1	09/29/2017 12:23
Methyl-t-butyl ether (MTBE)	ND	H	250	1	09/29/2017 12:23
Methylene chloride	ND	H	250	1	09/29/2017 12:23
n-Propyl benzene	ND	H	250	1	09/29/2017 12:23
Styrene	ND	H	250	1	09/29/2017 12:23
1,1,1,2-Tetrachloroethane	ND	H	250	1	09/29/2017 12:23
1,1,2,2-Tetrachloroethane	ND	H	250	1	09/29/2017 12:23
Tetrachloroethene	**1200**	H	250	1	09/29/2017 12:23
Toluene	ND	H	250	1	09/29/2017 12:23
1,2,3-Trichlorobenzene	ND	H	250	1	09/29/2017 12:23
1,2,4-Trichlorobenzene	ND	H	250	1	09/29/2017 12:23
1,1,1-Trichloroethane	ND	H	250	1	09/29/2017 12:23
1,1,2-Trichloroethane	ND	H	250	1	09/29/2017 12:23
Trichloroethene	ND	H	250	1	09/29/2017 12:23
Trichlorofluoromethane	ND	H	250	1	09/29/2017 12:23
1,2,3-Trichloropropane	ND	H	250	1	09/29/2017 12:23
1,2,4-Trimethylbenzene	ND	H	250	1	09/29/2017 12:23
1,3,5-Trimethylbenzene	ND	H	250	1	09/29/2017 12:23
Vinyl Chloride	ND	H	250	1	09/29/2017 12:23
Xylenes, Total	ND	H	250	1	09/29/2017 12:23

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	113	H	84-115	09/29/2017 12:23
Toluene-d8	110	H	86-112	09/29/2017 12:23
4-BFB	79	H	66-121	09/29/2017 12:23

Analyst(s): HK

(Cont.)

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Received:	9/28/17 8:35	**Extraction Method:**	SW5030B
Date Prepared:	9/29/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	1709B98-002A	Air	09/27/2017 14:30	GC10 09291710.D	146312

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	09/29/2017 13:11
Benzene	ND	H	250	1	09/29/2017 13:11
Bromobenzene	ND	H	250	1	09/29/2017 13:11
Bromochloromethane	ND	H	250	1	09/29/2017 13:11
Bromodichloromethane	ND	H	250	1	09/29/2017 13:11
Bromoform	ND	H	250	1	09/29/2017 13:11
Bromomethane	ND	H	250	1	09/29/2017 13:11
t-Butyl alcohol (TBA)	ND	H	2500	1	09/29/2017 13:11
n-Butyl benzene	ND	H	250	1	09/29/2017 13:11
sec-Butyl benzene	ND	H	250	1	09/29/2017 13:11
tert-Butyl benzene	ND	H	250	1	09/29/2017 13:11
Carbon Disulfide	ND	H	250	1	09/29/2017 13:11
Carbon Tetrachloride	ND	H	250	1	09/29/2017 13:11
Chlorobenzene	ND	H	250	1	09/29/2017 13:11
Chloroethane	ND	H	250	1	09/29/2017 13:11
Chloroform	ND	H	250	1	09/29/2017 13:11
Chloromethane	ND	H	250	1	09/29/2017 13:11
2-Chlorotoluene	ND	H	250	1	09/29/2017 13:11
4-Chlorotoluene	ND	H	250	1	09/29/2017 13:11
Dibromochloromethane	ND	H	250	1	09/29/2017 13:11
1,2-Dibromo-3-chloropropane	ND	H	250	1	09/29/2017 13:11
1,2-Dibromoethane (EDB)	ND	H	250	1	09/29/2017 13:11
Dibromomethane	ND	H	250	1	09/29/2017 13:11
1,2-Dichlorobenzene	ND	H	250	1	09/29/2017 13:11
1,3-Dichlorobenzene	ND	H	250	1	09/29/2017 13:11
1,4-Dichlorobenzene	ND	H	250	1	09/29/2017 13:11
Dichlorodifluoromethane	ND	H	250	1	09/29/2017 13:11
1,1-Dichloroethane	ND	H	250	1	09/29/2017 13:11
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	09/29/2017 13:11
1,1-Dichloroethene	ND	H	250	1	09/29/2017 13:11
cis-1,2-Dichloroethene	ND	H	250	1	09/29/2017 13:11
trans-1,2-Dichloroethene	ND	H	250	1	09/29/2017 13:11
1,2-Dichloropropane	ND	H	250	1	09/29/2017 13:11
1,3-Dichloropropane	ND	H	250	1	09/29/2017 13:11
2,2-Dichloropropane	ND	H	250	1	09/29/2017 13:11
1,1-Dichloropropene	ND	H	250	1	09/29/2017 13:11
cis-1,3-Dichloropropene	ND	H	250	1	09/29/2017 13:11

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Received:	9/28/17 8:35	**Extraction Method:**	SW5030B
Date Prepared:	9/29/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	1709B98-002A	Air	09/27/2017 14:30	GC10 09291710.D	146312

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	09/29/2017 13:11
Diisopropyl ether (DIPE)	ND	H	250	1	09/29/2017 13:11
Ethylbenzene	ND	H	250	1	09/29/2017 13:11
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	09/29/2017 13:11
Freon 113	ND	H	5000	1	09/29/2017 13:11
Hexachlorobutadiene	ND	H	250	1	09/29/2017 13:11
Hexachloroethane	ND	H	250	1	09/29/2017 13:11
2-Hexanone	ND	H	250	1	09/29/2017 13:11
Isopropylbenzene	ND	H	250	1	09/29/2017 13:11
4-Isopropyl toluene	ND	H	250	1	09/29/2017 13:11
Methyl-t-butyl ether (MTBE)	ND	H	250	1	09/29/2017 13:11
Methylene chloride	ND	H	250	1	09/29/2017 13:11
n-Propyl benzene	ND	H	250	1	09/29/2017 13:11
Styrene	ND	H	250	1	09/29/2017 13:11
1,1,1,2-Tetrachloroethane	ND	H	250	1	09/29/2017 13:11
1,1,2,2-Tetrachloroethane	ND	H	250	1	09/29/2017 13:11
Tetrachloroethene	ND	H	250	1	09/29/2017 13:11
Toluene	ND	H	250	1	09/29/2017 13:11
1,2,3-Trichlorobenzene	ND	H	250	1	09/29/2017 13:11
1,2,4-Trichlorobenzene	ND	H	250	1	09/29/2017 13:11
1,1,1-Trichloroethane	ND	H	250	1	09/29/2017 13:11
1,1,2-Trichloroethane	ND	H	250	1	09/29/2017 13:11
Trichloroethene	ND	H	250	1	09/29/2017 13:11
Trichlorofluoromethane	ND	H	250	1	09/29/2017 13:11
1,2,3-Trichloropropane	ND	H	250	1	09/29/2017 13:11
1,2,4-Trimethylbenzene	ND	H	250	1	09/29/2017 13:11
1,3,5-Trimethylbenzene	ND	H	250	1	09/29/2017 13:11
Vinyl Chloride	ND	H	250	1	09/29/2017 13:11
Xylenes, Total	ND	H	250	1	09/29/2017 13:11

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	112	H	84-115	09/29/2017 13:11
Toluene-d8	110	H	86-112	09/29/2017 13:11
4-BFB	82	H	66-121	09/29/2017 13:11

Analyst(s): HK

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Prepared:	9/29/17	**BatchID:**	146312
Date Analyzed:	9/29/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-146312

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	250	-	-	-
Benzene	ND	250	-	-	-
Bromobenzene	ND	250	-	-	-
Bromochloromethane	ND	250	-	-	-
Bromodichloromethane	ND	250	-	-	-
Bromoform	ND	250	-	-	-
Bromomethane	ND	250	-	-	-
t-Butyl alcohol (TBA)	ND	2500	-	-	-
n-Butyl benzene	ND	250	-	-	-
sec-Butyl benzene	ND	250	-	-	-
tert-Butyl benzene	ND	250	-	-	-
Carbon Disulfide	ND	250	-	-	-
Carbon Tetrachloride	ND	250	-	-	-
Chlorobenzene	ND	250	-	-	-
Chloroethane	ND	250	-	-	-
Chloroform	ND	250	-	-	-
Chloromethane	ND	250	-	-	-
2-Chlorotoluene	ND	250	-	-	-
4-Chlorotoluene	ND	250	-	-	-
Dibromochloromethane	ND	250	-	-	-
1,2-Dibromo-3-chloropropane	ND	250	-	-	-
1,2-Dibromoethane (EDB)	ND	250	-	-	-
Dibromomethane	ND	250	-	-	-
1,2-Dichlorobenzene	ND	250	-	-	-
1,3-Dichlorobenzene	ND	250	-	-	-
1,4-Dichlorobenzene	ND	250	-	-	-
Dichlorodifluoromethane	ND	250	-	-	-
1,1-Dichloroethane	ND	250	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	250	-	-	-
1,1-Dichloroethene	ND	250	-	-	-
cis-1,2-Dichloroethene	ND	250	-	-	-
trans-1,2-Dichloroethene	ND	250	-	-	-
1,2-Dichloropropane	ND	250	-	-	-
1,3-Dichloropropane	ND	250	-	-	-
2,2-Dichloropropane	ND	250	-	-	-
1,1-Dichloropropene	ND	250	-	-	-
cis-1,3-Dichloropropene	ND	250	-	-	-
trans-1,3-Dichloropropene	ND	250	-	-	-
Diisopropyl ether (DIPE)	ND	250	-	-	-

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Prepared:	9/29/17	**BatchID:**	146312
Date Analyzed:	9/29/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-146312

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Ethylbenzene	ND	250	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	250	-	-	-
Freon 113	ND	5000	-	-	-
Hexachlorobutadiene	ND	250	-	-	-
Hexachloroethane	ND	250	-	-	-
2-Hexanone	ND	250	-	-	-
Isopropylbenzene	ND	250	-	-	-
4-Isopropyl toluene	ND	250	-	-	-
Methyl-t-butyl ether (MTBE)	ND	250	-	-	-
Methylene chloride	ND	250	-	-	-
n-Propyl benzene	ND	250	-	-	-
Styrene	ND	250	-	-	-
1,1,1,2-Tetrachloroethane	ND	250	-	-	-
1,1,2,2-Tetrachloroethane	ND	250	-	-	-
Tetrachloroethene	ND	250	-	-	-
Toluene	ND	250	-	-	-
1,2,3-Trichlorobenzene	ND	250	-	-	-
1,2,4-Trichlorobenzene	ND	250	-	-	-
1,1,1-Trichloroethane	ND	250	-	-	-
1,1,2-Trichloroethane	ND	250	-	-	-
Trichloroethene	ND	250	-	-	-
Trichlorofluoromethane	ND	250	-	-	-
1,2,3-Trichloropropane	ND	250	-	-	-
1,2,4-Trimethylbenzene	ND	250	-	-	-
1,3,5-Trimethylbenzene	ND	250	-	-	-
Vinyl Chloride	ND	250	-	-	-
Xylenes, Total	ND	250	-	-	-
Surrogate Recovery					
Dibromofluoromethane	13750		12500	110	79-131
Toluene-d8	14020		12500	112	81-124
4-BFB	1013		1250	81	74-128

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1709B98
Date Prepared:	9/29/17	**BatchID:**	146312
Date Analyzed:	9/29/17	**Extraction Method:**	SW5030B
Instrument:	GC10	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-146312

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	3280	3380	5000	66	68	65-113	3.03	30
Benzene	4340	3930	5000	87	79	74-118	9.96	30
t-Butyl alcohol (TBA)	11,700	12,400	20000	58	62	30-117	6.18	30
Chlorobenzene	4180	3780	5000	84	76	72-107	10.1	30
1,2-Dibromoethane (EDB)	3380	3450	5000	68	69	68-110	2.20	30
1,2-Dichloroethane (1,2-DCA)	3660	3740	5000	73	75	68-115	2.14	30
1,1-Dichloroethene	5060	4280	5000	101	86	58-127	16.8	30
Diisopropyl ether (DIPE)	4460	4300	5000	89	86	72-119	3.61	30
Ethyl tert-butyl ether (ETBE)	3860	3840	5000	77	77	70-118	0	30
Methyl-t-butyl ether (MTBE)	3220	3370	5000	64, F2	67	65-125	4.42	30
Toluene	4360	3790	5000	87	76	70-112	13.8	30
Trichloroethene	4430	3930	5000	89	79	73-117	11.9	30
Xylenes, Total	13,400	12,100	15000	89	81	70-109	9.70	30
Surrogate Recovery								
Dibromofluoromethane	13,600	13,900	12500	109	111	79-131	2.57	30
Toluene-d8	14,100	13,700	12500	113	110	81-124	2.74	30
4-BFB	1150	1170	1250	92	94	74-128	1.24	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1709B98 **ClientCode: AGES**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Daniel Villanueva
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
(209) 467-1006 FAX: (209) 467-1118

Email: dvillanueva@advgeoenv.com; admin@adv
cc/3rd Party:
PO:
ProjectNo: Swiss Valley Cleaners

Bill to:
Erica
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
ap@advgeoenv.com; kburchard@advge

Requested TAT: 5 days;

Date Received: **09/28/2017**
Date Logged: **09/28/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1709B98-001	Influent/Vapor	Air	9/27/2017 14:25	☐	A											
1709B98-002	Effluent/Vapor	Air	9/27/2017 14:30	☐	A											

Test Legend:

1	8260B_A(UG/M3)	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Alexandra Iniguez

The following SampIDs: 001A, 002A contain testgroup 8260B_A.

Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ADVANCED GEOENVIRONMENTAL, INC.
Client Contact: Daniel Villanueva
Contact's Email: dvillanueva@advgeoenv.com; admin@advgeoenv.com; kburchard@advgeoenv.com

Project: Swiss Valley Cleaners
Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)

Work Order: 1709B98
QC Level: LEVEL 2
Date Logged: 9/28/2017

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1709B98-001A	Influent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	9/27/2017 14:25	5 days		☐	
1709B98-002A	Effluent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	9/27/2017 14:30	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1709B98

Advanced GeoEnvironmental, Inc.

www.advgeoenv.com

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☐ 381 Thor Place, Brea, California 92821 • Phone (714) 529-0200 • Fax (714) 529-0203
☐ 2318 Fourth Street, Santa Rosa, California 95404 • Phone (707) 570-1418 • Fax (707) 570-1461
☐ 395 Del Monte Center, #111, Monterey, California 93940 • Phone (800) 511-9300 • Fax (831) 394-5979
☐ _____

CHAIN OF CUSTODY RECORD

Date: 9/28/17 Page 1 of 1

Project Name Swiss Valley Cleaners	**Project Manager** Daniel Villanueva
Client	**Sampler (initials & signature)** KL
Invoice to: ☒ AGE ☐ Client	**Lab Project No.:**

Analysis Required

Sample ID/Location/Description	Date	Time	Matrix	Number	Notes	VOC's 8260
Influent/vapor	9/27/17	1425	A	1		X
Effluent/vapor	9/27/17	1430	A	1		X

Relinquished by: Rich Marty	Date: 9/28/17	Time: 1640	Laboratory: McCampbell		
Courier:			Received by:	Date: 9/29/17	Time: 0720
Relinquished by:	Date: 9/28/17	Time: 0835	Received by:	Date: 9/28/17	Time: 0835
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Requested Turn Around Time (circle): 24 hours 48 hours 72 hours 5 days (standard) Other:_____

Matrix Codes: A = Air W = Water S = Solid

Special Instructions to lab:

I hereby authorize the performance of the above indicated work.

Rich Marty

Geotracker EDF to: ☒ geotracker@advgeoenv.com ☐ _____

Global ID:

McCampbell Analytical, Inc.
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1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**Advanced GeoEnvironmental, Inc.**	Date and Time Received:	**9/28/2017 08:35**
Project Name:	**Swiss Valley Cleaners**	Date Logged:	**9/28/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1709B98** Matrix: Air	Logged by:	Alexandra Iniguez
Carrier:	Michael Ostrom (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	
COC agrees with Quote?	Yes	☐	No	☐	NA ☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☑	No	☐	NA ☐
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA ☐
Sample/Temp Blank temperature	Temp:				NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes	☐	No	☐	NA ☑
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☐	No	☑	

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments: Method SW8260B (VOCs) was received past its 0.25-day holding time.

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Analytical Report

WorkOrder: 1707527 **Amended:** 07/21/2017

Report Created for: Advanced GeoEnvironmental, Inc.

837 Shaw Road
Stockton, CA 95215

Project Contact: Daniel Villanueva
Project P.O.:
Project Name: Swiss Valley Cleaners

Project Received: 07/17/2017

Analytical Report reviewed & approved for release on 07/21/2017 by:

Angela Rydelius,
Laboratory Manager

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Glossary of Terms & Qualifier Definitions

Client: Advanced GeoEnvironmental, Inc.
Project: Swiss Valley Cleaners
WorkOrder: 1707527

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

H	Samples were analyzed out of holding time

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Received:	7/17/17 11:50	**Extraction Method:**	SW5030B
Date Prepared:	7/18/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	1707527-001A	Air	07/17/2017 10:47	GC16	142212

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	07/18/2017 16:36
Benzene	ND	H	250	1	07/18/2017 16:36
Bromobenzene	ND	H	250	1	07/18/2017 16:36
Bromochloromethane	ND	H	250	1	07/18/2017 16:36
Bromodichloromethane	ND	H	250	1	07/18/2017 16:36
Bromoform	ND	H	250	1	07/18/2017 16:36
Bromomethane	ND	H	250	1	07/18/2017 16:36
t-Butyl alcohol (TBA)	ND	H	2500	1	07/18/2017 16:36
n-Butyl benzene	ND	H	250	1	07/18/2017 16:36
sec-Butyl benzene	ND	H	250	1	07/18/2017 16:36
tert-Butyl benzene	ND	H	250	1	07/18/2017 16:36
Carbon Disulfide	ND	H	250	1	07/18/2017 16:36
Carbon Tetrachloride	ND	H	250	1	07/18/2017 16:36
Chlorobenzene	ND	H	250	1	07/18/2017 16:36
Chloroethane	ND	H	250	1	07/18/2017 16:36
Chloroform	ND	H	250	1	07/18/2017 16:36
Chloromethane	ND	H	250	1	07/18/2017 16:36
2-Chlorotoluene	ND	H	250	1	07/18/2017 16:36
4-Chlorotoluene	ND	H	250	1	07/18/2017 16:36
Dibromochloromethane	ND	H	250	1	07/18/2017 16:36
1,2-Dibromo-3-chloropropane	ND	H	250	1	07/18/2017 16:36
1,2-Dibromoethane (EDB)	ND	H	250	1	07/18/2017 16:36
Dibromomethane	ND	H	250	1	07/18/2017 16:36
1,2-Dichlorobenzene	ND	H	250	1	07/18/2017 16:36
1,3-Dichlorobenzene	ND	H	250	1	07/18/2017 16:36
1,4-Dichlorobenzene	ND	H	250	1	07/18/2017 16:36
Dichlorodifluoromethane	ND	H	250	1	07/18/2017 16:36
1,1-Dichloroethane	ND	H	250	1	07/18/2017 16:36
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	07/18/2017 16:36
1,1-Dichloroethene	ND	H	250	1	07/18/2017 16:36
cis-1,2-Dichloroethene	ND	H	250	1	07/18/2017 16:36
trans-1,2-Dichloroethene	ND	H	250	1	07/18/2017 16:36
1,2-Dichloropropane	ND	H	250	1	07/18/2017 16:36
1,3-Dichloropropane	ND	H	250	1	07/18/2017 16:36
2,2-Dichloropropane	ND	H	250	1	07/18/2017 16:36
1,1-Dichloropropene	ND	H	250	1	07/18/2017 16:36
cis-1,3-Dichloropropene	ND	H	250	1	07/18/2017 16:36

(Cont.)

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Analytical Report

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Date Received:	7/17/17 11:50	**Extraction Method:**	SW5030B
Date Prepared:	7/18/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	1707527-001A	Air	07/17/2017 10:47	GC16	142212

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	07/18/2017 16:36
Diisopropyl ether (DIPE)	ND	H	250	1	07/18/2017 16:36
Ethylbenzene	ND	H	250	1	07/18/2017 16:36
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	07/18/2017 16:36
Freon 113	ND	H	5000	1	07/18/2017 16:36
Hexachlorobutadiene	ND	H	250	1	07/18/2017 16:36
Hexachloroethane	ND	H	250	1	07/18/2017 16:36
2-Hexanone	ND	H	250	1	07/18/2017 16:36
Isopropylbenzene	ND	H	250	1	07/18/2017 16:36
4-Isopropyl toluene	ND	H	250	1	07/18/2017 16:36
Methyl-t-butyl ether (MTBE)	ND	H	250	1	07/18/2017 16:36
Methylene chloride	ND	H	250	1	07/18/2017 16:36
n-Propyl benzene	ND	H	250	1	07/18/2017 16:36
Styrene	ND	H	250	1	07/18/2017 16:36
1,1,1,2-Tetrachloroethane	ND	H	250	1	07/18/2017 16:36
1,1,2,2-Tetrachloroethane	ND	H	250	1	07/18/2017 16:36
Tetrachloroethene	ND	H	250	1	07/18/2017 16:36
Toluene	ND	H	250	1	07/18/2017 16:36
1,2,3-Trichlorobenzene	ND	H	250	1	07/18/2017 16:36
1,2,4-Trichlorobenzene	ND	H	250	1	07/18/2017 16:36
1,1,1-Trichloroethane	ND	H	250	1	07/18/2017 16:36
1,1,2-Trichloroethane	ND	H	250	1	07/18/2017 16:36
Trichloroethene	ND	H	250	1	07/18/2017 16:36
Trichlorofluoromethane	ND	H	250	1	07/18/2017 16:36
1,2,3-Trichloropropane	ND	H	250	1	07/18/2017 16:36
1,2,4-Trimethylbenzene	ND	H	250	1	07/18/2017 16:36
1,3,5-Trimethylbenzene	ND	H	250	1	07/18/2017 16:36
Vinyl Chloride	ND	H	250	1	07/18/2017 16:36
Xylenes, Total	ND	H	250	1	07/18/2017 16:36

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	109	H	70-130	07/18/2017 16:36
Toluene-d8	105	H	70-130	07/18/2017 16:36
4-BFB	116	H	70-130	07/18/2017 16:36

Analyst(s): HK

(Cont.)

CDPH ELAP 1644 • NELAP 4033ORELAP

Angela Rydelius, Lab Manager

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Received:	7/17/17 11:50	**Extraction Method:**	SW5030B
Date Prepared:	7/18/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	1707527-002A	Air	07/17/2017 10:46	GC16	142212

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	07/18/2017 17:17
Benzene	ND	H	250	1	07/18/2017 17:17
Bromobenzene	ND	H	250	1	07/18/2017 17:17
Bromochloromethane	ND	H	250	1	07/18/2017 17:17
Bromodichloromethane	ND	H	250	1	07/18/2017 17:17
Bromoform	ND	H	250	1	07/18/2017 17:17
Bromomethane	ND	H	250	1	07/18/2017 17:17
t-Butyl alcohol (TBA)	ND	H	2500	1	07/18/2017 17:17
n-Butyl benzene	ND	H	250	1	07/18/2017 17:17
sec-Butyl benzene	ND	H	250	1	07/18/2017 17:17
tert-Butyl benzene	ND	H	250	1	07/18/2017 17:17
Carbon Disulfide	ND	H	250	1	07/18/2017 17:17
Carbon Tetrachloride	ND	H	250	1	07/18/2017 17:17
Chlorobenzene	ND	H	250	1	07/18/2017 17:17
Chloroethane	ND	H	250	1	07/18/2017 17:17
Chloroform	ND	H	250	1	07/18/2017 17:17
Chloromethane	ND	H	250	1	07/18/2017 17:17
2-Chlorotoluene	ND	H	250	1	07/18/2017 17:17
4-Chlorotoluene	ND	H	250	1	07/18/2017 17:17
Dibromochloromethane	ND	H	250	1	07/18/2017 17:17
1,2-Dibromo-3-chloropropane	ND	H	250	1	07/18/2017 17:17
1,2-Dibromoethane (EDB)	ND	H	250	1	07/18/2017 17:17
Dibromomethane	ND	H	250	1	07/18/2017 17:17
1,2-Dichlorobenzene	ND	H	250	1	07/18/2017 17:17
1,3-Dichlorobenzene	ND	H	250	1	07/18/2017 17:17
1,4-Dichlorobenzene	ND	H	250	1	07/18/2017 17:17
Dichlorodifluoromethane	ND	H	250	1	07/18/2017 17:17
1,1-Dichloroethane	ND	H	250	1	07/18/2017 17:17
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	07/18/2017 17:17
1,1-Dichloroethene	ND	H	250	1	07/18/2017 17:17
cis-1,2-Dichloroethene	ND	H	250	1	07/18/2017 17:17
trans-1,2-Dichloroethene	ND	H	250	1	07/18/2017 17:17
1,2-Dichloropropane	ND	H	250	1	07/18/2017 17:17
1,3-Dichloropropane	ND	H	250	1	07/18/2017 17:17
2,2-Dichloropropane	ND	H	250	1	07/18/2017 17:17
1,1-Dichloropropene	ND	H	250	1	07/18/2017 17:17
cis-1,3-Dichloropropene	ND	H	250	1	07/18/2017 17:17

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Received:	7/17/17 11:50	**Extraction Method:**	SW5030B
Date Prepared:	7/18/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	**1707527-002A**	**Air**	**07/17/2017 10:46**	**GC16**	**142212**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	07/18/2017 17:17
Diisopropyl ether (DIPE)	ND	H	250	1	07/18/2017 17:17
Ethylbenzene	ND	H	250	1	07/18/2017 17:17
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	07/18/2017 17:17
Freon 113	ND	H	5000	1	07/18/2017 17:17
Hexachlorobutadiene	ND	H	250	1	07/18/2017 17:17
Hexachloroethane	ND	H	250	1	07/18/2017 17:17
2-Hexanone	ND	H	250	1	07/18/2017 17:17
Isopropylbenzene	ND	H	250	1	07/18/2017 17:17
4-Isopropyl toluene	ND	H	250	1	07/18/2017 17:17
Methyl-t-butyl ether (MTBE)	ND	H	250	1	07/18/2017 17:17
Methylene chloride	ND	H	250	1	07/18/2017 17:17
n-Propyl benzene	ND	H	250	1	07/18/2017 17:17
Styrene	ND	H	250	1	07/18/2017 17:17
1,1,1,2-Tetrachloroethane	ND	H	250	1	07/18/2017 17:17
1,1,2,2-Tetrachloroethane	ND	H	250	1	07/18/2017 17:17
Tetrachloroethene	**2100**	H	250	1	07/18/2017 17:17
Toluene	ND	H	250	1	07/18/2017 17:17
1,2,3-Trichlorobenzene	ND	H	250	1	07/18/2017 17:17
1,2,4-Trichlorobenzene	ND	H	250	1	07/18/2017 17:17
1,1,1-Trichloroethane	ND	H	250	1	07/18/2017 17:17
1,1,2-Trichloroethane	ND	H	250	1	07/18/2017 17:17
Trichloroethene	ND	H	250	1	07/18/2017 17:17
Trichlorofluoromethane	ND	H	250	1	07/18/2017 17:17
1,2,3-Trichloropropane	ND	H	250	1	07/18/2017 17:17
1,2,4-Trimethylbenzene	ND	H	250	1	07/18/2017 17:17
1,3,5-Trimethylbenzene	ND	H	250	1	07/18/2017 17:17
Vinyl Chloride	ND	H	250	1	07/18/2017 17:17
Xylenes, Total	ND	H	250	1	07/18/2017 17:17

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	107	H	70-130	07/18/2017 17:17
Toluene-d8	106	H	70-130	07/18/2017 17:17
4-BFB	109	H	70-130	07/18/2017 17:17

Analyst(s): HK

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Prepared:	7/18/17	**BatchID:**	142212
Date Analyzed:	7/18/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-142212

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	250	-	-	-
Benzene	ND	250	-	-	-
Bromobenzene	ND	250	-	-	-
Bromochloromethane	ND	250	-	-	-
Bromodichloromethane	ND	250	-	-	-
Bromoform	ND	250	-	-	-
Bromomethane	ND	250	-	-	-
t-Butyl alcohol (TBA)	ND	2500	-	-	-
n-Butyl benzene	ND	250	-	-	-
sec-Butyl benzene	ND	250	-	-	-
tert-Butyl benzene	ND	250	-	-	-
Carbon Disulfide	ND	250	-	-	-
Carbon Tetrachloride	ND	250	-	-	-
Chlorobenzene	ND	250	-	-	-
Chloroethane	ND	250	-	-	-
Chloroform	ND	250	-	-	-
Chloromethane	ND	250	-	-	-
2-Chlorotoluene	ND	250	-	-	-
4-Chlorotoluene	ND	250	-	-	-
Dibromochloromethane	ND	250	-	-	-
1,2-Dibromo-3-chloropropane	ND	250	-	-	-
1,2-Dibromoethane (EDB)	ND	250	-	-	-
Dibromomethane	ND	250	-	-	-
1,2-Dichlorobenzene	ND	250	-	-	-
1,3-Dichlorobenzene	ND	250	-	-	-
1,4-Dichlorobenzene	ND	250	-	-	-
Dichlorodifluoromethane	ND	250	-	-	-
1,1-Dichloroethane	ND	250	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	250	-	-	-
1,1-Dichloroethene	ND	250	-	-	-
cis-1,2-Dichloroethene	ND	250	-	-	-
trans-1,2-Dichloroethene	ND	250	-	-	-
1,2-Dichloropropane	ND	250	-	-	-
1,3-Dichloropropane	ND	250	-	-	-
2,2-Dichloropropane	ND	250	-	-	-
1,1-Dichloropropene	ND	250	-	-	-
cis-1,3-Dichloropropene	ND	250	-	-	-
trans-1,3-Dichloropropene	ND	250	-	-	-
Diisopropyl ether (DIPE)	ND	250	-	-	-

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Prepared:	7/18/17	**BatchID:**	142212
Date Analyzed:	7/18/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-142212

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Ethylbenzene	ND	250	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	250	-	-	-
Freon 113	ND	5000	-	-	-
Hexachlorobutadiene	ND	250	-	-	-
Hexachloroethane	ND	250	-	-	-
2-Hexanone	ND	250	-	-	-
Isopropylbenzene	ND	250	-	-	-
4-Isopropyl toluene	ND	250	-	-	-
Methyl-t-butyl ether (MTBE)	ND	250	-	-	-
Methylene chloride	ND	250	-	-	-
n-Propyl benzene	ND	250	-	-	-
Styrene	ND	250	-	-	-
1,1,1,2-Tetrachloroethane	ND	250	-	-	-
1,1,2,2-Tetrachloroethane	ND	250	-	-	-
Tetrachloroethene	ND	250	-	-	-
Toluene	ND	250	-	-	-
1,2,3-Trichlorobenzene	ND	250	-	-	-
1,2,4-Trichlorobenzene	ND	250	-	-	-
1,1,1-Trichloroethane	ND	250	-	-	-
1,1,2-Trichloroethane	ND	250	-	-	-
Trichloroethene	ND	250	-	-	-
Trichlorofluoromethane	ND	250	-	-	-
1,2,3-Trichloropropane	ND	250	-	-	-
1,2,4-Trimethylbenzene	ND	250	-	-	-
1,3,5-Trimethylbenzene	ND	250	-	-	-
Vinyl Chloride	ND	250	-	-	-
Xylenes, Total	ND	250	-	-	-
Surrogate Recovery					
Dibromofluoromethane	13500		12500	108	70-130
Toluene-d8	13230		12500	106	70-130
4-BFB	1448		1250	116	70-130

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1707527
Date Prepared:	7/18/17	**BatchID:**	142212
Date Analyzed:	7/18/17	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-142212

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	4140	4040	5000	83	81	56-133	2.66	30
Benzene	4480	4400	5000	90	88	72-122	1.77	30
t-Butyl alcohol (TBA)	14,600	14,700	20000	73	73	35-121	0	30
Chlorobenzene	4180	4050	5000	84	81	69-112	3.11	30
1,2-Dibromoethane (EDB)	4370	4100	5000	87	82	62-117	6.44	30
1,2-Dichloroethane (1,2-DCA)	4340	4200	5000	87	84	61-126	3.14	30
1,1-Dichloroethene	5180	5160	5000	104	103	67-122	0.571	30
Diisopropyl ether (DIPE)	4340	4240	5000	87	85	61-131	2.42	30
Ethyl tert-butyl ether (ETBE)	4380	4230	5000	88	85	63-132	3.40	30
Methyl-t-butyl ether (MTBE)	4730	4580	5000	95	92	63-127	3.03	30
Toluene	4550	4340	5000	91	87	64-115	4.80	30
Trichloroethene	5010	4890	5000	100	98	66-127	2.28	30
Xylenes, Total	13,400	13,000	15000	89	87	53-131	2.82	30
Surrogate Recovery								
Dibromofluoromethane	13,700	13,600	12500	109	109	83-124	0	30
Toluene-d8	13,800	13,400	12500	110	107	80-120	2.40	30
4-BFB	1320	1440	1250	106	115	70-129	8.65	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1707527 **ClientCode: AGES**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
Daniel Villanueva
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
(209) 467-1006 FAX: (209) 467-1118

Email: dvillanueva@advgeoenv.com; admin@adv
cc/3rd Party:
PO:
ProjectNo: Swiss Valley Cleaners

Bill to:
Erica
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
ap@advgeoenv.com; kburchard@advge

Requested TAT: 5 days;

Date Received: **07/17/2017**
Date Logged: **07/17/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1707527-001	Influent/Vapor	Air	7/17/2017 10:46	☐	A	A										
1707527-002	Effluent/Vapor	Air	7/17/2017 10:47	☐	A											

Test Legend:

1	8260B_A(UG/M3)	2	PREDF REPORT	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampIDs: 001A, 002A contain testgroup 8260B_A.

Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ADVANCED GEOENVIRONMENTAL, INC.
Project: Swiss Valley Cleaners
Work Order: 1707527
Client Contact: Daniel Villanueva
QC Level: LEVEL 2
Contact's Email: dvillanueva@advgeoenv.com; admin@advgeoenv.com; kburchard@advgeoenv.com
Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)
Date Logged: 7/17/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1707527-001A	Effluent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	7/17/2017 10:47	5 days		☐	
1707527-002A	Influent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	7/17/2017 10:46	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Advanced GeoEnvironmental, Inc.

www.advgeoenv.com

CHAIN OF CUSTODY RECORD

☑ 837 Shaw Road, Stockton, California 95215 • Phone (209) 467-1006 • Fax (209) 467-1118

☐ 381 Thor Place, Brea, California 92821 • Phone (714) 529-0200 • Fax (714) 529-0203

☐ 2318 Fourth Street, Santa Rosa, California 95404 • Phone (707) 570-1418 • Fax (707) 570-1461

☐ 395 Del Monte Center, #111, Monterey, California 93940 • Phone (800) 511-9300 • Fax (831) 394-5979

☐ _____

1707527

Date: 7/17/17 Page 1 of 1

Project Name Swiss Valley Cleaners	**Project Manager** Daniel Villanueva
Client	**Sampler (initials & signature)** RM
Invoice to: ☒ AGE ☐ Client	**Lab Project No.:**

Sample ID/Location/Description	Date	Time	Matrix	Number	Notes	Analysis Required: VOC's 8260
Influent Vapor	7/17/17	1046	A	1	1 liter tedlar bag	X
Effluent Vapor	7/17/17	1047	A	1	" " "	X

Relinquished by: Rul Mart	Date: 7/17/17	Time: 1150	Laboratory: McCampbell		
Courier: Delivered to Lab (RM)			Received by:	Date: 7/17/17	Time: 1150
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Requested Turn Around Time (circle): 24 hours 48 hours 72 hours 5 days (standard) Other:_____

Matrix Codes: A = Air W = Water S = Solid

Special Instructions to lab:

I hereby authorize the performance of the above indicated work.

Rul Mart

Geotracker EDF to: ☒ geotracker@advgeoenv.com ☐ _____

Global ID:

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Sample Receipt Checklist

Client Name:	**Advanced GeoEnvironmental, Inc.**	Date and Time Received	**7/17/2017 11:50**
Project Name:	**Swiss Valley Cleaners**	Date Logged:	**7/17/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1707527** Matrix: Air	Logged by:	Jena Alfaro
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Sample/Temp Blank temperature	Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

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Analytical Report

WorkOrder: 1708789

Report Created for: Advanced GeoEnvironmental, Inc.

837 Shaw Road
Stockton, CA 95215

Project Contact: Daniel Villanueva
Project P.O.:
Project Name: Swiss Valley Cleaners

Project Received: 08/17/2017

Analytical Report reviewed & approved for release on 08/23/2017 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.

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CA ELAP 1644 ♦ NELAP 4033ORELAP

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Glossary of Terms & Qualifier Definitions

Client: Advanced GeoEnvironmental, Inc.
Project: Swiss Valley Cleaners
WorkOrder: 1708789

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

H	Samples were analyzed out of holding time

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Received:	8/17/17 10:54	**Extraction Method:**	SW5030B
Date Prepared:	8/20/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	**1708789-001A**	**Air**	**08/17/2017 09:57**	**GC18**	**144066**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	08/20/2017 11:43
Benzene	ND	H	250	1	08/20/2017 11:43
Bromobenzene	ND	H	250	1	08/20/2017 11:43
Bromochloromethane	ND	H	250	1	08/20/2017 11:43
Bromodichloromethane	ND	H	250	1	08/20/2017 11:43
Bromoform	ND	H	250	1	08/20/2017 11:43
Bromomethane	ND	H	250	1	08/20/2017 11:43
t-Butyl alcohol (TBA)	ND	H	2500	1	08/20/2017 11:43
n-Butyl benzene	ND	H	250	1	08/20/2017 11:43
sec-Butyl benzene	ND	H	250	1	08/20/2017 11:43
tert-Butyl benzene	ND	H	250	1	08/20/2017 11:43
Carbon Disulfide	ND	H	250	1	08/20/2017 11:43
Carbon Tetrachloride	ND	H	250	1	08/20/2017 11:43
Chlorobenzene	ND	H	250	1	08/20/2017 11:43
Chloroethane	ND	H	250	1	08/20/2017 11:43
Chloroform	ND	H	250	1	08/20/2017 11:43
Chloromethane	ND	H	250	1	08/20/2017 11:43
2-Chlorotoluene	ND	H	250	1	08/20/2017 11:43
4-Chlorotoluene	ND	H	250	1	08/20/2017 11:43
Dibromochloromethane	ND	H	250	1	08/20/2017 11:43
1,2-Dibromo-3-chloropropane	ND	H	250	1	08/20/2017 11:43
1,2-Dibromoethane (EDB)	ND	H	250	1	08/20/2017 11:43
Dibromomethane	ND	H	250	1	08/20/2017 11:43
1,2-Dichlorobenzene	ND	H	250	1	08/20/2017 11:43
1,3-Dichlorobenzene	ND	H	250	1	08/20/2017 11:43
1,4-Dichlorobenzene	ND	H	250	1	08/20/2017 11:43
Dichlorodifluoromethane	ND	H	250	1	08/20/2017 11:43
1,1-Dichloroethane	ND	H	250	1	08/20/2017 11:43
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	08/20/2017 11:43
1,1-Dichloroethene	ND	H	250	1	08/20/2017 11:43
cis-1,2-Dichloroethene	ND	H	250	1	08/20/2017 11:43
trans-1,2-Dichloroethene	ND	H	250	1	08/20/2017 11:43
1,2-Dichloropropane	ND	H	250	1	08/20/2017 11:43
1,3-Dichloropropane	ND	H	250	1	08/20/2017 11:43
2,2-Dichloropropane	ND	H	250	1	08/20/2017 11:43
1,1-Dichloropropene	ND	H	250	1	08/20/2017 11:43
cis-1,3-Dichloropropene	ND	H	250	1	08/20/2017 11:43

(Cont.)

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Received:	8/17/17 10:54	**Extraction Method:**	SW5030B
Date Prepared:	8/20/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Influent/Vapor	**1708789-001A**	**Air**	**08/17/2017 09:57**	**GC18**	**144066**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	08/20/2017 11:43
Diisopropyl ether (DIPE)	ND	H	250	1	08/20/2017 11:43
Ethylbenzene	ND	H	250	1	08/20/2017 11:43
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	08/20/2017 11:43
Freon 113	ND	H	5000	1	08/20/2017 11:43
Hexachlorobutadiene	ND	H	250	1	08/20/2017 11:43
Hexachloroethane	ND	H	250	1	08/20/2017 11:43
2-Hexanone	ND	H	250	1	08/20/2017 11:43
Isopropylbenzene	ND	H	250	1	08/20/2017 11:43
4-Isopropyl toluene	ND	H	250	1	08/20/2017 11:43
Methyl-t-butyl ether (MTBE)	ND	H	250	1	08/20/2017 11:43
Methylene chloride	ND	H	250	1	08/20/2017 11:43
n-Propyl benzene	ND	H	250	1	08/20/2017 11:43
Styrene	ND	H	250	1	08/20/2017 11:43
1,1,1,2-Tetrachloroethane	ND	H	250	1	08/20/2017 11:43
1,1,2,2-Tetrachloroethane	ND	H	250	1	08/20/2017 11:43
Tetrachloroethene	**960**	H	250	1	08/20/2017 11:43
Toluene	ND	H	250	1	08/20/2017 11:43
1,2,3-Trichlorobenzene	ND	H	250	1	08/20/2017 11:43
1,2,4-Trichlorobenzene	ND	H	250	1	08/20/2017 11:43
1,1,1-Trichloroethane	ND	H	250	1	08/20/2017 11:43
1,1,2-Trichloroethane	ND	H	250	1	08/20/2017 11:43
Trichloroethene	ND	H	250	1	08/20/2017 11:43
Trichlorofluoromethane	ND	H	250	1	08/20/2017 11:43
1,2,3-Trichloropropane	ND	H	250	1	08/20/2017 11:43
1,2,4-Trimethylbenzene	ND	H	250	1	08/20/2017 11:43
1,3,5-Trimethylbenzene	ND	H	250	1	08/20/2017 11:43
Vinyl Chloride	ND	H	250	1	08/20/2017 11:43
Xylenes, Total	ND	H	250	1	08/20/2017 11:43

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	106	H	70-130	08/20/2017 11:43
Toluene-d8	100	H	70-130	08/20/2017 11:43
4-BFB	85	H	70-130	08/20/2017 11:43

Analyst(s): HK

(Cont.)

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Received:	8/17/17 10:54	**Extraction Method:**	SW5030B
Date Prepared:	8/20/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	1708789-002A	Air	08/17/2017 09:58	GC18	144066

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	H	250	1	08/20/2017 12:22
Benzene	ND	H	250	1	08/20/2017 12:22
Bromobenzene	ND	H	250	1	08/20/2017 12:22
Bromochloromethane	ND	H	250	1	08/20/2017 12:22
Bromodichloromethane	ND	H	250	1	08/20/2017 12:22
Bromoform	ND	H	250	1	08/20/2017 12:22
Bromomethane	ND	H	250	1	08/20/2017 12:22
t-Butyl alcohol (TBA)	ND	H	2500	1	08/20/2017 12:22
n-Butyl benzene	ND	H	250	1	08/20/2017 12:22
sec-Butyl benzene	ND	H	250	1	08/20/2017 12:22
tert-Butyl benzene	ND	H	250	1	08/20/2017 12:22
Carbon Disulfide	ND	H	250	1	08/20/2017 12:22
Carbon Tetrachloride	ND	H	250	1	08/20/2017 12:22
Chlorobenzene	ND	H	250	1	08/20/2017 12:22
Chloroethane	ND	H	250	1	08/20/2017 12:22
Chloroform	ND	H	250	1	08/20/2017 12:22
Chloromethane	ND	H	250	1	08/20/2017 12:22
2-Chlorotoluene	ND	H	250	1	08/20/2017 12:22
4-Chlorotoluene	ND	H	250	1	08/20/2017 12:22
Dibromochloromethane	ND	H	250	1	08/20/2017 12:22
1,2-Dibromo-3-chloropropane	ND	H	250	1	08/20/2017 12:22
1,2-Dibromoethane (EDB)	ND	H	250	1	08/20/2017 12:22
Dibromomethane	ND	H	250	1	08/20/2017 12:22
1,2-Dichlorobenzene	ND	H	250	1	08/20/2017 12:22
1,3-Dichlorobenzene	ND	H	250	1	08/20/2017 12:22
1,4-Dichlorobenzene	ND	H	250	1	08/20/2017 12:22
Dichlorodifluoromethane	ND	H	250	1	08/20/2017 12:22
1,1-Dichloroethane	ND	H	250	1	08/20/2017 12:22
1,2-Dichloroethane (1,2-DCA)	ND	H	250	1	08/20/2017 12:22
1,1-Dichloroethene	ND	H	250	1	08/20/2017 12:22
cis-1,2-Dichloroethene	ND	H	250	1	08/20/2017 12:22
trans-1,2-Dichloroethene	ND	H	250	1	08/20/2017 12:22
1,2-Dichloropropane	ND	H	250	1	08/20/2017 12:22
1,3-Dichloropropane	ND	H	250	1	08/20/2017 12:22
2,2-Dichloropropane	ND	H	250	1	08/20/2017 12:22
1,1-Dichloropropene	ND	H	250	1	08/20/2017 12:22
cis-1,3-Dichloropropene	ND	H	250	1	08/20/2017 12:22

(Cont.)

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Analytical Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Received:	8/17/17 10:54	**Extraction Method:**	SW5030B
Date Prepared:	8/20/17	**Analytical Method:**	SW8260B
Project:	Swiss Valley Cleaners	**Unit:**	µg/m³

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Effluent/Vapor	**1708789-002A**	**Air**	**08/17/2017 09:58**	**GC18**	**144066**

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
trans-1,3-Dichloropropene	ND	H	250	1	08/20/2017 12:22
Diisopropyl ether (DIPE)	ND	H	250	1	08/20/2017 12:22
Ethylbenzene	ND	H	250	1	08/20/2017 12:22
Ethyl tert-butyl ether (ETBE)	ND	H	250	1	08/20/2017 12:22
Freon 113	ND	H	5000	1	08/20/2017 12:22
Hexachlorobutadiene	ND	H	250	1	08/20/2017 12:22
Hexachloroethane	ND	H	250	1	08/20/2017 12:22
2-Hexanone	ND	H	250	1	08/20/2017 12:22
Isopropylbenzene	ND	H	250	1	08/20/2017 12:22
4-Isopropyl toluene	ND	H	250	1	08/20/2017 12:22
Methyl-t-butyl ether (MTBE)	ND	H	250	1	08/20/2017 12:22
Methylene chloride	ND	H	250	1	08/20/2017 12:22
n-Propyl benzene	ND	H	250	1	08/20/2017 12:22
Styrene	ND	H	250	1	08/20/2017 12:22
1,1,1,2-Tetrachloroethane	ND	H	250	1	08/20/2017 12:22
1,1,2,2-Tetrachloroethane	ND	H	250	1	08/20/2017 12:22
Tetrachloroethene	ND	H	250	1	08/20/2017 12:22
Toluene	ND	H	250	1	08/20/2017 12:22
1,2,3-Trichlorobenzene	ND	H	250	1	08/20/2017 12:22
1,2,4-Trichlorobenzene	ND	H	250	1	08/20/2017 12:22
1,1,1-Trichloroethane	ND	H	250	1	08/20/2017 12:22
1,1,2-Trichloroethane	ND	H	250	1	08/20/2017 12:22
Trichloroethene	ND	H	250	1	08/20/2017 12:22
Trichlorofluoromethane	ND	H	250	1	08/20/2017 12:22
1,2,3-Trichloropropane	ND	H	250	1	08/20/2017 12:22
1,2,4-Trimethylbenzene	ND	H	250	1	08/20/2017 12:22
1,3,5-Trimethylbenzene	ND	H	250	1	08/20/2017 12:22
Vinyl Chloride	ND	H	250	1	08/20/2017 12:22
Xylenes, Total	ND	H	250	1	08/20/2017 12:22

Surrogates	REC (%)	Qualifiers	Limits	
Dibromofluoromethane	107	H	70-130	08/20/2017 12:22
Toluene-d8	100	H	70-130	08/20/2017 12:22
4-BFB	86	H	70-130	08/20/2017 12:22

Analyst(s): HK

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Prepared:	8/20/17	**BatchID:**	144066
Date Analyzed:	8/20/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-144066

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
tert-Amyl methyl ether (TAME)	ND	250	-	-	-
Benzene	ND	250	-	-	-
Bromobenzene	ND	250	-	-	-
Bromochloromethane	ND	250	-	-	-
Bromodichloromethane	ND	250	-	-	-
Bromoform	ND	250	-	-	-
Bromomethane	ND	250	-	-	-
t-Butyl alcohol (TBA)	ND	2500	-	-	-
n-Butyl benzene	ND	250	-	-	-
sec-Butyl benzene	ND	250	-	-	-
tert-Butyl benzene	ND	250	-	-	-
Carbon Disulfide	ND	250	-	-	-
Carbon Tetrachloride	ND	250	-	-	-
Chlorobenzene	ND	250	-	-	-
Chloroethane	ND	250	-	-	-
Chloroform	ND	250	-	-	-
Chloromethane	ND	250	-	-	-
2-Chlorotoluene	ND	250	-	-	-
4-Chlorotoluene	ND	250	-	-	-
Dibromochloromethane	ND	250	-	-	-
1,2-Dibromo-3-chloropropane	ND	250	-	-	-
1,2-Dibromoethane (EDB)	ND	250	-	-	-
Dibromomethane	ND	250	-	-	-
1,2-Dichlorobenzene	ND	250	-	-	-
1,3-Dichlorobenzene	ND	250	-	-	-
1,4-Dichlorobenzene	ND	250	-	-	-
Dichlorodifluoromethane	ND	250	-	-	-
1,1-Dichloroethane	ND	250	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	250	-	-	-
1,1-Dichloroethene	ND	250	-	-	-
cis-1,2-Dichloroethene	ND	250	-	-	-
trans-1,2-Dichloroethene	ND	250	-	-	-
1,2-Dichloropropane	ND	250	-	-	-
1,3-Dichloropropane	ND	250	-	-	-
2,2-Dichloropropane	ND	250	-	-	-
1,1-Dichloropropene	ND	250	-	-	-
cis-1,3-Dichloropropene	ND	250	-	-	-
trans-1,3-Dichloropropene	ND	250	-	-	-
Diisopropyl ether (DIPE)	ND	250	-	-	-

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Prepared:	8/20/17	**BatchID:**	144066
Date Analyzed:	8/20/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-144066

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Ethylbenzene	ND	250	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	250	-	-	-
Freon 113	ND	5000	-	-	-
Hexachlorobutadiene	ND	250	-	-	-
Hexachloroethane	ND	250	-	-	-
2-Hexanone	ND	250	-	-	-
Isopropylbenzene	ND	250	-	-	-
4-Isopropyl toluene	ND	250	-	-	-
Methyl-t-butyl ether (MTBE)	ND	250	-	-	-
Methylene chloride	ND	250	-	-	-
n-Propyl benzene	ND	250	-	-	-
Styrene	ND	250	-	-	-
1,1,1,2-Tetrachloroethane	ND	250	-	-	-
1,1,2,2-Tetrachloroethane	ND	250	-	-	-
Tetrachloroethene	ND	250	-	-	-
Toluene	ND	250	-	-	-
1,2,3-Trichlorobenzene	ND	250	-	-	-
1,2,4-Trichlorobenzene	ND	250	-	-	-
1,1,1-Trichloroethane	ND	250	-	-	-
1,1,2-Trichloroethane	ND	250	-	-	-
Trichloroethene	ND	250	-	-	-
Trichlorofluoromethane	ND	250	-	-	-
1,2,3-Trichloropropane	ND	250	-	-	-
1,2,4-Trimethylbenzene	ND	250	-	-	-
1,3,5-Trimethylbenzene	ND	250	-	-	-
Vinyl Chloride	ND	250	-	-	-
Xylenes, Total	ND	250	-	-	-
Surrogate Recovery					
Dibromofluoromethane	12990		12500	104	70-130
Toluene-d8	12630		12500	101	70-130
4-BFB	1084		1250	87	70-130

(Cont.)

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Quality Control Report

Client:	Advanced GeoEnvironmental, Inc.	**WorkOrder:**	1708789
Date Prepared:	8/20/17	**BatchID:**	144066
Date Analyzed:	8/20/17	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Air	**Unit:**	µg/m³
Project:	Swiss Valley Cleaners	**Sample ID:**	MB/LCS/LCSD-144066

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	3860	3920	5000	77	78	56-133	1.58	30
Benzene	4190	4210	5000	84	84	72-122	0	30
t-Butyl alcohol (TBA)	14,300	14,800	20000	72	74	35-121	3.09	30
Chlorobenzene	4060	4010	5000	81	80	69-112	1.42	30
1,2-Dibromoethane (EDB)	3560	3540	5000	71	71	62-117	0	30
1,2-Dichloroethane (1,2-DCA)	4160	4200	5000	83	84	61-126	0.946	30
1,1-Dichloroethene	4240	4280	5000	85	86	67-122	0.968	30
Diisopropyl ether (DIPE)	4060	4100	5000	81	82	61-131	1.07	30
Ethyl tert-butyl ether (ETBE)	4190	4260	5000	84	85	63-132	1.60	30
Methyl-t-butyl ether (MTBE)	3940	4000	5000	79	80	63-127	1.55	30
Toluene	4020	4010	5000	80	80	64-115	0	30
Trichloroethene	3870	3900	5000	77	78	66-127	0.734	30
Xylenes, Total	12,800	12,700	15000	85	84	53-131	1.16	30
Surrogate Recovery								
Dibromofluoromethane	13,200	13,200	12500	106	106	83-124	0	30
Toluene-d8	12,800	12,700	12500	102	101	80-120	0.877	30
4-BFB	1160	1150	1250	92	92	70-129	0	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1708789 **ClientCode: AGES**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☐ Detection Summary ☐ Dry-Weight

Report to:
Daniel Villanueva
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
(209) 467-1006 FAX: (209) 467-1118

Email: dvillanueva@advgeoenv.com; admin@adv
cc/3rd Party:
PO:
ProjectNo: Swiss Valley Cleaners

Bill to:
Erica
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
ap@advgeoenv.com; kburchard@advge

Requested TAT: 5 days;

Date Received: **08/17/2017**
Date Logged: **08/17/2017**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below) 1	2	3	4	5	6	7	8	9	10	11	12
1708789-001	Influent/Vapor	Air	8/17/2017 09:57	☐	A	A										
1708789-002	Effluent/Vapor	Air	8/17/2017 09:58	☐	A											

Test Legend:

1	8260B_A(UG/M3)	2	PREDF REPORT	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampIDs: 001A, 002A contain testgroup 8260B_A.

Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: ADVANCED GEOENVIRONMENTAL, INC.
Project: Swiss Valley Cleaners
Work Order: 1708789
Client Contact: Daniel Villanueva
QC Level: LEVEL 2
Contact's Email: dvillanueva@advgeoenv.com; admin@advgeoenv.com; kburchard@advgeoenv.com
Comments: When Liter provided for TPH always do a Liter Extraction (Large Volume)
Date Logged: 8/17/2017

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1708789-001A	Influent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	8/17/2017 9:57	5 days		☐	
1708789-002A	Effluent/Vapor	Air	VOCs by PT & GCMS	1	Tedlar	☐	8/17/2017 9:58	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1708789

Advanced GeoEnvironmental, Inc.

www.advgeoenv.com

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☐ 381 Thor Place, Brea, California 92821 • Phone (714) 529-0200 • Fax (714) 529-0203
☐ 2318 Fourth Street, Santa Rosa, California 95404 • Phone (707) 570-1418 • Fax (707) 570-1461
☐ 395 Del Monte Center, #111, Monterey, California 93940 • Phone (800) 511-9300 • Fax (831) 394-5979
☐ _____

CHAIN OF CUSTODY RECORD

Date: 8/17/17 Page 1 of 1

Project Name: Swiss Valley Cleaners	Project Manager: Daniel Villanueva
Client:	Sampler (initials & signature): RM
Invoice to: ☒ AGE ☐ Client	Lab Project No.:

Sample ID/Location/Description	Date	Time	Matrix	Number	Notes	Analysis Required: VOCs 8260
Influent / vapor	8/17/17	957	A	1		X
Effluent / vapor	8/17/17	958	A	1		X

Relinquished by: Rul Martz	Date: 8/17/17	Time: 1054	Laboratory: McCampbell		
Courier: Delivered to LAB (RM)			Received by:	Date: 8/17/17	Time: 1054
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Requested Turn Around Time (circle): 24 hours 48 hours 72 hours 5 days (standard) Other:_____

Matrix Codes: A = Air W = Water S = Solid

Special Instructions to lab:

I hereby authorize the performance of the above indicated work.

Rul Martz

Geotracker EDF to: ☒ geotracker@advgeoenv.com ☐ _____ Global ID:

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Sample Receipt Checklist

Client Name:	**Advanced GeoEnvironmental, Inc.**	Date and Time Received	**8/17/2017 10:54**
Project Name:	**Swiss Valley Cleaners**	Date Logged:	**8/17/2017**
		Received by:	Jena Alfaro
WorkOrder №:	**1708789** Matrix: Air	Logged by:	Jena Alfaro
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	NA ☐
Sample/Temp Blank temperature	Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	NA ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes ☐	No ☐	NA ☑
Samples Received on Ice?	Yes ☐	No ☑	

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes ☐	No ☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes ☐	No ☐	NA ☑

Comments:

APPENDIX B

APPENDIX B

MASS-VOLUME CALCULATIONS
Swiss Valley Cleaners
1395 MacArthur Boulevard
San Leandro, California

M = C x Q x t

C = vapor concentration (kg/m^3)
Q = extraction flow rate (m^3/hr)
t = operational period (hrs)

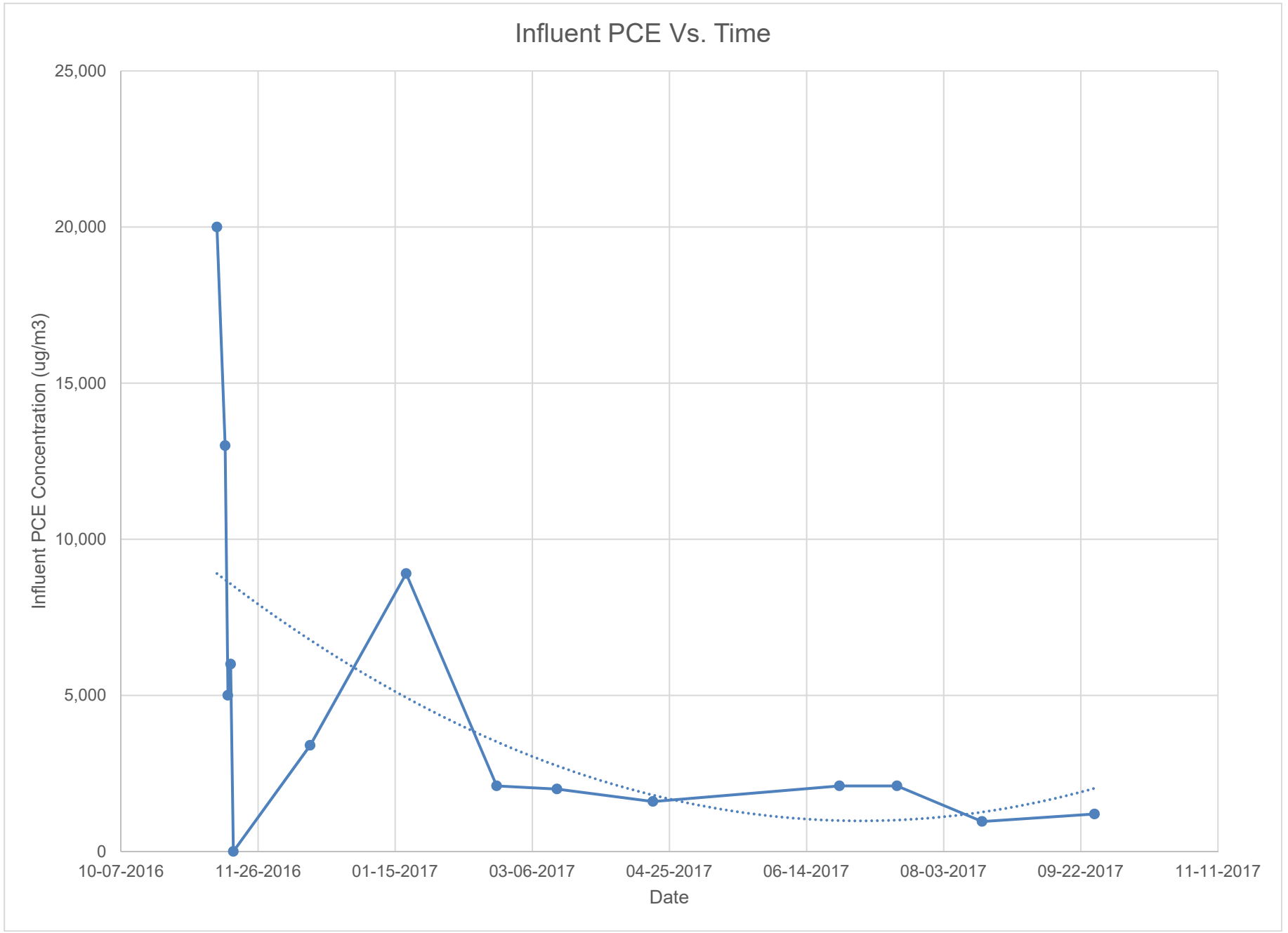
To convert, multiply by: 0.000001
To convert, multiply by: 60 min/hr
and: 0.0283168 m^3/ft^3

M(kg) = (Avg concentration)(0.000001) x [flow(ft^3/min)](60 min/hr)(0.0283168 m^3/ft^3) x time(hrs)

Converting kg of M to lbs of M, multiply by: 2.2046 lbs/kg
Converting lbs of M to gal of M, multiply by: 0.074 gal/lb

Dates	Hours	Avgerage Flow		PCE Concentration		PCE Extracted		
		scfm	m^3/hr	µg/l	kg/m^3	kg	lbs	gallons
11/11/16 to 11/14/16	74.7	167	284	16.5	0.0000165	**0.3497**	**0.7710**	**0.05705**
11/14/16 to 11/15/16	23.9	171	291	9	0.000009	**0.0625**	**0.1378**	**0.0102**
11/15/16 to 11/16/16	23.4	171	291	6.5	0.0000065	**0.0442**	**0.0974**	**0.0072**
11/16/16 to 11/17/16	23.2	171	291	3.5	0.0000035	**0.0236**	**0.0520**	**0.0038**
11/17/16 to 12/15/16	670.9	171	291	2.2	0.0000022	**0.4288**	**0.9454**	**0.0700**
12/15/16 to 01/19/17	462.1	178.5	303	8.9	0.0000089	**1.2473**	**2.7497**	**0.2035**
01/19/17 to 02/21/17	792.2	192.5	327	2.1	0.0000021	**0.5441**	**1.1995**	**0.0888**
02/21/17 to 03/15/17	430.8	192.5	327	2.0	0.000002	**0.2818**	**0.6212**	**0.0460**
03/15/17 to 04/19/17	625.0	182.5	310	1.6	0.0000016	**0.3101**	**0.6836**	**0.0506**
04/19/17 to 06/26/17	0.2	176	299	2.1	0.0000021	**0.0001**	**0.0003**	**0.00002**
06/26/17 to 07/17/17	501.6	176	299	2.1	0.0000021	**0.3150**	**0.6944**	**0.05139**
07/17/17 to 08/17/17	743.1	178	302	1	0.000000585	**0.1315**	**0.2898**	**0.02145**
08/17/17 to 09/27/17	990.7	178	302	1	0.0000012	**0.3595**	**0.7926**	**0.05865**
					Total PCE removed:	**4.0981**	**9.0348**	**0.6686**

APPENDIX C


Influent PCE Vs. Time
Influent PCE Concentration (ug/m3)
25,000
20,000
15,000
10,000
5,000
0
10-07-2016
11-26-2016
01-15-2017
03-06-2017
04-25-2017
06-14-2017
08-03-2017
09-22-2017
11-11-2017
Date