

RECEIVED

By Alameda County Environmental Health 9:58 am, Feb 10, 2017

PERJURY STATEMENT

Subject: 223 East 4th Street, San Leandro, California
Indoor Air Sampling Report

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Martha Vallejo 1-30-17

Ms. Martha Vallejo
201 East 14th Street
Oakland, California, 94577

AdvancedGeo Environmental

10 January 2017
AGE Project No. 16-3802

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

**Subject: Indoor Air Sampling Report
SUNSHINE CLEANERS
223 East 14th Street, San Leandro, California**

Dear Mr. Detterman:

Advanced GeoEnvironmental, Inc. (AGE) has prepared this Indoor Air Sampling Report for the Sunshine Cleaners property located at 223 East 14th Street, San Leandro, California (site). A total of two indoor air samples and one ambient air sample were collected from selected areas inside the San Gaspar Mexican Restaurant (201 East 14th Street) in December 2016 in order to evaluate indoor air quality at the site. One ambient air sample was collected from the rooftop to establish baseline ambient air concentrations at the site. A generalized site plan showing building structures and monitoring well and soil-vapor sampling locations are depicted in Figure 1.

INTRODUCTION/BACKGROUND

The site consists of two stand-alone buildings. A driveway and canopy separates the two, single story structures. The southern structure is a dry cleaning facility currently occupied by Sunshine Cleaners; and the northern building is currently occupied by San Gaspar Mexican Restaurant with associated address 201 East 14th Street. A residence and commercial/residential structures are located adjacent to the east and south, respectively.

It is AGE's understanding that the subject property housed a dry cleaning facility for approximately 40 years. In 1993, the sewer line leading to the site was found broken and was repaired. Thereafter, in December 1993, a subsurface environmental investigation was performed by ACC Environmental Consultants to determine if contamination from the dry cleaning operations had impacted the site. During the investigation, elevated levels of contamination was detected near the sewer line break. In 1999, Earth Engineers installed a total of four groundwater monitoring wells to evaluate impact to groundwater



837 Shaw Road • Stockton, CA 95215
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beneath the site. In September 2016, AGE conducted a site assessment and found elevated levels of Tetrachloroethene (PCE) in soil vapor throughout the site.

Based on current and historical use of PCE at the dry cleaning facility, indoor air sampling was performed at the site on 29 and 30 December 2016 in order to evaluate indoor air quality.

PROCEDURES

Field work was performed utilizing procedures provided in the Interstate Technology Regulatory Council (ITRC)-prepared, *Vapor Intrusion Pathway: A Practical Guideline dated January 2007* and the Department of Toxic Substance Control (DTSC)-prepared, *Guidance For The Evaluation And Mitigation Of Subsurface Vapor Intrusion To Indoor Air - Final* (Vapor Intrusion Guidance) dated October 2011.

PRE-FIELD WORK PREPARATIONS

On 29 December 2016, prior to the start of indoor air sample collection, all areas sampled were inspected and an organic vapor meter (OVM) equipped with a photo-ionization detector (PID) was utilized to locate indoor contaminant sources and products that could potentially bias the sampling results; positive PID readings were not observed during the survey. Building survey forms documenting pre-sampling observations are included in Appendix A.

INDOOR AIR SAMPLING

Passive integrated air samples were collected from inside and on the rooftop of the San Gaspar Mexican Restaurant located at 201 East 14th Street, San Leandro, California. Due to current use of PCE at the Sunshine Cleaners dry cleaning facility, indoor air samples were not collected at that location.

The sampling inlet on each canister was connected to a mass flow controller containing a particulate filter; the flow controllers were calibrated to a flow rate of 3.5 milliliters/minute (ml/min) in order to collect air samples over a 24-hour period. Each canister's initial vacuum was measured and recorded to ensure the initial vacuum was greater than 25 inches of mercury (in/Hg). Initial vacuum measurements ranged from 29 in/Hg to 32 in/Hg prior to air sample collection.

The air samples were transported under chain-of-custody procedures to McCampbell Analytical, Inc. (MAI) located in Pittsburg, California; the CDPH ELAP Certification

number is CA ELAP 1644. The indoor air samples were analyzed for volatile organic compounds (VOCs) in accordance with EPA Method TO-15 (Appendix B).

FINDINGS

A total of two indoor air samples (Kitchen-San Gaspar and Dining Area-San Gaspar) and one ambient air sample (Rooftop-San Gaspar) were collected on 29 and 30 December 2016. The following is a summary of the results from indoor air sampling events:

Kitchen-San Gaspar:

- Acetone was detected at a concentration of 9.2 microgram per cubic meter ($\mu\text{g}/\text{m}^3$);
- Acrolein was detected at a concentration of 4.6 $\mu\text{g}/\text{m}^3$;
- Benzene was detected at a concentration of 2.7 $\mu\text{g}/\text{m}^3$;
- Bromodichloromethane (BDCM) was detected at a concentration of 0.13 $\mu\text{g}/\text{m}^3$;
- Carbon Tetrachloride (CTC) was detected at a concentration of 0.36 $\mu\text{g}/\text{m}^3$;
- Chloroform was detected at a concentration of 4.8 $\mu\text{g}/\text{m}^3$;
- Chloromethane was detected at a concentration of 0.78 $\mu\text{g}/\text{m}^3$;
- 1,4 Dichlorobenzene was detected at a concentration of 0.23 $\mu\text{g}/\text{m}^3$;
- Dichlorodifluoromethane (DCDFM) was detected at a concentration of 2.8 $\mu\text{g}/\text{m}^3$;
- 1,2 Dichloroethane (1,2 DCA) was detected at a concentration of 0.067 $\mu\text{g}/\text{m}^3$;
- 1,2 Dichloropropane (1,2 DCP) was detected at a concentration of 0.037 $\mu\text{g}/\text{m}^3$;
- 1,4 Dioxane was detected at a concentration of 0.28 $\mu\text{g}/\text{m}^3$;
- Ethyl acetate was detected at a concentration of 1.9 $\mu\text{g}/\text{m}^3$;
- Ethylbenzene was detected at a concentration of 0.61 $\mu\text{g}/\text{m}^3$;
- Heptane was detected at a concentration of 2.3 $\mu\text{g}/\text{m}^3$;
- Hexane was detected at a concentration of 2.8 $\mu\text{g}/\text{m}^3$;
- Methylene Chloride was detected at a concentration of 2.5 $\mu\text{g}/\text{m}^3$;
- Napthalene was detected at a concentration of 0.27 $\mu\text{g}/\text{m}^3$;
- Styrene was detected at a concentration of 0.9 $\mu\text{g}/\text{m}^3$;
- PCE was detected at a concentration of 22 $\mu\text{g}/\text{m}^3$;
- Toluene was detected at a concentration of 3.2 $\mu\text{g}/\text{m}^3$;
- Trichlorofluoromethane (TCFM) was detected at a concentration of 1.4 $\mu\text{g}/\text{m}^3$;

- 1,2,4 Trimethylbenzene was detected at a concentration of 0.76 µg/m³;
- Total Xylenes was detected at a concentration of 3.0 µg/m³;

Dining Area-San Gaspar:

- Acetone was detected at a concentration of 9.1 µg/m³,
- Acrolein was detected at a concentration of 3.4 µg/m³;
- Benzene was detected at a concentration of 2.1 µg/m³;
- Bromodichloromethane was detected at a concentration of 0.071 µg/m³;
- CTC was detected at a concentration of 0.34 µg/m³;
- Chloroform was detected at a concentration of 2.2 µg/m³;
- Chloromethane was detected at a concentration of 0.81 µg/m³;
- 1,4 Dichlorobenzene was detected at a concentration of 0.37 µg/m³;
- Dichlorodifluoromethane was detected at a concentration of 2.7 µg/m³;
- 1,2 DCA was detected at a concentration of 0.068 µg/m³;
- 1,2 DCP was detected at a concentration of 0.035 µg/m³;
- Ethyl acetate was detected at a concentration of 1.4 µg/m³;
- Ethylbenzene was detected at a concentration of 0.59 µg/m³;
- Hexane was detected at a concentration of 2.4 µg/m³;
- Methylene Chloride was detected at a concentration of 2.5 µg/m³;
- Napthalene was detected at a concentration of 0.21 µg/m³;
- Styrene was detected at a concentration of 0.85 µg/m³;
- PCE was detected at a concentration of 18 µg/m³;
- Tetrahydrofuran was detected at a concentration of 0.70 µg/m³;
- Toluene was detected at a concentration of 2.9 µg/m³;
- Trichloroethene was detected at a concentration of 0.032 µg/m³;
- Trichlorofluoromethane was detected at a concentration of 1.4 µg/m³;
- 1,2,4 Trimethylbenzene was detected at a concentration of 0.70 µg/m³;
- Total Xylenes was detected at a concentration of 3.0 µg/m³;

Rooftop-San Gaspar (ambient):

- Acetone was detected at a concentration of 9.7 µg/m³,

- Acrolein was detected at a concentration of 1.2 µg/m³;
- Benzene was detected at a concentration of 1.1 µg/m³;
- Bromodichloromethane was detected at a concentration of 0.0085 µg/m³;
- Bromomethane was detected at a concentration of 0.40 µg/m³;
- Carbon Tetrachloride was detected at a concentration of 0.28 µg/m³;
- Chloroform was detected at a concentration of 0.23 µg/m³;
- Chloromethane was detected at a concentration of 0.79 µg/m³;
- 1,4 Dichlorobenzene was detected at a concentration of 0.091 µg/m³;
- Dichlorodifluoromethane was detected at a concentration of 2.5 µg/m³;
- 1,2 DCA was detected at a concentration of 0.065 µg/m³;
- 1,2 DCP was detected at a concentration of 0.033 µg/m³;
- Methylene Chloride was detected at a concentration of 2.0 µg/m³;
- Naphthalene was detected at a concentration of 0.18 µg/m³;
- PCE was detected at a concentration of 0.16 µg/m³;
- Toluene was detected at a concentration of 2.1 µg/m³;
- Trichlorofluoromethane was detected at a concentration of 1.3 µg/m³;
- 1,2,4 Trimethylbenzene was detected at a concentration of 0.62 µg/m³;
- Total Xylenes was detected at a concentration of 2.4 µg/m³;

Analytical results from the December 2016 indoor and ambient air sampling are summarized in Table 1. Laboratory reports (MAI Work Order No. 1612E53) QA/QC reports and chain of custody forms are included in Appendix B.

HUMAN HEALTH RISK ASSESSMENT

A preliminary Human Health Risk Assessment (HHRA) calculation was performed to assess the cancer risk and hazard index for vapor intrusion of PCE into indoor air in the two sampling locations within the restaurant, where PCE was detected above the ESL for a commercial setting. Inhalation of soil-vapor intrusion, via the indoor air pathway for a commercial occupant scenario, was the only scenario considered for this preliminary assessment. Other potential pathways are considered unlikely to be complete based on site assessment conducted to date.

The maximum PCE concentration (22 µg/m³) detected in the indoor air samples collected on 29 and 30 December 2016 from the kitchen area of the restaurant was used for the

model. Based on the RISC5 modeling software the cancer risk for an mean worker at the site was calculated at 8.9×10^{-7} , below the standard acceptable cancer risk of 1×10^{-6} (one in a million). The hazard index was calculated at 9.3×10^{-3} , well below the standard of 1.0. Based on these values, the indoor air PCE concentrations pass the model for cancer risk and the hazard index. HHRA input and output data is presented in Appendix C.

CONCLUSIONS

Dry cleaning solvent PCE, hydrocarbon constituent benzene and CTC were detected at concentrations above San Francisco Bay Area Environmental Screening Levels for a commercial setting during the December 2016 was detected at elevated levels during the December 2016 sampling event within the San Gaspar Mexican Restaurant (201 East 14th Street).

A preliminary HHRA was performed using the highest detection from the sampling. Based on the data inputs the concentrations should not pose a significant risk to employees and those that occupy the restaurant for dining. However, based on concentrations detected during the sampling event, a soil-vapor intrusion condition does exist at the site and will warrant remediation to reduce concentrations below the slab grade.

RECOMMENDATIONS

Based on findings from indoor air sampling completed in December 2016, AGE recommends the following:

- Modification of the HVAC system to introduce additional fresh air into the restaurant dining and kitchen areas. A minimum 30% increase to the HVAC unit should be completed at this time in order to reduce elevated impact within the restaurant. Following modifications to the unit, sampling should be conducted to evaluate the effectiveness of the modifications. This proposed sampling should be completed one-month following the proposed medications.
- Preparation of a fact sheet notifying current business occupants of historical, current and future assessment and remediation activities planned for the site. The fact sheet should also outline an explanation of the data collected to date.
- Preparation of a work plan for installation of sub-slab vapor points at several locations within the restaurant.
- Preparation of a work plan for the installation of shallow soil-vapor/observation wells and the performance of a limited soil-vapor extraction pilot test.

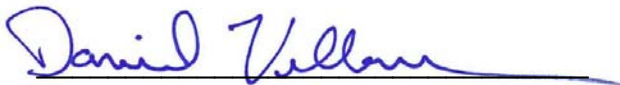
LIMITATIONS


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/hydrogeological 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.


If you have any questions or require further information, please contact our office at (800) 511-9300.

Sincerely,

Advanced GeoEnvironmental, Inc.


Daniel Villanueva
Senior Project Geologist


William R. Little
Senior Project Geologist
California Professional Geologist No. 7473



FIGURES

SITE PLAN
SUNSHINE CLEANERS
223 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA



LEGEND

- ⊕ MW-11 SUNSHINE CLEANERS GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION (approximated)
- ⊙ MW-1 GERMAN AUTOCRAFT GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION (approximated)
- DOMESTIC WELL LOCATION (approximated)
- B1 SOIL BORING LOCATIONS AND DESIGNATIONS (approximated)
- ▲ VP-1 SOIL-VAPOR SAMPLING LOCATION
- ▲ CONTINGENT SOIL-VAPOR SAMPLING LOCATION

TABLES

TABLE 1
INDOOR AIR ANALYTICAL RESULTS
SUNSHINE CLEANERS
 223 East 14th Street, San Leandro, California
 (micrograms per cubic meter)

Sample ID	Date	TO-15						
		PCE	TCE	B	T	E	X	Acetone
Kitchen - San Gaspar	12-30-2016	22	<0.27	2.7	3.2	0.61	3.0	9.2
Dining Area - San Gaspar	12-30-2016	18	0.032	2.1	2.9	0.59	3.0	9.1
Rooftop - San Gaspar (Ambient Air)	12-30-2016	0.16	<0.027	1.1	2.1	<0.44	2.4	9.7
CHHSLs (Commercial)		0.693	2.04	0.141	438	-	1,020	-
SFBRWCB ESL (Commercial)		2.1	3.0	0.42	1,300	4.9	440	140,000

Notes:

SFBRWCB ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for shallow soil gas

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

CHHSLs: California Human Health Screening Levels

PCE: Tetrachloroethene

TCE: Trichloroethene

B: Benzene; T: Toluene; E: Ethyl-benzene; X: Total Xylenes

*Concentrations denoted with orange fill are above ambient and indoor air screening levels for a commercial setting.

APPENDIX A

APPENDIX M – BUILDING SCREENING FORM

Occupant of Building San Gaspar Mexican Restaurant

Address _____

City _____

Field Investigator Rick Marty Date 12/29/16

Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients
0	Perimeter outside	
0	Kitchen	
0	hallways	
0	Dining area	
0	Storage/Freezer room	
0	rooftop	

Comments:

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: _____ Date/Time Prepared: _____
Affiliation: _____ Phone Number: _____

Occupant Information

Occupant Name: _____ Interviewed: Yes No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Owner/Landlord Information (Check if same as occupant)

Occupant Name: _____ Interviewed: Yes No
Mailing Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Email: _____

Building Type (Check appropriate boxes)

- Residential Residential Duplex Apartment Building Mobile Home Commercial (office)
 Commercial (warehouse) Industrial Strip Mall Split Level Church School

Building Characteristics

Approximate Building Age (years): _____ Number of Stories: _____
Approximate Building Area (square feet): _____ Number of Elevators: _____

Foundation Type (Check appropriate boxes)

- Slab-on-Grade Crawl Space Basement

Basement Characteristics (Check appropriate boxes)

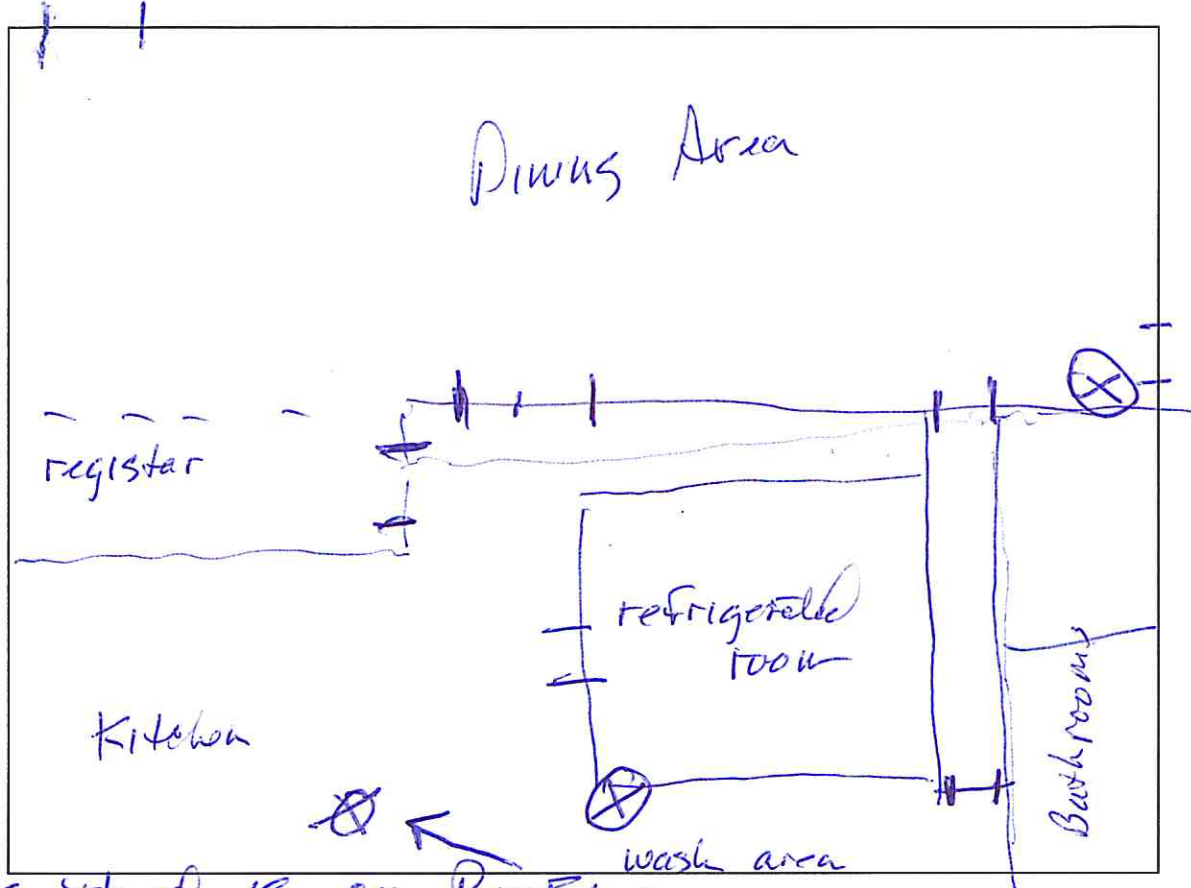
- Dirt Floor Sealed Wet Surfaces Sump Pump Concrete Cracks Floor Drains

Factors Influencing Indoor Air Quality

Is there an attached garage?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there smoking in the building?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there new carpet or furniture?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Have clothes or drapes been recently dry cleaned?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Has painting or staining been done with the last six months?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Has the building been recently remodeled?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Has the building ever had a fire?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there a hobby or craft area in the building?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Is gun cleaner stored in the building?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there a fuel oil tank on the property?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there a septic tank on the property?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has the building been fumigated or sprayed for pests recently?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____
Do any building occupants use solvents at work?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Describe: _____

Sampling Locations

Draw the general floor plan of the building and denote locations of sample collection. Indicate locations of doors, windows, indoor air contaminant sources and field instrument readings.



* Third IS on Rooftop
Primary Type of Energy Used (Check appropriate boxes)

- Natural Gas Fuel Oil Propane Electricity Wood Kerosene

Meteorological Conditions

Describe the general weather conditions during the indoor air sampling event.

General Comments

Provide any other information that may be of importance in understanding the indoor air quality of this building.

APPENDIX B



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1612E53

Report Created for: Advanced GeoEnvironmental, Inc.

837 Shaw Road
Stockton, CA 95215

Project Contact: Daniel Villanueva

Project P.O.:

Project Name: Sunshine Cleaners

Project Received: 12/30/2016

Analytical Report reviewed & approved for release on 01/06/2017 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.





Glossary of Terms & Qualifier Definitions

Client: Advanced GeoEnvironmental, Inc.
Project: Sunshine Cleaners
WorkOrder: 1612E53

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
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)

Quality Control Qualifiers

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



Case Narrative

Client: Advanced GeoEnvironmental, Inc.
Project: Sunshine Cleaners

Work Order: 1612E53
January 05, 2017

TO-15 ANALYSIS

All summa canisters are EVACUATED 5 days after the reporting of the results. Please call or email if a longer retention time is required.

In an effort to attain the lowest reporting limits possible for the majority of the TO-15 target list, high level compounds may be analyzed using EPA Method 8260B.

Polymer (Tedlar) bags are not recommended for TO15 samples. The disadvantages are listed in Appendix B of the DTSC Active Soil Gas Advisory of July 2015.



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Rooftop-San Gaspar	1612E53-001A	Indoor Air	12/30/2016 10:10	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
14.02	14.02	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	9.7	6.0	1	12/30/2016 20:05
Acrolein	1.2	0.58	1	12/30/2016 20:05
Acrylonitrile	ND	0.22	1	12/30/2016 20:05
tert-Amyl methyl ether (TAME)	ND	0.42	1	12/30/2016 20:05
Benzene	1.1	0.032	1	12/30/2016 20:05
Benzyl chloride	ND	0.53	1	12/30/2016 20:05
Bromodichloromethane	0.0085	0.0070	1	12/30/2016 20:05
Bromoform	ND	1.1	1	12/30/2016 20:05
Bromomethane	0.40	0.39	1	12/30/2016 20:05
1,3-Butadiene	ND	0.22	1	12/30/2016 20:05
2-Butanone (MEK)	ND	7.5	1	12/30/2016 20:05
t-Butyl alcohol (TBA)	ND	6.2	1	12/30/2016 20:05
Carbon Disulfide	ND	0.32	1	12/30/2016 20:05
Carbon Tetrachloride	0.28	0.0064	1	12/30/2016 20:05
Chlorobenzene	ND	0.47	1	12/30/2016 20:05
Chloroethane	ND	0.27	1	12/30/2016 20:05
Chloroform	0.23	0.025	1	12/30/2016 20:05
Chloromethane	0.79	0.21	1	12/30/2016 20:05
Cyclohexane	ND	1.8	1	12/30/2016 20:05
Dibromochloromethane	ND	0.87	1	12/30/2016 20:05
1,2-Dibromo-3-chloropropane	ND	0.050	1	12/30/2016 20:05
1,2-Dibromoethane (EDB)	ND	0.0078	1	12/30/2016 20:05
1,2-Dichlorobenzene	ND	0.61	1	12/30/2016 20:05
1,3-Dichlorobenzene	ND	0.61	1	12/30/2016 20:05
1,4-Dichlorobenzene	0.091	0.030	1	12/30/2016 20:05
Dichlorodifluoromethane	2.5	0.50	1	12/30/2016 20:05
1,1-Dichloroethane	ND	0.41	1	12/30/2016 20:05
1,2-Dichloroethane (1,2-DCA)	0.065	0.0041	1	12/30/2016 20:05
1,1-Dichloroethene	ND	0.10	1	12/30/2016 20:05
cis-1,2-Dichloroethene	ND	0.40	1	12/30/2016 20:05
trans-1,2-Dichloroethene	ND	0.40	1	12/30/2016 20:05
1,2-Dichloropropane	0.033	0.0047	1	12/30/2016 20:05
cis-1,3-Dichloropropene	ND	0.12	1	12/30/2016 20:05
trans-1,3-Dichloropropene	ND	0.12	1	12/30/2016 20:05

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Rooftop-San Gaspar	1612E53-001A	Indoor Air	12/30/2016 10:10	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
14.02	14.02	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.71	1	12/30/2016 20:05
Diisopropyl ether (DIPE)	ND	0.42	1	12/30/2016 20:05
1,4-Dioxane	ND	0.018	1	12/30/2016 20:05
Ethyl acetate	ND	0.92	1	12/30/2016 20:05
Ethyl tert-butyl ether (ETBE)	ND	0.42	1	12/30/2016 20:05
Ethylbenzene	ND	0.44	1	12/30/2016 20:05
4-Ethyltoluene	ND	0.50	1	12/30/2016 20:05
Freon 113	ND	0.78	1	12/30/2016 20:05
Heptane	ND	2.1	1	12/30/2016 20:05
Hexachlorobutadiene	ND	1.1	1	12/30/2016 20:05
Hexane	ND	1.8	1	12/30/2016 20:05
2-Hexanone	ND	0.42	1	12/30/2016 20:05
4-Methyl-2-pentanone (MIBK)	ND	0.42	1	12/30/2016 20:05
Methyl-t-butyl ether (MTBE)	ND	0.37	1	12/30/2016 20:05
Methylene chloride	2.0	0.88	1	12/30/2016 20:05
Methyl methacrylate	ND	0.42	1	12/30/2016 20:05
Naphthalene	0.18	0.050	1	12/30/2016 20:05
Propene	ND	8.8	1	12/30/2016 20:05
Styrene	ND	0.43	1	12/30/2016 20:05
1,1,1,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 20:05
1,1,2,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 20:05
Tetrachloroethene	0.16	0.069	1	12/30/2016 20:05
Tetrahydrofuran	ND	0.60	1	12/30/2016 20:05
Toluene	2.1	0.38	1	12/30/2016 20:05
1,2,4-Trichlorobenzene	ND	0.75	1	12/30/2016 20:05
1,1,1-Trichloroethane	ND	0.55	1	12/30/2016 20:05
1,1,2-Trichloroethane	ND	0.0055	1	12/30/2016 20:05
Trichloroethene	ND	0.027	1	12/30/2016 20:05
Trichlorofluoromethane	1.3	0.57	1	12/30/2016 20:05
1,2,4-Trimethylbenzene	0.62	0.50	1	12/30/2016 20:05
1,3,5-Trimethylbenzene	ND	0.50	1	12/30/2016 20:05
Vinyl Acetate	ND	1.8	1	12/30/2016 20:05
Vinyl Chloride	ND	0.013	1	12/30/2016 20:05
Xylenes, Total	2.4	1.3	1	12/30/2016 20:05

(Cont.)

 Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Rooftop-San Gaspar	1612E53-001A	Indoor Air	12/30/2016 10:10	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
14.02	14.02	AK

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1,2-DCA-d4	87	70-130		12/30/2016 20:05
Toluene-d8	97	70-130		12/30/2016 20:05
4-BFB	102	70-130		12/30/2016 20:05



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Kitchen-San Gaspar	1612E53-002A	Indoor Air	12/30/2016 10:15	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.55	13.55	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	9.2	6.0	1	12/30/2016 21:39
Acrolein	4.6	0.58	1	12/30/2016 21:39
Acrylonitrile	ND	0.22	1	12/30/2016 21:39
tert-Amyl methyl ether (TAME)	ND	0.42	1	12/30/2016 21:39
Benzene	2.7	0.032	1	12/30/2016 21:39
Benzyl chloride	ND	0.53	1	12/30/2016 21:39
Bromodichloromethane	0.13	0.0070	1	12/30/2016 21:39
Bromoform	ND	1.1	1	12/30/2016 21:39
Bromomethane	ND	0.39	1	12/30/2016 21:39
1,3-Butadiene	ND	0.22	1	12/30/2016 21:39
2-Butanone (MEK)	ND	7.5	1	12/30/2016 21:39
t-Butyl alcohol (TBA)	ND	6.2	1	12/30/2016 21:39
Carbon Disulfide	ND	0.32	1	12/30/2016 21:39
Carbon Tetrachloride	0.36	0.0064	1	12/30/2016 21:39
Chlorobenzene	ND	0.47	1	12/30/2016 21:39
Chloroethane	ND	0.27	1	12/30/2016 21:39
Chloroform	4.8	0.025	1	12/30/2016 21:39
Chloromethane	0.78	0.21	1	12/30/2016 21:39
Cyclohexane	ND	1.8	1	12/30/2016 21:39
Dibromochloromethane	ND	0.87	1	12/30/2016 21:39
1,2-Dibromo-3-chloropropane	ND	0.050	1	12/30/2016 21:39
1,2-Dibromoethane (EDB)	ND	0.0078	1	12/30/2016 21:39
1,2-Dichlorobenzene	ND	0.61	1	12/30/2016 21:39
1,3-Dichlorobenzene	ND	0.61	1	12/30/2016 21:39
1,4-Dichlorobenzene	0.23	0.030	1	12/30/2016 21:39
Dichlorodifluoromethane	2.8	0.50	1	12/30/2016 21:39
1,1-Dichloroethane	ND	0.41	1	12/30/2016 21:39
1,2-Dichloroethane (1,2-DCA)	0.067	0.0041	1	12/30/2016 21:39
1,1-Dichloroethene	ND	0.10	1	12/30/2016 21:39
cis-1,2-Dichloroethene	ND	0.40	1	12/30/2016 21:39
trans-1,2-Dichloroethene	ND	0.40	1	12/30/2016 21:39
1,2-Dichloropropane	0.037	0.0047	1	12/30/2016 21:39
cis-1,3-Dichloropropene	ND	0.12	1	12/30/2016 21:39
trans-1,3-Dichloropropene	ND	0.12	1	12/30/2016 21:39

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 Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Kitchen-San Gaspar	1612E53-002A	Indoor Air	12/30/2016 10:15	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.55	13.55	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.71	1	12/30/2016 21:39
Diisopropyl ether (DIPE)	ND	0.42	1	12/30/2016 21:39
1,4-Dioxane	0.28	0.018	1	12/30/2016 21:39
Ethyl acetate	1.9	0.92	1	12/30/2016 21:39
Ethyl tert-butyl ether (ETBE)	ND	0.42	1	12/30/2016 21:39
Ethylbenzene	0.61	0.44	1	12/30/2016 21:39
4-Ethyltoluene	ND	0.50	1	12/30/2016 21:39
Freon 113	ND	0.78	1	12/30/2016 21:39
Heptane	2.3	2.1	1	12/30/2016 21:39
Hexachlorobutadiene	ND	1.1	1	12/30/2016 21:39
Hexane	2.8	1.8	1	12/30/2016 21:39
2-Hexanone	ND	0.42	1	12/30/2016 21:39
4-Methyl-2-pentanone (MIBK)	ND	0.42	1	12/30/2016 21:39
Methyl-t-butyl ether (MTBE)	ND	0.37	1	12/30/2016 21:39
Methylene chloride	2.5	0.88	1	12/30/2016 21:39
Methyl methacrylate	ND	0.42	1	12/30/2016 21:39
Naphthalene	0.27	0.050	1	12/30/2016 21:39
Propene	ND	8.8	1	12/30/2016 21:39
Styrene	0.90	0.43	1	12/30/2016 21:39
1,1,1,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 21:39
1,1,2,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 21:39
Tetrachloroethene	22	0.069	1	12/30/2016 21:39
Tetrahydrofuran	ND	0.60	1	12/30/2016 21:39
Toluene	3.2	0.38	1	12/30/2016 21:39
1,2,4-Trichlorobenzene	ND	0.75	1	12/30/2016 21:39
1,1,1-Trichloroethane	ND	0.55	1	12/30/2016 21:39
1,1,2-Trichloroethane	ND	0.0055	1	12/30/2016 21:39
Trichloroethene	ND	0.027	1	12/30/2016 21:39
Trichlorofluoromethane	1.4	0.57	1	12/30/2016 21:39
1,2,4-Trimethylbenzene	0.76	0.50	1	12/30/2016 21:39
1,3,5-Trimethylbenzene	ND	0.50	1	12/30/2016 21:39
Vinyl Acetate	ND	1.8	1	12/30/2016 21:39
Vinyl Chloride	ND	0.013	1	12/30/2016 21:39
Xylenes, Total	3.0	1.3	1	12/30/2016 21:39

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Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Kitchen-San Gaspar	1612E53-002A	Indoor Air	12/30/2016 10:15	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.55	13.55	AK

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1,2-DCA-d4	87	70-130		12/30/2016 21:39
Toluene-d8	97	70-130		12/30/2016 21:39
4-BFB	103	70-130		12/30/2016 21:39



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Dinning Area-San Gaspar	1612E53-003A	Indoor Air	12/30/2016 10:18	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.91	13.91	AK

Analytes	Result	RL	DF	Date Analyzed
Acetone	9.1	6.0	1	12/30/2016 23:12
Acrolein	3.4	0.58	1	12/30/2016 23:12
Acrylonitrile	ND	0.22	1	12/30/2016 23:12
tert-Amyl methyl ether (TAME)	ND	0.42	1	12/30/2016 23:12
Benzene	2.1	0.032	1	12/30/2016 23:12
Benzyl chloride	ND	0.53	1	12/30/2016 23:12
Bromodichloromethane	0.071	0.0070	1	12/30/2016 23:12
Bromoform	ND	1.1	1	12/30/2016 23:12
Bromomethane	ND	0.39	1	12/30/2016 23:12
1,3-Butadiene	ND	0.22	1	12/30/2016 23:12
2-Butanone (MEK)	ND	7.5	1	12/30/2016 23:12
t-Butyl alcohol (TBA)	ND	6.2	1	12/30/2016 23:12
Carbon Disulfide	ND	0.32	1	12/30/2016 23:12
Carbon Tetrachloride	0.34	0.0064	1	12/30/2016 23:12
Chlorobenzene	ND	0.47	1	12/30/2016 23:12
Chloroethane	ND	0.27	1	12/30/2016 23:12
Chloroform	2.2	0.025	1	12/30/2016 23:12
Chloromethane	0.81	0.21	1	12/30/2016 23:12
Cyclohexane	ND	1.8	1	12/30/2016 23:12
Dibromochloromethane	ND	0.87	1	12/30/2016 23:12
1,2-Dibromo-3-chloropropane	ND	0.050	1	12/30/2016 23:12
1,2-Dibromoethane (EDB)	ND	0.0078	1	12/30/2016 23:12
1,2-Dichlorobenzene	ND	0.61	1	12/30/2016 23:12
1,3-Dichlorobenzene	ND	0.61	1	12/30/2016 23:12
1,4-Dichlorobenzene	0.37	0.030	1	12/30/2016 23:12
Dichlorodifluoromethane	2.7	0.50	1	12/30/2016 23:12
1,1-Dichloroethane	ND	0.41	1	12/30/2016 23:12
1,2-Dichloroethane (1,2-DCA)	0.068	0.0041	1	12/30/2016 23:12
1,1-Dichloroethene	ND	0.10	1	12/30/2016 23:12
cis-1,2-Dichloroethene	ND	0.40	1	12/30/2016 23:12
trans-1,2-Dichloroethene	ND	0.40	1	12/30/2016 23:12
1,2-Dichloropropane	0.035	0.0047	1	12/30/2016 23:12
cis-1,3-Dichloropropene	ND	0.12	1	12/30/2016 23:12
trans-1,3-Dichloropropene	ND	0.12	1	12/30/2016 23:12

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Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Dinning Area-San Gaspar	1612E53-003A	Indoor Air	12/30/2016 10:18	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.91	13.91	AK

Analytes	Result	RL	DF	Date Analyzed
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.71	1	12/30/2016 23:12
Diisopropyl ether (DIPE)	ND	0.42	1	12/30/2016 23:12
1,4-Dioxane	ND	0.018	1	12/30/2016 23:12
Ethyl acetate	1.4	0.92	1	12/30/2016 23:12
Ethyl tert-butyl ether (ETBE)	ND	0.42	1	12/30/2016 23:12
Ethylbenzene	0.59	0.44	1	12/30/2016 23:12
4-Ethyltoluene	ND	0.50	1	12/30/2016 23:12
Freon 113	ND	0.78	1	12/30/2016 23:12
Heptane	ND	2.1	1	12/30/2016 23:12
Hexachlorobutadiene	ND	1.1	1	12/30/2016 23:12
Hexane	2.4	1.8	1	12/30/2016 23:12
2-Hexanone	ND	0.42	1	12/30/2016 23:12
4-Methyl-2-pentanone (MIBK)	ND	0.42	1	12/30/2016 23:12
Methyl-t-butyl ether (MTBE)	ND	0.37	1	12/30/2016 23:12
Methylene chloride	2.5	0.88	1	12/30/2016 23:12
Methyl methacrylate	ND	0.42	1	12/30/2016 23:12
Naphthalene	0.21	0.050	1	12/30/2016 23:12
Propene	ND	8.8	1	12/30/2016 23:12
Styrene	0.85	0.43	1	12/30/2016 23:12
1,1,1,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 23:12
1,1,2,2-Tetrachloroethane	ND	0.0070	1	12/30/2016 23:12
Tetrachloroethene	18	0.069	1	12/30/2016 23:12
Tetrahydrofuran	0.70	0.60	1	12/30/2016 23:12
Toluene	2.9	0.38	1	12/30/2016 23:12
1,2,4-Trichlorobenzene	ND	0.75	1	12/30/2016 23:12
1,1,1-Trichloroethane	ND	0.55	1	12/30/2016 23:12
1,1,2-Trichloroethane	ND	0.0055	1	12/30/2016 23:12
Trichloroethene	0.032	0.027	1	12/30/2016 23:12
Trichlorofluoromethane	1.4	0.57	1	12/30/2016 23:12
1,2,4-Trimethylbenzene	0.70	0.50	1	12/30/2016 23:12
1,3,5-Trimethylbenzene	ND	0.50	1	12/30/2016 23:12
Vinyl Acetate	ND	1.8	1	12/30/2016 23:12
Vinyl Chloride	ND	0.013	1	12/30/2016 23:12
Xylenes, Total	3.0	1.3	1	12/30/2016 23:12

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Angela Rydelius, Lab Manager



Analytical Report

Client: Advanced GeoEnvironmental, Inc.
Date Received: 12/30/16 11:10
Date Prepared: 12/30/16
Project: Sunshine Cleaners

WorkOrder: 1612E53
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³

Volatile Organic Compounds

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Dinning Area-San Gaspar	1612E53-003A	Indoor Air	12/30/2016 10:18	GC24	132069

Initial Pressure (psia)	Final Pressure (psia)	Analyst(s)
13.91	13.91	AK

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
1,2-DCA-d4	87	70-130		12/30/2016 23:12
Toluene-d8	97	70-130		12/30/2016 23:12
4-BFB	102	70-130		12/30/2016 23:12

 Angela Rydelius, Lab Manager



Quality Control Report

Client: Advanced GeoEnvironmental, Inc.
Date Prepared: 12/30/16
Date Analyzed: 12/30/16
Instrument: GC24
Matrix: Indoor Air
Project: Sunshine Cleaners

WorkOrder: 1612E53
BatchID: 132069
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³
Sample ID: MB/LCS-132069

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	11.8	6.0	12	-	98	60-140
Acrolein	ND	11.8	0.58	11.65	-	102	60-140
Acrylonitrile	ND	12.7	0.22	11	-	115	60-140
tert-Amyl methyl ether (TAME)	ND	24.5	0.42	21	-	117	60-140
Benzene	ND	19.4	0.032	16	-	121	60-140
Benzyl chloride	ND	30.9	0.53	26.5	-	117	60-140
Bromodichloromethane	ND	44.1	0.0070	35	-	126	60-140
Bromoform	ND	71.0	1.1	52.5	-	135	60-140
Bromomethane	ND	28.4	0.39	19.5	-	146, F2	60-140
1,3-Butadiene	ND	15.0	0.22	11	-	137	60-140
2-Butanone (MEK)	ND	16.6	7.5	15	-	111	60-140
t-Butyl alcohol (TBA)	ND	16.1	6.2	15.5	-	104	60-140
Carbon Disulfide	ND	17.4	0.32	16	-	108	60-140
Carbon Tetrachloride	ND	45.7	0.0064	32	-	143, F2	60-140
Chlorobenzene	ND	26.7	0.47	23.5	-	114	60-140
Chloroethane	ND	14.9	0.27	13.5	-	110	60-140
Chloroform	ND	25.7	0.025	24.5	-	105	60-140
Chloromethane	ND	11.7	0.21	10.5	-	112	60-140
Cyclohexane	ND	18.3	1.8	17.5	-	105	60-140
Dibromochloromethane	ND	59.4	0.87	43.5	-	136	60-140
1,2-Dibromo-3-chloropropane	ND	57.6	0.050	49	-	118	60-140
1,2-Dibromoethane (EDB)	ND	46.9	0.0078	39	-	120	60-140
1,2-Dichlorobenzene	ND	36.9	0.61	30.5	-	121	60-140
1,3-Dichlorobenzene	ND	37.1	0.61	30.5	-	122	60-140
1,4-Dichlorobenzene	ND	36.7	0.030	30.5	-	120	60-140
Dichlorodifluoromethane	ND	26.0	0.50	25	-	104	60-140
1,1-Dichloroethane	ND	24.6	0.41	20.5	-	120	60-140
1,2-Dichloroethane (1,2-DCA)	ND	18.6	0.0041	20.5	-	91	60-140
1,1-Dichloroethene	ND	19.6	0.10	20	-	98	60-140
cis-1,2-Dichloroethene	ND	21.7	0.40	20	-	109	60-140
trans-1,2-Dichloroethene	ND	22.0	0.40	20	-	110	60-140
1,2-Dichloropropane	ND	27.3	0.0047	23.5	-	116	60-140
cis-1,3-Dichloropropene	ND	28.8	0.12	23	-	125	60-140
trans-1,3-Dichloropropene	ND	28.3	0.12	23	-	123	60-140
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	38.1	0.71	35.5	-	107	60-140
Diisopropyl ether (DIPE)	ND	23.0	0.42	21	-	110	60-140
1,4-Dioxane	ND	23.9	0.018	18.5	-	129	60-140

(Cont.)

QA/QC Officer



Quality Control Report

Client: Advanced GeoEnvironmental, Inc.
Date Prepared: 12/30/16
Date Analyzed: 12/30/16
Instrument: GC24
Matrix: Indoor Air
Project: Sunshine Cleaners

WorkOrder: 1612E53
BatchID: 132069
Extraction Method: TO15
Analytical Method: TO15
Unit: µg/m³
Sample ID: MB/LCS-132069

QC Summary Report for TO15

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Ethyl acetate	ND	20.2	0.92	18.5	-	109	60-140
Ethyl tert-butyl ether (ETBE)	ND	22.6	0.42	21	-	108	60-140
Ethylbenzene	ND	25.4	0.44	22	-	116	60-140
4-Ethyltoluene	ND	30.1	0.50	25	-	120	60-140
Freon 113	ND	42.9	0.78	39	-	110	60-140
Heptane	ND	24.3	2.1	21	-	116	60-140
Hexachlorobutadiene	ND	66.1	1.1	54	-	122	60-140
Hexane	ND	19.4	1.8	18	-	108	60-140
2-Hexanone	ND	21.4	0.42	21	-	102	60-140
4-Methyl-2-pentanone (MIBK)	ND	23.6	0.42	21	-	113	60-140
Methyl-t-butyl ether (MTBE)	ND	20.0	0.37	18.5	-	108	60-140
Methylene chloride	ND	17.6	0.88	17.5	-	101	60-140
Methyl methacrylate	ND	25.9	0.42	20.8	-	125	60-140
Naphthalene	ND	62.9	0.050	53	-	119	60-140
Propene	ND	ND	8.8	8.5	-	100	60-140
Styrene	ND	26.9	0.43	21.5	-	125	60-140
1,1,1,2-Tetrachloroethane	ND	44.7	0.0070	35	-	128	60-140
1,1,2,2-Tetrachloroethane	ND	44.2	0.0070	35	-	126	60-140
Tetrachloroethene	ND	38.6	0.069	34.5	-	112	60-140
Tetrahydrofuran	ND	14.6	0.60	15	-	97	60-140
Toluene	ND	21.6	0.38	19	-	114	60-140
1,2,4-Trichlorobenzene	ND	48.7	0.75	37.5	-	130	60-140
1,1,1-Trichloroethane	ND	32.4	0.55	27.5	-	118	60-140
1,1,2-Trichloroethane	ND	31.4	0.0055	27.5	-	114	60-140
Trichloroethene	ND	30.9	0.027	27.5	-	112	60-140
Trichlorofluoromethane	ND	32.7	0.57	28.5	-	115	60-140
1,2,4-Trimethylbenzene	ND	31.0	0.50	25	-	124	60-140
1,3,5-Trimethylbenzene	ND	30.3	0.50	25	-	121	60-140
Vinyl Acetate	ND	22.6	1.8	18	-	126	60-140
Vinyl Chloride	ND	17.9	0.013	13	-	138	60-140
Xylenes, Total	ND	81.3	1.3	66	-	123	60-140
Surrogate Recovery							
1,2-DCA-d4	89.1	87.1		100	89	87	70-130
Toluene-d8	98.3	99.1		100	98	99	70-130
4-BFB	101	103		100	101	103	70-130

QA/QC Officer



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1612E53

ClientCode: AGES

WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 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
cc/3rd Party:
PO:
ProjectNo: Sunshine Cleaners

Bill to:

Erica
Advanced GeoEnvironmental, Inc.
837 Shaw Road
Stockton, CA 95215
ap@advgeoenv.com

Requested TAT: 5 days;

Date Received: 12/30/2016

Date Logged: 12/30/2016

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	
1612E53-001	Rooftop-San Gaspar	Indoor Air	12/30/2016 10:10	<input type="checkbox"/>	A												
1612E53-002	Kitchen-San Gaspar	Indoor Air	12/30/2016 10:15	<input type="checkbox"/>	A												
1612E53-003	Dinning Area-San Gaspar	Indoor Air	12/30/2016 10:18	<input type="checkbox"/>	A												

Test Legend:

1	TO15_SCAN-SIM_Indoor(ug/m3)	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Jena Alfaro

The following SampIDs: 001A, 002A, 003A contain testgroup TO15_INDOOR.

Comments:

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.



WORK ORDER SUMMARY

Client Name: ADVANCED GEOENVIRONMENTAL, INC.

Project: Sunshine Cleaners

Work Order: 1612E53

Client Contact: Daniel Villanueva

QC Level: LEVEL 2

Contact's Email: dvillanueva@advgeoenv.com

Comments:

Date Logged: 12/30/2016

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
1612E53-001A	Rooftop-San Gaspar	Indoor Air	TO15 for Indoor Air (Scan-SIM)	1	6L Summa	<input type="checkbox"/>	12/30/2016 10:10	5 days		<input type="checkbox"/>	
1612E53-002A	Kitchen-San Gaspar	Indoor Air	TO15 for Indoor Air (Scan-SIM)	1	6L Summa	<input type="checkbox"/>	12/30/2016 10:15	5 days		<input type="checkbox"/>	
1612E53-003A	Dinning Area-San Gaspar	Indoor Air	TO15 for Indoor Air (Scan-SIM)	1	6L Summa	<input type="checkbox"/>	12/30/2016 10:18	5 days		<input type="checkbox"/>	

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.



Sample Receipt Checklist

Client Name: **Advanced GeoEnvironmental, Inc.**
 Project Name: **Sunshine Cleaners**

Date and Time Received: **12/30/2016 11:10**
 Date Logged: **12/30/2016**
 Received by: **Jena Alfaro**
 Logged by: **Jena Alfaro**

WorkOrder No: **1612E53** Matrix: Indoor Air
 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

UCMR3 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 C

SUMMARY OF CARCINOGENIC RISK

Receptor 1:

Worker - Mean

Chemical	Inhalation of Indoor Air	TOTAL
Tetrachloroethylene (PCE)	8.9E-07	8.9E-07
TOTAL	8.9E-07	8.9E-07

SUMMARY OF HAZARD QUOTIENTS

Receptor 1:

Worker - Mean

Chemical	Inhalation of Indoor Air	TOTAL
Tetrachloroethylene (PCE)	9.3E-03	9.3E-03
TOTAL	9.3E-03	9.3E-03