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RECEIVED

By Alameda County Environmental Health 2:18 pm, Apr 26, 2017

Mr. Gabe Stivala, P.G
ATC Group Services LLC
701 University Drive, Suite 200
Sacramento, CA 95825

SUBJECT Indoor Air Monitoring Report

Dry Clean 580 and Adjacent Retail Units
3735 East Castro Valley Boulevard, Castro Valley, CA
Alameda County LOP No. RO 3097

Dear Mr. Stivala:

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document submitted on my behalf by ATC Group Services LLC to ACDEH's FTP server and the SWRCB's GeoTracker website.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Charles Gurney', written over a horizontal line.

Charles Gurney

Weingarten Realty Investors

2600 Citadel Plaza Drive, Suite 300

Houston, Texas 77008

Date: 4/14/17

April 11, 2017

Ms. Karel Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

SUBJECT **Indoor Air Monitoring Report**
580 Market Place
3735 East Castro Valley Boulevard
Alameda County LOP No. RO 3097

Dear Ms. Detterman:

On behalf of Weingarten Realty Investors (Weingarten), ATC Group Services LLC (ATC) conducted indoor air assessment at the subject site. The sampling was performed to monitor previously reported trichloroethene (TCE) indoor air concentrations exceeding applicable screening levels.

SITE DESCRIPTION

The site is located in the 580 Market Place Shopping Center in Castro Valley, California (**Figure 1**) and the study area consists of the tenant units in the vicinity of the DryClean 580 as well as the paved areas south of these units. An extended Site Plan illustrating the layout of pertinent areas of the shopping center is shown on **Figure 2**. The assessment target for this report is the DryClean 580 facility. For this specific indoor air sampling event, samples were collected from the DryClean 580 tenant unit only.

BACKGROUND

The sampling was performed to monitor previously reported trichloroethene (TCE) indoor air concentrations exceeding screening levels established in the San Francisco Bay Regional Water Quality Control Board's Summary Table E3, 2016 Environmental Screening Levels, Revision 3 (ESLs) for Commercial/Industrial Indoor Air, and United States Environmental Protection Agency (EPA) Region 9 Interim TCE Indoor Air Response Action Levels for Commercial TCE Inhalation Exposure from Vapor Intrusion (EPA, 2014). Exceedances were reported for samples AI-1 and AI-2 collected from the DryClean 580 tenant unit on March 3, 2016 and had TCE concentrations of 19 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and $7.2 \mu\text{g}/\text{m}^3$, respectively; the ESL is $3.0 \mu\text{g}/\text{m}^3$ and the EPA Response Action Level for an 8-hour work day is $8.0 \mu\text{g}/\text{m}^3$; indoor air samples from adjacent tenant units did not exceed guidance concentrations. Following the March 2016 sampling, indoor air at the DryClean 580 tenant unit was resampled on

August 4, 2016. No detection of TCE were reported above the reporting limit for TCE of 0.55 $\mu\text{g}/\text{m}^3$ for the August 2016 sampling event.

On August 24 and 25, 2016, ATC implemented Interim Remedial Action consisting of the excavation and disposal of approximately 60 tons of soil from the identified chlorinated hydrocarbon release area adjacent to and outside the southern side of the DryClean 580 tenant unit. The purpose of the excavation was to remove the suspected source of chlorinated hydrocarbons detected in sub-slab vapor and indoor air at the DryClean 580 tenant unit. The excavation activities and confirmation soil sampling results are documented in ATC's *Interim Remedial Action Report*, dated September 26, 2016.

APPLICABLE SCREENING LEVELS

ATC compared the analytical results to San Francisco Bay Regional Water Quality Control Board's Summary Table E3, 2016 ESLs for Commercial/Industrial Indoor Air, the California Department of Toxic Substance Control (DTSC) Human Health Risk Assessment (HHRA) HERO Health Note Number 5, dated August 23, 2014, and EPA Region 9 Interim TCE Indoor Air Response Action Levels for Commercial TCE Inhalation Exposure from Vapor Intrusion (EPA, 2014).

INDOOR AND OUTDOOR AIR SAMPLING

Pre-Sampling Identification and Removal of Chemical Products

ATC met onsite with tenant of the DryClean 580 unit on March 8, 2017 and conducted a visual inventory of the products stored in the unit that could potentially affect the indoor air results. The tenant was provided instructions regarding removal of products or storage and non-use of products and chemicals, until completion of the sampling. ATC identified numerous chemical products (spot removers, etc.) stored in the DryClean 580 unit. The products were surveyed, removed from the active dry cleaning area, and stored in airtight plastic containers. Two 5-gallon drums of the main dry cleaning product (Exxon DF-2000) are used during daily operations and could not be removed, however this particular product is petroleum based and does not contain chlorinated hydrocarbons.

Air Sample Collection

The indoor air samples were collected in 6-liter Summa™ canisters that were supplied and individually-certified clean by the analytical laboratory. Each canister was fitted with a regulator that was individually-certified clean and was calibrated by the laboratory to ensure air sample collection over 8-hour period. Per request by the ACEH, the sampling was conducted during work hours to assess air quality under typical tenant working conditions. The sampling occurred with the rear door of the tenant unit open, as that is typical operating procedure for this tenant.

The initial vacuum of each canister was verified to be between 25 and 30 inches of mercury. Indoor and Outdoor air sampling locations are shown on **Figure 2**. Air samples were collected at the following locations:

- On March 15, 2017 from approximately 0800 hours to 1525 hours, two indoor air samples (IA1 and IA2) were collected from DryClean 580. Samples were collected at 4 to 5 feet above the floor in the central area of the building and southeast area of the building. Contemporaneously, one outdoor sample was collected (AA).
- Final canister vacuums were approximately 1 to 2 inches of mercury upon termination of sampling.

The air samples for this site identified using the following designation system:

- IA indicates the sample matrix is indoor air.
- AA indicates the sample matrix is outside air; note that for previous events OA was used.

Results from this event are summarized in Tables 1A through 1D.

Air Sampling Results – DryClean 580

Laboratory analytical results for this event are summarized in Tables 2A through 2D and select results are illustrated on Figures 3 through 9. The analytical results from the indoor air samples collected on March 15, 2017 indicated that:

- TCE was not reported to be present any of the samples at or above the method detection limit (MDL) of 0.55 $\mu\text{g}/\text{m}^3$, which is below the ESL (3.0 $\mu\text{g}/\text{m}^3$) and the EPA Response Action Level for an 8-hour work day (8.0 $\mu\text{g}/\text{m}^3$).
- PCE not reported to be present in any of the samples above the MDL of 0.69 $\mu\text{g}/\text{m}^3$, which is below the ESL (2.1 $\mu\text{g}/\text{m}^3$).
- Carbon tetrachloride was reported in samples IA1, IA2, and AA at concentrations of 0.45 $\mu\text{g}/\text{m}^3$, 0.51 $\mu\text{g}/\text{m}^3$, and 0.45 $\mu\text{g}/\text{m}^3$, respectively. These concentrations exceed the ESL (0.29 $\mu\text{g}/\text{m}^3$).
- Total Petroleum Hydrocarbons in the gasoline range (TPHg) was reported to be present in samples IA1 and IA at a concentrations of 260 $\mu\text{g}/\text{m}^3$ in sample IA1 and at a concentration of 320 $\mu\text{g}/\text{m}^3$ in the sample collected from IA2, neither of which exceed the ESL (2,500 $\mu\text{g}/\text{m}^3$); for sample AA, TPHg was not reported to be present at or above the MDL of 100 $\mu\text{g}/\text{m}^3$.
- Benzene was reported in samples IA1, IA2, and AA at concentrations of 0.65 $\mu\text{g}/\text{m}^3$, 0.61 $\mu\text{g}/\text{m}^3$, and 0.42 $\mu\text{g}/\text{m}^3$, respectively. All three samples meet or exceed the ESL (0.42 $\mu\text{g}/\text{m}^3$).

Background Outdoor Air Quality

ATC obtained outdoor air quality data from the Bay Area Air Quality Management District (BAAQMD) for two stations nearest to the site. The two BAAQMD stations are located in East Oakland and Livermore, California. Air quality data for select VOCs and HVOCs from February 2010 through December 2014 are summarized on Tables 2A through 2C.

The background outdoor air quality data was compared with the sampling data collected at the 580 Market Place Shopping Center between March 2015 and August 2016 and indicated the following:

- The average background concentrations for methylene chloride were $0.65 \mu\text{g}/\text{m}^3$ (Livermore) and $0.70 \mu\text{g}/\text{m}^3$ (East Oakland), while the reported indoor air concentrations were similar or lower, ranging from ($<0.35 \mu\text{g}/\text{m}^3$ to $0.75 \mu\text{g}/\text{m}^3$).
- The average background PCE concentrations reported regionally were $0.11 \mu\text{g}/\text{m}^3$ and $0.17 \mu\text{g}/\text{m}^3$, while the reported indoor air concentrations were generally higher, ranging from $<0.69 \mu\text{g}/\text{m}^3$ to $3.3 \mu\text{g}/\text{m}^3$.
- The average regional TCE concentrations were $0.01 \mu\text{g}/\text{m}^3$ and $0.05 \mu\text{g}/\text{m}^3$, while indoor air concentrations ranged from $<0.55 \mu\text{g}/\text{m}^3$ to $19 \mu\text{g}/\text{m}^3$.
- The average regional carbon tetrachloride concentration reported regionally was $0.67 \mu\text{g}/\text{m}^3$ (Liverpool and East Oakland) are higher than the reported indoor air concentrations ($<0.32 \mu\text{g}/\text{m}^3$ to $0.57 \mu\text{g}/\text{m}^3$).

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the recent indoor air sampling in the DryClean 580 tenant unit, ATC concludes the following:

- TCE was not detected in indoor air above the reporting limit of $<0.69 \mu\text{g}/\text{m}^3$, the ESL ($3.0 \mu\text{g}/\text{m}^3$), or the EPA Response Action Level for an 8-hour work day ($8.0 \mu\text{g}/\text{m}^3$).
- Reported detections of carbon tetrachloride and benzene are slightly above ESLs for sample inside of the tenant unit are comparable to ambient concentrations outside of the DryClean 580 tenant unit, and therefore are background concentrations and not related to chlorinated hydrocarbon release at the site.
- Other HVOCs were below reportable levels or were below applicable screening levels.

ATC concludes that the current indoor air results for the Dry Clean 580 facility continue to indicate that current indoor air quality poses no risk to human health in this commercial setting. Therefore, ATC recommends the site be considered for case closure.

LIMITATIONS

For documents cited that were not generated by ATC, the data taken from those documents is used "as is" and is assumed to be accurate. ATC does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents. This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please contact Mr. Gabe Stivala, ATC's Senior Project Manager for this site, at (916) 923-1097 or at gabe.stivala@atcassociates.com with any questions regarding this report.

Sincerely,



James Kundert
Staff Geologist
for ATC Group Services
Direct: 209 579 2221
Email: jim.kundert@atcasociates.com



Gabe Stivala, P.G.
Senior Project Manager
for ATC Group Services
Direct: 916 724 5247
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Enclosures:

References

Acronym List

Figure 1 Site Vicinity Map

Figure 2 Site Plan

Table 1A Indoor Air and Outdoor Air Analytical Results - HVOCS

Table 1B Indoor Air and Outdoor Air Analytical Results - HVOCS

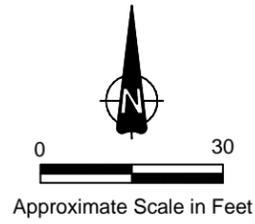
Table 1C Indoor Air and Outdoor Air Analytical Results – Atmospheric Gases and Hydrocarbons

Table 1D Indoor Air and Outdoor Air Analytical Results - VOCS

Appendix A Field Data Sheets

Appendix B Laboratory Analytical Reports

FIGURES



LEGEND

IAA-1 ● Indoor Air Sample

NOTES

SITE PLAN WITH ANALYTICAL DATA

PCE
 DRY CLEAN 580
 3735 E. Castro Valley Boulevard
 Castro Valley, CA

PROJECT NUMBER: 2386

DATE: 02/01/2016

FIGURE

APPROVED BY: AH

DRAWN BY: CC

PCE



3261 S. Higuera Street, Suite 200
 San Luis Obispo, CA 93401

Ph: (805) 543-7007 *** Fax: (805) 543-7027

TABLES

**TABLE 1A
INDOOR AIR ANALYTICAL RESULTS - HVOCs**

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 1 of 8)

Sample ID	Date	Dichlorodifluoro-methane		Methylene Chloride		Tetrachloro-ethene		Trichloro-ethene		1,1,1-Trichloroethane		1,1,2-Trichloro-1,2,2-Trifluoroethane		Trichlorofluoro-methane		Vinyl Chloride		Add'l HVOCs
		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		
		EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15/ EPA TO-15 SIM
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																		
Commercial/Industrial	---	---	12	12	2.1	2.1	3.0	3.0	4,400	4,400	---	---	---	---	0.16	0.16	---	
Human Health Risk Assessment Note Number 3 (DTSC, 2014)																		
Industrial	---	---	12.3	12	2.08	2.08	---	---	4,380	4,380	---	---	---	---	0.157	0.157	---	
Interim TCE Indoor Air Response Action Levels (EPA, 2014)																		
Commercial/Industrial Accelerated Response Action Level																		
8-hour Work Day	---	---	---	---	---	---	8	8	---	---	---	---	---	---	---	---	---	
10-hour Work Day	---	---	---	---	---	---	7	7	---	---	---	---	---	---	---	---	---	
Commercial/Industrial Urgent Response Action Level																		
8-hour Work Day	---	---	---	---	---	---	24	24	---	---	---	---	---	---	---	---	---	
10-hour Work Day	---	---	---	---	---	---	21	21	---	---	---	---	---	---	---	---	---	
Background Outdoor Air																		
Livermore (BAAQMD)																		
Minimum	---	---	0	0	0	0	0	0	---	---	---	---	---	---	---	---	---	
Average	---	---	0.65	0.65	0.11	0.11	0.0098	0.0098	---	---	---	---	---	---	---	---	---	
Maximum	---	---	4.14	4.14	2.11	2.11	0.11	0.11	---	---	---	---	---	---	---	---	---	
East Oakland (BAAQMD)																		
Minimum	---	---	0	0	0	0	0	0	---	---	---	---	---	---	---	---	---	
Average	---	---	0.70	0.70	0.17	0.17	0.05	0.05	---	---	---	---	---	---	---	---	---	
Maximum	---	---	7.71	7.71	0.82	0.82	1.45	1.45	---	---	---	---	---	---	---	---	---	

Dry Clean 580 Unit

IA1	03/05/15	2.9	1.9	<17	0.55	<3.4	0.58	3.0	3.1	<2.7	0.14	<11	0.51	<5.6	1.1	<1.3	<0.026	ND
IA1 Dup	03/05/15	2.9	2.0	<17	0.43	<3.4	0.65	3.5	3.5	<2.7	0.16	<11	0.52	<5.6	1.1	<1.3	<0.026	ND
IA1	03/02/16	2.1	NA	<0.71	NA	<1.4	NA	19	NA	<1.1	NA	<1.5	NA	1.6	NA	<0.26	NA	ND
IA1	08/04/16	1.9	NA	<0.35	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.1	NA	<0.13	NA	ND
IA1	03/15/17	1.8	NA	0.46	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.3	NA	<0.13	NA	ND
IA2	03/05/15	2.9	1.9	<17	0.51	<3.4	0.43	<2.7	1.2	<2.7	<0.14	<11	0.51	<5.6	1.0	<1.3	<0.026	ND
IA2	03/02/16	<2.0	NA	<0.71	NA	<1.4	NA	7.2	NA	<1.1	NA	<1.5	NA	1.5	NA	<0.26	NA	ND
IA2	08/04/16	1.6	NA	<0.35	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	0.85	NA	<0.13	NA	ND
IA2	03/15/17	1.9	NA	0.42	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.4	NA	<0.13	NA	ND

Verizon

3935 East Castro Valley Boulevard

IAV1	03/05/15	2.9	2.0	<17	0.30	<3.4	1.5	<2.7	0.25	<2.7	<0.14	<11	0.40	<5.6	1.1	<1.3	<0.026	ND
IAV1	03/02/16	2.0	NA	0.50	NA	3.3	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.8	NA	<0.13	NA	ND
IAV2	03/05/15	2.8	1.9	<17	0.64	<3.4	1.4	<2.7	0.31	<2.7	<0.14	<11	0.52	<5.6	1.1	<1.3	<0.026	ND
IAV2	03/02/16	<2.0	NA	0.75	NA	<1.4	NA	<1.1	NA	<1.1	NA	<1.5	NA	1.3	NA	<0.26	NA	ND

**TABLE 1A
INDOOR AIR ANALYTICAL RESULTS - HVOCS**

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 2 of 8)

Sample ID	Date	Dichlorodifluoro-methane		Methylene Chloride		Tetrachloro-ethene		Trichloro-ethene		1,1,1-Trichloroethane		1,1,2-Trichloro-1,2,2-Trifluoroethane		Trichlorofluoro-methane		Vinyl Chloride		Add'l HVOCs	
		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)	
		EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																			
Commercial/Industrial		---	---	12	12	2.1	2.1	3.0	3.0	4,400	4,400	---	---	---	---	0.16	0.16	---	
Human Health Risk Assessment Note Number 3 (DTSC, 2014)																			
Industrial		---	---	12.3	12	2.08	2.08	---	---	4,380	4,380	---	---	---	---	0.157	0.157	---	
Interim TCE Indoor Air Response Action Levels (EPA, 2014)																			
Commercial/Industrial Accelerated Response Action Level																			
8-hour Work Day		---	---	---	---	---	---	8	8	---	---	---	---	---	---	---	---	---	---
10-hour Work Day		---	---	---	---	---	---	7	7	---	---	---	---	---	---	---	---	---	---
Commercial/Industrial Urgent Response Action Level																			
8-hour Work Day		---	---	---	---	---	---	24	24	---	---	---	---	---	---	---	---	---	---
10-hour Work Day		---	---	---	---	---	---	21	21	---	---	---	---	---	---	---	---	---	---
Background Outdoor Air																			
Livermore (BAAQMD)																			
Minimum		---	---	0	0	0	0	0	0	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.65	0.65	0.11	0.11	0.0098	0.0098	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	4.14	4.14	2.11	2.11	0.11	0.11	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																			
Minimum		---	---	0	0	0	0	0	0	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.70	0.70	0.17	0.17	0.05	0.05	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	7.71	7.71	0.82	0.82	1.45	1.45	---	---	---	---	---	---	---	---	---	---

AT&T

3949 East Castro Valley Boulevard

IAA1	03/05/15	2.9	2.0	<17	0.68	<3.4	0.63	<2.7	0.43	<2.7	<0.14	<11	0.53	<5.6	1.1	<1.3	<0.026	ND
IAA1	03/02/16	1.6	NA	0.49	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.5	NA	<0.13	NA	ND

Outdoor Air

OA1	03/05/15	2.9	2.0	<17	0.45	<3.4	<0.17	<2.7	<0.13	<2.7	<0.14	<11	0.53	<5.6	1.1	<1.3	<0.026	ND	
OA1	03/02/16	1.9	NA	<0.35	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.6	NA	<0.13	NA	ND	
OA1	08/04/16	No Analyses - Summa canister stolen during sampling																	
AA	03/15/17	1.8	NA	0.46	NA	<0.69	NA	<0.55	NA	<0.55	NA	<0.77	NA	1.2	NA	<0.13	NA	ND	

Notes:

TPHg	=	Total petroleum hydrocarbons as gasoline.	% V	=	Percent by volume.
MTBE	=	Methyl tertiary butyl ether.	in Hg	=	Inches of mercury.
TBA	=	Tertiary butyl alcohol.	µg/m ³	=	Micrograms per meter cubed.
Add'l VOCs	=	Additional volatile organic compounds.	ND	=	Not detected.
SCAQMD	=	South Coast Air Quality Management District.	<	=	Less than the stated laboratory reporting limit.
ASTM	=	American Society of Testing and Materials.	---	=	Not applicable/Not specified.
EPA	=	Environmental Protection Agency.	a	=	Value for total xylenes.

TABLE 1B
INDOOR AIR ANALYTICAL RESULTS - HVOCs

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 3 of 8)

Sample ID	Date	Bromodichloromethane		Carbon Tetrachloride		Chlorobenzene		Chloroethane		Chloroform		Chloromethane		c-1,2-Dichloroethene		t-1,2-Dichloroethene	
		(µg/m³)		(µg/m³)		(µg/m³)		(µg/m³)		(µg/m³)		(µg/m³)		(µg/m³)		(µg/m³)	
		EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																	
Commercial/Industrial		0.33	0.33	0.29	0.29	220	220	44,000	44,000	0.53	0.53	390	390	35	35	260	260
Human Health Risk Assessment Note Number 3 (DTSC, 2014)																	
Industrial		370	370	175	175	---	---	---	---	---	---	---	---	31	31	---	---
Background Outdoor Air																	
Livermore (BAAQMD)																	
Minimum		---	---	0.37	0.37	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.67	0.67	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	1.22	1.22	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																	
Minimum		---	---	0.35	0.35	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.67	0.67	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	1.38	1.38	---	---	---	---	---	---	---	---	---	---	---	---

Dry Clean 580 Unit

IA1	03/05/15	<3.4	<0.17	<3.1	0.43	<2.3	<0.12	<1.3	<0.066	<2.4	0.27	1.6	1.2	<2.0	<0.099	<2.0	<0.099
IA1 Dup	03/05/15	<3.4	<0.17	<3.1	0.44	<2.3	<0.12	<1.3	<0.066	<2.4	0.28	1.6	1.2	<2.0	<0.099	<2.0	<0.099
IA1	03/02/16	<1.4	NA	<0.64	NA	<0.94	NA	<0.54	NA	<0.49	NA	1.1	NA	<0.80	NA	<0.80	NA
IA1	08/04/16	<0.68	NA	<0.32	NA	<0.47	NA	<0.27	NA	<0.25	NA	0.93	NA	<0.40	NA	<0.40	NA
IA1	03/15/17	<0.68	NA	0.45	NA	<0.47	NA	<0.27	NA	<0.25	NA	1.3	NA	<0.40	NA	<0.40	NA
IA2	03/05/15	<3.4	<0.17	<3.1	0.41	<2.3	<0.12	<1.3	<0.066	<2.4	0.21	1.6	1.2	<2.0	<0.099	<2.0	<0.099
IA2	03/02/16	<1.4	NA	<0.64	NA	<0.94	NA	<0.54	NA	<0.49	NA	1.1	NA	<0.80	NA	<0.80	NA
IA2	08/04/16	<0.68	NA	<0.32	NA	<0.47	NA	<0.27	NA	<0.25	NA	0.87	NA	<0.40	NA	<0.40	NA
IA2	03/15/17	<0.68	NA	0.51	NA	<0.47	NA	<0.27	NA	<0.25	NA	1.0	NA	<0.40	NA	<0.40	NA

Verizon

3935 East Castro Valley Boulevard

IAV1	03/05/15	<3.4	<0.17	<3.1	0.46	<2.3	<0.12	<1.3	<0.066	<2.4	0.27	1.6	1.1	<2.0	<0.099	<2.0	<0.099
IAV1	03/02/16	<0.68	NA	0.57	NA	<0.47	NA	<0.27	NA	0.43	NA	1.5	NA	<0.40	NA	<0.40	NA
IAV2	03/05/15	<3.4	<0.17	<3.1	0.43	<2.3	<0.12	<1.3	<0.066	<2.4	0.31	1.7	1.3	<2.0	<0.099	<2.0	<0.099
IAV2	03/02/16	<1.4	NA	<0.64	NA	<0.94	NA	<0.54	NA	0.56	NA	1.1	NA	<0.80	NA	<0.80	NA

AT&T

3949 East Castro Valley Boulevard

IAA1	03/05/15	<3.4	<0.17	<3.1	0.46	<2.3	<0.12	<1.3	<0.066	<2.4	0.27	1.9	1.3	<2.0	<0.099	<2.0	<0.099
IAA1	03/02/16	<0.68	NA	0.55	NA	<0.47	NA	<0.27	NA	0.32	NA	0.96	NA	<0.40	NA	<0.40	NA

TABLE 1B
INDOOR AIR ANALYTICAL RESULTS - HVOCs

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 4 of 8)

Sample ID	Date	Bromodichloromethane		Carbon Tetrachloride		Chlorobenzene		Chloroethane		Chloroform		Chloromethane		c-1,2-Dichloroethene		t-1,2-Dichloroethene	
		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)	
		EPA TO-15	EPA TO-15 SIM														
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																	
Commercial/Industrial		0.33	0.33	0.29	0.29	220	220	44,000	44,000	0.53	0.53	390	390	35	35	260	260
Human Health Risk Assessment Note Number 3 (DTSC, 2014)																	
Industrial		370	370	175	175	---	---	---	---	---	---	---	---	31	31	---	---
Background Outdoor Air																	
Livermore (BAAQMD)																	
Minimum		---	---	0.37	0.37	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.67	0.67	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	1.22	1.22	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																	
Minimum		---	---	0.35	0.35	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	0.67	0.67	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	1.38	1.38	---	---	---	---	---	---	---	---	---	---	---	---

Outdoor Air

OA1	03/05/15	<3.4	<0.17	<3.1	0.46	<2.3	<0.12	<1.3	<0.066	<2.4	<0.12	1.6	<0.12	<2.0	<0.099	<2.0	<0.099
OA1	03/02/16	<0.68	NA	0.57	NA	<0.47	NA	<0.27	NA	<0.25	NA	0.99	NA	<0.40	NA	<0.40	NA
OA1	08/04/16							No Analyses - Summa canister stolen during sampling									
AA	03/15/17	<0.68	NA	0.45	NA	<0.47	NA	<0.27	NA	<0.25	NA	<0.21	NA	<0.40	NA	<0.40	NA

Notes:

- TPHg = Total petroleum hydrocarbons as gasoline.
- MTBE = Methyl tertiary butyl ether.
- TBA = Tertiary butyl alcohol.
- Add'l VOCs = Additional volatile organic compounds.
- SCAQMD = South Coast Air Quality Management District.
- ASTM = American Society of Testing and Materials.
- EPA = Environmental Protection Agency.
- % V = Percent by volume.
- in Hg = Inches of mercury.
- µg/m³ = Micrograms per meter cubed.
- ND = Not detected.
- < = Less than the stated laboratory reporting limit.
- = Not applicable/Not specified.
- a = Value for total xylenes.

TABLE 1C
INDOOR AIR ANALYTICAL RESULTS - ATMOSPHERIC GASES AND HYDROCARBONS

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 5 of 8)

Sample ID	Date	Methane	Carbon Dioxide	Oxygen + Argon	TPHg	MTBE		Benzene		Toluene		Ethylbenzene		o-Xylenes		pm-Xylenes		TBA	Naphthalene		Ethanol
		(%V)	(%V)	(%V)	($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)		($\mu\text{g}/\text{m}^3$)	($\mu\text{g}/\text{m}^3$)		($\mu\text{g}/\text{m}^3$)										
		SCAQMD 25.1M	SCAQMD 25.1M	SCAQMD 25.1M	GC/MS C6-C12 as Gasoline	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15	EPA TO-15 SIM	EPA TO-15										
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																					
Commercial/Industrial		---	---	---	2,500	47	47	0.42	0.42	1,300	1,300	4.9	4.9	440	440a	440	440a	---	0.36	0.36	---
Background Outdoor Air																					
Livermore (BAAQMD)																					
Minimum		---	---	---	---	---	---	0.11	0.11	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	0.71	0.71	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	2.63	2.63	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																					
Minimum		---	---	---	---	---	---	0	0	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	0.95	0.95	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	4.03	4.03	---	---	---	---	---	---	---	---	---	---	---	---

Dry Clean 580 Unit

IA1	03/05/15	0.00019	0.043	22	9,100	<7.2	0.26	1.8	1.3	5.1	3.6	<2.2	0.38	<2.2	0.50	<8.7	1.3	<6.1	<26	0.30	220
IA1 Dup	03/05/15	0.00018	0.043	22	12,000	<7.2	<0.090	<1.6	1.2	3.8	2.9	<2.2	0.32	<2.2	0.35	<8.7	0.92	<6.1	<26	0.25	240
IA1	03/02/16	NA	<0.2	21	640	<1.5	NA	0.38	NA	2.1	NA	<0.88	NA	<0.88	NA	<0.88	NA	<3.1	NA	NA	NA
IA1	08/04/16	NA	<0.20	19	420	<0.73	NA	0.39	NA	1.3	NA	<0.44	NA	<0.44	NA	0.84	NA	<1.5	NA	NA	NA
IA1	03/15/17	NA	<0.20	21	260	<0.73	NA	0.65	NA	13	NA	0.44	NA	0.57	NA	1.6	NA	<1.5	NA	NA	NA
IA2	03/05/15	0.00018	0.041	22	2,100	<7.2	<0.090	<1.6	1.1	3.3	2.7	<2.2	0.31	<2.2	0.36	<8.7	0.90	<6.1	<26	0.22	230
IA2	03/02/16	NA	<0.2	21	560	<1.5	NA	0.41	NA	2.6	NA	<0.88	NA	<0.88	NA	1.1	NA	<3.1	NA	NA	NA
IA2	08/04/16	NA	<0.20	21	980	<0.73	NA	0.36	NA	1.3	NA	<0.44	NA	<0.44	NA	0.84	NA	<1.5	NA	NA	NA
IA2	03/15/17	NA	<0.20	21	320	<0.73	NA	0.61	NA	9.4	NA	0.48	NA	0.75	NA	1.8	NA	<1.5	NA	NA	NA

Verizon

3935 East Castro Valley Boulevard

IAV1	03/05/15	0.00019	0.049	22	<470	<7.2	<0.090	<1.6	1.5	5.0	4.3	<2.2	0.34	<2.2	0.34	<8.7	0.86	<6.1	<26	0.12	1,100
IAV1	03/02/16	NA	<0.2	21	210	<0.73	NA	0.37	NA	2.5	NA	<0.44	NA	0.44	NA	1.1	NA	<1.5	NA	NA	NA
IAV2	03/05/15	0.00019	0.050	22	610	<7.2	<0.090	2.0	1.8	3.7	3.2	2.2	0.30	<2.2	0.35	<8.7	0.82	<6.1	<26	0.12	1,500
IAV2	03/02/16	NA	<0.2	21	<200	<1.5	NA	0.45	NA	2.3	NA	<0.88	NA	<0.88	NA	1.3	NA	<3.1	NA	NA	NA

AT&T

3949 East Castro Valley Boulevard

IAA1	03/05/15	0.00019	0.070	22	680	<7.2	<0.090	2.0	1.9	5.2	4.3	<2.2	0.71	<2.2	0.53	<8.7	1.4	<6.1	<26	0.30	4,600
IAA1	03/02/16	NA	<0.2	21	150	<0.73	NA	0.36	NA	5.4	NA	<0.44	NA	<0.44	NA	1.0	NA	<1.5	NA	NA	NA

**TABLE 1C
INDOOR AIR ANALYTICAL RESULTS - ATMOSPHERIC GASES AND HYDROCARBONS**

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 6 of 8)

Sample ID	Date	Methane	Carbon Dioxide	Oxygen + Argon	TPHg	MTBE		Benzene		Toluene		Ethylbenzene		o-Xylenes		pm-Xylenes		TBA	Naphthalene		Ethanol
		(%V)	(%V)	(%V)	(µg/m ³)	(µg/m ³)		(µg/m ³)	(µg/m ³)		(µg/m ³)										
		SCAQMD 25.1M	SCAQMD 25.1M	SCAQMD 25.1M	GC/MS C6- C12 as Gasoline	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15	EPA TO-15 SIM	EPA TO-15 SIM										
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																					
Commercial/Industrial		---	---	---	2,500	47	47	0.42	0.42	1,300	1,300	4.9	4.9	440	440a	440	440a	---	0.36	0.36	---
Background Outdoor Air																					
Livermore (BAAQMD)																					
Minimum		---	---	---	---	---	---	0.11	0.11	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	0.71	0.71	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	2.63	2.63	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																					
Minimum		---	---	---	---	---	---	0	0	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	0.95	0.95	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	4.03	4.03	---	---	---	---	---	---	---	---	---	---	---	---

Outdoor Air

OA1	03/05/15	0.00018	0.038	22	<470	<7.2	<0.090	1.9	1.7	<1.9	0.86	<2.2	0.16	<2.2	0.22	<8.7	0.56	<6.1	<26	0.10	19
OA1	03/02/16	NA	<0.2	21	<100	<0.73	NA	0.25	NA	0.80	NA	<0.44	NA	<0.44	NA	<0.44	NA	<1.5	NA	NA	NA
OA1	08/04/16									No Analyses - Summa canister stolen during sampling											
AA	03/15/17	NA	<0.20	21	<100	<0.73	NA	0.42	NA	1.2	NA	<0.44	NA	0.53	NA	1.5	NA	<1.5	NA	NA	NA

Notes:

- TPHg = Total petroleum hydrocarbons as gasoline.
- MTBE = Methyl tertiary butyl ether.
- TBA = Tertiary butyl alcohol.
- Add'l VOCs = Additional volatile organic compounds.
- SCAQMD = South Coast Air Quality Management District.
- ASTM = American Society of Testing and Materials.
- EPA = Environmental Protection Agency.
- % V = Percent by volume.
- in Hg = Inches of mercury.
- µg/m³ = Micrograms per meter cubed.
- ND = Not detected.
- < = Less than the stated laboratory reporting limit.
- = Not applicable/Not specified.
- a = Value for total xylenes.

TABLE 1D
INDOOR AIR ANALYTICAL RESULTS - VOCs

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 7 of 8)

Sample ID	Date	Acetone		Bromomethane		2-Butanone (MEK)		4-Ethyltoluene		1,3,5-Trimethylbenzene		1,2,4-Trimethylbenzene		Styrene		Additional VOCs
		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)
		EPA TO-15	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM						
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																
Commercial/Industrial		140,000	22	22	22,000	22,000	---	---	---	---	---	---	---	3,900	3,900	---
Background Outdoor Air																
Livermore (BAAQMD)																
Minimum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																
Minimum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dry Clean 580 Unit

IA1	03/05/15	25	<1.9	<0.097	<4.4	<1.5	<2.5	<0.25	<2.5	0.12	<7.4	0.55	<6.4	0.16	ND
IA1 Dup	03/05/15	25	<1.9	<0.097	<4.4	<1.5	<2.5	<0.25	<2.5	<0.12	<7.4	0.46	<6.4	0.16	ND
IA1	03/02/16	12	<0.79	NA	1.5	NA	<1.0	NA	<1.0	NA	<1.0	NA	<0.86	NA	ND
IA1	08/04/16	NA	<0.39	NA	<0.60	NA	<0.50	NA	<0.50	NA	0.6	NA	<0.43	NA	ND
IA1	03/15/17	NA	<0.39	NA	1.4	NA	<0.50	NA	<0.50	NA	<0.5	NA	<0.43	NA	ND
IA2	03/05/15	25	<1.9	<0.097	<4.4	<1.5	<2.5	<0.25	<2.5	<0.12	<7.4	0.42	<6.4	0.15	ND
IA2	03/02/16	12	<0.79	NA	<1.2	NA	<1.0	NA	<1.0	NA	<1.0	NA	<0.86	NA	ND
IA2	08/04/16	NA	<0.39	NA	1.5	NA	<0.50	NA	<0.50	NA	<0.5	NA	<0.43	NA	ND
IA2	03/15/17	NA	<0.39	NA	0.84	NA	<0.50	NA	<0.50	NA	<0.5	NA	<0.43	NA	ND

Verizon

3935 East Castro Valley Boulevard

IAV1	03/05/15	29	<1.9	<0.097	<4.4	<1.5	<2.5	<0.25	<2.5	<0.12	<7.4	0.39	<6.4	0.59	ND
IAV1	03/02/16	15	<0.39	NA	1.5	NA	<0.50	NA	<0.50	NA	0.63	NA	2.2	NA	ND
IAV2	03/05/15	29	<1.9	<0.097	<4.4	<1.5	<2.5	<0.25	<2.5	<0.12	<7.4	0.43	<6.4	0.49	ND
IAV2	03/02/16	17	<0.79	NA	1.8	NA	<1.0	NA	<1.0	NA	<1.0	NA	1.3	NA	ND

AT&T

3949 East Castro Valley Boulevard

IAA1	03/05/15	43	<1.9	<0.097	<4.4	1.7	<2.5	<0.25	<2.5	0.12	<7.4	0.54	<6.4	0.67	ND
IAA1	03/02/16	16	<0.39	NA	1.6	NA	<0.50	NA	<0.50	NA	<0.50	NA	0.43	NA	ND

**TABLE 1D
INDOOR AIR ANALYTICAL RESULTS - VOCs**

Dry Clean 580
3735 East Castro Valley Boulevard
Castro Valley, California
(Page 8 of 8)

Sample ID	Date	Acetone			Bromomethane			2-Butanone (MEK)		4-Ethyltoluene		1,3,5-Trimethylbenzene		1,2,4-Trimethylbenzene		Styrene		Additional VOCs
		(µg/m ³)			(µg/m ³)			(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)		(µg/m ³)
		EPA TO-15	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM	EPA TO-15	EPA TO-15 SIM
Environmental Screening Levels, Subslab / Soil Gas, Table SG-1 and Indoor Air, Table IA-1 (February 2016)																		
Commercial/Industrial		140,000	22	22	22,000	22,000	---	---	---	---	---	---	---	3,900	3,900	---	---	---
Background Outdoor Air																		
Livermore (BAAQMD)																		
Minimum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
East Oakland (BAAQMD)																		
Minimum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Average		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Maximum		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Outdoor Air

OA1	03/05/15	14	<1.9	8.0	<4.4	<1.5	<2.5	<0.25	<2.5	<0.12	<7.4	0.32	<6.4	<0.11	ND
OA1	03/02/16	4.4	<0.39	NA	0.79	NA	<0.50	NA	<0.50	NA	<0.50	NA	<0.43	NA	ND
IA2	03/15/17	NA	<0.39	NA	0.90	NA	<0.50	NA	<0.50	NA	<0.5	NA	<0.43	NA	ND

Notes:

MTBE	=	Methyl tertiary butyl ether.
TBA	=	Tertiary butyl alcohol.
Add'l VOCs	=	Additional volatile organic compounds.
SCAQMD	=	South Coast Air Quality Management District.
ASTM	=	American Society of Testing and Materials.
EPA	=	Environmental Protection Agency.
% V	=	Percent by volume.
in Hg	=	Inches of mercury.
µg/m ³	=	Micrograms per meter cubed.
ND	=	Not detected.
<	=	Less than the stated laboratory reporting limit.
---	=	Not applicable/Not specified.
a	=	Value for total xylenes.

APPENDIX A

FIELD DATA SHEETS

Vapor Supplies Check List

Call H&P for support: 800-834-9888

Please return a copy of this sheet with your items to:

H&P Mobile Geochemistry
2470 Impala Drive
Carlsbad, CA 92010
www.handpmg.com

H&P IN HOUSE #: _____

PREPARED FOR
Company: ATC Group Services
Contact: Jim Kundert
Project Name: San Mateo Unocal Station #3294
H&P #: ATC031017-MC
H&P Status #: 170228.00 PM: Kim

PREPARED BY
Name: Tori
Date Prepared: 3/10/17
Est. Delivery Date: 3/13/17
Date Returned: _____

Other _____ UPS TRACK#: _____

RETURNED COMPLETE? Yes No INITIAL _____

Vapor Sampling Instructions: FSG 008 Chain of Custody UPS Return Label

****PLEASE NOTE: ALL SUMMAS AND SAMPLING EQUIPMENT RENTED OUT BY H&P MUST BE RETURNED WITHIN 14 DAYS****

SUMMA CANISTERS			
QTY SENT	ITEM	DESCRIPTION	QTY RET
<u>3</u>	A - Summa Canister	<input type="checkbox"/> 400 mL _____ <input type="checkbox"/> 1 Liter _____ <input checked="" type="checkbox"/> 6 Liter _____	
<u>0</u>	* Back-Up Summa	<input type="checkbox"/> Used <input type="checkbox"/> Unused (<input type="checkbox"/> 400mL <input type="checkbox"/> 1 Liter <input type="checkbox"/> 6 Liter)	
<u>3</u>	TOTAL SUMMAS	<input type="checkbox"/> Batch Certified _____ <input checked="" type="checkbox"/> Individually Certified _____	

* No charge for back-up if returning unused OR if used to replace faulty equipment

VAPOR SAMPLING EQUIPMENT			
QTY SENT	ITEM	DESCRIPTION	QTY RET
	B - Sampling Kit	<input type="checkbox"/> 50 ml/min _____ <input type="checkbox"/> 150 ml/min _____ <input type="checkbox"/> Other _____	
	* Back-Up	<input type="checkbox"/> USED <input type="checkbox"/> UNUSED	
	J - Inline Gauge	Set with male & female luer connections connected with Tygon tubing	
	M - Sampling Adapter	1/8" Male NPT Thread fitting w/ 1/8" Barb	
<u>3</u>	Flow Regulators	<input checked="" type="checkbox"/> 8-HR <input type="checkbox"/> 24-HR <u>1 w/hook 2 w/barb</u>	
	Summa Stands	Individual stands for 1 Liter Summa Canisters	

SAMPLING CONSUMABLES		
QTY SENT	ITEM	DESCRIPTION
	C - M. Luer w/ 3/8" tubing	Male Luer w/ 3/8" Tygon tubing connector attached (1 per sample)
	D - 3-way Valve	(1 per sample)
	E - Consumables	Includes 3-way valves, syringes, zip ties, 1/4" & 1/8" Tygon tubing
	L - 1/8" Nylaflow tubing	Used as connector tubing for subslab probes
	N - Teflon Tape	For subslab probes
	Tedlar Bags	<input type="checkbox"/> 0.5 Liter <input type="checkbox"/> 1 Liter <input type="checkbox"/> w/ kit (syringe, valve, male luer fitting)

SPECIFICATION	VAPOR PROBE(S)
# of Vapor Probes	# _____ @ _____, # _____ @ _____, # _____ @ _____
Filter Type	<input type="checkbox"/> Airstone <input type="checkbox"/> SS Impant <input type="checkbox"/> Other _____
Tubing Type & Size	<input type="checkbox"/> 1/8" Nylaflow <input type="checkbox"/> 1/4" Teflon <input type="checkbox"/> 1/4" Nylaflow <input type="checkbox"/> Other _____
Termination Type	<input type="checkbox"/> 1-way valve <input type="checkbox"/> SS Swagelok

APPENDIX B

LABORATORY ANALYTICAL REPORTS

31 March 2017

Mr. Gabe Stivala
ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

H&P Project: ATC032017-11
Client Project: 580 Marketplace / Weingarden

Dear Mr. Gabe Stivala:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 20-Mar-17 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,



Janis La Roux
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the California ELAP and the National Environmental Laboratory Accreditation Conference (NELAC). H&P is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.



ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
IA1	E703103-01	Vapor	15-Mar-17	20-Mar-17
IA2	E703103-02	Vapor	15-Mar-17	20-Mar-17
AA	E703103-03	Vapor	15-Mar-17	20-Mar-17

ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

DETECTIONS SUMMARY

Sample ID: IA1

Laboratory ID: E703103-01

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Oxygen	21	0.20		%	ASTM D1945	
Dichlorodifluoromethane (F12)	0.0018	0.0010		ug/l	EPA TO-15	
Chloromethane	0.0010	0.00021		ug/l	EPA TO-15	
Trichlorofluoromethane (F11)	0.0013	0.00056		ug/l	EPA TO-15	
Methylene chloride (Dichloromethane)	0.00046	0.00035		ug/l	EPA TO-15	
2-Butanone (MEK)	0.0014	0.00060		ug/l	EPA TO-15	
Benzene	0.00065	0.00016		ug/l	EPA TO-15	
Carbon tetrachloride	0.00045	0.00032		ug/l	EPA TO-15	
Toluene	0.013	0.00076		ug/l	EPA TO-15	
Ethylbenzene	0.00044	0.00044		ug/l	EPA TO-15	
m,p-Xylene	0.0016	0.00044		ug/l	EPA TO-15	
o-Xylene	0.00057	0.00044		ug/l	EPA TO-15	
TPHv (C5 - C12)	0.26	0.10		ug/l	EPA TO-15	

Sample ID: IA2

Laboratory ID: E703103-02

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Oxygen	21	0.20		%	ASTM D1945	
Dichlorodifluoromethane (F12)	0.0019	0.0010		ug/l	EPA TO-15	
Chloromethane	0.0011	0.00021		ug/l	EPA TO-15	
Trichlorofluoromethane (F11)	0.0014	0.00056		ug/l	EPA TO-15	
Methylene chloride (Dichloromethane)	0.00042	0.00035		ug/l	EPA TO-15	
2-Butanone (MEK)	0.00084	0.00060		ug/l	EPA TO-15	
Benzene	0.00061	0.00016		ug/l	EPA TO-15	
Carbon tetrachloride	0.00051	0.00032		ug/l	EPA TO-15	
Toluene	0.0094	0.00076		ug/l	EPA TO-15	
Ethylbenzene	0.00048	0.00044		ug/l	EPA TO-15	
m,p-Xylene	0.0018	0.00044		ug/l	EPA TO-15	
o-Xylene	0.00075	0.00044		ug/l	EPA TO-15	
1,2,4-Trimethylbenzene	0.00055	0.00050		ug/l	EPA TO-15	
TPHv (C5 - C12)	0.32	0.10		ug/l	EPA TO-15	

Sample ID: AA

Laboratory ID: E703103-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Oxygen	21	0.20		%	ASTM D1945	
Dichlorodifluoromethane (F12)	0.0018	0.0010		ug/l	EPA TO-15	

ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
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Project: ATC032017-11
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Reported:
31-Mar-17 11:33

Sample ID: AA

Laboratory ID: E703103-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Chloromethane	0.0010	0.00021		ug/l	EPA TO-15	
Trichlorofluoromethane (F11)	0.0012	0.00056		ug/l	EPA TO-15	
Methylene chloride (Dichloromethane)	0.00046	0.00035		ug/l	EPA TO-15	
2-Butanone (MEK)	0.00090	0.00060		ug/l	EPA TO-15	
Benzene	0.00042	0.00016		ug/l	EPA TO-15	
Carbon tetrachloride	0.00045	0.00032		ug/l	EPA TO-15	
Toluene	0.012	0.00076		ug/l	EPA TO-15	
m,p-Xylene	0.0015	0.00044		ug/l	EPA TO-15	
o-Xylene	0.00053	0.00044		ug/l	EPA TO-15	

ATC Group Services - Roseville
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Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Soil Gas and Vapor Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA1 (E703103-01) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Carbon dioxide	ND	0.20	%	1	EC72211	22-Mar-17	22-Mar-17	ASTM D1945	
Oxygen	21	0.20	"	"	"	"	"	"	
IA2 (E703103-02) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Carbon dioxide	ND	0.20	%	1	EC72211	22-Mar-17	22-Mar-17	ASTM D1945	
Oxygen	21	0.20	"	"	"	"	"	"	
AA (E703103-03) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Carbon dioxide	ND	0.20	%	1	EC72211	22-Mar-17	22-Mar-17	ASTM D1945	
Oxygen	21	0.20	"	"	"	"	"	"	

ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA1 (E703103-01) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Dichlorodifluoromethane (F12)	0.0018	0.0010	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Chloromethane	0.0010	0.00021	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.00071	"	"	"	"	"	"	
Vinyl chloride	ND	0.00013	"	"	"	"	"	"	
Bromomethane	ND	0.00039	"	"	"	"	"	"	
Chloroethane	ND	0.00027	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	0.0013	0.00056	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Tertiary-butyl alcohol (TBA)	ND	0.0015	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.00077	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	0.00046	0.00035	"	"	"	"	"	"	
Carbon disulfide	ND	0.00032	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.00073	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00041	"	"	"	"	"	"	
2-Butanone (MEK)	0.0014	0.00060	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Diisopropyl ether (DIPE)	ND	0.00085	"	"	"	"	"	"	
Chloroform	ND	0.00025	"	"	"	"	"	"	
Ethyl tert-butyl ether (ETBE)	ND	0.00085	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.00041	"	"	"	"	"	"	
Benzene	0.00065	0.00016	"	"	"	"	"	"	
Carbon tetrachloride	0.00045	0.00032	"	"	"	"	"	"	
Tertiary-amyl methyl ether (TAME)	ND	0.00085	"	"	"	"	"	"	
Trichloroethene	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.00047	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00068	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.00083	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
Toluene	0.013	0.00076	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.00083	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00086	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00069	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00078	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	

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Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA1 (E703103-01) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Chlorobenzene	ND	0.00047	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Ethylbenzene	0.00044	0.00044	"	"	"	"	"	"	
m,p-Xylene	0.0016	0.00044	"	"	"	"	"	"	
Styrene	ND	0.00043	"	"	"	"	"	"	
o-Xylene	0.00057	0.00044	"	"	"	"	"	"	
Bromoform	ND	0.0010	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.00050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.00050	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00050	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0019	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0027	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	76-134		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	78-125		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.8 %	77-127		"	"	"	"	
IA2 (E703103-02) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Dichlorodifluoromethane (F12)	0.0019	0.0010	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Chloromethane	0.0011	0.00021	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.00071	"	"	"	"	"	"	
Vinyl chloride	ND	0.00013	"	"	"	"	"	"	
Bromomethane	ND	0.00039	"	"	"	"	"	"	
Chloroethane	ND	0.00027	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	0.0014	0.00056	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Tertiary-butyl alcohol (TBA)	ND	0.0015	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.00077	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	0.00042	0.00035	"	"	"	"	"	"	
Carbon disulfide	ND	0.00032	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.00073	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00041	"	"	"	"	"	"	
2-Butanone (MEK)	0.00084	0.00060	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	

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Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA2 (E703103-02) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Diisopropyl ether (DIPE)	ND	0.00085	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Chloroform	ND	0.00025	"	"	"	"	"	"	
Ethyl tert-butyl ether (ETBE)	ND	0.00085	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.00041	"	"	"	"	"	"	
Benzene	0.00061	0.00016	"	"	"	"	"	"	
Carbon tetrachloride	0.00051	0.00032	"	"	"	"	"	"	
Tertiary-amyl methyl ether (TAME)	ND	0.00085	"	"	"	"	"	"	
Trichloroethene	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.00047	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00068	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.00083	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
Toluene	0.0094	0.00076	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.00083	"	"	"	"	"	"	
Dibromochloromethane	ND	0.00086	"	"	"	"	"	"	
Tetrachloroethene	ND	0.00069	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00078	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	
Chlorobenzene	ND	0.00047	"	"	"	"	"	"	
Ethylbenzene	0.00048	0.00044	"	"	"	"	"	"	
m,p-Xylene	0.0018	0.00044	"	"	"	"	"	"	
Styrene	ND	0.00043	"	"	"	"	"	"	
o-Xylene	0.00075	0.00044	"	"	"	"	"	"	
Bromoform	ND	0.0010	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.00050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.00050	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.00055	0.00050	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0019	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0027	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

103 %

76-134

"

"

"

"

ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA2 (E703103-02) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Surrogate: Toluene-d8		103 %	78-125		EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Surrogate: 4-Bromofluorobenzene		91.9 %	77-127		"	"	"	"	
AA (E703103-03) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Dichlorodifluoromethane (F12)	0.0018	0.0010	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Chloromethane	0.0010	0.00021	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	0.00071	"	"	"	"	"	"	
Vinyl chloride	ND	0.00013	"	"	"	"	"	"	
Bromomethane	ND	0.00039	"	"	"	"	"	"	
Chloroethane	ND	0.00027	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	0.0012	0.00056	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Tertiary-butyl alcohol (TBA)	ND	0.0015	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.00077	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	0.00046	0.00035	"	"	"	"	"	"	
Carbon disulfide	ND	0.00032	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Methyl tertiary-butyl ether (MTBE)	ND	0.00073	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.00041	"	"	"	"	"	"	
2-Butanone (MEK)	0.00090	0.00060	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.00040	"	"	"	"	"	"	
Diisopropyl ether (DIPE)	ND	0.00085	"	"	"	"	"	"	
Chloroform	ND	0.00025	"	"	"	"	"	"	
Ethyl tert-butyl ether (ETBE)	ND	0.00085	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.00041	"	"	"	"	"	"	
Benzene	0.00042	0.00016	"	"	"	"	"	"	
Carbon tetrachloride	0.00045	0.00032	"	"	"	"	"	"	
Tertiary-amyl methyl ether (TAME)	ND	0.00085	"	"	"	"	"	"	
Trichloroethene	ND	0.00055	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.00047	"	"	"	"	"	"	
Bromodichloromethane	ND	0.00068	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	0.00083	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.00046	"	"	"	"	"	"	
Toluene	0.012	0.00076	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.00055	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	0.00083	"	"	"	"	"	"	

ATC Group Services - Roseville
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
AA (E703103-03) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
Dibromochloromethane	ND	0.00086	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
Tetrachloroethene	ND	0.00069	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.00078	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	
Chlorobenzene	ND	0.00047	"	"	"	"	"	"	
Ethylbenzene	ND	0.00044	"	"	"	"	"	"	
m,p-Xylene	0.0015	0.00044	"	"	"	"	"	"	
Styrene	ND	0.00043	"	"	"	"	"	"	
o-Xylene	0.00053	0.00044	"	"	"	"	"	"	
Bromoform	ND	0.0010	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.00070	"	"	"	"	"	"	
4-Ethyltoluene	ND	0.00050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.00050	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.00050	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.00061	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.0019	"	"	"	"	"	"	
Hexachlorobutadiene	ND	0.0027	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.0 %		76-134	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		78-125	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.9 %		77-127	"	"	"	"	

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Reported:
31-Mar-17 11:33

Petroleum Hydrocarbon Analysis

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
IA1 (E703103-01) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
TPHv (C5 - C12)	0.26	0.10	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
IA2 (E703103-02) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
TPHv (C5 - C12)	0.32	0.10	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	
AA (E703103-03) Vapor Sampled: 15-Mar-17 Received: 20-Mar-17									
TPHv (C5 - C12)	ND	0.10	ug/l	1	EC72109	21-Mar-17	22-Mar-17	EPA TO-15	

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Reported:
31-Mar-17 11:33

Soil Gas and Vapor Analysis - Quality Control

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC72211 - GC

Blank (EC72211-BLK1)

Prepared & Analyzed: 22-Mar-17

Carbon dioxide	ND	0.20	%							
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ATC Group Services - Roseville
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Project: ATC032017-11
Project Number: 580 Marketplace / Weingarden
Project Manager: Mr. Gabe Stivala

Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC72109 - TO-15

Blank (EC72109-BLK1)

Prepared & Analyzed: 21-Mar-17

Dichlorodifluoromethane (F12)	ND	0.0010	ug/l							
Chloromethane	ND	0.00021	"							
Dichlorotetrafluoroethane (F114)	ND	0.00071	"							
Vinyl chloride	ND	0.00013	"							
Bromomethane	ND	0.00039	"							
Chloroethane	ND	0.00027	"							
Trichlorofluoromethane (F11)	ND	0.00056	"							
1,1-Dichloroethene	ND	0.00040	"							
Tertiary-butyl alcohol (TBA)	ND	0.0015	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	0.00077	"							
Methylene chloride (Dichloromethane)	ND	0.00035	"							
Carbon disulfide	ND	0.00032	"							
trans-1,2-Dichloroethene	ND	0.00040	"							
Methyl tertiary-butyl ether (MTBE)	ND	0.00073	"							
1,1-Dichloroethane	ND	0.00041	"							
2-Butanone (MEK)	ND	0.00060	"							
cis-1,2-Dichloroethene	ND	0.00040	"							
Diisopropyl ether (DIPE)	ND	0.00085	"							
Chloroform	ND	0.00025	"							
Ethyl tert-butyl ether (ETBE)	ND	0.00085	"							
1,1,1-Trichloroethane	ND	0.00055	"							
1,2-Dichloroethane (EDC)	ND	0.00041	"							
Benzene	ND	0.00016	"							
Carbon tetrachloride	ND	0.00032	"							
Tertiary-amyl methyl ether (TAME)	ND	0.00085	"							
Trichloroethene	ND	0.00055	"							
1,2-Dichloropropane	ND	0.00047	"							
Bromodichloromethane	ND	0.00068	"							
cis-1,3-Dichloropropene	ND	0.00046	"							
4-Methyl-2-pentanone (MIBK)	ND	0.00083	"							
trans-1,3-Dichloropropene	ND	0.00046	"							
Toluene	ND	0.00076	"							
1,1,2-Trichloroethane	ND	0.00055	"							
2-Hexanone (MBK)	ND	0.00083	"							

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31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC72109 - TO-15

Blank (EC72109-BLK1)

Prepared & Analyzed: 21-Mar-17

Dibromochloromethane	ND	0.00086	ug/l							
Tetrachloroethene	ND	0.00069	"							
1,2-Dibromoethane (EDB)	ND	0.00078	"							
1,1,1,2-Tetrachloroethane	ND	0.00070	"							
Chlorobenzene	ND	0.00047	"							
Ethylbenzene	ND	0.00044	"							
m,p-Xylene	ND	0.00044	"							
Styrene	ND	0.00043	"							
o-Xylene	ND	0.00044	"							
Bromoform	ND	0.0010	"							
1,1,1,2,2-Tetrachloroethane	ND	0.00070	"							
4-Ethyltoluene	ND	0.00050	"							
1,3,5-Trimethylbenzene	ND	0.00050	"							
1,2,4-Trimethylbenzene	ND	0.00050	"							
1,3-Dichlorobenzene	ND	0.00061	"							
1,4-Dichlorobenzene	ND	0.00061	"							
1,2-Dichlorobenzene	ND	0.00061	"							
1,2,4-Trichlorobenzene	ND	0.0019	"							
Hexachlorobutadiene	ND	0.0027	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0448		"	0.0429		105	76-134			
<i>Surrogate: Toluene-d8</i>	0.0420		"	0.0414		101	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0604		"	0.0729		82.8	77-127			

LCS (EC72109-BS1)

Prepared & Analyzed: 21-Mar-17

Dichlorodifluoromethane (F12)	0.018	0.0010	ug/l	0.0202		91.6	59-128			
Vinyl chloride	0.0082	0.00013	"	0.0104		79.0	64-127			
Chloroethane	0.0083	0.00027	"	0.0107		77.4	63-127			
Trichlorofluoromethane (F11)	0.020	0.00056	"	0.0226		88.7	62-126			
1,1-Dichloroethene	0.014	0.00040	"	0.0162		86.4	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	0.027	0.00077	"	0.0310		88.2	66-126			
Methylene chloride (Dichloromethane)	0.011	0.00035	"	0.0142		78.4	62-115			
trans-1,2-Dichloroethene	0.012	0.00040	"	0.0162		74.4	67-124			
1,1-Dichloroethane	0.013	0.00041	"	0.0165		80.2	68-126			

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Reported:
31-Mar-17 11:33

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC72109 - TO-15

LCS (EC72109-BS1)

Prepared & Analyzed: 21-Mar-17

cis-1,2-Dichloroethene	0.013	0.00040	ug/l	0.0160		78.7	70-121			
Chloroform	0.017	0.00025	"	0.0198		86.3	68-123			
1,1,1-Trichloroethane	0.020	0.00055	"	0.0222		91.5	68-125			
1,2-Dichloroethane (EDC)	0.014	0.00041	"	0.0165		87.5	65-128			
Benzene	0.011	0.00016	"	0.0130		83.9	69-119			
Carbon tetrachloride	0.026	0.00032	"	0.0256		100	68-132			
Trichloroethene	0.021	0.00055	"	0.0219		95.0	71-123			
Toluene	0.013	0.00076	"	0.0154		86.9	66-119			
1,1,2-Trichloroethane	0.019	0.00055	"	0.0222		87.1	73-119			
Tetrachloroethene	0.026	0.00069	"	0.0276		95.0	66-124			
1,1,1,2-Tetrachloroethane	0.028	0.00070	"	0.0280		99.5	67-129			
Ethylbenzene	0.017	0.00044	"	0.0177		95.0	70-124			
m,p-Xylene	0.017	0.00044	"	0.0177		96.2	61-134			
o-Xylene	0.016	0.00044	"	0.0177		91.5	67-125			
1,1,2,2-Tetrachloroethane	0.021	0.00070	"	0.0280		75.7	65-127			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0436</i>		<i>"</i>	<i>0.0429</i>		<i>102</i>	<i>76-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0413</i>		<i>"</i>	<i>0.0414</i>		<i>99.9</i>	<i>78-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0700</i>		<i>"</i>	<i>0.0729</i>		<i>96.0</i>	<i>77-127</i>			

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Reported:
31-Mar-17 11:33

Petroleum Hydrocarbon Analysis - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EC72109 - TO-15

Blank (EC72109-BLK1)

Prepared & Analyzed: 21-Mar-17

TPHv (C5 - C12)	ND	0.10	ug/l							
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Reported:
31-Mar-17 11:33

Notes and Definitions

LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs, accreditation number 69070 for EPA Method TO-15, H&P Method TO-15, EPA Method 8260B and H&P 8260SV.

H&P is approved by the State of Arizona as an Environmental Testing Laboratory and Mobile Laboratory, certification numbers AZM758 and AZ0779.

H&P is approved by the State of California as an Environmental Laboratory and Mobile Laboratory in conformance with the Environmental Laboratory Accreditation Program (ELAP) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste, certification numbers 2740, 2741, 2743, 2744, 2745, 2754 & 2930.

H&P is approved by the State of Florida Department of Health under the National Environmental Laboratory Accreditation Conference (NELAC) certification number E871100.

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/about/certifications.

Lab Client and Project Information		
Lab Client/Consultant: ATC Group Services LLC	Project Name / #: 580 Marketplace / Weingarden	
Lab Client Project Manager: Gabe Stivala	Project Location: 3735 E. Costa Valley Blvd	
Lab Client Address: 915 Highland Pointe Dr, Suite 250	Report E-Mail(s): gabe.stivala@atcassociates.com jim.kundert@atcassociates.com	
Lab Client City, State, Zip: Roseville, CA 95678	Phone Number: 916-724-5201	
Reporting Requirements	Turnaround Time	Sampler Information
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____	<input checked="" type="checkbox"/> 5-7 day Std <input type="checkbox"/> 24-Hr Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Mobile Lab <input type="checkbox"/> 48-Hr Rush <input type="checkbox"/> Other: _____	Sampler(s): Jim Kundert Signature: <i>[Signature]</i> Date: 3-15-2017
<input checked="" type="checkbox"/> CA Geotracker Global ID: T10000004345		

Sample Receipt (Lab Use Only)	
Date Rec'd: 3/20/17	Control #: 170228.01
H&P Project # ATC032017-11	
Lab Work Order # E703103	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: 70020	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #: 1293TT619051776421	
Lab PM Initials: KIM	

Additional Instructions to Laboratory:

* Preferred VOC units (please choose one):

µg/L µg/m³ ppbv ppmv

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates	Naphthalene	TPHv as Gas	Aromatic/Aliphatic Fractions	Leak Check Compound	Methane by EPA 8015m	Fixed Gases by ASTM D1945
								<input type="checkbox"/> 8260SV	<input checked="" type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15							
IA 1	35	031517	0805	IA	6L	337	-6.63	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
IA 2		031517	0800	IA	↓	563	-4.98	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AA		031517	0820	AA	↓	269	-5.81	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Approved/Relinquished by: <i>[Signature]</i>	Company: ATC	Date: 3-16-17	Time: 1300	Received by: Joni Unsworth	Company: H&P	Date: 3/20/17	Time: 10:05
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back