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November 16, 2010

Mr. Kenneth Thiessen, Project Manager
Oregon Department of Environmental Quality
Northwest Region Office
2020 SW Fourth Avenue, Suite 400
Portland, Oregon 97201-4987

Subject: Soil Gas Investigation Results
Macadam Floor Design Property
6140 SW Macadam Boulevard
DEQ ECSI #4723

Feige & Associates, Inc. (FAI) is submitting this Soil Gas Investigation Report in regards to on-going work activities which were conducted at the Macadam Floor Design, Pacific Pride Fueling Station site located at 6140 (ECSI #4723) and 6230 (ECSI #4772) SW Macadam Avenue, respectively, in Portland, Oregon (Figure 1).

Purpose

The purpose of this letter report is to document activities associated with the installation and sampling of soil gas monitoring points at the site. The soil gas samples were collected to address Oregon Department of Environmental Quality (DEQ) identified data gaps in regards to the petroleum hydrocarbon contaminant plumes at the site. The purpose of the soil gas investigation is to evaluate vapor intrusion risk to the Macadam Floor Design building, which is located on the north portion of the property and constructed over part of the former Sunset Fuel facility (Figure 1), and to complete revisions to the site Conceptual Site Model (CSM).

The *Preliminary Conceptual Site Models for Risk Assessment Screening* letter prepared by Kennedy/Jenks Consultants (K/J) and dated August 21, 2009, compared groundwater concentrations analyzed in monitoring wells at the site to the DEQ (2009) Risk Based Concentrations (RBCs) for vapor intrusion into buildings (RBCwi) for both residential and commercial exposure scenarios in order to evaluate the vapor intrusion pathway. The only constituents for which the maximum detected concentration exceeded the respective residential and occupational RBCwi were benzene, trichloroethene (TCE), and tetrachloroethene (PCE). As has been discussed, PCE and TCE have only been detected in monitoring wells MW-4 and MW-5 which are located hydraulically cross-gradient and across the site from the Macadam Floor Design Building. The source of PCE and TCE in these wells is unknown as chlorinated solvents were not known to have been used as a part of current or past operations at the site.

This letter report follows the *Soil Gas and MW-7 Source Investigation Workplan* prepared by FAI and dated August 19, 2010. The workplan was approved by Mr. Kenneth Thiessen of the DEQ in an email dated August 27, 2010. It was also agreed in discussions between FAI and DEQ during a July 8, 2010 meeting that evaluation of soil gas along the south perimeter of the Macadam Floor Design building would be sufficient for analyzing vapor intrusion risk inside the building.

The information included in this letter report will also be included in the Remedial Investigation (RI) Report which is expected to be completed in early 2011.

Soil Gas Monitoring Point Installation

On August 30, 2010 FAI installed three permanent soil gas monitoring points (SG-1, SG-2, and SG-3) adjacent to the south side of the Macadam Floor Design building within the asphalt paved

parking area (Figure 1). The monitoring points were installed by Cascade Drilling Inc. (Cascade) of Clackamas, Oregon utilizing a mobile track mounted Geoprobe 7720DT drill rig. Each monitoring point was installed to a total depth of 5 feet below ground surface (bgs). Monitoring point construction consisted of using one-half inch OD, 6-inch long stainless steel screen fitted with impermeable Teflon tubing. A granular sand pack was placed to just above the screen and a seal consisting of bentonite clay was placed into the annular space between the tubing and the outside of the borehole. Each monitoring point was completed with a traffic rated box mounted slightly above the surrounding surface grade to drain surface water away. Following installation each monitoring point was fitted with a ¼ - inch stop-cock valve to prevent ambient air from entering the tubing.

Soil Gas Sampling Procedures

On September 20, 2010 FAI sampled each soil gas monitoring point (SG-1, SG-2, and SG-3). Sampling procedures for each monitoring point included the following:

- Prior to sampling, at least two volumes of air was purged from each monitoring point. The monitoring points were purged by installing an air-tight three-way valve on the end of the tubing and opening the valve. A 60 milliliter (mL) syringe was then connected to the valve and approximately two volumes of air was purged from the monitoring point.
- Samples from each monitoring point were collected with a 1-Liter Summa canister equipped with a 100 mL/minute flow controller. The sample canister was opened and the initial vacuum and time was recorded. Sample collection was stopped when the canister vacuum reached approximately -5 inches of mercury.
- During sampling each monitoring point was tested for leaks by moistening cotton rags with isopropyl alcohol (2-propanol) and placing around the top of the boring and tubing connectors during the duration of the soil gas sample collection. Based on the DEQ guidance document entitled *Guidance for Assessing and Remediating Vapor Intrusion in Buildings*, dated March 25, 2010, a 5% or greater contribution from leakage is considered unacceptable. For 2-propanol a 5% contribution would be detected in the analysis at a concentration of 1,200,000 micrograms per cubic meter ($\mu g/m^3$).
- Following sampling all canisters were shipped under chain-of-custody procedures to Air Toxics Ltd. of Folsom, California (Air Toxics) and analyzed for 20 Volatile Organic Compounds (VOCs) analytes by EPA method TO-15.

The laboratory results from the September 20, 2010 sample event, which are discussed below, detected 2-propanol in sample SG-3 at a concentration which would indicate a greater than 5% contribution of ambient air in the sample. Based on this result, FAI returned to the site on October 13, 2010 to re-sample monitoring point SG-3 and at that time also re-sampled monitoring point SG-1. The procedures for purging and sampling during the October 13, 2010 event were identical to those described for the September 20, 2010 event.

Sample Results

Soil Gas sample results from the September 20, 2010 and October 13, 2010 sampling events are presented on Table 1. The Laboratory Reports and Chain-of–Custody (COC) documentation are presented in Appendix A.

September 20, 2010 Sampling Event

Soil Gas sample SG-1 indicated detectable concentrations above the method reporting limit (MRL) of PCE at 52 $\mu g/m^3$ and the leak detection compound 2-propanol at 15 $\mu g/m^3$. Soil Gas sample SG-2 indicated detectable concentrations above the MRL of m,p-Xylene at 9.1 $\mu g/m^3$ and 2-

propanol at 1,000 µg/m^3. Soil Gas sample SG-3 indicated detectable concentrations above the MRL of 2-propanol at 12,000,000 µg/m^3. No other VOC constituent was detected at or above the MRL in any of the samples.

According to the Air Toxics laboratory narrative there were no receiving or analytical discrepancies and surrogate recoveries were within limits for all samples. The detected concentration of 2-propanol in sample SG-3 exceeded the instrument calibration range and exceeded the 5% contribution from leakage (1,200,000 µg/m^3) as outlined in DEQ guidance (2010).

October 13, 2010 Sampling Event

Soil Gas sample SG-1 indicated detectable concentrations above the MRL of PCE at 76 µg/m^3 and 2-propanol at 64 µg/m^3. Soil Gas sample SG-3 indicated a detectable concentration above the MRL of 2-propanol at 18,000 µg/m^3. No other VOC constituent was detected at or above the MRL in any of the samples.

According to the Air Toxics laboratory narrative there were no analytical discrepancies, surrogate recoveries were within limits for all samples, and the detected concentration of 2-propanol in sample SG-3 exceeded the instrument calibration range. It was also discussed within the laboratory narrative that sample SG-3 was received by the lab with significant vacuum remaining in the canister. Although sample dilutions were required and MRLs of select compounds were subsequently elevated in sample SG-3, the contribution from leakage of 2-propanol (<5%) was acceptable based on DEQ guidance (2010).

Analysis and Discussion

The detected contaminant concentrations from SG-1 through SG-3 were compared to DEQ Soil Gas Vapor Intrusion into Buildings RBCs (RBCsv) based on an occupational exposure scenario (Table 1). The exposure screening is based on the current zoning (General Commercial) and use of the Macadam Floor Design Building and property. The following analysis and discussion is presented for the soil gas investigation.

- Low levels of m,p-Xylene were detected in monitoring point SG-2 during the September 20, 2010 sampling event. The detections of m,p-Xylene in SG-2 were below RBCsv based on an occupational scenario.
- During the September 20, 2010 sampling event, the detected concentration of leak detection compound 2-propanol in sample SG-3 exceeded the instrument calibration range and exceeded the 5% contribution from leakage as outlined in DEQ guidance (2010). During the October 13, 2010 sampling event, contribution from leakage of 2-propanol in SG-3 was less than 5%, though was still considerably higher than observed in SG-1 and SG-2. Laboratory results indicated that significant vacuum remained in the canister sample for SG-3 for the October 13, 2010 event. Discussions with the lab indicated that the vacuum remaining in the canister was likely due to tight soils within the boring which would cause a lack of available air in the subsurface. Although sample dilutions were required and MRLs of select compounds were subsequently elevated in sample SG-3 during the October 13, 2010 event, the MRLs of contaminants of interest (COIs) benzene, PCE, and TCE were below RBCsv based on an occupational scenario. FAI believes that the tight soils which inhibit the flow of subsurface air observed in SG-3 are due to fill material which was likely placed in the area during the construction of the Macadam Floor Design Building and parking area.
- Low levels of PCE were detected during both sample events in monitoring point SG-1. The detections of PCE in SG-1 were below RBCsv based on an occupational scenario.

PCE breakdown products (TCE, cis-1,2-Dichloroethene (DCE), and Vinyl Chloride (VC)) were not detected at or above the MRL in samples collected from either event in SG-1. As previously discussed, PCE has only been detected in groundwater from monitoring wells MW-4 and MW-5 which are located hydraulically cross-gradient and across the site from the Macadam Floor Design Building (Figure 1). The source of the low levels of PCE detected in this sample are unknown, however FAI has observed recent renovations at the Macadam Floor Design building which included demolition within the building accompanied by disposal of materials into roll-off bins which were located in the asphalt parking area in the vicinity of SG-1. It should also be noted that neither PCE nor any of its breakdown products (TCE, DCE, VC) were detected at or above the MRL in samples collected from monitoring points SG-2 or SG-3. Based on these multiple lines of evidence, the low levels of PCE detected in monitoring point SG-1 do not support the need for additional investigation of vapor intrusion risk to the Macadam Floor Design Building.

- No other VOC constituent was detected at or above the respective MRL in any of the samples during either sample event.

Conclusion

Based on these results and as outlined in the DEQ Guidance (2010), FAI believes that the vapor intrusion risk to the Macadam Floor Design building may be ruled out and does not require further evaluation based on current and future uses of the property.

Following DEQs acceptance, the results of this soil gas investigation will be utilized to complete revisions to the site CSM and be incorporated into the RI Report which is expected to be completed in early 2011. It is requested, following acceptance of this report, that the soil gas monitoring points be decommissioned with DEQs approval.

If you have any questions relating to this report, please call (503) 543-9700.

Sincerely,

John A. Wyatt, RG
Associate

Enclosures:

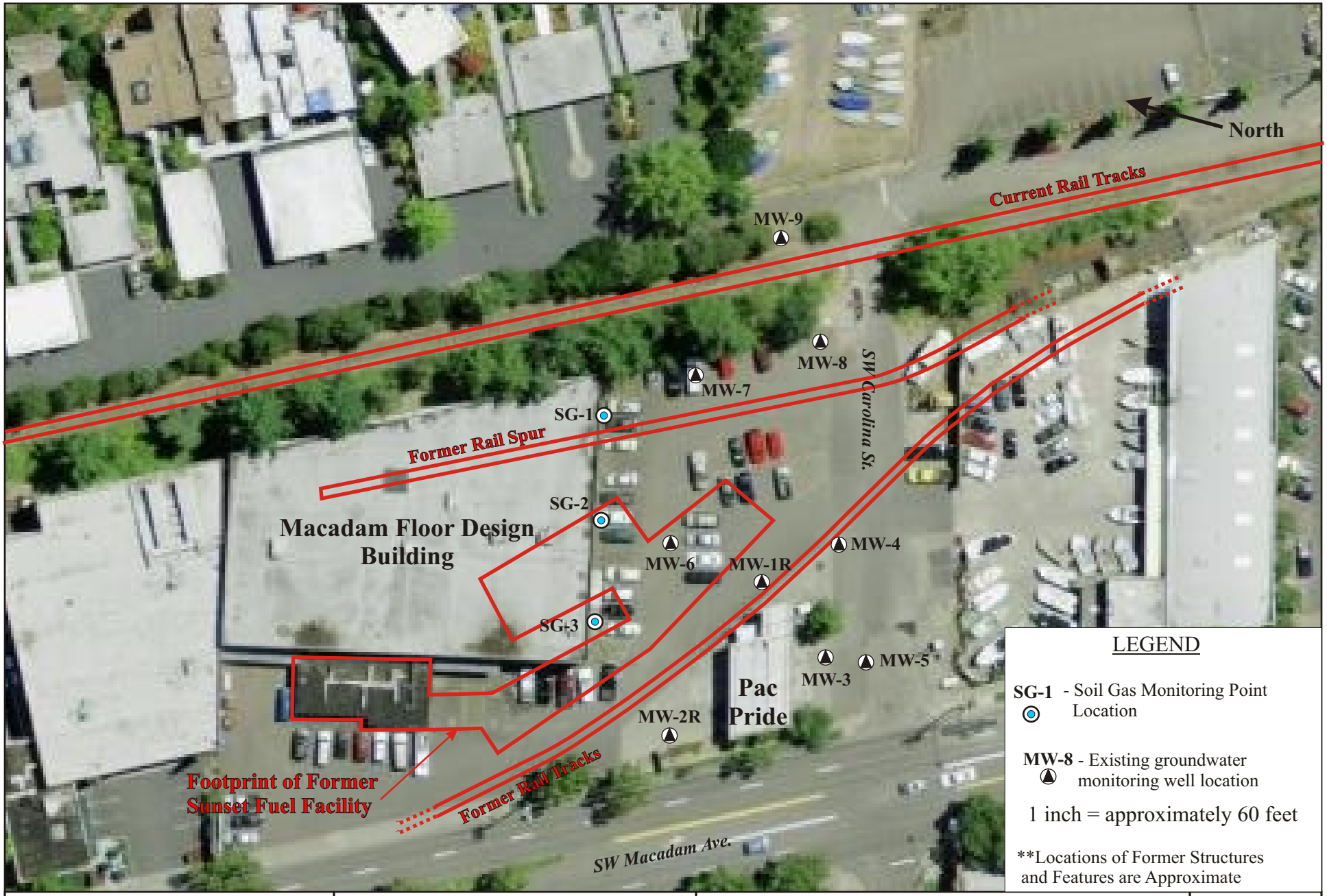
Figure 1 – Soil Gas Investigation Monitoring Point Locations - Current Site Map with Overlay of 1964 Features

Table 1 – Soil Gas Sampling Results

Appendix A – Chain of Custody and Analytical Reports (#1009476 and #1010319)

cc: Ms. Ginny Kretzer - Sunset Fuel Company
Mr. Jerry Miesen

FIGURES



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Macadam Floor Design/Pacific Pride
6140 and 6230 SW Macadam Ave.
Portland, Oregon

Soil Gas Investigation
Monitoring Point Locations -
Current Site Map with Overlay
of 1964 Site Features

Figure 1

TABLES

Macadam Floor Design, Pacific Pride
6140, 6230 SW Macadam Ave.
Portland, OR
DEQ ECSI 4723, 4772

Table 1
Soil Gas Sampling Results
(EPA Method TO-15 Analysis)

Sample Location	SG-1 ($\mu g/m^3$)		SG-2 ($\mu g/m^3$)	SG-3 ($\mu g/m^3$)		RBCs - Soil Gas Vapor Intrusion into Buildings - Occupational ($\mu g/m^3$)
Sample Date	9/20/2010	10/13/2010	9/20/2010	9/20/2010**	10/13/2010	
Vinyl Chloride	<3.4	<3.2	<3.5	<6900	<35	2,800
2-Propanol*	***15***	***64***	***1,000***	***12,000,000E***	***18,000E***	-
Methyl tert-butyl ether	<4.9	<4.5	<5.0	<9,700	<50	47,000
trans-1,2-Dichloroethene	<5.4	<4.9	<5.5	<11,000	<55	260,000
1,1-Dichloroethane	<5.5	<5.0	<5.6	<11,000	<56	7,700
cis-1,2-Dichloroethene	<5.4	<4.9	<5.5	<11,000	<55	-
Benzene	<4.3	<4.0	<4.4	<8,600	<44	1,600
1,2-Dichloroethane (EDC)	<5.5	<5.0	<5.6	<11,000	<56	470
Trichloroethene (TCE)	<7.2	<6.7	<7.4	<14,000	<74	140
Bromodichloromethane	<9.0	<8.3	<9.2	<18,000	<93	330
Toluene	<5.1	<4.7	<5.2	<10,000	<52	22,000,000
1,1,2-Trichloroethane	<7.4	<6.8	<7.5	<15,000	<76	770
Tetrachloroethene (PCE)	***52***	***76***	<9.4	<18,000	<94	2,100
1,2-Dibromoethane (EDB)	<10	<9.5	<11	<21,000	<110	20
Ethyl Benzene	<5.9	<5.4	<6.0	<12,000	<60	4,900
m,p-Xylene	<5.9	<5.4	***9.1***	<12,000	<60	440,000
o-Xylene	<5.9	<5.4	<6.0	<12,000	<60	440,000
Propylbenzene	<6.6	<6.1	<6.8	<13,000	<88	1,800,000
1,3,5-Trimethylbenzene	<6.6	<6.1	<6.8	<13,000	<88	26,000
1,2,4-Trimethylbenzene	<6.6	<6.1	<6.8	<13,000	<88	31,000

Notes:

BOLD indicates that Preliminary CSM (K/J, 2009) identified analyte as a COI for vapor intrusion

BOLD *ITALICS* indicates that analyte was detected above the laboratory method reporting limit (mrl)

RBCs from Risk Based Concentrations for Individual Chemicals (DEQ, September 15, 2009)

- = Risk Based Concentration is not available

* = Each monitoring point was tested for leaks by moistening cotton rags with isopropyl alcohol (2-propanol) and placing around the top of the boring and tubing connectors during the duration of the soil gas sample collection. Based on DEQ guidance a 5% contribution from leakage is considered unacceptable. For 2-propanol a 5% contribution would be detected in the analysis at a concentration of 1,200,000 $\mu g/m^3$

** = The concentration of 2-propanol detected in the sample indicates that a leak was present in the sample train since 5% contribution was exceeded

E=Exceeds instrument calibration range

APPENDIX A

CHAIN OF CUSTODY AND ANALYTICAL REPORTS

SEPTEMBER 20, 2010 - REPORT NUMBER 1009476

OCTOBER 13, 2010 - REPORT NUMBER 1010319

Air Toxics LTD.
Laboratory Services Since 1989

10/6/2010
Mr. John Wyatt
Feige & Associates
27001 Northwest Saint Helens St.

Scapoose OR 97056

Project Name: Sunset Macadam
Project #: 033
Workorder #: 1009476

Dear Mr. John Wyatt

The following report includes the data for the above referenced project for sample(s) received on 9/22/2010 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Karen Lopez at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Karen Lopez

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1009476

Work Order Summary

CLIENT:	Mr. John Wyatt Feige & Associates 27001 Northwest Saint Helens St. Scapoose, OR 97056	**BILL TO:**	Mr. John Wyatt Feige & Associates 27001 Northwest Saint Helens St. Scapoose, OR 97056
PHONE:	503-543-9700	**P.O. #**	033
FAX:		**PROJECT #**	033 Sunset Macadam
DATE RECEIVED:	09/22/2010	**CONTACT:**	Karen Lopez
DATE COMPLETED:	10/06/2010		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-1	Modified TO-15	7.6 "Hg	15 psi
02A	SG-2	Modified TO-15	8.0 "Hg	15 psi
03A	SG-3	Modified TO-15	7.6 "Hg	15 psi
04A	Lab Blank	Modified TO-15	NA	NA
04B	Lab Blank	Modified TO-15	NA	NA
05A	CCV	Modified TO-15	NA	NA
05B	CCV	Modified TO-15	NA	NA
06A	LCS	Modified TO-15	NA	NA
06AA	LCSD	Modified TO-15	NA	NA
06B	LCS	Modified TO-15	NA	NA
06BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 10/06/10

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Air Toxics LTD.
Laboratory Services Since 1989

LABORATORY NARRATIVE
EPA Method TO-15
Feige & Associates
Workorder# 1009476

Three 1 Liter Summa Canister samples were received on September 22, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-1

Lab ID#: 1009476-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.4	6.2	13	15
Tetrachloroethene	1.4	7.7	9.2	52

Client Sample ID: SG-2

Lab ID#: 1009476-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.5	420	14	1000
m,p-Xylene	1.4	2.1	6.0	9.1

Client Sample ID: SG-3

Lab ID#: 1009476-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	11000	4900000 E	26000	12000000 E

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SG-1

Lab ID#: 1009476-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100223**	**Date of Collection: 9/20/10 9:45:00 AM**	
Dil. Factor:	**2.70**	**Date of Analysis: 10/2/10 10:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.4	Not Detected
2-Propanol	5.4	6.2	13	15
Methyl tert-butyl ether	1.4	Not Detected	4.9	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.4	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.5	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.4	Not Detected
Benzene	1.4	Not Detected	4.3	Not Detected
1,2-Dichloroethane	1.4	Not Detected	5.5	Not Detected
Trichloroethene	1.4	Not Detected	7.2	Not Detected
Bromodichloromethane	1.4	Not Detected	9.0	Not Detected
Toluene	1.4	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.4	Not Detected
Tetrachloroethene	1.4	7.7	9.2	52
1,2-Dibromoethane (EDB)	1.4	Not Detected	10	Not Detected
Ethyl Benzene	1.4	Not Detected	5.9	Not Detected
m,p-Xylene	1.4	Not Detected	5.9	Not Detected
o-Xylene	1.4	Not Detected	5.9	Not Detected
Propylbenzene	1.4	Not Detected	6.6	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.6	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.6	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	119	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SG-2

Lab ID#: 1009476-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100222**	**Date of Collection: 9/20/10 10:15:00 AM**	
Dil. Factor:	**2.76**	**Date of Analysis: 10/2/10 10:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.4	Not Detected	3.5	Not Detected
2-Propanol	5.5	420	14	1000
Methyl tert-butyl ether	1.4	Not Detected	5.0	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.6	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Benzene	1.4	Not Detected	4.4	Not Detected
1,2-Dichloroethane	1.4	Not Detected	5.6	Not Detected
Trichloroethene	1.4	Not Detected	7.4	Not Detected
Bromodichloromethane	1.4	Not Detected	9.2	Not Detected
Toluene	1.4	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.5	Not Detected
Tetrachloroethene	1.4	Not Detected	9.4	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
Ethyl Benzene	1.4	Not Detected	6.0	Not Detected
m,p-Xylene	1.4	2.1	6.0	9.1
o-Xylene	1.4	Not Detected	6.0	Not Detected
Propylbenzene	1.4	Not Detected	6.8	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	6.8	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	6.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	118	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SG-3

Lab ID#: 1009476-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092810**	**Date of Collection:**	**9/20/10 11:15:00 AM**
Dil. Factor:	**540**	**Date of Analysis:**	**9/28/10 11:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2700	Not Detected	6900	Not Detected
2-Propanol	11000	4900000 E	26000	12000000 E
Methyl tert-butyl ether	2700	Not Detected	9700	Not Detected
trans-1,2-Dichloroethene	2700	Not Detected	11000	Not Detected
1,1-Dichloroethane	2700	Not Detected	11000	Not Detected
cis-1,2-Dichloroethene	2700	Not Detected	11000	Not Detected
Benzene	2700	Not Detected	8600	Not Detected
1,2-Dichloroethane	2700	Not Detected	11000	Not Detected
Trichloroethene	2700	Not Detected	14000	Not Detected
Bromodichloromethane	2700	Not Detected	18000	Not Detected
Toluene	2700	Not Detected	10000	Not Detected
1,1,2-Trichloroethane	2700	Not Detected	15000	Not Detected
Tetrachloroethene	2700	Not Detected	18000	Not Detected
1,2-Dibromoethane (EDB)	2700	Not Detected	21000	Not Detected
Ethyl Benzene	2700	Not Detected	12000	Not Detected
m,p-Xylene	2700	Not Detected	12000	Not Detected
o-Xylene	2700	Not Detected	12000	Not Detected
Propylbenzene	2700	Not Detected	13000	Not Detected
1,3,5-Trimethylbenzene	2700	Not Detected	13000	Not Detected
1,2,4-Trimethylbenzene	2700	Not Detected	13000	Not Detected

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1009476-04A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092808**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/10 10:06 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	5.0	Not Detected	13	Not Detected
2-Propanol	20	Not Detected	49	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
trans-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
1,1-Dichloroethane	5.0	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	5.0	Not Detected	20	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Trichloroethene	5.0	Not Detected	27	Not Detected
Bromodichloromethane	5.0	Not Detected	34	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
1,1,2-Trichloroethane	5.0	Not Detected	27	Not Detected
Tetrachloroethene	5.0	Not Detected	34	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
Propylbenzene	5.0	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	5.0	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	5.0	Not Detected	24	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1009476-04B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100212**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/10 04:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	117	70-130
4-Bromofluorobenzene	96	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1009476-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/10 07:09 PM**	

Compound	%Recovery
Vinyl Chloride	88
2-Propanol	78
Methyl tert-butyl ether	108
trans-1,2-Dichloroethene	90
1,1-Dichloroethane	93
cis-1,2-Dichloroethene	94
Benzene	80
1,2-Dichloroethane	124
Trichloroethene	90
Bromodichloromethane	111
Toluene	90
1,1,2-Trichloroethane	97
Tetrachloroethene	112
1,2-Dibromoethane (EDB)	101
Ethyl Benzene	95
m,p-Xylene	94
o-Xylene	97
Propylbenzene	96
1,3,5-Trimethylbenzene	111
1,2,4-Trimethylbenzene	112

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1009476-05B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/10 01:21 PM**	

Compound	%Recovery
Vinyl Chloride	113
2-Propanol	108
Methyl tert-butyl ether	110
trans-1,2-Dichloroethene	104
1,1-Dichloroethane	109
cis-1,2-Dichloroethene	100
Benzene	104
1,2-Dichloroethane	124
Trichloroethene	106
Bromodichloromethane	114
Toluene	108
1,1,2-Trichloroethane	104
Tetrachloroethene	101
1,2-Dibromoethane (EDB)	103
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	106
Propylbenzene	114
1,3,5-Trimethylbenzene	112
1,2,4-Trimethylbenzene	112

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	120	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1009476-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/10 07:53 PM**	

Compound	%Recovery
Vinyl Chloride	95
2-Propanol	81
Methyl tert-butyl ether	109
trans-1,2-Dichloroethene	92
1,1-Dichloroethane	87
cis-1,2-Dichloroethene	92
Benzene	83
1,2-Dichloroethane	122
Trichloroethene	92
Bromodichloromethane	111
Toluene	87
1,1,2-Trichloroethane	96
Tetrachloroethene	108
1,2-Dibromoethane (EDB)	106
Ethyl Benzene	95
m,p-Xylene	98
o-Xylene	96
Propylbenzene	95
1,3,5-Trimethylbenzene	112
1,2,4-Trimethylbenzene	114

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1009476-06AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092806**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/10 09:02 PM**	

Compound	%Recovery
Vinyl Chloride	92
2-Propanol	76
Methyl tert-butyl ether	108
trans-1,2-Dichloroethene	88
1,1-Dichloroethane	86
cis-1,2-Dichloroethene	91
Benzene	80
1,2-Dichloroethane	119
Trichloroethene	88
Bromodichloromethane	109
Toluene	87
1,1,2-Trichloroethane	96
Tetrachloroethene	110
1,2-Dibromoethane (EDB)	103
Ethyl Benzene	98
m,p-Xylene	94
o-Xylene	96
Propylbenzene	94
1,3,5-Trimethylbenzene	113
1,2,4-Trimethylbenzene	113

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1009476-06B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/10 01:58 PM**	

Compound	%Recovery
Vinyl Chloride	118
2-Propanol	105
Methyl tert-butyl ether	110
trans-1,2-Dichloroethene	103
1,1-Dichloroethane	103
cis-1,2-Dichloroethene	96
Benzene	108
1,2-Dichloroethane	125
Trichloroethene	108
Bromodichloromethane	116
Toluene	105
1,1,2-Trichloroethane	103
Tetrachloroethene	98
1,2-Dibromoethane (EDB)	106
Ethyl Benzene	106
m,p-Xylene	108
o-Xylene	106
Propylbenzene	113
1,3,5-Trimethylbenzene	114
1,2,4-Trimethylbenzene	115

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	121	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1009476-06BB

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**2100209**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/10 02:24 PM**	

Compound	%Recovery
Vinyl Chloride	110
2-Propanol	105
Methyl tert-butyl ether	109
trans-1,2-Dichloroethene	100
1,1-Dichloroethane	102
cis-1,2-Dichloroethene	94
Benzene	103
1,2-Dichloroethane	120
Trichloroethene	105
Bromodichloromethane	111
Toluene	103
1,1,2-Trichloroethane	108
Tetrachloroethene	103
1,2-Dibromoethane (EDB)	108
Ethyl Benzene	106
m,p-Xylene	108
o-Xylene	107
Propylbenzene	114
1,3,5-Trimethylbenzene	116
1,2,4-Trimethylbenzene	115

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	120	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager John Wyatt
Collected by: (Print and Sign) John Wyatt
Company Feige & Associates, Inc. Email jwyatt@feige.us
Address 27001 NW St. Helens Rd City Scappoose State OR Zip 97056
Phone 504-543-9700 Fax

Project Info:
P.O. # 033
Project # 033
Project Name Sunset Macadam

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-1	35627	9/20/10	945	* TO-15 Short List	-24 in Hg	-10 in Hg		
02A	SG-2	12364	9/20/10	1015	"	-29 in Hg	-10 in Hg		
03A	SG-3	37378	9/20/10	1115	"	-29 in Hg	-10 in Hg		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9/20/10 1200	Monica Gregor ATL	9/20/10 1110
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
* See Karen Lopez for short list of 20 analytes

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fed Ex Gr		NA	Good	Yes No (None)	1009470

Form 1293 rev.11

Air Toxics LTD.
Laboratory Services Since 1989

10/27/2010
Mr. John Wyatt
Feige & Associates
27001 Northwest Saint Helens St.

Scapoose OR 97056

Project Name: Sunset Macadam
Project #: 033
Workorder #: 1010319

Dear Mr. John Wyatt

The following report includes the data for the above referenced project for sample(s) received on 10/15/2010 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Karen Lopez at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Karen Lopez

Project Manager

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 1010319

Work Order Summary

CLIENT:	Mr. John Wyatt Feige & Associates 27001 Northwest Saint Helens St. Scapoose, OR 97056	**BILL TO:**	Mr. John Wyatt Feige & Associates 27001 Northwest Saint Helens St. Scapoose, OR 97056
PHONE:	503-543-9700	**P.O. #**	
FAX:		**PROJECT #**	033 Sunset Macadam
DATE RECEIVED:	10/15/2010	**CONTACT:**	Karen Lopez
DATE COMPLETED:	10/27/2010		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-1	Modified TO-15	5.6 "Hg	15 psi
02A	SG-3	Modified TO-15	21.2 "Hg	15 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 10/27/10

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763,
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/09, Expiration date: 06/30/11
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Feige & Associates
Workorder# 1010319

Two 1 Liter Summa Canister samples were received on October 15, 2010. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

Sample SG-3 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-1

Lab ID#: 1010319-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	5.0	26	12	64
Tetrachloroethene	1.2	11	8.4	76

Client Sample ID: SG-3

Lab ID#: 1010319-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
2-Propanol	55	7600 E	140	18000 E

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SG-1

Lab ID#: 1010319-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102229**	**Date of Collection: 10/13/10 9:27:00 AM**	
Dil. Factor:	**2.48**	**Date of Analysis: 10/22/10 09:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
2-Propanol	5.0	26	12	64
Methyl tert-butyl ether	1.2	Not Detected	4.5	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
1,1-Dichloroethane	1.2	Not Detected	5.0	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Bromodichloromethane	1.2	Not Detected	8.3	Not Detected
Toluene	1.2	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	11	8.4	76
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.5	Not Detected
Ethyl Benzene	1.2	Not Detected	5.4	Not Detected
m,p-Xylene	1.2	Not Detected	5.4	Not Detected
o-Xylene	1.2	Not Detected	5.4	Not Detected
Propylbenzene	1.2	Not Detected	6.1	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	91	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: SG-3

Lab ID#: 1010319-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102230**	**Date of Collection:**	**10/13/10 10:05:00 A**
Dil. Factor:	**27.7**	**Date of Analysis:**	**10/22/10 09:44 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	14	Not Detected	35	Not Detected
2-Propanol	55	7600 E	140	18000 E
Methyl tert-butyl ether	14	Not Detected	50	Not Detected
trans-1,2-Dichloroethene	14	Not Detected	55	Not Detected
1,1-Dichloroethane	14	Not Detected	56	Not Detected
cis-1,2-Dichloroethene	14	Not Detected	55	Not Detected
Benzene	14	Not Detected	44	Not Detected
1,2-Dichloroethane	14	Not Detected	56	Not Detected
Trichloroethene	14	Not Detected	74	Not Detected
Bromodichloromethane	14	Not Detected	93	Not Detected
Toluene	14	Not Detected	52	Not Detected
1,1,2-Trichloroethane	14	Not Detected	76	Not Detected
Tetrachloroethene	14	Not Detected	94	Not Detected
1,2-Dibromoethane (EDB)	14	Not Detected	110	Not Detected
Ethyl Benzene	14	Not Detected	60	Not Detected
m,p-Xylene	14	Not Detected	60	Not Detected
o-Xylene	14	Not Detected	60	Not Detected
Propylbenzene	14	Not Detected	68	Not Detected
1,3,5-Trimethylbenzene	14	Not Detected	68	Not Detected
1,2,4-Trimethylbenzene	14	Not Detected	68	Not Detected

E = Exceeds instrument calibration range.

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	88	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 1010319-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102207**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/22/10 10:53 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	94	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: CCV

Lab ID#: 1010319-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/22/10 09:02 AM**	

Compound	%Recovery
Vinyl Chloride	118
2-Propanol	110
Methyl tert-butyl ether	97
trans-1,2-Dichloroethene	111
1,1-Dichloroethane	106
cis-1,2-Dichloroethene	99
Benzene	116
1,2-Dichloroethane	115
Trichloroethene	108
Bromodichloromethane	116
Toluene	110
1,1,2-Trichloroethane	113
Tetrachloroethene	110
1,2-Dibromoethane (EDB)	112
Ethyl Benzene	115
m,p-Xylene	116
o-Xylene	112
Propylbenzene	116
1,3,5-Trimethylbenzene	121
1,2,4-Trimethylbenzene	120

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 1010319-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/22/10 09:26 AM**	

Compound	%Recovery
Vinyl Chloride	94
2-Propanol	100
Methyl tert-butyl ether	112
trans-1,2-Dichloroethene	110
1,1-Dichloroethane	109
cis-1,2-Dichloroethene	102
Benzene	118
1,2-Dichloroethane	112
Trichloroethene	114
Bromodichloromethane	122
Toluene	114
1,1,2-Trichloroethane	121
Tetrachloroethene	117
1,2-Dibromoethane (EDB)	126
Ethyl Benzene	125
m,p-Xylene	128
o-Xylene	122
Propylbenzene	122
1,3,5-Trimethylbenzene	128
1,2,4-Trimethylbenzene	129

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCSD

Lab ID#: 1010319-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**3102205**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/22/10 09:49 AM**	

Compound	%Recovery
Vinyl Chloride	94
2-Propanol	102
Methyl tert-butyl ether	111
trans-1,2-Dichloroethene	108
1,1-Dichloroethane	108
cis-1,2-Dichloroethene	103
Benzene	116
1,2-Dichloroethane	112
Trichloroethene	112
Bromodichloromethane	118
Toluene	111
1,1,2-Trichloroethane	119
Tetrachloroethene	116
1,2-Dibromoethane (EDB)	125
Ethyl Benzene	124
m,p-Xylene	126
o-Xylene	122
Propylbenzene	121
1,3,5-Trimethylbenzene	129
1,2,4-Trimethylbenzene	128

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	104	70-130

1 L Canister

SORBENT SAMPLE COLLECTION

@Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager John Wyatt

Collected by: (Print and Sign) John Wyatt, ALT

Company Feige & Assoc, Inc Email jwyatt@feige.us

Address 27001 NW St Helens Rd City Scappoose State Or Zip 97056

Phone 503-543-9700 Fax

Project Info:
P.O. #
Project # 033
Project Name Sunset Macadam

Turn Around Time:
☒ Normal
☐ Rush
specify

Circle Reporting Units:
ppbv ppmv
(ug/m3) mg/m3

Lab I.D.	Field Sample I.D. (Location)	Canister Tube# / Cartridge #	Date of Collection	Start Time	End Time	Flow Controller Duration	Final Volume	Analysis Requested
01A	SG-1	35611	10/13/10	0919	0927	00507	-9 in Hg	TO-15 mod Sec K Lopez
02A	SG-3	30832	10/13/10	0952	1005	00375	-13 in Hg	" "
	** SG-3 started @ -27 and after 10 min. stopped @ -13 in Hg and would not budge. Tapped gauge and no change. Spoke w/ K Lopez to alert of situation.							

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
ALT	10/13/10 1100	Brian Whittaker ATL	10/17/10 1200
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Pump Calibration Information
Pre-test Flow Rate:
Post-test Flow Rate:
Average Flow Rate:
Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FEDEX GR.		N/A	GOOD	Yes No (None)	1010319