Carryl MacLeod
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6506
cmacleod@chevron.com

April 14, 2014

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Former Chevron Service Station 209339
5940 College Avenue
Oakland, California
ACEH Case RO0000466

I accept the Data Gap Report.

I agree with the conclusions and recommendations presented in this document. The information included is accurate to the best of my knowledge, and appears to meet local agency and Regional Board guidelines. This Data Gap Report was prepared by Conestoga Rovers & Associates, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

Carryl MacLeod
Project Manager

Attachment: Data Gap Report

CONESTOGA-ROVERS & ASSOCIATES

10969 Trade Center Drive, Suite 107
Rancho Cordova, California 95670
Telephone: (916) 889-8900 Fax: (916) 889-8999
www.CRAworld.com

April 14, 2014 Reference No. 311954

Mr. Mark Detterman
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway
Alameda, California 94502

Re: Data Gap Report
Former Chevron Service Station 209339
5940 College Avenue
Oakland, California
ACEH Case RO0000466

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) is submitting this *Data Gap Report* for the site referenced above (Figure 1) on behalf of Chevron Environmental Management Company (Chevron). This report summarizes the results of soil and vapor sampling associated with two sub-slab vapor probes installed within the site building, one soil boring outside of the site building, and indoor and outdoor ambient air sampling. The purpose of this work was to collect data to address gaps associated with direct contact and outdoor air exposure criteria and vapor intrusion criteria for site closure in accordance with the *Low-Threat Closure Policy.*

Work was performed in accordance with previously submitted *Response to Technical Comments and Work Plan* (Work Plan), dated April 22, 2013, and *Response to Technical Comments and Work Plan Addendum* (Work Plan Addendum), dated July 18, 2013. Alameda County Environmental Health (ACEH) conditionally approved the *Work Plan* in a letter dated June 18, 2013, and fully approved the *Work Plan Addendum* in an email dated August 7, 2013 (Attachment A). A building survey and preferential pathway study were also performed. Presented below are the site description and background, details and results, and conclusions and recommendations.

SITE DESCRIPTION AND BACKGROUND

The site is a former Chevron gasoline service station located on the southeast corner of the intersection of College and Harwood Avenues in Oakland, California (Figure 1). The station occupied the site from 1938 to 1968. Former site facilities consisted of four underground storage tanks (USTs), one dispenser island, and a building (Figure 2). Retail service station operation at the site ceased 45 years ago and the former facilities were presumably removed. Subsequent site use included a parking lot for 11 years before redevelopment of the site as a two-story commercial facility 34 years ago. The current multi-story building was constructed in 1979 and contains multiple businesses (Figure 2). The site was

reportedly excavated to depths of 4 to 6 feet below grade (fbg) when construction of the commercial building was undertaken. Adjacent and south of the site is the former Sheaff's Garage, now Stauder Automotive service facility, with an open ACEH fuel leak case (RO0000377).

Depth to groundwater varies from 6 to 14 fbg and groundwater flow as reported on the adjacent former Sheaff's Garage site is variable, but regionally is reported westerly. A known hydrocarbon release occurred on the adjacent former Sheaff's Garage site and groundwater beneath both sites was historically impacted by this release. Two site wells (MW-1, downgradient offsite, and MW-2, adjacent to the former USTs onsite) have been sampled for 12 years and the most recent fourth quarter 2012 data indicates no hydrocarbons present in either well. With the exception of trace concentrations of toluene, ethylbenzene, and total xylenes, no hydrocarbons were reported in soil samples collected from these well borings.

Request and rationale for site closure has been submitted twice to ACEH in CRA's August 25, 2011 *Case Closure Request* and the December 4, 2012 *Addendum to Case Closure Request*. Correspondence is included as Attachment A.

DATA GAP WORK ACTIVITIES

Soil Boring Advancement and Soil Sampling

Soil boring SB-5 (Figure 2) was advanced on October 30, 2013 using a hand auger to 5 fbg, in accordance with Alameda County Public Works Agency (ACPWA) Water Resources Well Permit number W2013-0722 (Attachment B). Samples were screened in the field using visual observation and a photo-ionization detector (PID). The boring log is included as Attachment C.

A slide hammer was used to collect a relatively undisturbed soil samples in stainless steel sleeves at 2.5 and 5 fbg. The soil samples were capped with Teflon squares and plastic end caps, labeled, and placed on ice.

Soil Laboratory Analysis

The soil samples were shipped under chain of custody (COC) protocol to Eurofins Lancaster Laboratories in Lancaster, Pennsylvania. Laboratory analytical reports for soil sample analyses are included in Attachment D, and analytical results are summarized in Table 1. Soil samples were analyzed for the following:

- Total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015B
- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015B Modified

- Benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) by EPA Method 8260B
- Naphthalene by EPA Method 8270C

Soil Analytical Results

None of the analytes (TPHd, TPHg, BTEX, MTBE, or naphthalene) were detected in either soil sample. Site soil data was compared to the Low-Threat Criteria for Direct Contact and Outdoor Air Exposure in the table below.

	Policy Criteria					*Site Data*	
	Residential		*Commercial/Industrial*		*Utility Worker*	*Maximum Site Concentration*	
Constituent	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air 5–10 fbg (mg/kg)*	*0–5 fbg (mg/kg)*	*Volatilization to outdoor air 5–10 fbg (mg/kg)*	*0–10 fbg (mg/kg)*	*0–5 fbg (mg/kg)*	*5–10 fbg (mg/kg)*
Benzene	1.9	2.8	8.2	12	14	<0.005	<0.005
Ethylbenzene	21	32	89	134	314	0.0054	<0.001
Naphthalene	9.7	9.7	45	45	219	<0.003	<0.003
PAH*	0.063	NA	0.68	NA	4.5	NA	NA

* Based on the seven carcinogenic polycyclic aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent [BaPe]. The PAH screening level is only applicable where soil is affected by either waste oil and/or Bunker C fuel.
NA = not analyzed

The soil analytical data satisfies the Low-Threat Criteria for direct contact and outdoor air exposure closing the previous data gap.

Sub-Slab Vapor Point Installation

Sub-slab vapor points SSVP-1 and SSVP-2 (Figure 2) were installed on October 30, 2013, in accordance with ACPWA Water Resources Well Permit number W2013-0721 (Attachment B), using a rotary hammer drill to create a 1-inch deep "outer" hole that partially penetrates the concrete slab. A small portable vacuum cleaner was used to remove cuttings from the hole. A smaller 5/16-inch diameter "inner" hole was then advanced through the remainder of the concrete slab and into the substrate. The sub-slab vapor probes were constructed using stainless steel tubing and compression fittings to ensure that construction materials are not a potential source of volatile organic compounds (VOCs). The probes were set in the holes and completed flush with the slab. Cement grout was placed into the annular space between the probe and the edge of the "outer" hole and allowed to cure for one week before sampling.

Building Survey

Given the multitude of potential sources of analytes in indoor air, including cleaning chemicals, a building survey was performed to document any potential sources of airborne contaminants as well as to determine specific building characteristics (construction details, heating, ventilation, and air conditioning [HVAC] system details, interior layout, etc.).

The survey was performed on November 7, 2013. The building consists of two-floors: the sub-grade floor includes a parking garage, one retail suite and a restaurant; and the upper level floor consists of multiple retail suites. The building is approximately 15,000-square-feet in size, including the subsurface parking garage. The foundation is concrete slab, with laminate flooring on the interior. The building is heated and cooled by a central HVAC system. Cartridge World is a retail facility, thus the exterior doors are opened frequently throughout the day by the public. A copy of the building survey is included as Attachment E.

Small quantities of several household/office products with volatile chemical ingredients were identified in Cartridge World, including cleaning and personal hygiene products, and a large quantity of toner and ink cartridges for copiers and printers. The back room used for ink filling contained numerous open containers of printer refill ink. The lists of identified chemicals/products are also included as Attachment E.

Sub-Slab Vapor Sampling

Sub-slab vapor samples were collected on November 7, 2013 from sub-slab vapor probes SSVP-1 and SSVP-2 using 6-liter SUMMA™ canisters with a manifold and flow controller, set at approximately 100 milliliters per minute (mL/min), connected to the sampling tubing. The initial vacuum pressure in the canisters was approximately 30 inches of mercury and the vacuum of each SUMMA™ canister was used to draw the soil vapor through the flow controller until a negative pressure of approximately 5 inches of mercury was obtained. Initial and residual vacuum pressure was measured and recorded on the COC.

Prior to sampling each vapor point, approximately three probe volumes were purged using a separate 6-liter SUMMA™ canister. One field duplicate was collected for quality control/quality assurance (QA/QC) purposes by using a splitter connected to the soil vapor probe. The duplicate (Dup-1) was collected from SSVP-2 at the same time as the original sample.

Prior to collecting a sample, a closed circuit sampling train was created by attaching the sample SUMMA™ canister in series with the purge SUMMA™ canister via a steam-cleaned, stainless-steel manifold. A “shut-in” test was performed prior to connecting the sampling equipment to the vapor probe tubing. This test was performed by sealing all openings to ambient air, opening the purge SUMMA™ canister to establish a vacuum inside the sampling train and waiting to ensure the vacuum remained stable over time. The shut-in test reduces the potential for ambient air to dilute the soil vapor samples.

A TO-17 sample was additionally collected from SSVP-1 using a laboratory supplied 60 cc syringe to draw a measured volume of air through a sorbent tube. Naphthalene was analyzed from the TO-17 sorbent tube sample.

In accordance with the Department of Toxic Substances Control (DTSC) *Advisory – Active Soil Gas Investigation* guidance document, dated March 2010, leak testing was performed during sampling using laboratory grade helium. The vapor probe vault, probe tubing, and entire sampling train were enclosed in a rigid shroud. The helium concentration inside the shroud was maintained above 10 percent helium and quantified using a helium meter. Soil vapor sampling data sheets with purge volume calculations, pressure tests, starting and ending vacuum pressures, measurement times, and notes are provided as Attachment F.

Indoor/Outdoor Air Sampling

Two indoor air samples, each near one sub-slab vapor point location, and one outdoor ambient air sample were collected on November 7, 2013. All air samples were collected using 100 percent lab-certified 6-liter Summa™ canisters connected to flow controllers set to 11.5 mL/min. While sampling, the vacuum of the Summa™ canister was used to draw air through the flow controller until a negative pressure of approximately 5 inches of mercury was observed on the Summa™ canister vacuum gauge. All air samples were collected in the breathing zone and for a period of 8 hours, to represent the typical work day. Copies of the sampling field data sheets are included in Attachment F. The weather conditions during sampling were approximately 60 degrees Fahrenheit with clear skies and no recent precipitation.

Sub-Slab Vapor and Indoor/Outdoor Air Laboratory Analysis

After sampling, the SUMMA™ canisters were packaged and sent to Eurofins Air Toxics, LTD, a California-certified laboratory in Folsom, California under COC for analysis. Laboratory analytical reports for sub-slab vapor and indoor/outdoor air sample analyses are included in Attachment D and analytical results are summarized in Table 2. Sub-slab vapor and indoor/outdoor air samples were analyzed for the following:

- TPHg, BTEX, MTBE, and naphthalene by United States Environmental Protection Agency (USEPA) Method TO-15 selective-ion monitoring (SIM) gas chromatography/mass spectrometry(GC/MS)
- Naphthalene by USEPA Method TO-17 (SSVP-1 only)
- Air phase hydrocarbon (APH) Fractions (Sp) Aromatics C_8-C_{12} by Modified TO-15 GC/MS Full Scan
- APH Fractions (Sp) Aliphatics C_5-C_{12} by Modified TO-15 GC/MS Full Scan
- Oxygen, carbon dioxide, nitrogen, methane, and helium by American Society for Testing and Materials (ASTM) D-1946

Sub-Slab Vapor Sample Results

Sub-slab vapor results are summarized in Table 2 and indicate the following:

- Benzene, ethylbenzene, total xylenes, and TPHg were only detected in SSVP-1 at concentrations of 0.75 micrograms per cubic meter (µg/m^3), 0.87 µg/m^3, 4.7 µg/m^3, and 340 µg/m^3
- Naphthalene was only detected in SSVP-2 at a concentration of 6.0 µg/m^3
- Toluene was detected in both SSVP-1 and SSVP-2 at concentrations of 21 µg/m^3 and 0.25 µg/m^3, respectively
- No MTBE was detected in either the sub-slab vapor sample
- No helium was detected in the samples and only a small fraction of methane (0.00019 percent) was found in SSVP-1. The detected oxygen, nitrogen, and carbon dioxide concentrations were consistent with subsurface levels. Therefore, the samples appear to be representative of subsurface conditions and no significant leaks appear to have occurred.

As mentioned above, field duplicate sample Dup-1 was collected simultaneously with the original sample from SSVP-2 to further evaluate data quality. Naphthalene was not detected in the duplicate sample; however, the reporting limit (4.5 µg/m^3) is near the detection of SSVP-2 (6.0 µg/m^3). Due to the low concentration detected in the original sample, and the similarity of this concentration to the reporting limit of the duplicate sample, the quality of the data analysis is not a concern. Toluene was detected in the duplicate sample at 0.20 µg/m^3, which is similar to the detection in the original sample (0.25 µg/m^3).

Indoor/Outdoor Air Sample Results

Ambient air results from the backroom and showroom of the building and from outside are shown on Table 2 and indicate the following:

- Benzene was detected in all three ambient air samples (ambient-backroom, ambient-showroom, and ambient-outside) at concentrations of 0.95 µg/m^3, 0.80 µg/m^3, and 0.87 µg/m^3, respectively
- Ethylbenzene was detected in all three samples at concentrations of 0.91 µg/m^3, 0.69 µg/m^3, and 0.56 µg/m^3, respectively
- Toluene was detected in all three samples at concentrations of 3.8 µg/m^3, 3.0 µg/m^3, and 2.7 µg/m^3, respectively
- Total xylenes was detected in all three samples at concentrations of 2.88 µg/m^3, 2.22 µg/m^3, and 2.56 µg/m^3, respectively
- TPHg was detected in all three samples at concentrations of 260 µg/m^3, 190 µg/m^3, and 110 µg/m^3, respectively
- Naphthalene was only detected in the ambient-backroom sample, at a concentration of 8.2 µg/m^3
- No MTBE was detected in any of the indoor/outdoor air samples
- The atmospheric gas results for the indoor and ambient air samples were similar.

Sub-Slab Vapor and Indoor/Outdoor Air Evaluation

Sample SSVP-1 was collected beneath the showroom of Cartridge World and sample SSVP-2 was collected beneath the backroom (ink storage and filling area) of Cartridge World. Indoor air samples, ambient-showroom and ambient-backroom, were collected in the breathing zone above SSVP-1 and SSVP-2, respectively. Outdoor air sample, ambient-outdoor, was collected outside of the entrance to Cartridge World.

As shown in Table 2, the sub-slab (SSVP-1 and SSVP-2) benzene concentrations are less than the indoor air (ambient-showroom and ambient-backroom) and outdoor air (ambient-outside). Additionally, indoor air and outdoor air benzene concentrations are very similar. If vapor intrusion was occurring at the site at least one of the following criteria would need to be met:

- Indoor air benzene concentrations that are significantly higher than outdoor air
- Indoor air benzene concentrations that are significantly higher than the range of normal background concentrations
- Sub-slab benzene concentrations are significantly higher than indoor air (ratio of indoor air/sub-slab >0.1 per EPA Office of Underground Storage Tanks [OUST] screening levels).

As none of the criteria listed above is met based on the data collected during this investigation, it is unlikely vapor intrusion is occurring at the site.

Indoor air samples may measure BTEX and other petroleum hydrocarbon compounds within the concentration ranges commonly seen as background values measured at sites where no subsurface petroleum hydrocarbon contamination is present. There are many sources of background contamination inside buildings. Materials and substances commonly found in commercial and residential settings, such as paints, paint thinners, gasoline-powered machinery, building materials, cleaning products, dry cleaned clothing, and cigarette smoke, contain VOCs that may be detected by indoor air testing. This appears to be the case with this site as the sub-slab benzene concentrations were compared to ambient air concentrations. Benzene was detected in all three indoor/outdoor air samples and only detected in one sub-slab sample (SSVP-1). Outside contributors like VOCs from observed open ink cartridges found in Cartridge World and cigarette smoke from an adjacent restaurant customer may be directly related to the detected concentrations. However, the concentrations detected from the sub-slab vapor and indoor/outdoor air samples were either not detected or detected at low concentrations that should not pose unacceptable human health risks.

Preferential Pathway Study

CRA contacted the City of Oakland Building Services in order to conduct a file review to determine whether the sump located beneath the stairs on the west side of the site is potentially in communication with groundwater. Upon reviewing the plans available for the site, and investigating the sump pump,

CRA has determined that there is not a conduit between the sump and groundwater. The sump appears to be engineered to collect surface runoff water from the below grade stairs and patio area.

CRA also contacted the City of Oakland Fire Department's Hazardous Waste Division to determine if a permit or other documentation of the historical UST and product piping removal activities were available. CRA was informed that no records existed for this location. With these findings the preferential pathway study data gap is complete.

Conclusions and Recommendations

Based on results of soil, soil vapor, and ambient air sampling, direct contact and outdoor air exposure criteria have been met and vapor/air sample data indicates that VI pathway is not likely to be complete. Given that all general and other media-specific criteria have been previously met, we recommend ACEH grant site closure in accordance with the *Low-Threat Closure Policy*.

Please contact Brian Silva at (916) 889-8908 if you have any questions or need any additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brian Silva Greg Barclay, PG 6260

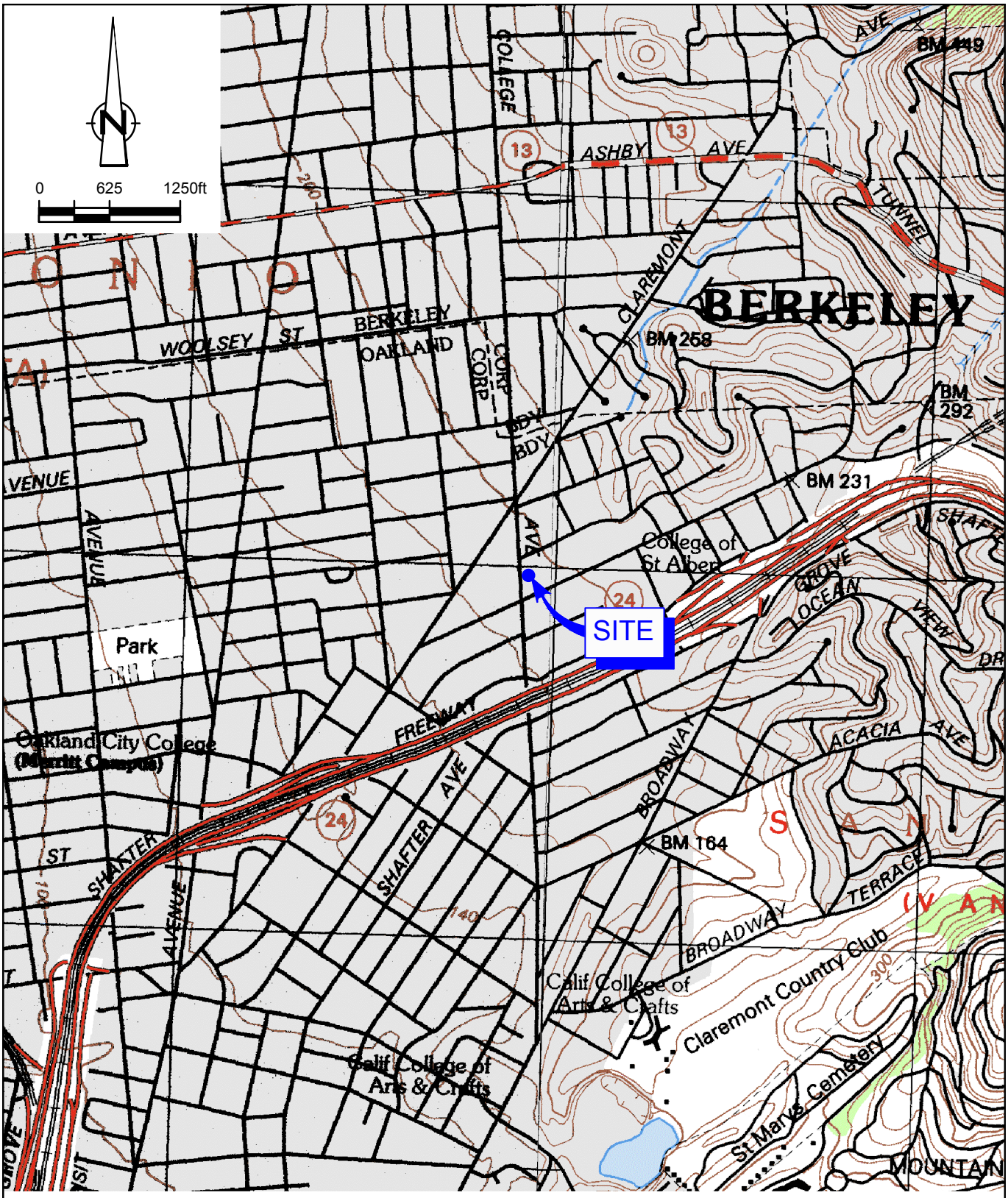
BRS/de/14
Encl.

Figure 1	Vicinity Map
Figure 2	Site Plan
Table 1	Summary of Soil Analytical Results
Table 2	Summary of Sub-Slab Vapor and Indoor/Outdoor Air Analytical Results

Attachment A	ACWD Correspondence
Attachment B	ACPWA Well Permits
Attachment C	Boring Log
Attachment D	Laboratory Analytical Results
Attachment E	Building Survey
Attachment F	Field Document

cc: Ms. Carryl Macleod, Chevron (electronic copy only)
Mr. Donald Sweet, San Francisco Property MGMT
Mr. Patrick Elwood, College Square Associates
Cartridge World, College Square

Figures



SOURCE: USGS QUADRANGLE MAPS: OAKLAND WEST, CA. & OAKLAND EAST, CA.

figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 209339
5940 COLLEGE AVENUE
Oakland, California

311954-2013.3(014)GN-WA001 DEC 12/2013

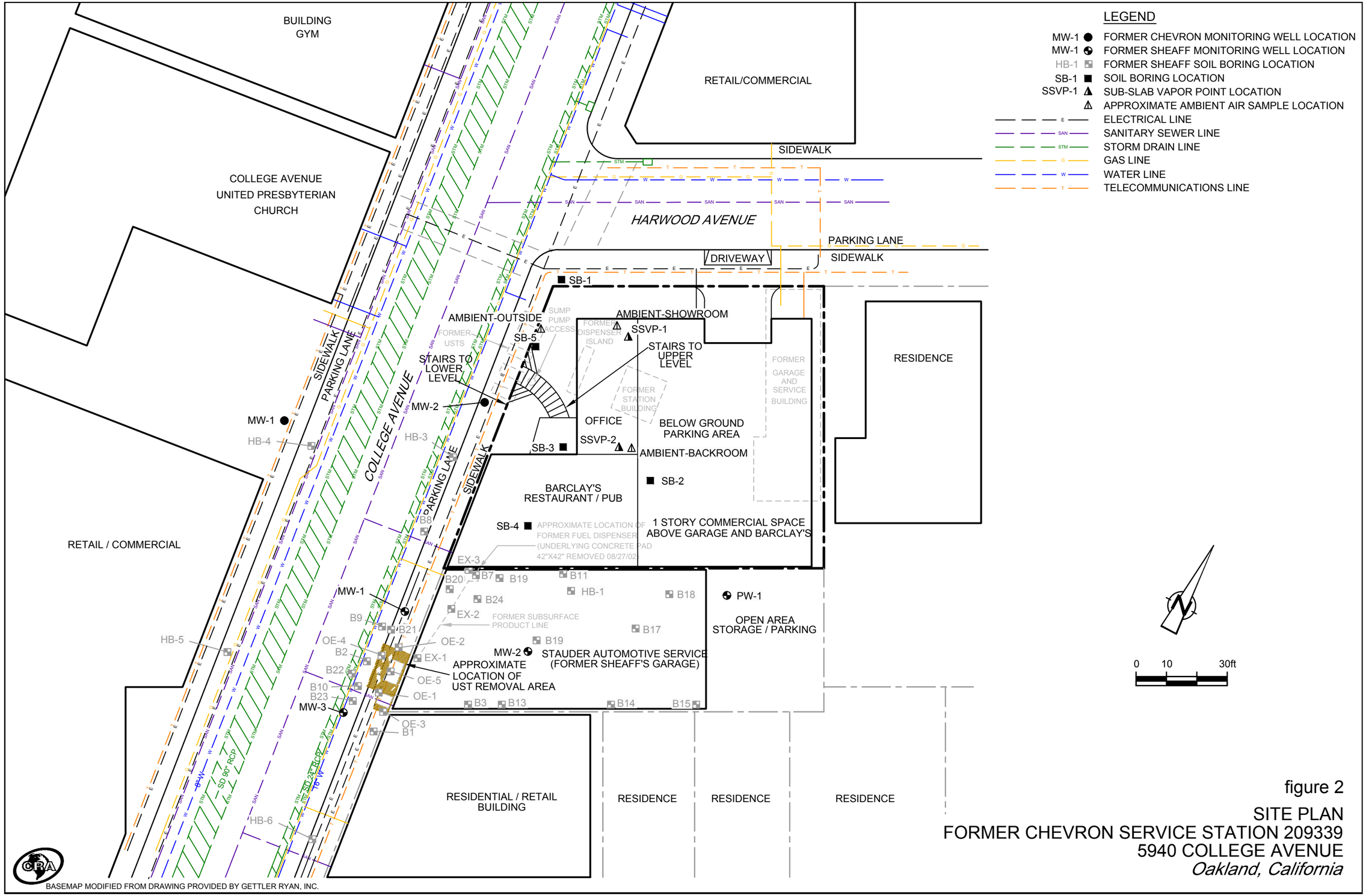


figure 2

SITE PLAN
FORMER CHEVRON SERVICE STATION 209339
5940 COLLEGE AVENUE
Oakland, California

BASEMAP MODIFIED FROM DRAWING PROVIDED BY GETTLER RYAN, INC.

311954-2013.3(014)GN-WA002 JAN 15/2014

Tables

TABLE 1

SOIL ANALYTICAL RESULTS
FORMER CHEVRON 209339
5940 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Location	Depth (fbg)	Date	TPHs		VOCs					SVOCs
			TPHg	TPHd	Benzene	Toluene	Ethylbenzene	Total Xylenes	Methyl Tert Butyl Ether	Naphthalene
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MW-1-4.5	4.5	12/06/2000	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--
MW-1-9.5	9.5	12/06/2000	<1.0	--	<0.005	<0.005	<0.005	<0.005	<0.05	--
MW-2-4.5	4.5	12/06/2000	<1.0	--	<0.005	***0.0062***	***0.0054***	***0.021***	***<0.05***	--
SB5-S-2.5-131030 Grab Soil	2.5	10/30/2013	<1.0	<4.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.003
SB5-S-5-131030 Grab Soil	5	10/30/2013	<1	<4.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.003

Abbreviations and Notes:

TPHg = total petroleum hydrocarbons as gasoline

TPHd = total petroleum hydrocarbons as diesel

<n = below detection limit

TPH = total petroleum hydrocarbons

VOCs = volatile organic compounds

SVOCs = semi-volatile organic compounds

fbg = feet below grade

mg/kg = milligrams per kilogram

-- = Not analyzed

TABLE 2

SUB-SLAB VAPOR ANALYTICAL RESULTS
FORMER CHEVRON 209339
5940 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Location	Date	VOCs							TPH Fractions						TPHs	ASTM D-1946				
		Benzene	Toluene	Ethylbenzene	Total xylenes	Methyl Tert Butyl Ether	Naphthalene (TO-17)	Naphthalene	C5-C6 Aliphatics	>C6-C8 Aliphatics	>C8-C10 Aliphatics	>C10-C12 Aliphatics	>C8-C10 Aromatics	>C10-C12 Aromatics	TPHg	Oxygen	Nitrogen	Carbon dioxide	Methane	Helium
Units		µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	%	%	%	%	%
SSVP-1	11/07/2013	**0.75**	**21**	**0.87**	**4.7**	<0.60	**<8.3**	<4.4*	**68**	<68	<97	<120	<82	<92	**340**	**21**	**79**	<0.017	**0.00019**	<0.084
SSVP-2	11/07/2013	<0.27	**0.25**	<0.15	<0.30	<0.61	--	**6.0**	<55	<70	<99	<120	<84	<93	<70	**20**	**80**	**0.28**	<0.00017	<0.085
Dup-1	11/07/2013	<0.27	**0.20**	<0.15	<0.30	<0.62	--	<4.5	<56	<70	<100	<120	<84	<94	<70	**20**	**80**	**0.29**	<0.00017	<0.086

Abbreviations and Notes:

*Naphthalene was also analyzed by Modified TO-17 VI Scan for this sample. It was not detected (<8.3µg/m³)

(D) = duplicate sample collected from SSVP-2

TPHg = total petroleum hydrocarbon as gasoline

<n = below detection limit

TPH = total petroleum hydrocarbons

VOCs = volatile organic compounds

µg/m³ = micro grams per cubic meter

% = percent

Bold indicates detection

TABLE 3

INDOOR/OUTDOOR AIR ANALYTICAL RESULTS
FORMER CHEVRON 209339
5940 COLLEGE AVENUE
OAKLAND, CALIFORNIA

Location	Date	VOCs						TPH Fractions						TPHs	ASTM D-1946				
		Benzene	Toluene	Ethylbenzene	Total xylenes	Methyl Tert Butyl Ether	Naphthalene	C5-C6 Aliphatics	>C6-C8 Aliphatics	>C8-C10 Aliphatics	>C10-C12 Aliphatics	>C8-C10 Aromatics	>C10-C12 Aromatics	TPHg	Oxygen	Nitrogen	Carbon dioxide	Methane	Helium
Units		µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	%	%	%	%	%
Ambient-backroom	11/07/2013	**0.95**	**3.8**	**0.91**	**2.88**	<0.55	**8.2**	<50	<63	<89	<110	<75	<84	**260**	21	79	0.072	0.00027	<0.076
Ambient-showroom	11/07/2013	**0.80**	**3.0**	**0.69**	**2.22**	<0.60	<4.4	<54	<68	<97	<120	<82	<91	**190**	21	79	0.07	0.00028	<0.083
Ambient-outside	11/07/2013	**0.87**	**2.7**	**0.56**	**2.56**	<0.58	<4.2	<52	<66	<94	<110	<79	<88	**110**	21	79	0.046	0.00024	<0.080

Abbreviations and Notes:

TPHg = total petroleum hydrocarbon as gasoline

<n = below detection limit

TPH = total petroleum hydrocarbons

VOCs = volatile organic compounds

µg/m^3 = micro grams per cubic meter

% = percent

Bold indicates detection

Attachment A

ACEH Correspondence

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 18, 2013

Ms. Carryl MacLeod
Chevron Environmental Management Co.
6101 Bollinger Canyon Road
San Ramon, CA 94583
(Sent via electronic mail to:
cmacleod@chevron.com)

Mr. Patrick Elwood
College Square Associates
1345 Grand Avenue
Piedmont, CA 94611

Mr. Donald Sweet
San Francisco Property Mgmt Co.
1375 Sutter Street, Suite 308
San Francisco, CA 941095

Subject: Conditional Work Plan Approval; Fuel Leak Case No. RO0000466 and Geotracker Global ID T06019752694, Chevron #20-9339, 5940 College Avenue, Oakland, CA 94618

Dear Ms. MacLeod, and Messrs. Elwood and Sweet:

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Response to Technical Comments and Work Plan,* dated April 19, 2013. The report was prepared and submitted on your behalf by Conestoga-Rovers & Associates (CRA). Thank you for submitting the work plan.

ACEH has reviewed the site under the Low-Threat Closure Policy and the site does not fit the policy due to the lack of one soil sample collected onsite (Direct Contact and Outdoor Air Exposure Criteria) and due to the lack of soil vapor or alternatively, the collection of shallow soil analytical data (Vapor Intrusion Criteria). ACEH anticipates that the site may close under the LTCP with the collection of limited additional data.

Based on ACEH staff review of the work plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Work Plan Modifications** – The referenced work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests the following modifications to the approach.
    a. **Proposed Soil Bore Location** - The work plan proposes to install one 5-foot soil bore between the presumed former locations of a number of underground storage tanks (USTs) and the former fuel dispenser. ACEH is in agreement that collection of the data is appropriate; however, requests the bore be located immediately adjacent to the presumed former underground storage tank (UST) locations rather than as depicted between the USTs and the dispenser. This is an effort to determine residual source area contamination in proximity to multiple former USTs. It is presumed that the vapor sample can provide data on the fuel dispenser area.
    b. **Soil Sampling** – As noted above, the work plan proposes to install one 5-foot soil bore between the presumed former locations of a number of USTs and the former fuel dispenser. Soil is proposed to be sampled for naphthalene only. Because not a *single* soil sample has been collected onsite, and only one soil sample has been collected close to the site (collected beneath the sidewalk in the public right-of-way proximal to one of the four former USTs), ACEH additionally requests the soil sample be analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, and benzene, toluene, ethylbenzene, total xylenes, and MTBE. Collection of some of these

analytes will provide a redundant (multiple lines of evidence) approach to the vapor intrusion and direct contact criterions.

c. **Vapor Intrusion Sub-Slab Sampling** – The work plan proposes the installation of two sub-slab vapor points beneath the existing buildings, and the collection of indoor and outdoor vapor samples. ACEH agrees that the collection of sub-slab vapor samples is appropriate; however, requests the relocation of the southerly vapor point northward within the same southerly building in order to minimize the affect of contamination that may originate at Shaeff's Garage. This also places the relocated vapor point closer to the subject site's presumed source area and SB-3. ACEH notes that the LTCP does not require the collection of indoor and outdoor vapor samples (or sub-slab vapor samples); however, is not opposed to the collection of the data. Because indoor and outdoor vapor sampling protocols were not attached to the work plan, please forward a copy of the protocols that include the precautions to be taken with the collection indoor vapor samples (chemical product inventory, etc.), by the date referenced below.

   Please be aware that the Department of Toxic Substances Control (DTSC) states (*Advisory Active Soil Gas Investigations*, April 2012) that if TO-15 is used to analyze for naphthalene, passive samplers should also be used to confirm the results (DTSC, Appendix E), and specifies tubing type due to selective absorption of naphthalene by standard vapor sampling tubing (among other items). Please verify or update your vapor protocols to reflect this. As noted, because vapor protocols were not attached to the work plan, please forward a copy of the protocols, as a Work Plan Addendum, by the date referenced below. It is anticipated that the review of, and comment on, the protocols can be expedited.

Please submit a site investigation report by the date specified below.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **July 19, 2013** – Work Plan Addendum (Indoor, Outdoor, and Sub-Slab Vapor Sampling Protocols)
  File to be named: RO466_WP_ADEND_R_yyyy-mm-dd

- **August 23, 2013** – Soil and Groundwater Investigation (Vapor)
  File to be named: RO466_SWI_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm. If your email address is not listed on the first page of this letter, or in the list of cc's listed below, ACEH is requesting your email address to help expedite communications and to help lower overall costs.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark Detterman
DN: cn=Mark Detterman, o, ou,
email=mark.detterman@acgov.org,
c=US
Date: 2013.06.18 11:45:12 -07'00'

Mark Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Greg Barclay, Conestoga-Rovers & Associates, 10969 Trade Center Drive, Suite 107, Rancho Cordova, CA 95670; (sent via electronic mail to: GBarclay@CRAworld.com)

Brian Silva, Conestoga-Rovers & Associates, 10969 Trade Center Drive, Suite 107, Rancho Cordova, CA 95670; (sent via electronic mail to: BSilva@CRAworld.com)

Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Suite 3341, Oakland, CA 94612-2032 (sent via electronic mail to lgriffin@oaklandnet.com)

Donna Drogos, (sent via electronic mail to donna.drogos@acgov.org)
Dilan Roe (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Geotracker, Electronic Files

ATTACHMENT 1

Responsible Party(ies) Legal Requirements/Obligations
& ACEH Electronic Report Upload (ftp) Instructions

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements. (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/)

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single Portable Document Format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to .loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to .loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Detterman, Mark, Env. Health

From: Detterman, Mark, Env. Health
Sent: Wednesday, August 07, 2013 3:01 PM
To: 'Silva, Brian'; 'CMacleod@Chevron.com'; 'GBarclay@craworld.com'
Cc: Roe, Dilan, Env. Health
Subject: RO466; Chevron 20-9339; 5940 College Avenue, Oakland: Work Plan Addendum & Extension Request Approval

Brian,
Thanks for the phone call and reminder. Thanks also for the update on site access. I've modified the report due date in concurrence with your request for an extension at the site.

Alameda County Environmental Health (ACEH) staff has reviewed the case file including the *Response to Technical Comments and Work Plan Addendum,* dated July 18, 2013.

Based on ACEH staff review of the work plan addendum, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS AND TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **October 11, 2013** – Soil and Groundwater Investigation (Vapor)
  File to be named: RO466_SWI_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm. If your email address is not listed on the first page of this letter, or in the list of cc's listed below, ACEH is requesting your email address to help expedite communications and to help lower overall costs.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Regards,

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

Attachment B

ACPWA Well Permits

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/04/2013 By jamesy

Permit Numbers: W2013-0721 to W2013-0722
Permits Valid from 10/01/2013 to 10/01/2013

Application Id: 1377821025632 **City of Project Site:** Oakland
Site Location: 5940 College Ave, Oakland, CA-Former Chevron 209339
Project Start Date: 10/01/2013 **Completion Date:** 10/01/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Conestoga Rovers - Ben Summersett **Phone:** 916-889-8926
10969 Trade Ctr Dr #107, Rancho Cordova, CA 95670
Property Owner: SF Prop. Mgt.- Don Sweet **Phone:** 415-885-5304
155 Jefferson Street #4, San Francisco, CA 94133
Client: Chevron EMC **Phone:** --
6101 Bollinger Canyon Rd, San Ramon, CA 94583

Total Due: $530.00
Receipt Number: WR2013-0323 **Total Amount Paid:** $530.00
Payer Name : Conestoga Rovers Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 2 Wells
Driller: Confluence Envr. Inc. - Lic #: 913194 - Method: other **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0721	09/04/2013	12/30/2013	SSVP-1	1.00 in.	0.25 in.	2.00 ft	8.00 ft
W2013-0721	09/04/2013	12/30/2013	SSVP-2	1.00 in.	0.25 in.	2.00 ft	8.00 ft

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

7. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

8. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

9. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

10. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

11. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

Borehole(s) for Investigation-Contamination Study - 1 Boreholes
Driller: Confluence Envr. Inc. - Lic #: 913194 - Method: other **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2013-0722	09/04/2013	12/30/2013	1	3.00 in.	5.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Attachment C

Boring Log

Conestoga-Rovers & Associates
10969 Trade Center Drive suite 107
Rancho Cordova, CA 95670
Telephone: 916-889-8900
Fax: 916-889-8999

BORING/WELL LOG

CLIENT NAME	Chevron EMC	**BORING/WELL NAME**	SB-5
JOB/SITE NAME	209339	**DRILLING STARTED**	30-Oct-13
LOCATION	5940 College Avenue, Oakland, CA	**DRILLING COMPLETED**	30-Oct-13
PROJECT NUMBER	311954	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Confluence Environmental Services	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand-Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	8"	**SCREENED INTERVAL**	NA
LOGGED BY	Charley Austin	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	Greg Barclay, P.G. 6260	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Concrete	0.5	
0.0		SB-5- 2.5		2	CL		**Silty CLAY:** brown; low plasticity; dry. Small calcareous deposits at 3 fbg. Increasing clay content.		Portland Type I/II
0.0		SB-5- 5		4				5.0	Bottom of Boring @ 5 fbg

Attachment D

Laboratory Analytical Results

eurofins | Air Toxics

11/22/2013
Mr. Ben Summersett
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 209339
Project #: 311954
Workorder #: 1311154A

Dear Mr. Ben Summersett

The following report includes the data for the above referenced project for sample(s) received on 11/8/2013 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1311154A

Work Order Summary

CLIENT:	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8900	**P.O. #**	311954
FAX:	916-677-3687	**PROJECT #**	311954 Chevron 209339
DATE RECEIVED:	11/08/2013	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/22/2013		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SSVP-1	Modified TO-15	5.5 "Hg	5.3 psi
01B	SSVP-1	Modified TO-15	5.5 "Hg	5.3 psi
02A	SSVP-2	Modified TO-15	6.5 "Hg	4.8 psi
02B	SSVP-2	Modified TO-15	6.5 "Hg	4.8 psi
03A	Dup-1	Modified TO-15	6.5 "Hg	5.1 psi
03B	Dup-1	Modified TO-15	6.5 "Hg	5.1 psi
04A	Ambient-backroom	Modified TO-15	3.7 "Hg	5.1 psi
04B	Ambient-backroom	Modified TO-15	3.7 "Hg	5.1 psi
05A	Ambient-showroom	Modified TO-15	5.7 "Hg	5.1 psi
05B	Ambient-showroom	Modified TO-15	5.7 "Hg	5.1 psi
06A	Ambient-outside	Modified TO-15	4.9 "Hg	5.1 psi
06B	Ambient-outside	Modified TO-15	4.9 "Hg	5.1 psi
07A	Lab Blank	Modified TO-15	NA	NA
07B	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
08B	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA
09AA	LCSD	Modified TO-15	NA	NA
09B	LCS	Modified TO-15	NA	NA
09BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 11/22/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Conestoga-Rovers Associates (CRA)
Workorder# 1311154A

Five 6 Liter Summa Canister (SIM Certified) and one 6 Liter Summa Canister samples were received on November 08, 2013. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

The sample canister used for sample Dup-1 was not individually certified for the requested SIM reporting limits, but the cleaning process did pass process certification at a 10% rate of frequency at 0.2 ppbv for all compounds with the exception of Naphthalene which was 0.8 ppbv. Concentrations that are below the level at which the canister was certified may be false positives.

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

eurofins | Air Toxics

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

Client Sample ID: SSVP-1

Lab ID#: 1311154A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	82	68	340

Client Sample ID: SSVP-1

Lab ID#: 1311154A-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.084	0.23	0.27	0.75
Toluene	0.033	5.5	0.12	21
Ethyl Benzene	0.033	0.20	0.14	0.87
m,p-Xylene	0.067	0.76	0.29	3.3
o-Xylene	0.033	0.33	0.14	1.4

Client Sample ID: SSVP-2

Lab ID#: 1311154A-02A

No Detections Were Found.

Client Sample ID: SSVP-2

Lab ID#: 1311154A-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.034	0.067	0.13	0.25
Naphthalene	0.85	1.1	4.4	6.0

Client Sample ID: Dup-1

Lab ID#: 1311154A-03A

No Detections Were Found.

Client Sample ID: Dup-1

Lab ID#: 1311154A-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

eurofins | Air Toxics

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

Client Sample ID: Dup-1

Lab ID#: 1311154A-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	0.034	0.054	0.13	0.20

Client Sample ID: Ambient-backroom

Lab ID#: 1311154A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	15	65	62	260

Client Sample ID: Ambient-backroom

Lab ID#: 1311154A-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.076	0.30	0.24	0.95
Toluene	0.031	1.0	0.12	3.8
Ethyl Benzene	0.031	0.21	0.13	0.91
m,p-Xylene	0.061	0.48	0.26	2.1
o-Xylene	0.031	0.18	0.13	0.78
Naphthalene	0.76	1.6	4.0	8.2

Client Sample ID: Ambient-showroom

Lab ID#: 1311154A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	46	68	190

Client Sample ID: Ambient-showroom

Lab ID#: 1311154A-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.083	0.25	0.26	0.80
Toluene	0.033	0.79	0.12	3.0
Ethyl Benzene	0.033	0.16	0.14	0.69

eurofins | Air Toxics

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

Client Sample ID: Ambient-showroom

Lab ID#: 1311154A-05B

m,p-Xylene	0.066	0.38	0.29	1.6
o-Xylene	0.033	0.14	0.14	0.62

Client Sample ID: Ambient-outside

Lab ID#: 1311154A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	16	26	66	110

Client Sample ID: Ambient-outside

Lab ID#: 1311154A-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.080	0.27	0.26	0.87
Toluene	0.032	0.72	0.12	2.7
Ethyl Benzene	0.032	0.13	0.14	0.56
m,p-Xylene	0.064	0.43	0.28	1.9
o-Xylene	0.032	0.15	0.14	0.66

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311154A-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111809**	**Date of Collection: 11/7/13 11:24:00 AM**	
Dil. Factor:	**1.67**	**Date of Analysis: 11/18/13 04:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	82	68	340

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311154A-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111809sim**	**Date of Collection: 11/7/13 11:24:00 AM**	
Dil. Factor:	**1.67**	**Date of Analysis: 11/18/13 04:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
Benzene	0.084	0.23	0.27	0.75
Toluene	0.033	5.5	0.12	21
Ethyl Benzene	0.033	0.20	0.14	0.87
m,p-Xylene	0.067	0.76	0.29	3.3
o-Xylene	0.033	0.33	0.14	1.4
Naphthalene	0.84	Not Detected	4.4	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	126	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

Client Sample ID: SSVP-2

Lab ID#: 1311154A-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111810**	**Date of Collection: 11/7/13 2:50:00 PM**	
Dil. Factor:	**1.70**	**Date of Analysis: 11/18/13 05:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	Not Detected	70	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: SSVP-2

Lab ID#: 1311154A-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111810sim**	**Date of Collection: 11/7/13 2:50:00 PM**	
Dil. Factor:	**1.70**	**Date of Analysis: 11/18/13 05:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.17	Not Detected	0.61	Not Detected
Benzene	0.085	Not Detected	0.27	Not Detected
Toluene	0.034	0.067	0.13	0.25
Ethyl Benzene	0.034	Not Detected	0.15	Not Detected
m,p-Xylene	0.068	Not Detected	0.30	Not Detected
o-Xylene	0.034	Not Detected	0.15	Not Detected
Naphthalene	0.85	1.1	4.4	6.0

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: Dup-1

Lab ID#: 1311154A-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111811**	**Date of Collection: 11/7/13**	
Dil. Factor:	**1.72**	**Date of Analysis: 11/18/13 06:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	Not Detected	70	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	105	70-130

eurofins | Air Toxics

Client Sample ID: Dup-1

Lab ID#: 1311154A-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111811sim**	**Date of Collection: 11/7/13**	
Dil. Factor:	**1.72**	**Date of Analysis: 11/18/13 06:29 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.17	Not Detected	0.62	Not Detected
Benzene	0.086	Not Detected	0.27	Not Detected
Toluene	0.034	0.054	0.13	0.20
Ethyl Benzene	0.034	Not Detected	0.15	Not Detected
m,p-Xylene	0.069	Not Detected	0.30	Not Detected
o-Xylene	0.034	Not Detected	0.15	Not Detected
Naphthalene	0.86	Not Detected	4.5	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	124	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-backroom

Lab ID#: 1311154A-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111812**	**Date of Collection: 11/7/13 3:35:00 PM**	
Dil. Factor:	**1.53**	**Date of Analysis: 11/18/13 07:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	15	65	62	260

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	97	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-backroom

Lab ID#: 1311154A-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111812sim**	**Date of Collection: 11/7/13 3:35:00 PM**	
Dil. Factor:	**1.53**	**Date of Analysis: 11/18/13 07:12 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.15	Not Detected	0.55	Not Detected
Benzene	0.076	0.30	0.24	0.95
Toluene	0.031	1.0	0.12	3.8
Ethyl Benzene	0.031	0.21	0.13	0.91
m,p-Xylene	0.061	0.48	0.26	2.1
o-Xylene	0.031	0.18	0.13	0.78
Naphthalene	0.76	1.6	4.0	8.2

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-showroom

Lab ID#: 1311154A-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111813**	**Date of Collection: 11/7/13 5:02:00 PM**	
Dil. Factor:	**1.66**	**Date of Analysis: 11/18/13 08:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	17	46	68	190

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-showroom

Lab ID#: 1311154A-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111813sim**	**Date of Collection: 11/7/13 5:02:00 PM**	
Dil. Factor:	**1.66**	**Date of Analysis: 11/18/13 08:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
Benzene	0.083	0.25	0.26	0.80
Toluene	0.033	0.79	0.12	3.0
Ethyl Benzene	0.033	0.16	0.14	0.69
m,p-Xylene	0.066	0.38	0.29	1.6
o-Xylene	0.033	0.14	0.14	0.62
Naphthalene	0.83	Not Detected	4.4	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-outside

Lab ID#: 1311154A-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111814**	**Date of Collection: 11/7/13 5:08:00 PM**	
Dil. Factor:	**1.61**	**Date of Analysis: 11/18/13 09:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	16	26	66	110

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: Ambient-outside

Lab ID#: 1311154A-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111814sim**	**Date of Collection: 11/7/13 5:08:00 PM**	
Dil. Factor:	**1.61**	**Date of Analysis: 11/18/13 09:02 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.16	Not Detected	0.58	Not Detected
Benzene	0.080	0.27	0.26	0.87
Toluene	0.032	0.72	0.12	2.7
Ethyl Benzene	0.032	0.13	0.14	0.56
m,p-Xylene	0.064	0.43	0.28	1.9
o-Xylene	0.032	0.15	0.14	0.66
Naphthalene	0.80	Not Detected	4.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	102	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154A-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111808**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 03:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	119	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154A-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111808sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 03:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1311154A-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111804**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 11:19 AM**	

Compound	**%Recovery**
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	123	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1311154A-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111804sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 11:19 AM**	

Compound	%Recovery
Methyl tert-butyl ether	112
Benzene	71
Toluene	89
Ethyl Benzene	98
m,p-Xylene	102
o-Xylene	104
Naphthalene	70

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1311154A-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 12:12 PM**	

Compound	**%Recovery**	**Method Limits**
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	111	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1311154A-09AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111806**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 01:39 PM**	

Compound	%Recovery	Method Limits
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	108	70-130

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1311154A-09B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111805sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 12:12 PM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	124	70-130
Benzene	77	70-130
Toluene	95	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	110	70-130
o-Xylene	110	70-130
Naphthalene	54 Q	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	113	70-130

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1311154A-09BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**e111806sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/18/13 01:39 PM**	

Compound	%Recovery	Method Limits
Methyl tert-butyl ether	125	70-130
Benzene	76	70-130
Toluene	94	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	109	70-130
o-Xylene	108	70-130
Naphthalene	52 Q	60-140

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	110	70-130
4-Bromofluorobenzene	107	70-130

eurofins | Air Toxics

11/22/2013
Mr. Ben Summersett
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 209339
Project #: 311954
Workorder #: 1311154B

Dear Mr. Ben Summersett

The following report includes the data for the above referenced project for sample(s) received on 11/8/2013 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 APH 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1311154B

Work Order Summary

CLIENT:	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8900	**P.O. #**	311954
FAX:	916-677-3687	**PROJECT #**	311954 Chevron 209339
DATE RECEIVED:	11/08/2013	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/22/2013		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SSVP-1	Modified TO-15 APH	5.5 "Hg	5.3 psi
01B	SSVP-1	Modified TO-15 APH	5.5 "Hg	5.3 psi
02A	SSVP-2	Modified TO-15 APH	6.5 "Hg	4.8 psi
02B	SSVP-2	Modified TO-15 APH	6.5 "Hg	4.8 psi
03A	Dup-1	Modified TO-15 APH	6.5 "Hg	5.1 psi
03B	Dup-1	Modified TO-15 APH	6.5 "Hg	5.1 psi
04A	Ambient-backroom	Modified TO-15 APH	3.7 "Hg	5.1 psi
04B	Ambient-backroom	Modified TO-15 APH	3.7 "Hg	5.1 psi
05A	Ambient-showroom	Modified TO-15 APH	5.7 "Hg	5.1 psi
05B	Ambient-showroom	Modified TO-15 APH	5.7 "Hg	5.1 psi
06A	Ambient-outside	Modified TO-15 APH	4.9 "Hg	5.1 psi
06B	Ambient-outside	Modified TO-15 APH	4.9 "Hg	5.1 psi
07A	Lab Blank	Modified TO-15 APH	NA	NA
07B	Lab Blank	Modified TO-15 APH	NA	NA
08A	CCV	Modified TO-15 APH	NA	NA
08B	CCV	Modified TO-15 APH	NA	NA

CERTIFIED BY: Heidi Rayos DATE: 11/22/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 & VPH Fractions
Conestoga-Rovers Associates (CRA)
Workorder# 1311154B

Five 6 Liter Summa Canister (SIM Certified) and one 6 Liter Summa Canister samples were received on November 08, 2013. The laboratory performed analysis via EPA Method TO-15 and Air Toxics VPH (Volatile Petroleum Hydrocarbon) methods for the Determination of VPH Fractions using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. This method is designed to measure gaseous phase aliphatic and aromatic compounds in ambient air and soil gas collected in stainless steel Summa canisters. Air Toxics VPH method is a hybrid of EPA TO-15, MADEP APH and WSDE VPH methods. Chromatographic peaks were identified via mass spectrum as either aliphatic or aromatic petroleum hydrocarbons and included in the appropriate range as defined by the method. The volatile Aliphatic hydrocarbons are collectively quantified within the C5 to C6 range, C6 to C8 range, C8 to C10 range and the C10 to C12 range. Additionally, the volatile Aromatic hydrocarbons are collectively quantified within the C8 to C10 range and the C10 to C12 range. The Aromatic ranges refer to the equivalent carbon (EC) ranges.

Aliphatic data is calculated from the Total Ion chromatogram which has been reprocessed in a duplicate file differentiated from the original by the addition of an alphanumeric extension. The Aromatic calculation also uses the information contained in the associated Extracted Ion file.

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

eurofins | Air Toxics

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

Client Sample ID: SSVP-1

Lab ID#: 1311154B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17	21	54	68

Client Sample ID: SSVP-1

Lab ID#: 1311154B-01B

No Detections Were Found.

Client Sample ID: SSVP-2

Lab ID#: 1311154B-02A

No Detections Were Found.

Client Sample ID: SSVP-2

Lab ID#: 1311154B-02B

No Detections Were Found.

Client Sample ID: Dup-1

Lab ID#: 1311154B-03A

No Detections Were Found.

Client Sample ID: Dup-1

Lab ID#: 1311154B-03B

No Detections Were Found.

Client Sample ID: Ambient-backroom

Lab ID#: 1311154B-04A

No Detections Were Found.

Client Sample ID: Ambient-backroom

Lab ID#: 1311154B-04B

No Detections Were Found.

eurofins | Air Toxics

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

Client Sample ID: Ambient-showroom

Lab ID#: 1311154B-05A

No Detections Were Found.

Client Sample ID: Ambient-showroom

Lab ID#: 1311154B-05B

No Detections Were Found.

Client Sample ID: Ambient-outside

Lab ID#: 1311154B-06A

No Detections Were Found.

Client Sample ID: Ambient-outside

Lab ID#: 1311154B-06B

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311154B-01A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111919a**	**Date of Collection: 11/7/13 11:24:00 AM**	
Dil. Factor:	**1.67**	**Date of Analysis: 11/20/13 11:32 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17	21	54	68
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17	Not Detected	68	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17	Not Detected	97	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17	Not Detected	120	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311154B-01B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111919c**	**Date of Collection: 11/7/13 11:24:00 AM**	
Dil. Factor:	**1.67**	**Date of Analysis: 11/20/13 11:32 AM**	

Compound	**Rpt. Limit (ppbv)**	**Amount (ppbv)**	**Rpt. Limit (ug/m3)**	**Amount (ug/m3)**
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17	Not Detected	82	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17	Not Detected	92	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: SSVP-2

Lab ID#: 1311154B-02A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111920a**	**Date of Collection: 11/7/13 2:50:00 PM**	
Dil. Factor:	**1.70**	**Date of Analysis: 11/20/13 12:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17	Not Detected	55	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17	Not Detected	70	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17	Not Detected	99	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17	Not Detected	120	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: SSVP-2

Lab ID#: 1311154B-02B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111920c**	**Date of Collection: 11/7/13 2:50:00 PM**	
Dil. Factor:	**1.70**	**Date of Analysis: 11/20/13 12:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17	Not Detected	84	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17	Not Detected	93	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Dup-1

Lab ID#: 1311154B-03A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111921a**	**Date of Collection: 11/7/13**	
Dil. Factor:	**1.72**	**Date of Analysis: 11/20/13 12:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17	Not Detected	56	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17	Not Detected	70	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17	Not Detected	100	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17	Not Detected	120	Not Detected

Container Type: 6 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: Dup-1

Lab ID#: 1311154B-03B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111921c**	**Date of Collection: 11/7/13**	
Dil. Factor:	**1.72**	**Date of Analysis: 11/20/13 12:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17	Not Detected	84	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17	Not Detected	94	Not Detected

Container Type: 6 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: Ambient-backroom

Lab ID#: 1311154B-04A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111922a**	**Date of Collection: 11/7/13 3:35:00 PM**	
Dil. Factor:	**1.53**	**Date of Analysis: 11/20/13 01:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	15	Not Detected	50	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	15	Not Detected	63	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	15	Not Detected	89	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	15	Not Detected	110	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-backroom

Lab ID#: 1311154B-04B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111922c**	**Date of Collection: 11/7/13 3:35:00 PM**	
Dil. Factor:	**1.53**	**Date of Analysis: 11/20/13 01:30 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	15	Not Detected	75	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	15	Not Detected	84	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-showroom

Lab ID#: 1311154B-05A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111923a**	**Date of Collection: 11/7/13 5:02:00 PM**	
Dil. Factor:	**1.66**	**Date of Analysis: 11/20/13 02:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17	Not Detected	54	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17	Not Detected	68	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17	Not Detected	97	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17	Not Detected	120	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-showroom

Lab ID#: 1311154B-05B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111923c**	**Date of Collection: 11/7/13 5:02:00 PM**	
Dil. Factor:	**1.66**	**Date of Analysis: 11/20/13 02:05 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17	Not Detected	82	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17	Not Detected	91	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-outside

Lab ID#: 1311154B-06A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111924a**	**Date of Collection: 11/7/13 5:08:00 PM**	
Dil. Factor:	**1.61**	**Date of Analysis: 11/20/13 02:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	16	Not Detected	52	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	16	Not Detected	66	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	16	Not Detected	94	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	16	Not Detected	110	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-outside

Lab ID#: 1311154B-06B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111924c**	**Date of Collection: 11/7/13 5:08:00 PM**	
Dil. Factor:	**1.61**	**Date of Analysis: 11/20/13 02:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	16	Not Detected	79	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	16	Not Detected	88	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154B-07A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111910a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/19/13 08:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	10	Not Detected	32	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	10	Not Detected	41	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	10	Not Detected	58	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	10	Not Detected	70	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154B-07B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111910c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/19/13 08:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	10	Not Detected	49	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	10	Not Detected	55	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1311154B-08A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111909a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/19/13 07:49 PM**	

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	91
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	90
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	94
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	94

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1311154B-08B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	**3111909c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/19/13 07:49 PM**	

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	87
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	92

Container Type: NA - Not Applicable

eurofins | Air Toxics

11/25/2013
Mr. Ben Summersett
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 209339
Project #: 311954
Workorder #: 1311154C

Dear Mr. Ben Summersett

The following report includes the data for the above referenced project for sample(s) received on 11/8/2013 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1311154C

Work Order Summary

CLIENT:	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8900	**P.O. #**	311954
FAX:	916-677-3687	**PROJECT #**	311954 Chevron 209339
DATE RECEIVED:	11/08/2013	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/25/2013		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SSVP-1	Modified ASTM D-1946	5.5 "Hg	5.3 psi
02A	SSVP-2	Modified ASTM D-1946	6.5 "Hg	4.8 psi
03A	Dup-1	Modified ASTM D-1946	6.5 "Hg	5.1 psi
04A	Ambient-backroom	Modified ASTM D-1946	3.7 "Hg	5.1 psi
05A	Ambient-showroom	Modified ASTM D-1946	5.7 "Hg	5.1 psi
06A	Ambient-outside	Modified ASTM D-1946	4.9 "Hg	5.1 psi
07A	Lab Blank	Modified ASTM D-1946	NA	NA
07B	Lab Blank	Modified ASTM D-1946	NA	NA
08A	LCS	Modified ASTM D-1946	NA	NA
08AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Rayos DATE: 11/25/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 1311154C

Five 6 Liter Summa Canister (SIM Certified) and one 6 Liter Summa Canister samples were received on November 08, 2013. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Since Nitrogen is used to pressurize samples, the reported Nitrogen values are calculated by adding all the sample components and subtracting from 100%.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reporting limit for Nitrogen was raised from 0.10% to 0.50%.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
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 detection limit.
M - Reported value may be biased due to apparent matrix interferences.
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

eurofins | Air Toxics

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SSVP-1

Lab ID#: 1311154C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	21
Nitrogen	0.84	79
Methane	0.00017	0.00019

Client Sample ID: SSVP-2

Lab ID#: 1311154C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	20
Nitrogen	0.85	80
Carbon Dioxide	0.017	0.28

Client Sample ID: Dup-1

Lab ID#: 1311154C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	20
Nitrogen	0.86	80
Carbon Dioxide	0.017	0.29

Client Sample ID: Ambient-backroom

Lab ID#: 1311154C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.15	21
Nitrogen	0.76	79
Carbon Dioxide	0.015	0.072
Methane	0.00015	0.00027

Client Sample ID: Ambient-showroom

Lab ID#: 1311154C-05A

eurofins | Air Toxics

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: Ambient-showroom

Lab ID#: 1311154C-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	21
Nitrogen	0.83	79
Carbon Dioxide	0.017	0.070
Methane	0.00017	0.00028

Client Sample ID: Ambient-outside

Lab ID#: 1311154C-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.16	21
Nitrogen	0.80	79
Carbon Dioxide	0.016	0.046
Methane	0.00016	0.00024

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311154C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111413**	**Date of Collection: 11/7/13 11:24:00 AM**	
Dil. Factor:	**1.67**	**Date of Analysis: 11/14/13 03:38 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.17	21
Nitrogen	0.84	79
Carbon Dioxide	0.017	Not Detected
Methane	0.00017	0.00019
Helium	0.084	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: SSVP-2

Lab ID#: 1311154C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111414**	**Date of Collection: 11/7/13 2:50:00 PM**	
Dil. Factor:	**1.70**	**Date of Analysis: 11/14/13 04:00 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	20
Nitrogen	0.85	80
Carbon Dioxide	0.017	0.28
Methane	0.00017	Not Detected
Helium	0.085	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Dup-1

Lab ID#: 1311154C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111415**	**Date of Collection: 11/7/13**	
Dil. Factor:	**1.72**	**Date of Analysis: 11/14/13 04:40 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.17	20
Nitrogen	0.86	80
Carbon Dioxide	0.017	0.29
Methane	0.00017	Not Detected
Helium	0.086	Not Detected

Container Type: 6 Liter Summa Canister

eurofins | Air Toxics

Client Sample ID: Ambient-backroom

Lab ID#: 1311154C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111416**	**Date of Collection: 11/7/13 3:35:00 PM**	
Dil. Factor:	**1.53**	**Date of Analysis: 11/14/13 05:10 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.15	21
Nitrogen	0.76	79
Carbon Dioxide	0.015	0.072
Methane	0.00015	0.00027
Helium	0.076	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-showroom

Lab ID#: 1311154C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111417**	**Date of Collection: 11/7/13 5:02:00 PM**	
Dil. Factor:	**1.66**	**Date of Analysis: 11/14/13 05:56 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.17	21
Nitrogen	0.83	79
Carbon Dioxide	0.017	0.070
Methane	0.00017	0.00028
Helium	0.083	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Ambient-outside

Lab ID#: 1311154C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111418**	**Date of Collection: 11/7/13 5:08:00 PM**	
Dil. Factor:	**1.61**	**Date of Analysis: 11/14/13 06:21 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.16	21
Nitrogen	0.80	79
Carbon Dioxide	0.016	0.046
Methane	0.00016	0.00024
Helium	0.080	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/13 09:34 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.10	Not Detected
Nitrogen	0.50	Not Detected
Carbon Dioxide	0.010	Not Detected
Methane	0.00010	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311154C-07B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111403c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/13 08:33 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1311154C-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/13 07:59 AM**	

Compound	%Recovery	Method Limits
Oxygen	102	85-115
Nitrogen	100	85-115
Carbon Dioxide	100	85-115
Methane	101	85-115
Helium	100	85-115

Container Type: NA - Not Applicable

eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1311154C-08AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10111425**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/14/13 09:32 PM**	

Compound	%Recovery	Method Limits
Oxygen	99	85-115
Nitrogen	99	85-115
Carbon Dioxide	100	85-115
Methane	100	85-115
Helium	99	85-115

Container Type: NA - Not Applicable

eurofins | Air Toxics

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: Brian Silva
Collected by: (Print and Sign) Ben Summerett
Company: CRA Email: bsilva@craworld.com
Address: 10969 Trade Center City: Rancho Cordova State: CA Zip: 95670
Phone: 916-889-8908 Fax: 916-889-8999

Project Info:
P.O. #: ____
Project #: 311954
Project Name: Chevron 209339

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N 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 (ATL)
01A	SSVP-1	14120	11-07-2013	1124	TPHg, BTEX, MTBE +	30	6		
02A	SSVP-2	31133		1450	naphthalene by EPA TO-15	30	7		
03A	Dup-1	34434		—	APH SP C-8-C12 by	30	7		
04A	Ambient-backroom	1555		1535	modified TO-15 full scan	30	5		
05A	Ambient-Showroom	4231		1702	APH SP C5-C12 by	30	5.5		
06A	Ambient-outside	34737		1708	modified TO-15 full scan	29	5.5		
					O2, CO2, N2, CH4, He				
					by ASTM D-1946				
					= all samples =				

Relinquished by: (signature) Date/Time: 11-8-13 1115
Received by: (signature) Date/Time: 11/08/13 1135
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes:

Lab Use Only: Shipper Name: FED Ex Air Bill #: NA Temps °C: 9.0 Condition: GOOD Custody Seals Intact? Yes No None
Work Order #: 1311154

Form 188 rev. 11

eurofins | Air Toxics

11/15/2013
Mr. Ben Summersett
Conestoga-Rovers Associates (CRA)
10969 Trade Center Dr
Suite 107
Rancho Cordova CA 95670

Project Name: Chevron 209339
Project #: 311954
Workorder #: 1311144

Dear Mr. Ben Summersett

The following report includes the data for the above referenced project for sample(s) received on 11/8/2013 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI 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: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori

Project Manager

eurofins | Air Toxics

WORK ORDER #: 1311144

Work Order Summary

CLIENT:	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670	**BILL TO:**	Mr. Ben Summersett Conestoga-Rovers Associates (CRA) 10969 Trade Center Dr Suite 107 Rancho Cordova, CA 95670
PHONE:	916-889-8900	**P.O. #**	311954
FAX:	916-677-3687	**PROJECT #**	311954 Chevron 209339
DATE RECEIVED:	11/08/2013	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/15/2013		

FRACTION #	NAME	TEST
01A	SSVP-1	Modified TO-17 VI
02A	Lab Blank	Modified TO-17 VI
03A	CCV	Modified TO-17 VI
04A	LCS	Modified TO-17 VI
04AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes DATE: 11/15/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Conestoga-Rovers Associates (CRA)
Workorder# 1311144

One TO-17 VI Tube sample was received on November 08, 2013. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Initial Calibration	%RSD</=30% with 2 allowed out up to 40%	VOC list: %RSD</=30% with 2 allowed out up to 40% SVOC list: %RSD</=30% with 2 allowed out up to 40%
Daily Calibration	%D for each target compound within +/-30%.	Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene within +/-40%D
Audit Accuracy	70-130%	Second source recovery limits for Fluorene, Phenanthrene, Anthracene, Fluoranthene, and Pyrene = 60-140%.
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 0.0600 L was used to convert ng to ug/m3 for the associated Lab Blank.

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, LOD, or MDL value. See data page for project specific U-flag definition.

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

eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SSVP-1

Lab ID#: 1311144-01A

No Detections Were Found.

eurofins | Air Toxics

Client Sample ID: SSVP-1

Lab ID#: 1311144-01A

EPA METHOD TO-17

File Name:	**f110814**	**Date of Extraction: NA**	**Date of Collection: 11/7/13 11:35:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 11/8/13 08:14 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	71	50-150
Toluene-d8	62	50-150
Naphthalene-d8	59	50-150

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1311144-02A

EPA METHOD TO-17

File Name:	**f110809**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 11/8/13 04:12 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	8.3	Not Detected	Not Detected

Air Sample Volume(L): 0.0600

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	50-150
Toluene-d8	103	50-150
Naphthalene-d8	114	50-150

eurofins | Air Toxics

Client Sample ID: CCV
Lab ID#: 1311144-03A
EPA METHOD TO-17

File Name:	**f110802**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 11/8/13 11:19 AM**

Compound	%Recovery
Naphthalene	93

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	50-150
Toluene-d8	91	50-150
Naphthalene-d8	84	50-150

eurofins | Air Toxics

Client Sample ID: LCS
Lab ID#: 1311144-04A
EPA METHOD TO-17

File Name:	**f110803**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 11/8/13 12:00 PM**

Compound	%Recovery	Method Limits
Naphthalene	90	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	50-150
Toluene-d8	88	50-150
Naphthalene-d8	80	50-150

eurofins | Air Toxics

Client Sample ID: LCSD
Lab ID#: 1311144-04AA
EPA METHOD TO-17

File Name:	**f110804**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 11/8/13 12:42 PM**

Compound	%Recovery	Method Limits
Naphthalene	90	70-130

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	50-150
Toluene-d8	87	50-150
Naphthalene-d8	80	50-150

TO-17 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
(916) 985-1000 FAX (916) 985-1020

Page ____ of ____

Project Manager Brian Silva

Collected by: (Print and Sign) Ben Summerset

Company CRA Email bsilva@craworld.com

Address 10969 Trade Center Dr. City Rancho Cordova State CA Zip 95670

Phone 916-889-8908 Fax

Project Info:
P.O. #
Project # 311954
Project Name Chevron 209339

Turn Around Time:
☒ Normal
☐ Rush
specify

Reporting Units:
☐ ppmv
☐ ppbv
☐ µg/m3
☐ mg/m3

Lab I.D.	Field Sample I.D. (Location)	Engraved or Stamped Tube #	Date of Collection (mm/dd/yy)	Start Time (hr : min)	End Time (hr : min)	Pre-Test Flow Rate	Post-Test Flow Rate	Volume	Indoor/Outdoor % RH	Indoor/Outdoor Temp	Indoor Air	Outdoor Air	Soil Vapor	Other ( )
01A	SSVP-1	60143451	11/07/13	11:35	11:35	—	—	60cc			☐	☐	☒	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐
											☐	☐	☐	☐

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	11-8-13/1118	[signature] HTL	11/08/13 1135
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
Please analyze for Naphthalene by TO-17

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	HTL		6.0°C	good	Yes No (None)	1311144

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

REVISED

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

November 20, 2013

Project: 209339

Submittal Date: 10/31/2013
Group Number: 1430502
PO Number: 0015118372
Release Number: SHRILL HOPKINS
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
SB5-S-2.5-131030 Grab Soil	7258946
SB5-S-5-131030 Grab Soil	7258947

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	Chevron	Attn: CRA EDD
ELECTRONIC COPY TO	CRA	Attn: Brian Silva
ELECTRONIC COPY TO	CRA	Attn: Mohamed Ibrahim

Respectfully Submitted,

Natalie R. Luciano
Senior Specialist

(717) 556-7258

REVISED

Sample Description: SB5-S-2.5-131030 Grab Soil
Facility# 209339 CRAW
5940 College Ave-Oakland T06019752694 SB5

LL Sample # SW 7258946
LL Group # 1430502
Account # 10880

Project Name: 209339

Collected: 10/30/2013 08:55 by CA

Submitted: 10/31/2013 09:15
Reported: 11/20/2013 16:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SB501

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1
10237	Toluene	108-88-3	N.D.	0.001	0.005	1
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	0.017	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1.0	1.0	26.12
	The container for the volatile soil preparation was submitted with headspace.					
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX/MTBE 8260 Soil	SW-846 8260B	1	B133151AA	11/12/2013 03:52	Christopher G Torres	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 23:02	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201331033054	11/06/2013 23:02	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 21:16	Mitchell R Washel	n.a.
10724	PAH's 8270C Soil	SW-846 8270C	1	13306SLE026	11/05/2013 17:47	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	13306SLE026	11/04/2013 09:15	Katheryne V Sponheimer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13311A16A	11/07/2013 23:29	Laura M Krieger	26.12
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 21:17	Mitchell R Washel	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	133140027A	11/13/2013 11:18	Glorines Suarez-Rivera	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SB5-S-2.5-131030 Grab Soil
Facility# 209339 CRAW
5940 College Ave-Oakland T06019752694 SB5

LL Sample # SW 7258946
LL Group # 1430502
Account # 10880

Project Name: 209339

Collected: 10/30/2013 08:55 by CA

Submitted: 10/31/2013 09:15
Reported: 11/20/2013 16:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SB501

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10942	Microwave Extraction-DRO soils	SW-846 3546	1	133140027A	11/12/2013 09:45	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SB5-S-5-131030 Grab Soil
Facility# 209339 CRAW
5940 College Ave-Oakland T06019752694 SB5

LL Sample # SW 7258947
LL Group # 1430502
Account # 10880

Project Name: 209339

Collected: 10/30/2013 09:10 by CA

Submitted: 10/31/2013 09:15
Reported: 11/20/2013 16:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SB502

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	**mg/kg**	
10237	Benzene	71-43-2	N.D.	0.0005	0.005	1.05
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.05
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.05
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.05
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.05
GC/MS Semivolatiles	**SW-846 8270C**		**mg/kg**	**mg/kg**	**mg/kg**	
10724	Naphthalene	91-20-3	N.D.	0.003	0.017	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	1	1	24.83
	The container for the volatile soil preparation was submitted with headspace.					
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	12	1

General Sample Comments

CA ELAP Lab Certification No. 2792; CA NELAP Lab Certification No. 10276CA

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX/MTBE 8260 Soil	SW-846 8260B	1	B133151AA	11/12/2013 04:14	Christopher G Torres	1.05
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 23:02	Mitchell R Washel	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201331033054	11/06/2013 23:02	Mitchell R Washel	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 21:24	Mitchell R Washel	n.a.
10724	PAH's 8270C Soil	SW-846 8270C	1	13306SLE026	11/05/2013 18:13	Joseph M Gambler	1
10814	BNA Soil Microwave PAH	SW-846 3546	1	13306SLE026	11/04/2013 09:15	Katheryne V Sponheimer	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13311A16A	11/08/2013 00:07	Laura M Krieger	24.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201331033054	11/06/2013 21:25	Mitchell R Washel	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	133140027A	11/13/2013 11:40	Glorines Suarez-Rivera	1

*=This limit was used in the evaluation of the final result

REVISED

Sample Description: SB5-S-5-131030 Grab Soil
Facility# 209339 CRAW
5940 College Ave-Oakland T06019752694 SB5

LL Sample # SW 7258947
LL Group # 1430502
Account # 10880

Project Name: 209339

Collected: 10/30/2013 09:10 by CA

Submitted: 10/31/2013 09:15
Reported: 11/20/2013 16:43

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

SB502

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10942	Microwave Extraction-DRO soils	SW-846 3546	1	133140027A	11/12/2013 09:45	Katheryne V Sponheimer	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1430502
Reported: 11/20/13 at 04:43 PM

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL**	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: B133151AA	Sample number(s): 7258946-7258947								
Benzene	N.D.	0.0005	0.005	mg/kg	87	91	80-120	4	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	83	88	80-120	6	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	94	96	69-126	3	30
Toluene	N.D.	0.001	0.005	mg/kg	84	90	80-120	6	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	85	91	80-120	7	30
Batch number: 13306SLE026	Sample number(s): 7258946-7258947								
Naphthalene	N.D.	0.003	0.017	mg/kg	99		77-115		
Batch number: 13311A16A	Sample number(s): 7258946-7258947								
TPH-GRO N. CA soil C6-C12	N.D.	1.0	1.0	mg/kg	96	103	67-119	6	30
Batch number: 133140027A	Sample number(s): 7258946-7258947								
TPH-DRO soil C10-C28 microwave	N.D.	4.0	12	mg/kg	97		76-120		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: B133151AA	Sample number(s): 7258946-7258947 BKG: 7258946								
Benzene						N.D.	N.D.	0 (1)	30
Ethylbenzene						N.D.	N.D.	0 (1)	30
Methyl Tertiary Butyl Ether						N.D.	N.D.	0 (1)	30
Toluene						N.D.	N.D.	0 (1)	30
Xylene (Total)						N.D.	N.D.	0 (1)	30
Batch number: 13306SLE026	Sample number(s): 7258946-7258947 UNSPK: P256006								
Naphthalene	93	96	44-142	3	30				
Batch number: 133140027A	Sample number(s): 7258946-7258947 UNSPK: 7258946 BKG: 7258946								
TPH-DRO soil C10-C28 microwave	90		35-129			N.D.	N.D.	0 (1)	20

Surrogate Quality Control

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1430502
Reported: 11/20/13 at 04:43 PM

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: B133151AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7258946	105	105	95	90
7258947	106	110	95	93
Blank	101	99	97	96
DUP	105	104	96	89
LCS	101	103	97	103
LCSD	97	99	98	101
Limits:	50-141	54-135	52-141	50-131

Analysis Name: PAH's 8270C Soil
Batch number: 13306SLE026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
7258946	85	93	100
7258947	83	93	97
Blank	95	101	107
LCS	92	100	101
MS	87	91	94
MSD	90	95	93
Limits:	60-120	69-120	66-137

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 13311A16A

	Trifluorotoluene-F
7258946	95
7258947	92
Blank	105
LCS	98
LCSD	104
Limits:	50-142

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 133140027A

	Orthoterphenyl
7258946	87
7258947	78
Blank	99
DUP	87
LCS	95
MS	89
Limits:	52-136

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco Group Number: 1430502
Reported: 11/20/13 at 04:43 PM

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

CHAIN OF CUSTODY RECORD

COC NO.:

5900 Hollis Street, Suite A, Emeryville, CA 94608
PHONE (510) 420-0070: FAX (510) 420-9170

10880/430502/7258946-50

PAGE 1 OF 1

CONESTOGA-ROVERS & ASSOCIATES

Project No: 311954 / Phase/Task Code:	Laboratory Name: Lancaster	Lab Location: Lancaster, PA	SSOW No:
Project Name: Former Chevron 209339	Lab Contact:	Lab Quote No.:	Cooler No.: 1/2
Project Location: 5940 College Ave Oakland, CA			Carrier: UPS
Chemistry Contact:			Airbill No:
Sampler(s): Charley Austin			Date Shipped: 10/30/13

Item	Sample I.D. No. (Containers for each sample may be combined on one line)	Date mm/dd	Time hh:mm	Sample Type: Grab	Sample Type: Composite	Matrix Code *	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	Other:	Analysis Requested: Naphthalene (8270)	MS/MSD Request	Comments / Special Instructions / Conditions Of Receipt
1	311954-103013-SB5 (2.5)	10/30/13	0855	X		SO	1					X		* contact mibrahim@cramtd.com with any questions
2	311954-103013-SB5 (5)	10/30/13	0910	X		SO	1					X		
3														
4														
5														
6														
7														
8														
9														
10														

TAT Required (BD): ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Weeks ☑ Other: Standard

Lab Deliverables (Select): ☐ Summary ☐ Expanded ☐ Other: ☐ See SSOW

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. Charley Austin	CRA	10/30/13	1630	1.			
2.				2.			
3.				3.	ELLE	10/31/13	0915

*Matrix Codes: WG-Groundwater, WS-Surface water, WL-Leachate Water, WW-Waste Water, SL-Sludge, SO-Soil, SE-Sediment, CC-Concrete, AA-Ambient Air

Distribution: WHITE – Fully Executed Copy YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm	**ng**	nanogram(s)
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
µg	microgram(s)	**mg**	milligram(s)
mL	milliliter(s)	**L**	liter(s)
m3	cubic meter(s)	**µL**	microliter(s)
		pg/L	picogram/liter

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Data Qualifiers:

C – result confirmed by reanalysis.

J - estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	**B**	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	**E**	Estimated due to interference
C	Pesticide result confirmed by GC/MS	**M**	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	**N**	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	**S**	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	**U**	Compound was not detected
P	Concentration difference between primary and confirmation columns >25%	**W**	Post digestion spike out of control limits
U	Compound was not detected	*****	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	**+**	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR part 136 Table II as “analyze immediately” are not performed within 15 minutes.

Attachment E

Building Survey

APPENDIX L - BUILDING SURVEY FORM

Preparer's Name: Ben Summerset Date/Time Prepared: 11-7-13/ 1100
Affiliation: CRA Phone Number: 916-889-8926

Occupant Information

Occupant Name: mirna Interviewed: ☒ Yes ☐ No
Mailing Address: Cartridge World - 5940 College Ave, Oakland, CA
City: Oakland State: CA Zip Code:
Phone: 510-428-9500 Email:

Owner/Landlord Information (Check if same as occupant ☐)

Occupant Name: ~~AA~~ Donald Sweet Interviewed: ☐ Yes ☒ No
Mailing Address: SF Property Management Co, Inc 155 Jefferson st, Ste #4
City: San Francisco State: CA Zip Code: 94133
Phone: 415-885-5304 Email: dsi001@SFpmweb.com

Building Type (Check appropriate boxes)

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

Building Characteristics

Approximate Building Age (years): 35 Number of Stories: 2
Approximate Building Area (square feet): ~15,000 including parking garage Number of Elevators: 1

Foundation Type (Check appropriate boxes)

☒ Slab-on-Grade ☐ Crawl Space ☐ Basement

Basement Characteristics (Check appropriate boxes)

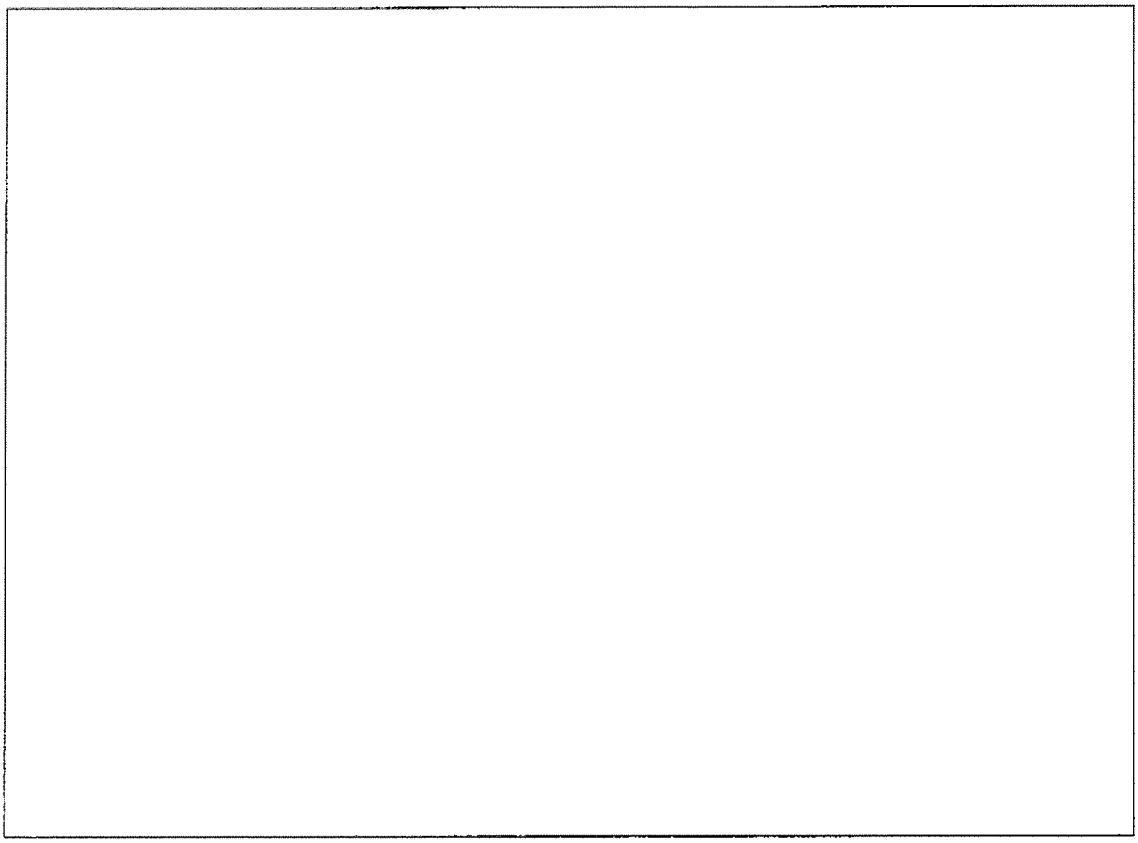
☐ Dirt Floor ☐ Sealed ☐ Wet Surfaces ☒ Sump Pump ☐ Concrete Cracks ☐ Floor Drains

Factors Influencing Indoor Air Quality

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

Sampling Locations

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



Primary Type of Energy Used (Check appropriate boxes)

☒ Natural Gas ☐ Fuel Oil ☐ Propane ☑ Electricity ☐ Wood ☐ Kerosene

Meteorological Conditions

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

Sunny 60°F

General Comments

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

Ambient air samples collected in a printer cartridge store. Print cartridges are refilled in this store, many open containers containing refill ink.

APPENDIX M – BUILDING SCREENING FORM

Occupant of Building Cartridge World

Address 5940 College Avenue

City Oakland, CA

Field Investigator Ben Summersett Date November 7, 2013

Field Instrument Reading	Measurement Location (Ambient Air, Foundation Opening, or Consumer Product)	If Consumer Product, Potential Volatile Ingredients
	Sharpie markers	
	Marks-A-Lot perminent markers	
	AA batteries	
	ink cartridges	
	Laser cartridges	
	ink containers (open)	
	Printers	
	Simple Green	
	Ajax powdered bleach	
	Soft soap (hand soap)	

Comments:
This is an ink filling store, There are several open containers of refill ink present,

Attachment F

Field Documents

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: SSP-1 **Date:** 11-7-13

Job/Site Name: Chevron 209339 **Technician:** Ben S.

Project No. 311954 **PM:** Brian S.

Site Address: 5940 College Ave, Oakland, CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1007	23	in Hg	
1017	23	in Hg	Passed

Purge Volume

Calculated Purge Volume: 0.02 Liter (11 seconds @ 100 ml/min)

Time	Flow	Volume	PID Reading
1023	100 ml/min	0.02	N/A

Sample Collection

Flow Control Orifice Setting: 100 ml/min Summa Canister ID: 14126

Summa Canister Size: 6 Liters Analysis: see coc

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1625	30	1124	6

Notes: Pre test = 30

~ 10"Hg

Tube # G0143451-TO-17 @ 1135

\\Rac-s1\shared\Field Forms\[Soil Vapor Sampling Form.xls]SV form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: SSVP-2 **Date:** 11-7-13

Job/Site Name: 209339 Chevron **Technician:** Ben S.

Project No. 311954 **PM:** Brian S.

Site Address: 5946 College Ave, Oakland CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1207	9	in Hg	
1217	9	in Hg	Passed test

Purge Volume

Calculated Purge Volume: 0.02 Liters 11 seconds

Time	Flow	Volume	PID Reading
1301	100 ml/min	0.02	N/A

Sample Collection

Flow Control Orifice Setting: 100 ml/min Summa Canister ID: 31133

Summa Canister Size: 6 Liter Analysis: see COC

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1306	30	1450	7

Notes: 10% He

Dup-1 - can # 34434

\\Rac-s1\shared\Field Forms\[Soil Vapor Sampling Form.xls]SV form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: Ambient-background **Date:** 11-7-13

Job/Site Name: 209339 chevron **Technician:** Ben S,

Project No. 311954 **PM:** Brian S,

Site Address: 5940 College Ave, Oakland CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading

Sample Collection

Flow Control Orifice Setting: 111.5 ml/min Summa Canister ID: 1555

Summa Canister Size: 6 Liter Analysis: see COC

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
930	30	1535	5

Notes:

\\Rac-s1\shared\Field Forms\[Soil Vapor Sampling Form.xls]SV form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: Ambient - showroom **Date:** 11-7-13

Job/Site Name: 209339 chevron **Technician:** Ben S.

Project No. 311954 **PM:** Brian S.

Site Address: 5940 College Ave, Oakland CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading

Sample Collection

Flow Control Orifice Setting: 11.5 m/min Summa Canister ID: 4231

Summa Canister Size: 6 L Analysis: See COC

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
930	30	1702	5.5

Notes:

\\Rac-s1\shared\Field Forms\[Soil Vapor Sampling Form.xls]SV form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: Ambient-outside **Date:** 11-7-13

Job/Site Name: 209329 Chevron **Technician:** Ben S.

Project No. 311954 **PM:** Brian Silva

Site Address: 5940 College Ave, Oakland CA

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments

Purge Volume

Calculated Purge Volume: ~~0.02 Liters - Purge for 11 seconds @ 100 ml/min~~

Time	Flow	Volume	PID Reading

Sample Collection

Flow Control Orifice Setting: 11.5 ml/min Summa Canister ID: 34737

Summa Canister Size: 6L Analysis: See COC

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
906	29	1708	5.5

Notes:

\\Rac-s1\shared\Field Forms\[Soil Vapor Sampling Form.xls]SV form