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By Alameda County Environmental Health at 2:42 pm, Jan 03, 2014



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December 20, 2013

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

Re: Former Chevron Service Station 95607
5269 Crow Canyon Road
Castro Valley, CA
ACEH Case #RO 0350

I have reviewed the Subsurface Investigation Report.

I agree with the conclusions and recommendations presented in the referenced report. This information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Conestoga Rovers Associates, upon who 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,

A handwritten signature in black ink, appearing to read "E. Hetrick".

Eric Hetrick
Project Manager

Attachment: Subsurface Investigation Report Transmittal



SUBSURFACE INVESTIGATION REPORT

**FORMER CHEVRON STATION 95607
5269 CROW CANYON ROAD
CASTRO VALLEY, CALIFORNIA
FUEL LEAK CASE RO0350**

Prepared For:

**Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, California 94502**

**Prepared by:
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DECEMBER 20, 2013

REF. NO. 311950 (26)

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SUBSURFACE INVESTIGATION REPORT

FORMER CHEVRON STATION 95607
5269 CROW CANYON ROAD
CASTRO VALLEY, CALIFORNIA
FUEL LEAK CASE RO0350

A handwritten signature in black ink, appearing to read "Judy Gilbert".

Judy Gilbert



N. Scott MacLeod, PG 5747

Prepared by:
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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this Subsurface Investigation Report on behalf of Chevron Environmental Management Company (Chevron) summarizing the soil vapor investigation conducted at former Chevron Station 95607 located at 5269 Crow Canyon Road in Castro Valley, CA (Figure 1). The investigation was conducted in accordance with CRA's *Work Plan for Soil Vapor Investigation*, dated August 21, 2013, which was conditionally approved in an email dated September 6, 2013. In an email dated October 2, 2013, Alameda County Environmental Health Services (ACEH) approved CRA's request for an extension from October 30, 2013 to December 20, 2013, for submitting the report. Copies of these email correspondences are included in Appendix A. The site description and background, an investigation summary, soil and soil vapor sample analytical results, and conclusions and recommendations are presented below.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 SITE HISTORY

The site is a former Chevron service station, currently occupied by an automotive repair shop, located on the southeast corner of Waterford Place and Crow Canyon Road in Castro Valley, California (Figure 1). A used-oil underground storage tank (UST), owned by the current property owner, is located on the west side of the repair shop. The former station facilities consisted of a station building, three gasoline USTs and two dispenser islands under one canopy (Figure 2). The USTS and dispensers were removed in 1990. Surrounding properties consist of residential properties to the south, west and east, and undeveloped hillside property to the north.

2.2 SITE GEOLOGY AND HYDROGEOLOGY

The site lies within the Northern Coast Range geomorphic province at an elevation of approximately 285 feet above mean sea level (ft-amsl). Lithology beneath the site is mapped as Miocene age sandstone, shale, siltstone, conglomerate, and breccia. Soil encountered beneath the site is characterized as interbedded clay, silt, silty sand, and clayey sand to the maximum depth explored of 55 feet below grade (fbg). Bedrock is encountered beneath the site at depths ranging from approximately 30 to 55 fbg.

The site is located in the Castro Valley Groundwater Basin (California Department of Water Resources, Bulletin 118 2004). The San Francisco Bay Regional Water Quality Control Board (RWQCB-SF) Basin Plan considers groundwater in this basin a potential resource for municipal, industrial process, and agricultural water usage.

The nearest surface water bodies are Crow Creek located approximately 380 feet southwest (downgradient) of the site, and Cull Canyon Lake located approximately 2,245 feet northwest (crossgradient) of the site. Depth to groundwater has historically ranged between approximately 0.5 and 34 fbg. Groundwater flow direction is to the west-southwest toward Crow Creek.

3.0 SUBSURFACE INVESTIGATION

According to the State Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank Case Closure Policy (LTCP) Title 23, 2923 (OAL File No. 2012-0618-02 S) adopted on May 1, 2012 and effective as of August 17, 2012, one of the media specific criteria is related to petroleum vapor intrusion to indoor air, and another is related to direct contact and outdoor air exposure by petroleum hydrocarbons. The objective of this investigation was to collect soil vapor and shallow soil samples to evaluate the conditions at the site against these criteria.

Soil Boring and Vapor Probe Installation Dates

Soil boring and vapor probe installation occurred on September 10 through 13, 2013.

Drilling Company

Cascade Drilling of Richmond, California (C57 License No. 938110) was contracted to complete the soil borings and soil vapor probes.

CRA Personnel

CRA personnel Belew Yifru, Oliver Yang, and Jason Hills conducted the fieldwork and sampling under the supervision of California Professional Geologist Brandon S. Wilken, PG 7564.

Geophysical Survey

Prior to drilling, CRA contacted Underground Service Alert to mark existing underground utilities servicing the site. Additionally, on August 28 and September 5, 2013, private utility locator, NORCAL Geophysical of Cotati, California, conducted a geophysical survey for underground utilities in the areas of the proposed boring locations using a metal detector, tracer cable, and ground penetrating radar

equipment. Results of the geophysical survey were used to modify the soil boring locations, as necessary.

3.1 SOIL BORINGS AND SAMPLING

The locations of vapor probes VP-1 through VP-10 are shown on Figure 2. Vapor probes VP-1 through VP-6 are located onsite; VP-7 through VP-10 are located offsite on the adjoining townhouse property. A summary of the soil boring and vapor probe installation activities are presented below.

Permit

CRA obtained Alameda County Public Works Agency permits No. W2013-0743 and W2013-0744 (Appendix B) authorizing the soil boring activities.

Drilling Method and Soil Sampling

Using 3-inch outside diameter hand augers, soil borings were advanced up to 12 fbg at each onsite location, with the exception of VP-4, which was completed to 5.5 fbg. Offsite locations were advanced to approximately 7 fbg, due to lower surface elevation and shallower groundwater offsite.

Undisturbed soil samples were collected for chemical analysis and physical parameter tests using a slide hammer and stainless steel sleeves. CRA geologists continuously logged soils using the ASTM D2488-06 Unified Soil Classification System. Soils were field-screened for volatile organic compounds using a photo-ionization detector. At the onsite vapor probe locations (except at VP-4, where refusal was met at 6 fbg), undisturbed soil samples were collected at 3.5 fbg, 5 fbg, 7 fbg, and 11.5 fbg. Soil samples were collected from VP-4 at 3.5 and 5 fbg. At the offsite locations, samples were collected at 3.5 fbg, 5 fbg, and 7 fbg. The samples, collected in a steam-cleaned liner, were sealed with Teflon® sheets, capped, labeled, logged on a chain-of-custody form, placed on ice, and transported to Eurofins Lancaster Laboratories (Lancaster) of Lancaster, Pennsylvania, a Chevron and State-approved laboratory, for analysis.

Four undisturbed soil samples, two from onsite boring VP-1 and two from offsite boring VP-9 were also collected to test for specific gravity and moisture content. The samples were collected either directly above or below the soil vapor probe screened intervals at each vapor probe location. These samples were collected to provide site specific data in case a more robust soil vapor risk assessment is needed. The samples were sealed, capped, labeled, logged on a chain-of-custody form, and transported to Cooper Testing Laboratories in Palo Alto, California for analysis.

3.2

VAPOR PROBE INSTALLATION AND SAMPLING

Vapor probes were constructed of a permeable stainless steel filter with a ¼-inch push-to-connect fitting connected to ¼-inch outside diameter Teflon®. Nested soil vapor probes were installed in each boring with the exception of VP-4. The nested vapor probes were installed so that at least one probe at each location was completed at least 5 feet below the bottom of the building foundation. The onsite and offsite buildings are slab-on-grade; therefore, CRA installed the shallow probes at each onsite location at 7 fbg and the deeper probes at 12 fbg. CRA met refusal at 6 fbg at VP-4; therefore, a single probe was installed at 5.5 fbg. The offsite probes were installed at 3.5 and 7 fbg. Each probe was surrounded by a 12-inch sand pack consisting of #2/12 sand. Above the sand pack, 12 inches of dry granulated bentonite was topped with at least 12 inches of hydrated granular bentonite. Each probe was separated from the others by a grout mixture. The probe tubing was labeled and capped, and a sealed, traffic-rated well vault was installed flush to grade. The boring logs and probe installation diagrams are included as Appendix C.

Soil Vapor Sampling Protocol

Vapor samples were collected on September 16 through 18, 2013, more than 48 hours after the installation of the probes. CRA used 100 percent laboratory certified 1-liter Summa™ canisters to collect vapor samples for analyses by TO-15 method and 100 percent laboratory certified Sorbent Tubes and a syringe assembly to collect samples for analyses by TO-17 method. For the TO-15 method, prior to collecting samples, 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 for at least 10 minutes to ensure the vacuum remained stable over time. The shut-in test reduces the potential for ambient air to dilute the soil vapor samples. Once the sampling train passed the “shut in” test, it was connected to the probe tubing. Using the same flow rate as is used during sampling; approximately three purge volumes were purged from the sampling tubing using the purge Summa™ canister before sample collection began. The vacuum of the sample Summa™ canister was used to draw the soil vapor through the flow controller until a negative pressure of approximately 5 inches of mercury was observed on the vacuum gauge.

In accordance with the Department of Toxic Substances Control (DTSC) *Advisory* –

Active Soil Gas Investigation guidance document, dated April 2012, 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 50 percent helium and quantified using a helium meter. A minimum of 10 percent helium is needed inside the shroud during sampling for leak detection. After samples were collected, the Summa™ canisters final pressure was measured, capped, packaged and sent to Eurofins Air Toxics Laboratory (ATL) in Folsom, California under chain-of-custody for analysis.

Vapor samples collected for TO-17 analysis (for naphthalene) were collected immediately after the Summa™ canisters were disconnected. A leak test was performed on the syringe assembly prior to connecting the sampling equipment to the vapor tubing. The test was performed by inserting the sorbent tube into the tube holder on the 60 cubic centimeter (cc) syringe assembly, turning the valve into the 'off' position, and pulling the plunger of the syringe. If the plunger does not move or immediately returns to the starting position, the system is leak tight and is ready for sampling. Approximately 200 cc of vapor sample was collected by pulling and purging the syringe three times to 60 cc and one time to 20 cc. After each sample was collected, the sorbent tube was removed from both the syringe and the probe tubing ends and immediately re-capped. The sample ID, the tube number, and sample volume were recorded and the tubes were wrapped in aluminum foil, put on ice and sent to ATL under chain-of-custody for analysis.

3.3 SOIL ANALYTICAL DATA EVALUATION

Soil samples were analyzed for:

- Total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) Method 8015B modified
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) methyl tertiary-butyl ether (MTBE) and naphthalene by EPA Method 8260B.
- Soil samples from VP-1 at 6.5 fbg and 11.5fbg and from VP-9 at 5 fbg and 7 fbg were collected and analyzed for specific gravity and moisture content by API RP 40/ASTM D2216.

Chemical Analyses Results

The soil analytical laboratory report is included as Appendix D and soil analytical data are summarized in Table 1. Petroleum hydrocarbons were detected in soil collected at

onsite vapor probes VP-3 and VP-6. The highest concentrations detected were TPHg at 260 micrograms per kilogram ($\mu\text{g}/\text{kg}$), ethylbenzene at 1.7 $\mu\text{g}/\text{kg}$, xylenes at 0.80 $\mu\text{g}/\text{kg}$, and naphthalene at 5 $\mu\text{g}/\text{kg}$ in VP-6 at 5 fbg. No petroleum hydrocarbons were detected in the soil samples collected from the offsite vapor probe locations.

Results were compared to the LTCP Direct Contact and Outdoor Air Exposure Criteria. None of the soil analytical results exceed the established LTCP criteria (Table 1).

Physical Analyses Results

Moisture content in the 6.5 and 11.5 foot samples collected from VP-1 were 8.1 and 15.4 percent moisture; and of the 5 and 7 foot samples collected from VP-9 were 8.3 and 15.2 percent moisture. The deeper samples collected at each location were analyzed for specific gravity. The specific gravity of the samples at 20° C was 2.728 (VP-9) and 2.720 (VP-1). The soil physical parameter analytical laboratory results are included on Table 1 and the report is included in Appendix E.

3.4 SOIL VAPOR ANALYTICAL DATA EVALUATION

Soil vapor samples were analyzed for:

- TPHg, BTEX, MTBE and naphthalene by EPA Method TO-15
- Naphthalene by EPA Method TO-17
- Oxygen (O₂), carbon dioxide (CO₂), nitrogen (N₂), methane (CH₄), and helium by ASTM D-1946 (GC/TCD)
- Air phase hydrocarbon (APH) fractions (Sp) aromatics C₈-C₁₂ by modified TO-15 GC/MS Full Scan
- APH fractions (Sp) aliphatics C₅-C₁₂ by modified TO-15 GC/MS Full Scan.

Chemical Analyses Results

Soil vapor analytical laboratory reports are included in Appendix F and soil vapor analytical data are summarized in Tables 2 and 3. Soil vapor analytical data were compared to the LTCP petroleum vapor intrusion to indoor air criteria. Laboratory results indicate the following:

- Volatile petroleum hydrocarbons were detected at various concentrations at each location except for VP-1 and VP-4. The maximum concentrations were detected in onsite locations VP-3 and VP-6. TPHg was detected at a maximum concentration of 28,000,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) in VP-6 at 7 fbg.

- Due to the high concentrations of TPHg detected in the samples collected from VP-3 and VP-6, the method detection limits for the other petroleum hydrocarbons in these samples were also high and in some cases were above the LTCP soil gas commercial and residential criteria.
- Benzene was not detected at concentrations above either LTCP criteria in any of the samples. However, the method detection limits for three of the four samples collected at VP-3 and VP-6 ranged from 1,200 to 4,100 µg/m³, which is above both LTCP criteria.
- Ethylbenzene was detected at a maximum concentration of 81,000 µg/m³ in VP-6 at 7 fbg, which is above both LTCP criteria. Samples from other locations did not have ethylbenzene at concentrations above either LTCP criteria.
- The maximum concentration of naphthalene detected was 30 µg/m³ by TO-15 in VP-2 at 7 fbg, which is below both LTCP criteria and 1,900 µg/m³ by TO-17 at VP-6 at 7 fbg, which is above both LTCP criteria. The concentration was noted by the lab as exceeding the instrument calibration range. Naphthalene was detected in the duplicate sample (VP-6-7DUP) at 110 µg/m³. Naphthalene was not detected above either the LTCP criteria in the remaining samples by either analysis.
- Aliphatic (non-carcinogenic) hydrocarbons were detected in all locations with the exception of VP-1 and VP-4. The maximum concentrations were detected in the sample collected from VP-6.
- Aromatic (carcinogenic) hydrocarbons were detected in samples collected from VP-6, VP-9, and VP-10 with the maximum concentrations detected in the sample collected from VP-6.
- Helium was detected at 11 percent by volume in the sample collected from VP-9 at 7 fbg, indicating that ambient air may have been introduced to the soil gas sample during the collection process. Helium was detected at acceptable concentrations in the samples from the 3.5 fbg probe at the same location.

4.0 WASTE DISPOSAL

Waste soil generated during vapor probe installation activities were stored in sealed and labeled Department of Transportation approved 55-gallon drums. The waste generated was transported for offsite disposal on October 10, 2013 by Clean Harbors, LLC at their facility in San Jose, California.

5.0 CONCLUSIONS AND RECOMMENDATIONS

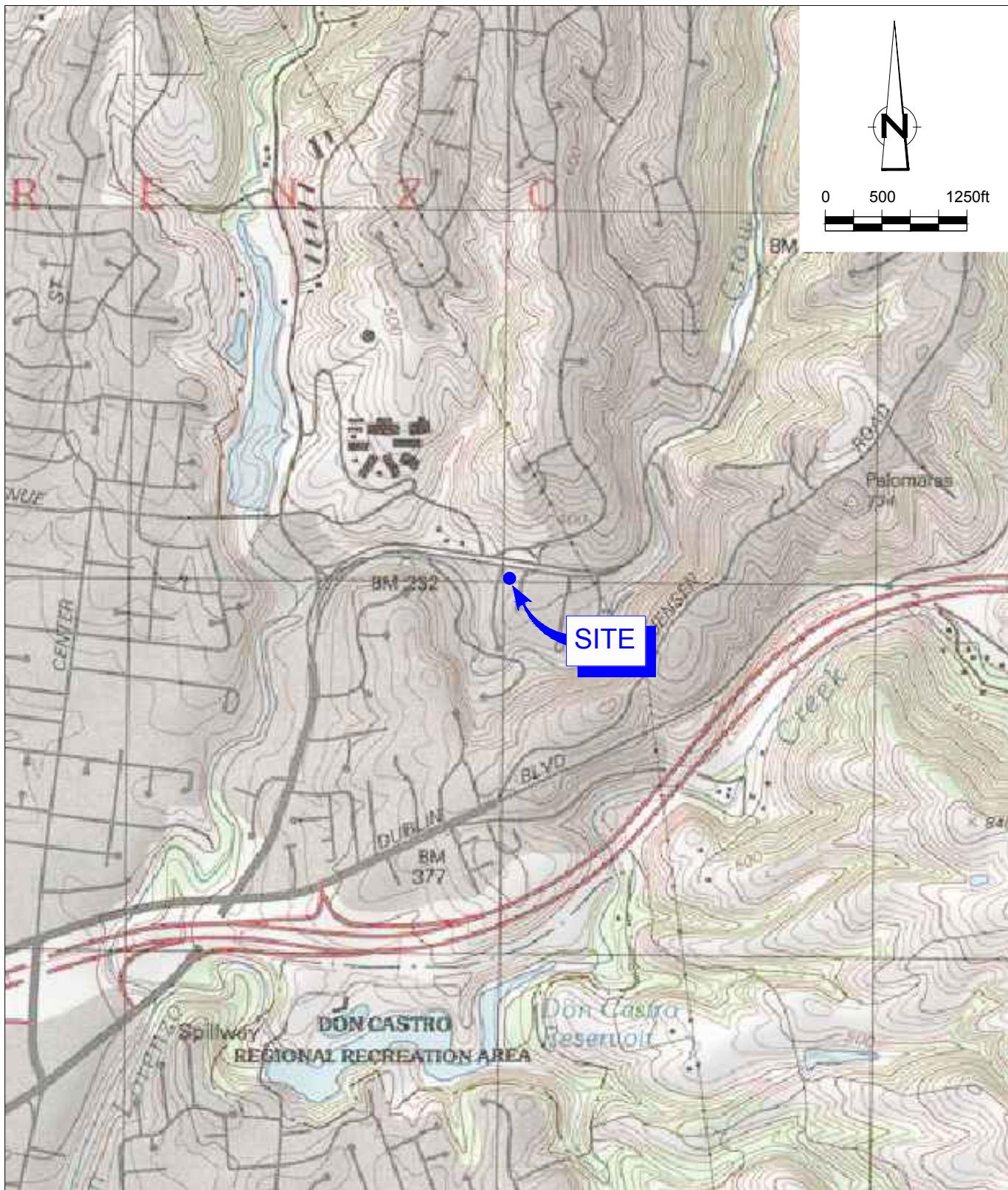
Elevated concentrations of petroleum hydrocarbons were detected in soil samples collected from boring locations VP-3 and VP-6. No concentrations exceeded the LTCP Direct Contact and Outdoor Air Exposure Criteria.

Elevated concentrations of petroleum hydrocarbons in soil vapor were detected in samples collected from VP-3 and VP-6. The LTCP soil gas criterion for ethylbenzene was exceeded at VP-6. Due to elevated concentrations of TPHg in samples from VP-3 and VP-6, the method detection limits for the other analytes were in most cases above the commercial and residential LTCP soil gas criteria at these two locations.

Based on the results on this investigation, CRA recommends the following:

- The installation of two soil vapor extraction (SVE) wells in the vicinity of VP-3 and VP-6. This work was approved by ACEH in a letter dated November 21, 2013. The wells will be installed in December 2013 and connected to the dual phase extraction system which will be installed and started up in early 2014.
- Post remediation vapor sampling from the onsite vapor probes.

FIGURES



SOURCE: TOPO! MAPS.

Figure 1

VICINITY MAP
FORMER CHEVRON STATION 95607
5269 CROW CANYON ROAD
Castro Valley, California





TABLES

TABLE 1

SOIL ANALYTICAL DATA
FORMER CHEVRON SERVICE STATION 95607
5269 CROW CANYON ROAD
CASTRO VALLEY, CALIFORNIA

Sample ID	Date	Depth (ftbg)	TPHg (C6-C12)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Moisture	Specific Gravity
<i>Concentrations in µg/kg</i>											
											in %
<i>LTCP Direct Contact and Outdoor Air Exposure Criteria</i>											
Residential		0-5		1.9		21			9.7		
Residential		5-10		2.8		32			9.7		
Commercial/Industrial		0-5		8.2		89			45		
Commercial/Industrial		5-10		12		134			45		
Utility Worker		0-10		14		314			219		
VP-1	9/17/2013	3.5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-1	9/17/2013	5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-1	9/17/2013	6.5	--	--	--	--	--	--	--		8.1
VP-1	9/17/2013	7	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-1	9/17/2013	11.5	--	--	--	--	--	--	--	15.4	2.720
VP-1	9/17/2013	12	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-2	9/17/2013	3.5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-2	9/17/2013	5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-2	9/17/2013	7	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-2	9/17/2013	12	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-3	9/17/2013	3.5	2.8	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	0.001		
VP-3	9/17/2013	5	< 1.0	< 0.0005	< 0.0009	< 0.0009	< 0.0009	< 0.0005	< 0.0009		
VP-3	9/17/2013	7	1.2	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-3	9/17/2013	12	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-4	9/17/2013	3.5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-4	9/17/2013	5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-5	9/18/2013	3.5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-5	9/18/2013	5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-5	9/18/2013	7	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-5	9/18/2013	12	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-6	9/18/2013	4	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-6	9/18/2013	5	260	< 0.026	< 0.051	1.7	0.80	< 0.026	5.0		
VP-6	9/18/2013	7	31	< 0.024	< 0.048	0.097	< 0.048	< 0.024	0.096		
VP-6	9/18/2013	12	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-7	9/16/2013	3.5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-7	9/16/2013	5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-7	9/16/2013	7	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-8	9/16/2013	3.5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-8	9/16/2013	5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-8	9/16/2013	7	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-9	9/17/2013	3.5	< 1.0	< 0.0005	< 0.0009	< 0.0009	< 0.0009	< 0.0005	< 0.0009		
VP-9	9/17/2013	5	--	--	--	--	--	--	--		8.3
VP-9	9/17/2013	5.5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-9	9/17/2013	6.5	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-9	9/17/2013	7	--	--	--	--	--	--	--	15.2	2.728
VP-10	9/16/2013	3.5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-10	9/16/2013	5	< 1.0	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		
VP-10	9/16/2013	7	< 1	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.001		

Notes:

mg/kg = Milligrams per kilogram.

<x = Indicates chemical not detected at or above reporting limit x.

fbg = Feet below grade.

LTCP = Low Threat Closure Policy

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 8015M.

Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8260B.

Methyl tertiary butyl ether (MTBE) by EPA Method 8260B.

Naphthalene by EPA Method 8260B.

Exceedance of one or more ESL

TABLE 2

Page 1 of 1

**CUMULATIVE SOIL VAPOR ANALYTICAL DATA
FORMER CHEVRON STATION 95607
5269 CROW CANYON ROAD
CASTRO VALLEY, CALIFORNIA**

Sample ID	Date	Depth (f/bg)	TPHg	Ethyl-benzene Total Xylenes ¹ MTBE Naphthalene (TO-17)					Naphthalene (TO-17)	Oxygen	N ₂	CO ₂	Methane	He
				Benzene	Toluene	Reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)	→	→						
LTCP Soil Gas Criteria-Residential														
				<85		<100			<93	<93	--	--	--	--
LTCP Soil Gas Criteria-Commercial														
				<280		<3600			<310	<310	--	--	--	--
VP-1-7	9/17/2013	7	<240	<3.7	<4.4	<5.0	<5.0	<4.2	<24	<2.5	15	77	7.6	<0.00023 <0.12
VP-1-12	9/17/2013	12	<230	<3.6	4.3	<4.9	<5.0	<4.1	<24	<2.5	8.9	76	15	<0.00023 <0.11
VP-1-12DUP	9/17/2013	12	--	--	--	--	--	--	--	<2.5	--	--	--	--
VP-2-7	9/17/2013	7	860	5	8.2	<5.6	<5.6	<4.6	30	<2.5	8.7	76	15	0.0021 <0.13
VP-2-12	9/17/2013	12	3,600	16	57	6.3	32.4	<4.6	<27	<2.5	1.6	79	19	0.37 <0.13
VP-3-7	9/17/2013	7	3,100,000	<1200	<1400	<1600	<1600	<1400	<8000	<2.5	1.9	95	2.4	0.31 <0.11
VP-3-12	9/17/2013	12	710,000	<160	<180	<210	<210	<180	<1000	<2.5	1.4	91	7.1	0.63 <0.12
VP-4-5.5	9/17/2013	5.5	<240	<3.8	<4.5	<5.2	<5.2	<4.3	<25	<2.5	21	79	0.3	<0.00024 <0.12
VP-5-7	9/18/2013	7	6,400	15	18	<5.0	11	<4.2	<24	8.3	4.5	77	18	0.063 <0.12
VP-5-12	9/18/2013	12	20,000	30	37	6.9	29.6	<4.2	<24	<2.5	3.3	74	23	0.13 <0.12
VP-6-7	9/18/2013	7	27,000,000	<2,800	<3,300	81,000	97,000	<3100	<18,000	1900 E	10	80	9.1	0.12 <0.13
VP-6-7DUP	9/18/2013	7	28,000,000	<4,100	<4,900	80,000	97,000	<4600	<27,000	110	11	79	9.1	0.11 <0.13
VP-7-3.5	9/16/2013	3.5	1600	19	15	<5.7	13	<4.7	<27	<2.5	1.9	82	16	0.071 <0.13
VP-7-7	9/16/2013	7	1600	12	17	7.5	38.0	<4.7	<27	<2.5	7.5	87	4	0.046 1.2
VP-8-3.5	9/16/2013	3.5	4400	67	78	17	71	<8.5	<49	24	13	86	0.8	0.0076 <0.12
VP-8-7	9/16/2013	7	2600	62	47	<22	30	<18	<100	4.1	15	81	1.6	0.0044 2.7
VP-9-3.5	9/17/2013	3.5	9700	56	66	60	162	<4.3	27	<2.5	11	87	1.5	0.0048 0.82
VP-9-3.5DUP	9/17/2013	3.5	6900	56	66	9.0	64	<4.3	<25	--	12	86	1.6	0.0049 0.75
VP-9-7	9/17/2013	7	5600	23	55	<9.0	29	<7.5	<43	--	14	69	6.3	0.0031 11
VP-10-3.5	9/16/2013	3.5	2100	48	44	10	46	<4.5	<26	3.0	15	82	3.2	0.00053 <0.13
VP-10-7	9/16/2013	7	41,000	51	130	36	161	<11	<65	2.6	1.7	82	16	0.068 <0.12
Trip Blank		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	0.23	100	<0.010	<0.00010	<0.050
Lab Blank 11A		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	<0.10	<0.5	<0.010	<0.00010	--
Lab Blank 11B		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	--	--	--	--	<0.050
Lab Blank 11C		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	--	--	--	--	<0.050
Lab Blank 12A		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	<0.10	<0.5	<0.010	<0.00010	--
Lab Blank 12B		<100	<1.6	<1.9	<2.2	<2.2	<1.8	<10	--	--	--	--	--	<0.050
Lab Blank 20A		--	--	--	--	--	--	--	<2.5	--	--	--	--	--
Lab Blank 20B		--	--	--	--	--	--	--	<2.5	--	--	--	--	--

Explanations:

1 = Total xylenes obtained by adding results of m,p-Xylene and o-Xylene

fbg = feet below grade

TPHg = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tert-butyl ether

-- = Not analyzed

<n = Not above laboratory reporting limit

 $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

E= Exceeds Instrument Calibration Range

LTCP Soil Gas Criteria = Low Threat Closure Policy, Appendix 4 - Soil Gas Sampling - No Bioattenuation Zone

Bold = Exceeds the LTCP criteria

Benzene, toluene, ethylbenzene, and xylenes (BTEX), Methyl tertiary-butyl ether (MTBE), and Naphthalene analyzed by EPA Method TO-15 GC/MS Full Scan

Naphthalene analyzed by EPA Method TO-17

Helium, oxygen, carbon dioxide (CO₂), methane and nitrogen by ASTM D-1946 unless otherwise noted.

TABLE 3

Page 1 of 1

APH SOIL VAPOR ANALYTICAL DATA
FORMER CHEVRON STATION 95607
5269 CROW CANYON ROAD
CASTRO VALLEY, CALIFORNIA

Location	Date	Depth	>C5-C6		>C6-C8		>C8-C10		>C10-C12		>C8-C10		>C10-C12													
			<i>Aliphatic</i>	<i>Hydrocarbons</i>	<i>Aliphatic</i>	<i>Hydrocarbons</i>	<i>Aliphatic</i>	<i>Hydrocarbons</i>	<i>Aliphatic</i>	<i>Hydrocarbons</i>	<i>Aromatic</i>	<i>Hydrocarbons</i>	<i>Aromatic</i>	<i>Hydrocarbons</i>												
Units		(fbg)	Reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)																							
LTCP Soil Gas Criteria-Residential																										
LTCP Soil Gas Criteria-Commercial																										
VP-1-7	9/17/2013	7	<75		<95		<140		<160		<110		<130													
VP-1-12	9/17/2013	12	<74		<93		<130		<160		<110		<120													
VP-1-12DUP	9/17/2013	12	--		--		--		--		--		--													
VP-2-7	9/17/2013	7	<83		<100		<150		<180		<130		<140													
VP-2-12	9/17/2013	12	<83		280		190		580		<130		<140													
VP-3-7	9/17/2013	7	620,000		1,600,000		<44,000		<53,000		<38,000		<42,000													
VP-3-12	9/17/2013	12	270,000		350,000		<5,600		<6,800		<4,800		<5,300													
VP-4-5.5	9/17/2013	5.5	<78		<98		<140		<170		<120		<130													
VP-5-7	9/18/2013	7	1100		1000		280		770		<110		<130													
VP-5-12	9/18/2013	12	9000		3900		430		1300		<110		<130													
VP-6-7	9/18/2013	7	2,800,000		9,800,000		850,000		1,000,000		900,000		210,000													
VP-6-7DUP	9/18/2013	7	3,000,000		10,000,000		820,000		980,000		860,000		180,000													
VP-7-3.5	9/16/2013	3.5	97		<110		<150		<180		<130		<140													
VP-7-7	9/16/2013	7	<84		<110		<150		<180		<130		<140													
VP-8-3.5	9/16/2013	3.5	450		420		<270		<330		<230		<260													
VP-8-7	9/16/2013	7	<320		<410		<580		<690		<490		<550													
VP-9-3.5	9/17/2013	3.5	1100		960		570		<160		490		<130													
VP-9-3.5DUP	9/17/2013	3.5	1100		850		270		<170		<120		<130													
VP-9-7	9/17/2013	7	210		<170		<240		540		<200		<230													
VP-10-3.5	9/16/2013	3.5	<82		<100		<150		<180		<120		<140													
VP-10-7	9/16/2013	7	330		510		700		19,000		480		<340													
Lab Blank 10A/10B			<32		<41		<58		<70		<49		<55													
Lab Blank 10C/10D			<32		<41		<58		<70		<49		<55													
Lab Blank 10E/10F			<32		<41		<58		<70		<49		<55													
Lab Blank 12A/12B			<32		<41		<58		<70		<49		<55													
Lab Blank 12C/12D			<32		<41		<58		<70		<49		<55													

Notes:

APH = Air Phase Hydrocarbon Fractions analyses by EPA Method TO-15 GC/MS Full Scan.

fbg = Feet below grade.

 $\mu\text{g}/\text{m}^3$ = Micrograms per cubic meter

LTC= Low Threat Closure Policy

NE = Not Established

<x = Not detected above laboratory reporting limit x.

-- = Not analyzed/not applicable.

APPENDIX A
REGULATORY CORRESPONDENCES

From: [Detterman, Mark, Env. Health](#)
To: ["Herrick, Eric G"](#); [Gilbert, Judy](#); [Brasher, Bill](#); [Wilken, Brandon](#)
Cc: [Roe, Dilan, Env. Health](#); [dehloptoxic, Env. Health](#)
Subject: Chevron 9-5607 5269 Crow Canyon Rd, Castro Valley, CA (RO350): Conditional Approval of Work Plan
Date: Friday, September 06, 2013 2:25:34 PM

Erik,

Alameda County Environmental Health (ACEH) has reviewed the *Work Plan for Soil Vapor Investigation*, dated August 30, 2013, submitted by Conestoga-Rovers & Associates (CRA) at the request of ACEH. The work plan was submitted in follow up to the resent submittal of a draft work plan as discussed at an August 21, 2013 meeting regarding the site. The final work plan proposed the installation of nine dual completion soil vapor wells. Six are proposed for onsite locations and four were proposed for offsite locations. The onsite wells were proposed to be installed at a depth of 7 and 12 feet below grade surface (bgs), while offsite wells were proposed for installation at 3.5 and 7 feet bgs due to elevation differences. Vapor samples were proposed to be collected in accordance with DTSC guidelines and Chevron soil vapor protocols. At least three undisturbed shallow soil samples were proposed for collection in the upper 10 feet of the site (two above five feet, and one below five feet), and at least one undisturbed soil sample was proposed to be collected within each screen interval of all soil vapor probes as itemized above.

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. Should an alternative proposal be considered, the methods should be incorporated into a revised work plan. ACEH requests expediency in conducting this work as it is being collected to support Monitored Natural Attenuation and as such is a variance from the approved Corrective Action Plan. We request that you address the following technical comments, perform the proposed work, and send us the report described below. ACEH has already received a 72-hour advance written notification of this work.

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, requests a modification to the approach. Please submit a report by the date specified below.
 - a. Shallow Soil Sample Collection** – The work plan proposes to collect and retain for laboratory analysis at least two undisturbed onsite soil samples from the 0 to 5 foot depth interval in addition to soil samples within each screen interval of each well. Because the majority of the proposed soil samples will be in the 5 to 10 foot depth interval, ACEH requests that sufficient shallow onsite soil samples be collected from the 0 to 5 foot depth interval to characterize each potential source zone (each dispenser island, and the UST excavation edges), in addition to a bias towards signs of contamination (staining, odor, and etc).

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:

- September 27, 2013 – Data Transmittal (tabulated soil and soil vapor analytical, bore and well construction logs, site and vicinity plan, etc.)**
File to be named: RO350_SWI_R_YYYY-MM-DD
- October 28, 2013 – Soil and Groundwater Investigation**
File to be named: RO350_SWI_R_YYYY-MM-DD

Should you have any questions, please contact me at (510) 567-6876 or send me an electronic mail message at mark.detterman@acgov.org. Because I will be out of the office until Wednesday September 4th, please also contact Dilan Roe at (510) 567-6767 or dilan.roe@acgov.org should you have questions in the interim period of time.

cc. Kevin and Julia Hinkley, Kevin Hinkley Service, 5269 Crow Canyon Road, Castro Valley, CA 94552

Geotracker, Electronic File

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>

From: [Detterman, Mark, Env. Health](#)
To: ["Herrick, Eric G"](#); [Brasher, Bill](#); [Gilbert, Judy](#)
Cc: [Roe, Dilan, Env. Health](#)
Subject: Chevron 9-5607 5269 Crow Canyon Rd, Castro Valley, CA (RO350): Report Submittal Extension and Additional Thought
Date: Wednesday, October 02, 2013 1:49:24 PM

Eric et. al,

In followup to the conference call earlier today, I have extended the timeline in Geotracker for the submittal of the report to December 20, 2013; hoping to keep it a bit away from all the holiday festivities. Please use this email to document the extension. Please also know that additional reasonable extensions are possible (but hopefully won't be needed).

We also had the additional thought as we were signing off the call this morning, in regards to the potential use of MNA at the site; one that should factor into your decision making for remedial options at the site. ACEH would not be able to consider MNA at a site without an understanding of the source area location(s), and an estimate of the residual mass that would be needed to estimate a MNA timeline. The LTCP also requires adequate delineation of contamination. The recent work discussed suggests an additional source area at the site; one that has previously been suggested by the consistency of groundwater concentrations over the life of this project. The recent concentration of benzene in wells C-3 and C-6 was each 13,000 ug/l (July 2013). A very similar concentration of benzene has been present in each well as far back as October 1996 (C-3) and September to December 1990 (C-6). Benzene (and other constituents) concentrations have cycled significantly up and down in that time (C-3 down to 32 ug/l benzene and up to LNAPL concentrations; C-6 down to 16.8 and up to 27,000 ug/l benzene). Well C-3 had an approximately 4.5 year period where LNAPL caused it from being sampled during that time. As a rough guide, ACEH interprets this data to indicate that a return to higher contaminant concentrations do remain possible from residual soil mass at the site from the current concentrations. Clearly significant residual mass is present beneath the site that has not been documented or estimated and will factor into MNA estimates.

Hope this helps.

Thanks also for the discussion this morning. It should really help the site progress.
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>

APPENDIX B

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: 09/05/2013 By jamesy

Permit Numbers: W2013-0744
Permits Valid from 09/10/2013 to 09/13/2013

Application Id: 1378342891641
Site Location: 5269 Crow Canyon Road, Castro Valley, CA
Project Start Date: 09/10/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: Castro Valley
Completion Date: 09/13/2013

Applicant: Conestoga-Rovers & Associates - Oliver Yan
5900 Hollis Street, Suite A, Emeryville, CA 94608
Property Owner: EMC Chevron
6101 Bollinger Canyon Road, San Ramon, CA 94583
Client: EMC Chevron
6101 Bollinger Canyon Road, San Ramon, CA 94583
Contact: Oliver Yan

Phone: 510-420-3372
Phone: --
Phone: --
Phone: 510-420-3372
Cell: 916-919-0467

	Receipt Number: WR2013-0336	Total Due:	\$265.00
	Payer Name : Oliver Yan	Total Amount Paid:	\$265.00
		Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 12 Wells

Driller: Cascade Drilling - Lic #: 938110 - Method: Hand

Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0744	09/05/2013	12/09/2013	VP-1A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-1B	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-2A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-2B	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-3A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-3B	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-4A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-4B	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-5A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-5B	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-6A	3.00 in.	0.25 in.	10.50 ft	12.50 ft
W2013-0744	09/05/2013	12/09/2013	VP-6B	3.00 in.	0.25 in.	5.50 ft	7.50 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

Alameda County Public Works Agency - Water Resources Well Permit

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.

Alameda County Public Works Agency - Water Resources Well Permit

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: 09/05/2013 By jamesy

Permit Numbers: W2013-0743
Permits Valid from 09/10/2013 to 09/13/2013

Application Id: 1378343630275
Site Location: 20111 Waterford Place, Castro Valley, CA
Project Start Date: 09/10/2013
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

City of Project Site: Castro Valley
Completion Date: 09/13/2013

Applicant: Conestoga-Rovers & Associates - Olivre Yan
5900 Hollis Street, Suite A, Emeryville, CA 94608
Property Owner: Townhomes Forrest Creek
20111 Waterford Place, Castro Valley, CA 94552
Client: EMC Chevron
6101 Bollinger Canyon Road, San Ramon, CA 94583
Contact: Oliver Yan

Phone: 510-420-3372
Phone: --
Phone: --
Phone: 510-420-3372
Cell: 916-919-0467

Receipt Number: WR2013-0335	Total Due:	\$265.00
Payer Name : Oliver Yan	Total Amount Paid:	\$265.00
	Paid By: VISA	PAID IN FULL

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 8 Wells

Driller: Cascade Drilling - Lic #: 938110 - Method: Hand

Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2013-0743	09/05/2013	12/09/2013	VP-10A	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-10B	3.00 in.	0.25 in.	2.50 ft	3.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-7A	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-7B	3.00 in.	0.25 in.	2.50 ft	3.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-8A	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-8B	3.00 in.	0.25 in.	2.50 ft	3.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-9A	3.00 in.	0.25 in.	5.50 ft	7.50 ft
W2013-0743	09/05/2013	12/09/2013	VP-9B	3.00 in.	0.25 in.	2.50 ft	3.50 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 Well Permit

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.

APPENDIX C

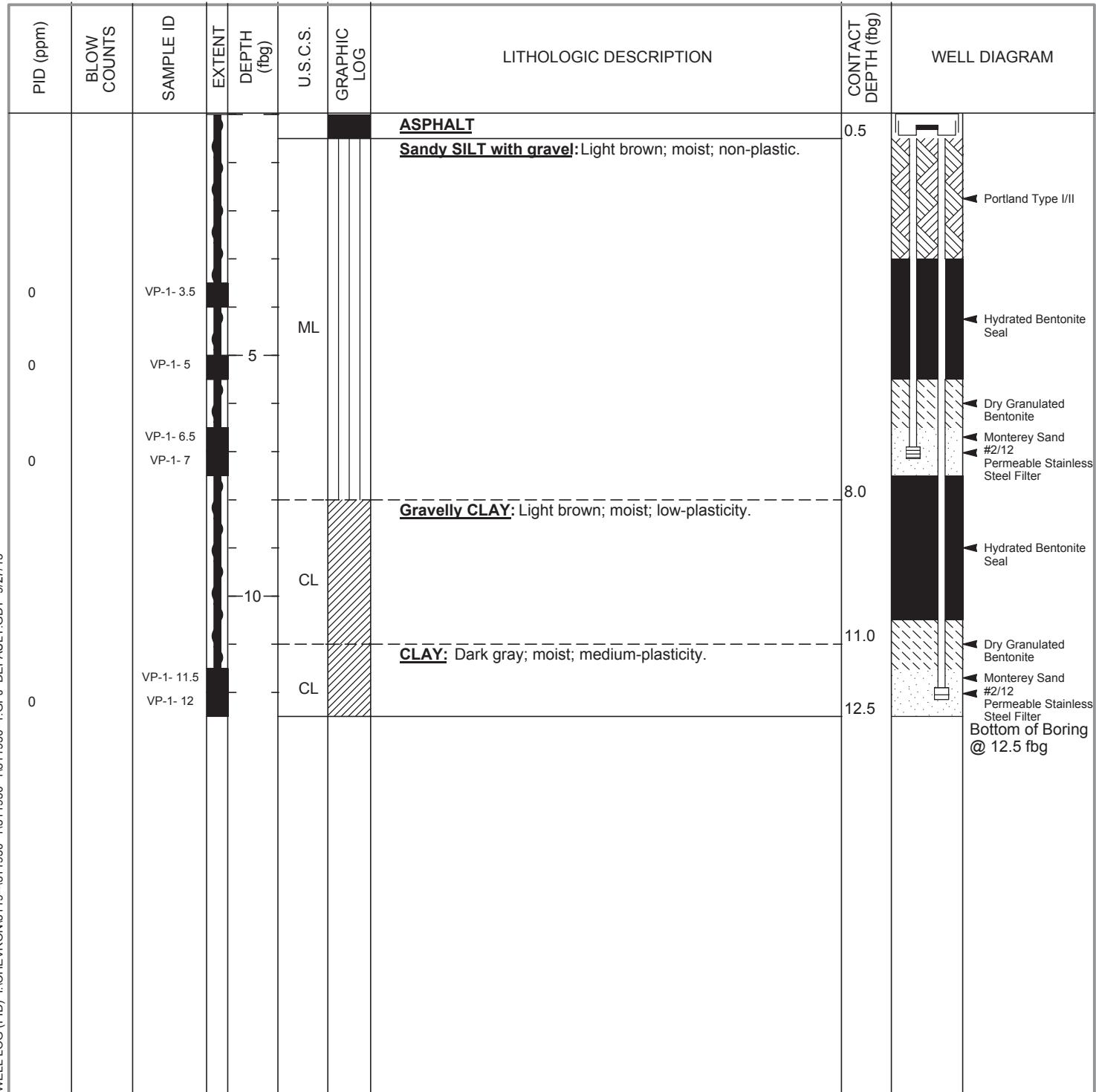
BORING LOGS



Conestoga - Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-1
JOB/SITE NAME	95607	DRILLING STARTED	10-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	10-Sep-13
PROJECT NUMBER	311950	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Cascade Drilling, C-57 #717510	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3 inch	SCREENED INTERVALS	NA
LOGGED BY	Belew Yirfu	DEPTH TO WATER (First Encountered)	NA
REVIEWED BY	B. Wilken, PG# 7564	DEPTH TO WATER (Static)	NA
REMARKS			

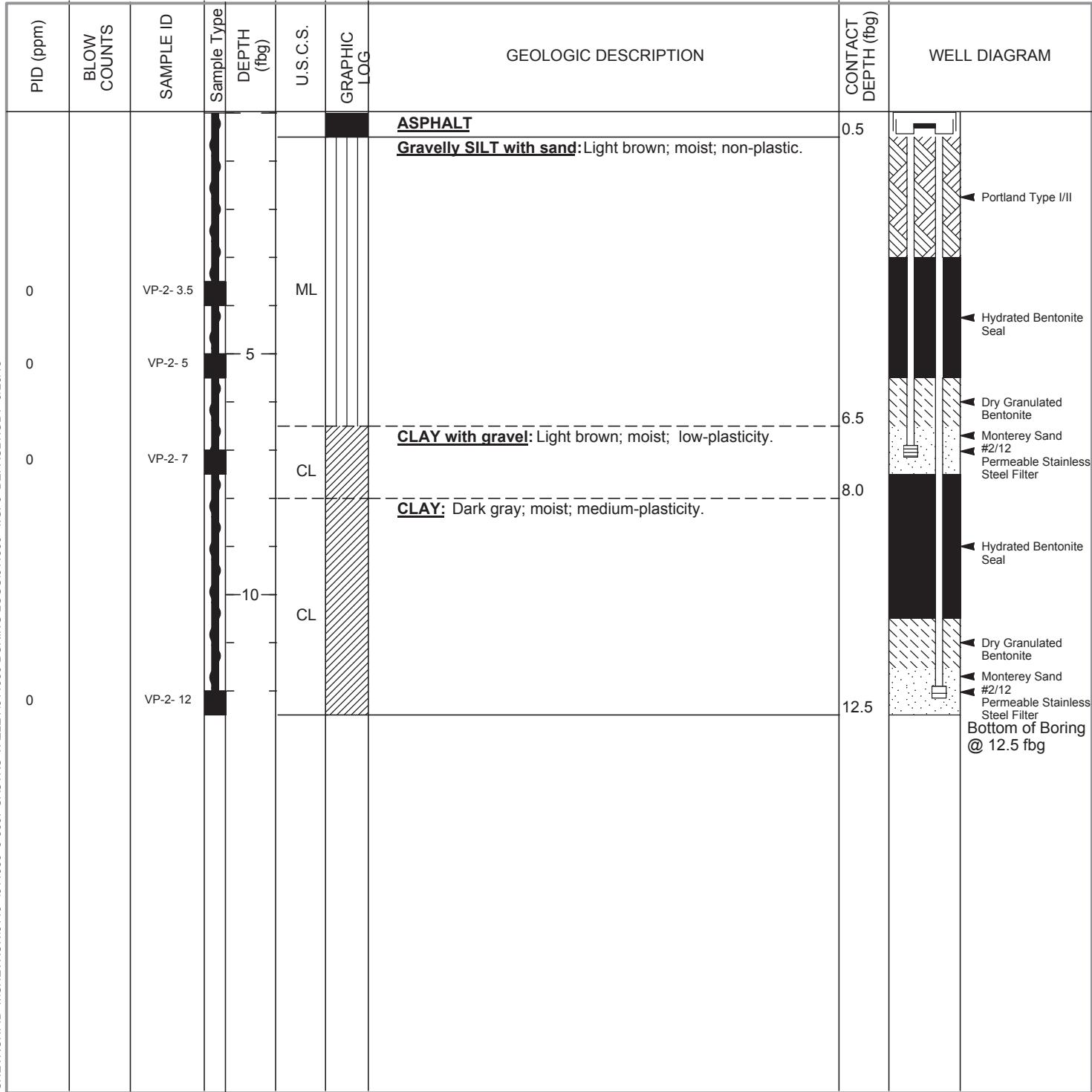




BORING / WELL LOG

Conestoga-Rovers & Associates

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-2
JOB/SITE NAME	95607	DRILLING STARTED	11-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	11-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA 
LOGGED BY	Oliver Yan	DEPTH TO WATER (Static)	NA 
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

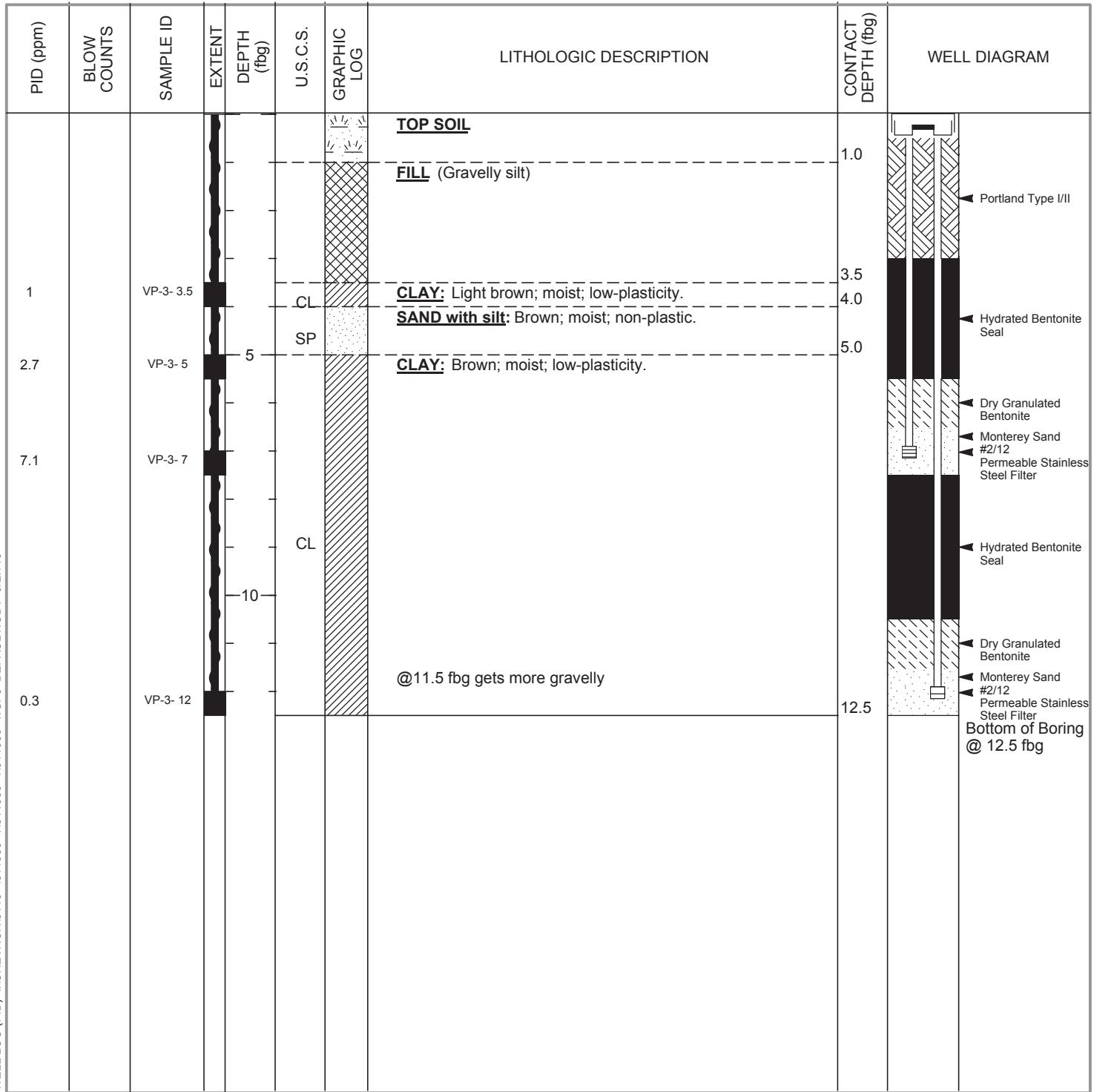




Conestoga - Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-3
JOB/SITE NAME	95607	DRILLING STARTED	11-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	11-Sep-13
PROJECT NUMBER	311950	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Cascade Drilling, C-57 #717510	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3 inch	SCREENED INTERVALS	NA
LOGGED BY	Belew Yifru	DEPTH TO WATER (First Encountered)	NA
REVIEWED BY	B. Wilken, PG# 7564	DEPTH TO WATER (Static)	NA
REMARKS			

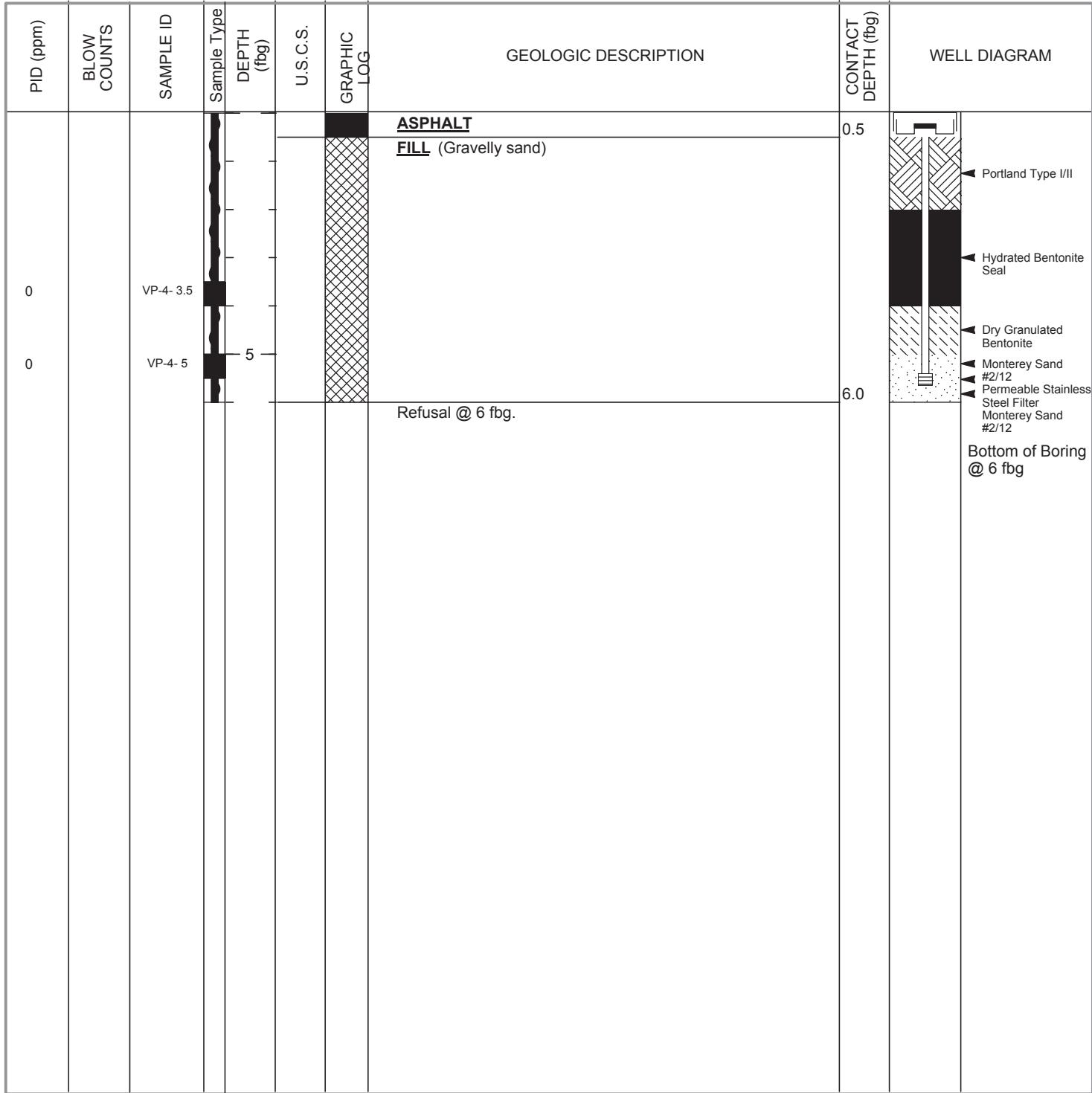




BORING / WELL LOG

Conestoga-Rovers & Associates

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-4
JOB/SITE NAME	95607	DRILLING STARTED	11-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	11-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA 
LOGGED BY	Oliver Yan	DEPTH TO WATER (Static)	NA 
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

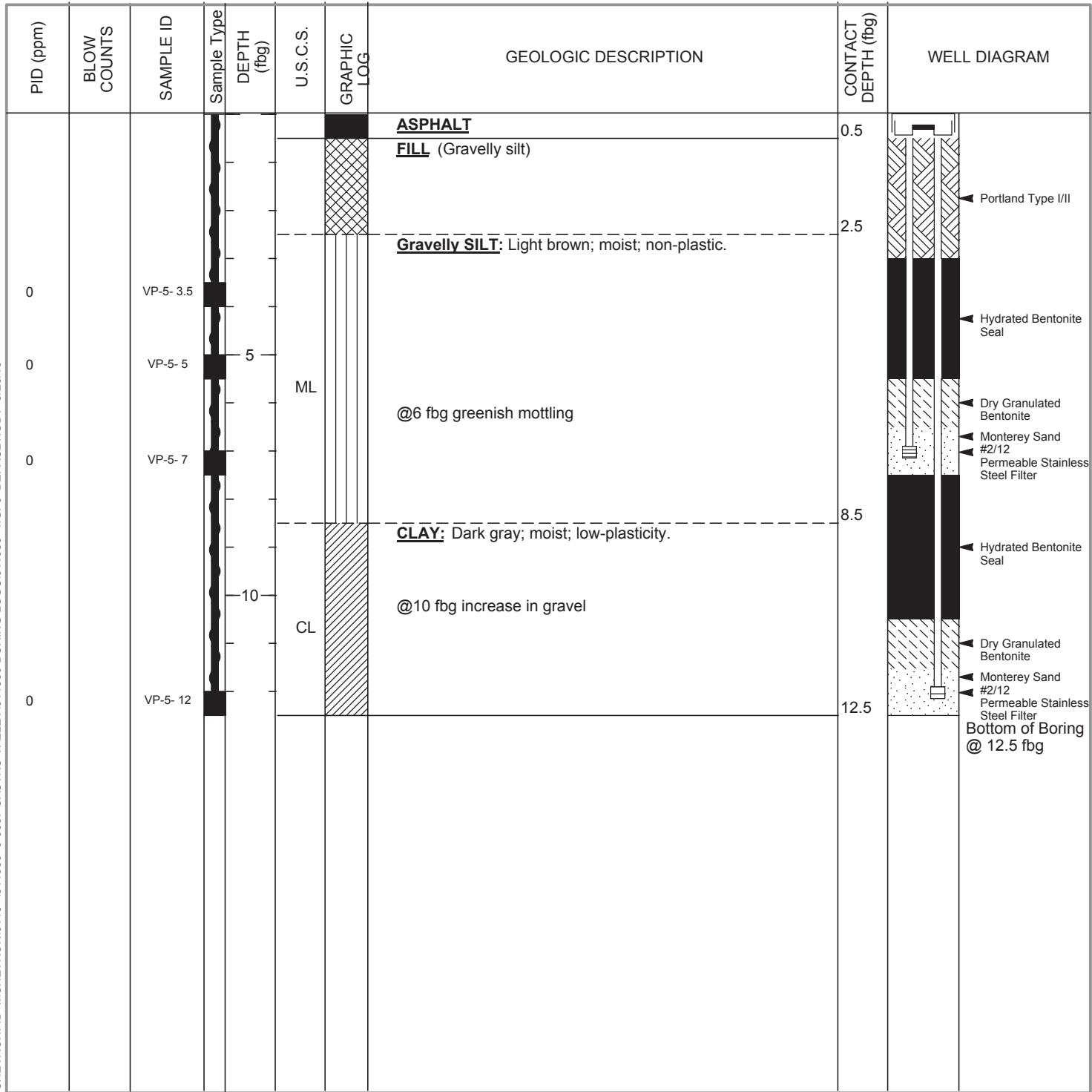




BORING / WELL LOG

Conestoga-Rovers & Associates

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-5
JOB/SITE NAME	95607	DRILLING STARTED	11-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	12-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA 
LOGGED BY	Belew Yifru	DEPTH TO WATER (Static)	NA 
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

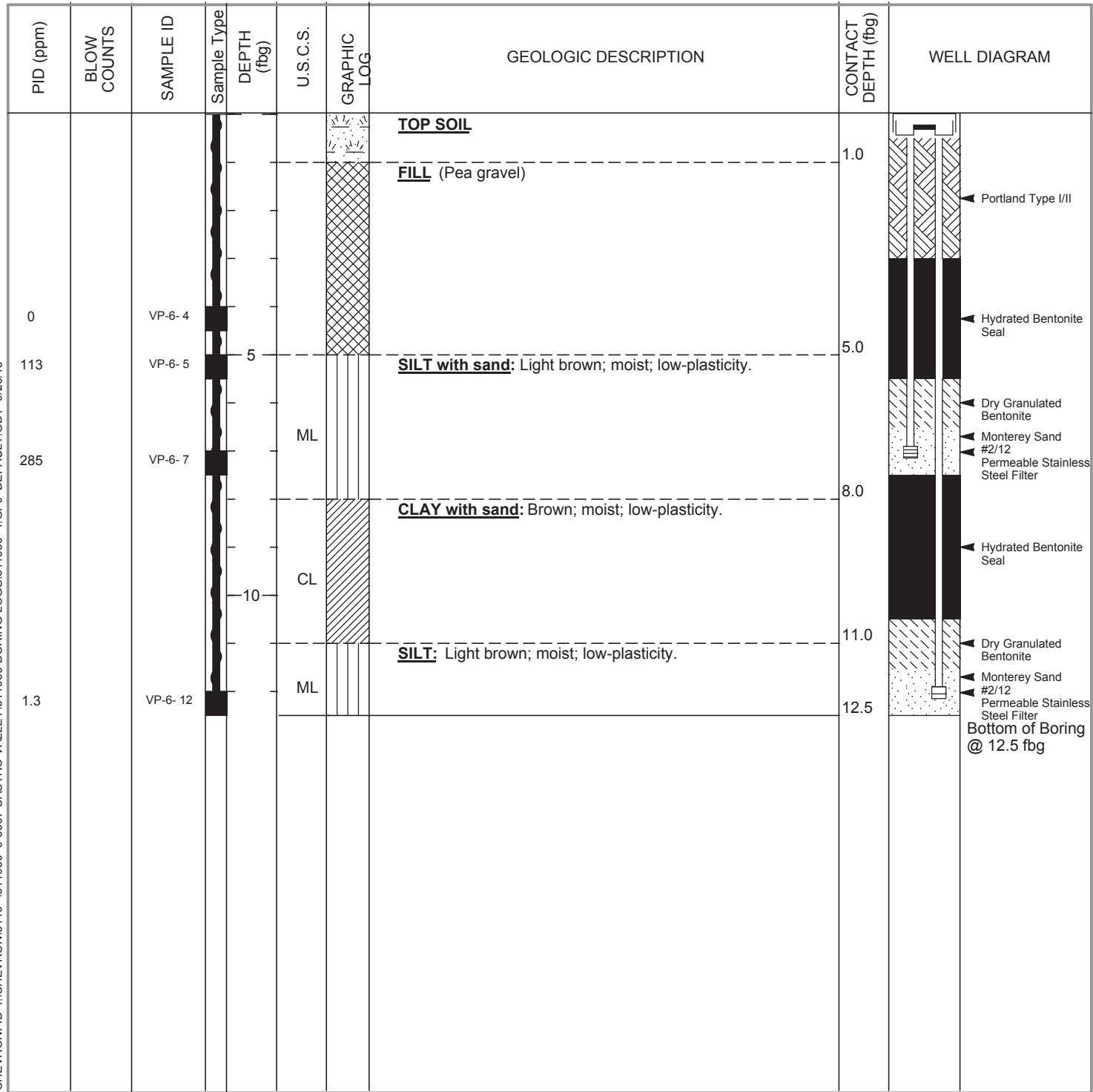




BORING / WELL LOG

Conestoga-Rovers & Associates

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-6
JOB/SITE NAME	95607	DRILLING STARTED	12-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	12-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA
LOGGED BY	Belew Yirfu	DEPTH TO WATER (Static)	NA
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

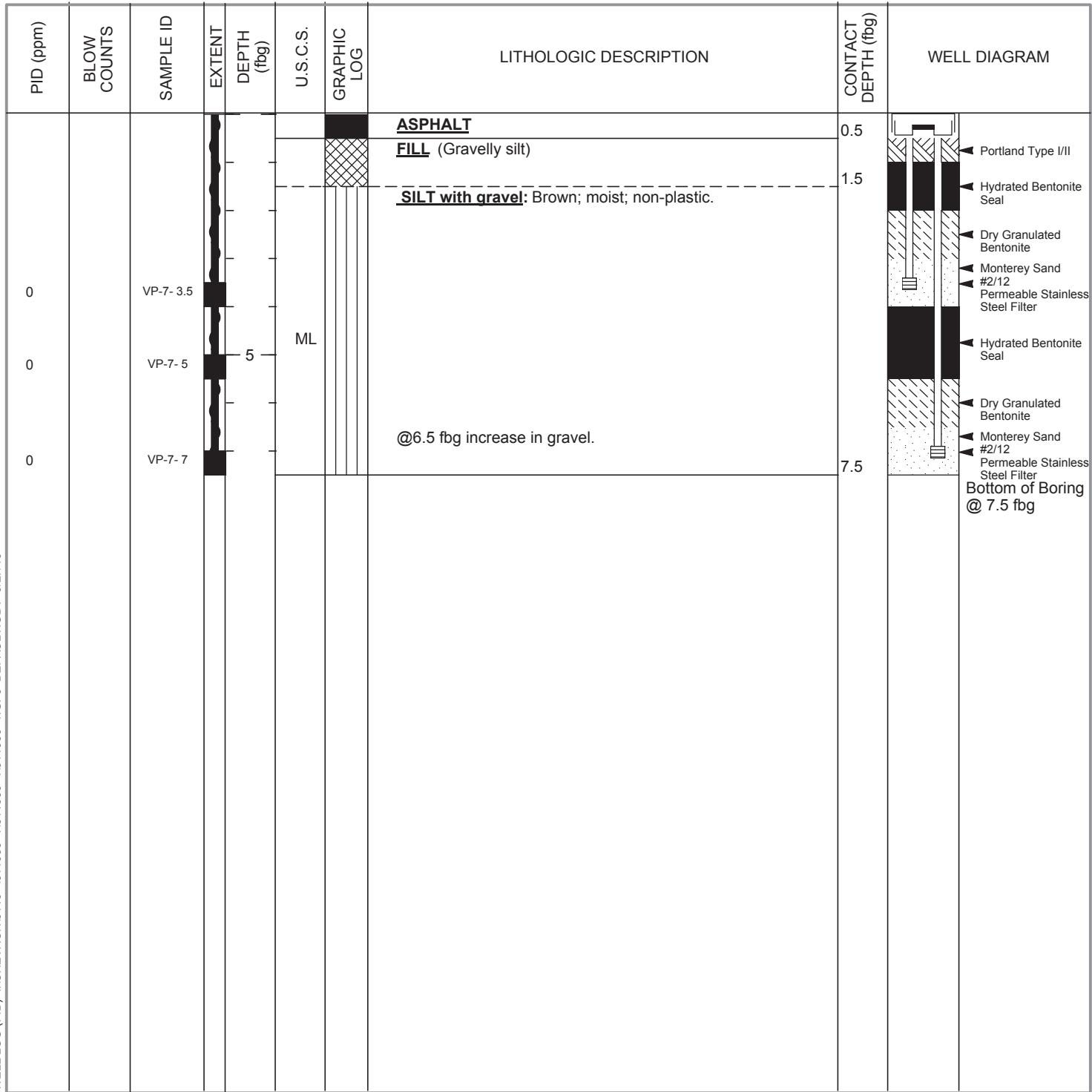




Conestoga - Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-7
JOB/SITE NAME	95607	DRILLING STARTED	12-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	12-Sep-13
PROJECT NUMBER	311950	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Cascade Drilling, C-57 #717510	GROUND SURFACE ELEVATION	NA
DRILLING METHOD	Hand Auger	TOP OF CASING ELEVATION	NA
BORING DIAMETER	3 inch	SCREENED INTERVALS	NA
LOGGED BY	Belew Yifru	DEPTH TO WATER (First Encountered)	NA 
REVIEWED BY	B. Wilken, PG# 7564	DEPTH TO WATER (Static)	NA 
REMARKS			

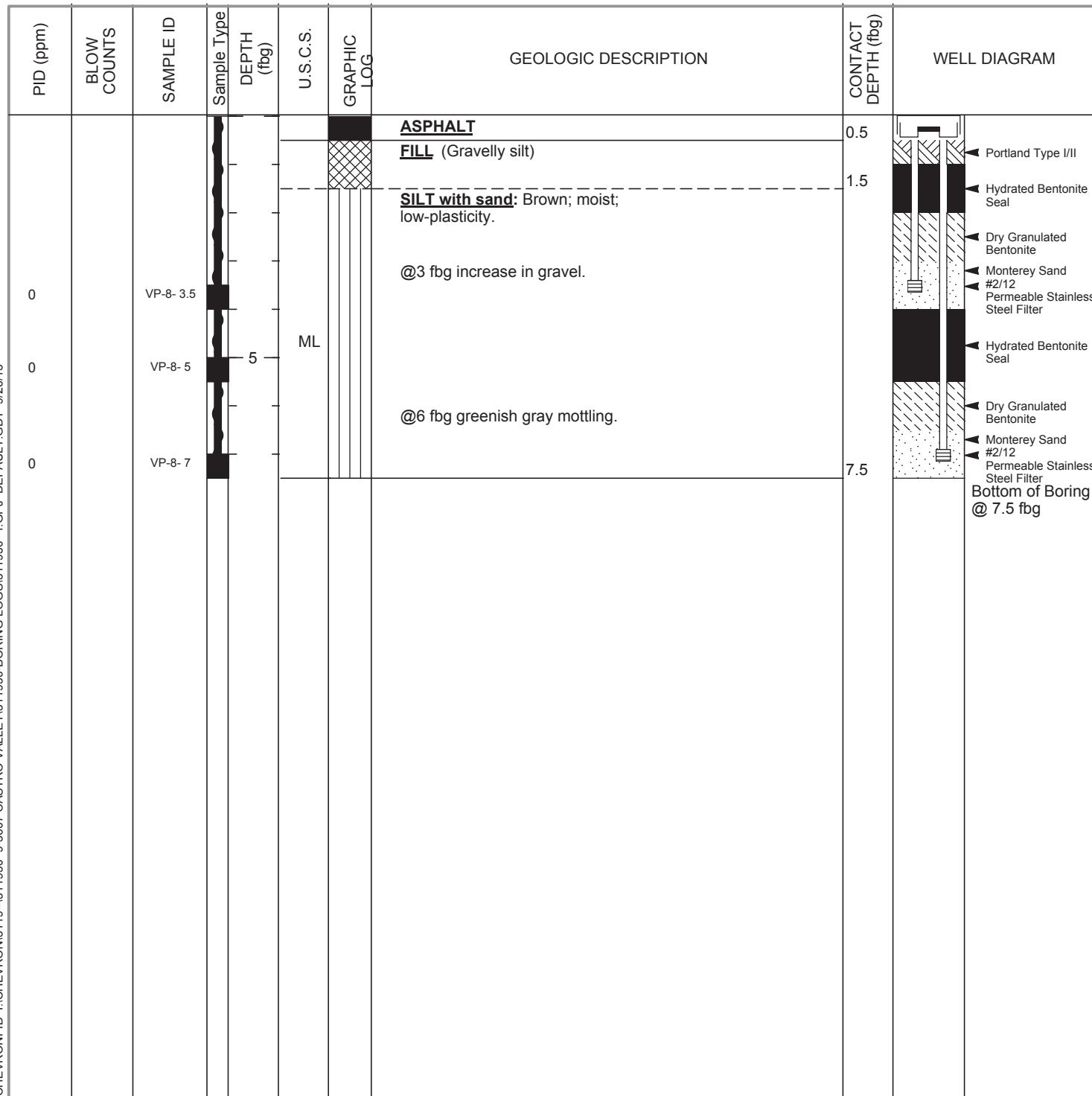




Conestoga-Rovers & Associates

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-8
JOB/SITE NAME	95607	DRILLING STARTED	13-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	13-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA
LOGGED BY	Belew Yirfu	DEPTH TO WATER (Static)	NA
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

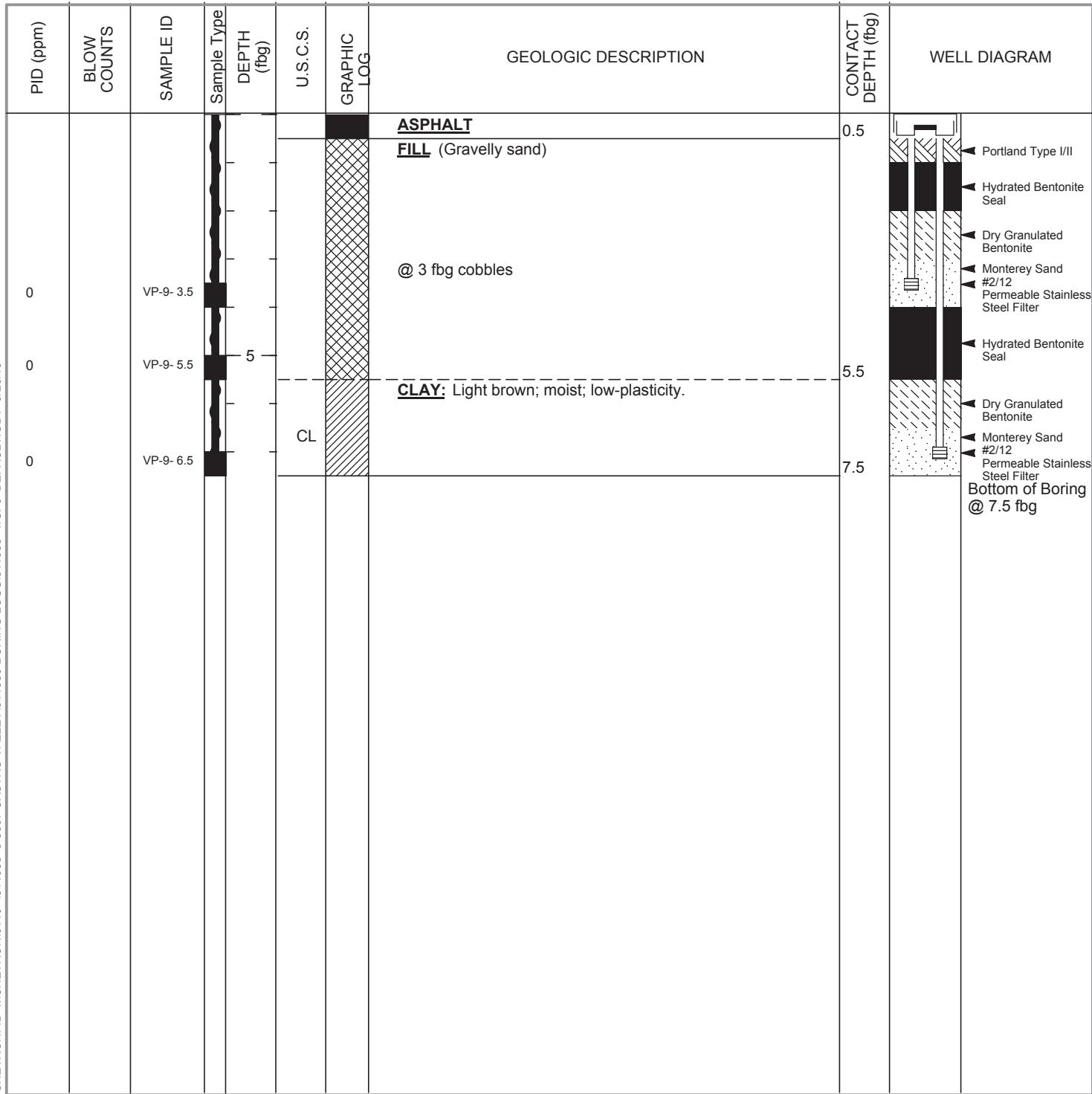




Conestoga-Rovers & Associates

BORING / WELL LOG

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-9
JOB/SITE NAME	95607	DRILLING STARTED	13-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	13-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA
LOGGED BY	Oliver Yan	DEPTH TO WATER (Static)	NA
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			

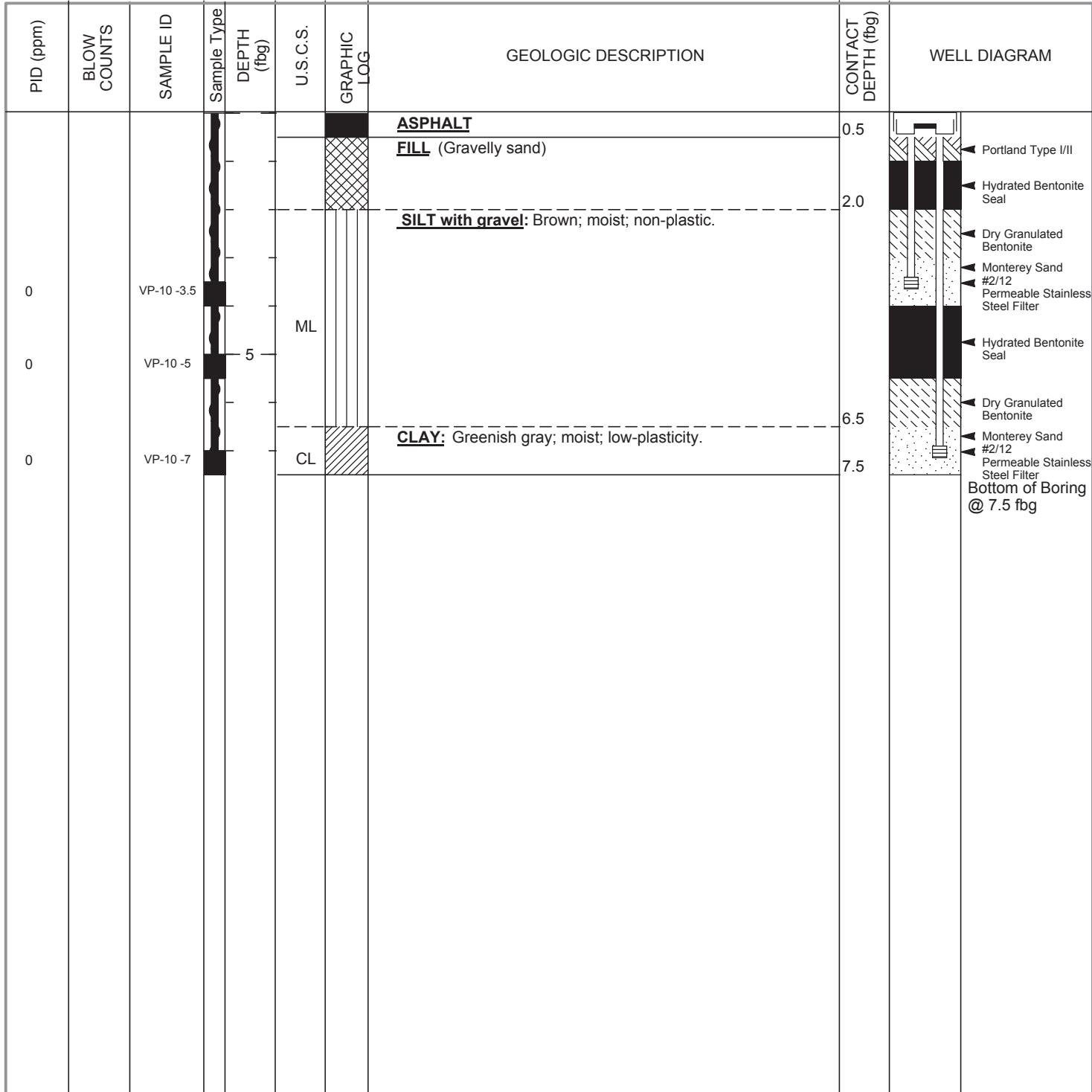




BORING / WELL LOG

Conestoga-Rovers & Associates

CLIENT NAME	Chevron Environmental Management Company	BORING/WELL NAME	VP-10
JOB/SITE NAME	95607	DRILLING STARTED	13-Sep-13
LOCATION	5269 Crow Canyon Road, Castro Valley, California	DRILLING COMPLETED	13-Sep-13
PROJECT NUMBER	311950	GROUND SURFACE ELEVATION	NA
DRILLER	Cascade Drilling, C-57 #717510	TOP OF CASING ELEVATION	NA
DRILLING METHOD	Hand Auger	SCREENED INTERVALS	NA
BORING DIAMETER	3 inch	DEPTH TO WATER (First Encountered)	NA 
LOGGED BY	Belew Yifru	DEPTH TO WATER (Static)	NA 
REVIEWED BY	B. Wilken, PG# 7564		
REMARKS			



APPENDIX D

SOIL LABORATORYANALYTICAL REPORT

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

September 20, 2013

Project: 95607

Submittal Date: 09/17/2013

Group Number: 1419295

PO Number: 0015118368

Release Number: SHRILL HOPKINS

State of Sample Origin: CA

Client Sample Description

VP-1-S-3.5-130910 Grab Soil
VP-1-S-5-130910 Grab Soil
VP-1-S-7-130910 Grab Soil
VP-1-S-12-130910 Grab Soil
VP-2-S-3.5-130911 Grab Soil
VP-2-S-5-130911 Grab Soil
VP-2-S-7-130911 Grab Soil
VP-2-S-12-130911 Grab Soil
VP-3-S-3.5-130911 Grab Soil
VP-3-S-5-130911 Grab Soil
VP-3-S-7-130911 Grab Soil
VP-3-S-12-130911 Grab Soil
VP-4-S-3.5-130911 Grab Soil
VP-4-S-5-130911 Grab Soil
VP-5-S-3.5-130911 Grab Soil
VP-5-S-5-130911 Grab Soil
VP-5-S-7-130911 Grab Soil
VP-5-S-12-130912 Grab Soil
VP-6-S-4-130912 Grab Soil
VP-6-S-7-130912 Grab Soil
VP-6-S-12-130912 Grab Soil
VP-6-S-5-130912 Grab Soil
VP-7-S-3.5-130912 Grab Soil
VP-7-S-5-130912 Grab Soil
VP-7-S-7-130912 Grab Soil
VP-8-S-3.5-130913 Grab Soil
VP-8-S-5-130913 Grab Soil
VP-8-S-7-130913 Grab Soil
VP-9-S-3.5-130913 Grab Soil
VP-9-S-5.5-130913 Grab Soil
VP-9-S-6.5-130913 Grab Soil

Lancaster Labs (LL) #

7200094
7200095
7200096
7200097
7200098
7200099
7200100
7200101
7200102
7200103
7200104
7200105
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7200121
7200122
7200123
7200124

VP-10-S-3.5-130913 Grab Soil	7200125
VP-10-S-5-130913 Grab Soil	7200126
VP-10-S-7-130913 Grab Soil	7200127

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

ELECTRONIC	Chevron	Attn: CRA EDD
COPY TO		
ELECTRONIC	CRA	Attn: Judy Gilbert
COPY TO		

Respectfully Submitted,



Natalie R. Luciano
Senior Specialist

(717) 556-7258



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

Sample Description: VP-1-S-3.5-130910 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-1

LL Sample # SW 7200094
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/10/2013 11:30 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV13

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	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
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	24.11

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/17/2013 23:37	Sara E Johnson	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:15	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/17/2013 22:13	Laura M Krieger	24.11
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:16	Larry E Bevins	n.a.

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



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Sample Description: VP-1-S-5-130910 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-1

LL Sample # SW 7200095
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/10/2013 11:40 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV15

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	Naphthalene	91-20-3	N.D.	0.001	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 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	25.35

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 00:00	Sara E Johnson	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:18	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/17/2013 22:50	Laura M Krieger	25.35
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:19	Larry E Bevins	n.a.

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



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Sample Description: VP-1-S-7-130910 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-1

LL Sample # SW 7200096
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/10/2013 12:35 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV17

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	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
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	24.51

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 00:23	Sara E Johnson	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:22	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/17/2013 23:26	Laura M Krieger	24.51
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:23	Larry E Bevins	n.a.

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



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Sample Description: VP-1-S-12-130910 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-1

LL Sample # SW 7200097
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/10/2013 14:35 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV12

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	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
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	24.88

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 00:45	Sara E Johnson	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:26	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 00:02	Laura M Krieger	24.88
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:27	Larry E Bevins	n.a.

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



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Sample Description: VP-2-S-3.5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-2

LL Sample # SW 7200098
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 08:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV23

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	Naphthalene	91-20-3	N.D.	0.001	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 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	24.34

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 01:08	Sara E Johnson	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:29	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 00:38	Laura M Krieger	24.34
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:30	Larry E Bevins	n.a.

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



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

Sample Description: VP-2-S-5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-2

LL Sample # SW 7200099
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 08:08 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV25

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	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.03
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03
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	24.68

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 01:31	Sara E Johnson	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:33	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 01:15	Laura M Krieger	24.68
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:33	Larry E Bevins	n.a.

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



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

Sample Description: VP-2-S-7-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-2

LL Sample # SW 7200100
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 08:30 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV27

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	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
	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	24.2

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 01:53	Sara E Johnson	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:32	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 01:51	Laura M Krieger	24.2
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:39	Larry E Bevins	n.a.

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



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Sample Description: VP-2-S-12-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-2

LL Sample # SW 7200101
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 09:05 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV22

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	Naphthalene	91-20-3	N.D.	0.001	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 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	25.69

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 02:16	Sara E Johnson	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:43	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 02:27	Laura M Krieger	25.69
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:43	Larry E Bevins	n.a.

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



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Sample Description: VP-3-S-3.5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-3

LL Sample # SW 7200102
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 11:25 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV33

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	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	0.001	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
	GC Volatiles	SW-846 8015B modified	mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	2.8	1	1	24.22

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 06:50	Sara E Johnson	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:46	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 05:28	Laura M Krieger	24.22
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:47	Larry E Bevins	n.a.

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



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Sample Description: VP-3-S-5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-3

LL Sample # SW 7200103
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 11:35 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV35

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	0.94
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.94
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.94
10237	Naphthalene	91-20-3	N.D.	0.0009	0.005	0.94
10237	Toluene	108-88-3	N.D.	0.0009	0.005	0.94
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.005	0.94
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	25.23

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 02:39	Sara E Johnson	0.94
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:49	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 06:05	Laura M Krieger	25.23
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:50	Larry E Bevins	n.a.

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



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Sample Description: VP-3-S-7-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-3

LL Sample # SW 7200104
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 11:40 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV37

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	1.06
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.06
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.06
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.06
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.06
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.06
	GC Volatiles	SW-846 8015B modified	mg/kg	mg/kg	mg/kg	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1.2	1	1	24.83

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 07:13	Sara E Johnson	1.06
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:53	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 06:41	Laura M Krieger	24.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:54	Larry E Bevins	n.a.

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



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

Sample Description: VP-3-S-12-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-3

LL Sample # SW 7200105
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 12:14 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV32

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	1.09
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.09
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.09
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.09
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.09
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.09
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	24.75

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 03:02	Sara E Johnson	1.09
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:31	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:56	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 07:17	Laura M Krieger	24.75
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 13:57	Larry E Bevins	n.a.

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



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

Sample Description: VP-4-S-3.5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-4

LL Sample # SW 7200106
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 14:38 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV43

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	Naphthalene	91-20-3	N.D.	0.001	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 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	26.04

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 03:25	Sara E Johnson	1.05
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:00	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 07:53	Laura M Krieger	26.04
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:00	Larry E Bevins	n.a.

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



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Sample Description: VP-4-S-5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-4

LL Sample # SW 7200107
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 15:15 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV45

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	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
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	24.06

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 03:48	Sara E Johnson	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:02	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 08:30	Laura M Krieger	24.06
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:03	Larry E Bevins	n.a.

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



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

Sample Description: VP-5-S-3.5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-5

LL Sample # SW 7200108
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 15:25 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV53

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	0.98
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.98
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.98
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.98
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.98
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.98
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	24.8

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 04:10	Sara E Johnson	0.98
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:36	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 09:06	Laura M Krieger	24.8
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:36	Larry E Bevins	n.a.

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



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Sample Description: VP-5-S-5-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-5

LL Sample # SW 7200109
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 15:35 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV55

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	1.08
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.08
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.08
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.08
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.08
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.08
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	25.23

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 07:36	Sara E Johnson	1.08
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:39	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 09:42	Laura M Krieger	25.23
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:40	Larry E Bevins	n.a.

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



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Sample Description: VP-5-S-7-130911 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-5

LL Sample # SW 7200110
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/11/2013 16:05 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV57

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	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
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	25.46

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 04:33	Sara E Johnson	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:42	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 10:18	Laura M Krieger	25.46
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:43	Larry E Bevins	n.a.

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



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Sample Description: VP-5-S-12-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-5

LL Sample # SW 7200111
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 11:20 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV52

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	1.08
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.08
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.08
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.08
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.08
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.08
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	25.83

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 04:56	Sara E Johnson	1.08
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:30	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:46	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 10:55	Laura M Krieger	25.83
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:47	Larry E Bevins	n.a.

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



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Sample Description: VP-6-S-4-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-6

LL Sample # SW 7200112
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 08:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV64

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	Naphthalene	91-20-3	N.D.	0.001	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 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	24.3

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 05:19	Sara E Johnson	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	4	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	5	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	6	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:53	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 14:54	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 14:54	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 03:04	Laura M Krieger	24.3
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 14:56	Larry E Bevins	n.a.

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



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Sample Description: VP-6-S-4-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-6

LL Sample # SW 7200112
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 08:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV64

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 14:57	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 14:58	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	4	201326032428	09/17/2013 14:56	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	5	201326032428	09/17/2013 14:58	Larry E Bevins	n.a.

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



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

Sample Description: VP-6-S-7-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-6

LL Sample # SW 7200113
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 08:36 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV67

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.	0.024	0.24	47.71
10237	Ethylbenzene	100-41-4	0.097	0.048	0.24	47.71
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.024	0.24	47.71
10237	Naphthalene	91-20-3	0.096	0.048	0.24	47.71
10237	Toluene	108-88-3	N.D.	0.048	0.24	47.71
10237	Xylene (Total)	1330-20-7	N.D.	0.048	0.24	47.71
Reporting limits were raised due to interference from the sample matrix.						
GC Volatiles	SW-846 8015B modified	mg/kg	mg/kg	mg/kg		
01725	TPH-GRO N. CA soil C6-C12	n.a.	31	4.0	4.0	100.81

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	R132601AA	09/18/2013 07:56	Stephanie A Selis	47.71
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:03	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13260A31A	09/18/2013 11:31	Laura M Krieger	100.81
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:04	Larry E Bevins	n.a.

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



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

Sample Description: VP-6-S-12-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-6

LL Sample # SW 7200114
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 09:10 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV62

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	1.04
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.04
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.04
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.04
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	25.91

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132602AA	09/18/2013 06:28	Sara E Johnson	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:06	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 18:45	Laura M Krieger	25.91
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:07	Larry E Bevins	n.a.

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



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Sample Description: VP-6-S-5-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-6

LL Sample # SW 7200115
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 08:25 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV65

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.	0.026	0.26	51.23
10237	Ethylbenzene	100-41-4	1.7	0.051	0.26	51.23
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.026	0.26	51.23
10237	Naphthalene	91-20-3	5.0	0.051	0.26	51.23
10237	Toluene	108-88-3	N.D.	0.051	0.26	51.23
10237	Xylene (Total)	1330-20-7	0.80	0.051	0.26	51.23
GC Volatiles	SW-846 8015B modified	mg/kg	mg/kg	mg/kg		
01725	TPH-GRO N. CA soil C6-C12	n.a.	260	190	190	4844.96

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	R132601AA	09/18/2013 08:20	Stephanie A Selis	51.23
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:10	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 17:33	Laura M Krieger	4844.96
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:11	Larry E Bevins	n.a.

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



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

Sample Description: VP-7-S-3.5-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-7

LL Sample # SW 7200116
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 14:50 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV73

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	Naphthalene	91-20-3	N.D.	0.001	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 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	25.43

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 20:25	Chelsea B Stong	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:13	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 19:21	Laura M Krieger	25.43
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:14	Larry E Bevins	n.a.

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



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Sample Description: VP-7-S-5-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-7

LL Sample # SW 7200117
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 15:05 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV75

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	Naphthalene	91-20-3	N.D.	0.001	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 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	25.48

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 17:23	Chelsea B Stong	1
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:17	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 19:58	Laura M Krieger	25.48
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:18	Larry E Bevins	n.a.

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



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Sample Description: VP-7-S-7-130912 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-7

LL Sample # SW 7200118
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/12/2013 15:15 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV77

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	0.96
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.96
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.96
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.96
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.96
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.96
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	23.97

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 17:46	Chelsea B Stong	0.96
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:20	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 20:34	Laura M Krieger	23.97
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:21	Larry E Bevins	n.a.

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



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Sample Description: VP-8-S-3.5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-8

LL Sample # SW 7200119
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 09:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310

San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV83

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	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.03
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03
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	25.61

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 18:09	Chelsea B Stong	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:24	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 21:10	Laura M Krieger	25.61
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:24	Larry E Bevins	n.a.

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



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Sample Description: VP-8-S-5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-8

LL Sample # SW 7200120
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 09:14 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV85

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	1.02
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.02
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.02
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.02
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.02
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.02
	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	24.63

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 18:31	Chelsea B Stong	1.02
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:27	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 00:12	Laura M Krieger	24.63
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:28	Larry E Bevins	n.a.

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



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Sample Description: VP-8-S-7-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-8

LL Sample # SW 7200121
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 09:50 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV87

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	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
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	24.85

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 18:54	Chelsea B Stong	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:31	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 00:48	Laura M Krieger	24.85
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:32	Larry E Bevins	n.a.

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



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Sample Description: VP-9-S-3.5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-9

LL Sample # SW 7200122
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 09:40 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV93

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	0.94
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.005	0.94
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.94
10237	Naphthalene	91-20-3	N.D.	0.0009	0.005	0.94
10237	Toluene	108-88-3	N.D.	0.0009	0.005	0.94
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.005	0.94
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	25.43

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 19:17	Chelsea B Stong	0.94
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:35	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 01:24	Laura M Krieger	25.43
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:35	Larry E Bevins	n.a.

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



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Sample Description: VP-9-S-5.5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-9

LL Sample # SW 7200123
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 10:35 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV95

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	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.95
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.95
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	26.01

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 19:40	Chelsea B Stong	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:38	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 02:01	Laura M Krieger	26.01
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:39	Larry E Bevins	n.a.

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



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Sample Description: VP-9-S-6.5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-9

LL Sample # SW 7200124
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 10:40 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV96

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	1.03
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.03
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.03
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.03
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.03
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.03
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	24.11

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132611AA	09/18/2013 20:02	Chelsea B Stong	1.03
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:42	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 02:37	Laura M Krieger	24.11
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:43	Larry E Bevins	n.a.

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



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

Sample Description: VP-10-S-3.5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-10

LL Sample # SW 7200125
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 13:40 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV03

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	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.95
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.95
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.95
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

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132612AA	09/19/2013 02:01	Stephanie A Selis	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:46	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 03:13	Laura M Krieger	26.12
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:46	Larry E Bevins	n.a.

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



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Sample Description: VP-10-S-5-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-10

LL Sample # SW 7200126
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 13:45 by BY

ChevronTexaco

Submitted: 09/17/2013 09:05

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Reported: 09/20/2013 18:41

CCV05

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	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.005	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	0.99
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	25.54

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132612AA	09/19/2013 02:24	Stephanie A Selis	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:29	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:49	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/19/2013 03:49	Laura M Krieger	25.54
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 15:49	Larry E Bevins	n.a.

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



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Sample Description: VP-10-S-7-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-10

LL Sample # SW 7200127
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 14:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV07

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	1.01
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.005	1.01
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.005	1.01
10237	Naphthalene	91-20-3	N.D.	0.001	0.005	1.01
10237	Toluene	108-88-3	N.D.	0.001	0.005	1.01
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.005	1.01
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	24.9

General Sample Comments

State of California Lab Certification No. 2501

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	VOCs 8260 BTEX/MTBE/Naph Soil	SW-846 8260B	1	B132612AA	09/19/2013 02:47	Stephanie A Selis	1.01
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:28	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	4	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	5	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	6	201326032428	09/17/2013 16:27	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:19	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:20	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 16:20	Larry E Bevins	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	13261A31A	09/18/2013 21:47	Laura M Krieger	24.9
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201326032428	09/17/2013 16:22	Larry E Bevins	n.a.

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



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Sample Description: VP-10-S-7-130913 Grab Soil
Facility# 95607 CRAW
5269 Crow Canyon-Castro Va T0600100344 VP-10

LL Sample # SW 7200127
LL Group # 1419295
Account # 10880

Project Name: 95607

Collected: 09/13/2013 14:00 by BY

ChevronTexaco

6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Submitted: 09/17/2013 09:05

Reported: 09/20/2013 18:41

CCV07

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	2	201326032428	09/17/2013 16:23	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	3	201326032428	09/17/2013 16:25	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	4	201326032428	09/17/2013 16:23	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	5	201326032428	09/17/2013 16:24	Larry E Bevins	n.a.

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

Quality Control Summary

Client Name: ChevronTexaco
Reported: 09/20/13 at 06:41 PM

Group Number: 1419295

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL**</u>	<u>Blank LOQ</u>	<u>Report Units</u>	LCS %REC	LCSD %REC	<u>LCS/LCSD Limits</u>	RPD	RPD Max
Batch number: B132602AA									
Benzene	N.D.	0.0005	0.005	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.001	0.005	mg/kg	91		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	96		69-126		
Naphthalene	N.D.	0.001	0.005	mg/kg	98		59-123		
Toluene	N.D.	0.001	0.005	mg/kg	92		80-120		
Xylene (Total)	N.D.	0.001	0.005	mg/kg	91		80-120		
Batch number: B132611AA									
Benzene	N.D.	0.0005	0.005	mg/kg	98	95	80-120	3	30
Ethylbenzene	N.D.	0.001	0.005	mg/kg	96	91	80-120	6	30
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	99	100	69-126	1	30
Naphthalene	N.D.	0.001	0.005	mg/kg	85	93	59-123	9	30
Toluene	N.D.	0.001	0.005	mg/kg	94	91	80-120	4	30
Xylene (Total)	N.D.	0.001	0.005	mg/kg	97	92	80-120	5	30
Batch number: B132612AA									
Benzene	N.D.	0.0005	0.005	mg/kg	96		80-120		
Ethylbenzene	N.D.	0.001	0.005	mg/kg	93		80-120		
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.005	mg/kg	98		69-126		
Naphthalene	N.D.	0.001	0.005	mg/kg	83		59-123		
Toluene	N.D.	0.001	0.005	mg/kg	91		80-120		
Xylene (Total)	N.D.	0.001	0.005	mg/kg	92		80-120		
Batch number: R132601AA									
Benzene	N.D.	0.025	0.25	mg/kg	107	100	80-120	7	30
Ethylbenzene	N.D.	0.050	0.25	mg/kg	102	95	80-120	6	30
Methyl Tertiary Butyl Ether	N.D.	0.025	0.25	mg/kg	108	108	69-126	0	30
Naphthalene	N.D.	0.050	0.25	mg/kg	93	94	59-123	1	30
Toluene	N.D.	0.050	0.25	mg/kg	104	97	80-120	7	30
Xylene (Total)	N.D.	0.050	0.25	mg/kg	101	95	80-120	7	30
Batch number: 13260A31A TPH-GRO N. CA soil C6-C12									
				Sample number(s): 7200094-7200113					
	N.D.	1.0	1.0	mg/kg	76		67-119		
Batch number: 13261A31A TPH-GRO N. CA soil C6-C12									
				Sample number(s): 7200114-7200127					
	N.D.	1.0	1.0	mg/kg	78		67-119		

Sample Matrix 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: 1419295

Reported: 09/20/13 at 06:41 PM

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

Background (BKG) = the sample used in conjunction with the duplicate

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD RPD</u>	<u>BKG MAX</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: B132602AA			Sample number(s): 7200094-7200112, 7200114 UNSPK: 7200112					
Benzene	76	71	55-143	5	30			
Ethylbenzene	51	42*	44-141	19	30			
Methyl Tertiary Butyl Ether	93	94	55-129	3	30			
Naphthalene	65	65	10-138	2	30			
Toluene	64	57	50-146	12	30			
Xylene (Total)	52	44	44-136	17	30			
Batch number: B132611AA			Sample number(s): 7200116-7200124 BKG: P200129					
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	
Naphthalene				N.D.	N.D.	0 (1)	30	
Toluene				N.D.	N.D.	0 (1)	30	
Batch number: B132612AA			Sample number(s): 7200125-7200127 UNSPK: P195526					
Benzene	67	140	55-143	56*	30			
Ethylbenzene	45	81	44-141	45*	30			
Methyl Tertiary Butyl Ether	91	96	55-129	12	30			
Naphthalene	35	62	10-138	31*	30			
Toluene	90	108	50-146	23	30			
Xylene (Total)	7*	121	44-136	51*	30			
Batch number: 13260A31A			Sample number(s): 7200094-7200113 UNSPK: 7200112					
TPH-GRO N. CA soil C6-C12	71	72	39-118	1	30			
Batch number: 13261A31A			Sample number(s): 7200114-7200127 UNSPK: 7200127					
TPH-GRO N. CA soil C6-C12	76	71	39-118	8	30			

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: B132602AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7200094	99	104	96	97
7200095	97	100	98	94
7200096	99	102	96	95
7200097	99	99	99	87
7200098	98	99	97	91
7200099	100	102	95	94
7200100	99	103	95	93
7200101	99	102	95	93
7200102	99	101	100	94
7200103	97	97	101	88
7200104	99	98	100	91

*- 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
Reported: 09/20/13 at 06:41 PM

Group Number: 1419295

Surrogate Quality Control

7200105	97	96	100	94
7200106	101	106	95	96
7200107	99	100	97	91
7200108	98	99	99	90
7200109	100	99	97	95
7200110	101	102	96	93
7200111	99	98	97	91
7200112	99	100	96	91
7200114	99	97	103	88
Blank	97	98	96	96
LCS	97	100	98	96
MS	99	98	101	96
MSD	100	100	99	96

Limits: 50-141 54-135 52-141 50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: B132611AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7200116	102	99	97	94
7200117	103	101	96	92
7200118	105	105	95	95
7200119	102	98	94	90
7200120	103	98	93	90
7200121	104	103	94	90
7200122	103	99	94	91
7200123	103	99	95	88
7200124	104	100	95	91
Blank	100	103	97	97
DUP	103	99	96	92
LCS	99	101	97	100
LCSD	99	95	96	96

Limits: 50-141 54-135 52-141 50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: B132612AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7200125	105	103	95	93
7200126	103	99	99	92
7200127	104	103	97	92
Blank	103	106	95	94
LCS	101	99	98	96
MS	101	103	122	81
MSD	101	101	127	80

Limits: 50-141 54-135 52-141 50-131

Analysis Name: 8260 Ext. Soil Master w/GRO
Batch number: R132601AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
7200113	85	86	79	84
7200115	85	86	83	87

*- 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
Reported: 09/20/13 at 06:41 PM

Group Number: 1419295

Surrogate Quality Control

Blank	96	99	93	94
LCS	104	112	102	103
LCSD	103	105	98	102
Limits:	50-141	54-135	52-141	50-131

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 13260A31A
Trifluorotoluene-F

7200094	71
7200095	71
7200096	71
7200097	67
7200098	65
7200099	69
7200100	68
7200101	65
7200102	61
7200103	70
7200104	62
7200105	65
7200106	67
7200107	70
7200108	66
7200109	66
7200110	64
7200111	65
7200112	65
7200113	86
Blank	75
LCS	78
MS	64
MSD	67

Limits: 50-142

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 13261A31A
Trifluorotoluene-F

7200114	69
7200115	181*
7200116	75
7200117	70
7200118	72
7200119	71
7200120	69
7200121	70
7200122	66
7200123	70
7200124	71
7200125	69
7200126	69
7200127	69
Blank	81

*- 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
Reported: 09/20/13 at 06:41 PM

Group Number: 1419295

Surrogate Quality Control

LCS	81
MS	66
MSD	69

Limits: 50-142

*- 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.

Chevron California Region Analysis Request/Chain of Custody



Lancaster
Laboratories

091613-03
GLOBAL ID # T06001 00349

Acct. # 1 of 4 10880

For Lancaster Laboratories use only
Group # 1419295 Sample # 7200094-127
Instructions on reverse side correspond with circled numbers.

1 Client Information		4 Matrix		5 Analyses Requested	
Facility # CHEVRON 95607	WBS 07.11/08.04	Sediment <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input type="checkbox"/>	
Site Address 5269 CROW CANYON ROAD, CASTRO VALLEY, CA	Lead Consultant CRA	Potable <input type="checkbox"/>	NPDES <input type="checkbox"/>	Air <input type="checkbox"/>	
Consultant/Office 5900 HOLLIS ST, STEA, EMERYVILLE, CA	Consultant Project Mgr. JUDY GILBERT	Water <input type="checkbox"/>	Oil <input type="checkbox"/>	Oxygenates <input type="checkbox"/>	
Consultant Phone # (510) 420-3314	Sampler B.YIPRU / O.YAN	Grab <input checked="" type="checkbox"/>	Composite <input checked="" type="checkbox"/>	Total Number of Containers	
2 Sample Identification	Collected	Date <input type="checkbox"/>	Time <input type="checkbox"/>	BTEX + MTBE <input type="checkbox"/>	TPH GRO <input checked="" type="checkbox"/>
VP-1 @ 3.5	09/10/13	11:30	X	8021	8015 <input checked="" type="checkbox"/>
VP-1 @ 5	09/10/13	11:40	X	8260	8260 <input checked="" type="checkbox"/>
VP-1 @ 7	09/10/13	12:35	X	MOD DRO	
VP-1 @ 12	09/10/13	14:35	X	Silica Gel Cleanup	
VP-2 @ 3.5	09/11/13	08:00	X	8260 Full Scan	
VP-2 @ 5	09/11/13	08:08	X		
VP-2 @ 7	09/11/13	08:30	X		
VP-2 @ 12	09/11/13	09:05	X		
VP-3 @ 3.5	09/11/13	11:25	X		
VP-3 @ 5	09/11/13	11:35	X		
VP-3 @ 7	09/11/13	11:40	X		
VP-3 @ 12	09/11/13	12:14	X		
VP-4 @ 3.5	09/11/13	14:30	X		
7 Turnaround Time Requested (TAT) (please circle)	Standard 72 hour	5 day 48 hour	4 day 24 hour	Received by <i>CRA</i>	Received by <i>CRA SECURE LOCATION</i>
				Date 09/11/13	Date 09/11/13
				Time 17:45	Time 17:45
8 Data Package Options (please circle if required)	Relinquished by <i>CRA</i>	Commercial Carrier: <i>a. Salter 16 SEP</i>	Received by <i>CRA</i>	Date 09/11/13	Date 09/11/13
Type I - Full	Relinquished by <i>CRA</i>	UPS <input type="checkbox"/>	Received by <i>CRA</i>	Time 1330	Time 1330
Type VI (Raw Data)	Commercial Carrier: <i>a. Salter 16 SEP</i>	FedEx <input type="checkbox"/>	Temperature Upon Receipt <i>0.5</i> °C		
	Other <i>1634</i>	Other <i>1634</i>			
			Custody Seals Intact?	Yes <i>UPS</i>	No

SCR #: _____

Results in Dry Weight
 J value reporting needed
 Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
 Confirm highest hit by 8260
 Confirm all hits by 8260
 Run ____ oxy's on highest hit
 Run ____ oxy's on all hits

6 Remarks

Email results to:
jgilbert@craworld.com,
byifru@craworld.com

Chevron California Region Analysis Request/Chain of Custody



Lancaster
Laboratories

Acct. # 10880
091613-03 404
GLOBAL 10 # 10600100344

For Lancaster Laboratories use only
Group # 1419295 Sample # 7200094-127
Instructions on reverse side correspond with circled numbers.

1 Client Information			4 Matrix			5 Analyses Requested		
Facility # CHEVRON 95607	WBS 07.11/08.04		Sediment <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input type="checkbox"/>	Total Number of Containers		
Site Address 5269 CROW CANYON RD., CASTRO VALLEY, CA			Potable <input type="checkbox"/>	NPDES <input type="checkbox"/>	Air <input type="checkbox"/>	BTEX + MTBE <input checked="" type="checkbox"/>	TPH GRO <input checked="" type="checkbox"/>	TPH 8015 MOD DRO <input type="checkbox"/>
Chevron PM ERIC HETTRICK	Lead Consultant CRA		Oil <input type="checkbox"/>			8260 <input checked="" type="checkbox"/>	8260 <input checked="" type="checkbox"/>	Silica Gel Cleanup <input type="checkbox"/>
Consultant/Office 5900 HOLLIS ST. SUITE A, EMERYVILLE, CA								Oxygenates <input type="checkbox"/>
Consultant Project Mgr. JUDY GILBERT								8260 Full Scan <input type="checkbox"/>
Consultant Phone # (510) 420 - 3314								
Sampler B-YI FENG/O.YAN								
2 Sample Identification			Collected					
	Date 09/11/13	Time 1515	<input checked="" type="checkbox"/> Grab	<input checked="" type="checkbox"/> Composite				
VP-4 @ 5			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		1 <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VP-5 @ 3.5	09/11/13	1525	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-5 @ 51	09/11/13	1535	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-5 @ 7	09/11/13	1605	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-5 @ 12	09/12/13	11:20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-6 @ 4	09/12/13	0800	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-6 @ 7	09/12/13	0835	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-6 @ 12	09/12/13	0910	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-6 @ 5	09/12/13	0825	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-7 @ 3.5	09/12/13	14:50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-7 @ 5	09/12/13	1505	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-7 @ 7	09/12/13	1515	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
7 Turnaround Time Requested (TAT) (please circle)			Relinquished by <i>[Signature]</i>	Date 09/12/13	Time 16:40	Received by CRA SECURE LOCATION	Date 09/12/13	Time 16:40
Standard	5 day	4 day	Relinquished by <i>[Signature]</i>	Date 09/16/13	Time 18:30	Received by <i>[Signature]</i>	Date 09/16/13	Time 1330
72 hour	48 hour	24 hour	Relinquished by <i>[Signature]</i>					
8 Data Package Options (please circle if required)			Relinquished by Commercial Carrier UPS FedEx Other	Date 16 SEP 13	Time 16:30	Received by <i>[Signature]</i>	Date	Time
Type I - Full	Type VI (Raw Data)							
			Temperature Upon Receipt 0.5 °C			Custody Seals Intact?	<input checked="" type="checkbox"/> Yes	No

SCR #: _____

- Results in Dry Weight
- J value reporting needed
- Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
- Confirm highest hit by 8260
- Confirm all hits by 8260
- Run ____ oxy's on highest hit
- Run ____ oxy's on all hits

6 Remarks

EMAIL RESULTS TO:
JGILBERT@CRAWORLD.COM
BYFENG@CRAWORLD.COM

Chevron California Region Analysis Request/Chain of Custody



Lancaster
Laboratories

09/16/13-03 344
GLOBAL ID # T0600100344

Acct. # 10880
Group # 1419295 Sample # 7300094-127
Instructions on reverse side correspond with circled numbers.

① Client Information		④ Matrix		⑤ Analyses Requested				
Facility # CHEROKEE 95007	WBS 07.11/08.04	Sediment <input type="checkbox"/>	Ground <input type="checkbox"/>	Surface <input type="checkbox"/>			SCR #: _____	
Site Address 5269 CROW CANYON ROAD, CASTRO VALLEY, CA		Potable <input type="checkbox"/>	NPDES <input type="checkbox"/>	Air <input type="checkbox"/>			<input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits	
Chevron PM ERIC HETRICK	Lead Consultant CRA	Oil <input type="checkbox"/>						
Consultant/Office 5900 HOLLIS ST. SUITE A, EMERYVILLE, CA								
Consultant Project Mgr. JUDY GILBERT								
Consultant Phone # (510) 420-3314								
Sampler B. YIFRU / O. YAN								
② Sample Identification		Collected						
VP-8 @ 3.5	09/13/13	0900	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-8 @ 5	09/13/13	0914						
VP-8 @ 7	09/13/13	0950						
VP-9 @ 3.5	09/13/13	0940						
VP-9 @ 5.5	09/13/13	1035						
VP-9 @ 6.5	09/13/13	1040						
VP-10 @ 3.5	09/13/13	1340						
VP-10 @ 5	09/13/13	1345						
VP-10 @ 7	09/13/13	1400	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				
VP-3 @ 3.5	09/11/13	1000						
VP-3 @ 5.0	09/11/13	1005						
⑦ Turnaround Time Requested (TAT) (please circle)		Relinquished by <i>[Signature]</i>		Date 09/13/13	Time 1600	Received by CRA SECURE LOCATION	Date 09/13/13	Time 1600
Standard <input checked="" type="radio"/>	5 day	4 day						
72 hour <input checked="" type="radio"/>	48 hour	24 hour						
⑧ Data Package Options (please circle if required)		Relinquished by Commercial Carrier <input checked="" type="radio"/> UPS <input type="radio"/> FedEx <input type="radio"/> Other		Date 09/16/13	Time 1330	Received by <i>[Signature]</i>	Date 09/16/13	Time 1330
Type I - Full	Type VI (Raw Data)							
		Temperature Upon Receipt 0.5 °C		Custody Seals Intact?		<input checked="" type="radio"/> Yes	<input type="radio"/> No	

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 \geq the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

- A** TIC is a possible aldol-condensation product
- B** Analyte was also detected in the blank
- C** Pesticide result confirmed by GC/MS
- D** Compound quantitated on a diluted sample
- E** Concentration exceeds the calibration range of the instrument
- N** Presumptive evidence of a compound (TICs only)
- P** Concentration difference between primary and confirmation columns $>25\%$
- U** Compound was not detected
- X,Y,Z** Defined in case narrative

Inorganic Qualifiers

- B** Value is <CRDL, but \geq IDL
- E** Estimated due to interference
- M** Duplicate injection precision not met
- N** Spike sample not within control limits
- S** Method of standard additions (MSA) used for calculation
- U** Compound was not detected
- W** Post digestion spike out of control limits
- * Duplicate analysis not within control limits
- + 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.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

APPENDIX E

SOIL PHYSICAL PARAMETERS ANALYTICAL REPORT



Moisture-Density-Porosity Report

Cooper Testing Labs, Inc. (ASTM D 2937)

CTL Job No:	390-011		Project No.	311950	By:	RU		
Client:	CRA		Date:	09/25/13				
Project Name:	Former Chevron Station 95607			Remarks:				
Boring:	VP-1	VP-1	VP-9	VP-9				
Sample:								
Depth, ft:	6.5	11.5	5	7				
Visual Description:	Dark Yellowish Brown Clayey SAND w/ Gravel (Silty)	Very Dark Brown CLAY w/ Sand	Dark Olive Brown Clayey SAND w/ Gravel	Dark Olive Brown Clayey SAND w/ Gravel				
Actual G _s		2.72		2.73				
Assumed G _s								
Moisture, %	8.1	15.4	8.3	15.2				
Wet Unit wt, pcf		120.5		135.0				
Dry Unit wt, pcf		104.4		117.1				
Dry Bulk Dens.pb, (g/cc)		1.67		1.88				
Saturation, %		66.9		91.3				
Total Porosity, %		38.5		31.3				
Volumetric Water Cont., Θw		25.8		28.6				
Volumetric Air Cont., Θa		12.8		2.7				
Void Ratio		0.63		0.45				
Series	1	2	3	4	5	6	7	8

Note: All reported parameters are from the as-received sample condition unless otherwise noted. If an assumed specific gravity (Gs) was used then the saturation, porosities, and void ratio should be considered approximate.

The Zero Air-Voids curves represent the dry density at 100% saturation for each value of specific gravity

COOPER
TESTING LABORATORY

Moisture-Density Lab Worksheet

CTL Job No.: Client: Project Name: Project No.: Boring: Sample: Depth, ft.:	390-011			Date: By:	9/25/13 RU		
	CRA						
	Former Chevron Station 95607						
	311950						
	VP-1	VP-1	VP-9	VP-9			
	6.5	11.5	5	7			
Density Data							
Height, in.:	2.008		2.007				
Diameter, in.:	1.92		1.9				
Determined Sp. Grav.:	2.72		2.728				
Assumed Sp. Grav.:	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Total Wt of Soil & Tare, g:	246.1		263.8				
Tare, g:	62.16		62.16				
Total Wet Wt of Soil, g:	183.94		201.64				
Moisture Content Data							
Tare No.:							
Wet Wt. Of Soil & Tare, g:	151.38	199.8	133.4	215.62			
Dry Wt of Soil & Tare, g:	141.73	175.3	124.85	189.35			
Tare, g:	22.04	16.42	22.21	16.85			
Visual Classification:	Dark Yellowish Brown Clayey SAND w/ Gravel (Silty)	Very Dark Brown CLAY w/ Sand	Dark Olive Brown Clayey SAND w/ Gravel	Dark Olive Brown Clayey SAND w/ Gravel			
% Sat	#DIV/0!	66.9	#DIV/0!	91.3	#DIV/0!	#DIV/0!	#DIV/0!
Total Dry wt. Of Soil	0.0	159.4	0.0	175.0	0.0	0.0	0.0
Vol ft ³	0.000	0.003	0.000	0.003	0.000	0.000	0.000
Vol cc	0.000	95.345	0.000	93.323	0.000	0.000	0.000
Vol Solids	0.000	58.590	0.000	64.146	0.000	0.000	0.000
Vol Voids	0.000	36.755	0.000	29.177	0.000	0.000	0.000
Void Ratio	#DIV/0!	0.627	#DIV/0!	0.455	#DIV/0!	#DIV/0!	#DIV/0!
Porosity:	#DIV/0!	38.5	#DIV/0!	31.3	#DIV/0!	#DIV/0!	#DIV/0!
Pore water Volume,ml	0.0	24.6	0.0	26.6	0.0	0.0	0.0
Sat. %	#DIV/0!	66.9	#DIV/0!	91.3	#DIV/0!	#DIV/0!	#DIV/0!



The following information is intended to provide some more detailed information about each of the parameters presented in the accompanying report. For additional information on this subject we recommend a general soil mechanics text book.

SPECIFIC GRAVITY - The specific gravity is equivalent to the particle density. It is defined as the ratio of the density of the soil solids to the density of water at 20°C. It is used to calculate the phase relationships of soils, such as void ratio and degree of saturation. If a specific gravity test was not run on a sample then an assumed specific gravity value is used to calculate an estimated saturation.

MOISTURE CONTENT - The moisture content as reported here is based on a gravimetric measurement and not a volumetric measurement. The moisture content is defined as the weight of water in a specimen (g) divided by the oven-dry weight of the specimen (g) and expressed as a percentage.

WET UNIT WEIGHT - The wet unit weight is equivalent to the total unit weight or the wet bulk density and is typically reported in units of pounds per cubic foot (pcf) although it can also be reported in units of grams per cubic centimeter (g/cm^3). It is defined as the total wet weight of the sample (wt. of soil plus wt. of water) divided by the total volume (volume of solids plus the volume of voids).

DRY UNIT WEIGHT - The dry unit weight is equivalent to the dry bulk density and is typically reported in units of pounds per cubic foot (pcf) although it can also be reported in units of grams per cubic centimeter (g/cm^3). It is defined as the total dry weight of the sample divided by the total volume (volume of solids plus the volume of voids).

SATURATION - The degree of saturation (S) is defined as the ratio of the volume of water in a sample to the volume of voids (pore space). It can be expressed either as a percentage or as a decimal. A saturation of zero would indicate an oven-dry state. All of the voids are filled with air. A saturation of 100% would indicate that all of the voids in the sample are filled with water and there is no air in the soil. It is theoretically impossible to have saturation values greater than 100%. If a specific gravity test is not run on a sample then an assumed specific gravity value is used to calculate an estimated saturation.

TOTAL POROSITY - The total porosity is a measure of how porous the sample is or how much of the bulk sample volume is pore space. It is defined as the ratio of the volume of voids (pore space) to the total volume (volume of solids plus the volume of voids). It can be expressed either as a percentage or as a decimal. Interestingly, clays typically have a higher porosity than sands although the size of the voids tends to be much smaller in clays resulting in the typically very low hydraulic conductivity values for clays relative to sands.

TOTAL POROSITY vs. EFFECTIVE POROSITY - While the total porosity is defined as the volume of voids/ the bulk volume of the sample(volume of voids plus volume of solids) not all of the void space contributes in a significant way to the flow of water. Some of the voids are isolated, are too small or are filled with water which is adsorbed to the clay minerals or other grains. Effective porosity is basically defined as the volume of voids that contribute in a significant way to the flow of water divided by the bulk volume of the soil. The effective porosity can approach the total porosity in the case of clean coarse sands and can approach zero in the case of clays but it is always less than the total porosity.

VOLUMETRIC WATER CONTENT - Volumetric Water Content (θ_w) is the same as Water-filled Porosity. It is defined simply as the percent of the total volume of the sample that is occupied by water.

VOLUMETRIC AIR CONTENT - Volumetric Air Content (θ_a) is the same as Air-filled Porosity. It is defined simply as the percent of the total volume of the sample that is occupied by air.

VOID RATIO - The void ratio is related to the porosity as a measure of how much void space is in the sample. It is defined as the ratio of the volume of void space in a sample to the total volume (volume of solids plus the volume of voids).

INITIAL and FINAL SAMPLE STATES - For some tests such as the hydraulic conductivity or triaxial shear tests the sample is saturated as part of the test procedure. The reports for these types of tests will provide results for sample parameters in both the "Initial" and "Final" sample conditions. These parameters include wet and dry densities, moisture contents, porosities etc. The "Initial" state is the as-received state. If the sample was undisturbed then the initial sample parameters will reflect the condition of the in-situ condition of the soil. The "Final" state is the at-test state. In this state, water may have been added to the sample to saturate it. The sample may have also been consolidated as part of the test (hydraulic conductivity, air permeability and triaxial/direct shear strength testing only). This would cause an increase in sample density and related values from the as-received state. If the sample was consolidated the report would indicate this as well as the consolidation stress applied.

SAMPLE DISTURBANCE - Some soil parameters are significantly affected by the density and arrangement of the soil particles. These parameters include density, porosity(total and effective), volumetric air and water contents, hydraulic conductivity, air permeability, strength, void ratio etc. For these analyses the goal is to test samples that are as representative of the in-situ soil conditions as possible. The way in which samples are collected determines the degree of disturbance the sample experiences. Typically, the larger the sample diameter the less disturbed the sample is and the more representative it is of the in-situ condition. Cooper Testing Labs recommends a minimum sample diameter of 2 inches for any testing that calls for undisturbed specimens such as those listed above. Although we recommend against using direct push sampling to obtain undisturbed samples we realize that there are times when there are no other options. In this case we recommend limiting the push length to a maximum of 12 inches when "undisturbed" samples are desired. This will help to minimize the sample disturbance.



Specific Gravity by Pycnometer
ASTM D 854

CTL Job#: 390-011 Project Name: Former Chevron Station 95607 Date: 09/25/13

Client: CRA Project No.: 311950 Run By: MD

Checked DC

Boring:	VP-1	VP-9						
Sample:								
Depth, ft.:	11.5	7						
Pan No.:								
Soil Description (visual)	Very Dark Brown CLAY w/ Sand	Dark Olive Brown Clayey SAND w/ Gravel						
Pycnometer ID:	6	E						
Mass of Clean, Dry Pycnometer (g):	164.22	171.63						
Mass of Pycnometer, Soil, and Water (g):	724.92	732.19						
Temperature of Slurry (°C):	23.4	23.4						
Tare ID:								
Mass of Tare (g):	234.01	227.68						
Mass of Dry Soil and Tare (g):	332.66	325.97						
Mass of Dry Soil (g):	98.65	98.29						
Mass of Pycnometer and Water at Test Temp (g):	662.52	669.91						
Specific Gravity @ Test Temp:	2.722	2.730						
Specific Gravity @ 20 °C:	2.720	2.728						

APPENDIX F

SOIL VAPOR LABORATORY ANALYTICAL REPORTS

9/23/2013
Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: FORMER CHEVRON 95607

Project #: 311950
Workorder #: 1309346

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Maria Barajas at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Maria Barajas
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309346

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	VP-7-3.5	Modified TO-17 VI
02A	VP-7-7	Modified TO-17 VI
03A	VP-8-3.5	Modified TO-17 VI
04A	VP-8-7	Modified TO-17 VI
05A	VP-10-3.5	Modified TO-17 VI
06A	VP-10-7	Modified TO-17 VI
07A	VP-9-3.5	Modified TO-17 VI
08A	VP-1-7	Modified TO-17 VI
09A	VP-1-12	Modified TO-17 VI
10A	VP-1-12-DUP	Modified TO-17 VI
11A	VP-2-7	Modified TO-17 VI
12A	VP-2-12	Modified TO-17 VI
13A	VP-3-7	Modified TO-17 VI
14A	VP-3-12	Modified TO-17 VI
15A	VP-4-5.5	Modified TO-17 VI
16A	VP-5-7	Modified TO-17 VI
17A	VP-5-12	Modified TO-17 VI
18A	VP-6-7	Modified TO-17 VI
19A	VP-6-7-DUP	Modified TO-17 VI
20A	Lab Blank	Modified TO-17 VI
20B	Lab Blank	Modified TO-17 VI
21A	CCV	Modified TO-17 VI
21B	CCV	Modified TO-17 VI

Continued on next page

WORK ORDER #: 1309346

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
22A	LCS	Modified TO-17 VI
22AA	LCSD	Modified TO-17 VI
22B	LCS	Modified TO-17 VI
22BB	LCSD	Modified TO-17 VI

CERTIFIED BY:



DATE: 09/23/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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



LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Conesoga-Rovers Associates (CRA)
Workorder# 1309346

Nineteen TO-17 VI Tube samples were received on September 19, 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 0.200 L was used to convert ng to ug/m³ for the associated Lab Blanks.

The field surrogate, Naphthalene-d8, in samples VP-5-12, VP-6-7 and VP-6-7-DUP exceeded the laboratory limits of 50-150%.

Naphthalene was detected in sample VP-6-7-DUP. Because the preceding sample VP-6-7, contained concentrations exceeding the calibration range, the results for Naphthalene in sample VP-6-7-DUP may be

biased high.

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



Air Toxics

Summary of Detected Compounds EPA METHOD TO-17

Client Sample ID: VP-7-3.5**Lab ID#: 1309346-01A**

No Detections Were Found.

Client Sample ID: VP-7-7**Lab ID#: 1309346-02A**

No Detections Were Found.

Client Sample ID: VP-8-3.5**Lab ID#: 1309346-03A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	4.7	24

Client Sample ID: VP-8-7**Lab ID#: 1309346-04A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.83	4.1

Client Sample ID: VP-10-3.5**Lab ID#: 1309346-05A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.61	3.0

Client Sample ID: VP-10-7**Lab ID#: 1309346-06A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.52	2.6

Client Sample ID: VP-9-3.5**Lab ID#: 1309346-07A**

No Detections Were Found.

Summary of Detected Compounds EPA METHOD TO-17

Client Sample ID: VP-1-7

Lab ID#: 1309346-08A

No Detections Were Found.

Client Sample ID: VP-1-12

Lab ID#: 1309346-09A

No Detections Were Found.

Client Sample ID: VP-1-12-DUP

Lab ID#: 1309346-10A

No Detections Were Found.

Client Sample ID: VP-2-7

Lab ID#: 1309346-11A

No Detections Were Found.

Client Sample ID: VP-2-12

Lab ID#: 1309346-12A

No Detections Were Found.

Client Sample ID: VP-3-7

Lab ID#: 1309346-13A

No Detections Were Found.

Client Sample ID: VP-3-12

Lab ID#: 1309346-14A

No Detections Were Found.

Client Sample ID: VP-4-5.5

Lab ID#: 1309346-15A

No Detections Were Found.

Client Sample ID: VP-5-7

Lab ID#: 1309346-16A



Air Toxics

Summary of Detected Compounds EPA METHOD TO-17

Client Sample ID: VP-5-7**Lab ID#: 1309346-16A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	1.6	8.3

Client Sample ID: VP-5-12**Lab ID#: 1309346-17A**

No Detections Were Found.

Client Sample ID: VP-6-7**Lab ID#: 1309346-18A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	370 E	1900 E

Client Sample ID: VP-6-7-DUP**Lab ID#: 1309346-19A**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	23	110



Client Sample ID: VP-7-3.5

Lab ID#: 1309346-01A

EPA METHOD TO-17

File Name:	f091925	Date of Extraction: NA	Date of Collection: 9/16/13 12:44:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 04:37 AM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	80			50-150



Client Sample ID: VP-7-7

Lab ID#: 1309346-02A

EPA METHOD TO-17

File Name:	f091926	Date of Extraction: NA	Date of Collection: 9/16/13 12:54:00 PM
Dil. Factor:	1.00		Date of Analysis: 9/20/13 05:18 AM

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	84	50-150



Client Sample ID: VP-8-3.5

Lab ID#: 1309346-03A

EPA METHOD TO-17

File Name:	f091927	Date of Extraction: NA	Date of Collection: 9/16/13 3:02:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 06:00 AM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	4.7	24
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	82			50-150



Client Sample ID: VP-8-7

Lab ID#: 1309346-04A

EPA METHOD TO-17

File Name:	f091928	Date of Extraction: NA	Date of Collection: 9/16/13 3:14:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 06:41 AM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.83	4.1
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	84			50-150



Client Sample ID: VP-10-3.5

Lab ID#: 1309346-05A

EPA METHOD TO-17

File Name:	6092008	Date of Extraction: NA	Date of Collection: 9/16/13 5:12:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 04:44 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.61	3.0
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	128			50-150



Client Sample ID: VP-10-7

Lab ID#: 1309346-06A

EPA METHOD TO-17

File Name:	6092009	Date of Extraction: NA	Date of Collection: 9/16/13 5:22:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 05:22 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	0.52	2.6
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	134			50-150



Client Sample ID: VP-9-3.5

Lab ID#: 1309346-07A

EPA METHOD TO-17

File Name:	6092010	Date of Extraction: NA	Date of Collection: 9/17/13 8:49:00 AM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 06:00 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	130			50-150



Client Sample ID: VP-1-7

Lab ID#: 1309346-08A

EPA METHOD TO-17

File Name:	6092011	Date of Extraction: NA	Date of Collection: 9/17/13 11:15:00 AM
Dil. Factor:	1.00		Date of Analysis: 9/20/13 06:37 PM

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	120	50-150



Client Sample ID: VP-1-12

Lab ID#: 1309346-09A

EPA METHOD TO-17

File Name:	6092012	Date of Extraction: NA	Date of Collection: 9/17/13 11:55:00 AM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 07:15 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	129			50-150



Client Sample ID: VP-1-12-DUP

Lab ID#: 1309346-10A

EPA METHOD TO-17

File Name:	6092013	Date of Extraction: NA	Date of Collection: 9/17/13 11:55:00 AM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 07:52 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	128			50-150



Client Sample ID: VP-2-7

Lab ID#: 1309346-11A

EPA METHOD TO-17

File Name:	6092014	Date of Extraction: NA	Date of Collection: 9/17/13 1:07:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 08:29 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	132			50-150



Client Sample ID: VP-2-12

Lab ID#: 1309346-12A

EPA METHOD TO-17

File Name:	6092015	Date of Extraction: NA	Date of Collection: 9/17/13 1:40:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 09:06 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	144			50-150



Client Sample ID: VP-3-7

Lab ID#: 1309346-13A

EPA METHOD TO-17

File Name:	6092016	Date of Extraction: NA	Date of Collection: 9/17/13 2:36:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 09:43 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	132			50-150



Client Sample ID: VP-3-12

Lab ID#: 1309346-14A

EPA METHOD TO-17

File Name:	6092017	Date of Extraction: NA	Date of Collection: 9/17/13 3:27:00 PM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 10:21 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery			Method Limits
Naphthalene-d8	132			50-150



Client Sample ID: VP-4-5.5

Lab ID#: 1309346-15A

EPA METHOD TO-17

File Name:	6092018	Date of Extraction: NA	Date of Collection: 9/17/13 4:19:00 PM
Dil. Factor:	1.00		Date of Analysis: 9/20/13 10:58 PM

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	127	50-150



Client Sample ID: VP-5-7

Lab ID#: 1309346-16A

EPA METHOD TO-17

File Name:	6092019	Date of Extraction: NA	Date of Collection: 9/18/13 9:22:00 AM	
Dil. Factor:	1.00		Date of Analysis: 9/20/13 11:35 PM	
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	1.6	8.3
Air Sample Volume(L): 0.200				
Container Type: TO-17 VI Tube				
Surrogates	%Recovery		Method Limits	
Naphthalene-d8	150		50-150	



Client Sample ID: VP-5-12

Lab ID#: 1309346-17A

EPA METHOD TO-17

File Name:	6092020	Date of Extraction: NA	Date of Collection: 9/18/13 10:05:00 AM
Dil. Factor:	1.00		Date of Analysis: 9/21/13 12:13 AM

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	0.50	2.5	Not Detected	Not Detected

Air Sample Volume(L): 0.200

Q = Exceeds Quality Control limits.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	160 Q	50-150



Air Toxics

Client Sample ID: VP-6-7

Lab ID#: 1309346-18A

EPA METHOD TO-17

File Name:	6092021	Date of Extraction:	NA	Date of Collection:	9/18/13 11:50:00 AM
Dil. Factor:	1.00			Date of Analysis:	9/21/13 12:52 AM
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)	
Naphthalene	0.50	2.5	370 E	1900 E	

Air Sample Volume(L): 0.200

E = Exceeds instrument calibration range.

Q = Exceeds Quality Control limits.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	155 Q	50-150



Air Toxics

Client Sample ID: VP-6-7-DUP

Lab ID#: 1309346-19A

EPA METHOD TO-17

File Name:	6092022	Date of Extraction:	NA	Date of Collection:	9/18/13 11:50:00 AM
Dil. Factor:	1.00			Date of Analysis:	9/21/13 01:34 AM
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)	
Naphthalene	0.50	2.5	23	110	

Air Sample Volume(L): 0.200

Q = Exceeds Quality Control limits.

Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	170 Q	50-150



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309346-20A

EPA METHOD TO-17

File Name:	f091905	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00			Date of Analysis:	9/19/13 02:00 PM
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)	
Naphthalene	0.50	2.5	Not Detected	Not Detected	
Air Sample Volume(L): 0.200					
Container Type: NA - Not Applicable					
Surrogates	%Recovery				Method Limits
Naphthalene-d8	107				50-150



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309346-20B

EPA METHOD TO-17

File Name:	6092007	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00			Date of Analysis:	9/20/13 03:32 PM
Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)	
Naphthalene	0.50	2.5	Not Detected	Not Detected	
Air Sample Volume(L): 0.200					
Container Type: NA - Not Applicable					
Surrogates	%Recovery				Method Limits
Naphthalene-d8	99				50-150



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309346-21A

EPA METHOD TO-17

File Name:	f091902	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00			Date of Analysis:	9/19/13 11:53 AM

Compound	%Recovery
Naphthalene	86

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	120	50-150



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309346-21B

EPA METHOD TO-17

File Name:	6092003	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00			Date of Analysis:	9/20/13 11:57 AM

Compound	%Recovery
Naphthalene	108

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	88	50-150



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309346-22A

EPA METHOD TO-17

File Name:	f091903	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00			Date of Analysis:	9/19/13 12:35 PM

Compound	%Recovery	Method Limits
Naphthalene	85	70-130

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	117	50-150



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1309346-22AA

EPA METHOD TO-17

File Name:	f091904	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis: 9/19/13 01:18 PM			

Compound	%Recovery	Method Limits
Naphthalene	85	70-130

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

Surrogates	%Recovery	Method Limits
Naphthalene-d8	117	50-150



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309346-22B

EPA METHOD TO-17

File Name:	6092004	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 12:34 PM			

Compound	%Recovery	Method Limits
Naphthalene	129	70-130

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	129	50-150



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1309346-22BB

EPA METHOD TO-17

File Name:	6092005	Date of Extraction:	NA	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 01:12 PM			

Compound	%Recovery	Method Limits
Naphthalene	129	70-130

Air Sample Volume(L): 1.00

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	102	50-150

9/25/2013

Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: 5269 Crow Canyon Rd

Project #: 311950
Workorder #: 1309347AR1

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309347AR1

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 5269 Crow Canyon Rd
DATE RECEIVED:	09/19/2013	CONTACT:	Kelly Buettner
DATE COMPLETED:	09/24/2013		
DATE REISSUED:	09/25/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-9-3.5	Modified TO-15	4.5 "Hg	15.1 psi
02A	VP-9-3.5-Dup	Modified TO-15	4.7 "Hg	15.2 psi
03A	VP-9-7	Modified TO-15	15.5 "Hg	14.7 psi
04A	VP-1-7	Modified TO-15	3.7 "Hg	15.2 psi
05A	VP-1-12	Modified TO-15	3.5 "Hg	15 psi
06A	VP-2-7	Modified TO-15	6.3 "Hg	15.1 psi
07A	VP-2-12	Modified TO-15	6.5 "Hg	14.9 psi
08A	VP-3-7	Modified TO-15	3.9 "Hg	14.6 psi
09A	VP-3-12	Modified TO-15	5.1 "Hg	14.9 psi
10A	Trip Blank	Modified TO-15	28.8 "Hg	15.3 psi
11A	Lab Blank	Modified TO-15	NA	NA
11B	Lab Blank	Modified TO-15	NA	NA
11C	Lab Blank	Modified TO-15	NA	NA
12A	CCV	Modified TO-15	NA	NA
12B	CCV	Modified TO-15	NA	NA
12C	CCV	Modified TO-15	NA	NA
13A	LCS	Modified TO-15	NA	NA
13AA	LCSD	Modified TO-15	NA	NA
13B	LCS	Modified TO-15	NA	NA
13BB	LCSD	Modified TO-15	NA	NA
13C	LCS	Modified TO-15	NA	NA
13CC	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

DATE: 09/25/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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



**LABORATORY NARRATIVE
EPA Method TO-15
Conestoga-Rovers Associates (CRA)
Workorder# 1309347AR1**

Ten 1 Liter Summa Canister (100% Certified) samples were received on September 19, 2013. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

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

Receiving Notes

The number of samples received did not match the information on the Chain of Custody (COC). Sample Trip Blank was added to the analytical request.

Sample VP-9-7 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

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.

Dilution was performed on samples VP-3-7 and VP-3-12 due to matrix interference.

THE WORKORDER WAS REISSUED ON 9/25/13 TO REPORT THE ADDITIONAL COMPOUND METHYL TERT-BUTYL ETHER AS REQUIRED BY THE PROJECT SPECIFICATIONS.

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



Air Toxics

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

Client Sample ID: VP-9-3.5**Lab ID#: 1309347AR1-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	17	3.8	56
Ethyl Benzene	1.2	14	5.2	60
Toluene	1.2	18	4.5	66
m,p-Xylene	1.2	35	5.2	150
o-Xylene	1.2	2.8	5.2	12
Naphthalene	4.8	5.1	25	27
TPH ref. to Gasoline (MW=100)	60	2400	240	9700

Client Sample ID: VP-9-3.5-Dup**Lab ID#: 1309347AR1-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	17	3.8	56
Ethyl Benzene	1.2	2.1	5.2	9.0
Toluene	1.2	18	4.5	66
m,p-Xylene	1.2	12	5.2	54
o-Xylene	1.2	2.3	5.2	10
TPH ref. to Gasoline (MW=100)	60	1700	250	6900

Client Sample ID: VP-9-7**Lab ID#: 1309347AR1-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.1	7.3	6.6	23
Toluene	2.1	15	7.8	55
m,p-Xylene	2.1	6.6	9.0	29
TPH ref. to Gasoline (MW=100)	100	1400	420	5600

Client Sample ID: VP-1-7**Lab ID#: 1309347AR1-04A**

No Detections Were Found.

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

Client Sample ID: VP-1-12

Lab ID#: 1309347AR1-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	1.1	1.1	4.3	4.3

Client Sample ID: VP-2-7

Lab ID#: 1309347AR1-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	1.6	4.1	5.0
Toluene	1.3	2.2	4.8	8.2
Naphthalene	5.1	5.8	27	30
TPH ref. to Gasoline (MW=100)	64	210	260	860

Client Sample ID: VP-2-12

Lab ID#: 1309347AR1-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	4.8	4.1	16
Ethyl Benzene	1.3	1.4	5.6	6.3
Toluene	1.3	15	4.8	57
m,p-Xylene	1.3	5.8	5.6	25
<u>o-Xylene</u>	1.3	1.7	5.6	7.4
TPH ref. to Gasoline (MW=100)	64	880	260	3600

Client Sample ID: VP-3-7

Lab ID#: 1309347AR1-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	19000	760000	78000	3100000

Client Sample ID: VP-3-12

Lab ID#: 1309347AR1-09A

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

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

Client Sample ID: VP-3-12

Lab ID#: 1309347AR1-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	2400	170000	9900	710000

Client Sample ID: Trip Blank

Lab ID#: 1309347AR1-10A

No Detections Were Found.



Client Sample ID: VP-9-3.5
Lab ID#: 1309347AR1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092018r1	Date of Collection:	9/17/13 8:38:00 AM	
Dil. Factor:	2.38	Date of Analysis:	9/20/13 06:54 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	17	3.8	56
Ethyl Benzene	1.2	14	5.2	60
Toluene	1.2	18	4.5	66
m,p-Xylene	1.2	35	5.2	150
<u>o-Xylene</u>	<u>1.2</u>	<u>2.8</u>	<u>5.2</u>	<u>12</u>
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
Naphthalene	4.8	5.1	25	27
TPH ref. to Gasoline (MW=100)	60	2400	240	9700

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347AR1-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092019r1	Date of Collection:	9/17/13 8:38:00 AM	
Dil. Factor:	2.41	Date of Analysis:	9/20/13 07:26 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	17	3.8	56
Ethyl Benzene	1.2	2.1	5.2	9.0
Toluene	1.2	18	4.5	66
m,p-Xylene	1.2	12	5.2	54
<u>o-Xylene</u>	<u>1.2</u>	<u>2.3</u>	<u>5.2</u>	<u>10</u>
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
Naphthalene	4.8	Not Detected	25	Not Detected
TPH ref. to Gasoline (MW=100)	60	1700	250	6900

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: VP-9-7
Lab ID#: 1309347AR1-03A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092020r1	Date of Collection:	9/17/13 9:54:00 AM	
Dil. Factor:	4.14	Date of Analysis:	9/20/13 08:27 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.1	7.3	6.6	23
Ethyl Benzene	2.1	Not Detected	9.0	Not Detected
Toluene	2.1	15	7.8	55
m,p-Xylene	2.1	6.6	9.0	29
<u>o-Xylene</u>	<u>2.1</u>	<u>Not Detected</u>	<u>9.0</u>	<u>Not Detected</u>
Methyl tert-butyl ether	2.1	Not Detected	7.5	Not Detected
Naphthalene	8.3	Not Detected	43	Not Detected
TPH ref. to Gasoline (MW=100)	100	1400	420	5600

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: VP-1-7
Lab ID#: 1309347AR1-04A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092022r1	Date of Collection:	9/17/13 11:07:00 AM	
Dil. Factor:	2.32	Date of Analysis:	9/20/13 09:21 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	Not Detected	3.7	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
<u>o-Xylene</u>	<u>1.2</u>	<u>Not Detected</u>	<u>5.0</u>	<u>Not Detected</u>
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Naphthalene	4.6	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	58	Not Detected	240	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: VP-1-12

Lab ID#: 1309347AR1-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092023r1	Date of Collection:	9/17/13 11:48:00 AM	
Dil. Factor:	2.28	Date of Analysis:	9/20/13 10:06 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	Not Detected	3.6	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
Toluene	1.1	1.1	4.3	4.3
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
<u>o</u> -Xylene	1.1	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	4.1	Not Detected
Naphthalene	4.6	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	57	Not Detected	230	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: VP-2-7
Lab ID#: 1309347AR1-06A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092024r1	Date of Collection:	9/17/13 1:03:00 PM	
Dil. Factor:	2.57	Date of Analysis:	9/20/13 10:43 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	1.6	4.1	5.0
Ethyl Benzene	1.3	Not Detected	5.6	Not Detected
Toluene	1.3	2.2	4.8	8.2
m,p-Xylene	1.3	Not Detected	5.6	Not Detected
<u>o-Xylene</u>	<u>1.3</u>	<u>Not Detected</u>	<u>5.6</u>	<u>Not Detected</u>
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
Naphthalene	5.1	5.8	27	30
TPH ref. to Gasoline (MW=100)	64	210	260	860

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: VP-2-12
Lab ID#: 1309347AR1-07A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092025r1	Date of Collection:	9/17/13 1:38:00 PM	
Dil. Factor:	2.57	Date of Analysis:	9/21/13 08:30 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	4.8	4.1	16
Ethyl Benzene	1.3	1.4	5.6	6.3
Toluene	1.3	15	4.8	57
m,p-Xylene	1.3	5.8	5.6	25
<u>o-Xylene</u>	1.3	1.7	5.6	7.4
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
Naphthalene	5.1	Not Detected	27	Not Detected
TPH ref. to Gasoline (MW=100)	64	880	260	3600

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: VP-3-7
Lab ID#: 1309347AR1-08A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092111r1	Date of Collection:	9/17/13 2:28:00 PM	
Dil. Factor:	763	Date of Analysis:	9/21/13 03:53 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	380	Not Detected	1200	Not Detected
Ethyl Benzene	380	Not Detected	1600	Not Detected
Toluene	380	Not Detected	1400	Not Detected
m,p-Xylene	380	Not Detected	1600	Not Detected
<u>o-Xylene</u>	<u>380</u>	<u>Not Detected</u>	<u>1600</u>	<u>Not Detected</u>
Methyl tert-butyl ether	380	Not Detected	1400	Not Detected
Naphthalene	1500	Not Detected	8000	Not Detected
TPH ref. to Gasoline (MW=100)	19000	760000	78000	3100000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: VP-3-12
Lab ID#: 1309347AR1-09A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092320r1	Date of Collection:	9/17/13 3:17:00 PM	
Dil. Factor:	97.2	Date of Analysis:	9/23/13 10:53 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	49	Not Detected	160	Not Detected
Ethyl Benzene	49	Not Detected	210	Not Detected
Toluene	49	Not Detected	180	Not Detected
m,p-Xylene	49	Not Detected	210	Not Detected
<u>o-Xylene</u>	<u>49</u>	<u>Not Detected</u>	<u>210</u>	<u>Not Detected</u>
Methyl tert-butyl ether	49	Not Detected	180	Not Detected
Naphthalene	190	Not Detected	1000	Not Detected
TPH ref. to Gasoline (MW=100)	2400	170000	9900	710000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	108	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: Trip Blank
Lab ID#: 1309347AR1-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092108r1	Date of Collection:	9/17/13	
Dil. Factor:	1.00	Date of Analysis:	9/21/13 01:39 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	<u>0.50</u>	<u>Not Detected</u>	<u>2.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347AR1-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/20/13 12:13 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	<u>0.50</u>	<u>Not Detected</u>	<u>2.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347AR1-11B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/21/13 12:21 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	<u>0.50</u>	<u>Not Detected</u>	<u>2.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	97	70-130



Client Sample ID: Lab Blank
Lab ID#: 1309347AR1-11C
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092307	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/23/13 01:26 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	0.50	Not Detected	2.2	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: CCV
Lab ID#: 1309347AR1-12A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 09:30 AM

Compound	%Recovery
Benzene	90
Ethyl Benzene	96
Toluene	88
m,p-Xylene	100
<u>o-Xylene</u>	99
Methyl tert-butyl ether	106
Naphthalene	92
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: CCV
Lab ID#: 1309347AR1-12B
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092102	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 09:36 AM

Compound	%Recovery
Benzene	87
Ethyl Benzene	93
Toluene	88
m,p-Xylene	99
<u>o-Xylene</u>	98
Methyl tert-butyl ether	107
Naphthalene	95
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: CCV
Lab ID#: 1309347AR1-12C
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092302	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 09:03 AM

Compound	%Recovery
Benzene	85
Ethyl Benzene	92
Toluene	85
m,p-Xylene	96
<u>o-Xylene</u>	94
Methyl tert-butyl ether	107
Naphthalene	91
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCS
Lab ID#: 1309347AR1-13A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092003	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 09:53 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	100	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	65	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCSD
Lab ID#: 1309347AR1-13AA
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 10:11 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	102	70-130
Methyl tert-butyl ether	106	70-130
Naphthalene	68	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: LCS
Lab ID#: 1309347AR1-13B
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092103	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 10:12 AM

Compound	%Recovery	Method Limits
Benzene	91	70-130
Ethyl Benzene	97	70-130
Toluene	90	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	99	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	69	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCSD
Lab ID#: 1309347AR1-13BB
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/21/13 10:30 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	103	70-130
<u>o-Xylene</u>	100	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	71	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCS
Lab ID#: 1309347AR1-13C
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092303	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 09:44 AM

Compound	%Recovery	Method Limits
Benzene	89	70-130
Ethyl Benzene	94	70-130
Toluene	87	70-130
m,p-Xylene	100	70-130
<u>o-Xylene</u>	98	70-130
Methyl tert-butyl ether	108	70-130
Naphthalene	65	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: LCSD
Lab ID#: 1309347AR1-13CC
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092304	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/23/13 10:16 AM

Compound	%Recovery	Method Limits
Benzene	85	70-130
Ethyl Benzene	93	70-130
Toluene	85	70-130
m,p-Xylene	99	70-130
<u>o-Xylene</u>	96	70-130
Methyl tert-butyl ether	105	70-130
Naphthalene	67	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	99	70-130

9/24/2013
Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: 5269 Crow Canyon Rd
Project #: 311950
Workorder #: 1309347B

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Maria Barajas at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Maria Barajas
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309347B

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 5269 Crow Canyon Rd
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-9-3.5	Modified TO-15 APH	4.5 "Hg	15.1 psi
01B	VP-9-3.5	Modified TO-15 APH	4.5 "Hg	15.1 psi
02A	VP-9-3.5-Dup	Modified TO-15 APH	4.7 "Hg	15.2 psi
02B	VP-9-3.5-Dup	Modified TO-15 APH	4.7 "Hg	15.2 psi
03A	VP-9-7	Modified TO-15 APH	15.5 "Hg	14.7 psi
03B	VP-9-7	Modified TO-15 APH	15.5 "Hg	14.7 psi
04A	VP-1-7	Modified TO-15 APH	3.7 "Hg	15.2 psi
04B	VP-1-7	Modified TO-15 APH	3.7 "Hg	15.2 psi
05A	VP-1-12	Modified TO-15 APH	3.5 "Hg	15 psi
05B	VP-1-12	Modified TO-15 APH	3.5 "Hg	15 psi
06A	VP-2-7	Modified TO-15 APH	6.3 "Hg	15.1 psi
06B	VP-2-7	Modified TO-15 APH	6.3 "Hg	15.1 psi
07A	VP-2-12	Modified TO-15 APH	6.5 "Hg	14.9 psi
07B	VP-2-12	Modified TO-15 APH	6.5 "Hg	14.9 psi
08A	VP-3-7	Modified TO-15 APH	3.9 "Hg	14.6 psi
08B	VP-3-7	Modified TO-15 APH	3.9 "Hg	14.6 psi
09A	VP-3-12	Modified TO-15 APH	5.1 "Hg	14.9 psi
09B	VP-3-12	Modified TO-15 APH	5.1 "Hg	14.9 psi
10A	Lab Blank	Modified TO-15 APH	NA	NA
10B	Lab Blank	Modified TO-15 APH	NA	NA
10C	Lab Blank	Modified TO-15 APH	NA	NA
10D	Lab Blank	Modified TO-15 APH	NA	NA
10E	Lab Blank	Modified TO-15 APH	NA	NA

Continued on next page

WORK ORDER #: 1309347B

Work Order Summary

CLIENT: Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville, CA 94608

BILL TO: Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville, CA 94608

PHONE: 510-420-0700

P.O. #: 311950-2013.8-07.11

FAX: 510-420-9170

PROJECT #: 311950 5269 Crow Canyon Rd

DATE RECEIVED: 09/19/2013

CONTACT: Maria Barajas

DATE COMPLETED: 09/23/2013

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC/PRES.</u>	<u>FINAL PRESSURE</u>
10F	Lab Blank	Modified TO-15 APH	NA	NA
11A	CCV	Modified TO-15 APH	NA	NA
11B	CCV	Modified TO-15 APH	NA	NA
11C	CCV	Modified TO-15 APH	NA	NA
11D	CCV	Modified TO-15 APH	NA	NA
11E	CCV	Modified TO-15 APH	NA	NA
11F	CCV	Modified TO-15 APH	NA	NA

CERTIFIED BY:



DATE: 09/24/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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



**LABORATORY NARRATIVE
Modified TO-15 & VPH Fractions
Conestoga-Rovers Associates (CRA)
Workorder# 1309347B**

Nine 1 Liter Summa Canister (100% Certified) samples were received on September 19, 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

Sample VP-9-7 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

Dilution was performed on samples VP-3-7 and VP-3-12 due to matrix interference.

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

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

Client Sample ID: VP-9-3.5

Lab ID#: 1309347B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	24	350	77	1100
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	24	230	98	960
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	24	98	140	570

Client Sample ID: VP-9-3.5

Lab ID#: 1309347B-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	24	99	120	490

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	24	330	78	1100
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	24	210	99	850
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	24	46	140	270

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347B-02B

No Detections Were Found.

Client Sample ID: VP-9-7

Lab ID#: 1309347B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	41	64	130	210

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

Client Sample ID: VP-9-7

Lab ID#: 1309347B-03A

>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	41	78	290	540
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Client Sample ID: VP-9-7

Lab ID#: 1309347B-03B

No Detections Were Found.

Client Sample ID: VP-1-7

Lab ID#: 1309347B-04A

No Detections Were Found.

Client Sample ID: VP-1-7

Lab ID#: 1309347B-04B

No Detections Were Found.

Client Sample ID: VP-1-12

Lab ID#: 1309347B-05A

No Detections Were Found.

Client Sample ID: VP-1-12

Lab ID#: 1309347B-05B

No Detections Were Found.

Client Sample ID: VP-2-7

Lab ID#: 1309347B-06A

No Detections Were Found.

Client Sample ID: VP-2-7

Lab ID#: 1309347B-06B

No Detections Were Found.



Air Toxics

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

Client Sample ID: VP-2-12**Lab ID#: 1309347B-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26	67	100	280
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26	33	150	190
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26	83	180	580

Client Sample ID: VP-2-12**Lab ID#: 1309347B-07B**

No Detections Were Found.

Client Sample ID: VP-3-7**Lab ID#: 1309347B-08A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	7600	190000	25000	620000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	7600	400000	31000	1600000

Client Sample ID: VP-3-7**Lab ID#: 1309347B-08B**

No Detections Were Found.

Client Sample ID: VP-3-12**Lab ID#: 1309347B-09A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	970	85000	3100	270000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	970	86000	4000	350000

Client Sample ID: VP-3-12**Lab ID#: 1309347B-09B**



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

Client Sample ID: VP-3-12

Lab ID#: 1309347B-09B

No Detections Were Found.



Air Toxics

Client Sample ID: VP-9-3.5

Lab ID#: 1309347B-01A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092018a	Date of Collection: 9/17/13 8:38:00 AM		
Dil. Factor:	2.38	Date of Analysis: 9/20/13 06:54 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	24	350	77	1100
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	24	230	98	960
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	24	98	140	570
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	24	Not Detected	160	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-3.5**Lab ID#: 1309347B-01B****MODIFIED METHOD TO-15 GC/MS FULL SCAN**

File Name:	3092018c	Date of Collection: 9/17/13 8:38:00 AM		
Dil. Factor:	2.38	Date of Analysis: 9/20/13 06:54 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	24	99	120	490
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	24	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347B-02A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092019a	Date of Collection: 9/17/13 8:38:00 AM		
Dil. Factor:	2.41	Date of Analysis: 9/20/13 07:26 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	24	330	78	1100
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	24	210	99	850
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	24	46	140	270
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	24	Not Detected	170	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347B-02B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092019c	Date of Collection: 9/17/13 8:38:00 AM		
Dil. Factor:	2.41	Date of Analysis: 9/20/13 07:26 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	24	Not Detected	120	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	24	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-7

Lab ID#: 1309347B-03A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092020a		Date of Collection:	9/17/13 9:54:00 AM
Dil. Factor:	4.14		Date of Analysis:	9/20/13 08:27 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	41	64	130	210
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	41	Not Detected	170	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	41	Not Detected	240	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	41	78	290	540

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-7

Lab ID#: 1309347B-03B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092020c	Date of Collection:	9/17/13 9:54:00 AM	
Dil. Factor:	4.14	Date of Analysis:	9/20/13 08:27 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	41	Not Detected	200	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	41	Not Detected	230	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-7

Lab ID#: 1309347B-04A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092022a		Date of Collection:	9/17/13 11:07:00 AM
Dil. Factor:	2.32		Date of Analysis:	9/20/13 09:21 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	Not Detected	75	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	Not Detected	95	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	Not Detected	140	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	Not Detected	160	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-7

Lab ID#: 1309347B-04B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092022c	Date of Collection:	9/17/13 11:07:00 AM	
Dil. Factor:	2.32	Date of Analysis:	9/20/13 09:21 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	23	Not Detected	110	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	23	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-12

Lab ID#: 1309347B-05A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092023a		Date of Collection:	9/17/13 11:48:00 AM
Dil. Factor:	2.28		Date of Analysis:	9/20/13 10:06 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	Not Detected	74	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	Not Detected	93	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	Not Detected	130	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	Not Detected	160	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-12

Lab ID#: 1309347B-05B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092023c	Date of Collection:	9/17/13 11:48:00 AM	
Dil. Factor:	2.28	Date of Analysis:	9/20/13 10:06 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	23	Not Detected	110	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	23	Not Detected	120	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-2-7

Lab ID#: 1309347B-06A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092024a		Date of Collection:	9/17/13 1:03:00 PM
Dil. Factor:	2.57		Date of Analysis:	9/20/13 10:43 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26	Not Detected	83	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26	Not Detected	100	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26	Not Detected	150	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26	Not Detected	180	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-2-7

Lab ID#: 1309347B-06B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092024c	Date of Collection:	9/17/13 1:03:00 PM	
Dil. Factor:	2.57	Date of Analysis:	9/20/13 10:43 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26	Not Detected	130	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26	Not Detected	140	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VP-2-12

Lab ID#: 1309347B-07A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092025a	Date of Collection: 9/17/13 1:38:00 PM		
Dil. Factor:	2.57	Date of Analysis: 9/21/13 08:30 AM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26	Not Detected	83	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26	67	100	280
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26	33	150	190
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26	83	180	580

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-2-12

Lab ID#: 1309347B-07B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092025c	Date of Collection:	9/17/13 1:38:00 PM	
Dil. Factor:	2.57	Date of Analysis:	9/21/13 08:30 AM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26	Not Detected	130	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26	Not Detected	140	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-7

Lab ID#: 1309347B-08A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092111a		Date of Collection:	9/17/13 2:28:00 PM
Dil. Factor:	763		Date of Analysis:	9/21/13 03:53 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	7600	190000	25000	620000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	7600	400000	31000	1600000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	7600	Not Detected	44000	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	7600	Not Detected	53000	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-7

Lab ID#: 1309347B-08B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092111c	Date of Collection:	9/17/13 2:28:00 PM	
Dil. Factor:	763	Date of Analysis:	9/21/13 03:53 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	7600	Not Detected	38000	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	7600	Not Detected	42000	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-12

Lab ID#: 1309347B-09A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092320a		Date of Collection:	9/17/13 3:17:00 PM
Dil. Factor:	97.2		Date of Analysis:	9/23/13 10:53 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	970	85000	3100	270000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	970	86000	4000	350000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	970	Not Detected	5600	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	970	Not Detected	6800	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-12

Lab ID#: 1309347B-09B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092320c	Date of Collection:	9/17/13 3:17:00 PM	
Dil. Factor:	97.2	Date of Analysis:	9/23/13 10:53 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	970	Not Detected	4800	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	970	Not Detected	5300	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/20/13 12:13 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007c	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/20/13 12:13 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10C

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/21/13 12:21 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10D

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107c	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/21/13 12:21 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10E

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092307a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/23/13 01:26 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347B-10F

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092307c	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/23/13 01:26 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



Client Sample ID: CCV

Lab ID#: 1309347B-11A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092005a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 11:10 AM

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	91
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	81
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	69
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	84

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309347B-11B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092005c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 11:10 AM

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	97
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	108

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309347B-11C

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092105a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/21/13 11:05 AM

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	90
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	80
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	68
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	85

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309347B-11D

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092105c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 11:05 AM

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	97
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	107

Container Type: NA - Not Applicable



Client Sample ID: CCV

Lab ID#: 1309347B-11E

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092305a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/23/13 11:35 AM

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	89
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	79
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	66
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	84

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309347B-11F

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092305c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/23/13 11:35 AM

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	92
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	104

Container Type: NA - Not Applicable

9/23/2013
Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: 5269 Crow Canyon Rd
Project #: 311950
Workorder #: 1309347C

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Maria Barajas at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Maria Barajas
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309347C

Work Order Summary

CLIENT: Mr. Oliver Yan
 Conestoga-Rovers Associates (CRA)
 5900 Hollis Street
 Suite A
 Emeryville, CA 94608

BILL TO: Mr. Oliver Yan
 Conestoga-Rovers Associates (CRA)
 5900 Hollis Street
 Suite A
 Emeryville, CA 94608

PHONE: 510-420-0700

P.O. #: 311950-2013.8-07.11

FAX: 510-420-9170

PROJECT #: 311950 5269 Crow Canyon Rd

DATE RECEIVED: 09/19/2013

CONTACT: Maria Barajas

DATE COMPLETED: 09/23/2013

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-9-3.5	Modified ASTM D-1946	4.5 "Hg	15.1 psi
02A	VP-9-3.5-Dup	Modified ASTM D-1946	4.7 "Hg	15.2 psi
03A	VP-9-7	Modified ASTM D-1946	15.5 "Hg	14.7 psi
04A	VP-1-7	Modified ASTM D-1946	3.7 "Hg	15.2 psi
05A	VP-1-12	Modified ASTM D-1946	3.5 "Hg	15 psi
06A	VP-2-7	Modified ASTM D-1946	6.3 "Hg	15.1 psi
07A	VP-2-12	Modified ASTM D-1946	6.5 "Hg	14.9 psi
08A	VP-3-7	Modified ASTM D-1946	3.9 "Hg	14.6 psi
09A	VP-3-12	Modified ASTM D-1946	5.1 "Hg	14.9 psi
10A	Trip Blank	Modified ASTM D-1946	28.8 "Hg	15.3 psi
11A	Lab Blank	Modified ASTM D-1946	NA	NA
11B	Lab Blank	Modified ASTM D-1946	NA	NA
12A	LCS	Modified ASTM D-1946	NA	NA
12AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY:

DATE: 09/23/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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


**LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 1309347C**

Ten 1 Liter Summa Canister (100% Certified) samples were received on September 19, 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

The number of samples received did not match the information on the Chain of Custody (COC). Sample Trip Blank was added to the analytical request.

Sample VP-9-7 was received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

The Trip Blank sample has a reportable level of Oxygen present. Reanalysis confirmed the initial result.

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

Summary of Detected Compounds

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VP-9-3.5

Lab ID#: 1309347C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	11
Nitrogen	1.2	87
Carbon Dioxide	0.024	1.5
Methane	0.00024	0.0048
Helium	0.12	0.82

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	12
Nitrogen	1.2	86
Carbon Dioxide	0.024	1.6
Methane	0.00024	0.0049
Helium	0.12	0.75

Client Sample ID: VP-9-7

Lab ID#: 1309347C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.41	14
Nitrogen	2.1	69
Carbon Dioxide	0.041	6.3
Methane	0.00041	0.0031
Helium	0.21	11

Client Sample ID: VP-1-7

Lab ID#: 1309347C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Nitrogen	1.2	77

Summary of Detected Compounds

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VP-1-7

Lab ID#: 1309347C-04A

Carbon Dioxide	0.023	7.6
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Client Sample ID: VP-1-12

Lab ID#: 1309347C-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	8.9
Nitrogen	1.1	76
Carbon Dioxide	0.023	15

Client Sample ID: VP-2-7

Lab ID#: 1309347C-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	8.7
Nitrogen	1.3	76
Carbon Dioxide	0.026	15
Methane	0.00026	0.0021

Client Sample ID: VP-2-12

Lab ID#: 1309347C-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	1.6
Nitrogen	1.3	79
Carbon Dioxide	0.026	19
Methane	0.00026	0.37

Client Sample ID: VP-3-7

Lab ID#: 1309347C-08A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	1.9
Nitrogen	1.1	95

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

Client Sample ID: VP-3-7

Lab ID#: 1309347C-08A

Carbon Dioxide	0.023	2.4
Methane	0.00023	0.31

Client Sample ID: VP-3-12

Lab ID#: 1309347C-09A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	1.4
Nitrogen	1.2	91
Carbon Dioxide	0.024	7.1
Methane	0.00024	0.63

Client Sample ID: Trip Blank

Lab ID#: 1309347C-10A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	0.23
Nitrogen	0.50	100



Air Toxics

Client Sample ID: VP-9-3.5

Lab ID#: 1309347C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092305	Date of Collection: 9/17/13 8:38:00 AM
Dil. Factor:	2.38	Date of Analysis: 9/23/13 09:17 AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	11
Nitrogen	1.2	87
Carbon Dioxide	0.024	1.5
Methane	0.00024	0.0048
Helium	0.12	0.82

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-3.5-Dup

Lab ID#: 1309347C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092307	Date of Collection:	9/17/13 8:38:00 AM
Dil. Factor:	2.41	Date of Analysis:	9/23/13 10:10 AM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.24	12	
Nitrogen	1.2	86	
Carbon Dioxide	0.024	1.6	
Methane	0.00024	0.0049	
Helium	0.12	0.75	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-9-7

Lab ID#: 1309347C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092308	Date of Collection: 9/17/13 9:54:00 AM
Dil. Factor:	4.14	Date of Analysis: 9/23/13 10:40 AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.41	14
Nitrogen	2.1	69
Carbon Dioxide	0.041	6.3
Methane	0.00041	0.0031
Helium	0.21	11

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-7

Lab ID#: 1309347C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092309	Date of Collection: 9/17/13 11:07:00 AM
Dil. Factor:	2.32	Date of Analysis: 9/23/13 11:07 AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	15
Nitrogen	1.2	77
Carbon Dioxide	0.023	7.6
Methane	0.00023	Not Detected
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-1-12

Lab ID#: 1309347C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092310	Date of Collection: 9/17/13 11:48:00 AM
Dil. Factor:	2.28	Date of Analysis: 9/23/13 11:34 AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	8.9
Nitrogen	1.1	76
Carbon Dioxide	0.023	15
Methane	0.00023	Not Detected
Helium	0.11	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-2-7

Lab ID#: 1309347C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092311	Date of Collection:	9/17/13 1:03:00 PM
Dil. Factor:	2.57	Date of Analysis:	9/23/13 12:03 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.26	8.7	
Nitrogen	1.3	76	
Carbon Dioxide	0.026	15	
Methane	0.00026	0.0021	
Helium	0.13	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-2-12

Lab ID#: 1309347C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092312	Date of Collection:	9/17/13 1:38:00 PM
Dil. Factor:	2.57	Date of Analysis:	9/23/13 12:29 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.26	1.6	
Nitrogen	1.3	79	
Carbon Dioxide	0.026	19	
Methane	0.00026	0.37	
Helium	0.13	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-7

Lab ID#: 1309347C-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092313	Date of Collection:	9/17/13 2:28:00 PM
Dil. Factor:	2.29	Date of Analysis:	9/23/13 12:55 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.23	1.9	
Nitrogen	1.1	95	
Carbon Dioxide	0.023	2.4	
Methane	0.00023	0.31	
Helium	0.11	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-3-12

Lab ID#: 1309347C-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092316	Date of Collection: 9/17/13 3:17:00 PM
Dil. Factor:	2.43	Date of Analysis: 9/23/13 02:42 PM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	1.4
Nitrogen	1.2	91
Carbon Dioxide	0.024	7.1
Methane	0.00024	0.63
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: Trip Blank

Lab ID#: 1309347C-10A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092317	Date of Collection:	9/17/13
Dil. Factor:	1.00	Date of Analysis:	9/23/13 03:09 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.10	0.23	
Nitrogen	0.50	100	
Carbon Dioxide	0.010	Not Detected	
Methane	0.00010	Not Detected	
Helium	0.050	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347C-11A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092304	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 08:47 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309347C-11B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092303c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 08:23 AM
Compound	Rpt. Limit (%)	Amount (%)	
Helium	0.050	Not Detected	

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309347C-12A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092302	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 07:56 AM
Compound	%Recovery	Method	Limits
Oxygen	102	85-115	
Nitrogen	100	85-115	
Carbon Dioxide	102	85-115	
Methane	100	85-115	
Helium	99	85-115	

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1309347C-12AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092319	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/23/13 04:27 PM
Compound	%Recovery	Method	Limits
Oxygen	100	85-115	
Nitrogen	100	85-115	
Carbon Dioxide	101	85-115	
Methane	100	85-115	
Helium	98	85-115	

Container Type: NA - Not Applicable

9/26/2013

Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: FORMER CHEVRON 95607

Project #: 311950
Workorder #: 1309348AR1

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309348AR1

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Kelly Buettner
DATE COMPLETED:	09/23/2013		
DATE REISSUED:	09/26/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-7-3.5	Modified TO-15	6.9 "Hg	14.8 psi
02A	VP-7-7	Modified TO-15	7.1 "Hg	14.4 psi
03A	VP-8-3.5	Modified TO-15	4.1 "Hg	15.1 psi
04A	VP-8-7	Modified TO-15	5.7 "Hg	14.9 psi
05A	VP-10-3.5	Modified TO-15	5.9 "Hg	15 psi
06A	VP-10-7	Modified TO-15	5.7 "Hg	14.7 psi
07A	VP-5-7	Modified TO-15	3.7 "Hg	15.3 psi
08A	VP-5-12	Modified TO-15	4.1 "Hg	14.9 psi
09A	VP-6-7	Modified TO-15	7.1 "Hg	14.5 psi
10A	VP-6-7-Dup	Modified TO-15	6.3 "Hg	15.2 psi
11A	VP-4-5.5	Modified TO-15	4.7 "Hg	15 psi
12A	Lab Blank	Modified TO-15	NA	NA
12B	Lab Blank	Modified TO-15	NA	NA
13A	CCV	Modified TO-15	NA	NA
13B	CCV	Modified TO-15	NA	NA
14A	LCS	Modified TO-15	NA	NA
14AA	LCSD	Modified TO-15	NA	NA
14B	LCS	Modified TO-15	NA	NA
14BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:

DATE: 09/26/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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



**LABORATORY NARRATIVE
EPA Method TO-15
Conestoga-Rovers Associates (CRA)
Workorder# 1309348AR1**

Eleven 1 Liter Summa Canister (100% Certified) samples were received on September 19, 2013. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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.

Dilution was performed on samples VP-8-3.5, VP-8-7, VP-5-7, VP-6-7 and VP-6-7-Dup due to the presence of high level non-target species.

The hydrocarbon profile present in sample VP-10-7 did not resemble that of commercial gasoline. Results were calculated using the response factor derived from the gasoline calibration.

THE WORKORDER WAS REISSUED ON 9/26/13 TO REPORT THE ADDITIONAL COMPOUND METHYL TERT-BUTYL ETHER AS REQUIRED BY THE PROJECT SPECIFICATIONS.

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



Air Toxics

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

Client Sample ID: VP-7-3.5**Lab ID#: 1309348AR1-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	5.9	4.2	19
Toluene	1.3	4.0	4.9	15
m,p-Xylene	1.3	3.1	5.7	13
TPH ref. to Gasoline (MW=100)	65	380	270	1600

Client Sample ID: VP-7-7**Lab ID#: 1309348AR1-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	3.8	4.2	12
Ethyl Benzene	1.3	1.7	5.6	7.5
Toluene	1.3	4.6	4.9	17
m,p-Xylene	1.3	6.6	5.6	29
<u>o-Xylene</u>	1.3	2.1	5.6	9.0
TPH ref. to Gasoline (MW=100)	65	380	260	1600

Client Sample ID: VP-8-3.5**Lab ID#: 1309348AR1-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.4	21	7.5	67
Ethyl Benzene	2.4	3.9	10	17
Toluene	2.4	21	8.8	78
m,p-Xylene	2.4	12	10	54
<u>o-Xylene</u>	2.4	3.8	10	17
TPH ref. to Gasoline (MW=100)	120	1100	480	4400

Client Sample ID: VP-8-7**Lab ID#: 1309348AR1-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	5.0	19	16	62



Air Toxics

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

Client Sample ID: VP-8-7**Lab ID#: 1309348AR1-04A**

Toluene	5.0	12	19	47
m,p-Xylene	5.0	6.9	22	30
TPH ref. to Gasoline (MW=100)	250	650	1000	2600

Client Sample ID: VP-10-3.5**Lab ID#: 1309348AR1-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	15	4.0	48
Ethyl Benzene	1.3	2.3	5.5	10
Toluene	1.3	12	4.7	44
m,p-Xylene	1.3	7.8	5.5	34
<u>o-Xylene</u>	<u>1.3</u>	<u>2.8</u>	<u>5.5</u>	<u>12</u>
TPH ref. to Gasoline (MW=100)	63	510	260	2100

Client Sample ID: VP-10-7**Lab ID#: 1309348AR1-06A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	3.1	16	9.9	51
Ethyl Benzene	3.1	8.3	13	36
Toluene	3.1	35	12	130
m,p-Xylene	3.1	24	13	110
<u>o-Xylene</u>	<u>3.1</u>	<u>12</u>	<u>13</u>	<u>51</u>
TPH ref. to Gasoline (MW=100)	150	10000	630	41000

Client Sample ID: VP-5-7**Lab ID#: 1309348AR1-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	4.8	3.7	15
Toluene	1.2	4.7	4.4	18
m,p-Xylene	1.2	2.4	5.0	11
TPH ref. to Gasoline (MW=100)	58	1600	240	6400



Air Toxics

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

Client Sample ID: VP-5-12**Lab ID#: 1309348AR1-08A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	9.3	3.7	30
Ethyl Benzene	1.2	1.6	5.0	6.9
Toluene	1.2	9.8	4.4	37
m,p-Xylene	1.2	5.3	5.0	23
o-Xylene	1.2	1.5	5.0	6.6
TPH ref. to Gasoline (MW=100)	58	5000	240	20000

Client Sample ID: VP-6-7**Lab ID#: 1309348AR1-09A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethyl Benzene	870	18000	3800	81000
m,p-Xylene	870	19000	3800	81000
o-Xylene	870	3800	3800	16000
TPH ref. to Gasoline (MW=100)	44000	6700000	180000	27000000

Client Sample ID: VP-6-7-Dup**Lab ID#: 1309348AR1-10A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethyl Benzene	1300	18000	5600	80000
m,p-Xylene	1300	19000	5600	81000
o-Xylene	1300	3800	5600	16000
TPH ref. to Gasoline (MW=100)	64000	6900000	260000	28000000

Client Sample ID: VP-4-5.5**Lab ID#: 1309348AR1-11A**

No Detections Were Found.



Client Sample ID: VP-7-3.5
Lab ID#: 1309348AR1-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092008r1	Date of Collection:	9/16/13 2:42:00 PM	
Dil. Factor:	2.61	Date of Analysis:	9/20/13 01:23 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	5.9	4.2	19
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
Toluene	1.3	4.0	4.9	15
m,p-Xylene	1.3	3.1	5.7	13
<u>o-Xylene</u>	<u>1.3</u>	<u>Not Detected</u>	<u>5.7</u>	<u>Not Detected</u>
Methyl tert-butyl ether	1.3	Not Detected	4.7	Not Detected
Naphthalene	5.2	Not Detected	27	Not Detected
TPH ref. to Gasoline (MW=100)	65	380	270	1600

Container Type: 1 Liter Summa Canister (100% Certified)

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



Client Sample ID: VP-7-7
Lab ID#: 1309348AR1-02A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092009r1	Date of Collection:	9/16/13 12:23:00 PM	
Dil. Factor:	2.60	Date of Analysis:	9/20/13 02:14 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	3.8	4.2	12
Ethyl Benzene	1.3	1.7	5.6	7.5
Toluene	1.3	4.6	4.9	17
m,p-Xylene	1.3	6.6	5.6	29
<u>o-Xylene</u>	<u>1.3</u>	<u>2.1</u>	<u>5.6</u>	<u>9.0</u>
Methyl tert-butyl ether	1.3	Not Detected	4.7	Not Detected
Naphthalene	5.2	Not Detected	27	Not Detected
TPH ref. to Gasoline (MW=100)	65	380	260	1600

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



Air Toxics

Client Sample ID: VP-8-3.5

Lab ID#: 1309348AR1-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092010r1	Date of Collection:	9/16/13 2:17:00 PM	
Dil. Factor:	4.70	Date of Analysis:	9/20/13 02:32 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	2.4	21	7.5	67
Ethyl Benzene	2.4	3.9	10	17
Toluene	2.4	21	8.8	78
m,p-Xylene	2.4	12	10	54
<u>o-Xylene</u>	<u>2.4</u>	<u>3.8</u>	<u>10</u>	<u>17</u>
Methyl tert-butyl ether	2.4	Not Detected	8.5	Not Detected
Naphthalene	9.4	Not Detected	49	Not Detected
TPH ref. to Gasoline (MW=100)	120	1100	480	4400

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: VP-8-7
Lab ID#: 1309348AR1-04A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092011r1	Date of Collection:	9/16/13 3:32:00 PM	
Dil. Factor:	9.96	Date of Analysis:	9/20/13 02:59 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	5.0	19	16	62
Ethyl Benzene	5.0	Not Detected	22	Not Detected
Toluene	5.0	12	19	47
m,p-Xylene	5.0	6.9	22	30
<u>o-Xylene</u>	<u>5.0</u>	<u>Not Detected</u>	<u>22</u>	<u>Not Detected</u>
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
Naphthalene	20	Not Detected	100	Not Detected
TPH ref. to Gasoline (MW=100)	250	650	1000	2600

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: VP-10-3.5
Lab ID#: 1309348AR1-05A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092012r1	Date of Collection:	9/16/13 4:26:00 PM	
Dil. Factor:	2.52	Date of Analysis:	9/20/13 03:37 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.3	15	4.0	48
Ethyl Benzene	1.3	2.3	5.5	10
Toluene	1.3	12	4.7	44
m,p-Xylene	1.3	7.8	5.5	34
<u>o-Xylene</u>	<u>1.3</u>	<u>2.8</u>	<u>5.5</u>	<u>12</u>
Methyl tert-butyl ether	1.3	Not Detected	4.5	Not Detected
Naphthalene	5.0	Not Detected	26	Not Detected
TPH ref. to Gasoline (MW=100)	63	510	260	2100

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: VP-10-7
Lab ID#: 1309348AR1-06A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092013r1	Date of Collection:	9/16/13 5:07:00 PM	
Dil. Factor:	6.18	Date of Analysis:	9/20/13 04:01 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	3.1	16	9.9	51
Ethyl Benzene	3.1	8.3	13	36
Toluene	3.1	35	12	130
m,p-Xylene	3.1	24	13	110
<u>o-Xylene</u>	<u>3.1</u>	<u>12</u>	<u>13</u>	<u>51</u>
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
Naphthalene	12	Not Detected	65	Not Detected
TPH ref. to Gasoline (MW=100)	150	10000	630	41000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: VP-5-7
Lab ID#: 1309348AR1-07A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092014r1	Date of Collection:	9/18/13 9:17:00 AM	
Dil. Factor:	2.32	Date of Analysis:	9/20/13 04:30 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	4.8	3.7	15
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
Toluene	1.2	4.7	4.4	18
m,p-Xylene	1.2	2.4	5.0	11
<u>o-Xylene</u>	<u>1.2</u>	Not Detected	5.0	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Naphthalene	4.6	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	58	1600	240	6400

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: VP-5-12

Lab ID#: 1309348AR1-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092015r1	Date of Collection:	9/18/13 10:00:00 AM	
Dil. Factor:	2.33	Date of Analysis:	9/20/13 05:06 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	9.3	3.7	30
Ethyl Benzene	1.2	1.6	5.0	6.9
Toluene	1.2	9.8	4.4	37
m,p-Xylene	1.2	5.3	5.0	23
<u>o-Xylene</u>	<u>1.2</u>	<u>1.5</u>	<u>5.0</u>	<u>6.6</u>
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Naphthalene	4.7	Not Detected	24	Not Detected
TPH ref. to Gasoline (MW=100)	58	5000	240	20000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	101	70-130



Client Sample ID: VP-6-7
Lab ID#: 1309348AR1-09A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092112r1	Date of Collection:	9/18/13 11:48:00 AM	
Dil. Factor:	1740	Date of Analysis:	9/21/13 04:31 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	870	Not Detected	2800	Not Detected
Ethyl Benzene	870	18000	3800	81000
Toluene	870	Not Detected	3300	Not Detected
m,p-Xylene	870	19000	3800	81000
<u>o-Xylene</u>	<u>870</u>	<u>3800</u>	<u>3800</u>	<u>16000</u>
Methyl tert-butyl ether	870	Not Detected	3100	Not Detected
Naphthalene	3500	Not Detected	18000	Not Detected
TPH ref. to Gasoline (MW=100)	44000	6700000	180000	27000000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: VP-6-7-Dup

Lab ID#: 1309348AR1-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092113r1	Date of Collection:	9/18/13 11:48:00 AM	
Dil. Factor:	2580	Date of Analysis:	9/21/13 05:14 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1300	Not Detected	4100	Not Detected
Ethyl Benzene	1300	18000	5600	80000
Toluene	1300	Not Detected	4900	Not Detected
m,p-Xylene	1300	19000	5600	81000
<u>o-Xylene</u>	<u>1300</u>	<u>3800</u>	<u>5600</u>	<u>16000</u>
Methyl tert-butyl ether	1300	Not Detected	4600	Not Detected
Naphthalene	5200	Not Detected	27000	Not Detected
TPH ref. to Gasoline (MW=100)	64000	6900000	2600000	28000000

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: VP-4-5.5
Lab ID#: 1309348AR1-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092017r1	Date of Collection:	9/17/13 4:15:00 PM	
Dil. Factor:	2.40	Date of Analysis:	9/20/13 06:15 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.2	Not Detected	3.8	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
<u>o-Xylene</u>	<u>1.2</u>	<u>Not Detected</u>	<u>5.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
Naphthalene	4.8	Not Detected	25	Not Detected
TPH ref. to Gasoline (MW=100)	60	Not Detected	240	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348AR1-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007r1	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/20/13 12:13 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	<u>0.50</u>	<u>Not Detected</u>	<u>2.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348AR1-12B

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/21/13 12:21 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
<u>o-Xylene</u>	<u>0.50</u>	<u>Not Detected</u>	<u>2.2</u>	<u>Not Detected</u>
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected
TPH ref. to Gasoline (MW=100)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	97	70-130



Client Sample ID: CCV
Lab ID#: 1309348AR1-13A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 09:30 AM

Compound	%Recovery
Benzene	90
Ethyl Benzene	96
Toluene	88
m,p-Xylene	100
<u>o-Xylene</u>	99
Methyl tert-butyl ether	106
Naphthalene	92
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130



Client Sample ID: CCV
Lab ID#: 1309348AR1-13B
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092102	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 09:36 AM

Compound	%Recovery
Benzene	87
Ethyl Benzene	93
Toluene	88
m,p-Xylene	99
<u>o-Xylene</u>	98
Methyl tert-butyl ether	107
Naphthalene	95
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: LCS
Lab ID#: 1309348AR1-14A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 09:53 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	100	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	65	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCSD
Lab ID#: 1309348AR1-14AA
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092004	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 10:11 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	102	70-130
Methyl tert-butyl ether	106	70-130
Naphthalene	68	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: LCS
Lab ID#: 1309348AR1-14B
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092103	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 10:12 AM

Compound	%Recovery	Method Limits
Benzene	91	70-130
Ethyl Benzene	97	70-130
Toluene	90	70-130
m,p-Xylene	104	70-130
<u>o-Xylene</u>	99	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	69	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCSD
Lab ID#: 1309348AR1-14BB
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3092104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/21/13 10:30 AM

Compound	%Recovery	Method Limits
Benzene	92	70-130
Ethyl Benzene	97	70-130
Toluene	91	70-130
m,p-Xylene	103	70-130
<u>o-Xylene</u>	100	70-130
Methyl tert-butyl ether	111	70-130
Naphthalene	71	60-140
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

9/23/2013
Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: FORMER CHEVRON 95607

Project #: 311950
Workorder #: 1309348B

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Maria Barajas at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Maria Barajas
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309348B

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-7-3.5	Modified TO-15 APH	6.9 "Hg	14.8 psi
01B	VP-7-3.5	Modified TO-15 APH	6.9 "Hg	14.8 psi
02A	VP-7-7	Modified TO-15 APH	7.1 "Hg	14.4 psi
02B	VP-7-7	Modified TO-15 APH	7.1 "Hg	14.4 psi
03A	VP-8-3.5	Modified TO-15 APH	4.1 "Hg	15.1 psi
03B	VP-8-3.5	Modified TO-15 APH	4.1 "Hg	15.1 psi
04A	VP-8-7	Modified TO-15 APH	5.7 "Hg	14.9 psi
04B	VP-8-7	Modified TO-15 APH	5.7 "Hg	14.9 psi
05A	VP-10-3.5	Modified TO-15 APH	5.9 "Hg	15 psi
05B	VP-10-3.5	Modified TO-15 APH	5.9 "Hg	15 psi
06A	VP-10-7	Modified TO-15 APH	5.7 "Hg	14.7 psi
06B	VP-10-7	Modified TO-15 APH	5.7 "Hg	14.7 psi
07A	VP-5-7	Modified TO-15 APH	3.7 "Hg	15.3 psi
07B	VP-5-7	Modified TO-15 APH	3.7 "Hg	15.3 psi
08A	VP-5-12	Modified TO-15 APH	4.1 "Hg	14.9 psi
08B	VP-5-12	Modified TO-15 APH	4.1 "Hg	14.9 psi
09A	VP-6-7	Modified TO-15 APH	7.1 "Hg	14.5 psi
09B	VP-6-7	Modified TO-15 APH	7.1 "Hg	14.5 psi
10A	VP-6-7-Dup	Modified TO-15 APH	6.3 "Hg	15.2 psi
10B	VP-6-7-Dup	Modified TO-15 APH	6.3 "Hg	15.2 psi
11A	VP-4-5.5	Modified TO-15 APH	4.7 "Hg	15 psi
11B	VP-4-5.5	Modified TO-15 APH	4.7 "Hg	15 psi
12A	Lab Blank	Modified TO-15 APH	NA	NA

Continued on next page

WORK ORDER #: 1309348B

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC/PRES.</u>	<u>FINAL PRESSURE</u>
12B	Lab Blank	Modified TO-15 APH	NA	NA
12C	Lab Blank	Modified TO-15 APH	NA	NA
12D	Lab Blank	Modified TO-15 APH	NA	NA
13A	CCV	Modified TO-15 APH	NA	NA
13B	CCV	Modified TO-15 APH	NA	NA
13C	CCV	Modified TO-15 APH	NA	NA
13D	CCV	Modified TO-15 APH	NA	NA

CERTIFIED BY:

DATE: 09/23/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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



**LABORATORY NARRATIVE
Modified TO-15 & VPH Fractions
Conestoga-Rovers Associates (CRA)
Workorder# 1309348B**

Eleven 1 Liter Summa Canister (100% Certified) samples were received on September 19, 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

Dilution was performed on samples VP-8-3.5, VP-8-7, VP-5-7, VP-6-7 and VP-6-7-Dup due to matrix interference.

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

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

Client Sample ID: VP-7-3.5

Lab ID#: 1309348B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26	30	84	97

Client Sample ID: VP-7-3.5

Lab ID#: 1309348B-01B

No Detections Were Found.

Client Sample ID: VP-7-7

Lab ID#: 1309348B-02A

No Detections Were Found.

Client Sample ID: VP-7-7

Lab ID#: 1309348B-02B

No Detections Were Found.

Client Sample ID: VP-8-3.5

Lab ID#: 1309348B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	47	140	150	450
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	47	100	190	420

Client Sample ID: VP-8-3.5

Lab ID#: 1309348B-03B

No Detections Were Found.

Client Sample ID: VP-8-7

Lab ID#: 1309348B-04A

No Detections Were Found.

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

Client Sample ID: VP-8-7

Lab ID#: 1309348B-04B

No Detections Were Found.

Client Sample ID: VP-10-3.5

Lab ID#: 1309348B-05A

No Detections Were Found.

Client Sample ID: VP-10-3.5

Lab ID#: 1309348B-05B

No Detections Were Found.

Client Sample ID: VP-10-7

Lab ID#: 1309348B-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	62	100	200	330
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	62	120	250	510
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	62	120	360	700
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	62	2800	430	19000

Client Sample ID: VP-10-7

Lab ID#: 1309348B-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	62	98	300	480

Client Sample ID: VP-5-7

Lab ID#: 1309348B-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	330	75	1100

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

Client Sample ID: VP-5-7

Lab ID#: 1309348B-07A

>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	240	95	1000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	48	140	280
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	110	160	770

Client Sample ID: VP-5-7

Lab ID#: 1309348B-07B

No Detections Were Found.

Client Sample ID: VP-5-12

Lab ID#: 1309348B-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	2800	75	9000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	960	95	3900
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	74	140	430
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	190	160	1300

Client Sample ID: VP-5-12

Lab ID#: 1309348B-08B

No Detections Were Found.

Client Sample ID: VP-6-7

Lab ID#: 1309348B-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17000	880000	56000	2800000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17000	2400000	71000	9800000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17000	140000	100000	850000



Air Toxics

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

Client Sample ID: VP-6-7**Lab ID#: 1309348B-09A**

>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17000	150000	120000	1000000
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Client Sample ID: VP-6-7**Lab ID#: 1309348B-09B**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17000	180000	86000	900000
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17000	38000	96000	210000

Client Sample ID: VP-6-7-Dup**Lab ID#: 1309348B-10A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26000	910000	84000	3000000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26000	2500000	100000	10000000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26000	140000	150000	820000
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26000	140000	180000	980000

Client Sample ID: VP-6-7-Dup**Lab ID#: 1309348B-10B**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26000	170000	130000	860000
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26000	33000	140000	180000

Client Sample ID: VP-4-5.5**Lab ID#: 1309348B-11A**

No Detections Were Found.



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

Client Sample ID: VP-4-5.5

Lab ID#: 1309348B-11B

No Detections Were Found.



Air Toxics

Client Sample ID: VP-7-3.5

Lab ID#: 1309348B-01A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092008a		Date of Collection:	9/16/13 2:42:00 PM
Dil. Factor:	2.61		Date of Analysis:	9/20/13 01:23 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26	30	84	97
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26	Not Detected	110	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26	Not Detected	150	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26	Not Detected	180	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-7-3.5**Lab ID#: 1309348B-01B****MODIFIED METHOD TO-15 GC/MS FULL SCAN**

File Name:	3092008c	Date of Collection: 9/16/13 2:42:00 PM		
Dil. Factor:	2.61	Date of Analysis: 9/20/13 01:23 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26	Not Detected	130	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26	Not Detected	140	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-7-7

Lab ID#: 1309348B-02A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092009a		Date of Collection:	9/16/13 12:23:00 PM
Dil. Factor:	2.60		Date of Analysis:	9/20/13 02:14 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26	Not Detected	84	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26	Not Detected	110	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26	Not Detected	150	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26	Not Detected	180	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-7-7

Lab ID#: 1309348B-02B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092009c	Date of Collection:	9/16/13 12:23:00 PM	
Dil. Factor:	2.60	Date of Analysis:	9/20/13 02:14 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26	Not Detected	130	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26	Not Detected	140	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-3.5

Lab ID#: 1309348B-03A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092010a		Date of Collection:	9/16/13 2:17:00 PM
Dil. Factor:	4.70		Date of Analysis:	9/20/13 02:32 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	47	140	150	450
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	47	100	190	420
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	47	Not Detected	270	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	47	Not Detected	330	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-3.5

Lab ID#: 1309348B-03B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092010c	Date of Collection:	9/16/13 2:17:00 PM	
Dil. Factor:	4.70	Date of Analysis:	9/20/13 02:32 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	47	Not Detected	230	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	47	Not Detected	260	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-7

Lab ID#: 1309348B-04A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092011a		Date of Collection:	9/16/13 3:32:00 PM
Dil. Factor:	9.96		Date of Analysis:	9/20/13 02:59 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	100	Not Detected	320	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	100	Not Detected	410	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	100	Not Detected	580	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	100	Not Detected	690	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-7

Lab ID#: 1309348B-04B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092011c	Date of Collection:	9/16/13 3:32:00 PM	
Dil. Factor:	9.96	Date of Analysis:	9/20/13 02:59 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	100	Not Detected	490	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	100	Not Detected	550	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-3.5

Lab ID#: 1309348B-05A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092012a		Date of Collection:	9/16/13 4:26:00 PM
Dil. Factor:	2.52		Date of Analysis:	9/20/13 03:37 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	25	Not Detected	82	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	25	Not Detected	100	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	25	Not Detected	150	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	25	Not Detected	180	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-3.5

Lab ID#: 1309348B-05B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092012c	Date of Collection:	9/16/13 4:26:00 PM	
Dil. Factor:	2.52	Date of Analysis:	9/20/13 03:37 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	25	Not Detected	120	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	25	Not Detected	140	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-7

Lab ID#: 1309348B-06A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092013a		Date of Collection:	9/16/13 5:07:00 PM
Dil. Factor:	6.18		Date of Analysis:	9/20/13 04:01 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	62	100	200	330
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	62	120	250	510
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	62	120	360	700
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	62	2800	430	19000

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-7

Lab ID#: 1309348B-06B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092013c	Date of Collection:	9/16/13 5:07:00 PM	
Dil. Factor:	6.18	Date of Analysis:	9/20/13 04:01 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	62	98	300	480
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	62	Not Detected	340	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VP-5-7

Lab ID#: 1309348B-07A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092014a	Date of Collection: 9/18/13 9:17:00 AM		
Dil. Factor:	2.32	Date of Analysis: 9/20/13 04:30 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m³)	Amount (ug/m³)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	330	75	1100
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	240	95	1000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	48	140	280
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	110	160	770

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VP-5-7

Lab ID#: 1309348B-07B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092014c	Date of Collection: 9/18/13 9:17:00 AM		
Dil. Factor:	2.32	Date of Analysis: 9/20/13 04:30 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	23	Not Detected	110	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	23	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-5-12

Lab ID#: 1309348B-08A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092015a	Date of Collection: 9/18/13 10:00:00 AM		
Dil. Factor:	2.33	Date of Analysis: 9/20/13 05:06 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	23	2800	75	9000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	23	960	95	3900
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	23	74	140	430
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	23	190	160	1300

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-5-12

Lab ID#: 1309348B-08B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092015c	Date of Collection:	9/18/13 10:00:00 AM	
Dil. Factor:	2.33	Date of Analysis:	9/20/13 05:06 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	23	Not Detected	110	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	23	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7

Lab ID#: 1309348B-09A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092112a		Date of Collection:	9/18/13 11:48:00 AM
Dil. Factor:	1740		Date of Analysis:	9/21/13 04:31 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	17000	880000	56000	2800000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	17000	2400000	71000	9800000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	17000	140000	100000	850000
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	17000	150000	120000	1000000

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7

Lab ID#: 1309348B-09B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092112c	Date of Collection: 9/18/13 11:48:00 AM		
Dil. Factor:	1740	Date of Analysis: 9/21/13 04:31 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	17000	180000	86000	900000
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	17000	38000	96000	210000

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7-Dup

Lab ID#: 1309348B-10A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092113a	Date of Collection: 9/18/13 11:48:00 AM		
Dil. Factor:	2580	Date of Analysis: 9/21/13 05:14 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	26000	910000	84000	3000000
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	26000	2500000	100000	10000000
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	26000	140000	150000	820000
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	26000	140000	180000	980000

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7-Dup

Lab ID#: 1309348B-10B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092113c	Date of Collection: 9/18/13 11:48:00 AM		
Dil. Factor:	2580	Date of Analysis: 9/21/13 05:14 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	26000	170000	130000	860000
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	26000	33000	140000	180000

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-4-5.5

Lab ID#: 1309348B-11A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092017a		Date of Collection:	9/17/13 4:15:00 PM
Dil. Factor:	2.40		Date of Analysis:	9/20/13 06:15 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	24	Not Detected	78	Not Detected
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	24	Not Detected	98	Not Detected
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	24	Not Detected	140	Not Detected
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	24	Not Detected	170	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-4-5.5**Lab ID#: 1309348B-11B****MODIFIED METHOD TO-15 GC/MS FULL SCAN**

File Name:	3092017c	Date of Collection: 9/17/13 4:15:00 PM		
Dil. Factor:	2.40	Date of Analysis: 9/20/13 06:15 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	24	Not Detected	120	Not Detected
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	24	Not Detected	130	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348B-12A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/20/13 12:13 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348B-12B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092007c	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/20/13 12:13 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348B-12C

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107a	Date of Collection: NA		
Dil. Factor:	1.00	Date of Analysis: 9/21/13 12:21 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348B-12D

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092107c	Date of Collection:	NA	
Dil. Factor:	1.00	Date of Analysis:	9/21/13 12:21 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



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309348B-13A

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092005a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 11:10 AM

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	91
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	81
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	69
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	84

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309348B-13B

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092005c	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/20/13 11:10 AM

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	97
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	108

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309348B-13C

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092105a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 9/21/13 11:05 AM

Compound	%Recovery
C5-C6 Aliphatic Hydrocarbons (ref. to Pentane + Hexane)	90
>C6-C8 Aliphatic Hydrocarbons (ref. to Heptane)	80
>C8-C10 Aliphatic Hydrocarbons (ref. to Decane)	68
>C10-C12 Aliphatic Hydrocarbons (ref. to Dodecane)	85

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: CCV

Lab ID#: 1309348B-13D

MODIFIED METHOD TO-15 GC/MS FULL SCAN

File Name:	3092105c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/21/13 11:05 AM

Compound	%Recovery
>C8-C10 Aromatic Hydrocarbons (ref. to 1,2,3-TMB)	97
>C10-C12 Aromatic Hydrocarbons (ref. to 1,2,4,5-TMB)	107

Container Type: NA - Not Applicable

9/23/2013
Mr. Oliver Yan
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: FORMER CHEVRON 95607

Project #: 311950
Workorder #: 1309348C

Dear Mr. Oliver Yan

The following report includes the data for the above referenced project for sample(s) received on 9/19/2013 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: Maria Barajas at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Maria Barajas
Project Manager

A Eurofins Lancaster Laboratories Company

WORK ORDER #: 1309348C

Work Order Summary

CLIENT:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Mr. Oliver Yan Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	P.O. #	311950-2013.8-07.11
FAX:	510-420-9170	PROJECT #	311950 FORMER CHEVRON 95607
DATE RECEIVED:	09/19/2013	CONTACT:	Maria Barajas
DATE COMPLETED:	09/23/2013		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-7-3.5	Modified ASTM D-1946	6.9 "Hg	14.8 psi
02A	VP-7-7	Modified ASTM D-1946	7.1 "Hg	14.4 psi
03A	VP-8-3.5	Modified ASTM D-1946	4.1 "Hg	15.1 psi
04A	VP-8-7	Modified ASTM D-1946	5.7 "Hg	14.9 psi
05A	VP-10-3.5	Modified ASTM D-1946	5.9 "Hg	15 psi
06A	VP-10-7	Modified ASTM D-1946	5.7 "Hg	14.7 psi
07A	VP-5-7	Modified ASTM D-1946	3.7 "Hg	15.3 psi
08A	VP-5-12	Modified ASTM D-1946	4.1 "Hg	14.9 psi
09A	VP-6-7	Modified ASTM D-1946	7.1 "Hg	14.5 psi
10A	VP-6-7-Dup	Modified ASTM D-1946	6.3 "Hg	15.2 psi
11A	VP-4-5.5	Modified ASTM D-1946	4.7 "Hg	15 psi
12A	Lab Blank	Modified ASTM D-1946	NA	NA
12B	Lab Blank	Modified ASTM D-1946	NA	NA
13A	LCS	Modified ASTM D-1946	NA	NA
13AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY:

DATE: 09/23/13

Technical Director

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291,
 TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, VA NELAP - 460197, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)

Accreditation number: CA300005, Effective date: 10/18/2012, Expiration date: 10/17/2013.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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



**LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 1309348C**

Eleven 1 Liter Summa Canister (100% Certified) samples were received on September 19, 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



Air Toxics

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

Client Sample ID: VP-7-3.5

Lab ID#: 1309348C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	1.9
Nitrogen	1.3	82
Carbon Dioxide	0.026	16
Methane	0.00026	0.071

Client Sample ID: VP-7-7

Lab ID#: 1309348C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	7.5
Nitrogen	1.3	87
Carbon Dioxide	0.026	4.0
Methane	0.00026	0.046
Helium	0.13	1.2

Client Sample ID: VP-8-3.5

Lab ID#: 1309348C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	13
Nitrogen	1.2	86
Carbon Dioxide	0.024	0.80
Methane	0.00024	0.0076

Client Sample ID: VP-8-7

Lab ID#: 1309348C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	15
Nitrogen	1.2	81
Carbon Dioxide	0.025	1.6
Methane	0.00025	0.0044



Air Toxics

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

Client Sample ID: VP-8-7

Lab ID#: 1309348C-04A

Helium	0.12	2.7
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Client Sample ID: VP-10-3.5

Lab ID#: 1309348C-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	15
Nitrogen	1.3	82
Carbon Dioxide	0.025	3.2
Methane	0.00025	0.00053

Client Sample ID: VP-10-7

Lab ID#: 1309348C-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	1.7
Nitrogen	1.2	82
Carbon Dioxide	0.025	16
Methane	0.00025	0.068

Client Sample ID: VP-5-7

Lab ID#: 1309348C-07A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	4.5
Nitrogen	1.2	77
Carbon Dioxide	0.023	18
Methane	0.00023	0.063

Client Sample ID: VP-5-12

Lab ID#: 1309348C-08A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.23	3.3



Air Toxics

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

Client Sample ID: VP-5-12

Lab ID#: 1309348C-08A

Nitrogen	1.2	74
Carbon Dioxide	0.023	23
Methane	0.00023	0.13

Client Sample ID: VP-6-7

Lab ID#: 1309348C-09A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	10
Nitrogen	1.3	80
Carbon Dioxide	0.026	9.1
Methane	0.00026	0.12

Client Sample ID: VP-6-7-Dup

Lab ID#: 1309348C-10A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Nitrogen	1.3	79
Carbon Dioxide	0.026	9.1
Methane	0.00026	0.11

Client Sample ID: VP-4-5.5

Lab ID#: 1309348C-11A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	21
Nitrogen	1.2	79
Carbon Dioxide	0.024	0.30



Air Toxics

Client Sample ID: VP-7-3.5

Lab ID#: 1309348C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092007	Date of Collection:	9/16/13 2:42:00 PM
Dil. Factor:	2.61	Date of Analysis:	9/20/13 10:43 AM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.26	1.9	
Nitrogen	1.3	82	
Carbon Dioxide	0.026	16	
Methane	0.00026	0.071	
Helium	0.13	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-7-7

Lab ID#: 1309348C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092008	Date of Collection: 9/16/13 12:23:00 PM
Dil. Factor:	2.60	Date of Analysis: 9/20/13 11:13 AM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	7.5
Nitrogen	1.3	87
Carbon Dioxide	0.026	4.0
Methane	0.00026	0.046
Helium	0.13	1.2

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-3.5

Lab ID#: 1309348C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092009	Date of Collection:	9/16/13 2:17:00 PM
Dil. Factor:	2.35	Date of Analysis:	9/20/13 11:50 AM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.24	13	
Nitrogen	1.2	86	
Carbon Dioxide	0.024	0.80	
Methane	0.00024	0.0076	
Helium	0.12	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-8-7

Lab ID#: 1309348C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092010	Date of Collection:	9/16/13 3:32:00 PM
Dil. Factor:	2.49	Date of Analysis:	9/20/13 12:20 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.25	15	
Nitrogen	1.2	81	
Carbon Dioxide	0.025	1.6	
Methane	0.00025	0.0044	
Helium	0.12	2.7	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-3.5

Lab ID#: 1309348C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092011	Date of Collection:	9/16/13 4:26:00 PM
Dil. Factor:	2.52	Date of Analysis:	9/20/13 12:55 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.25	15	
Nitrogen	1.3	82	
Carbon Dioxide	0.025	3.2	
Methane	0.00025	0.00053	
Helium	0.13	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-10-7

Lab ID#: 1309348C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092012	Date of Collection:	9/16/13 5:07:00 PM
Dil. Factor:	2.47	Date of Analysis:	9/20/13 01:42 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.25	1.7	
Nitrogen	1.2	82	
Carbon Dioxide	0.025	16	
Methane	0.00025	0.068	
Helium	0.12	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-5-7

Lab ID#: 1309348C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092013	Date of Collection:	9/18/13 9:17:00 AM
Dil. Factor:	2.32	Date of Analysis:	9/20/13 02:29 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.23	4.5	
Nitrogen	1.2	77	
Carbon Dioxide	0.023	18	
Methane	0.00023	0.063	
Helium	0.12	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Client Sample ID: VP-5-12

Lab ID#: 1309348C-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092014	Date of Collection:	9/18/13 10:00:00 AM
Dil. Factor:	2.33	Date of Analysis:	9/20/13 03:08 PM
Compound	Rpt. Limit (%)		Amount (%)
Oxygen	0.23		3.3
Nitrogen	1.2		74
Carbon Dioxide	0.023		23
Methane	0.00023		0.13
Helium	0.12		Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7

Lab ID#: 1309348C-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092015	Date of Collection:	9/18/13 11:48:00 AM
Dil. Factor:	2.61	Date of Analysis:	9/20/13 03:30 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.26	10	
Nitrogen	1.3	80	
Carbon Dioxide	0.026	9.1	
Methane	0.00026	0.12	
Helium	0.13	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-6-7-Dup

Lab ID#: 1309348C-10A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092016	Date of Collection: 9/18/13 11:48:00 AM
Dil. Factor:	2.58	Date of Analysis: 9/20/13 03:57 PM
Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Nitrogen	1.3	79
Carbon Dioxide	0.026	9.1
Methane	0.00026	0.11
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: VP-4-5.5

Lab ID#: 1309348C-11A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092019	Date of Collection:	9/17/13 4:15:00 PM
Dil. Factor:	2.40	Date of Analysis:	9/20/13 05:20 PM
Compound	Rpt. Limit (%)	Amount (%)	
Oxygen	0.24	21	
Nitrogen	1.2	79	
Carbon Dioxide	0.024	0.30	
Methane	0.00024	Not Detected	
Helium	0.12	Not Detected	

Container Type: 1 Liter Summa Canister (100% Certified)



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348C-12A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092005	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 09:49 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



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1309348C-12B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092004c	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 09:17 AM
Compound	Rpt. Limit (%)		Amount (%)
Helium	0.050		Not Detected

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCS

Lab ID#: 1309348C-13A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092002	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 08:13 AM
Compound	%Recovery	Method	Limits
Oxygen	102	85-115	
Nitrogen	100	85-115	
Carbon Dioxide	102	85-115	
Methane	100	85-115	
Helium	98	85-115	

Container Type: NA - Not Applicable



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1309348C-13AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	10092030	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	9/20/13 10:22 PM
Compound	%Recovery	Method	Limits
Oxygen	101	85-115	
Nitrogen	101	85-115	
Carbon Dioxide	102	85-115	
Methane	100	85-115	
Helium	98	85-115	

Container Type: NA - Not Applicable