Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

November 21, 2008
(date)

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

Re: Chevron Facility # 9-1583

Address: 5509 Martin Luther King Jr. Way, Oakland, California

I have reviewed the attached report titled *Soil Vapor Assessment Report* and dated November 21, 2008.

I agree with the conclusions and recommendations presented in the referenced report. The 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 whose assistance and advice I have relied.

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

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SHFrerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

CONESTOGA-ROVERS
& ASSOCIATES

2000 Opportunity Dr, Suite 110, Roseville, California 95678
Telephone: 916-677-3407, ext. 100 Facsimile: 916-677-3687
www.CRAworld.com

November 21, 2008 Reference No. 611960

Mr. Steven Plunkett
Alameda County Health Care Services Agency
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Soil Vapor Assessment Report
Former Chevron Service Station 9-1583
5509 Martin Luther King Jr. Way
Oakland, California
LOP Case No. RO0000002

Dear Mr. Plunkett:

Conestoga-Rovers & Associates (CRA) has prepared this Soil Vapor Assessment Report on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. CRA advanced five hand auger soil borings (VP-1 through VP-5) at the site, and completed them as permanent soil vapor wells. The work was requested by Alameda County Health Care Services Agency, Environmental Health Services (ACEH) in a letter dated July 27 2007 (Appendix A), and was performed in general accordance with CRA's Soil Vapor Investigation Workplan, dated August 31, 2007. Please note that CRA did not receive a response from ACEH regarding the work plan within 60 calendar days. Therefore, in a letter dated July 31, 2008, CRA notified ACEH that the work was proceeding as proposed. A copy of the notification letter is presented in Appendix A. The site background, investigation details and results, and our conclusions and recommendations are presented in the following sections.

1.0 SITE DESCRIPTION AND BACKGROUND

The site is located on the northwest corner of the intersection of Martin Luther King Jr. Way and 55th Street in Oakland, California (Figure 1). Land use in the vicinity of the site is mixed commercial and residential. The site was formerly occupied by a Chevron service station with a station building, four dispenser islands, three 10,000-gallon fuel underground storage tanks (USTs), a 1,000-gallon used-oil UST, three hydraulic hoists, and product lines. The used-oil UST and hydraulic hoists were removed in 1995 and 1998, respectively, and Chevron sold the property in November 1998. Since 2003, the site has been occupied by a Super Stop Gas Station. Locations of former and current site features are shown on Figure 2. A summary of previous environmental work performed at the site is included in Appendix B.

1.1 SITE GEOLOGY

Soil in the site area consists of Pleistocene beach and sand dune deposits (Merritt Sand) of loose, well-sorted fine to medium sand. Based on previous investigations, soil beneath the site generally consists of layers of gravelly to sandy silt, silty to gravelly clay, clayey to sandy gravel, and sand from just below the surface to 26.5 feet below grade (fbg), the maximum depth of exploration.

1.2 SITE HYDROGEOLOGY

Depth to groundwater beneath the site has historically ranged from approximately 6.5 to 14 fbg. Based on historical monitoring data, the groundwater flow direction beneath the site has been variable.

2.0 INVESTIGATION PROCEDURES

The objective of this investigation was to collect soil vapor samples to evaluate potential vapor intrusion issues. To meet this objective, CRA advanced five soil borings to approximately 6 fbg, and completed them as permanent soil vapor wells VP-1 through VP-5. Soil vapor samples were collected from the completed wells. Vapor wells VP-1 through VP-3 were located along the western site boundary, vapor well VP-4 was located near the northeast corner of the existing station building, and vapor well VP-5 was located adjacent to the northeast side of the station building. The vapor well locations are shown on Figure 2.

The details of the investigation are summarized below. Fieldwork was performed by CRA staff Oliver Yan, Lindsay Marsh, and Chris Benedict under the supervision of project geologist Brian Carey (P.G. #7820).

2.1 DRILLING ACTIVITIES

Permit: Prior to drilling, CRA obtained Well Permit W2008-0502 from Alameda County Public Works Agency for the vapor wells. A copy of the permit is included in Appendix C.

Drilling Dates: Borings VP-1 through VP-5 were advanced on August 26, 2008.

Drilling Company: Drilling activities were performed by V & W Drilling, Inc. of Lodi, California (C-57 Lic. # 720904), under CRA's supervision.

Drilling Method: The borings were advanced using a 3-inch diameter hand auger to the total depth of 6 fbg.

Lithology: The soil encountered in the borings was logged in accordance with the Unified Soil Classification System (USCS), and generally consisted of clayey gravel with sand, clay with sand, clay, and sandy clay to approximately 6 fbg (maximum depth of borings). Groundwater was not encountered in any of the borings. Copies of the boring logs are included in Appendix C.

Soil Screening: Soil samples were screened in the field for the presence of organic vapors using a photo-ionization detector (PID). The PID measurements are also presented on the boring logs.

2.2 SOIL SAMPLING AND LABORATORY ANALYSIS

Soil Sampling: Soil samples were collected from each boring at approximately 3 fbg for laboratory analysis. The soil samples were collected by filling a brass tube with disturbed soil cuttings removed from the boreholes. The brass tubes were capped using Teflon tape and plastic end caps, labeled, placed in an ice-chilled cooler, and transported under chain-of-custody to Lancaster Laboratories, Inc. (Lancaster) in Lancaster, Pennsylvania, for analysis. CRA's standard field procedures for soil sampling from borings are included in Appendix D.

Laboratory Analysis: The six soil samples were analyzed by Lancaster for total petroleum hydrocarbons as gasoline (TPHg) and diesel (TPHd) by EPA Method 8015B; benzene, toluene, ethylbenzene, and xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (EDB) by EPA Method 8260B.

2.3 SOIL VAPOR WELL CONSTRUCTION

Well Materials: Soil vapor wells VP-1 through VP-5 were constructed with ¼-inch diameter Nylaflow tubing and a 6-inch-long section of 0.010-inch slotted Schedule 40 PVC screen. Monterey Sand #2/16 was used as a filter pack from the bottom of the boring to 3 inches above the top of the screen; 3 inches of dry, granular bentonite was placed above the sand pack, and the remainder of the annular space was filled with hydrated bentonite gel to approximately 0.5 fbg. Well boxes were installed flush to grade and equipped with traffic-rated lids. Well construction diagrams are shown on the boring logs in Appendix C.

Screened Interval: Wells VP-1 through VP-5 are screened from 5 to 5.5 fbg.

2.4 SOIL VAPOR SAMPLING AND LABORATORY ANALYSIS

Soil Vapor Sampling: On September 11, 2008, soil vapor samples were collected from wells VP-1 through VP-5 in 1-Liter Summa™ canisters and sorbent tubes. A duplicate sample was also collected from well VP-2. A tent was placed over the sampling apparatus and well, and was filled with helium during sample collection in order to evaluate for leaks in the sampling equipment. CRA's standard field procedures for soil vapor sampling are included in Appendix D. Copies of the vapor sampling field data sheets are included in Appendix E.

Laboratory Analysis: The soil vapor samples were kept at ambient temperature and submitted under chain-of-custody to Air Toxics Ltd. in Folsom, California, for analysis. The five soil vapor samples were analyzed for TPHg by EPA Method TO-3; TPHd by EPA Method TO-17; and BTEX, MTBE, TBA, 1,2-DCA, EDB, ethanol, and iso-octane (2,2,4-trimethylpentane) by EPA Method TO-15. To evaluate the data quality, the samples were analyzed for helium (leak check compound) by ASTM Method D-1946. The samples were also analyzed for oxygen and carbon dioxide by ASTM Method D-1946.

2.5 INVESTIGATION-DERIVED WASTE

Soil cuttings were temporarily stored onsite in a 55-gallon steel drum, and sampled for disposal purposes. The drum was removed from the site by Integrated Wastestream Management (IWM) of San Jose, California, and transported to Vasco Road Landfill in Livermore, California, for disposal on October 3, 2008.

3.0 ANALYTICAL RESULTS

3.1 SOIL SAMPLE ANALYTICAL RESULTS

No analytes were detected in any of the soil samples. The soil sample analytical results are presented in Table 1. A copy of the laboratory report and chain-of-custody documentation is presented in Appendix F.

3.2 SOIL VAPOR SAMPLE ANALYTICAL RESULTS

On September 11, 2008, soil vapor samples were collected from wells VP-1 through VP-5. As mentioned above, a field duplicate sample (Dupe) was collected simultaneously with the original sample from VP-2 to further evaluate data quality. The duplicate sample analytical results are not included in the following discussion, as similar concentrations within an

acceptable range were detected in both samples. Please refer to Appendix F for the duplicate sample analytical results.

In accordance with the Department of Toxic Substances Control (DTSC) *Advisory-Active Soil Gas Investigations* guidance document dated January 28, 2003, leak testing was performed during sampling. Helium was used as a leak check compound to evaluate if significant ambient air was entering the Summa™ canisters during sampling. The samples were analyzed for helium by EPA Method ASTM D-1946, which was not detected in any of the samples. Furthermore, a leak test on the aboveground sampling connections was initially performed by creating a test vacuum using the purge pump. A constant vacuum was maintained for at least 10 minutes prior to sample collection, indicating significant leaks were not occurring. Therefore, the samples appear to be representative of subsurface conditions and the results are assumed to be valid.

TPHg was detected in samples VP-1 through VP-5 at concentrations of 550 micrograms per cubic meter ($\mu g/m^3$), 330,000 $\mu g/m^3$, 540 $\mu g/m^3$, 38,000 $\mu g/m^3$, and 46,000 $\mu g/m^3$, respectively. TPHd was only detected in samples VP-2 (6,900 $\mu g/m^3$) and VP-4 (920 $\mu g/m^3$); however, the laboratory reported that the TPH pattern in the samples did not resemble that of diesel fuel. Iso-octane was only detected in samples VP-2 (17,000 $\mu g/m^3$) and VP-4 (5,400 $\mu g/m^3$); BTEX, MTBE, TBA, 1,2-DCA, EDB, and ethanol were not detected in any of the samples.

The soil vapor analytical results were compared to the shallow soil gas environmental screening levels (ESLs) associated with vapor intrusion concerns at commercial/industrial and residential sites (Table E); established by the San Francisco Bay Regional Water Quality Control Board (RWQCB) in May 2008. The ESLs are for use as screening levels in determining if further evaluation is warranted, in prioritizing areas of concern, in establishing cleanup goals, and in estimation of potential health risks. As stated by the RWQCB, the ESLs are considered to be conservative. The presence of a chemical at a concentration above an ESL does not necessarily indicate that adverse impacts to human health or the environment are occurring; exceeding ESLs indicates that the potential for impacts may exist and that additional evaluation may be needed.

The TPHg concentrations detected in samples VP-2, VP-4, and VP-5 exceeded both the commercial/industrial (29,000 g/m^3) and residential (10,000 $\mu g/m^3$) ESLs. The remaining detected constituents did not exceed the respective ESLs, where established. The soil vapor sample analytical results are presented in Table 2. Copies of the laboratory reports and chain-of-custody documentation are presented in Appendix F.

4.0 CONCLUSIONS AND RECOMMENDATIONS

CRA installed and sampled soil vapor wells VP-1 through VP-5 to evaluate potential vapor intrusion issues due to residual impacted groundwater and/or soil beneath the site. Petroleum hydrocarbons were not detected in any of the soil samples collected from the well borings. TPHg was detected in all the soil vapor samples. The TPHg concentrations detected in soil vapor samples VP-2, VP-4, and VP-5 exceeded both the commercial/industrial and the residential ESLs associated with vapor intrusion concerns. Only low concentrations of TPHg were detected in samples VP-1 and VP-3. TPHd was only detected in samples VP-2 and VP-4 and the detected concentrations did not exceed the ESLs. The laboratory reported that the TPH pattern in the samples did not resemble that of diesel fuel, and diesel does not appear to have been stored at the site. Therefore, the TPHd detections may be due to weathered gasoline. No BTEX, MTBE, TBA, 1,2-DCA, EDB, or ethanol was detected in any of the samples.

Based on the analytical results, impacted soil vapor is present in the northwest portion of the site. The maximum TPHg concentration was detected in sample VP-2 located on the western site boundary. If a potential source of the impacted soil vapor (residual impacted soil or groundwater) is located in this area, it appears to be somewhat limited as TPHg has not been detected in groundwater in well MW-7 since 1998 and only relatively low concentrations of TPHg (less than 800 micrograms per liter [µg/L]) have been detected in groundwater in well MW-8 for the past several years. Well VP-2 is located approximately 15 feet from well MW-8.

The detected TPHg concentrations in VP-2, VP-4, and VP-5 exceeded the commercial/industrial and residential ESLs; however, significant concentrations of 2,2,4-Trimethylpentane (iso-octane) were detected in samples VP-2 and VP-4. The presence of iso-octane in the soil vapor samples suggests that at least a portion of the TPHg in soil vapor is due to a recent release. Iso-octane is a significant constituent of California Reformulated Gasoline (CaRFG) Phase 3, which has been used in California since 2004 after the elimination of MTBE and CaRFG Phase 2. A possible cause of the iso-octane detections is a vapor leak from the existing UST equipment as the site remains an active gas station. Additionally, as the site is an active gas station, gasoline vapors will be present in the ambient air due to typical daily operations; and the exposure to these ambient vapors by onsite workers or nearby residents likely is a much more significant risk than that due to potential vapor intrusion. Based on this information, an accurate evaluation of potential vapor intrusion risk due to residual impact from the original release (Chevron) does not appear possible while the site remains an active gas station.

On May 10, 2005, Cambria Environmental Technology, Inc. (now CRA) submitted a site conceptual model (SCM) and closure request report to ACEH. In that report, the case was made for low-risk closure based on improving conditions at the site. A review of current groundwater data confirms this, with most constituents no longer detected or a continued

decline in concentrations is observed as predicted in site wells. Based on the information presented above, and the likelihood that the site will remain an active gas station for the foreseeable future, CRA will update the SCM and submit it to the ACEH along with an additional request for site closure.

5.0 CLOSING

We appreciate your assistance on this project. If you have any questions please contact Mr. James Kiernan at (916) 677-3407 ext. 102.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

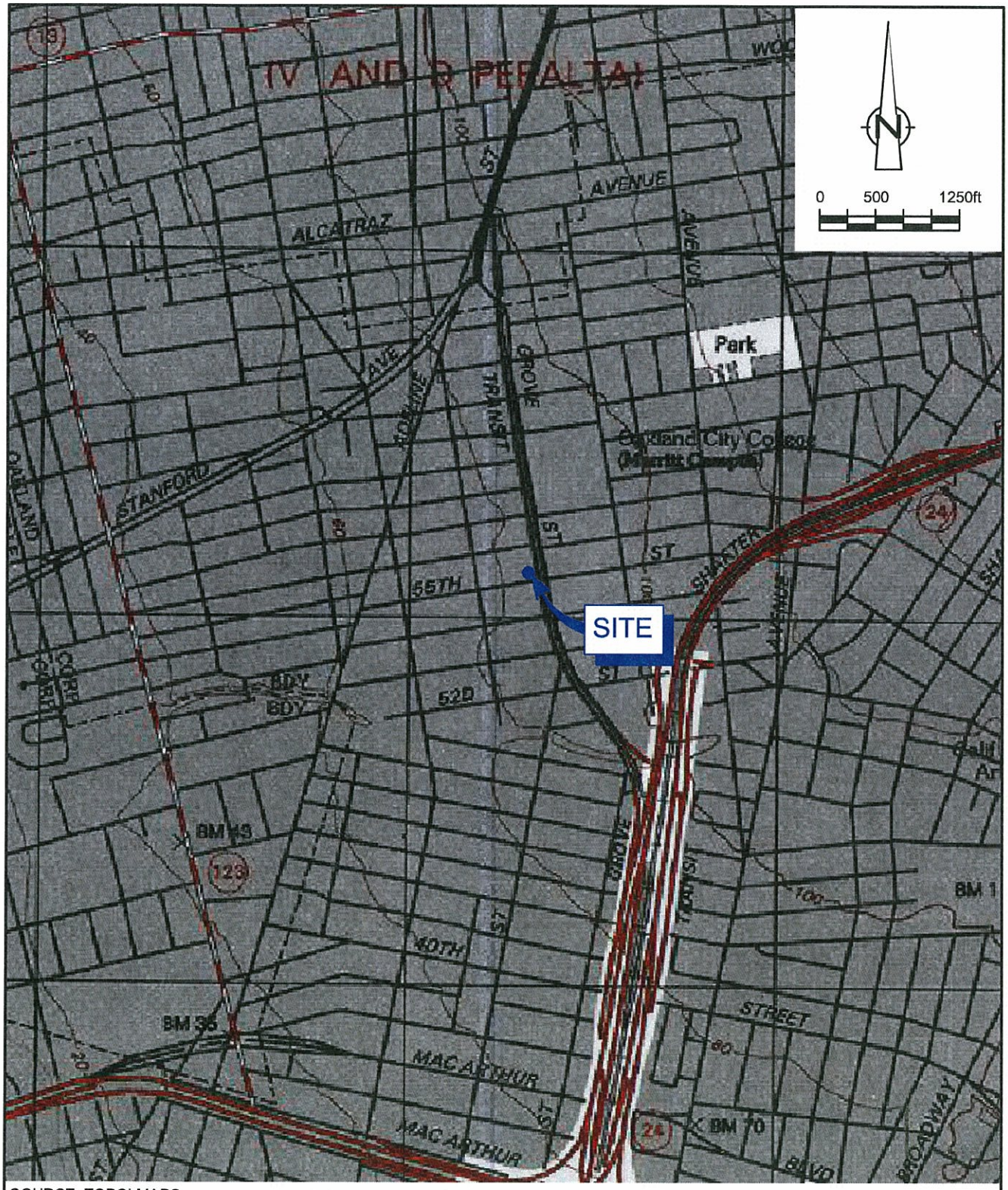
Lindsay Marsh
Geologist

James P. Kiernan, P.E. #C68498
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
JAMES P. KIERNAN
No. 68498
Exp. 9/30/09
CIVIL
STATE OF CALIFORNIA

LM/kw/1
Encl.

cc: Ms. Stacie Hartung-Frerichs, Chevron Environmental Management Company
Mr. Ben Shimek

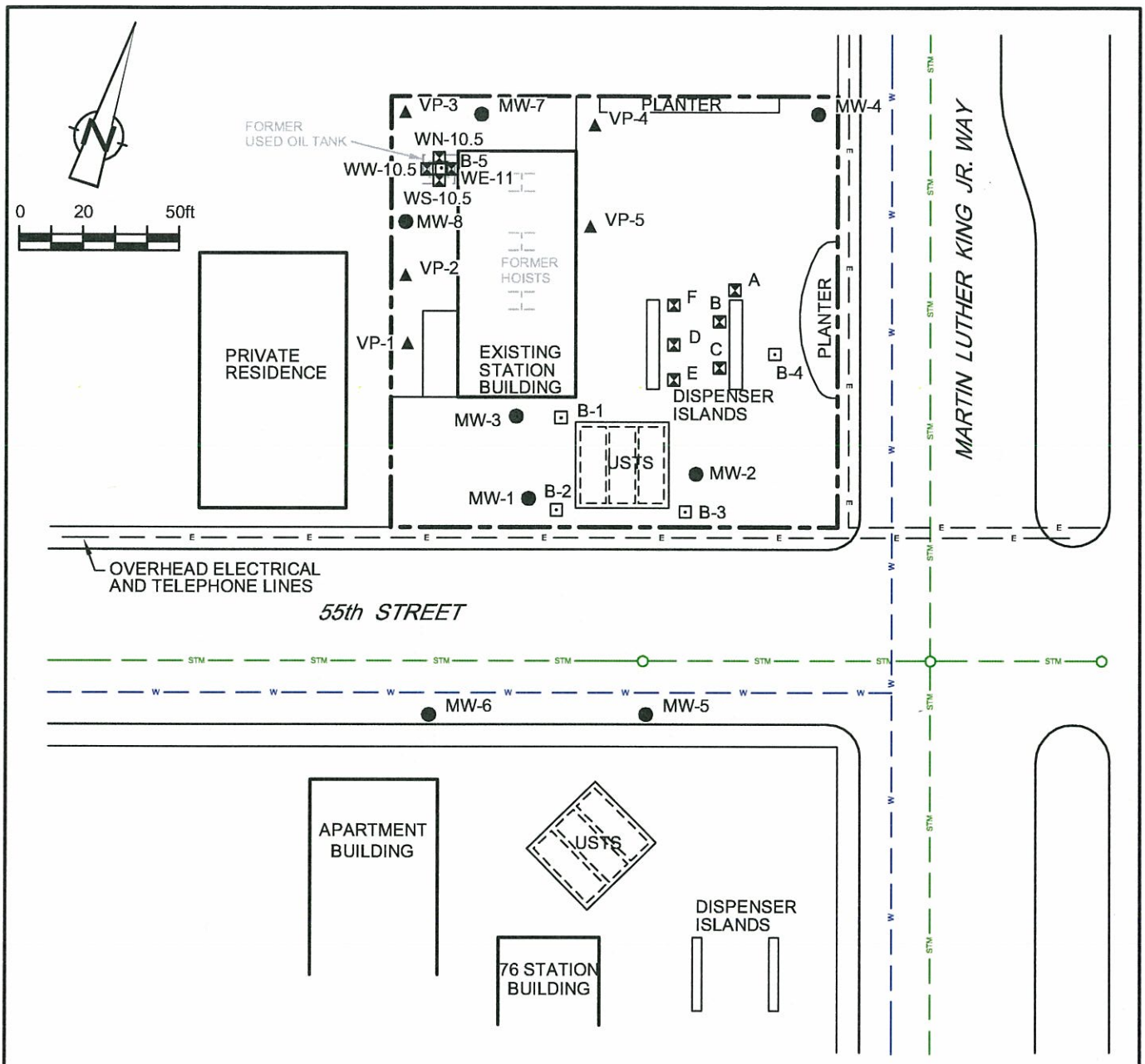


SOURCE: TOPO! MAPS.

figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 9-1583
5509 MARTIN LUTHER KING JR. WAY
Oakland, California

611960-299(PRES001)GN-WA001 SEP 08/2008



LEGEND

VP-1 ▲	VAPOR WELL LOCATION
MW-1 ●	MONITORING WELL LOCATION
B-1 ⊡	HAND AUGER BORING LOCATION
A ⊠	SOIL SAMPLE LOCATION
— — — E —	ELECTRICAL LINE (OVERHEAD WHERE LABLED)
— — — STM —	STORM DRAIN
— — — W —	WATER LINE

figure 2

SITE PLAN
FORMER CHEVRON SERVICE STATION 9-1583
5509 MARTIN LUTHER KING JR. WAY
Oakland, California

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION 9-1583
5509 MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

Boring ID	*Sample Depth (fbg)*	*Date Sampled*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TBA*	*1,2-DCA*	*EDB*
							(Concentrations in mg/kg)					
VP-1	3	8/26/2008	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001
VP-2	3	8/26/2008	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001
VP-3	3	8/26/2008	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.021	<0.001	<0.001
VP-4	3	8/26/2008	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001
VP-5	3	8/26/2008	<4.0	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.020	<0.001	<0.001

Abbreviations and Methods:

fbg = feet below grade
mg/kg = miligrams per kilogram
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015
TPHg = Total petrolum hydrocarbons as gasoline by EPA Method 8015
Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B
MTBE = Methyl tertiary butyl ether by EPA Method 8260B
TBA = tertiary butyl alcohol by EPA Method 8260B
1,2-DCA = 1,2-Dichloroethane by EPA Method 8260B
EDB = 1,2-Dibromoethane by EPA Method 8260B
<x = not detected at or above the stated laboratory reporting limit

TABLE 2

SOIL VAPOR SAMPLE ANALYTICAL RESULTS
FORMER CHEVRON SERVICE STATION 9-1583
5509 MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

Sample ID	*Sample Date*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*TBA*	*1,2-DCA*	*EDB*	*Ethanol*	*Iso-octane*	*Helium*	*Oxygen*	*Carbon dioxide*
		Concentrations reported in micrograms per cubic meter ($\mu g/m^3$)												*Reported in percent*		
VP-1	9/11/08	<170	550	<7.5	<8.9	<10	<10	<8.5	<28	<9.5	<18	<18	<11	<0.24	14	6.8
VP-2	9/11/08	6,900	**330,000**	<52	<62	<71	<71	<59	<200	<66	<130	<120	17,000	<0.12	16	8.7
VP-3	9/11/08	<180	540	<3.9	<4.6	<5.4	<5.4	<4.4	<15	<5.0	<9.5	<9.3	<5.8	<0.12	17	4.7
VP-4	9/11/08	920	**38,000**	<18	<21	<24	<24	<20	<67	<22	<42	<41	5,400	<0.11	11	10
VP-5	9/11/08	<160	**46,000**	<7.1	<8.4	<9.6	<9.6	<8.0	<27	<9.0	<17	<17	<10	<0.22	10	14
Commercial ESL		29,000	29,000	280	180,000	3,300	58,000	31,000	NE	310	14	NE	NE			
Residential ESL		10,000	10,000	84	63,000	980	21,000	9,400	NE	94	4.1	NE	NE			

Abbreviations/Notes:

Total petroleum hydrocarbons as diesel (TPHd) by EPA Method TO-17.

Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3.

Benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA Method TO-15.

Methyl tertiary butyl ether (MTBE) by EPA Method TO-15.

Tertiary butyl alcohol (TBA) by EPA Method TO-15.

1,2-Dichloroethane (1,2-DCA) by EPA Method TO-15.

1,2 Dibromoethane (EDB) by EPA Method TO-15.

Ethanol and iso-octane (2,2,4-Trimethylpentane) by EPA Method TO-15

Oxygen, carbon dioxide and helium by modified ASTM D-1946.

<x = Not detected at or above method detection limit.

ESL = Shallow soil gas environmental screening level associated with vapor intrusion concerns, RWQCB-May 2008 (Table E)

NE = Not established

Bold Indicates concentration exceeds commercial and/or residential ESL

APPENDIX A

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

July 27, 2007

Mr. Tom Bauhs
Chevron Environmental Management Co.
6001 Bollinger Canyon Rd., K2204
San Ramon, CA 94583-2324

Dear Mr. Bauhs:

Subject: Fuel Leak Case RO0000002 & Global ID T0600100348, 5509 Martin Luther King Jr. Way, Oakland, CA 94609

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the subject site including the February 28, 2007 Subsurface Investigation Report by Cambria (CRA). This report's work plan was approved in the County's November 11, 2006 letter. The intent of the work was to fill in identified data gaps and move the site towards closure. Unfortunately, not all samples were collected and analyzed as proposed and approved by our office due to boring refusal in B-5. Because of this, the area around the waste oil tank still remains in question. The historic presence of TPHg and MTBE in wells MW-7 and MW-8, adjacent to the former waste oil tank remains unexplained. The sampling of shallow fill material from the tank pit did not provide any information as no contaminants were detected, as expected. Therefore, CRA's recommendation to submit an updated site closure request appears premature without further site information. Please address the following technical comments and submit the requested reports.

TECHNICAL COMMENTS

1. Borings Around Former Fuel USTs- Soil samples from 3-9' bgs from the three boring indicate that no shallow contamination exists in the immediate vicinity of the former UST tank pit. Grab groundwater samples from B-1 and B-2 from 11-12' bgs, however, were contaminated with up to 4500 ppb TPHg, which may be residual contamination from historic releases also detected in MW-1 and MW-3. This suggests that there may have been impacted soil or groundwater below the depths of these borings and that groundwater gradient has not always been to the southeast as depicted in monitoring reports. Please provide an explanation or plausible SCM, which explains this data. Propose additional investigation, if necessary. We request soil vapor sampling be done to evaluate potential risks from fuel releases to both on and off-site properties.

2. Contaminants in Boring B- The compounds, BTEX, MTBE, other ether oxygenates and the lead scavengers were not analyzed in soil boring B, which detected 1700 ppm TPHg. Soil and groundwater samples from B-4, down-gradient of boring B were ND for TPHg, BTEX, MTBE, oxygenates and lead scavengers. It appears that these other contaminants, including TPHg, have not impacted soil and groundwater down-gradient of these dispensers.

3. Waste Oil Tank Area- The historic presence of TPHg and MTBE in wells MW-7 and MW-8 near the former waste oil tank, has not been explained. As mentioned previously, the inability to collect deep soil and groundwater samples from the former pit leaves this area still in question. Was the historic elevated TPHg, BTEX and MTBE contamination in MW-8 from the former waste oil tank or is there another source for these contaminants either on or off-site? Has this contamination migrated off-site and affected neighboring properties? Please provide an explanation or plausible SCM, which explains this data. Propose additional investigation, if necessary. We request soil vapor sampling be done to evaluate potential risks from fuel releases to both on and off-site properties.

TECHNICAL REPORT REQUEST

Please submit the following report according to the following schedule:

- August 31, 2007- Work Plan for Soil Vapor Sampling, Additional SWI and SCM Revision

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).
In order to facilitate electronic correspondence, we request that you provide up to date electronic mail addresses for all responsible and interested parties. Please provide current electronic mail addresses and notify us of future changes to electronic mail addresses by sending an electronic mail message to me at barney.chan@acgov.org.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the

best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

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

If you have any questions, please call me at (510) 567-6765.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: files, D. Drogos
Mr. David Herzog, Cambria Environmental, 2000 Opportunity Drive, Suite 110, Roseville, CA 95678

7_25_07 5509 MLKJr Way

Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

July 31, 2008
(date)

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

Re: Chevron Facility #91583

Address: 5509 Martin Luther King Boulevard, Oakland, California, RO0000002

I have reviewed the attached report titled Implementation of Proposed Soil Vapor Work Plan and dated July 31, 2008.

I agree with the conclusions and recommendations presented in the referenced report. The 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 whose assistance and advice I have relied.

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

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SHFrerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

CONESTOGA-ROVERS
& ASSOCIATES

2000 Opportunity Dr, Suite 110, Roseville, California 95678
Telephone: 916-677-3407, ext. 100 Facsimile: 916-677-3687
www.CRAworld.com

July 31, 2008

Mr. Steven Plunkett
Alameda County Health Care Services Agency (ACHCS)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Implementation of Proposed Soil Vapor Work Plan**
Chevron Service Station 91583
5509 Martin Luther King Jr. Way
Oakland, California
RO0000002

Dear Mr. Plunkett:

Conestoga-Rovers & Associates (CRA) prepared a *Soil Vapor Investigation Workplan (Workplan)*, dated August 31, 2007, on behalf of Chevron Environmental Management Company (Chevron) for the referenced site. The *Workplan* was prepared in response to an ACHCS letter dated July 27, 2007. CRA proposed advancing five hand augered soil borings, to be completed as permanent soil vapor points. Soil vapor points will be used to evaluate potential risks from fuel releases to both on- and off-site properties. More than 60 calendar days have passed since submittal of the *Workplan* and CRA has not received correspondence from the ACHCS regarding the proposed scope of work. Per the California Code of Regulations, Title 23, Division 3, Chapter 16, Article 11, Section 2722 Scope of Corrective Action, part e, CRA will proceed with the scope of work as proposed in the *Workplan.*

SCHEDULE

CRA will notify the ACHCS approximately three days prior to the initiation of the field activities. CRA will submit an investigation report approximately six weeks after receiving soil vapor analytical results.

CLOSING

CRA is performing this work to satisfy site closure requirements and would appreciate any additional comments or concerns from the ACHCS. Please call Sara Giorgi (ext. 122) or Brian Carey (ext. 106) at (916) 677-3407 if you have any questions or comments regarding this work.

CONESTOGA-ROVERS
& ASSOCIATES

Sincerely,
Conestoga-Rovers & Associates

Sara E. Giorgi
Senior Project Geologist

cc: Ms. Stacie Hartung-Frerichs, Chevron Environmental Management Company, PO Box 6012, San Ramon, CA 94583
Mr. Robert Speers, Chevron Environmental Management Company, PO Box 6012, San Ramon, CA 94583

Conestoga-Rovers & Associates file copy

I:\rocklin.chevron\9-1583 oakland\reports and investigations\soil vapor investigation 2007-2008\91583 notification of 60 day rule implementation of vapor work plan 07292008.doc

APPENDIX B

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

1983 Subsurface Investigation: In December 1983, Gettler-Ryan, Inc. (G-R) installed three on-site monitoring wells (MW-1 through MW-3). The wells were installed to a depth of 20 feet below grade (fbg). Groundwater was encountered at depths ranging from 16 to 18 fbg in the well borings. No soil samples were collected and analyzed from the well borings. This investigation was documented in a letter from G-R to Chevron dated January 5, 1984.

1989 Product Piping Upgrade: In December 1989, Geotest collected six soil samples (A through F) at depths ranging from 2 to 4.5 fbg from the piping trenches in the vicinity of the product dispenser islands during piping upgrade work. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) only. TPHg (1,700 milligrams per kilogram [mg/kg]) was only detected in sample B, collected at a depth of 3 fbg. A report documenting the details of this work was not available.

1990 Well Redevelopment: In March 1990, Geraghty & Miller, Inc. (G&M) redeveloped and sampled wells MW-1 through MW-3. Laboratory analyses of the groundwater samples detected TPHg in wells MW-1 through MW-3 at concentrations of 50,000 micrograms per liter (µg/L), 800 µg/L, and 47,000 µg/L, respectively. Benzene was detected in wells MW-1 through MW-3 at concentrations of 3,000 µg/L, 400 µg/L, and 1,000 µg/L, respectively. Concentrations of toluene (up to 9,900 µg/L), ethylbenzene (up to 1,900 µg/L), and xylenes (up to 18,000 µg/L) were also detected in all three wells. Details of the investigation were presented in G&M's letter report *Results of Groundwater Sampling Activities*, dated April 2, 1990.

1990 Subsurface Investigation: In October 1990, G&M installed monitoring wells MW-4 through MW-6 to further evaluate the offsite extent of petroleum hydrocarbons in groundwater. Well MW-4 was installed in the northeast corner of the site and wells MW-5 and MW-6 were installed offsite, along the southern shoulder of 55th Street. The wells were installed to depths ranging between 20 and 25 fbg. A total of six soil samples were collected from the borings at depths between 10.5 and 20.5 fbg and analyzed for TPHg only. TPHg was only detected in the sample collected at 10.5 fbg from boring MW-5 (190 mg/kg), and in the sample collected at 10.5 fbg from boring MW-6 (11 mg/kg). Details of the investigation were presented in G&M's *Site Assessment Report*, dated December 15, 1990.

1994 Subsurface Investigation: In February 1994, Groundwater Technology, Inc. (GTI) installed monitoring wells MW-7 and MW-8 to evaluate the extent of petroleum hydrocarbons in groundwater near the former used-oil UST. Wells MW-7 and MW-8

were installed to a depth of 20 fbg. Four soil samples were collected from the borings at depths between 5 and 15 fbg and analyzed for TPHg and benzene, toluene, ethylbenzene, and xylenes (BTEX), which were not detected in any of the samples. Details of the investigation were presented in GTI's *Additional Soil and Groundwater Assessment Report*, dated April 8, 1994.

1995 Used-Oil Tank Removal and Soil Excavation: In April 1995, a 1,000-gallon used-oil underground storage tank (UST) was removed from the northwest corner of the site. Touchstone Developments (TD) collected four soil samples from the base of the excavation at depths of 10.5 or 11 fbg. The four samples were analyzed for total oil and grease (TOG). Two of the samples were additionally analyzed for TPHg, TPH as diesel (TPHd), BTEX, volatile organic compounds (VOCs), semi-VOCs, and the metals cadmium, chromium, lead, nickel, and zinc. TOG was detected in all four samples at concentrations ranging from 76 to 2,700 mg/kg. TPHg, BTEX, VOCs, semi-VOCs, and lead were not detected in the two samples analyzed. TPHd was only detected in one of the samples analyzed (75 mg/kg). Cadmium (up to 0.60 mg/kg), chromium (up to 46 mg/kg), nickel (up to 61 mg/kg), and zinc (up to 72 mg/kg) were detected in the two samples. The pit was subsequently over-excavated to 12.5 fbg. Groundwater was encountered in the excavation at approximately 12 fbg. Approximately 80 cubic yards of impacted soil was removed and disposed offsite during the work. Details were presented in TD's *Used Oil Tank Removal Report*, dated June 12, 1995.

1998 Hydraulic Hoist and Clarifier Removal and Excavation: In November 1998, two single post semi-hydraulic hoists and one dual post hydraulic hoist with clarifier were removed from the site. TD collected one soil sample from beneath each of the hoists at depths of 7.5 fbg or 8 fbg. The sample collected beneath the hoist with clarifier was analyzed for TPHg, TPHd, TPH as hydraulic oil (TPHho), TOG, VOCs, semi-VOCs, and the metals cadmium, chromium, lead, nickel, and zinc. TPHg, TPHd, TPHho, TOG, VOCs, and semi-VOCs were not detected in the sample collected beneath the hoist with clarifier; chromium, nickel, and zinc were detected in the sample at 32.1 mg/kg, 40.8 mg/kg, and 44.0 mg/kg, respectively. The remaining two samples were only analyzed for TPHho, which was not detected. Details were presented in TD's *Hoist/Clarifier Removal and Sampling Report*, dated January 19, 1999.

2002 Sensitive Receptor Survey: In April 2002, Delta Environmental Consultants, Inc. (Delta) conducted a sensitive receptor survey for the site vicinity. It was determined that drinking water for the site area was supplied by the Alameda County Water District (ACWD) from three sources: treated surface water from the Sacramento/San Joaquin Delta and/or Lake Del Valle, purchased San Francisco water from Hetch Hetchy Reservoir or Calaveras or San Antonio Reservoirs, or blended water consisting of

purchased San Francisco water and local groundwater. The groundwater supply came from the Niles Cone Groundwater Basin. No municipal wells were identified within 2,000 feet of the site. A search of Department of Water Resources (DWR) files was performed to evaluate the presence of domestic, municipal, or irrigation supply wells within 2,000 feet of the site. One industrial well and one cathodic protection well were identified approximately 1,200 feet northwest and 1,800 feet southeast of the site, respectively. Utilities identified adjacent to the site included storm drains, sanitary sewer, television cable, and water lines buried at depths of 4 to 22 fbg. Based on conversations with Alameda County Public Works Agency, the water-bearing materials beneath the site had not been classified as a potential drinking water source. No surface water bodies were located within a one-mile radius of the site. The nearest surface water body identified was Glen Echo Creek, located approximately 7,400 feet southeast of the site. Details were presented in Delta's *Sensitive Receptor Survey*, dated August 1, 2002.

2005 Site Conceptual Model and Closure Request: In May 2005, Cambria Environmental Technology, Inc. (Cambria) submitted a *Site Conceptual Model and Closure Request* to ACEH. ACEH requested further investigation near the USTs, dispenser islands, and former used oil tank.

2007 Subsurface Investigation: In January 2007, Cambria advanced five hand-auger soil borings (B-1 through B-5) to further evaluate hydrocarbon impact to soil and groundwater. Borings B-1 through B-4 were advanced to depths of 11 to 13 fbg. In boring B-5, refusal was encountered at 5.5 fbg. A total of 14 soil samples were collected at various depths from the borings. TPHg, BTEX, fuel oxygenates, ethylene dibromide (EDB), and 1,2-Dichloroethane (1,2-DCA) generally were not detected in the samples with the exception of toluene at 0.001 mg/kg in the sample collected at 3 fbg from boring B-1, and MTBE at 0.0006 mg/kg in the sample collected at 9 fbg from boring B-1. Grab-groundwater samples were collected from borings B-1 through B-4. TPHg was only detected in the groundwater samples collected from borings B-1 (2,600 µg/L) and B-2 (4,500 µg/L). BTEX, fuel oxygenates, EDB, and 1,2-DCA generally were not detected in the samples with the exception of ethylbenzene (0.9 µg/L) and MTBE (2 µg/L) in the sample collected from boring B-1, and MTBE (5 µg/L) in the sample collected from boring B-2. Details of the investigation were presented in Cambria's *Subsurface Investigation Report*, dated February 28, 2007.

APPENDIX C

WELL PERMITS AND BORING LOGS

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: 07/23/2008 By jamesy

Permit Numbers: W2008-0502
Permits Valid from 08/26/2008 to 08/26/2008

Application Id: 1216417110071 **City of Project Site:** Oakland
Site Location: 5509 Martin Luther King Jr Way
Project Start Date: 08/14/2008 **Completion Date:** 08/14/2008
Requested Inspection: 08/14/2008
Scheduled Inspection: 08/14/2008 at 2:00 PM (Contact your inspector, James Yoo at (510) 670-6633, to confirm.)
Extension Start Date: 08/26/2008 **Extension End Date:** 08/26/2008
Extension Count: 1 **Extended By:** jamesy

Applicant: Conestoga-Rovers & Associates - Lindsay Marsh
2000 Opportunity Drive Suite 110, Roseville, CA 95678 **Phone:** 916-677-3407

Property Owner: Evelyn Schlichting Trust
31 INDUSTRIAL WAY, GREENBRAE, CA 94904 **Phone:** --

Client: Chevron EMC
P.O. Box 6012 Rm K2204, San Ramon, CA 94583 **Phone:** --

Total Due: $230.00
Receipt Number: WR2008-0258 **Total Amount Paid:** $230.00
Payer Name : Conestoga-Rovers & Paid By: CHECK **PAID IN FULL**
Associates

Works Requesting Permits:

Remediation Well Construction-Vapor Remediation Well - 5 Wells
Driller: V&W Drilling - Lic #: 720904 - Method: Hand **Work Total: $230.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2008-0502	07/23/2008	11/12/2008	VP-1	3.00 in.	2.00 in.	2.00 ft	6.00 ft
W2008-0502	07/23/2008	11/12/2008	VP-2	3.00 in.	2.00 in.	2.00 ft	6.00 ft
W2008-0502	07/23/2008	11/12/2008	VP-3	3.00 in.	2.00 in.	2.00 ft	6.00 ft
W2008-0502	07/23/2008	11/12/2008	VP-4	3.00 in.	2.00 in.	2.00 ft	6.00 ft
W2008-0502	07/23/2008	11/12/2008	VP-5	3.00 in.	2.00 in.	2.00 ft	6.00 ft

Specific Work Permit Conditions

1. 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.

2. Permitte, 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.

Alameda County Public Works Agency - Water Resources Well Permit

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or 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.

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

5. Applicant shall contact James Yoo for an inspection time at 510-670-6633 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. 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.

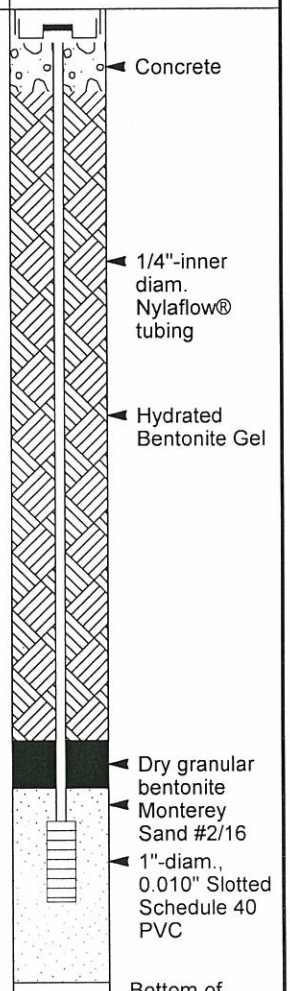
9. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a 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.

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA
Telephone: 916-677-3407
Fax: 916-677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	9-1583 Oakland	**DRILLING STARTED**	26-Aug-08
LOCATION	5509 Martin Luther King Jr Way	**DRILLING COMPLETED**	26-Aug-08
PROJECT NUMBER	611960	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	V&W Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3-inch	**SCREENED INTERVAL**	5 to 5.5 fbg
LOGGED BY	O. Yan	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	James Kiernan, PE	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Asphalt	0.5
					GC		**Clayey GRAVEL with sand:** brown; moist; 50% gravel, 25% sand, 25% clay; fine to medium grained sand; low plasticity; high estimated permeability.	1.0
0.3		VP-1- 3'		5	CL		**CLAY with sand:** brown; moist; 70% clay, 15% silt, 15% sand; medium plasticity; low estimated permeability.	6.0



WELL LOG (PID) I:\ROCKLIN.CHEVRON\6119--\611960 - 9-1583 OAKLAND\611960-REPORTS\611960-RPT1-SOIL VAPOR ASSESSMENT RPT\9-1583 VAPOR PROBES 2008.GPJ DEFAULT.GDT 10/21/08

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA
Telephone: 916-677-3407
Fax: 916-677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-2
JOB/SITE NAME	9-1583 Oakland	**DRILLING STARTED**	26-Aug-08
LOCATION	5509 Martin Luther King Jr Way	**DRILLING COMPLETED**	26-Aug-08
PROJECT NUMBER	611960	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	V&W Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3-inch	**SCREENED INTERVAL**	5 to 5.5 fbg
LOGGED BY	O. Yan	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	James Kiernan, PE	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Asphalt	0.5	Concrete
					GC		**Clayey GRAVEL with sand:** dark brown; moist; 50% gravel, 25% sand, 25% clay; fine to medium grained sand; low plasticity; high estimated permeability.	1.0	
							CLAY with sand: dark brown; moist; 75% clay, 25% sand; medium plasticity; low estimated permeability.		1/4"-inner diam. Nylaflow® tubing
									Hydrated Bentonite Gel
0.2		VP-2- 3'			CL				
				5					Dry granular bentonite
									Monterey Sand #2/16
									1"-diam., 0.010" Slotted Schedule 40 PVC
								6.0	Bottom of Boring @ 6 fbg

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA
Telephone: 916-677-3407
Fax: 916-677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-3
JOB/SITE NAME	9-1583 Oakland	**DRILLING STARTED**	26-Aug-08
LOCATION	5509 Martin Luther King Jr Way	**DRILLING COMPLETED**	26-Aug-08
PROJECT NUMBER	611960	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	V&W Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3-inch	**SCREENED INTERVAL**	5 to 5.5 fbg
LOGGED BY	O. Yan	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	James Kiernan, PE	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Asphalt	0.5	Concrete
					GC		**Clayey GRAVEL with sand:** dark brown; moist; 50% gravel, 25% sand, 25% clay; fine to medium grained sand; low plasticity; high estimated permeability.	1.0	
							CLAY: dark grey; moist; 70% clay, 20% silt, 10% sand; medium plasticity; low estimated permeability.		1/4"-inner diam. Nylaflow® tubing
									Hydrated Bentonite Gel
0.1		VP-3- 3'			CL				
				5			At 4 fbg dark brown.		Dry granular bentonite
									Monterey Sand #2/16
									1"-diam., 0.010" Slotted Schedule 40 PVC
								6.0	Bottom of Boring @ 6 fbg

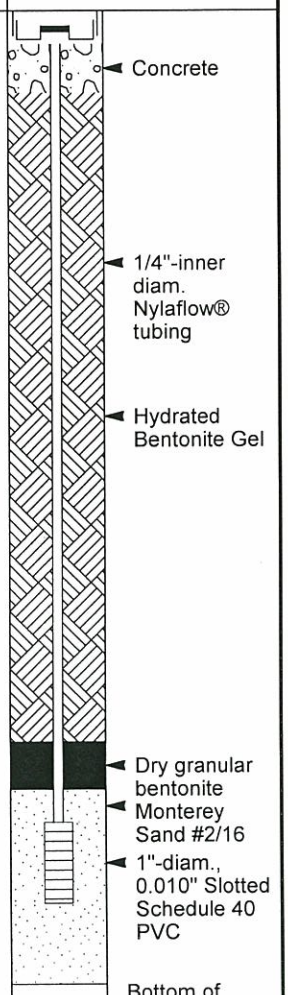
WELL LOG (PID) I:\ROCKLIN.CHEVRON\6119--\611960 - 9-1583 OAKLAND\611960-REPORTS\611960-RPT1-SOIL VAPOR ASSESSMENT RPT\9-1583 VAPOR PROBES 2008.GPJ DEFAULT.GDT 10/21/08

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA
Telephone: 916-677-3407
Fax: 916-677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-4
JOB/SITE NAME	9-1583 Oakland	**DRILLING STARTED**	26-Aug-08
LOCATION	5509 Martin Luther King Jr Way	**DRILLING COMPLETED**	26-Aug-08
PROJECT NUMBER	611960	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	V&W Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3-inch	**SCREENED INTERVAL**	5 to 5.5 fbg
LOGGED BY	O. Yan	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	James Kiernan, PE	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							Asphalt	0.7
					GC		**Clayey GRAVEL with sand:** dark brown; moist; 50% gravel, 25% sand, 25% clay; fine to medium grained sand; low plasticity; high estimated permeability.	1.2
					CL		**Sandy CLAY:** dark brown; moist; 50% clay, 30% sand, 20% silt; low plasticity; moderate estimated permeability.	2.0
0.3		VP-4- 3'		5	CL		**CLAY:** dark brown; moist; 70% clay, 20% silt, 10% sand; medium plasticity; low estimated permeability.	6.0



WELL LOG (PID) I:\ROCKLIN CHEVRON\6119--1611960 - 9-1583 OAKLAND\611960-REPORTS\611960-RPT1-SOIL VAPOR ASSESSMENT RPT\9-1583 VAPOR PROBES 2008.GPJ DEFAULT.GDT 10/21/08

Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA
Telephone: 916-677-3407
Fax: 916-677-3687

BORING/WELL LOG

CLIENT NAME	Chevron Environmental Management Co.	**BORING/WELL NAME**	VP-5
JOB/SITE NAME	9-1583 Oakland	**DRILLING STARTED**	26-Aug-08
LOCATION	5509 Martin Luther King Jr Way	**DRILLING COMPLETED**	26-Aug-08
PROJECT NUMBER	611960	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	V&W Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hand Auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	3-inch	**SCREENED INTERVAL**	5 to 5.5 fbg
LOGGED BY	O. Yan	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	James Kiernan, PE	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Asphalt	0.5	Concrete
					GC		**Clayey GRAVEL with sand:** dark brown; moist; 50% gravel, 25% sand, 25% clay; fine to medium grained sand; low plasticity; high estimated permeability.	1.0	
0.3		VP-5- 3'		5	CL		**CLAY:** dark grey; moist; 70% clay, 20% silt, 10% sand; medium plasticity; low estimated permeability.	6.0	1/4"-inner diam. Nylaflow® tubing Hydrated Bentonite Gel Dry granular bentonite Monterey Sand #2/16 1"-diam., 0.010" Slotted Schedule 40 PVC Bottom of Boring @ 6 fbg

WELL LOG (PID) I:\ROCKLIN.CHEVRON\6119--1611960 - 9-1583 OAKLAND\611960-REPORTS\611960-RPT1-SOIL VAPOR ASSESSMENT RPT\9-1583 VAPOR PROBES 2008.GPJ DEFAULT.GDT 10/21/08

APPENDIX D

STANDARD OPERATING PROCEDURES

Conestoga-Rovers & Associates

STANDARD FIELD PROCEDURES FOR SOIL VAPOR PROBE INSTALLATION AND SAMPLING

VAPOR POINT METHODS

This document describes Conestoga-Rovers & Associates' standard field methods for soil vapor sampling. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

Objectives

Soil vapor samples are collected and analyzed to assess whether vapor-phase subsurface contaminants pose a threat to human health or the environment.

Shallow Soil Vapor Point Installation

The shallow soil vapor point method for soil vapor sampling utilizes a hand auger or drill rig to advance a boring for the installation of a soil vapor sampling point. Once the boring is hand augered to the final depth, a probe, connected with Swagelok fittings to nylon or Teflon tubing of ¼-inch outer-diameter, is placed within 12-inches of number 2/16 filter sand (Figure A). A 12-inch layer of dry granular bentonite is placed on top of the filter pack. Pre-hydrated granular bentonite is then poured to fill the borehole. The tube is coiled and placed within a wellbox finished flush to the surface. Soil vapor samples will be collected no sooner than 48 hours after installation of the soil vapor points to allow adequate time for representative soil vapors to accumulate. Soil vapor sample collection will not be scheduled until after a minimum of three consecutive precipitation-free days and irrigation onsite has ceased. Figure B shows the soil vapor sampling apparatus. A measured volume of air will be purged from the tubing using a different Summa purge canister. Immediately after purging, soil vapor samples will be collected using the appropriate size Summa canister with attached flow regulator and sediment filter. The soil vapor points will be preserved until they are no longer needed for risk evaluation purposes. At that time, they will be destroyed by extracting the tubing, hand augering to remove the sand and bentonite, and backfilling the boring with neat cement. The boring will be patched with asphalt or concrete, as appropriate.

Sampling of Soil Vapor Points

Samples will be collected using a SUMMA™ canister connected to sampling tubing at each vapor point. Prior to collecting soil vapor samples, the initial vacuum of the canisters is measured and recorded on the chain-of-custody. The vacuum of the SUMMA™ canister is used to draw the soil vapor through the flow controller until a negative pressure of approximately 5-inches of Hg is observed on the vacuum gauge and recorded on the

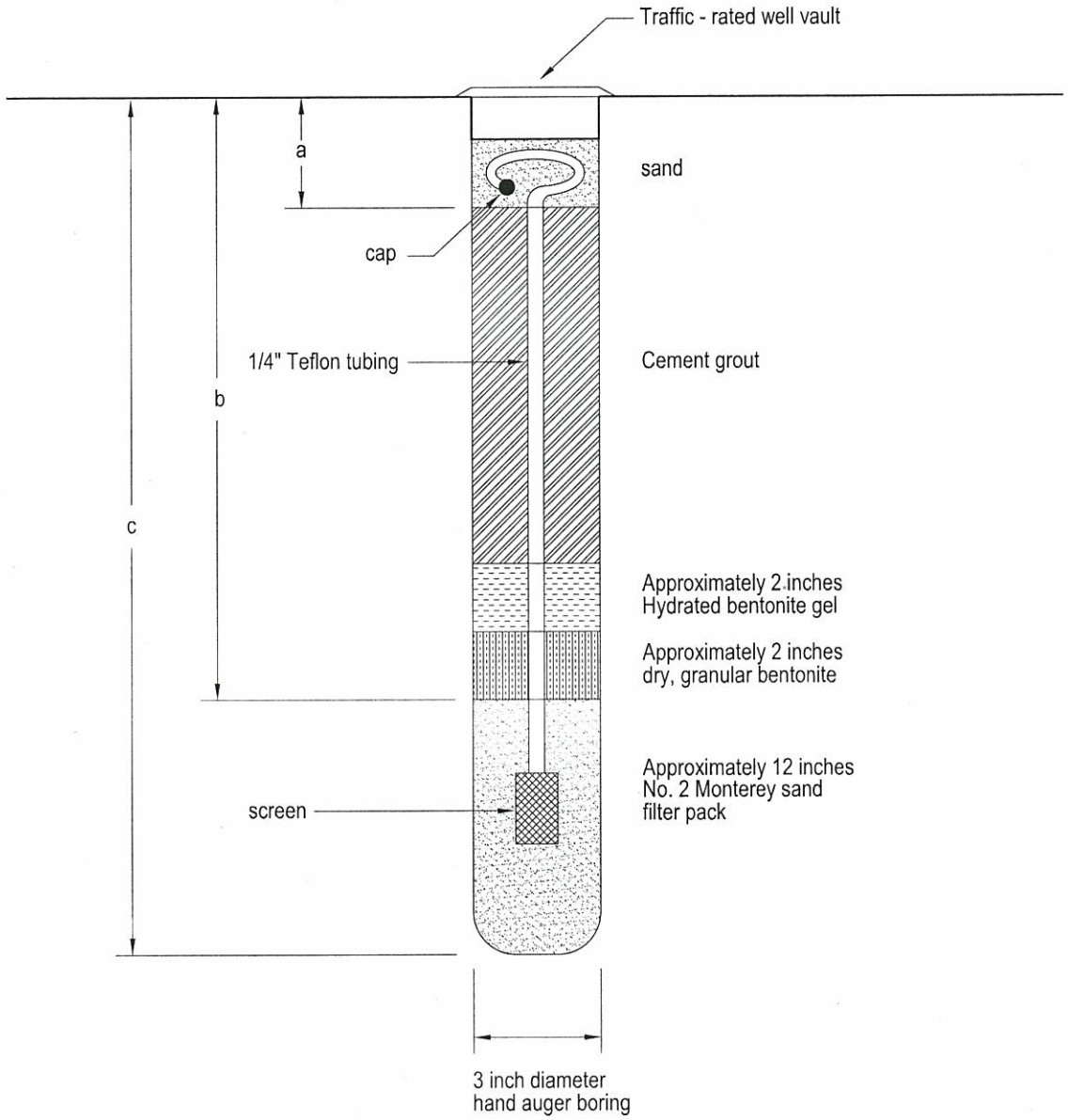
chain-of-custody. The flow controllers should be set to 100-200 ml/minute. Field duplicates should be collected for every day of sampling and/or for every 10 samples collected.

Prior to sample collection, stagnant air in the sampling apparatus should be removed by purging approximately 3 purge volumes. The purge volume is defined as the amount of air within the probe and tubing.

In accordance with the DTSC Advisory-Active Soil Gas Investigations guidance document, dated January 28, 2003, leak testing needs to be performed during sampling. Helium is recommended, although shaving cream is acceptable.

Vapor Sample Storage, Handling, and Transport

Samples are stored and transported under chain-of-custody to a state-certified analytic laboratory. Samples should never be cooled due to the possibility of condensation within the canister.



I:\MISC\SOPs\SOIL VAPOR SAMPLING\VAPOR-POINT FIG A.DWG

Schematic Not to Scale

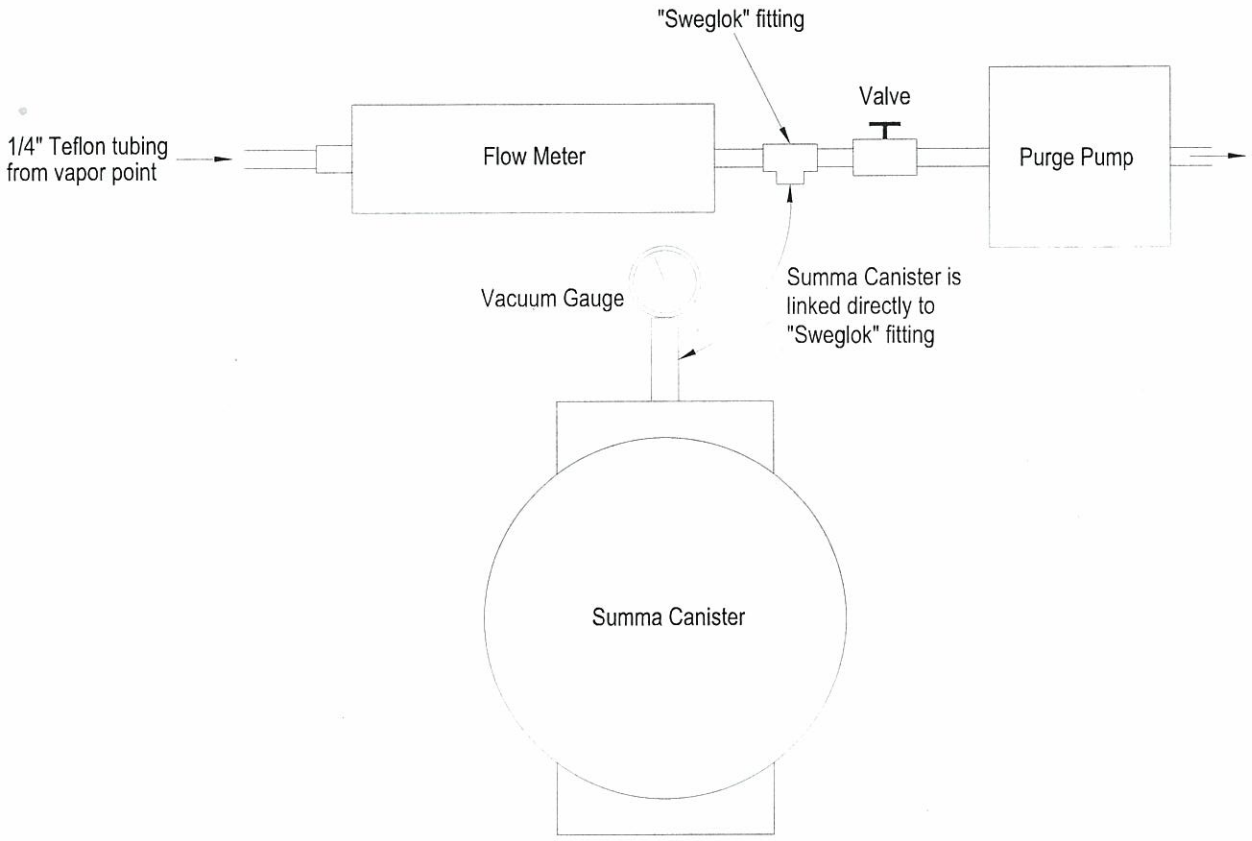
FIGURE

A

CONESTOGA-ROVERS
& ASSOCIATES

Soil Vapor Point

09/25/02



Schematic Not to Scale

FIGURE

B

S:\0-TEXACO\TEX-SITES\211273\FIGURES\VAPOR-DIAG.DWG

CONESTOGA-ROVERS
& ASSOCIATES

Soil Vapor Sampling Apparatus Diagram

APPENDIX E

VAPOR SAMPLING FIELD DATA SHEETS

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-1 **Date:** 9/11/08

Job/Site Name: 9-1583 **Technician:** L. Marsh

Project No. 611960 **PM:** S. Giorgi

Site Address: 5509 MLK Jr

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1127	-19+		
1132	-19+		passed

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading
1132			
1134			

Sample Collection

Flow Control Orifice Setting: 167 Summa Canister ID: 1453 / sorbent tube 118373

Summa Canister Size: 1 L Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1135		1141	

Notes: 1 L = 39 sec

T = 60 sec

$\frac{3.78}{39} \times 60 = 5.8$ L

C:\Documents and Settings\cbenedict\Local Settings\Temporary Internet Files\OLK7B\[Soil Vapor Sampling Form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-2/Dupe **Date:** 9/11/08

Job/Site Name: 9-HP1583 **Technician:** C.B.

Project No. 611960 **PM:** S. Giorgi

Site Address: 5509 MLK Oakland

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1314	-19/-20.5		
1324	-19/-20.5		passed

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading
1324			
1326			

Sample Collection

Flow Control Orifice Setting: 167 ml/min Summa Canister ID: VP-2 Summa 36560 / Dup 30830 / Sorbent tubes VP-2 118374 / Dup

Summa Canister Size: 1L Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1326	-30/-30	1332	-5/-5

Notes:

VP-2

1 gal = 30 $\frac{3.28}{30} \cdot .45 \cdot 567$

T = 45

Dup

1 gal = 30 $\frac{3.28}{30} \cdot .45 \cdot 567$

T = 45

C:\Documents and Settings\cbenedict\Local Settings\Temporary Internet Files\OLK7B\[Soil Vapor Sampling Form

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-3
Date: 9/11/08
Job/Site Name: 9-1583
Technician: CB
Project No. 611960
PM: S Giorg.
Site Address: 5509 MLK Jr Oakland

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1204	-19.5	in/Hg	
1215	-19.5		passed

Purge Volume

Calculated Purge Volume: ______

Time	Flow	Volume	PID Reading

Sample Collection

Flow Control Orifice Setting: ______
Summa Canister ID: 3800/ sorbent tube 119833
Summa Canister Size: 1L
Analysis: ______

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1219	-30	1226	-5

Notes: 1g = 36.
T = 54

3.786 / 36 · 54 = 5.67L

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-4 **Date:** 9-11-08

Job/Site Name: **Technician:**

Project No. **PM:** S. Giorgi

Site Address: 5509 MLK Jr Way, Oakland

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
1037	-20	in/Hg	
1047	-20		passed

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading
1047			
1049			

Sample Collection

Flow Control Orifice Setting: 147 mL/min Summa Canister ID: 34600 / Sorbent tube 119832

Summa Canister Size: 1 L Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1049	-30	1056	-5

Notes: 1 gal = 33 sec
T = 48 sec
3.78 × 4 = 5.52
33 sec

C:\Documents and Settings\cbenedict\Local Settings\Temporary Internet Files\OLK7B\[Soil Vapor Sampling Form

Conestoga-Rovers & Associates

SOIL VAPOR SAMPLING DATA SHEET

Soil Vapor Sampling Point ID: VP-5 **Date:** 9-11-08

Job/Site Name: 9-1583 Oakland **Technician:** C. Benedict

Project No. 611960 **PM:** S. Giorgi

Site Address: 5509 MLK Jr Way, Oakland

Vapor Sampling Apparatus Pressure Testing

Time	Vacuum Reading	Unit	Comments
~~949~~	~~-19.5~~	~~in/Hg~~	
952	-22	in/Hg	
1004	-22		passed

Purge Volume

Calculated Purge Volume: _____

Time	Flow	Volume	PID Reading
1006			
1008			

Sample Collection

Flow Control Orifice Setting: ~~167~~ mL/min Summa Canister ID: 1024 / 95575 (Sorbent tube)

Summa Canister Size: 1L Analysis: _____

Time - Begin Sampling	Canister Vacuum	Time - End Sampling	Canister Vacuum
1006	-30 in/Hg	1014	-5 in/Hg

Notes: 1 gal = 27 sec $\frac{3.7 \text{ L}}{27 \text{ sec}} \cdot 45 \text{ sec} = 6.3 \text{ L}$

T = 45 sec

C:\Documents and Settings\cbenedict\Local Settings\Temporary Internet Files\OLK7B\[Soil Vapor Sampling Form

APPENDIX F

LABORATORY ANALYTICAL REPORTS

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

916-677-3407

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1107457. Samples arrived at the laboratory on Thursday, August 28, 2008. The PO# for this group is 91583 and the release number is MTI.

Client Description	Lancaster Labs Number
VP-3-S-3-080826 Grab Soil	5452714
VP-2-S-3-080826 Grab Soil	5452715
VP-4-S-3-080826 Grab Soil	5452716
VP-5-S-3-080826 Grab Soil	5452717
VP-1-S-3-080826 Grab Soil	5452718

ELECTRONIC COPY TO	Chevron c/o CRA	Attn: CRA EDD
ELECTRONIC COPY TO	CRA	Attn: Sara Giorgi

Lancaster Laboratories

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Analysis Report

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300

Respectfully Submitted,

Barbara F Reedy
Senior Specialist

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW5452714 **Group No. 1107457**

VP-3-S-3-080826 Grab Soil
Facility# 91583 MTI# 61-1960 CETK
5509 Martin Luther King-Oakland T0600100348 VP-3
Collected:08/26/2008 09:25 by LM

Account Number: 11997

Submitted: 08/28/2008 09:00
Reported: 09/07/2008 at 11:42
Discard: 10/08/2008

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

LUTV3

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	ND	1.0	mg/kg	25
08270	TPH-DRO by 8015B	n.a.	ND	4.0	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	ND	0.0005	mg/kg	1.03
02020	t-Butyl alcohol	75-65-0	ND	0.021	mg/kg	1.03
05460	Benzene	71-43-2	ND	0.0005	mg/kg	1.03
05461	1,2-Dichloroethane	107-06-2	ND	0.001	mg/kg	1.03
05466	Toluene	108-88-3	ND	0.001	mg/kg	1.03
05471	1,2-Dibromoethane	106-93-4	ND	0.001	mg/kg	1.03
05474	Ethylbenzene	100-41-4	ND	0.001	mg/kg	1.03
06301	Xylene (Total)	1330-20-7	ND	0.001	mg/kg	1.03

State of California Lab Certification No. 2116

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	SW-846 8015B modified	1	09/03/2008 06:31	Linda C Pape	25
08270	TPH-DRO by 8015B	SW-846 8015B	1	09/06/2008 04:44	Heather E Williams	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	09/01/2008 11:31	Kathrine K Muramatsu	1.03
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:33	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	08/29/2008 15:33	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	08/29/2008 15:35	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:34	Larry E Bevins	n.a.
07004	Extraction - DRO (Soils)	SW-846 3550B	1	09/04/2008 10:40	Jessica Agosto	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW5452715 **Group No. 1107457**

VP-2-S-3-080826 Grab Soil
Facility# 91583 MTI# 61-1960 CETK
5509 Martin Luther King-Oakland T0600100348 VP-2
Collected:08/26/2008 09:39 by LM

Account Number: 11997

Submitted: 08/28/2008 09:00
Reported: 09/07/2008 at 11:42
Discard: 10/08/2008

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

LUTV2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	ND	1.0	mg/kg	25
08270	TPH-DRO by 8015B	n.a.	ND	4.0	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	ND	0.0005	mg/kg	1.01
02020	t-Butyl alcohol	75-65-0	ND	0.020	mg/kg	1.01
05460	Benzene	71-43-2	ND	0.0005	mg/kg	1.01
05461	1,2-Dichloroethane	107-06-2	ND	0.001	mg/kg	1.01
05466	Toluene	108-88-3	ND	0.001	mg/kg	1.01
05471	1,2-Dibromoethane	106-93-4	ND	0.001	mg/kg	1.01
05474	Ethylbenzene	100-41-4	ND	0.001	mg/kg	1.01
06301	Xylene (Total)	1330-20-7	ND	0.001	mg/kg	1.01

State of California Lab Certification No. 2116

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	SW-846 8015B modified	1	09/03/2008 07:08	Linda C Pape	25
08270	TPH-DRO by 8015B	SW-846 8015B	1	09/06/2008 05:03	Heather E Williams	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	09/01/2008 11:54	Kathrine K Muramatsu	1.01
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:37	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	08/29/2008 15:38	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	08/29/2008 15:39	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:38	Larry E Bevins	n.a.
07004	Extraction - DRO (Soils)	SW-846 3550B	1	09/04/2008 10:40	Jessica Agosto	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW5452716 **Group No. 1107457**

VP-4-S-3-080826 Grab Soil
Facility# 91583 MTI# 61-1960 CETK
5509 Martin Luther King-Oakland T0600100348 VP-4
Collected:08/26/2008 10:48 by LM

Account Number: 11997

Submitted: 08/28/2008 09:00
Reported: 09/07/2008 at 11:42
Discard: 10/08/2008

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

LUTV4

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	ND	1.0	mg/kg	25
08270	TPH-DRO by 8015B	n.a.	ND	4.0	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	ND	0.0005	mg/kg	1
02020	t-Butyl alcohol	75-65-0	ND	0.020	mg/kg	1
05460	Benzene	71-43-2	ND	0.0005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	ND	0.001	mg/kg	1
05466	Toluene	108-88-3	ND	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	ND	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	ND	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	ND	0.001	mg/kg	1

State of California Lab Certification No. 2116

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	SW-846 8015B modified	1	09/03/2008 07:44	Linda C Pape	25
08270	TPH-DRO by 8015B	SW-846 8015B	1	09/06/2008 05:21	Heather E Williams	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	09/01/2008 12:16	Kathrine K Muramatsu	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:41	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	08/29/2008 15:41	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	08/29/2008 15:43	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:42	Larry E Bevins	n.a.
07004	Extraction - DRO (Soils)	SW-846 3550B	1	09/04/2008 10:40	Jessica Agosto	1

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Analysis Report

Lancaster Laboratories Sample No. SW5452717 Group No. 1107457

VP-5-S-3-080826 Grab Soil
Facility# 91583 MTI# 61-1960 CETK
5509 Martin Luther King-Oakland T0600100348 VP-5
Collected:08/26/2008 11:15 by LM

Account Number: 11997

Submitted: 08/28/2008 09:00
Reported: 09/07/2008 at 11:42
Discard: 10/08/2008

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

LUTV5

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	ND	1.0	mg/kg	25
08270	TPH-DRO by 8015B	n.a.	ND	4.0	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	ND	0.0005	mg/kg	0.98
02020	t-Butyl alcohol	75-65-0	ND	0.020	mg/kg	0.98
05460	Benzene	71-43-2	ND	0.0005	mg/kg	0.98
05461	1,2-Dichloroethane	107-06-2	ND	0.001	mg/kg	0.98
05466	Toluene	108-88-3	ND	0.001	mg/kg	0.98
05471	1,2-Dibromoethane	106-93-4	ND	0.001	mg/kg	0.98
05474	Ethylbenzene	100-41-4	ND	0.001	mg/kg	0.98
06301	Xylene (Total)	1330-20-7	ND	0.001	mg/kg	0.98

State of California Lab Certification No. 2116

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	SW-846 8015B modified	1	09/03/2008 09:33	Linda C Pape	25
08270	TPH-DRO by 8015B	SW-846 8015B	1	09/06/2008 08:30	Heather E Williams	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	09/01/2008 12:38	Kathrine K Muramatsu	0.98
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:45	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	08/29/2008 15:46	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	08/29/2008 15:47	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:46	Larry E Bevins	n.a.
07004	Extraction - DRO (Soils)	SW-846 3550B	1	09/04/2008 10:40	Jessica Agosto	1

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Analysis Report

Lancaster Laboratories Sample No. SW5452718 **Group No. 1107457**

VP-1-S-3-080826 Grab Soil
Facility# 91583 MTI# 61-1960 CETK
5509 Martin Luther King-Oakland T0600100348 VP-1
Collected:08/26/2008 11:51 by LM

Account Number: 11997

Submitted: 08/28/2008 09:00
Reported: 09/07/2008 at 11:42
Discard: 10/08/2008

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

LUTV1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	ND	1.0	mg/kg	25
08270	TPH-DRO by 8015B	n.a.	ND	4.0	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	ND	0.0005	mg/kg	0.98
02020	t-Butyl alcohol	75-65-0	ND	0.020	mg/kg	0.98
05460	Benzene	71-43-2	ND	0.0005	mg/kg	0.98
05461	1,2-Dichloroethane	107-06-2	ND	0.001	mg/kg	0.98
05466	Toluene	108-88-3	ND	0.001	mg/kg	0.98
05471	1,2-Dibromoethane	106-93-4	ND	0.001	mg/kg	0.98
05474	Ethylbenzene	100-41-4	ND	0.001	mg/kg	0.98
06301	Xylene (Total)	1330-20-7	ND	0.001	mg/kg	0.98

State of California Lab Certification No. 2116

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	SW-846 8015B modified	1	09/03/2008 10:09	Linda C Pape	25
08270	TPH-DRO by 8015B	SW-846 8015B	1	09/06/2008 05:40	Heather E Williams	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	09/01/2008 13:01	Kathrine K Muramatsu	0.98
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:49	Larry E Bevins	n.a.
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	2	08/29/2008 15:49	Larry E Bevins	n.a.
01150	GC - Bulk Soil Prep	SW-846 5030A	1	08/29/2008 15:51	Larry E Bevins	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5030A	1	08/29/2008 15:50	Larry E Bevins	n.a.
07004	Extraction - DRO (Soils)	SW-846 3550B	1	09/04/2008 10:40	Jessica Agosto	1

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Analysis Report

Quality Control Summary

Client Name: Chevron c/o CRA
Reported: 09/07/08 at 11:42 AM

Group Number: 1107457

Matrix QC may not be reported if 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.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 08245A34A	Sample number(s): 5452714-5452718							
TPH-GRO - Soils	ND	1.0	mg/kg	82		67-119		
Batch number: 082470014A	Sample number(s): 5452714-5452718							
TPH-DRO by 8015B	ND	4.0	mg/kg	92		71-109		
Batch number: A082451AA	Sample number(s): 5452714-5452718							
Methyl Tertiary Butyl Ether	ND	0.0005	mg/kg	96	91	72-117	6	30
t-Butyl alcohol	ND	0.020	mg/kg	90	89	66-146	1	30
Benzene	ND	0.0005	mg/kg	99	94	84-115	6	30
1,2-Dichloroethane	ND	0.001	mg/kg	100	94	76-135	7	30
Toluene	ND	0.001	mg/kg	97	93	81-116	4	30
1,2-Dibromoethane	ND	0.001	mg/kg	98	90	77-114	8	30
Ethylbenzene	ND	0.001	mg/kg	93	90	82-115	3	30
Xylene (Total)	ND	0.001	mg/kg	92	89	82-117	4	30

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 08245A34A	Sample number(s): 5452714-5452718 UNSPK: P455933								
TPH-GRO - Soils	82	82	39-118	1	30				
Batch number: 082470014A	Sample number(s): 5452714-5452718 UNSPK: P453656 BKG: P453656								
TPH-DRO by 8015B	92		52-117			ND	ND	0 (1)	20
Batch number: A082451AA	Sample number(s): 5452714-5452718 UNSPK: 5452714								
Methyl Tertiary Butyl Ether	95		59-119						
t-Butyl alcohol	92		50-143						
Benzene	102		66-112						
1,2-Dichloroethane	103		62-130						
Toluene	104		58-116						
1,2-Dibromoethane	96		65-115						
Ethylbenzene	97		54-116						
Xylene (Total)	93		52-117						

Surrogate Quality Control

*- Outside of specification
(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: Chevron c/o CRA
Reported: 09/07/08 at 11:42 AM

Group Number: 1107457

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: TPH-GRO - Soils
Batch number: 08245A34A

	Trifluorotoluene-F
5452714	78
5452715	77
5452716	76
5452717	71
5452718	75
Blank	75
LCS	82
MS	77
MSD	73
Limits:	61-122

Analysis Name: TPH-DRO by 8015B
Batch number: 082470014A

	Orthoterphenyl
5452714	98
5452715	90
5452716	102
5452717	103
5452718	99
Blank	114
DUP	98
LCS	109
MS	110
Limits:	59-129

Analysis Name: BTEX+5 Oxygenates+EDC+EDB
Batch number: A082451AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5452714	86	79	89	74
5452715	87	83	87	76
5452716	90	81	86	75
5452717	91	82	94	68*
5452718	89	83	87	76
Blank	88	89	85	81
LCS	87	86	88	84
LCSD	86	83	88	84
MS	87	83	92	79
Limits:	71-114	70-109	70-123	70-111

*- Outside of specification
(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
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 11997 Sample #: 545274-18 SCR#: 240307

611960

Group# 1107457

Analyses Requested

Facility #: Chevron 9-1583
Site Address: 5509 Martin Luther King Jr Way, Oakland
Chevron PM: S. Frerichs Lead Consultant: CRA
Consultant/Office: Roseville
Consultant Prj. Mgr.: Sara Giorgi
Consultant Phone #: 916-677-3407 Fax #: 916-677-3687
Sampler: L. Marsh
Service Order #: ☐ Non SAR:

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	Preservation Codes	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	3 Oxygenates *	Lead 7420 ☐ 7421 ☐
VP-3-3	S		3	08 08 26	0925	Y	X		1		X	X	X		X	
VP-2-3	S		3	08 08 26	0939	Y	X		1		X	X	X		X	
VP-4-3	S		3	08 08 26	1048	Y	X		1		X	X	X		X	
VP-5-3	S		3	08 08 26	1115	Y	X		1		X	X	X		X	
VP-1-3	S		3	08 08 26	1151	Y	X		1		X	X	X		X	

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ 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

Comments / Remarks
3 Oxygenates = TBA, 1,2-DCA, EDB by 8260B

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Lindsay Marsh	8-27-08	12:00			
2						
3						
4	Relinquished by Commercial Carrier: UPS (FedEx) Other ____			Received by:	8/28/08	0900
5	Temperature Upon Receipt ____ C°			Custody Seals Intact? Yes No		

3460 Rev. 10/04/01

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

Lancaster Laboratories
Explanation of Symbols and Abbreviations

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

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< 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 of gas 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.

U.S. EPA 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 quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
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 ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount 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 for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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.

APPENDIX F

LABORATORY ANALYTICAL REPORT FOR SOIL VAPOR

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809235

Work Order Summary

CLIENT:	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678	**BILL TO:**	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678
PHONE:	916-677-3407 x123	**P.O. #**	
FAX:	916-677-3687	**PROJECT #**	9-1583 Oakland
DATE RECEIVED:	09/12/2008	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/18/2008		

FRACTION #	NAME	TEST
01A	VP-5	Modified TO-17
02A	VP-4	Modified TO-17
03A	VP-1	Modified TO-17
04A	VP-2	Modified TO-17
05A	VP-3	Modified TO-17
06A	Dupe	Modified TO-17
07A	Lab Blank	Modified TO-17
08A	CCV	Modified TO-17
09A	LCS	Modified TO-17

CERTIFIED BY: Linda A. Truman DATE: 09/18/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

LABORATORY NARRATIVE
TO-17 - Markes ATD
Conestoga-Rovers Associates (CRA)
Workorder# 0809235

Six TO-17 Tube (Tenax-GR) samples were received on September 12, 2008. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for further separation.

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

Requirement	*TO-17*	*ATL Modifications*
Laboratory Blank	At least 2 tubes from the same cleaning batch as the samples are analyzed at the beginning and end of the analytical sequence. Do not dry purge Lab Blanks.	Tubes used for daily lab blank may or may not be from the same batch or sampling media. Only 1 lab blank is analyzed prior to sample analysis. Lab blanks are dry purged to eliminate the possibility of sample anomaly attributed to dry purge process.
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-17 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

A Temperature Blank was included with the shipment. Temperature was measured and was not within 4±2 °C. Coolant in the form of blue ice was present. Analysis proceeded.

Analytical Notes

The TPH pattern in sample VP-4, VP-2 and Dupe did not resemble that of the diesel fuel. Results are reported from the hydrocarbons distributed in the lighter carbon range of diesel.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

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

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

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Air Toxics LTD.

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Summary of Detected Compounds
MODIFIED METHOD TO-17

Client Sample ID: VP-5

Lab ID#: 0809235-01A

No Detections Were Found.

Client Sample ID: VP-4

Lab ID#: 0809235-02A

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	5000	920

Client Sample ID: VP-1

Lab ID#: 0809235-03A

No Detections Were Found.

Client Sample ID: VP-2

Lab ID#: 0809235-04A

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	39000	6900

Client Sample ID: VP-3

Lab ID#: 0809235-05A

No Detections Were Found.

Client Sample ID: Dupe

Lab ID#: 0809235-06A

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	41000	7200

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Client Sample ID: VP-5

Lab ID#: 0809235-01A

MODIFIED METHOD TO-17

File Name:	**n091616**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 04:10 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	160	Not Detected	Not Detected

Container Type: TO-17 Tube (Tenax-GR)

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Client Sample ID: VP-4

Lab ID#: 0809235-02A

MODIFIED METHOD TO-17

File Name:	**n091617**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 04:48 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	5000	920

Container Type: TO-17 Tube (Tenax-GR)

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Client Sample ID: VP-1

Lab ID#: 0809235-03A

MODIFIED METHOD TO-17

File Name:	**n091618**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 05:26 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	170	Not Detected	Not Detected

Container Type: TO-17 Tube (Tenax-GR)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0809235-04A

MODIFIED METHOD TO-17

File Name:	**n091619**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 06:04 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	39000	6900

Container Type: TO-17 Tube (Tenax-GR)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0809235-05A

MODIFIED METHOD TO-17

File Name:	**n091620**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 06:42 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	Not Detected	Not Detected

Container Type: TO-17 Tube (Tenax-GR)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Dupe

Lab ID#: 0809235-06A

MODIFIED METHOD TO-17

File Name:	**n091621**	**Date of Extraction: NA**	**Date of Collection: 9/11/08**
Dil. Factor:	**1.00**		**Date of Analysis: 9/17/08 07:20 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	180	41000	7200

Container Type: TO-17 Tube (Tenax-GR)

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809235-07A

MODIFIED METHOD TO-17

File Name:	**n091611**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 9/16/08 11:36 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (uG/m3)	Amount (ng)	Amount (uG/m3)
TPH (Diesel Range)	1000	160	Not Detected	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 0809235-08A

MODIFIED METHOD TO-17

File Name:	**n091608**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 9/16/08 06:27 PM**

Compound	%Recovery
TPH (Diesel Range)	98

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 0809235-09A

MODIFIED METHOD TO-17

File Name:	**n091609**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 9/16/08 07:05 PM**

Compound	%Recovery
TPH (Diesel Range)	90

Container Type: NA - Not Applicable

Air Toxics LTD.

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Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809246B

Work Order Summary

CLIENT:	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678	**BILL TO:**	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678
PHONE:	916-677-3407 x123	**P.O. #**	
FAX:	916-677-3687	**PROJECT #**	9-1583 Oakland
DATE RECEIVED:	09/12/2008	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/25/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-5	Modified TO-3	2.5 "Hg	15 psi
02A	VP-4	Modified TO-3	2.5 "Hg	15 psi
03A	VP-1	Modified TO-3	4.0 "Hg	15 psi
04A	VP-2	Modified TO-3	5.5 "Hg	15 psi
05A	VP-3	Modified TO-3	5.5 "Hg	15 psi
06A	Dupe	Modified TO-3	4.0 "Hg	15 psi
06AA	Dupe Lab Duplicate	Modified TO-3	4.0 "Hg	15 psi
07A	Lab Blank	Modified TO-3	NA	NA
08A	LCS	Modified TO-3	NA	NA

CERTIFIED BY: Linda J. Truman DATE: 09/25/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 0809246B

Six 1 Liter Summa Canister (100% Certified) samples were received on September 12, 2008. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppbv result to ug/m3.

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

Requirement	*TO-3*	*ATL Modifications*
Daily Calibration Standard Frequency	Prior to sample analysis and every 4 - 6 hrs	Prior to sample analysis and after the analytical batch </= 20 samples
Initial Calibration Calculation	4-point calibration using a linear regression model	5-point calibration using average Response Factor
Initial Calibration Frequency	Weekly	When daily calibration standard recovery is outside 75 - 125 %, or upon significant changes to procedure or instrumentation
Moisture Control	Nafion system	Sorbent system
Minimum Detection Limit (MDL)	Calculated using the equation DL = A+3.3S, where A is intercept of calibration line and S is the standard deviation of at least 3 reps of low level standard	40 CFR Pt. 136 App. B
Preparation of Standards	Levels achieved through dilution of gas mixture	Levels achieved through loading various volumes of the gas mixture

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

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
MODIFIED EPA METHOD TO-3 GC/FID

Client Sample ID: VP-5

Lab ID#: 0809246B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	55	11000	220	46000

Client Sample ID: VP-4

Lab ID#: 0809246B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	55	9400	220	38000

Client Sample ID: VP-1

Lab ID#: 0809246B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	58	130	240	550

Client Sample ID: VP-2

Lab ID#: 0809246B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	200	80000	810	330000

Client Sample ID: VP-3

Lab ID#: 0809246B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	62	130	250	540

Client Sample ID: Dupe

Lab ID#: 0809246B-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	190	78000	760	320000

Summary of Detected Compounds
MODIFIED EPA METHOD TO-3 GC/FID

Client Sample ID: Dupe Lab Duplicate

Lab ID#: 0809246B-06AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	190	76000	760	310000

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0809246B-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091404**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.20**	**Date of Analysis: 9/14/08 10:19 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	55	11000	220	46000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	142	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0809246B-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091403**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.20**	**Date of Analysis: 9/14/08 09:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	55	9400	220	38000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	101	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0809246B-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091405**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 9/14/08 10:51 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	58	130	240	550

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	99	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0809246B-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091406**	**Date of Collection: 9/11/08**	
Dil. Factor:	**7.90**	**Date of Analysis: 9/14/08 11:25 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	200	80000	810	330000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	109	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0809246B-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091407**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/14/08 11:58 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	62	130	250	540

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	102	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Dupe

Lab ID#: 0809246B-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091408**	**Date of Collection: 9/11/08**	
Dil. Factor:	**7.46**	**Date of Analysis: 9/14/08 12:41 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	190	78000	760	320000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	106	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Dupe Lab Duplicate

Lab ID#: 0809246B-06AA

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091409**	**Date of Collection: 9/11/08**	
Dil. Factor:	**7.46**	**Date of Analysis: 9/14/08 01:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	190	76000	760	310000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	105	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246B-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/13/08 09:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	25	Not Detected	100	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	101	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246B-08A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d091412**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/14/08 03:34 PM**	

Compound	**%Recovery**
TPH (Gasoline Range)	85

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
Fluorobenzene (FID)	106	75-150

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Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809246A

Work Order Summary

CLIENT:	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678	**BILL TO:**	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678
PHONE:	916-677-3407 x123	**P.O. #**	
FAX:	916-677-3687	**PROJECT #**	9-1583 Oakland
DATE RECEIVED:	09/12/2008	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/26/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-5	Modified TO-15	2.5 "Hg	15 psi
02A	VP-4	Modified TO-15	2.5 "Hg	15 psi
02AA	VP-4 Lab Duplicate	Modified TO-15	2.5 "Hg	15 psi
03A	VP-1	Modified TO-15	4.0 "Hg	15 psi
04A	VP-2	Modified TO-15	5.5 "Hg	15 psi
05A	VP-3	Modified TO-15	5.5 "Hg	15 psi
06A	Dupe	Modified TO-15	4.0 "Hg	15 psi
07A	Lab Blank	Modified TO-15	NA	NA
07B	Lab Blank	Modified TO-15	NA	NA
07C	Lab Blank	Modified TO-15	NA	NA
08A	CCV	Modified TO-15	NA	NA
08B	CCV	Modified TO-15	NA	NA
08C	CCV	Modified TO-15	NA	NA
09A	LCS	Modified TO-15	NA	NA
09B	LCS	Modified TO-15	NA	NA
09C	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda J. Truman DATE: 09/26/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

LABORATORY NARRATIVE
Modified TO-15 Std & Soil Gas
Conestoga-Rovers Associates (CRA)
Workorder# 0809246A

Six 1 Liter Summa Canister (100% Certified) samples were received on September 12, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

Requirement	*TO-15*	*ATL Modifications*
Daily CCV	+- 30% Difference	</= 30% Difference with two allowed out up to </=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported LCS from instrument MSD-W has been derived from more than one analytical file.

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 EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: VP-5

Lab ID#: 0809246A-01A

No Detections Were Found.

Client Sample ID: VP-4

Lab ID#: 0809246A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2,2,4-Trimethylpentane	5.5	1100	26	5400

Client Sample ID: VP-4 Lab Duplicate

Lab ID#: 0809246A-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2,2,4-Trimethylpentane	5.5	1100	26	5000

Client Sample ID: VP-1

Lab ID#: 0809246A-03A

No Detections Were Found.

Client Sample ID: VP-2

Lab ID#: 0809246A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2,2,4-Trimethylpentane	16	3700	77	17000

Client Sample ID: VP-3

Lab ID#: 0809246A-05A

No Detections Were Found.

Client Sample ID: Dupe

Lab ID#: 0809246A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2,2,4-Trimethylpentane	24	4300	110	20000

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0809246A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092508**	**Date of Collection: 9/11/08**	
Dil. Factor:	**4.44**	**Date of Analysis: 9/25/08 12:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	2.2	Not Detected	8.0	Not Detected
Benzene	2.2	Not Detected	7.1	Not Detected
Toluene	2.2	Not Detected	8.4	Not Detected
Ethyl Benzene	2.2	Not Detected	9.6	Not Detected
m,p-Xylene	2.2	Not Detected	9.6	Not Detected
o-Xylene	2.2	Not Detected	9.6	Not Detected
tert-Butyl alcohol	8.9	Not Detected	27	Not Detected
1,2-Dibromoethane (EDB)	2.2	Not Detected	17	Not Detected
1,2-Dichloroethane	2.2	Not Detected	9.0	Not Detected
2,2,4-Trimethylpentane	2.2	Not Detected	10	Not Detected
Ethanol	8.9	Not Detected	17	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0809246A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092424**	**Date of Collection:**	**9/11/08**
Dil. Factor:	**11.0**	**Date of Analysis:**	**9/25/08 01:27 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	5.5	Not Detected	20	Not Detected
Benzene	5.5	Not Detected	18	Not Detected
Toluene	5.5	Not Detected	21	Not Detected
Ethyl Benzene	5.5	Not Detected	24	Not Detected
m,p-Xylene	5.5	Not Detected	24	Not Detected
o-Xylene	5.5	Not Detected	24	Not Detected
tert-Butyl alcohol	22	Not Detected	67	Not Detected
1,2-Dibromoethane (EDB)	5.5	Not Detected	42	Not Detected
1,2-Dichloroethane	5.5	Not Detected	22	Not Detected
2,2,4-Trimethylpentane	5.5	1100	26	5400
Ethanol	22	Not Detected	41	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	105	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4 Lab Duplicate

Lab ID#: 0809246A-02AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092425**	**Date of Collection: 9/11/08**	
Dil. Factor:	**11.0**	**Date of Analysis: 9/25/08 02:06 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	5.5	Not Detected	20	Not Detected
Benzene	5.5	Not Detected	18	Not Detected
Toluene	5.5	Not Detected	21	Not Detected
Ethyl Benzene	5.5	Not Detected	24	Not Detected
m,p-Xylene	5.5	Not Detected	24	Not Detected
o-Xylene	5.5	Not Detected	24	Not Detected
tert-Butyl alcohol	22	Not Detected	67	Not Detected
1,2-Dibromoethane (EDB)	5.5	Not Detected	42	Not Detected
1,2-Dichloroethane	5.5	Not Detected	22	Not Detected
2,2,4-Trimethylpentane	5.5	1100	26	5000
Ethanol	22	Not Detected	41	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	105	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0809246A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092507**	**Date of Collection:**	**9/11/08**
Dil. Factor:	**4.71**	**Date of Analysis:**	**9/25/08 12:16 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	2.4	Not Detected	8.5	Not Detected
Benzene	2.4	Not Detected	7.5	Not Detected
Toluene	2.4	Not Detected	8.9	Not Detected
Ethyl Benzene	2.4	Not Detected	10	Not Detected
m,p-Xylene	2.4	Not Detected	10	Not Detected
o-Xylene	2.4	Not Detected	10	Not Detected
tert-Butyl alcohol	9.4	Not Detected	28	Not Detected
1,2-Dibromoethane (EDB)	2.4	Not Detected	18	Not Detected
1,2-Dichloroethane	2.4	Not Detected	9.5	Not Detected
2,2,4-Trimethylpentane	2.4	Not Detected	11	Not Detected
Ethanol	9.4	Not Detected	18	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0809246A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092426**	**Date of Collection: 9/11/08**	
Dil. Factor:	**32.9**	**Date of Analysis: 9/25/08 03:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	16	Not Detected	59	Not Detected
Benzene	16	Not Detected	52	Not Detected
Toluene	16	Not Detected	62	Not Detected
Ethyl Benzene	16	Not Detected	71	Not Detected
m,p-Xylene	16	Not Detected	71	Not Detected
o-Xylene	16	Not Detected	71	Not Detected
tert-Butyl alcohol	66	Not Detected	200	Not Detected
1,2-Dibromoethane (EDB)	16	Not Detected	130	Not Detected
1,2-Dichloroethane	16	Not Detected	66	Not Detected
2,2,4-Trimethylpentane	16	3700	77	17000
Ethanol	66	Not Detected	120	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0809246A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092427**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/25/08 04:36 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.4	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.4	Not Detected
m,p-Xylene	1.2	Not Detected	5.4	Not Detected
o-Xylene	1.2	Not Detected	5.4	Not Detected
tert-Butyl alcohol	4.9	Not Detected	15	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.5	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.8	Not Detected
Ethanol	4.9	Not Detected	9.3	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	86	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Dupe

Lab ID#: 0809246A-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092408**	**Date of Collection: 9/11/08**	
Dil. Factor:	**4.78**	**Date of Analysis: 9/24/08 03:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
tert-Butyl alcohol	96	Not Detected	290	Not Detected
Ethanol	96	Not Detected	180	Not Detected
Methyl tert-butyl ether	24	Not Detected	86	Not Detected
2,2,4-Trimethylpentane	24	4300	110	20000
Benzene	24	Not Detected	76	Not Detected
1,2-Dichloroethane	24	Not Detected	97	Not Detected
Toluene	24	Not Detected	90	Not Detected
1,2-Dibromoethane (EDB)	24	Not Detected	180	Not Detected
Ethyl Benzene	24	Not Detected	100	Not Detected
m,p-Xylene	24	Not Detected	100	Not Detected
o-Xylene	24	Not Detected	100	Not Detected

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

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092410**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 02:25 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	84	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246A-07B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/08 11:33 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	82	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246A-07C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 01:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
tert-Butyl alcohol	20	Not Detected	61	Not Detected
Ethanol	20	Not Detected	38	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
2,2,4-Trimethylpentane	5.0	Not Detected	23	Not Detected
Benzene	5.0	Not Detected	16	Not Detected
1,2-Dichloroethane	5.0	Not Detected	20	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
1,2-Dibromoethane (EDB)	5.0	Not Detected	38	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected

Container Type: NA - Not Applicable

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809246A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092409**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 01:42 PM**	

Compound	%Recovery
Methyl tert-butyl ether	99
Benzene	99
Toluene	101
Ethyl Benzene	106
m,p-Xylene	107
o-Xylene	109
tert-Butyl alcohol	81
1,2-Dibromoethane (EDB)	108
1,2-Dichloroethane	98
2,2,4-Trimethylpentane	88
Ethanol	85

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	106	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809246A-08B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/08 08:58 AM**	

Compound	%Recovery
Methyl tert-butyl ether	97
Benzene	94
Toluene	100
Ethyl Benzene	104
m,p-Xylene	104
o-Xylene	106
tert-Butyl alcohol	80
1,2-Dibromoethane (EDB)	105
1,2-Dichloroethane	93
2,2,4-Trimethylpentane	83
Ethanol	84

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	92	70-130
4-Bromofluorobenzene	107	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0809246A-08C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092402**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 11:16 AM**	

Compound	%Recovery
tert-Butyl alcohol	94
Ethanol	100
Methyl tert-butyl ether	82
2,2,4-Trimethylpentane	107
Benzene	100
1,2-Dichloroethane	88
Toluene	99
1,2-Dibromoethane (EDB)	101
Ethyl Benzene	100
m,p-Xylene	102
o-Xylene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	97	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 09:19 AM**	

Compound	%Recovery
Methyl tert-butyl ether	105
Benzene	103
Toluene	110
Ethyl Benzene	106
m,p-Xylene	106
o-Xylene	109
tert-Butyl alcohol	90
1,2-Dibromoethane (EDB)	106
1,2-Dichloroethane	103
2,2,4-Trimethylpentane	99
Ethanol	92

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	104	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246A-09B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**t092504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/08 10:16 AM**	

Compound	%Recovery
Methyl tert-butyl ether	102
Benzene	96
Toluene	107
Ethyl Benzene	104
m,p-Xylene	104
o-Xylene	107
tert-Butyl alcohol	81
1,2-Dibromoethane (EDB)	104
1,2-Dichloroethane	97
2,2,4-Trimethylpentane	82
Ethanol	82

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	107	70-130

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246A-09C

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w092403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/24/08 12:01 PM**	

Compound	%Recovery
tert-Butyl alcohol	102
Ethanol	108
Methyl tert-butyl ether	86
2,2,4-Trimethylpentane	99
Benzene	100
1,2-Dichloroethane	88
Toluene	99
1,2-Dibromoethane (EDB)	100
Ethyl Benzene	100
m,p-Xylene	102
o-Xylene	104

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	98	70-130

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Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0809246C

Work Order Summary

CLIENT:	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678	**BILL TO:**	Ms. Lindsay Marsh Conestoga-Rovers Associates (CRA) 2000 Opportunity Drive Suite 110 Roseville, CA 95678
PHONE:	916-677-3407 x123	**P.O. #**	
FAX:	916-677-3687	**PROJECT #**	9-1583 Oakland
DATE RECEIVED:	09/12/2008	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	09/25/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	VP-5	Modified ASTM D-1946	2.5 "Hg	15 psi
02A	VP-4	Modified ASTM D-1946	2.5 "Hg	15 psi
03A	VP-1	Modified ASTM D-1946	4.0 "Hg	15 psi
04A	VP-2	Modified ASTM D-1946	5.5 "Hg	15 psi
05A	VP-3	Modified ASTM D-1946	5.5 "Hg	15 psi
06A	Dupe	Modified ASTM D-1946	4.0 "Hg	15 psi
07A	Lab Blank	Modified ASTM D-1946	NA	NA
07B	Lab Blank	Modified ASTM D-1946	NA	NA
07C	Lab Blank	Modified ASTM D-1946	NA	NA
07D	Lab Blank	Modified ASTM D-1946	NA	NA
08A	LCS	Modified ASTM D-1946	NA	NA
08B	LCS	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Linda D. Frumarn DATE: 09/25/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

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

LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 0809246C

Six 1 Liter Summa Canister (100% Certified) samples were received on September 12, 2008. The laboratory performed analysis via Modified ASTM Method D-1946 for fixed gases in air using 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.

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

There were no analytical discrepancies.

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 LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-5

Lab ID#: 0809246C-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.44	10
Carbon Dioxide	0.044	14

Client Sample ID: VP-4

Lab ID#: 0809246C-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	11
Carbon Dioxide	0.022	10

Client Sample ID: VP-1

Lab ID#: 0809246C-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.47	14
Carbon Dioxide	0.047	6.8

Client Sample ID: VP-2

Lab ID#: 0809246C-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	16
Carbon Dioxide	0.025	8.7

Client Sample ID: VP-3

Lab ID#: 0809246C-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	17
Carbon Dioxide	0.025	4.7

Client Sample ID: Dupe

Lab ID#: 0809246C-06A

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: Dupe

Lab ID#: 0809246C-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.48	8.7
Carbon Dioxide	0.048	10

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0809246C-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092308b**	**Date of Collection: 9/11/08**	
Dil. Factor:	**4.44**	**Date of Analysis: 9/23/08 10:44 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.44	10
Carbon Dioxide	0.044	14
Helium	0.22	Not Detected

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

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Client Sample ID: VP-4

Lab ID#: 0809246C-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092222b**	**Date of Collection:**	**9/11/08**
Dil. Factor:	**2.20**	**Date of Analysis:**	**9/22/08 07:32 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	11
Carbon Dioxide	0.022	10
Helium	0.11	Not Detected

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0809246C-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092310b**	**Date of Collection:**	**9/11/08**
Dil. Factor:	**4.71**	**Date of Analysis:**	**9/23/08 11:35 AM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.47	14
Carbon Dioxide	0.047	6.8
Helium	0.24	Not Detected

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-2

Lab ID#: 0809246C-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092224b**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/22/08 08:35 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	16
Carbon Dioxide	0.025	8.7
Helium	0.12	Not Detected

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

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0809246C-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092225b**	**Date of Collection: 9/11/08**	
Dil. Factor:	**2.47**	**Date of Analysis: 9/22/08 09:06 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	17
Carbon Dioxide	0.025	4.7
Helium	0.12	Not Detected

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

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Client Sample ID: Dupe

Lab ID#: 0809246C-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092311b**	**Date of Collection:**	**9/11/08**
Dil. Factor:	**4.78**	**Date of Analysis:**	**9/23/08 12:01 PM**

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.48	8.7
Carbon Dioxide	0.048	10
Helium	0.24	Not Detected

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092204b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/22/08 08:48 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246C-07B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092203b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/22/08 08:23 AM**	

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

Container Type: NA - Not Applicable

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246C-07C

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092304b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/23/08 08:43 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0809246C-07D

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092303b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/23/08 08:18 AM**	

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

Container Type: NA - Not Applicable

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246C-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092229b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/22/08 10:48 PM**	

Compound	%Recovery
Oxygen	100
Carbon Dioxide	99
Helium	105

Container Type: NA - Not Applicable

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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0809246C-08B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9092323b**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/23/08 05:11 PM**

Compound	%Recovery
Oxygen	100
Carbon Dioxide	99
Helium	103

Container Type: NA - Not Applicable