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11:09 am, Oct 31, 2008

Alameda County
Environmental Health

Ian Robb
Project Manager
Marketing Business Unit

**Chevron Environmental
Management Company**
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9496
Fax (925) 842-8370
ianrobb@chevron.com

RE: Chevron Service Station # - 206145

Address 800 Center St., Oakland, CA

I have reviewed the attached report dated 10/30/2008.

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 (CRA) 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,

Ian Robb

Attachment: Report



**CONESTOGA-ROVERS
& ASSOCIATES**

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
<http://www.craworld.com>

October 30, 2008

Reference No. 312002

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

Re: Fuel Leak Case No. RO0000454 (Global ID # T0600102230).
Chevron # 20-6145/Signal SS 800 Center Street, Oakland CA

Dear Mr. Plunkett:

INTRODUCTION

Conestoga-Rovers & Associates (CRA) has prepared this response on behalf of Chevron Environmental Management Company (Chevron), to your letter of August 20, 2008 (Attachment A). Summarized below are responses to ACEH's technical comments.

RESPONSE TO TECHNICAL COMMENTS

1. Soil and Groundwater Contamination at Depth

ACEH is correct that the Feasibility Study/Corrective Action Plan (FS/CAP) did not address groundwater impacts deeper than 30 fbg, and as discussed below, we do not think it was necessary to do so.

In April 2007, CRA installed nine wells screened at discrete depths below 30 fbg to confirm previous soil and groundwater results from cone penetration testing (CPT) borings. Monitoring wells MW-9, MW-11, MW-13 and MW-15 are screened from 35-40 fbg; monitoring wells MW-10, MW-12, MW-14, and MW-16 are screened from 55-60 fbg; and monitoring well MW-17 is screened from 70-75 fbg. These wells have been sampled seven times since installation and hydrocarbon concentrations have steadily decreased over this period. Current concentrations, based on the third quarter 2008 quarterly monitoring and sampling report, not yet submitted to ACEH, are as follows:

35-40 fbg: Wells MW-13 and MW-15 contained 78 micrograms per liter ($\mu\text{g/L}$) and 190 $\mu\text{g/L}$ total petroleum hydrocarbons as diesel (TPHd), respectively. No other hydrocarbons were detected.

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55-60 fbg: Wells MW-14 and MW-16 contained 88 µg/L and 74 µg/L TPHd, respectively. Well MW-14 contained 0.9 µg/L benzene and well MW-16 contained 0.6 µg/L ethylbenzene. No other hydrocarbons were detected.

70-75 fbg: Well MW-17 contained 150 µg/L TPHd, 180 µg/L total petroleum hydrocarbons as gasoline (TPHg), 2.5 µg/L benzene, 2.0 µg/L toluene, 2.8 µg/L ethylbenzene, and 1.5 µg/L xylenes. These concentrations are all below San Francisco Regional Water Quality Control Board's (SFRWQCB) environmental screening levels (ESLs) where groundwater is not a current or potential source of drinking water.

All hydrocarbon concentrations in these nine wells have decreased significantly since installation and do not show any significant impacts. Accordingly, no mitigation/control of hydrocarbons greater than 30 fbg is necessary. Furthermore, given the seven quarters of consistently decreasing sampling results, CRA proposes to destroy monitoring wells MW-9 through MW-17 and will submit a proposal to do so under separate cover.

2. CAP Recommendation for Air Sparging

We need to correct what might be a misunderstanding about the FS/CAP. ACEH expressed concern that the air sparge (AS) system could result in the creation of vapor phase contamination on the vadose zone. We think that your concern is based on implementation of a higher flow AS system. The FS/CAP should have been clearer that we propose a *low flow* AS (LFAS) system which should eliminate any concern regarding the creation of vapor phase contamination in the vadose zone. We do not intend to sparge at a rate sufficient to establish air pathways to the water table. By using lower air flows and short injection cycles, we mitigate potential concerns from stripping of volatile hydrocarbons and preclude the need for soil vapor extraction (SVE).

ACEH commented that it does not agree with the assertion in the FS/CAP that site lithology is marginally feasible for the use of SVE or that residual mass in soil and groundwater is limited and AS/SVE is not a cost effective remedial option. Perhaps this concern is addressed by our having clarified that this is a low flow system. It may be true that the soil lithology is conducive to AS/SVE. However, the majority of residual source area mass is submerged (including the sample from SW-4) and would not benefit from SVE.

3. Soil Vapor Sampling

ACEH posed technical questions about possible negative bias due to breakthrough of isobutane during vapor sampling and the sufficiency of sampling to evaluate residential scenarios. On the issue of possible negative bias, during the November 2007 sampling event, a shaving cream propellant, isobutane, was



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used as a tracer gas to check for leaks of potential ambient air entering the sample, which could result in a possible negative bias. In one of the samples, VP-5, isobutane was detected, but the lab was unable to determine if the elevated concentrations were from the high TPHg concentrations (2,100,000 microgram per meter cubed ($\mu\text{g}/\text{m}^3$)) or from a potential leak in the sampling train. Chevron's internal protocols no longer allow isobutane to be used as a tracer gas because it is a petroleum hydrocarbon and it contains potential impurities, including elevated concentrations of benzene.

On October 3, 2008, CRA re-sampled all vapor wells onsite to confirm previous analytical results. This sampling event used ultra-high pure grade helium as a tracer gas. Ultra-high pure grade helium is preferred since is not found at impacted fuel sites and should not contain organic impurities. No helium was detected in any of these samples. The result for TPHg, using EPA Method TO-3 was 120,000 $\mu\text{g}/\text{m}^3$. The result for TPHg, using EPA Method TO-15, in VP-5 was 57,000 $\mu\text{g}/\text{m}^3$ and 65,000 $\mu\text{g}/\text{m}^3$ for the lab duplicate (Table 1). The results were sampled by two different methods for comparison purposes and to determine the composition of the TPHg sample. Although these results are lower than the previous result of 2,100,000 $\mu\text{g}/\text{m}^3$, sampled in November 2007, they are above the established ESLs of 10,000 $\mu\text{g}/\text{m}^3$ for a residential scenario. Analytical results are presented in Attachment C.

The second question posed was whether the vapor sampling locations were sufficient to evaluate the site for residential use. Sample locations were chosen to characterize the site based on the proposed building footprints and available groundwater monitoring data. Vapor wells were installed underneath the proposed building footprints, near groundwater monitoring wells with elevated TPHg and benzene concentrations, and in areas of elevated TPHg and benzene concentrations in soil. This spacing exceeds Department of Toxic Substances Control and California Environmental Protection Agency recommendations that "...soil gas sampling for future residential development should be conducted on a quarter acre spacing,"¹ or one probe for every 10,890 square feet (ft^2). The site is approximately 80 feet by 100 feet (8000 square feet) and 6 probes were installed onsite, with a spacing of approximately 1 probe per 1,335 ft^2 .

A description of the second vapor sampling event, results and risk assessment based on the potential risk to human health from shallow soil vapor into future onsite buildings will be presented under separate cover.

¹ Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, December 15, 2004, revised February 7, 2005.



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4. Environmental Screening Levels (ESLs) and Remediation Goals

ACEH asked a question whether the correct ESL designation values were used in the FS/CAP. The FS/CAP presented the ESLs agreed to by ACEH in 2005. In a letter dated December 19, 2005 to Chevron and the property owner, ACEH stated, "Although groundwater within the site has been designated a zone of significant drinking water resource by the SFRWQCB, we agree with the proposed deep soil screening levels for residential land where groundwater is not a drinking water source as cleanup levels." (Attachment B).

We are unaware of any conditions that have changed that would require different cleanup levels. These ESLs are protective of human health and are appropriate for actual risk receptors at this site. The timeframe to meet remedial objectives utilizing the recommended alternative, LFAS is estimated at between three and five years, as detailed in the LFAS evaluation above. This should be sufficient to remediate the site prior to installation of any water supply system using first encountered groundwater as a drinking water source.

5. Quarterly Groundwater Monitoring and Reporting

CRA will submit quarterly groundwater monitoring reports that include an analysis of sampling activities, updated concentration site plans including rose diagrams, and conclusions and recommendations.

6. Vapor Migration Control Using Liquid Boot

We acknowledge that ACEH does not accept Liquid Boot as a vapor mitigation measure.

7. Verification Sampling and Monitoring of Soil and Groundwater

CRA understands that verification sampling will be conducted after remedial work is completed.

CLOSING

We appreciate the opportunity to work with you on this project. Please contact Charlotte Evans of CRA at (510) 420-3351 or Ian Robb of Chevron at (925) 543-2375 if you have any questions or comments.



**CONESTOGA-ROVERS
& ASSOCIATES**

October 30, 2008

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Reference No. 312002

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in cursive script, appearing to read 'Charlotte Evans'.

Charlotte Evans

A handwritten signature in cursive script, appearing to read 'Brandon Wilken'.

Brandon Wilken, PG# 7564

CE/doh/1

Enc.

cc: Ian Robb, Chevron
Rene Boisvert, 800 Center LLC



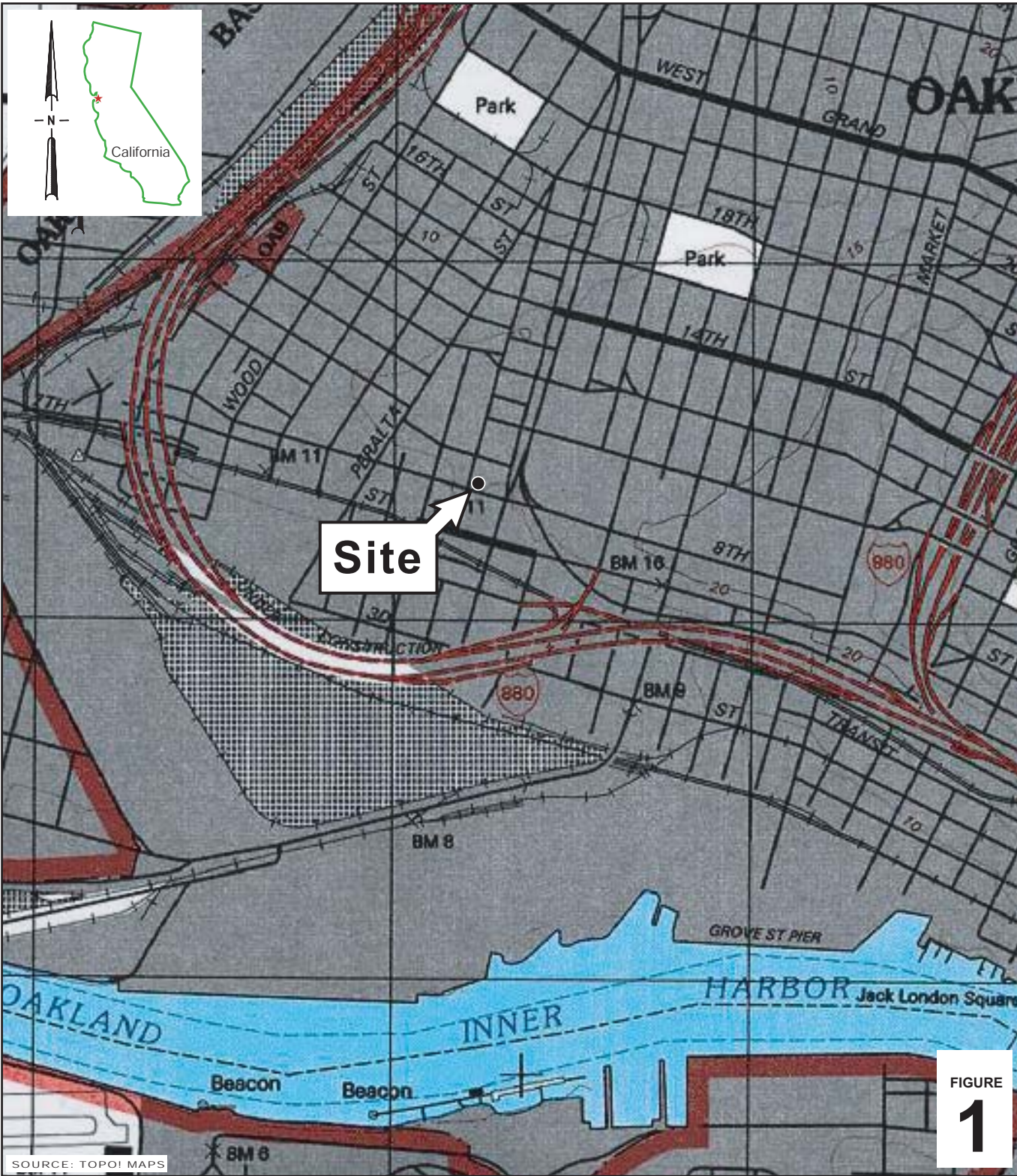


FIGURE 1

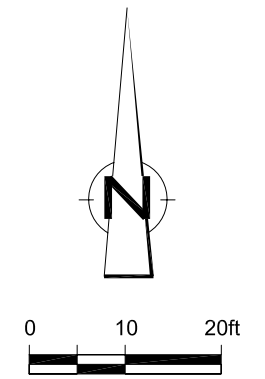
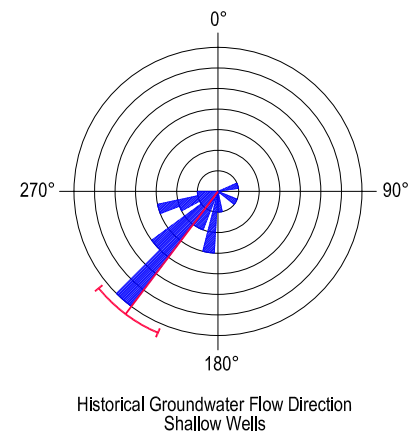
Chevron Station No. 206145

800 Center Street
Oakland, California



**CONESTOGA-ROVERS
& ASSOCIATES**

Vicinity Map



EXPLANATION





- MW-9  Deep monitoring well location
- MW-2  Shallow monitoring well location
- MW-1A  Destroyed well location
- VP-1  Vapor probe location

FIGURE 3
SITE PLAN with WELLS and VAPOR PROBE LOCATIONS
FORMER CHEVRON SERVICE STATION 20-6145
800 CENTER STREET
Oakland, California



VAPOR ANALYTICAL DATA
FORMER CHEVRON STATION 20-6145
800 CENTER ST., OAKLAND, CALIFORNIA

Sample ID	Sample Date	Depth Interval fbg	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes ¹	MTBE	Naphthalene	Isobutane ²	Oxygen	Carbon		
												Dioxide	Methane	Helium
Concentrations reported in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)												ppbv		
												% Volume		
VP-1	11/06/07	5.0-5.5	1,400	<3.8	16	<5.2	<5.2	<17	<25	6.6	10	<0.024	<0.00024	--
VP-1	LAB DUPLICATE		--	<3.8	14	<5.2	<5.2	<17	<25	6.5	--	--	--	--
VP-1	10/3/2008	5.0-5.5	<97	<3.8	<4.5	<5.2	<5.2	<4.3	<25	--	14	0.027	0.00027	<0.12
VP-2	11/06/07	5.0-5.5	<250	<3.9	<4.6	<5.2	<5.2	<17	<25	ND	10	0.88	<0.00024	--
VP-2	LAB DUPLICATE		<250	--	--	--	--	--	--	--	10	0.88	<0.00024	--
VP-3	11/06/07	5.0-5.5	<240	<3.7	<4.4	<5.0	<5.0	<17	<24	ND	16	2.0	<0.00023	--
VP-3	10/03/08	5.0-5.5	<92	<3.6	<4.2	<4.9	<4.9	<4.0	<23	--	16	2.4	<0.00022	<0.11
VP-3	LAB DUPLICATE		--	--	--	--	--	--	--	--	16	2.4	<0.00022	<0.11
VP-4	11/06/07	5.0-5.5	280	<3.9	<4.6	<5.2	<5.2	<17	<25	ND	9.7	4.0	<0.00024	--
VP-4	10/03/08	5.0-5.5	390	<4.1	<4.9	<5.6	<5.6	<4.6	<27	--	11	4.8	0.00028	<0.13
VP-4 DUPLICATE	10/03/08	5.0-5.5	240	<4.2	<5.0	<5.7	<5.7	<4.8	<28	--	--	--	--	--
VP-4	LAB DUPLICATE		--	--	--	--	--	--	--	--	11	5.0	0.00028	<0.13
VP-5	11/06/07	5.0-5.5	2,100,000	<760	<900	<1000	<1000	<3400	<5000	13,000	16	4.4	<0.00024	--
VP-5	10/03/08	5.0-5.5	57,000	<86	<100	<120	<120	<97	<560	--	17	4.1	<0.00024	<0.12
VP-5	LAB DUPLICATE		65,000	<15	<18	<21	<21	<17	<100	--	--	--	--	--
VP-5*	10/03/08	5.0-5.5	120,000	--	--	--	--	--	--	--	--	--	--	--
VP-6	11/06/07	5.0-5.5	<260	<4.0	<4.8	<5.5	<5.5	<18	<26	ND	20	1.0	<0.00025	--
VP-6 DUPLICATE	11/06/07	5.0-5.5	<250	<3.9	<4.6	<5.4	<5.4	<18	<26	ND	20	1.0	<0.00025	--
VP-6	10/03/08	5.0-5.5	<97	<3.8	<4.5	<5.2	<5.2	<4.3	<25	--	20	0.98	<0.00024	<0.12
ESL	--	--	10,000	84	63,000	210,000	21,000	9,400	72	--	--	--	--	--

Notes:

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method TO-3 for samples collected 11/06/07

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method TO-15 for samples collected 10/03/08

Benzene, toluene, ethylbenzene, xylenes (BTEX), methyl-tertiary butyl ether (MTBE), naphthalene by EPA method TO-15

Oxygen, carbon dioxide and helium by ASTM D-1946

fbg = feet below grade

ppbv = parts per billion volume

1 = Values for highest value of xylenes detected

2 = Constituent used as leak detector for samples collected 11/06/07 determined as a Tentatively Identified Compound (TICs) by Modified EPA Method TO-15. Match quality was below 50%.

<x.xxx = Below laboratory method detection limits

ND = Not detected above laboratory method detection limits

-- = Not analyzed

* = TPHg samples collected on 10/03/08 from VP-5 were analyzed by EPA Method TO-15 and EPA Method TO-3 for comparison purposes. Results were within laboratory limits.

ATTACHMENT A

ACEH Regulatory Correspondence
August 20, 2008

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

August 20, 2008

Mr. Ian Robb
6001 Bollinger Canyon Road K2256 B
PO Box 6012
San Ramon, CA 94583-2324

Mr. Rene Boisvert
Boulevard Equity Group
484 Lake Park Ave #246
Oakland, CA 94610-2730

Terrella Sadler
618 Brooklyn Avenue
Oakland, CA 94606-1004

Subject: Fuel Leak Case No. RO0000454 (Global ID # T0600102230), Chevron #20-6145/Signal SS, 800 Center Street, Oakland CA

Dear Mr. Robb:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site and the documents entitled "Feasibility Study and Corrective Action Plan (FS/CAP)" dated November 2, 2007. The FS/CAP recommends the use of air sparging (AS) as the chosen remedial alternative. While AS is an effective remedial technology, CRA has not presented a discussion regarding the potential affects that may result as consequence of AS. For example, AS could induce vapor migration in the vadoze zone, which would need additional engineering controls -such as vapor extraction- to mitigate. Furthermore, AS used in conjunction with soil vapor extraction (SVE) would be a more effective remedial option at this site. ACEH does not agree with the scope of work as proposed in the FS/CAP.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below.

TECHNICAL COMMENTS

- 1. Soil and Groundwater Contamination at Depth.** In April 2007, CRA installed monitoring wells screened at discrete depths to determine the extent of vertical contamination beneath the site. Petroleum hydrocarbon contamination was detected in soil and groundwater at depths of up to 75 feet bgs. Of particular concern are high levels of TPHg and benzene detected in monitoring wells MW-9, MW-10, MW-12, MW-13, MW-14 MW-16 and MW-17 at concentrations of up to 16,000 ppb TPHg, and 550 ppb benzene at 60 feet bgs. However, no discussion has been presented in either the FS/CAP or SCM to address groundwater contamination at depths greater than 30 feet bgs. Please discuss your plan to mitigate/control contamination below 30 feet and present your conclusions in the report requested below.
- 2. CAP Recommendation for Air Sparging.** The CAP recommends a remedial alternative consisting of air sparging (AS) without the use of soil vapor extraction (SVE). Our review of AS indicate that once remediation via AS has been implemented, dissolved phase and sorbed phase contamination below the water table will volatilize, resulting in the creation of vapor phase contamination in the vadoze zone. Once the sorbed and dissolved phase contamination has been remobilized, AS alone will not result in the recovery of the newly created vapor phase contamination. Additionally, CRA states in the CAP that site lithology is marginally feasible, the use of SVE combined with AS is an effective remedial option, contamination mass remaining in soil and groundwater is limited and SVE/AS is not a cost effective remedial option. ACEH does not agree with the assertion that site lithology is marginally feasible for the use of SVE or that residual mass in soil and groundwater is limited.

and groundwater is limited and SVE/AS is not a cost effective remedial option. ACEH does not agree with the assertion that site lithology is marginally feasible for the use of SVE or that residual mass in soil and groundwater is limited.

Our review of soil boring logs indicates that site lithology (silty sand) is conducive to the successful application of SVE/AS. Moreover, residual mass in the source area has been documented during post over-excavation soil confirmation sampling. For example over-excavation side wall sample SW-4 collected at 10 feet bgs detected TPHg, benzene and MtBE at concentrations of 18,000 ppm, 91 ppm and 150 ppm, respectively. Therefore, we request that you prepare an updated FS/CAP to include SVE combined with AS. Please present the updated FS/CAP according to the schedule below. Additionally, the CAP will be made available for public comment and address the cleanup levels and cleanup goals for all constituents of concern at the site.

Public participation is a requirement for the Corrective Action Plan (CAP) process. Therefore, upon approval of a CAP, ACEH require that potentially affected or concerned members of the public who live or own property in the surrounding area of the proposed remediation described in the CAP be notified. Public comments on the proposed remediation will be accepted for a 30-day period.

- 3. Soil Vapor Sampling.** High levels of TPHg were detected in soil vapor sample VP-5 at concentrations of up to 2,100,000 parts per billion volume (ppbv). In addition, soil analytical data from soil boring G-27, which is approximately 7 feet away, detected high levels of TPHg, and benzene in soil up to 10,000 mg/kg and 58 mg/kg, respectively. Furthermore, Isobutane, which is used to evaluate the reliability of sampling equipment, was detected at concentrations of up to 13,000 ppbv, indicating that soil gas data may be negatively biased and actual concentrations may be higher. Benzene was not detected above laboratory reporting limits; however, reporting limits were increased due to the unusually high concentration of TPHg detected.

Given the high residual concentrations of benzene in soil throughout the site (up to 91 ppm), please address if the sampling locations were sufficient to evaluate the site for residential use. Please discuss in detail the possible negative bias -due to breakthrough of isobutene- of soil vapor data collected from VP-5 and what may have lead to or caused the failure of the soil vapor sampling equipment. Please present your discussion and conclusions in the report requested below.

- 4. Environmental Screening Levels and Remediation Goals.** Considering the high residual benzene concentrations in soil (up to 92 mg/kg) and TPHg in soil vapor (2,100,000 ppbv), please address whether sampling distribution were sufficient to assess this site for unrestricted residential use. CRA's has proposed using the ESLs as soil and groundwater cleanup levels for the site. However, the ESLs used in the FS/CAP are for sites where groundwater is not a current or potential drinking water source. ACEH is unaware of any changes in the Basin Plan that have lead to the de-designation of this location as potential drinking water source.

The CAP should include contamination cleanup levels and cleanup goals for all COCs and for the appropriate groundwater designation. Soil cleanup levels should ultimately (within a reasonable timeframe) achieve water quality objectives (cleanup goals) for groundwater in accordance with San Francisco Regional Water Quality Control Board Basin Plan. Please propose appropriate cleanup levels and cleanup goals in accordance with 23 CCR Section 2725, 2726, and 2727 in the FS/CAP. Please include your anticipated time frame for meeting the cleanup levels and goal.

- 5. Quarterly Groundwater Monitoring and Reporting.** Quarterly groundwater monitoring and sampling reports prepared by Gettler-Ryan do not contain any discussion or evaluation of data. In the future, quarterly groundwater monitoring reports must contain an analysis of monitoring activities including a discussion of the results and any conclusions and recommendations regarding monitoring activities on an annual basis. Additionally, please include rose diagrams for groundwater flow direction in QMRs.

6. **Vapor Migration Control Using Liquid Boot.** CRA acknowledges that AS will result in hydrocarbon vapor production and increased soil vapor concentrations in the vadoze zone. Subsequently, CRA has discussed the use of a geotextile/liquid boot in conjunction with the installation of perforated piping beneath the liquid boot/membrane to mitigate vapor migration beneath the site. Liquid boot was developed for use as a waterproofing and its intended use is as a fluid/water vapor migration barrier. It is unclear how the proposed waterproofing compound will act as a "vapor barrier" to mitigate soil vapor contamination beneath the site. To our knowledge, it has not been clearly demonstrated that liquid boot is a legitimate soil vapor mitigation/migration technique. Therefore, ACEH does not concur with the use of liquid boot as a vapor mitigation measure.
7. **Verification Sampling and Monitoring of Soil and Groundwater.** After site remediation has been completed and contamination concentrations have been reduced by SVE/AS, verification sampling of soil and groundwater will be required.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Mr. Steven Plunkett), according to the following schedule:

- **October 30, 2008** – Updated Feasibility Study and Corrective Action Plan

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." 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. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all 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 monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml).

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

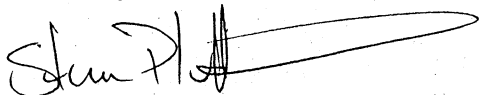
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

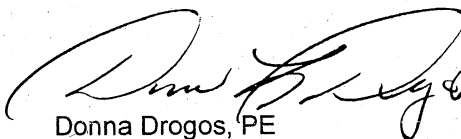
If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 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) 383-1761 or send me an electronic mail message at steven.plunkett@acgov.org.

Sincerely,



Steven Plunkett
Hazardous Materials Specialist



Donna Drogos, PE
Supervising Hazardous Materials Specialist

cc: Charlotte Evans
CRA
5900 Hollis Street, Suite A
Emeryville, CA 94608

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

Donna Drogos, ACEH), Steven Plunkett ACEH, File

ATTACHMENT B

ACEH Regulatory Correspondence
December 19, 2005

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director

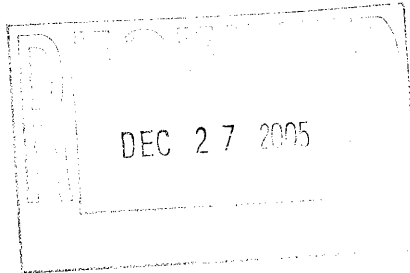


Laura

December 19, 2005

Mr. Mark Inglis
Chevron
Bollinger Canyon Rd., K
San Ramon, CA 94583

Mr. Rene Boisvert
484 Lakepark Ave.
Oakland, CA 94610



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

Dear Messrs. Inglis and Boisvert:

Subject: Fuel Leak Case No. RO0000454, CHEVRON #20-6145 / SIGNAL SS,
800 Center St., Oakland CA 94607

Alameda County Environmental Health (ACEH) staff has recently reviewed the case file for the subject site including the Workplan for Site Excavation, dated November 17, 2005, prepared by Cambria Environmental. The work plan proposes additional excavation to an approximate depth of 17 feet below ground surface and pumping and treating groundwater. This action is intended to allow the residential development of the site. We request that you address the following technical comments, perform the proposed work, and send us the technical reports requested below.

TECHNICAL COMMENTS

1. Soil Excavation Proposal- The work plan correctly states that even with the proposed excavation to a depth of 17' bgs, contaminated soil may still be present at the site. We have no objection to the excavation proposal and confirmation sampling on 20 foot grids. Please provide your estimate of removal mass and mass of residual contamination present after completion of your excavation. We request that sidewall samples be collected at both the proposed depth of 10' bgs and at the pit bottom after excavation. Soil reuse criteria should meet that in the Draft November 2002 SFRWQCB document, *Characterization & Reuse of Petroleum Hydrocarbon Impacted Soil as Inert Waste*. All previous data must be included if such data is used as part of your data set used for evaluation. This request is in reference to the statement that the top seven feet of the excavation will be re-used as backfill.
2. Groundwater Removal- We agree that the dewatering proposed for the site will likely remove significant amounts of hydrocarbon-bearing groundwater. We request that groundwater sampling and testing be performed and an estimate be made of the mass of hydrocarbon removed during this action. We also request that the drainage system be designed to be able to segregate and sample groundwater from different areas of the excavation. This will allow you to identify the areas where groundwater is impacted and those areas that are not. This information may be used in your future well installation proposal.
3. Proposed Cleanup Levels- Although groundwater within the site has been designated is a zone of significant drinking water resource by the SFRWQCB, we agree with the proposed deep soil screening levels for residential land where groundwater is not a drinking water source as cleanup levels. We believe that the soil and groundwater

remediation proposed will reduce the significant contamination sources and thus allow natural bio-attenuation to reach more the conservative levels of a drinking water resource site in the future.

4. Groundwater Monitoring- To monitor the effect of the proposed remediation, we require that additional multi-level wells be installed down-gradient and perpendicular of the source areas. This monitoring will also serve to test the hypothesis that a deep contaminant plume exists on and off-site which is not being detected by the existing shallow wells. Please provide your monitoring well work plan as requested below. We concur with the proposal to monitor the existing wells on a semi-annual basis until the newly proposed wells have been installed.

5. Soil and Groundwater Investigation Report- Please provide your SWI as requested below. Please include a map indicating residual soil concentrations in your report. Please also indicate addresses of the newly acquired properties to the north and east on your map.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health, according to the following schedule:

60 days after completion of SWI- SWI report.
60 days after completion of SWI- Monitoring well work plan
January 15, 2006- First Semi-annual monitoring report
June 15, 2006- Second Semi-annual monitoring report

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

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. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." 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

Messrs. Inglis and Boisvert
December 19, 2005
Page 4

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

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: files, D. Drogos

✓ Ms. Laura Genin, Cambria Environmental, 5900 Hollis St., Suite A, Emeryville,
CA 94608

12_19_05 800Center St

ATTACHMENT C

Analytical Results



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**



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810122B

Work Order Summary

CLIENT: Ms. Charlotte Evans
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville, CA 94608
BILL TO: Ms. Charlotte Evans
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville, CA 94608
PHONE: 510-420-3351
FAX: 510-420-9170
DATE RECEIVED: 10/06/2008
DATE COMPLETED: 10/13/2008
P.O. #: 312002/206145
PROJECT #: 206145 Oakland
CONTACT: Kyle Vagadori

Table with 5 columns: FRACTION #, NAME, TEST, RECEIPT VAC./PRES., FINAL PRESSURE. Rows include various fractions (01A-10A) and their corresponding test results and pressures.

CERTIFIED BY: [Signature] DATE: 10/13/08
Laboratory Director

Certification 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
This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.
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(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 0810122B

Seven 1 Liter Summa Canister (100% Certified) samples were received on October 06, 2008. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

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

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

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
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 $\geq 95\%$ 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

Sample VP-5 Repeat was placed on hold per the client's request.

Sample identification for sample VP-5 was not provided on the sample tag. Therefore the information on the Chain of Custody was used to process and report the sample.

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-3

Lab ID#: 0810122B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Carbon Dioxide	0.022	2.4

Client Sample ID: VP-3 Lab Duplicate

Lab ID#: 0810122B-01AA

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Carbon Dioxide	0.022	2.4

Client Sample ID: VP-1

Lab ID#: 0810122B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	14
Methane	0.00024	0.00027
Carbon Dioxide	0.024	0.027

Client Sample ID: VP-4

Lab ID#: 0810122B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Methane	0.00026	0.00028
Carbon Dioxide	0.026	4.8

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Methane	0.00026	0.00028
Carbon Dioxide	0.026	5.0



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: VP-6

Lab ID#: 0810122B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	20
Carbon Dioxide	0.024	0.98

Client Sample ID: VP-5

Lab ID#: 0810122B-06A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Carbon Dioxide	0.024	4.1



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0810122B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100905	Date of Collection:	10/3/08
Dil. Factor:	2.24	Date of Analysis:	10/9/08 10:09 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	2.4
Helium	0.11	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3 Lab Duplicate

Lab ID#: 0810122B-01AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100906	Date of Collection: 10/3/08
Dil. Factor:	2.24	Date of Analysis: 10/9/08 10:50 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.22	16
Methane	0.00022	Not Detected
Carbon Dioxide	0.022	2.4
Helium	0.11	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0810122B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100907	Date of Collection:	10/3/08
Dil. Factor:	2.38	Date of Analysis:	10/9/08 11:20 AM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	14
Methane	0.00024	0.00027
Carbon Dioxide	0.024	0.027
Helium	0.12	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0810122B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100908	Date of Collection:	10/3/08
Dil. Factor:	2.58	Date of Analysis:	10/9/08 12:17 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Methane	0.00026	0.00028
Carbon Dioxide	0.026	4.8
Helium	0.13	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100909	Date of Collection:	10/3/08
Dil. Factor:	2.64	Date of Analysis:	10/9/08 12:43 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	11
Methane	0.00026	0.00028
Carbon Dioxide	0.026	5.0
Helium	0.13	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-6

Lab ID#: 0810122B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100910	Date of Collection:	10/3/08
Dil. Factor:	2.38	Date of Analysis:	10/9/08 01:53 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	20
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	0.98
Helium	0.12	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0810122B-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100911	Date of Collection:	10/3/08
Dil. Factor:	2.42	Date of Analysis:	10/9/08 02:27 PM

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	17
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	4.1
Helium	0.12	Not Detected

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122B-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100904	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/9/08 08:37 AM

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

Container Type: NA - Not Applicable



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122B-09B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100903b	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	10/9/08 08:12 AM

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

Container Type: NA - Not Applicable



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810122B-10A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100930	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 12:57 AM

Compound	%Recovery
Oxygen	100
Methane	101
Carbon Dioxide	100
Helium	106

Container Type: NA - Not Applicable



CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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

Page 1 of 4

Project Manager Charlotte Evans
 Collected by: (Print and Sign) Charlotte Evans
 Company CRA Email cevance@craworld.com
 Address 5900 Hollis St City Emeryville State CA Zip 94608
 Phone 510-420-3351 Fax 510-420-9170

Project Info: P.O. # <u>312002/206145</u> Project # <u>206145</u> Project Name <u>206145 Oakland</u>	Turn Around Time: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Rush <u>1 week</u> <small>specify</small>	<small>Lab Use Only</small> Pressurized by: Date: Pressurization Gas: N ₂ He
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Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final (psi)
01A	VP-3	SC85	10/03/08	10:55	TPH by TO-15-top TOXICS	-30	-3		
02A	VP-1	SC36	10/03/08	11:24	BTEX, naphthalene	-30	-5		
03A	VP-4	351607	10/03/08	12:16	MTBE by TO-15	-30	-7		
04A	VP-4 DUPLICATE	34059	10/03/08	12:16	CO ₂ , O ₂ , CH ₄ , Helium by	-30	-7		
05A	VP-6	SC1	10/03/08	12:49	ASTM D-1946	-30	-5		
06A	VP-5	2105	10/03/08	13:19		-30	-5		
	Helium	SC53	10/03/08	13:17	Helium by ASTM D-1946 <small>only</small>	-30	-9		
07A	VP-5 Repeat	9402	10/03/08	13:35	HOLD	-30	-5		

Relinquished by: (signature) <u>CEVANCE</u> Date/Time <u>10/03/08 15:45</u>	Received by: (signature) <u>Monica Greggen</u> Date/Time <u>10/03/08 8:55</u>	Notes: Please hold VP-5 Repeat. Any ques. - ask Kyle units $\mu\text{g}/\text{m}^3$ & PPBV EDFI data
Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____	
Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____	

Lab Use Only	Shipper Name <u>Fed-Ex</u>	Air Bill # _____	Temp. (°C) <u>NA</u>	Condition <u>Good</u>	Custody Seals Intact? Yes No <u>(None)</u>	Work Order # <u>0810122</u>
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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**



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810122C

Work Order Summary

CLIENT:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3351	P.O. #	312002/206145
FAX:	510-420-9170	PROJECT #	206145 Oakland
DATE RECEIVED:	10/06/2008	CONTACT:	Kyle Vagadori
DATE COMPLETED:	10/13/2008		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
07A	Helium	Modified ASTM D-1946	8.5 "Hg	15 psi
07AA	Helium Lab Duplicate	Modified ASTM D-1946	8.5 "Hg	15 psi
08A	Lab Blank	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA

CERTIFIED BY: 

DATE: 10/13/08

Laboratory Director

Certification 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

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LABORATORY NARRATIVE
Modified ASTM D-1946
Conestoga-Rovers Associates (CRA)
Workorder# 0810122C

One 1 Liter Summa Canister (100% Certified) sample was received on October 06, 2008. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

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

<i>Requirement</i>	<i>ASTM D-1946</i>	<i>ATL Modifications</i>
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 $\geq 95\%$ 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: Helium

Lab ID#: 0810122C-07A

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.14	80

Client Sample ID: Helium Lab Duplicate

Lab ID#: 0810122C-07AA

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.14	80



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Helium

Lab ID#: 0810122C-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100912b	Date of Collection:	10/3/08
Dil. Factor:	2.82	Date of Analysis:	10/9/08 02:56 PM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.14	80

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Helium Lab Duplicate

Lab ID#: 0810122C-07AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100913b	Date of Collection:	10/3/08
Dil. Factor:	2.82	Date of Analysis:	10/9/08 04:02 PM

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.14	80

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122C-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100903b	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/9/08 08:12 AM

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

Container Type: NA - Not Applicable



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810122C-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9100930b	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 12:57 AM

Compound	%Recovery
Helium	106

Container Type: NA - Not Applicable



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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- 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**




AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810122A

Work Order Summary

CLIENT:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3351	P.O. #	312002/206145
FAX:	510-420-9170	PROJECT #	206145 Oakland
DATE RECEIVED:	10/06/2008	CONTACT:	Kyle Vagadori
DATE COMPLETED:	10/14/2008		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	VP-3	Modified TO-15/TICs	3.0 "Hg	15 psi
02A	VP-1	Modified TO-15/TICs	4.5 "Hg	15 psi
03A	VP-4	Modified TO-15/TICs	6.5 "Hg	15 psi
04A	VP-4 DUPLICATE	Modified TO-15/TICs	7.0 "Hg	15 psi
05A	VP-6	Modified TO-15/TICs	4.5 "Hg	15 psi
06A	VP-5	Modified TO-15/TICs	5.0 "Hg	15 psi
06AA	VP-5 Lab Duplicate	Modified TO-15/TICs	5.0 "Hg	15 psi
08A(on hold)	VP-5 Repeat	Modified TO-15/TICs	4.5 "Hg	15 psi
09A	Lab Blank	Modified TO-15/TICs	NA	NA
10A	CCV	Modified TO-15/TICs	NA	NA
11A	LCS	Modified TO-15/TICs	NA	NA

CERTIFIED BY: 
 Laboratory Director

DATE: 10/14/08

Certification 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
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LABORATORY NARRATIVE
Modified TO-15
Conestoga-Rovers Associates (CRA)
Workorder# 0810122A

Seven 1 Liter Summa Canister (100% Certified) samples were received on October 06, 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 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	<= 30% Difference	<= 30% Difference; Compounds exceeding this criterion and associated data are flagged and narrated.
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

Sample VP-5 Repeat was placed on hold per the client's request.

Sample identification for sample VP-5 was not provided on the sample tag. Therefore the information on the Chain of Custody was used to process and report the sample.

Analytical Notes

The recovery of surrogate 1,2-Dichloroethane-d4 in sample VP-5 Lab Duplicate was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

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 no 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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-3

Lab ID#: 0810122A-01A

No Detections Were Found.

Client Sample ID: VP-1

Lab ID#: 0810122A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 11	1.2	1.2	6.7	6.7

Client Sample ID: VP-4

Lab ID#: 0810122A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH ref. to Gasoline (MW=100)	26	95	100	390

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
1-Hexanol, 2-ethyl-	104-76-7	78%	6.5 N J
Nonanal	124-19-6	64%	8.0 N J
Benzene, ethyl-1,2,4-trimethyl-	54120-62-6	81%	12 N J
1-Phenylcyclopentanol-1	10487-96-4	43%	11 N J
1H-Indene, 2,3-dihydro-5,6-dimethyl-	1075-22-5	96%	6.9 N J

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH ref. to Gasoline (MW=100)	26	58	110	240

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	50%	7.9 N J
Benzene, pentamethyl-	700-12-9	81%	18 N J
Benzene, ethyl-1,2,4-trimethyl-	54120-62-6	83%	14 N J
1H-Indene, 2,3-dihydro-5,6-dimethyl-	1075-22-5	96%	11 N J
1H-Indene, 2,3-dihydro-1,2-dimethyl-	17057-82-8	94%	10 N J
Benzene, 1,3-dimethyl-5-(1-methylethyl)-	4706-90-5	87%	6.6 N J



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-6

Lab ID#: 0810122A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Disulfide	1.2	4.0	3.7	12

Client Sample ID: VP-5

Lab ID#: 0810122A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
2,2,4-Trimethylpentane	27	6100	120	28000
TPH ref. to Gasoline (MW=100)	540	14000	2200	57000

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Propane, 2,2-dimethyl-	463-82-1	56%	440 N J
Butane, 2,2-dimethyl-	75-83-2	83%	570 N J
Butane, 2,2,3-trimethyl-	464-06-2	64%	550 N J
Pentane, 2,2,3-trimethyl-	564-02-3	83%	470 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	1200 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	5600 N J
1-Heptene, 6-methyl-	5026-76-6	43%	160 N J
Heptane, 2,2-dimethyl-	1071-26-7	47%	360 N J

Client Sample ID: VP-5 Lab Duplicate

Lab ID#: 0810122A-06AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Disulfide	4.8	6.5	15	20
2,2,4-Trimethylpentane	4.8	5300 E	23	25000 E
TPH ref. to Gasoline (MW=100)	97	16000	400	65000

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Propane, 2,2-dimethyl-	463-82-1	72%	250 N J
Butane, 2,2-dimethyl-	75-83-2	83%	360 N J
Butane, 2,2,3-trimethyl-	464-06-2	64%	370 N J
Pentane, 2,2,3-trimethyl-	564-02-3	83%	560 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	1400 N J



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-5 Lab Duplicate

Lab ID#: 0810122A-06AA

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Pentane, 2,3,3-trimethyl-	560-21-4	90%	5800 N J
Cyclopentane, 1,1,2-trimethyl-	4259-00-1	81%	220 N J
Heptane, 2,2-dimethyl-	1071-26-7	50%	430 N J
Decane, 2,5,6-trimethyl-	62108-23-0	64%	110 N J
Nonane, 3,7-dimethyl-	17302-32-8	64%	100 N J



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0810122A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101010	Date of Collection:	10/3/08
Dil. Factor:	2.24	Date of Analysis:	10/10/08 10:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.1	Not Detected	5.5	Not Detected
Freon 114	1.1	Not Detected	7.8	Not Detected
Chloromethane	4.5	Not Detected	9.2	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,3-Butadiene	1.1	Not Detected	2.5	Not Detected
Bromomethane	1.1	Not Detected	4.3	Not Detected
Chloroethane	1.1	Not Detected	3.0	Not Detected
Freon 11	1.1	Not Detected	6.3	Not Detected
Ethanol	4.5	Not Detected	8.4	Not Detected
Freon 113	1.1	Not Detected	8.6	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	4.5	Not Detected	11	Not Detected
2-Propanol	4.5	Not Detected	11	Not Detected
Carbon Disulfide	1.1	Not Detected	3.5	Not Detected
3-Chloropropene	4.5	Not Detected	14	Not Detected
Methylene Chloride	1.1	Not Detected	3.9	Not Detected
Methyl tert-butyl ether	1.1	Not Detected	4.0	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.1	Not Detected	3.3	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Tetrahydrofuran	1.1	Not Detected	3.3	Not Detected
Chloroform	1.1	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Cyclohexane	1.1	Not Detected	3.8	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.0	Not Detected
2,2,4-Trimethylpentane	1.1	Not Detected	5.2	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	Not Detected
Heptane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.0	Not Detected
1,2-Dichloropropane	1.1	Not Detected	5.2	Not Detected
1,4-Dioxane	4.5	Not Detected	16	Not Detected
Bromodichloromethane	1.1	Not Detected	7.5	Not Detected
cis-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected
4-Methyl-2-pentanone	1.1	Not Detected	4.6	Not Detected
Toluene	1.1	Not Detected	4.2	Not Detected
trans-1,3-Dichloropropene	1.1	Not Detected	5.1	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-3

Lab ID#: 0810122A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101010	Date of Collection: 10/3/08
Dil. Factor:	2.24	Date of Analysis: 10/10/08 10:50 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
2-Hexanone	4.5	Not Detected	18	Not Detected
Dibromochloromethane	1.1	Not Detected	9.5	Not Detected
1,2-Dibromoethane (EDB)	1.1	Not Detected	8.6	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Bromoform	1.1	Not Detected	12	Not Detected
Cumene	1.1	Not Detected	5.5	Not Detected
1,1,1,2-Tetrachloroethane	1.1	Not Detected	7.7	Not Detected
Propylbenzene	1.1	Not Detected	5.5	Not Detected
4-Ethyltoluene	1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,3-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,4-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
alpha-Chlorotoluene	1.1	Not Detected	5.8	Not Detected
1,2-Dichlorobenzene	1.1	Not Detected	6.7	Not Detected
1,2,4-Trichlorobenzene	4.5	Not Detected	33	Not Detected
Hexachlorobutadiene	4.5	Not Detected	48	Not Detected
TPH ref. to Gasoline (MW=100)	22	Not Detected	92	Not Detected
Naphthalene	4.5	Not Detected	23	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
None Identified			

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

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	89	70-130
4-Bromofluorobenzene	116	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0810122A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101011	Date of Collection:	10/3/08
Dil. Factor:	2.38	Date of Analysis:	10/10/08 11:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.2	Not Detected	5.9	Not Detected
Freon 114	1.2	Not Detected	8.3	Not Detected
Chloromethane	4.8	Not Detected	9.8	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	1.2	Not Detected	4.6	Not Detected
Chloroethane	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	1.2	6.7	6.7
Ethanol	4.8	Not Detected	9.0	Not Detected
Freon 113	1.2	Not Detected	9.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Acetone	4.8	Not Detected	11	Not Detected
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	1.2	Not Detected	3.7	Not Detected
3-Chloropropene	4.8	Not Detected	15	Not Detected
Methylene Chloride	1.2	Not Detected	4.1	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.2	Not Detected	3.5	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.5	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Cyclohexane	1.2	Not Detected	4.1	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.5	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.6	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Heptane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.5	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	8.0	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.9	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-1

Lab ID#: 0810122A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101011	Date of Collection: 10/3/08
Dil. Factor:	2.38	Date of Analysis: 10/10/08 11:36 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
2-Hexanone	4.8	Not Detected	19	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.1	Not Detected
Chlorobenzene	1.2	Not Detected	5.5	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Styrene	1.2	Not Detected	5.1	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.2	Not Detected
Propylbenzene	1.2	Not Detected	5.8	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.8	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.2	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,2,4-Trichlorobenzene	4.8	Not Detected	35	Not Detected
Hexachlorobutadiene	4.8	Not Detected	51	Not Detected
TPH ref. to Gasoline (MW=100)	24	Not Detected	97	Not Detected
Naphthalene	4.8	Not Detected	25	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
None Identified			

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

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	114	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0810122A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101020	Date of Collection: 10/3/08
Dil. Factor:	2.58	Date of Analysis: 10/10/08 05:48 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	Not Detected	6.4	Not Detected
Freon 114	1.3	Not Detected	9.0	Not Detected
Chloromethane	5.2	Not Detected	11	Not Detected
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,3-Butadiene	1.3	Not Detected	2.8	Not Detected
Bromomethane	1.3	Not Detected	5.0	Not Detected
Chloroethane	1.3	Not Detected	3.4	Not Detected
Freon 11	1.3	Not Detected	7.2	Not Detected
Ethanol	5.2	Not Detected	9.7	Not Detected
Freon 113	1.3	Not Detected	9.9	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Acetone	5.2	Not Detected	12	Not Detected
2-Propanol	5.2	Not Detected	13	Not Detected
Carbon Disulfide	1.3	Not Detected	4.0	Not Detected
3-Chloropropene	5.2	Not Detected	16	Not Detected
Methylene Chloride	1.3	Not Detected	4.5	Not Detected
Methyl tert-butyl ether	1.3	Not Detected	4.6	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Hexane	1.3	Not Detected	4.5	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.8	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.8	Not Detected
Chloroform	1.3	Not Detected	6.3	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Cyclohexane	1.3	Not Detected	4.4	Not Detected
Carbon Tetrachloride	1.3	Not Detected	8.1	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	6.0	Not Detected
Benzene	1.3	Not Detected	4.1	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.2	Not Detected
Heptane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	6.9	Not Detected
1,2-Dichloropropane	1.3	Not Detected	6.0	Not Detected
1,4-Dioxane	5.2	Not Detected	18	Not Detected
Bromodichloromethane	1.3	Not Detected	8.6	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.3	Not Detected
Toluene	1.3	Not Detected	4.9	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	5.8	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0810122A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101020	Date of Collection:	10/3/08
Dil. Factor:	2.58	Date of Analysis:	10/10/08 05:48 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
2-Hexanone	5.2	Not Detected	21	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.9	Not Detected
Chlorobenzene	1.3	Not Detected	5.9	Not Detected
Ethyl Benzene	1.3	Not Detected	5.6	Not Detected
m,p-Xylene	1.3	Not Detected	5.6	Not Detected
o-Xylene	1.3	Not Detected	5.6	Not Detected
Styrene	1.3	Not Detected	5.5	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.3	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.8	Not Detected
Propylbenzene	1.3	Not Detected	6.3	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.3	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.7	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.8	Not Detected
1,2,4-Trichlorobenzene	5.2	Not Detected	38	Not Detected
Hexachlorobutadiene	5.2	Not Detected	55	Not Detected
TPH ref. to Gasoline (MW=100)	26	95	100	390
Naphthalene	5.2	Not Detected	27	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
1-Hexanol, 2-ethyl-	104-76-7	78%	6.5 N J
Nonanal	124-19-6	64%	8.0 N J
Benzene, ethyl-1,2,4-trimethyl-	54120-62-6	81%	12 N J
1-Phenylcyclopentanol-1	10487-96-4	43%	11 N J
1H-Indene, 2,3-dihydro-5,6-dimethyl-	1075-22-5	96%	6.9 N J

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

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4

Lab ID#: 0810122A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101020	Date of Collection: 10/3/08
Dil. Factor:	2.58	Date of Analysis: 10/10/08 05:48 PM

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
4-Bromofluorobenzene	122	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101012	Date of Collection:	10/3/08
Dil. Factor:	2.64	Date of Analysis:	10/10/08 12:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.3	Not Detected	6.5	Not Detected
Freon 114	1.3	Not Detected	9.2	Not Detected
Chloromethane	5.3	Not Detected	11	Not Detected
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,3-Butadiene	1.3	Not Detected	2.9	Not Detected
Bromomethane	1.3	Not Detected	5.1	Not Detected
Chloroethane	1.3	Not Detected	3.5	Not Detected
Freon 11	1.3	Not Detected	7.4	Not Detected
Ethanol	5.3	Not Detected	9.9	Not Detected
Freon 113	1.3	Not Detected	10	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Acetone	5.3	Not Detected	12	Not Detected
2-Propanol	5.3	Not Detected	13	Not Detected
Carbon Disulfide	1.3	Not Detected	4.1	Not Detected
3-Chloropropene	5.3	Not Detected	16	Not Detected
Methylene Chloride	1.3	Not Detected	4.6	Not Detected
Methyl tert-butyl ether	1.3	Not Detected	4.8	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Hexane	1.3	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.3	Not Detected	3.9	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.9	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Cyclohexane	1.3	Not Detected	4.5	Not Detected
Carbon Tetrachloride	1.3	Not Detected	8.3	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	6.2	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Heptane	1.3	Not Detected	5.4	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
1,2-Dichloropropane	1.3	Not Detected	6.1	Not Detected
1,4-Dioxane	5.3	Not Detected	19	Not Detected
Bromodichloromethane	1.3	Not Detected	8.8	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	6.0	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.4	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	6.0	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101012	Date of Collection:	10/3/08
Dil. Factor:	2.64	Date of Analysis:	10/10/08 12:21 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
2-Hexanone	5.3	Not Detected	22	Not Detected
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	10	Not Detected
Chlorobenzene	1.3	Not Detected	6.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
Styrene	1.3	Not Detected	5.6	Not Detected
Bromoform	1.3	Not Detected	14	Not Detected
Cumene	1.3	Not Detected	6.5	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.1	Not Detected
Propylbenzene	1.3	Not Detected	6.5	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.5	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.8	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
1,2,4-Trichlorobenzene	5.3	Not Detected	39	Not Detected
Hexachlorobutadiene	5.3	Not Detected	56	Not Detected
TPH ref. to Gasoline (MW=100)	26	58	110	240
Naphthalene	5.3	Not Detected	28	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	50%	7.9 N J
Benzene, pentamethyl-	700-12-9	81%	18 N J
Benzene, ethyl-1,2,4-trimethyl-	54120-62-6	83%	14 N J
1H-Indene, 2,3-dihydro-5,6-dimethyl-	1075-22-5	96%	11 N J
1H-Indene, 2,3-dihydro-1,2-dimethyl-	17057-82-8	94%	10 N J
Benzene, 1,3-dimethyl-5-(1-methylethyl)-	4706-90-5	87%	6.6 N J

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

Surrogates	%Recovery	Method Limits
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AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-4 DUPLICATE

Lab ID#: 0810122A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101012	Date of Collection: 10/3/08
Dil. Factor:	2.64	Date of Analysis: 10/10/08 12:21 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	113	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-6

Lab ID#: 0810122A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101013	Date of Collection: 10/3/08
Dil. Factor:	2.38	Date of Analysis: 10/10/08 01:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	1.2	Not Detected	5.9	Not Detected
Freon 114	1.2	Not Detected	8.3	Not Detected
Chloromethane	4.8	Not Detected	9.8	Not Detected
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,3-Butadiene	1.2	Not Detected	2.6	Not Detected
Bromomethane	1.2	Not Detected	4.6	Not Detected
Chloroethane	1.2	Not Detected	3.1	Not Detected
Freon 11	1.2	Not Detected	6.7	Not Detected
Ethanol	4.8	Not Detected	9.0	Not Detected
Freon 113	1.2	Not Detected	9.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Acetone	4.8	Not Detected	11	Not Detected
2-Propanol	4.8	Not Detected	12	Not Detected
Carbon Disulfide	1.2	4.0	3.7	12
3-Chloropropene	4.8	Not Detected	15	Not Detected
Methylene Chloride	1.2	Not Detected	4.1	Not Detected
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	1.2	Not Detected	3.5	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Tetrahydrofuran	1.2	Not Detected	3.5	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
1,1,1-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Cyclohexane	1.2	Not Detected	4.1	Not Detected
Carbon Tetrachloride	1.2	Not Detected	7.5	Not Detected
2,2,4-Trimethylpentane	1.2	Not Detected	5.6	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Heptane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
1,2-Dichloropropane	1.2	Not Detected	5.5	Not Detected
1,4-Dioxane	4.8	Not Detected	17	Not Detected
Bromodichloromethane	1.2	Not Detected	8.0	Not Detected
cis-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected
4-Methyl-2-pentanone	1.2	Not Detected	4.9	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
trans-1,3-Dichloropropene	1.2	Not Detected	5.4	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-6

Lab ID#: 0810122A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101013	Date of Collection: 10/3/08
Dil. Factor:	2.38	Date of Analysis: 10/10/08 01:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
2-Hexanone	4.8	Not Detected	19	Not Detected
Dibromochloromethane	1.2	Not Detected	10	Not Detected
1,2-Dibromoethane (EDB)	1.2	Not Detected	9.1	Not Detected
Chlorobenzene	1.2	Not Detected	5.5	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Styrene	1.2	Not Detected	5.1	Not Detected
Bromoform	1.2	Not Detected	12	Not Detected
Cumene	1.2	Not Detected	5.8	Not Detected
1,1,2,2-Tetrachloroethane	1.2	Not Detected	8.2	Not Detected
Propylbenzene	1.2	Not Detected	5.8	Not Detected
4-Ethyltoluene	1.2	Not Detected	5.8	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected
1,3-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,4-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
alpha-Chlorotoluene	1.2	Not Detected	6.2	Not Detected
1,2-Dichlorobenzene	1.2	Not Detected	7.2	Not Detected
1,2,4-Trichlorobenzene	4.8	Not Detected	35	Not Detected
Hexachlorobutadiene	4.8	Not Detected	51	Not Detected
TPH ref. to Gasoline (MW=100)	24	Not Detected	97	Not Detected
Naphthalene	4.8	Not Detected	25	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
None Identified			

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

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	90	70-130
4-Bromofluorobenzene	114	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0810122A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101016	Date of Collection:	10/3/08
Dil. Factor:	53.8	Date of Analysis:	10/10/08 03:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	27	Not Detected	130	Not Detected
Freon 114	27	Not Detected	190	Not Detected
Chloromethane	110	Not Detected	220	Not Detected
Vinyl Chloride	27	Not Detected	69	Not Detected
1,3-Butadiene	27	Not Detected	60	Not Detected
Bromomethane	27	Not Detected	100	Not Detected
Chloroethane	27	Not Detected	71	Not Detected
Freon 11	27	Not Detected	150	Not Detected
Ethanol	110	Not Detected	200	Not Detected
Freon 113	27	Not Detected	210	Not Detected
1,1-Dichloroethene	27	Not Detected	110	Not Detected
Acetone	110	Not Detected	260	Not Detected
2-Propanol	110	Not Detected	260	Not Detected
Carbon Disulfide	27	Not Detected	84	Not Detected
3-Chloropropene	110	Not Detected	340	Not Detected
Methylene Chloride	27	Not Detected	93	Not Detected
Methyl tert-butyl ether	27	Not Detected	97	Not Detected
trans-1,2-Dichloroethene	27	Not Detected	110	Not Detected
Hexane	27	Not Detected	95	Not Detected
1,1-Dichloroethane	27	Not Detected	110	Not Detected
2-Butanone (Methyl Ethyl Ketone)	27	Not Detected	79	Not Detected
cis-1,2-Dichloroethene	27	Not Detected	110	Not Detected
Tetrahydrofuran	27	Not Detected	79	Not Detected
Chloroform	27	Not Detected	130	Not Detected
1,1,1-Trichloroethane	27	Not Detected	150	Not Detected
Cyclohexane	27	Not Detected	92	Not Detected
Carbon Tetrachloride	27	Not Detected	170	Not Detected
2,2,4-Trimethylpentane	27	6100	120	28000
Benzene	27	Not Detected	86	Not Detected
1,2-Dichloroethane	27	Not Detected	110	Not Detected
Heptane	27	Not Detected	110	Not Detected
Trichloroethene	27	Not Detected	140	Not Detected
1,2-Dichloropropane	27	Not Detected	120	Not Detected
1,4-Dioxane	110	Not Detected	390	Not Detected
Bromodichloromethane	27	Not Detected	180	Not Detected
cis-1,3-Dichloropropene	27	Not Detected	120	Not Detected
4-Methyl-2-pentanone	27	Not Detected	110	Not Detected
Toluene	27	Not Detected	100	Not Detected
trans-1,3-Dichloropropene	27	Not Detected	120	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0810122A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101016	Date of Collection: 10/3/08
Dil. Factor:	53.8	Date of Analysis: 10/10/08 03:08 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	27	Not Detected	150	Not Detected
Tetrachloroethene	27	Not Detected	180	Not Detected
2-Hexanone	110	Not Detected	440	Not Detected
Dibromochloromethane	27	Not Detected	230	Not Detected
1,2-Dibromoethane (EDB)	27	Not Detected	210	Not Detected
Chlorobenzene	27	Not Detected	120	Not Detected
Ethyl Benzene	27	Not Detected	120	Not Detected
m,p-Xylene	27	Not Detected	120	Not Detected
o-Xylene	27	Not Detected	120	Not Detected
Styrene	27	Not Detected	110	Not Detected
Bromoform	27	Not Detected	280	Not Detected
Cumene	27	Not Detected	130	Not Detected
1,1,2,2-Tetrachloroethane	27	Not Detected	180	Not Detected
Propylbenzene	27	Not Detected	130	Not Detected
4-Ethyltoluene	27	Not Detected	130	Not Detected
1,3,5-Trimethylbenzene	27	Not Detected	130	Not Detected
1,2,4-Trimethylbenzene	27	Not Detected	130	Not Detected
1,3-Dichlorobenzene	27	Not Detected	160	Not Detected
1,4-Dichlorobenzene	27	Not Detected	160	Not Detected
alpha-Chlorotoluene	27	Not Detected	140	Not Detected
1,2-Dichlorobenzene	27	Not Detected	160	Not Detected
1,2,4-Trichlorobenzene	110	Not Detected	800	Not Detected
Hexachlorobutadiene	110	Not Detected	1100	Not Detected
TPH ref. to Gasoline (MW=100)	540	14000	2200	57000
Naphthalene	110	Not Detected	560	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Propane, 2,2-dimethyl-	463-82-1	56%	440 N J
Butane, 2,2-dimethyl-	75-83-2	83%	570 N J
Butane, 2,2,3-trimethyl-	464-06-2	64%	550 N J
Pentane, 2,2,3-trimethyl-	564-02-3	83%	470 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	1200 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	5600 N J
1-Heptene, 6-methyl-	5026-76-6	43%	160 N J
Heptane, 2,2-dimethyl-	1071-26-7	47%	360 N J

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0810122A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101016	Date of Collection: 10/3/08
Dil. Factor:	53.8	Date of Analysis: 10/10/08 03:08 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	114	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5 Lab Duplicate

Lab ID#: 0810122A-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101014a	Date of Collection:	10/3/08
Dil. Factor:	9.68	Date of Analysis:	10/10/08 01:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	4.8	Not Detected	24	Not Detected
Freon 114	4.8	Not Detected	34	Not Detected
Chloromethane	19	Not Detected	40	Not Detected
Vinyl Chloride	4.8	Not Detected	12	Not Detected
1,3-Butadiene	4.8	Not Detected	11	Not Detected
Bromomethane	4.8	Not Detected	19	Not Detected
Chloroethane	4.8	Not Detected	13	Not Detected
Freon 11	4.8	Not Detected	27	Not Detected
Ethanol	19	Not Detected	36	Not Detected
Freon 113	4.8	Not Detected	37	Not Detected
1,1-Dichloroethene	4.8	Not Detected	19	Not Detected
Acetone	19	Not Detected	46	Not Detected
2-Propanol	19	Not Detected	48	Not Detected
Carbon Disulfide	4.8	6.5	15	20
3-Chloropropene	19	Not Detected	60	Not Detected
Methylene Chloride	4.8	Not Detected	17	Not Detected
Methyl tert-butyl ether	4.8	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	4.8	Not Detected	19	Not Detected
Hexane	4.8	Not Detected	17	Not Detected
1,1-Dichloroethane	4.8	Not Detected	20	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	4.8	Not Detected	19	Not Detected
Tetrahydrofuran	4.8	Not Detected	14	Not Detected
Chloroform	4.8	Not Detected	24	Not Detected
1,1,1-Trichloroethane	4.8	Not Detected	26	Not Detected
Cyclohexane	4.8	Not Detected	17	Not Detected
Carbon Tetrachloride	4.8	Not Detected	30	Not Detected
2,2,4-Trimethylpentane	4.8	5300 E	23	25000 E
Benzene	4.8	Not Detected	15	Not Detected
1,2-Dichloroethane	4.8	Not Detected	20	Not Detected
Heptane	4.8	Not Detected	20	Not Detected
Trichloroethene	4.8	Not Detected	26	Not Detected
1,2-Dichloropropane	4.8	Not Detected	22	Not Detected
1,4-Dioxane	19	Not Detected	70	Not Detected
Bromodichloromethane	4.8	Not Detected	32	Not Detected
cis-1,3-Dichloropropene	4.8	Not Detected	22	Not Detected
4-Methyl-2-pentanone	4.8	Not Detected	20	Not Detected
Toluene	4.8	Not Detected	18	Not Detected
trans-1,3-Dichloropropene	4.8	Not Detected	22	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5 Lab Duplicate

Lab ID#: 0810122A-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101014a	Date of Collection:	10/3/08
Dil. Factor:	9.68	Date of Analysis:	10/10/08 01:44 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	4.8	Not Detected	26	Not Detected
Tetrachloroethene	4.8	Not Detected	33	Not Detected
2-Hexanone	19	Not Detected	79	Not Detected
Dibromochloromethane	4.8	Not Detected	41	Not Detected
1,2-Dibromoethane (EDB)	4.8	Not Detected	37	Not Detected
Chlorobenzene	4.8	Not Detected	22	Not Detected
Ethyl Benzene	4.8	Not Detected	21	Not Detected
m,p-Xylene	4.8	Not Detected	21	Not Detected
o-Xylene	4.8	Not Detected	21	Not Detected
Styrene	4.8	Not Detected	21	Not Detected
Bromoform	4.8	Not Detected	50	Not Detected
Cumene	4.8	Not Detected	24	Not Detected
1,1,2,2-Tetrachloroethane	4.8	Not Detected	33	Not Detected
Propylbenzene	4.8	Not Detected	24	Not Detected
4-Ethyltoluene	4.8	Not Detected	24	Not Detected
1,3,5-Trimethylbenzene	4.8	Not Detected	24	Not Detected
1,2,4-Trimethylbenzene	4.8	Not Detected	24	Not Detected
1,3-Dichlorobenzene	4.8	Not Detected	29	Not Detected
1,4-Dichlorobenzene	4.8	Not Detected	29	Not Detected
alpha-Chlorotoluene	4.8	Not Detected	25	Not Detected
1,2-Dichlorobenzene	4.8	Not Detected	29	Not Detected
1,2,4-Trichlorobenzene	19	Not Detected	140	Not Detected
Hexachlorobutadiene	19	Not Detected	210	Not Detected
TPH ref. to Gasoline (MW=100)	97	16000	400	65000
Naphthalene	19	Not Detected	100	Not Detected

E = Exceeds instrument calibration range.

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Propane, 2,2-dimethyl-	463-82-1	72%	250 N J
Butane, 2,2-dimethyl-	75-83-2	83%	360 N J
Butane, 2,2,3-trimethyl-	464-06-2	64%	370 N J
Pentane, 2,2,3-trimethyl-	564-02-3	83%	560 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	1400 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	5800 N J
Cyclopentane, 1,1,2-trimethyl-	4259-00-1	81%	220 N J
Heptane, 2,2-dimethyl-	1071-26-7	50%	430 N J
Decane, 2,5,6-trimethyl-	62108-23-0	64%	110 N J



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5 Lab Duplicate

Lab ID#: 0810122A-06AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101014a	Date of Collection:	10/3/08
Dil. Factor:	9.68	Date of Analysis:	10/10/08 01:44 PM

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Nonane, 3,7-dimethyl-	17302-32-8	64%	100 N J

Q = Exceeds Quality Control limits of 70% to 130%, due to matrix effects.

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

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	160 Q	70-130
4-Bromofluorobenzene	116	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 07:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101005	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 07:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	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
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,1,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
Naphthalene	2.0	Not Detected	10	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
None Identified			

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	85	70-130
4-Bromofluorobenzene	119	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810122A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 05:16 AM

Compound	%Recovery
Freon 12	103
Freon 114	99
Chloromethane	94
Vinyl Chloride	90
1,3-Butadiene	108
Bromomethane	88
Chloroethane	81
Freon 11	102
Ethanol	84
Freon 113	97
1,1-Dichloroethene	91
Acetone	76
2-Propanol	85
Carbon Disulfide	88
3-Chloropropene	81
Methylene Chloride	87
Methyl tert-butyl ether	113
trans-1,2-Dichloroethene	92
Hexane	78
1,1-Dichloroethane	86
2-Butanone (Methyl Ethyl Ketone)	92
cis-1,2-Dichloroethene	88
Tetrahydrofuran	81
Chloroform	99
1,1,1-Trichloroethane	102
Cyclohexane	92
Carbon Tetrachloride	106
2,2,4-Trimethylpentane	82
Benzene	95
1,2-Dichloroethane	102
Heptane	92
Trichloroethene	103
1,2-Dichloropropane	90
1,4-Dioxane	95
Bromodichloromethane	106
cis-1,3-Dichloropropene	102
4-Methyl-2-pentanone	95
Toluene	101
trans-1,3-Dichloropropene	89



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810122A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101002	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 05:16 AM

Compound	%Recovery
1,1,2-Trichloroethane	93
Tetrachloroethene	100
2-Hexanone	81
Dibromochloromethane	104
1,2-Dibromoethane (EDB)	103
Chlorobenzene	103
Ethyl Benzene	103
m,p-Xylene	104
o-Xylene	108
Styrene	118
Bromoform	126
Cumene	112
1,1,1,2-Tetrachloroethane	122
Propylbenzene	119
4-Ethyltoluene	107
1,3,5-Trimethylbenzene	124
1,2,4-Trimethylbenzene	119
1,3-Dichlorobenzene	127
1,4-Dichlorobenzene	123
alpha-Chlorotoluene	117
1,2-Dichlorobenzene	129
1,2,4-Trichlorobenzene	104
Hexachlorobutadiene	103
TPH ref. to Gasoline (MW=100)	Not Spiked
Naphthalene	117

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	117	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810122A-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 05:52 AM

Compound	%Recovery
Freon 12	96
Freon 114	91
Chloromethane	91
Vinyl Chloride	83
1,3-Butadiene	94
Bromomethane	76
Chloroethane	74
Freon 11	97
Ethanol	83
Freon 113	107
1,1-Dichloroethene	94
Acetone	70
2-Propanol	84
Carbon Disulfide	80
3-Chloropropene	76
Methylene Chloride	87
Methyl tert-butyl ether	114
trans-1,2-Dichloroethene	89
Hexane	73
1,1-Dichloroethane	83
2-Butanone (Methyl Ethyl Ketone)	91
cis-1,2-Dichloroethene	84
Tetrahydrofuran	75
Chloroform	102
1,1,1-Trichloroethane	103
Cyclohexane	88
Carbon Tetrachloride	107
2,2,4-Trimethylpentane	75
Benzene	91
1,2-Dichloroethane	101
Heptane	88
Trichloroethene	102
1,2-Dichloropropane	81
1,4-Dioxane	98
Bromodichloromethane	104
cis-1,3-Dichloropropene	98
4-Methyl-2-pentanone	88
Toluene	105
trans-1,3-Dichloropropene	86



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810122A-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	t101003	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/10/08 05:52 AM

Compound	%Recovery
1,1,2-Trichloroethane	91
Tetrachloroethene	104
2-Hexanone	75
Dibromochloromethane	106
1,2-Dibromoethane (EDB)	101
Chlorobenzene	103
Ethyl Benzene	100
m,p-Xylene	103
o-Xylene	106
Styrene	115
Bromoform	129
Cumene	112
1,1,1,2-Tetrachloroethane	120
Propylbenzene	117
4-Ethyltoluene	105
1,3,5-Trimethylbenzene	120
1,2,4-Trimethylbenzene	114
1,3-Dichlorobenzene	124
1,4-Dichlorobenzene	119
alpha-Chlorotoluene	121
1,2-Dichlorobenzene	124
1,2,4-Trichlorobenzene	85
Hexachlorobutadiene	82
TPH ref. to Gasoline (MW=100)	Not Spiked
Naphthalene	91

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	119	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

10/22/2008

Ms. Charlotte Evans
Conestoga-Rovers Associates (CRA)
5900 Hollis Street
Suite A
Emeryville CA 94608

Project Name: Oakland
Project #: 206145

Dear Ms. Charlotte Evans

The following report includes the data for the above referenced project for sample(s) received on 10/6/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-3 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Regards,

A handwritten signature in black ink that reads 'Kyle Vagadori'.

Kyle Vagadori
Project Manager



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810122D

Work Order Summary

CLIENT:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	BILL TO:	Ms. Charlotte Evans Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-3351	P.O. #	312002/206145
FAX:	510-420-9170	PROJECT #	206145 Oakland
DATE RECEIVED:	10/06/2008	CONTACT:	Kyle Vagadori
DATE COMPLETED:	10/22/2008		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
06A	VP-5	Modified TO-3	5.0 "Hg	15 psi
07A	Lab Blank	Modified TO-3	NA	NA
08A	LCS	Modified TO-3	NA	NA

CERTIFIED BY: 

DATE: 10/22/08

Laboratory Director

Certification 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

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

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# 0810122D

One 1 Liter Summa Canister (100% Certified) sample was received on October 06, 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.

<i>Requirement</i>	<i>TO-3</i>	<i>ATL Modifications</i>
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

Sample VP-5 Repeat was placed on hold per the client's request.

Sample identification for sample VP-5 was not provided on the sample tag. Therefore the information on the Chain of Custody was used to process and report the sample.

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



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP-5

Lab ID#: 0810122D-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	240	29000	990	120000



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP-5

Lab ID#: 0810122D-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d101310	Date of Collection:	10/3/08
Dil. Factor:	9.68	Date of Analysis:	10/13/08 05:38 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	240	29000	990	120000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	97	75-150



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810122D-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d101307	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/13/08 03:08 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)	96	75-150



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810122D-08A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	d101312	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/13/08 07:08 PM

Compound	%Recovery
TPH (Gasoline Range)	89

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	114	75-150