Denis L. Brown
Shell Oil Products US
HSE – Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Former Shell Service Station
4411 Foothill Boulevard
Oakland, California
SAP Code 135686
Incident No. 98995746
Agency Site No. RO0415

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Project Manager

SOIL VAPOR PROBE INSTALLATION AND SAMPLING REPORT

FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE **135686**
INCIDENT NO. **98995746**
AGENCY NO. **RO0000415**

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
U.S.A. 94608

Office: (510) 420-0700
Fax: (510) 420-9170

web: http:\\www.CRAworld.com

NOVEMBER 10, 2008
REF. NO. 240897 (2)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to present the recent soil vapor probe installation details and sampling results. Alameda County Health Care Services Agency's (ACHCSA's) August 15, 2008 letter requested the probe installations and this sampling event.

The site is a former Shell service station located on the southern corner of the intersection of Foothill Boulevard and High Street in Oakland, California (Figure 1). The former station layout included three first-generation underground storage tanks (USTs) (1958 to 1971), three second-generation USTs (1971 to 1984), three third-generation gasoline USTs (1984 to 2002), a waste oil UST (removed 1992), and four product dispensers (Figure 2). Land use in the vicinity of the site is a mix of commercial and residential, with gasoline service stations occupying the northern and western corners of the intersection. The subject property is currently developed as a strip mall with a variety of commercial and retail uses.

A summary of previous work performed at the site and additional background information is contained in Appendix A.

2.0 SOIL VAPOR PROBE INSTALLATION AND SAMPLING

2.1 PERMIT

CRA obtained a drilling permit from Alameda County Public Works Agency, and a copy is provided in Appendix B.

2.2 DRILLING DATE

October 14, 2008.

2.3 DRILING COMPANY

WDC Exploration and Wells (WDC) of Richmond, California (C57 License No. 283326).

2.4 PERSONNEL PRESENT

CRA Staff Scientist Lauren Goldfinch working under the supervision of California Professional Geologist Peter Schaefer.

2.5 DRILLING METHOD

The probes were installed using air/water-knife equipment.

2.6 NUMBER OF PROBES

CRA installed soil vapor probes V-8 and V-9 at the locations shown in Figure 2.

2.7 VAPOR POINT MATERIALS

The vapor probes were constructed using ¼-inch diameter Teflon tubing attached to 1-inch length plastic screen intervals, and #2/12 Monterey sand filter pack. Well diagrams are provided with boring logs in Appendix C.

2.8 SCREENED INTERVALS

Soil vapor probe V-8 was screened from approximately 5.0 to 5.2 fbg and soil vapor probe V-9 was screened from approximately 4.8 to 5.0 fbg.

2.9 SOIL VAPOR SAMPLING

Soil vapor sampling and leak testing were performed following Department of Toxic Substances Control's January 28, 2003 *Advisory-Active Soil Gas Investigation* guidelines.

During sampling, the Teflon tubing for each vapor probe was connected to a control valve, and then to a flow regulator attached to a lab-supplied sampling manifold connecting two 1-liter summa canisters (one purge canister and one sampling canister) with flow regulators and pressure gauges. Prior to sampling, a vacuum test was conducted between the summa canisters, the sampling manifold, and the valves by closing the valves and opening the purge summa canister for approximately 10 minutes. Additionally, paper towels with shaving cream were placed at sample system connections for the leak test and held in place with aluminum foil during sampling activities. At least three tubing volumes of air were purged into the purge canister prior to sampling. Immediately after purging, soil vapor samples were collected using the second 1-liter Summa canister. Each sample was labeled, documented on a chain-of-custody, and submitted to Air Toxics Ltd. in Folsom, California for analysis.

CRA staff sampled the soil vapor probes V-1 through V-11 on October 22 and 23, 2008.

2.10 SOIL VAPOR SAMPLING ANALYSIS

Soil vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA Method TO-3 (modified) and benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tertiary-butyl ether (MTBE), tertiary-butyl alcohol (TBA), and tracer compounds isobutane (reported as 2-methylpropane), butane, and propane (as tentatively identified compounds [TICs]) by modified EPA Method TO-15. These tracer compounds were identified by EPA Method TO-15 analysis as the most abundant compounds of the specific shaving cream. The laboratory notes that the identification of TICs is based on presumptive evidence, and that their values are estimated.

2.1.11 DISPOSAL

Soil and rinse water generated during field activities were stored on site, in 55-gallon drums, sampled, and profiled for disposal. Waste disposal confirmation documentation is pending and will be provided by CRA upon request.

3.0 SOIL VAPOR PROBE SAMPLING RESULTS

Soil vapor samples collected on October 22 and 23, 2008 contained up to 51,000,000 micrograms per cubic meter (µg/m^3) TPHg (V-3), 8,300 µg/m^3 benzene (V-2), 9,800 µg/m^3 ethylbenzene (V-2), and 7,700 µg/m^3 xylenes (V-2).

Table 1 summarizes the soil vapor analytical data. TPHg, benzene, and MTBE results are shown on Figure 2, and the laboratory analytical reports are presented in Appendix D.

3.1 LEAK TESTING

Leak testing was performed, and isobutane(reported as 2-methylpropane) was detected in seven of the samples. The concentrations of isobutane (0.40 to 53 parts per million by volume [ppmv]) and other TICs reported in probes V-1 and V-3 through V-6 appear to indicate leakage. As shown in the following table, the TICs present in shaving cream used for leak testing, are likely contributing to the TPHg result in these samples.

Sample	EPA Method TO-15 Total TIC result (ppmv)	EPA Method TO-3 TPHg result (ppmv)
V-1	60	82
V-3	8,600	12,000[a]
V-4	730	1,000
V-5	450	580
V-6	1,100	1,300

[a] = Exceeds quality control limits, possibly due to matrix effects.

The highest isobutane concentration in the remaining samples was 0.024 ppmv in the sample from probe V-10, an amount considered negligible when compared with the amount in the tracer gas compound (approximately 150 ppmv in shaving cream).

The laboratory analytical reports for TICs are presented in Appendix D.

4.0 STATUS OF PROPOSED OFF-SITE WELL INSTALLATION

As of November 11, 2008, construction of the parking lot on the adjacent property (4340 Bond Street) was underway. According to workers on the site it was due to be finished in a few weeks. CRA will proceed with the proposed well and vapor probe installations following the completion of construction.

5.0 CONCLUSIONS AND RECOMMENDATIONS

TPHg concentrations in soil vapor samples from probes V-1 through V-6 collected during the October 22 and 23, 2008 sampling event exceeded San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential and commercial land use. Benzene detections in probes V-2 and V-3 and the ethylbenzene detection in probe V-2 also exceeded the RWQCB ESLs.

All soil vapor sample concentrations for toluene, xylenes, MTBE and TBA are below the residential land use RWQCB ESLs.

Due to the leak testing results, CRA proposes to resample soil vapor probes V-1 and V-3 through V-6.

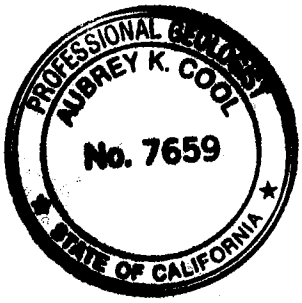
As discussed in ACHCSA's August 15, 2008 letter, since the results of this soil vapor sampling event are similar to the previous two events and some petroleum hydrocarbon detections exceed commercial ESLs, CRA will consider options for evaluating human health risks due to soil vapor intrusion. A proposal will be included with an addendum report documenting the results of the resampling of soil vapor probes V-1 and V-3 through V-6.

CRA will proceed with the installation of off-site wells S-10 through S-12 and off-site soil vapor probe V-12 when construction is completed on the adjacent site. CRA recommends an additional round of sampling the soil vapor probes following the off-site installations.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

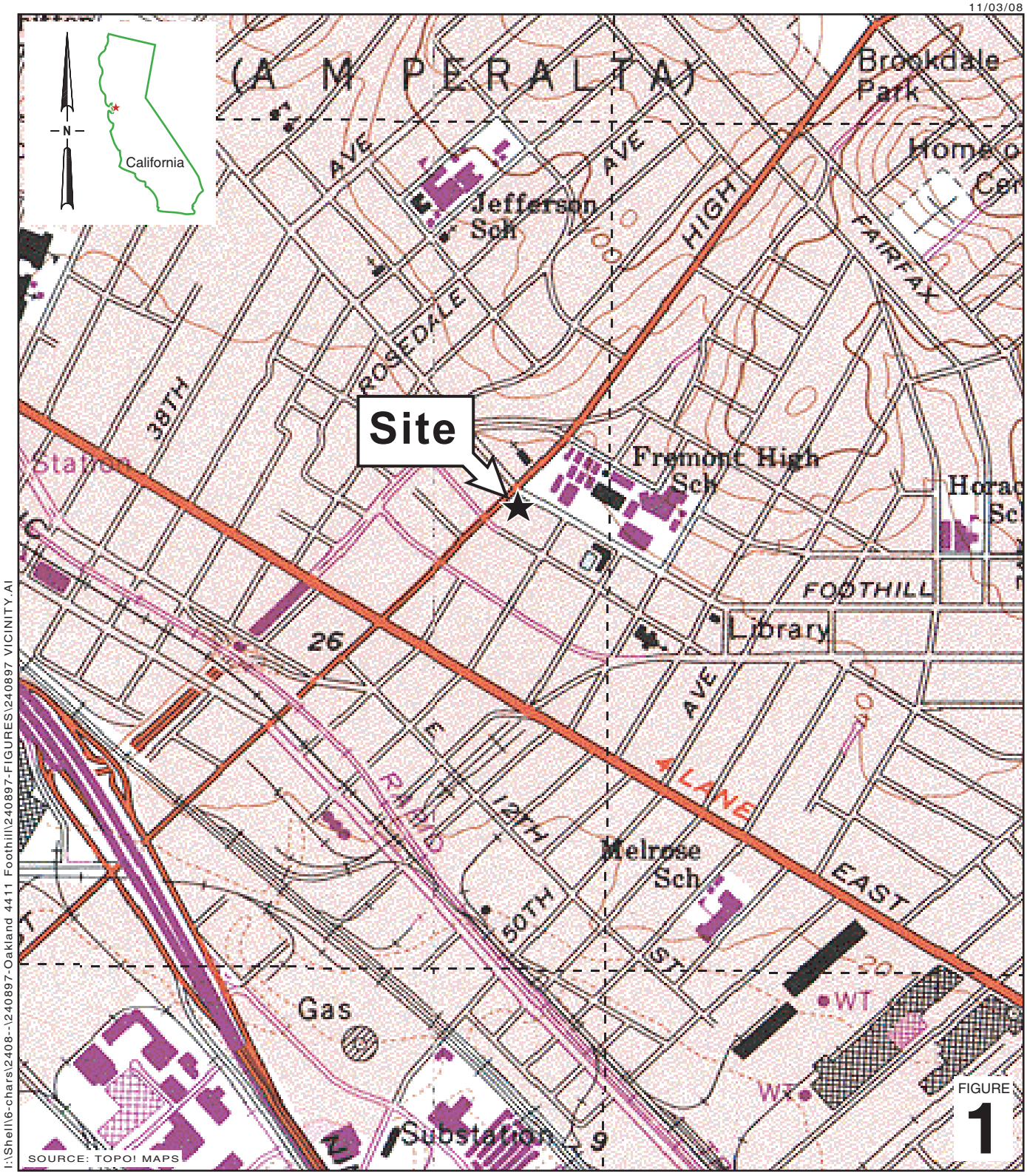
Peter Schaefer, CEG, CHG
Project Manager

Aubrey K. Cool, PG
Professional Geologist



FIGURES

11/03/08



I:\Shell\6-chars\2408--\240897-Oakland 4411 Foothill\240897-FIGURES\240897 VICINITY.AI

FIGURE 1

0 1/6 1/3 1/2 1

SCALE : 1" = 1/6 MILE

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

11/12/08

Soil Vapor Chemical Concentration Map

October 22 and 23, 2008

EXPLANATION

- V-12 — Proposed soil vapor probe
- S-10 — Proposed monitoring well location
- S-6 — Monitoring well location
- S-1 — Destroyed monitoring well location
- BW-A — Destroyed tank backfill well location
- Electrical line (E)
- Telecommunications line (T)
- Gas line (GAS)
- Water line (W)
- Sanitary Sewer line (SAN)
- Storm drain line (STM)
- FH — Fire hydrant
- CB — Catch basin
- Manhole
- Power pole
- Flow direction

Well — Well ID
TPHg
Benzene
MTBE — TPHg, benzene, and MTBE concentrations are in micrograms per cubic meter

Notes:
<x = Not detected at reporting limit x

HIGH STREET

FOOTHILL BOULEVARD

4411 Foothill

Former Shell Station
4411 Foothill

BLDG. A

Wood Moulding & Doors
4413 Foothill

Laundromat

Former Dispenser Islands

Third-Generation USTs (1984 to 2002)

Former W/O UST (removed 2002)

Former Dispenser Islands

4415 Foothill

4417 Foothill

BLDG. B

4419 Foothill

Jackson & Hewitt Tax Services
4421 Foothill

Nails & Spa
4423 Foothill

Former Building

Restaurant

First- and Second-Generation USTs (~1958 to 1984)

parking

parking

Residential
1724 High St.

Residential
4320 Bond St.

V-1	340,000	V-2	5,000,000	V-3	51,000,000	V-4	4,300,000	V-5	2,400,000	V-6	5,400,000
	<45		8,300		4,200		270		<340		<970
	<51		<360		<4,400		<230		<380		<1,100

V-7	3,700	V-8	7,000	V-9	870	V-10	280	V-11	<220	V-12	
	<2,6		<3,8		<3,7		<4,2		<3,5		
	<2,9		<4,3		<4,2		<4,8		<4,0		

N

0 10 20 40

Scale (ft)

FIGURE

2

Former Shell Service Station
4411 Foothill Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

I:\Shell\6-chars\2408-\240897-Oakland 4411 Foothill\240897-FIGURES\240897 3Q08-VAPOR.DWG

TABLES

TABLE 1

SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Depth (fbg)*	*Date*	*TPHg µg/m³*	*Benzene µg/m³*	*Toluene µg/m³*	*Ethylbenzene µg/m³*	*Total Xylenes µg/m³*	*MTBE µg/m³*	*TBA µg/m³*
V-1	4.5-4.8	1/14/2008	**16,000,000**	**<1,200**	<1,400	<1,700	<5,000	<5,500	<4,600
V-1	4.5-4.8	6/26/2008	**1,000,000**	**<160**	<190	<220	<220	<180	<610
V-1	4.5-4.8	10/22/2008	**340,000**	<45	<53	<61	<120	<51	<170
V-2	4.5-4.8	1/14/2008	**15,000,000**	**9,000**	<1,100	**20,000**	7,700	<4,100	<3,500
V-2	4.5-4.8	5/22/2008	**8,300,000**	**7,000**	2,400	**5,600**	<1,400	<1,200	<4,000
V-2	4.5-4.8	10/22/2008	**5,000,000b**	**8,300**	<380	**9,800**	7,700	<360	<1,200
V-3	4.5-4.8	1/14/2008	**20,000,000**	**3,800**	<2,800	<3,300	<9,800	<11,000	<9,100
V-3	4.5-4.8	5/22/2008	**22,000,000**	**1,600**	1,700	<1,300	<1,300	<1,100	<3,700
V-3	4.5-4.8	10/22/2008	**51,000,000b**	**4,200**	<4,600	**<5,200**	<10,000	<4,400	<15,000
V-4	4.5-4.8	1/14/2008	**1,300,000**	<150	<180	<210	<620	<680	<570
V-4	4.5-4.8	6/26/2008	**980,000**	<160	<190	<220	<220	<180	<620
V-4	4.5-4.8	10/22/2008	**4,300,000**	270	<240	<280	<560	<230	<780
V-5	4.5-4.8	1/14/2008	**2,500,000**	**<290**	<340	<400	<1,190	<1,300	<1,100
V-5	4.5-4.8	5/22/2008	**3,300,000**	**<1,600**	3,100	<2,200	<2,200	<1,800	<6,100
V-5	4.5-4.8	10/22/2008	**2,400,000**	**<340**	<400	<460	<920	<380	<1,300
V-6	4.5-4.8	1/14/2008	**15,000,000**	**9,100**	<270	<310	<930	<1,000	<860
V-6	4.5-4.8	5/22/2008	**2,300,000**	<130	<150	<180	<180	<140	<490
V-6	4.5-4.8	10/22/2008	**5,400,000**	**<970**	<1,100	<1,300	<2,600	<1,100	<3,700
V-7	4.5-4.8	1/14/2008	**170,000**	<19	<22	<25	<76	<84	<71
V-7	4.5-4.8	5/22/2008	790	<4.2	<5.0	<5.7	<5.7	<4.8	<16
V-7	4.5-4.8	10/22/2008	3,700	<2.6	<3.0	26	120	<2.9	<9.8
V-8	5.0-5.2	10/23/2008	7,000	<3.8	<4.5	<5.2	<10	<4.3	<14
V-9	5.0-5.2	10/23/2008	870	<3.7	<4.4	<5.0	<10	<4.2	>14
V-10	4.5-4.8	1/14/2008	Unable to sample due to water in sample tube						
V-10	4.5-4.8	5/22/2008	750	<4.1	<4.9	<5.6	<5.6	<4.6	<16
V-10	4.5-4.8	10/23/2008	280	<4.2	<5.0	<5.7	<11	<4.8	<16
V-11	4.5-4.8	1/14/2008	18,000	<2.2	5	<3.0	<8.9	<9.8	<8.2
V-11	4.5-4.8	6/26/2008	<260	<4.0	<4.8	<5.5	<5.5	<4.6	<15
V-11	4.5-4.8	10/23/2008	<220	<3.5	<4.1	<4.8	<9.6	<4.0	<13
Ambient Air	NA	1/14/2008	<17,000	<2.4	4	<3.2	<9.7	<11	<9.0
SFBRWQCB ESLs for Shallow Soil Gas [a]	**Commercial Land Use**	**29,000**	**280**	**180,000**	**3,300**	**58,000**	**31,000**	**NA**
	Residential Land Use	**10,000**	**84**	**63,000**	**980**	**21,000**	**9,400**	**NA**

TABLE 1

SOIL VAPOR ANALYTICAL DATA
FORMER SHELL SERVICE STATION
4411 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method TO-3 GC/FID
Benzene, toluene, ethylbenzene and total xylenes by modified EPA Method TO-15
MTBE = Methyl-tertiary butyl ether by modified EPA Method TO-15
TBA = Tertiary-butyl alcohol (TBA) by Modified EPA Method TO-15
fbg = Feet below grade
$\mu g/m^3$ = Micrograms per cubic meter
<x = Not detected at reporting limit x
ESL = Environmental screening level
SFBRWQCB = San Francisco Bay Regional Water Quality Control Board
NA = Not applicable or not available
Results in **bold** exceed Environmental Screening Level for commercial land use

a = From Table E of SFBRWQCB ESLs. Ref: Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - Interim Final - November 2007 (Revised May 2008).
b = Exceeds quality control limits, possibly due to matrix effects.

APPENDIX A

SITE HISTORY

SITE HISTORY

1958 UST Piping Leak: On April 19, 1958, a gasoline shortage was discovered at the operating Shell station. It was determined that there was a piping leak into a concrete pump pit and then into the soil in the vicinity of the storage tanks. Separate phase hydrocarbons (SPHs) were found in an irrigation well located at 4320 Bond Street, adjacent to the Shell site. Shell installed 22 8-inch wells to depths of 15 feet below grade (fbg) along the property boundary and 1 well within the tank complex. Groundwater was pumped from the wells, and the extracted water was transported to a separator. Though the volume of the release is not known, Shell reported in a June 2, 1958 letter to Traveler's Insurance Company that they recovered 650 gallons of gasoline from the wells.

1971 UST Removal and Replacement: A Shell document dated July 15, 1971 notes plans to remove the existing 6,000-gallon underground storage tanks (USTs). An invoice dated September 17, 1971 indicates the delivery of one 10,000-gallon UST, one 8,000-gallon UST, and one 550-gallon underground waste oil tank.

1977 Dispenser Piping Leak: A Shell Oil Company Spill Report dated October 19, 1977 documents the release of 2,000 gallons of gasoline from a leaking pipe that ran from the USTs to the dispenser located closest to High Street. The report noted that the damaged section of pipe was replaced and that leak detectors were installed on all systems.

1984 UST Removal and Replacement: A Shell purchase order dated October 1, 1984 indicates the removal of the then-existing USTs and installation of three 10,000-gallon fiberglass USTs.

1991 Waste Oil Tank Leak: On June 5, 1991, Shell submitted to Alameda County Health Care Services Agency (ACHCSA) an Underground Storage Tank Unauthorized Release Report detailing a release from the 550-gallon waste oil tank at the site. The report stated that the release was caused by tank failure, that the volume of release was unknown, and that the contents of the tank had been removed.

1992 Waste Oil Tank Removal: A 550-gallon waste oil tank was removed on February 5, 1992. A soil sample was collected at the bottom of the excavation at a depth of approximately 11 fbg. No total petroleum hydrocarbons as gasoline (TPHg), total petroleum hydrocarbons as diesel (TPHd), benzene, toluene, ethylbenzene and xylenes (BTEX), oil and grease, halogenated volatile organic compounds, or metals were detected in the sample. Total lead was detected at 6.7 milligrams per kilogram (mg/kg). Details of the waste oil tank removal and sampling activities are presented in a March 26, 1992 GeoStrategies Inc. (GeoStrategies) report.

1992 Monitoring Well Installation: A single monitoring well (S-1) was installed in the vicinity of the waste oil tank location. Details of this well installation are presented in the GeoStrategies' January 19, 1993 *Monitoring Well Installation Report*.

1993 Monitoring Well Installation: Hydro Environmental Technologies, Inc. (HETI) installed monitoring wells S-2 and S-3 on May 21, 1993. Well installation details are presented in HETI's July 22, 1993 report.

1995 Soil and Groundwater Investigation: Pacific Environmental Group (PEG) of San Jose, California conducted a Geoprobe® investigation in June 1995. The investigation consisted of advancing eight on-site soil borings and two off-site borings to collect soil and groundwater samples. PEG's September 12, 1995 *Site Investigation* report presents investigation details.

1998 Product Equipment Upgrades: In November 1998, Paradiso Mechanical (Paradiso) of San Leandro, California upgraded the service station by adding secondary containment to the gasoline turbines and dispensers. Details of dispenser upgrade and sampling activities are presented in Cambria Environmental Technology Inc.'s (Cambria's) November 30, 1998 *Dispenser Soil Sampling Report*.

September 1999 Oxygen Releasing Compound (ORC) remediation: ORC socks were installed in wells S-1, S-2, and BW-A.

December 1999 Site Conceptual Model (SCM) and Conduit Study: A subsurface conduit study identified several conduits, which may provide limited preferential groundwater flow at times of shallow groundwater depth.

January 2000 Monitoring Well Installation: Cambria installed one well (S-4) adjacent to the southeast corner of the station building. The maximum TPHd and TPHg concentrations were 27.2 mg/kg and 28.2 mg/kg, respectively. Investigation details are contained in Cambria's November 17, 2000 Site Investigation Report.

February 2000 Sensitive Receptor Survey (SRS): A SRS conducted by Cambria identified 58 monitoring, test, or industrial wells located within a ½-mile radius of the site. No municipal, domestic, or irrigation wells were identified.

November 2001 Corrective Action Plan (CAP): On November 12, 2001, Cambria submitted a CAP in preparation for impending site demolition and fueling facility removal. In the CAP, Cambria discussed remedial alternatives and made remedial action recommendations. Cambria recommended additional on-site over-excavation, following removal of the underground facilities, to substantially remove residual impacted soils from within the property boundaries. Cambria also recommended removing groundwater from the excavation, and placing ORC at the base of the excavation to enhance biological degradation of residual-impacted soil and groundwater. Continued quarterly groundwater monitoring was recommended to track the subsequent natural attenuation process.

February 2002 UST Removal: Paradiso removed the gasoline USTs and hydraulic hoists, and over-excavated approximately 1,250 cubic yards of impacted soil around and beneath the USTs, product dispenser islands, and hydraulic hoists. Phillips Services Corporation extracted approximately 16,000 gallons of groundwater from the excavation pits. Following over-excavation, Paradiso placed 810 pounds of ORC powder on the bottom of the excavation. Details of the fuel facilities removal and corrective action are presented in Cambria's February 25, 2002 Underground Storage Tank Closure Report.

May 2002 Well Installation: In May 2002, Cambria installed one groundwater monitoring well (S-5). The well installation is described in Cambria's July 2, 2002 Monitoring Well Installation Report.

2005 Subsurface Investigation Work Plan and SCM: In response to a request in a June 10, 2005 letter from ACHCSA, Cambria submitted a Subsurface Investigation Work Plan and Site Conceptual Model on August 16, 2005. In anticipation of site redevelopment, Cambria recommended destroying all on-site wells, and replacing them after site development was completed.

2005 Well Destructions: In anticipation of redevelopment of the site, Cambria destroyed wells S-1 through S-5 on July 14, 2005. The well destructions were completed in accordance with Alameda County Public Works Agency and San Francisco Regional Water Quality Control Board guidelines. The well destructions are described in Cambria's August 19, 2005 Well Destruction Report.

2005 Subsurface Investigation and Over-Excavation: In August 2005, Cambria advanced two soil borings to investigate the extent of petroleum-hydrocarbon-impacted soil and groundwater from the 1958 piping leak. Borings TB-1 and TB-3 contained concentrations of up to 1,600 mg/kg TPHg in soil and 180,000 micrograms per liter (µg/l) TPHg, 22,000 µg/l benzene, 9,700 µg/l toluene, 5,200 µg/l ethylbenzene, 25,000 µg/l total xylenes, and 13.4 µg/l lead in groundwater. Because the former UST area was located within the proposed footprint of a new building to be constructed at the site, Cambria excavated soil to the extent feasible in order to remove hydrocarbon-impacted soil beneath the building prior to site redevelopment. The excavation was completed to dimensions of 20 feet long by 25 feet wide by 20 feet deep. Following excavation, Cambria collected one confirmation soil sample from each sidewall and two soil samples from the excavation base. The maximum concentrations in the excavation samples were 0.050 mg/kg benzene, 0.0083 mg/kg ethylbenzene, 0.040 mg/kg xylenes, and 0.023 mg/kg di-isopropyl ether. TPHg, toluene, MTBE and tertiary-butyl alcohol (TBA) were not detected in the excavation samples. No water was observed in the bottom of the excavation. The activities are described in their entirety in Cambria's November 16, 2005 Subsurface Investigation and Over-Excavation Report.

2006 Subsurface Investigation for Replacement Wells: In May 2006, Cambria advanced five soil borings (SB-5 through SB-8, and SB-12) at the site to assess the vertical profile of subsurface contamination. Petroleum hydrocarbons were found in soils in the vicinity of the former USTs, dispensers, and product piping, to depths above approximately 15 fbg. Historical maximum concentrations of petroleum

constituents in soils are 3,100 mg/kg TPHg, 244 mg/kg TPHd, 9.6 mg/kg benzene, and 2.5 mg/kg MTBE. The vertical extent of petroleum constituents in groundwater at the site was defined by the groundwater results from boring SB-12, located just down gradient of the first- and second-generation USTs. The results from the groundwater sample from 31 to 35 fbg in this boring indicated that the petroleum constituent concentrations attenuate by one to two orders of magnitude with depth. The activities are described in Cambria's July 25, 2005 Subsurface Investigation Report and Monitoring Well Installation Work Plan.

2007 Subsurface Investigation to Install Replacement Wells: Conestoga-Rovers & Associates (CRA) installed four replacement wells (S-6 through S-9) at locations determined by the findings of Cambria's July 25, 2005 Subsurface Investigation Report and Monitoring Well Installation Work Plan. Low concentrations of TPHd, TPHg, benzene, MTBE, and TBA were found in soils extending into the groundwater interface. Concentrations of TPHd, TPHg, BTEX, and MTBE were reported in the groundwater samples from all four wells. Additionally, concentrations of TBA and 1,2-dichlorethane (1,2-DCA) were reported in all wells except S-9. The maximum concentrations of TPHg and benzene were detected in the sample from well S-7 (March 2007) at 100,000 and 32,000 µg/l, respectively. The activities are described in CRA's April 19, 2007 Site Investigation and First Quarter 2007 Groundwater Monitoring Report.

2007 Soil Vapor Investigation: CRA installed nine on-site soil vapor probes (V-1 through V-7, V-10, and V-11) at depths of approximately 5 fbg. The probe installation details are presented in CRA's March 13, 2008 Soil Vapor Probe Installation and Sampling Report.

2008 Soil Vapor Monitoring: CRA conducted two rounds of soil vapor monitoring utilizing the nine on-site soil vapor probes. TPHg, benzene, and ethylbenzene were detected at concentrations exceeding San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for shallow soil gas with commercial land use. The monitoring results are presented in CRA's March 13, 2008 Soil Vapor Probe Installation and Sampling Report.

Groundwater Monitoring Program: Groundwater has been monitored at the site since December 1992. Groundwater depths have ranged from approximately 6 to 12 fbg. The calculated groundwater gradient typically trends southwesterly at approximately 0.12 feet per foot (ft/ft). During the third quarter 2008 sample event, maximum concentrations were 120,000 µg/l TPHg (S-7), 7,100 µg/l TPHd (S-6), 25,000 µg/l benzene (S-7), and 210 µg/l MTBE (S-8).

APPENDIX B

PERMIT

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 09/09/2008 By jamesy

Permit Numbers: W2008-0624
Permits Valid from 10/09/2008 to 10/14/2008

Application Id:	1219870779219	**City of Project Site:**	Oakland
Site Location:	4411 Foothill Blvd./strip mall		
Project Start Date:	10/09/2008	**Completion Date:**	10/09/2008
Requested Inspection:	10/09/2008		
Scheduled Inspection:	10/09/2008 at 2:30 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)		
Extension Start Date:	10/09/2008	**Extension End Date:**	10/14/2008
Extension Count:	1	**Extended By:**	vickyh1

Applicant:	Conestoga-Rovers & Associates - Peter Schaefer 5900 Hollis Street, Suite A, Emeryville, CA 94608	**Phone:** 510-420-0700
Property Owner:	Bill Phwa P.O. Box 10664, Oakland, CA 94610	**Phone:** 510-761-3333
Client:	Denis Brown -Project Manager Shell Oil Products US 20945 S. Wilmington Ave, Carson, CA 90810	**Phone:** 707-865-0251
Contact:	Lauren Goldfinch	**Phone:** 510-420-3371 **Cell:** 510-385-2638

Total Due: $230.00
Receipt Number: WR2008-0311 **Total Amount Paid:** $230.00
Payer Name : Conestoga-Rovers & Paid By: CHECK **PAID IN FULL**
Associates

Works Requesting Permits:

Remediation Well Construction-Vapor Remediation Well - 2 Wells
Driller: WDC Exploration - Lic #: 283326 - Method: other **Work Total: $230.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2008-0624	09/09/2008	01/07/2009	V-8	3.50 in.	0.50 in.	4.00 ft	5.50 ft
W2008-0624	09/09/2008	01/07/2009	V-9	3.50 in.	0.50 in.	4.00 ft	5.50 ft

Specific Work Permit Conditions

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

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

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755

(Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

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

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

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

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

APPENDIX C

BORING LOGS

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-8
JOB/SITE NAME	Former Shell Branded Service Station	**DRILLING STARTED**	14-Oct-08
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Oct-08
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	WDC	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	5"	**SCREENED INTERVALS**	5 to 5.2 fbg
LOGGED BY	L. Goldfinch	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							CONCRETE	0.8	Flush-grade 5" well box
					GW GC		**Well-graded Gravel with Clay and Sand (GW-GC)** dark grayish brown (2.5Y 4/2); moist; 10% clay, 25% fine to coarse sand, 65% fine to coarse gravel.	2.0	1/4" diam., Teflon Tubing; concrete
				5	GC		**Clayey GRAVEL with Sand (GC)** very dark grayish brown (10YR 3/2); moist; 20% clay, 25% fine to coarse sand, 55% fine to coarse gravel.	5.2	Bentonite Slurry with Pellet Base; #2/16 Sand; 2" length of inert vapor probe filter; Bottom of Boring @ 5.2 fbg

WELL LOG (PID) I:\SHELL.TEMP\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-PRE-SEPTEMBER 2008\GINT\0897.GPJ DEFAULT.GDT 10/15/08

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	V-9
JOB/SITE NAME	Former Shell Branded Service Station	**DRILLING STARTED**	14-Oct-08
LOCATION	4411 Foothill Blvd, Oakland, California	**DRILLING COMPLETED**	14-Oct-08
PROJECT NUMBER	240897	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	WDC	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Airknife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	5"	**SCREENED INTERVALS**	4.8 to 5 fbg
LOGGED BY	L. Goldfinch	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					GW		**Well-graded Gravel with Sand (GW)** brown (10YR 4/3); dry; 20% fine to coarse sand, 80% fine to coarse gravel.		Flush-grade 5" well box
									1/4" diam., Teflon Tubing
								2.0	concrete
					GW		**Well-graded GRAVEL(GW)** brown (10YR 5/3); dry; 10% fine to coarse sand, 90% fine to coarse gravel.		Bentonite Slurry with Pellet Base
									#2/16 Sand
				5				5.0	2" length of inert vapor probe filter
									Bottom of Boring @ 5 fbg

WELL LOG (PID) I:\SHELL TEMP\6-CHARS\2408--\240897-OAKLAND 4411 FOOTHILL\240897-PRE-SEPTEMBER 2008\GINT\0897.GPJ DEFAULT.GDT 10/15/08

APPENDIX D

LABORATORY ANALYTICAL REPORTS

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABRATORY

11/6/2008

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

Project Name: 4411 Foothill Blvd, Oakland
Project #: 240612-010

Dear Mr. Peter Schaefer

The following report includes the data for the above referenced project for sample(s) received on 10/24/2008 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 you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori
Project Manager

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810580B

Work Order Summary

CLIENT:	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	240612-010 4411 Foothill Blvd, Oakland
DATE RECEIVED:	10/24/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/06/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	V-5	Modified TO-3	9.5 "Hg	15 psi
02A	V-6	Modified TO-3	5.0 "Hg	15 psi
03A	V-6 DUP	Modified TO-3	6.0 "Hg	15 psi
04A	V-7	Modified TO-3	5.0 "Hg	15 psi
04AA	V-7 Lab Duplicate	Modified TO-3	5.0 "Hg	15 psi
05A	V-4	Modified TO-3	6.5 "Hg	15 psi
06A	V-3	Modified TO-3	5.0 "Hg	15 psi
07A	V-2	Modified TO-3	5.0 "Hg	15 psi
08A	V-1	Modified TO-3	8.5 "Hg	15 psi
09A	Lab Blank	Modified TO-3	NA	NA
10A	LCS	Modified TO-3	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 11/06/08

Laboratory Director

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

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

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 0810580B

Eight 1 Liter Summa Canister (100% Certified) samples were received on October 24, 2008. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppbv result to ug/m3.

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The recovery of surrogate Fluorobenzene in samples V-3 and V-2 was outside control limits due to high level hydrocarbon matrix interference. Data is reported as qualified.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.

J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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

Client Sample ID: V-5

Lab ID#: 0810580B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	4600	580000	19000	2400000

Client Sample ID: V-6

Lab ID#: 0810580B-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	6000	1300000	25000	5400000

Client Sample ID: V-6 DUP

Lab ID#: 0810580B-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	5000	1300000	21000	5200000

Client Sample ID: V-7

Lab ID#: 0810580B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	920	250	3700

Client Sample ID: V-7 Lab Duplicate

Lab ID#: 0810580B-04AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	900	250	3700

Client Sample ID: V-4

Lab ID#: 0810580B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	4300	1000000	18000	4300000

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

Client Sample ID: V-3

Lab ID#: 0810580B-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	24000	12000000	99000	51000000

Client Sample ID: V-2

Lab ID#: 0810580B-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	2000	1200000	8200	5000000

Client Sample ID: V-1

Lab ID#: 0810580B-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	280	82000	1200	340000

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-5

Lab ID#: 0810580B-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102914**	**Date of Collection: 10/22/08**	
Dil. Factor:	**185**	**Date of Analysis: 10/29/08 06:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	4600	580000	19000	2400000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	94	75-150

Client Sample ID: V-6

Lab ID#: 0810580B-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102915**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**242**	**Date of Analysis:**	**10/29/08 06:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	6000	1300000	25000	5400000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	111	75-150

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-6 DUP

Lab ID#: 0810580B-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102916**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**202**	**Date of Analysis:**	**10/29/08 07:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	5000	1300000	21000	5200000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	113	75-150

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-7

Lab ID#: 0810580B-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102917**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**2.42**	**Date of Analysis:**	**10/29/08 07:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	920	250	3700

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	82	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-7 Lab Duplicate

Lab ID#: 0810580B-04AA

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102919**	**Date of Collection: 10/22/08**	
Dil. Factor:	**2.42**	**Date of Analysis: 10/29/08 09:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	900	250	3700

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	81	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-4

Lab ID#: 0810580B-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102918**	**Date of Collection: 10/22/08**	
Dil. Factor:	**172**	**Date of Analysis: 10/29/08 08:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	4300	1000000	18000	4300000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	115	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-3

Lab ID#: 0810580B-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102913**	**Date of Collection: 10/22/08**	
Dil. Factor:	**968**	**Date of Analysis: 10/29/08 05:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	24000	12000000	99000	51000000

Q = Exceeds Quality Control limits, possibly due to matrix effects.

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	191 Q	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-2

Lab ID#: 0810580B-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102920**	**Date of Collection: 10/22/08**	
Dil. Factor:	**80.7**	**Date of Analysis: 10/29/08 09:34 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	2000	1200000	8200	5000000

Q = Exceeds Quality Control limits, possibly due to matrix effects.

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	244 Q	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-1

Lab ID#: 0810580B-08A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102921**	**Date of Collection: 10/22/08**	
Dil. Factor:	**11.3**	**Date of Analysis: 10/29/08 10:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	280	82000	1200	340000

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	121	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810580B-09A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102905**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/29/08 10:35 AM**	

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)	89	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810580B-10A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**6102903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/29/08 08:57 AM**	

Compound	%Recovery
TPH (Gasoline Range)	99

Container Type: NA - Not Applicable

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABRATORY

11/10/2008

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

Project Name: 4411 Foothill Blvd, Oakland
Project #: 240612-010

Dear Mr. Peter Schaefer

The following report includes the data for the above referenced project for sample(s) received on 10/24/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 (5&20 ppbv)/TICs 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 you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori
Project Manager

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810580A

Work Order Summary

CLIENT:	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	240612-010 4411 Foothill Blvd, Oakland
DATE RECEIVED:	10/24/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:			

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	V-5	Modified TO-15 (5&20 ppbv)/	9.5 "Hg	15 psi
02A	V-6	Modified TO-15 (5&20 ppbv)/	5.0 "Hg	15 psi
03A	V-6 DUP	Modified TO-15 (5&20 ppbv)/	6.0 "Hg	15 psi
04A	V-7	Modified TO-15 (5&20 ppbv)/	5.0 "Hg	15 psi
05A	V-4	Modified TO-15 (5&20 ppbv)/	6.5 "Hg	15 psi
06A	V-3	Modified TO-15 (5&20 ppbv)/	5.0 "Hg	15 psi
06AA	V-3 Lab Duplicate	Modified TO-15 (5&20 ppbv)/	5.0 "Hg	15 psi
07A	V-2	Modified TO-15 (5&20 ppbv)/	5.0 "Hg	15 psi
08A	V-1	Modified TO-15 (5&20 ppbv)/	8.5 "Hg	15 psi
09A	Lab Blank	Modified TO-15 (5&20 ppbv)/	NA	NA
09B	Lab Blank	Modified TO-15 (5&20 ppbv)/	NA	NA
10A	CCV	Modified TO-15 (5&20 ppbv)/	NA	NA
10B	CCV	Modified TO-15 (5&20 ppbv)/	NA	NA
11A	LCS	Modified TO-15 (5&20 ppbv)/	NA	NA
11B	LCS	Modified TO-15 (5&20 ppbv)/	NA	NA

CERTIFIED BY: Linda A. Truman DATE: 11/10/08

Laboratory Director

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

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

LABORATORY NARRATIVE
Modified TO-15 Std & Soil Gas
Conestoga-Rovers Associates (CRA)
Workorder# 0810580A

Eight 1 Liter Summa Canister (100% Certified) samples were received on October 24, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples V-5, V-6 and V-2 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: V-5

Lab ID#: 0810580A-01A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	9600 N J
Butane, 2,3-dimethyl-	79-29-8	56%	23000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	24000 N J
Heptane, 3-methyl-	589-81-1	64%	8800 N J
Pentane, 2,3-dimethyl-	565-59-3	91%	35000 N J
Hexane, 2,2-dimethyl-	590-73-8	83%	200000 N J
Butane	106-97-8	9.0%	940 N J
Cyclopentane, 1,2,4-trimethyl-, (1.alpha	16883-48-0	91%	6300 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	69000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	83%	60000 N J
Hexane, 2,2,4-trimethyl-	16747-26-5	83%	12000 N J
Propane, 2-methyl-	75-28-5	64%	1900 N J

Client Sample ID: V-6

Lab ID#: 0810580A-02A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	230000 N J
Pentane	109-66-0	90%	62000 N J
Pentane, 2-methyl-	107-83-5	91%	200000 N J
Pentane, 3-methyl-	96-14-0	86%	61000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	92000 N J
Pentane, 2,3-dimethyl-	565-59-3	58%	130000 N J
Hexane, 3-methyl-	589-34-4	80%	55000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	140000 N J
Butane	106-97-8	50%	80000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	44000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	45000 N J
Propane, 2-methyl-	75-28-5	59%	25000 N J

Client Sample ID: V-6 DUP

Lab ID#: 0810580A-03A

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: V-6 DUP

Lab ID#: 0810580A-03A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	200000 N J
Pentane	109-66-0	90%	55000 N J
Pentane, 2-methyl-	107-83-5	91%	180000 N J
Pentane, 3-methyl-	96-14-0	86%	54000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	82000 N J
Pentane, 2,3-dimethyl-	565-59-3	58%	140000 N J
Heptane, 4-methyl-	589-53-7	50%	49000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	130000 N J
Butane	106-97-8	50%	69000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	41000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	83%	42000 N J
Propane, 2-methyl-	75-28-5	86%	22000 N J

Client Sample ID: V-7

Lab ID#: 0810580A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethyl Benzene	0.80	6.0	3.5	26
m,p-Xylene	0.80	23	3.5	99
o-Xylene	0.80	5.4	3.5	24

Client Sample ID: V-4

Lab ID#: 0810580A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	64	86	210	270

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	99000 N J
Pentane	109-66-0	90%	20000 N J
Butane, 2,3-dimethyl-	79-29-8	64%	100000 N J
Pentane, 2,2,3-trimethyl-	564-02-3	56%	40000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	56000 N J

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

Client Sample ID: V-4

Lab ID#: 0810580A-05A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Pentane, 2,3-dimethyl-	565-59-3	91%	84000 N J
Heptane, 4-methyl-	589-53-7	64%	25000 N J
Heptane, 2,2,4,6,6-pentamethyl-	13475-82-6	64%	160000 N J
Butane	106-97-8	42%	25000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	58000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	58000 N J
Propane, 2-methyl-	75-28-5	80%	7800 N J

Client Sample ID: V-3

Lab ID#: 0810580A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1200	1300	3900	4200

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	1000000 N J
Pentane	109-66-0	90%	530000 N J
Pentane, 2-methyl-	107-83-5	91%	1500000 N J
Pentane, 3-methyl-	96-14-0	86%	720000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	580000 N J
Cyclopentane, methyl-	96-37-7	90%	760000 N J
Hexane, 2-methyl-	591-76-4	76%	440000 N J
Hexane, 2,2,5,5-tetramethyl-	1071-81-4	50%	1100000 N J
Pentane, 3-ethyl-	617-78-7	72%	680000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	840000 N J
Butane	106-97-8	50%	380000 N J
Propane, 2-methyl-	75-28-5	72%	53000 N J

Client Sample ID: V-3 Lab Duplicate

Lab ID#: 0810580A-06AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	600	1100	1900	3500

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

Client Sample ID: V-3 Lab Duplicate

Lab ID#: 0810580A-06AA

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	770000 N J
Pentane	109-66-0	90%	420000 N J
Pentane, 2-methyl-	107-83-5	91%	1100000 N J
Pentane, 3-methyl-	96-14-0	86%	540000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	420000 N J
Cyclopentane, methyl-	96-37-7	90%	570000 N J
Hexane, 2-methyl-	591-76-4	76%	350000 N J
Hexane, 2,2,5,5-tetramethyl-	1071-81-4	50%	890000 N J
Pentane, 3-ethyl-	617-78-7	59%	520000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	610000 N J
Butane	106-97-8	53%	300000 N J
Propane, 2-methyl-	75-28-5	86%	40000 N J

Client Sample ID: V-2

Lab ID#: 0810580A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	100	2600	320	8300
Ethyl Benzene	100	2300	440	9800
m,p-Xylene	100	1600	440	7000
o-Xylene	100	170	440	720

Client Sample ID: V-1

Lab ID#: 0810580A-08A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane, 2-methyl-	78-78-4	86%	9800 N J
Pentane	109-66-0	90%	1400 N J
Pentane, 2-methyl-	107-83-5	91%	12000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	5200 N J
Hexane, 2-methyl-	591-76-4	76%	2300 N J
Pentane, 2,3-dimethyl-	565-59-3	72%	7800 N J
Heptane, 4-methyl-	589-53-7	64%	4400 N J

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: V-1

Lab ID#: 0810580A-08A

Hexane, 2,2-dimethyl-	590-73-8	64%	8100 N J
Butane	106-97-8	64%	1700 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	3100 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	3700 N J
Propane, 2-methyl-	75-28-5	59%	400 N J

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-5

Lab ID#: 0810580A-01A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110608**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**21.1**	**Date of Analysis:**	**11/6/08 11:28 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	100	Not Detected	340	Not Detected
Toluene	100	Not Detected	400	Not Detected
Ethyl Benzene	100	Not Detected	460	Not Detected
m,p-Xylene	100	Not Detected	460	Not Detected
Methyl tert-butyl ether	100	Not Detected	380	Not Detected
o-Xylene	100	Not Detected	460	Not Detected
tert-Butyl alcohol	420	Not Detected	1300	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	9600 N J
Butane, 2,3-dimethyl-	79-29-8	56%	23000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	24000 N J
Heptane, 3-methyl-	589-81-1	64%	8800 N J
Pentane, 2,3-dimethyl-	565-59-3	91%	35000 N J
Hexane, 2,2-dimethyl-	590-73-8	83%	200000 N J
Butane	106-97-8	9.0%	940 N J
Cyclopentane, 1,2,4-trimethyl-, (1.alpha	16883-48-0	91%	6300 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	69000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	83%	60000 N J
Hexane, 2,2,4-trimethyl-	16747-26-5	83%	12000 N J
Propane, 2-methyl-	75-28-5	64%	1900 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	91	70-130
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	108	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-6

Lab ID#: 0810580A-02A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110609**	**Date of Collection: 10/22/08**	
Dil. Factor:	**60.5**	**Date of Analysis: 11/6/08 11:56 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	300	Not Detected	970	Not Detected
Toluene	300	Not Detected	1100	Not Detected
Ethyl Benzene	300	Not Detected	1300	Not Detected
m,p-Xylene	300	Not Detected	1300	Not Detected
Methyl tert-butyl ether	300	Not Detected	1100	Not Detected
o-Xylene	300	Not Detected	1300	Not Detected
tert-Butyl alcohol	1200	Not Detected	3700	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	230000 N J
Pentane	109-66-0	90%	62000 N J
Pentane, 2-methyl-	107-83-5	91%	200000 N J
Pentane, 3-methyl-	96-14-0	86%	61000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	92000 N J
Pentane, 2,3-dimethyl-	565-59-3	58%	130000 N J
Hexane, 3-methyl-	589-34-4	80%	55000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	140000 N J
Butane	106-97-8	50%	80000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	44000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	45000 N J
Propane, 2-methyl-	75-28-5	59%	25000 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	95	70-130
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-6 DUP

Lab ID#: 0810580A-03A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110610**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**31.6**	**Date of Analysis:**	**11/6/08 12:23 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	160	Not Detected	500	Not Detected
Toluene	160	Not Detected	600	Not Detected
Ethyl Benzene	160	Not Detected	690	Not Detected
m,p-Xylene	160	Not Detected	690	Not Detected
Methyl tert-butyl ether	160	Not Detected	570	Not Detected
o-Xylene	160	Not Detected	690	Not Detected
tert-Butyl alcohol	630	Not Detected	1900	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	200000 N J
Pentane	109-66-0	90%	55000 N J
Pentane, 2-methyl-	107-83-5	91%	180000 N J
Pentane, 3-methyl-	96-14-0	86%	54000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	82000 N J
Pentane, 2,3-dimethyl-	565-59-3	58%	140000 N J
Heptane, 4-methyl-	589-53-7	50%	49000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	130000 N J
Butane	106-97-8	50%	69000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	41000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	83%	42000 N J
Propane, 2-methyl-	75-28-5	86%	22000 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	94	70-130
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-7

Lab ID#: 0810580A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110712**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**1.61**	**Date of Analysis:**	**11/7/08 01:47 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.80	Not Detected	2.9	Not Detected
Benzene	0.80	Not Detected	2.6	Not Detected
Toluene	0.80	Not Detected	3.0	Not Detected
Ethyl Benzene	0.80	6.0	3.5	26
m,p-Xylene	0.80	23	3.5	99
o-Xylene	0.80	5.4	3.5	24
tert-Butyl alcohol	3.2	Not Detected	9.8	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-4

Lab ID#: 0810580A-05A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110611**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**12.9**	**Date of Analysis:**	**11/6/08 01:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	64	86	210	270
Toluene	64	Not Detected	240	Not Detected
Ethyl Benzene	64	Not Detected	280	Not Detected
m,p-Xylene	64	Not Detected	280	Not Detected
Methyl tert-butyl ether	64	Not Detected	230	Not Detected
o-Xylene	64	Not Detected	280	Not Detected
tert-Butyl alcohol	260	Not Detected	780	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	99000 N J
Pentane	109-66-0	90%	20000 N J
Butane, 2,3-dimethyl-	79-29-8	64%	100000 N J
Pentane, 2,2,3-trimethyl-	564-02-3	56%	40000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	56000 N J
Pentane, 2,3-dimethyl-	565-59-3	91%	84000 N J
Heptane, 4-methyl-	589-53-7	64%	25000 N J
Heptane, 2,2,4,6,6-pentamethyl-	13475-82-6	64%	160000 N J
Butane	106-97-8	42%	25000 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	58000 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	58000 N J
Propane, 2-methyl-	75-28-5	80%	7800 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130
1,2-Dichloroethane-d4	116	70-130
Toluene-d8	111	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-3

Lab ID#: 0810580A-06A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110612**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**242**	**Date of Analysis:**	**11/6/08 02:05 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1200	1300	3900	4200
Toluene	1200	Not Detected	4600	Not Detected
Ethyl Benzene	1200	Not Detected	5200	Not Detected
m,p-Xylene	1200	Not Detected	5200	Not Detected
Methyl tert-butyl ether	1200	Not Detected	4400	Not Detected
o-Xylene	1200	Not Detected	5200	Not Detected
tert-Butyl alcohol	4800	Not Detected	15000	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	1000000 N J
Pentane	109-66-0	90%	530000 N J
Pentane, 2-methyl-	107-83-5	91%	1500000 N J
Pentane, 3-methyl-	96-14-0	86%	720000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	580000 N J
Cyclopentane, methyl-	96-37-7	90%	760000 N J
Hexane, 2-methyl-	591-76-4	76%	440000 N J
Hexane, 2,2,5,5-tetramethyl-	1071-81-4	50%	1100000 N J
Pentane, 3-ethyl-	617-78-7	72%	680000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	840000 N J
Butane	106-97-8	50%	380000 N J
Propane, 2-methyl-	75-28-5	72%	53000 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	102	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-3 Lab Duplicate

Lab ID#: 0810580A-06AA

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110613**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**121**	**Date of Analysis:**	**11/6/08 02:27 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	600	1100	1900	3500
Toluene	600	Not Detected	2300	Not Detected
Ethyl Benzene	600	Not Detected	2600	Not Detected
m,p-Xylene	600	Not Detected	2600	Not Detected
Methyl tert-butyl ether	600	Not Detected	2200	Not Detected
o-Xylene	600	Not Detected	2600	Not Detected
tert-Butyl alcohol	2400	Not Detected	7300	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	770000 N J
Pentane	109-66-0	90%	420000 N J
Pentane, 2-methyl-	107-83-5	91%	1100000 N J
Pentane, 3-methyl-	96-14-0	86%	540000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	420000 N J
Cyclopentane, methyl-	96-37-7	90%	570000 N J
Hexane, 2-methyl-	591-76-4	76%	350000 N J
Hexane, 2,2,5,5-tetramethyl-	1071-81-4	50%	890000 N J
Pentane, 3-ethyl-	617-78-7	59%	520000 N J
Butane, 2,2,3,3-tetramethyl-	594-82-1	72%	610000 N J
Butane	106-97-8	53%	300000 N J
Propane, 2-methyl-	75-28-5	86%	40000 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-2

Lab ID#: 0810580A-07A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110614**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**20.2**	**Date of Analysis:**	**11/6/08 03:01 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	100	2600	320	8300
Toluene	100	Not Detected	380	Not Detected
Ethyl Benzene	100	2300	440	9800
m,p-Xylene	100	1600	440	7000
Methyl tert-butyl ether	100	Not Detected	360	Not Detected
o-Xylene	100	170	440	720
tert-Butyl alcohol	400	Not Detected	1200	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-1

Lab ID#: 0810580A-08A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110615**	**Date of Collection:**	**10/22/08**
Dil. Factor:	**2.82**	**Date of Analysis:**	**11/6/08 03:26 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	14	Not Detected	45	Not Detected
Toluene	14	Not Detected	53	Not Detected
Ethyl Benzene	14	Not Detected	61	Not Detected
m,p-Xylene	14	Not Detected	61	Not Detected
Methyl tert-butyl ether	14	Not Detected	51	Not Detected
o-Xylene	14	Not Detected	61	Not Detected
tert-Butyl alcohol	56	Not Detected	170	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane, 2-methyl-	78-78-4	86%	9800 N J
Pentane	109-66-0	90%	1400 N J
Pentane, 2-methyl-	107-83-5	91%	12000 N J
Pentane, 2,4-dimethyl-	108-08-7	91%	5200 N J
Hexane, 2-methyl-	591-76-4	76%	2300 N J
Pentane, 2,3-dimethyl-	565-59-3	72%	7800 N J
Heptane, 4-methyl-	589-53-7	64%	4400 N J
Hexane, 2,2-dimethyl-	590-73-8	64%	8100 N J
Butane	106-97-8	64%	1700 N J
Pentane, 2,3,4-trimethyl-	565-75-3	91%	3100 N J
Pentane, 2,3,3-trimethyl-	560-21-4	90%	3700 N J
Propane, 2-methyl-	75-28-5	59%	400 N J
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810580A-09A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110606**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/6/08 10:13 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	5.0	Not Detected	16	Not Detected
Toluene	5.0	Not Detected	19	Not Detected
Ethyl Benzene	5.0	Not Detected	22	Not Detected
m,p-Xylene	5.0	Not Detected	22	Not Detected
Methyl tert-butyl ether	5.0	Not Detected	18	Not Detected
o-Xylene	5.0	Not Detected	22	Not Detected
tert-Butyl alcohol	20	Not Detected	61	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount ((ppbv))
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	106	70-130
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	99	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810580A-09B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/7/08 09:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810580A-10A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/6/08 08:06 AM**	

Compound	%Recovery
Benzene	98
Toluene	90
Ethyl Benzene	95
m,p-Xylene	93
Methyl tert-butyl ether	77
o-Xylene	92
tert-Butyl alcohol	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	96	70-130
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	92	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810580A-10B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/7/08 08:29 AM**	

Compound	%Recovery
Methyl tert-butyl ether	94
Benzene	78
Toluene	89
Ethyl Benzene	88
m,p-Xylene	87
o-Xylene	89
tert-Butyl alcohol	93

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810580A-11A

MODIFIED EPA METHOD TO-15 GC/MS

File Name:	**w110604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/6/08 09:03 AM**	

Compound	%Recovery
Benzene	94
Toluene	101
Ethyl Benzene	95
m,p-Xylene	96
Methyl tert-butyl ether	88
o-Xylene	98
tert-Butyl alcohol	130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	99	70-130
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	106	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810580A-11B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	8110703	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 11/7/08 08:58 AM	

Compound	%Recovery
Methyl tert-butyl ether	94
Benzene	80
Toluene	92
Ethyl Benzene	86
m,p-Xylene	88
o-Xylene	88
tert-Butyl alcohol	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

0810580

Shell Oil Products Chain Of Custody Record

LAB (LOCATION): Air Toxics

Please Check Appropriate Box: ☑ ENV. SERVICES ☐ MOTIVA REFINE ☐ SHELL REFINE ☐ MOTIVA SCHEN ☐ CONSULTANT ☐ OTHER ☐ SHELL PIPELINE

Print Bill To Contact Name: Denis Brown

INCIDENT # (ENVSERVICES): 9 8 9 9 5 7 4 6 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10/22/08

PAGE: 1 of 1

PO #: SAP #:

Consulting Company: Conestoga-Rovers & Associates

Log Code: CRAW

Address: 5900 Hollis Street, Suite A, Emeryville, CA 94608

Project Contact (Hardcopy or PDF Report to): Peter Schaefer

Telephone: 510-420-3319 Fax: 510-420-9170 E-mail: pschaefer@craworld.com

Turnaround Time (Calendar Days): ☑ STANDARD (14 Day) 10 DAYS ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

Site Address: Street and City: 4411 Foothill Blvd. Oakland State: CA Global ID No.: T0600101065

Project No.: 510-420-3343

E-mail: pl.el.em-edf@craworld.com Consultant Project No.: 240612-010

Sampler Name (Print): Lauren Goldfinch

Chevron Site #:

SPECIAL INSTRUCTIONS OR NOTES:

please report results in µg/m³

☑ SHELL CONTRACT RATE APPLIES ☐ STATE REIMBURSEMENT RATE APPLIES ☐ EDD NOT REQUIRED ☑ RECEIPT/FRACTIONATION REQUESTED

REQUESTED ANALYSIS

Lab Use Only	Field Sample Identification	Sampling: Date	Sampling: Time	Matrix	Preservative	No. of Cont	TPHg (TO-3)	BTEX by EPA Method (TO-3)	MTBE by EPA Method (TO-3)	Isobutane, Butane, & propane (10-15, GC/MS)	Container ID Readings or Laboratory Notes
09A	V-5	10/22/08	10:09	air		1	X	X	X	X	Summa ID: 34162
10A	V-6		10:51								Summa ID: 36521
05A	V-6 Dup		10:51								Summa ID: 30828
08A	V-7		11:47								Summa ID: SC80
06A	V-4		12:39								Summa ID: SC97
04A	V-3		13:03								Summa ID: 34613
03A	V-2		13:58								Summa ID 13 029
01A	V-1		14:20								Summa ID: 20780

Temperature on Receipt: °C

Relinquished by (Signature): Received by (Signature): Same location

Relinquished by (Signature): Received by (Signature): 10/24/08 0910

Relinquished by (Signature): Received by (Signature): Date: 10/22/08 Time: 15:30

Date: Time:

Date: Time:

CUSTODY SEAL INTACT? Y N NONE TEMP N/A

Fed Ex

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABRATORY

11/7/2008

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

Project Name: 4411 Foothill Blvd, Oakland
Project #: 240897-2008-13

Dear Mr. Peter Schaefer

The following report includes the data for the above referenced project for sample(s) received on 10/27/2008 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 you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori
Project Manager

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810621B

Work Order Summary

CLIENT:	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	240897-2008-13 4411 Foothill Blvd, Oakland
DATE RECEIVED:	10/27/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/07/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	V-10	Modified TO-3	7.0 "Hg	15 psi
02A	V-11	Modified TO-3	2.5 "Hg	15 psi
03A	V-11 DUP	Modified TO-3	4.0 "Hg	15 psi
04A	V-8	Modified TO-3	4.5 "Hg	15 psi
05A	V-9	Modified TO-3	4.0 "Hg	15 psi
06A	Trip Blank	Modified TO-3	26.0 "Hg	15 psi
07A	Lab Blank	Modified TO-3	NA	NA
08A	LCS	Modified TO-3	NA	NA

CERTIFIED BY: Linda S. Freeman DATE: 11/07/08

Laboratory Director

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

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

LABORATORY NARRATIVE
Modified TO-3
Conestoga-Rovers Associates (CRA)
Workorder# 0810621B

Six 1 Liter Summa Canister (100% Certified) samples were received on October 27, 2008. The laboratory performed analysis for volatile organic compounds in air via modified EPA Method TO-3 using gas chromatography with flame ionization detection. The method involves concentrating up to 200 mL of sample. The concentrated aliquot is then dry purged to remove water vapor prior to entering the chromatographic system. The TPH (Gasoline Range) results are calculated using the response factor of Gasoline. A molecular weight of 100 is used to convert the TPH (Gasoline Range) ppbv result to ug/m3.

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

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

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.

E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: V-10

Lab ID#: 0810621B-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	66	68	270	280

Client Sample ID: V-11

Lab ID#: 0810621B-02A

No Detections Were Found.

Client Sample ID: V-11 DUP

Lab ID#: 0810621B-03A

No Detections Were Found.

Client Sample ID: V-8

Lab ID#: 0810621B-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	1700	240	7000

Client Sample ID: V-9

Lab ID#: 0810621B-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	58	210	240	870

Client Sample ID: Trip Blank

Lab ID#: 0810621B-06A

No Detections Were Found.

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-10

Lab ID#: 0810621B-01A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110204**	**Date of Collection:**	**10/23/08**
Dil. Factor:	**2.64**	**Date of Analysis:**	**11/2/08 02:38 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	66	68	270	280

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	89	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-11

Lab ID#: 0810621B-02A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110205**	**Date of Collection:**	**10/23/08**
Dil. Factor:	**2.20**	**Date of Analysis:**	**11/2/08 03:22 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	55	Not Detected	220	Not Detected

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	90	75-150

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-11 DUP

Lab ID#: 0810621B-03A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110206**	**Date of Collection:**	**10/23/08**
Dil. Factor:	**2.33**	**Date of Analysis:**	**11/2/08 03:54 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	58	Not Detected	240	Not Detected

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	96	75-150

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-8

Lab ID#: 0810621B-04A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110207**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.38**	**Date of Analysis: 11/2/08 04:28 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	60	1700	240	7000

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

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-9

Lab ID#: 0810621B-05A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110208**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 11/2/08 05:01 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH (Gasoline Range)	58	210	240	870

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

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	98	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Trip Blank

Lab ID#: 0810621B-06A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110209**	**Date of Collection: 10/23/08**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/2/08 05:38 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: 1 Liter Summa Canister (100% Certified)

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810621B-07A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/2/08 01:32 PM**	

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

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	78	75-150

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810621B-08A

MODIFIED EPA METHOD TO-3 GC/FID

File Name:	**d110210**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/2/08 06:16 PM**	

Compound	%Recovery
TPH (Gasoline Range)	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Fluorobenzene (FID)	93	75-150

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABRATORY

11/10/2008

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

Project Name: 4411 Foothill Blvd, Oakland
Project #: 240897-2008-13

Dear Mr. Peter Schaefer

The following report includes the data for the above referenced project for sample(s) received on 10/27/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15/TICs 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 you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kyle Vagadori
Project Manager

Air Toxics LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810621A

Work Order Summary

CLIENT:	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608	**BILL TO:**	Mr. Peter Schaefer Conestoga-Rovers Associates (CRA) 5900 Hollis Street Suite A Emeryville, CA 94608
PHONE:	510-420-0700	**P.O. #**	
FAX:	510-420-9170	**PROJECT #**	240897-2008-13 4411 Foothill Blvd, Oakland
DATE RECEIVED:	10/27/2008	**CONTACT:**	Kyle Vagadori
DATE COMPLETED:	11/10/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	V-10	Modified TO-15/TICs	7.0 "Hg	15 psi
02A	V-11	Modified TO-15/TICs	2.5 "Hg	15 psi
03A	V-11 DUP	Modified TO-15/TICs	4.0 "Hg	15 psi
04A	V-8	Modified TO-15/TICs	4.5 "Hg	15 psi
05A	V-9	Modified TO-15/TICs	4.0 "Hg	15 psi
06A	Trip Blank	Modified TO-15/TICs	26.0 "Hg	15 psi
07A	Lab Blank	Modified TO-15/TICs	NA	NA
08A	CCV	Modified TO-15/TICs	NA	NA
09A	LCS	Modified TO-15/TICs	NA	NA

CERTIFIED BY: Linda A. Furman DATE: 11/10/08

Laboratory Director

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

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

LABORATORY NARRATIVE
Modified TO-15
Conestoga-Rovers Associates (CRA)
Workorder# 0810621A

Six 1 Liter Summa Canister (100% Certified) samples were received on October 27, 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.

Requirement	*TO-15*	*ATL Modifications*
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

There were no receiving discrepancies.

Analytical Notes

Specific analytes that are requested by the client to be reported as tentatively identified compounds (TICs) are determined by searching for each compound's characteristic spectra. If no chromatographic peak displaying the compound specific spectra exists, then the TIC is reported as not detected. Please note that the laboratory has not evaluated the stability of any heretofore tentatively identified compound in the vapor phase or for efficiency of recovery through the analytical system.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

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

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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

Client Sample ID: V-10

Lab ID#: 0810621A-01A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Propane, 2-methyl-	75-28-5	40%	24

Client Sample ID: V-11

Lab ID#: 0810621A-02A

No Detections Were Found.

Client Sample ID: V-11 DUP

Lab ID#: 0810621A-03A

No Detections Were Found.

Client Sample ID: V-8

Lab ID#: 0810621A-04A

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	80%	120
Propane, 2-methyl-	75-28-5	59%	23

Client Sample ID: V-9

Lab ID#: 0810621A-05A

No Detections Were Found.

Client Sample ID: Trip Blank

Lab ID#: 0810621A-06A

No Detections Were Found.

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-10

Lab ID#: 0810621A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110720**	**Date of Collection:**	**10/23/08**
Dil. Factor:	**2.64**	**Date of Analysis:**	**11/7/08 08:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.3	Not Detected	4.8	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
Toluene	1.3	Not Detected	5.0	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
tert-Butyl alcohol	5.3	Not Detected	16	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Propane, 2-methyl-	75-28-5	40%	24
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	94	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-11

Lab ID#: 0810621A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110721**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.20**	**Date of Analysis: 11/7/08 09:07 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.1	Not Detected	4.0	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
tert-Butyl alcohol	4.4	Not Detected	13	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	101	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-11 DUP

Lab ID#: 0810621A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110722**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 11/7/08 09:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
tert-Butyl alcohol	4.7	Not Detected	14	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	99	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-8

Lab ID#: 0810621A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110723**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.38**	**Date of Analysis: 11/7/08 10:18 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.3	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
Toluene	1.2	Not Detected	4.5	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
tert-Butyl alcohol	4.8	Not Detected	14	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	80%	120
Propane, 2-methyl-	75-28-5	59%	23
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	102	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: V-9

Lab ID#: 0810621A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110724**	**Date of Collection: 10/23/08**	
Dil. Factor:	**2.33**	**Date of Analysis: 11/7/08 11:07 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	1.2	Not Detected	4.2	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
tert-Butyl alcohol	4.7	Not Detected	14	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

Surrogates	%Recovery	Method Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	100	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Trip Blank

Lab ID#: 0810621A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110725**	**Date of Collection: 10/23/08**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/8/08 07:42 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

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

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

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810621A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110704**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/7/08 09:28 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected

TENTATIVELY IDENTIFIED COMPOUNDS

Compound	CAS Number	Match Quality	Amount (ppbv)
Butane	106-97-8	NA	Not Detected
Isobutane	75-28-5	NA	Not Detected
Propane	74-98-6	NA	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	96	70-130
4-Bromofluorobenzene	98	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810621A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110702**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/7/08 08:29 AM**	

Compound	%Recovery
Methyl tert-butyl ether	94
Benzene	78
Toluene	89
Ethyl Benzene	88
m,p-Xylene	87
o-Xylene	89
tert-Butyl alcohol	93

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	103	70-130

Air Toxics LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810621A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**8110703**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/7/08 08:58 AM**	

Compound	%Recovery
Methyl tert-butyl ether	94
Benzene	80
Toluene	92
Ethyl Benzene	86
m,p-Xylene	88
o-Xylene	88
tert-Butyl alcohol	97

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	104	70-130

0810621

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
☑ CUSTOMER: Air Toxics
☐ SPL
☐ XENCO
☐ TEST AMERICA
☐ OTHER

Please Check Appropriate Box
☑ ENV. SERVICES | ☐ ACTIVA RETAIL | ☐ SHELL RETAIL
☐ MOTIVA SUBOX | ☐ CONSULTANT | ☐ JOBS
☐ SHELL PIPELINE | ☐ OTHER

Print Bill To Contact Name: Denis Brown

INCIDENT # (ENV. SERVICES): 98995746
SAP #:

☐ CREDIT TO INCIDENT # ABOVE

DATE: 10/23/08
PAGE: 1 of 1

Consultant Company: Conestoga-Rovers & Associates		Job Code: CRAW	
Address: 5900 Hollis Street, Suite A, Emeryville, CA 94608			
Project Contact (Hardcopy or PDF Report to): Peter Schaefer			
Telephone: 510-420-3319	Fax: 510-420-9170	Email: pschaefer@craworld.com	

Site Address (Street and City): 4411 Foothill Blvd, Oakland		State: CA	Global ID: T0600101065
Invoice To (Name, Company, Address, Phone #): Brenda Carter, CRA, Emeryville		Phone #: 510-420-3343	Email: shell.emails@craworld.com
Consultant Project No.: 240897-2008-13			
Sampler Name(s) (Print and Sign): Lauren Goldfinch			Lab Use Only

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 7 DAY ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ EDF - EQUIS REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES:
please report results in µg/m³

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD REQUIRED
☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

Lab Use Only	Field Sample Identification	Sampling: Date	Sampling: Time	Matrix	Preservative: HCL	HNO3	H2SO4	NONE	OTHER	No. of Cont.	TPHg (TO-3)	BTEX by EPA Method (TO-3)	MTBE by EPA Method (TO-3)	Isobutane, butane, & propane (TO-15, GC/MS)	Container P/D Readings or Laboratory Notes
01A	V-10	10/23/08	9:18	air						1	X	X	X	X	SUMMA ID: 14511
02A	V-11		10:09	↓						1	↓	↓	1	↓	SUMMA ID: 14518
03A	V-11 DUP		10:09							1					SUMMA ID: 12375
04A	V-8		10:37							1					SUMMA ID: 34102
05A	V-9		10:58							1					SUMMA ID: 9525
06A	TRIP BLANK		11:45	↓						1	↓	↓	↓	↓	SUMMA ID: 34662

TEMPERATURE ON RECEIPT: °C

Relinquished by (Signature): L. Gf	Received by (Signature): Secure location	Date: 10/23/08	Time: 12:30
Relinquished by (Signature):	Received by (Signature): Monica Gregson ATL 10/24/08 905	Date:	Time:
Relinquished by (Signature):	Received by (Signature):	Date:	Time:

Fed Ex CUSTODY SEAL INTACT? Y N NONE TEMP NA

26266 Revised