CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
www.CRAworld.com

TRANSMITTAL

DATE: December 21, 2012

REFERENCE NO.: 060364

PROJECT NAME: 3750 International Boulevard, Oakland

TO: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED
By Alameda County Environmental Health at 3:40 pm, Jan 17, 2013

Please find enclosed:
- ☐ Draft
- ☐ Originals
- ☐ Prints
- ☒ Final
- ☐ Other

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- ☐ Mail
- ☐ Overnight Courier
- ☐ Same Day Courier
- ☒ Other GeoTracker and Alameda County FTP

QUANTITY	DESCRIPTION
1	Dispenser Over-Excavation Report

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
Reza Mahmoodi, Reza, Inc. (property owner; electronic copy)
Clint Mercer, SC Fuels (lessee), 1800 West Katella Avenue, Orange, CA 92863
Keith Mathews, Oakland Fire Department, Fire Prevention Bureau, 250 Frank H. Ogawa Plaza, Suite 3341, Oakland, California 94612-2032

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

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 Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Shell-branded Service Station
3750 International Boulevard
Oakland, California
SAP Code 135682

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
Senior Program Manager

DISPENSER OVER-EXCAVATION REPORT

SHELL-BRANDED SERVICE STATION
3750 INTERNATIONAL BOULEVARD
OAKLAND, CALIFORNIA

SAP CODE 135675

Prepared by:
Conestoga-Rovers & Associates

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

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Fax: (510) 420-9170

web: http://www.CRAworld.com

DECEMBER 21, 2012
REF. NO. 060364 (2)
This report is printed on recycled paper.

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EXECUTIVE SUMMARY

- One dispenser over-excavation was conducted following receipt of analytical results from fuel-system replacement activities conducted by the property owner.
- No TPHg or BTEX was detected in soil samples collected from the dispenser over-excavation pit.
- Based on the data from the fuel system replacement investigation and historical soil data, CRA believes that no further environmental investigation is warranted.

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to document the recent dispenser over-excavation at the referenced site. The dispenser over-excavation was conducted following receipt of analytical results from fuel-system replacement activities conducted by the property owner.

2.0 SITE DESCRIPTION

The subject site is a Shell-branded service station located on the northern corner of International Boulevard and 38th Avenue in Oakland, California (Figure 1). The area surrounding the site is both commercial and residential. The service station layout included four dispensers, three gasoline underground storage tanks (USTs), and a station building (Figure 2).

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

3.0 SAMPLING ACTIVITIES AND SAMPLE ANALYSES

On August 9, 2012, Musco Excavators, Inc. of Santa Rosa, California over-excavated beneath a product dispenser (Figure 2).

3.1 PERSONNEL PRESENT

Cristina Arganbright, Staff Scientist, CRA

3.2 SAMPLING DATE

August 9, 2012

3.3 DISPENSER OVER-EXCAVATION SOIL SAMPLING

CRA collected four soil samples from the sidewalls of the dispenser over-excavation pit and one soil sample from the center of the pit at a depth of 4 feet below grade (fbg) using

a backhoe. Figure 2 shows the sampling locations. The soil was removed from the backhoe and packed into clean stainless steel sample tubes; the tube ends were covered with Teflon® tape and plastic end caps. Soil samples were labeled, placed into a cooler with ice, entered onto a chain-of-custody record, and transported to a California-certified analytical laboratory.

3.4 CHEMICAL ANALYSES

State-certified laboratory TestAmerica Laboratories, Inc. of Irvine, California analyzed the soil samples for total petroleum hydrocarbons as gasoline (TPHg), and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

4.0 ANALYTICAL RESULTS

Figure 2 and Table 1 summarize soil analytical results. No TPHg or BTEX was detected in soil samples collected from the dispenser over-excavation pit. Appendix B presents the laboratory analytical reports.

5.0 DISCUSSION

Soil sample locations and analytical results from the fuel system replacement activities are also presented in Figure 2 and Table 1, respectively. With the exception of TPHg and BTEX in sample D-3, which was subsequently over-excavated, none of the TPHg, BTEX, fuel oxygenate, lead scavenger, or total lead detections in samples collected during the fuel system replacement activities exceed San Francisco Bay Regional Water Quality Control Board environmental screening levels (ESLs) for shallow or deep soils at a site with commercial land use where groundwater is not a potential source of drinking water[1].

The maximum concentrations of constituents of concern (COCs) detected during the fuel system replacement activities and from previous investigations are shown in the following table. Detections in sample D-3 are not included because the area was subsequently over-excavated.

---

1 *Screening for Environmental Concerns at Site With Contaminated Soil and Groundwater,* California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]

TABLE A			
COCs	*Maximum Soil Concentration from August 2012 Fuel System Replacement Sampling*	*Previous Historical Maximum Soil Concentrations*	*Shallow Soil Commercial ESL*
TPHg	150 mg/kg	130 mg/kg	180 mg/kg
Benzene	0.012 mg/kg	0.032 mg/kg	0.27 mg/kg
Toluene	1.3 mg/kg	0.55 mg/kg	9.3 mg/kg
Ethylbenzene	0.35 mg/kg	0.73 mg/kg	4.7 mg/kg
Total Xylenes	1.9 mg/kg	2.0 mg/kg	11 mg/kg
Total Lead	14 mg/kg	11.6 mg/kg	750 mg/kg

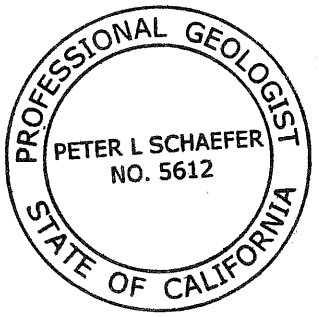
Note: mg/kg = Milligrams per kilogram.

The comparison in Table A demonstrates that TPHg, BTEX, and total lead concentrations are generally within historical ranges observed during previous investigations and that all current and historical concentrations are below ESLs. The slightly higher detections of TPHg, toluene, and total lead during this investigation may be attributable to the samples being collected from directly beneath the fuel system instead of adjacent to the system as in previous investigations.

Based on the data from the fuel system replacement investigation and historical soil data, CRA believes that no further environmental investigation is warranted.

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

Peter Schaefer, CHG, CEG



Mike Murphy

FIGURES

09/06/2012

FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

I:\Shell\6-chars\0603-\060364-Oakland 3750 International Bl\060364-FIGURES\060634 VICINITY.AI

Shell-branded Service Station
3750 International Boulevard
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

EXPLANATION

D-1 • Soil sample location

MW-1 ⊠ Destroyed monitoring well location

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-1	08/02/2012	3	<1.0	<0.005	<0.005	12

Notes:
Soil sample ID, date, depth in feet below grade (fbg), and concentrations in milligrams per kilogram (mg/kg)
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
NA = Not analyzed
<X = Not detected at reporting limit X
- Values in **bold** are above the Environmental Screening Level (ESL)

Storage

Building

Former Waste Oil UST

MW-2

MW-1

Former USTs (First Generation)

Former Dispenser Island (typ.)

Canopy

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-1	08/02/2012	3	<1.0	<0.005	<0.005	12

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
P-1	08/02/2012	4	<1.0	<0.005	<0.005	14

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-4	08/02/2012	3	<1.0	<0.005	<0.005	2.2

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
P-3	08/02/2012	4	<1.0	<0.005	<0.005	8.5

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3-N	08/09/2012	4	<0.10	<0.0010	NA	NA

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-2	08/02/2012	3	<1.0	0.012	<0.005	6.8

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
P-2	08/02/2012	4	<1.0	<0.005	<0.005	4.1

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3-W	08/09/2012	4	<0.10	<0.0010	NA	NA

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3	08/02/2012	3	**4,600**	**20**	<1.0	6.4

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3-B	08/09/2012	4	<0.10	<0.0010	NA	NA

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3-S	08/09/2012	4	<0.099	<0.00099	NA	NA

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
D-3-E	08/09/2012	4	<0.10	<0.0010	NA	NA

D-1

Dispenser Islands

P-1

D-2

D-4

P-2

D-3-N

P-3

D-3-W

D-3

D-3-B

D-3-E

D-3-S

Approximate Excavation Limits

Approximate Over-Excavation Limits

MW-4

TE-N

TE-S

TC-N

TC-S

TW-N

TW-S

Former USTs (Se

Existing USTs

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TE-N	08/02/2012	15	150	<0.20	<0.20	2.8

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TE-S	08/02/2012	15	1.3	<0.005	<0.005	1.9

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TC-N	08/02/2012	15	120	<0.20	<0.20	2.9

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TC-S	08/02/2012	15	1.4	<0.005	<0.005	2.2

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TW-N	08/02/2012	15	140	<0.25	<0.25	3.1

ID	Date	Depth	TPHg	Benzene	MTBE	Lead
TW-S	08/02/2012	15	<1.0	<0.005	<0.005	2.0

MW-3

38th AVENUE

INTERNATIONAL BOULEVARD

N

0 10 20ft

Figure 2

Soil Chemical Concentrations Map
Shell-branded Service Station
3750 International Boulevard
Oakland, California

I:\Shell\6-chars\0603--\060364-Oakland 3750 International Bl\060364-FIGURES\060364 SITE PLAN.DWG (09/07/2012)

TABLE

TABLE 1

SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
3750 INTERNATIONAL BOULEVARD, OAKLAND, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg (mg/kg)*	*B (mg/kg)*	*T (mg/kg)*	*E (mg/kg)*	*X (mg/kg)*	*MTBE (mg/kg)*	*TBA (mg/kg)*	*DIPE (mg/kg)*	*ETBE (mg/kg)*	*TAME (mg/kg)*	*1,2-DCA (mg/kg)*	*EDB (mg/kg)*	*Total Lead (mg/kg)*
D-1	8/2/2012	3	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	12
D-2	8/2/2012	3	<1.0	0.012	0.062	0.011	0.16	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	6.8
D-3	8/2/2012	3	**4,600**	**20**	**170**	**70**	**290**	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	6.4
D-3-B	8/9/2012	4	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	---	---	---	---	---	---	---
D-3-N	8/9/2012	4	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	---	---	---	---	---	---	---
D-3-E	8/9/2012	4	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	---	---	---	---	---	---	---
D-3-S	8/9/2012	4	<0.099	<0.0099	<0.0099	<0.0099	<0.0020	---	---	---	---	---	---	---	---
D-3-W	8/9/2012	4	<0.10	<0.0010	<0.0010	<0.0010	<0.0020	---	---	---	---	---	---	---	---
D-4	8/2/2012	3	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	2.2
TW-N	8/2/2012	15	140	<0.25	1.3	0.35	1.9	<0.25	<2.5	<0.25	<0.25	<0.25	<0.25	<0.25	3.1
TW-S	8/2/2012	15	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	2.0
TC-N	8/2/2012	15	120	<0.20	<0.20	<0.20	<0.40	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	2.9
TC-S	8/2/2012	15	1.4	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	2.2
TE-N	8/2/2012	15	150	<0.20	<0.20	<0.20	<0.40	<0.20	<2.0	<0.20	<0.20	<0.20	<0.20	<0.20	2.8
TE-S	8/2/2012	15	1.3	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	1.9
P-1	8/2/2012	4	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	14
P-2	8/2/2012	4	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	4.1
P-3	8/2/2012	4	<1.0	<0.005	<0.005	<0.005	<0.010	<0.005	<0.050	<0.005	<0.005	<0.005	<0.005	<0.005	8.5
Shallow Soil (≤10 fbg) ESL [a]:			180	0.27	9.3	4.7	11	8.4	110	NA	NA	NA	0.48	0.044	750
Deep Soil (>10 fbg) ESL [a]:			180	2.0	9.3	4.7	11	8.4	110	NA	NA	NA	1.8	1.000	750

TABLE 1

SOIL ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
3750 INTERNATIONAL BOULEVARD, OAKLAND, CALIFORNIA

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B
Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
1,2-DCA = 1,2-Dichloroethane analyzed by EPA Method 8260B
EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B
Total Lead analyzed by EPA Method 6010B
fbg = Feet below grade
mg/kg = Milligrams per kilogram
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
Results in **bold** equal or exceed applicable ESL
Shading indicates soil sample location was subsequently excavated; results are not representative of residual soil.

a = San Francisco Bay Regional Water Quality Control Board commercial/industrial ESL for soil where groundwater is not a source of drinking water (Tables B and D of *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater* , California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]).

APPENDIX A

SITE HISTORY

SITE HISTORY

1981 Tank Replacement: Shell installed three fiberglass underground storage tanks (USTs) which apparently replaced three former steel USTs. No information is available concerning the tank removal.

1986 Waste Oil UST Replacement: In November 1986, Petroleum Engineering of Santa Rosa, California removed a 550-gallon steel waste oil UST and installed a 550-gallon fiberglass waste oil UST. Blaine Technical Services, Inc. of San Jose, California collected a soil sample from the middle of the tank excavation at a depth of 7 feet below grade (fbg) which contained a concentration of 117.4 milligrams per kilogram (mg/kg) of total oil and grease (TOG). Weiss Associates' (WA's) July 18, 1990 *Subsurface Investigation* report summarized the waste oil UST removal sampling activities.

1990 Subsurface Investigation: In April 1990, WA installed three monitoring wells (MW-1 through MW-3). Soil samples from the well borings contained up to 130 mg/kg total petroleum hydrocarbons as gasoline (TPHg) and 0.032 mg/kg benzene. Total petroleum hydrocarbons as diesel (TPHd), volatile organic compounds, and TOG were not detected in the soil samples. WA's July 18, 1990 *Subsurface Investigation* report presents investigation details.

1990 Well Survey: WA conducted a well survey which identified an irrigation well located approximately one block east (up- and cross-gradient). No domestic or municipal wells were identified within one-half mile of the site. WA's July 18, 1990 *Subsurface Investigation* report provides well survey results.

1991 UST Unauthorized Release (Leak)/Contamination Site Report (URR): On February 6, 1991 Shell filed a URR based on the waste oil UST investigation results.

1992 Subsurface Investigation: In June 1992, WA installed groundwater monitoring well MW-4 immediately down gradient of the UST complex. Soil samples from the well boring contained concentrations of TPHg up to 6.4 mg/kg. No benzene was detected in the soil samples. WA's September 8, 1992 *Subsurface Investigation* report presents investigation details.

1990 to 1996 Groundwater Monitoring: Groundwater monitoring was conducted between 1990 and 1996. Depth to groundwater varied from 6 to 16 fbg. The highest concentration of TPHg detected was 12,000 micrograms per liter (µg/l) in MW-3 (first quarter 1994), and the highest level of benzene detected was 210 µg/l in MW-4 (third

quarter 1992). Concentrations in the first quarter of 1996 had dropped to 1,500 µg/l of TPHg and 4.1 µg/l of benzene.

1997 Environmental Case Closure: Alameda County Environmental Health's October 3, 1997 letter granted closure of the UST fuel leak case.

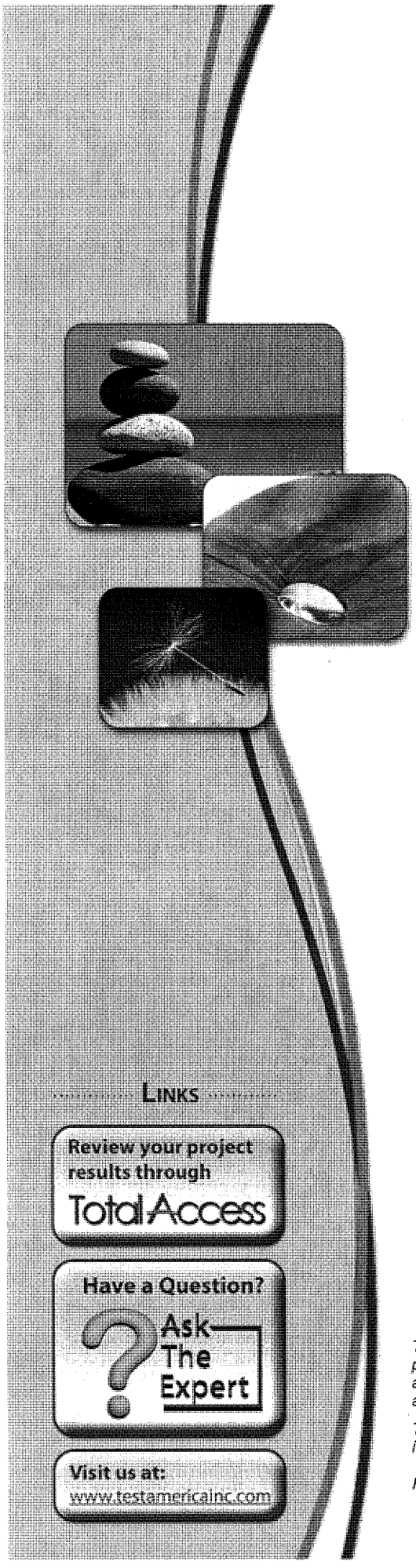
2004 Dispenser Replacement Soil Sampling: In July 2004 Paradiso Mechanical, Inc. upgraded the facility's fuel system. Cambria Environmental Technology, Inc. (Cambria) collected soil samples from beneath each dispenser. No TPHg, benzene, toluene, ethylbenzene, xylenes, or methyl tertiary-butyl ether (MTBE) was detected in the soil samples. Cambria's November 23, 2004 *Dispenser Upgrade Sampling Report* details the dispenser sampling activities and results.

2006 Waste Oil UST Removal: In May 2006, Wayne Perry, Inc. removed one 550-gallon dual-wall fiberglass waste oil UST. One soil sample was collected from the excavation and contained concentrations up to 28 mg/kg TOG and 7.5 mg/kg TPHd. Based on these results Cambria filed a URR on June 6, 2006. Cambria's July 31, 2006 *Underground Storage Tank Removal Report* presents UST removal details and sampling results.

2008 Phase II Environmental Site Assessment: In August 2008, Delta Consultants, Inc. (Delta) drilled five borings to collect grab groundwater samples. Three of the five samples contained concentrations of TPHg ranging from 180 to 3,900 µg/l. Benzene (17 µg/l) and MTBE (5.8 µg/l) were each detected in one grab groundwater sample. Delta's October 1, 2008 *Phase II Environmental Site Assessment* report provides investigation details.

APPENDIX B

LABORATORY ANALYTICAL REPORTS



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-20151-1
Client Project/Site: 3750 International Blvd., Oakland

For:
Conestoga-Rovers & Associates, Inc.
5900 Hollis Street
Suite A
Emeryville, California 94608

Attn: Peter Schaefer

Authorized for release by:
8/22/2012 10:53:29 AM

Philip Sanelle
Project Manager I
philip.sanelle@testamericainc.com

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3750 International Blvd., Oakland

TestAmerica Job ID: 440-20151-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-20151-1	D-3-B	Solid	08/09/12 09:30	08/11/12 09:40
440-20151-2	D-3-N	Solid	08/09/12 09:45	08/11/12 09:40
440-20151-3	D-3-E	Solid	08/09/12 09:50	08/11/12 09:40
440-20151-4	D-3-S	Solid	08/09/12 09:55	08/11/12 09:40
440-20151-5	D-3-W	Solid	08/09/12 10:00	08/11/12 09:40

Job ID: 440-20151-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-20151-1

Comments
No additional comments.

Receipt
The samples were received on 8/11/2012 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: Internal standard responses were outside of acceptance limits for the following sample(s): D-3-W (440-20151-5). The sample(s) shows evidence of matrix interference.

Method(s) 8260B/CA_LUFTMS: Surrogate recovery for the following sample(s) was outside control limits: D-3-W (440-20151-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B/CA_LUFTMS: Internal standard responses were outside of acceptance limits for the following sample(s): D-3-N (440-20151-2). The sample(s) shows evidence of matrix interference.

Method(s) 8260B/CA_LUFTMS: Surrogate recovery for the following sample(s) was outside control limits: D-3-E (440-20151-3), D-3-N (440-20151-2), D-3-S (440-20151-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: D-3-W (440-20151-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: D-3-E (440-20151-3), D-3-N (440-20151-2), D-3-S (440-20151-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): D-3-N (440-20151-2). The sample(s) shows evidence of matrix interference.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: D-3-B

Lab Sample ID: 440-20151-1
Matrix: Solid
Date Collected: 08/09/12 09:30
Date Received: 08/11/12 09:40

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/16/12 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*111*		*80 - 125*		*08/16/12 03:24*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*08/16/12 03:24*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*08/16/12 03:24*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/16/12 03:24	1
Toluene	ND		0.0010		mg/Kg			08/16/12 03:24	1
Ethylbenzene	ND		0.0010		mg/Kg			08/16/12 03:24	1
Xylenes, Total	ND		0.0020		mg/Kg			08/16/12 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*08/16/12 03:24*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 125*		*08/16/12 03:24*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*		*08/16/12 03:24*	*1*

Client Sample ID: D-3-N

Lab Sample ID: 440-20151-2
Matrix: Solid
Date Collected: 08/09/12 09:45
Date Received: 08/11/12 09:40

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/16/12 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 125*		*08/16/12 17:56*	*1*
4-Bromofluorobenzene (Surr)	*45*	*X*	*80 - 120*		*08/16/12 17:56*	*1*
Toluene-d8 (Surr)	*1*	*X*	*80 - 120*		*08/16/12 17:56*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/16/12 17:56	1
Toluene	ND		0.0010		mg/Kg			08/16/12 17:56	1
Ethylbenzene	ND		0.0010		mg/Kg			08/16/12 17:56	1
Xylenes, Total	ND		0.0020		mg/Kg			08/16/12 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*45*	*X*	*80 - 120*		*08/16/12 17:56*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 125*		*08/16/12 17:56*	*1*
Toluene-d8 (Surr)	*1*	*X*	*80 - 120*		*08/16/12 17:56*	*1*

Client Sample ID: D-3-E

Lab Sample ID: 440-20151-3
Matrix: Solid
Date Collected: 08/09/12 09:50
Date Received: 08/11/12 09:40

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/16/12 18:25	1

Client Sample ID: D-3-E
Date Collected: 08/09/12 09:50
Date Received: 08/11/12 09:40

Lab Sample ID: 440-20151-3
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 125*		*08/16/12 18:25*	*1*
4-Bromofluorobenzene (Surr)	*78*	*X*	*80 - 120*		*08/16/12 18:25*	*1*
Toluene-d8 (Surr)	*80*		*80 - 120*		*08/16/12 18:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/16/12 18:25	1
Toluene	ND		0.0010		mg/Kg			08/16/12 18:25	1
Ethylbenzene	ND		0.0010		mg/Kg			08/16/12 18:25	1
Xylenes, Total	ND		0.0020		mg/Kg			08/16/12 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*	*X*	*80 - 120*		*08/16/12 18:25*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 125*		*08/16/12 18:25*	*1*
Toluene-d8 (Surr)	*80*		*80 - 120*		*08/16/12 18:25*	*1*

Client Sample ID: D-3-S
Date Collected: 08/09/12 09:55
Date Received: 08/11/12 09:40

Lab Sample ID: 440-20151-4
Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.099		mg/Kg			08/16/12 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*105*		*80 - 125*		*08/16/12 18:54*	*1*
4-Bromofluorobenzene (Surr)	*71*	*X*	*80 - 120*		*08/16/12 18:54*	*1*
Toluene-d8 (Surr)	*55*	*X*	*80 - 120*		*08/16/12 18:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00099		mg/Kg			08/16/12 18:54	1
Toluene	ND		0.00099		mg/Kg			08/16/12 18:54	1
Ethylbenzene	ND		0.00099		mg/Kg			08/16/12 18:54	1
Xylenes, Total	ND		0.0020		mg/Kg			08/16/12 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*	*X*	*80 - 120*		*08/16/12 18:54*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 125*		*08/16/12 18:54*	*1*
Toluene-d8 (Surr)	*55*	*X*	*80 - 120*		*08/16/12 18:54*	*1*

Client Sample ID: D-3-W
Date Collected: 08/09/12 10:00
Date Received: 08/11/12 09:40

Lab Sample ID: 440-20151-5
Matrix: Solid

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/17/12 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*97*		*80 - 125*		*08/17/12 17:55*	*1*
4-Bromofluorobenzene (Surr)	*60*	*X*	*80 - 120*		*08/17/12 17:55*	*1*
Toluene-d8 (Surr)	*18*	*X*	*80 - 120*		*08/17/12 17:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3750 International Blvd., Oakland

TestAmerica Job ID: 440-20151-1

Client Sample ID: D-3-W
Date Collected: 08/09/12 10:00
Date Received: 08/11/12 09:40

Lab Sample ID: 440-20151-5
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/17/12 17:55	1
Toluene	ND		0.0010		mg/Kg			08/17/12 17:55	1
Ethylbenzene	ND		0.0010		mg/Kg			08/17/12 17:55	1
Xylenes, Total	ND		0.0020		mg/Kg			08/17/12 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*X*	*80 - 120*		*08/17/12 17:55*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 125*		*08/17/12 17:55*	*1*
Toluene-d8 (Surr)	*18*	*X*	*80 - 120*		*08/17/12 17:55*	*1*

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3750 International Blvd., Oakland

TestAmerica Job ID: 440-20151-1

Client Sample ID: D-3-B

Lab Sample ID: 440-20151-1

Date Collected: 08/09/12 09:30
Matrix: Solid
Date Received: 08/11/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	4.96 g	10 mL	45547	08/16/12 03:24	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	4.96 g	10 mL	45548	08/16/12 03:24	RM	TAL IRV

Client Sample ID: D-3-N

Lab Sample ID: 440-20151-2

Date Collected: 08/09/12 09:45
Matrix: Solid
Date Received: 08/11/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	10 mL	45688	08/16/12 17:56	NA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 g	10 mL	45689	08/16/12 17:56	SS	TAL IRV

Client Sample ID: D-3-E

Lab Sample ID: 440-20151-3

Date Collected: 08/09/12 09:50
Matrix: Solid
Date Received: 08/11/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.01 g	10 mL	45688	08/16/12 18:25	NA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5.01 g	10 mL	45689	08/16/12 18:25	SS	TAL IRV

Client Sample ID: D-3-S

Lab Sample ID: 440-20151-4

Date Collected: 08/09/12 09:55
Matrix: Solid
Date Received: 08/11/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.05 g	10 mL	45688	08/16/12 18:54	NA	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5.05 g	10 mL	45689	08/16/12 18:54	SS	TAL IRV

Client Sample ID: D-3-W

Lab Sample ID: 440-20151-5

Date Collected: 08/09/12 10:00
Matrix: Solid
Date Received: 08/11/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5.01 g	10 mL	46006	08/17/12 17:55	AT	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5.01 g	10 mL	46007	08/17/12 17:55	AT	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3750 International Blvd., Oakland

TestAmerica Job ID: 440-20151-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-45547/4
Matrix: Solid
Analysis Batch: 45547

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/15/12 20:38	1
Toluene	ND		0.0010		mg/Kg			08/15/12 20:38	1
Ethylbenzene	ND		0.0010		mg/Kg			08/15/12 20:38	1
Xylenes, Total	ND		0.0020		mg/Kg			08/15/12 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/15/12 20:38*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 125*		*08/15/12 20:38*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*08/15/12 20:38*	*1*

Lab Sample ID: LCS 440-45547/5
Matrix: Solid
Analysis Batch: 45547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0539		mg/Kg		108	65 - 120
Toluene	0.0500	0.0522		mg/Kg		104	70 - 125
Ethylbenzene	0.0500	0.0518		mg/Kg		104	70 - 125
m,p-Xylene	0.100	0.104		mg/Kg		104	70 - 125
o-Xylene	0.0500	0.0511		mg/Kg		102	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*80 - 125*
Toluene-d8 (Surr)	*110*		*80 - 120*

Lab Sample ID: 440-20130-A-1 MS
Matrix: Solid
Analysis Batch: 45547

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0504	0.0529		mg/Kg		105	65 - 130
Toluene	ND		0.0504	0.0525		mg/Kg		104	70 - 130
Ethylbenzene	ND		0.0504	0.0516		mg/Kg		102	70 - 135
m,p-Xylene	ND		0.101	0.103		mg/Kg		102	70 - 130
o-Xylene	ND		0.0504	0.0511		mg/Kg		101	65 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*80 - 125*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-20130-A-1 MSD
Matrix: Solid
Analysis Batch: 45547

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0499	0.0530		mg/Kg		106	65 - 130	0	20
Toluene	ND		0.0499	0.0519		mg/Kg		104	70 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20130-A-1 MSD
Matrix: Solid
Analysis Batch: 45547

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylbenzene	ND		0.0499	0.0526		mg/Kg		105	70 - 135	2	25
m,p-Xylene	ND		0.0998	0.105		mg/Kg		106	70 - 130	2	25
o-Xylene	ND		0.0499	0.0516		mg/Kg		103	65 - 130	1	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 125*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: MB 440-45688/4
Matrix: Solid
Analysis Batch: 45688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/16/12 09:37	1
Toluene	ND		0.0010		mg/Kg			08/16/12 09:37	1
Ethylbenzene	ND		0.0010		mg/Kg			08/16/12 09:37	1
Xylenes, Total	ND		0.0020		mg/Kg			08/16/12 09:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*80 - 120*		*08/16/12 09:37*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 125*		*08/16/12 09:37*	*1*
Toluene-d8 (Surr)	*108*		*80 - 120*		*08/16/12 09:37*	*1*

Lab Sample ID: LCS 440-45688/5
Matrix: Solid
Analysis Batch: 45688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0553		mg/Kg		111	65 - 120
Toluene	0.0500	0.0539		mg/Kg		108	70 - 125
Ethylbenzene	0.0500	0.0514		mg/Kg		103	70 - 125
m,p-Xylene	0.100	0.103		mg/Kg		103	70 - 125
o-Xylene	0.0500	0.0507		mg/Kg		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*109*		*80 - 125*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-20349-A-1 MS
Matrix: Solid
Analysis Batch: 45688

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0499	0.0566		mg/Kg		113	65 - 130
Toluene	ND		0.0499	0.0563		mg/Kg		113	70 - 130
Ethylbenzene	ND		0.0499	0.0569		mg/Kg		114	70 - 135
m,p-Xylene	ND		0.0998	0.113		mg/Kg		113	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-20349-A-1 MS
Matrix: Solid
Analysis Batch: 45688

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	ND		0.0499	0.0555		mg/Kg		111	65 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 125*
Toluene-d8 (Surr)	*105*		*80 - 120*

Lab Sample ID: 440-20349-A-1 MSD
Matrix: Solid
Analysis Batch: 45688

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0496	0.0585		mg/Kg		118	65 - 130	3	20
Toluene	ND		0.0496	0.0572		mg/Kg		115	70 - 130	2	20
Ethylbenzene	ND		0.0496	0.0601		mg/Kg		121	70 - 135	6	25
m,p-Xylene	ND		0.0992	0.120		mg/Kg		120	70 - 130	5	25
o-Xylene	ND		0.0496	0.0579		mg/Kg		117	65 - 130	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 125*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 440-46006/4
Matrix: Solid
Analysis Batch: 46006

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0010		mg/Kg			08/17/12 08:43	1
Toluene	ND		0.0010		mg/Kg			08/17/12 08:43	1
Ethylbenzene	ND		0.0010		mg/Kg			08/17/12 08:43	1
Xylenes, Total	ND		0.0020		mg/Kg			08/17/12 08:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*08/17/12 08:43*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 125*		*08/17/12 08:43*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*08/17/12 08:43*	*1*

Lab Sample ID: LCS 440-46006/5
Matrix: Solid
Analysis Batch: 46006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0552		mg/Kg		110	65 - 120
Toluene	0.0500	0.0537		mg/Kg		107	70 - 125
Ethylbenzene	0.0500	0.0518		mg/Kg		104	70 - 125
m,p-Xylene	0.100	0.104		mg/Kg		104	70 - 125
o-Xylene	0.0500	0.0518		mg/Kg		104	70 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-46006/5
Matrix: Solid
Analysis Batch: 46006

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	112		80 - 125
Toluene-d8 (Surr)	107		80 - 120

Lab Sample ID: 440-20583-A-5 MS
Matrix: Solid
Analysis Batch: 46006

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		0.0499	0.0531		mg/Kg		106	65 - 130
Toluene	ND		0.0499	0.0522		mg/Kg		105	70 - 130
Ethylbenzene	ND		0.0499	0.0557		mg/Kg		112	70 - 135
m,p-Xylene	ND		0.0998	0.111		mg/Kg		111	70 - 130
o-Xylene	ND		0.0499	0.0539		mg/Kg		108	65 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		80 - 120
Dibromofluoromethane (Surr)	97		80 - 125
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: 440-20583-A-5 MSD
Matrix: Solid
Analysis Batch: 46006

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		0.0500	0.0557		mg/Kg		111	65 - 130	5	20
Toluene	ND		0.0500	0.0541		mg/Kg		108	70 - 130	3	20
Ethylbenzene	ND		0.0500	0.0576		mg/Kg		115	70 - 135	3	25
m,p-Xylene	ND		0.100	0.116		mg/Kg		116	70 - 130	4	25
o-Xylene	ND		0.0500	0.0555		mg/Kg		111	65 - 130	3	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		80 - 120
Dibromofluoromethane (Surr)	98		80 - 125
Toluene-d8 (Surr)	100		80 - 120

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 440-45548/4
Matrix: Solid
Analysis Batch: 45548

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/15/12 20:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	105		80 - 125		08/15/12 20:38	1
4-Bromofluorobenzene (Surr)	98		80 - 120		08/15/12 20:38	1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 440-45548/4
Matrix: Solid
Analysis Batch: 45548

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		80 - 120		08/15/12 20:38	1

Lab Sample ID: LCS 440-45548/6
Matrix: Solid
Analysis Batch: 45548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			1.00	0.893		mg/Kg		89	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	114		80 - 125
4-Bromofluorobenzene (Surr)	106		80 - 120
Toluene-d8 (Surr)	111		80 - 120

Lab Sample ID: 440-20130-A-1 MS
Matrix: Solid
Analysis Batch: 45548

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.48	3.04		mg/Kg		87	55 - 140		

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	105		80 - 125
4-Bromofluorobenzene (Surr)	102		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Lab Sample ID: 440-20130-A-1 MSD
Matrix: Solid
Analysis Batch: 45548

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	3.07		mg/Kg		89	55 - 140	1	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	109		80 - 125
4-Bromofluorobenzene (Surr)	103		80 - 120
Toluene-d8 (Surr)	107		80 - 120

Lab Sample ID: MB 440-45689/4
Matrix: Solid
Analysis Batch: 45689

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/16/12 09:37	1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 440-45689/4
Matrix: Solid
Analysis Batch: 45689

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		80 - 125		08/16/12 09:37	1
4-Bromofluorobenzene (Surr)	106		80 - 120		08/16/12 09:37	1
Toluene-d8 (Surr)	108		80 - 120		08/16/12 09:37	1

Lab Sample ID: LCS 440-45689/6
Matrix: Solid
Analysis Batch: 45689

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)			1.00	0.944		mg/Kg		94	60 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	110		80 - 125
4-Bromofluorobenzene (Surr)	103		80 - 120
Toluene-d8 (Surr)	108		80 - 120

Lab Sample ID: 440-20349-A-1 MS
Matrix: Solid
Analysis Batch: 45689

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	3.25		mg/Kg		94	55 - 140		

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	102		80 - 125
4-Bromofluorobenzene (Surr)	96		80 - 120
Toluene-d8 (Surr)	105		80 - 120

Lab Sample ID: 440-20349-A-1 MSD
Matrix: Solid
Analysis Batch: 45689

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.42	3.09		mg/Kg		90	55 - 140	5	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	99		80 - 125
4-Bromofluorobenzene (Surr)	94		80 - 120
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 440-46007/4
Matrix: Solid
Analysis Batch: 46007

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Volatile Fuel Hydrocarbons (C4-C12)	ND		0.10		mg/Kg			08/17/12 08:43	1

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 440-46007/4
Matrix: Solid
Analysis Batch: 46007

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		80 - 125		08/17/12 08:43	1
4-Bromofluorobenzene (Surr)	101		80 - 120		08/17/12 08:43	1
Toluene-d8 (Surr)	107		80 - 120		08/17/12 08:43	1

Lab Sample ID: LCS 440-46007/6
Matrix: Solid
Analysis Batch: 46007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	1.00	0.955		mg/Kg		95	60 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	111		80 - 125
4-Bromofluorobenzene (Surr)	105		80 - 120
Toluene-d8 (Surr)	109		80 - 120

Lab Sample ID: 440-20583-A-5 MS
Matrix: Solid
Analysis Batch: 46007

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.44	2.82		mg/Kg		82	55 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Dibromofluoromethane (Surr)	97		80 - 125
4-Bromofluorobenzene (Surr)	86		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: 440-20583-A-5 MSD
Matrix: Solid
Analysis Batch: 46007

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Volatile Fuel Hydrocarbons (C4-C12)	ND		3.45	2.92		mg/Kg		85	55 - 140	4	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr)	98		80 - 125
4-Bromofluorobenzene (Surr)	89		80 - 120
Toluene-d8 (Surr)	100		80 - 120

GC/MS VOA

Analysis Batch: 45547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20130-A-1 MS	Matrix Spike	Total/NA	Solid	8260B	
440-20130-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
440-20151-1	D-3-B	Total/NA	Solid	8260B	
LCS 440-45547/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-45547/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 45548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20130-A-1 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-20130-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
440-20151-1	D-3-B	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-45548/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-45548/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 45688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20151-2	D-3-N	Total/NA	Solid	8260B	
440-20151-3	D-3-E	Total/NA	Solid	8260B	
440-20151-4	D-3-S	Total/NA	Solid	8260B	
440-20349-A-1 MS	Matrix Spike	Total/NA	Solid	8260B	
440-20349-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
LCS 440-45688/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-45688/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 45689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20151-2	D-3-N	Total/NA	Solid	8260B/CA_LUFT MS	
440-20151-3	D-3-E	Total/NA	Solid	8260B/CA_LUFT MS	
440-20151-4	D-3-S	Total/NA	Solid	8260B/CA_LUFT MS	
440-20349-A-1 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-20349-A-1 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-45689/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-45689/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

Analysis Batch: 46006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20151-5	D-3-W	Total/NA	Solid	8260B	
440-20583-A-5 MS	Matrix Spike	Total/NA	Solid	8260B	
440-20583-A-5 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
LCS 440-46006/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-46006/4	Method Blank	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 46007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-20151-5	D-3-W	Total/NA	Solid	8260B/CA_LUFT MS	
440-20583-A-5 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-20583-A-5 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-46007/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-46007/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3750 International Blvd., Oakland

TestAmerica Job ID: 440-20151-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arizona	State Program	9	AZ0671	10-13-12
California	LA Cty Sanitation Districts	9	10256	01-31-13
California	NELAC	9	1108CA	01-31-13
California	State Program	9	2706	06-30-14
Guam	State Program	9	Cert. No. 12.002r	01-23-13
Hawaii	State Program	9	N/A	01-31-13
Nevada	State Program	9	CA015312007A	07-31-12
New Mexico	State Program	6	N/A	01-31-12
Northern Mariana Islands	State Program	9	MP0002	01-31-13
Oregon	NELAC	10	4005	09-12-12
USDA	Federal		P330-09-00080	06-06-14

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
☐ CALSCIENCE (_____)
☐ SPL (_____)
☐ XENCO (_____)
☒ TEST AMERICA (Irvine)
☐ OTHER (_____)

Please Check Appropriate Box:
☐ ENV. SERVICES ☐ MOTIVA RETAIL ☐ SHELL RETAIL
☐ MOTIVA SD&CM ☑ CONSULTANT ☐ LUBES
☐ SHELL PIPELINE ☐ OTHER

Print Bill To Contact Name: Peter Schaefer D0D364
PO #:
INCIDENT # (ENV SERVICES): ☑ CHECK IF NO INCIDENT # APPLIES
SAP #: 135682
DATE: ~~8/12/2010~~ 8/9/2012
PAGE: 1 of 1

SAMPLING 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

SITE ADDRESS: Street and City: 3750 International Blvd, Oakland
State: CA
GLOBAL ID NO.: NA
EDF DELIVERABLE TO (Name, Company, Office Location): NA ~~Brenda Garlick, CRA, Emeryville~~
PHONE NO.: NA ~~510-420-3345~~
E-MAIL: NA shell.em1.eq@craworld.com
CONSULTANT PROJECT NO.: 060364
SAMPLER NAME(S) (Print): Cristina Arganbright
LAB USE ONLY: 120-7051

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

SPECIAL INSTRUCTIONS OR NOTES:
Copy final report to Shell.Lab.Billing@craworld.com
~~Report results in ppm~~

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ 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.	TPH -GRO, Purgeable (8260B)	TPH -DRO, Extractable (8015M)	TPHg (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (TO-15)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: _____ (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	CH4 ASTMD 1946	O2 + Argon ASTMD 1946	Helium ASTMD 1946 (M)	CO2 ASTMD 1946	TEMPERATURE ON RECEIPT C°	Container PID Readings or Laboratory Notes
	D-3-B	8/9	0930	SO						1	X			X														
	D-3-N	8/9	0945	SO						1	X			X														
	D-3-E	8/9	0950	SO						1	X			X														
	D-3-S	8/9	0955	SO						1	X			X														
	D-3-W	8/9	1000	SO						1	X			X														

	Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
1		Emeryville Office	8/9/12	1200
2			8-10-12	13:15
3	8-10-12 16:00		8/11/12	0940

1.3°C

05/2/05 Revision

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-20151-1

Login Number: 20151
List Number: 1
Creator: Avila, Stephanie

List Source: TestAmerica Irvine

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	