CONESTOGA-ROVERS & ASSOCIATES

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

TRANSMITTAL

DATE: July 25, 2012

REFERENCE NO.: 240554

PROJECT NAME: 3420 San Pablo Avenue, Oakland

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

RECEIVED
12:02 pm, Aug 14, 2012
Alameda County
Environmental Health

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

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

QUANTITY	DESCRIPTION
1	Subsurface Investigation 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)
Shahriar Almasi, Portola Valley Shell (property owner), 965 Laurel Glen Drive, Palo Alto, CA 94304

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: Former Shell Service Station
3420 San Pablo Avenue
Oakland, California
SAP Code 139619
Incident No. 98995748
ACEH Case No. RO0000006

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

SUBSURFACE INVESTIGATION REPORT

FORMER SHELL SERVICE STATION
3420 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

SAP CODE 139619
INCIDENT NO. 98995748
AGENCY NO. RO0000006

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

JULY 25, 2012
REF. NO. 240554 (13)
This report is printed on recycled paper.

TABLE OF CONTENTS

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

LIST OF APPENDICES

EXECUTIVE SUMMARY

- CRA drilled three soil borings (SB-13 through SB-15) during this investigation to evaluate soil conditions in the area of previous soil boring SB-10. ACEH requested that lead detections from this investigation and previous investigations be evaluated using the updated OEHHA CHHSL for soil with commercial land use.
- Total lead detections exceeded the OEHHA CHHSL in all samples collected from SB-13 through SB-15 at 1 fbg and in SB-13 and SB-15 at 2 fbg.
- We also note that during the October 2006 and January 2012 subsurface investigations total lead detections exceeded the OEHHA CHHSL in borings SB-1, SB-7, and SB-9 at 2 fbg and SB-10 at 1 fbg.
- We recommend four additional soil borings to further delineate total lead impacts in shallow soils and one additional soil boring behind the station building to collect background samples to evaluate the potential source of lead impacts.

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 subsurface investigation at this site. The purpose of the investigation was to evaluate soil conditions in the area of previous soil boring SB-10, as proposed in CRA's February 8, 2012 *Subsurface Investigation Report* (report). CRA followed the scope of work outlined in our report and procedures presented in our September 27, 2011 *Subsurface Investigation Work Plan* (work plan), as approved in Alameda County Environmental Health's (ACEH's) March 28, 2012 letter. ACEH also requested evaluation of lead concentrations using the updated California human health screening level (CHHSL) for total lead in soil with commercial land use developed by the California Office of Environmental Health Hazard Assessment (OEHHA; September 23, 2010).

ACEH's July 25, 2011 letter requested a soil vapor investigation proposal; however, the State Water Resources Control Board's low-threat underground storage tank closure policy[1] states that soil vapor investigations are not warranted at active service stations. The subject site is likely to remain a service station for the foreseeable future, so no soil vapor investigation is proposed at this time.

The subject site is a former Shell service station located at the southeast corner of the San Pablo Avenue and 35th Street intersection in a mixed commercial and residential neighborhood of Oakland, California (Figure 1). Shell sold the station and property in March 2005. The site is currently an operating third-party service station (Figure 2).

A summary of previous work performed at the site and additional background information was presented in our work plan and is not repeated herein.

2.0 INVESTIGATION RESULTS

2.1 PERMIT

CRA obtained a drilling permit from Alameda County Public Works Agency (Appendix A).

---

1 *Low-Threat Underground Storage Tank Case Closure Policy*, State Water Resources Control Board, adopted May 1, 2012

2.2 DRILLING DATE

May 9, 2012.

2.3 DRILLING COMPANY

Gregg Drilling and Testing, Inc.

2.4 CRA PERSONNEL

Environmental scientist Cristina Arganbright directed the drilling activities under the supervision of California Professional Geologist Peter Schaefer.

2.5 DRILLING METHOD

Water-knife.

2.6 NUMBER OF BORINGS

Three soil borings (SB-13 through SB-15) were drilled during this investigation.

The boring specifications and soil types encountered are described on the boring logs contained in Appendix B. The boring locations are shown on Figure 2.

2.7 BORING DEPTHS

5.5 feet below grade (fbg).

2.8 WASTE DISPOSAL

Sludge generated during field activities was temporarily stored on site in a 55-gallon drum, sampled, and profiled for disposal. Waste confirmation documentation is pending and will be provided by CRA upon request. The laboratory analytical report is presented in Appendix C.

3.0 FINDINGS

3.1 SOIL

The soil chemical analytical data are summarized in Table 1, and total lead analytical results are presented on Figure 2. The laboratory analytical report is presented in Appendix C.

4.0 CONCLUSIONS

Total lead detections exceeded the OEHHA CHHSL in all samples collected from SB-13 through SB-15 at 1 fbg and in SB-13 and SB-15 at 2 fbg. We also note that during the October 2006 and January 2012 subsurface investigations total lead detections exceeded the OEHHA CHHSL in borings SB-1, SB-7, and SB-9 at 2 fbg and SB-10 at 1 fbg.

5.0 RECOMMENDATIONS

CRA recommends drilling four additional soil borings to further delineate total lead impacts in shallow soils and one additional soil boring behind the station building to collect background samples to evaluate the potential source of lead impacts. The proposed boring locations are shown in Figure 2, and we propose to follow the procedures detailed in our September 27, 2011 work plan, with the exception that the soil samples will be analyzed for lead only.

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

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

12/02/08

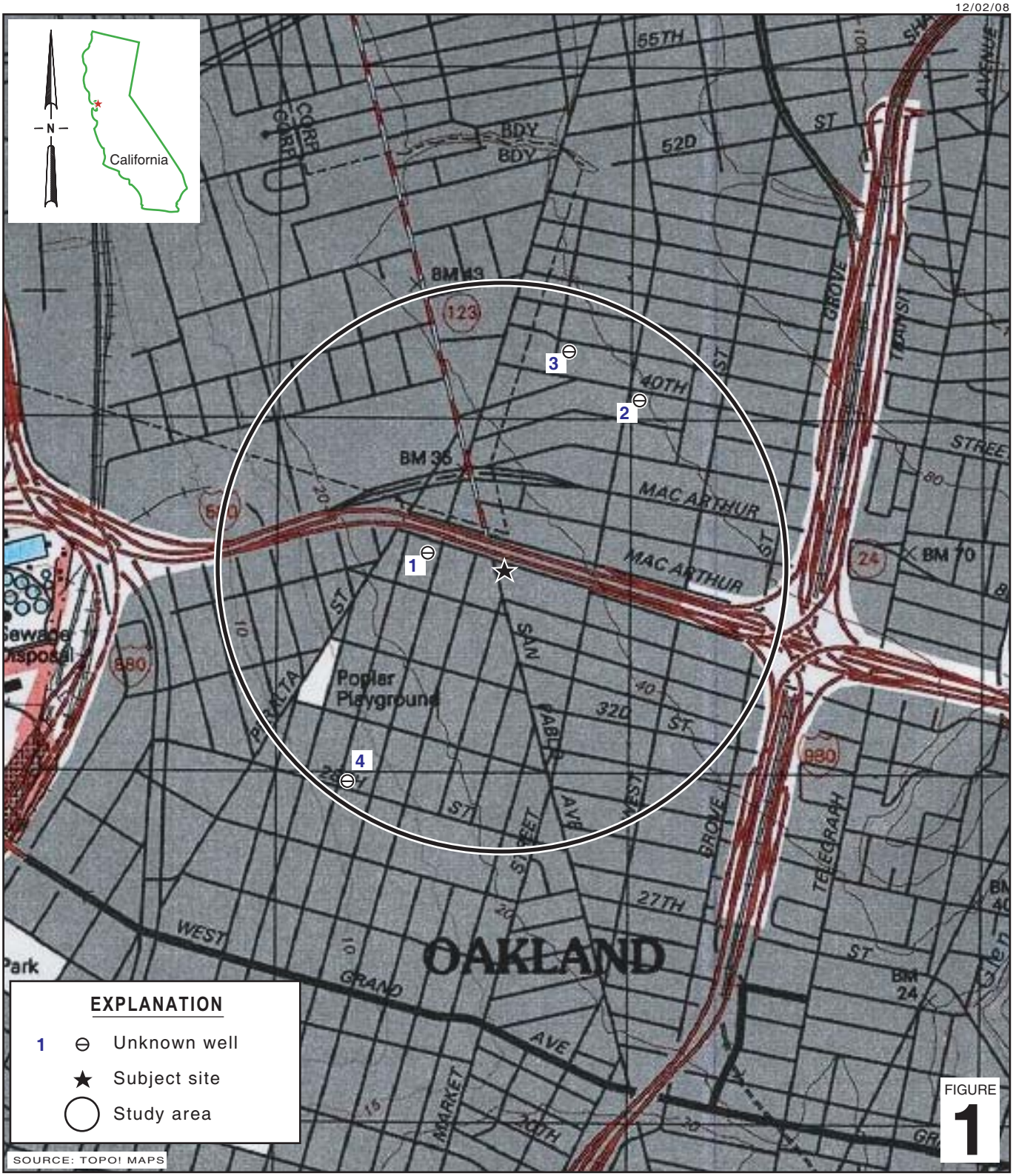


FIGURE 1

I:\Shell\6-chars\2405--\240554-Oakland 3420 San Pablo\240554-FIGURES\240554 VICINITY.AI

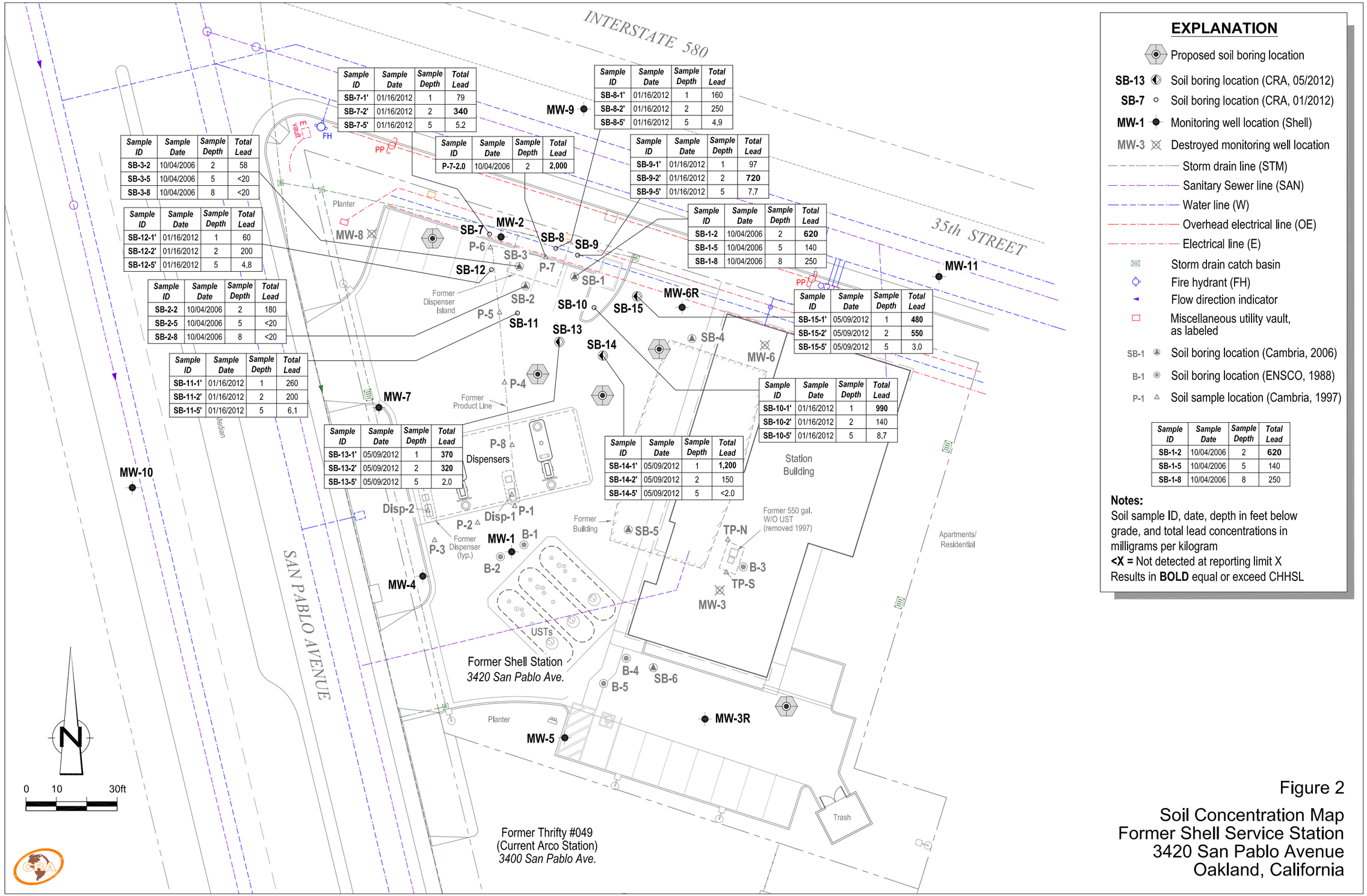
0 1/8 1/4 1/2 1

SCALE (MILES)

Former Shell Service Station
3420 San Pablo Avenue
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map



Sample ID	Sample Date	Sample Depth	Total Lead
SB-7-1'	01/16/2012	1	79
SB-7-2'	01/16/2012	2	**340**
SB-7-5'	01/16/2012	5	5.2

Sample ID	Sample Date	Sample Depth	Total Lead
P-7-2.0	10/04/2006	2	**2,000**

Sample ID	Sample Date	Sample Depth	Total Lead
SB-8-1'	01/16/2012	1	160
SB-8-2'	01/16/2012	2	250
SB-8-5'	01/16/2012	5	4.9

Sample ID	Sample Date	Sample Depth	Total Lead
SB-9-1'	01/16/2012	1	97
SB-9-2'	01/16/2012	2	**720**
SB-9-5'	01/16/2012	5	7.7

Sample ID	Sample Date	Sample Depth	Total Lead
SB-3-2	10/04/2006	2	58
SB-3-5	10/04/2006	5	<20
SB-3-8	10/04/2006	8	<20

Sample ID	Sample Date	Sample Depth	Total Lead
SB-12-1'	01/16/2012	1	60
SB-12-2'	01/16/2012	2	200
SB-12-5'	01/16/2012	5	4.8

Sample ID	Sample Date	Sample Depth	Total Lead
SB-1-2	10/04/2006	2	**620**
SB-1-5	10/04/2006	5	140
SB-1-8	10/04/2006	8	250

Sample ID	Sample Date	Sample Depth	Total Lead
SB-2-2	10/04/2006	2	180
SB-2-5	10/04/2006	5	<20
SB-2-8	10/04/2006	8	<20

Sample ID	Sample Date	Sample Depth	Total Lead
SB-15-1'	05/09/2012	1	**480**
SB-15-2'	05/09/2012	2	**550**
SB-15-5'	05/09/2012	5	3.0

Sample ID	Sample Date	Sample Depth	Total Lead
SB-11-1'	01/16/2012	1	260
SB-11-2'	01/16/2012	2	200
SB-11-5'	01/16/2012	5	6.1

Sample ID	Sample Date	Sample Depth	Total Lead
SB-10-1'	01/16/2012	1	**990**
SB-10-2'	01/16/2012	2	140
SB-10-5'	01/16/2012	5	8.7

Sample ID	Sample Date	Sample Depth	Total Lead
SB-13-1'	05/09/2012	1	**370**
SB-13-2'	05/09/2012	2	**320**
SB-13-5'	05/09/2012	5	2.0

Sample ID	Sample Date	Sample Depth	Total Lead
SB-14-1'	05/09/2012	1	**1,200**
SB-14-2'	05/09/2012	2	150
SB-14-5'	05/09/2012	5	<2.0

EXPLANATION

- Proposed soil boring location
- SB-13 — Soil boring location (CRA, 05/2012)
- SB-7 — Soil boring location (CRA, 01/2012)
- MW-1 — Monitoring well location (Shell)
- MW-3 — Destroyed monitoring well location
- Storm drain line (STM)
- Sanitary Sewer line (SAN)
- Water line (W)
- Overhead electrical line (OE)
- Electrical line (E)
- Storm drain catch basin
- Fire hydrant (FH)
- Flow direction indicator
- Miscellaneous utility vault, as labeled
- SB-1 — Soil boring location (Cambria, 2006)
- B-1 — Soil boring location (ENSCO, 1988)
- P-1 — Soil sample location (Cambria, 1997)

Sample ID	Sample Date	Sample Depth	Total Lead
SB-1-2	10/04/2006	2	**620**
SB-1-5	10/04/2006	5	140
SB-1-8	10/04/2006	8	250

Notes:
Soil sample ID, date, depth in feet below grade, and total lead concentrations in milligrams per kilogram
<X = Not detected at reporting limit X
Results in **BOLD** equal or exceed CHHSL

Figure 2

Soil Concentration Map
Former Shell Service Station
3420 San Pablo Avenue
Oakland, California

I:\Shell\6-chars\2405--\240554-Oakland 3420 San Pablo\240554-FIGURES\240554 SITE PLAN.DWG (07/24/2012)

TABLE

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
3420 SAN PABLO AVENUE, 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)*	*Total Lead (mg/kg)*
B-1	8/8/1988	5 - 5.5	1,400	1.9	42	43	120	---	---
B-1	8/8/1988	9.5 - 10	80	---	---	---	---	---	---
B-1	8/8/1988	15 - 15.5	<5.0	---	---	---	---	---	---
B-1	8/8/1988	20 - 20.5	<5.0	---	---	---	---	---	---
B-2	8/8/1988	5 - 5.5	550	1.5	16	35	33	---	---
B-2	8/8/1988	10 - 10.5	580	0.7	3.3	7.8	48	---	---
B-3	8/8/1988	5, 10, and 15	<5.0	---	---	---	---	---	---
B-4	8/8/1988	5, 10, and 15	<5.0	---	---	---	---	---	---
B-5	8/8/1988	5, 10, and 15	<5.0	---	---	---	---	---	---
MW-1	4/10/1989	5.5 - 6	850	1.2	14	19	100	---	4
MW-1	4/10/1989	10.5 - 11	80	<0.05	1.9	1.9	16	---	3
MW-2	4/10/1989	10.5 - 11	70	0.4	1.5	1.7	1.5	---	8
MW-3	4/10/1989	10.5 - 11	<0.2	<0.002	0.010	0.008	0.069	---	3
MW-4	4/10/1989	10.5 - 11	<0.2	<0.002	0.005	0.004	0.031	---	2
MW-5	1/19/1990	5.5 - 6	5.0	<0.05	<0.1	<0.1	<0.1	---	---
MW-6	1/19/1990	5.5 - 6	<1.0	<0.05	<0.1	<0.1	<0.1	---	---
MW-7	1/19/1990	5.5 - 6	14	0.078	<0.1	0.21	<0.1	---	---
MW-8	1/18/1990	5.5 - 6	<1.0	<0.05	<0.1	<0.1	<0.1	---	---
MW-9	1/18/1990	10.5 - 11	6.1	<0.05	<0.1	0.39	0.14	---	---
MW-10	10/23/1991	5	1.4	0.015	0.006	0.010	0.008	---	---
MW-10	10/23/1991	10	1.8	0.06	<0.0050	0.027	0.0070	---	---
MW-11	10/23/1991	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
MW-11	10/23/1991	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---
Disp-1-2.5	6/26/1997	2.5	8.4	0.054	0.046	0.0094	0.21	1.6	5.8
Disp-2-2.0	6/26/1997	2	51	0.075	1.6	0.38	1.6	7.9	9.6
TP-N-7	6/26/1997	7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	<5.0
TP-S-7	6/26/1997	7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	6.4
P-1-2.5	6/26/1997	2.5	39	0.13	0.051	0.012	0.032	0.82	7.4
P-2-2.5	6/26/1997	2.5	17	0.035	0.079	0.063	0.11	0.33	7.4
P-3-2.5	6/26/1997	2.5	16	0.028	0.059	0.019	0.026	0.092	6.9
P-4-4.0	6/26/1997	4	19	0.041	0.053	<0.010	0.078	<0.050	7.4
P-5-4.0	6/26/1997	4	3.1	0.016	0.0054	<0.0050	0.018	0.028	7.4
P-6-2.5	6/26/1997	2.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	33

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
3420 SAN PABLO AVENUE, 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)*	*Total Lead (mg/kg)*
P-7-2.0	6/26/1997	2	4.5	0.040	0.0097	0.0095	0.053	<0.025	**2,000**
P-8-2.5	6/26/1997	2.5	120	<0.12	0.43	0.33	0.42	<0.62	8.2
SB-1-2	10/4/2006	2	<1.0	0.011	<0.0050	0.0058	0.017	0.0096	**620**
SB-1-5	10/4/2006	5	6.9	0.0066	<0.0050	<0.0050	<0.010	<0.0050	140
SB-1-8	10/4/2006	8	**46,000**	<25	<25	<25	<50	<25	250
SB-2-2	10/4/2006	2	**12,000**	**74**	<25	<25	**82**	<25	180
SB-2-5	10/4/2006	5	1.8	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<20
SB-2-8	10/4/2006	8	160	<0.12	<0.12	2.2	1.3	<0.12	<20
SB-3-2	10/4/2006	2	4.7	0.058	0.0075	0.018	0.079	0.15	58
SB-3-5	10/4/2006	5	**11,000**	<25	<25	<25	<50	<25	<20
SB-3-8	10/4/2006	8	27	<0.12	<0.12	<0.12	<0.25	<0.12	<20
SB-4-4.5	10/4/2006	4.5	<1.0	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<5
SB-5-4.5	10/4/2006	4.5	2.9	<0.0050	<0.0050	<0.0050	<0.010	0.059	<5
SB-6-4.5	10/4/2006	4.5	7.2	0.012	0.017	0.018	0.16	<0.0050	29
SB-7-1'	1/16/2012	1	<0.099	0.0020	<0.0020	<0.0020	<0.0040	<0.0050	79
SB-7-2'	1/16/2012	2	<0.12	0.0023	<0.0023	<0.0023	<0.0046	0.0058	**340**
SB-7-5'	1/16/2012	5	<0.20	<0.00099	<0.00099	<0.00099	<0.0020	<0.0020	5.2
SB-8-1'	1/16/2012	1	<0.085	0.0023	<0.0017	<0.0017	<0.0034	<0.0043	160
SB-8-2'	1/16/2012	2	<0.096	0.0044	<0.0019	<0.0019	<0.0039	<0.0048	250
SB-8-5'	1/16/2012	5	1.7	<0.00098	<0.00098	<0.00098	<0.0020	<0.0020	4.9
SB-9-1'	1/16/2012	1	0.12	0.0025	0.0023	<0.0018	<0.0036	<0.0045	97
SB-9-2'	1/16/2012	2	<0.083	0.0048	<0.0017	<0.0017	<0.0033	<0.0042	**720**
SB-9-5'	1/16/2012	5	<0.20	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	7.7
SB-10-1'	1/16/2012	1	0.12	0.017	0.0028	<0.0022	<0.0044	<0.0056	**990**
SB-10-2'	1/16/2012	2	0.67	0.0036	<0.0019	<0.0019	<0.0039	<0.0048	140
SB-10-5'	1/16/2012	5	3.1	0.0016	<0.0010	<0.0010	<0.0020	<0.0020	8.7
SB-11-1'	1/16/2012	1	0.72	0.065	0.0070	0.0071	0.022	0.012	260
SB-11-2'	1/16/2012	2	1.7	0.16	0.0070	0.019	0.049	0.021	200
SB-11-5'	1/16/2012	5	2.9	0.10	0.0010	0.042	0.0074	0.030	6.1
SB-12-1'	1/16/2012	1	0.20	0.031	0.0041	0.0040	0.015	0.0061	60
SB-12-2'	1/16/2012	2	2.8	0.20	0.011	0.025	0.097	0.029	200
SB-12-5'	1/16/2012	5	**180**	0.22	<0.050	1.6	<0.10	<0.10	4.8
SB-13-1'	5/9/2012	1	---	---	---	---	---	---	**370**
SB-13-2'	5/9/2012	2	---	---	---	---	---	---	**320**

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
3420 SAN PABLO AVENUE, 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)*	*Total Lead (mg/kg)*
SB-13-5'	5/9/2012	5	---	---	---	---	---	---	2.0
SB-14-1'	5/9/2012	1	---	---	---	---	---	---	**1,200**
SB-14-2'	5/9/2012	2	---	---	---	---	---	---	150
SB-14-5'	5/9/2012	5	---	---	---	---	---	---	<2.0
SB-15-1'	5/9/2012	1	---	---	---	---	---	---	**480**
SB-15-2'	5/9/2012	2	---	---	---	---	---	---	**550**
SB-15-5'	5/9/2012	5	---	---	---	---	---	---	3.0
Shallow Soil (≤10 fbg) Screeening Level:			180 a	0.27 a	9.3 a	4.7 a	11 a	8.4 a	320 b
Deep Soil (>10 fbg) Screeening Level:			180 a	2.0 a	9.3 a	4.7 a	11 a	8.4 a	320 b

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; prior to June 26, 1997, analyzed by EPA Method 8015M
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B; prior to June 26, 1997, analyzed by EPA Method 8020
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; prior to June 26, 1997, analyzed by EPA Method 8020
Total lead analysis by EPA 6010B; prior to April 11, 1989 analyzed by EPA Method 7420
fbg = Feet below grade
mg/kg = Milligrams per kilogram
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
CHHSL = California human health screening level
Results in **bold** equal or exceed applicable ESL or CHHSL

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]).

b = Updated CHHSL for total exposure (inhalation, ingestion, and dermal absorption) developed by the California Office of Environmental Health Hazard Assessment (September 23, 2010) for lead in soil with commercial land use.

APPENDIX A

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: 04/11/2012 By jamesy

Permit Numbers: W2012-0251
Permits Valid from 05/09/2012 to 05/09/2012

Application Id:	1334151653955	**City of Project Site:** Oakland
Site Location:	3420 San Pablo Ave, Oakland, CA	
Project Start Date:	05/09/2012	**Completion Date:** 05/09/2012
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org	
Applicant:	Conestoga Rovers & Associates - Sherry Phillips 19449 Riverside Drive, Suite 230, Sonoma, CA 95476	**Phone:** 707-732-3039
Property Owner:	Portolla Valley Shell 965 Laural Glen Drive, Palo Alto, CA 94304	**Phone:** --
Client:	NA Shell Oil Products US 20945 S Wilmington Ave, Carson, CA 90815	**Phone:** 707-865-2501
Contact:	Sherry Phillips	**Phone:** 707-732-3039 **Cell:** 707-732-3039

	Total Due:	$265.00
Receipt Number: WR2012-0109	**Total Amount Paid:**	$265.00
Payer Name : sherry j phillips	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Contamination Study - 3 Boreholes
Driller: Gregg Drilling & Testing Inc - Lic #: 485165 - Method: Hand

Work Total: $265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2012-0251	04/11/2012	08/07/2012	3	2.00 in.	5.50 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

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

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the

permits and requirements have been approved or obtained.

5. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. 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.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

BORING LOGS

Conestoga-Rovers and Associates
5900 Hollis Street, Suite A
Emeryville, California, 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-13
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-May-12
LOCATION	3420 San Pablo Avenue, Oakland, Ca	**DRILLING COMPLETED**	09-May-12
PROJECT NUMBER	240554	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Water-knife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVAL**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.1	
							Gravelly SILT (ML) ; black (7.5YR 2.5/1) ; dry ; 70% silt; 10% fine to medium sand; 20% fine gravel.		
3.3		SB-13-1'					@ 1' -**SILT with Gravel (ML)** ; moist ; 75% silt, 5% medium sand, 20% fine gravel.		
17.5		SB-13-2'			ML				Portland Type I/II
18.9		SB-13-5'		5			@ 5'- 5% clay, 70% silt, 25% fine gravel.	5.5	Bottom of Boring @ 5.5 ft
				10					

WELL LOG (PID) C:\DOCUMENTS AND SETTINGS\CARGANBRIGHT\DESKTOP\240554-3420_SAN_PABLO.GPJ DEFAULT.GDT 7/19/12

Conestoga-Rovers and Associates
5900 Hollis Street, Suite A
Emeryville, California, 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-14
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-May-12
LOCATION	3420 San Pablo Avenue, Oakland, Ca	**DRILLING COMPLETED**	09-May-12
PROJECT NUMBER	240554	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Water-knife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVAL**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.1	
13.7		SB-14-1'					**Gravelly SILT with Sand (ML)** ; black (7.5YR 2.5/1); dry ; 60% silt, 15% fine to medium sand, 25% fine gravel.		
10.5		SB-14-2'			ML		@ 2'- **SILT with Gravel (ML)** ; moist ; 5% clay, 80% silt, 15% fine gravel.		Portland Type I/II
207.0		SB-14-5'		5				5.5	Bottom of Boring @ 5.5 ft
				10					

WELL LOG (PID) C:\DOCUMENTS AND SETTINGS\CARGANBRIGHT\DESKTOP\240554-3420 SAN PABLO.GPJ DEFAULT.GDT 7/19/12

Conestoga-Rovers and Associates
5900 Hollis Street, Suite A
Emeryville, California, 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

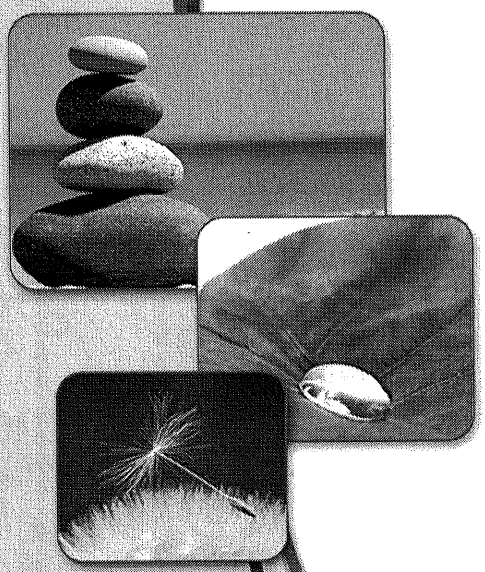
CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	SB-15
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	09-May-12
LOCATION	3420 San Pablo Avenue, Oakland, Ca	**DRILLING COMPLETED**	09-May-12
PROJECT NUMBER	240554	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Water-knife	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	4"	**SCREENED INTERVAL**	NA
LOGGED BY	C. Arganbright	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	P. Schaefer PG 5612	**DEPTH TO WATER (Static)**	NA
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	SOIL DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							ASPHALT	0.1	
1.5		SB-15-1'					**Gravelly SILT with Sand (ML)** ; black (7.5YR 2.5/1) ; dry ; 60% silt, 15% fine to medium sand, 25% fine gravel.		
6.1		SB-15-2'			ML		@ 2'- moist.		Portland Type I/II
2.5		SB-15-5'		5			@ 5'- **SILT (ML)** ; black (7.5YR 2.5/1); moist ; 10% clay, 90% silt; low plasticity.	5.5	Bottom of Boring @ 5.5 ft
				10					

WELL LOG (PID) C:\DOCUMENTS AND SETTINGS\CARGANBRIGHT\DESKTOP\240554-3420_SAN_PABLO.GPJ DEFAULT.GDT 7/19/12

APPENDIX C

CERTIFIED 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: 440-11558-1
Client Project/Site: 3420 San Pablo Ave., Oakland, CA

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

Attn: Peter Schaefrer

Philip Sanelle

Authorized for release by:
5/29/2012 4:38:55 PM

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

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-11558-1	SB-15-1'	Solid	05/09/12 08:30	05/11/12 10:00
440-11558-2	SB-15-2'	Solid	05/09/12 08:54	05/11/12 10:00
440-11558-3	SB-15-5'	Solid	05/09/12 09:06	05/11/12 10:00
440-11558-4	SB-14-1'	Solid	05/09/12 09:57	05/11/12 10:00
440-11558-5	SB-14-2'	Solid	05/09/12 10:07	05/11/12 10:00
440-11558-6	SB-14-5'	Solid	05/09/12 10:15	05/11/12 10:00
440-11558-7	SB-13-1'	Solid	05/09/12 10:54	05/11/12 10:00
440-11558-8	SB-13-2'	Solid	05/09/12 11:03	05/11/12 10:00
440-11558-9	SB-13-5'	Solid	05/09/12 11:13	05/11/12 10:00

Job ID: 440-11558-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-11558-1

Comments
No additional comments.

Receipt
The samples were received on 5/11/2012 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 25822 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 6010B: The following sample(s) was diluted due to the nature of the sample matrix: IDW-3 (440-11410-18). Elevated reporting limits (RLs) are provided. High Calcium.

No other analytical or quality issues were noted.

Client Sample ID: SB-15-1'
Date Collected: 05/09/12 08:30
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-1
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	480		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:01	5

Client Sample ID: SB-15-2'
Date Collected: 05/09/12 08:54
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-2
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	550		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:03	5

Client Sample ID: SB-15-5'
Date Collected: 05/09/12 09:06
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-3
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.0		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:05	5

Client Sample ID: SB-14-1'
Date Collected: 05/09/12 09:57
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-4
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1200		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:07	5

Client Sample ID: SB-14-2'
Date Collected: 05/09/12 10:07
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-5
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	150		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:09	5

Client Sample ID: SB-14-5'
Date Collected: 05/09/12 10:15
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-6
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:11	5

Client Sample ID: SB-13-1'
Date Collected: 05/09/12 10:54
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-7
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	370		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:13	5

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Client Sample ID: SB-13-2'
Date Collected: 05/09/12 11:03
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-8
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	320		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:15	5

Client Sample ID: SB-13-5'
Date Collected: 05/09/12 11:13
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-9
Matrix: Solid

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.0		2.0		mg/Kg		05/14/12 09:28	05/22/12 19:24	5

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Client Sample ID: SB-15-1'

Lab Sample ID: 440-11558-1

Date Collected: 05/09/12 08:30
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.03 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:01	DP	TAL IRV

Client Sample ID: SB-15-2'

Lab Sample ID: 440-11558-2

Date Collected: 05/09/12 08:54
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.99 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:03	DP	TAL IRV

Client Sample ID: SB-15-5'

Lab Sample ID: 440-11558-3

Date Collected: 05/09/12 09:06
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.00 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:05	DP	TAL IRV

Client Sample ID: SB-14-1'

Lab Sample ID: 440-11558-4

Date Collected: 05/09/12 09:57
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.98 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:07	DP	TAL IRV

Client Sample ID: SB-14-2'

Lab Sample ID: 440-11558-5

Date Collected: 05/09/12 10:07
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.03 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:09	DP	TAL IRV

Client Sample ID: SB-14-5'

Lab Sample ID: 440-11558-6

Date Collected: 05/09/12 10:15
Matrix: Solid
Date Received: 05/11/12 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.02 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:11	DP	TAL IRV

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Client Sample ID: SB-13-1'

Date Collected: 05/09/12 10:54
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.99 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:13	DP	TAL IRV

Client Sample ID: SB-13-2'

Date Collected: 05/09/12 11:03
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.00 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:15	DP	TAL IRV

Client Sample ID: SB-13-5'

Date Collected: 05/09/12 11:13
Date Received: 05/11/12 10:00

Lab Sample ID: 440-11558-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			2.04 g	50 mL	25822	05/14/12 09:28	DT	TAL IRV
Total/NA	Analysis	6010B		5			28095	05/22/12 19:24	DP	TAL IRV

Laboratory References:

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

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-25822/1-A ^5
Matrix: Solid
Analysis Batch: 27981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 25822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		mg/Kg		05/14/12 09:28	05/22/12 18:30	5

Lab Sample ID: LCS 440-25822/2-A ^5
Matrix: Solid
Analysis Batch: 27981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 25822

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	48.7		mg/Kg		97	80 - 120

Lab Sample ID: 440-11410-B-18-B MS ^25
Matrix: Solid
Analysis Batch: 27981

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 25822

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	74		49.5	115		mg/Kg		81	75 - 125

Lab Sample ID: 440-11410-B-18-C MSD ^25
Matrix: Solid
Analysis Batch: 27981

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 25822

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	74		50.0	99.0	F	mg/Kg		49	75 - 125	15	20

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Metals

Prep Batch: 25822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-11410-B-18-B MS ^25	Matrix Spike	Total/NA	Solid	3050B	
440-11410-B-18-C MSD ^25	Matrix Spike Duplicate	Total/NA	Solid	3050B	
440-11558-1	SB-15-1'	Total/NA	Solid	3050B	
440-11558-2	SB-15-2'	Total/NA	Solid	3050B	
440-11558-3	SB-15-5'	Total/NA	Solid	3050B	
440-11558-4	SB-14-1'	Total/NA	Solid	3050B	
440-11558-5	SB-14-2'	Total/NA	Solid	3050B	
440-11558-6	SB-14-5'	Total/NA	Solid	3050B	
440-11558-7	SB-13-1'	Total/NA	Solid	3050B	
440-11558-8	SB-13-2'	Total/NA	Solid	3050B	
440-11558-9	SB-13-5'	Total/NA	Solid	3050B	
LCS 440-25822/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
MB 440-25822/1-A ^5	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 27981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-11410-B-18-B MS ^25	Matrix Spike	Total/NA	Solid	6010B	25822
440-11410-B-18-C MSD ^25	Matrix Spike Duplicate	Total/NA	Solid	6010B	25822
LCS 440-25822/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	25822
MB 440-25822/1-A ^5	Method Blank	Total/NA	Solid	6010B	25822

Analysis Batch: 28095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-11558-1	SB-15-1'	Total/NA	Solid	6010B	25822
440-11558-2	SB-15-2'	Total/NA	Solid	6010B	25822
440-11558-3	SB-15-5'	Total/NA	Solid	6010B	25822
440-11558-4	SB-14-1'	Total/NA	Solid	6010B	25822
440-11558-5	SB-14-2'	Total/NA	Solid	6010B	25822
440-11558-6	SB-14-5'	Total/NA	Solid	6010B	25822
440-11558-7	SB-13-1'	Total/NA	Solid	6010B	25822
440-11558-8	SB-13-2'	Total/NA	Solid	6010B	25822
440-11558-9	SB-13-5'	Total/NA	Solid	6010B	25822

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS or MSD exceeds the 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: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-11558-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 12.002r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	Federal		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package . Please contact your project manager for the laboratory's current list of certified methods and analytes.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- ☑ CALSCIENCE (_____)
- ☐ SPL (_____)
- ☐ XENCO (_____)
- ☑ TEST AMERICA (_____)
- ☐ 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- 240554
INCIDENT # (ENV SERVICES) ☐ CHECK IF NO INCIDENT # APPLIES
DATE: 11/7/2008
PO # SAP #
PAGE: 1 of 2

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: pshaefer@craworld.com

SITE ADDRESS: Street and City: 3420 San Pablo Ave, Oakland
State: CA
GLOBAL ID NO.: T0600101253
EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter
PHONE NO.: 510-420-3343
E-MAIL: shelledf@craworld.com
CONSULTANT PROJECT NO.: 240554-95-12.02
SAMPLER NAME(S) (Print): Cristina Arganbright
LAB USE ONLY: 240-11558

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:
Call composite sample ID and field point name CRA-A
Marked TAT except for those contingent tests needed for Aquatic Bioassay determination (5 day TAT or better may apply)
cc: Derek Elsman, Delsman@craworld.com and Shell.Lab.Billing@craworld.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

TEMPERATURE ON RECEIPT: 3.4 C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH - MO (8015M)	CAM 17 Metals - Total (6010)	SVOCs (8270C)	VOCs (8260)	PCBs (8082)	TOTAL LEAD EPA 6010B		Container PID Readings or Laboratory Notes
1	SB-15-1'	5/9	0830	Soil						1																			X		
2	SB-15-2'	5/9	0854	Soil						1																			X		
3	SB-15-5'	5/9	0900	Soil						1																			X		
4	SB-14-1'	5/9	0957	Soil						1																			X		
5	SB-14-2'	5/9	1007	Soil						1																			X		
6	SB-14-5'	5/9	1015	Soil						1																			X		
7	SB-13-1'	5/9	1094	Soil						1																			X		
8	SB-13-2'	5/9	1103	Soil						1																			X		
9	SB-13-5'	5/9	1113	Soil						1																			X		

Relinquished by: (Signature)	Received by: (Signature) Emeryville office	Date: 5/9/12	Time: 1300
Relinquished by: (Signature)	Received by: (Signature)	Date: 5-10-12	Time: 11.00
Relinquished by: (Signature) 5-10-12 16:00	Received by: (Signature)	Date: 5-11-12	Time: 10:00

05/2/06 Revision

05

Page 13 of 17

5/29/2012

Login Sample Receipt Checklist

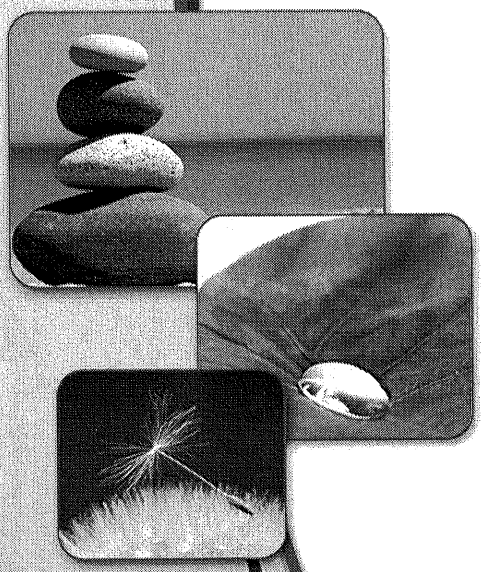
Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-11558-1

Login Number: 11558
List Number: 1
Creator: Escalante, Maria

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.	N/A	
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	Brenda Carter
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.	True	
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.	N/A	
Residual Chlorine Checked.	N/A	



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: 440-9616-1
Client Project/Site: 3420 San Pablo Ave., Oakland, CA

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

Attn: Peter Schaefrer

Philip Sanelle

Authorized for release by:
5/8/2012 4:31:54 PM

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

Table of Contents

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-9616-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-9616-1	CRA-1	Solid	04/20/12 13:10	04/24/12 10:25

Job ID: 440-9616-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-9616-1

Comments
No additional comments.

Receipt
The sample was received on 4/24/2012 10:25 AM; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.30 C.

GC/MS VOA
Method(s) 8260B/CA_LUFTMS: Internal standard responses were outside of acceptance limits for the following sample(s): CRA-1 (440-9616-1). The sample(s) shows evidence of matrix interference.

Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: (440-9641-3 MS), (440-9641-3 MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries associated with batch 21930 were outside control limits: (440-9641-3 MS), (440-9641-3 MSD). Matrix interference is suspected.

Method(s) 8260B: Internal standard responses were outside of acceptance limits for the following sample(s): CRA-1 (440-9616-1). The sample(s) shows evidence of matrix interference.

No other analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Metals
Method(s) 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 440-21838 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep
Method(s) CA LUFT: The following sample(s) was diluted prior to extraction due to the nature of the sample matrix: CRA-1 (440-9616-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Client Sample ID: CRA-1
Date Collected: 04/20/12 13:10
Date Received: 04/24/12 10:25

Lab Sample ID: 440-9616-1
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)	1.8		0.10		mg/Kg			04/26/12 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*80 - 125*		*04/26/12 04:33*	*1*
4-Bromofluorobenzene (Surr)	*89*		*75 - 120*		*04/26/12 04:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/26/12 04:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.024		0.0010		mg/Kg			04/26/12 04:33	1
Ethylbenzene	0.016		0.0010		mg/Kg			04/26/12 04:33	1
Toluene	0.0012		0.0010		mg/Kg			04/26/12 04:33	1
Xylenes, Total	0.021		0.0020		mg/Kg			04/26/12 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*04/26/12 04:33*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 125*		*04/26/12 04:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/26/12 04:33*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	100		30		mg/Kg		04/25/12 10:48	04/26/12 03:22	1
ORO (C29-C40)	92		30		mg/Kg		04/25/12 10:48	04/26/12 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*70*		*40 - 140*	*04/25/12 10:48*	*04/26/12 03:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Arsenic	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Barium	94		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Beryllium	ND		0.51		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Cadmium	ND		0.51		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Chromium	17		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Cobalt	3.4		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Copper	18		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Lead	54		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Molybdenum	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Nickel	18		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Selenium	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Thallium	ND		10		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Vanadium	14		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Zinc	110		5.1		mg/Kg		04/25/12 10:53	04/25/12 22:38	5
Silver	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:38	5

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.9		0.10		mg/L			05/05/12 22:26	20

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-9616-1

Client Sample ID: CRA-1
Date Collected: 04/20/12 13:10
Date Received: 04/24/12 10:25

Lab Sample ID: 440-9616-1
Matrix: Solid

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.098		0.020		mg/Kg		04/25/12 11:23	04/25/12 18:35	1

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-9616-1

Client Sample ID: CRA-1
Date Collected: 04/20/12 13:10
Date Received: 04/24/12 10:25

Lab Sample ID: 440-9616-1
Matrix: Solid

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	21930	04/26/12 04:33	RM	TAL IRV
Total/NA	Analysis	8260B/CA_LUFTMS		1	5 g	10 mL	21931	04/26/12 04:33	RM	TAL IRV
Total/NA	Prep	CA LUFT			5.00 g	1 mL	21835	04/25/12 10:48	TM	TAL IRV
Total/NA	Analysis	8015B		1			21926	04/26/12 03:22	ES	TAL IRV
Total/NA	Prep	7471A			0.50 g	50 mL	21382	04/25/12 11:23	SN	TAL IRV
Total/NA	Analysis	7471A		1			21971	04/25/12 18:35	MP	TAL IRV
Total/NA	Prep	3050B			1.98 g	50 mL	21838	04/25/12 10:53	DT	TAL IRV
Total/NA	Analysis	6010B		5			22410	04/25/12 22:38	TK	TAL IRV
STLC Citrate	Leach	CA WET Citrate			32.9 g	329 mL	22649	04/29/12 18:16	CH	TAL IRV
STLC Citrate	Analysis	6010B		20	1.0 mL	1.0 mL	24104	05/05/12 22:26	TK	TAL IRV

Laboratory References:

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

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

Lab Sample ID: MB 440-21930/4
Matrix: Solid
Analysis Batch: 21930

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			04/25/12 18:18	1
Ethylbenzene	ND		0.0010		mg/Kg			04/25/12 18:18	1
m,p-Xylene	ND		0.0020		mg/Kg			04/25/12 18:18	1
o-Xylene	ND		0.0010		mg/Kg			04/25/12 18:18	1
Toluene	ND		0.0010		mg/Kg			04/25/12 18:18	1
Xylenes, Total	ND		0.0020		mg/Kg			04/25/12 18:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*80 - 120*		*04/25/12 18:18*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 125*		*04/25/12 18:18*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/25/12 18:18*	*1*

Lab Sample ID: LCS 440-21930/5
Matrix: Solid
Analysis Batch: 21930

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	0.0514		mg/Kg		103	65 - 120
Ethylbenzene	0.0500	0.0492		mg/Kg		98	70 - 125
m,p-Xylene	0.100	0.104		mg/Kg		104	70 - 125
o-Xylene	0.0500	0.0532		mg/Kg		106	70 - 125
Toluene	0.0500	0.0486		mg/Kg		97	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 125*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: 440-9641-A-3 MS
Matrix: Solid
Analysis Batch: 21930

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		0.0507	0.0515		mg/Kg		102	65 - 130
Ethylbenzene	ND		0.0507	0.0574		mg/Kg		113	70 - 135
m,p-Xylene	ND		0.101	0.120		mg/Kg		119	70 - 130
o-Xylene	ND		0.0507	0.0584		mg/Kg		115	65 - 130
Toluene	ND		0.0507	0.0495		mg/Kg		98	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*68*	*X*	*80 - 125*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: 440-9641-A-3 MSD
Matrix: Solid
Analysis Batch: 21930

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	0.0506		mg/Kg		102	65 - 130	2	20
Ethylbenzene	ND		0.0496	0.0504		mg/Kg		102	70 - 135	13	25
m,p-Xylene	ND		0.0992	0.104		mg/Kg		105	70 - 130	14	25
o-Xylene	ND		0.0496	0.0542		mg/Kg		109	65 - 130	8	25
Toluene	ND		0.0496	0.0470		mg/Kg		95	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*68*	*X*	*80 - 125*
Toluene-d8 (Surr)	*104*		*80 - 120*

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

Lab Sample ID: MB 440-21931/4
Matrix: Solid
Analysis Batch: 21931

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			04/25/12 18:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 125*		*04/25/12 18:18*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 120*		*04/25/12 18:18*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*04/25/12 18:18*	*1*

Lab Sample ID: LCS 440-21931/6
Matrix: Solid
Analysis Batch: 21931

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	0.991		mg/Kg		99	60 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*96*		*80 - 125*
4-Bromofluorobenzene (Surr)	*111*		*75 - 120*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: 440-9641-A-3 MS
Matrix: Solid
Analysis Batch: 21931

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		3.50	2.41		mg/Kg		69	55 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*68*	*X*	*80 - 125*

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

Lab Sample ID: 440-9641-A-3 MS
Matrix: Solid
Analysis Batch: 21931

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

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: 440-9641-A-3 MSD
Matrix: Solid
Analysis Batch: 21931

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	2.51		mg/Kg		73	55 - 140	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*68*	*X*	*80 - 125*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-21835/1-A
Matrix: Solid
Analysis Batch: 21926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	ND		5.0		mg/Kg		04/25/12 10:48	04/25/12 20:32	1
ORO (C29-C40)	ND		5.0		mg/Kg		04/25/12 10:48	04/25/12 20:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*74*		*40 - 140*	*04/25/12 10:48*	*04/25/12 20:32*	*1*

Lab Sample ID: LCS 440-21835/2-A
Matrix: Solid
Analysis Batch: 21926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21835

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)			33.3	23.7		mg/Kg		71	45 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*68*		*40 - 140*

Lab Sample ID: 440-8587-A-1-I MS
Matrix: Solid
Analysis Batch: 21926

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
DRO (C10-C28)	360		33.3	256	4	mg/Kg		-314	40 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane	*73*		*40 - 140*

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 440-8587-A-1-J MSD
Matrix: Solid
Analysis Batch: 21926

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C28)	360		33.3	239	4	mg/Kg		-363	40 - 120	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane	*67*		*40 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-21838/1-A ^5
Matrix: Solid
Analysis Batch: 22410

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Arsenic	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Barium	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Beryllium	ND		0.50		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Cadmium	ND		0.50		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Chromium	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Cobalt	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Copper	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Lead	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Molybdenum	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Nickel	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Selenium	ND		2.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Thallium	ND		10		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Vanadium	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Zinc	ND		5.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5
Silver	ND		1.0		mg/Kg		04/25/12 10:53	04/25/12 22:18	5

Lab Sample ID: LCS 440-21838/2-A ^5
Matrix: Solid
Analysis Batch: 22410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.5	46.6		mg/Kg		92	80 - 120
Arsenic	50.5	48.2		mg/Kg		95	80 - 120
Barium	50.5	49.0		mg/Kg		97	80 - 120
Beryllium	50.5	48.8		mg/Kg		97	80 - 120
Cadmium	50.5	48.2		mg/Kg		95	80 - 120
Chromium	50.5	49.0		mg/Kg		97	80 - 120
Cobalt	50.5	47.6		mg/Kg		94	80 - 120
Copper	50.5	46.6		mg/Kg		92	80 - 120
Lead	50.5	56.7		mg/Kg		112	80 - 120
Molybdenum	50.5	51.4		mg/Kg		102	80 - 120
Nickel	50.5	48.1		mg/Kg		95	80 - 120
Selenium	50.5	44.9		mg/Kg		89	80 - 120
Thallium	50.5	47.5		mg/Kg		94	80 - 120
Vanadium	50.5	47.8		mg/Kg		95	80 - 120
Zinc	50.5	45.7		mg/Kg		90	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-21838/2-A ^5
Matrix: Solid
Analysis Batch: 22410

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	25.3	23.8		mg/Kg		94	80 - 120

Lab Sample ID: 440-7596-A-1-L MS ^5
Matrix: Solid
Analysis Batch: 22410

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		50.3	34.3	F	mg/Kg		68	75 - 125
Arsenic	ND		50.3	45.2		mg/Kg		86	75 - 125
Barium	190		50.3	255	F	mg/Kg		131	75 - 125
Beryllium	ND		50.3	46.8		mg/Kg		93	75 - 125
Cadmium	1.1		50.3	47.1		mg/Kg		92	75 - 125
Chromium	13		50.3	62.6		mg/Kg		99	75 - 125
Cobalt	ND		50.3	51.0		mg/Kg		98	75 - 125
Copper	440		50.3	518	4	mg/Kg		146	75 - 125
Lead	13		50.3	64.0		mg/Kg		101	75 - 125
Molybdenum	8.2		50.3	54.2		mg/Kg		92	75 - 125
Nickel	18		50.3	64.0		mg/Kg		91	75 - 125
Selenium	4.2		50.3	48.0		mg/Kg		87	75 - 125
Thallium	ND		50.3	40.0		mg/Kg		80	75 - 125
Vanadium	11		50.3	58.8		mg/Kg		95	75 - 125
Zinc	660		50.3	744	4	mg/Kg		163	75 - 125
Silver	18		25.1	41.0		mg/Kg		93	75 - 125

Lab Sample ID: 440-7596-A-1-M MSD ^5
Matrix: Solid
Analysis Batch: 22410

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		50.5	35.6	F	mg/Kg		70	75 - 125	4	20
Arsenic	ND		50.5	46.9		mg/Kg		89	75 - 125	4	20
Barium	190		50.5	264	F	mg/Kg		146	75 - 125	3	20
Beryllium	ND		50.5	48.6		mg/Kg		96	75 - 125	4	20
Cadmium	1.1		50.5	49.3		mg/Kg		96	75 - 125	5	20
Chromium	13		50.5	64.9		mg/Kg		103	75 - 125	4	20
Cobalt	ND		50.5	53.1		mg/Kg		101	75 - 125	4	20
Copper	440		50.5	539	4	mg/Kg		187	75 - 125	4	20
Lead	13		50.5	66.2		mg/Kg		105	75 - 125	3	20
Molybdenum	8.2		50.5	56.0		mg/Kg		95	75 - 125	3	20
Nickel	18		50.5	73.0		mg/Kg		109	75 - 125	13	20
Selenium	4.2		50.5	50.3		mg/Kg		91	75 - 125	5	20
Thallium	ND		50.5	43.4		mg/Kg		86	75 - 125	8	20
Vanadium	11		50.5	60.4		mg/Kg		98	75 - 125	3	20
Zinc	660		50.5	770	4	mg/Kg		212	75 - 125	3	20
Silver	18		25.3	42.0		mg/Kg		97	75 - 125	3	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 440-22649/1-A ^20
Matrix: Solid
Analysis Batch: 24104

Client Sample ID: Method Blank
Prep Type: STLC Citrate

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.10		mg/L			05/05/12 22:20	20

Lab Sample ID: LCS 440-22649/2-A ^20
Matrix: Solid
Analysis Batch: 24104

Client Sample ID: Lab Control Sample
Prep Type: STLC Citrate

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	20.0	19.5		mg/L		98	80 - 120

Lab Sample ID: 440-9616-1 MS
Matrix: Solid
Analysis Batch: 24104

Client Sample ID: CRA-1
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	2.9		20.0	22.5		mg/L		98	75 - 125

Lab Sample ID: 440-9616-1 MSD
Matrix: Solid
Analysis Batch: 24104

Client Sample ID: CRA-1
Prep Type: STLC Citrate

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	2.9		20.0	22.4		mg/L		97	75 - 125	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-21382/1-A
Matrix: Solid
Analysis Batch: 21971

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		04/23/12 16:23	04/25/12 17:29	1

Lab Sample ID: LCS 440-21382/2-A
Matrix: Solid
Analysis Batch: 21971

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.800	0.732		mg/Kg		92	80 - 120

Lab Sample ID: 440-9090-A-1-D MS
Matrix: Solid
Analysis Batch: 21971

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 21382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.784	0.634		mg/Kg		78	70 - 130

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 440-9090-A-1-E MSD
Matrix: Solid
Analysis Batch: 21971

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 21382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.784	0.643		mg/Kg		80	70 - 130	1	20

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-9616-1

GC/MS VOA

Analysis Batch: 21930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9616-1	CRA-1	Total/NA	Solid	8260B	
440-9641-A-3 MS	Matrix Spike	Total/NA	Solid	8260B	
440-9641-A-3 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	
LCS 440-21930/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 440-21930/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 21931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9616-1	CRA-1	Total/NA	Solid	8260B/CA_LUFT MS	
440-9641-A-3 MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	
440-9641-A-3 MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 440-21931/6	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
MB 440-21931/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	

GC Semi VOA

Prep Batch: 21835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-8587-A-1-I MS	Matrix Spike	Total/NA	Solid	CA LUFT	
440-8587-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	CA LUFT	
440-9616-1	CRA-1	Total/NA	Solid	CA LUFT	
LCS 440-21835/2-A	Lab Control Sample	Total/NA	Solid	CA LUFT	
MB 440-21835/1-A	Method Blank	Total/NA	Solid	CA LUFT	

Analysis Batch: 21926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-8587-A-1-I MS	Matrix Spike	Total/NA	Solid	8015B	21835
440-8587-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	21835
440-9616-1	CRA-1	Total/NA	Solid	8015B	21835
LCS 440-21835/2-A	Lab Control Sample	Total/NA	Solid	8015B	21835
MB 440-21835/1-A	Method Blank	Total/NA	Solid	8015B	21835

Metals

Prep Batch: 21382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9090-A-1-D MS	Matrix Spike	Total/NA	Solid	7471A	
440-9090-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	
440-9616-1	CRA-1	Total/NA	Solid	7471A	
LCS 440-21382/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 440-21382/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 21838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-7596-A-1-L MS ^5	Matrix Spike	Total/NA	Solid	3050B	
440-7596-A-1-M MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	3050B	
440-9616-1	CRA-1	Total/NA	Solid	3050B	
LCS 440-21838/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 21838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-21838/1-A ^5	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 21971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9090-A-1-D MS	Matrix Spike	Total/NA	Solid	7471A	21382
440-9090-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	7471A	21382
440-9616-1	CRA-1	Total/NA	Solid	7471A	21382
LCS 440-21382/2-A	Lab Control Sample	Total/NA	Solid	7471A	21382
MB 440-21382/1-A	Method Blank	Total/NA	Solid	7471A	21382

Analysis Batch: 22410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-7596-A-1-L MS ^5	Matrix Spike	Total/NA	Solid	6010B	21838
440-7596-A-1-M MSD ^5	Matrix Spike Duplicate	Total/NA	Solid	6010B	21838
440-9616-1	CRA-1	Total/NA	Solid	6010B	21838
LCS 440-21838/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	21838
MB 440-21838/1-A ^5	Method Blank	Total/NA	Solid	6010B	21838

Leach Batch: 22649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9616-1	CRA-1	STLC Citrate	Solid	CA WET Citrate	
440-9616-1 MS	CRA-1	STLC Citrate	Solid	CA WET Citrate	
440-9616-1 MSD	CRA-1	STLC Citrate	Solid	CA WET Citrate	
LCS 440-22649/2-A ^20	Lab Control Sample	STLC Citrate	Solid	CA WET Citrate	
MB 440-22649/1-A ^20	Method Blank	STLC Citrate	Solid	CA WET Citrate	

Analysis Batch: 24104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-9616-1	CRA-1	STLC Citrate	Solid	6010B	
440-9616-1 MS	CRA-1	STLC Citrate	Solid	6010B	
440-9616-1 MSD	CRA-1	STLC Citrate	Solid	6010B	
LCS 440-22649/2-A ^20	Lab Control Sample	STLC Citrate	Solid	6010B	
MB 440-22649/1-A ^20	Method Blank	STLC Citrate	Solid	6010B	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

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: 3420 San Pablo Ave., Oakland, CA

TestAmerica Job ID: 440-9616-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 12.002r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	Federal		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

[redacted]

LAB (LOCATION)

- ☐ CALSCIENCE ( )
- ☐ SPL ( )
- ☐ XENCO ( )
- ☑ TEST AMERICA ( )
- ☐ OTHER ( )

Shell Oil Products Chain Of Custody Record

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

INCIDENT # (ENV SERVICES): 9 8 9 9 5 7 4 8 ☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/20/2012

PAGE: 1 of 1

PO #:

SAP #: 1 3 9 6 1 9

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

SITE ADDRESS: Street and City: 3420 San Pablo Ave., Oakland

State: CA

GLOBAL ID NO.: T0600101253

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

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, CRA, Emeryville

PHONE NO.: 510-420-3343

E-MAIL: shelledf@craworld.com

CONSULTANT PROJECT NO: 240554-95- 11.02

PROJECT CONTACT (Hardcopy or PDF Report to): Peter Schaefer

SAMPLER NAME(S) (Print): Peter Schaefer

LAB USE ONLY: 440-9616

TELEPHONE: 510-420-3319 FAX: 510-420-9170 E-MAIL: acool@craworld.com

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 :

cc: Derek Eisman, DEisman@craworld.com and Shell.Lab.Billing@craworld.com

Marked TAT except for those contingent tests needed for Aquatic Bioassay determination (5 day TAT or better may apply)

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

TEMPERATURE ON RECEIPT: 2.4°C

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TPH - MO (8015M)	CAM17 Metals - Total (6010)	SVOCs (8270C)	VOCs (8260)	PCBs (8082)		Container PID Readings or Laboratory Notes
	CRA-1	4/20/12	1310	sludge						3	X	X	X											X	X					

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	RELEASED TO SECURE LOCATION	4/20/12	1400
[signature]	[signature]	4-23-12	1355
[signature]	[signature]	4-23-12	1605

05/2/06 Revision

[signature] 4-23-12 1630 Vu Banda 3.3°C 4/24/12 10:25 (55)

5/8/2012

Contingent analyses

- Organic lead required if TTLC lead ≥ 13 mg/kg
- Aquatic bioassay required if **any** TPH (gasoline, diesel, or motor oil) ≥ 5,000 mg/kg
- TCLP benzene required if benzene ≥ 10 mg/kg
- TCLP and STLC required for metals per table below

Metal	Trigger level TTLC (mg/kg)	Requirement
Antimony	150	STLC required if TTLC ≥ 150 mg/kg
Arsenic	50/100	STLC required if TTLC ≥ 50 mg/kg; STLC and TCLP required if TTLC ≥ 100 mg/kg
Barium	1,000/2,000	STLC required if TTLC ≥ 1,000 mg/kg; STLC and TCLP required if TTLC ≥ 2,000 mg/kg
Beryllium	7.5	STLC required if TTLC ≥ 7.5 mg/kg
Cadmium	10/20	STLC required if TTLC ≥ 10 mg/kg; STLC and TCLP required if TTLC ≥ 20 mg/kg
Chromium	50/100	STLC required if TTLC ≥ 50 mg/kg; STLC and TCLP required if TTLC ≥ 100 mg/kg
Cobalt	800	STLC required if TTLC ≥ 800 mg/kg
Copper	250	STLC required if TTLC ≥ 250 mg/kg
Lead	50/100	STLC required if TTLC ≥ 50 mg/kg; STLC and TCLP required if TTLC ≥ 100 mg/kg
Mercury	2/4	STLC required if TTLC ≥ 2 mg/kg; STLC and TCLP required if TTLC ≥ 4 mg/kg
Molybdenum	350	STLC required if TTLC ≥ 350 mg/kg
Nickel	200	STLC required if TTLC ≥ 200 mg/kg
Selenium	10/20	STLC required if TTLC ≥ 10 mg/kg; STLC and TCLP required if TTLC ≥ 20 mg/kg
Silver	50/100	STLC required if TTLC ≥ 50 mg/kg; STLC and TCLP required if TTLC ≥ 100 mg/kg
Thallium	70	STLC required if TTLC ≥ 70 mg/kg
Vanadium	240	STLC required if TTLC ≥ 240 mg/kg
Zinc	2,500	STLC required if TTLC ≥ 2,500 mg/kg

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 440-9616-1

Login Number: 9616
List Number: 1
Creator: Perez, Angel

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.	N/A	
Residual Chlorine Checked.	N/A	