CONESTOGA-ROVERS & ASSOCIATES

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www.CRAworld.com

TRANSMITTAL

DATE: August 27, 2010

REFERENCE NO.: 060204

PROJECT NAME: 2301-2307 Lincoln Avenue, Alameda

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

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9:40 am, Sep 01, 2010
Alameda County
Environmental Health

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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)*
Alan A. and Beverly M. Sebanc, Trustees, 2805 Ralston Avenue, Hillsborough, CA 94010
Jake Torrens, AMEC Geomatrix, Inc., 2101 Webster Street, 12th Floor, Oakland, CA 94612

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

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

Subject: 2301-2307 Lincoln Avenue
Alameda, California
SAP Code 165255
Incident No. 97767044
ACEH No. RO0002971

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.

As always, please feel free to contact me directly at (707) 865-0251 with any questions or concerns.

Sincerely,

Denis L. Brown
Project Manager

SUBSURFACE INVESTIGATION REPORT

FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

SAP CODE 165255
INCIDENT NO. 97767044
AGENCY NO. RO0002971

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
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AUGUST 27, 2010
REF. NO. 060204 (14)
This report is printed on recycled paper.

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EXECUTIVE SUMMARY

- One off-site boring B-6 was drilled at 2267 Lincoln Avenue to further assess the extent of petroleum hydrocarbons in soil and groundwater.
- No TPHmo, TPHd, TPHg, BTEX, fuel oxygenates, 1,2-DCA, or EDB were detected in soil samples collected from boring B-6. Up to 2.72 mg/kg lead was detected (B-6-8.0). The lead detection did not exceed the ESL.
- No TPHg, BTEX, fuel oxygenates, 1,2-DCA, or EDB were detected in the grab groundwater sample collected from boring B-6. The grab groundwater sample contained 56 µg/l TPHd. The TPHd detection did not exceed the ESL.
- Based on data from this investigation and previous investigations, the extent of soil, groundwater, and soil vapor impacts has been adequately defined.
- No additional soil, groundwater, or soil vapor investigation is recommended. As recommended in CRA's May 12, 2010 *Subsurface Investigation Report*, we will continue to monitor well MW-9 quarterly for one hydrologic cycle (through first quarter 2011).

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 off-site subsurface investigation at 2267 Lincoln Avenue. The purpose of the investigation was to further assess the extent of petroleum hydrocarbons in soil and groundwater. CRA followed the scope of work and procedures presented in our November 23, 2009 *Revised Subsurface Investigation Work Plan*, which was conditionally approved by Alameda County Environmental Health's (ACEH's) January 12, 2010 letter.

The site is a former Shell service station located at the northeastern corner of Lincoln Avenue and Oak Street in Alameda, California (Figure 1). The area surrounding the site is mixed commercial and residential. The current site layout (Figure 2) includes a parking lot and commercial building housing a convenience store, a cleaners (not a dry cleaner), and a laundromat. The former service station layout included a station building, two dispenser islands, and seven fuel underground storage tanks (USTs). According to the Alameda Fire Department, the seven USTs were removed from the site in June 1982.

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

2.0 INVESTIGATION RESULTS

2.1 PERMIT

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

2.2 DRILLING DATE

July 13, 2010.

2.3 DRILLING COMPANY

Gregg Drilling & Testing, Inc.

2.4 CRA PERSONNEL

California Professional Geologist Peter Schaefer directed the drilling activities.

2.5 DRILLING METHOD

Geoprobe®.

2.6 NUMBER OF BORINGS

One soil boring (B-6) was drilled during this investigation.

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

2.7 BORING DEPTH

15 feet below grade (fbg).

2.8 GROUNDWATER DEPTH

Groundwater was first-encountered at 12.20 fbg.

2.9 WASTE DISPOSAL

Soil and construction debris generated during field activities were stored on site in 55-gallon drums and profiled for disposal using data from CRA's March 2010 investigation. Waste disposal confirmation documentation is pending and will be provided by CRA upon request.

3.0 FINDINGS

3.1 SOIL

The soil chemical analytical data are summarized in Table 1, and total petroleum hydrocarbons as motor oil (TPHmo), total petroleum hydrocarbons as diesel (TPHd),

total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tertiary-butyl ether (MTBE) analytical results are presented on Figure 2. The laboratory analytical report is presented in Appendix D.

3.2 GRAB GROUNDWATER

The grab groundwater chemical analytical data are summarized in Table 2, and TPHd, TPHg, benzene, and MTBE analytical results are presented on Figure 3. The laboratory analytical report is presented in Appendix D.

4.0 CONCLUSIONS

No TPHmo, TPHd, TPHg, benzene, toluene, ethylbenzene, xylenes (BTEX), fuel oxygenates (MTBE, di-isopropyl ether, ethyl tertiary-butyl ether, tertiary-amyl methyl ether, tertiary-butyl alcohol), 1,2-dichloroethane (1,2-DCA), or 1,2-dibromoethane (EDB) were detected in soil samples from boring B-6. Up to 2.72 milligrams per kilogram lead were detected (in sample B-6-8.0). The lead detection did not exceed the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) for shallow or deep soil with commercial land use where groundwater is not a source of drinking water.

No TPHg, BTEX, fuel oxygenates, 1,2-DCA, or EDB were detected in the grab groundwater sample collected from boring B-6. The grab groundwater sample contained 56 micrograms per liter (µg/L) TPHd. The TPHd detection did not exceed the ESL for groundwater where groundwater is not a source of drinking water.

Soil impacts are defined below commercial land use ESLs horizontally by soil samples from MW-2, MW-4, MW-6 through MW-9, EB-4, SB-3, SB-4, and B-6. Soil samples from 8.5 to 10.5 fbg in EB-1 through EB-3, B-8, and MW-1 contained TPHg, benzene, ethylbenzene, or xylenes concentrations which exceeded ESLs; however, deeper samples in each of these borings, with the exception of B-8, define the extent of soil impacts to below commercial land use ESLs vertically. Soil samples collected from well boring MW-9, directly adjacent to boring B-8, suggest that the detections in B-8 at 8.5 fbg are confined to a limited area.

Groundwater impacts are defined below non-drinking water ESLs horizontally by groundwater samples from wells MW-2, MW-3, and MW-5 through MW-9 and grab groundwater samples from borings EB-4, SB-6, B-5, and B-6, with the exception of TPHg

and TPHd in the area southwest of MW-1 and TPHg, TPHd, and BTEX in the area northwest of MW-4. TPHg grab groundwater analytical results from boring SB-3 (4,500 µg/l) are considerably lower than the current concentration in MW 1 (13,000 µg/l), demonstrating that TPHg attenuates rapidly to the southwest of well MW-1. Soil vapor results from soil vapor probes SVP-7 and SVP-8 suggest that TPHg- and BTEX-impacted groundwater does not extend significantly to the northwest of well MW-4. Laboratory notes indicate that the TPHd detections do not match the chromatographic pattern of the laboratory's diesel standard, suggesting that the TPHd detections are due to weathered TPHg which elutes in the TPHd range.

Soil vapor concentrations are defined below ESLs vertically by soil vapor probe SVP-5A (at 2 fbg) and horizontally by soil vapor probes SVP-2 through SVP-4 and SVP-6 through SVP-8.

5.0 RECOMMENDATIONS

No additional soil or groundwater investigation in the area near boring B-6 is recommended. Based on data from this investigation and previous investigations, the extent of soil, groundwater, and soil vapor impacts has been adequately defined. No additional soil, groundwater, or soil vapor investigation is warranted. As recommended in CRA's May 12, 2010 *Subsurface Investigation Report*, we will continue to monitor well MW-9 quarterly for one hydrologic cycle (through first quarter 2011).

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

Peter Schaefer, CEG, CHG

Aubrey K. Cool, PG

FIGURES

12/01/08

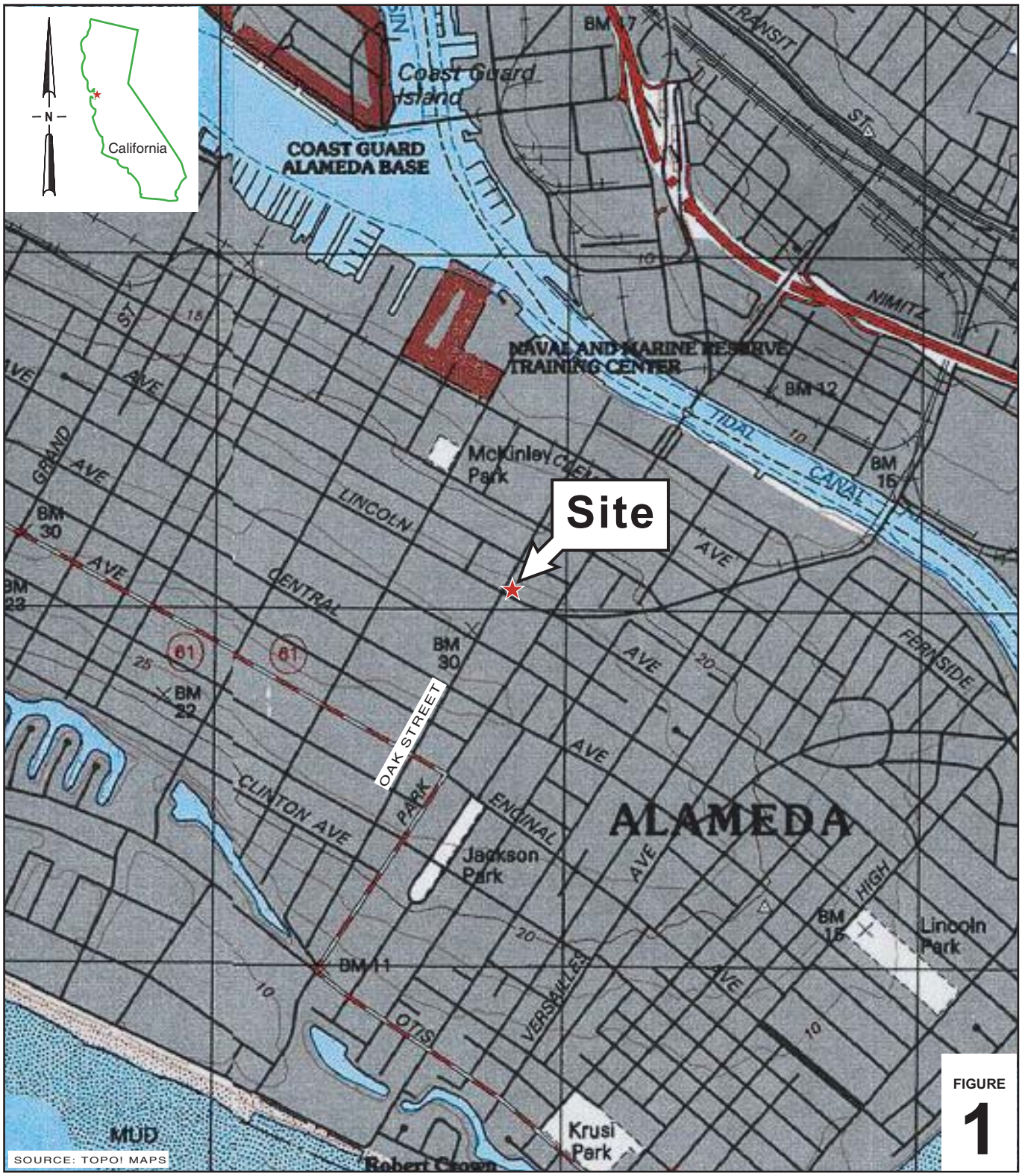

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FIGURE
1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Former Shell Service Station
2301-2307 Lincoln Avenue
Alameda, California

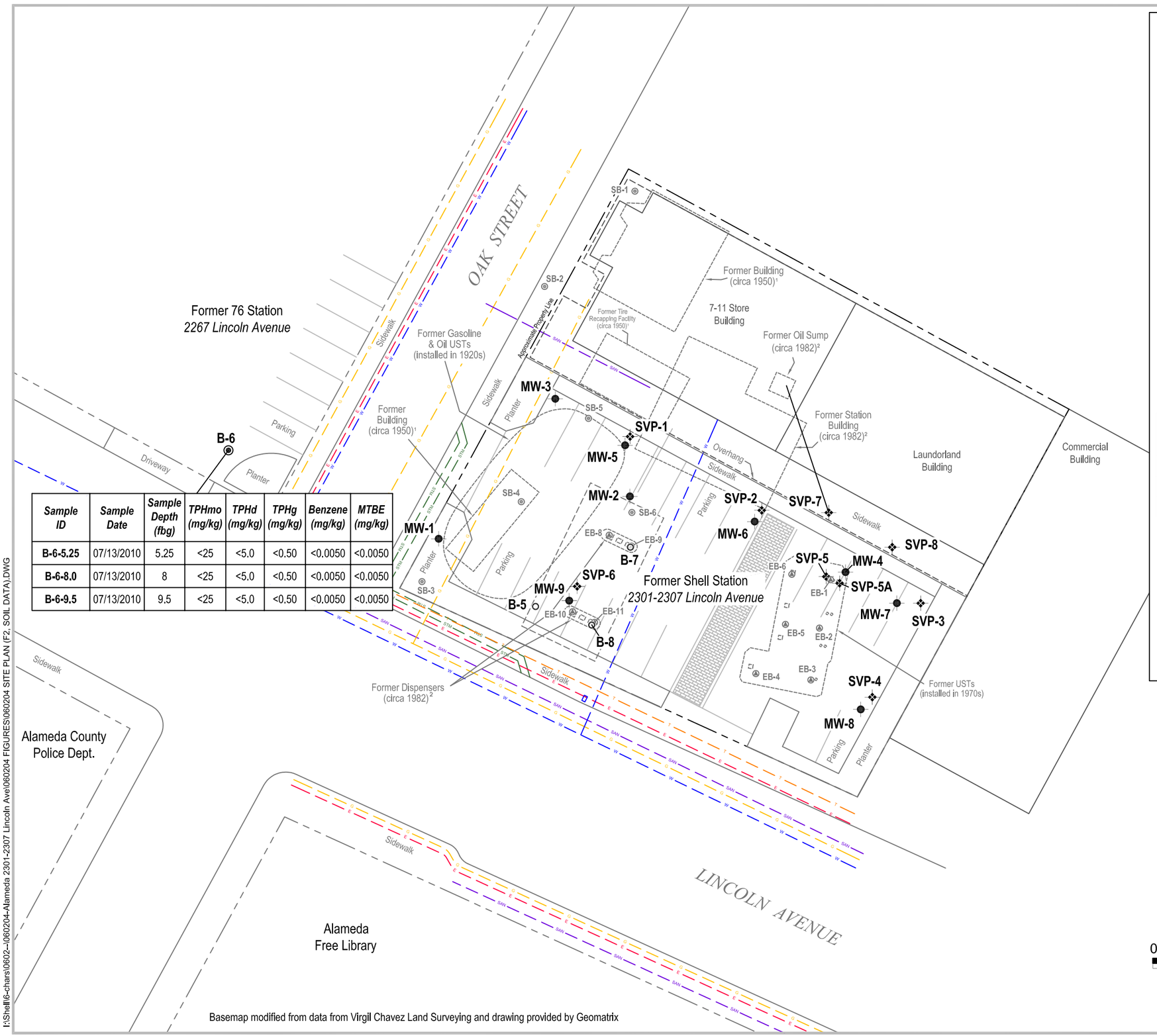
CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

08/24/10

Soil Chemical Concentration Map

July 13, 2010



EXPLANATION

- MW-1 — Monitoring well location
- B-6 — Soil boring location (CRA, 7/10)
- SVP-1 — Soil vapor probe location (CRA, 2/09, 3/10)
- B-5 — Geoprobe boring location (CRA, 2/09)
- EB-1 — Soil boring location (Geomatrix, 8/07)
- SB-1 — Soil boring location (Basics Environmental, 7/99)
- Electrical & Telecommunications line (E)
- Telecommunications & Cable TV line (T)
- Gas line (G)
- Storm drain line (STM)
- Sanitary sewer line (SAN)
- Water line (W)

Sources:

1. Sanborn Fire Insurance Map, 1950
2. Majors Civil Engineering, 1982

Sample ID	Sample Date	Sample Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	MTBE (mg/kg)
B-6-5.25	07/13/2010	5.25	<25	<5.0	<0.50	<0.0050	<0.0050
B-6-8.0	07/13/2010	8	<25	<5.0	<0.50	<0.0050	<0.0050
B-6-9.5	07/13/2010	9.5	<25	<5.0	<0.50	<0.0050	<0.0050

Notes:
Soil sample ID, date, depth in feet below grade (fbg), and concentrations in milligrams per kilogram (mg/kg)
TPHmo = Total petroleum hydrocarbons as motor oil
TPHd = Total petroleum hydrocarbons as diesel
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
<X = Not detected at reporting limit X

Sample ID	Sample Date	Sample Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	TPHg (mg/kg)	Benzene (mg/kg)	MTBE (mg/kg)
B-6-5.25	07/13/2010	5.25	<25	<5.0	<0.50	<0.0050	<0.0050
B-6-8.0	07/13/2010	8	<25	<5.0	<0.50	<0.0050	<0.0050
B-6-9.5	07/13/2010	9.5	<25	<5.0	<0.50	<0.0050	<0.0050

N

0 15 30 60

Scale (ft)

FIGURE **2**

CONESTOGA-ROVERS & ASSOCIATES

Former Shell Service Station

2301-2307 Lincoln Avenue

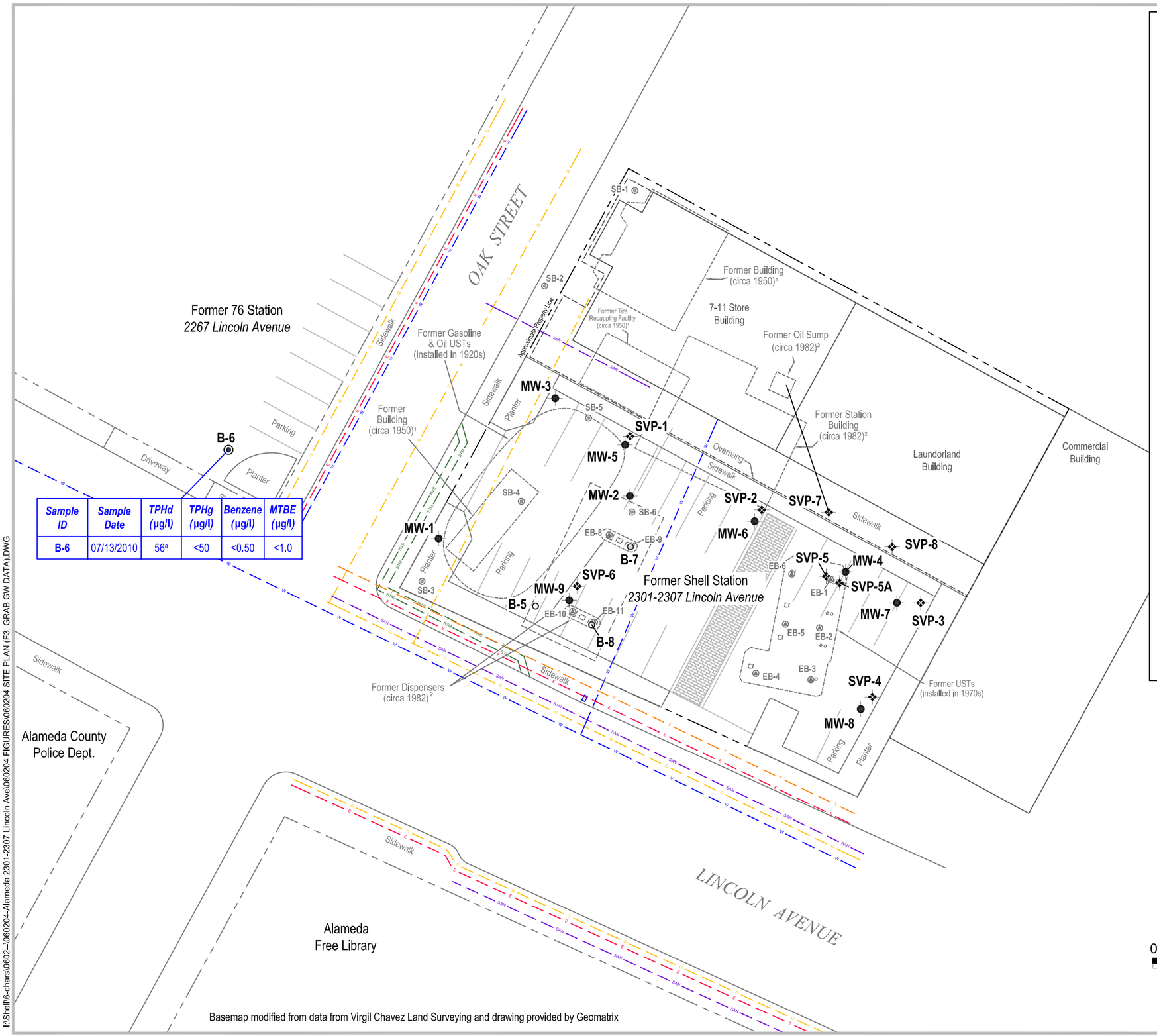
Alameda, California

I:\Shell\6-chars\0602--\060204-Alameda 2301-2307 Lincoln Ave\060204 FIGURES\060204 SITE PLAN (F2, SOIL DATA).DWG

08/24/10

Grab Groundwater Chemical Concentration Map

July 13, 2010



Sample ID	Sample Date	TPHd (µg/l)	TPHg (µg/l)	Benzene (µg/l)	MTBE (µg/l)
B-6	07/13/2010	56[a]	<50	<0.50	<1.0

EXPLANATION

- MW-1 — Monitoring well location
- B-6 — Soil boring location (CRA, 7/10)
- SVP-1 — Soil vapor probe location (CRA, 2/09, 3/10)
- B-5 — Geoprobe boring location (CRA, 2/09)
- EB-1 — Soil boring location (Geomatrix, 8/07)
- SB-1 — Soil boring location (Basics Environmental, 7/99)
- Electrical & Telecommunications line (E)
- Telecommunications & Cable TV line (T)
- Gas line (G)
- Storm drain line (STM)
- Sanitary sewer line (SAN)
- Water line (W)

Sources:

1. Sanborn Fire Insurance Map, 1950
2. Majors Civil Engineering, 1982

Sample ID	Sample Date	TPHd (µg/l)	TPHg (µg/l)	Benzene (µg/l)	MTBE (µg/l)
B-6	07/13/2010	56[a]	<50	<0.50	<1.0

Notes:

Grab groundwater sample ID, date, and concentrations in micrograms per liter (µg/l)
TPHd = Total petroleum hydrocarbons as diesel
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
a = The sample chromatographic pattern for TPHd does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
<X = Not detected at reporting limit X

N

0 15 30 60

Scale (ft)

Basemap modified from data from Virgil Chavez Land Surveying and drawing provided by Geomatrix

FIGURE

3

CONESTOGA-ROVERS & ASSOCIATES

Former Shell Service Station

2301-2307 Lincoln Avenue
Alameda, California

I:\Shell\6-chars\0602--\060204-Alameda 2301-2307 Lincoln Ave\060204 FIGURES\060204 SITE PLAN (F3, GRAB GW DATA).DWG

TABLES

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*	*Total Lead*
SB-1	7/24/1999	7.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	---	---	---	---	---	---	---
SB-2	7/24/1999	7.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	---	---	---	---	---	---	---
SB-3	7/24/1999	7.5	---	---	40[a]	<0.005	<0.005	0.012	<0.005	<0.05	---	---	---	---	---	---	---
SB-4	7/24/1999	7.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	---	---	---	---	---	---	---
SB-5	7/24/1999	7.5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	---	---	---	---	---	---	---
SB-6	7/24/1999	5	---	---	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05	---	---	---	---	---	---	---
MW-1-3.0	8/15/2007	3.0	---	---	<0.18	<0.0042	<0.0042	<0.0042	<0.0084	<0.0042	---	---	---	---	---	---	---
MW-1-8.5	8/15/2007	8.5	---	---	**1,600**	<2.0	<2.0	<2.0	<4.0	<2.0	---	---	---	---	---	---	---
MW-1-12.0	8/15/2007	12.0	---	---	2.4	<0.0037	<0.0037	<0.0037	<0.0074	<0.0037	---	---	---	---	---	---	---
MW-1-14.5	8/15/2007	14.5	---	---	<0.160	<0.0052	<0.0052	<0.0052	<0.01	<0.0052	---	---	---	---	---	---	---
MW-2-10.5	8/15/2007	10.5	---	---	5.0	<0.004	<0.004	<0.004	<0.008	<0.004	---	---	---	---	---	---	---
EB-1-10.5	8/16/2007	10.5	---	---	**470**	<6.6	<6.6	**100**	<13.2	<6.6	---	---	---	---	---	---	4.5
EB-1-14.0	8/16/2007	14.0	---	---	<0.820	<0.004	<0.004	<0.004	<0.008	<0.004	---	---	---	---	---	---	1.4
EB-2-9.0	8/16/2007	9.0	---	---	24	**0.44**	<0.270	3.7	<0.540	<0.0045	---	---	---	---	---	---	21
EB-2-13	8/16/2007	13.0	---	---	<0.150	<0.0045	<0.0045	<0.0045	<0.009	<0.27	---	---	---	---	---	---	1.2
EB-3-9.0	8/16/2007	9.0	---	---	68	**0.99**	<0.73	**12**	1.0	<0.73	---	---	---	---	---	---	2.0
EB-3-11.8	8/16/2007	11.8	---	---	<0.180	<0.0042	<0.0042	<0.0042	<0.0084	<0.0042	---	---	---	---	---	---	1.8
EB-4-6.5	8/16/2007	6.5	---	---	<0.190	<0.0043	<0.0043	<0.0043	<0.0086	<0.0043	---	---	---	---	---	---	2.3
EB-4-10.2	8/16/2007	10.2	---	---	<0.180	<0.0045	<0.0045	<0.0045	<0.009	<0.0045	---	---	---	---	---	---	1.8

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*	*Total Lead*
EB-4-13.0	8/16/2007	13.0	---	---	<0.160	<0.0041	<0.0041	<0.0041	<0.0082	<0.0041	---	---	---	---	---	---	1.7
EB-5-2.5	8/16/2007	2.5	---	---	<0.180	<0.0071	<0.0071	<0.0071	<0.014	<0.0045	---	---	---	---	---	---	48
EB-5-9.0	8/16/2007	9.0	---	---	2.4	<0.210	<0.210	3.7	1.1	<0.0071	---	---	---	---	---	---	2.6
EB-5-12.5	8/16/2007	12.5	---	---	<1.1	<0.0045	<0.0045	<0.0045	<0.009	<0.21	---	---	---	---	---	---	1.5
EB-6-9.5	8/16/2007	9.5	---	---	4.3	<0.12	<0.12	1.8	<2.4	<0.12	---	---	---	---	---	---	2.5
EB-6-14.0	8/16/2007	14.0	---	---	<0.180	<0.0036	<0.0036	<0.0036	<0.007	<0.0036	---	---	---	---	---	---	2.0
EB-8-1.5	8/15/2007	1.5	---	---	<0.980	<0.0049	<0.0049	<0.0049	<0.0098	<0.020	---	---	---	---	---	---	40
EB-9-2.0	8/15/2007	2.0	---	---	<0.960	<0.0048	<0.0048	<0.0048	<0.0096	<0.019	---	---	---	---	---	---	2.0
EB-10-2.0	8/16/2007	2.0	---	---	<1.5	<0.0051	<0.0051	<0.0051	<0.012	<0.0051	---	---	---	---	---	---	550
EB-11-2.0	8/16/2007	2.0	---	---	<1.2	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	---	---	---	---	---	---	3.3
B-5-5.5'	2/27/2009	5.5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
B-5-8.5'	2/27/2009	8.5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
B-7-5.5'	2/27/2009	5.5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
B-7-8.5'	2/27/2009	8.5	---	---	87	<0.50	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---
B-8-5.5'	2/27/2009	5.5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
B-8-8.5'	2/27/2009	8.5	---	---	**7,900**	<20	<20	**120**	**150**	<20	---	---	---	---	---	---	---
MW-4-5'	2/25/2009	5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-4-8'	2/25/2009	8	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*	*Total Lead*
MW-5-5'	2/24/2009	5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-5-8'	2/24/2009	8	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-6-5'	2/26/2009	5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-6-8'	2/26/2009	8	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-7-5'	2/25/2009	5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-7-8'	2/25/2009	8	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-8-5'	2/23/2009	5	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-8-8'	2/23/2009	8	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
MW-9-5.5'	3/25/2010	5.5	81	9.7[b]	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	3.36
MW-9-8.5'	3/25/2010	8.5	<25	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	2.45
MW-9-12'	3/25/2010	12	450	54[b]	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	17.1
MW-9-17.5'	3/25/2010	17.5	<25	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---	1.85
B-6-5.25	7/13/2010	5.25	<25	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.0050	<0.0050	2.18
B-6-8.0	7/13/2010	8	<25	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.0050	<0.0050	2.72
B-6-9.5	7/13/2010	9.5	<25	<5.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.010	<0.050	<0.0050	<0.0050	2.68
Shallow Soil (≤10 fbg) ESL[a]			2,500	180	180	0.27	9.3	4.7	11	8.4	---	---	---	110	0.48	0.044	750
Deep Soil (>10 fbg) ESL[a]			5,000	180	180	2.0	9.3	4.7	11	8.4	---	---	---	110	1.8	1.0	750

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*	*Total Lead*

Notes:

All results in milligrams per kilogram (mg/kg) unless otherwise indicated.
fbg = feet below grade
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before February 27, 2009, analyzed by EPA
Benzene, toluene, ethylbenzene and total xylenes analyzed by EPA Method 8260B; before August 15, 2007, analyzed by EPA
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B, before August 15, 2007, analyzed by EPA
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
EDB = 1,2-Dibromoethane analyzed by EPA
Lead analyzed by EPA Method 6010B
<x = Not detected at reporting limit x
--- = Not analyzed or no applicable ESL
ESL = Environmental screening level

a = Strongly aged gasoline or diesel range compounds are significant.

b = The sample chromatographic pattern for TPHd does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

c = San Francisco Bay Regional Water Quality Control Board commercial/industrial Environmental Screening Level for soil where groundwater is not a source of drinking water (Table B 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]).

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*	*Total Lead*

d = San Francisco Bay Regional Water Quality Control Board commercial/industrial Environmental Screening Level for soil where groundwater is not a source of drinking water (Table 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]).

TABLE 2

HISTORICAL GRAB GROUNDWATER ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*DIPE*	*ETBE*	*TAME*	*TBA*	*1,2-DCA*	*EDB*
SB-1W	7/24/1999	8 to 10	---	<50	<1	<1	<1	<1	<5	---	---	---	---	---	---
SB-2W	7/24/1999	8 to 10	---	<50	<1	<1	<1	<1	<5	---	---	---	---	---	---
SB-3W	7/24/1999	8 to 10	---	**4,500** [a]	<2.5	<2.5	<2.5	<2.5	<20	---	---	---	---	---	---
SB-4W	7/24/1999	8 to 10	---	<50	<1	<1	<1	<1	<5	---	---	---	---	---	---
SB-6W	7/24/1999	8 to 10	---	160 [a]	<1	<1	<1	<1	<5	---	---	---	---	---	---
EB-1-081607	8/16/2007	10 to 15	---	**7,000**	**980**	11	**490**	19	<5.0	---	---	---	---	---	---
EB-4-081607	8/16/2007	10 to 15	---	<50	<0.5	<0.5	<0.5	<1.0	<0.5	---	---	---	---	---	---
B-5 (GW@9-13')	2/27/2009	9 to 13	---	<50	<0.50	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---
B-7 (GW@9-13')	2/27/2009	9 to 13	---	**240**	<0.50	<1.0	5.6	17	<1.0	---	---	---	---	---	---
B-8 (GW@9-13')	2/27/2009	9 to 13	---	60	<0.50	<1.0	2.5	2.6	<1.0	---	---	---	---	---	---
MW-4 (GW@31-34')	2/25/2009	31 to 34	---	**470**	2.0	<1.0	14	16	<1.0	---	---	---	---	---	---
MW-5 (GW@31-34')	2/24/2009	31 to 34	---	<50	<0.50	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---
MW-6 (GW@31-34')	2/26/2009	31 to 34	---	<50	<0.50	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---
MW-7 (GW@31-34')	2/25/2009	31 to 34	---	<50	<0.50	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---
MW-8 (GW@31-34')	2/23/2009	31 to 34	---	94	<0.50	<1.0	<1.0	<1.0	<1.0	---	---	---	---	---	---

TABLE 2

HISTORICAL GRAB GROUNDWATER ANALYTICAL DATA
FORMER SHELL SERVICE STATION
2301-2307 LINCOLN AVENUE
ALAMEDA, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
B-6	7/13/2010	10 to 15	56[b]	<50	<0.50	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<2.0	<10	<0.50	<1.0
Groundwater ESL[c]:			210	210	46	130	43	100	1,800	---	---	---	18,000	200	150

Notes:

All results in micrograms per liter (µg/l) unless otherwise indicated.

fbg = Feet below grade

TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B

TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before February 27, 2009, analyzed by

Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B

MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; before August 16, 2007, analyzed by EPA

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

<x = Not detected at reporting limit x

--- = Not analyzed or no applicable ESL

ESL = Environmental screening level

a = Heavier gasoline range compounds are significant (aged gasoline?).

b = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

c = San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for groundwater where groundwater is not a source of drinking water (Table B 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

1999 Phase II Site Investigation: Basics Environmental (Basics) drilled six borings (SB-1 through SB-6, Figure 2) in the western portion of the site. Single soil samples were collected from all of the borings at 5 or 7.5 feet below grade (fbg) and grab groundwater samples were obtained from five of the borings (all except SB-5). Benzene and methyl tertiary-butyl ether (MTBE) were not detected in any of the samples. Analyses of the soil sample from boring SB-3 at 7.5 fbg showed concentrations of 40 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and 0.012 mg/kg ethylbenzene. Analyses of the grab groundwater sample from SB-3 showed concentrations of up to 4,500 micrograms per liter (µg/l) TPHg, 4.4 µg/l toluene, 2.7 µg/l ethylbenzene, 4.0 µg/l xylenes, 10 µg/l n-butylbenzene, 14 µg/l sec-butylbenzene, 45 µg/l isopropyl benzene, 60 µg/l n-propylbenzene, and 26 µg/l vinyl acetate. These results were presented in Basics' August 12, 1999 *Limited Phase II Environmental Site Investigation* report.

2000 Site Assessment: Toxichem Management Systems, Inc. (Toxichem) conducted a site assessment which included a review of Basics' investigation, aerial photographs, Sanborn maps, and agency files. The site assessment is presented in Toxichem's May 1, 2000 *Site Assessment Report.*

2007 Site Investigation: Geomatrix installed three groundwater monitoring wells (MW-1 through MW-3, Figure 2) in the western former UST (USTs originally installed in the 1920's) area and drilled 11 exploratory borings (EB-1 through EB-6 and EB-8 through EB-11, Figure 2) in the area of the eastern former USTs (USTs originally installed in the 1970's) and fuel dispensers. No toluene, fuel oxygenates, or lead scavengers were detected in any of the soil samples. No petroleum hydrocabons were detected in samples collected from 1.5 to 6.5 fbg. Soil samples collected from 8.5 to 14.0 fbg showed concentrations of up to 1,600 mg/kg TPHg, 0.99 mg/kg benzene, 100 mg/kg ethylbenzene, 1.1 mg/kg xylenes, and 21 mg/kg lead. Sample EB-10-2.0 contained a concentration of 550 mg/kg lead. Grab groundwater samples collected from the wells and exploratory borings EB-1 and EB-4 contained concentrations of up to 7,000 µg/l TPHg, 980 µg/l benzene, 490 µg/l ethylbenzene, 11 µg/l toluene, and 19 µg/l xylenes. Groundwater was gauged at 8.37 to 9.26 fbg and flow direction was calculated to be to the east-northeast. These results were presented in Geomatrix's December 2007 *Subsurface Investigation Summary Report.*

2009 Subsurface Investigation: Conestoga-Rovers & Associates (CRA) installed five groundwater monitoring wells (MW-4, MW-5, MW-6, MW-7, and MW-8), installed five soil vapor probes (SVP-1 through SVP-5), and drilled three soil borings (B-5, B-7, and

B-8). No benzene, toluene, or MTBE were detected in soil samples collected during this investigation. Only the TPHg (7,900 mg/kg), ethylbenzene (120 mg/kg), and total xylenes (150 mg/kg) detections in soil sample B-8-8.5' exceeded the San Francisco Bay Regional Water Quality Control Board's (RWQCB's) environmental screening levels (ESLs) for shallow soil where groundwater is not a source of drinking water[1]. TPHg, benzene, ethylbenzene, and xylenes were detected in grab groundwater samples collected from some of the borings. Only TPHg (up to 470 µg/l) exceeded the ESL in two grab groundwater samples; no other constituents of concern exceeded ESLs. MTBE was not detected in grab groundwater. Soil vapor samples from soil vapor probe SVP-5 contained concentrations of TPHg (up to 11,000,000 micrograms per cubic meter [µg/m^3]), benzene (up to 12,000 µg/m^3), and ethylbenzene (up to 23,000 µg/m^3), which exceeded ESLs. TPHg and benzene, toluene, ethylbenzene, and xylenes concentrations in soil vapor samples collected from the other three soil vapor probes (SVP-1, SVP-2, and SVP-3) were all below ESLs. MTBE was not detected in soil vapor. Soil vapor probe SVP-4 could not be sampled due to an obstruction in the sample line. These results were presented in CRA's April 9, 2009 *Subsurface Investigation Report.*

2010 Subsurface Investigation: In March 2010, CRA installed one groundwater monitoring well (MW-9), installed four soil vapor probes (SVP-5A and SVP-6 through SVP-8), and reinstalled one soil vapor probe (SVP-4). No TPHg, benzene, toluene, ethylbenzene, or xylenes were detected in soil samples collected from well boring MW-9. Up to 450 mg/kg TPHmo, 54 mg/kg TPHd, and 17.1 mg/kg lead were detected (in sample MW-9-12'). None of the detections exceeded the ESLs. CRA's May 12, 2010 *Subsurface Investigation Report* provides details of this investigation.

2010 Soil Vapor Sampling: In June 2010, CRA sampled five soil vapor probes (SVP-4, SVP-5A, and SVP-6 through SVP-8) and in July 2010 CRA sampled one soil vapor probe (SVP-5). Only the TPHg (8,400,000 µg/m^3) and ethylbenzene (14,000 µg/m^3) detections from SVP-5 (at 5 fbg) exceeded ESLs. Soil vapor concentrations are defined below ESLs vertically by SVP-5A (at 2 fbg) and horizontally by SVP-2 through SVP-4 and SVP-6 through SVP-8. CRA's August 24, 2010 *Soil Vapor Sampling Report* provides details of this investigation.

Groundwater Monitoring: Geomatrix sampled wells MW-1 through MW-3 in August 2007, and groundwater monitoring was initiated beginning with the first quarter of 2009 in wells MW-1 through MW-8 and the second quarter of 2010 in well MW-9. Fuel oxygenates were not detected in any of the August 2007 groundwater samples and are not included in the groundwater monitoring program, because gasoline

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]

station operations ceased at the site prior to the use of MTBE in gasoline. No constituents of concern have been detected above non-drinking water ESLs in wells MW-2, MW-3, and MW-5 through MW-9. Concentrations up to 17,000 µg/l TPHg, 1,700 µg/l total petroleum hydrocarbons as diesel, 280 µg/l benzene, 270 µg/l ethylbenzene, 25 µg/l toluene, and 360 µg/l xylenes have been detected in groundwater samples from MW-1 and MW-4.

APPENDIX B

PERMIT

Alameda County Public Works Agency - Water Resources Well Permit

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

Application Approved on: 05/11/2010 By jamesy

Permit Numbers: W2010-0329
Permits Valid from 07/13/2010 to 07/13/2010

Application Id: 1273595079864
City of Project Site: Alameda
Site Location: 2301-2307 Lincoln Avenue, Alameda, CA 94501
Project Start Date: 07/13/2010
Completion Date: 07/13/2010

Assigned Inspector: Contact Ron Smalley at (510) 670-5407 or ronaldws@acpwa.org

Applicant: Conestoga Rovers & Asscoiates - Scott Lewis
19449 Riverside Dr, Ste 230, sonoma, CA 95476
Phone: 707-933-2369

Property Owner: Katy S. Wong
2267 Lincoln Avenue, Alameda, CA 94501
Phone: --

Client: Shell Oil Products
20945 S Wilmington Avenue, Carson, CA 90810
Phone: 707-865-0251 x

Total Due: $265.00
Receipt Number: WR2010-0165 **Total Amount Paid:** $265.00
Payer Name : Conestoga Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Geotechnical Study/CPT's - 1 Boreholes
Driller: Gregg - Lic #: 465165 - Method: other

Work Total: $265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0329	05/11/2010	10/11/2010	1	2.00 in.	15.00 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.

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 Ron Smalley for an inspection time at 510-670-5407 or email to ronaldws@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. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

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

8. 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 C

BORING LOG

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Shell Oil Products US	**BORING/WELL NAME**	B-6
JOB/SITE NAME	Former Shell Service Station	**DRILLING STARTED**	13-Jul-10
LOCATION	2301-2307 Lincoln Avenue, Alameda, CA	**DRILLING COMPLETED**	13-Jul-10
PROJECT NUMBER	060204	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling, C-57 #485165	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Air-knife & Direct-push	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	2.5"	**SCREENED INTERVALS**	NA
LOGGED BY	P. Schaefer	**DEPTH TO WATER (First Encountered)**	12.20 fbg ▽
REVIEWED BY	P. Schaefer	**DEPTH TO WATER (Static)**	NA ▼
REMARKS			

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
0.0							**Silty SAND (SM)** ; brown (10YR 4/3); moist; 15% silt, 85% fine grained sand.		
0.0		B-6-5 .25		5					
0.0					SM		@ 6.5' - yellowish brown (10YR 5/4).		
0.0		B-6-8 .0							
0.0		B-6-9 .5		10			@ 11' - wet.		
0.0							▽		
0.0				15				15.0	Bottom of Boring @ 15 fbg

WELL LOG (PID) I:\SHELL\6-CHARS\0602--\060204--\10648E9--\060204-1.GPJ DEFAULT.GDT 8/24/10

APPENDIX D

CERTIFIED ANALYTICAL REPORT

Calscience
Environmental
Laboratories, Inc.

July 26, 2010

Peter Schaefer
Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Subject: **Calscience Work Order No.: 10-07-1052**
Client Reference: 2301-2307 Lincoln Ave., Alameda, CA

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 7/15/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Xuan H. Dang
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received:	07/15/10
5900 Hollis Street, Suite A	Work Order No:	10-07-1052
Emeryville, CA 94608-2008	Preparation:	EPA 3550B
	Method:	EPA 8015B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-5.25	10-07-1052-1-A	07/13/10 08:10	Solid	GC 49	07/16/10	07/17/10 07:09	100716B07

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	100	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-8.0	10-07-1052-2-A	07/13/10 08:20	Solid	GC 49	07/16/10	07/17/10 07:25	100716B07

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	98	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-9.5	10-07-1052-3-A	07/13/10 08:30	Solid	GC 49	07/16/10	07/17/10 07:40	100716B07

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	96	61-145			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-025-1,249	N/A	Solid	GC 49	07/16/10	07/16/10 23:47	100716B07

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	5.0	1		mg/kg
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	104	61-145			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates	Date Received: 07/15/10
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 3510C
	Method: EPA 8015B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6	**10-07-1052-4-D**	**07/13/10 08:40**	**Aqueous**	**GC 27**	**07/19/10**	**07/20/10 08:26**	**100719B05**

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	56	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	104	68-140			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-211-1,743**	**N/A**	**Aqueous**	**GC 27**	**07/19/10**	**07/20/10 01:37**	**100719B05**

Parameter	Result	RL	DF	Qual	Units
Diesel Range Organics	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
Decachlorobiphenyl	133	68-140			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-5.25	10-07-1052-1-A	07/13/10 08:10	Solid	GC 49	07/16/10	07/17/10 07:09	100716B08

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	100	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-8.0	10-07-1052-2-A	07/13/10 08:20	Solid	GC 49	07/16/10	07/17/10 07:25	100716B08

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	98	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-9.5	10-07-1052-3-A	07/13/10 08:30	Solid	GC 49	07/16/10	07/17/10 07:40	100716B08

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	97	61-145	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-254-1,337	N/A	Solid	GC 49	07/16/10	07/16/10 23:47	100716B08

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	25	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	104	61-145	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: ug/L

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6	10-07-1052-4-C	07/13/10 08:40	Aqueous	GC/MS T	07/21/10	07/21/10 13:39	100721L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Ethylbenzene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Toluene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	110	80-126			1,2-Dichloroethane-d4	110	80-131		
Toluene-d8-TPPH	100	88-112			Toluene-d8	98	80-120		
1,4-Bromofluorobenzene	90	80-120							

Method Blank	099-12-767-4,328	N/A	Aqueous	GC/MS T	07/21/10	07/21/10 13:09	100721L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	2.0	1	
Ethylbenzene	ND	1.0	1		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1	
Toluene	ND	1.0	1		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1	
Xylenes (total)	ND	1.0	1		TPPH	ND	50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	108	80-126			1,2-Dichloroethane-d4	109	80-131		
Toluene-d8	98	80-120			Toluene-d8-TPPH	100	88-112		
1,4-Bromofluorobenzene	92	80-120							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: mg/kg

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-5.25	10-07-1052-1-A	07/13/10 08:10	Solid	GC/MS W	07/20/10	07/21/10 16:55	100721L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	109	63-141			1,2-Dichloroethane-d4	110	62-146		
Toluene-d8	94	80-120			1,4-Bromofluorobenzene	89	60-132		
Toluene-d8-TPPH	96	87-111							

B-6-8.0	10-07-1052-2-A	07/13/10 08:20	Solid	GC/MS UU	07/15/10	07/19/10 17:51	100719L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	101	63-141			1,2-Dichloroethane-d4	107	62-146		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	93	60-132		
Toluene-d8-TPPH	100	87-111							

B-6-9.5	10-07-1052-3-A	07/13/10 08:30	Solid	GC/MS UU	07/15/10	07/19/10 18:17	100719L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	102	63-141			1,2-Dichloroethane-d4	106	62-146		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	94	60-132		
Toluene-d8-TPPH	99	87-111							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B
Units: mg/kg

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-798-1,107	N/A	Solid	GC/MS UU	07/19/10	07/19/10 13:06	100719L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	100	63-141			1,2-Dichloroethane-d4	108	62-146		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	94	60-132		
Toluene-d8-TPPH	101	87-111							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-798-1,110	N/A	Solid	GC/MS W	07/21/10	07/21/10 13:29	100721L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.0050	1		Methyl-t-Butyl Ether (MTBE)	ND	0.0050	1	
1,2-Dibromoethane	ND	0.0050	1		Tert-Butyl Alcohol (TBA)	ND	0.050	1	
1,2-Dichloroethane	ND	0.0050	1		Diisopropyl Ether (DIPE)	ND	0.010	1	
Ethylbenzene	ND	0.0050	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.010	1	
Toluene	ND	0.0050	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.010	1	
Xylenes (total)	ND	0.0050	1		TPPH	ND	0.50	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
Dibromofluoromethane	104	63-141			1,2-Dichloroethane-d4	112	62-146		
Toluene-d8	96	80-120			1,4-Bromofluorobenzene	89	60-132		
Toluene-d8-TPPH	97	87-111							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 3050B
Method: EPA 6010B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-5.25	10-07-1052-1-A	07/13/10 08:10	Solid	ICP 5300	07/15/10	07/15/10 20:21	100715L03

Parameter	Result	RL	DF	Qual	Units
Lead	2.18	0.500	1		mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-8.0	10-07-1052-2-A	07/13/10 08:20	Solid	ICP 5300	07/15/10	07/15/10 20:22	100715L03

Parameter	Result	RL	DF	Qual	Units
Lead	2.72	0.500	1		mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
B-6-9.5	10-07-1052-3-A	07/13/10 08:30	Solid	ICP 5300	07/15/10	07/15/10 20:23	100715L03

Parameter	Result	RL	DF	Qual	Units
Lead	2.68	0.500	1		mg/kg

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-13,781	N/A	Solid	ICP 5300	07/15/10	07/15/10 16:10	100715L03

Parameter	Result	RL	DF	Qual	Units
Lead	ND	0.500	1		mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 3050B
Method: EPA 6010B

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-0688-10	Solid	ICP 5300	07/15/10	07/15/10	100715S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	95	98	75-125	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Conestoga-Rovers & Associates	Date Received 07/15/10
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 3050B
	Method: EPA 6010B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PDSD Batch Number
10-07-0688-10	Solid	ICP 5300	07/15/10	07/15/10	100715S03

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	93	90	75-125	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates	Date Received: 07/15/10
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 3550B
	Method: EPA 8015B

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1129-10	Solid	GC 49	07/16/10	07/17/10	100716S07

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	81	96	64-130	16	0-15	4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates	Date Received:	07/15/10
5900 Hollis Street, Suite A	Work Order No:	10-07-1052
Emeryville, CA 94608-2008	Preparation:	EPA 3550B
	Method:	EPA 8015B (M)

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1129-10	Solid	GC 49	07/16/10	07/17/10	100716S08

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	65	91	64-130	28	0-15	4

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates	Date Received: 07/15/10
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 5030B
	Method: LUFT GC/MS / EPA 8260B

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1315-8	Aqueous	GC/MS T	07/21/10	07/21/10	100721S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	106	106	80-120	0	0-20	
Carbon Tetrachloride	108	112	55-151	3	0-20	
Chlorobenzene	103	104	80-120	1	0-20	
1,2-Dibromoethane	105	105	77-125	0	0-20	
1,2-Dichlorobenzene	104	105	78-120	1	0-20	
1,2-Dichloroethane	105	106	80-120	1	0-20	
1,1-Dichloroethene	98	100	69-129	3	0-20	
Ethylbenzene	108	109	73-127	1	0-20	
Toluene	104	105	80-120	1	0-20	
Trichloroethene	103	105	67-133	2	0-20	
Vinyl Chloride	91	93	67-133	2	0-20	
Methyl-t-Butyl Ether (MTBE)	94	96	65-131	2	0-22	
Tert-Butyl Alcohol (TBA)	110	109	62-134	1	0-20	
Diisopropyl Ether (DIPE)	104	106	64-136	2	0-29	
Ethyl-t-Butyl Ether (ETBE)	95	98	70-124	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	99	101	71-125	2	0-20	
Ethanol	87	87	44-152	1	0-43	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: 07/15/10
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1246-10	Solid	GC/MS UU	07/16/10	07/19/10	100719S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	99	61-127	6	0-20	
Carbon Tetrachloride	112	104	51-135	7	0-29	
Chlorobenzene	102	104	57-123	1	0-20	
1,2-Dibromoethane	103	97	64-124	6	0-20	
1,2-Dichlorobenzene	99	100	35-131	1	0-25	
1,2-Dichloroethane	101	93	80-120	8	0-20	
1,1-Dichloroethene	110	100	47-143	9	0-25	
Ethylbenzene	99	102	57-129	3	0-22	
Toluene	102	100	63-123	2	0-20	
Trichloroethene	102	100	44-158	2	0-20	
Vinyl Chloride	116	103	49-139	12	0-47	
Methyl-t-Butyl Ether (MTBE)	96	87	57-123	11	0-21	
Tert-Butyl Alcohol (TBA)	95	104	30-168	9	0-34	
Diisopropyl Ether (DIPE)	103	93	57-129	10	0-20	
Ethyl-t-Butyl Ether (ETBE)	98	89	55-127	9	0-20	
Tert-Amyl-Methyl Ether (TAME)	93	88	58-124	5	0-20	
Ethanol	80	94	17-167	15	0-47	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Conestoga-Rovers & Associates	Date Received: 07/15/10
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 5030B
	Method: LUFT GC/MS / EPA 8260B

Project 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-07-1416-6	Solid	GC/MS W	07/20/10	07/21/10	100721L01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	79	94	61-127	17	0-20	
Carbon Tetrachloride	72	87	51-135	19	0-29	
Chlorobenzene	81	99	57-123	19	0-20	
1,2-Dibromoethane	97	108	64-124	11	0-20	
1,2-Dichlorobenzene	81	100	35-131	21	0-25	
1,2-Dichloroethane	88	99	80-120	12	0-20	
1,1-Dichloroethene	102	91	47-143	12	0-25	
Ethylbenzene	80	102	57-129	24	0-22	4
Toluene	79	97	63-123	20	0-20	
Trichloroethene	81	98	44-158	19	0-20	
Vinyl Chloride	98	96	49-139	2	0-47	
Methyl-t-Butyl Ether (MTBE)	70	81	57-123	15	0-21	
Tert-Butyl Alcohol (TBA)	77	101	30-168	27	0-34	
Diisopropyl Ether (DIPE)	80	97	57-129	20	0-20	
Ethyl-t-Butyl Ether (ETBE)	61	76	55-127	22	0-20	4
Tert-Amyl-Methyl Ether (TAME)	69	82	58-124	18	0-20	
Ethanol	99	115	17-167	15	0-47	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates	Date Received: N/A
5900 Hollis Street, Suite A	Work Order No: 10-07-1052
Emeryville, CA 94608-2008	Preparation: EPA 3050B
	Method: EPA 6010B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-13,781	Solid	ICP 5300	07/15/10	07/15/10	100715L03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	101	99	80-120	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: N/A
Work Order No: 10-07-1052
Preparation: EPA 3550B
Method: EPA 8015B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-025-1,249	Solid	GC 49	07/16/10	07/17/10	100716B07

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	96	98	75-123	3	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates		Date Received:	N/A
5900 Hollis Street, Suite A		Work Order No:	10-07-1052
Emeryville, CA 94608-2008		Preparation:	EPA 3510C
		Method:	EPA 8015B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-211-1,743	Aqueous	GC 27	07/19/10	07/20/10	100719B05

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Diesel Range Organics	98	94	75-117	4	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates		Date Received:	N/A
5900 Hollis Street, Suite A		Work Order No:	10-07-1052
Emeryville, CA 94608-2008		Preparation:	EPA 3550B
		Method:	EPA 8015B (M)

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-254-1,337	Solid	GC 49	07/16/10	07/17/10	100716B08

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	80	79	75-123	1	0-12	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates		Date Received:	N/A
5900 Hollis Street, Suite A		Work Order No:	10-07-1052
Emeryville, CA 94608-2008		Preparation:	EPA 5030B
		Method:	LUFT GC/MS / EPA 8260B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-767-4,328	Aqueous	GC/MS T	07/21/10	07/21/10	100721L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	105	105	80-120	73-127	0	0-20	
Carbon Tetrachloride	106	107	67-139	55-151	1	0-22	
Chlorobenzene	104	102	80-120	73-127	2	0-20	
1,2-Dibromoethane	103	104	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	105	104	79-120	72-127	1	0-20	
1,2-Dichloroethane	102	103	80-120	73-127	0	0-20	
1,1-Dichloroethene	98	97	71-125	62-134	1	0-25	
Ethylbenzene	110	108	80-123	73-130	1	0-20	
Toluene	102	103	80-120	73-127	1	0-20	
Trichloroethene	102	103	80-120	73-127	1	0-20	
Vinyl Chloride	91	92	68-140	56-152	1	0-23	
Methyl-t-Butyl Ether (MTBE)	93	95	75-123	67-131	1	0-25	
Tert-Butyl Alcohol (TBA)	110	109	72-126	63-135	0	0-20	
Diisopropyl Ether (DIPE)	103	104	75-129	66-138	1	0-22	
Ethyl-t-Butyl Ether (ETBE)	97	97	76-124	68-132	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	99	101	79-121	72-128	1	0-20	
Ethanol	84	83	53-143	38-158	2	0-25	
TPPH	99	100	65-135	53-147	1	0-30	

Total number of LCS compounds : 18
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: N/A
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-798-1,107	Solid	GC/MS UU	07/19/10	07/19/10	100719L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	99	78-120	71-127	1	0-20	
Carbon Tetrachloride	103	104	49-139	34-154	1	0-20	
Chlorobenzene	100	100	79-120	72-127	1	0-20	
1,2-Dibromoethane	99	99	80-120	73-127	0	0-20	
1,2-Dichlorobenzene	101	100	75-120	68-128	1	0-20	
1,2-Dichloroethane	97	98	80-120	73-127	1	0-20	
1,1-Dichloroethene	96	94	74-122	66-130	2	0-20	
Ethylbenzene	100	99	76-120	69-127	1	0-20	
Toluene	100	100	77-120	70-127	0	0-20	
Trichloroethene	98	97	80-120	73-127	0	0-20	
Vinyl Chloride	97	98	68-122	59-131	1	0-20	
Methyl-t-Butyl Ether (MTBE)	96	97	77-120	70-127	0	0-20	
Tert-Butyl Alcohol (TBA)	94	94	68-122	59-131	0	0-20	
Diisopropyl Ether (DIPE)	99	99	78-120	71-127	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	97	97	78-120	71-127	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	98	98	75-120	68-128	0	0-20	
Ethanol	90	88	56-140	42-154	3	0-20	
TPPH	100	96	65-135	53-147	4	0-30	

Total number of LCS compounds : 18
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Conestoga-Rovers & Associates
5900 Hollis Street, Suite A
Emeryville, CA 94608-2008

Date Received: N/A
Work Order No: 10-07-1052
Preparation: EPA 5030B
Method: LUFT GC/MS / EPA 8260B

Project: 2301-2307 Lincoln Ave., Alameda, CA

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-798-1,110	Solid	GC/MS W	07/21/10	07/21/10	100721L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	96	78-120	71-127	2	0-20	
Carbon Tetrachloride	91	93	49-139	34-154	2	0-20	
Chlorobenzene	104	104	79-120	72-127	1	0-20	
1,2-Dibromoethane	109	103	80-120	73-127	6	0-20	
1,2-Dichlorobenzene	100	106	75-120	68-128	6	0-20	
1,2-Dichloroethane	97	97	80-120	73-127	0	0-20	
1,1-Dichloroethene	94	94	74-122	66-130	0	0-20	
Ethylbenzene	108	108	76-120	69-127	1	0-20	
Toluene	101	101	77-120	70-127	0	0-20	
Trichloroethene	102	101	80-120	73-127	1	0-20	
Vinyl Chloride	99	103	68-122	59-131	4	0-20	
Methyl-t-Butyl Ether (MTBE)	80	80	77-120	70-127	0	0-20	
Tert-Butyl Alcohol (TBA)	102	96	68-122	59-131	6	0-20	
Diisopropyl Ether (DIPE)	90	90	78-120	71-127	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	76	77	78-120	71-127	1	0-20	ME
Tert-Amyl-Methyl Ether (TAME)	83	83	75-120	68-128	1	0-20	
Ethanol	115	120	56-140	42-154	4	0-20	
TPPH	90	83	65-135	53-147	8	0-30	

Total number of LCS compounds : 18
Total number of ME compounds : 1
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 10-07-1052

Qualifier	Definition
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
E	Concentration exceeds the calibration range.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- [x] CALSCIENCE (_____)
- [ ] SPL (_____)
- [ ] XENCO (_____)
- [ ] TEST AMERICA (_____)
- [ ] OTHER (_____)

Please Check Appropriate Box:
- [ ] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [x] CONSULTANT
- [ ] LUBES
- [ ] SHELL PIPELINE
- [ ] OTHER

Print Bill To Contact Name: Peter Schaefer

INCIDENT # (ENV SERVICES): 9 7 7 6 7 0 4 9

PO # / SAP #

- [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 7/13/10

PAGE: _____ of _____

SAMPLING COMPANY: Conestoga-Rovers & Associates

LOG CODE: CRAW

SITE ADDRESS: Street and City: 2301-2307 Lincoln Avenue, Alameda State: CA

GLOBAL ID NO.:

ADDRESS: ~~19449 Riverside Drive, Suite 230, Sonoma, California 95476~~ 5900 Hollis St. Suite A Emeryville, CA 94608

EDF DELIVERABLE TO (Name, Company, Office Location): Brenda Carter, ~~Patricia Ballard, CRA, Sonoma~~ Emeryville

PHONE NO.: 510-420-3343 ~~707-935-4850~~

E-MAIL: Shelledf ~~sonomaedf~~@craworld.com

CONSULTANT PROJECT NO.:

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

SAMPLER NAME(S) (Print): SCHAEFER

LAB USE ONLY: 07- 1052

TELEPHONE: 510-420-3319

FAX: ~~510-420-9170~~ ~~707-935-6649~~

E-MAIL: pschaefer@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:

REQUESTED ANALYSIS

SPECIAL INSTRUCTIONS OR NOTES :

Copy final report to Shell.Lab.Billing@craworld.com

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] EDD NOT NEEDED
- [x] RECEIPT VERIFICATION REQUESTED

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)	TPH-MG (8015M)	BTEX (8260B)	BTEX + MTBE (8260B)	BTEX + MTBE + TBA (8260B)	BTEX + 5 OXYs (MTBE, TBA, DIPE, TAME, ETBE) 8260B	Full VOC list (8260B)	Single Compound: _____ (8260B)	1,2-DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	LEAD (6010)	TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
1	B-6-5.25	7/13/10	0810	SOIL						1	X	X		X	[redacted]			X			X	X			X	
2	B-6-8.0	↓	0820	↓						1	X	X		X				X			X	X			X	
3	B-6-9.5		0830							1	X	X		X				X			X	X			X	
4	B-6		0840	(WATER (40ml)	X					3	X	[redacted]						X			X	X				
			~~0840~~	~~(WATER (40ml)~~	~~X~~																					
			~~0840~~		~~X~~																					
			~~0840~~		~~X~~																					
4	B-6	↓	0840	WATER (500ml)						1		X														

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Peter Schaefer	Released to secure location	7/13/10	1135
[signature]	Tom O'Malley CEC	7/14/10	1035
Tom O'Malley TO 650 7/14/10 1730	[signature] CA	7/15/10	1000

05/2/06 Revision

1052

GSO

<WebShip>>>>>

800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
$0.00

Reference:
BTS, CRA

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 514545887

NPS

ORC

D

GARDEN GROVE

D92843A

83114893

Print Date : 07/14/10 16:28 PM

Package 1 of 1

Send Label To Printer | ☑ Print All | Edit Shipment | Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 10-07-1052

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: PS TBTS CRA 7/15/10

DATE: 07/15/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.4 °C + 0.5 °C (CF) = 1.9 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: PS

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Initial: PS

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: GO

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☑Sleeve (P (1-3)) ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh (3 (1-4)) ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na₂** ☐1AGB**s**

☐500AGB ☑500AGJ (1-4) ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** GO

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** _____

Preservative: **h:** HCL **n:** HNO_3 **na₂:** $Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** _____