



**CONESTOGA-ROVERS
& ASSOCIATES**

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TRANSMITTAL

DATE: April 16, 2013 REFERENCE NO.: 240781
 PROJECT NAME: 2703 Martin Luther King Jr. Way, Oakland
 To: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

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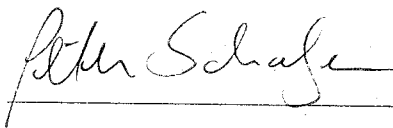
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QUANTITY	DESCRIPTION
1	Remedial Action Report

As Requested For Review and Comment
 For Your Use

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

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
 Rodney & Janet Kwan (property owners), Auto Tech West, 2703 Martin Luther King Jr. Way, Oakland, CA 94612
 Solomon Tesfa (adjacent property owner), 484 Lake Park Avenue, #288, Oakland, CA 94610
 Wilfrid Kintonouza (adjacent property owner) (electronic copy)

Completed by: Peter Schaefer Signed: 

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

Re: Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California
SAP Code 129449
Incident No. 97093397
ACEH Case No. RO0000145

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,

A handwritten signature in black ink, appearing to read "Denis L. Brown", is written over a horizontal line.

Denis L. Brown
Senior Program Manager



REMEDIAL ACTION REPORT

FORMER SHELL SERVICE STATION
2703 MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

SAP CODE 129449
INCIDENT NO. 97093397
AGENCY NO. RO0000145

APRIL 16, 2013
REF. NO. 240781 (27)
This report is printed on recycled paper.

**Prepared by:
Conestoga-Rovers
& Associates**

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AND LEAD

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EXECUTIVE SUMMARY

- A shallow soil excavation was completed behind the former service station building to remove petroleum hydrocarbon and lead soil impacts identified during previous investigations.
- All COC detections above laboratory reporting limits in soil samples collected from the excavation are below RWQCB ESLs for commercial land use, with the exception of a lead detection in one sidewall sample from the north edge of the excavation which is likely related to the off-site lead impacts detected during previous investigations. The remedial actions have adequately addressed the lead and hydrocarbon-impacted area in the north portion of the site identified during previous investigations.

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 remedial action at this site. CRA followed the scope of work and procedures presented in CRA's March 4, 2011 *Subsurface Investigation Report and Revised Remedial Action Plan*, which was approved in Alameda County Environmental Health's (ACEH's) August 15, 2012 letter. As discussed in Shell's and CRA's January 23, 2013 meeting with ACEH, the excavation was limited to the on-site area behind the former station building pending the results of an additional shallow soil investigation detailed in CRA's February 7, 2013 *Subsurface Investigation Work Plan* which was approved in ACEH's March 5, 2013 letter.

The subject site is a former service station located on the northwest corner of Martin Luther King Jr. Way and 27th Street in a mixed commercial and residential area of Oakland, California (Figure 1). Currently, the site is occupied by Auto Tech West and is used as an automotive repair shop (Figure 2).

A summary of previous work performed at the site and additional background information is presented in CRA's February 7, 2013 *Subsurface Investigation Work Plan* and is not repeated herein.

2.0 SOIL EXCAVATION

In order to address residual petroleum hydrocarbon and lead impacts identified during previous investigations, CRA directed two excavations at the locations shown on Figure 2, as detailed below.

2.1 PERMITS

Cornerstone Environmental Contractors, Inc. (Cornerstone) obtained an excavation permit and a right-of-way obstruction permit from the City of Oakland (Appendix A).

2.2 FIELD DATES

January 21 through March 8, 2013.

2.3 EXCAVATION COMPANY

Cornerstone.

2.4 PERSONNEL PRESENT

Engineer Jessica Radon directed the excavation under the supervision of California Professional Engineer Lee Brennan.

2.5 EXCAVATION SOIL SAMPLING

On January 22, 2013, CRA collected five soil samples (B-1 through B-5) from the bottom of the excavation, three soil samples (N-1, N-2, and N-3) from the north sidewall of the excavation, three soil samples (S-1, S-2, and S-3) from the south sidewall of the excavation, and two soil samples (W-1 and W-2) from the west sidewall of the excavation. All samples were collected at a depth of approximately 2 feet below original grade using a shovel. Following receipt of confirmation soil sampling results, the area around soil sample W-2 was over-excavated to approximately 3 feet below original grade on February 21, 2013, and three additional soil samples (OX-1 through OX-3) were collected from the over-excavation area. Figure 2 illustrates the excavation, over-excavation, and soil sampling locations.

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

2.6 CHEMICAL ANALYSES

State-certified Accutest Laboratories of San Jose, California analyzed the soil samples for total petroleum hydrocarbons as motor oil (TPHmo) and total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015B (M); for semi-volatile hydrocarbons by EPA Method 8270C; and for total lead by EPA Method 6010B. Appendix B includes the laboratory reports.

2.7 WASTE DISPOSAL

CRA collected one composite soil sample (SP-1) from the planned excavation area in order to pre-profile excavated soils for disposal. On March 4, 2013, DenBeste, Inc. transported approximately 52.08 tons of soil to US Ecology, Inc.'s landfill in Beatty, Nevada for disposal. Final disposal documentation is pending and will be provided upon request.

3.0 FINDINGS

3.1 SOIL

The soil chemical analytical data are summarized in Table 1, and TPHmo, TPHd, and lead analytical results are presented on Figure 2. Laboratory analytical reports are presented in Appendix B.

The confirmation soil samples from the limits of excavation contained up to 254 milligrams per kilogram (mg/kg) TPHmo, 162 mg/kg TPHd, 0.467 mg/kg bis(2-ethylhexyl)phthalate, and 721 mg/kg total lead.

4.0 CONCLUSIONS

All constituent of concern (COC) detections in soil samples collected from the limits of excavation are below San Francisco Bay Regional Water Quality Control Board (RWQCB) environmental screening levels (ESLs) for commercial land use, with the exception of 721 mg/kg lead detected in sidewall sample N-3, collected from the north sidewall of the excavation, which is likely related to the off-site lead impacts detected during previous investigations. The remedial actions have adequately addressed impacted area in the northern portion of the site identified during previous investigations.

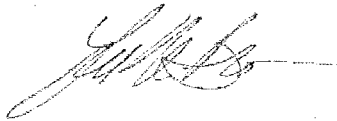
5.0 RECOMMENDATIONS

CRA will evaluate the need for off-site remedial action based on the results of shallow soil investigation proposed in CRA's February 7, 2013 *Subsurface Investigation Work Plan*.

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



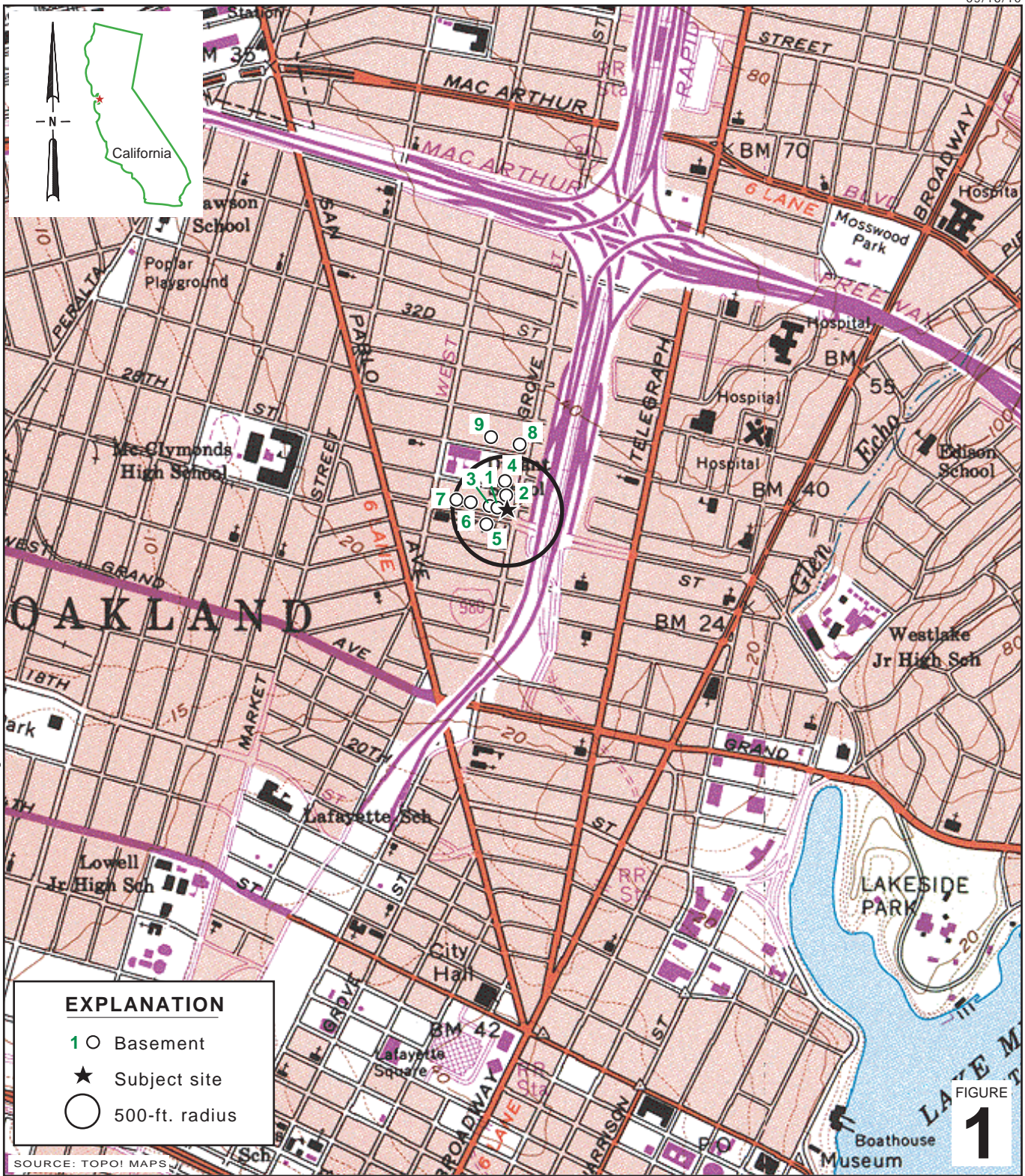
Peter Schaefer, CEG, CHG



DATED 4/16/2013

Lee Brennan, PE

FIGURES



I:\Shell\6-chars\2407--\240781-Oakland 2703 Martin Luther King\240781-FIGURES\240781 VICINITY.AI

EXPLANATION

- 1 ○ Basement
- ★ Subject site
- 500-ft. radius

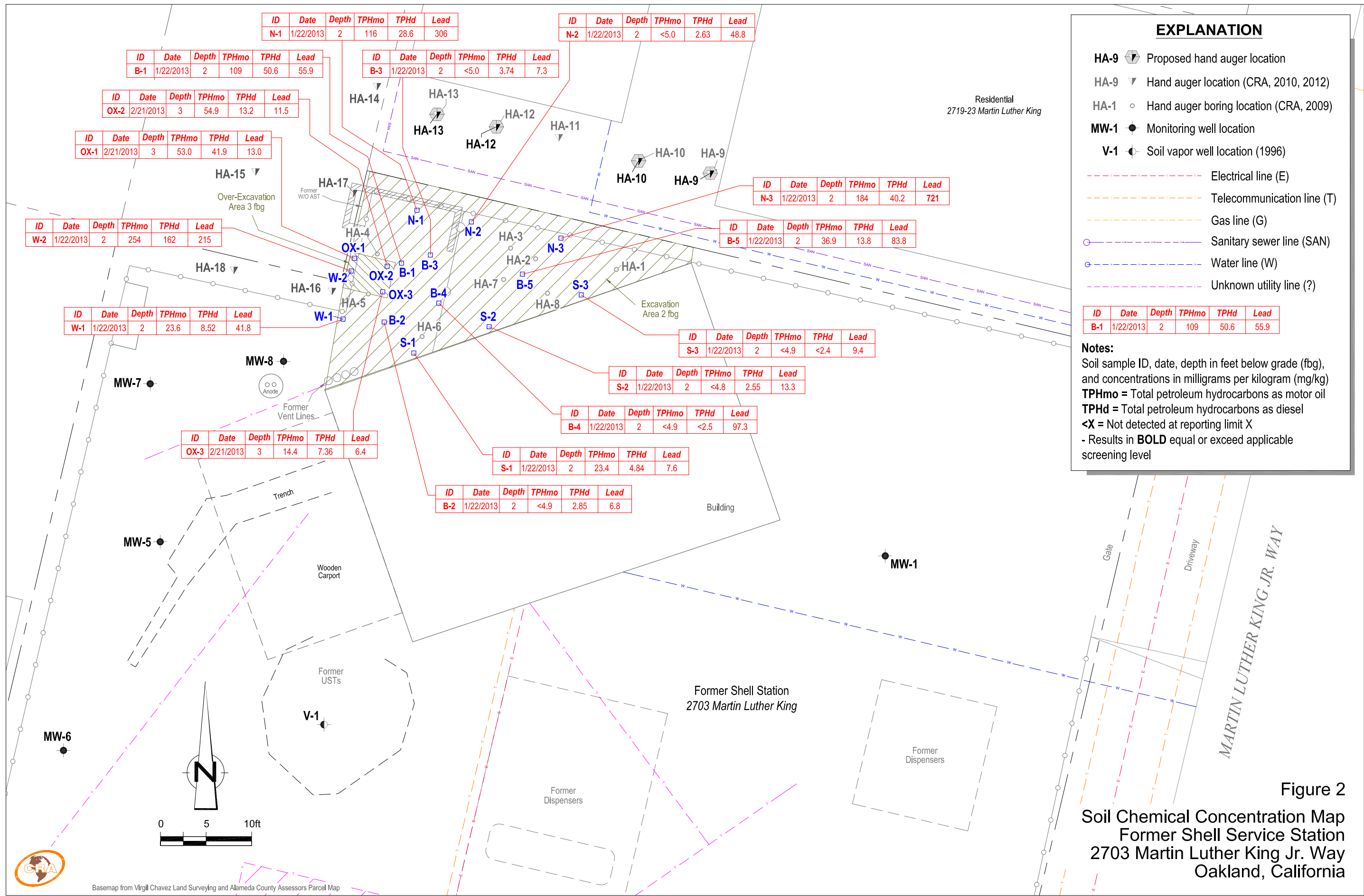


Former Shell Service Station
 2703 Martin Luther King Jr. Way
 Oakland, California



**CONESTOGA-ROVERS
& ASSOCIATES**

Vicinity Map



EXPLANATION

- HA-9 Proposed hand auger location
- HA-9 Hand auger location (CRA, 2010, 2012)
- HA-1 Hand auger boring location (CRA, 2009)
- MW-1 Monitoring well location
- V-1 Soil vapor well location (1996)
- Electrical line (E)
- Telecommunication line (T)
- Gas line (G)
- Sanitary sewer line (SAN)
- Water line (W)
- Unknown utility line (?)

ID	Date	Depth	TPHmo	TPHd	Lead
B-1	1/22/2013	2	109	50.6	55.9

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
<X = Not detected at reporting limit X
 - Results in **BOLD** equal or exceed applicable screening level

Figure 2
 Soil Chemical Concentration Map
 Former Shell Service Station
 2703 Martin Luther King Jr. Way
 Oakland, California

TABLE

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA FOR TPHMO, TPHD, PAHS, AND LEAD
 FORMER SHELL SERVICE STATION
 2703 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	Naphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Bis(2-ethylhexyl)phthalate (mg/kg)	Diethyl Phthalate (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) Anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(k) Fluoranthene (mg/kg)	Benzo(b) Fluoranthene (mg/kg)	Benzo(a) Pyrene (mg/kg)	Benzo(g,h,i) Perylene (mg/kg)	Indeno(1,2,3-c,d) Pyrene (mg/kg)	Dibenz(a,b) Anthracene (mg/kg)	1-Methylnaphthalene (mg/kg)	Lead (mg/kg)	
HA-1-0.7'	4/8/2009	0.7	7,900	1,300 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.18	<0.040	<0.040	<0.040	<0.040	<0.040	24.5
HA-1-1.5'	4/8/2009	1.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	7.73
HA-1-5'	4/8/2009	5	97	19 a	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	7.74
HA-2-0.7'	4/8/2009	0.7	6,700	560 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.19	<0.040	<0.040	<0.040	<0.040	<0.040	44.0
HA-2-1.5'	4/8/2009	1.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	29.5
HA-2-5'	4/8/2009	5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	19.4
HA-3-0.7'	4/8/2009	0.7	6,300	570 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	<0.040	<0.040	0.070	<0.040	<0.040	0.16	<0.040	<0.040	<0.040	<0.040	<0.040	59.9
HA-3-1.5'	4/8/2009	1.5	50	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	20.8
HA-3-5'	4/8/2009	5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	6.65
HA-4-0.7'	4/8/2009	0.7	7,800	4,500 a	1.2	<1.0	<1.0	1.6	1.7	8.5	2.6	---	---	7.9	8.1	3.6	4.0	7.1	<1.0	4.2	1.6	2.2	<1.0	<1.0	<1.0	43.5
HA-4-1.5'	4/8/2009	1.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	10.1
HA-4-5'	4/8/2009	5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	5.81
HA-5-0.7'	4/8/2009	0.7	5,800	700 a	<0.040	<0.040	<0.040	<0.040	<0.040	0.25	0.075	---	---	0.39	0.98	0.29	0.48	0.61	0.56	0.51	0.18	0.16	0.048	<0.040	<0.040	46.0
HA-5-1.5'	4/8/2009	1.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	8.14
HA-5-5'	4/8/2009	5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	7.85
HA-6-0.7'	4/8/2009	0.7	7,400	1,800 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	0.077	<0.040	0.12	<0.040	<0.040	0.21	0.077	<0.040	<0.040	<0.040	<0.040	40.3
HA-6-1.5'	4/8/2009	1.5	290	110 a	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	11.3
HA-6-5'	4/8/2009	5	230	130 a	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	12.1
HA-7-0.7'	4/8/2009	0.7	11,000	910 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	<0.040	<0.040	0.091	<0.040	<0.040	0.18	<0.040	<0.040	<0.040	<0.040	<0.040	37.1
HA-7-1.5'	4/8/2009	1.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	8.82
HA-7-5'	4/8/2009	5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	7.45
HA-8-0.7'	4/8/2009	0.7	9,600	810 a	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	---	---	<0.040	<0.040	<0.040	0.079	<0.040	<0.040	0.17	<0.040	<0.040	<0.040	<0.040	<0.040	32.8
HA-8-1.5'	4/8/2009	1.5	74	11 a	<0.020	<0.020	<0.020	<0.020	<0.020	0.10	0.027	---	---	0.29	0.31	0.17	0.18	0.18	0.15	0.20	0.045	0.061	<0.020	<0.020	<0.020	1,060
HA-8-5'	4/8/2009	5	190	35 a	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	19.7

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA FOR TPHMO, TPHD, PAHS, AND LEAD
FORMER SHELL SERVICE STATION
2703 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	Naphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Bis(2-ethylhexyl)phthalate (mg/kg)	Diethyl Phthalate (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) Anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(k) Fluoranthene (mg/kg)	Benzo(b) Fluoranthene (mg/kg)	Benzo(a) Pyrene (mg/kg)	Benzo(g,h,i) Perylene (mg/kg)	Indeno(1,2,3-c,d) Pyrene (mg/kg)	Dibenz(a,b) Anthracene (mg/kg)	1-Methylnaphthalene (mg/kg)	Lead (mg/kg)
HA-9-0	12/13/2010	0	470	140a	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	---	---	0.19	0.23	0.12	0.15	0.10	0.12	0.14	0.15	0.10	<0.10	<0.10	1,410
HA-9-1	12/13/2010	1	26	11 a	<0.020	<0.020	<0.020	<0.020	<0.020	0.091	0.027	---	---	0.14	0.14	0.093	0.10	0.062	0.071	0.092	0.057	0.044	<0.020	<0.020	357
HA-9-4.5	12/13/2010	4.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	5.53
HA-10-0	12/13/2010	0	370a	150a	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	---	---	0.17	0.22	0.11	0.17	0.11	0.15	0.14	0.22	0.14	<0.10	<0.10	1,240
HA-10-1	12/13/2010	1	1,200	430a	0.020	<0.020	<0.020	<0.020	<0.020	0.098	0.030	---	---	0.20	0.24	0.12	0.15	0.094	0.11	0.16	0.14	0.10	0.022	<0.020	529
HA-10-4.5	12/13/2010	4.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	7.39
HA-11-0	12/13/2010	0	340a	120a	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	---	---	0.19	0.27	0.11	0.17	0.10	0.14	0.16	0.18	0.12	<0.10	<0.10	1,950
HA-11-1	12/13/2010	1	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	0.048	<0.020	---	---	0.074	0.070	0.047	0.052	0.035	0.027	0.043	0.024	<0.020	<0.020	<0.020	166
HA-11-4.5	12/13/2010	4.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	73.2
HA-12-0	12/13/2010	0	120	39 a	0.059	0.042	0.048	<0.020	<0.020	0.26	0.055	---	---	0.41	0.55	0.20	0.25	0.17	0.18	0.26	0.21	0.15	0.035	0.029	4,550
HA-12-1	12/13/2010	1	130	39 a	<0.020	<0.020	<0.020	<0.020	<0.020	0.089	0.026	---	---	0.086	0.088	0.050	0.057	0.040	0.035	0.045	0.035	0.025	<0.020	<0.020	1,150
HA-12-4.5	12/13/2010	4.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	9.25
HA-13-0	12/13/2010	0	920	210a	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	<0.10	---	---	0.38	0.42	0.22	0.25	0.19	0.18	0.24	0.19	0.15	<0.10	<0.10	3,940
HA-13-1	12/13/2010	1	<25	7.8a	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	291
HA-13-4.5	12/13/2010	4.5	<25	<5.0	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	---	---	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	498
HA-14-0	4/18/2012	0	69	47	<0.18	---	<0.18	<0.18	<0.18	<0.18	<0.18	---	---	<0.18	0.27	<0.18	<0.18	<0.18	0.25	0.22	0.20	<0.18	<0.18	---	1,800
HA-14-1	4/18/2012	1	<5.0	<5.0	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	87
HA-14-4.5	4/18/2012	4.5	<5.0	<5.0	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	7.7
HA-15-0	4/18/2012	0	<10	23	<0.45	---	<0.45	<0.45	<0.45	<0.45	<0.45	---	---	0.054	0.080	<0.45	<0.45	<0.45	0.058	<0.45	<0.45	<0.45	<0.45	---	1,400
HA-15-1	4/18/2012	1	<10	11	<0.045	---	<0.045	<0.045	<0.045	<0.045	<0.045	---	---	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	---	40
HA-15-4.5	4/18/2012	4.5	<5.0	<5.0	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	6.4
HA-16-0	4/18/2012	0	75	89	<0.18	---	<0.18	<0.18	<0.18	0.19	<0.18	---	---	<0.18	0.26	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	---	1,100
HA-16-1	4/18/2012	1	10	7.3	<0.045	---	<0.045	<0.045	<0.045	<0.045	<0.045	---	---	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	---	220

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA FOR TPHMO, TPHD, PAHS, AND LEAD
FORMER SHELL SERVICE STATION
2703 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	Naphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Bis(2-ethylhexyl)phthalate (mg/kg)	Diethyl Phthalate (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) Anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(k) Fluoranthene (mg/kg)	Benzo(b) Fluoranthene (mg/kg)	Benzo(a) Pyrene (mg/kg)	Benzo(g,h,i) Perylene (mg/kg)	Indeno(1,2,3-c,d) Pyrene (mg/kg)	Dibenz(a,b) Anthracene (mg/kg)	1-Methylnaphthalene (mg/kg)	Lead (mg/kg)	
HA-16-4.5	4/18/2012	4.5	<5.0	<5.0	<0.045	---	<0.045	<0.045	<0.045	<0.045	<0.045	---	---	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	---	150
HA-17-0	4/18/2012	0	81	50	<0.45	---	<0.45	<0.45	<0.45	<0.45	<0.45	---	---	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	---	4,200
HA-17-1	4/18/2012	1	<10	<10	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	---	38
HA-17-4.5	4/18/2012	4.5	<5.0	<5.0	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	---	14
HA-18-0	4/18/2012	0	61	53	<0.45	---	<0.45	<0.45	<0.45	<0.45	<0.45	---	---	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	<0.45	---	1,000
HA-18-1	4/18/2012	1	8.3	7.3	<0.045	---	<0.045	<0.045	<0.045	<0.045	<0.045	---	---	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	---	410
HA-18-4.5	4/18/2012	4.5	<5.0	<5.0	<0.030	---	<0.030	<0.030	<0.030	<0.030	<0.030	---	---	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	---	11
B-1	1/22/2013	2	109	50.6	<0.31	<0.32	<0.31	<0.29	<0.29	<0.23	<0.21	<0.26	<0.23	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.17	<0.17	<0.16	<0.30	55.9	
B-2	1/22/2013	2	<4.9	2.85 b	<0.077	<0.079	<0.078	<0.073	<0.072	<0.058	<0.053	0.467	0.0788 b	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.043	<0.041	<0.076	6.8
B-3	1/22/2013	2	<5.0	3.74 b	<0.077	<0.079	<0.078	<0.073	<0.072	<0.058	<0.053	0.0683 b	0.0595 b	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.042	<0.041	<0.076	7.3	
B-4	1/22/2013	2	<4.9	<2.5	<0.15	<0.16	<0.15	<0.15	<0.14	<0.12	<0.11	<0.13	<0.11	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.086	<0.085	<0.082	<0.15	97.3	
B-5	1/22/2013	2	36.9	13.8	<0.15	<0.16	<0.16	<0.15	<0.14	<0.12	<0.11	<0.13	<0.11	0.151 b	0.158 b	0.0800 b	0.0832 b	0.0687 b	0.0858 b	0.0868 b	<0.086	<0.085	<0.082	<0.15	83.8	
N-1	1/22/2013	2	116	28.6 b	<0.31	<0.32	<0.31	<0.29	<0.29	<0.23	<0.21	<0.27	<0.23	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.17	<0.17	<0.16	<0.30	306	
N-2	1/22/2013	2	<5.0	2.63 b	<0.077	<0.079	<0.078	<0.073	<0.072	<0.058	<0.053	<0.66	0.0756 b	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.042	<0.041	<0.076	48.8	
N-3	1/22/2013	2	184	40.2	<0.15	<0.16	<0.16	<0.15	<0.14	<0.12	<0.11	0.415 b	<0.11	0.113 b	0.136 b	0.0767 b	0.0925 b	0.0808 b	0.0900 b	0.100 b	<0.086	<0.085	<0.083	<0.15	721	
S-1	1/22/2013	2	23.4	4.84 b	<0.077	<0.080	<0.078	<0.073	<0.072	<0.058	<0.054	<0.067	<0.057	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.043	<0.041	<0.076	7.6	
S-2	1/22/2013	2	<4.8	2.55 b	<0.077	<0.079	<0.078	<0.073	<0.072	<0.058	<0.053	<0.66	0.0644 b	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.042	<0.041	<0.076	13.3	
S-3	1/22/2013	2	<4.9	<2.4	<0.077	<0.079	<0.078	<0.073	<0.072	<0.058	<0.053	<0.66	<0.056	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.043	<0.042	<0.041	<0.076	9.4	
W-1	1/22/2013	2	23.6	8.52 b	<0.077	<0.16	<0.16	<0.15	<0.14	<0.12	<0.11	<0.13	<0.11	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067	<0.067	<0.087	<0.085	<0.083	<0.15	41.8	
W-2	1/22/2013	2	254	162	<0.15	<0.16	<0.16	<0.15	<0.14	<0.12	<0.11	<0.13	<0.11	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.066	<0.086	<0.085	<0.082	<0.15	215	
OX-1	2/21/2013	3	53.0	41.9	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.66	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	13.0	
OX-2	2/21/2013	3	54.9	13.2	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.33	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	11.5	
OX-3	2/21/2013	3	14.4	7.36	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	0.0771 b	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	6.4	

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA FOR TPHMO, TPHD, PAHS, AND LEAD
FORMER SHELL SERVICE STATION
2703 MARTIN LUTHER KING JR. WAY, OAKLAND, CALIFORNIA

Sample ID	Date	Depth (fbg)	TPHmo (mg/kg)	TPHd (mg/kg)	Naphthalene (mg/kg)	2-Methylnaphthalene (mg/kg)	Acenaphthylene (mg/kg)	Acenaphthene (mg/kg)	Fluorene (mg/kg)	Phenanthrene (mg/kg)	Anthracene (mg/kg)	Bis(2-ethylhexyl)phthalate (mg/kg)	Diethyl Phthalate (mg/kg)	Fluoranthene (mg/kg)	Pyrene (mg/kg)	Benzo(a) Anthracene (mg/kg)	Chrysene (mg/kg)	Benzo(k) Fluoranthene (mg/kg)	Benzo(b) Fluoranthene (mg/kg)	Benzo(a) Pyrene (mg/kg)	Benzo(g,h,i) Perylene (mg/kg)	Indeno(1,2,3-c,d) Pyrene (mg/kg)	Dibenz(a,b) Anthracene (mg/kg)	1-Methylnaphthalene (mg/kg)	Lead (mg/kg)		
<i>Shallow Soils (≤10 fbg) Screening Level:</i>																											
<i>Residential^c</i>			500	100	1.7	0.25	13	19	8.9	11	2.8	160	0.035	40	85	0.38	3.8	0.38	0.38	0.038	27	0.38	0.11	NA	80		
<i>Commercial^d</i>			2,500	500	4.8	0.25	13	19	8.9	11	2.8	780	0.035	40	85	12	23	37	40	5.3	27	15	15	NA	320		

Notes:
 TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015B (M)
 TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015B
 Polycyclic aromatic hydrocarbons (PAHs) analyzed by EPA Method 8270C SIM PAHS. Individual constituents tabulated.
 Lead analyzed by EPA Method 6010B
 fbg = feet below grade
 mg/kg = Milligrams per kilogram
 <x = Not detected at reporting limit x
 --- = Not analyzed
 ESLs = Environmental screening levels
 CHHSL = California human health screening level
 NA = No applicable ESL
 Results in **bold** equal or exceed applicable screening level
 Shading indicates that soil sample location was subsequently excavated; results are not representative of residual soil.

a = 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.
 b = Indicates an estimated value below method reporting limit.
 c = San Francisco Bay Regional Water Quality Control Board ESL for shallow soil where groundwater is not a current or potential source of drinking water with residential land use (Table B in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater -Interim Final -November 2007 [Revised May 2008] - updated February 2013).
 d = San Francisco Bay Regional Water Quality Control Board ESL for shallow soil where groundwater is not a current or potential source of drinking water with commercial land use (Table B in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater -Interim Final -November 2007 [Revised May 2008] - updated February 2013).

APPENDIX A

PERMITS

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

SCH Pre Construction MEETING

Appl# GR1200076 Job Site 2703 M L KING JR WY Parcel# 009 -0691-003-01

Descr Excavate contaminated soil and refill due to contamination Permit Issued 01/02/13
remediation & cleanup.

Grade Cubic Yards Fill 36 Estimated Start Date
USA #
Grade Cubic Yards Excavation 36 Estimated Complete Date

Owner KWAN RODNEY & JANET TRS
Contractor CORNERSTONE ENVIRONMENTAL INC X (925)299-9225 722253 A C10
Arch/Engr LEE BRENNAN, CRA WORLD
Agent CRA WORLD JEFF SCHRUPP (510)385-0436
Applic Addr 125 MASON CIR STE G, CONCORD, CA 94520, 94520

\$3,086.26 FEES TO BE PAID AT FILING		\$657.52 FEES TO BE PAID AT ISSUANCE	
\$71.00 Applic	\$.00 Permit	\$.00 Applic	\$.00 Permit
\$2,618.55 Process	\$255.51 Rec Mgmt	\$573.00 Process	\$54.44 Rec Mgmt
\$.00 Gen Plan	\$.00 Invstg	\$.00 Gen Plan	\$.00 Invstg
\$.00 Other	\$141.20 Tech Enh	\$.00 Other	\$30.08 Tech Enh

Application Processed By CAB Date: _____

Permit Issued By CB Date: 1-2-13

Finalled By _____ Date: _____

Application Docs Forwarded To _____ Date: _____

APPLICANT COPY

ADDRESS:

DIST:

CITY OF OAKLAND

Applications for which no permit is issued within 180 days shall expire by limitation. No refund more than 180 days after expiration or final.

Appl# OB121114

Job Site 2703 M L KING JR WY

Parcel# 009 -0691-003-01

Reserve in front of parcel only for construction related to Grading Permit.

Permit Issued 11/30/12

No impact on traffic lane or sidewalk allowed.

Nbr of days: 3
Effective: 12/17/12

Linear feet: 100
Expiration: 12/19/12

SHORT TERM NON-METERED

	Applnt	Phone#	Lic#	--License Classes--
Owner	KWAN RODNEY & JANET TRS			
Contractor	CORNERSTONE ENVIRONMENTAL INC	X (925) 299-9225	722253 A	C10
Arch/Engr	LEE BRENNAN, CRA WORLD			
Agent	CRA WORLD JEFF SCHRUPP	(510) 385-0436		
Applic Addr	125 MASON CIR STE G, CONCORD, CA 94520, 94520			

\$319.01 FEES TO BE PAID AT FILING	
\$71.00 Applic	\$207.00 Permit
\$.00 Process	\$26.41 Rec Mgmt
\$.00 Gen Plan	\$.00 Invstg
\$.00 Other	\$14.60 Tech Enh

\$.00 FEES TO BE PAID AT ISSUANCE

11433

CONESTOGA - ROVERS & ASSOCIATES INC.

5900 HOLLIS ST. STE A
EMERYVILLE, CA 94608-2008

90-4187/1211

DATE 11/30/2012

PAY TO THE ORDER OF City of Oakland \$ 319.01
Three hundred nineteen 3⁰¹/100 DOLLARS



TWO SIGNATURES REQUIRED OVER \$5,000

FOR 240781-95-12.04

[Signature]

⑈011433⑈ ⑆121141877⑆ 07 303480⑈

ADDRESS: from the previously approved plan.

Applicant: _____

Issued by: [Signature] _____

DATE:

APPENDIX B
CERTIFIED ANALYTICAL REPORTS

Technical Report for

Shell Oil Company

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
240781-95-12.04

Accutest Job Number: C25854

Sampling Date: 01/22/13

Report to:

Conestoga-Rovers & Associates
5900 Hollis Street Suite A
Emeryville, CA 94608
pschaefer@croworld.com

ATTN: Peter Schaefer

Total number of pages in report: 96



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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Sample Summary

Shell Oil Company

Job No: C25854

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Project No: 240781-95-12.04

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C25854-1	01/22/13	16:00 JR	01/22/13	SO	Soil	B-1
C25854-2	01/22/13	16:00 JR	01/22/13	SO	Soil	B-2
C25854-3	01/22/13	16:00 JR	01/22/13	SO	Soil	B-3
C25854-4	01/22/13	16:00 JR	01/22/13	SO	Soil	B-4
C25854-5	01/22/13	16:00 JR	01/22/13	SO	Soil	B-5
C25854-6	01/22/13	16:00 JR	01/22/13	SO	Soil	S-1
C25854-7	01/22/13	16:00 JR	01/22/13	SO	Soil	S-2
C25854-8	01/22/13	16:00 JR	01/22/13	SO	Soil	S-3
C25854-9	01/22/13	16:00 JR	01/22/13	SO	Soil	N-1
C25854-10	01/22/13	16:00 JR	01/22/13	SO	Soil	N-2
C25854-11	01/22/13	16:00 JR	01/22/13	SO	Soil	N-3
C25854-12	01/22/13	16:00 JR	01/22/13	SO	Soil	W-1
C25854-13	01/22/13	16:00 JR	01/22/13	SO	Soil	W-2

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C25854
Account: Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
Collected: 01/22/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
C25854-1	B-1					
		TPH (C10-C28)	50.6	29	7.3	mg/kg SW846 8015B M
		TPH (> C28-C40)	109	58	15	mg/kg SW846 8015B M
		Lead	55.9	1.8		mg/kg SW846 6010B
C25854-2	B-2					
		Diethyl phthalate	78.8 J	170	56	ug/kg SW846 8270C
		bis(2-Ethylhexyl)phthalate	467	330	66	ug/kg SW846 8270C
		TPH (C10-C28)	2.85 J	9.7	2.4	mg/kg SW846 8015B M
		Lead	6.8	1.7		mg/kg SW846 6010B
C25854-3	B-3					
		Diethyl phthalate	59.5 J	170	56	ug/kg SW846 8270C
		bis(2-Ethylhexyl)phthalate	68.3 J	330	66	ug/kg SW846 8270C
		TPH (C10-C28)	3.74 J	10	2.5	mg/kg SW846 8015B M
		Lead	7.3	1.8		mg/kg SW846 6010B
C25854-4	B-4					
		Lead	97.3	1.7		mg/kg SW846 6010B
C25854-5	B-5					
		Benzo(a)anthracene ^a	80.0 J	330	66	ug/kg SW846 8270C
		Benzo(a)pyrene ^a	86.8 J	330	66	ug/kg SW846 8270C
		Benzo(b)fluoranthene ^a	85.8 J	330	66	ug/kg SW846 8270C
		Benzo(k)fluoranthene ^a	68.7 J	330	66	ug/kg SW846 8270C
		Chrysene ^a	83.2 J	330	66	ug/kg SW846 8270C
		Fluoranthene ^a	151 J	330	66	ug/kg SW846 8270C
		Pyrene ^a	158 J	330	66	ug/kg SW846 8270C
		TPH (C10-C28)	13.8	10	2.5	mg/kg SW846 8015B M
		TPH (> C28-C40)	36.9	20	5.0	mg/kg SW846 8015B M
		Lead	83.8	1.7		mg/kg SW846 6010B
C25854-6	S-1					
		TPH (C10-C28)	4.84 J	9.5	2.4	mg/kg SW846 8015B M
		TPH (> C28-C40)	23.4	19	4.8	mg/kg SW846 8015B M
		Lead	7.6	1.8		mg/kg SW846 6010B

Summary of Hits

Job Number: C25854
Account: Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
Collected: 01/22/13

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method	
C25854-7	S-2						
		Diethyl phthalate	61.1 J	170	56	ug/kg	SW846 8270C
		TPH (C10-C28)	2.55 J	9.7	2.4	mg/kg	SW846 8015B M
		Lead	13.3	1.6		mg/kg	SW846 6010B
C25854-8	S-3						
		Lead	9.4	1.8		mg/kg	SW846 6010B
C25854-9	N-1						
		TPH (C10-C28)	28.6 J	30	7.5	mg/kg	SW846 8015B M
		TPH (> C28-C40)	116	60	15	mg/kg	SW846 8015B M
		Lead	306	1.6		mg/kg	SW846 6010B
C25854-10	N-2						
		Diethyl phthalate	75.6 J	170	56	ug/kg	SW846 8270C
		TPH (C10-C28)	2.63 J	10	2.5	mg/kg	SW846 8015B M
		Lead	48.8	1.9		mg/kg	SW846 6010B
C25854-11	N-3						
		Benzo(a)anthracene ^a	76.7 J	330	67	ug/kg	SW846 8270C
		Benzo(a)pyrene ^a	100 J	330	67	ug/kg	SW846 8270C
		Benzo(b)fluoranthene ^a	90.0 J	330	67	ug/kg	SW846 8270C
		Benzo(k)fluoranthene ^a	80.8 J	330	67	ug/kg	SW846 8270C
		Chrysene ^a	92.5 J	330	67	ug/kg	SW846 8270C
		bis(2-Ethylhexyl)phthalate ^a	415 J	670	130	ug/kg	SW846 8270C
		Fluoranthene ^a	113 J	330	67	ug/kg	SW846 8270C
		Pyrene ^a	136 J	330	67	ug/kg	SW846 8270C
		TPH (C10-C28)	40.2	30	7.5	mg/kg	SW846 8015B M
		TPH (> C28-C40)	184	60	15	mg/kg	SW846 8015B M
		Lead	721	1.7		mg/kg	SW846 6010B
C25854-12	W-1						
		TPH (C10-C28)	8.52 J	9.9	2.5	mg/kg	SW846 8015B M
		TPH (> C28-C40)	23.6	20	5.0	mg/kg	SW846 8015B M
		Lead	41.8	1.7		mg/kg	SW846 6010B
C25854-13	W-2						
		TPH (C10-C28)	162	50	12	mg/kg	SW846 8015B M

Summary of Hits

Job Number: C25854
Account: Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
Collected: 01/22/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TPH (> C28-C40)		254	100	25	mg/kg	SW846 8015B M
Lead		215	1.9		mg/kg	SW846 6010B

(a) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: B-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-1		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18711.D	4	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	2600	630	ug/kg	
95-57-8	2-Chlorophenol	ND	660	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	660	280	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	660	310	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	660	260	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	2600	530	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1300	250	ug/kg	
95-48-7	2-Methylphenol	ND	660	350	ug/kg	
	3&4-Methylphenol	ND	1300	310	ug/kg	
88-75-5	2-Nitrophenol	ND	660	310	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	160	ug/kg	
87-86-5	Pentachlorophenol	ND	1300	130	ug/kg	
108-95-2	Phenol	ND	660	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	660	300	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	660	280	ug/kg	
83-32-9	Acenaphthene	ND	660	290	ug/kg	
208-96-8	Acenaphthylene	ND	660	310	ug/kg	
62-53-3	Aniline	ND	660	180	ug/kg	
120-12-7	Anthracene	ND	660	210	ug/kg	
103-33-3	Azobenzene	ND	660	240	ug/kg	
92-87-5	Benzidine	ND	2600	320	ug/kg	
56-55-3	Benzo(a)anthracene	ND	660	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	660	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	660	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	660	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	660	130	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	660	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	660	130	ug/kg	
100-51-6	Benzyl Alcohol	ND	660	350	ug/kg	
91-58-7	2-Chloronaphthalene	ND	660	300	ug/kg	
106-47-8	4-Chloroaniline	ND	660	200	ug/kg	
86-74-8	Carbazole	ND	660	140	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-1	Date Sampled:	01/22/13
Lab Sample ID:	C25854-1	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	660	130	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	660	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	660	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	660	270	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	660	300	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	660	300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	660	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	660	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	660	280	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	660	300	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1300	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	660	160	ug/kg	
132-64-9	Dibenzofuran	ND	660	290	ug/kg	
122-39-4	Diphenylamine	ND	660	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	660	130	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	660	140	ug/kg	
84-66-2	Diethyl phthalate	ND	660	230	ug/kg	
131-11-3	Dimethyl phthalate	ND	660	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1300	260	ug/kg	
206-44-0	Fluoranthene	ND	660	130	ug/kg	
86-73-7	Fluorene	ND	660	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	660	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	660	380	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	660	370	ug/kg	
67-72-1	Hexachloroethane	ND	660	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	660	170	ug/kg	
78-59-1	Isophorone	ND	660	270	ug/kg	
90-12-0	1-Methylnaphthalene	ND	660	300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	660	320	ug/kg	
88-74-4	2-Nitroaniline	ND	660	270	ug/kg	
99-09-2	3-Nitroaniline	ND	660	200	ug/kg	
100-01-6	4-Nitroaniline	ND	660	170	ug/kg	
91-20-3	Naphthalene	ND	660	310	ug/kg	
98-95-3	Nitrobenzene	ND	660	310	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	660	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	660	290	ug/kg	
85-01-8	Phenanthrene	ND	660	230	ug/kg	
129-00-0	Pyrene	ND	660	130	ug/kg	
110-86-1	Pyridine	ND	1300	180	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	660	300	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-1		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		14-99%
4165-62-2	Phenol-d5	69%		18-100%
118-79-6	2,4,6-Tribromophenol	93%		25-107%
4165-60-0	Nitrobenzene-d5	61%		15-101%
321-60-8	2-Fluorobiphenyl	73%		15-104%
1718-51-0	Terphenyl-d14	100%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: B-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-1	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300216.D	2	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.3 g	1.5 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	50.6	29	7.3	mg/kg	
	TPH (> C28-C40)	109	58	15	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	88%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-1	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	55.9	1.8	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: B-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-2		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18675.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-2	Date Sampled:	01/22/13
Lab Sample ID:	C25854-2	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	78.8	170	56	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	467	330	66	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-2		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%		14-99%
4165-62-2	Phenol-d5	76%		18-100%
118-79-6	2,4,6-Tribromophenol	87%		25-107%
4165-60-0	Nitrobenzene-d5	72%		15-101%
321-60-8	2-Fluorobiphenyl	74%		15-104%
1718-51-0	Terphenyl-d14	91%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: B-2	Date Sampled: 01/22/13
Lab Sample ID: C25854-2	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300163.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	2.85	9.7	2.4	mg/kg	J
	TPH (> C28-C40)	ND	19	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	80%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-2	Date Sampled: 01/22/13
Lab Sample ID: C25854-2	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.8	1.7	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: B-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-3		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18676.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	39	ug/kg	
87-86-5	Pentachlorophenol	ND	330	33	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	34	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-3	Date Sampled:	01/22/13
Lab Sample ID:	C25854-3	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	59.5	170	56	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	68.3	330	66	ug/kg	J
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	45	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-3		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		14-99%
4165-62-2	Phenol-d5	64%		18-100%
118-79-6	2,4,6-Tribromophenol	74%		25-107%
4165-60-0	Nitrobenzene-d5	57%		15-101%
321-60-8	2-Fluorobiphenyl	57%		15-104%
1718-51-0	Terphenyl-d14	86%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-3	Date Sampled: 01/22/13
Lab Sample ID: C25854-3	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300164.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	3.74	10	2.5	mg/kg	J
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	76%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-3	Date Sampled: 01/22/13
Lab Sample ID: C25854-3	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	7.3	1.8	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: B-4		Date Sampled: 01/22/13
Lab Sample ID: C25854-4		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18712.D	2	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	310	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	150	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	260	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	170	ug/kg	
	3&4-Methylphenol	ND	660	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	660	79	ug/kg	
87-86-5	Pentachlorophenol	ND	660	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	150	ug/kg	
62-53-3	Aniline	ND	330	88	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	66	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	99	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-4	Date Sampled:	01/22/13
Lab Sample ID:	C25854-4	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	330	66	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	660	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	82	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	66	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	660	130	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	99	ug/kg	
100-01-6	4-Nitroaniline	ND	330	86	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	66	ug/kg	
110-86-1	Pyridine	ND	660	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-4		Date Sampled: 01/22/13
Lab Sample ID: C25854-4		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		14-99%
4165-62-2	Phenol-d5	69%		18-100%
118-79-6	2,4,6-Tribromophenol	87%		25-107%
4165-60-0	Nitrobenzene-d5	61%		15-101%
321-60-8	2-Fluorobiphenyl	66%		15-104%
1718-51-0	Terphenyl-d14	91%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: B-4		Date Sampled: 01/22/13
Lab Sample ID: C25854-4		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300168.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.9	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	74%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-4	Date Sampled: 01/22/13
Lab Sample ID: C25854-4	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	97.3	1.7	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: B-5		Date Sampled: 01/22/13
Lab Sample ID: C25854-5		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18713.D	2	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	310	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	150	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	180	ug/kg	
	3&4-Methylphenol	ND	660	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	660	79	ug/kg	
87-86-5	Pentachlorophenol	ND	660	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
62-53-3	Aniline	ND	330	88	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	80.0	330	66	ug/kg	J
50-32-8	Benzo(a)pyrene	86.8	330	66	ug/kg	J
205-99-2	Benzo(b)fluoranthene	85.8	330	66	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	68.7	330	66	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	66	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	100	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	B-5	Date Sampled:	01/22/13
Lab Sample ID:	C25854-5	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	83.2	330	66	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	660	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	82	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	66	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	660	130	ug/kg	
206-44-0	Fluoranthene	151	330	66	ug/kg	J
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	100	ug/kg	
100-01-6	4-Nitroaniline	ND	330	86	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	158	330	66	ug/kg	J
110-86-1	Pyridine	ND	660	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-5		Date Sampled: 01/22/13
Lab Sample ID: C25854-5		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		14-99%
4165-62-2	Phenol-d5	71%		18-100%
118-79-6	2,4,6-Tribromophenol	87%		25-107%
4165-60-0	Nitrobenzene-d5	64%		15-101%
321-60-8	2-Fluorobiphenyl	68%		15-104%
1718-51-0	Terphenyl-d14	91%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.5
3

Client Sample ID: B-5	Date Sampled: 01/22/13
Lab Sample ID: C25854-5	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300219.D	1	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	13.8	10	2.5	mg/kg	
	TPH (> C28-C40)	36.9	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	70%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: B-5	Date Sampled: 01/22/13
Lab Sample ID: C25854-5	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	83.8	1.7	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: S-1		
Lab Sample ID: C25854-6		Date Sampled: 01/22/13
Matrix: SO - Soil		Date Received: 01/22/13
Method: SW846 8270C SW846 3550B		Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18677.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-6		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-6		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		14-99%
4165-62-2	Phenol-d5	65%		18-100%
118-79-6	2,4,6-Tribromophenol	71%		25-107%
4165-60-0	Nitrobenzene-d5	57%		15-101%
321-60-8	2-Fluorobiphenyl	59%		15-104%
1718-51-0	Terphenyl-d14	80%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-6	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300220.D	1	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.5 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	4.84	9.5	2.4	mg/kg	J
	TPH (> C28-C40)	23.4	19	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	86%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-6	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	7.6	1.8	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: S-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-7		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18678.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	87	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	39	ug/kg	
87-86-5	Pentachlorophenol	ND	330	33	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	88	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	34	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S-2	Date Sampled:	01/22/13
Lab Sample ID:	C25854-7	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	61.1	170	56	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	66	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	45	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-7		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		14-99%
4165-62-2	Phenol-d5	77%		18-100%
118-79-6	2,4,6-Tribromophenol	83%		25-107%
4165-60-0	Nitrobenzene-d5	70%		15-101%
321-60-8	2-Fluorobiphenyl	69%		15-104%
1718-51-0	Terphenyl-d14	95%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

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Client Sample ID: S-2	Date Sampled: 01/22/13
Lab Sample ID: C25854-7	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300173.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	2.55	9.7	2.4	mg/kg	J
	TPH (> C28-C40)	ND	19	4.8	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-2	Date Sampled: 01/22/13
Lab Sample ID: C25854-7	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	13.3	1.6	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: S-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-8		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18679.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-8		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	56	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	66	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	45	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-8		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		14-99%
4165-62-2	Phenol-d5	61%		18-100%
118-79-6	2,4,6-Tribromophenol	67%		25-107%
4165-60-0	Nitrobenzene-d5	57%		15-101%
321-60-8	2-Fluorobiphenyl	58%		15-104%
1718-51-0	Terphenyl-d14	71%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-8		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300171.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

	Initial Weight	Final Volume
Run #1	10.2 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	9.8	2.4	mg/kg	
	TPH (> C28-C40)	ND	20	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	75%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis



Client Sample ID: S-3	Date Sampled: 01/22/13
Lab Sample ID: C25854-8	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	9.4	1.8	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: N-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-9		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18714.D	4	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	2700	630	ug/kg	
95-57-8	2-Chlorophenol	ND	660	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	660	290	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	660	310	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	660	260	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	2700	530	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	1300	250	ug/kg	
95-48-7	2-Methylphenol	ND	660	350	ug/kg	
	3&4-Methylphenol	ND	1300	310	ug/kg	
88-75-5	2-Nitrophenol	ND	660	310	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	160	ug/kg	
87-86-5	Pentachlorophenol	ND	1300	130	ug/kg	
108-95-2	Phenol	ND	660	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	660	300	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	660	280	ug/kg	
83-32-9	Acenaphthene	ND	660	290	ug/kg	
208-96-8	Acenaphthylene	ND	660	310	ug/kg	
62-53-3	Aniline	ND	660	180	ug/kg	
120-12-7	Anthracene	ND	660	210	ug/kg	
103-33-3	Azobenzene	ND	660	240	ug/kg	
92-87-5	Benzidine	ND	2700	320	ug/kg	
56-55-3	Benzo(a)anthracene	ND	660	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	660	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	660	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	660	170	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	660	130	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	660	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	660	130	ug/kg	
100-51-6	Benzyl Alcohol	ND	660	350	ug/kg	
91-58-7	2-Chloronaphthalene	ND	660	300	ug/kg	
106-47-8	4-Chloroaniline	ND	660	200	ug/kg	
86-74-8	Carbazole	ND	660	140	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-9		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	660	130	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	660	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	660	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	660	270	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	660	300	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	660	300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	660	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	660	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	660	290	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	660	300	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1300	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	660	160	ug/kg	
132-64-9	Dibenzofuran	ND	660	290	ug/kg	
122-39-4	Diphenylamine	ND	660	260	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	660	130	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	660	140	ug/kg	
84-66-2	Diethyl phthalate	ND	660	230	ug/kg	
131-11-3	Dimethyl phthalate	ND	660	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1300	270	ug/kg	
206-44-0	Fluoranthene	ND	660	130	ug/kg	
86-73-7	Fluorene	ND	660	290	ug/kg	
118-74-1	Hexachlorobenzene	ND	660	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	660	380	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	660	370	ug/kg	
67-72-1	Hexachloroethane	ND	660	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	660	170	ug/kg	
78-59-1	Isophorone	ND	660	270	ug/kg	
90-12-0	1-Methylnaphthalene	ND	660	300	ug/kg	
91-57-6	2-Methylnaphthalene	ND	660	320	ug/kg	
88-74-4	2-Nitroaniline	ND	660	270	ug/kg	
99-09-2	3-Nitroaniline	ND	660	200	ug/kg	
100-01-6	4-Nitroaniline	ND	660	170	ug/kg	
91-20-3	Naphthalene	ND	660	310	ug/kg	
98-95-3	Nitrobenzene	ND	660	310	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	660	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	660	290	ug/kg	
85-01-8	Phenanthrene	ND	660	230	ug/kg	
129-00-0	Pyrene	ND	660	130	ug/kg	
110-86-1	Pyridine	ND	1300	180	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	660	300	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-9		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		14-99%
4165-62-2	Phenol-d5	73%		18-100%
118-79-6	2,4,6-Tribromophenol	90%		25-107%
4165-60-0	Nitrobenzene-d5	66%		15-101%
321-60-8	2-Fluorobiphenyl	69%		15-104%
1718-51-0	Terphenyl-d14	96%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.9
3

Client Sample ID: N-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-9	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300217.D	2	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.5 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	28.6	30	7.5	mg/kg	J
	TPH (> C28-C40)	116	60	15	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-9	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	306	1.6	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: N-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-10		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y18680.D	1	01/26/13	MT	01/23/13	OP7376	EY879
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	87	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	39	ug/kg	
87-86-5	Pentachlorophenol	ND	330	33	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	88	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	34	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-10		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	75.6	170	56	ug/kg	J
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	66	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	45	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-10		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		14-99%
4165-62-2	Phenol-d5	64%		18-100%
118-79-6	2,4,6-Tribromophenol	69%		25-107%
4165-60-0	Nitrobenzene-d5	56%		15-101%
321-60-8	2-Fluorobiphenyl	58%		15-104%
1718-51-0	Terphenyl-d14	80%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-2	Date Sampled: 01/22/13
Lab Sample ID: C25854-10	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300172.D	1	01/23/13	JH	01/23/13	OP7372	GHH904
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	2.63	10	2.5	mg/kg	J
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-10		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	48.8	1.9	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: N-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-11		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18715.D	2	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	320	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	160	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	670	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	180	ug/kg	
	3&4-Methylphenol	ND	670	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	670	79	ug/kg	
87-86-5	Pentachlorophenol	ND	670	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
62-53-3	Aniline	ND	330	88	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	76.7	330	67	ug/kg	J
50-32-8	Benzo(a)pyrene	100	330	67	ug/kg	J
205-99-2	Benzo(b)fluoranthene	90.0	330	67	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	80.8	330	67	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	67	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	100	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	N-3	Date Sampled:	01/22/13
Lab Sample ID:	C25854-11	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	92.5	330	67	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	670	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	83	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	67	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	415	670	130	ug/kg	J
206-44-0	Fluoranthene	113	330	67	ug/kg	J
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	100	ug/kg	
100-01-6	4-Nitroaniline	ND	330	86	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	160	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	136	330	67	ug/kg	J
110-86-1	Pyridine	ND	670	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-3		Date Sampled: 01/22/13
Lab Sample ID: C25854-11		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	67%		14-99%
4165-62-2	Phenol-d5	71%		18-100%
118-79-6	2,4,6-Tribromophenol	84%		25-107%
4165-60-0	Nitrobenzene-d5	65%		15-101%
321-60-8	2-Fluorobiphenyl	67%		15-104%
1718-51-0	Terphenyl-d14	87%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-3	Date Sampled: 01/22/13
Lab Sample ID: C25854-11	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300218.D	2	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.5 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	40.2	30	7.5	mg/kg	
	TPH (> C28-C40)	184	60	15	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	76%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: N-3	Date Sampled: 01/22/13
Lab Sample ID: C25854-11	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	721	1.7	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: W-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-12		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18716.D	2	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	320	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	160	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	670	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	180	ug/kg	
	3&4-Methylphenol	ND	670	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	670	79	ug/kg	
87-86-5	Pentachlorophenol	ND	670	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
62-53-3	Aniline	ND	330	89	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	67	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	67	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	67	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	87	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	67	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	67	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	100	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-12		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	330	67	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	670	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	83	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	67	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	670	130	ug/kg	
206-44-0	Fluoranthene	ND	330	67	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	100	ug/kg	
100-01-6	4-Nitroaniline	ND	330	87	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	160	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	67	ug/kg	
110-86-1	Pyridine	ND	670	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-12		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	77%		14-99%
4165-62-2	Phenol-d5	81%		18-100%
118-79-6	2,4,6-Tribromophenol	95%		25-107%
4165-60-0	Nitrobenzene-d5	75%		15-101%
321-60-8	2-Fluorobiphenyl	79%		15-104%
1718-51-0	Terphenyl-d14	97%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-1		Date Sampled: 01/22/13
Lab Sample ID: C25854-12		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300221.D	1	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	8.52	9.9	2.5	mg/kg	J
	TPH (> C28-C40)	23.6	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	79%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-1	Date Sampled: 01/22/13
Lab Sample ID: C25854-12	Date Received: 01/22/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	41.8	1.7	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: W-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-13		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18717.D	2	01/26/13	MT	01/23/13	OP7376	EY880
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	310	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	150	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	180	ug/kg	
	3&4-Methylphenol	ND	660	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	660	79	ug/kg	
87-86-5	Pentachlorophenol	ND	660	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
62-53-3	Aniline	ND	330	88	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	66	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	100	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	W-2	Date Sampled:	01/22/13
Lab Sample ID:	C25854-13	Date Received:	01/22/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	330	66	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	660	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	82	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	66	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	660	130	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	100	ug/kg	
100-01-6	4-Nitroaniline	ND	330	86	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	66	ug/kg	
110-86-1	Pyridine	ND	660	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-13		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		14-99%
4165-62-2	Phenol-d5	73%		18-100%
118-79-6	2,4,6-Tribromophenol	90%		25-107%
4165-60-0	Nitrobenzene-d5	66%		15-101%
321-60-8	2-Fluorobiphenyl	73%		15-104%
1718-51-0	Terphenyl-d14	91%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-2		Date Sampled: 01/22/13
Lab Sample ID: C25854-13		Date Received: 01/22/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300212.D	5	01/24/13	JH	01/23/13	OP7372	GHH905
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	162	50	12	mg/kg	
	TPH (> C28-C40)	254	100	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	73%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: W-2	
Lab Sample ID: C25854-13	Date Sampled: 01/22/13
Matrix: SO - Soil	Date Received: 01/22/13
	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	215	1.9	mg/kg	1	01/24/13	01/25/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA2949

(2) Prep QC Batch: MP5767

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C25854 Client: SHELL OIL Project: 2703 MLK JR. WAY, Oakland, CA
 Date / Time Received: 1/22/2013 Delivery Method: Accutest Courier Airbill #s: _____

Cooler Temps (Initial/Adjusted): #1: (3.3/3.3): 0

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:			<u>Intact</u>

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

C25854: Chain of Custody

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GC/MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C25854**Account:** SHELLWIC Shell Oil Company**Project:** CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MB	Y18656.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples:**Method:** SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	

Method Blank Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MB	Y18656.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples:

Method: SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

Method Blank Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MB	Y18656.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples:

Method: SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	77% 14-99%
4165-62-2	Phenol-d5	79% 18-100%
118-79-6	2,4,6-Tribromophenol	79% 25-107%
4165-60-0	Nitrobenzene-d5	77% 15-101%
321-60-8	2-Fluorobiphenyl	79% 15-104%
1718-51-0	Terphenyl-d14	94% 56-123%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-BS	Y18657.D	1	01/25/13	MT	01/23/13	OP7376	EY879
OP7376-BSD	Y18658.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples: **Method:** SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1670	1510	91	1430	86	5	25-112/32
95-57-8	2-Chlorophenol	833	524	63	477	57	9	31-110/31
59-50-7	4-Chloro-3-methyl phenol	833	669	80	622	75	7	33-118/27
120-83-2	2,4-Dichlorophenol	833	596	72	519	62	14	30-115/30
105-67-9	2,4-Dimethylphenol	833	570	68	494	59	14	30-116/30
51-28-5	2,4-Dinitrophenol	833	646	78	612	73	5	11-139/30
534-52-1	4,6-Dinitro-o-cresol	833	591	71	592	71	0	30-139/24
95-48-7	2-Methylphenol	833	559	67	490	59	13	30-113/31
	3&4-Methylphenol	833	595	71	519	62	14	30-113/30
88-75-5	2-Nitrophenol	833	536	64	477	57	12	29-112/32
100-02-7	4-Nitrophenol	833	747	90	743	89	1	40-127/23
87-86-5	Pentachlorophenol	833	570	68	613	74	7	43-140/20
108-95-2	Phenol	833	549	66	481	58	13	30-112/30
95-95-4	2,4,5-Trichlorophenol	833	651	78	621	75	5	33-121/27
88-06-2	2,4,6-Trichlorophenol	833	649	78	598	72	8	31-115/29
83-32-9	Acenaphthene	833	548	66	499	60	9	34-112/28
208-96-8	Acenaphthylene	833	585	70	533	64	9	33-115/28
62-53-3	Aniline	833	488	59	434	52	12	30-93/27
120-12-7	Anthracene	833	756	91	740	89	2	59-111/21
103-33-3	Azobenzene	833	652	78	618	74	5	39-114/22
92-87-5	Benzidine	1670	1180	71	1130	68	4	10-96/39
56-55-3	Benzo(a)anthracene	833	773	93	761	91	2	72-122/22
50-32-8	Benzo(a)pyrene	833	807	97	802	96	1	71-120/22
205-99-2	Benzo(b)fluoranthene	833	747	90	777	93	4	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	947	114	903	108	5	57-134/24
207-08-9	Benzo(k)fluoranthene	833	771	93	783	94	2	74-126/25
101-55-3	4-Bromophenyl phenyl ether	833	692	83	665	80	4	45-110/22
85-68-7	Butyl benzyl phthalate	833	755	91	731	88	3	68-129/20
100-51-6	Benzyl Alcohol	833	568	68	492	59	14	25-116/31
91-58-7	2-Chloronaphthalene	833	581	70	518	62	11	33-110/30
106-47-8	4-Chloroaniline	833	501	60	445	53	12	27-92/25
86-74-8	Carbazole	833	813	98	819	98	1	64-125/21
218-01-9	Chrysene	833	758	91	745	89	2	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	833	543	65	480	58	12	31-112/31
111-44-4	bis(2-Chloroethyl)ether	833	506	61	469	56	8	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	833	504	60	465	56	8	30-111/32

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-BS	Y18657.D	1	01/25/13	MT	01/23/13	OP7376	EY879
OP7376-BSD	Y18658.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples: **Method:** SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	833	699	84	655	79	6	40-111/25
95-50-1	1,2-Dichlorobenzene	833	474	57	437	52	8	28-102/32
541-73-1	1,3-Dichlorobenzene	833	464	56	429	51	8	26-99/32
106-46-7	1,4-Dichlorobenzene	833	467	56	438	53	6	27-100/32
121-14-2	2,4-Dinitrotoluene	833	761	91	745	89	2	55-115/21
606-20-2	2,6-Dinitrotoluene	833	719	86	685	82	5	45-115/21
91-94-1	3,3'-Dichlorobenzidine	1670	1950	117* a	1860	112	5	53-115/24
53-70-3	Dibenzo(a,h)anthracene	833	954	114	915	110	4	59-132/23
132-64-9	Dibenzofuran	833	650	78	599	72	8	37-113/26
122-39-4	Diphenylamine	833	747	90	715	86	4	51-112/24
84-74-2	Di-n-butyl phthalate	833	834	100	831	100	0	67-114/22
117-84-0	Di-n-octyl phthalate	833	642	77	713	86	10	62-138/24
84-66-2	Diethyl phthalate	833	790	95	754	90	5	52-111/22
131-11-3	Dimethyl phthalate	833	740	89	703	84	5	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	833	744	89	728	87	2	66-130/20
206-44-0	Fluoranthene	833	799	96	803	96	0	69-117/21
86-73-7	Fluorene	833	686	82	647	78	6	42-112/24
118-74-1	Hexachlorobenzene	833	701	84	684	82	2	50-110/24
87-68-3	Hexachlorobutadiene	833	453	54	417	50	8	30-116/33
77-47-4	Hexachlorocyclopentadiene	833	363	44	309	37	16	10-108/33
67-72-1	Hexachloroethane	833	469	56	431	52	8	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	833	914	110	912	109	0	60-131/21
78-59-1	Isophorone	833	567	68	497	60	13	32-108/30
90-12-0	1-Methylnaphthalene	833	566	68	499	60	13	33-110/30
91-57-6	2-Methylnaphthalene	833	581	70	507	61	14	33-107/30
88-74-4	2-Nitroaniline	833	671	81	634	76	6	39-120/24
99-09-2	3-Nitroaniline	833	655	79	629	75	4	41-107/24
100-01-6	4-Nitroaniline	833	674	81	647	78	4	48-132/24
91-20-3	Naphthalene	833	473	57	429	51	10	32-121/31
98-95-3	Nitrobenzene	833	521	63	477	57	9	30-109/31
62-75-9	N-Nitrosodimethylamine	833	470	56	431	52	9	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	833	545	65	492	59	10	29-111/32
85-01-8	Phenanthrene	833	709	85	692	83	2	57-113/21
129-00-0	Pyrene	833	748	90	717	86	4	63-120/20
110-86-1	Pyridine	833	331	40	300	36	10	16-75/34
120-82-1	1,2,4-Trichlorobenzene	833	517	62	474	57	9	29-104/32

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-BS	Y18657.D	1	01/25/13	MT	01/23/13	OP7376	EY879
OP7376-BSD	Y18658.D	1	01/25/13	MT	01/23/13	OP7376	EY879

The QC reported here applies to the following samples: **Method:** SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	64%	58%	14-99%
4165-62-2	Phenol-d5	69%	60%	18-100%
118-79-6	2,4,6-Tribromophenol	90%	88%	25-107%
4165-60-0	Nitrobenzene-d5	63%	58%	15-101%
321-60-8	2-Fluorobiphenyl	72%	63%	15-104%
1718-51-0	Terphenyl-d14	94%	91%	56-123%

(a) Outside laboratory control limits (high bias); but within marginal exceedence criteria.

* = Outside of Control Limits.

5.2.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MS	Y18707.D	2	01/26/13	MT	01/23/13	OP7376	EY880
OP7376-MSD	Y18708.D	2	01/26/13	MT	01/23/13	OP7376	EY880
C25854-13 ^a	Y18717.D	2	01/26/13	MT	01/23/13	OP7376	EY880

The QC reported here applies to the following samples:

Method: SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	C25854-13 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND		1660	1700	102	1980	119* b	15	25-112/32
95-57-8	2-Chlorophenol	ND		831	638	77	681	82	7	31-110/31
59-50-7	4-Chloro-3-methyl phenol	ND		831	734	88	808	97	10	33-118/27
120-83-2	2,4-Dichlorophenol	ND		831	699	84	769	92	10	30-115/30
105-67-9	2,4-Dimethylphenol	ND		831	672	81	725	87	8	30-116/30
51-28-5	2,4-Dinitrophenol	ND		831	478	58	ND	0* b	200* b	11-139/30
534-52-1	4,6-Dinitro-o-cresol	ND		831	507	61	271	33	61* b	30-139/24
95-48-7	2-Methylphenol	ND		831	670	81	717	86	7	30-113/31
	3&4-Methylphenol	ND		831	683	82	730	88	7	30-113/30
88-75-5	2-Nitrophenol	ND		831	660	79	696	84	5	29-112/32
100-02-7	4-Nitrophenol	ND		831	734	88	792	95	8	40-127/23
87-86-5	Pentachlorophenol	ND		831	696	84	733	88	5	43-140/20
108-95-2	Phenol	ND		831	643	77	693	83	7	30-112/30
95-95-4	2,4,5-Trichlorophenol	ND		831	699	84	791	95	12	33-121/27
88-06-2	2,4,6-Trichlorophenol	ND		831	712	86	810	97	13	31-115/29
83-32-9	Acenaphthene	ND		831	584	70	639	77	9	34-112/28
208-96-8	Acenaphthylene	ND		831	640	77	691	83	8	33-115/28
62-53-3	Aniline	ND		831	466	56	434	52	7	30-93/27
120-12-7	Anthracene	ND		831	726	87	788	95	8	59-111/21
103-33-3	Azobenzene	ND		831	680	82	739	89	8	39-114/22
92-87-5	Benzidine	ND		1660	ND	0* b	ND	0* b	nc	10-96/39
56-55-3	Benzo(a)anthracene	ND		831	735	88	794	95	8	72-122/22
50-32-8	Benzo(a)pyrene	ND		831	753	91	813	98	8	71-120/22
205-99-2	Benzo(b)fluoranthene	ND		831	757	91	825	99	9	67-123/24
191-24-2	Benzo(g,h,i)perylene	ND		831	774	93	793	95	2	57-134/24
207-08-9	Benzo(k)fluoranthene	ND		831	727	87	772	93	6	74-126/25
101-55-3	4-Bromophenyl phenyl ether	ND		831	702	84	802	96	13	45-110/22
85-68-7	Butyl benzyl phthalate	ND		831	739	89	818	98	10	68-129/20
100-51-6	Benzyl Alcohol	ND		831	664	80	723	87	9	25-116/31
91-58-7	2-Chloronaphthalene	ND		831	654	79	712	86	8	33-110/30
106-47-8	4-Chloroaniline	ND		831	425	51	383	46	10	27-92/25
86-74-8	Carbazole	ND		831	811	98	854	103	5	64-125/21
218-01-9	Chrysene	ND		831	701	84	766	92	9	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	ND		831	639	77	686	82	7	31-112/31
111-44-4	bis(2-Chloroethyl)ether	ND		831	601	72	657	79	9	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	ND		831	593	71	653	79	10	30-111/32

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MS	Y18707.D	2	01/26/13	MT	01/23/13	OP7376	EY880
OP7376-MSD	Y18708.D	2	01/26/13	MT	01/23/13	OP7376	EY880
C25854-13 ^a	Y18717.D	2	01/26/13	MT	01/23/13	OP7376	EY880

The QC reported here applies to the following samples:

Method: SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	C25854-13 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND		831	721	87	789	95	9	40-111/25
95-50-1	1,2-Dichlorobenzene	ND		831	555	67	611	73	10	28-102/32
541-73-1	1,3-Dichlorobenzene	ND		831	531	64	590	71	11	26-99/32
106-46-7	1,4-Dichlorobenzene	ND		831	546	66	599	72	9	27-100/32
121-14-2	2,4-Dinitrotoluene	ND		831	687	83	773	93	12	55-115/21
606-20-2	2,6-Dinitrotoluene	ND		831	692	83	760	91	9	45-115/21
91-94-1	3,3'-Dichlorobenzidine	ND		1660	900	54	1120	67	22	53-115/24
53-70-3	Dibenzo(a,h)anthracene	ND		831	812	98	851	102	5	59-132/23
132-64-9	Dibenzofuran	ND		831	685	82	749	90	9	37-113/26
122-39-4	Diphenylamine	ND		831	710	85	787	95	10	51-112/24
84-74-2	Di-n-butyl phthalate	ND		831	782	94	852	102	9	67-114/22
117-84-0	Di-n-octyl phthalate	ND		831	691	83	787	95	13	62-138/24
84-66-2	Diethyl phthalate	ND		831	779	94	844	101	8	52-111/22
131-11-3	Dimethyl phthalate	ND		831	720	87	788	95	9	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	ND		831	714	86	799	96	11	66-130/20
206-44-0	Fluoranthene	ND		831	739	89	801	96	8	69-117/21
86-73-7	Fluorene	ND		831	704	85	765	92	8	42-112/24
118-74-1	Hexachlorobenzene	ND		831	705	85	764	92	8	50-110/24
87-68-3	Hexachlorobutadiene	ND		831	563	68	616	74	9	30-116/33
77-47-4	Hexachlorocyclopentadiene	ND		831	430	52	384	46	11	10-108/33
67-72-1	Hexachloroethane	ND		831	543	65	585	70	7	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		831	787	95	819	98	4	60-131/21
78-59-1	Isophorone	ND		831	645	78	716	86	10	32-108/30
90-12-0	1-Methylnaphthalene	ND		831	673	81	728	88	8	33-110/30
91-57-6	2-Methylnaphthalene	ND		831	695	84	757	91	9	33-107/30
88-74-4	2-Nitroaniline	ND		831	693	83	748	90	8	39-120/24
99-09-2	3-Nitroaniline	ND		831	540	65	531	64	2	41-107/24
100-01-6	4-Nitroaniline	ND		831	594	71	565	68	5	48-132/24
91-20-3	Naphthalene	ND		831	565	68	618	74	9	32-121/31
98-95-3	Nitrobenzene	ND		831	625	75	668	80	7	30-109/31
62-75-9	N-Nitrosodimethylamine	ND		831	536	64	608	73	13	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	ND		831	631	76	692	83	9	29-111/32
85-01-8	Phenanthrene	ND		831	726	87	773	93	6	57-113/21
129-00-0	Pyrene	ND		831	791	95	838	101	6	63-120/20
110-86-1	Pyridine	ND		831	400	48	429	52	7	16-75/34
120-82-1	1,2,4-Trichlorobenzene	ND		831	621	75	684	82	10	29-104/32

* = Outside of Control Limits.

5.3.1
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7376-MS	Y18707.D	2	01/26/13	MT	01/23/13	OP7376	EY880
OP7376-MSD	Y18708.D	2	01/26/13	MT	01/23/13	OP7376	EY880
C25854-13 ^a	Y18717.D	2	01/26/13	MT	01/23/13	OP7376	EY880

The QC reported here applies to the following samples: **Method:** SW846 8270C

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Surrogate Recoveries	MS	MSD	C25854-13	Limits
367-12-4	2-Fluorophenol	77%	82%	68%	14-99%
4165-62-2	Phenol-d5	82%	87%	73%	18-100%
118-79-6	2,4,6-Tribromophenol	95%	102%	90%	25-107%
4165-60-0	Nitrobenzene-d5	75%	80%	66%	15-101%
321-60-8	2-Fluorobiphenyl	79%	87%	73%	15-104%
1718-51-0	Terphenyl-d14	95%	101%	91%	56-123%

- (a) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).
- (b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

5.3.1
5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7372-MB	HH300155.D 1		01/23/13	JH	01/23/13	OP7372	GHH904

The QC reported here applies to the following samples:

Method: SW846 8015B M

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	77% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7372-BS	HH300156.D1		01/23/13	JH	01/23/13	OP7372	GHH904
OP7372-BSD	HH300159.D1		01/23/13	JH	01/23/13	OP7372	GHH904

The QC reported here applies to the following samples: Method: SW846 8015B M

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	81.9	82	82.7	83	1	39-102/29
	TPH (> C28-C40)	100	90.5	91	90.6	91	0	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	82%	84%	37-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25854
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7372-MS	HH300224.D5		01/24/13	JH	01/23/13	OP7372	GHH905
OP7372-MSD	HH300225.D5		01/24/13	JH	01/23/13	OP7372	GHH905
C25854-13	HH300212.D5		01/24/13	JH	01/23/13	OP7372	GHH905

The QC reported here applies to the following samples: Method: SW846 8015B M

C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

CAS No.	Compound	C25854-13 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	162	99.8	228	66	240	78	5	39-102/29
	TPH (> C28-C40)	254	99.8	335	81	347	94	4	42-111/26

CAS No.	Surrogate Recoveries	MS	MSD	C25854-13	Limits
630-01-3	Hexacosane	75%	79%	73%	37-122%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C25854
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5767
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/24/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	-0.38	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP5767: C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25854
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5767
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 01/24/13

Metal	C25854-2 Original MS	Spike/lot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	6.8	45.9	42.7	91.5 75-125
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5767: C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25854
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5767
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 01/24/13

Metal	C25854-2 Original MSD	SpikeLot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	6.8	45.1	42.7	89.6	1.8 20
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP5767: C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
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SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C25854
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5767 Methods: SW846 6010B
 Matrix Type: SOLID Units: mg/kg

Prep Date: 01/24/13 01/24/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits	BSD Result	Spikelot MPIR4A	% Rec	BSD RPD	QC Limit
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron									
Lead	45.8	50	91.6	80-120	45.7	50	91.4	0.2	
Magnesium									
Manganese									
Molybdenum	anr								
Nickel	anr								
Potassium									
Selenium	anr								
Silicon									
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP5767: C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.3
7

SERIAL DILUTION RESULTS SUMMARY

Login Number: C25854
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5767
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 01/24/13

Metal	C25854-2 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	78.6	80.1	1.9	0-10
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5767: C25854-1, C25854-2, C25854-3, C25854-4, C25854-5, C25854-6, C25854-7, C25854-8, C25854-9, C25854-10, C25854-11, C25854-12, C25854-13

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.4
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Technical Report for

Shell Oil Company

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
240781-95-12.04

Accutest Job Number: C25837

Sampling Date: 01/21/13

Report to:

Conestoga-Rovers & Associates
5900 Hollis Street Suite A
Emeryville, CA 94608
pschaefer@croworld.com; deisman@croworld.com
ATTN: Peter Schaefer

Total number of pages in report: **63**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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Sample Summary

Shell Oil Company

Job No: C25837

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Project No: 240781-95-12.04

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
C25837-1	01/21/13	14:00 JR	01/21/13	SO	Soil	SP-1A
C25837-2	01/21/13	14:00 JR	01/21/13	SO	Soil	SP-1B
C25837-3	01/21/13	14:00 JR	01/21/13	SO	Soil	SP-1C
C25837-4	01/21/13	14:00 JR	01/21/13	SO	Soil	SP-1D
C25837-5	01/21/13	00:00 JR	01/21/13	SO	Soil	SP-1
C25837-5T	01/21/13	00:00 JR	01/21/13	SO	Soil	SP-1
C25837-5W	01/21/13	00:00 JR	01/21/13	SO	Soil	SP-1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C25837
Account: Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
Collected: 01/21/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C25837-5	SP-1					
Naphthalene ^a		811	250	50	ug/kg	SW846 8260B
Benzo(a)anthracene ^b		348 J	1700	330	ug/kg	SW846 8270C
Benzo(a)pyrene ^b		397 J	1700	330	ug/kg	SW846 8270C
Benzo(k)fluoranthene ^b		333 J	1700	330	ug/kg	SW846 8270C
Chrysene ^b		372 J	1700	330	ug/kg	SW846 8270C
Fluoranthene ^b		557 J	1700	330	ug/kg	SW846 8270C
Pyrene ^b		686 J	1700	330	ug/kg	SW846 8270C
TPH (C10-C28)		176	100	25	mg/kg	SW846 8015B M
TPH (> C28-C40)		518	200	50	mg/kg	SW846 8015B M
Arsenic		4.7	1.8		mg/kg	SW846 6010B
Barium		237	18		mg/kg	SW846 6010B
Chromium		46.2	0.91		mg/kg	SW846 6010B
Cobalt		4.1	0.91		mg/kg	SW846 6010B
Copper		51.9	2.3		mg/kg	SW846 6010B
Lead		318	1.8		mg/kg	SW846 6010B
Mercury		1.0	0.39		mg/kg	SW846 7471A
Nickel		30.3	0.91		mg/kg	SW846 6010B
Silver		1.2	0.91		mg/kg	SW846 6010B
Vanadium		38.4	0.91		mg/kg	SW846 6010B
Zinc		247	1.8		mg/kg	SW846 6010B

C25837-5T SP-1

Lead	0.13	0.050	mg/l	SW846 6010B
------	------	-------	------	-------------

C25837-5W SP-1

Lead	23.7	0.25	mg/l	SW846 6010B
------	------	------	------	-------------

(a) 4:1 composite

(b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: SP-1		Date Sampled: 01/21/13
Lab Sample ID: C25837-5		Date Received: 01/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8260B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	M37429.D	1	01/22/13	XB	n/a	n/a	VM1135
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	2000	500	ug/kg	
71-43-2	Benzene	ND	250	25	ug/kg	
108-86-1	Bromobenzene	ND	250	25	ug/kg	
74-97-5	Bromochloromethane	ND	250	25	ug/kg	
75-27-4	Bromodichloromethane	ND	250	25	ug/kg	
75-25-2	Bromoform	ND	250	25	ug/kg	
104-51-8	n-Butylbenzene	ND	250	25	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	25	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	25	ug/kg	
108-90-7	Chlorobenzene	ND	250	25	ug/kg	
75-00-3	Chloroethane	ND	250	50	ug/kg	
67-66-3	Chloroform	ND	250	25	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	25	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	25	ug/kg	
56-23-5	Carbon tetrachloride	ND	250	25	ug/kg	
75-34-3	1,1-Dichloroethane	ND	250	25	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	250	25	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	25	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	70	ug/kg	
106-93-4	1,2-Dibromoethane	ND	250	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	250	25	ug/kg	
78-87-5	1,2-Dichloropropane	ND	250	25	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	25	ug/kg	
108-20-3	Di-Isopropyl ether	ND	250	25	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	25	ug/kg	
124-48-1	Dibromochloromethane	ND	250	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	50	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	250	55	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	250	25	ug/kg	
541-73-1	m-Dichlorobenzene	ND	250	25	ug/kg	
95-50-1	o-Dichlorobenzene	ND	250	25	ug/kg	
106-46-7	p-Dichlorobenzene	ND	250	25	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-1		
Lab Sample ID: C25837-5		Date Sampled: 01/21/13
Matrix: SO - Soil		Date Received: 01/21/13
Method: SW846 8260B		Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

VOA 8260 List

CAS No.	Compound	Result	RL	MDL	Units	Q
156-60-5	trans-1,2-Dichloroethylene	ND	250	25	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	250	25	ug/kg	
100-41-4	Ethylbenzene	ND	250	25	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	250	25	ug/kg	
591-78-6	2-Hexanone	ND	1000	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	50	ug/kg	
98-82-8	Isopropylbenzene	ND	250	25	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	25	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	1000	100	ug/kg	
74-83-9	Methyl bromide	ND	250	50	ug/kg	
74-87-3	Methyl chloride	ND	250	50	ug/kg	
74-95-3	Methylene bromide	ND	250	25	ug/kg	
75-09-2	Methylene chloride	ND	1000	250	ug/kg	
78-93-3	Methyl ethyl ketone	ND	1000	100	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	250	50	ug/kg	
91-20-3	Naphthalene	811	250	50	ug/kg	
103-65-1	n-Propylbenzene	ND	250	25	ug/kg	
100-42-5	Styrene	ND	250	25	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	250	25	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	2000	500	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	25	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	250	25	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	25	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	250	25	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	25	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	50	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	25	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	50	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	50	ug/kg	
127-18-4	Tetrachloroethylene	ND	250	30	ug/kg	
108-88-3	Toluene	ND	250	25	ug/kg	
79-01-6	Trichloroethylene	ND	250	25	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	50	ug/kg	
75-01-4	Vinyl chloride	ND	250	50	ug/kg	
1330-20-7	Xylene (total)	ND	500	50	ug/kg	
	TPH-GRO (C6-C10)	ND	5000	2500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		70-130%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-1	Date Sampled: 01/21/13
Lab Sample ID: C25837-5	Date Received: 01/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8260B	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	112%		70-130%
460-00-4	4-Bromofluorobenzene	91%		70-130%

- (a) All results reported on a wet weight basis.
- (b) 4:1 composite

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-1		Date Sampled: 01/21/13
Lab Sample ID: C25837-5		Date Received: 01/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y18578.D	10	01/22/13	LW	01/22/13	OP7365	EY876
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	6600	1600	ug/kg	
95-57-8	2-Chlorophenol	ND	1700	710	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	1700	710	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	1700	770	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	1700	650	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	6600	1300	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	3300	620	ug/kg	
95-48-7	2-Methylphenol	ND	1700	880	ug/kg	
	3&4-Methylphenol	ND	3300	780	ug/kg	
88-75-5	2-Nitrophenol	ND	1700	790	ug/kg	
100-02-7	4-Nitrophenol	ND	3300	400	ug/kg	
87-86-5	Pentachlorophenol	ND	3300	340	ug/kg	
108-95-2	Phenol	ND	1700	690	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	1700	750	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	1700	700	ug/kg	
83-32-9	Acenaphthene	ND	1700	730	ug/kg	
208-96-8	Acenaphthylene	ND	1700	780	ug/kg	
62-53-3	Aniline	ND	1700	440	ug/kg	
120-12-7	Anthracene	ND	1700	530	ug/kg	
103-33-3	Azobenzene	ND	1700	590	ug/kg	
92-87-5	Benzidine	ND	6600	790	ug/kg	
56-55-3	Benzo(a)anthracene	348	1700	330	ug/kg	J
50-32-8	Benzo(a)pyrene	397	1700	330	ug/kg	J
205-99-2	Benzo(b)fluoranthene	ND	1700	330	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	1700	430	ug/kg	
207-08-9	Benzo(k)fluoranthene	333	1700	330	ug/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	1700	670	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1700	330	ug/kg	
100-51-6	Benzyl Alcohol	ND	1700	890	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1700	750	ug/kg	
106-47-8	4-Chloroaniline	ND	1700	500	ug/kg	
86-74-8	Carbazole	ND	1700	350	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SP-1	Date Sampled:	01/21/13
Lab Sample ID:	C25837-5	Date Received:	01/21/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	372	1700	330	ug/kg	J
111-91-1	bis(2-Chloroethoxy)methane	ND	1700	740	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1700	660	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1700	670	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1700	750	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	1700	750	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1700	730	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1700	710	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	1700	710	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	1700	740	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	3300	690	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	1700	410	ug/kg	
132-64-9	Dibenzofuran	ND	1700	730	ug/kg	
122-39-4	Diphenylamine	ND	1700	650	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1700	330	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1700	340	ug/kg	
84-66-2	Diethyl phthalate	ND	1700	560	ug/kg	
131-11-3	Dimethyl phthalate	ND	1700	690	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	3300	660	ug/kg	
206-44-0	Fluoranthene	557	1700	330	ug/kg	J
86-73-7	Fluorene	ND	1700	720	ug/kg	
118-74-1	Hexachlorobenzene	ND	1700	700	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1700	960	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1700	920	ug/kg	
67-72-1	Hexachloroethane	ND	1700	700	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1700	420	ug/kg	
78-59-1	Isophorone	ND	1700	690	ug/kg	
90-12-0	1-Methylnaphthalene	ND	1700	760	ug/kg	
91-57-6	2-Methylnaphthalene	ND	1700	790	ug/kg	
88-74-4	2-Nitroaniline	ND	1700	670	ug/kg	
99-09-2	3-Nitroaniline	ND	1700	500	ug/kg	
100-01-6	4-Nitroaniline	ND	1700	430	ug/kg	
91-20-3	Naphthalene	ND	1700	770	ug/kg	
98-95-3	Nitrobenzene	ND	1700	770	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	1700	660	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1700	720	ug/kg	
85-01-8	Phenanthrene	ND	1700	580	ug/kg	
129-00-0	Pyrene	686	1700	330	ug/kg	J
110-86-1	Pyridine	ND	3300	450	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1700	750	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-1		Date Sampled: 01/21/13
Lab Sample ID: C25837-5		Date Received: 01/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		14-99%
4165-62-2	Phenol-d5	82%		18-100%
118-79-6	2,4,6-Tribromophenol	78%		25-107%
4165-60-0	Nitrobenzene-d5	76%		15-101%
321-60-8	2-Fluorobiphenyl	85%		15-104%
1718-51-0	Terphenyl-d14	104%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SP-1	Date Sampled: 01/21/13
Lab Sample ID: C25837-5	Date Received: 01/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 1.8	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Arsenic	4.7	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Barium	237	18	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Beryllium	< 0.91	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Cadmium	< 0.91	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Chromium	46.2	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Cobalt	4.1	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Copper	51.9	2.3	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Lead	318	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Mercury	1.0	0.39	mg/kg	10	01/28/13	01/28/13 RW	SW846 7471A ²	SW846 7471A ⁴
Molybdenum	< 1.8	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Nickel	30.3	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Selenium	< 1.8	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Silver	1.2	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Thallium	< 1.8	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Vanadium	38.4	0.91	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³
Zinc	247	1.8	mg/kg	1	01/22/13	01/23/13 RS	SW846 6010B ¹	SW846 3050B ³

- (1) Instrument QC Batch: MA2947
- (2) Instrument QC Batch: MA2953
- (3) Prep QC Batch: MP5758
- (4) Prep QC Batch: MP5781

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: SP-1	
Lab Sample ID: C25837-5T	Date Sampled: 01/21/13
Matrix: SO - Soil	Date Received: 01/21/13
	Percent Solids: n/a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	0.13	D008	5.0	0.050	mg/l	1	02/01/13	02/04/13 RS	SW846 6010B ¹	SW3010A ²

(1) Instrument QC Batch: MA2965

(2) Prep QC Batch: MP5799

RL = Reporting Limit

MCL = Maximum Contamination Level (40 CFR 261 6/96)

Report of Analysis

Client Sample ID: SP-1	Date Sampled: 01/21/13
Lab Sample ID: C25837-5W	Date Received: 01/21/13
Matrix: SO - Soil	Percent Solids: n/a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis, STLC Leachate CA WET

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	23.7		0.25	mg/l	1	02/02/13	02/05/13 RS	SW846 6010B ¹	SW3010A ²

(1) Instrument QC Batch: MA2966

(2) Prep QC Batch: MP5805

RL = Reporting Limit
MCL = Maximum Contamination Level (not available)

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

C25837

California Contingent Analyses - Metals

Metal	Trigger level TTLC (mg/kg)	Requirement (based on CCR 66261.24) [Both Solids and Liquids]
Antimony	150	STLC required if TTLC \geq 150 mg/kg
Arsenic	50/100	STLC required if TTLC \geq 50 mg/kg; TCLP required if TTLC \geq 100 mg/kg
Barium	1,000/2,000	STLC required if TTLC \geq 1,000 mg/kg; TCLP required if TTLC \geq 2,000 mg/kg
Beryllium	7.5	STLC required if TTLC \geq 7.5 mg/kg
Cadmium	10/20	STLC required if TTLC \geq 10 mg/kg; TCLP required if TTLC \geq 20 mg/kg
Chromium	50/100	STLC required if TTLC \geq 50 mg/kg; TCLP required if TTLC \geq 100 mg/kg
Cobalt	800	STLC required if TTLC \geq 800 mg/kg
Copper	250	STLC required if TTLC \geq 250 mg/kg
Lead	13/50/100	Organic lead required if TTLC lead \geq 13 mg/kg STLC required if TTLC \geq 50 mg/kg; TCLP required if TTLC \geq 100 mg/kg
Mercury	2/4	STLC required if TTLC \geq 2 mg/kg; TCLP required if TTLC \geq 4 mg/kg
Molybdenum	3,500	STLC required if TTLC \geq 350 mg/kg
Nickel	200	STLC required if TTLC \geq 200 mg/kg
Selenium	10/20	STLC required if TTLC \geq 10 mg/kg; TCLP required if TTLC \geq 20 mg/kg
Silver	50/100	STLC required if TTLC \geq 50 mg/kg; TCLP required if TTLC \geq 100 mg/kg
Thallium	70	STLC required if TTLC \geq 70 mg/kg
Vanadium	240	STLC required if TTLC \geq 240 mg/kg
Zinc	2,500	STLC required if TTLC \geq 2,500 mg/kg

California Contingent Analyses - Organics

Organic Constituents	Trigger level TTLC (mg/kg)	Requirement (based on CCR 66261.24) [Both Solids and Liquids]
Benzene	10	TCLP benzene required if TTLC \geq 10 mg/kg
Pentachlorophenol	1.7	STLC required if TTLC \geq 1.7
Trichloroethylene	10/204	STLC required if TTLC \geq 10 mg/kg; TCLP required if TTLC \geq 204 mg/kg

Organic Constituents	(mg/kg)	Requirements based on TSDf permits [ONLY for Solids if they meet the below criteria]
TPHd	20,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TPHg	5,900	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TPHmo	10,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)
TRPH (tot rec pet hc)	5,000	Requires fish bioassay (Acute Aquatic 96 hr LC 50)

C25837: Chain of Custody

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Alpva

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Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C25837 Client: SHELL OIL Project: 2703 MLK JR. WAY, OAKLAND, CA
 Date / Time Received: 1/21/2013 Delivery Method: Accutest Courier Airbill #s: _____

Cooler Temps (Initial/Adjusted): #1: (2.3/2.3): 0

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. Smp'l Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

C25837: Chain of Custody

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GC/MS Volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C25837**Account:** SHELLWIC Shell Oil Company**Project:** CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-MB	M37428.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:**Method:** SW846 8260B

C25837-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	40	10	ug/kg	
71-43-2	Benzene	ND	5.0	0.50	ug/kg	
108-86-1	Bromobenzene	ND	5.0	0.50	ug/kg	
74-97-5	Bromochloromethane	ND	5.0	0.50	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	0.50	ug/kg	
75-25-2	Bromoform	ND	5.0	0.50	ug/kg	
104-51-8	n-Butylbenzene	ND	5.0	0.50	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.0	0.50	ug/kg	
98-06-6	tert-Butylbenzene	ND	5.0	0.50	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	0.50	ug/kg	
75-00-3	Chloroethane	ND	5.0	1.0	ug/kg	
67-66-3	Chloroform	ND	5.0	0.50	ug/kg	
95-49-8	o-Chlorotoluene	ND	5.0	0.50	ug/kg	
106-43-4	p-Chlorotoluene	ND	5.0	0.50	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	0.50	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	0.50	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	5.0	0.50	ug/kg	
563-58-6	1,1-Dichloropropene	ND	5.0	0.50	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	0.50	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	0.50	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	0.50	ug/kg	
142-28-9	1,3-Dichloropropane	ND	5.0	0.50	ug/kg	
108-20-3	Di-Isopropyl ether	ND	5.0	0.50	ug/kg	
594-20-7	2,2-Dichloropropane	ND	5.0	0.50	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	0.50	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	5.0	1.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
541-73-1	m-Dichlorobenzene	ND	5.0	0.50	ug/kg	
95-50-1	o-Dichlorobenzene	ND	5.0	0.50	ug/kg	
106-46-7	p-Dichlorobenzene	ND	5.0	0.50	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	5.0	0.50	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	0.50	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	0.50	ug/kg	
637-92-3	Ethyl tert-Butyl Ether	ND	5.0	0.50	ug/kg	

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-MB	M37428.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	Result	RL	MDL	Units	Q
591-78-6	2-Hexanone	ND	20	2.0	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5.0	1.0	ug/kg	
98-82-8	Isopropylbenzene	ND	5.0	0.50	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.0	0.50	ug/kg	
108-10-1	4-Methyl-2-pentanone	ND	20	2.0	ug/kg	
74-83-9	Methyl bromide	ND	5.0	1.0	ug/kg	
74-87-3	Methyl chloride	ND	5.0	1.0	ug/kg	
74-95-3	Methylene bromide	ND	5.0	0.50	ug/kg	
75-09-2	Methylene chloride	ND	20	5.0	ug/kg	
78-93-3	Methyl ethyl ketone	ND	20	2.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	1.0	ug/kg	
91-20-3	Naphthalene	ND	5.0	1.0	ug/kg	
103-65-1	n-Propylbenzene	ND	5.0	0.50	ug/kg	
100-42-5	Styrene	ND	5.0	0.50	ug/kg	
994-05-8	Tert-Amyl Methyl Ether	ND	5.0	0.50	ug/kg	
75-65-0	Tert Butyl Alcohol	ND	40	10	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	0.50	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	0.50	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	0.50	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	5.0	0.50	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	5.0	1.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5.0	0.50	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	5.0	1.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.0	1.0	ug/kg	
127-18-4	Tetrachloroethylene	ND	5.0	0.60	ug/kg	
108-88-3	Toluene	ND	5.0	0.50	ug/kg	
79-01-6	Trichloroethylene	ND	5.0	0.50	ug/kg	
75-69-4	Trichlorofluoromethane	ND	5.0	1.0	ug/kg	
75-01-4	Vinyl chloride	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.0	ug/kg	
	TPH-GRO (C6-C10)	ND	100	50	ug/kg	

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-MB	M37428.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	98% 70-130%
2037-26-5	Toluene-D8	110% 70-130%
460-00-4	4-Bromofluorobenzene	90% 70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-BS	M37425.D	1	01/22/13	XB	n/a	n/a	VM1135
VM1135-BSD	M37426.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	160	140	88	138	86	1	62-130/24
71-43-2	Benzene	40	41.9	105	41.8	105	0	81-119/20
108-86-1	Bromobenzene	40	45.4	114	46.6	117	3	79-120/22
74-97-5	Bromochloromethane	40	42.6	107	43.5	109	2	81-120/19
75-27-4	Bromodichloromethane	40	40.0	100	38.7	97	3	79-124/20
75-25-2	Bromoform	40	45.1	113	43.9	110	3	76-128/21
104-51-8	n-Butylbenzene	40	43.9	110	44.1	110	0	79-123/26
135-98-8	sec-Butylbenzene	40	41.6	104	42.3	106	2	77-122/24
98-06-6	tert-Butylbenzene	40	42.9	107	43.2	108	1	77-121/23
108-90-7	Chlorobenzene	40	41.1	103	41.4	104	1	82-121/20
75-00-3	Chloroethane	40	43.8	110	42.0	105	4	80-126/21
67-66-3	Chloroform	40	39.9	100	39.8	100	0	82-123/20
95-49-8	o-Chlorotoluene	40	44.7	112	44.5	111	0	78-125/25
106-43-4	p-Chlorotoluene	40	36.3	91	37.7	94	4	75-125/26
56-23-5	Carbon tetrachloride	40	42.1	105	40.4	101	4	82-127/22
75-34-3	1,1-Dichloroethane	40	37.8	95	38.3	96	1	80-123/20
75-35-4	1,1-Dichloroethylene	40	40.2	101	42.0	105	4	76-123/19
563-58-6	1,1-Dichloropropene	40	43.3	108	41.7	104	4	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	40	39.2	98	37.2	93	5	64-133/23
106-93-4	1,2-Dibromoethane	40	43.2	108	42.6	107	1	80-120/20
107-06-2	1,2-Dichloroethane	40	39.1	98	36.7	92	6	76-132/21
78-87-5	1,2-Dichloropropane	40	39.6	99	39.1	98	1	80-121/20
142-28-9	1,3-Dichloropropane	40	41.6	104	41.1	103	1	78-120/20
108-20-3	Di-Isopropyl ether	40	38.5	96	39.7	99	3	78-126/19
594-20-7	2,2-Dichloropropane	40	40.6	102	39.9	100	2	77-132/22
124-48-1	Dibromochloromethane	40	42.6	107	41.6	104	2	76-121/21
75-71-8	Dichlorodifluoromethane	40	38.6	97	36.3	91	6	51-135/23
156-59-2	cis-1,2-Dichloroethylene	40	41.4	104	42.7	107	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	40	46.3	116	44.9	112	3	81-124/21
541-73-1	m-Dichlorobenzene	40	41.6	104	42.5	106	2	79-123/23
95-50-1	o-Dichlorobenzene	40	42.7	107	43.2	108	1	79-124/22
106-46-7	p-Dichlorobenzene	40	44.7	112	45.8	115	2	79-123/22
156-60-5	trans-1,2-Dichloroethylene	40	42.4	106	44.4	111	5	78-120/19
10061-02-6	trans-1,3-Dichloropropene	40	40.6	102	39.6	99	2	81-123/22
100-41-4	Ethylbenzene	40	43.7	109	43.7	109	0	80-119/21
637-92-3	Ethyl tert-Butyl Ether	40	39.6	99	39.8	100	1	75-132/21

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-BS	M37425.D	1	01/22/13	XB	n/a	n/a	VM1135
VM1135-BSD	M37426.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	160	148	93	142	89	4	68-139/24
87-68-3	Hexachlorobutadiene	40	47.3	118	47.9	120	1	81-126/32
98-82-8	Isopropylbenzene	40	41.2	103	40.9	102	1	81-122/22
99-87-6	p-Isopropyltoluene	40	42.4	106	42.6	107	0	81-121/23
108-10-1	4-Methyl-2-pentanone	160	144	90	135	84	6	74-136/23
74-83-9	Methyl bromide	40	49.6	124	43.5	109	13	82-124/20
74-87-3	Methyl chloride	40	34.9	87	35.5	89	2	60-132/26
74-95-3	Methylene bromide	40	41.6	104	40.2	101	3	82-120/20
75-09-2	Methylene chloride	40	40.2	101	42.9	107	6	75-119/20
78-93-3	Methyl ethyl ketone	160	145	91	147	92	1	71-130/22
1634-04-4	Methyl Tert Butyl Ether	40	38.4	96	38.5	96	0	79-127/19
91-20-3	Naphthalene	40	44.9	112	44.2	111	2	78-125/23
103-65-1	n-Propylbenzene	40	40.3	101	41.1	103	2	79-124/22
100-42-5	Styrene	40	44.7	112	44.7	112	0	83-122/21
994-05-8	Tert-Amyl Methyl Ether	40	38.7	97	39.3	98	2	80-127/20
75-65-0	Tert Butyl Alcohol	200	170	85	167	84	2	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	40	44.9	112	44.4	111	1	82-123/21
71-55-6	1,1,1-Trichloroethane	40	40.8	102	39.9	100	2	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	40	41.6	104	41.6	104	0	77-126/20
79-00-5	1,1,2-Trichloroethane	40	41.6	104	41.3	103	1	79-123/20
87-61-6	1,2,3-Trichlorobenzene	40	46.2	116	46.6	117	1	81-122/26
96-18-4	1,2,3-Trichloropropane	40	40.9	102	39.1	98	4	79-122/24
120-82-1	1,2,4-Trichlorobenzene	40	46.9	117	47.2	118	1	81-121/26
95-63-6	1,2,4-Trimethylbenzene	40	45.1	113	45.4	114	1	82-121/24
108-67-8	1,3,5-Trimethylbenzene	40	45.9	115	46.4	116	1	81-123/23
127-18-4	Tetrachloroethylene	40	46.2	116	45.9	115	1	80-125/25
108-88-3	Toluene	40	44.1	110	44.4	111	1	80-117/21
79-01-6	Trichloroethylene	40	44.7	112	43.7	109	2	81-122/20
75-69-4	Trichlorofluoromethane	40	42.0	105	40.9	102	3	77-133/22
75-01-4	Vinyl chloride	40	49.5	124	48.1	120	3	71-133/23
1330-20-7	Xylene (total)	120	127	106	127	106	0	81-122/22

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	98%	103%	70-130%

* = Outside of Control Limits.

5.2.1
 5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-BS	M37425.D	1	01/22/13	XB	n/a	n/a	VM1135
VM1135-BSD	M37426.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
2037-26-5	Toluene-D8	102%	107%	70-130%
460-00-4	4-Bromofluorobenzene	93%	94%	70-130%

* = Outside of Control Limits.

Laboratory Control Sample Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1135-LCS	M37427.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	Spike ug/kg	LCS ug/kg	LCS %	Limits
	TPH-GRO (C6-C10)	250	281	112	50-121

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	110%	70-130%
460-00-4	4-Bromofluorobenzene	91%	70-130%

* = Outside of Control Limits.

5.3.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C25826-6MS	M37445.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6MSD	M37446.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6	M37434.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	C25826-6 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		5760	4930	86	5340	93	8	62-130/24
71-43-2	Benzene	136	J	1440	1490	94	1520	96	2	81-119/20
108-86-1	Bromobenzene	ND		1440	1560	108	1610	112	3	79-120/22
74-97-5	Bromochloromethane	ND		1440	1410	98	1450	101	3	81-120/19
75-27-4	Bromodichloromethane	ND		1440	1250	87	1270	88	2	79-124/20
75-25-2	Bromoform	ND		1440	1360	94	1430	99	5	76-128/21
104-51-8	n-Butylbenzene	ND		1440	1350	94	1410	98	4	79-123/26
135-98-8	sec-Butylbenzene	ND		1440	1430	99	1480	103	3	77-122/24
98-06-6	tert-Butylbenzene	ND		1440	1460	101	1520	105	4	77-121/23
108-90-7	Chlorobenzene	ND		1440	1450	101	1480	103	2	82-121/20
75-00-3	Chloroethane	ND		1440	1360	94	1360	94	0	80-126/21
67-66-3	Chloroform	ND		1440	1190	83	1210	84	2	82-123/20
95-49-8	o-Chlorotoluene	ND		1440	1340	93	1440	100	7	78-125/25
106-43-4	p-Chlorotoluene	ND		1440	1350	94	1400	97	4	75-125/26
56-23-5	Carbon tetrachloride	ND		1440	1170	81* a	1210	84	3	82-127/22
75-34-3	1,1-Dichloroethane	ND		1440	1180	82	1210	84	3	80-123/20
75-35-4	1,1-Dichloroethylene	ND		1440	1300	90	1360	94	5	76-123/19
563-58-6	1,1-Dichloropropene	ND		1440	1260	87	1300	90	3	79-123/20
96-12-8	1,2-Dibromo-3-chloropropane	ND		1440	1180	82	1250	87	6	64-133/23
106-93-4	1,2-Dibromoethane	ND		1440	1420	99	1460	101	3	80-120/20
107-06-2	1,2-Dichloroethane	ND		1440	1120	78	1150	80	3	76-132/21
78-87-5	1,2-Dichloropropane	ND		1440	1330	92	1350	94	1	80-121/20
142-28-9	1,3-Dichloropropane	ND		1440	1330	92	1370	95	3	78-120/20
108-20-3	Di-Isopropyl ether	ND		1440	1370	95	1390	96	1	78-126/19
594-20-7	2,2-Dichloropropane	ND		1440	1050	73* a	1060	74* a	1	77-132/22
124-48-1	Dibromochloromethane	ND		1440	1360	94	1400	97	3	76-121/21
75-71-8	Dichlorodifluoromethane	ND		1440	1010	70	995	69	1	51-135/23
156-59-2	cis-1,2-Dichloroethylene	ND		1440	1350	94	1390	96	3	79-123/20
10061-01-5	cis-1,3-Dichloropropene	ND		1440	1320	92	1340	93	2	81-124/21
541-73-1	m-Dichlorobenzene	ND		1440	1500	104	1540	107	3	79-123/23
95-50-1	o-Dichlorobenzene	ND		1440	1510	105	1560	108	3	79-124/22
106-46-7	p-Dichlorobenzene	ND		1440	1470	102	1540	107	5	79-123/22
156-60-5	trans-1,2-Dichloroethylene	ND		1440	1330	92	1380	96	4	78-120/19
10061-02-6	trans-1,3-Dichloropropene	ND		1440	1260	87	1290	90	2	81-123/22
100-41-4	Ethylbenzene	209		1440	1530	92	1560	94	2	80-119/21
637-92-3	Ethyl tert-Butyl Ether	ND		1440	1180	82	1220	85	3	75-132/21

* = Outside of Control Limits.

5.4.1
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Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C25826-6MS	M37445.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6MSD	M37446.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6	M37434.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Compound	C25826-6 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
591-78-6	2-Hexanone	ND		5760	4510	78	4650	81	3	68-139/24
87-68-3	Hexachlorobutadiene	ND		1440	1450	101	1520	105	5	81-126/32
98-82-8	Isopropylbenzene	ND		1440	1370	95	1400	97	2	81-122/22
99-87-6	p-Isopropyltoluene	ND		1440	1430	99	1490	103	4	81-121/23
108-10-1	4-Methyl-2-pentanone	ND		5760	4600	80	4770	83	4	74-136/23
74-83-9	Methyl bromide	ND		1440	1460	101	1450	101	1	82-124/20
74-87-3	Methyl chloride	ND		1440	1090	76	1170	81	7	60-132/26
74-95-3	Methylene bromide	ND		1440	1320	92	1360	94	3	82-120/20
75-09-2	Methylene chloride	ND		1440	1330	92	1370	95	3	75-119/20
78-93-3	Methyl ethyl ketone	ND		5760	5020	87	5340	93	6	71-130/22
1634-04-4	Methyl Tert Butyl Ether	ND		1440	1200	83	1240	86	3	79-127/19
91-20-3	Naphthalene	ND		1440	1480	103	1550	108	5	78-125/23
103-65-1	n-Propylbenzene	34.6	J	1440	1420	96	1480	100	4	79-124/22
100-42-5	Styrene	ND		1440	1440	100	1470	102	2	83-122/21
994-05-8	Tert-Amyl Methyl Ether	ND		1440	1230	85	1270	88	3	80-127/20
75-65-0	Tert Butyl Alcohol	ND		7200	5410	75	5570	77	3	65-144/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		1440	1380	96	1410	98	2	82-123/21
71-55-6	1,1,1-Trichloroethane	ND		1440	1130	78* a	1160	81	3	79-129/21
79-34-5	1,1,2,2-Tetrachloroethane	ND		1440	1400	97	1460	101	4	77-126/20
79-00-5	1,1,2-Trichloroethane	ND		1440	1380	96	1440	100	4	79-123/20
87-61-6	1,2,3-Trichlorobenzene	ND		1440	1490	103	1550	108	4	81-122/26
96-18-4	1,2,3-Trichloropropane	ND		1440	1240	86	1300	90	5	79-122/24
120-82-1	1,2,4-Trichlorobenzene	ND		1440	1470	102	1540	107	5	81-121/26
95-63-6	1,2,4-Trimethylbenzene	225		1440	1610	96	1670	100	4	82-121/24
108-67-8	1,3,5-Trimethylbenzene	61.0	J	1440	1500	100	1550	103	3	81-123/23
127-18-4	Tetrachloroethylene	ND		1440	1470	102	1520	105	3	80-125/25
108-88-3	Toluene	863		1440	2110	87	2130	88	1	80-117/21
79-01-6	Trichloroethylene	ND		1440	1450	101	1510	105	4	81-122/20
75-69-4	Trichlorofluoromethane	ND		1440	1200	83	1190	83	1	77-133/22
75-01-4	Vinyl chloride	ND		1440	527	37* a	537	37* a	2	71-133/23
1330-20-7	Xylene (total)	971		4320	5050	94	5120	96	1	81-122/22

CAS No.	Surrogate Recoveries	MS	MSD	C25826-6	Limits
1868-53-7	Dibromofluoromethane	90%	92%	96%	70-130%

* = Outside of Control Limits.

5.4.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
C25826-6MS	M37445.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6MSD	M37446.D	1	01/22/13	XB	n/a	n/a	VM1135
C25826-6	M37434.D	1	01/22/13	XB	n/a	n/a	VM1135

The QC reported here applies to the following samples:

Method: SW846 8260B

C25837-5

CAS No.	Surrogate Recoveries	MS	MSD	C25826-6	Limits
2037-26-5	Toluene-D8	98%	98%	106%	70-130%
460-00-4	4-Bromofluorobenzene	85%	85%	89%	70-130%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

5.4.1
5

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MB	Y18563.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MB	Y18563.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MB	Y18563.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	77% 15-101%
321-60-8	2-Fluorobiphenyl	78% 15-104%
1718-51-0	Terphenyl-d14	89% 56-123%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-BS	Y18564.D	1	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-BSD	Y18565.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1670	1680	101	1610	97	4	25-112/32
95-57-8	2-Chlorophenol	833	684	82	599	72	13	31-110/31
59-50-7	4-Chloro-3-methyl phenol	833	748	90	699	84	7	33-118/27
120-83-2	2,4-Dichlorophenol	833	711	85	645	77	10	30-115/30
105-67-9	2,4-Dimethylphenol	833	682	82	609	73	11	30-116/30
51-28-5	2,4-Dinitrophenol	833	641	77	667	80	4	11-139/30
534-52-1	4,6-Dinitro-o-cresol	833	677	81	660	79	3	30-139/24
95-48-7	2-Methylphenol	833	693	83	615	74	12	30-113/31
	3&4-Methylphenol	833	714	86	649	78	10	30-113/30
88-75-5	2-Nitrophenol	833	672	81	589	71	13	29-112/32
100-02-7	4-Nitrophenol	833	754	90	758	91	1	40-127/23
87-86-5	Pentachlorophenol	833	626	75	620	74	1	43-140/20
108-95-2	Phenol	833	696	84	608	73	13	30-112/30
95-95-4	2,4,5-Trichlorophenol	833	748	90	677	81	10	33-121/27
88-06-2	2,4,6-Trichlorophenol	833	749	90	678	81	10	31-115/29
83-32-9	Acenaphthene	833	623	75	559	67	11	34-112/28
208-96-8	Acenaphthylene	833	672	81	604	72	11	33-115/28
62-53-3	Aniline	833	636	76	557	67	13	30-93/27
120-12-7	Anthracene	833	791	95	766	92	3	59-111/21
103-33-3	Azobenzene	833	696	84	635	76	9	39-114/22
92-87-5	Benzidine	1670	1160	70	1200	72	3	10-96/39
56-55-3	Benzo(a)anthracene	833	809	97	803	96	1	72-122/22
50-32-8	Benzo(a)pyrene	833	862	103	836	100	3	71-120/22
205-99-2	Benzo(b)fluoranthene	833	803	96	805	97	0	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	843	101	782	94	8	57-134/24
207-08-9	Benzo(k)fluoranthene	833	834	100	822	99	1	74-126/25
101-55-3	4-Bromophenyl phenyl ether	833	747	90	707	85	6	45-110/22
85-68-7	Butyl benzyl phthalate	833	770	92	754	90	2	68-129/20
100-51-6	Benzyl Alcohol	833	712	85	634	76	12	25-116/31
91-58-7	2-Chloronaphthalene	833	702	84	613	74	14	33-110/30
106-47-8	4-Chloroaniline	833	566	68	525	63	8	27-92/25
86-74-8	Carbazole	833	826	99	821	99	1	64-125/21
218-01-9	Chrysene	833	774	93	769	92	1	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	833	680	82	598	72	13	31-112/31
111-44-4	bis(2-Chloroethyl)ether	833	680	82	576	69	17	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	833	672	81	582	70	14	30-111/32

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-BS	Y18564.D	1	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-BSD	Y18565.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	833	767	92	699	84	9	40-111/25
95-50-1	1,2-Dichlorobenzene	833	632	76	545	65	15	28-102/32
541-73-1	1,3-Dichlorobenzene	833	616	74	531	64	15	26-99/32
106-46-7	1,4-Dichlorobenzene	833	619	74	540	65	14	27-100/32
121-14-2	2,4-Dinitrotoluene	833	794	95	763	92	4	55-115/21
606-20-2	2,6-Dinitrotoluene	833	776	93	732	88	6	45-115/21
91-94-1	3,3'-Dichlorobenzidine	1670	1820	109	1760	106	3	53-115/24
53-70-3	Dibenzo(a,h)anthracene	833	877	105	824	99	6	59-132/23
132-64-9	Dibenzofuran	833	733	88	666	80	10	37-113/26
122-39-4	Diphenylamine	833	795	95	753	90	5	51-112/24
84-74-2	Di-n-butyl phthalate	833	881	106	857	103	3	67-114/22
117-84-0	Di-n-octyl phthalate	833	679	81	693	83	2	62-138/24
84-66-2	Diethyl phthalate	833	813	98	775	93	5	52-111/22
131-11-3	Dimethyl phthalate	833	800	96	749	90	7	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	833	739	89	739	89	0	66-130/20
206-44-0	Fluoranthene	833	830	100	822	99	1	69-117/21
86-73-7	Fluorene	833	749	90	689	83	8	42-112/24
118-74-1	Hexachlorobenzene	833	738	89	714	86	3	50-110/24
87-68-3	Hexachlorobutadiene	833	604	72	517	62	16	30-116/33
77-47-4	Hexachlorocyclopentadiene	833	525	63	461	55	13	10-108/33
67-72-1	Hexachloroethane	833	622	75	539	65	14	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	833	866	104	798	96	8	60-131/21
78-59-1	Isophorone	833	692	83	612	73	12	32-108/30
90-12-0	1-Methylnaphthalene	833	696	84	611	73	13	33-110/30
91-57-6	2-Methylnaphthalene	833	710	85	625	75	13	33-107/30
88-74-4	2-Nitroaniline	833	737	88	689	83	7	39-120/24
99-09-2	3-Nitroaniline	833	656	79	618	74	6	41-107/24
100-01-6	4-Nitroaniline	833	746	90	759	91	2	48-132/24
91-20-3	Naphthalene	833	603	72	518	62	15	32-121/31
98-95-3	Nitrobenzene	833	676	81	589	71	14	30-109/31
62-75-9	N-Nitrosodimethylamine	833	611	73	536	64	13	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	833	702	84	610	73	14	29-111/32
85-01-8	Phenanthrene	833	756	91	740	89	2	57-113/21
129-00-0	Pyrene	833	768	92	749	90	3	63-120/20
110-86-1	Pyridine	833	410	49	353	42	15	16-75/34
120-82-1	1,2,4-Trichlorobenzene	833	671	81	575	69	15	29-104/32

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-BS	Y18564.D	1	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-BSD	Y18565.D	1	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-60-0	Nitrobenzene-d5	79%	68%	15-101%
321-60-8	2-Fluorobiphenyl	81%	72%	15-104%
1718-51-0	Terphenyl-d14	92%	89%	56-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MS ^a	Y18566.D	2	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-MSD ^a	Y18567.D	2	01/22/13	LW	01/22/13	OP7365	EY876
C25836-25 ^b	Y18568.D	2	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	C25836-25 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND	1660	1520	91	1280	77	17	25-112/32
95-57-8	2-Chlorophenol	ND	832	698	84	661	79	5	31-110/31
59-50-7	4-Chloro-3-methyl phenol	ND	832	791	95	742	89	6	33-118/27
120-83-2	2,4-Dichlorophenol	ND	832	768	92	721	87	6	30-115/30
105-67-9	2,4-Dimethylphenol	ND	832	736	88	695	84	6	30-116/30
51-28-5	2,4-Dinitrophenol	ND	832	436	52	ND	0* ^c	200* ^c	11-139/30
534-52-1	4,6-Dinitro-o-cresol	ND	832	532	64	349	42	42* ^c	30-139/24
95-48-7	2-Methylphenol	ND	832	731	88	692	83	5	30-113/31
	3&4-Methylphenol	ND	832	736	88	693	83	6	30-113/30
88-75-5	2-Nitrophenol	ND	832	703	85	661	79	6	29-112/32
100-02-7	4-Nitrophenol	ND	832	650	78	582	70	11	40-127/23
87-86-5	Pentachlorophenol	ND	832	590	71	533	64	10	43-140/20
108-95-2	Phenol	ND	832	715	86	673	81	6	30-112/30
95-95-4	2,4,5-Trichlorophenol	ND	832	765	92	712	86	7	33-121/27
88-06-2	2,4,6-Trichlorophenol	ND	832	768	92	730	88	5	31-115/29
83-32-9	Acenaphthene	ND	832	656	79	623	75	5	34-112/28
208-96-8	Acenaphthylene	ND	832	701	84	674	81	4	33-115/28
62-53-3	Aniline	ND	832	624	75	591	71	5	30-93/27
120-12-7	Anthracene	ND	832	791	95	748	90	6	59-111/21
103-33-3	Azobenzene	ND	832	711	85	671	81	6	39-114/22
92-87-5	Benzidine	ND	1660	360	22	298	18	19	10-96/39
56-55-3	Benzo(a)anthracene	ND	832	780	94	741	89	5	72-122/22
50-32-8	Benzo(a)pyrene	ND	832	812	98	775	93	5	71-120/22
205-99-2	Benzo(b)fluoranthene	ND	832	757	91	739	89	2	67-123/24
191-24-2	Benzo(g,h,i)perylene	ND	832	788	95	762	92	3	57-134/24
207-08-9	Benzo(k)fluoranthene	ND	832	813	98	812	98	0	74-126/25
101-55-3	4-Bromophenyl phenyl ether	ND	832	775	93	745	90	4	45-110/22
85-68-7	Butyl benzyl phthalate	ND	832	837	101	860	103	3	68-129/20
100-51-6	Benzyl Alcohol	ND	832	724	87	692	83	5	25-116/31
91-58-7	2-Chloronaphthalene	ND	832	741	89	697	84	6	33-110/30
106-47-8	4-Chloroaniline	ND	832	633	76	612	74	3	27-92/25
86-74-8	Carbazole	ND	832	793	95	742	89	7	64-125/21
218-01-9	Chrysene	ND	832	748	90	708	85	5	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	ND	832	732	88	681	82	7	31-112/31
111-44-4	bis(2-Chloroethyl)ether	ND	832	666	80	627	75	6	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	ND	832	680	82	649	78	5	30-111/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MS ^a	Y18566.D	2	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-MSD ^a	Y18567.D	2	01/22/13	LW	01/22/13	OP7365	EY876
C25836-25 ^b	Y18568.D	2	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Compound	C25836-25 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND		832	783	94	739	89	6	40-111/25
95-50-1	1,2-Dichlorobenzene	ND		832	628	75	595	72	5	28-102/32
541-73-1	1,3-Dichlorobenzene	ND		832	609	73	575	69	6	26-99/32
106-46-7	1,4-Dichlorobenzene	ND		832	610	73	582	70	5	27-100/32
121-14-2	2,4-Dinitrotoluene	ND		832	763	92	715	86	6	55-115/21
606-20-2	2,6-Dinitrotoluene	ND		832	763	92	729	88	5	45-115/21
91-94-1	3,3'-Dichlorobenzidine	ND		1660	1670	100	1630	98	2	53-115/24
53-70-3	Dibenzo(a,h)anthracene	ND		832	907	109	880	106	3	59-132/23
132-64-9	Dibenzofuran	ND		832	764	92	716	86	6	37-113/26
122-39-4	Diphenylamine	ND		832	784	94	734	88	7	51-112/24
84-74-2	Di-n-butyl phthalate	ND		832	843	101	772	93	9	67-114/22
117-84-0	Di-n-octyl phthalate	ND		832	796	96	866	104	8	62-138/24
84-66-2	Diethyl phthalate	ND		832	807	97	745	90	8	52-111/22
131-11-3	Dimethyl phthalate	ND		832	804	97	754	91	6	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	ND		832	821	99	831	100	1	66-130/20
206-44-0	Fluoranthene	ND		832	779	94	707	85	10	69-117/21
86-73-7	Fluorene	ND		832	763	92	730	88	4	42-112/24
118-74-1	Hexachlorobenzene	ND		832	768	92	730	88	5	50-110/24
87-68-3	Hexachlorobutadiene	ND		832	635	76	597	72	6	30-116/33
77-47-4	Hexachlorocyclopentadiene	ND		832	461	55	361	43	24	10-108/33
67-72-1	Hexachloroethane	ND		832	620	75	574	69	8	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		832	829	100	817	98	1	60-131/21
78-59-1	Isophorone	ND		832	748	90	703	85	6	32-108/30
90-12-0	1-Methylnaphthalene	ND		832	751	90	709	85	6	33-110/30
91-57-6	2-Methylnaphthalene	ND		832	774	93	726	87	6	33-107/30
88-74-4	2-Nitroaniline	ND		832	744	89	715	86	4	39-120/24
99-09-2	3-Nitroaniline	ND		832	670	81	663	80	1	41-107/24
100-01-6	4-Nitroaniline	ND		832	698	84	680	82	3	48-132/24
91-20-3	Naphthalene	ND		832	638	77	610	73	4	32-121/31
98-95-3	Nitrobenzene	ND		832	683	82	644	77	6	30-109/31
62-75-9	N-Nitrosodimethylamine	ND		832	608	73	571	69	6	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	ND		832	715	86	678	82	5	29-111/32
85-01-8	Phenanthrene	ND		832	764	92	725	87	5	57-113/21
129-00-0	Pyrene	ND		832	853	103	889	107	4	63-120/20
110-86-1	Pyridine	ND		832	426	51	399	48	7	16-75/34
120-82-1	1,2,4-Trichlorobenzene	ND		832	716	86	669	80	7	29-104/32

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7365-MS ^a	Y18566.D	2	01/22/13	LW	01/22/13	OP7365	EY876
OP7365-MSD ^a	Y18567.D	2	01/22/13	LW	01/22/13	OP7365	EY876
C25836-25 ^b	Y18568.D	2	01/22/13	LW	01/22/13	OP7365	EY876

The QC reported here applies to the following samples:

Method: SW846 8270C

C25837-5

CAS No.	Surrogate Recoveries	MS	MSD	C25836-25	Limits
4165-60-0	Nitrobenzene-d5	80%	76%	80%	15-101%
321-60-8	2-Fluorobiphenyl	86%	82%	87%	15-104%
1718-51-0	Terphenyl-d14	100%	105%	110%	56-123%

- (a) Dilution required due to matrix interference.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).
- (c) Outside control limits due to dilution and matrix interference.

* = Outside of Control Limits.

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7364-MB	GG40779.D	1	01/22/13	LB	01/21/13	OP7364	GGG1079

The QC reported here applies to the following samples:

Method: SW846 8015B M

C25837-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	97% 37-122%

7.1.1
7

Blank Spike/Blank Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7364-BS	GG40774.D	1	01/22/13	LB	01/21/13	OP7364	GGG1079
OP7364-BSD	GG40775.D	1	01/22/13	LB	01/21/13	OP7364	GGG1079

The QC reported here applies to the following samples: Method: SW846 8015B M

C25837-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	92.3	92	90.6	91	2	39-102/29
	TPH (> C28-C40)	100	96.7	97	100	100	3	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	101%	98%	37-122%

* = Outside of Control Limits.

7.2.1
7

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C25837
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7364-MS	HH300132.D 1		01/23/13	JH	01/21/13	OP7364	GHH903
OP7364-MSD	HH300133.D 1		01/23/13	JH	01/21/13	OP7364	GHH903
C25828-10	HH300129.D 1		01/23/13	JH	01/21/13	OP7364	GHH903

The QC reported here applies to the following samples:

Method: SW846 8015B M

C25837-5

CAS No.	Compound	C25828-10 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	2.81	J	100	81.4	79	76.6	74	6	39-102/29
	TPH (> C28-C40)	ND		100	86.1	86	89.0	89	3	42-111/26

CAS No.	Surrogate Recoveries	MS	MSD	C25828-10	Limits
630-01-3	Hexacosane	76%	76%	59%	37-122%

* = Outside of Control Limits.

7.3.1
 7

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5758
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 01/22/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087	0.040	<2.0
Arsenic	2.0	.07	.07	-0.17	<2.0
Barium	20	.04	.035	0.17	<20
Beryllium	1.0	.02	.012	0.0	<1.0
Boron	10	.09	.2		
Cadmium	1.0	.02	.015	0.040	<1.0
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054	0.060	<1.0
Cobalt	1.0	.02	.022	-0.020	<1.0
Copper	2.5	.12	.19	0.31	<2.5
Iron	20	.64	1.6		
Lead	2.0	.07	.054	0.090	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024	0.020	<2.0
Nickel	1.0	.02	.024	0.12	<1.0
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23	-0.13	<2.0
Silicon		.12			
Silver	1.0	.03	.044	-0.010	<1.0
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073	-0.21	<2.0
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025	-0.010	<1.0
Zinc	2.0	.03	.098	0.31	<2.0

Associated samples MP5758: C25837-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.1.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5758
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 01/22/13

Metal	C25836-29 Original MS		Spike MPIR4A	% Rec	QC Limits
Aluminum					
Antimony	0.22	14.3	43.1	32.7N(a)	75-125
Arsenic	3.1	42.0	43.1	90.2	75-125
Barium	163	195	43.1	74.2N(a)	75-125
Beryllium	0.55	41.4	43.1	94.8	75-125
Boron					
Cadmium	0.0	40.2	43.1	93.3	75-125
Calcium					
Chromium	98.7	132	43.1	77.3	75-125
Cobalt	16.4	54.3	43.1	87.9	75-125
Copper	39.4	76.9	43.1	87.0	75-125
Iron					
Lead	6.7	51.1	43.1	103.0	75-125
Magnesium					
Manganese					
Molybdenum	0.0	36.3	43.1	84.2	75-125
Nickel	93.1	129	43.1	83.3	75-125
Potassium					
Selenium	0.68	37.8	43.1	86.1	75-125
Silicon					
Silver	0.0	39.6	43.1	91.9	75-125
Sodium					
Strontium					
Thallium	2.0	44.1	43.1	97.7	75-125
Tin					
Titanium					
Vanadium	77.5	111	43.1	77.7	75-125
Zinc	58.0	97.5	43.1	91.6	75-125

Associated samples MP5758: C25837-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested
 (a) Spike recovery indicates possible matrix interference.

8.1.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5758
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 01/22/13

Metal	C25836-29 Original MSD		SpikeLot MPIR4A	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	0.22	13.5	42.7	31.1N(a)	5.8	20
Arsenic	3.1	41.7	42.7	90.3	0.7	20
Barium	163	209	42.7	107.6	6.9	20
Beryllium	0.55	40.5	42.7	93.5	2.2	20
Boron						
Cadmium	0.0	39.6	42.7	92.7	1.5	20
Calcium						
Chromium	98.7	140	42.7	96.6	5.9	20
Cobalt	16.4	54.3	42.7	88.7	0.0	20
Copper	39.4	79.5	42.7	93.8	3.3	20
Iron						
Lead	6.7	49.5	42.7	100.2	3.2	20
Magnesium						
Manganese						
Molybdenum	0.0	34.9	42.7	81.7	3.9	20
Nickel	93.1	132	42.7	91.0	2.3	20
Potassium						
Selenium	0.68	37.5	42.7	86.2	0.8	20
Silicon						
Silver	0.0	38.7	42.7	90.6	2.3	20
Sodium						
Strontium						
Thallium	2.0	43.5	42.7	97.1	1.4	20
Tin						
Titanium						
Vanadium	77.5	119	42.7	97.1	7.0	20
Zinc	58.0	98.5	42.7	94.8	1.0	20

Associated samples MP5758: C25837-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested
 (a) Spike recovery indicates possible matrix interference.

8.12
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5758
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 01/22/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	48.8	50	97.6	80-120
Arsenic	48.4	50	96.8	80-120
Barium	49.6	50	99.2	80-120
Beryllium	50.1	50	100.2	80-120
Boron				
Cadmium	48.7	50	97.4	80-120
Calcium				
Chromium	54.2	50	108.4	80-120
Cobalt	52.6	50	105.2	80-120
Copper	50.9	50	101.8	80-120
Iron				
Lead	50.6	50	101.2	80-120
Magnesium				
Manganese				
Molybdenum	50.5	50	101.0	80-120
Nickel	49.3	50	98.6	80-120
Potassium				
Selenium	47.3	50	94.6	80-120
Silicon				
Silver	48.6	50	97.2	80-120
Sodium				
Strontium				
Thallium	51.3	50	102.6	80-120
Tin				
Titanium				
Vanadium	50.8	50	101.6	80-120
Zinc	53.1	50	106.2	80-120

Associated samples MP5758: C25837-5

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.1.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5758
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 01/22/13

Metal	C25836-29 Original SDL 1:5		%DIF	QC Limits
Aluminum				
Antimony	2.60	0.00	100.0 (a)	0-10
Arsenic	36.8	43.8	19.0* (b)	0-10
Barium	1920	2310	20.4* (b)	0-10
Beryllium	6.50	7.90	21.5 (a)	0-10
Boron				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	1170	1300	11.9* (b)	0-10
Cobalt	193	206	6.6	0-10
Copper	465	514	10.5* (b)	0-10
Iron				
Lead	79.6	79.8	0.3	0-10
Magnesium				
Manganese				
Molybdenum	0.00	0.00	NC	0-10
Nickel	1100	1000	8.9	0-10
Potassium				
Selenium	8.00	11.1	38.8 (a)	0-10
Silicon				
Silver	0.00	47.3	NC	0-10
Sodium				
Strontium				
Thallium	23.3	35.2	51.1 (a)	0-10
Tin				
Titanium				
Vanadium	914	1020	11.6* (b)	0-10
Zinc	685	707	3.2	0-10

Associated samples MP5758: C25837-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

8.1.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5781
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/28/13

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.042	.00035	.0043	0.0065	<0.042

Associated samples MP5781: C25837-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5781
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/28/13

Metal	C25837-5 Original MS	Spike HGPWS1	% Rec	QC Limits
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Mercury 1.0 1.7 0.328 213.5N(a) 75-125

Associated samples MP5781: C25837-5

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Outside control limits due to high level in sample relative to spike amount.

8.2.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5781
Matrix Type: SOLID

Methods: SW846 7471A
Units: mg/kg

Prep Date: 01/28/13

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.18	0.167	108.0	80-120

Associated samples MP5781: C25837-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.2.3
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5799
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 02/01/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	1.0	.067	.042		
Antimony	0.030	.0035	.0026		
Arsenic	0.050	.0035	.0033		
Barium	1.0	.002	.0018		
Beryllium	0.025	.001	.002		
Boron	0.50	.0045	.0032		
Cadmium	0.010	.001	.00075		
Calcium	25	.036	.061		
Chromium	0.050	.0015	.0021		
Cobalt	0.025	.001	.0015		
Copper	0.050	.006	.015		
Iron	1.0	.032	.062		
Lead	0.050	.0035	.0043	0.0080	<0.050
Magnesium	25	.14	.18		
Manganese	0.075	.0005	.0063		
Molybdenum	0.10	.001	.0011		
Nickel	0.025	.001	.0006		
Potassium	50	.09	.22		
Selenium	0.050	.009	.011		
Silicon	0.50	.006	.035		
Silver	0.025	.0015	.0024		
Sodium	50	.074	.066		
Strontium	0.050	.001	.0012		
Thallium	0.050	.0025	.0027		
Tin	0.25	.001	.0035		
Titanium	0.050	.002	.0017		
Vanadium	0.050	.0015	.0015		
Zinc	0.10	.0015	.021		

Associated samples MP5799: C25837-5T

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

8.3.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5799
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/01/13

Metal	C25848-1T Original MS		Spike/lot MPIR4A % Rec		QC Limits
Aluminum					
Antimony					
Arsenic	anr				
Barium	anr				
Beryllium					
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper					
Iron					
Lead	0.0	2.6	2.5	104.0	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP5799: C25837-5T

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.3.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5799
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/01/13

Metal	C25848-1T Original MSD	SpikeLot MPIR4A	% Rec	MSD RPD	QC Limit	
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	0.0	2.6	2.5	104.0	0.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP5799: C25837-5T

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.3.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5799
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/01/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	2.5	2.5	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP5799: C25837-5T

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.3.3
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5799
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 02/01/13

Metal	C25848-1T Original SDL 1:5	%DIF	QC Limits
-------	-------------------------------	------	--------------

Aluminum			
Antimony			
Arsenic	anr		
Barium	anr		
Beryllium			
Boron			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt			
Copper			
Iron			
Lead	0.00	9.30	NC 0-10
Magnesium			
Manganese			
Molybdenum			
Nickel			
Potassium			
Selenium	anr		
Silicon			
Silver	anr		
Sodium			
Strontium			
Thallium			
Tin			
Titanium			
Vanadium			
Zinc			

Associated samples MP5799: C25837-5T

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.3.4
8

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C25837
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5805
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 02/02/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	5.0	.34	.21		
Antimony	0.15	.018	.013		
Arsenic	0.25	.018	.016		
Barium	5.0	.01	.0088		
Beryllium	0.13	.005	.01		
Boron	2.5	.023	.016		
Cadmium	0.050	.005	.0038		
Calcium	130	.18	.3		
Chromium	0.25	.0075	.01		
Cobalt	0.13	.005	.0075		
Copper	0.25	.03	.075		
Iron	5.0	.16	.31		
Lead	0.25	.018	.021	0.28	* (a)
Magnesium	130	.68	.91		
Manganese	0.38	.0025	.031		
Molybdenum	0.50	.005	.0055		
Nickel	0.13	.005	.003		
Potassium	250	.45	1.1		
Selenium	0.25	.045	.055		
Silicon	2.5	.03	.17		
Silver	0.13	.0075	.012		
Sodium	250	.37	.33		
Strontium	0.25	.005	.006		
Thallium	0.25	.013	.014		
Tin	1.3	.005	.018		
Titanium	0.25	.01	.0085		
Vanadium	0.25	.0075	.0075		
Zinc	0.50	.0075	.1		

Associated samples MP5805: C25837-5W

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) All sample results >10x method blank concentration.

8.4.1
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5805
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/02/13

Metal	C25837-5W Original MS		Spike/lot MPIR4A % Rec		QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium	anr				
Cobalt					
Copper					
Iron					
Lead	23.7	36.8	12.5	104.8	75-125
Magnesium					
Manganese					
Molybdenum					
Nickel					
Potassium					
Selenium					
Silicon					
Silver					
Sodium					
Strontium					
Thallium					
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP5805: C25837-5W

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.4.2
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5805
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/02/13

Metal	C25837-5W Original MSD		SpikeLot MPIR4A % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	23.7	36.8	12.5	104.8	0.0	20
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silicon						
Silver						
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP5805: C25837-5W

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

8.4.2
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C25837
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5805
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 02/02/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	13.2	12.5	105.6	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium				
Silicon				
Silver				
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP5805: C25837-5W

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

8.4.3
8

Technical Report for

Shell Oil Company

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

240781-95-12.04

Accutest Job Number: C26331

Sampling Date: 02/21/13

Report to:

Conestoga-Rovers & Associates
5900 Hollis Street Suite A
Emeryville, CA 94608
pschaefer@croworld.com; deisman@croworld.com

ATTN: Peter Schaefer

Total number of pages in report: **43**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.



James J. Rhudy
Lab Director

Client Service contact: Nutan Kabir 408-588-0200

Certifications: CA (08258CA) AZ (AZ0762) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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Sample Summary

Shell Oil Company

Job No: C26331

CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Project No: 240781-95-12.04

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C26331-1	02/21/13	12:14 JR	02/21/13	SO	Soil	OX-1
C26331-2	02/21/13	12:14 JR	02/21/13	SO	Soil	OX-2
C26331-3	02/21/13	12:14 JR	02/21/13	SO	Soil	OX-3

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: C26331
Account: Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA
Collected: 02/21/13

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C26331-1	OX-1					
TPH (C10-C28)		41.9	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		53.0	20	5.0	mg/kg	SW846 8015B M
Lead		13.0	1.9		mg/kg	SW846 6010B
C26331-2	OX-2					
TPH (C10-C28)		13.2	9.7	2.4	mg/kg	SW846 8015B M
TPH (> C28-C40)		54.9	19	4.9	mg/kg	SW846 8015B M
Lead		11.5	1.9		mg/kg	SW846 6010B
C26331-3	OX-3					
bis(2-Ethylhexyl)phthalate		77.1 J	330	66	ug/kg	SW846 8270C
TPH (C10-C28)		7.36 J	10	2.5	mg/kg	SW846 8015B M
TPH (> C28-C40)		14.4 J	20	5.0	mg/kg	SW846 8015B M
Lead		6.4	1.6		mg/kg	SW846 6010B

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: OX-1		Date Sampled: 02/21/13
Lab Sample ID: C26331-1		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^b	Y19141.D	2	02/21/13	MT	02/21/13	OP7532	EY899
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	1300	310	ug/kg	
95-57-8	2-Chlorophenol	ND	330	140	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	330	140	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	330	150	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	330	130	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	270	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	660	120	ug/kg	
95-48-7	2-Methylphenol	ND	330	170	ug/kg	
	3&4-Methylphenol	ND	660	160	ug/kg	
88-75-5	2-Nitrophenol	ND	330	160	ug/kg	
100-02-7	4-Nitrophenol	ND	660	79	ug/kg	
87-86-5	Pentachlorophenol	ND	660	67	ug/kg	
108-95-2	Phenol	ND	330	140	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	330	150	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	330	140	ug/kg	
83-32-9	Acenaphthene	ND	330	150	ug/kg	
208-96-8	Acenaphthylene	ND	330	160	ug/kg	
62-53-3	Aniline	ND	330	88	ug/kg	
120-12-7	Anthracene	ND	330	110	ug/kg	
103-33-3	Azobenzene	ND	330	120	ug/kg	
92-87-5	Benzidine	ND	1300	160	ug/kg	
56-55-3	Benzo(a)anthracene	ND	330	66	ug/kg	
50-32-8	Benzo(a)pyrene	ND	330	66	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	330	66	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	330	86	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	330	66	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	330	130	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	330	66	ug/kg	
100-51-6	Benzyl Alcohol	ND	330	180	ug/kg	
91-58-7	2-Chloronaphthalene	ND	330	150	ug/kg	
106-47-8	4-Chloroaniline	ND	330	99	ug/kg	
86-74-8	Carbazole	ND	330	69	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OX-1	Date Sampled:	02/21/13
Lab Sample ID:	C26331-1	Date Received:	02/21/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	330	66	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	330	150	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	330	130	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	330	130	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	330	150	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	330	150	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	330	150	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	330	140	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	330	140	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	330	150	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	660	140	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	330	82	ug/kg	
132-64-9	Dibenzofuran	ND	330	150	ug/kg	
122-39-4	Diphenylamine	ND	330	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	330	66	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	330	68	ug/kg	
84-66-2	Diethyl phthalate	ND	330	110	ug/kg	
131-11-3	Dimethyl phthalate	ND	330	140	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	660	130	ug/kg	
206-44-0	Fluoranthene	ND	330	66	ug/kg	
86-73-7	Fluorene	ND	330	140	ug/kg	
118-74-1	Hexachlorobenzene	ND	330	140	ug/kg	
87-68-3	Hexachlorobutadiene	ND	330	190	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	180	ug/kg	
67-72-1	Hexachloroethane	ND	330	140	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	330	85	ug/kg	
78-59-1	Isophorone	ND	330	140	ug/kg	
90-12-0	1-Methylnaphthalene	ND	330	150	ug/kg	
91-57-6	2-Methylnaphthalene	ND	330	160	ug/kg	
88-74-4	2-Nitroaniline	ND	330	130	ug/kg	
99-09-2	3-Nitroaniline	ND	330	99	ug/kg	
100-01-6	4-Nitroaniline	ND	330	86	ug/kg	
91-20-3	Naphthalene	ND	330	150	ug/kg	
98-95-3	Nitrobenzene	ND	330	150	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	330	130	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	330	140	ug/kg	
85-01-8	Phenanthrene	ND	330	120	ug/kg	
129-00-0	Pyrene	ND	330	66	ug/kg	
110-86-1	Pyridine	ND	660	91	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	330	150	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-1		Date Sampled: 02/21/13
Lab Sample ID: C26331-1		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		14-99%
4165-62-2	Phenol-d5	59%		18-100%
118-79-6	2,4,6-Tribromophenol	69%		25-107%
4165-60-0	Nitrobenzene-d5	54%		15-101%
321-60-8	2-Fluorobiphenyl	62%		15-104%
1718-51-0	Terphenyl-d14	110%		56-123%

- (a) All results reported on a wet weight basis.
- (b) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: OX-1	Date Sampled: 02/21/13
Lab Sample ID: C26331-1	Date Received: 02/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A	
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300944.D	1	02/22/13	JH	02/21/13	OP7533	GHH923
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.1 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	41.9	10	2.5	mg/kg	
	TPH (> C28-C40)	53.0	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	106%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-1	Date Sampled: 02/21/13
Lab Sample ID: C26331-1	Date Received: 02/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	13.0	1.9	mg/kg	1	02/21/13	02/22/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3010

(2) Prep QC Batch: MP5881

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: OX-2		Date Sampled: 02/21/13
Lab Sample ID: C26331-2		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y19139.D	1	02/21/13	MT	02/21/13	OP7532	EY899
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OX-2	Date Sampled:	02/21/13
Lab Sample ID:	C26331-2	Date Received:	02/21/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: OX-2		Date Sampled: 02/21/13
Lab Sample ID: C26331-2		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		14-99%
4165-62-2	Phenol-d5	79%		18-100%
118-79-6	2,4,6-Tribromophenol	82%		25-107%
4165-60-0	Nitrobenzene-d5	75%		15-101%
321-60-8	2-Fluorobiphenyl	83%		15-104%
1718-51-0	Terphenyl-d14	99%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

32
3

Client Sample ID: OX-2		Date Sampled: 02/21/13
Lab Sample ID: C26331-2		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300898.D	1	02/22/13	JH	02/21/13	OP7533	GHH922
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.3 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	13.2	9.7	2.4	mg/kg	
	TPH (> C28-C40)	54.9	19	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	105%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-2	Date Sampled: 02/21/13
Lab Sample ID: C26331-2	Date Received: 02/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	11.5	1.9	mg/kg	1	02/21/13	02/22/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3010

(2) Prep QC Batch: MP5881

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Report of Analysis

Client Sample ID: OX-3		Date Sampled: 02/21/13
Lab Sample ID: C26331-3		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y19140.D	1	02/21/13	MT	02/21/13	OP7532	EY899
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	660	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	70	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	71	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	77	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	64	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	660	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	87	ug/kg	
	3&4-Methylphenol	ND	330	78	ug/kg	
88-75-5	2-Nitrophenol	ND	170	78	ug/kg	
100-02-7	4-Nitrophenol	ND	330	39	ug/kg	
87-86-5	Pentachlorophenol	ND	330	33	ug/kg	
108-95-2	Phenol	ND	170	68	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	74	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	70	ug/kg	
83-32-9	Acenaphthene	ND	170	72	ug/kg	
208-96-8	Acenaphthylene	ND	170	77	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	53	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	660	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	66	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	88	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	75	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	34	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	OX-3	Date Sampled:	02/21/13
Lab Sample ID:	C26331-3	Date Received:	02/21/13
Matrix:	SO - Soil	Percent Solids:	n/a ^a
Method:	SW846 8270C SW846 3550B		
Project:	CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	66	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	66	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	75	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	74	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	73	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	71	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	71	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	74	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	69	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	72	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	56	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	77.1	330	66	ug/kg	J
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	70	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	95	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	91	ug/kg	
67-72-1	Hexachloroethane	ND	170	70	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	42	ug/kg	
78-59-1	Isophorone	ND	170	68	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	79	ug/kg	
88-74-4	2-Nitroaniline	ND	170	66	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	76	ug/kg	
98-95-3	Nitrobenzene	ND	170	77	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	57	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	45	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	74	ug/kg	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-3		Date Sampled: 02/21/13
Lab Sample ID: C26331-3		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8270C SW846 3550B		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

ABN Full List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		14-99%
4165-62-2	Phenol-d5	74%		18-100%
118-79-6	2,4,6-Tribromophenol	73%		25-107%
4165-60-0	Nitrobenzene-d5	69%		15-101%
321-60-8	2-Fluorobiphenyl	74%		15-104%
1718-51-0	Terphenyl-d14	103%		56-123%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-3		Date Sampled: 02/21/13
Lab Sample ID: C26331-3		Date Received: 02/21/13
Matrix: SO - Soil		Percent Solids: n/a ^a
Method: SW846 8015B M SW846 3545A		
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH300899.D	1	02/22/13	JH	02/21/13	OP7533	GHH922
Run #2							

Run #	Initial Weight	Final Volume
Run #1	10.0 g	1.0 ml
Run #2		

TPH Extractable

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	7.36	10	2.5	mg/kg	J
	TPH (> C28-C40)	14.4	20	5.0	mg/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
630-01-3	Hexacosane	89%		37-122%

(a) All results reported on a wet weight basis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: OX-3	Date Sampled: 02/21/13
Lab Sample ID: C26331-3	Date Received: 02/21/13
Matrix: SO - Soil	Percent Solids: n/a ^a
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA	

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.4	1.6	mg/kg	1	02/21/13	02/22/13 RS	SW846 6010B ¹	SW846 3050B ²

(1) Instrument QC Batch: MA3010

(2) Prep QC Batch: MP5881

(a) All results reported on a wet weight basis.

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: C26331 Client: SHELL OIL Project: 2703 MLK JR. WAY, Oakland, CA
 Date / Time Received: 2/21/2013 Delivery Method: Accutest Courier Airbill #s: _____

Cooler Temps (Initial/Adjusted): #1: (8/8): 0

Cooler Security

	<u>Y or N</u>			<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. Smp'l Dates/Time OK	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Cooler Temperature

	<u>Y or N</u>	
1. Temp criteria achieved:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Cooler temp verification:	<u>IR Gun</u>	
3. Cooler media:	<u>Ice (Bag)</u>	
4. No. Coolers:	<u>1</u>	

Quality Control Preservation

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Trip Blank listed on COC:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Samples preserved properly:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Sample Integrity - Documentation

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Integrity - Condition

	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Condition of sample:	<u>Intact</u>		

Sample Integrity - Instructions

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments Samples arrived on ice within 4 hours of sampling.

Accutest Laboratories
V:408.588.0200

2105 Lundy Avenue
F: 408.588.0201

San Jose, CA 95131
www.accutest.com

C26331: Chain of Custody

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GC/MS Semi-volatiles

5

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C26331**Account:** SHELLWIC Shell Oil Company**Project:** CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MB	Y19123.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:**Method:** SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Result	RL	MDL	Units	Q
65-85-0	Benzoic acid	ND	670	160	ug/kg	
95-57-8	2-Chlorophenol	ND	170	71	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	72	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	78	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	65	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	670	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	330	62	ug/kg	
95-48-7	2-Methylphenol	ND	170	88	ug/kg	
	3&4-Methylphenol	ND	330	79	ug/kg	
88-75-5	2-Nitrophenol	ND	170	79	ug/kg	
100-02-7	4-Nitrophenol	ND	330	40	ug/kg	
87-86-5	Pentachlorophenol	ND	330	34	ug/kg	
108-95-2	Phenol	ND	170	69	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	75	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	71	ug/kg	
83-32-9	Acenaphthene	ND	170	73	ug/kg	
208-96-8	Acenaphthylene	ND	170	78	ug/kg	
62-53-3	Aniline	ND	170	44	ug/kg	
120-12-7	Anthracene	ND	170	54	ug/kg	
103-33-3	Azobenzene	ND	170	59	ug/kg	
92-87-5	Benzidine	ND	670	79	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	33	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	33	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	33	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	43	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	33	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	170	67	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	170	33	ug/kg	
100-51-6	Benzyl Alcohol	ND	170	89	ug/kg	
91-58-7	2-Chloronaphthalene	ND	170	76	ug/kg	
106-47-8	4-Chloroaniline	ND	170	50	ug/kg	
86-74-8	Carbazole	ND	170	35	ug/kg	
218-01-9	Chrysene	ND	170	33	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	170	74	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	170	67	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	170	67	ug/kg	

Method Blank Summary

Job Number: C26331**Account:** SHELLWIC Shell Oil Company**Project:** CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MB	Y19123.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:**Method:** SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Result	RL	MDL	Units	Q
7005-72-3	4-Chlorophenyl phenyl ether	ND	170	76	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	75	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	72	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	170	72	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	170	75	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	330	70	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	41	ug/kg	
132-64-9	Dibenzofuran	ND	170	73	ug/kg	
122-39-4	Diphenylamine	ND	170	65	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	170	33	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	170	34	ug/kg	
84-66-2	Diethyl phthalate	ND	170	57	ug/kg	
131-11-3	Dimethyl phthalate	ND	170	69	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	330	67	ug/kg	
206-44-0	Fluoranthene	ND	170	33	ug/kg	
86-73-7	Fluorene	ND	170	72	ug/kg	
118-74-1	Hexachlorobenzene	ND	170	71	ug/kg	
87-68-3	Hexachlorobutadiene	ND	170	96	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	170	92	ug/kg	
67-72-1	Hexachloroethane	ND	170	71	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	43	ug/kg	
78-59-1	Isophorone	ND	170	69	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	76	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	80	ug/kg	
88-74-4	2-Nitroaniline	ND	170	67	ug/kg	
99-09-2	3-Nitroaniline	ND	170	50	ug/kg	
100-01-6	4-Nitroaniline	ND	170	43	ug/kg	
91-20-3	Naphthalene	ND	170	77	ug/kg	
98-95-3	Nitrobenzene	ND	170	78	ug/kg	
62-75-9	N-Nitrosodimethylamine	ND	170	66	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	170	72	ug/kg	
85-01-8	Phenanthrene	ND	170	58	ug/kg	
129-00-0	Pyrene	ND	170	33	ug/kg	
110-86-1	Pyridine	ND	330	46	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	170	75	ug/kg	

Method Blank Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MB	Y19123.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:

Method: SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	83% 14-99%
4165-62-2	Phenol-d5	79% 18-100%
118-79-6	2,4,6-Tribromophenol	67% 25-107%
4165-60-0	Nitrobenzene-d5	78% 15-101%
321-60-8	2-Fluorobiphenyl	80% 15-104%
1718-51-0	Terphenyl-d14	107% 56-123%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26331

Account: SHELLWIC Shell Oil Company

Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-BS	Y19124.D	1	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-BSD	Y19125.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:

Method: SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	1670	1210	73	1330	80	9	25-112/32
95-57-8	2-Chlorophenol	833	520	62	614	74	17	31-110/31
59-50-7	4-Chloro-3-methyl phenol	833	574	69	664	80	15	33-118/27
120-83-2	2,4-Dichlorophenol	833	560	67	645	77	14	30-115/30
105-67-9	2,4-Dimethylphenol	833	517	62	601	72	15	30-116/30
51-28-5	2,4-Dinitrophenol	833	507	61	540	65	6	11-139/30
534-52-1	4,6-Dinitro-o-cresol	833	603	72	681	82	12	30-139/24
95-48-7	2-Methylphenol	833	525	63	624	75	17	30-113/31
	3&4-Methylphenol	833	540	65	636	76	16	30-113/30
88-75-5	2-Nitrophenol	833	546	66	630	76	14	29-112/32
100-02-7	4-Nitrophenol	833	498	60	549	66	10	40-127/23
87-86-5	Pentachlorophenol	833	484	58	559	67	14	43-140/20
108-95-2	Phenol	833	536	64	628	75	16	30-112/30
95-95-4	2,4,5-Trichlorophenol	833	534	64	633	76	17	33-121/27
88-06-2	2,4,6-Trichlorophenol	833	561	67	666	80	17	31-115/29
83-32-9	Acenaphthene	833	468	56	549	66	16	34-112/28
208-96-8	Acenaphthylene	833	502	60	603	72	18	33-115/28
62-53-3	Aniline	833	453	54	537	64	17	30-93/27
120-12-7	Anthracene	833	585	70	702	84	18	59-111/21
103-33-3	Azobenzene	833	546	66	655	79	18	39-114/22
92-87-5	Benzidine	1670	623	37	674	40	8	10-96/39
56-55-3	Benzo(a)anthracene	833	610	73	732	88	18	72-122/22
50-32-8	Benzo(a)pyrene	833	640	77	776	93	19	71-120/22
205-99-2	Benzo(b)fluoranthene	833	631	76	756	91	18	67-123/24
191-24-2	Benzo(g,h,i)perylene	833	580	70	726	87	22	57-134/24
207-08-9	Benzo(k)fluoranthene	833	647	78	800	96	21	74-126/25
101-55-3	4-Bromophenyl phenyl ether	833	524	63	633	76	19	45-110/22
85-68-7	Butyl benzyl phthalate	833	584	70	703	84	18	68-129/20
100-51-6	Benzyl Alcohol	833	541	65	639	77	17	25-116/31
91-58-7	2-Chloronaphthalene	833	518	62	615	74	17	33-110/30
106-47-8	4-Chloroaniline	833	415	50	472	57	13	27-92/25
86-74-8	Carbazole	833	633	76	773	93	20	64-125/21
218-01-9	Chrysene	833	588	71* a	714	86	19	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	833	522	63	611	73	16	31-112/31
111-44-4	bis(2-Chloroethyl)ether	833	504	60	598	72	17	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	833	481	58	567	68	16	30-111/32

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-BS	Y19124.D	1	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-BSD	Y19125.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples: **Method:** SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	833	545	65	651	78	18	40-111/25
95-50-1	1,2-Dichlorobenzene	833	478	57	553	66	15	28-102/32
541-73-1	1,3-Dichlorobenzene	833	460	55	533	64	15	26-99/32
106-46-7	1,4-Dichlorobenzene	833	465	56	541	65	15	27-100/32
121-14-2	2,4-Dinitrotoluene	833	615	74	730	88	17	55-115/21
606-20-2	2,6-Dinitrotoluene	833	578	69	701	84	19	45-115/21
91-94-1	3,3'-Dichlorobenzidine	1670	1350	81	1620	97	18	53-115/24
53-70-3	Dibenzo(a,h)anthracene	833	611	73	747	90	20	59-132/23
132-64-9	Dibenzofuran	833	546	66	645	77	17	37-113/26
122-39-4	Diphenylamine	833	579	69	699	84	19	51-112/24
84-74-2	Di-n-butyl phthalate	833	632	76	772	93	20	67-114/22
117-84-0	Di-n-octyl phthalate	833	600	72	706	85	16	62-138/24
84-66-2	Diethyl phthalate	833	567	68	685	82	19	52-111/22
131-11-3	Dimethyl phthalate	833	593	71	719	86	19	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	833	518	62* a	628	75	19	66-130/20
206-44-0	Fluoranthene	833	611	73	740	89	19	69-117/21
86-73-7	Fluorene	833	550	66	654	78	17	42-112/24
118-74-1	Hexachlorobenzene	833	502	60	598	72	17	50-110/24
87-68-3	Hexachlorobutadiene	833	437	52	495	59	12	30-116/33
77-47-4	Hexachlorocyclopentadiene	833	470	56	517	62	10	10-108/33
67-72-1	Hexachloroethane	833	468	56	544	65	15	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	833	545	65	714	86	27* a	60-131/21
78-59-1	Isophorone	833	545	65	641	77	16	32-108/30
90-12-0	1-Methylnaphthalene	833	526	63	608	73	14	33-110/30
91-57-6	2-Methylnaphthalene	833	549	66	628	75	13	33-107/30
88-74-4	2-Nitroaniline	833	555	67	654	78	16	39-120/24
99-09-2	3-Nitroaniline	833	515	62	637	76	21	41-107/24
100-01-6	4-Nitroaniline	833	558	67	703	84	23	48-132/24
91-20-3	Naphthalene	833	455	55	524	63	14	32-121/31
98-95-3	Nitrobenzene	833	518	62	609	73	16	30-109/31
62-75-9	N-Nitrosodimethylamine	833	439	53	527	63	18	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	833	527	63	621	75	16	29-111/32
85-01-8	Phenanthrene	833	561	67	669	80	18	57-113/21
129-00-0	Pyrene	833	629	75	745	89	17	63-120/20
110-86-1	Pyridine	833	309	37	369	44	18	16-75/34
120-82-1	1,2,4-Trichlorobenzene	833	521	63	600	72	14	29-104/32

* = Outside of Control Limits.

5.2.1
5

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-BS	Y19124.D	1	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-BSD	Y19125.D	1	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:

Method: SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	70%	82%	14-99%
4165-62-2	Phenol-d5	69%	81%	18-100%
118-79-6	2,4,6-Tribromophenol	68%	76%	25-107%
4165-60-0	Nitrobenzene-d5	67%	79%	15-101%
321-60-8	2-Fluorobiphenyl	70%	81%	15-104%
1718-51-0	Terphenyl-d14	81%	95%	56-123%

(a) Outside laboratory control limits; but within marginal exceedence criteria.

* = Outside of Control Limits.

5.2.1
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MS ^a	Y19126.D	2	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-MSD ^a	Y19127.D	2	02/21/13	MT	02/21/13	OP7532	EY899
C26241-9 ^a	Y19128.D	2	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:

Method: SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	C26241-9 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
65-85-0	Benzoic acid	ND	1670	ND	0* b	ND	0* b	nc	25-112/32
95-57-8	2-Chlorophenol	ND	833	338	41	487	59	36* b	31-110/31
59-50-7	4-Chloro-3-methyl phenol	ND	833	547	66	591	71	8	33-118/27
120-83-2	2,4-Dichlorophenol	ND	833	432	52	538	65	22	30-115/30
105-67-9	2,4-Dimethylphenol	ND	833	ND	0* b	148	18* b	200* b	30-116/30
51-28-5	2,4-Dinitrophenol	ND	833	ND	0* b	ND	0* b	nc	11-139/30
534-52-1	4,6-Dinitro-o-cresol	ND	833	ND	0* b	ND	0* b	nc	30-139/24
95-48-7	2-Methylphenol	ND	833	309	37	440	53	35* b	30-113/31
	3&4-Methylphenol	ND	833	392	47	501	60	24	30-113/30
88-75-5	2-Nitrophenol	ND	833	267	32	448	54	51* b	29-112/32
100-02-7	4-Nitrophenol	ND	833	297	36* b	314	38* b	6	40-127/23
87-86-5	Pentachlorophenol	ND	833	73.7	9* b	118	14* b	46* b	43-140/20
108-95-2	Phenol	ND	833	414	50	523	63	23	30-112/30
95-95-4	2,4,5-Trichlorophenol	ND	833	453	54	493	59	8	33-121/27
88-06-2	2,4,6-Trichlorophenol	ND	833	430	52	508	61	17	31-115/29
83-32-9	Acenaphthene	ND	833	268	32* b	444	53	49* b	34-112/28
208-96-8	Acenaphthylene	ND	833	306	37	508	61	50* b	33-115/28
62-53-3	Aniline	ND	833	200	24* b	327	39	48* b	30-93/27
120-12-7	Anthracene	ND	833	402	48* b	601	72	40* b	59-111/21
103-33-3	Azobenzene	ND	833	364	44	552	66	41* b	39-114/22
92-87-5	Benzidine	ND	1670	ND	0* b	ND	0* b	nc	10-96/39
56-55-3	Benzo(a)anthracene	ND	833	418	50* b	602	72	36* b	72-122/22
50-32-8	Benzo(a)pyrene	ND	833	442	53* b	625	75	34* b	71-120/22
205-99-2	Benzo(b)fluoranthene	ND	833	435	52* b	625	75	36* b	67-123/24
191-24-2	Benzo(g,h,i)perylene	ND	833	411	49* b	573	69	33* b	57-134/24
207-08-9	Benzo(k)fluoranthene	ND	833	441	53* b	635	76	36* b	74-126/25
101-55-3	4-Bromophenyl phenyl ether	ND	833	347	42* b	529	64	42* b	45-110/22
85-68-7	Butyl benzyl phthalate	ND	833	479	57* b	673	81	34* b	68-129/20
100-51-6	Benzyl Alcohol	ND	833	411	49	525	63	24	25-116/31
91-58-7	2-Chloronaphthalene	ND	833	301	36	518	62	53* b	33-110/30
106-47-8	4-Chloroaniline	ND	833	321	39	481	58	40* b	27-92/25
86-74-8	Carbazole	ND	833	493	59* b	685	82	33* b	64-125/21
218-01-9	Chrysene	ND	833	413	50* b	595	72* b	36* b	73-125/22
111-91-1	bis(2-Chloroethoxy)methane	ND	833	286	34	491	59	53* b	31-112/31
111-44-4	bis(2-Chloroethyl)ether	ND	833	247	30	465	56	61* b	30-106/31
108-60-1	bis(2-Chloroisopropyl)ether	ND	833	236	28* b	433	52	59* b	30-111/32

* = Outside of Control Limits.

5.3.1
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MS ^a	Y19126.D	2	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-MSD ^a	Y19127.D	2	02/21/13	MT	02/21/13	OP7532	EY899
C26241-9 ^a	Y19128.D	2	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples:

Method: SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Compound	C26241-9 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
7005-72-3	4-Chlorophenyl phenyl ether	ND		833	349	42	553	66	45* b	40-111/25
95-50-1	1,2-Dichlorobenzene	ND		833	215	26* b	420	51	65* b	28-102/32
541-73-1	1,3-Dichlorobenzene	ND		833	208	25* b	402	48	64* b	26-99/32
106-46-7	1,4-Dichlorobenzene	ND		833	207	25* b	398	48	63* b	27-100/32
121-14-2	2,4-Dinitrotoluene	ND		833	399	48* b	571	69	35* b	55-115/21
606-20-2	2,6-Dinitrotoluene	ND		833	380	46	574	69	41* b	45-115/21
91-94-1	3,3'-Dichlorobenzidine	ND		1670	461	28* b	624	38* b	30* b	53-115/24
53-70-3	Dibenzo(a,h)anthracene	ND		833	416	50* b	579	70	33* b	59-132/23
132-64-9	Dibenzofuran	ND		833	339	41	545	66	47* b	37-113/26
122-39-4	Diphenylamine	ND		833	339	41* b	521	63	42* b	51-112/24
84-74-2	Di-n-butyl phthalate	ND		833	478	57* b	667	80	33* b	67-114/22
117-84-0	Di-n-octyl phthalate	ND		833	463	56* b	700	84	41* b	62-138/24
84-66-2	Diethyl phthalate	ND		833	443	53	585	70	28* b	52-111/22
131-11-3	Dimethyl phthalate	ND		833	466	56	615	74	28* b	42-113/23
117-81-7	bis(2-Ethylhexyl)phthalate	ND		833	409	49* b	604	73	38* b	66-130/20
206-44-0	Fluoranthene	ND		833	421	51* b	618	74	38* b	69-117/21
86-73-7	Fluorene	ND		833	352	42	555	67	45* b	42-112/24
118-74-1	Hexachlorobenzene	ND		833	332	40* b	503	60	41* b	50-110/24
87-68-3	Hexachlorobutadiene	ND		833	229	27* b	417	50	58* b	30-116/33
77-47-4	Hexachlorocyclopentadiene	ND		833	191	23	316	38	49* b	10-108/33
67-72-1	Hexachloroethane	ND		833	208	25	390	47	61* b	25-101/34
193-39-5	Indeno(1,2,3-cd)pyrene	ND		833	385	46* b	534	64	32* b	60-131/21
78-59-1	Isophorone	ND		833	395	47	548	66	32* b	32-108/30
90-12-0	1-Methylnaphthalene	ND		833	306	37	535	64	54* b	33-110/30
91-57-6	2-Methylnaphthalene	ND		833	308	37	538	65	54* b	33-107/30
88-74-4	2-Nitroaniline	ND		833	406	49	533	64	27* b	39-120/24
99-09-2	3-Nitroaniline	ND		833	460	55	572	69	22	41-107/24
100-01-6	4-Nitroaniline	ND		833	499	60	567	68	13	48-132/24
91-20-3	Naphthalene	ND		833	247	30* b	447	54	58* b	32-121/31
98-95-3	Nitrobenzene	ND		833	263	32	472	57	57* b	30-109/31
62-75-9	N-Nitrosodimethylamine	ND		833	285	34	404	49	35* b	27-101/32
621-64-7	N-Nitroso-di-n-propylamine	ND		833	304	36	483	58	45* b	29-111/32
85-01-8	Phenanthrene	ND		833	397	48* b	579	70	37* b	57-113/21
129-00-0	Pyrene	ND		833	470	56* b	682	82	37* b	63-120/20
110-86-1	Pyridine	ND		833	145	17	221	27	42* b	16-75/34
120-82-1	1,2,4-Trichlorobenzene	ND		833	272	33	502	60	59* b	29-104/32

* = Outside of Control Limits.

5.3.1
 5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7532-MS ^a	Y19126.D	2	02/21/13	MT	02/21/13	OP7532	EY899
OP7532-MSD ^a	Y19127.D	2	02/21/13	MT	02/21/13	OP7532	EY899
C26241-9 ^a	Y19128.D	2	02/21/13	MT	02/21/13	OP7532	EY899

The QC reported here applies to the following samples: **Method:** SW846 8270C

C26331-1, C26331-2, C26331-3

CAS No.	Surrogate Recoveries	MS	MSD	C26241-9	Limits
367-12-4	2-Fluorophenol	30%	59%	41%	14-99%
4165-62-2	Phenol-d5	36%	65%	43%	18-100%
118-79-6	2,4,6-Tribromophenol	31%	55%	28%	25-107%
4165-60-0	Nitrobenzene-d5	28%	66%	41%	15-101%
321-60-8	2-Fluorobiphenyl	33%	74%	46%	15-104%
1718-51-0	Terphenyl-d14	49%* ^b	90%	59%	56-123%

(a) Dilution required due to matrix interference (dark and viscous extract; high concentration of non-target hydrocarbons).

(b) Outside laboratory control limits.

* = Outside of Control Limits.

5.3.1
5

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7533-MB	HH300859.D 1		02/21/13	JH	02/21/13	OP7533	GHH922

The QC reported here applies to the following samples:

Method: SW846 8015B M

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	10	2.5	mg/kg	
	TPH (> C28-C40)	ND	20	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
630-01-3	Hexacosane	58% 37-122%

Blank Spike/Blank Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7533-BS	HH300860.D 1		02/21/13	JH	02/21/13	OP7533	GHH922
OP7533-BSD	HH300861.D 1		02/21/13	JH	02/21/13	OP7533	GHH922

The QC reported here applies to the following samples: Method: SW846 8015B M

C26331-1, C26331-2, C26331-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	100	83.1	83	83.0	83	0	39-102/29
	TPH (> C28-C40)	100	81.5	82	83.8	84	3	42-111/26

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
630-01-3	Hexacosane	83%	82%	37-122%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: C26331
Account: SHELLWIC Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP7533-MS	HH300900.D5		02/22/13	JH	02/21/13	OP7533	GHH922
OP7533-MSD	HH300901.D5		02/22/13	JH	02/21/13	OP7533	GHH922
C26320-4	HH300896.D2		02/22/13	JH	02/21/13	OP7533	GHH922

The QC reported here applies to the following samples:

Method: SW846 8015B M

C26331-1, C26331-2, C26331-3

CAS No.	Compound	C26320-4 mg/kg	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	34.6	105	251	206*	257	212*	2	39-102/29
	TPH (> C28-C40)	176	105	853	645*	871	661*	2	42-111/26

CAS No.	Surrogate Recoveries	MS	MSD	C26320-4	Limits
630-01-3	Hexacosane	91%	89%	42%	37-122%

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C26331
Account: SHELLWIC - Shell Oil Company
Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5881
Matrix Type: SOLID

Methods: SW846 6010B
Units: mg/kg

Prep Date: 02/21/13

Metal	RL	IDL	MDL	MB raw	final
Aluminum	20	1.3	2		
Antimony	2.0	.07	.087		
Arsenic	2.0	.07	.07		
Barium	20	.04	.035		
Beryllium	1.0	.02	.012		
Boron	10	.09	.2		
Cadmium	1.0	.02	.015		
Calcium	500	.71	7.6		
Chromium	1.0	.03	.054		
Cobalt	1.0	.02	.022		
Copper	2.5	.12	.19		
Iron	20	.64	1.6		
Lead	2.0	.07	.054	-0.15	<2.0
Magnesium	500	2.7	1.5		
Manganese	1.5	.01	.054		
Molybdenum	2.0	.02	.024		
Nickel	1.0	.02	.024		
Potassium	1000	1.8	1.3		
Selenium	2.0	.18	.23		
Silicon		.12			
Silver	1.0	.03	.044		
Sodium	1000	1.5	4.8		
Strontium	1.0	.02	.017		
Thallium	2.0	.05	.073		
Tin	50	.02	.41		
Titanium	1.0	.04	.079		
Vanadium	1.0	.03	.025		
Zinc	2.0	.03	.098		

Associated samples MP5881: C26331-1, C26331-2, C26331-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26331
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5881
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 02/21/13

Metal	C26320-11 Original MS	Spike/lot MPIR4A	% Rec	QC Limits	
Aluminum					
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron					
Lead	8.4	50.3	44.6	93.9	75-125
Magnesium					
Manganese					
Molybdenum	anr				
Nickel	anr				
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium	anr				
Zinc	anr				

Associated samples MP5881: C26331-1, C26331-2, C26331-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
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MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C26331
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5881
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 02/21/13

Metal	C26320-11 Original MSD	SpikeLot MPIR4A	% Rec	MSD RPD	QC Limit	
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	8.4	52.0	46.2	94.5	3.3	20
Magnesium						
Manganese						
Molybdenum	anr					
Nickel	anr					
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP5881: C26331-1, C26331-2, C26331-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

7.1.2
7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C26331
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5881
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: mg/kg

Prep Date: 02/21/13

Metal	BSP Result	Spikelot MPIR4A	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron				
Lead	47.8	50	95.6	80-120
Magnesium				
Manganese				
Molybdenum	anr			
Nickel	anr			
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP5881: C26331-1, C26331-2, C26331-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.3
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SERIAL DILUTION RESULTS SUMMARY

Login Number: C26331
 Account: SHELLWIC - Shell Oil Company
 Project: CRACAE:T0600101876-INC#97093397, 2703 MLK JR. Way, Oakland, CA

QC Batch ID: MP5881
 Matrix Type: SOLID

Methods: SW846 6010B
 Units: ug/l

Prep Date: 02/21/13

Metal	C26320-11 Original SDL 1:5	%DIF	QC Limits
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Aluminum			
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium			
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron			
Lead	93.1	88.2	5.3 0-10
Magnesium			
Manganese			
Molybdenum	anr		
Nickel	anr		
Potassium			
Selenium	anr		
Silicon			
Silver	anr		
Sodium			
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

Associated samples MP5881: C26331-1, C26331-2, C26331-3

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

7.1.4
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