

**REPORT FOR
SOIL AND GROUNDWATER SAMPLING AND ANALYSIS DURING
UNDERGROUND STORAGE TANK CLOSURE**

**4321 Salem Street
Emeryville, California**

**Prepared for
Mr. Tom Evernden
Balch Petroleum**

**Prepared by
Envirocom**

**March 11, 2016
Project 16-018.03**



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Project 16-018.03**

**Mr. Tom Evernden
Balch Petroleum
930 Ames Avenue
Milpitas, CA 95035**

**Subject: Report For Soil & Groundwater Sampling and Analysis During
Underground Storage Tank Closure at 4321 Salem Street,
Emeryville CA**

Dear Mr. Evernden:

Envirocom is pleased to present this environmental sampling and analysis report for the subject property, hereafter, referred to as Site. The report documents the field observations during tank closure, and includes laboratory analytical results for 2 soil samples collected from the exposed side walls of a 1,500-gallon heating oil underground storage tank (UST) excavation, and one groundwater sample collected from the tank excavation for laboratory analysis.

Balch Petroleum Contractors and Builders, Inc. (Balch) of Milpitas, California performed the construction activities related to the tank removal closure. Envirocom performed the environmental sampling and analysis. Envirocom submitted the samples to Curtis & Tompkins, Ltd. (C&T), Berkeley, for chemical analysis.

C&T is an independent State-certified analytical laboratory # 2896.

P.O. Box 28310
San Jose, CA 95159
Phone (408) 894-9062
Fax (408) 894-9063

FIELD ACTIVITIES

Soil And Groundwater Sampling

On February 25, 2016, Envirocom visited the Site and met with Balch representatives. Envirocom observed the tank excavation to be approximately 8' x 12' with shoring and bracing inside the excavation. Balch informed Envirocom that one 1,500-gallon single wall steel tank remains at the bottom of the excavation approximately 10 feet below ground surface (bgs). Balch informed Envirocom that the tank was installed sometime in the 1930's and was filled with cement slurry in the past. The soil excavated from the tank pit was stockpiled near the tank excavation. Pictures of the tank excavation are presented in Appendix A.

At the time of Envirocom's visit, the tank was submerged under groundwater. Groundwater level was approximately 8.5' bgs. On the same day Balch retained the services of Integrated Waste Management (IWM) to use a truck mounted vacuum truck to dewater the tank excavation. Shortly after dewatering the excavation Mr. Scott McMillan from Alameda County Fire Department (ACFD) and later Mr. Kevin Hom of the Alameda County Health Agency (ACHA) arrived at the Site. The tank had the filler pipe cut off and cement was observed inside the pipe on top of the tank. The delivery pipe was cut and capped. A small hole was observed on the top back of the tank, and what appeared to be blackish oil was emitting from the hole. Balch removed the cap from the delivery piping directly on top of the tank and black oil was observed inside the piping. IWM removed approximately 1,400 gallons of water from the excavation. The groundwater waste manifest is presented in Appendix B.

With the direction of Mr. Hom, Envirocom collected one soil sample (T1-8) from the Northern sidewall of the excavation at approximately 8'- 8.5' bgs. Envirocom collected another sample from the Western sidewall of the excavation at approximately the same depth as the previous sample. All other excavation sidewalls were covered with shoring plates. No discoloration along with hydrocarbon odor was detected in the soil samples. Analytical results for soil samples are presented in Table I. Sample locations are presented in Figure 1.

After groundwater recharge in the tank excavation, Mr. Hom directed Envirocom to collect groundwater samples for laboratory analysis. Hydrocarbon Odor was detected in the groundwater. Sheen was observed on the water. Analytical results for groundwater sample (W1) is presented in Table II.

After soil and groundwater samples were collected, Balch backfilled the tank excavation with ¾" drain rock to above the water level, placed geofabric on the rock, and compacted remainder of the excavation with native soil. On February 26, 2016, Balch requested Envirocom to collect soil samples from the remaining soil stockpile for proper disposal. On the same day, Envirocom's representative collected soil sample ST1A, B, C, and D from soil stockpile at the Site for 4-point composite laboratory analysis. Analytical results are also presented in Table I.

The groundwater was collected in laboratory provided amber jars with no preservative and vials containing HCL preservative. The soil samples from the tank excavation were collected using a 6-inch long stainless steel liner using a slide hammer. After collection, the liners were sealed with Teflon[®] tape and plastic caps. All samples were labeled, and placed on ice and delivered to C&T with chain-of-custody documentation.

CHEMICAL ANALYSIS

The water and soil samples collected from the excavation were analyzed for total petroleum hydrocarbons as diesel (TPHD) and motor oil using EPA modified method 8015. They were also analyzed for total petroleum hydrocarbons as gasoline (TPHG), and full scan volatile organic compounds (VOCs) using EPA method 8260B. In addition, the samples were analyzed for PCBs using EPA 8082A, SVOCs using EPA 8270, and 5 Metals using EPA 6010 (soil samples only).

ANALYTICAL RESULTS

Summaries of the analytical results are presented in Table I and II. Certified analytical results and chain-of-custody documentation is presented in Appendix C.

Please contact me if you have any questions.

**Sincerely,
Envirocom**



**Mitch Hajiaghai, REA II, CPESC, QSD
Principal**

Attachments: Table I - Analytical Result For Soil Samples
Table II - Analytical Result For Groundwater Sample
Figure 1 - Sample Locations
Appendix A - Tank Excavation Photographs
Appendix B - Groundwater Waste Manifest
Appendix C - Certified Analytical Results and Chain of Custody

cc: Mr. Kevin Horn (1 Electronic Copy)

TABLE I
ANALYTICAL RESULTS FOR SOIL SAMPLES

Sample ID	T1-8	T2-8	ST1A, B, C, D (Composite)
Sample Depth	≈ 8'	≈ 8'	N/A ¹
Sample Date	2-25-16	2-25-16	2-26-16
Analytes			
TPHD ² in mg/kg	ND ¹⁰	ND	5.8Y
Motor Oil in mg/kg	ND	ND	NA
TPHG ³ in ug/kg	ND	ND	NA ⁹
VOC / Carbon Disulfide in ug/kg	11	ND	NA
VOCs ⁶ in ug/kg	ND	ND	NA
SVOCs ⁷ in mg/kg	ND	ND	NA
5 Metals ¹¹ in mg/kg	0.73, 35, 2.9, 21, 33	0.66, 36, 2.3, 19, 30	NA
PCB ⁸ in ug/kg	ND	ND	NA

Note: Y= Sample exhibits chromatographic pattern which does not resemble standard

- 1 N/A = Not Applicable
- 2 TPHD = Total Petroleum Hydrocarbons as Diesel
- 3 TPHG = Total Petroleum Hydrocarbons as Gasoline
- 4 BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
- 5 FOs = Fuel Oxygenates
- 6 VOCs = Volatile Organic Compounds
- 7 SVOCs = Semi-Volatile Organic Compounds
- 8 PCB = Polychlorinated Biphenyl
- 9 NA = Not Analyzed
- 10 ND = Not Detected
- 11 5 Metals = Cadmium, Chromium, Lead, Nickel, Zinc

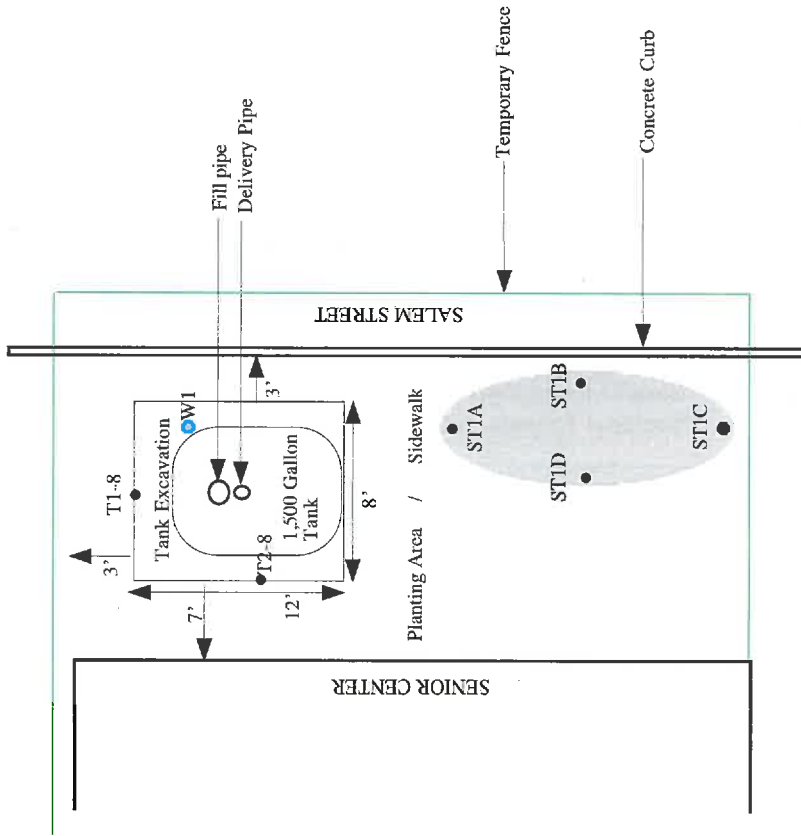
**TABLE II
ANALYTICAL RESULTS FOR WATER SAMPLE**

Sample ID	W1
Sample Depth	≈ 10'
Sample Date	2-25-16
Unit	ug/L
TPHD	3,700
Motor Oil	1,800
TPHG	1,200Y
VOCs ¹²	2.8, 0.9, 1.2, 0.9, 4.5, 2.5, 1.7, 0.7, 3.7, 12, 0.7, 0.7, 0.7, 17
SVOC / 2-Methylnaphthalene	42
SVOCs	ND
5 Metals	NA
PCB	ND

12 VOCs = VOCs detected were Chloroform, Benzene, Toluene, Ethylbenzene, M,P-Xylenes, O-Xylene, Isopropylbenzene, propylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, Sec-Butylbenzene, Para-Isopropyl Toluene, n-Butyl benzene, and Naphthalene respectively

LEGEND

- Soil Sample Location and Designation
- Water Sample Location and Designation



Drawing Not To Scale

Tank Excavation And Sample Location

Emeryville Senior Center

4321 Salem Street • Emeryville • California

FIGURE

1

March 11, 2016
Project 16-018.03



ENVIROCOM

P.O. Box 28310
San Jose • California • 95159
Phone [408] 894-9062 • Fax [408] 894-9063

Appendix A
SITE PHOTOGRAPHS

Senior Center/Veterans Memorial



Tank Excavation



AREA OF BROKEN DELIVERY PIPING



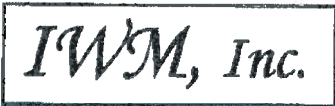
EXPOSED UST AFTER DEWATERING



SOIL STOCKPILE



Appendix B
GROUNDWATER WASTE MANIFEST



INTEGRATED WASTESTREAM MANAGEMENT, INC.
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131
PHONE: 408.433.1990 FAX: 408.433.9521

FEB 26 2015

CERTIFICATE OF DISPOSAL

Generator Name: City of Emeryville
Address: 1333 Park Avenue
Emeryville, CA
Contact: Tom Balch
Phone: 408-942-8686

Facility Name: Emeryville Senior Center
Address: 4321 Salem Street
Emeryville
Facility Contact: Tom Balch
Phone: 408-942-8686

IWM Job #:	<u>Bella 778</u>
Description of Waste:	<u>1400 Gallons of</u> <u>Non-Hazardous</u> <u>Water</u>
Removal Date:	<u>2-25-16</u>
Ticket #:	<u>SP02252016-MISC</u>

Transporter Information

Name: IWM, Inc.
Address: 1945 Concourse Drive
San Jose, CA 95131
Phone: (408) 433-1990

Disposal Facility Information

Name: Seaport Refining & Environmental
Address: 700 Seaport Blvd
Redwood City, CA 94063
Phone: (650) 364-1024

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon *William T. DeLon*
Authorized Representative (Print Name and Signature)

2-25-16
Date

Appendix C

**CERTIFIED ANALYTICAL RESULTS AND CHAIN
OF CUSTODY**



ct Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 274543
ANALYTICAL REPORT

Envirocom
800 Charcot Avenue
San Jose, CA 95131

Project : 16-018.03
Location : 4321 Salem St., Emeryville
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
T1-8	274543-001
T2-8	274543-002
W1	274543-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 03/10/2016

Will Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 274543
Client: Envirocom
Project: 16-018.03
Location: 4321 Salem St., Emeryville
Request Date: 02/25/16
Samples Received: 02/25/16

This data package contains sample and QC results for two soil samples and one water sample, requested for the above referenced project on 02/25/16. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B) Water:

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B) Soil:

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:

Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 02/29/16 07:48; this analyte met minimum response criteria, and affected data was qualified with "b". No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:

High recoveries were observed for toluene in the MS/MSD for batch 232475; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C) Water:

W1 (lab # 274543-003) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

Semivolatile Organics by GC/MS (EPA 8270C) Soil:

Low recoveries were observed for 1,4-dichlorobenzene and 1,2,4-trichlorobenzene in the MS/MSD for batch 232536; the parent sample was not a project sample, the LCSs were within limits, and the associated RPDs were within limits. No other analytical problems were encountered.

PCBs (EPA 8082) Water:

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 274543
Client: Envirocom
Project: 16-018.03
Location: 4321 Salem St., Emeryville
Request Date: 02/25/16
Samples Received: 02/25/16

PCBs (EPA 8082) Soil:

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. No analytical problems were encountered.

Metals (EPA 6010B):

Low recoveries were observed for lead in the MS/MSD for batch 232640; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. Chromium and nickel were detected above the RL in the method blank for batch 232640; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.



274543

EMVIROCOM

CHAIN OF CUSTODY

Project Name: Emeryville Senior Center Project No: 16-018.03 Date: 2-26-15

Project Location 4321 Salem St., Emeryville Client: Balch Petroleum Sampler: M. Hajjaj

Sample ID	Date Sampled	Sampling Time	Matrix	N° of Containers	Analyte Requested							Turnaround Time
					TPHG 82608	TPHD 8015	VOC 815 826AB	Motor Oil 8015	5 Metals 6010	PCBs 8082A	SVOC 8270	
1 T1-8	2-25-16	9:45	Soil	1	X	X	X	X	X	X	X	Normal
2 T2-8	↓	9:50	Soil	1	X	X	X	X	X	X	X	Normal
3 W1	↓	10:05	Water	13	X	X	X	X	X	X	X	Normal
												Normal
												Normal
												Normal
												Normal
												Normal

NOTES:

Relinquished by *M. Hajjaj* Date 2/25/16 Time 10:53
 Received by *Pat Tomphey* Date 2/25/16 Time 10:53

800 Charcot Avenue, Suite 114 • San Jose • California • 95131
 Phone (408) 894-9062 • Fax (408) 894-9063

COOLER RECEIPT CHECKLIST



Login # 27543 Date Received 2/25/16 Number of coolers 1
 Client ENVNO.com Project 16-018.03

Date Opened 2/25 By (print) CUN (sign) [Signature]
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO

Shipping info _____

2A. Were custody seals present? YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO

6. Indicate the packing in cooler: (if other, describe) _____

- Bubble Wrap Foam blocks Bags None
- Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Temperature blank(s) included? Thermometer# _____ IR Gun# _____

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are there any missing / extra samples? _____ YES NO

11. Are samples in the appropriate containers for indicated tests? _____ YES NO

12. Are sample labels present, in good condition and complete? _____ YES NO

13. Do the sample labels agree with custody papers? _____ YES NO

14. Was sufficient amount of sample sent for tests requested? _____ YES NO

15. Are the samples appropriately preserved? _____ YES NO N/A

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? (pH strip lot# H412308) _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

21. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

11. Received an ~~HNO₃~~ HNO₂ preserved poly for metals analysis but no analysis indicated for container

Curtis & Tompkins Sample Preservation for 274543

Sample	pH: <2	>9	>12	Other
-003a	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
b	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
d	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
e	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
f	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
g	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
h	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
i	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
j	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
k	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Analyst: CJN
Date: 2/25/16



Detections Summary for 274543

Results for any subcontracted analyses are not included in this summary.

Client : Envirocom
 Project : 16-018.03
 Location : 4321 Salem St., Emeryville

Client Sample ID : T1-8 Laboratory Sample ID : 274543-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Carbon Disulfide	11		4.6	ug/Kg	As Recd	0.9276	EPA 8260B	EPA 5030B
Cadmium	0.73		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	2.9		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	21		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	33		0.94	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : T2-8 Laboratory Sample ID : 274543-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Cadmium	0.66		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	36		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	2.3		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Nickel	19		0.24	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	30		0.94	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : W1 Laboratory Sample ID : 274543-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	3,700		52	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	1,800		310	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Gasoline C7-C12	1,200	Y	50	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chloroform	2.8		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Benzene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Toluene	1.2		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Ethylbenzene	0.9		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
m,p-Xylenes	4.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
o-Xylene	2.5		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Isopropylbenzene	1.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Propylbenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,3,5-Trimethylbenzene	3.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
1,2,4-Trimethylbenzene	12		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
sec-Butylbenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
para-Isopropyl Toluene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
n-Butylbenzene	0.7		0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Naphthalene	17		2.0	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Methylnaphthalene	42		20	ug/L	As Recd	2.000	EPA 8270C	EPA 3520C

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Volatile Hydrocarbons

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	232476
Units:	mg/Kg	Sampled:	02/25/16
Basis:	as received	Received:	02/25/16
Diln Fac:	1.000	Analyzed:	02/26/16

Field ID: T1-8 Lab ID: 274543-001
 Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	109	78-138

Field ID: T2-8 Lab ID: 274543-002
 Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	78-138

Type: BLANK Lab ID: QC824990

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-138

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC824991	Batch#:	232476
Matrix:	Soil	Analyzed:	02/26/16
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9526	95	80-121

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	78-138

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8015B
Field ID:	T1-8	Diln Fac:	1.000
MSS Lab ID:	274543-001	Batch#:	232476
Matrix:	Soil	Sampled:	02/25/16
Units:	mg/Kg	Received:	02/25/16
Basis:	as received	Analyzed:	02/26/16

Type: MS Lab ID: QC824992

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.06981	10.10	8.535	84	50-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	78-138

Type: MSD Lab ID: QC824993

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.42	8.340	80	50-120	5	31

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	112	78-138

RPD= Relative Percent Difference

Total Extractable Hydrocarbons

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8015B
Field ID:	W1	Batch#:	232438
Matrix:	Water	Sampled:	02/25/16
Units:	ug/L	Received:	02/25/16
Diln Fac:	1.000		

Type: SAMPLE Prepared: 02/26/16
 Lab ID: 274543-003 Analyzed: 02/29/16

Analyte	Result	RL
Diesel C10-C24	3,700	52
Motor Oil C24-C36	1,800	310

Surrogate	%REC	Limits
o-Terphenyl	102	67-136

Type: BLANK Prepared: 02/25/16
 Lab ID: QC824832 Analyzed: 02/26/16

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	105	67-136

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC824833	Batch#:	232438
Matrix:	Water	Prepared:	02/25/16
Units:	ug/L	Analyzed:	02/26/16

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,145	86	60-121

Surrogate	%REC	Limits
o-Terphenyl	113	67-136

Batch QC Report
Total Extractable Hydrocarbons

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	232438
MSS Lab ID:	274513-003	Sampled:	02/23/16
Matrix:	Water	Received:	02/24/16
Units:	ug/L	Prepared:	02/25/16
Diln Fac:	1.000	Analyzed:	02/26/16

Type: MS Lab ID: QC824834

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2,578	2,500	5,133	102	55-122

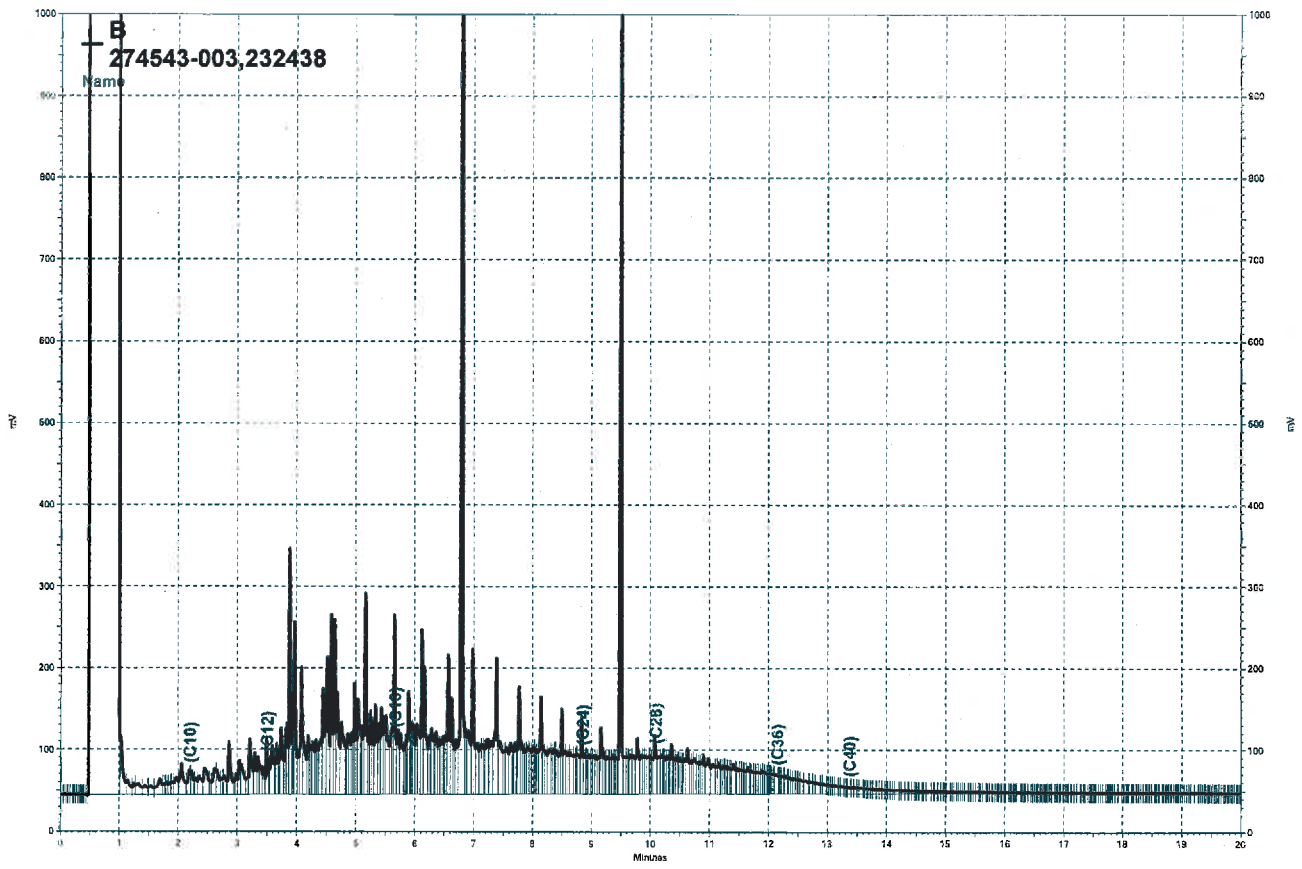
Surrogate	%REC	Limits
o-Terphenyl	103	67-136

Type: MSD Lab ID: QC824835

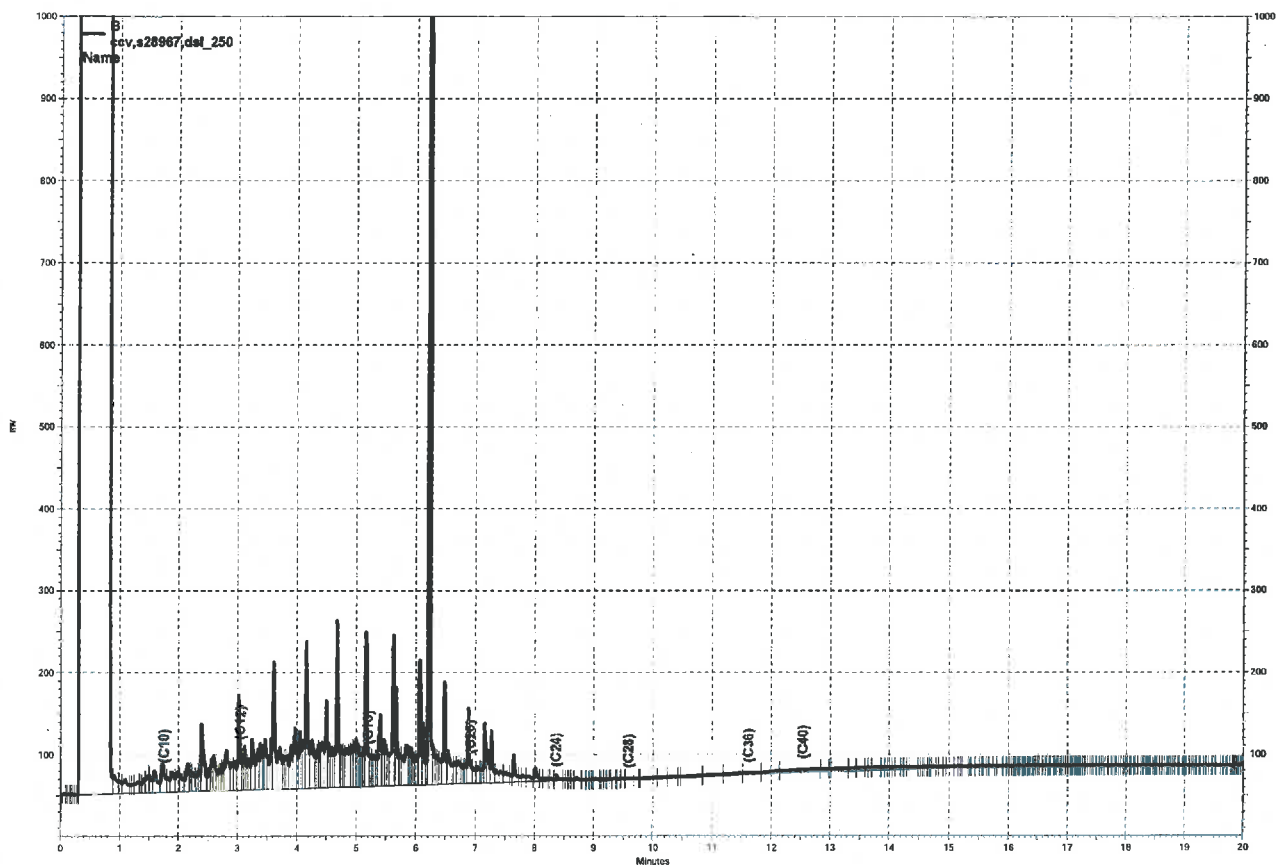
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	5,228	106	55-122	2	53

Surrogate	%REC	Limits
o-Terphenyl	102	67-136

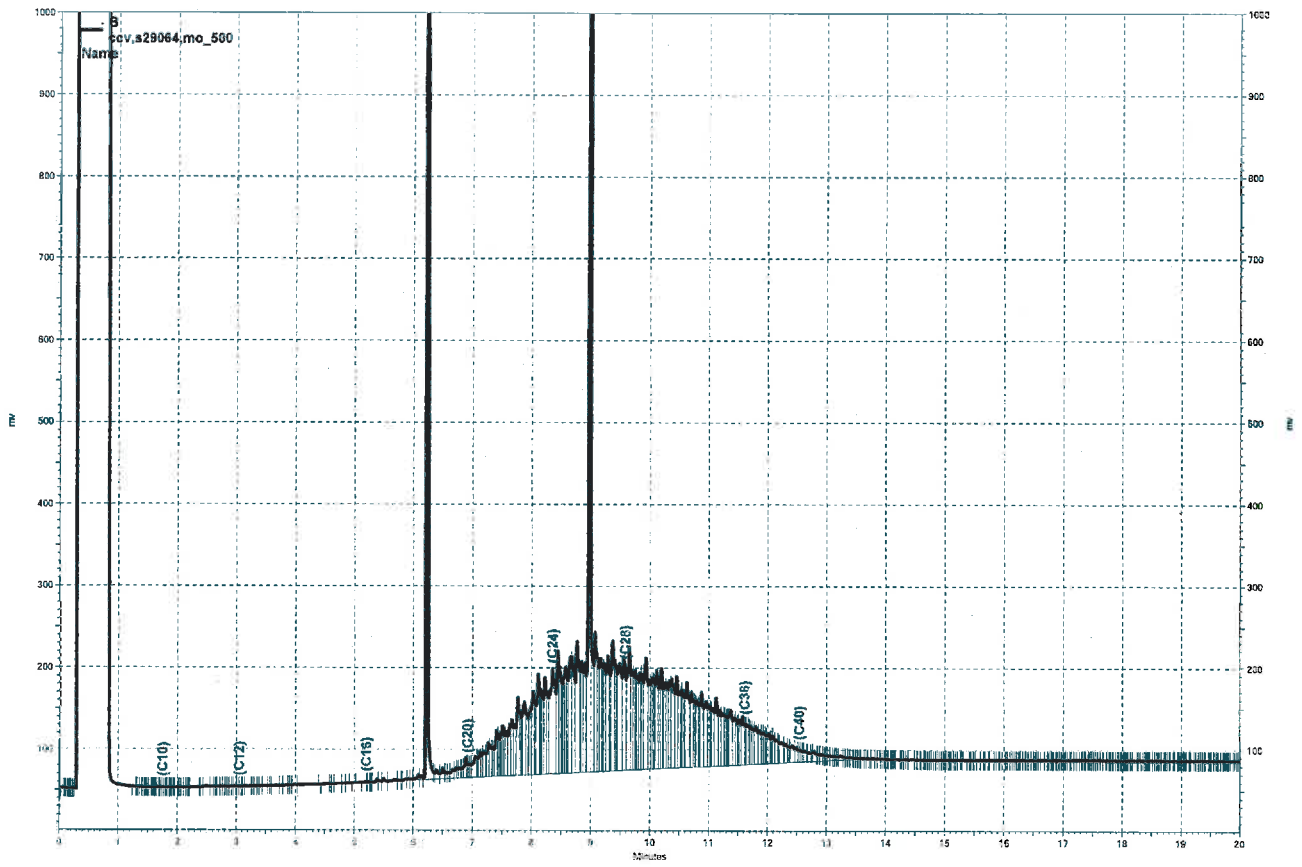
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC14B\Data\060b008, B



— \\Lims\drive\ezchrom\Projects\GC15B\Data\057b004, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\057b003, B

Total Extractable Hydrocarbons

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	02/25/16
Units:	mg/Kg	Received:	02/25/16
Basis:	as received	Prepared:	02/29/16
Diln Fac:	1.000	Analyzed:	03/01/16
Batch#:	232541		

Field ID: T1-8 Lab ID: 274543-001
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	105	59-140

Field ID: T2-8 Lab ID: 274543-002
 Type: SAMPLE

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	100	59-140

Type: BLANK Lab ID: QC825259

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	59-140

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825260	Batch#:	232541
Matrix:	Soil	Prepared:	02/29/16
Units:	mg/Kg	Analyzed:	03/01/16

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.85	56.79	114	58-137

Surrogate	%REC	Limits
o-Terphenyl	103	59-140

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	232541
MSS Lab ID:	274570-001	Sampled:	02/26/16
Matrix:	Soil	Received:	02/26/16
Units:	mg/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825261

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	22.73	50.17	68.90	92	46-154

Surrogate	%REC	Limits
o-Terphenyl	85	59-140

Type: MSD Lab ID: QC825262

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.81	62.92	81	46-154	9	50

Surrogate	%REC	Limits
o-Terphenyl	94	59-140

RPD= Relative Percent Difference

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	W1	Diln Fac:	1.000
Lab ID:	274543-003	Sampled:	02/25/16
Matrix:	Water	Received:	02/25/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	1,200 Y	50	232512	02/29/16
Freon 12	ND	1.0	232512	02/29/16
tert-Butyl Alcohol (TBA)	ND	10	232512	02/29/16
Chloromethane	ND	1.0	232512	02/29/16
Isopropyl Ether (DIPE)	ND	0.5	232512	02/29/16
Vinyl Chloride	ND	0.5	232512	02/29/16
Bromomethane	ND	1.0	232512	02/29/16
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	232512	02/29/16
Chloroethane	ND	1.0	232512	02/29/16
Methyl tert-Amyl Ether (TAME)	ND	0.5	232512	02/29/16
Trichlorofluoromethane	ND	1.0	232512	02/29/16
Acetone	ND	10	232574	03/01/16
Freon 113	ND	2.0	232512	02/29/16
1,1-Dichloroethene	ND	0.5	232512	02/29/16
Methylene Chloride	ND	10	232512	02/29/16
Carbon Disulfide	ND	0.5	232512	02/29/16
MTBE	ND	0.5	232512	02/29/16
trans-1,2-Dichloroethene	ND	0.5	232512	02/29/16
Vinyl Acetate	ND	10	232512	02/29/16
1,1-Dichloroethane	ND	0.5	232512	02/29/16
2-Butanone	ND	10	232512	02/29/16
cis-1,2-Dichloroethene	ND	0.5	232512	02/29/16
2,2-Dichloropropane	ND	0.5	232512	02/29/16
Chloroform	2.8	0.5	232512	02/29/16
Bromochloromethane	ND	0.5	232512	02/29/16
1,1,1-Trichloroethane	ND	0.5	232512	02/29/16
1,1-Dichloropropene	ND	0.5	232512	02/29/16
Carbon Tetrachloride	ND	0.5	232512	02/29/16
1,2-Dichloroethane	ND	0.5	232512	02/29/16
Benzene	0.9	0.5	232512	02/29/16
Trichloroethene	ND	0.5	232512	02/29/16
1,2-Dichloropropane	ND	0.5	232512	02/29/16
Bromodichloromethane	ND	0.5	232512	02/29/16
Dibromomethane	ND	0.5	232512	02/29/16
4-Methyl-2-Pentanone	ND	10	232512	02/29/16
cis-1,3-Dichloropropene	ND	0.5	232512	02/29/16
Toluene	1.2	0.5	232512	02/29/16
trans-1,3-Dichloropropene	ND	0.5	232512	02/29/16
1,1,2-Trichloroethane	ND	0.5	232512	02/29/16
2-Hexanone	ND	10	232512	02/29/16
1,3-Dichloropropane	ND	0.5	232512	02/29/16
Tetrachloroethene	ND	0.5	232512	02/29/16
Dibromochloromethane	ND	0.5	232512	02/29/16
1,2-Dibromoethane	ND	0.5	232512	02/29/16
Chlorobenzene	ND	0.5	232512	02/29/16
1,1,1,2-Tetrachloroethane	ND	0.5	232512	02/29/16
Ethylbenzene	0.9	0.5	232512	02/29/16
m,p-Xylenes	4.5	0.5	232512	02/29/16
o-Xylene	2.5	0.5	232512	02/29/16
Styrene	ND	0.5	232512	02/29/16
Bromoform	ND	1.0	232512	02/29/16
Isopropylbenzene	1.7	0.5	232512	02/29/16
1,1,2,2-Tetrachloroethane	ND	0.5	232512	02/29/16
1,2,3-Trichloropropane	ND	0.5	232512	02/29/16

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	W1	Diln Fac:	1.000
Lab ID:	274543-003	Sampled:	02/25/16
Matrix:	Water	Received:	02/25/16
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Propylbenzene	0.7	0.5	232512	02/29/16
Bromobenzene	ND	0.5	232512	02/29/16
1,3,5-Trimethylbenzene	3.7	0.5	232512	02/29/16
2-Chlorotoluene	ND	0.5	232512	02/29/16
4-Chlorotoluene	ND	0.5	232512	02/29/16
tert-Butylbenzene	ND	0.5	232512	02/29/16
1,2,4-Trimethylbenzene	12	0.5	232512	02/29/16
sec-Butylbenzene	0.7	0.5	232512	02/29/16
para-Isopropyl Toluene	0.7	0.5	232512	02/29/16
1,3-Dichlorobenzene	ND	0.5	232512	02/29/16
1,4-Dichlorobenzene	ND	0.5	232512	02/29/16
n-Butylbenzene	0.7	0.5	232512	02/29/16
1,2-Dichlorobenzene	ND	0.5	232512	02/29/16
1,2-Dibromo-3-Chloropropane	ND	2.0	232512	02/29/16
1,2,4-Trichlorobenzene	ND	0.5	232512	02/29/16
Hexachlorobutadiene	ND	2.0	232512	02/29/16
Naphthalene	17	2.0	232512	02/29/16
1,2,3-Trichlorobenzene	ND	0.5	232512	02/29/16

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	92	80-128	232512	02/29/16
1,2-Dichloroethane-d4	108	75-139	232512	02/29/16
Toluene-d8	103	80-120	232512	02/29/16
Bromofluorobenzene	100	80-120	232512	02/29/16

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232512
Units:	ug/L	Analyzed:	02/29/16
Diln Fac:	1.000		

Type: BS Lab ID: QC825143

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	37.23 b	60	32-155
Isopropyl Ether (DIPE)	12.50	11.49	92	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	10.61	85	62-120
Methyl tert-Amyl Ether (TAME)	12.50	11.88	95	69-120
1,1-Dichloroethene	12.50	11.15	89	66-135
Benzene	12.50	13.16	105	80-123
Trichloroethene	12.50	12.30	98	80-123
Toluene	12.50	13.50	108	80-121
Chlorobenzene	12.50	13.05	104	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-128
1,2-Dichloroethane-d4	103	75-139
Toluene-d8	106	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC825144

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	49.73 b	80	32-155	29	33
Isopropyl Ether (DIPE)	12.50	11.65	93	57-128	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.12	89	62-120	5	20
Methyl tert-Amyl Ether (TAME)	12.50	12.11	97	69-120	2	20
1,1-Dichloroethene	12.50	11.90	95	66-135	7	24
Benzene	12.50	12.90	103	80-123	2	20
Trichloroethene	12.50	12.59	101	80-123	2	20
Toluene	12.50	13.00	104	80-121	4	20
Chlorobenzene	12.50	13.04	104	80-123	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	99	80-120

b= See narrative
 RPD= Relative Percent Difference
 Page 1 of 1

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232512
Units:	ug/L	Analyzed:	02/29/16
Diln Fac:	1.000		

Type: BS Lab ID: QC825145

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,082	108	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC825146

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,083	108	70-130	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825147	Batch#:	232512
Matrix:	Water	Analyzed:	02/29/16
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825147	Batch#:	232512
Matrix:	Water	Analyzed:	02/29/16
Units:	ug/L		

Analyte	Result	RL
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	104	80-120
Bromofluorobenzene	98	80-120

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	232512
MSS Lab ID:	274513-003	Sampled:	02/23/16
Matrix:	Water	Received:	02/24/16
Units:	ug/L	Analyzed:	02/29/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825155

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.224	62.50	51.46 b	82	49-155
Isopropyl Ether (DIPE)	<0.1284	12.50	12.02	96	65-122
Ethyl tert-Butyl Ether (ETBE)	<0.1318	12.50	11.84	95	69-120
Methyl tert-Amyl Ether (TAME)	<0.1449	12.50	13.36	107	74-120
1,1-Dichloroethene	<0.1259	12.50	12.52	100	73-129
Benzene	<0.1492	12.50	14.40	115	80-120
Trichloroethene	0.9615	12.50	14.55	109	73-123
Toluene	<0.1147	12.50	14.48	116	80-120
Chlorobenzene	<0.1188	12.50	14.37	115	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-120

Type: MSD Lab ID: QC825156

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	58.95 b	94	49-155	14	33
Isopropyl Ether (DIPE)	12.50	12.52	100	65-122	4	22
Ethyl tert-Butyl Ether (ETBE)	12.50	12.37	99	69-120	4	20
Methyl tert-Amyl Ether (TAME)	12.50	13.74	110	74-120	3	20
1,1-Dichloroethene	12.50	12.65	101	73-129	1	25
Benzene	12.50	14.61	117	80-120	1	20
Trichloroethene	12.50	14.70	110	73-123	1	20
Toluene	12.50	14.64	117	80-120	1	21
Chlorobenzene	12.50	14.37	115	80-120	0	24

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-128
1,2-Dichloroethane-d4	105	75-139
Toluene-d8	103	80-120
Bromofluorobenzene	95	80-120

b= See narrative

RPD= Relative Percent Difference

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	232574
Units:	ug/L	Analyzed:	03/01/16
Diln Fac:	1.000		

Type: BS Lab ID: QC825403

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	45.94	74	32-155
Isopropyl Ether (DIPE)	12.50	11.55	92	57-128
Ethyl tert-Butyl Ether (ETBE)	12.50	11.01	88	62-120
Methyl tert-Amyl Ether (TAME)	12.50	10.71	86	69-120
1,1-Dichloroethene	12.50	12.03	96	66-135
Benzene	12.50	12.36	99	80-123
Trichloroethene	12.50	11.89	95	80-123
Toluene	12.50	11.86	95	80-121
Chlorobenzene	12.50	12.38	99	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC825404

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	48.79	78	32-155	6	33
Isopropyl Ether (DIPE)	12.50	11.62	93	57-128	1	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.38	91	62-120	3	20
Methyl tert-Amyl Ether (TAME)	12.50	11.06	88	69-120	3	20
1,1-Dichloroethene	12.50	11.91	95	66-135	1	24
Benzene	12.50	12.26	98	80-123	1	20
Trichloroethene	12.50	12.25	98	80-123	3	20
Toluene	12.50	11.93	95	80-121	1	20
Chlorobenzene	12.50	12.84	103	80-123	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-128
1,2-Dichloroethane-d4	101	75-139
Toluene-d8	100	80-120
Bromofluorobenzene	100	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825405	Batch#:	232574
Matrix:	Water	Analyzed:	03/01/16
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
Freon 12	ND	1.0
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825405	Batch#:	232574
Matrix:	Water	Analyzed:	03/01/16
Units:	ug/L		

Analyte	Result	RL
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

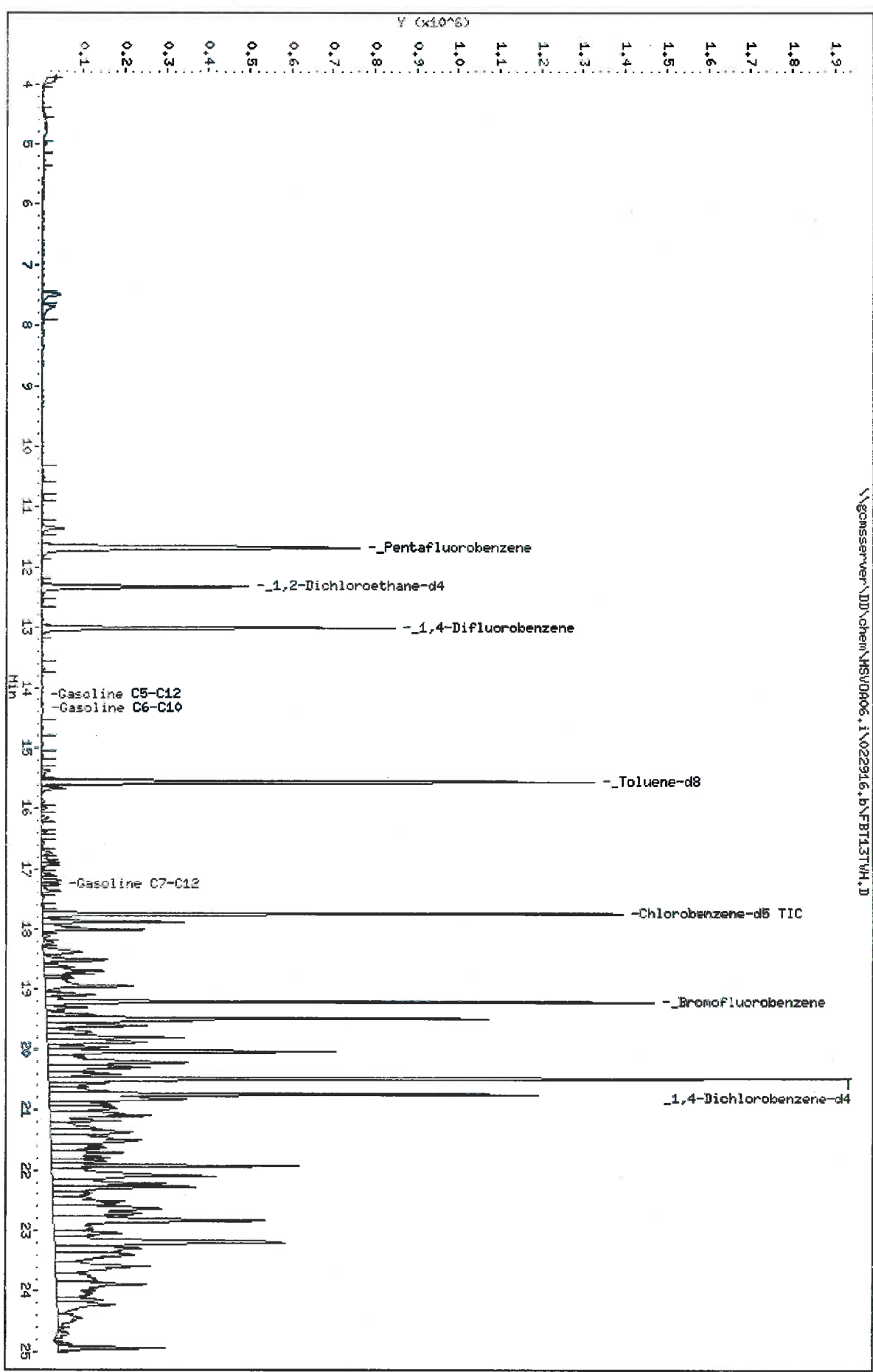
Surrogate	%REC	Limits
Dibromofluoromethane	103	80-128
1,2-Dichloroethane-d4	99	75-139
Toluene-d8	101	80-120
Bromofluorobenzene	99	80-120

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Data File: \\gonserver\DI\chem\MSV0A06.1\022916.b\FBI3TVH.D
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 Client ID: DYNA P&T
 Sample Info: S.274543-003
 Column phase:

Instrument: HSY0A06.i
 Operator: VDC
 Column diameter: 2.00

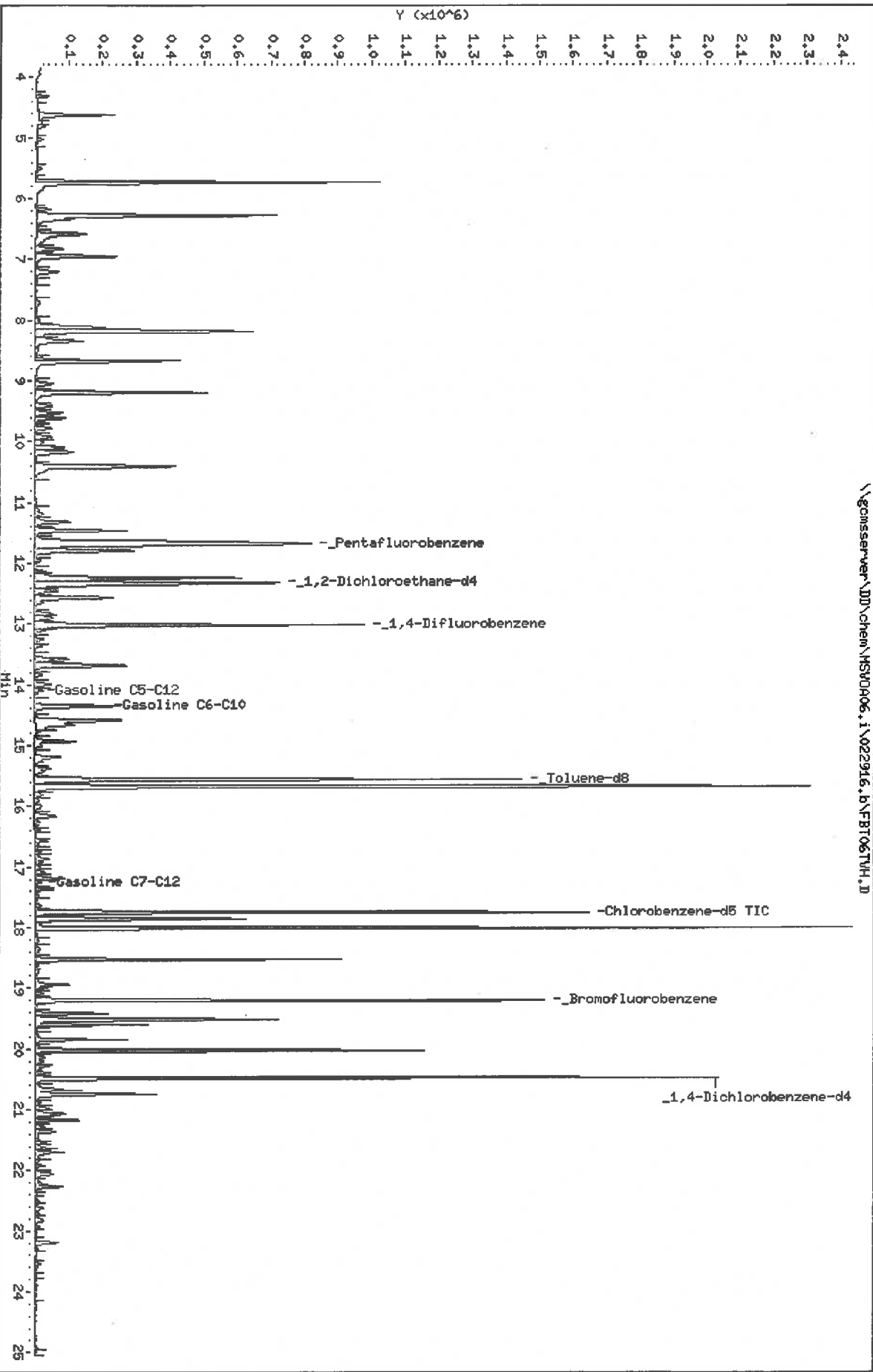
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Date : 29-FEB-2016 09:02
Client ID: DYN4 P&T
Sample Info: CCV/BS,DC828145,232812,S28894,.01/100
Column phase:

Instrument: HSV0A06.1
Operator: VDC
Column diameter: 2.00

\\gonserver\DD\chem\HSV0A06.1\022916.b\FRT061VH.D



Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	T1-8	Diln Fac:	0.9276
Lab ID:	274543-001	Batch#:	232475
Matrix:	Soil	Sampled:	02/25/16
Units:	ug/Kg	Received:	02/25/16
Basis:	as received	Analyzed:	02/26/16

Analyte	Result	RL
Freon 12	ND	9.3
Chloromethane	ND	9.3
Vinyl Chloride	ND	9.3
Bromomethane	ND	9.3
Chloroethane	ND	9.3
Trichlorofluoromethane	ND	4.6
Acetone	ND	19
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	19
Carbon Disulfide	11	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.3
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.3
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.3
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	ND	4.6

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	T1-8	Diln Fac:	0.9276
Lab ID:	274543-001	Batch#:	232475
Matrix:	Soil	Sampled:	02/25/16
Units:	ug/Kg	Received:	02/25/16
Basis:	as received	Analyzed:	02/26/16

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-134
1,2-Dichloroethane-d4	98	80-138
Toluene-d8	115	80-120
Bromofluorobenzene	110	78-123

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	T2-8	Diln Fac:	0.9615
Lab ID:	274543-002	Batch#:	232475
Matrix:	Soil	Sampled:	02/25/16
Units:	ug/Kg	Received:	02/25/16
Basis:	as received	Analyzed:	02/26/16

Analyte	Result	RL
Freon 12	ND	9.6
Chloromethane	ND	9.6
Vinyl Chloride	ND	9.6
Bromomethane	ND	9.6
Chloroethane	ND	9.6
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.6
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.6
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.6
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	ND	4.8

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	T2-8	Diln Fac:	0.9615
Lab ID:	274543-002	Batch#:	232475
Matrix:	Soil	Sampled:	02/25/16
Units:	ug/Kg	Received:	02/25/16
Basis:	as received	Analyzed:	02/26/16

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	101	78-134
1,2-Dichloroethane-d4	99	80-138
Toluene-d8	119	80-120
Bromofluorobenzene	109	78-123

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC824987	Batch#:	232475
Matrix:	Soil	Analyzed:	02/26/16
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.58	110	70-134
Benzene	25.00	24.75	99	80-123
Trichloroethene	25.00	25.96	104	80-128
Toluene	25.00	28.58	114	80-120
Chlorobenzene	25.00	27.86	111	80-123

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-134
1,2-Dichloroethane-d4	94	80-138
Toluene-d8	115	80-120
Bromofluorobenzene	99	78-123

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC824989	Batch#:	232475
Matrix:	Soil	Analyzed:	02/26/16
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC824989	Batch#:	232475
Matrix:	Soil	Analyzed:	02/26/16
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	108	78-134
1,2-Dichloroethane-d4	96	80-138
Toluene-d8	119	80-120
Bromofluorobenzene	113	78-123

ND= Not Detected
 RL= Reporting Limit

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 5030B
Project#:	16-018.03	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	232475
MSS Lab ID:	274540-001	Sampled:	02/24/16
Matrix:	Soil	Received:	02/25/16
Units:	ug/Kg	Analyzed:	02/26/16
Basis:	as received		

Type: MS Diln Fac: 0.9242
 Lab ID: QC825038

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.8717	46.21	50.16	109	56-133
Benzene	<0.8370	46.21	48.63	105	57-120
Trichloroethene	<0.7747	46.21	55.12	119	49-145
Toluene	<0.6598	46.21	57.23	124 *	51-120
Chlorobenzene	<0.6364	46.21	53.80	116	47-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-134
1,2-Dichloroethane-d4	100	80-138
Toluene-d8	115	80-120
Bromofluorobenzene	101	78-123

Type: MSD Diln Fac: 0.9091
 Lab ID: QC825039

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	45.45	54.23	119	56-133	9	46
Benzene	45.45	49.19	108	57-120	3	44
Trichloroethene	45.45	55.79	123	49-145	3	46
Toluene	45.45	55.98	123 *	51-120	1	47
Chlorobenzene	45.45	53.54	118	47-120	1	50

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-134
1,2-Dichloroethane-d4	99	80-138
Toluene-d8	115	80-120
Bromofluorobenzene	102	78-123

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	W1	Batch#:	232435
Lab ID:	274543-003	Sampled:	02/25/16
Matrix:	Water	Received:	02/25/16
Units:	ug/L	Prepared:	02/26/16
Diln Fac:	2.000	Analyzed:	02/29/16

Analyte	Result	RL
N-Nitrosodimethylamine	ND	20
Phenol	ND	20
bis(2-Chloroethyl) ether	ND	20
2-Chlorophenol	ND	20
1,3-Dichlorobenzene	ND	20
1,4-Dichlorobenzene	ND	20
Benzyl alcohol	ND	20
1,2-Dichlorobenzene	ND	20
2-Methylphenol	ND	20
bis(2-Chloroisopropyl) ether	ND	20
4-Methylphenol	ND	20
N-Nitroso-di-n-propylamine	ND	20
Hexachloroethane	ND	20
Nitrobenzene	ND	20
Isophorone	ND	20
2-Nitrophenol	ND	40
2,4-Dimethylphenol	ND	20
Benzoic acid	ND	100
bis(2-Chloroethoxy) methane	ND	20
2,4-Dichlorophenol	ND	20
1,2,4-Trichlorobenzene	ND	20
Naphthalene	ND	20
4-Chloroaniline	ND	20
Hexachlorobutadiene	ND	20
4-Chloro-3-methylphenol	ND	20
2-Methylnaphthalene	42	20
Hexachlorocyclopentadiene	ND	40
2,4,6-Trichlorophenol	ND	20
2,4,5-Trichlorophenol	ND	20
2-Chloronaphthalene	ND	20
2-Nitroaniline	ND	40
Dimethylphthalate	ND	20
Acenaphthylene	ND	20
2,6-Dinitrotoluene	ND	20
3-Nitroaniline	ND	40
Acenaphthene	ND	20
2,4-Dinitrophenol	ND	40
4-Nitrophenol	ND	40
Dibenzofuran	ND	20
2,4-Dinitrotoluene	ND	20
Diethylphthalate	ND	20
Fluorene	ND	20
4-Chlorophenyl-phenylether	ND	20
4-Nitroaniline	ND	40
4,6-Dinitro-2-methylphenol	ND	40
N-Nitrosodiphenylamine	ND	20
Azobenzene	ND	20
4-Bromophenyl-phenylether	ND	20
Hexachlorobenzene	ND	20
Pentachlorophenol	ND	40
Phenanthrene	ND	20
Anthracene	ND	20
Di-n-butylphthalate	ND	20
Fluoranthene	ND	20

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	W1	Batch#:	232435
Lab ID:	274543-003	Sampled:	02/25/16
Matrix:	Water	Received:	02/25/16
Units:	ug/L	Prepared:	02/26/16
Diln Fac:	2.000	Analyzed:	02/29/16

Analyte	Result	RL
Pyrene	ND	20
Butylbenzylphthalate	ND	20
3,3'-Dichlorobenzidine	ND	40
Benzo (a) anthracene	ND	20
Chrysene	ND	20
bis(2-Ethylhexyl)phthalate	ND	20
Di-n-octylphthalate	ND	20
Benzo (b) fluoranthene	ND	20
Benzo (k) fluoranthene	ND	20
Benzo (a) pyrene	ND	20
Indeno (1,2,3-cd) pyrene	ND	20
Dibenz (a,h) anthracene	ND	20
Benzo (g,h,i) perylene	ND	20

Surrogate	%REC	Limits
2-Fluorophenol	71	38-120
Phenol-d5	72	38-120
2,4,6-Tribromophenol	73	46-120
Nitrobenzene-d5	67	51-120
2-Fluorobiphenyl	67	54-120
Terphenyl-d14	28	21-120

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC824815	Batch#:	232435
Matrix:	Water	Prepared:	02/25/16
Units:	ug/L	Analyzed:	02/26/16

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl) ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy) methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Batch QC Report
Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC824815	Batch#:	232435
Matrix:	Water	Prepared:	02/25/16
Units:	ug/L	Analyzed:	02/26/16

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo (a) anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo (b) fluoranthene	ND	10
Benzo (k) fluoranthene	ND	10
Benzo (a) pyrene	ND	10
Indeno (1,2,3-cd) pyrene	ND	10
Dibenz (a,h) anthracene	ND	10
Benzo (g,h,i) perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	75	38-120
Phenol-d5	72	38-120
2,4,6-Tribromophenol	73	46-120
Nitrobenzene-d5	67	51-120
2-Fluorobiphenyl	65	54-120
Terphenyl-d14	47	21-120

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	232435
Units:	ug/L	Prepared:	02/25/16
Diln Fac:	2.000	Analyzed:	02/26/16

Type: BS Lab ID: QC824816

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	66.07	83	46-120
2-Chlorophenol	80.00	65.63	82	48-120
1,4-Dichlorobenzene	80.00	57.37	72	52-120
N-Nitroso-di-n-propylamine	80.00	61.34	77	46-120
1,2,4-Trichlorobenzene	80.00	61.21	77	53-120
4-Chloro-3-methylphenol	80.00	70.62	88	40-120
Acenaphthene	30.00	28.26	94	61-120
4-Nitrophenol	80.00	61.65	77	40-120
2,4-Dinitrotoluene	80.00	67.85	85	64-120
Pentachlorophenol	80.00	65.59	82	47-120
Pyrene	30.00	27.82	93	62-120

Surrogate	%REC	Limits
2-Fluorophenol	76	38-120
Phenol-d5	77	38-120
2,4,6-Tribromophenol	76	46-120
Nitrobenzene-d5	64	51-120
2-Fluorobiphenyl	69	54-120
Terphenyl-d14	73	21-120

Type: BSD Lab ID: QC824817

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	70.00	87	46-120	6	55
2-Chlorophenol	80.00	69.87	87	48-120	6	54
1,4-Dichlorobenzene	80.00	59.66	75	52-120	4	30
N-Nitroso-di-n-propylamine	80.00	65.31	82	46-120	6	25
1,2,4-Trichlorobenzene	80.00	61.44	77	53-120	0	26
4-Chloro-3-methylphenol	80.00	72.01	90	40-120	2	54
Acenaphthene	30.00	25.98	87	61-120	8	25
4-Nitrophenol	80.00	62.62	78	40-120	2	45
2,4-Dinitrotoluene	80.00	71.24	89	64-120	5	32
Pentachlorophenol	80.00	67.54	84	47-120	3	48
Pyrene	30.00	29.01	97	62-120	4	26

Surrogate	%REC	Limits
2-Fluorophenol	82	38-120
Phenol-d5	82	38-120
2,4,6-Tribromophenol	79	46-120
Nitrobenzene-d5	71	51-120
2-Fluorobiphenyl	72	54-120
Terphenyl-d14	73	21-120

RPD= Relative Percent Difference

Semivolatle Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	T1-8	Batch#:	232536
Lab ID:	274543-001	Sampled:	02/25/16
Matrix:	Soil	Received:	02/25/16
Units:	ug/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Analyte	Result	RL
N-Nitrosodimethylamine	ND	340
Phenol	ND	340
bis(2-Chloroethyl) ether	ND	340
2-Chlorophenol	ND	340
1,3-Dichlorobenzene	ND	340
1,4-Dichlorobenzene	ND	340
Benzyl alcohol	ND	340
1,2-Dichlorobenzene	ND	340
2-Methylphenol	ND	340
bis(2-Chloroisopropyl) ether	ND	340
4-Methylphenol	ND	340
N-Nitroso-di-n-propylamine	ND	340
Hexachloroethane	ND	340
Nitrobenzene	ND	340
Isophorone	ND	340
2-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	340
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	340
2,4-Dichlorophenol	ND	340
1,2,4-Trichlorobenzene	ND	340
Naphthalene	ND	67
4-Chloroaniline	ND	340
Hexachlorobutadiene	ND	340
4-Chloro-3-methylphenol	ND	340
2-Methylnaphthalene	ND	67
Hexachlorocyclopentadiene	ND	670
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	340
2-Chloronaphthalene	ND	340
2-Nitroaniline	ND	670
Dimethylphthalate	ND	340
Acenaphthylene	ND	67
2,6-Dinitrotoluene	ND	340
3-Nitroaniline	ND	670
Acenaphthene	ND	67
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	340
2,4-Dinitrotoluene	ND	340
Diethylphthalate	ND	340
Fluorene	ND	67
4-Chlorophenyl-phenylether	ND	340
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
N-Nitrosodiphenylamine	ND	340
Azobenzene	ND	340
4-Bromophenyl-phenylether	ND	340
Hexachlorobenzene	ND	340
Pentachlorophenol	ND	670
Phenanthrene	ND	67
Anthracene	ND	67
Di-n-butylphthalate	ND	340

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Semivolatile Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	T1-8	Batch#:	232536
Lab ID:	274543-001	Sampled:	02/25/16
Matrix:	Soil	Received:	02/25/16
Units:	ug/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Analyte	Result	RL
Fluoranthene	ND	67
Pyrene	ND	67
Butylbenzylphthalate	ND	340
3,3'-Dichlorobenzidine	ND	670
Benzo (a) anthracene	ND	67
Chrysene	ND	67
bis (2-Ethylhexyl) phthalate	ND	340
Di-n-octylphthalate	ND	340
Benzo (b) fluoranthene	ND	67
Benzo (k) fluoranthene	ND	67
Benzo (a) pyrene	ND	67
Indeno (1,2,3-cd) pyrene	ND	67
Dibenz (a,h) anthracene	ND	67
Benzo (g,h,i) perylene	ND	67

Surrogate	%REC	Limits
2-Fluorophenol	66	25-120
Phenol-d5	68	36-120
2,4,6-Tribromophenol	64	27-120
Nitrobenzene-d5	55	44-120
2-Fluorobiphenyl	51	47-120
Terphenyl-d14	66	49-120

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Semivolatle Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	T2-8	Batch#:	232536
Lab ID:	274543-002	Sampled:	02/25/16
Matrix:	Soil	Received:	02/25/16
Units:	ug/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Analyte	Result	RL
N-Nitrosodimethylamine	ND	340
Phenol	ND	340
bis(2-Chloroethyl) ether	ND	340
2-Chlorophenol	ND	340
1,3-Dichlorobenzene	ND	340
1,4-Dichlorobenzene	ND	340
Benzyl alcohol	ND	340
1,2-Dichlorobenzene	ND	340
2-Methylphenol	ND	340
bis(2-Chloroisopropyl) ether	ND	340
4-Methylphenol	ND	340
N-Nitroso-di-n-propylamine	ND	340
Hexachloroethane	ND	340
Nitrobenzene	ND	340
Isophorone	ND	340
2-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	340
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	340
2,4-Dichlorophenol	ND	340
1,2,4-Trichlorobenzene	ND	340
Naphthalene	ND	67
4-Chloroaniline	ND	340
Hexachlorobutadiene	ND	340
4-Chloro-3-methylphenol	ND	340
2-Methylnaphthalene	ND	67
Hexachlorocyclopentadiene	ND	670
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	340
2-Chloronaphthalene	ND	340
2-Nitroaniline	ND	670
Dimethylphthalate	ND	340
Acenaphthylene	ND	67
2,6-Dinitrotoluene	ND	340
3-Nitroaniline	ND	670
Acenaphthene	ND	67
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	340
2,4-Dinitrotoluene	ND	340
Diethylphthalate	ND	340
Fluorene	ND	67
4-Chlorophenyl-phenylether	ND	340
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
N-Nitrosodiphenylamine	ND	340
Azobenzene	ND	340
4-Bromophenyl-phenylether	ND	340
Hexachlorobenzene	ND	340
Pentachlorophenol	ND	670
Phenanthrene	ND	67
Anthracene	ND	67
Di-n-butylphthalate	ND	340

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	T2-8	Batch#:	232536
Lab ID:	274543-002	Sampled:	02/25/16
Matrix:	Soil	Received:	02/25/16
Units:	ug/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Analyte	Result	RL
Fluoranthene	ND	67
Pyrene	ND	67
Butylbenzylphthalate	ND	340
3,3'-Dichlorobenzidine	ND	670
Benzo (a) anthracene	ND	67
Chrysene	ND	67
bis (2-Ethylhexyl) phthalate	ND	340
Di-n-octylphthalate	ND	340
Benzo (b) fluoranthene	ND	67
Benzo (k) fluoranthene	ND	67
Benzo (a) pyrene	ND	67
Indeno (1,2,3-cd) pyrene	ND	67
Dibenz (a,h) anthracene	ND	67
Benzo (g,h,i) perylene	ND	67

Surrogate	%REC	Limits
2-Fluorophenol	75	25-120
Phenol-d5	74	36-120
2,4,6-Tribromophenol	66	27-120
Nitrobenzene-d5	63	44-120
2-Fluorobiphenyl	54	47-120
Terphenyl-d14	61	49-120

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report
Semivolatiles Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825232	Batch#:	232536
Matrix:	Soil	Prepared:	02/29/16
Units:	ug/Kg	Analyzed:	02/29/16

Analyte	Result	RL
N-Nitrosodimethylamine	ND	340
Phenol	ND	340
bis(2-Chloroethyl) ether	ND	340
2-Chlorophenol	ND	340
1,3-Dichlorobenzene	ND	340
1,4-Dichlorobenzene	ND	340
Benzyl alcohol	ND	340
1,2-Dichlorobenzene	ND	340
2-Methylphenol	ND	340
bis(2-Chloroisopropyl) ether	ND	340
4-Methylphenol	ND	340
N-Nitroso-di-n-propylamine	ND	340
Hexachloroethane	ND	340
Nitrobenzene	ND	340
Isophorone	ND	340
2-Nitrophenol	ND	680
2,4-Dimethylphenol	ND	340
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	340
2,4-Dichlorophenol	ND	340
1,2,4-Trichlorobenzene	ND	340
Naphthalene	ND	68
4-Chloroaniline	ND	340
Hexachlorobutadiene	ND	340
4-Chloro-3-methylphenol	ND	340
2-Methylnaphthalene	ND	68
Hexachlorocyclopentadiene	ND	680
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	340
2-Chloronaphthalene	ND	340
2-Nitroaniline	ND	680
Dimethylphthalate	ND	340
Acenaphthylene	ND	68
2,6-Dinitrotoluene	ND	340
3-Nitroaniline	ND	680
Acenaphthene	ND	68
2,4-Dinitrophenol	ND	680
4-Nitrophenol	ND	680
Dibenzofuran	ND	340
2,4-Dinitrotoluene	ND	340
Diethylphthalate	ND	340
Fluorene	ND	68
4-Chlorophenyl-phenylether	ND	340
4-Nitroaniline	ND	680
4,6-Dinitro-2-methylphenol	ND	680
N-Nitrosodiphenylamine	ND	340
Azobenzene	ND	340
4-Bromophenyl-phenylether	ND	340
Hexachlorobenzene	ND	340
Pentachlorophenol	ND	680
Phenanthrene	ND	68
Anthracene	ND	68
Di-n-butylphthalate	ND	340
Fluoranthene	ND	68

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 2

Batch QC Report

Semivolatiles Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825232	Batch#:	232536
Matrix:	Soil	Prepared:	02/29/16
Units:	ug/Kg	Analyzed:	02/29/16

Analyte	Result	RL
Pyrene	ND	68
Butylbenzylphthalate	ND	340
3,3'-Dichlorobenzidine	ND	680
Benzo (a) anthracene	ND	68
Chrysene	ND	68
bis(2-Ethylhexyl) phthalate	ND	340
Di-n-octylphthalate	ND	340
Benzo (b) fluoranthene	ND	68
Benzo (k) fluoranthene	ND	68
Benzo (a) pyrene	ND	68
Indeno (1,2,3-cd) pyrene	ND	68
Dibenz (a,h) anthracene	ND	68
Benzo (g,h,i) perylene	ND	68

Surrogate	%REC	Limits
2-Fluorophenol	86	25-120
Phenol-d5	100	36-120
2,4,6-Tribromophenol	71	27-120
Nitrobenzene-d5	68	44-120
2-Fluorobiphenyl	65	47-120
Terphenyl-d14	67	49-120

ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report
Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825233	Batch#:	232536
Matrix:	Soil	Prepared:	02/29/16
Units:	ug/Kg	Analyzed:	02/29/16

Analyte	Spiked	Result	%REC	Limits
Phenol	2,706	2,324	86	42-120
2-Chlorophenol	2,706	2,331	86	45-120
1,4-Dichlorobenzene	2,706	1,786	66	48-120
N-Nitroso-di-n-propylamine	2,706	2,073	77	27-123
1,2,4-Trichlorobenzene	2,706	1,925	71	50-120
4-Chloro-3-methylphenol	2,706	1,912	71	59-120
Acenaphthene	1,015	712.8	70	53-120
4-Nitrophenol	2,706	2,147	79	47-120
2,4-Dinitrotoluene	2,706	2,249	83	55-120
Pentachlorophenol	2,706	1,577	58	32-120
Pyrene	1,015	826.0	81	52-120

Surrogate	%REC	Limits
2-Fluorophenol	79	25-120
Phenol-d5	84	36-120
2,4,6-Tribromophenol	87	27-120
Nitrobenzene-d5	59	44-120
2-Fluorobiphenyl	60	47-120
Terphenyl-d14	66	49-120

Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Field ID:	ZZZZZZZZZZ	Batch#:	232536
MSS Lab ID:	274570-001	Sampled:	02/26/16
Matrix:	Soil	Received:	02/26/16
Units:	ug/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825234

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<17.31	2,667	2,379	89	47-120
2-Chlorophenol	<16.45	2,667	2,177	82	44-120
1,4-Dichlorobenzene	<10.11	2,667	1,124	42 *	49-120
N-Nitroso-di-n-propylamine	<33.02	2,667	2,376	89	42-120
1,2,4-Trichlorobenzene	<9.661	2,667	1,847	69	54-120
4-Chloro-3-methylphenol	<14.70	2,667	2,461	92	55-120
Acenaphthene	<12.01	1,000	840.5	84	51-120
4-Nitrophenol	<68.73	2,667	2,298	86	36-120
2,4-Dinitrotoluene	<9.686	2,667	2,263	85	52-120
Pentachlorophenol	<148.3	2,667	997.0	37	14-120
Pyrene	<9.359	1,000	873.4	87	46-124

Surrogate	%REC	Limits
2-Fluorophenol	89	25-120
Phenol-d5	86	36-120
2,4,6-Tribromophenol	79	27-120
Nitrobenzene-d5	74	44-120
2-Fluorobiphenyl	69	47-120
Terphenyl-d14	69	49-120

Type: MSD Lab ID: QC825235

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,681	1,745	65	47-120	31	39
2-Chlorophenol	2,681	1,595	60	44-120	31	38
1,4-Dichlorobenzene	2,681	989.1	37 *	49-120	13	45
N-Nitroso-di-n-propylamine	2,681	1,676	63	42-120	35	40
1,2,4-Trichlorobenzene	2,681	1,424	53 *	54-120	26	38
4-Chloro-3-methylphenol	2,681	1,950	73	55-120	24	41
Acenaphthene	1,005	622.5	62	51-120	30	47
4-Nitrophenol	2,681	1,644	61	36-120	34	41
2,4-Dinitrotoluene	2,681	1,709	64	52-120	28	40
Pentachlorophenol	2,681	592.5	22	14-120	51	53
Pyrene	1,005	661.4	66	46-124	28	50

Surrogate	%REC	Limits
2-Fluorophenol	61	25-120
Phenol-d5	63	36-120
2,4,6-Tribromophenol	58	27-120
Nitrobenzene-d5	55	44-120
2-Fluorobiphenyl	51	47-120
Terphenyl-d14	52	49-120

*= Value outside of QC limits; see narrative
 RPD= Relative Percent Difference

Batch QC Report
Semivolatile Organics by GC/MS

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825236	Batch#:	232536
Matrix:	Soil	Prepared:	02/29/16
Units:	ug/Kg	Analyzed:	02/29/16

Analyte	Spiked	Result	%REC	Limits
Phenol	2,653	2,502	94	42-120
2-Chlorophenol	2,653	2,523	95	45-120
1,4-Dichlorobenzene	2,653	2,047	77	48-120
N-Nitroso-di-n-propylamine	2,653	2,249	85	27-123
1,2,4-Trichlorobenzene	2,653	2,186	82	50-120
4-Chloro-3-methylphenol	2,653	2,291	86	59-120
Acenaphthene	994.7	839.9	84	53-120
4-Nitrophenol	2,653	2,647	100	47-120
2,4-Dinitrotoluene	2,653	2,750	104	55-120
Pentachlorophenol	2,653	2,336	88	32-120
Pyrene	994.7	995.2	100	52-120

Surrogate	%REC	Limits
2-Fluorophenol	86	25-120
Phenol-d5	90	36-120
2,4,6-Tribromophenol	110	27-120
Nitrobenzene-d5	66	44-120
2-Fluorobiphenyl	69	47-120
Terphenyl-d14	81	49-120

Polychlorinated Biphenyls (PCBs)

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8082
Field ID:	W1	Batch#:	232432
Matrix:	Water	Sampled:	02/25/16
Units:	ug/L	Received:	02/25/16
Diln Fac:	1.000	Analyzed:	03/01/16

Type: SAMPLE Prepared: 02/26/16
 Lab ID: 274543-003

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	68	39-120
Decachlorobiphenyl	75	28-120

Type: BLANK Prepared: 02/25/16
 Lab ID: QC824800

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	88	39-120
Decachlorobiphenyl	101	28-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3520C
Project#:	16-018.03	Analysis:	EPA 8082
Matrix:	Water	Batch#:	232432
Units:	ug/L	Prepared:	02/25/16
Diln Fac:	1.000	Analyzed:	03/01/16

Type: BS Lab ID: QC824801

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	5.570	111	62-127
Aroclor-1260	5.000	5.389	108	60-135

Surrogate	%REC	Limits
TCMX	92	39-120
Decachlorobiphenyl	106	28-120

Type: BSD Lab ID: QC824802

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	5.546	111	62-127	0	29
Aroclor-1260	5.000	5.432	109	60-135	1	40

Surrogate	%REC	Limits
TCMX	88	39-120
Decachlorobiphenyl	106	28-120

RPD= Relative Percent Difference

Polychlorinated Biphenyls (PCBs)

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8082
Matrix:	Soil	Batch#:	232483
Units:	ug/Kg	Sampled:	02/25/16
Basis:	as received	Received:	02/25/16
Diln Fac:	1.000	Prepared:	02/26/16

Field ID: T1-8 Lab ID: 274543-001
 Type: SAMPLE Analyzed: 03/01/16

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	96	46-141
Decachlorobiphenyl	102	25-135

Field ID: T2-8 Lab ID: 274543-002
 Type: SAMPLE Analyzed: 03/01/16

Analyte	Result	RL
Aroclor-1016	ND	12
Aroclor-1221	ND	24
Aroclor-1232	ND	12
Aroclor-1242	ND	12
Aroclor-1248	ND	12
Aroclor-1254	ND	12
Aroclor-1260	ND	12

Surrogate	%REC	Limits
TCMX	99	46-141
Decachlorobiphenyl	103	25-135

Type: BLANK Analyzed: 02/26/16
 Lab ID: QC825011

Analyte	Result	RL
Aroclor-1016	ND	4.8
Aroclor-1221	ND	9.7
Aroclor-1232	ND	4.8
Aroclor-1242	ND	4.8
Aroclor-1248	ND	4.8
Aroclor-1254	ND	4.8
Aroclor-1260	ND	4.8

Surrogate	%REC	Limits
TCMX	113	46-141
Decachlorobiphenyl	118	25-135

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825012	Batch#:	232483
Matrix:	Soil	Prepared:	02/26/16
Units:	ug/Kg	Analyzed:	02/26/16

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	168.6	185.7	110	64-140
Aroclor-1260	168.6	172.8	102	65-146

Surrogate	%REC	Limits
TCMX	106	46-141
Decachlorobiphenyl	117	25-135

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3550B
Project#:	16-018.03	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	232483
MSS Lab ID:	274541-007	Sampled:	02/19/16
Matrix:	Soil	Received:	02/19/16
Units:	ug/Kg	Prepared:	02/26/16
Basis:	as received	Analyzed:	02/26/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825013

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.990	164.4	180.9	110	60-161
Aroclor-1260	97.71	164.4	232.9	88	42-166

Surrogate	%REC	Limits
TCMX	93	46-141
Decachlorobiphenyl	91	25-135

Type: MSD Lab ID: QC825014

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.7	186.7	112	60-161	2	43
Aroclor-1260	166.7	217.7	78	42-166	8	51

Surrogate	%REC	Limits
TCMX	91	46-141
Decachlorobiphenyl	90	25-135

RPD= Relative Percent Difference

Batch QC Report

California LUFT Metals			
Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3050B
Project#:	16-018.03	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	232640
Units:	mg/Kg	Prepared:	03/02/16
Diln Fac:	1.000	Analyzed:	03/03/16

Type: BS Lab ID: QC825675

Analyte	Spiked	Result	%REC	Limits
Cadmium	50.51	51.61	102	80-120
Chromium	50.51	53.40	106	80-120
Lead	50.51	49.81	99	80-120
Nickel	50.51	52.47	104	80-120
Zinc	50.51	50.78	101	80-120

Type: BSD Lab ID: QC825676

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	45.87	47.18	103	80-120	1	20
Chromium	45.87	48.84	106	80-120	1	20
Lead	45.87	45.50	99	80-120	1	20
Nickel	45.87	47.96	105	80-120	1	20
Zinc	45.87	46.54	101	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report
California LUFT Metals

Lab #:	274543	Location:	4321 Salem St., Emeryville
Client:	Envirocom	Prep:	EPA 3050B
Project#:	16-018.03	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	232640
MSS Lab ID:	274542-013	Sampled:	02/25/16
Matrix:	Soil	Received:	02/25/16
Units:	mg/Kg	Prepared:	03/02/16
Basis:	as received	Analyzed:	03/03/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825677

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	0.2955	50.51	50.09	99	71-120
Chromium	34.67	50.51	86.16	102	57-133
Lead	134.3	50.51	109.2	-50 *	53-125
Nickel	35.83	50.51	85.68	99	44-141
Zinc	79.60	50.51	115.9	72	45-145

Type: MSD Lab ID: QC825678

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.51	49.06	97	71-120	2	25
Chromium	50.51	85.60	101	57-133	1	33
Lead	50.51	159.8	50 *	53-125	38	42
Nickel	50.51	85.91	99	44-141	0	39
Zinc	50.51	115.2	71	45-145	1	39

*= Value outside of QC limits; see narrative
 RPD= Relative Percent Difference



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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 274598
ANALYTICAL REPORT

Envirocom
800 Charcot Avenue
San Jose, CA 95131

Project : 15-020.03
Location : Griffall Tracking
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
ST1A	274598-001
ST1B	274598-002
ST1C	274598-003
ST1D	274598-004
ST1 (A,B,C,D)	274598-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 03/07/2016

Will Rice
Project Manager
will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 274598
Client: Envirocom
Project: 15-020.03
Location: Griffall Tracking
Request Date: 02/26/16
Samples Received: 02/26/16

This data package contains sample and QC results for one four-point soil composite, requested for the above referenced project on 02/26/16. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.



274598

ENVIROCOM

CHAIN OF CUSTODY

Project Name: Senior Center Project No: 15-020-03 Date: 2-26-16

Project Location: 4321 Salem St. Emeryville Client: Batch Petroleum Sampler: M. Hajjeh

Sample ID	Date Sampled	Sampling Time	Matrix	N° of Containers	Analysis Requested	Turnaround Time
1 ST1A	2-26-16		Soil	1	Heptachlor TPHD BTEX 801SM 8260	24-hour Other
2 ST1B					4 point Composite Analysis	Normal
3 ST1C						Normal
4 ST1D						Normal
						Normal
						Normal
						Normal
						Normal

NOTES: Please do 4-point composite Analysis

Relinquished by: M. Hajjeh Date: 2/26/16 Time: 12:50 Received by: [Signature] Date: 2/26/16 Time: 12:50

P.O. Box 28310 • San Jose • California • 95159
Phone (408) 894-9062 • Fax (408) 894-9063

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 274598 Date Received 2/26/16 Number of coolers 0
 Client Enviro.com Project 15-02003

Date Opened 2/26 By (print) CJN (sign) [Signature]
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
 Shipping info _____

2A. Were custody seals present? YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO

6. Indicate the packing in cooler: (if other, describe) _____

- Bubble Wrap Foam blocks Bags None
- Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) _____

Temperature blank(s) included? Thermometer# _____ IR Gun# _____

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO

10. Are there any missing / extra samples? _____ YES NO

11. Are samples in the appropriate containers for indicated tests? _____ YES NO

12. Are sample labels present, in good condition and complete? _____ YES NO

13. Do the sample labels agree with custody papers? _____ YES NO

14. Was sufficient amount of sample sent for tests requested? _____ YES NO

15. Are the samples appropriately preserved? _____ YES NO N/A

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? (pH strip lot# _____) YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

21. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

Detections Summary for 274598

Results for any subcontracted analyses are not included in this summary.

Client : Envirocom
 Project : 15-020.03
 Location : Griffall Tracking

Client Sample ID : ST1(A,B,C,D) Laboratory Sample ID : 274598-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	5.8	Y	1.0	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Extractable Hydrocarbons			
Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 3550B
Project#:	15-020.03	Analysis:	EPA 8015B
Field ID:	ST1(A,B,C,D)	Batch#:	232541
Matrix:	Soil	Sampled:	02/26/16
Units:	mg/Kg	Received:	02/26/16
Basis:	as received	Prepared:	02/29/16
Diln Fac:	1.000	Analyzed:	03/01/16

Type: SAMPLE Lab ID: 274598-005

Analyte	Result	RL
Diesel C10-C24	5.8 Y	1.0

Surrogate	%REC	Limits
o-Terphenyl	99	59-140

Type: BLANK Lab ID: QC825259

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
o-Terphenyl	103	59-140

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 3550B
Project#:	15-020.03	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825260	Batch#:	232541
Matrix:	Soil	Prepared:	02/29/16
Units:	mg/Kg	Analyzed:	03/01/16

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.85	56.79	114	58-137

Surrogate	%REC	Limits
o-Terphenyl	103	59-140

Batch QC Report
Total Extractable Hydrocarbons

Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 3550B
Project#:	15-020.03	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	232541
MSS Lab ID:	274570-001	Sampled:	02/26/16
Matrix:	Soil	Received:	02/26/16
Units:	mg/Kg	Prepared:	02/29/16
Basis:	as received	Analyzed:	03/01/16
Diln Fac:	1.000		

Type: MS Lab ID: QC825261

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	22.73	50.17	68.90	92	46-154

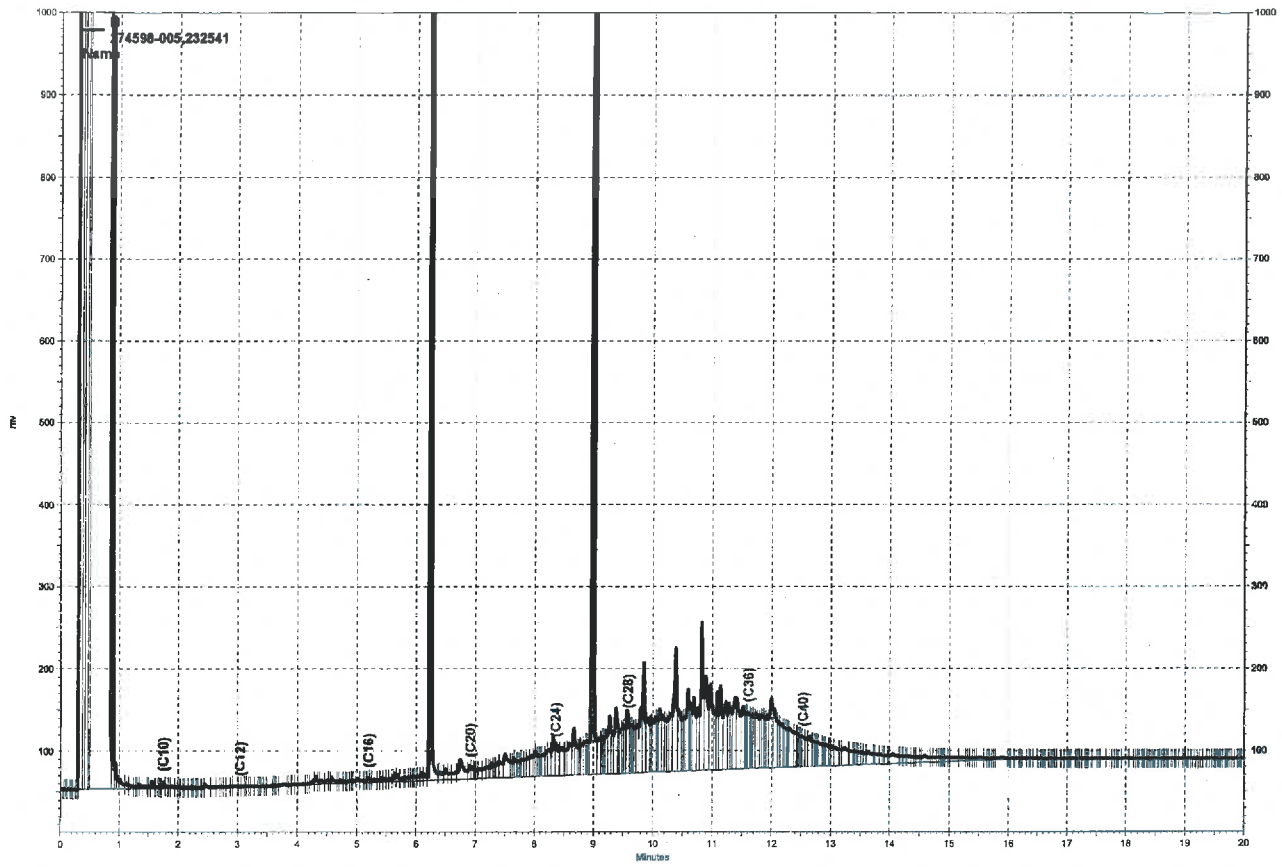
Surrogate	%REC	Limits
o-Terphenyl	85	59-140

Type: MSD Lab ID: QC825262

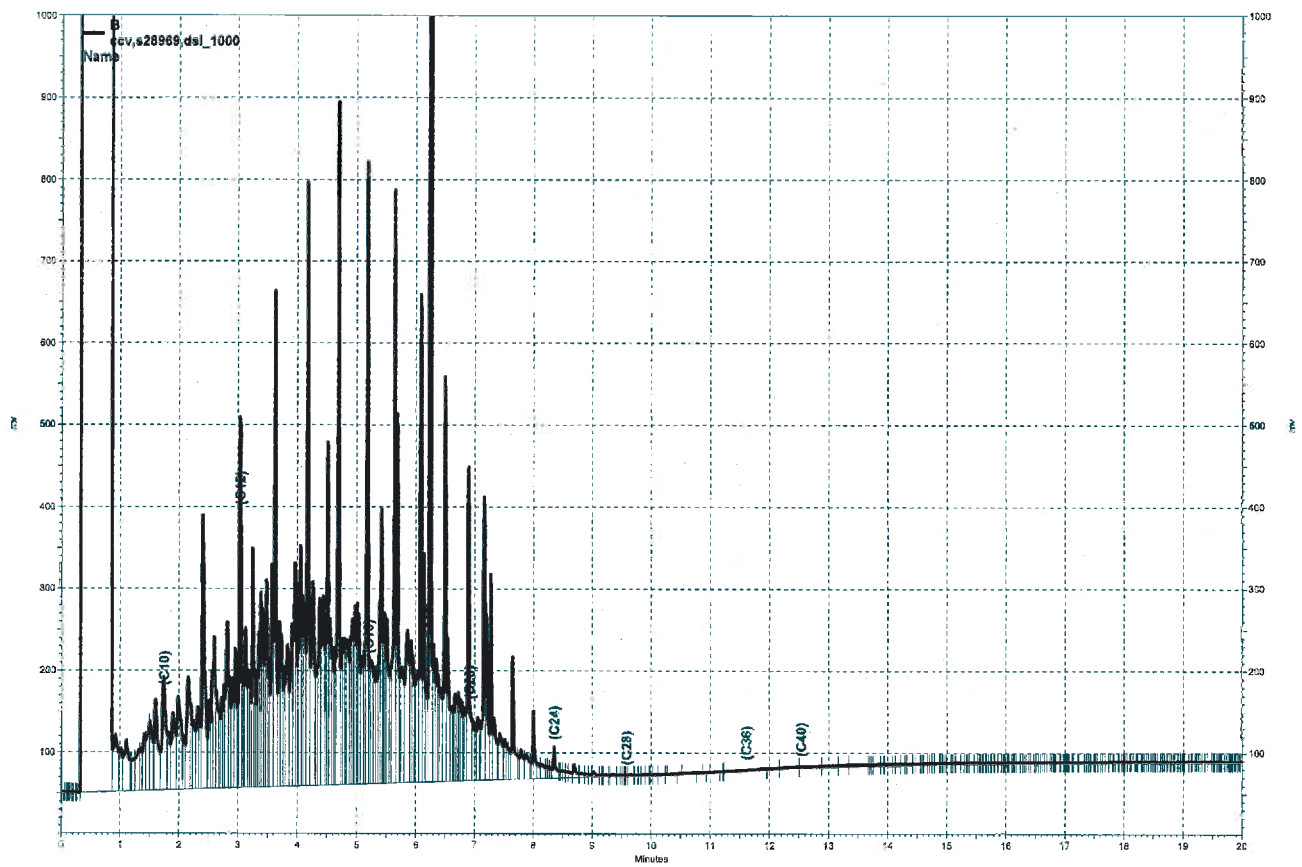
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.81	62.92	81	46-154	9	50

Surrogate	%REC	Limits
o-Terphenyl	94	59-140

RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\061b020, B



— \\Lims\gdrive\ezchrom\Projects\GC15B\Data\061b010, B

Purgeable Aromatics by GC/MS

Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 5030B
Project#:	15-020.03	Analysis:	EPA 8260B
Field ID:	ST1 (A,B,C,D)	Diln Fac:	0.9294
Lab ID:	274598-005	Batch#:	232532
Matrix:	Soil	Sampled:	02/26/16
Units:	ug/Kg	Received:	02/26/16
Basis:	as received	Analyzed:	02/29/16

Analyte	Result	RL
MTBE	ND	4.6
Benzene	ND	4.6
Toluene	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-134
1,2-Dichloroethane-d4	95	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	104	78-123

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Batch QC Report

Purgeable Aromatics by GC/MS			
Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 5030B
Project#:	15-020.03	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC825224	Batch#:	232532
Matrix:	Soil	Analyzed:	02/29/16
Units:	ug/Kg		

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-134
1,2-Dichloroethane-d4	89	80-138
Toluene-d8	96	80-120
Bromofluorobenzene	100	78-123

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Aromatics by GC/MS

Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 5030B
Project#:	15-020.03	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC825278	Batch#:	232532
Matrix:	Soil	Analyzed:	02/29/16
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
MTBE	25.00	23.84	95	61-122
Benzene	25.00	25.98	104	80-123
Toluene	25.00	25.05	100	80-120
Ethylbenzene	25.00	25.45	102	80-122
m,p-Xylenes	50.00	52.23	104	80-127
o-Xylene	25.00	25.40	102	80-125

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-134
1,2-Dichloroethane-d4	91	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	92	78-123

Batch QC Report

Purgeable Aromatics by GC/MS			
Lab #:	274598	Location:	Griffall Tracking
Client:	Envirocom	Prep:	EPA 5030B
Project#:	15-020.03	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZ	Batch#:	232532
MSS Lab ID:	274599-001	Sampled:	02/25/16
Matrix:	Soil	Received:	02/26/16
Units:	ug/Kg	Analyzed:	03/01/16
Basis:	as received		

Type: MS Diln Fac: 0.9488
 Lab ID: QC825285

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.4672	47.44	41.75	88	49-120
Benzene	<0.6732	47.44	44.33	93	57-120
Toluene	<0.7374	47.44	40.38	85	51-120
Ethylbenzene	<0.6887	47.44	38.75	82	45-120
m,p-Xylenes	<1.331	94.88	76.07	80	45-123
o-Xylene	<0.5746	47.44	38.43	81	44-122

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-134
1,2-Dichloroethane-d4	94	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	91	78-123

Type: MSD Diln Fac: 0.9634
 Lab ID: QC825286

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	48.17	43.94	91	49-120	4	40
Benzene	48.17	48.06	100	57-120	7	44
Toluene	48.17	43.57	90	51-120	6	47
Ethylbenzene	48.17	40.88	85	45-120	4	55
m,p-Xylenes	96.34	80.53	84	45-123	4	53
o-Xylene	48.17	40.35	84	44-122	3	55

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-134
1,2-Dichloroethane-d4	95	80-138
Toluene-d8	94	80-120
Bromofluorobenzene	91	78-123

RPD= Relative Percent Difference