

Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Client Sample ID: SB-30-20

Lab Sample ID: 720-91856-40

Date Collected: 03/08/19 09:00

Matrix: Solid

Date Received: 03/08/19 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		03/28/19 20:04	03/29/19 11:46	1

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Client Sample Results

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Client Sample ID: SB-24-20

Lab Sample ID: 720-91856-60

Date Collected: 03/08/19 13:00

Matrix: Solid

Date Received: 03/08/19 14:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.13		0.10		mg/L		03/28/19 20:04	03/29/19 11:51	1

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QC Sample Results

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-262709/1-A
Matrix: Solid
Analysis Batch: 262807

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 262709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		03/27/19 14:08	03/28/19 12:02	1

Lab Sample ID: LCS 720-262709/2-A
Matrix: Solid
Analysis Batch: 262807

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 262709

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.963		mg/L		96	80 - 120

Lab Sample ID: MB 720-262827/1-A
Matrix: Solid
Analysis Batch: 262869

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 262827

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		03/28/19 20:04	03/29/19 10:22	1

Lab Sample ID: LCS 720-262827/2-A
Matrix: Solid
Analysis Batch: 262869

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 262827

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.944		mg/L		94	80 - 120

Lab Sample ID: LB4 720-261651/1-D
Matrix: Solid
Analysis Batch: 262807

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 262709

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		03/27/19 14:08	03/28/19 12:11	1

Lab Sample ID: LB4 720-262527/1-B
Matrix: Solid
Analysis Batch: 262807

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 262709

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		03/27/19 14:08	03/28/19 12:42	1

Lab Sample ID: LB4 720-262538/1-B
Matrix: Solid
Analysis Batch: 262869

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 262827

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		03/28/19 20:04	03/29/19 10:32	1

Lab Sample ID: 720-91856-3 MS
Matrix: Solid
Analysis Batch: 262869

Client Sample ID: SB-19-10
Prep Type: STLC Citrate
Prep Batch: 262827

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	ND		10.0	8.43		mg/L		83	75 - 125

TestAmerica Pleasanton

QC Sample Results

Client: PES Environmental, Inc.
 Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Lab Sample ID: 720-91856-3 MSD
Matrix: Solid
Analysis Batch: 262869

Client Sample ID: SB-19-10
Prep Type: STLC Citrate
Prep Batch: 262827

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	ND		10.0	8.67		mg/L		86	75 - 125	3	20

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QC Association Summary

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Metals

Leach Batch: 261651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB4 720-261651/1-D	Method Blank	STLC Citrate	Solid	CA WET Citrate	

Leach Batch: 262527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-1	SB-19-3	STLC Citrate	Solid	CA WET Citrate	
720-91856-2	SB-19-5	STLC Citrate	Solid	CA WET Citrate	
LB4 720-262527/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	

Leach Batch: 262538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-3	SB-19-10	STLC Citrate	Solid	CA WET Citrate	
720-91856-4	SB-19-15	STLC Citrate	Solid	CA WET Citrate	
720-91856-5	SB-19-20	STLC Citrate	Solid	CA WET Citrate	
720-91856-13	SB-26-10	STLC Citrate	Solid	CA WET Citrate	
720-91856-36	SB-30-3	STLC Citrate	Solid	CA WET Citrate	
720-91856-37	SB-30-5	STLC Citrate	Solid	CA WET Citrate	
720-91856-38	SB-30-10	STLC Citrate	Solid	CA WET Citrate	
720-91856-39	SB-30-15	STLC Citrate	Solid	CA WET Citrate	
720-91856-40	SB-30-20	STLC Citrate	Solid	CA WET Citrate	
720-91856-60	SB-24-20	STLC Citrate	Solid	CA WET Citrate	
LB4 720-262538/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	
720-91856-3 MS	SB-19-10	STLC Citrate	Solid	CA WET Citrate	
720-91856-3 MSD	SB-19-10	STLC Citrate	Solid	CA WET Citrate	

Prep Batch: 262709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-1	SB-19-3	STLC Citrate	Solid	3005A	262527
720-91856-2	SB-19-5	STLC Citrate	Solid	3005A	262527
LB4 720-261651/1-D	Method Blank	STLC Citrate	Solid	3005A	261651
LB4 720-262527/1-B	Method Blank	STLC Citrate	Solid	3005A	262527
MB 720-262709/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 720-262709/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	

Analysis Batch: 262807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-1	SB-19-3	STLC Citrate	Solid	6010B	262709
720-91856-2	SB-19-5	STLC Citrate	Solid	6010B	262709
LB4 720-261651/1-D	Method Blank	STLC Citrate	Solid	6010B	262709
LB4 720-262527/1-B	Method Blank	STLC Citrate	Solid	6010B	262709
MB 720-262709/1-A	Method Blank	Total Recoverable	Solid	6010B	262709
LCS 720-262709/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	262709

Prep Batch: 262827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-3	SB-19-10	STLC Citrate	Solid	3005A	262538
720-91856-4	SB-19-15	STLC Citrate	Solid	3005A	262538
720-91856-5	SB-19-20	STLC Citrate	Solid	3005A	262538
720-91856-13	SB-26-10	STLC Citrate	Solid	3005A	262538
720-91856-36	SB-30-3	STLC Citrate	Solid	3005A	262538
720-91856-37	SB-30-5	STLC Citrate	Solid	3005A	262538
720-91856-38	SB-30-10	STLC Citrate	Solid	3005A	262538

TestAmerica Pleasanton

QC Association Summary

Client: PES Environmental, Inc.
 Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Metals (Continued)

Prep Batch: 262827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-39	SB-30-15	STLC Citrate	Solid	3005A	262538
720-91856-40	SB-30-20	STLC Citrate	Solid	3005A	262538
720-91856-60	SB-24-20	STLC Citrate	Solid	3005A	262538
LB4 720-262538/1-B	Method Blank	STLC Citrate	Solid	3005A	262538
MB 720-262827/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 720-262827/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
720-91856-3 MS	SB-19-10	STLC Citrate	Solid	3005A	262538
720-91856-3 MSD	SB-19-10	STLC Citrate	Solid	3005A	262538

Analysis Batch: 262869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-91856-3	SB-19-10	STLC Citrate	Solid	6010B	262827
720-91856-4	SB-19-15	STLC Citrate	Solid	6010B	262827
720-91856-5	SB-19-20	STLC Citrate	Solid	6010B	262827
720-91856-13	SB-26-10	STLC Citrate	Solid	6010B	262827
720-91856-36	SB-30-3	STLC Citrate	Solid	6010B	262827
720-91856-37	SB-30-5	STLC Citrate	Solid	6010B	262827
720-91856-38	SB-30-10	STLC Citrate	Solid	6010B	262827
720-91856-39	SB-30-15	STLC Citrate	Solid	6010B	262827
720-91856-40	SB-30-20	STLC Citrate	Solid	6010B	262827
720-91856-60	SB-24-20	STLC Citrate	Solid	6010B	262827
LB4 720-262538/1-B	Method Blank	STLC Citrate	Solid	6010B	262827
MB 720-262827/1-A	Method Blank	Total Recoverable	Solid	6010B	262827
LCS 720-262827/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	262827
720-91856-3 MS	SB-19-10	STLC Citrate	Solid	6010B	262827
720-91856-3 MSD	SB-19-10	STLC Citrate	Solid	6010B	262827

Lab Chronicle

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Client Sample ID: SB-19-3

Lab Sample ID: 720-91856-1

Date Collected: 03/07/19 09:45

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262527	03/25/19 12:30	SUN	TAL PLS
STLC Citrate	Prep	3005A			262709	03/27/19 14:08	MAA	TAL PLS
STLC Citrate	Analysis	6010B		1	262807	03/28/19 12:47	OBI	TAL PLS

Client Sample ID: SB-19-5

Lab Sample ID: 720-91856-2

Date Collected: 03/07/19 10:00

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262527	03/25/19 12:30	SUN	TAL PLS
STLC Citrate	Prep	3005A			262709	03/27/19 14:08	MAA	TAL PLS
STLC Citrate	Analysis	6010B		1	262807	03/28/19 13:02	OBI	TAL PLS

Client Sample ID: SB-19-10

Lab Sample ID: 720-91856-3

Date Collected: 03/07/19 10:15

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 10:56	BKR	TAL PLS

Client Sample ID: SB-19-15

Lab Sample ID: 720-91856-4

Date Collected: 03/07/19 10:35

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:01	BKR	TAL PLS

Client Sample ID: SB-19-20

Lab Sample ID: 720-91856-5

Date Collected: 03/07/19 11:20

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:06	BKR	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Client Sample ID: SB-26-10

Lab Sample ID: 720-91856-13

Date Collected: 03/07/19 13:15

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:21	BKR	TAL PLS

Client Sample ID: SB-30-3

Lab Sample ID: 720-91856-36

Date Collected: 03/08/19 08:00

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:26	BKR	TAL PLS

Client Sample ID: SB-30-5

Lab Sample ID: 720-91856-37

Date Collected: 03/08/19 08:30

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:31	BKR	TAL PLS

Client Sample ID: SB-30-10

Lab Sample ID: 720-91856-38

Date Collected: 03/08/19 08:45

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:36	BKR	TAL PLS

Client Sample ID: SB-30-15

Lab Sample ID: 720-91856-39

Date Collected: 03/08/19 08:55

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:41	BKR	TAL PLS

TestAmerica Pleasanton

Lab Chronicle

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Client Sample ID: SB-30-20

Lab Sample ID: 720-91856-40

Date Collected: 03/08/19 09:00

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:46	BKR	TAL PLS

Client Sample ID: SB-24-20

Lab Sample ID: 720-91856-60

Date Collected: 03/08/19 13:00

Matrix: Solid

Date Received: 03/08/19 14:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			262538	03/26/19 12:11	GLL	TAL PLS
STLC Citrate	Prep	3005A			262827	03/28/19 20:04	GLL	TAL PLS
STLC Citrate	Analysis	6010B		1	262869	03/29/19 11:51	BKR	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20
USDA	Federal		P330-17-00380	12-11-20

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Method Summary

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PLS
CA WET Citrate	California - Waste Extraction Test with Citrate Leach	CA-WET	TAL PLS

Protocol References:

CA-WET = California Waste Extraction Test, from Title 22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

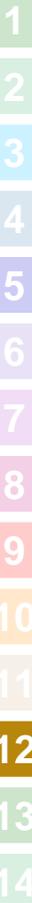
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Sample Summary

Client: PES Environmental, Inc.
Project/Site: Bayswater Ave & Myrtle Rd/Burlingame

TestAmerica Job ID: 720-91856-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-91856-1	SB-19-3	Solid	03/07/19 09:45	03/08/19 14:45
720-91856-2	SB-19-5	Solid	03/07/19 10:00	03/08/19 14:45
720-91856-3	SB-19-10	Solid	03/07/19 10:15	03/08/19 14:45
720-91856-4	SB-19-15	Solid	03/07/19 10:35	03/08/19 14:45
720-91856-5	SB-19-20	Solid	03/07/19 11:20	03/08/19 14:45
720-91856-13	SB-26-10	Solid	03/07/19 13:15	03/08/19 14:45
720-91856-36	SB-30-3	Solid	03/08/19 08:00	03/08/19 14:45
720-91856-37	SB-30-5	Solid	03/08/19 08:30	03/08/19 14:45
720-91856-38	SB-30-10	Solid	03/08/19 08:45	03/08/19 14:45
720-91856-39	SB-30-15	Solid	03/08/19 08:55	03/08/19 14:45
720-91856-40	SB-30-20	Solid	03/08/19 09:00	03/08/19 14:45
720-91856-60	SB-24-20	Solid	03/08/19 13:00	03/08/19 14:45



Salimpour, Afsaneh

720-91856-2

From: Justin J. Patterson <jpatterson@pesenv.com>
Sent: Friday, March 22, 2019 4:41 PM
To: Salimpour, Afsaneh
Cc: William W. Mast
Subject: RE: TestAmerica EDD and report files from 720-91856-1 Bayswater Ave & Myrtle Rd/Burlingame

-External Email-

Afsaneh

Based on these sample results, please analyze the following sample for WET chromium:

SB-19-3, SB-19-5, SB-19-10, SB-19-15, SB-19-20, SB-24-20, SB-26-10, SB-30-3, SB-30-5, SB-30-10, SB-30-15, SB-30-20

Standard TAT

Please call with any questions

Justin Patterson
Senior Environmental Scientist
PES ENVIRONMENTAL, INC.
7665 Redwood Boulevard, Suite 200
Novato, California 94945
(v) 415-899-1600 x237
(f) 415-899-1601
(C) 415-497-2735



720-91856 Chain of Custody

From: Afsaneh Salimpour <afsaneh.salimpour@testamericainc.com>
Sent: Monday, March 18, 2019 3:55 PM
To: Justin J. Patterson <jpatterson@pesenv.com>; William W. Mast <wmast@pesenv.com>
Subject: TestAmerica EDD and report files from 720-91856-1 Bayswater Ave & Myrtle Rd/Burlingame

Hello,

Attached please find the EDD and report files for job 720-91856-1; Bayswater Ave & Myrtle Rd/Burlingame

Please feel free to contact me if you have any questions.

Thank you.

Afsaneh F Salimpour
Project Manager

TestAmerica Pleasanton

E-mail: afsaneh.salimpour@testamericainc.com
www.TestAmericainc.com



Reference [720-300177]
Attachments 2

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: [Project Feedback](#)

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Login Sample Receipt Checklist

Client: PES Environmental, Inc.

Job Number: 720-91856-2

Login Number: 91856

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

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



DRAFT

For Discussion Purposes Only

PES Environmental, Inc.

Table 2
Summary of Analytical Results for Soil Borings - Soluble Metals
920 Bayswater Avenue
Burlingame, California

Sample Location	Sample Identification	Depth (Feet bgs)	Date Collected	Extractable (WET) Chromium (mg/L)
SB-19	SB-19-3	3-3.5	3/7/2019	ND (0.10)
	SB-19-5	5-5.5	3/7/2019	ND (0.10)
	SB-19-10	10-10.5	3/7/2019	ND (0.10)
	SB-19-15	15-15.5	3/7/2019	0.11
	SB-19-20	20-20.5	3/7/2019	0.12
SB-24	SB-24-20	20-20.5	3/8/2019	0.13
SB-26	SB-26-10	10-10.5	3/7/2019	ND (0.10)
SB-30	SB-30-3	3-3.5	3/8/2019	ND (0.10)
	SB-30-5	5-5.5	3/8/2019	0.1
	SB-30-10	10-10.5	3/8/2019	0.11
	SB-30-15	15-15.5	3/8/2019	ND (0.10)
	SB-30-20	20-20.5	3/8/2019	ND (0.10)
STLC				5.0

Notes:

Detections are shown in **bold**.
Detections exceeding the STLC are shaded.
WET = California Waste Extraction Test by U.S. EPA Test Method 3010A and analyzed by U.S. EPA Test Method 6010B.
Feet bgs = Feet below ground surface.
mg/L = Milligrams per liter.
ND (0.050) = Not detected at or above the specified laboratory reporting limit.
STLC = Soluble Threshold Limit Concentration, Title 22 California Code of Regulations, Chapter 11, Article 3.

For Discussion Purposes Only

Table 1
Summary of Analytical Results for Soil Borings - Metals
920 Bayswater Avenue
Burlingame, California

Sample Location	Sample Identification	Depth (Feet bgs)	Date Collected	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB-19	SB-19-3	3-3.5	3/7/2019	4.0	130	0.83	ND (0.50)	110	21.0	22	7.4	0.031	78	90	54
	SB-19-5	5-5.5	3/7/2019	ND (3.4)	120	0.44	ND (0.42)	82	14.0	27	5.4	0.022	76	64	39
	SB-19-10	10-10.5	3/7/2019	ND (4.0)	130	0.60	ND (0.50)	140	19.0	42	7.1	0.037	120	99	55
	SB-19-15	15-15.5	3/7/2019	ND (3.0)	89	0.36	ND (0.37)	82	15	24	4.5	0.023	68	64	41
	SB-19-20	20-20.5	3/7/2019	ND (3.6)	91	0.36	ND (0.45)	170	21	38	4.9	0.043	130	84	45
SB-20	SB-20-3	3-3.5	3/7/2019	ND (3.0)	95	0.48	ND (0.38)	71	13	19	5.3	0.025	48	65	43
	SB-20-5	5-5.5	3/7/2019	ND (3.4)	92	0.38	ND (0.42)	110	18	28	5.6	0.056	110	72	39
	SB-20-10	10-10.5	3/7/2019	ND (2.5)	87	0.39	ND (0.31)	120	21	39	5.0	0.030	100	87	48
	SB-20-15	15-15.5	3/7/2019	ND (3.1)	100	0.42	ND (0.39)	120	23	39	6.4	0.053	130	80	43
	SB-20-20	20-20.5	3/7/2019	ND (3.3)	110	0.53	ND (0.41)	140	20	45	7.6	0.055	130	88	61
SB-21	SB-21-3	3-3.5	3/8/2019	2.5	100	0.32	ND (0.31)	58	10	15	4.9	0.015	43	55	41
	SB-21-5	5-5.5	3/8/2019	ND (2.5)	120	0.65	ND (0.31)	120	21	37	5.6	0.045	95	90	51
	SB-21-10	10-10.5	3/8/2019	ND (2.8)	97	0.45	ND (0.35)	93	17	29	5.4	0.041	100	71	48
	SB-21-15	15-15.5	3/8/2019	ND (3.4)	120	0.49	ND (0.42)	110	22	29	5.7	0.019	99	86	52
	SB-21-20	20-20.5	3/8/2019	ND (3.7)	93	0.46	ND (0.46)	160	17	24	6.9	0.065	100	60	40.0
SB-22	SB-22-3	3-3.5	3/7/2019	ND (3.4)	110	0.41	ND (0.43)	88	14	17	5.6	0.037	62	65	37
	SB-22-5	5-5.5	3/7/2019	ND (3.4)	100	0.44	ND (0.42)	110	16	27	5.4	0.034	83	69	42
	SB-22-10	10-10.5	3/7/2019	ND (3.4)	100	0.43	ND (0.43)	89	16	32	6.3	0.015	94	77	47
	SB-22-15	15-15.5	3/7/2019	ND (3.6)	120	0.56	ND (0.45)	120	23	35	5.3	0.023	98	99	58
	SB-22-20	20-20.5	3/7/2019	ND (3.1)	87	0.34	ND (0.38)	85	15	28	4.8	0.036	87	71	42
SB-23	SB-23-3	3-3.5	3/8/2019	3.2	130	0.45	ND (0.33)	67	13	15	6.1	0.066	48	62	41
	SB-23-5	5-5.5	3/8/2019	2.8	130	0.51	ND (0.30)	110	19	34	6.4	0.051	100	73	57
	SB-23-10	10-10.5	3/8/2019	ND (3.6)	120	0.55	ND (0.45)	140	24.0	38	7.0	0.039	120	97	55
	SB-23-15	15-15.5	3/8/2019	ND (2.2)	96	0.34	ND (0.27)	71	16.0	17	4.9	0.022	65	53	43
	SB-23-20	20-20.5	3/8/2019	ND (2.8)	91	0.44	ND (0.34)	100	18.0	28	5.9	0.060	140	59	39
SB-24	SB-24-3	3-3.5	3/8/2019	2.1	100	0.54	ND (0.26)	82	16.0	22	5.7	0.035	62	72	42
	SB-24-5	5-5.5	3/8/2019	ND (2.7)	100	0.49	ND (0.34)	100	18	27	5.8	0.033	88	76	47
	SB-24-10	10-10.5	3/8/2019	ND (2.7)	100	0.36	ND (0.34)	98	19	31	5.9	0.043	110	68	46
	SB-24-15	15-15.5	3/8/2019	ND (2.0)	89	0.36	ND (0.25)	77	16	22	4.5	0.016	64	63	46
	SB-24-20	20-20.5	3/8/2019	ND (2.5)	100	0.48	ND (0.31)	190	35	47	5.1	0.038	160	94	51
SB-25	SB-25-3	3-3.5	3/8/2019	3.2	120	0.58	ND (0.30)	85	15	19	6.5	0.130	65	72	42
	SB-25-5	5-5.5	3/8/2019	ND (3.2)	110	0.55	ND (0.40)	85	14	21	6.4	0.028	67	76	42
	SB-25-10	10-10.5	3/8/2019	ND (3.7)	110	0.47	ND (0.47)	150	22	40	6.0	0.047	120	92	51
	SB-25-15	15-15.5	3/8/2019	ND (2.9)	98	0.44	ND (0.36)	87	16	21	6.2	0.055	71	69	47
	SB-25-20	20-20.5	3/8/2019	ND (2.8)	73	0.37	ND (0.35)	69	12.0	24	5.7	0.042	71	57	36
SB-26	SB-26-3	3-3.5	3/7/2019	4.2	120	0.59	ND (0.46)	89	21.0	22	7.5	0.052	67	79	45
	SB-26-5	5-5.5	3/7/2019	ND (2.8)	100	0.48	0.7	89	13.0	27	15.0	0.033	59	66	57
	SB-26-10	10-10.5	3/7/2019	ND (3.7)	100	0.39	ND (0.46)	130	20.0	41	6.0	0.059	130	91	57
	SB-26-15	15-15.5	3/7/2019	ND (3.6)	110	ND (0.36)	ND (0.45)	99	17	28	4.9	0.042	97	66	59
	SB-26-20	20-20.5	3/7/2019	ND (3.4)	87	0.38	ND (0.43)	92	16	29	5.3	0.047	99	70	45
SB-27	SB-27-3	3-3.5	3/7/2019	ND (3.3)	120	0.62	ND (0.41)	130	20	17	7.7	0.026	56	77	40
	SB-27-5	5-5.5	3/7/2019	ND (3.7)	120	0.49	ND (0.46)	100	15.0	29	5.5	0.037	87	71	48
	SB-27-10	10-10.5	3/7/2019	ND (3.4)	96	0.37	ND (0.43)	100	17	33	6.1	0.043	110	70	50
	SB-27-15	15-15.5	3/7/2019	ND (3.1)	110	0.39	ND (0.31)	98	22.00	28	6.5	0.058	90	73	46
	SB-27-20	20-20.5	3/7/2019	ND (3.0)	85	0.39	ND (0.37)	98	16	28	5.2	0.038	100	64	39

Need Test - TCLP CHROMIUM OVER 100 mg/kg - Problem
 Need Test - STLL CHROMIUM OVER 50 mg/kg - Problem
 NICKEL - NO OVER 150 mg/kg - OK OK LEAD - NO OVER 50/100 mg/kg - OK OK

For Discussion Purposes Only

Table 1
Summary of Analytical Results for Soil Borings - Metals
920 Bayswater Avenue
Burlingame, California

Sample Location	Sample Identification	Depth (Feet bgs)	Date Collected	Arsenic (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Nickel (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB-28	SB-28-3	3-3.5	3/7/2019	3.4	110	0.47	ND (0.37)	63	13.0	15.0	5.8	0.067	47	60	37
	SB-28-5	5-5.5	3/7/2019	3.3	130	0.52	ND (0.41)	110	19	30	7.3	0.047	87	85	51
	SB-28-10	10-10.5	3/7/2019	ND (3.0)	100	0.42	ND (0.37)	90	15.0	27	6.0	0.042	89	65	45
	SB-28-15	15-15.5	3/7/2019	ND (2.7)	95	0.44	ND (0.34)	150	22.0	42	4.2	0.033	130	100	52
	SB-28-20	20-20.5	3/7/2019	ND (3.3)	120	0.47	ND (0.41)	100	20.0	32	6.7	0.035	110	73	52
SB-29	SB-29-3	3-3.5	3/7/2019	ND (3.8)	130	0.46	ND (0.48)	80	17.0	15	6.8	0.084	57	64	37
	SB-29-5	5-5.5	3/7/2019	ND (3.5)	110	0.49	ND (0.43)	64	16.0	14	5.6	0.03	49	61	36
	SB-29-10	10-10.5	3/7/2019	ND (3.8)	120	0.44	ND (0.48)	110	18.0	29	5.3	0.04	100	67	45
	SB-29-15	15-15.5	3/7/2019	ND (3.6)	120	0.44	ND (0.45)	120	21	48	6.8	0.028	120	89	58
	SB-29-20	20-20.5	3/7/2019	ND (2.5)	120	0.53	ND (0.32)	130	28.0	37	7.1	0.46	130	79	46
SB-30	SB-30-3	3-3.5	3/8/2019	ND (3.1)	120	0.52	ND (0.38)	110	16.0	23	6.1	0.036	78	72	44
	SB-30-5	5-5.5	3/8/2019	ND (3.4)	100	0.51	ND (0.42)	77	15.0	20	5.0	0.59	61	63	38
	SB-30-10	10-10.5	3/8/2019	2.8	110	0.44	ND (0.33)	120	22	39	7.2	0.04	120	78	56
	SB-30-15	15-15.5	3/8/2019	ND (3.0)	100	0.46	ND (0.38)	110	24.0	35	7.5	0.07	120	69	42
	SB-30-20	20-20.5	3/8/2019	ND (2.5)	100	0.49	ND (0.31)	150	17	26	6.4	0	130	63	40
TTLc values ⁽¹⁾				500	10,000	75	100	2,500	8,000	2,500	1,000	20	2,000	5,000	5,000

Notes:

Detections are shown in **bold**.

Results equal to or exceeding TTLc are shaded.

Total Metals by U.S. EPA Test Methods 6010B and 7471A.

Only analytes detected in at least one sample are presented on this table.

Feet bgs = Feet below ground surface.

mg/kg = Milligrams per Kilogram.

ND (0.47) = Not detected at or above the specified laboratory reporting limit.

⁽¹⁾ TTLc: Total Threshold Limit Concentration, Title 22 California Code of Regulations, Chapter 11, Article 3

Table 2
Summary of Soil Analytical Results - Metals
Phase II Subsurface Investigation
908 and 920 Bayswater Avenue and 108 through 124 Myrtle Road, Burlingame, California

Sample Location	Sample ID	Sample Depth (feet bgs)	Date Sampled	Antimony (mg/kg)	Arsenic ¹ (mg/kg)	Barium (mg/kg)	Beryllium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Cobalt (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Molybdenum (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Thallium (mg/kg)	Vanadium (mg/kg)	Zinc (mg/kg)
SB-1	SB-1-2.0	2	7/1/2015	ND(2.50)	2.95	132	ND(2.50)	ND(2.50)	49.3	11.3	16.1	6.05	ND(0.100)	ND(2.50)	35.6	ND(2.50)	ND(2.50)	ND(2.50)	47.6	33.1
	SB-1-4.5	4.5	7/1/2015	ND(2.50)	4.15	139	ND(2.50)	ND(2.50)	127	18.7	38.6	8.11	ND(0.100)	ND(2.50)	101	ND(2.50)	ND(2.50)	ND(2.50)	85.2	47.6
	SB-1-16.0	16	7/1/2015	ND(2.50)	3.36	96.8	ND(2.50)	ND(2.50)	98.8	21.4	31.4	6.88	0.128	ND(2.50)	132	ND(2.50)	ND(2.50)	ND(2.50)	61.7	37.5
	SB-1-22.0	22	7/1/2015	ND(2.50)	3.34	95.3	ND(2.50)	ND(2.50)	80.2	17.4	26.5	5.92	ND(0.100)	ND(2.50)	98.1	ND(2.50)	ND(2.50)	ND(2.50)	56.9	33.5
SB-2	SB-2-2.0	2	7/1/2015	ND(2.50)	3.12	119	ND(2.50)	ND(2.50)	57.3	10.6	14.9	7.42	ND(0.100)	ND(2.50)	34.9	ND(2.50)	ND(2.50)	ND(2.50)	50.2	33.7
	SB-2-4.5	4.5	7/1/2015	ND(2.50)	3.63	131	ND(2.50)	ND(2.50)	114	19.2	25.2	6.94	ND(0.100)	ND(2.50)	74.5	ND(2.50)	ND(2.50)	ND(2.50)	76.4	39.8
SB-3	SB-3-2.0	2	7/1/2015	ND(2.50)	2.80	126	ND(2.50)	ND(2.50)	54.5	8.13	14.5	9.85	ND(0.100)	ND(2.50)	35.3	ND(2.50)	ND(2.50)	ND(2.50)	52.1	34.4
	SB-3-4.5	4.5	7/1/2015	ND(2.50)	3.61	105	ND(2.50)	ND(2.50)	71.3	12.8	19.7	24.0	ND(0.100)	ND(2.50)	53.8	ND(2.50)	ND(2.50)	ND(2.50)	69.7	40.5
SB-8	SB-8-16.0	16	7/6/2015	ND(2.50)	2.73	97.1	ND(2.50)	ND(2.50)	116	16.2	29.3	4.83	ND(0.100)	ND(2.50)	83.0	ND(2.50)	ND(2.50)	ND(2.50)	74.1	41.4
	SB-8-22.0	22	7/6/2015	ND(2.50)	3.99	102	ND(2.50)	ND(2.50)	142	20.0	36.5	5.68	ND(0.100)	ND(2.50)	126	ND(2.50)	ND(2.50)	ND(2.50)	83.3	47.1
SB-10	SB-10-4.5	4.5	7/2/2015	ND(2.50)	4.13	67.0	ND(2.50)	ND(2.50)	47.9	7.64	12.0	29.8	ND(0.100)	ND(2.50)	35.0	ND(2.50)	ND(2.50)	ND(2.50)	39.4	46.0
	SB-10-9.5	9.5	7/2/2015	ND(2.50)	4.10	120	ND(2.50)	ND(2.50)	146	20.2	42.9	6.87	ND(0.100)	ND(2.50)	134	ND(2.50)	ND(2.50)	ND(2.50)	95.8	59.7
SB-11	SB-11-3.0	3	7/6/2015	ND(2.50)	2.70	125	ND(2.50)	ND(2.50)	56.0	9.41	14.3	5.46	ND(0.100)	ND(2.50)	37.1	ND(2.50)	ND(2.50)	ND(2.50)	52.4	33.4
	SB-11-4.5	4.5	7/6/2015	ND(2.50)	3.28	105	ND(2.50)	ND(2.50)	78.9	14.6	21.0	6.49	ND(0.100)	ND(2.50)	65.3	ND(2.50)	ND(2.50)	ND(2.50)	63.5	39.6
SB-12	SB-12-2.0	2	7/6/2015	ND(2.50)	3.09	164	ND(2.50)	ND(2.50)	59.8	10.3	22.8	35.3	ND(0.100)	ND(2.50)	41.2	ND(2.50)	ND(2.50)	ND(2.50)	51.5	60.6
	SB-12-4.5	4.5	7/6/2015	ND(2.50)	3.93	139	ND(2.50)	ND(2.50)	100	16.4	20.5	8.04	ND(0.100)	ND(2.50)	61.8	ND(2.50)	ND(2.50)	ND(2.50)	74.8	39.7
SB-13	SB-13-2.0	2	7/6/2015	ND(2.50)	2.96	183	ND(2.50)	ND(2.50)	57.8	9.16	21.7	26.8	ND(0.100)	ND(2.50)	37.4	ND(2.50)	ND(2.50)	ND(2.50)	50.7	46.4
	SB-13-4.5	4.5	7/6/2015	ND(2.50)	4.14	130	ND(2.50)	ND(2.50)	112	20.9	23.1	9.02	ND(0.100)	ND(2.50)	66.4	ND(2.50)	ND(2.50)	ND(2.50)	83.4	42.9
SB-14	SB-14-2.0	2	7/6/2015	ND(2.50)	2.54	128	ND(2.50)	ND(2.50)	48.2	9.14	16.5	28.2	ND(0.100)	ND(2.50)	36.0	ND(2.50)	ND(2.50)	ND(2.50)	44.6	44.9
	SB-14-4.5	4.5	7/6/2015	ND(2.50)	3.14	115	ND(2.50)	ND(2.50)	70.0	14.3	16.0	8.94	ND(0.100)	ND(2.50)	44.0	ND(2.50)	ND(2.50)	ND(2.50)	63.6	36.3
SB-15	SB-15-2.0	2	7/6/2015	ND(2.50)	2.85	128	ND(2.50)	ND(2.50)	58.4	11.8	15.2	7.01	ND(0.100)	ND(2.50)	40.2	ND(2.50)	ND(2.50)	ND(2.50)	51.6	37.2
	SB-15-4.5	4.5	7/6/2015	ND(2.50)	3.06	125	ND(2.50)	ND(2.50)	67.4	11.9	14.8	6.00	ND(0.100)	ND(2.50)	45.2	ND(2.50)	ND(2.50)	ND(2.50)	59.6	32.4
SB-16	SB-16-2.0	2	7/1/2015	ND(2.50)	2.59	104	ND(2.50)	ND(2.50)	50.2	9.11	13.9	4.64	ND(0.100)	ND(2.50)	32.1	ND(2.50)	ND(2.50)	ND(2.50)	45.6	29.1
	SB-16-4.5	4.5	7/1/2015	ND(2.50)	3.59	98.8	ND(2.50)	ND(2.50)	66.0	19.6	17.5	5.70	ND(0.100)	ND(2.50)	49.3	ND(2.50)	ND(2.50)	ND(2.50)	64.8	29.3
SB-17	SB-17-2.0	2	7/1/2015	ND(2.50)	3.72	158	ND(2.50)	ND(2.50)	94.3	16.0	15.7	7.64	ND(0.100)	ND(2.50)	41.5	ND(2.50)	ND(2.50)	ND(2.50)	72.3	38.7
	SB-17-4.5	4.5	7/1/2015	ND(2.50)	3.41	103	ND(2.50)	ND(2.50)	58.6	14.5	15.9	5.66	ND(0.100)	ND(2.50)	45.4	ND(2.50)	ND(2.50)	ND(2.50)	61.6	30.3
SB-18	SB-18-2.0	2	7/6/2015	ND(2.50)	3.92	98.5	ND(2.50)	ND(2.50)	68.1	17.1	15.7	6.71	ND(0.100)	ND(2.50)	49.3	ND(2.50)	ND(2.50)	ND(2.50)	69.0	34.1
	SB-18-4.5	4.5	7/6/2015	ND(2.50)	3.35	102	ND(2.50)	ND(2.50)	77.5	13.5	21.9	6.00	ND(0.100)	ND(2.50)	64.3	ND(2.50)	ND(2.50)	ND(2.50)	67.3	38.9
Residential land use ESL (Shallow Soil <3 m bgs) ²				20	0.39	750	4.0	12	1,000 ⁶	23	230	80	6.7	40	150	10	20	0.78	200	600
Commercial/industrial land use ESL (Shallow Soil <3 m bgs) ³				40	1.6	1,500	8.0	12	2,500 ⁶	80	230	320	10	40	150	10	40	10	200	600
Residential land use ESL (Deep Soil >3 m bgs) ⁴				31	0.39	2,500	160	78	2,500 ⁶	23	2,500	80	6.7	390	1,500	390	390	0.78	390	2,500
Commercial/industrial land use ESL (Deep Soil >3 m bgs) ⁵				410	1.6	5,000	2,000	1,000	5,000 ⁶	300	5,000	320	88	5,000	5,000	5,000	5,000	10	5,000	5,000

Notes:

Detections are shown in bold. Results equal to or exceeding applicable regulatory screening levels are shaded.

bgs = Below ground surface.

mg/kg = Milligrams per kilogram.

ND(2.50) = Not detected at or above the indicated laboratory method reporting limit.

- = Not applicable/not analyzed.

NE = Not established.

1. Background concentrations of arsenic in soil in the San Francisco Bay Area, calculated as the 95th percentile of 1,395 data points, is 17 mg/kg (LBNL, 2009).

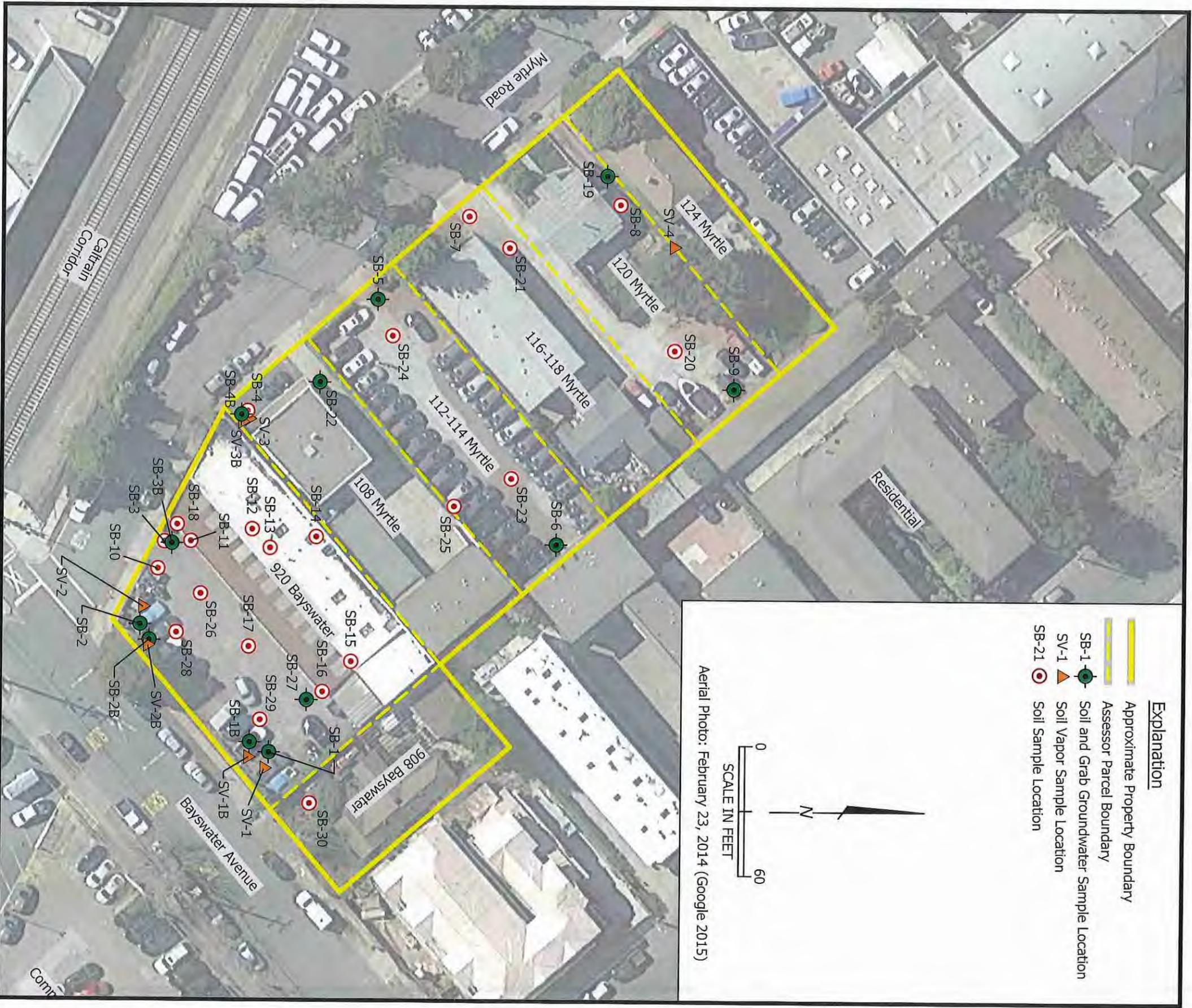
2. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-1. Shallow Soil Screening Levels (<3 m bgs), Residential Land Use (groundwater is a current or potential drinking water resource).

3. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table A-2. Shallow Soil Screening Levels (<3 m bgs), Commercial/Industrial Land Use (groundwater is a current or potential drinking water resource).

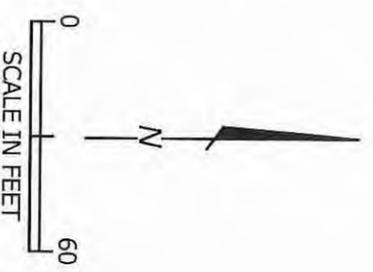
4. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table C-1. Deep Soil Screening Levels (>3 m bgs), Residential Land Use (groundwater is a current or potential drinking water resource).

5. December 2013 Regional Water Quality Control Board, San Francisco Bay Region (SFRWQCB) Environmental Screening Levels (ESLs), Table C-2. Deep Soil Screening Levels (>3 m bgs), Commercial/Industrial Land Use (groundwater is a current or potential drinking water resource).

6. ESL value is for total chromium.



- Explanation**
- Approximate Property Boundary
 - - - Assessor Parcel Boundary
 - Soil and Grab Groundwater Sample Location
 - ▲ Soil Vapor Sample Location
 - Soil Sample Location



Aerial Photo: February 23, 2014 (Google 2015)

Site Plan and Sample Locations
Site Management and Contingency Plan
908 and 920 Bayswater Avenue and 108-124 Myrtle Road
Burlingame, California

1107 Cowper St, Palo Alto CA

**GEOTECHNICAL INVESTIGATION
BTBT LLC
NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA**

THIS REPORT HAS BEEN PREPARED FOR:

**BTBT LLC
885 EL CAMINO REAL, SUITE 13A-369
PALO ALTO, CALIFORNIA 94301**

JUNE 2018





June 1, 2018
Project No. 3012-1R1

BTBT, LLC
885 El Camino Real, Suite 13A-369
Palo Alto, California 94301

**RE: GEOTECHNICAL INVESTIGATION,
NEW RESIDENCE,
1107 COWPER STREET,
PALO ALTO, CALIFORNIA**

Ladies and Gentlemen:

We are pleased to present the results of our geotechnical investigation relating to design and construction of the new residence and associated improvements on the property at 1107 Cowper Street in Palo Alto, California. This report summarizes the results of our field, laboratory, and engineering work, and presents geotechnical recommendations for the design and construction of the proposed development.

The conclusions and recommendations presented in this report are contingent upon our review and approval of the project plans and our observation and testing of the geotechnical aspects of the construction.

If you have any questions concerning our investigation, please call.

Very truly yours,

MURRAY ENGINEERS, INC.

A handwritten signature in blue ink, appearing to read "D. Yee", written over a light blue circular stamp.

Derek C. Yee
Staff Engineer



Andrew D. Murray, P.E.
Principal Engineer

DY:ADM

Copies: Addressee (email)
Fergus Garber Young Architects (4)
Attn: Ms. Kristen Lomax

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**GEOTECHNICAL INVESTIGATION
BTBT LLC – NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA**

INTRODUCTION

This report contains the results of our geotechnical investigation relating to design and construction of the new residence and associated improvements on the property at 1107 Cowper Street in Palo Alto, California. The project location is indicated on the Vicinity Map, Figure A-1. The purpose of our investigation was to evaluate the subsurface conditions on the site in the area of the proposed improvements and to provide geotechnical design criteria and recommendations for the project.

Project Description

We understand the project will include demolition of the existing residence, swimming pool and detached structures and construction of a new two-story residence with a partial basement and detached three-car garage in roughly the same location. Additional improvements will include a new pool house, swimming pool, and accessory structure along the north and northeastern portion of the property. Other exterior improvements will likely include a new driveway and various patios and walkways. We anticipate that structural loads will be relatively light and typical of residential construction. The layout of the existing and proposed improvements is shown on the attached Site Plan, Figure A-2.

Scope of Services

We performed the following services in accordance with our agreement with you dated April 9, 2018 (executed on April 11, 2018):

- ➊ Reviewed geologic and seismic conditions in the site vicinity and commented on the geologic hazards that could potentially impact the site and the proposed improvements
- ➋ Performed a reconnaissance of the site in the area of the proposed improvements
- ➌ Explored the subsurface by advancing and logging six (6) borings in the vicinity of the proposed improvements
- ➍ Performed laboratory analysis of select soil samples for soil classification and to evaluate engineering properties of the subsurface materials
- ➎ Performed geotechnical engineering analyses to develop geotechnical engineering design criteria for the proposed construction
- ➏ Prepared this report containing a summary of our investigation and our geotechnical conclusions and recommendations



GEOLOGIC & SEISMIC CONDITIONS

Geologic Overview

The subject property is located in the Santa Clara Valley, a broad, sediment-filled basin bounded on the southwest by the Santa Cruz Mountains and on the northeast by the Diablo Mountain range. The site is situated at an approximate elevation of 37 feet above mean sea level. According to the Geologic Map of the Palo Alto and Part of the Redwood Point 7.5" Quadrangles (Pampeyan, 1993), the site is located in an area underlain by Pleistocene age (approximately 10,000 to 2 million years old) older alluvium (Qoa). Older alluvium is generally described as unconsolidated to moderately consolidated gravel, sand, and silt. This material grades coarser headward and interfingers with stream terrace deposits in narrow drainage channels and locally incised by channels filled with younger alluvium. A copy of the relevant portion of this map is presented on the Vicinity Geologic Map, Figure A-3.

According to the State of California Seismic Hazard Zones Map for the Palo Alto Quadrangle (California Geological Survey, 2006), the site is not located in an area where historical occurrences of earthquake-induced liquefaction. A copy of the relevant portion of this map is presented on the State Seismic Hazard Zones Map, Figure A-4.

Seismicity

The San Francisco Bay Area, which is affected by the San Andreas Fault system, is recognized by geologists and seismologists as one of the most active seismic regions in the United States. In the Bay Area there are three major faults trending in a northwest direction within the San Andreas Fault system, which have generated about 12 earthquakes per century large enough to cause significant structural damage. These faults include the San Andreas, Hayward, and Calaveras faults. The San Andreas Fault is located approximately 5.8 miles southwest of the site. The Hayward and Calaveras faults are located approximately 13 and 18 miles northeast of the site, respectively. In addition, the potentially active Monte Vista-Shannon fault zone is located approximately 3.9 miles southwest of the site.

Seismologic and geologic experts convened by the U. S. Geological Survey, California Geological Survey, and the Southern California Earthquake Center conclude that there is a 72 percent probability for at least one "large" earthquake of magnitude 6.7 or larger in the Bay Area before the year 2043. The northern portion of the San Andreas fault is estimated to have a 6 percent probability of producing a magnitude 6.7 or larger earthquake by the year 2043 and the Hayward and Calaveras faults are estimated to have a 14 percent and 7 percent probability of producing a similar magnitude earthquake during the same time period (Working Group on California Earthquake Probabilities, 2014). Given a large earthquake on the San Andreas fault similar to the 7.8 magnitude earthquake that occurred in 1906, it is anticipated that ground shaking at the site will be violent and approximately equal to a Modified Mercalli Intensity of 9 (Association of Bay Area Governments, 2016).



SITE EXPLORATION & RECONNAISSANCE

Exploration Program

Our field investigation was performed on April 25, 2018 and included the excavation and logging of six exploratory borings to depths of approximately 12 to 20 feet, respectively, at the locations shown on Figure A-2, the Site Plan. The boring locations were approximately determined by measuring distance from building corners with a tape measure on the supplied site plan and should be considered accurate only to the degree implied by the mapping technique used.

The borings were advanced using continuous sampling methods with portable equipment. Soil samples were collected with split-spoon samplers that were driven with a 140-pound hammer repeatedly dropped from a height of 30 inches with a rope and cathead attached to a sampling tripod. The split-spoon samplers included 3-inch and 2.5-inch outside diameter (OD) samplers, and a 2-inch OD Standard Penetration Test sampler. The sampler types used are indicated on the logs at the appropriate depths. The number of hammer blows required to drive the samplers were recorded in 6-inch increments for the length of the 24-inch long sampler barrels. The associated blow count data, which is the sum of the second and third 6-inch increment, is presented on the boring logs as sampling resistance in blows per foot. The field blow counts for the 2.5-inch and 3-inch OD samplers have been adjusted to Standard Penetration Test blow counts for sampler diameter; however, the blow count data has not been adjusted for other factors such as hammer efficiency. The logs of the borings are presented in Appendix B as Figures B-1 through B-6. Also included in Appendix B is Figure B-7, Key to Boring Logs; and Figure B-8, Unified Soil Classification System.

Our staff engineer logged the borings in general accordance with the Unified Soil Classification System. The boring logs show our interpretation of the subsurface conditions at the locations and on the date indicated and it is not warranted that these conditions are representative of the subsurface conditions at other locations and times. In addition, the stratification lines shown on the logs represent approximate boundaries between the soil materials and the transitions may be gradual. Soil samples recovered from the borings were retained for laboratory testing and classification and review by our staff engineer.

Site Description

The approximately 0.95-acre, relatively flat property is located in the northeast side of Cowper Street in a fully developed residential neighborhood of Palo Alto. The rectangular-shaped property measures 130 to 175 feet wide and by 144 to 255 feet deep and is bounded by Cowper Street to the southwest and residential properties on other sides. The site is accessed by a concrete paver walkway and driveway extending northeast from Cowper Street. The site is developed with a two-story residence with an attached garage located in



the central portion of the property. A detached garden shed is located to the east of the residence. A swimming pool and pool houses are located along the northern corner of the property. Concrete paver walkways are located around the residence. Concrete patios are located around the pool and pool house. The remaining portions of the site are landscaped or vegetated with grass lawn, mulch, bushes, shrubs, and various young to mature trees.

The ground surface is relatively level across the site with overall site drainage to the northeast and southeast. The existing residence is equipped with roof gutters and downspouts which discharge into closed pipes of unknown discharge locations.

Subsurface

Six exploratory borings were excavated on the site in the area of the proposed residence and associated improvements at the approximate locations shown on the Site Plan, Figure A-2. In general, our exploratory borings encountered fine-grained and coarse-grained alluvium consisting of soft to hard clays and silts and loose to medium dense silty sand with gravel to the maximum depth explored of approximately 20 feet. The locations of the borings are shown on Figure A-2 and detailed logs of each boring are presented in Appendix B.

Atterberg Limits testing on a sample of surficial alluvium from Boring B-4 at depths of 0 to 2 feet yielded a plasticity index of 18 percent and a liquid limit of 32 percent, indicating that this material has a moderate potential for expansion (see Figure C-1, Liquid & Plastic Limits Test Report).

Groundwater

Groundwater was encountered in Borings B-1 & B-2 at a depth of approximately 18.5 feet below existing ground surface at the time of drilling and when re-measured approximately 24 hours later. We note that fluctuations in the level of groundwater can occur due to variations in rainfall, landscaping, and other factors that may not have been evident at the time our measurements were made.

Historical Groundwater Level Data

Based on The City of Palo Alto Shallow Groundwater Map (Terradex, Inc., 2016) indicates that the site is located within a zone anticipated to have a highest measured groundwater level in the range of 15 to 20 feet below site grades. In addition, based on Plate 1.2 of the Official State Seismic Hazard Zone report for the Palo Alto Quadrangle (California Geological Survey, 2006), the historically-shallowest depth to groundwater in the site vicinity appears to be between approximately 10 to 20 feet below the ground surface. Based on our interpolation between the 10- and 20-foot groundwater depth contours, the map indicates a historical depth to groundwater at the location of the subject property of approximately 18 feet below the ground surface.



CONCLUSIONS

In our opinion, the proposed site development is feasible from a geotechnical perspective provided that the recommendations contained in this report are implemented in the design and construction of the project. The primary geotechnical constraints to the proposed improvements are the potential for differential compaction of the relatively weak surficial soil blanketing portions of the site and at depth, the potential for differential settlement of proposed pool backfill, the potential for expansion and contraction of the moderately plastic soil blanketing the site, and the potential for strong to very strong ground shaking at the site during a large earthquake on the San Andreas Fault or any one of the other nearby active Faults.

Based on our investigation, the site appears to be underlain by soft to hard fine-grained and loose to medium dense coarse-grained alluvial soils to the full depth explored of 20 feet. In our opinion, the underlying competent alluvial soils should provide adequate support for the new foundations proposed provided the recommendation contained hereunder are carefully followed.

Highest Projected Groundwater Level

In accordance with the requirements of the City of Palo Alto Public Works Department, we have included the following statement: Based on our subsurface exploration and the available historic groundwater data reviewed, in our professional judgment, the groundwater level at the project site is unlikely rise above a depth of 13 feet as measured from existing site grades. Therefore, from a geotechnical perspective, if a basement with a finished floor extending below a depth of 13 feet is constructed, in our opinion, the basement slab foundation would be required to resist uplift pressures from regional groundwater buoyancy effects. Waterproofing of the basement is critical and should be designed and installed by an experienced consultant/contractor.

Please note that the City of Palo Alto prohibits new basements from being constructed with subsurface drainage. Therefore, as noted in the Retaining Wall section that follows, basement retaining walls should be designed for the undrained condition and waterproofing (designed by others) should be incorporated in the design.

Temporary Basement Groundwater Dewatering

Since groundwater was not encountered within 2 feet of the planned/anticipated bottom of basement elevation at the time of our subsurface exploration (per new Public Works requirements), in our opinion, groundwater dewatering of the basement excavation should not be required and, therefore, we have not performed a detailed evaluation related to ground subsidence from the effects of temporary groundwater dewatering.



However, we recommend that the groundwater level be measured before the excavation of the new basement. If groundwater is found to be within 2 feet of the deepest excavation and temporary dewatering is required, the City of Palo Alto will require a geotechnical engineer to fill out and sign the City of Palo Alto's new Geotechnical Report Worksheet. The Geotechnical Report Worksheet requires a comprehensive dewatering plan that includes a description of the dewatering technique, including the location of dewatering wells, the anticipated dewatering flow rate, the total dewatering duration, the location of anticipated discharge, the estimated radius of influence (i.e. the extent of the cone of depression) from each dewatering well as a function of time, based on local soil and groundwater conditions, the impact of the proposed dewatering on settlement or movement of offsite structures and infrastructure.

In order to respond to the City's Geotechnical Report Worksheet, in our opinion, aquifer testing is required (i.e. pumping test). A pumping test is a practical, reliable method of estimating well performance, well yield, the zone of influence of the well and aquifer characteristics. Examples of aquifer characteristics include the aquifer's ability to store and transmit water, anisotropy, aquifer extent, the presence of boundary conditions, and possible hydraulic connection between the aquifer and any surface water. A pumping test consists of pumping at one well, usually at a constant rate, and measuring the change in water level drawdown over time at both the pumping well and at nearby observation wells during and after pumping.

Geologic Hazards

As part of our investigation, we evaluated the potential for geologic hazards to impact the site and the proposed improvements. The results of our review are presented below:

- ④ **Expansive Soils** – Based on our laboratory testing, the near-surface material has a moderate potential for expansion. In general, expansive soil can undergo volume changes with changes in moisture content. Specifically, when wetted as during the rainy season, expansive soil tends to swell and when dried as during the summer months, this material shrinks. Structures and flatwork supported on expansive soil tend to experience cyclic, seasonal heave and settlement. In our opinion, shrink and swell of the surficial soil should not have a significant impact on the structural integrity of the proposed improvements, provided that they are designed and constructed in accordance with the recommendations presented in this report. In our opinion, these recommendations should mitigate the potential for significant heave, but will not eliminate this potential.

- ④ **Fault Rupture** - Based on our review of published maps, it is our opinion that no active or potentially active faults cross the property. Therefore, in our opinion, the potential for fault rupture to occur at the site is very low.



- ⊕ Ground Shaking - As noted in the Seismicity section above, moderate to large earthquakes are probable along several active faults in the greater Bay Area. Therefore, strong ground shaking should be expected at some time during the design life of the proposed development. The improvements should be designed in accordance with current earthquake resistant standards, including the 2016 CBC guidelines and design parameters presented in this report. It should be clearly understood that these guidelines and parameters will not prevent damage to structures; rather they are intended to prevent catastrophic collapse. The magnitude and extent of earthquake-related damage can be mitigated to a degree by utilizing an upgraded structural design. The project structural engineer should be consulted for additional details relating to an upgraded seismic design.

- ⊕ Differential Compaction/Settlement – During moderate and large earthquakes, soft or loose, natural or fill soils can densify and settle, often unevenly across a site. In general, the alluvial soil materials encountered at the site are soft to hard clays and silts and loose to medium dense sands. In our opinion, the stiff to hard and medium dense soil has a low potential and the soft to medium stiff and loose soil encountered across the site and at depth, has a moderate to high potential for differential compaction and/or settlement during a seismic setting. In addition, we anticipate that similar materials are present at areas not sampled during our subsurface evaluation. However, in our opinion, differential compaction of these materials should not constitute a significant hazard to the proposed improvements, provided that the improvements are supported on foundations designed in accordance with the recommendations presented in this report.

- ⊕ Liquefaction – Liquefaction is a soil softening response, by which an increase in the excess pore water pressure results in partial to full loss of soil shear strength. In order for liquefaction to occur, the following four factors are required: 1) saturated soil or soil situated below the groundwater table; 2) undrained loading (strong ground shaking), such as by earthquake; 3) contractive soil response during shear loading, which is often the case for a soil which is initially in a loose or uncompacted state; and 4) susceptible soil type; such as clean, uniformly graded sands, non-plastic silts, or gravels. Structures situated above temporarily liquefied soils may sink or tilt, potentially resulting in significant structural damage. Because the site is underlain by relatively stiff, cohesive, fine-grained and relatively medium dense coarse-grained alluvial soils and because groundwater was not encountered during our subsurface exploration, it is our opinion that the potential for liquefaction and liquefaction-related distress to the proposed improvements is relatively low. In addition, the site is mapped outside the area considered susceptible to earthquake-induced liquefaction (see Figure A-4).

RECOMMENDATIONS

We recommend that the residence basement, its retaining walls, and all loads overlying the basement be supported on a mat foundation bearing in the underlying competent alluvial deposits. We recommend any at-grade portions of the new residence, including any accessory features such as entrance steps, porches, and overhangs structurally tied to the house, should be either supported on drilled piers or cantilevered off the basement walls to limit the potential for differential movement between the basement and the at-grade portions of the structure.

To mitigate the potential for differential settlement of basement retaining wall or pool backfill, proposed detached accessory structures, such as the proposed garage and pool house located within the temporary basement excavation, basement access ramp, or pool backfill, should be supported on drilled piers gaining support in native alluvial deposits below the backfill material. In our opinion, the detached accessory structures located outside the temporary basement excavation, basement access ramp, or pool backfill, may be supported either on drilled piers or continuous spread footings. Although, in our opinion, piers tend to have a better long-term performance level than footings in terms of limiting differential foundation movement, spread footings can be expected to perform reasonably well at this site but with an increased risk of some degree of differential foundation movement primarily attributable to expansion and contraction of the moderately expansive and soft surficial soils blanketing the site. We anticipate that such differential foundation movement, if it occurs, would not significantly impact the structural integrity of the structure but produce a level of distress to the structure that is cosmetic in nature, such as minor to moderate cracking of interior drywall or exterior stucco surfaces and possibly out-of-level floors. If this type of potential distress is not acceptable, then these building structures should be supported on piers. We recommend that interior slab floors for living space be designed and constructed as structural slabs supported on pier or footing foundations.

Based on our subsurface exploration, in our opinion, groundwater should not impact the basement design, but the potential for some groundwater entering into the basement excavations should be taken into account by the building contractor. In addition, there is a potential for encountering isolated zones of relatively clean granular deposits of variable density and consistency during excavations for the proposed structures that could cause localized caving. The design and construction of any temporary shoring or dewatering is the responsibility of the building contractor. In addition, we strongly encourage the use of a waterproofing consultant and/or waterproofing subcontractor to assure adequate protection from surface water that will accumulate adjacent to the basement walls and bottoms of mat slabs.

We recommend interior residence and living space slab floors be constructed as structural slabs supported on foundations as presented above. Slabs-on-grade for the garage, pool



patios, and exterior patios and walkways and flexible pavements should be constructed over a section of select granular fill. Any slabs-on-grade planned adjacent to the basement walls or overlying pool backfill should be designed to span the area underlain by the planned backfill (approximately 10-feet) to help mitigate settlement of the backfill material. Where existing fill is present within areas of new hardscape, portions of the fill should be removed and replaced as engineered fill as deemed necessary by our field representative during construction. Detailed foundation, grading, and drainage recommendations and geotechnical design criteria are presented below. We should review the proposed layout and design, prior to completion of the final plans, to verify that the following recommendations are appropriate.

The proposed swimming pool shell may also be supported on drilled piers gaining support in the underlying alluvium beneath any proposed backfill. A pool supported on piers would offer higher assurance against slight differential movement from potential settlement of proposed backfill and future heave-related pool damage. Alternatively, if you as the owner are willing to accept greater risk with respect to future potential distress and/or differential pool movement resulting in an out-of-level pool coping and possible trip hazards adjacent to pool patios, in our opinion, the pool may be designed and constructed as a rigid mat foundation bearing on the competent alluvium/and or engineered fill.

2016 CBC EARTHQUAKE DESIGN PARAMETERS

Site-specific seismic design parameters have been developed based on the procedures described in Chapter 16, Section 1613 of the 2016 California Building Code (California Building Standards Commission, 2016). These procedures utilize State standardized spectral acceleration values for maximum considered earthquake ground motion taking into account historical seismicity, available paleoseismic data, and activity rates along known fault traces, as well as site-specified soil and bedrock response characteristics. Contour maps of Class B bedrock horizontal spectral acceleration values for the State of California are included as figures in Chapter 16 of the 2016 CBC, representing both short (0.2 seconds) and long (1.0 second) periods of spectral response and taking into account 5 percent of critical damping. The United States Geological Survey (2017) has prepared an online seismic design value application tool for public use that allows for site-specific adjustments of these acceleration values for different subsurface conditions, which are defined by site classes. Given representative latitude of 37.44343 and longitude of -122.15088 derived by Google Earth and in accordance with guidelines presented in the 2016 CBC, the following seismic design parameters will apply for this site:

- Site Class D – Soil Profile Name: Stiff Soil (Table 1613.5.2)
- Mapped Spectral Accelerations for 0.2 second Period: $S_s = 1.504$ (Site Class B)
- Mapped Spectral Accelerations for a 1-second Period: $S_1 = 0.681$ (Site Class B)



- Design Spectral Accelerations for 0.2 second Period: $S_{DS} = 1.003$ (Site Class D)
- Design Spectral Accelerations for a 1-second Period: $S_{D1} = 0.681$ (Site Class D)

FOUNDATIONS

Basement Mat Slab

If the finished floor of the proposed basement will extend below a depth of 13 feet, the basement slab foundation should be designed to resist uplift pressures from buoyancy effects, assuming a water level at 13 feet below existing grade. Uplift pressures from buoyancy can be resisted by the weight of the structure, including the concrete mat foundation and retaining walls. If necessary, uplift pressures can also be resisted by using the weight of soil (average unit weight of 80 pounds per cubic foot (pcf)) overlying the heel (if any) of the retaining wall foundation or using drilled piers.

We recommend that the residence basement be supported on a reinforced concrete mat slab foundation bearing on the underlying alluvium. The mat may be designed for an allowable bearing pressure of 1,500 pounds per square foot for combined dead plus live loads, with a one-third increase allowed for transient loads, including wind or seismic forces.

Lateral loads may be resisted by friction between the mat and the supporting subgrade utilizing a frictional resistance of 0.30 for concrete formed on the alluvium. In addition, lateral resistance may be provided by passive pressures acting against the lower two-thirds of the basement retaining walls using an equivalent fluid pressure of 300 pounds per cubic foot. Mat slab thickness and reinforcing should be established by the project structural design engineer based on the preceding recommendations, anticipated loading, and other structural requirements.

Our representative should observe the basement excavation upon its completion and prior to placement of the recommended waterproofing and reinforcing steel to evaluate the condition of the subgrade soil and to make sure that the conditions are consistent with those anticipated from our subsurface exploration. It may be necessary to compact the subgrade soil in the basement excavation, if loose or disturbed areas are created or encountered during construction. In addition, amending the soil as previously discussed may be needed if soft saturated conditions are encountered at basement subgrade level. Generally, the waterproofing system may be placed directly on a poured working slab or on the prepared, uniformly graded subgrade soils.

The basement must be appropriately waterproofed. The mat slab floor and the retaining wall waterproofing systems should be designed as an integral system. We recommend that a

waterproofing consultant be retained to provide appropriate recommendations and construction specifications.

Based on our engineering judgment, post construction thirty-year differential foundation movement due to static loads is not expected to exceed 1/2-inch across any 20-foot horizontal span of the new mat-supported improvements.

Drilled Cast-in-Place Concrete Piers

We recommend that any at-grade portions of the residence, including attached porches and/or roof overhangs be supported on drilled, reinforced, cast-in-place, concrete friction piers with interconnected grade beams. Small overhangs may alternatively be supported by cantilevering off the basement retaining walls. The detached accessory structures, swimming pool, and pool patio may also be supported on drilled piers. Drilled piers should be at least 16 inches in diameter and should extend at least 12 feet below bottoms of grade beams. Piers that are drilled through basement retaining wall, basement access ramp, or pool backfill should extend at least 10 feet into competent alluvial soil beneath the backfill.

The piers should be designed to resist dead plus live loads using an allowable skin friction value of 400 pounds per square foot acting below a depth of 2 feet from bottom of grade beam (or below any backfill) with a one-third increase allowed for transient loads, including wind and seismic forces. The upper 2 feet of soil and any point-bearing resistance should be neglected for support of vertical loads. Drilled piers should be spaced no closer than approximately three pier-diameters, center-to-center.

Lateral loads may be resisted by passive earth pressure based upon an equivalent fluid pressure of 300 pounds per cubic foot, acting on 2 times the projected area of the pier below a depth of 2 feet from the bottom of the grade beams. Passive resistance of the soil within the upper 2 feet of the pier should be neglected. In addition, piers located within approximately 10 feet of the basement walls should neglect passive resistance above a 1:1 plane projected upward from the base of the basement retaining wall.

Pier reinforcing should be established by the project structural engineer based on the preceding design criteria and structural requirements.

The bottoms of the pier excavations should be substantially free of all loose cuttings and soil slough prior to the installation of reinforcing steel and the placement of concrete. In addition, any appreciable amount of water, which may accumulate in the pier excavations, should be pumped prior to placing concrete. Alternatively, the concrete may be placed using the tremie method to displace the water. A representative of Murray Engineers, Inc. should observe the pier drilling to establish that piers are sufficiently embedded in alluvial deposits

and that the pier excavations are properly cleaned. The pier depths recommended above may require adjustment, if differing conditions are encountered during drilling. Pier excavations should be filled with concrete as soon as practical after drilling to minimize the potential for caving.

Grade beams should be incorporated between piers, as required by the structural engineer. Perimeter grade beams should extend at least 6-inches below the crawlspace grade or bottom of slab subgrade to help mitigate the potential for infiltration of surface runoff under the at-grade portions of the structure. In addition, we recommend that all grade beams for the improvements be constructed over 2-inch thick cardboard void forms, such as manufactured by SureVoid, in areas overlying potentially expansive soil. Grade beam reinforcing should be established by the project structural engineer based on the preceding design criteria and structural requirements.

Based on our engineering judgment, post construction thirty-year vertical differential movement due to static loads is not expected to exceed approximately $\frac{3}{4}$ -inch across any 20-foot span of the new pier-supported improvements.

Spread Footings

As an alternative to drilled piers, the detached accessory structures located outside of the temporary basement excavation, basement access ramp, or pool backfill may be supported on conventional continuous spread footings bearing in the underlying competent alluvial soils. Continuous footings should have a minimum width of 15 inches. Isolated footings should be a minimum of 18 inches square. Spread footings should be adequately reinforced with steel and extend at least 30 inches below the final adjacent exterior grade and 24 inches below bottom of interior slab subgrade or crawlspace pad grade, and at least 6 inches into competent alluvium, whichever is deeper. Spread footings for light landscape features structurally separated from buildings, such as fences, gates, trellises, and arbors, should extend at least 30 inches below lowest adjacent grade.

We recommend that the footings be designed using an allowable bearing pressure of 1,150 pounds per square foot for dead plus live loads, with a one-third increase allowed for total loads including wind and seismic forces. The weight of the footings may be neglected for design purposes.

Lateral loads may be resisted by friction between the footings and the supporting subgrade using a friction coefficient of 0.30 for concrete formed on undisturbed soil. In addition to the preceding frictional resistance, lateral resistance may be provided by passive pressures acting against foundations poured neat in excavations using an equivalent fluid pressure of 300 pounds per cubic foot below a depth of 1 foot relative to lowest adjacent grade.

The project structural engineer should design footing reinforcing to provide structural continuity and to permit spanning of local irregularities.

All footings located adjacent to utility lines or other footings should bear below a 1:1 plane extended upward from the bottom of edge of the utility trench or footing. The footing excavations should be substantially free of all loose soil, prior to placing reinforcing steel and concrete. Our representative should observe the footing excavations prior to placing concrete forms and reinforcing steel to evaluate that they are founded in competent bearing materials and have been properly cleaned. In addition, any loose soil in the footing excavations resulting from the placement of forms and reinforcing steel should be removed prior to placing concrete.

Based on our engineering judgment, thirty-year differential foundation movement due to static loads is not expected to exceed approximately 1.25-inch across any 20-foot span of the footing-supported portions of the improvements.

BASEMENT RETAINING WALLS

Basement retaining walls should be supported on foundations designed in accordance with the recommendations provided above. The general contractor shall be responsible for all shoring and bracing required to adequately stabilize the basement excavation for the safety of construction workers and protection of any adjacent structures or property lines. Waterproofing or damp-proofing of retaining walls should be included in areas where wall moisture would be undesirable, such as at living space or where wall finishes could be impacted by moisture. The project architect or a waterproofing consultant should provide detailed recommendations for waterproofing or damp proofing, as necessary. Basement mat slab waterproofing should be designed and constructed to be integral with the basement wall waterproofing.

Lateral Earth Pressures

Because City guidelines prohibit the use of subsurface drainage, we recommend that basement retaining walls be designed for undrained lateral soil loading conditions acting over the entire height of the wall. All portions of unrestrained retaining walls should be designed to resist an equivalent fluid pressure of 85 pounds per cubic foot (pcf) plus one-third of any anticipated surcharge loads. Undrained walls restrained from movement at the top should be designed to resist an equivalent fluid pressure of 85 pcf plus a uniform pressure of $8H$ pounds per square foot (psf), where H is the height in feet of the retained soil. Restrained walls should also be designed to resist an additional uniform pressure equal to one-half of any surcharge loads applied at the surface.

In accordance with the 2016 CBC, where applicable, retaining walls should also be designed to resist lateral earth pressure from seismic loading. We recommend that the seismic loading be based on an equivalent fluid pressure for an unrestrained condition and a uniform pressure of $8H$ pounds per square foot (psf)/foot of wall height, where H is the height in feet of the retained soil. In our opinion, site retaining walls less than 6 feet high do not need to be designed for seismic loading. The allowable passive pressures provided for retaining wall foundations may be increased by one-third for short-term seismic forces.

Retaining Wall Drainage

Please note that the geotechnical standard of care for basement retaining walls is to incorporate a subsurface drainage system behind basement retaining walls (integral with the basement mat foundation drainage system) to mitigate buildup of water pressure from surface water infiltration and/or other possible sources of water. However, in accordance with adopted requirements of the City of Palo Alto Public Works Department, we understand that basement retaining wall and subslab drainage systems are not allowed for any new construction within the City of Palo Alto. In our opinion, this poses a significant concern in relation to the potential issues of water permeation through slab surfaces and into the interior basement portions of the house, which, if it were to occur, would be unacceptable for a livable area such as the basement. Therefore, we strongly recommend the basement and mat slab be appropriately waterproofed. The mat slab floor and the retaining wall waterproofing systems should be designed as an integral system. We recommend that a waterproofing consultant and/or experienced waterproofing contractor be retained to provide appropriate recommendations and construction specifications.

Retaining Wall Backfill

Backfill placed behind the walls should be compacted in accordance with the specifications outlined in Table 1 of the Compaction section of this report using light compaction equipment. If heavy compaction equipment is used, the walls should be temporarily braced. Please refer also to the Earthwork section of this report for important recommendations regarding wall backfill.

SWIMMING POOL

The proposed swimming pool may be constructed as a mat slab bearing on underlying alluvium and/or engineered fill, or, as a more conservative approach of substantially mitigating the potential for differential movement, the pool may be designed as a pier-supported structural slab. In our opinion, the pier supported pool will provide better resistance to differential foundation movement and will provide better long-term support than a mat slab-supported shell. While the mat slab supported shell may be more susceptible to differential movement, a relatively rigid designed mat should be able to better accommodate minor differential movement without cracking with the understanding and

acceptance of the increased risk for potential distress that may occur from any potential settlement of the underlying proposed backfill.

The below-grade walls of the pool should be designed to resist a lateral earth equivalent fluid pressure of 70 pounds per cubic foot. The pool walls should also be designed to resist an additional uniform pressure equivalent to one-half of any surcharge loads applied at the surface. Any portion of the pool walls above ground should be designed as free-standing walls.

To mitigate the potential for expansive soil movement, soil moisture should be maintained within the pool excavations and should not be allowed to dry out prior to placing the gunite/concrete.

Pier-Supported Shell

As a more conservative design approach to substantially mitigate the potential for differential movement, the pool may be supported on drilled piers designed in accordance with the Drilled Pier section above. If piers are used, the bottom of the pool shell should be constructed as a structural slab spanning between the drilled, cast-in-place, concrete friction piers.

Mat Slab Pool Shell

As an alternative to drilled piers, the pool may be supported on a mat slab bearing on the underlying competent alluvium and/or engineered fill. Where the new pool bottom is shallower than the excavation left by the decommissioned existing swimming pool, the over-excavated areas should be backfilled to the level of the new pool bottom with select granular fill, such as Class 2 aggregate baserock, compacted in accordance with the Compaction section below. Additional over-excavation across the entire pool base may be required to maintain more uniform soil support conditions. The depth and magnitude of over-excavation should be decided in the field by our firm's representative.

The pool mat slab should be designed for an allowable bearing pressure of 1,500 pounds per square foot for combined dead plus live loads, with a one-third increase allowed for transient loads, including wind or seismic forces.

In addition, we recommend that the pool shell mat slab should be designed to simply span a distance of approximately 10 feet under full dead loads and cantilever 7.5 feet at the corners and perimeter with limited deflection, to account for localized loss in support beneath the structure due to potential differential movement of the underlying materials and/or backfill.

We recommend that one or more pressure relief valves be placed in the bottom of the pool to limit potential damage from hydrostatic (buoyant) pressure, a condition that could result if the pool were empty and the water level outside of the pool or spa were temporarily high. Roughly four inches of clean 1/2- to 3/4-inch crushed rock should be placed beneath the pool shell to allow water to flow to the pressure relief valve(s). Filter fabric, such as Mirafi 140N, should be placed on the pool subgrade prior to placement of the crushed rock.

CONCRETE SLABS

We anticipate that concrete slabs may be used for the interior residence and pool house floors, garage, pool patio, and exterior patios and walkways. Residence and living space interior slabs should be designed and constructed as structural slabs. The garage slab and pool patios may be constructed as either a structural slab supported on foundations mentioned above or as a conventional slab. In our opinion, structural slabs provide significantly higher resistance to differential movement and related distress that may occur. Other exterior concrete slabs may be constructed as slabs-on-grade. Detailed recommendations are presented in the following sections of the report.

Structural Slabs

Structural slabs should be supported on piers or footings designed in accordance with the recommendations provided above. If expansive material is encountered at subgrade level, the slabs should be underlain by 2-inch thick cardboard void forms to mitigate excessive uplift forces from expansive soil against the bottom of the slab. If a damp proofing system is used beneath interior structural slabs, the void form may be used to serve as a capillary break between the underlying subgrade and the slabs.

To limit interior slab dampness from soil moisture vapors, such as for interior or garage slabs, we recommend that a heavy-duty impermeable membrane be placed over the void form to limit slab dampness from soil moisture vapors. In particular, we suggest the use of an integrally bonded vapor retarder, such as Florprufe™ (Grace Construction Products), which will remain in direct contact with the slab when the cardboard void-former deteriorates. Please refer to the Vapor Retarder Considerations section below for additional information relating to slab underlayment. Please note that these recommendations do not comprise a specification for “waterproofing.” For greater protection against concrete slab dampness, a concrete slab waterproofing system should be considered. The project architect or a waterproofing consultant should provide project-specific waterproofing design and details.

Slabs-on-Grade

We recommend slabs-on-grade for the garage (if used) and driveway be underlain by at least 18 inches of Class 2 aggregate baserock. Other exterior slabs-on-grade for patios and walkways should be underlain by at least 10 inches of Class 2 aggregate baserock. Where existing fill is present within areas of new hardscape, portions of the fill should be removed and replaced as engineered fill as deemed necessary by our field representative during construction. The preceding recommendations are intended to mitigate significant slab movement and cracking. We note that minor slab movement or localized cracking of slabs may still occur.

Prior to placement of the select granular fill, the subgrade soils should be scarified and moisture conditioned, as necessary, to a depth of approximately 6 inches and re-compacted in accordance with the Compaction section of this report.

Any slabs-on-grade planned adjacent to the basement walls or overlying proposed pool backfill should be designed to span the area underlain by the planned basement retaining wall backfill (approximately 10-feet) to mitigate the concerns for backfill settlement. Where existing fill is present within areas of new hardscape, portions or all of the fill should be removed and replaced as engineered fill as deemed necessary by our field representative during construction.

In general, exterior slabs-on-grade should be designed as “free-floating” slabs, structurally isolated from adjacent foundations. We recommend that exterior slabs be provided with control joints at spacing of not more than about 10 feet. The project structural engineer should determine slab reinforcement based on anticipated use and loading.

Select granular fill should be compacted in accordance with the Compaction section of this report. Where slab surface moisture would be a significant concern, we recommend that the slabs be underlain by a vapor retarder consisting of a highly durable membrane not less than 15 mils thick (such as Stego Wrap Vapor Barrier by Stego Industries, LLC or equivalent), underlain by a capillary break consisting of 4 inches of 1/2- to 3/4-inch crushed rock. The capillary break may be considered the equivalent thickness as the upper 4 inches of select granular fill recommended above. Please also refer to the Vapor Retarder Considerations section below for additional information. Please note that these recommendations do not comprise a specification for “waterproofing.” For greater protection against concrete dampness, we recommend that a waterproofing consultant be retained.

Vapor Retarder Considerations

Based on our understanding, two opposing schools of thought currently prevail concerning protection of the vapor retarder during construction. Some believe that 2 inches of sand should be placed above the vapor retarder to protect it from damage during construction



and also to provide a small reservoir of moisture (when slightly wetted just prior to concrete placement) to benefit the concrete curing process. Still others believe that protection of the vapor retarder and/or curing of concrete are not as critical design considerations when compared to the possibility of entrapment of moisture in the sand above the vapor retarder and below the slab. The presence of moisture in the sand could lead to post-construction absorption of the trapped moisture through the slab and result in mold or mildew forming at the upper surface of the slab.

We understand that recent trends are to use a highly durable vapor retarder membrane (at least 15 mils thick) without the protective sand covering for interior slabs surfaced with floor coverings including, but not limited to, carpet, wood, or glued tiles and linoleum. However, it is also noted that several special considerations are required to reduce the potential for concrete edge curling if sand will not be used, including slightly higher placement of reinforcement steel and a water-cement ratio not exceeding 0.5 (Holland and Walker, 1998). We recommend that you consult with other members of your design team, such as your structural engineer, architect, and waterproofing consultant for further guidance on this matter.

FLEXIBLE PAVEMENTS

Asphaltic Concrete

We anticipate that asphaltic concrete pavement may be used for the new driveway. At a minimum, we recommend that the proposed asphalt driveway surface be at least 2.5 inches thick and that it be underlain by at least 10 inches of imported Class 2 aggregate baserock (R-value of 78). If soft subgrade conditions are encountered at subgrade elevation along the driveway, it may be advisable to increase the thickness of the select granular fill. Prior to placement of the select granular fill, the subgrade soils should be scarified to a depth of approximately 6 inches, moisture conditioned (as necessary), and recompact in accordance with the Compaction section of this report.

Sand-Set Pavers

We anticipate that sand-set pavers or flagstones may be used for exterior hardscape. We generally recommend that they be placed in accordance with the manufacturer's recommendations. At a minimum, we also generally recommend that pavers be underlain by at least 10 inches of compacted Class 2 aggregate baserock for vehicular loads and at least 10 inches of compacted Class 2 aggregate baserock for pedestrian loads. We note that the placement of the above thickness of baserock beneath proposed pavers will in our opinion mitigate but not eliminate the potential for differential movement/performance of these pavers. A representative from our office should observe the subgrade conditions of the hardscape prior to placement of baserock. Prior to placement of the baserock, the subgrade

soils should be scarified and moisture conditioned to a depth of at least 6 to 12 inches, as necessary, and compacted in accordance with the Compaction section of this report.

EARTHWORK

A moderate amount of earthwork is anticipated as part of the proposed construction, including basement and pool excavation, foundation excavation, basement retaining wall backfill, pool backfill, subgrade preparation beneath hardscape, placement and compaction of engineered fill, and backfill in utility trenches. Any proposed earthwork should be performed in accordance with the following recommendations.

Clearing & Site Preparation

Initially, the proposed improvement areas should be cleared of obstructions, including existing foundations, flatwork, utilities, and trees not designated to remain. Holes or depressions resulting from the removal of underground obstructions below proposed subgrade levels, such as the existing footings, and root balls, should be backfilled with engineered fill, placed and compacted in accordance with the recommendations provided below. After clearing, the proposed improvement areas should be adequately stripped to remove surface vegetation and organic-laden topsoil. The stripped material should not be used as engineered fill; however, it may be stockpiled and used for landscaping purposes.

Demolition & Backfill of Existing Pool

Once the existing pool shell has been completely removed, a representative of Murray Engineers, Inc. (MEI) should visit the site to observe that the excavations are free of construction debris and loose soil and the exposed subgrade soils are adequately compacted prior to the placement of new fill material. If the proposed pool will be supported on a mat slab, the excavations should be backfilled with Class 2 aggregate baserock, placed and compacted as discussed below and in the Compaction section of this report. Alternatively, if the proposed pool will be supported on drilled piers, the excavation should be backfilled with approved fill material, as discussed below and in the Compaction section of this report.

Material for Fill

On-site soils below the stripped layer having an organic content of less than 3 percent organic material by volume (ASTM D 2974) may be suitable for use as engineered fill, contingent on our firm reviewing and accepting this material prior to its placement. In general, fill material should not contain rocks or pieces larger than 6 inches in greatest dimension, and should contain no more than 15 percent larger than 2.5 inches. Any required imported fill should be predominantly granular material or low plasticity material with a plasticity index of less than approximately 15 percent. Any proposed fill for import should be approved by Murray Engineers, Inc. prior to importing to the site. Our approval process may require index testing to establish the expansive potential of the soil; therefore, it



is important that we receive samples of any proposed import material at least 3 days prior to planned importing. Class 2 aggregate baserock should meet the specifications outlined in the Caltrans Standard Specifications, latest edition.

Compaction

Prior to placing engineered fill, the subgrade soil should be scarified and compacted, as necessary. Material used for fill should be placed in uniform lifts, no more than 8-inches in uncompacted thickness. The fill material should be moisture conditioned, as necessary, and compacted in accordance with the specifications listed in Table 1 below. The relative compaction and moisture content specified in Table 1 are relative to ASTM D 1557 (latest edition). Compacted lifts should be firm and non-yielding under the weight of compaction equipment prior to the placement of successive lifts.

Table 1 Compaction Specifications

Fill Element	Relative Compaction*	Moisture Content*
General fill for raising of site grades, driveway, patio areas, and retaining wall backfill (for fills up to 4 feet thick)	90 percent	Near optimum
For fills greater than 4 feet thick, including basement retaining wall and pool backfill	93 percent (entire fill)	Near optimum
Upper 6 inches of subgrade beneath hardscape, for non-expansive soils (PI~<=20%)	90 percent	Near optimum
Aggregate baserock under hardscape	95 percent	Near optimum
½- to ¾-inch Crushed Rock - Compact with at least 3 passes of a vibratory plate with lift-thickness ≤ 12 inches.	see note at left	Not critical
Backfill of utility trenches using on-site soil	90 percent	Near optimum
Backfill of utility trenches using imported sand	90 percent	Near optimum

- Relative to ASTM D 1557, latest edition.

Temporary Slopes & Trench Excavations

The contractor should be responsible for the stability of all temporary cut slopes and trenches excavated at the site, and design and construction of any required shoring. Shoring and bracing should be provided in accordance with all applicable local and state safety regulations, including the current OSHA excavation and trench safety standards. Because of the potential for variable soil conditions, field modifications of temporary cut slopes may be required. Unstable materials encountered on the slopes during the excavation should be trimmed off, even if this requires cutting the slope back at flatter inclinations.

Location & Backfill of Temporary Basement Access Ramp

In planning the location for any temporary basement access ramp, the contractor should consider the future location of any at-grade structures or hardscape. If possible, we recommend that the ramp excavation be kept approximately 5 feet away from proposed

structures and hardscape. If placement of the ramp within this zone is unavoidable, it is imperative that the backfilled soils be compacted in accordance with the specifications outlined in Table 1 of the Compaction section of this report. We should observe and test the compaction of the ramp backfill. In addition, we recommend that a note be included on the structural plans referencing these recommendations.

SITE DRAINAGE

Roof run-off, rain, or irrigation water should not be allowed to pond near the structures, exterior slabs, or pavement areas. The new residence and detached structures should be provided with roof gutters and downspouts. Water collected in the gutters should not be allowed to discharge freely onto the ground surface adjacent to the foundations and should be conveyed away from the structures via splash blocks or via buried closed conduits and routed to a suitable discharge outlet. The finished grades should be designed to drain surface water away from the proposed structures, slabs, pavement areas, and yard areas to suitable discharge points. The ground surface should have positive gradient away from the structures. Where such surface gradients are difficult to achieve, we recommend that area drains or surface drainage swales be installed to collect surface water and convey it to a suitable discharge location away from the structures.

We recommend that annual maintenance of the surface drainage systems be performed. This maintenance should include inspection and testing to make sure that roof gutters and downspouts are in good working order and do not leak; inspection and flushing of area drains to make sure that they are free of debris and are in good working order; and inspection of surface drainage outfall locations to verify that introduced water flows freely through the discharge pipes and that no excessive erosion has occurred. If erosion is detected, this office should be contacted to evaluate its extent and to provide mitigation.

REQUIRED FUTURE SERVICES

Plan Review

To better assure conformance of the final design documents with the recommendations contained in this report, and to better comply with the building department's requirements, Murray Engineers, Inc. must review the completed project plans prior to construction. The plans should be made available for our review as soon as possible after completion so that we can better assist in keeping your project schedule on track. We recommend that the following note be added to the architectural, structural, and civil plans:

- “The geotechnical aspects of the construction, including basement and swimming pool excavations; pier drilling; spread footing excavation; retaining wall and pool backfill; subgrade preparation and baserock compaction beneath hardscapes;



placement and compaction of engineered fill; and installation of site drainage control systems should be performed in accordance with the geotechnical report prepared by Murray Engineers, Inc. dated June 1, 2018. Murray Engineers, Inc. should be provided at least 48 hours advance notification (650-559-9980) of any geotechnical aspects of the construction and should be present to observe and test the earthwork, foundation, and drainage installation phases of the project.”

Construction Observation Services

Murray Engineers, Inc. should observe and test (as necessary) the earthwork and foundation phases of construction in order to a) confirm that subsurface conditions exposed during construction are substantially the same as those interpolated from our limited subsurface exploration, on which the analysis and design were based; b) evaluate compliance with the geotechnical design concepts, specifications, and recommendations; and c) allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on limited subsurface information. The nature and extent of variation across the site may not become evident until construction. If variations are exposed during construction, it may be necessary to re-evaluate our recommendations.

LIMITATIONS

This report has been prepared for the sole use of BTBT LLC, specifically for developing geotechnical design criteria relating to design and construction of the new residence and associated improvements, as discussed above, at 1107 Cowper Street in Palo Alto, California. The opinions presented in this report are based upon information obtained from borings at widely separated locations, site reconnaissance, review of field data made available to us, and upon local experience and engineering judgment, and have been formulated in accordance with generally accepted geotechnical engineering practices that exist in the San Francisco Bay Area at the time this report was prepared. Further, our recommendations are based on the assumption that soil and geologic conditions at or between borings do not deviate substantially from those encountered. In addition, geotechnical issues may arise that are not apparent at this time. No other warranty, expressed or implied, is made or should be inferred. We are not responsible for data provided by others.

The recommendations provided in this report are based on the assumption that we will be retained to provide the Future Services described above in order to evaluate compliance with our recommendations. If we are not retained for these services, Murray Engineers, Inc. cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Murray Engineers, Inc.’ report by others. Furthermore, if another geotechnical consultant is retained for follow-up service to this report, Murray Engineers, Inc. will at that time cease to be the Engineer-of-Record.



The opinions presented in this report are valid as of the present date for the property evaluated. Changes in the condition of a property can occur with the passage of time, whether due to natural processes or the works of man, on this or adjacent properties. In addition, changes in applicable standards of practice can occur, whether from legislation or the broadening of knowledge. Accordingly, the opinions presented in this report may be invalidated, wholly or partially, by changes outside of our control. Therefore, this report is subject to review and should not be relied upon after a period of three years, nor should it be used, or is it applicable, for any property other than that evaluated.



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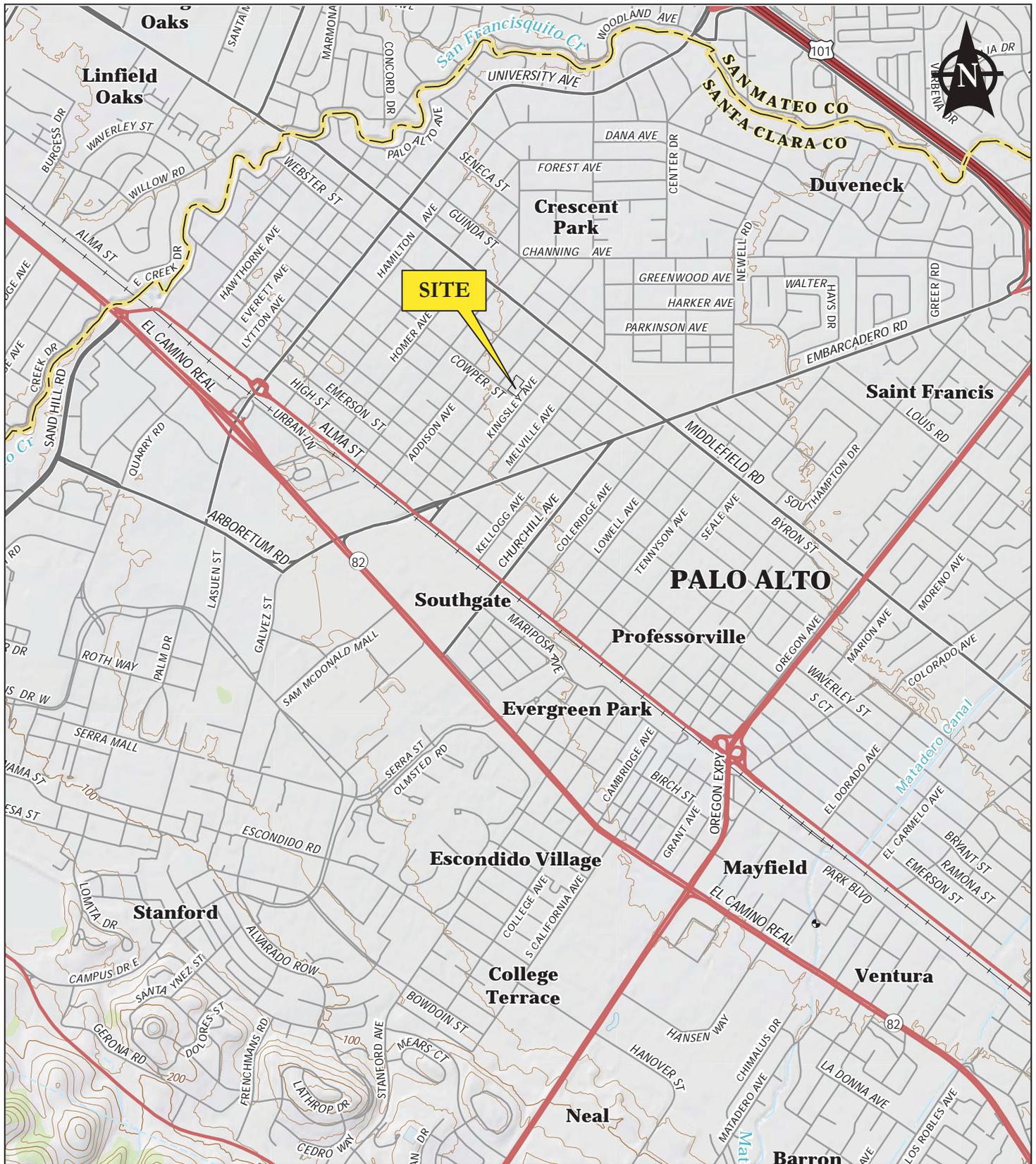
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Base: USGS Topographic Map Palo Alto Quadrangle, 7.5 Minute Series, 2015. Scale: 1 inch = 2,000 feet



BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

VICINITY MAP

PROJECT NO. 3012-1R1

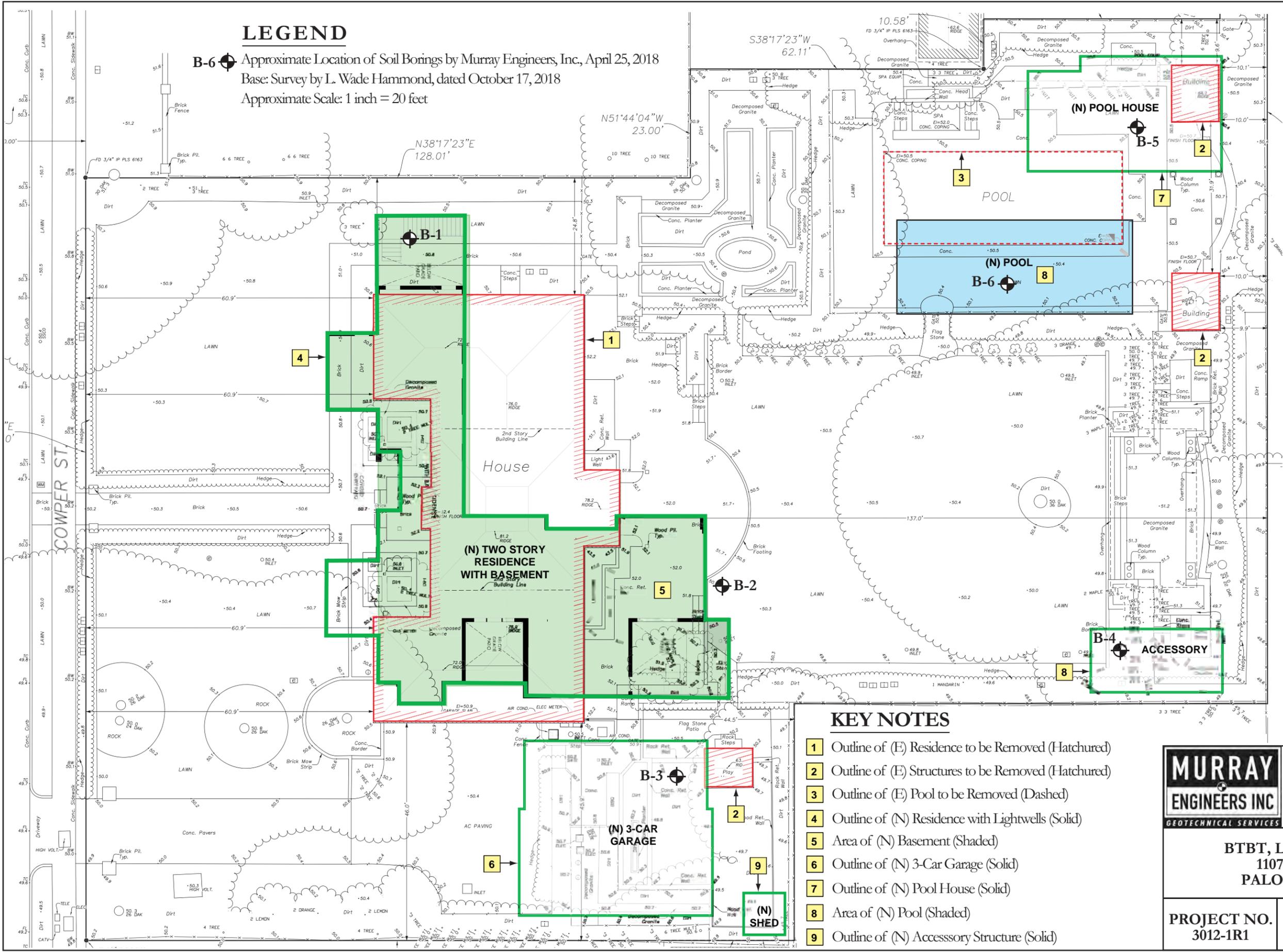
JUNE 2018

FIGURE A-1



LEGEND

B-6 Approximate Location of Soil Borings by Murray Engineers, Inc., April 25, 2018
 Base: Survey by L. Wade Hammond, dated October 17, 2018
 Approximate Scale: 1 inch = 20 feet



KEY NOTES

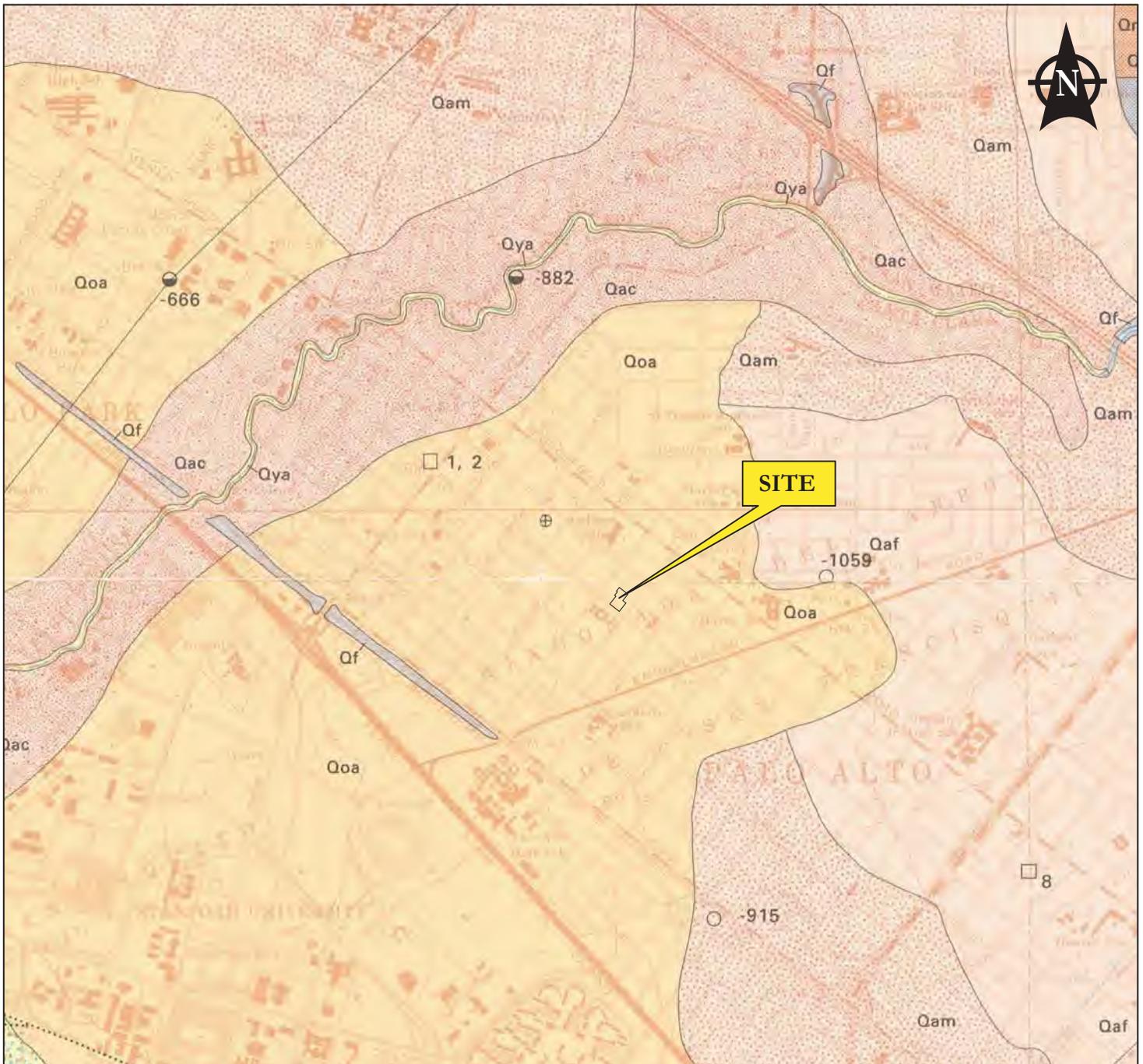
- 1 Outline of (E) Residence to be Removed (Hatched)
- 2 Outline of (E) Structures to be Removed (Hatched)
- 3 Outline of (E) Pool to be Removed (Dashed)
- 4 Outline of (N) Residence with Lightwells (Solid)
- 5 Area of (N) Basement (Shaded)
- 6 Outline of (N) 3-Car Garage (Solid)
- 7 Outline of (N) Pool House (Solid)
- 8 Area of (N) Pool (Shaded)
- 9 Outline of (N) Accessory Structure (Solid)



SITE PLAN

BTBT, LLC - NEW RESIDENCE
 1107 COWPER STREET
 PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1	JUNE 2018	FIGURE A-2
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Legend & Selected Map Symbols

	Medium-grained Alluvium		Fine-grained Alluvium
	Older Alluvium		Coarse-grained Alluvium
	Artificial Fill		

Base: Geologic Map of the Palo Alto and Part of the Redwood Point 7.5" Quadrangles, San Mateo and Santa Clara Counties, Earl H. Pampeyan, 1993 Scale: 1 inch = 2,000 feet



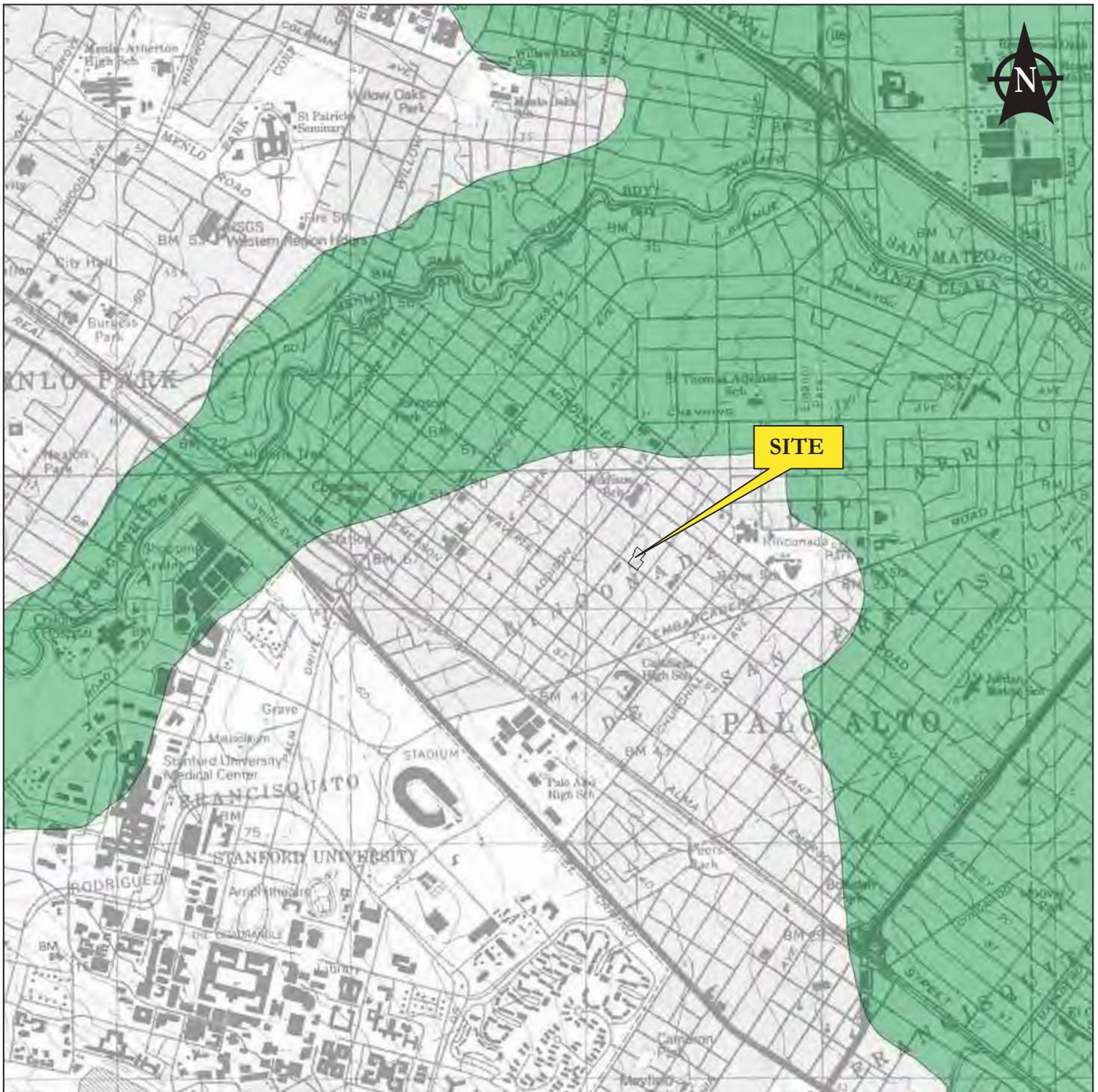
BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

VICINITY
GEOLOGIC MAP

PROJECT NO. 3012-1R1

JUNE 2018

FIGURE A-3



Legend

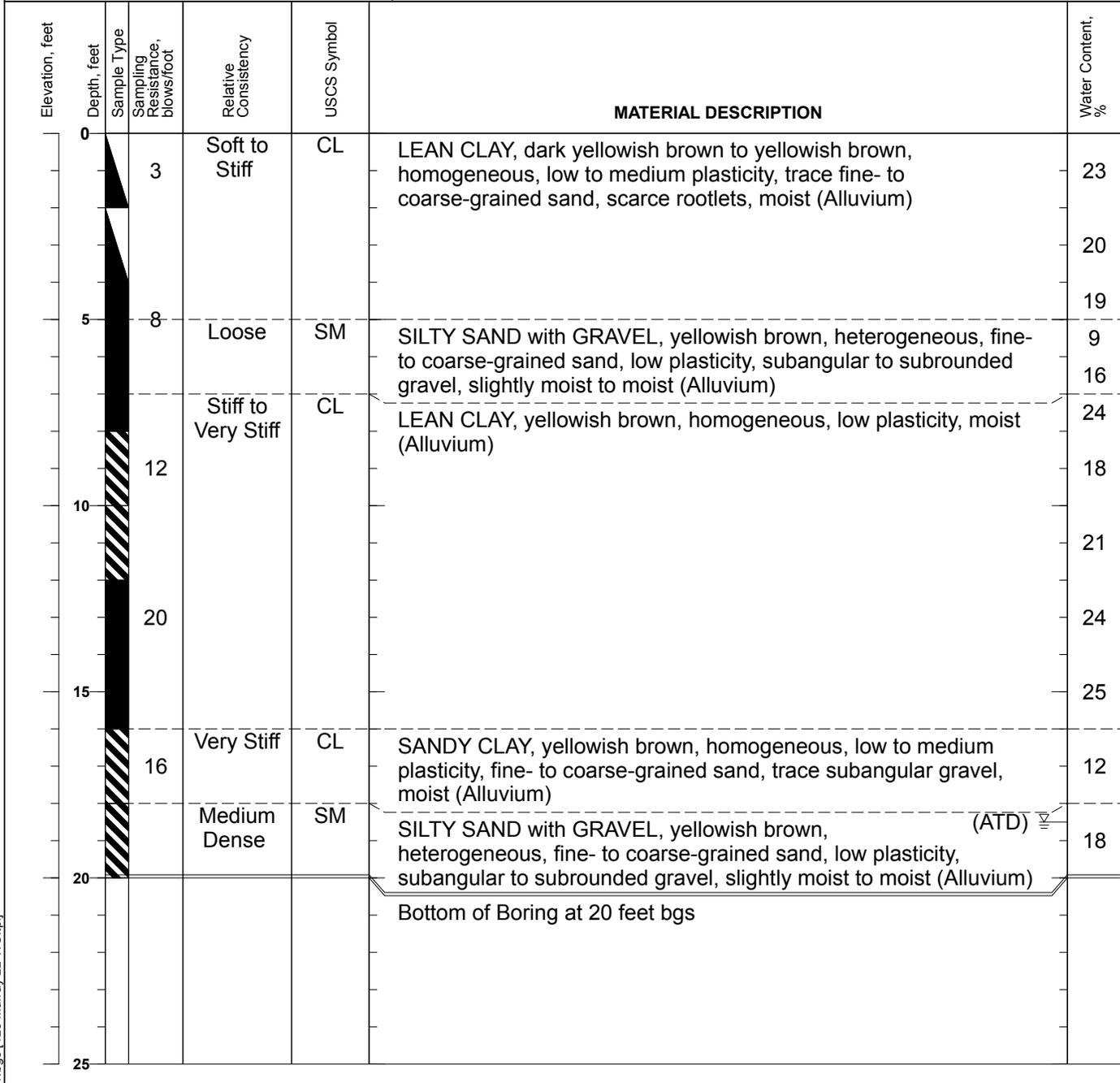


Areas where historic occurrence of liquefaction, or local, geological, geotechnical and groundwater conditions indicate a potential for earthquake-induced liquefaction.

Base: State of California Seismic Hazard Zone Map, Palo Alto Quadrangle, 7.5 Minute Series, 2006
 Scale: 1 inch = 2,000 feet

	<p align="center">BTBT, LLC - NEW RESIDENCE 1107 COWPER STREET PALO ALTO, CALIFORNIA</p>	<p align="center">STATE SEISMIC HAZARD ZONES MAP</p>	
	<p align="center">PROJECT NO. 3012-1R1</p>	<p align="center">JUNE 2018</p>	<p align="center">FIGURE A-4</p>

Date(s) Drilled April 25, 2018	Logged By DY	Checked By DY
Drilling Method Continuous Sampling	Drill Bit Size/Type N/A	Total Depth of Borehole 20 feet bgs
Drill Rig Type N/A	Drilling Contractor Access Soil Drilling, Inc.	Approximate Surface Elevation --
Groundwater Level and Date Measured 18.5 feet ATD and after 24-hours	Sampling Method(s) 3" OD, 2.5" OD, & 2" OD SPT Split Spoon Samplers	Hammer Data 140 lb, 30 in drop, rope & cathead
Borehole Backfill Cuttings	Location Norht east side of proposed residence	



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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1 **JUNE 2018**

LOG OF BORING B-2

FIGURE B-2

Date(s) Drilled April 25, 2018	Logged By DY	Checked By DY
Drilling Method Continuous Sampling	Drill Bit Size/Type N/A	Total Depth of Borehole 16 feet bgs
Drill Rig Type N/A	Drilling Contractor Access Soil Drilling, Inc.	Approximate Surface Elevation --
Groundwater Level and Date Measured Not Encountered ATD	Sampling Method(s) 3" OD, 2.5" OD, & 2" OD SPT Split Spoon Samplers	Hammer Data 140 lb, 30 in drop, rope & cathead
Borehole Backfill Cuttings	Location Proposed garage	

Elevation, feet	Depth, feet	Sample Type	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	MATERIAL DESCRIPTION	Water Content, %
0				Stiff	CL	LANDSCAPE FILL: LEAN SANDY CLAY, dark yellowish brown, medium plasticity, fine- to medium-grained sand, scarce subangular gravel, moist	14
	11			Stiff to Very Stiff			13
						LEAN CLAY, dark yellowish brown to yellowish brown, homogeneous, low to medium plasticity, trace fine- to coarse-grained sand, scarce rootlets, moist (Alluvium)	18
	5		21				22
							21
	10		16				17
							17
	15		16				20
							17
						Bottom of Boring at 16 feet bgs	
	20						
	25						

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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA
 PROJECT NO. 3012-1R1

LOG OF BORING B-3
 JUNE 2018
 FIGURE B-3

Date(s) Drilled April 25, 2018	Logged By DY	Checked By DY
Drilling Method Continuous Sampling	Drill Bit Size/Type N/A	Total Depth of Borehole 12 feet bgs
Drill Rig Type N/A	Drilling Contractor Access Soil Drilling, Inc.	Approximate Surface Elevation --
Groundwater Level and Date Measured Not Encountered ATD	Sampling Method(s) 3" OD, 2.5" OD, & 2" OD SPT Split Spoon Samplers	Hammer Data 140 lb, 30 in drop, rope & cathead
Borehole Backfill Cuttings	Location Proposed accessory	

Elevation, feet	Depth, feet	Sample Type	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	MATERIAL DESCRIPTION	Water Content, %
0	0	tapped		Very Stiff	CL	LEAN CLAY, dark yellowish brown to yellowish brown, homogeneous, low to medium plasticity, trace fine- to coarse-grained sand, scarce rootlets, moist (Alluvium)	13
	16					PI=18%; LL=32% (sample from 0 to 2 feet)	22
	5		16	Very Stiff	ML	CLAYEY SILT, yellowish brown, homogeneous, low plasticity, trace fine-grained sand, moist (Alluvium)	18
	10		20	Very Stiff	CL	LEAN CLAY, dark yellowish brown to yellowish brown, homogeneous, low to medium plasticity, trace fine- to coarse-grained sand, scarce rootlets, moist (Alluvium)	16
	15					Bottom of Boring at 12 feet bgs	16
	20						18
	25						

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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1 **JUNE 2018**

LOG OF BORING B-4

FIGURE B-4

Date(s) Drilled April 25, 2018	Logged By DY	Checked By DY
Drilling Method Continuous Sampling	Drill Bit Size/Type N/A	Total Depth of Borehole 12 feet bgs
Drill Rig Type N/A	Drilling Contractor Access Soil Drilling, Inc.	Approximate Surface Elevation --
Groundwater Level and Date Measured Not Encountered ATD	Sampling Method(s) 3" OD, 2.5" OD, & 2" OD SPT Split Spoon Samplers	Hammer Data 140 lb, 30 in drop, rope & cathead
Borehole Backfill Cuttings	Location Proposed pool house	

Elevation, feet	Depth, feet	Sample Type	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	MATERIAL DESCRIPTION	Water Content, %
0	0						
	4		4	Soft to Very Stiff	CL	LEAN CLAY, dark yellowish brown to yellowish brown, homogeneous, low to medium plasticity, trace fine- to coarse-grained sand, scarce rootlets, moist (Alluvium)	17
							17
							20
5	5		19	Medium Dense	SM	SILTY SAND with GRAVEL, yellowish brown, heterogeneous, fine- to coarse-grained sand, low plasticity, subangular to subrounded gravel, slightly moist to moist (Alluvium)	8
							12
							6
10	10		15	Stiff	CL	LEAN CLAY, yellowish brown, homogeneous, low plasticity, moist (Alluvium)	20
						Bottom of Boring at 12 feet bgs	
15							
20							
25							

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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1 **JUNE 2018**

LOG OF BORING B-5

FIGURE B-5

Date(s) Drilled April 25, 2018	Logged By DY	Checked By DY
Drilling Method Continuous Sampling	Drill Bit Size/Type N/A	Total Depth of Borehole 12 feet bgs
Drill Rig Type N/A	Drilling Contractor Access Soil Drilling, Inc.	Approximate Surface Elevation --
Groundwater Level and Date Measured Not Encountered ATD	Sampling Method(s) 3" OD, 2.5" OD, & 2" OD SPT Split Spoon Samplers	Hammer Data 140 lb, 30 in drop, rope & cathead
Borehole Backfill Cuttings	Location Proposed swimming pool	

Elevation, feet	Depth, feet	Sample Type	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	MATERIAL DESCRIPTION	Water Content, %
0	0						
	4			Soft to Stiff	CL	LEAN CLAY, dark yellowish brown to yellowish brown, homogeneous, low to medium plasticity, trace fine- to coarse-grained sand, scarce rootlets, moist (Alluvium)	16
							16
							19
5	12			Medium Dense	SM	SILTY SAND with GRAVEL, yellowish brown, heterogeneous, fine- to coarse-grained sand, low plasticity, subangular to subrounded gravel, slightly moist to moist (Alluvium)	10
							7
							17
10	7			Medium Stiff to Very Stiff	CL	LEAN CLAY, yellowish brown, homogeneous, low plasticity, moist (Alluvium)	17
							17
						Bottom of Boring at 12 feet bgs	
15							
20							
25							

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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1 **JUNE 2018**

LOG OF BORING B-6

FIGURE B-6

Elevation, feet	Depth, feet	Sample Type	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	MATERIAL DESCRIPTION	Water Content, %
-----------------	-------------	-------------	---------------------------------	----------------------	-------------	----------------------	------------------

1 2 3 4 5 6 7 8

COLUMN DESCRIPTIONS

- 1 **Elevation, feet:** Elevation (MSL, feet)
- 2 **Depth, feet:** Depth in feet below the ground surface.
- 3 **Sample Type:** Type of soil sample collected at the depth interval shown (see TYPICAL SAMPLER GRAPHIC SYMBOLS below)
- 4 **Sampling Resistance, blows/foot:** Number of blows required to advance the sampler 12 inches or the distance shown. Blow counts for the 3.0-inch O.D. and 2.5-inch O.D. samplers have been corrected for sampler size to SPT values using conversion factors of 0.65 and 0.77, respectively.
- 5 **Relative Consistency:** Relative consistency of the subsurface material.
- 6 **USCS Symbol:** USCS symbol of the subsurface material.
- 7 **MATERIAL DESCRIPTION:** Description of material encountered. May include consistency, moisture, color, and other descriptive text.
- 8 **Water Content, %:** Water content of the soil sample, expressed as percentage of dry weight of sample.

FIELD AND LABORATORY TEST ABBREVIATIONS

- CHEM:** Chemical tests to assess corrosivity
- COMP:** Compaction test
- CONS:** One-dimensional consolidation test
- LL:** Liquid Limit, percent
- PI:** Plasticity Index, percent
- SA:** Sieve analysis (percent passing No. 200 Sieve)
- UC:** Unconfined compressive strength test, Qu, in ksf
- WA:** Wash sieve (percent passing No. 200 Sieve)

TYPICAL MATERIAL GRAPHIC SYMBOLS

Sandstone	Well graded SAND with Silt (SM-SW)	Lean-Fat CLAY, CLAY w/SAND, SANDY CLAY (CL-CH)
Well graded GRAVEL (GW)	Well graded SAND with Clay (SW-SC)	SILTY CLAY (CL-ML)
Poorly graded GRAVEL (GP)	Poorly graded SAND with Silt (SP-SM)	Lean CLAY/PEAT (CL-OL)
Well graded GRAVEL with Silt (GW-GM)	Poorly graded SAND with Clay (SP-SC)	Fat CLAY/SILT (CH-MH)
Well graded GRAVEL with Clay (GW-GC)	Silty SAND (SM)	Fat CLAY/PEAT (CH-OH)
Poorly graded GRAVEL with Silt (GP-GM)	Clayey SAND (SC)	Silty SAND to Sandy SILT (SM-ML)
Poorly graded GRAVEL with Clay (GP-GC)	SILT, SILT w/SAND, SANDY SILT (ML)	Silty SAND to Sandy SILT (SM-MH)
Silty GRAVEL (GM)	Lean CLAY, CLAY w/SAND, SANDY CLAY (CL)	Clayey SAND to Sandy CLAY (SC-CL)
Clayey GRAVEL (GC)	SILT, SILT w/SAND, SANDY SILT (MH)	Clayey SAND to Sandy CLAY (SC-CH)
Well graded SAND (SW)	Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)	SILT to CLAY (CL/ML)
Poorly graded SAND (SP)	SILT, SILT with SAND, SANDY SILT (ML-MH)	Silty to Clayey SAND (SM-SC)

TYPICAL SAMPLER GRAPHIC SYMBOLS

2 inch-OD Unlined Split Spoon (SPT)	Shelby Tube (thin-walled, fixed head)	Pitcher Sample
2.5 inch-OD Unlined Split Spoon	Grab Sample	Other Sampler
3 inch-OD Unlined Split Spoon	Bulk Sample	

OTHER GRAPHIC SYMBOLS

- Water level (at time of drilling, ATD)
- Water level (after waiting a given time)
- Minor change in material properties within a stratum
- Inferred or gradational contact between strata
- Queried contact between strata

GENERAL NOTES

- Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

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BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

PROJECT NO. 3012-1R1 **JUNE 2018**

KEY TO BORING LOGS

FIGURE B-7

APPENDIX C
LABORATORY TESTS

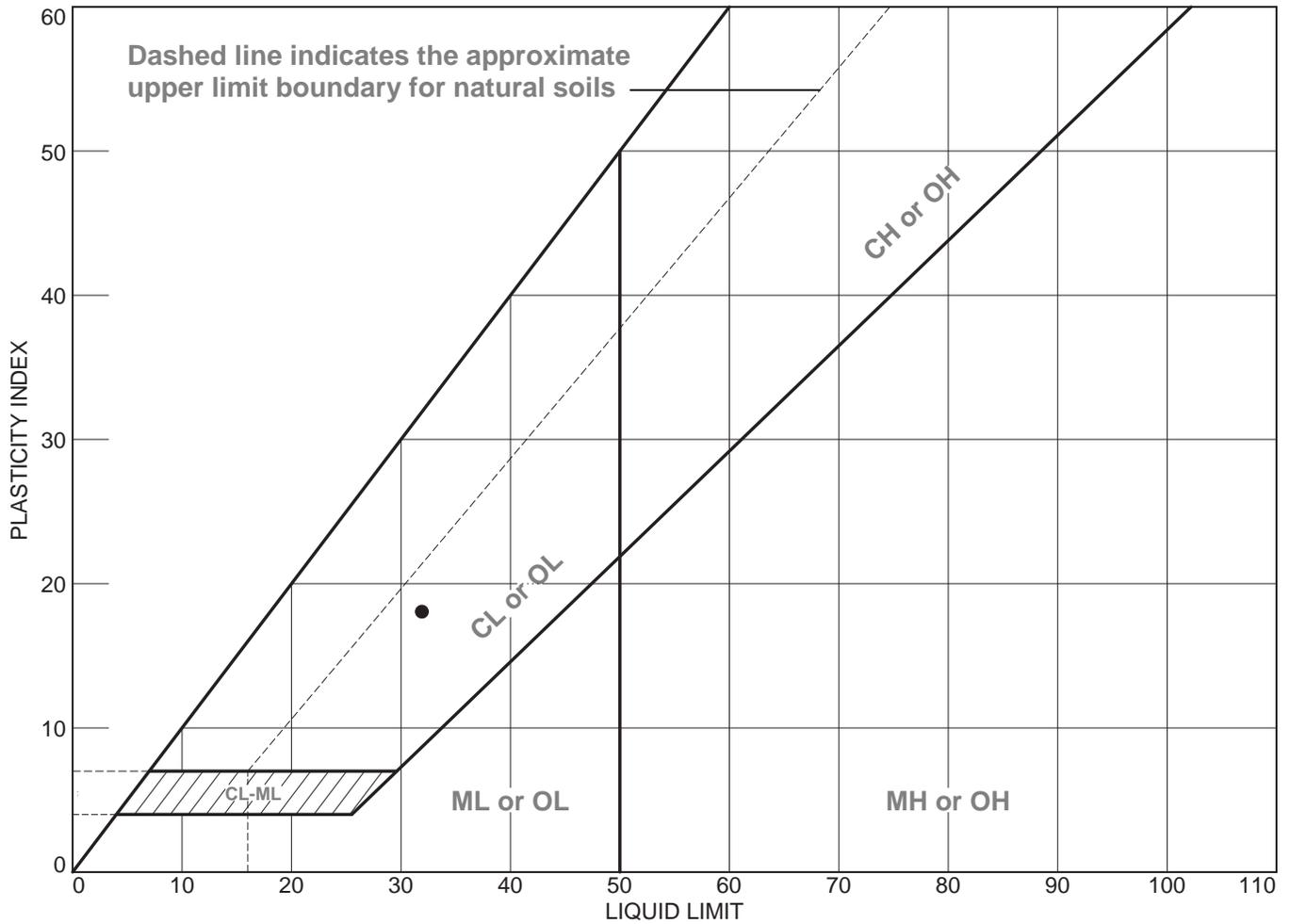
Samples from the subsurface exploration were selected for tests to establish the physical and engineering properties of the soils. The tests performed are briefly described below.

Natural moisture content was determined for most samples recovered from the borings in accordance with ASTM D2216. This test determines the moisture content representative of field conditions at the time the samples were collected. The results are presented on the boring logs at the appropriate sample depths.

The Atterberg Limits were determined on one sample in accordance with ASTM D 4318. The Atterberg limits are the moisture content within which the soil is workable or plastic. The results of this test are presented in Figure C-1 and on the boring logs, at the appropriate sample depth.



LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	Boring 4	1	0-2'	13.2	14	32	18	CL



BTBT, LLC - NEW RESIDENCE
1107 COWPER STREET
PALO ALTO, CALIFORNIA

**LIQUID & PLASTIC
LIMITS TEST REPORT**

PROJECT NO. 3012-1R1

JUNE 2018

FIGURE C-1

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-95291-1
Client Project/Site: Alan Hynes
Revision: 1

For:
Dysert Environmental, Inc
PO BOX 5608
San Mateo, California 94402

Attn: Mark Dysert



Authorized for release by:
10/9/2019 4:03:10 PM

Criselda Caparas, Project Manager I
(925)484-1919
criselda.caparas@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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QC Sample Results	33
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Certification Summary	65
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Definitions/Glossary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Job ID: 720-95291-1

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative 720-95291-1

Comments

Revised report on 10/09/2019 - Report to include missing Pesticides results for S3-1'
Original report was sent on 10/04/2019
No additional comments.

Receipt

The samples were received on 9/27/2019 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.5° C.

GC/MS VOA

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 720-273801 recovered above the upper control limit for 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: S1-1' (720-95291-1), S2-3' (720-95291-4), S3-6' (720-95291-7) and S4-9' (720-95291-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: (720-95291-A-1-I MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 720-273785 and analytical batch 720-273958 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for Chlordane (technical) for the following sample: S2-1' (720-95291-3). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The following sample was diluted due to color. S4-1' (720-95291-8). Elevated reporting limits (RL) are provided.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: (LCS 720-273712/2-A), (MB 720-273712/1-A), S1-1' (720-95291-1),

S2-3' (720-95291-4), S3-6' (720-95291-7) and S4-9' (720-95291-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010B: The following samples were diluted due to the abundance of non-target analytes: S1-1' (720-95291-1), S2-3' (720-95291-4), S3-6' (720-95291-7) and S4-9' (720-95291-10). Elevated reporting limits (RLs) are provided.

Method(s) 7471A: The method blank for preparation batch 720-273863 and analytical batch 720-273949 contained Mercury above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	210	J	320	66	ug/Kg	1		8270C	Total/NA
Diesel Range Organics [C10-C28]	2.5		1.9	0.70	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	25	J	47	9.4	mg/Kg	1		8015B	Total/NA
4,4'-DDT	3.3		1.9	0.39	ug/Kg	1		8081A	Total/NA
4,4'-DDE	3.5		1.9	0.40	ug/Kg	1		8081A	Total/NA
Antimony	1.1	J	1.3	0.21	mg/Kg	4		6010B	Total/NA
Arsenic	4.4		2.5	0.21	mg/Kg	4		6010B	Total/NA
Barium	200		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.44		0.25	0.081	mg/Kg	4		6010B	Total/NA
Cadmium	0.25	J	0.31	0.031	mg/Kg	4		6010B	Total/NA
Chromium	55		1.3	0.13	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.50	0.050	mg/Kg	4		6010B	Total/NA
Copper	26		3.8	1.8	mg/Kg	4		6010B	Total/NA
Lead	11		1.3	0.26	mg/Kg	4		6010B	Total/NA
Molybdenum	0.87	J	1.3	0.16	mg/Kg	4		6010B	Total/NA
Nickel	47		1.3	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	44		1.3	0.17	mg/Kg	4		6010B	Total/NA
Zinc	60		3.8	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.061	B	0.016	0.0023	mg/Kg	1		7471A	Total/NA

Client Sample ID: S2-1'

Lab Sample ID: 720-95291-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	4.1		2.0	0.40	ug/Kg	1		8081A	Total/NA
4,4'-DDE	6.2		2.0	0.41	ug/Kg	1		8081A	Total/NA
Chlordane (technical)	6.4	J p	39	3.1	ug/Kg	1		8081A	Total/NA

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	200	J	320	67	ug/Kg	1		8270C	Total/NA
Diesel Range Organics [C10-C28]	0.84	J	1.9	0.72	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	11	J	48	9.6	mg/Kg	1		8015B	Total/NA
Antimony	2.3		1.5	0.26	mg/Kg	4		6010B	Total/NA
Arsenic	4.8		3.1	0.26	mg/Kg	4		6010B	Total/NA
Barium	160		1.5	0.22	mg/Kg	4		6010B	Total/NA
Beryllium	0.46		0.31	0.10	mg/Kg	4		6010B	Total/NA
Cadmium	0.38		0.38	0.038	mg/Kg	4		6010B	Total/NA
Chromium	87		1.5	0.16	mg/Kg	4		6010B	Total/NA
Cobalt	13		0.62	0.062	mg/Kg	4		6010B	Total/NA
Copper	29		4.6	2.2	mg/Kg	4		6010B	Total/NA
Lead	6.0		1.5	0.32	mg/Kg	4		6010B	Total/NA
Molybdenum	1.1	J	1.5	0.20	mg/Kg	4		6010B	Total/NA
Nickel	72		1.5	0.16	mg/Kg	4		6010B	Total/NA
Selenium	0.77	J	3.1	0.46	mg/Kg	4		6010B	Total/NA
Vanadium	57		1.5	0.21	mg/Kg	4		6010B	Total/NA
Zinc	63		4.6	2.0	mg/Kg	4		6010B	Total/NA
Mercury	0.041	B	0.017	0.0025	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pleasanton

Detection Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-1'

Lab Sample ID: 720-95291-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	230		4.0	0.82	ug/Kg	2		8081A	Total/NA
4,4'-DDE	490		4.0	0.84	ug/Kg	2		8081A	Total/NA
4,4'-DDD	9.8		4.0	1.2	ug/Kg	2		8081A	Total/NA

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	200	J	320	65	ug/Kg	1		8270C	Total/NA
Diesel Range Organics [C10-C28]	1.5	J	1.9	0.72	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	10	J	48	9.5	mg/Kg	1		8015B	Total/NA
Antimony	0.97	J	1.1	0.18	mg/Kg	4		6010B	Total/NA
Arsenic	4.9		2.1	0.18	mg/Kg	4		6010B	Total/NA
Barium	170		1.1	0.15	mg/Kg	4		6010B	Total/NA
Beryllium	0.63		0.21	0.070	mg/Kg	4		6010B	Total/NA
Cadmium	0.080	J	0.27	0.027	mg/Kg	4		6010B	Total/NA
Chromium	57		1.1	0.11	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.43	0.043	mg/Kg	4		6010B	Total/NA
Copper	28		3.2	1.5	mg/Kg	4		6010B	Total/NA
Lead	5.1		1.1	0.22	mg/Kg	4		6010B	Total/NA
Molybdenum	0.96	J	1.1	0.14	mg/Kg	4		6010B	Total/NA
Nickel	47		1.1	0.11	mg/Kg	4		6010B	Total/NA
Vanadium	43		1.1	0.15	mg/Kg	4		6010B	Total/NA
Zinc	58		3.2	1.4	mg/Kg	4		6010B	Total/NA
Mercury	0.051	B	0.016	0.0024	mg/Kg	1		7471A	Total/NA

Client Sample ID: S4-1'

Lab Sample ID: 720-95291-8

No Detections.

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	200	J	320	66	ug/Kg	1		8270C	Total/NA
Diesel Range Organics [C10-C28]	0.86	J	1.9	0.71	mg/Kg	1		8015B	Total/NA
Motor Oil Range Organics [C24-C36]	10	J	48	9.5	mg/Kg	1		8015B	Total/NA
Antimony	0.54	J	1.8	0.30	mg/Kg	4		6010B	Total/NA
Arsenic	5.2		3.7	0.31	mg/Kg	4		6010B	Total/NA
Barium	150		1.8	0.26	mg/Kg	4		6010B	Total/NA
Beryllium	0.47		0.37	0.12	mg/Kg	4		6010B	Total/NA
Cadmium	0.35	J	0.46	0.046	mg/Kg	4		6010B	Total/NA
Chromium	41		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	11		0.73	0.073	mg/Kg	4		6010B	Total/NA
Copper	25		5.5	2.6	mg/Kg	4		6010B	Total/NA
Lead	6.6		1.8	0.39	mg/Kg	4		6010B	Total/NA
Molybdenum	1.2	J	1.8	0.23	mg/Kg	4		6010B	Total/NA
Nickel	40		1.8	0.19	mg/Kg	4		6010B	Total/NA
Vanadium	42		1.8	0.25	mg/Kg	4		6010B	Total/NA
Zinc	70		5.5	2.3	mg/Kg	4		6010B	Total/NA
Mercury	0.035	B	0.016	0.0023	mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Acetone	ND		50	38	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Benzene	ND		5.0	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Bromobenzene	ND		5.0	0.79	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chlorobromomethane	ND		20	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Bromoform	ND		5.0	2.0	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Bromomethane	ND		10	0.79	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
2-Butanone (MEK)	ND		50	21	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Carbon disulfide	ND		5.0	2.0	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chlorobenzene	ND		5.0	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chloroethane	ND		10	0.56	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chloroform	ND		5.0	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chloromethane	ND		10	0.79	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Dibromomethane	ND		10	0.86	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Ethylbenzene	ND		5.0	0.75	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
2-Hexanone	ND		50	10	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Methylene Chloride	ND		10	5.6	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Naphthalene	ND		10	1.5	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Styrene	ND		5.0	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg		09/30/19 13:10	10/02/19 02:19	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Toluene	ND		5.0	0.71	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Trichloroethene	ND		5.0	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Vinyl acetate	ND		20	5.0	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Vinyl chloride	ND		5.0	0.73	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Xylenes, Total	ND		5.0	1.2	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg		09/30/19 13:10	10/02/19 02:19	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg		09/30/19 13:10	10/02/19 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		45 - 131	09/30/19 13:10	10/02/19 02:19	1
1,2-Dichloroethane-d4 (Surr)	131		60 - 140	09/30/19 13:10	10/02/19 02:19	1
Toluene-d8 (Surr)	98		58 - 140	09/30/19 13:10	10/02/19 02:19	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	F1	65	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Bis(2-chloroethyl)ether	ND	F1	65	14	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Chlorophenol	ND	F1	65	7.2	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
1,3-Dichlorobenzene	ND	F1	65	7.8	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
1,4-Dichlorobenzene	ND	F1	65	17	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzyl alcohol	ND	F1	170	10	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
1,2-Dichlorobenzene	ND	F1	65	9.1	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Methylphenol	ND	F1	65	9.7	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Methylphenol, 3 & 4	ND	F1	65	18	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
N-Nitrosodi-n-propylamine	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Hexachloroethane	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Nitrobenzene	ND	F1	65	27	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Isophorone	ND	F1	65	9.1	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Nitrophenol	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4-Dimethylphenol	ND	F1	130	52	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Bis(2-chloroethoxy)methane	ND	F1	170	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4-Dichlorophenol	ND	F1	320	8.7	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
1,2,4-Trichlorobenzene	ND	F1	65	14	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Naphthalene	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Chloroaniline	ND		170	8.6	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Hexachlorobutadiene	ND	F1	65	9.7	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Chloro-3-methylphenol	ND	F1	170	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Methylnaphthalene	ND	F1	65	12	ug/Kg		10/01/19 16:08	10/04/19 05:48	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		170	52	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4,6-Trichlorophenol	ND	F1	170	19	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4,5-Trichlorophenol	ND		65	8.2	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Chloronaphthalene	ND	F1	65	9.3	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Nitroaniline	ND	F1	320	66	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Dimethyl phthalate	ND	F1	170	12	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Acenaphthylene	ND	F1	65	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
3-Nitroaniline	ND	F1	170	76	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Acenaphthene	ND	F1	65	7.4	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4-Dinitrophenol	ND		640	130	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Nitrophenol	ND		320	66	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Dibenzofuran	ND	F1	65	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,4-Dinitrotoluene	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2,6-Dinitrotoluene	ND	F1	130	66	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Diethyl phthalate	ND	F1	170	9.1	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Chlorophenyl phenyl ether	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Fluorene	ND	F1	65	7.8	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Nitroaniline	ND		320	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
2-Methyl-4,6-dinitrophenol	ND		320	66	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
N-Nitrosodiphenylamine	ND	F1	65	7.6	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
4-Bromophenyl phenyl ether	ND		170	9.7	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Hexachlorobenzene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Pentachlorophenol	ND		320	130	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Phenanthrene	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Anthracene	ND	F1	65	8.4	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Di-n-butyl phthalate	ND	F1	170	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Fluoranthene	ND	F1	65	15	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Pyrene	ND	F1	65	7.4	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Butyl benzyl phthalate	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
3,3'-Dichlorobenzidine	ND	F1	170	19	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzo[a]anthracene	ND	F1	320	35	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Bis(2-ethylhexyl) phthalate	ND		320	13	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Chrysene	ND	F1	130	64	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Di-n-octyl phthalate	ND		170	9.3	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzo[b]fluoranthene	ND	F1	65	18	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzo[a]pyrene	ND	F1	65	13	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzo[k]fluoranthene	ND		65	27	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Indeno[1,2,3-cd]pyrene	ND	F1	65	25	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzo[g,h,i]perylene	ND		130	39	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Benzoic acid	210	J	320	66	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Azobenzene	ND	F1	65	12	ug/Kg		10/01/19 16:08	10/04/19 05:48	1
Pyridine	ND	F1	0.13	0.017	mg/Kg		10/01/19 16:08	10/04/19 05:48	1
Dibenz(a,h)anthracene	ND	F1	65	29	ug/Kg		10/01/19 16:08	10/04/19 05:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	45		21 - 98	10/01/19 16:08	10/04/19 05:48	1
2-Fluorobiphenyl	54		30 - 112	10/01/19 16:08	10/04/19 05:48	1
Terphenyl-d14	63		59 - 134	10/01/19 16:08	10/04/19 05:48	1
2-Fluorophenol	54		28 - 98	10/01/19 16:08	10/04/19 05:48	1
Phenol-d5	54		23 - 101	10/01/19 16:08	10/04/19 05:48	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	57		37 - 114	10/01/19 16:08	10/04/19 05:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	2.5		1.9	0.70	mg/Kg		09/30/19 15:09	10/02/19 19:29	1
Motor Oil Range Organics [C24-C36]	25	J	47	9.4	mg/Kg		09/30/19 15:09	10/02/19 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	103		40 - 130	09/30/19 15:09	10/02/19 19:29	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9	0.47	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Dieldrin	ND		1.9	0.56	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endrin aldehyde	ND		1.9	0.63	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endrin	ND		1.9	0.63	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endrin ketone	ND		1.9	0.31	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Heptachlor	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
4,4'-DDT	3.3		1.9	0.39	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
4,4'-DDE	3.5		1.9	0.40	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
4,4'-DDD	ND		1.9	0.58	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endosulfan I	ND		1.9	0.30	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endosulfan II	ND		1.9	0.46	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
alpha-BHC	ND		1.9	0.52	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
beta-BHC	ND		1.9	0.34	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
delta-BHC	ND		1.9	0.42	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Methoxychlor	ND		1.9	0.64	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Toxaphene	ND		38	6.4	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
Chlordane (technical)	ND		38	3.0	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		09/30/19 15:19	10/02/19 22:42	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		21 - 145	09/30/19 15:19	10/02/19 22:42	1
DCB Decachlorobiphenyl	77		21 - 136	09/30/19 15:19	10/02/19 22:42	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1221	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1232	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1242	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1248	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1254	ND		47	1.7	ug/Kg		09/30/19 15:13	10/02/19 21:25	1
PCB-1260	ND		47	5.0	ug/Kg		09/30/19 15:13	10/02/19 21:25	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		45 - 132	09/30/19 15:13	10/02/19 21:25	1
DCB Decachlorobiphenyl	82		42 - 146	09/30/19 15:13	10/02/19 21:25	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	1.3	0.21	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Arsenic	4.4		2.5	0.21	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Barium	200		1.3	0.18	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Beryllium	0.44		0.25	0.081	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Cadmium	0.25	J	0.31	0.031	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Chromium	55		1.3	0.13	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Cobalt	11		0.50	0.050	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Copper	26		3.8	1.8	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Lead	11		1.3	0.26	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Molybdenum	0.87	J	1.3	0.16	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Nickel	47		1.3	0.13	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Selenium	ND		2.5	0.38	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Silver	ND		0.63	0.13	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Thallium	ND		1.3	0.36	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Vanadium	44		1.3	0.17	mg/Kg		10/01/19 12:21	10/02/19 12:01	4
Zinc	60		3.8	1.6	mg/Kg		10/01/19 12:21	10/02/19 12:01	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061	B	0.016	0.0023	mg/Kg		10/02/19 14:04	10/03/19 11:59	1

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-1'

Lab Sample ID: 720-95291-3

Date Collected: 09/27/19 09:16

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0	0.49	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Dieldrin	ND		2.0	0.58	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endrin aldehyde	ND		2.0	0.66	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endrin	ND		2.0	0.66	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endrin ketone	ND		2.0	0.32	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Heptachlor	ND		2.0	0.45	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Heptachlor epoxide	ND		2.0	0.34	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
4,4'-DDT	4.1		2.0	0.40	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
4,4'-DDE	6.2		2.0	0.41	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
4,4'-DDD	ND		2.0	0.60	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endosulfan I	ND		2.0	0.31	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endosulfan II	ND		2.0	0.48	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
alpha-BHC	ND		2.0	0.54	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
beta-BHC	ND		2.0	0.35	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
gamma-BHC (Lindane)	ND		2.0	0.62	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
delta-BHC	ND		2.0	0.43	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Endosulfan sulfate	ND		2.0	0.37	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Methoxychlor	ND		2.0	0.67	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Toxaphene	ND		39	6.7	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
Chlordane (technical)	6.4 J p		39	3.1	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
cis-Chlordane	ND		2.0	0.39	ug/Kg		09/30/19 15:19	10/03/19 20:02	1
trans-Chlordane	ND		2.0	0.45	ug/Kg		09/30/19 15:19	10/03/19 20:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	78		21 - 145	09/30/19 15:19	10/03/19 20:02	1
<i>DCB Decachlorobiphenyl</i>	85		21 - 136	09/30/19 15:19	10/03/19 20:02	1

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6	1.1	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Acetone	ND		46	35	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Benzene	ND		4.6	0.60	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Dichlorobromomethane	ND		4.6	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Bromobenzene	ND		4.6	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chlorobromomethane	ND		18	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Bromoform	ND		4.6	1.8	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Bromomethane	ND		9.2	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
2-Butanone (MEK)	ND		46	19	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
n-Butylbenzene	ND		4.6	0.92	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
sec-Butylbenzene	ND		4.6	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
tert-Butylbenzene	ND		4.6	0.67	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Carbon disulfide	ND		4.6	1.8	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Carbon tetrachloride	ND		4.6	0.57	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chlorobenzene	ND		4.6	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chloroethane	ND		9.2	0.51	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chloroform	ND		4.6	0.61	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chloromethane	ND		9.2	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
2-Chlorotoluene	ND		4.6	0.60	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
4-Chlorotoluene	ND		4.6	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Chlorodibromomethane	ND		4.6	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2-Dichlorobenzene	ND		4.6	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,3-Dichlorobenzene	ND		4.6	0.66	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,3-Dichloropropane	ND		4.6	0.67	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1-Dichloropropene	ND		4.6	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2-Dibromo-3-Chloropropane	ND		9.2	1.6	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Ethylene Dibromide	ND		4.6	1.3	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Dibromomethane	ND		9.2	0.79	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Dichlorodifluoromethane	ND		9.2	0.72	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1-Dichloroethane	ND		4.6	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2-Dichloroethane	ND		4.6	0.70	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
cis-1,2-Dichloroethene	ND		4.6	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
trans-1,2-Dichloroethene	ND		4.6	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2-Dichloropropane	ND		4.6	0.58	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
cis-1,3-Dichloropropene	ND		4.6	0.63	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
trans-1,3-Dichloropropene	ND		4.6	0.61	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Ethylbenzene	ND		4.6	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Hexachlorobutadiene	ND		4.6	0.83	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
2-Hexanone	ND		46	9.2	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Isopropylbenzene	ND		4.6	0.62	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
4-Isopropyltoluene	ND		4.6	2.3	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Methylene Chloride	ND		9.2	5.1	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
4-Methyl-2-pentanone (MIBK)	ND		46	9.2	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Naphthalene	ND		9.2	1.4	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
N-Propylbenzene	ND		4.6	0.61	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Styrene	ND		4.6	0.58	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1,1,2-Tetrachloroethane	ND		4.6	0.70	ug/Kg		09/30/19 13:10	10/02/19 02:46	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6	0.69	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Tetrachloroethene	ND		4.6	0.61	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Toluene	ND		4.6	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2,3-Trichlorobenzene	ND		4.6	0.68	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2,4-Trichlorobenzene	ND		4.6	0.65	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1,1-Trichloroethane	ND		4.6	0.56	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1,2-Trichloroethane	ND		4.6	0.64	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Trichloroethene	ND		4.6	0.58	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Trichlorofluoromethane	ND		4.6	0.51	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2,3-Trichloropropane	ND		4.6	0.71	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.9	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,2,4-Trimethylbenzene	ND		4.6	1.5	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
1,3,5-Trimethylbenzene	ND		4.6	0.60	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Vinyl acetate	ND		18	4.6	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Vinyl chloride	ND		4.6	0.67	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Xylenes, Total	ND		4.6	1.1	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
2,2-Dichloropropane	ND		4.6	1.8	ug/Kg		09/30/19 13:10	10/02/19 02:46	1
Gasoline Range Organics (GRO) -C4-C12	ND		230	92	ug/Kg		09/30/19 13:10	10/02/19 02:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		45 - 131	09/30/19 13:10	10/02/19 02:46	1
1,2-Dichloroethane-d4 (Surr)	131		60 - 140	09/30/19 13:10	10/02/19 02:46	1
Toluene-d8 (Surr)	99		58 - 140	09/30/19 13:10	10/02/19 02:46	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		66	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Bis(2-chloroethyl)ether	ND		66	14	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Chlorophenol	ND		66	7.3	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
1,3-Dichlorobenzene	ND		66	7.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
1,4-Dichlorobenzene	ND		66	18	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzyl alcohol	ND		170	10	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
1,2-Dichlorobenzene	ND		66	9.2	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Methylphenol	ND		66	9.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Methylphenol, 3 & 4	ND		66	19	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
N-Nitrosodi-n-propylamine	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Hexachloroethane	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Nitrobenzene	ND		66	27	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Isophorone	ND		66	9.2	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Nitrophenol	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4-Dimethylphenol	ND		130	53	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Bis(2-chloroethoxy)methane	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4-Dichlorophenol	ND		320	8.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
1,2,4-Trichlorobenzene	ND		66	14	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Naphthalene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Chloroaniline	ND		170	8.6	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Hexachlorobutadiene	ND		66	9.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Chloro-3-methylphenol	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Methylnaphthalene	ND		66	12	ug/Kg		10/01/19 16:08	10/04/19 06:13	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		170	53	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4,6-Trichlorophenol	ND		170	20	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4,5-Trichlorophenol	ND		66	8.2	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Chloronaphthalene	ND		66	9.4	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Nitroaniline	ND		320	67	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Dimethyl phthalate	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Acenaphthylene	ND		66	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
3-Nitroaniline	ND		170	76	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Acenaphthene	ND		66	7.4	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4-Dinitrophenol	ND		650	130	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Nitrophenol	ND		320	67	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Dibenzofuran	ND		66	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,4-Dinitrotoluene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2,6-Dinitrotoluene	ND		130	67	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Diethyl phthalate	ND		170	9.2	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Chlorophenyl phenyl ether	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Fluorene	ND		66	7.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Nitroaniline	ND		320	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
2-Methyl-4,6-dinitrophenol	ND		320	67	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
N-Nitrosodiphenylamine	ND		66	7.6	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
4-Bromophenyl phenyl ether	ND		170	9.8	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Hexachlorobenzene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Pentachlorophenol	ND		320	130	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Phenanthrene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Anthracene	ND		66	8.4	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Di-n-butyl phthalate	ND		170	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Fluoranthene	ND		66	15	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Pyrene	ND		66	7.4	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Butyl benzyl phthalate	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
3,3'-Dichlorobenzidine	ND		170	20	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzo[a]anthracene	ND		320	35	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Bis(2-ethylhexyl) phthalate	ND		320	13	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Chrysene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Di-n-octyl phthalate	ND		170	9.4	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzo[b]fluoranthene	ND		66	19	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzo[a]pyrene	ND		66	13	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzo[k]fluoranthene	ND		66	27	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Indeno[1,2,3-cd]pyrene	ND		66	25	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzo[g,h,i]perylene	ND		130	39	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Benzoic acid	200	J	320	67	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Azobenzene	ND		66	12	ug/Kg		10/01/19 16:08	10/04/19 06:13	1
Pyridine	ND		0.13	0.018	mg/Kg		10/01/19 16:08	10/04/19 06:13	1
Dibenz(a,h)anthracene	ND		66	29	ug/Kg		10/01/19 16:08	10/04/19 06:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	40		21 - 98	10/01/19 16:08	10/04/19 06:13	1
2-Fluorobiphenyl	49		30 - 112	10/01/19 16:08	10/04/19 06:13	1
Terphenyl-d14	59		59 - 134	10/01/19 16:08	10/04/19 06:13	1
2-Fluorophenol	51		28 - 98	10/01/19 16:08	10/04/19 06:13	1
Phenol-d5	50		23 - 101	10/01/19 16:08	10/04/19 06:13	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		37 - 114	10/01/19 16:08	10/04/19 06:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.84	J	1.9	0.72	mg/Kg		09/30/19 15:09	10/02/19 19:59	1
Motor Oil Range Organics [C24-C36]	11	J	48	9.6	mg/Kg		09/30/19 15:09	10/02/19 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	103		40 - 130	09/30/19 15:09	10/02/19 19:59	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9	0.48	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Dieldrin	ND		1.9	0.56	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endrin aldehyde	ND		1.9	0.64	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endrin	ND		1.9	0.64	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endrin ketone	ND		1.9	0.32	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Heptachlor	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
4,4'-DDD	ND		1.9	0.58	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endosulfan I	ND		1.9	0.31	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endosulfan II	ND		1.9	0.47	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
alpha-BHC	ND		1.9	0.53	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
beta-BHC	ND		1.9	0.34	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
delta-BHC	ND		1.9	0.42	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Methoxychlor	ND		1.9	0.65	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Toxaphene	ND		38	6.5	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
Chlordane (technical)	ND		38	3.1	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		09/30/19 15:19	10/02/19 22:58	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		21 - 145	09/30/19 15:19	10/02/19 22:58	1
DCB Decachlorobiphenyl	70		21 - 136	09/30/19 15:19	10/02/19 22:58	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1221	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1232	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1242	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1248	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1254	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:13	1
PCB-1260	ND		48	5.1	ug/Kg		09/30/19 15:13	10/03/19 10:13	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	64		45 - 132	09/30/19 15:13	10/03/19 10:13	1
DCB Decachlorobiphenyl	76		42 - 146	09/30/19 15:13	10/03/19 10:13	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.3		1.5	0.26	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Arsenic	4.8		3.1	0.26	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Barium	160		1.5	0.22	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Beryllium	0.46		0.31	0.10	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Cadmium	0.38		0.38	0.038	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Chromium	87		1.5	0.16	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Cobalt	13		0.62	0.062	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Copper	29		4.6	2.2	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Lead	6.0		1.5	0.32	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Molybdenum	1.1	J	1.5	0.20	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Nickel	72		1.5	0.16	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Selenium	0.77	J	3.1	0.46	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Silver	ND		0.77	0.16	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Thallium	ND		1.5	0.45	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Vanadium	57		1.5	0.21	mg/Kg		10/01/19 12:21	10/02/19 12:06	4
Zinc	63		4.6	2.0	mg/Kg		10/01/19 12:21	10/02/19 12:06	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041	B	0.017	0.0025	mg/Kg		10/02/19 14:04	10/03/19 12:07	1

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-1'

Lab Sample ID: 720-95291-5

Date Collected: 09/27/19 09:28

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		4.0	1.0	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Dieldrin	ND		4.0	1.2	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endrin aldehyde	ND		4.0	1.3	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endrin	ND		4.0	1.3	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endrin ketone	ND		4.0	0.66	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Heptachlor	ND		4.0	0.92	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Heptachlor epoxide	ND		4.0	0.70	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
4,4'-DDT	230		4.0	0.82	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
4,4'-DDE	490		4.0	0.84	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
4,4'-DDD	9.8		4.0	1.2	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endosulfan I	ND		4.0	0.64	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endosulfan II	ND		4.0	0.98	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
alpha-BHC	ND		4.0	1.1	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
beta-BHC	ND		4.0	0.72	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
gamma-BHC (Lindane)	ND		4.0	1.3	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
delta-BHC	ND		4.0	0.88	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Endosulfan sulfate	ND		4.0	0.76	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Methoxychlor	ND		4.0	1.4	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Toxaphene	ND		80	14	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
Chlordane (technical)	ND		80	6.4	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
cis-Chlordane	ND		4.0	0.80	ug/Kg		10/08/19 12:39	10/08/19 23:40	2
trans-Chlordane	ND		4.0	0.92	ug/Kg		10/08/19 12:39	10/08/19 23:40	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	87		21 - 145	10/08/19 12:39	10/08/19 23:40	2
DCB Decachlorobiphenyl	120		21 - 136	10/08/19 12:39	10/08/19 23:40	2

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Acetone	ND		49	37	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Benzene	ND		4.9	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Dichlorobromomethane	ND		4.9	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Bromobenzene	ND		4.9	0.77	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chlorobromomethane	ND		20	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Bromoform	ND		4.9	2.0	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Bromomethane	ND		9.8	0.77	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
2-Butanone (MEK)	ND		49	21	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
n-Butylbenzene	ND		4.9	0.98	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
sec-Butylbenzene	ND		4.9	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
tert-Butylbenzene	ND		4.9	0.72	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Carbon disulfide	ND		4.9	2.0	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Carbon tetrachloride	ND		4.9	0.61	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chlorobenzene	ND		4.9	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chloroethane	ND		9.8	0.55	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chloroform	ND		4.9	0.65	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chloromethane	ND		9.8	0.77	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
2-Chlorotoluene	ND		4.9	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
4-Chlorotoluene	ND		4.9	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Chlorodibromomethane	ND		4.9	0.70	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2-Dichlorobenzene	ND		4.9	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,3-Dichlorobenzene	ND		4.9	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,4-Dichlorobenzene	ND		4.9	0.70	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,3-Dichloropropane	ND		4.9	0.72	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1-Dichloropropene	ND		4.9	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Ethylene Dibromide	ND		4.9	1.4	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Dibromomethane	ND		9.8	0.84	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Dichlorodifluoromethane	ND		9.8	0.77	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1-Dichloroethane	ND		4.9	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2-Dichloroethane	ND		4.9	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1-Dichloroethene	ND		4.9	0.61	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
cis-1,2-Dichloroethene	ND		4.9	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
trans-1,2-Dichloroethene	ND		4.9	0.74	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2-Dichloropropane	ND		4.9	0.62	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
cis-1,3-Dichloropropene	ND		4.9	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
trans-1,3-Dichloropropene	ND		4.9	0.66	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Ethylbenzene	ND		4.9	0.74	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Hexachlorobutadiene	ND		4.9	0.88	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
2-Hexanone	ND		49	9.8	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Isopropylbenzene	ND		4.9	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
4-Isopropyltoluene	ND		4.9	2.5	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Methylene Chloride	ND		9.8	5.5	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
4-Methyl-2-pentanone (MIBK)	ND		49	9.8	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Naphthalene	ND		9.8	1.5	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
N-Propylbenzene	ND		4.9	0.65	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Styrene	ND		4.9	0.62	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1,1,2-Tetrachloroethane	ND		4.9	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:12	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.74	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Toluene	ND		4.9	0.70	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2,3-Trichlorobenzene	ND		4.9	0.73	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2,4-Trichlorobenzene	ND		4.9	0.70	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1,1-Trichloroethane	ND		4.9	0.60	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1,2-Trichloroethane	ND		4.9	0.69	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Trichloroethene	ND		4.9	0.62	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Trichlorofluoromethane	ND		4.9	0.55	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2,3-Trichloropropane	ND		4.9	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,2,4-Trimethylbenzene	ND		4.9	1.6	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
1,3,5-Trimethylbenzene	ND		4.9	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Vinyl acetate	ND		20	4.9	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Vinyl chloride	ND		4.9	0.72	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Xylenes, Total	ND		4.9	1.2	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
2,2-Dichloropropane	ND		4.9	2.0	ug/Kg		09/30/19 13:10	10/02/19 03:12	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	98	ug/Kg		09/30/19 13:10	10/02/19 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		45 - 131	09/30/19 13:10	10/02/19 03:12	1
1,2-Dichloroethane-d4 (Surr)	135		60 - 140	09/30/19 13:10	10/02/19 03:12	1
Toluene-d8 (Surr)	98		58 - 140	09/30/19 13:10	10/02/19 03:12	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		64	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Bis(2-chloroethyl)ether	ND		64	13	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Chlorophenol	ND		64	7.1	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
1,3-Dichlorobenzene	ND		64	7.7	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
1,4-Dichlorobenzene	ND		64	17	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzyl alcohol	ND		160	10	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
1,2-Dichlorobenzene	ND		64	9.0	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Methylphenol	ND		64	9.6	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Methylphenol, 3 & 4	ND		64	18	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
N-Nitrosodi-n-propylamine	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Hexachloroethane	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Nitrobenzene	ND		64	27	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Isophorone	ND		64	9.0	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Nitrophenol	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4-Dimethylphenol	ND		130	52	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Bis(2-chloroethoxy)methane	ND		160	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4-Dichlorophenol	ND		320	8.7	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
1,2,4-Trichlorobenzene	ND		64	13	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Naphthalene	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Chloroaniline	ND		160	8.5	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Hexachlorobutadiene	ND		64	9.6	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Chloro-3-methylphenol	ND		160	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Methylnaphthalene	ND		64	12	ug/Kg		10/01/19 16:08	10/04/19 06:38	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		160	52	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4,6-Trichlorophenol	ND		160	19	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4,5-Trichlorophenol	ND		64	8.1	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Chloronaphthalene	ND		64	9.2	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Nitroaniline	ND		320	65	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Dimethyl phthalate	ND		160	12	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Acenaphthylene	ND		64	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
3-Nitroaniline	ND		160	75	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Acenaphthene	ND		64	7.3	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4-Dinitrophenol	ND		630	130	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Nitrophenol	ND		320	65	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Dibenzofuran	ND		64	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,4-Dinitrotoluene	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2,6-Dinitrotoluene	ND		130	65	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Diethyl phthalate	ND		160	9.0	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Chlorophenyl phenyl ether	ND		160	12	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Fluorene	ND		64	7.7	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Nitroaniline	ND		320	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
2-Methyl-4,6-dinitrophenol	ND		320	65	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
N-Nitrosodiphenylamine	ND		64	7.5	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
4-Bromophenyl phenyl ether	ND		160	9.6	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Hexachlorobenzene	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Pentachlorophenol	ND		320	130	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Phenanthrene	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Anthracene	ND		64	8.3	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Di-n-butyl phthalate	ND		160	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Fluoranthene	ND		64	14	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Pyrene	ND		64	7.3	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Butyl benzyl phthalate	ND		160	11	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
3,3'-Dichlorobenzidine	ND		160	19	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzo[a]anthracene	ND		320	35	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Bis(2-ethylhexyl) phthalate	ND		320	13	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Chrysene	ND		130	63	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Di-n-octyl phthalate	ND		160	9.2	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzo[b]fluoranthene	ND		64	18	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzo[a]pyrene	ND		64	13	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzo[k]fluoranthene	ND		64	27	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Indeno[1,2,3-cd]pyrene	ND		64	25	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzo[g,h,i]perylene	ND		130	38	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Benzoic acid	200	J	320	65	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Azobenzene	ND		64	12	ug/Kg		10/01/19 16:08	10/04/19 06:38	1
Pyridine	ND		0.13	0.017	mg/Kg		10/01/19 16:08	10/04/19 06:38	1
Dibenz(a,h)anthracene	ND		64	29	ug/Kg		10/01/19 16:08	10/04/19 06:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	43		21 - 98	10/01/19 16:08	10/04/19 06:38	1
2-Fluorobiphenyl	50		30 - 112	10/01/19 16:08	10/04/19 06:38	1
Terphenyl-d14	59		59 - 134	10/01/19 16:08	10/04/19 06:38	1
2-Fluorophenol	56		28 - 98	10/01/19 16:08	10/04/19 06:38	1
Phenol-d5	55		23 - 101	10/01/19 16:08	10/04/19 06:38	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		37 - 114	10/01/19 16:08	10/04/19 06:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.5	J	1.9	0.72	mg/Kg		09/30/19 15:09	10/02/19 20:28	1
Motor Oil Range Organics [C24-C36]	10	J	48	9.5	mg/Kg		09/30/19 15:09	10/02/19 20:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	98		40 - 130	09/30/19 15:09	10/02/19 20:28	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9	0.47	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Dieldrin	ND		1.9	0.56	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endrin aldehyde	ND		1.9	0.64	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endrin	ND		1.9	0.64	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endrin ketone	ND		1.9	0.31	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Heptachlor	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Heptachlor epoxide	ND		1.9	0.33	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
4,4'-DDT	ND		1.9	0.39	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
4,4'-DDE	ND		1.9	0.40	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
4,4'-DDD	ND		1.9	0.58	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endosulfan I	ND		1.9	0.30	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endosulfan II	ND		1.9	0.46	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
alpha-BHC	ND		1.9	0.52	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
beta-BHC	ND		1.9	0.34	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
gamma-BHC (Lindane)	ND		1.9	0.60	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
delta-BHC	ND		1.9	0.42	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Endosulfan sulfate	ND		1.9	0.36	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Methoxychlor	ND		1.9	0.65	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Toxaphene	ND		38	6.5	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
Chlordane (technical)	ND		38	3.0	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
cis-Chlordane	ND		1.9	0.38	ug/Kg		09/30/19 15:19	10/02/19 23:14	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 23:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		21 - 145	09/30/19 15:19	10/02/19 23:14	1
DCB Decachlorobiphenyl	75		21 - 136	09/30/19 15:19	10/02/19 23:14	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1221	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1232	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1242	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1248	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1254	ND		47	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:31	1
PCB-1260	ND		47	5.0	ug/Kg		09/30/19 15:13	10/03/19 10:31	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	59		45 - 132	09/30/19 15:13	10/03/19 10:31	1
DCB Decachlorobiphenyl	70		42 - 146	09/30/19 15:13	10/03/19 10:31	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.97	J	1.1	0.18	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Arsenic	4.9		2.1	0.18	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Barium	170		1.1	0.15	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Beryllium	0.63		0.21	0.070	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Cadmium	0.080	J	0.27	0.027	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Chromium	57		1.1	0.11	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Cobalt	10		0.43	0.043	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Copper	28		3.2	1.5	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Lead	5.1		1.1	0.22	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Molybdenum	0.96	J	1.1	0.14	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Nickel	47		1.1	0.11	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Selenium	ND		2.1	0.32	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Silver	ND		0.53	0.11	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Thallium	ND		1.1	0.31	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Vanadium	43		1.1	0.15	mg/Kg		10/01/19 12:21	10/02/19 12:11	4
Zinc	58		3.2	1.4	mg/Kg		10/01/19 12:21	10/02/19 12:11	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051	B	0.016	0.0024	mg/Kg		10/02/19 14:04	10/03/19 12:09	1

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-1'

Lab Sample ID: 720-95291-8

Date Collected: 09/27/19 09:39

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		9.6	2.4	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Dieldrin	ND		9.6	2.8	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endrin aldehyde	ND		9.6	3.2	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endrin	ND		9.6	3.2	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endrin ketone	ND		9.6	1.6	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Heptachlor	ND		9.6	2.2	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Heptachlor epoxide	ND		9.6	1.7	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
4,4'-DDT	ND		9.6	2.0	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
4,4'-DDE	ND		9.6	2.0	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
4,4'-DDD	ND		9.6	2.9	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endosulfan I	ND		9.6	1.5	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endosulfan II	ND		9.6	2.3	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
alpha-BHC	ND		9.6	2.6	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
beta-BHC	ND		9.6	1.7	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
gamma-BHC (Lindane)	ND		9.6	3.0	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
delta-BHC	ND		9.6	2.1	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Endosulfan sulfate	ND		9.6	1.8	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Methoxychlor	ND		9.6	3.3	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Toxaphene	ND		190	33	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
Chlordane (technical)	ND		190	15	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
cis-Chlordane	ND		9.6	1.9	ug/Kg		09/30/19 15:19	10/03/19 20:18	5
trans-Chlordane	ND		9.6	2.2	ug/Kg		09/30/19 15:19	10/03/19 20:18	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		21 - 145	09/30/19 15:19	10/03/19 20:18	5
DCB Decachlorobiphenyl	70	p	21 - 136	09/30/19 15:19	10/03/19 20:18	5

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Acetone	ND		47	36	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Benzene	ND		4.7	0.61	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Dichlorobromomethane	ND		4.7	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Bromobenzene	ND		4.7	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chlorobromomethane	ND		19	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Bromoform	ND		4.7	1.9	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Bromomethane	ND		9.5	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
2-Butanone (MEK)	ND		47	20	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
n-Butylbenzene	ND		4.7	0.95	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
sec-Butylbenzene	ND		4.7	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
tert-Butylbenzene	ND		4.7	0.69	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Carbon disulfide	ND		4.7	1.9	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Carbon tetrachloride	ND		4.7	0.59	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chlorobenzene	ND		4.7	0.65	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chloroethane	ND		9.5	0.53	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chloroform	ND		4.7	0.62	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chloromethane	ND		9.5	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
2-Chlorotoluene	ND		4.7	0.61	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
4-Chlorotoluene	ND		4.7	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Chlorodibromomethane	ND		4.7	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Ethylene Dibromide	ND		4.7	1.4	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Dibromomethane	ND		9.5	0.81	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1-Dichloroethene	ND		4.7	0.59	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2-Dichloropropane	ND		4.7	0.60	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Ethylbenzene	ND		4.7	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
2-Hexanone	ND		47	9.5	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Isopropylbenzene	ND		4.7	0.64	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Methylene Chloride	ND		9.5	5.3	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
4-Methyl-2-pentanone (MIBK)	ND		47	9.5	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Naphthalene	ND		9.5	1.4	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
N-Propylbenzene	ND		4.7	0.62	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Styrene	ND		4.7	0.60	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg		09/30/19 13:10	10/02/19 03:39	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Tetrachloroethene	ND		4.7	0.63	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Toluene	ND		4.7	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Trichloroethene	ND		4.7	0.60	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,2,4-Trimethylbenzene	ND		4.7	1.6	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
1,3,5-Trimethylbenzene	ND		4.7	0.61	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Vinyl acetate	ND		19	4.7	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Vinyl chloride	ND		4.7	0.69	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Xylenes, Total	ND		4.7	1.2	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg		09/30/19 13:10	10/02/19 03:39	1
Gasoline Range Organics (GRO) -C4-C12	ND		240	95	ug/Kg		09/30/19 13:10	10/02/19 03:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		45 - 131	09/30/19 13:10	10/02/19 03:39	1
1,2-Dichloroethane-d4 (Surr)	132		60 - 140	09/30/19 13:10	10/02/19 03:39	1
Toluene-d8 (Surr)	99		58 - 140	09/30/19 13:10	10/02/19 03:39	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		65	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Bis(2-chloroethyl)ether	ND		65	14	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Chlorophenol	ND		65	7.2	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
1,3-Dichlorobenzene	ND		65	7.8	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
1,4-Dichlorobenzene	ND		65	18	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzyl alcohol	ND		170	10	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
1,2-Dichlorobenzene	ND		65	9.1	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Methylphenol	ND		65	9.7	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Methylphenol, 3 & 4	ND		65	18	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
N-Nitrosodi-n-propylamine	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Hexachloroethane	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Nitrobenzene	ND		65	27	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Isophorone	ND		65	9.1	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Nitrophenol	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4-Dimethylphenol	ND		130	53	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Bis(2-chloroethoxy)methane	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4-Dichlorophenol	ND		320	8.8	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
1,2,4-Trichlorobenzene	ND		65	14	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Naphthalene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Chloroaniline	ND		170	8.6	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Hexachlorobutadiene	ND		65	9.7	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Chloro-3-methylphenol	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Methylnaphthalene	ND		65	12	ug/Kg		10/01/19 16:08	10/04/19 07:03	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		170	53	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4,6-Trichlorophenol	ND		170	19	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4,5-Trichlorophenol	ND		65	8.2	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Chloronaphthalene	ND		65	9.3	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Nitroaniline	ND		320	66	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Dimethyl phthalate	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Acenaphthylene	ND		65	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
3-Nitroaniline	ND		170	76	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Acenaphthene	ND		65	7.4	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4-Dinitrophenol	ND		640	130	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Nitrophenol	ND		320	66	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Dibenzofuran	ND		65	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,4-Dinitrotoluene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2,6-Dinitrotoluene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Diethyl phthalate	ND		170	9.1	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Chlorophenyl phenyl ether	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Fluorene	ND		65	7.8	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Nitroaniline	ND		320	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
2-Methyl-4,6-dinitrophenol	ND		320	66	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
N-Nitrosodiphenylamine	ND		65	7.6	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
4-Bromophenyl phenyl ether	ND		170	9.7	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Hexachlorobenzene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Pentachlorophenol	ND		320	130	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Phenanthrene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Anthracene	ND		65	8.4	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Di-n-butyl phthalate	ND		170	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Fluoranthene	ND		65	15	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Pyrene	ND		65	7.4	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Butyl benzyl phthalate	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
3,3'-Dichlorobenzidine	ND		170	19	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzo[a]anthracene	ND		320	35	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Bis(2-ethylhexyl) phthalate	ND		320	13	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Chrysene	ND		130	64	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Di-n-octyl phthalate	ND		170	9.3	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzo[b]fluoranthene	ND		65	18	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzo[a]pyrene	ND		65	13	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzo[k]fluoranthene	ND		65	27	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Indeno[1,2,3-cd]pyrene	ND		65	25	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzo[g,h,i]perylene	ND		130	39	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Benzoic acid	200	J	320	66	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Azobenzene	ND		65	12	ug/Kg		10/01/19 16:08	10/04/19 07:03	1
Pyridine	ND		0.13	0.018	mg/Kg		10/01/19 16:08	10/04/19 07:03	1
Dibenz(a,h)anthracene	ND		65	29	ug/Kg		10/01/19 16:08	10/04/19 07:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	43		21 - 98	10/01/19 16:08	10/04/19 07:03	1
2-Fluorobiphenyl	50		30 - 112	10/01/19 16:08	10/04/19 07:03	1
Terphenyl-d14	60		59 - 134	10/01/19 16:08	10/04/19 07:03	1
2-Fluorophenol	54		28 - 98	10/01/19 16:08	10/04/19 07:03	1
Phenol-d5	53		23 - 101	10/01/19 16:08	10/04/19 07:03	1

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	52		37 - 114	10/01/19 16:08	10/04/19 07:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	0.86	J	1.9	0.71	mg/Kg		09/30/19 15:09	10/02/19 20:57	1
Motor Oil Range Organics [C24-C36]	10	J	48	9.5	mg/Kg		09/30/19 15:09	10/02/19 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	104		40 - 130	09/30/19 15:09	10/02/19 20:57	1

Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9	0.48	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Dieldrin	ND		1.9	0.57	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endrin aldehyde	ND		1.9	0.65	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endrin	ND		1.9	0.65	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endrin ketone	ND		1.9	0.32	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Heptachlor	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Heptachlor epoxide	ND		1.9	0.34	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
4,4'-DDT	ND		1.9	0.40	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
4,4'-DDE	ND		1.9	0.41	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
4,4'-DDD	ND		1.9	0.59	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endosulfan I	ND		1.9	0.31	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endosulfan II	ND		1.9	0.47	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
alpha-BHC	ND		1.9	0.53	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
beta-BHC	ND		1.9	0.35	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
gamma-BHC (Lindane)	ND		1.9	0.61	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
delta-BHC	ND		1.9	0.42	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Endosulfan sulfate	ND		1.9	0.37	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Methoxychlor	ND		1.9	0.66	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Toxaphene	ND		39	6.6	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
Chlordane (technical)	ND		39	3.1	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
cis-Chlordane	ND		1.9	0.39	ug/Kg		09/30/19 15:19	10/02/19 23:29	1
trans-Chlordane	ND		1.9	0.44	ug/Kg		09/30/19 15:19	10/02/19 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		21 - 145	09/30/19 15:19	10/02/19 23:29	1
DCB Decachlorobiphenyl	80		21 - 136	09/30/19 15:19	10/02/19 23:29	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1221	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1232	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1242	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1248	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1254	ND		48	1.7	ug/Kg		09/30/19 15:13	10/03/19 10:48	1
PCB-1260	ND		48	5.1	ug/Kg		09/30/19 15:13	10/03/19 10:48	1

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Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		45 - 132	09/30/19 15:13	10/03/19 10:48	1
DCB Decachlorobiphenyl	75		42 - 146	09/30/19 15:13	10/03/19 10:48	1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.8	0.30	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Arsenic	5.2		3.7	0.31	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Barium	150		1.8	0.26	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Beryllium	0.47		0.37	0.12	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Cadmium	0.35	J	0.46	0.046	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Chromium	41		1.8	0.19	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Cobalt	11		0.73	0.073	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Copper	25		5.5	2.6	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Lead	6.6		1.8	0.39	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Molybdenum	1.2	J	1.8	0.23	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Nickel	40		1.8	0.19	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Selenium	ND		3.7	0.55	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Silver	ND		0.92	0.19	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Thallium	ND		1.8	0.53	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Vanadium	42		1.8	0.25	mg/Kg		10/01/19 12:21	10/02/19 12:16	4
Zinc	70		5.5	2.3	mg/Kg		10/01/19 12:21	10/02/19 12:16	4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	B	0.016	0.0023	mg/Kg		10/02/19 14:04	10/03/19 12:15	1

Surrogate Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (45-131)	DCA (60-140)	TOL (58-140)
720-95269-B-1-C MS	Matrix Spike	89	143 X	96
720-95269-B-1-D MSD	Matrix Spike Duplicate	95	138	95
720-95291-1	S1-1'	100	131	98
720-95291-4	S2-3'	100	131	99
720-95291-7	S3-6'	103	135	98
720-95291-10	S4-9'	101	132	99
LCS 720-273801/5	Lab Control Sample	97	114	101
LCS 720-273801/7	Lab Control Sample	102	121	98
LCSD 720-273801/6	Lab Control Sample Dup	101	121	101
LCSD 720-273801/8	Lab Control Sample Dup	103	123	98
MB 720-273801/4	Method Blank	104	118	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (21-98)	FBP (30-112)	TPHL (59-134)	2FP (28-98)	PHL (23-101)	TBP (37-114)
720-95291-1	S1-1'	45	54	63	54	54	57
720-95291-1 MS	S1-1'	42	47	58 X	46	46	54
720-95291-1 MSD	S1-1'	55	62	78	60	62	72
720-95291-4	S2-3'	40	49	59	51	50	61
720-95291-7	S3-6'	43	50	59	56	55	61
720-95291-10	S4-9'	43	50	60	54	53	52
LCS 720-273785/2-A	Lab Control Sample	70	80	99	75	76	97
MB 720-273785/1-A	Method Blank	57	65	77	69	67	71

Surrogate Legend

NBZ = Nitrobenzene-d5
FBP = 2-Fluorobiphenyl
TPHL = Terphenyl-d14
2FP = 2-Fluorophenol
PHL = Phenol-d5
TBP = 2,4,6-Tribromophenol

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		TPH1 (40-130)
720-95284-A-5-C MS	Matrix Spike	98
720-95284-A-5-D MSD	Matrix Spike Duplicate	100
720-95291-1	S1-1'	103
720-95291-4	S2-3'	103
720-95291-7	S3-6'	98

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Surrogate Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TPH1 (40-130)
720-95291-10	S4-9'	104
LCS 720-273711/2-A	Lab Control Sample	120
MB 720-273711/1-A	Method Blank	104

Surrogate Legend

TPH = p-Terphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2 (21-145)	DCBP2 (21-136)
720-95290-A-4-E MS	Matrix Spike	73	89
720-95290-A-4-F MSD	Matrix Spike Duplicate	78	90
720-95291-5 MS	S3-1'	73	76
720-95291-7	S3-6'	70	75
720-95291-10	S4-9'	73	80

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (21-145)	DCBP2 (21-136)
720-95291-1	S1-1'	73	77
720-95291-4	S2-3'	69	70
720-95291-5	S3-1'	87	120
720-95291-5 MSD	S3-1'	84	88

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (21-145)	DCBP1 (21-136)
720-95291-3	S2-1'	78	85
720-95291-8	S4-1'	86	70 p
LCS 720-274168/2-A	Lab Control Sample	90	110
MB 720-274168/1-A	Method Blank	82	102

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Surrogate Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX2 (21-145)	DCBP1 (21-136)
LCS 720-273713/2-A	Lab Control Sample	68	81
MB 720-273713/1-A	Method Blank	61	76

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCBP1 (42-146)
720-95290-A-4-B MS	Matrix Spike	65	77
720-95290-A-4-C MSD	Matrix Spike Duplicate	67	83
720-95291-1	S1-1'	70	82
720-95291-4	S2-3'	64	76
720-95291-7	S3-6'	59	70
720-95291-10	S4-9'	65	75
LCS 720-273712/2-A	Lab Control Sample	70	93
MB 720-273712/1-A	Method Blank	55	64

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCBP = DCB Decachlorobiphenyl

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: 720-95269-B-1-C MS

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 273621

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Methyl tert-butyl ether	ND		48.9	59.0		ug/Kg		120	69 - 130
Acetone	ND		245	341		ug/Kg		139	37 - 150
Benzene	ND		48.9	41.4		ug/Kg		85	70 - 130
Dichlorobromomethane	ND		48.9	55.9		ug/Kg		114	64 - 135
Bromobenzene	ND	*	48.9	55.4	*	ug/Kg		113	70 - 130
Chlorobromomethane	ND		48.9	50.0		ug/Kg		102	65 - 130
Bromoform	ND	*	48.9	64.3		ug/Kg		131	58 - 132
Bromomethane	ND		48.9	48.4		ug/Kg		99	56 - 130
2-Butanone (MEK)	ND		245	263		ug/Kg		107	41 - 150
n-Butylbenzene	ND	*	48.9	34.0	*	ug/Kg		70	60 - 145
sec-Butylbenzene	ND	*	48.9	43.3	*	ug/Kg		88	64 - 137
tert-Butylbenzene	ND	*	48.9	50.0	*	ug/Kg		102	63 - 134
Carbon disulfide	ND		48.9	37.5		ug/Kg		77	10 - 150
Carbon tetrachloride	ND		48.9	60.9		ug/Kg		124	54 - 130
Chlorobenzene	ND	*	48.9	43.2		ug/Kg		88	70 - 130
Chloroethane	ND		48.9	43.1		ug/Kg		88	61 - 130
Chloroform	ND		48.9	54.2		ug/Kg		111	67 - 130
Chloromethane	ND		48.9	38.5		ug/Kg		79	50 - 131
2-Chlorotoluene	ND	*	48.9	49.3	*	ug/Kg		101	70 - 130
4-Chlorotoluene	ND	*	48.9	47.7	*	ug/Kg		98	70 - 130
Chlorodibromomethane	ND		48.9	58.2		ug/Kg		119	60 - 141
1,2-Dichlorobenzene	ND	*	48.9	42.1	*	ug/Kg		86	70 - 130
1,3-Dichlorobenzene	ND	*	48.9	42.0	*	ug/Kg		86	70 - 130
1,4-Dichlorobenzene	ND	*	48.9	42.6	*	ug/Kg		87	70 - 130
1,3-Dichloropropane	ND		48.9	47.5		ug/Kg		97	70 - 130
1,1-Dichloropropene	ND		48.9	44.1		ug/Kg		90	67 - 130
1,2-Dibromo-3-Chloropropane	ND	F2 F1 *	48.9	71.3	F1 *	ug/Kg		146	57 - 130
Ethylene Dibromide	ND		48.9	49.6		ug/Kg		101	66 - 135
Dibromomethane	ND		48.9	52.9		ug/Kg		108	65 - 131
Dichlorodifluoromethane	ND		48.9	55.6		ug/Kg		114	38 - 130
1,1-Dichloroethane	ND		48.9	46.7		ug/Kg		95	67 - 130
1,2-Dichloroethane	ND	F1	48.9	63.9	F1	ug/Kg		131	70 - 130
1,1-Dichloroethene	ND		48.9	42.4		ug/Kg		87	64 - 130
cis-1,2-Dichloroethene	ND		48.9	48.8		ug/Kg		100	68 - 131
trans-1,2-Dichloroethene	ND		48.9	42.8		ug/Kg		88	70 - 130
1,2-Dichloropropane	ND		48.9	43.4		ug/Kg		89	65 - 133
cis-1,3-Dichloropropene	ND		48.9	46.3		ug/Kg		95	46 - 139
trans-1,3-Dichloropropene	ND		48.9	48.8		ug/Kg		100	55 - 131
Ethylbenzene	ND	*	48.9	43.1		ug/Kg		88	65 - 130
Hexachlorobutadiene	ND	F2 F1 *	48.9	27.6	F1 *	ug/Kg		56	58 - 132
2-Hexanone	ND		245	259		ug/Kg		106	44 - 150
Isopropylbenzene	ND	*	48.9	41.3		ug/Kg		84	65 - 130
4-Isopropyltoluene	ND	*	48.9	43.1	*	ug/Kg		88	69 - 134
Methylene Chloride	ND		48.9	42.8		ug/Kg		87	63 - 130
4-Methyl-2-pentanone (MIBK)	ND		245	257		ug/Kg		105	51 - 140
Naphthalene	ND	*	48.9	36.6	*	ug/Kg		75	45 - 146
N-Propylbenzene	ND	*	48.9	46.9	*	ug/Kg		96	70 - 130
Styrene	ND	*	48.9	40.6		ug/Kg		83	58 - 135

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-95269-B-1-C MS

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 273621

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
1,1,1,2-Tetrachloroethane	ND	*	48.9	56.0		ug/Kg		114		64 - 133
1,1,2,2-Tetrachloroethane	ND	*	48.9	51.0	*	ug/Kg		104		70 - 131
Tetrachloroethene	ND		48.9	43.4		ug/Kg		89		67 - 130
Toluene	ND	*	48.9	45.1		ug/Kg		92		70 - 130
1,2,3-Trichlorobenzene	ND	F2 F1 *	48.9	26.1	F1 *	ug/Kg		53		58 - 138
1,2,4-Trichlorobenzene	ND	F2 *	48.9	26.6	*	ug/Kg		54		49 - 144
1,1,1-Trichloroethane	ND		48.9	60.1		ug/Kg		123		57 - 133
1,1,2-Trichloroethane	ND		48.9	46.0		ug/Kg		94		68 - 132
Trichloroethene	ND		48.9	52.1		ug/Kg		107		66 - 130
Trichlorofluoromethane	ND	F1	48.9	64.2	F1	ug/Kg		131		61 - 130
1,2,3-Trichloropropane	ND	F2 F1 *	48.9	81.8	F1 *	ug/Kg		167		62 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		48.9	49.4		ug/Kg		101		52 - 130
1,2,4-Trimethylbenzene	ND	*	48.9	48.0	*	ug/Kg		98		64 - 140
1,3,5-Trimethylbenzene	ND	*	48.9	49.7	*	ug/Kg		102		67 - 134
Vinyl acetate	ND	F1	48.9	ND	F1	ug/Kg		0		52 - 150
Vinyl chloride	ND		48.9	44.5		ug/Kg		91		62 - 130
m-Xylene & p-Xylene	ND	*	48.9	42.5		ug/Kg		87		70 - 130
o-Xylene	ND	*	48.9	44.5		ug/Kg		91		68 - 130
Xylenes, Total	ND		97.8	87.1		ug/Kg		89		70 - 130
2,2-Dichloropropane	ND	F1	48.9	66.9	F1	ug/Kg		137		63 - 130
		MS MS								
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene	89		45 - 131							
1,2-Dichloroethane-d4 (Surr)	143	X	60 - 140							
Toluene-d8 (Surr)	96		58 - 140							

Lab Sample ID: 720-95269-B-1-D MSD

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 273621

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Methyl tert-butyl ether	ND		49.4	55.7		ug/Kg		113		69 - 130	6	20
Acetone	ND		247	297		ug/Kg		120		37 - 150	14	20
Benzene	ND		49.4	40.0		ug/Kg		81		70 - 130	3	20
Dichlorobromomethane	ND		49.4	55.8		ug/Kg		113		64 - 135	0	20
Bromobenzene	ND	*	49.4	48.6		ug/Kg		98		70 - 130	13	20
Chlorobromomethane	ND		49.4	48.3		ug/Kg		98		65 - 130	3	20
Bromoform	ND	*	49.4	59.2		ug/Kg		120		58 - 132	8	20
Bromomethane	ND		49.4	49.1		ug/Kg		99		56 - 130	1	20
2-Butanone (MEK)	ND		247	247		ug/Kg		100		41 - 150	6	20
n-Butylbenzene	ND	*	49.4	35.9		ug/Kg		73		60 - 145	5	20
sec-Butylbenzene	ND	*	49.4	41.4		ug/Kg		84		64 - 137	4	20
tert-Butylbenzene	ND	*	49.4	45.5		ug/Kg		92		63 - 134	9	20
Carbon disulfide	ND		49.4	34.8		ug/Kg		71		10 - 150	7	20
Carbon tetrachloride	ND		49.4	57.7		ug/Kg		117		54 - 130	5	20
Chlorobenzene	ND	*	49.4	41.3		ug/Kg		84		70 - 130	5	20
Chloroethane	ND		49.4	43.4		ug/Kg		88		61 - 130	1	20
Chloroform	ND		49.4	52.8		ug/Kg		107		67 - 130	3	20

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-95269-B-1-D MSD

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 273621

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Chloromethane	ND		49.4	39.1		ug/Kg		79	50 - 131	1	20
2-Chlorotoluene	ND *		49.4	44.9		ug/Kg		91	70 - 130	9	20
4-Chlorotoluene	ND *		49.4	43.7		ug/Kg		89	70 - 130	9	20
Chlorodibromomethane	ND		49.4	55.9		ug/Kg		113	60 - 141	4	20
1,2-Dichlorobenzene	ND *		49.4	41.3		ug/Kg		84	70 - 130	2	20
1,3-Dichlorobenzene	ND *		49.4	41.4		ug/Kg		84	70 - 130	1	20
1,4-Dichlorobenzene	ND *		49.4	41.4		ug/Kg		84	70 - 130	3	20
1,3-Dichloropropane	ND		49.4	43.6		ug/Kg		88	70 - 130	9	20
1,1-Dichloropropene	ND		49.4	41.1		ug/Kg		83	67 - 130	7	20
1,2-Dibromo-3-Chloropropane	ND	F2 F1 *	49.4	57.8	F2	ug/Kg		117	57 - 130	21	20
Ethylene Dibromide	ND		49.4	46.5		ug/Kg		94	66 - 135	6	20
Dibromomethane	ND		49.4	49.7		ug/Kg		101	65 - 131	6	20
Dichlorodifluoromethane	ND		49.4	55.8		ug/Kg		113	38 - 130	0	20
1,1-Dichloroethane	ND		49.4	46.9		ug/Kg		95	67 - 130	1	20
1,2-Dichloroethane	ND	F1	49.4	60.5		ug/Kg		122	70 - 130	5	20
1,1-Dichloroethene	ND		49.4	40.6		ug/Kg		82	64 - 130	4	20
cis-1,2-Dichloroethene	ND		49.4	47.2		ug/Kg		95	68 - 131	3	20
trans-1,2-Dichloroethene	ND		49.4	40.9		ug/Kg		83	70 - 130	5	20
1,2-Dichloropropane	ND		49.4	41.3		ug/Kg		84	65 - 133	5	20
cis-1,3-Dichloropropene	ND		49.4	44.1		ug/Kg		89	46 - 139	5	20
trans-1,3-Dichloropropene	ND		49.4	45.8		ug/Kg		93	55 - 131	6	20
Ethylbenzene	ND *		49.4	41.3		ug/Kg		84	65 - 130	4	20
Hexachlorobutadiene	ND	F2 F1 *	49.4	37.5	F2	ug/Kg		76	58 - 132	30	20
2-Hexanone	ND		247	248		ug/Kg		101	44 - 150	4	20
Isopropylbenzene	ND *		49.4	41.6		ug/Kg		84	65 - 130	1	20
4-Isopropyltoluene	ND *		49.4	42.1		ug/Kg		85	69 - 134	2	20
Methylene Chloride	ND		49.4	42.0		ug/Kg		85	63 - 130	2	20
4-Methyl-2-pentanone (MIBK)	ND		247	244		ug/Kg		99	51 - 140	5	20
Naphthalene	ND *		49.4	38.1		ug/Kg		77	45 - 146	4	20
N-Propylbenzene	ND *		49.4	42.2		ug/Kg		85	70 - 130	11	20
Styrene	ND *		49.4	40.0		ug/Kg		81	58 - 135	2	20
1,1,1,2-Tetrachloroethane	ND *		49.4	53.2		ug/Kg		108	64 - 133	5	20
1,1,2,2-Tetrachloroethane	ND *		49.4	45.9		ug/Kg		93	70 - 131	11	20
Tetrachloroethene	ND		49.4	42.5		ug/Kg		86	67 - 130	2	20
Toluene	ND *		49.4	42.0		ug/Kg		85	70 - 130	7	20
1,2,3-Trichlorobenzene	ND	F2 F1 *	49.4	33.3	F2	ug/Kg		67	58 - 138	24	20
1,2,4-Trichlorobenzene	ND	F2 *	49.4	33.2	F2	ug/Kg		67	49 - 144	22	20
1,1,1-Trichloroethane	ND		49.4	58.0		ug/Kg		117	57 - 133	4	20
1,1,2-Trichloroethane	ND		49.4	43.4		ug/Kg		88	68 - 132	6	20
Trichloroethene	ND		49.4	46.0		ug/Kg		93	66 - 130	12	20
Trichlorofluoromethane	ND	F1	49.4	64.1		ug/Kg		130	61 - 130	0	20
1,2,3-Trichloropropane	ND	F2 F1 *	49.4	63.0	F2	ug/Kg		127	62 - 150	26	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		49.4	48.2		ug/Kg		98	52 - 130	2	20
1,2,4-Trimethylbenzene	ND *		49.4	45.3		ug/Kg		92	64 - 140	6	20
1,3,5-Trimethylbenzene	ND *		49.4	46.0		ug/Kg		93	67 - 134	8	20
Vinyl acetate	ND	F1	49.4	12.2	J F1	ug/Kg		25	52 - 150	NC	20
Vinyl chloride	ND		49.4	45.9		ug/Kg		93	62 - 130	3	20
m-Xylene & p-Xylene	ND *		49.4	41.8		ug/Kg		85	70 - 130	2	20

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-95269-B-1-D MSD

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 273621

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier		Result	Qualifier						
o-Xylene	ND	*	49.4	43.7		ug/Kg		88	68 - 130	2	20
Xylenes, Total	ND		98.8	85.5		ug/Kg		86	70 - 130	2	20
2,2-Dichloropropane	ND	F1	49.4	64.3		ug/Kg		130	63 - 130	4	20
Surrogate	MSD	MSD	Limits								
	%Recovery	Qualifier									
4-Bromofluorobenzene	95		45 - 131								
1,2-Dichloroethane-d4 (Surr)	138		60 - 140								
Toluene-d8 (Surr)	95		58 - 140								

Lab Sample ID: MB 720-273801/4

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			10/01/19 19:13	1
Acetone	ND		50	38	ug/Kg			10/01/19 19:13	1
Benzene	ND		5.0	0.65	ug/Kg			10/01/19 19:13	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			10/01/19 19:13	1
Bromobenzene	ND		5.0	0.79	ug/Kg			10/01/19 19:13	1
Chlorobromomethane	ND		20	0.72	ug/Kg			10/01/19 19:13	1
Bromoform	ND		5.0	2.0	ug/Kg			10/01/19 19:13	1
Bromomethane	ND		10	0.79	ug/Kg			10/01/19 19:13	1
2-Butanone (MEK)	ND		50	21	ug/Kg			10/01/19 19:13	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			10/01/19 19:13	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			10/01/19 19:13	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			10/01/19 19:13	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			10/01/19 19:13	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			10/01/19 19:13	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			10/01/19 19:13	1
Chloroethane	ND		10	0.56	ug/Kg			10/01/19 19:13	1
Chloroform	ND		5.0	0.66	ug/Kg			10/01/19 19:13	1
Chloromethane	ND		10	0.79	ug/Kg			10/01/19 19:13	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			10/01/19 19:13	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			10/01/19 19:13	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			10/01/19 19:13	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			10/01/19 19:13	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			10/01/19 19:13	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			10/01/19 19:13	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			10/01/19 19:13	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			10/01/19 19:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			10/01/19 19:13	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			10/01/19 19:13	1
Dibromomethane	ND		10	0.86	ug/Kg			10/01/19 19:13	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			10/01/19 19:13	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			10/01/19 19:13	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			10/01/19 19:13	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			10/01/19 19:13	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			10/01/19 19:13	1

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-273801/4
Matrix: Solid
Analysis Batch: 273801

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			10/01/19 19:13	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			10/01/19 19:13	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			10/01/19 19:13	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			10/01/19 19:13	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			10/01/19 19:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			10/01/19 19:13	1
2-Hexanone	ND		50	10	ug/Kg			10/01/19 19:13	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			10/01/19 19:13	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			10/01/19 19:13	1
Methylene Chloride	ND		10	5.6	ug/Kg			10/01/19 19:13	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			10/01/19 19:13	1
Naphthalene	ND		10	1.5	ug/Kg			10/01/19 19:13	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			10/01/19 19:13	1
Styrene	ND		5.0	0.63	ug/Kg			10/01/19 19:13	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.76	ug/Kg			10/01/19 19:13	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.75	ug/Kg			10/01/19 19:13	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			10/01/19 19:13	1
Toluene	ND		5.0	0.71	ug/Kg			10/01/19 19:13	1
1,2,3-Trichlorobenzene	ND		5.0	0.74	ug/Kg			10/01/19 19:13	1
1,2,4-Trichlorobenzene	ND		5.0	0.71	ug/Kg			10/01/19 19:13	1
1,1,1-Trichloroethane	ND		5.0	0.61	ug/Kg			10/01/19 19:13	1
1,1,2-Trichloroethane	ND		5.0	0.70	ug/Kg			10/01/19 19:13	1
Trichloroethene	ND		5.0	0.63	ug/Kg			10/01/19 19:13	1
Trichlorofluoromethane	ND		5.0	0.56	ug/Kg			10/01/19 19:13	1
1,2,3-Trichloropropane	ND		5.0	0.77	ug/Kg			10/01/19 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	2.1	ug/Kg			10/01/19 19:13	1
1,2,4-Trimethylbenzene	ND		5.0	1.6	ug/Kg			10/01/19 19:13	1
1,3,5-Trimethylbenzene	ND		5.0	0.65	ug/Kg			10/01/19 19:13	1
Vinyl acetate	ND		20	5.0	ug/Kg			10/01/19 19:13	1
Vinyl chloride	ND		5.0	0.73	ug/Kg			10/01/19 19:13	1
Xylenes, Total	ND		5.0	1.2	ug/Kg			10/01/19 19:13	1
2,2-Dichloropropane	ND		5.0	2.0	ug/Kg			10/01/19 19:13	1
Gasoline Range Organics (GRO) -C4-C12	ND		250	100	ug/Kg			10/01/19 19:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		45 - 131		10/01/19 19:13	1
1,2-Dichloroethane-d4 (Surr)	118		60 - 140		10/01/19 19:13	1
Toluene-d8 (Surr)	97		58 - 140		10/01/19 19:13	1

Lab Sample ID: LCS 720-273801/5
Matrix: Solid
Analysis Batch: 273801

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	47.7		ug/Kg		95	70 - 144
Acetone	250	201		ug/Kg		80	30 - 162
Benzene	50.0	42.3		ug/Kg		85	70 - 130
Dichlorobromomethane	50.0	51.2		ug/Kg		102	70 - 140

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-273801/5

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	45.8		ug/Kg		92	70 - 130
Chlorobromomethane	50.0	45.7		ug/Kg		91	70 - 130
Bromoform	50.0	52.2		ug/Kg		104	59 - 158
Bromomethane	50.0	51.0		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	197		ug/Kg		79	59 - 159
n-Butylbenzene	50.0	45.6		ug/Kg		91	70 - 142
sec-Butylbenzene	50.0	46.1		ug/Kg		92	70 - 136
tert-Butylbenzene	50.0	47.1		ug/Kg		94	70 - 130
Carbon disulfide	50.0	44.1		ug/Kg		88	60 - 140
Carbon tetrachloride	50.0	57.4		ug/Kg		115	70 - 142
Chlorobenzene	50.0	44.5		ug/Kg		89	70 - 130
Chloroethane	50.0	46.4		ug/Kg		93	65 - 130
Chloroform	50.0	50.7		ug/Kg		101	77 - 127
Chloromethane	50.0	39.9		ug/Kg		80	55 - 140
2-Chlorotoluene	50.0	45.9		ug/Kg		92	70 - 138
4-Chlorotoluene	50.0	45.9		ug/Kg		92	70 - 136
Chlorodibromomethane	50.0	53.3		ug/Kg		107	70 - 146
1,2-Dichlorobenzene	50.0	43.1		ug/Kg		86	70 - 130
1,3-Dichlorobenzene	50.0	44.3		ug/Kg		89	70 - 131
1,4-Dichlorobenzene	50.0	44.2		ug/Kg		88	70 - 130
1,3-Dichloropropane	50.0	43.3		ug/Kg		87	70 - 140
1,1-Dichloropropene	50.0	46.5		ug/Kg		93	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	43.0		ug/Kg		86	60 - 145
Ethylene Dibromide	50.0	45.3		ug/Kg		91	70 - 140
Dibromomethane	50.0	45.7		ug/Kg		91	70 - 139
Dichlorodifluoromethane	50.0	52.8		ug/Kg		106	37 - 158
1,1-Dichloroethane	50.0	45.4		ug/Kg		91	70 - 130
1,2-Dichloroethane	50.0	51.2		ug/Kg		102	70 - 130
1,1-Dichloroethene	50.0	44.5		ug/Kg		89	74 - 122
cis-1,2-Dichloroethene	50.0	47.3		ug/Kg		95	70 - 138
trans-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	67 - 130
1,2-Dichloropropane	50.0	41.7		ug/Kg		83	73 - 127
cis-1,3-Dichloropropene	50.0	46.5		ug/Kg		93	68 - 147
trans-1,3-Dichloropropene	50.0	47.2		ug/Kg		94	70 - 155
Ethylbenzene	50.0	46.3		ug/Kg		93	80 - 137
Hexachlorobutadiene	50.0	58.2		ug/Kg		116	70 - 132
2-Hexanone	250	186		ug/Kg		74	62 - 158
Isopropylbenzene	50.0	48.2		ug/Kg		96	70 - 130
4-Isopropyltoluene	50.0	47.3		ug/Kg		95	70 - 133
Methylene Chloride	50.0	40.7		ug/Kg		81	70 - 134
4-Methyl-2-pentanone (MIBK)	250	186		ug/Kg		74	60 - 160
Naphthalene	50.0	40.1		ug/Kg		80	60 - 147
N-Propylbenzene	50.0	45.3		ug/Kg		91	70 - 130
Styrene	50.0	45.0		ug/Kg		90	70 - 130
1,1,1,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	70 - 130
1,1,1,2,2-Tetrachloroethane	50.0	38.4		ug/Kg		77	70 - 146
Tetrachloroethene	50.0	50.9		ug/Kg		102	70 - 132
Toluene	50.0	44.4		ug/Kg		89	75 - 120
1,2,3-Trichlorobenzene	50.0	45.3		ug/Kg		91	60 - 140

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCS 720-273801/5

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	50.0	46.4		ug/Kg		93	60 - 140
1,1,1-Trichloroethane	50.0	56.7		ug/Kg		113	70 - 130
1,1,2-Trichloroethane	50.0	43.0		ug/Kg		86	70 - 130
Trichloroethene	50.0	47.4		ug/Kg		95	70 - 133
Trichlorofluoromethane	50.0	58.5		ug/Kg		117	60 - 140
1,2,3-Trichloropropane	50.0	44.5		ug/Kg		89	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.1		ug/Kg		102	60 - 140
1,2,4-Trimethylbenzene	50.0	47.8		ug/Kg		96	70 - 130
1,3,5-Trimethylbenzene	50.0	47.7		ug/Kg		95	70 - 131
Vinyl acetate	50.0	39.1		ug/Kg		78	38 - 176
Vinyl chloride	50.0	47.9		ug/Kg		96	58 - 125
m-Xylene & p-Xylene	50.0	47.0		ug/Kg		94	70 - 146
o-Xylene	50.0	46.9		ug/Kg		94	70 - 140
Xylenes, Total	100	93.8		ug/Kg		94	70 - 146
2,2-Dichloropropane	50.0	64.9		ug/Kg		130	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	114		60 - 140
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: LCS 720-273801/7

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C4-C12	1000	1000		ug/Kg		100	70 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		45 - 131
1,2-Dichloroethane-d4 (Surr)	121		60 - 140
Toluene-d8 (Surr)	98		58 - 140

Lab Sample ID: LCSD 720-273801/6

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	51.7		ug/Kg		103	70 - 144	8	20
Acetone	250	233		ug/Kg		93	30 - 162	15	30
Benzene	50.0	42.3		ug/Kg		85	70 - 130	0	20
Dichlorobromomethane	50.0	55.1		ug/Kg		110	70 - 140	7	20
Bromobenzene	50.0	44.8		ug/Kg		90	70 - 130	2	20
Chlorobromomethane	50.0	48.1		ug/Kg		96	70 - 130	5	20
Bromoform	50.0	56.3		ug/Kg		113	59 - 158	8	20
Bromomethane	50.0	51.0		ug/Kg		102	59 - 132	0	20
2-Butanone (MEK)	250	230		ug/Kg		92	59 - 159	15	20

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-273801/6

Matrix: Solid

Analysis Batch: 273801

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
n-Butylbenzene	50.0	42.0		ug/Kg		84	70 - 142	8	20
sec-Butylbenzene	50.0	41.6		ug/Kg		83	70 - 136	10	20
tert-Butylbenzene	50.0	43.3		ug/Kg		87	70 - 130	8	20
Carbon disulfide	50.0	42.7		ug/Kg		85	60 - 140	3	20
Carbon tetrachloride	50.0	56.0		ug/Kg		112	70 - 142	3	20
Chlorobenzene	50.0	44.5		ug/Kg		89	70 - 130	0	20
Chloroethane	50.0	45.9		ug/Kg		92	65 - 130	1	20
Chloroform	50.0	51.2		ug/Kg		102	77 - 127	1	20
Chloromethane	50.0	40.3		ug/Kg		81	55 - 140	1	20
2-Chlorotoluene	50.0	43.7		ug/Kg		87	70 - 138	5	20
4-Chlorotoluene	50.0	44.1		ug/Kg		88	70 - 136	4	20
Chlorodibromomethane	50.0	57.5		ug/Kg		115	70 - 146	7	20
1,2-Dichlorobenzene	50.0	43.7		ug/Kg		87	70 - 130	1	20
1,3-Dichlorobenzene	50.0	44.1		ug/Kg		88	70 - 131	0	20
1,4-Dichlorobenzene	50.0	44.4		ug/Kg		89	70 - 130	0	20
1,3-Dichloropropane	50.0	46.7		ug/Kg		93	70 - 140	7	20
1,1-Dichloropropene	50.0	45.6		ug/Kg		91	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	47.7		ug/Kg		95	60 - 145	10	20
Ethylene Dibromide	50.0	49.7		ug/Kg		99	70 - 140	9	20
Dibromomethane	50.0	49.6		ug/Kg		99	70 - 139	8	20
Dichlorodifluoromethane	50.0	52.0		ug/Kg		104	37 - 158	1	20
1,1-Dichloroethane	50.0	44.6		ug/Kg		89	70 - 130	2	20
1,2-Dichloroethane	50.0	54.5		ug/Kg		109	70 - 130	6	20
1,1-Dichloroethene	50.0	44.2		ug/Kg		88	74 - 122	1	20
cis-1,2-Dichloroethene	50.0	47.9		ug/Kg		96	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	45.0		ug/Kg		90	67 - 130	1	20
1,2-Dichloropropane	50.0	42.4		ug/Kg		85	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	48.5		ug/Kg		97	68 - 147	4	20
trans-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	70 - 155	6	20
Ethylbenzene	50.0	44.8		ug/Kg		90	80 - 137	3	20
Hexachlorobutadiene	50.0	52.2		ug/Kg		104	70 - 132	11	20
2-Hexanone	250	221		ug/Kg		88	62 - 158	17	20
Isopropylbenzene	50.0	46.8		ug/Kg		94	70 - 130	3	20
4-Isopropyltoluene	50.0	43.5		ug/Kg		87	70 - 133	9	20
Methylene Chloride	50.0	41.7		ug/Kg		83	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	217		ug/Kg		87	60 - 160	15	20
Naphthalene	50.0	44.0		ug/Kg		88	60 - 147	9	20
N-Propylbenzene	50.0	42.2		ug/Kg		84	70 - 130	7	20
Styrene	50.0	45.0		ug/Kg		90	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	51.0		ug/Kg		102	70 - 130	2	20
1,1,1,2,2-Tetrachloroethane	50.0	41.0		ug/Kg		82	70 - 146	6	20
Tetrachloroethene	50.0	50.0		ug/Kg		100	70 - 132	2	20
Toluene	50.0	42.8		ug/Kg		86	75 - 120	4	20
1,2,3-Trichlorobenzene	50.0	48.0		ug/Kg		96	60 - 140	6	20
1,2,4-Trichlorobenzene	50.0	48.1		ug/Kg		96	60 - 140	4	20
1,1,1-Trichloroethane	50.0	55.2		ug/Kg		110	70 - 130	3	20
1,1,2-Trichloroethane	50.0	46.0		ug/Kg		92	70 - 130	7	20
Trichloroethene	50.0	47.5		ug/Kg		95	70 - 133	0	20
Trichlorofluoromethane	50.0	57.5		ug/Kg		115	60 - 140	2	20

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8260B/CA_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: LCSD 720-273801/6
Matrix: Solid
Analysis Batch: 273801

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	50.0	46.9		ug/Kg		94	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.3		ug/Kg		97	60 - 140	6	20
1,2,4-Trimethylbenzene	50.0	45.8		ug/Kg		92	70 - 130	4	20
1,3,5-Trimethylbenzene	50.0	44.8		ug/Kg		90	70 - 131	6	20
Vinyl acetate	50.0	43.7		ug/Kg		87	38 - 176	11	20
Vinyl chloride	50.0	47.5		ug/Kg		95	58 - 125	1	20
m-Xylene & p-Xylene	50.0	46.0		ug/Kg		92	70 - 146	2	20
o-Xylene	50.0	47.0		ug/Kg		94	70 - 140	0	20
Xylenes, Total	100	92.9		ug/Kg		93	70 - 146	1	20
2,2-Dichloropropane	50.0	63.9		ug/Kg		128	70 - 162	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	121		60 - 140
Toluene-d8 (Surr)	101		58 - 140

Lab Sample ID: LCSD 720-273801/8
Matrix: Solid
Analysis Batch: 273801

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C4-C12	1000	981		ug/Kg		98	70 - 122	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	103		45 - 131
1,2-Dichloroethane-d4 (Surr)	123		60 - 140
Toluene-d8 (Surr)	98		58 - 140

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-273785/1-A
Matrix: Solid
Analysis Batch: 273958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		67	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Bis(2-chloroethyl)ether	ND		67	14	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Chlorophenol	ND		67	7.4	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
1,3-Dichlorobenzene	ND		67	8.0	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
1,4-Dichlorobenzene	ND		67	18	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzyl alcohol	ND		170	10	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
1,2-Dichlorobenzene	ND		67	9.4	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Methylphenol	ND		67	10	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Methylphenol, 3 & 4	ND		67	19	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
N-Nitrosodi-n-propylamine	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Hexachloroethane	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Nitrobenzene	ND		67	28	ug/Kg		10/01/19 16:08	10/04/19 01:10	1

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QC Sample Results

Client: Dysert Environmental, Inc
 Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-273785/1-A
Matrix: Solid
Analysis Batch: 273958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273785

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Isophorone	ND		67	9.4	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Nitrophenol	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4-Dimethylphenol	ND		130	54	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Bis(2-chloroethoxy)methane	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4-Dichlorophenol	ND		330	9.0	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
1,2,4-Trichlorobenzene	ND		67	14	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Naphthalene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Chloroaniline	ND		170	8.8	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Hexachlorobutadiene	ND		67	10	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Chloro-3-methylphenol	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Methylnaphthalene	ND		67	12	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Hexachlorocyclopentadiene	ND		170	54	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4,6-Trichlorophenol	ND		170	20	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4,5-Trichlorophenol	ND		67	8.4	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Chloronaphthalene	ND		67	9.6	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Nitroaniline	ND		330	68	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Dimethyl phthalate	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Acenaphthylene	ND		67	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
3-Nitroaniline	ND		170	78	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Acenaphthene	ND		67	7.6	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4-Dinitrophenol	ND		660	130	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Nitrophenol	ND		330	68	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Dibenzofuran	ND		67	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,4-Dinitrotoluene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2,6-Dinitrotoluene	ND		130	68	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Diethyl phthalate	ND		170	9.4	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Chlorophenyl phenyl ether	ND		170	12	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Fluorene	ND		67	8.0	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Nitroaniline	ND		330	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
2-Methyl-4,6-dinitrophenol	ND		330	68	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
N-Nitrosodiphenylamine	ND		67	7.8	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
4-Bromophenyl phenyl ether	ND		170	10	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Hexachlorobenzene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Pentachlorophenol	ND		330	130	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Phenanthrene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Anthracene	ND		67	8.6	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Di-n-butyl phthalate	ND		170	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Fluoranthene	ND		67	15	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Pyrene	ND		67	7.6	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Butyl benzyl phthalate	ND		170	11	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
3,3'-Dichlorobenzidine	ND		170	20	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzo[a]anthracene	ND		330	36	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Bis(2-ethylhexyl) phthalate	ND		330	13	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Chrysene	ND		130	66	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Di-n-octyl phthalate	ND		170	9.6	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzo[b]fluoranthene	ND		67	19	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzo[a]pyrene	ND		67	13	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzo[k]fluoranthene	ND		67	28	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Indeno[1,2,3-cd]pyrene	ND		67	26	ug/Kg		10/01/19 16:08	10/04/19 01:10	1

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-273785/1-A
Matrix: Solid
Analysis Batch: 273958

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		130	40	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Benzoic acid	ND		330	68	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Azobenzene	ND		67	12	ug/Kg		10/01/19 16:08	10/04/19 01:10	1
Pyridine	ND		0.13	0.018	mg/Kg		10/01/19 16:08	10/04/19 01:10	1
Dibenz(a,h)anthracene	ND		67	30	ug/Kg		10/01/19 16:08	10/04/19 01:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		21 - 98	10/01/19 16:08	10/04/19 01:10	1
2-Fluorobiphenyl	65		30 - 112	10/01/19 16:08	10/04/19 01:10	1
Terphenyl-d14	77		59 - 134	10/01/19 16:08	10/04/19 01:10	1
2-Fluorophenol	69		28 - 98	10/01/19 16:08	10/04/19 01:10	1
Phenol-d5	67		23 - 101	10/01/19 16:08	10/04/19 01:10	1
2,4,6-Tribromophenol	71		37 - 114	10/01/19 16:08	10/04/19 01:10	1

Lab Sample ID: LCS 720-273785/2-A
Matrix: Solid
Analysis Batch: 273958

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273785

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Phenol	2670	2040		ug/Kg		76	52 - 110
Bis(2-chloroethyl)ether	2670	1720		ug/Kg		64	43 - 110
2-Chlorophenol	2670	2060		ug/Kg		77	53 - 110
1,3-Dichlorobenzene	2670	1800		ug/Kg		67	44 - 110
1,4-Dichlorobenzene	2670	1820		ug/Kg		68	45 - 110
Benzyl alcohol	2670	2040		ug/Kg		77	55 - 100
1,2-Dichlorobenzene	2670	1840		ug/Kg		69	46 - 110
2-Methylphenol	2670	2050		ug/Kg		77	53 - 110
Methylphenol, 3 & 4	2670	2090		ug/Kg		79	56 - 101
N-Nitrosodi-n-propylamine	2670	1910		ug/Kg		72	34 - 110
Hexachloroethane	2670	1890		ug/Kg		71	45 - 110
Nitrobenzene	2670	1990		ug/Kg		75	51 - 110
Isophorone	2670	2030		ug/Kg		76	52 - 100
2-Nitrophenol	2670	2190		ug/Kg		82	54 - 105
2,4-Dimethylphenol	2670	2210		ug/Kg		83	52 - 100
Bis(2-chloroethoxy)methane	2670	1990		ug/Kg		75	52 - 110
2,4-Dichlorophenol	2670	2290		ug/Kg		86	56 - 100
1,2,4-Trichlorobenzene	2670	2050		ug/Kg		77	49 - 110
Naphthalene	2670	1990		ug/Kg		75	51 - 110
4-Chloroaniline	2670	1980		ug/Kg		74	35 - 110
Hexachlorobutadiene	2670	2060		ug/Kg		77	47 - 110
4-Chloro-3-methylphenol	2670	2350		ug/Kg		88	58 - 104
2-Methylnaphthalene	2670	2100		ug/Kg		79	53 - 110
Hexachlorocyclopentadiene	2670	2170		ug/Kg		81	6 - 106
2,4,6-Trichlorophenol	2670	2480		ug/Kg		93	55 - 105
2,4,5-Trichlorophenol	2670	2490		ug/Kg		93	53 - 106
2-Chloronaphthalene	2670	2180		ug/Kg		82	52 - 110
2-Nitroaniline	2670	2450		ug/Kg		92	59 - 109
Dimethyl phthalate	2670	2480		ug/Kg		93	56 - 109

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-273785/2-A

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	2670	2210		ug/Kg		83	53 - 102
3-Nitroaniline	2670	2160		ug/Kg		81	50 - 100
Acenaphthene	2670	2240		ug/Kg		84	53 - 103
2,4-Dinitrophenol	5330	3350		ug/Kg		63	18 - 100
4-Nitrophenol	5330	5240		ug/Kg		98	50 - 117
Dibenzofuran	2670	2280		ug/Kg		85	52 - 101
2,4-Dinitrotoluene	2670	2580		ug/Kg		97	59 - 115
2,6-Dinitrotoluene	2670	2490		ug/Kg		93	58 - 107
Diethyl phthalate	2670	2430		ug/Kg		91	56 - 114
4-Chlorophenyl phenyl ether	2670	2380		ug/Kg		89	53 - 106
Fluorene	2670	2320		ug/Kg		87	54 - 103
4-Nitroaniline	2670	2270		ug/Kg		85	49 - 115
2-Methyl-4,6-dinitrophenol	5330	4720		ug/Kg		88	48 - 114
N-Nitrosodiphenylamine	2670	2380		ug/Kg		89	56 - 110
4-Bromophenyl phenyl ether	2670	2460		ug/Kg		92	56 - 113
Hexachlorobenzene	2670	2510		ug/Kg		94	55 - 113
Pentachlorophenol	5330	4970		ug/Kg		93	46 - 115
Phenanthrene	2670	2410		ug/Kg		90	57 - 106
Anthracene	2670	2410		ug/Kg		91	59 - 112
Di-n-butyl phthalate	2670	2510		ug/Kg		94	58 - 119
Fluoranthene	2670	2450		ug/Kg		92	56 - 117
Pyrene	2670	2610		ug/Kg		98	61 - 121
Butyl benzyl phthalate	2670	2610		ug/Kg		98	57 - 126
3,3'-Dichlorobenzidine	2670	2450		ug/Kg		92	47 - 104
Benzo[a]anthracene	2670	2570		ug/Kg		96	58 - 117
Bis(2-ethylhexyl) phthalate	2670	2650		ug/Kg		100	58 - 131
Chrysene	2670	2530		ug/Kg		95	58 - 115
Di-n-octyl phthalate	2670	2590		ug/Kg		97	55 - 126
Benzo[b]fluoranthene	2670	2720		ug/Kg		102	57 - 120
Benzo[a]pyrene	2670	2570		ug/Kg		96	57 - 116
Benzo[k]fluoranthene	2670	2550		ug/Kg		96	59 - 122
Indeno[1,2,3-cd]pyrene	2670	2570		ug/Kg		96	56 - 117
Benzo[g,h,i]perylene	2670	2720		ug/Kg		102	52 - 124
Benzoic acid	2670	2340		ug/Kg		88	31 - 113
Azobenzene	2670	2190		ug/Kg		82	52 - 111
Pyridine	5.33	2.62		mg/Kg		49	30 - 110
Dibenz(a,h)anthracene	2670	2560		ug/Kg		96	57 - 116

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	70		21 - 98
2-Fluorobiphenyl	80		30 - 112
Terphenyl-d14	99		59 - 134
2-Fluorophenol	75		28 - 98
Phenol-d5	76		23 - 101
2,4,6-Tribromophenol	97		37 - 114

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-95291-1 MS

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: S1-1'

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
Phenol	ND	F1	2610	1180	F1	ug/Kg		45	52 - 110
Bis(2-chloroethyl)ether	ND	F1	2610	960	F1	ug/Kg		37	43 - 110
2-Chlorophenol	ND	F1	2610	1200	F1	ug/Kg		46	53 - 110
1,3-Dichlorobenzene	ND	F1	2610	1010	F1	ug/Kg		39	44 - 110
1,4-Dichlorobenzene	ND	F1	2610	1020	F1	ug/Kg		39	45 - 110
Benzyl alcohol	ND	F1	2610	1230	F1	ug/Kg		47	55 - 100
1,2-Dichlorobenzene	ND	F1	2610	1040	F1	ug/Kg		40	46 - 110
2-Methylphenol	ND	F1	2610	1080	F1	ug/Kg		42	53 - 110
Methylphenol, 3 & 4	ND	F1	2610	1150	F1	ug/Kg		44	56 - 101
N-Nitrosodi-n-propylamine	ND		2610	1090		ug/Kg		42	34 - 110
Hexachloroethane	ND	F1	2610	1040	F1	ug/Kg		40	45 - 110
Nitrobenzene	ND	F1	2610	1160	F1	ug/Kg		44	51 - 110
Isophorone	ND	F1	2610	1180	F1	ug/Kg		45	52 - 100
2-Nitrophenol	ND	F1	2610	1310	F1	ug/Kg		50	54 - 105
2,4-Dimethylphenol	ND	F1	2610	920	F1	ug/Kg		35	52 - 100
Bis(2-chloroethoxy)methane	ND	F1	2610	1180	F1	ug/Kg		45	52 - 110
2,4-Dichlorophenol	ND	F1	2610	1390	F1	ug/Kg		53	56 - 100
1,2,4-Trichlorobenzene	ND	F1	2610	1200	F1	ug/Kg		46	49 - 110
Naphthalene	ND	F1	2610	1160	F1	ug/Kg		45	51 - 110
4-Chloroaniline	ND		2610	1150		ug/Kg		44	35 - 110
Hexachlorobutadiene	ND	F1	2610	1200	F1	ug/Kg		46	47 - 110
4-Chloro-3-methylphenol	ND	F1	2610	1430	F1	ug/Kg		55	58 - 104
2-Methylnaphthalene	ND	F1	2610	1220	F1	ug/Kg		47	53 - 110
Hexachlorocyclopentadiene	ND		2610	1180		ug/Kg		45	6 - 106
2,4,6-Trichlorophenol	ND	F1	2610	1360	F1	ug/Kg		52	55 - 105
2,4,5-Trichlorophenol	ND		2610	1430		ug/Kg		55	53 - 106
2-Chloronaphthalene	ND	F1	2610	1220	F1	ug/Kg		47	52 - 110
2-Nitroaniline	ND	F1	2610	1430	F1	ug/Kg		55	59 - 109
Dimethyl phthalate	ND	F1	2610	1430	F1	ug/Kg		55	56 - 109
Acenaphthylene	ND	F1	2610	1250	F1	ug/Kg		48	53 - 102
3-Nitroaniline	ND	F1	2610	1270	F1	ug/Kg		49	50 - 100
Acenaphthene	ND	F1	2610	1260	F1	ug/Kg		48	53 - 103
2,4-Dinitrophenol	ND		5220	2520		ug/Kg		48	18 - 100
4-Nitrophenol	ND		5220	2890		ug/Kg		55	50 - 117
Dibenzofuran	ND	F1	2610	1270	F1	ug/Kg		49	52 - 101
2,4-Dinitrotoluene	ND	F1	2610	1490	F1	ug/Kg		57	59 - 115
2,6-Dinitrotoluene	ND	F1	2610	1440	F1	ug/Kg		55	58 - 107
Diethyl phthalate	ND	F1	2610	1390	F1	ug/Kg		53	56 - 114
4-Chlorophenyl phenyl ether	ND		2610	1390		ug/Kg		53	53 - 106
Fluorene	ND	F1	2610	1320	F1	ug/Kg		51	54 - 103
4-Nitroaniline	ND		2610	1320		ug/Kg		51	49 - 115
2-Methyl-4,6-dinitrophenol	ND		5220	2980		ug/Kg		57	48 - 114
N-Nitrosodiphenylamine	ND	F1	2610	1230	F1	ug/Kg		47	56 - 110
4-Bromophenyl phenyl ether	ND		2610	1460		ug/Kg		56	56 - 113
Hexachlorobenzene	ND		2610	1460		ug/Kg		56	55 - 113
Pentachlorophenol	ND		5220	2690		ug/Kg		52	46 - 115
Phenanthrene	ND	F1	2610	1380	F1	ug/Kg		53	57 - 106
Anthracene	ND	F1	2610	1370	F1	ug/Kg		53	59 - 112

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-95291-1 MS

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: S1-1'

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
Di-n-butyl phthalate	ND	F1	2610	1430	F1	ug/Kg		55		58 - 119
Fluoranthene	ND	F1	2610	1400	F1	ug/Kg		54		56 - 117
Pyrene	ND	F1	2610	1450	F1	ug/Kg		55		61 - 121
Butyl benzyl phthalate	ND		2610	1490		ug/Kg		57		57 - 126
3,3'-Dichlorobenzidine	ND	F1	2610	659	F1	ug/Kg		25		47 - 104
Benzo[a]anthracene	ND	F1	2610	1470	F1	ug/Kg		56		58 - 117
Bis(2-ethylhexyl) phthalate	ND		2610	1510		ug/Kg		58		58 - 131
Chrysene	ND	F1	2610	1460	F1	ug/Kg		56		58 - 115
Di-n-octyl phthalate	ND		2610	1470		ug/Kg		56		55 - 126
Benzo[b]fluoranthene	ND	F1	2610	1460	F1	ug/Kg		56		57 - 120
Benzo[a]pyrene	ND	F1	2610	1460	F1	ug/Kg		56		57 - 116
Benzo[k]fluoranthene	ND		2610	1540		ug/Kg		59		59 - 122
Indeno[1,2,3-cd]pyrene	ND	F1	2610	1430	F1	ug/Kg		55		56 - 117
Benzo[g,h,i]perylene	ND		2610	1520		ug/Kg		58		52 - 124
Benzoic acid	210	J	2610	1080		ug/Kg		33		31 - 113
Azobenzene	ND	F1	2610	1220	F1	ug/Kg		47		52 - 111
Pyridine	ND	F1	5.22	1.49	F1	mg/Kg		29		30 - 110
Dibenz(a,h)anthracene	ND	F1	2610	1450	F1	ug/Kg		55		57 - 116

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	42		21 - 98
2-Fluorobiphenyl	47		30 - 112
Terphenyl-d14	58	X	59 - 134
2-Fluorophenol	46		28 - 98
Phenol-d5	46		23 - 101
2,4,6-Tribromophenol	54		37 - 114

Lab Sample ID: 720-95291-1 MSD

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: S1-1'

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Phenol	ND	F1	2580	1570		ug/Kg		61		52 - 110	28	35
Bis(2-chloroethyl)ether	ND	F1	2580	1230		ug/Kg		48		43 - 110	25	35
2-Chlorophenol	ND	F1	2580	1540		ug/Kg		60		53 - 110	25	35
1,3-Dichlorobenzene	ND	F1	2580	1320		ug/Kg		51		44 - 110	27	35
1,4-Dichlorobenzene	ND	F1	2580	1330		ug/Kg		52		45 - 110	27	35
Benzyl alcohol	ND	F1	2580	1610		ug/Kg		62		55 - 100	27	35
1,2-Dichlorobenzene	ND	F1	2580	1380		ug/Kg		53		46 - 110	28	35
2-Methylphenol	ND	F1	2580	1460		ug/Kg		56		53 - 110	29	35
Methylphenol, 3 & 4	ND	F1	2580	1530		ug/Kg		59		56 - 101	29	35
N-Nitrosodi-n-propylamine	ND		2580	1440		ug/Kg		56		34 - 110	27	35
Hexachloroethane	ND	F1	2580	1390		ug/Kg		54		45 - 110	29	35
Nitrobenzene	ND	F1	2580	1490		ug/Kg		58		51 - 110	25	35
Isophorone	ND	F1	2580	1520		ug/Kg		59		52 - 100	25	35
2-Nitrophenol	ND	F1	2580	1700		ug/Kg		66		54 - 105	26	35
2,4-Dimethylphenol	ND	F1	2580	1210	F1	ug/Kg		47		52 - 100	27	35
Bis(2-chloroethoxy)methane	ND	F1	2580	1510		ug/Kg		59		52 - 110	25	35

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-95291-1 MSD

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: S1-1'

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier				Limits		Limit
2,4-Dichlorophenol	ND	F1	2580	1820		ug/Kg		70	56 - 100	27	35
1,2,4-Trichlorobenzene	ND	F1	2580	1570		ug/Kg		61	49 - 110	27	35
Naphthalene	ND	F1	2580	1480		ug/Kg		57	51 - 110	24	35
4-Chloroaniline	ND		2580	1500		ug/Kg		58	35 - 110	27	35
Hexachlorobutadiene	ND	F1	2580	1560		ug/Kg		61	47 - 110	26	35
4-Chloro-3-methylphenol	ND	F1	2580	1860		ug/Kg		72	58 - 104	26	35
2-Methylnaphthalene	ND	F1	2580	1580		ug/Kg		61	53 - 110	26	35
Hexachlorocyclopentadiene	ND		2580	1590		ug/Kg		61	6 - 106	29	35
2,4,6-Trichlorophenol	ND	F1	2580	1840		ug/Kg		71	55 - 105	30	35
2,4,5-Trichlorophenol	ND		2580	1920		ug/Kg		75	53 - 106	29	35
2-Chloronaphthalene	ND	F1	2580	1630		ug/Kg		63	52 - 110	29	35
2-Nitroaniline	ND	F1	2580	1860		ug/Kg		72	59 - 109	26	35
Dimethyl phthalate	ND	F1	2580	1850		ug/Kg		72	56 - 109	26	35
Acenaphthylene	ND	F1	2580	1650		ug/Kg		64	53 - 102	27	35
3-Nitroaniline	ND	F1	2580	1640		ug/Kg		63	50 - 100	25	35
Acenaphthene	ND	F1	2580	1680		ug/Kg		65	53 - 103	29	35
2,4-Dinitrophenol	ND		5160	3420		ug/Kg		66	18 - 100	30	35
4-Nitrophenol	ND		5160	3880		ug/Kg		75	50 - 117	29	35
Dibenzofuran	ND	F1	2580	1700		ug/Kg		66	52 - 101	29	35
2,4-Dinitrotoluene	ND	F1	2580	1960		ug/Kg		76	59 - 115	27	35
2,6-Dinitrotoluene	ND	F1	2580	1890		ug/Kg		73	58 - 107	27	35
Diethyl phthalate	ND	F1	2580	1820		ug/Kg		71	56 - 114	27	35
4-Chlorophenyl phenyl ether	ND		2580	1830		ug/Kg		71	53 - 106	27	35
Fluorene	ND	F1	2580	1740		ug/Kg		67	54 - 103	27	35
4-Nitroaniline	ND		2580	1700		ug/Kg		66	49 - 115	25	35
2-Methyl-4,6-dinitrophenol	ND		5160	3700		ug/Kg		72	48 - 114	22	35
N-Nitrosodiphenylamine	ND	F1	2580	1650		ug/Kg		64	56 - 110	29	35
4-Bromophenyl phenyl ether	ND		2580	1960		ug/Kg		76	56 - 113	29	35
Hexachlorobenzene	ND		2580	1930		ug/Kg		75	55 - 113	28	35
Pentachlorophenol	ND		5160	3620		ug/Kg		70	46 - 115	29	35
Phenanthrene	ND	F1	2580	1780		ug/Kg		69	57 - 106	25	35
Anthracene	ND	F1	2580	1810		ug/Kg		70	59 - 112	27	35
Di-n-butyl phthalate	ND	F1	2580	1870		ug/Kg		72	58 - 119	27	35
Fluoranthene	ND	F1	2580	1810		ug/Kg		70	56 - 117	26	35
Pyrene	ND	F1	2580	1930		ug/Kg		75	61 - 121	29	35
Butyl benzyl phthalate	ND		2580	1970		ug/Kg		76	57 - 126	27	35
3,3'-Dichlorobenzidine	ND	F1	2580	903	F1	ug/Kg		35	47 - 104	31	35
Benzo[a]anthracene	ND	F1	2580	1900		ug/Kg		74	58 - 117	26	35
Bis(2-ethylhexyl) phthalate	ND		2580	2020		ug/Kg		78	58 - 131	29	35
Chrysene	ND	F1	2580	1870		ug/Kg		72	58 - 115	24	35
Di-n-octyl phthalate	ND		2580	1900		ug/Kg		74	55 - 126	26	35
Benzo[b]fluoranthene	ND	F1	2580	2020		ug/Kg		78	57 - 120	32	35
Benzo[a]pyrene	ND	F1	2580	1870		ug/Kg		73	57 - 116	25	35
Benzo[k]fluoranthene	ND		2580	1870		ug/Kg		73	59 - 122	20	35
Indeno[1,2,3-cd]pyrene	ND	F1	2580	1820		ug/Kg		70	56 - 117	24	35
Benzo[g,h,i]perylene	ND		2580	1930		ug/Kg		75	52 - 124	24	35
Benzoic acid	210	J	2580	1330		ug/Kg		43	31 - 113	21	35
Azobenzene	ND	F1	2580	1610		ug/Kg		62	52 - 111	28	35
Pyridine	ND	F1	5.16	1.78		mg/Kg		35	30 - 110	18	35

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 720-95291-1 MSD

Matrix: Solid

Analysis Batch: 273958

Client Sample ID: S1-1'

Prep Type: Total/NA

Prep Batch: 273785

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz(a,h)anthracene	ND	F1	2580	1840		ug/Kg		71	57 - 116	24	35
Surrogate	%Recovery	MSD Qualifier	Limits								
Nitrobenzene-d5	55		21 - 98								
2-Fluorobiphenyl	62		30 - 112								
Terphenyl-d14	78		59 - 134								
2-Fluorophenol	60		28 - 98								
Phenol-d5	62		23 - 101								
2,4,6-Tribromophenol	72		37 - 114								

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

Lab Sample ID: MB 720-273711/1-A

Matrix: Solid

Analysis Batch: 273750

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 273711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		2.0	0.75	mg/Kg		09/30/19 15:09	10/02/19 05:04	1
Motor Oil Range Organics [C24-C36]	ND		50	10	mg/Kg		09/30/19 15:09	10/02/19 05:04	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	104		40 - 130				09/30/19 15:09	10/02/19 05:04	1

Lab Sample ID: LCS 720-273711/2-A

Matrix: Solid

Analysis Batch: 273750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 273711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	167	154		mg/Kg		92	50 - 150
Surrogate	%Recovery	LCS Qualifier	Limits				
p-Terphenyl	120		40 - 130				

Lab Sample ID: 720-95284-A-5-C MS

Matrix: Solid

Analysis Batch: 273750

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 273711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	47		158	170		mg/Kg		78	50 - 150
Surrogate	%Recovery	MS Qualifier	Limits						
p-Terphenyl	98		40 - 130						

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

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

Lab Sample ID: 720-95284-A-5-D MSD

Matrix: Solid

Analysis Batch: 273750

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 273711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	47		162	181		mg/Kg		82	50 - 150	6	30
Surrogate	%Recovery	MSD Qualifier	MSD	Limits							
p-Terphenyl	100			40 - 130							

Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-273713/1-A

Matrix: Solid

Analysis Batch: 273829

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 273713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0	0.50	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Dieldrin	ND		2.0	0.59	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endrin aldehyde	ND		2.0	0.67	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endrin	ND		2.0	0.67	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endrin ketone	ND		2.0	0.33	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Heptachlor	ND		2.0	0.46	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
4,4'-DDT	ND		2.0	0.41	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
4,4'-DDE	ND		2.0	0.42	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
4,4'-DDD	ND		2.0	0.61	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endosulfan I	ND		2.0	0.32	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endosulfan II	ND		2.0	0.49	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
alpha-BHC	ND		2.0	0.55	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
beta-BHC	ND		2.0	0.36	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
delta-BHC	ND		2.0	0.44	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Methoxychlor	ND		2.0	0.68	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Toxaphene	ND		40	6.8	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Chlordane (technical)	ND		40	3.2	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		09/30/19 15:19	10/02/19 20:48	1
Surrogate	%Recovery	MB Qualifier	MB	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61			21 - 145			09/30/19 15:19	10/02/19 20:48	1
DCB Decachlorobiphenyl	76			21 - 136			09/30/19 15:19	10/02/19 20:48	1

Lab Sample ID: LCS 720-273713/2-A

Matrix: Solid

Analysis Batch: 273829

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 273713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.7	11.1		ug/Kg		67	65 - 120
Dieldrin	16.7	12.1		ug/Kg		73	72 - 120
Endrin aldehyde	16.7	14.8		ug/Kg		89	68 - 120

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 720-273713/2-A

Matrix: Solid

Analysis Batch: 273829

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 273713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Endrin	16.7	12.1		ug/Kg		73	68 - 120
Endrin ketone	16.7	13.1		ug/Kg		79	75 - 136
Heptachlor	16.7	12.8		ug/Kg		77	69 - 120
Heptachlor epoxide	16.7	12.2		ug/Kg		73	68 - 120
4,4'-DDT	16.7	11.1		ug/Kg		67	63 - 127
4,4'-DDE	16.7	12.9		ug/Kg		78	76 - 126
4,4'-DDD	16.7	13.0		ug/Kg		78	75 - 128
Endosulfan I	16.7	12.3		ug/Kg		74	62 - 120
Endosulfan II	16.7	13.0		ug/Kg		78	65 - 120
alpha-BHC	16.7	11.2		ug/Kg		67	46 - 122
beta-BHC	16.7	13.1		ug/Kg		79	78 - 136
gamma-BHC (Lindane)	16.7	12.1		ug/Kg		73	72 - 120
delta-BHC	16.7	11.7		ug/Kg		70	43 - 125
Endosulfan sulfate	16.7	13.0		ug/Kg		78	72 - 121
Methoxychlor	16.7	11.8		ug/Kg		71	71 - 132
cis-Chlordane	16.7	12.5		ug/Kg		75	70 - 120
trans-Chlordane	16.7	12.2		ug/Kg		73	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	68		21 - 145
DCB Decachlorobiphenyl	81		21 - 136

Lab Sample ID: 720-95290-A-4-E MS

Matrix: Solid

Analysis Batch: 273829

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 273713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Aldrin	ND		16.4	13.5		ug/Kg		82	53 - 120
Dieldrin	0.62	J	16.4	14.4		ug/Kg		84	46 - 130
Endrin aldehyde	ND		16.4	15.6		ug/Kg		95	40 - 120
Endrin	ND		16.4	14.6		ug/Kg		89	32 - 143
Endrin ketone	ND		16.4	14.9		ug/Kg		91	40 - 120
Heptachlor	ND		16.4	12.8		ug/Kg		78	52 - 120
Heptachlor epoxide	ND		16.4	14.3		ug/Kg		87	40 - 120
4,4'-DDT	0.73	J	16.4	13.9		ug/Kg		80	17 - 144
4,4'-DDE	10	*	16.4	20.7		ug/Kg		63	40 - 120
4,4'-DDD	1.0	J	16.4	15.2		ug/Kg		87	40 - 120
Endosulfan I	ND		16.4	14.3		ug/Kg		88	40 - 120
Endosulfan II	ND		16.4	14.8		ug/Kg		90	40 - 120
alpha-BHC	ND		16.4	12.2		ug/Kg		75	40 - 120
beta-BHC	ND		16.4	15.4		ug/Kg		94	40 - 120
gamma-BHC (Lindane)	ND		16.4	13.7		ug/Kg		84	58 - 120
delta-BHC	ND		16.4	14.1		ug/Kg		86	40 - 120
Endosulfan sulfate	ND		16.4	14.8		ug/Kg		90	40 - 120
Methoxychlor	ND		16.4	13.5		ug/Kg		83	40 - 120
cis-Chlordane	ND		16.4	14.8		ug/Kg		91	40 - 120
trans-Chlordane	ND		16.4	14.7		ug/Kg		90	40 - 120

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-95290-A-4-E MS
Matrix: Solid
Analysis Batch: 273829

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273713

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	73		21 - 145
DCB Decachlorobiphenyl	89		21 - 136

Lab Sample ID: 720-95290-A-4-F MSD
Matrix: Solid
Analysis Batch: 273829

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	MSD		RPD	Limit
				Result	Qualifier				%Rec.	RPD		
Aldrin	ND		16.1	13.7		ug/Kg		85	53 - 120	2	20	
Dieldrin	0.62	J	16.1	14.6		ug/Kg		87	46 - 130	1	20	
Endrin aldehyde	ND		16.1	15.7		ug/Kg		97	40 - 120	0	20	
Endrin	ND		16.1	14.8		ug/Kg		92	32 - 143	1	20	
Endrin ketone	ND		16.1	15.1		ug/Kg		94	40 - 120	1	20	
Heptachlor	ND		16.1	13.2		ug/Kg		82	52 - 120	3	20	
Heptachlor epoxide	ND		16.1	14.6		ug/Kg		91	40 - 120	2	20	
4,4'-DDT	0.73	J	16.1	14.1		ug/Kg		83	17 - 144	2	20	
4,4'-DDE	10	*	16.1	21.6		ug/Kg		70	40 - 120	4	20	
4,4'-DDD	1.0	J	16.1	15.7		ug/Kg		91	40 - 120	3	20	
Endosulfan I	ND		16.1	14.6		ug/Kg		91	40 - 120	2	20	
Endosulfan II	ND		16.1	14.9		ug/Kg		92	40 - 120	1	30	
alpha-BHC	ND		16.1	12.7		ug/Kg		79	40 - 120	4	20	
beta-BHC	ND		16.1	15.6		ug/Kg		97	40 - 120	1	20	
gamma-BHC (Lindane)	ND		16.1	14.2		ug/Kg		89	58 - 120	3	20	
delta-BHC	ND		16.1	14.4		ug/Kg		90	40 - 120	2	20	
Endosulfan sulfate	ND		16.1	15.0		ug/Kg		94	40 - 120	2	20	
Methoxychlor	ND		16.1	13.8		ug/Kg		86	40 - 120	2	20	
cis-Chlordane	ND		16.1	14.9		ug/Kg		93	40 - 120	1	20	
trans-Chlordane	ND		16.1	14.9		ug/Kg		93	40 - 120	1	20	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	78		21 - 145
DCB Decachlorobiphenyl	90		21 - 136

Lab Sample ID: MB 720-274168/1-A
Matrix: Solid
Analysis Batch: 274158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
							Time	Time	Time	Time	
Aldrin	ND		2.0	0.50	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Dieldrin	ND		2.0	0.59	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Endrin aldehyde	ND		2.0	0.67	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Endrin	ND		2.0	0.67	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Endrin ketone	ND		2.0	0.33	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Heptachlor	ND		2.0	0.46	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
Heptachlor epoxide	ND		2.0	0.35	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
4,4'-DDT	ND		2.0	0.41	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
4,4'-DDE	ND		2.0	0.42	ug/Kg		10/08/19 12:39	10/08/19 19:28			1
4,4'-DDD	ND		2.0	0.61	ug/Kg		10/08/19 12:39	10/08/19 19:28			1

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 720-274168/1-A
Matrix: Solid
Analysis Batch: 274158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274168

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I	ND		2.0	0.32	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
Endosulfan II	ND		2.0	0.49	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
alpha-BHC	ND		2.0	0.55	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
beta-BHC	ND		2.0	0.36	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
gamma-BHC (Lindane)	ND		2.0	0.63	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
delta-BHC	ND		2.0	0.44	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
Endosulfan sulfate	ND		2.0	0.38	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
Methoxychlor	ND		2.0	0.68	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
Toxaphene	ND		40	6.8	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
Chlordane (technical)	ND		40	3.2	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
cis-Chlordane	ND		2.0	0.40	ug/Kg		10/08/19 12:39	10/08/19 19:28	1
trans-Chlordane	ND		2.0	0.46	ug/Kg		10/08/19 12:39	10/08/19 19:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		21 - 145	10/08/19 12:39	10/08/19 19:28	1
DCB Decachlorobiphenyl	102		21 - 136	10/08/19 12:39	10/08/19 19:28	1

Lab Sample ID: LCS 720-274168/2-A
Matrix: Solid
Analysis Batch: 274158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274168

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Aldrin	16.7	13.0		ug/Kg		78	65 - 120
Dieldrin	16.7	16.1		ug/Kg		96	72 - 120
Endrin aldehyde	16.7	19.0		ug/Kg		114	68 - 120
Endrin	16.7	15.9		ug/Kg		95	68 - 120
Endrin ketone	16.7	17.5		ug/Kg		105	75 - 136
Heptachlor	16.7	15.6		ug/Kg		94	69 - 120
Heptachlor epoxide	16.7	15.7		ug/Kg		94	68 - 120
4,4'-DDT	16.7	15.1		ug/Kg		90	63 - 127
4,4'-DDE	16.7	15.9		ug/Kg		96	76 - 126
4,4'-DDD	16.7	16.6		ug/Kg		100	75 - 128
Endosulfan I	16.7	16.9		ug/Kg		101	62 - 120
Endosulfan II	16.7	17.3		ug/Kg		104	65 - 120
alpha-BHC	16.7	14.4		ug/Kg		87	46 - 122
beta-BHC	16.7	16.5		ug/Kg		99	78 - 136
gamma-BHC (Lindane)	16.7	15.5		ug/Kg		93	72 - 120
delta-BHC	16.7	15.0		ug/Kg		90	43 - 125
Endosulfan sulfate	16.7	16.9		ug/Kg		101	72 - 121
Methoxychlor	16.7	17.0		ug/Kg		102	71 - 132
cis-Chlordane	16.7	16.3		ug/Kg		98	70 - 120
trans-Chlordane	16.7	15.6		ug/Kg		93	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	90		21 - 145
DCB Decachlorobiphenyl	110		21 - 136

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-95291-5 MS

Matrix: Solid

Analysis Batch: 274158

Client Sample ID: S3-1'

Prep Type: Total/NA

Prep Batch: 274168

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Aldrin	ND		16.5	11.3		ug/Kg		68	53 - 120
Dieldrin	ND		16.5	12.2		ug/Kg		74	46 - 130
Endrin aldehyde	ND		16.5	12.6		ug/Kg		76	40 - 120
Endrin	ND		16.5	12.9		ug/Kg		78	32 - 143
Endrin ketone	ND		16.5	13.3		ug/Kg		80	40 - 120
Heptachlor	ND		16.5	11.4		ug/Kg		69	52 - 120
Heptachlor epoxide	ND		16.5	12.4		ug/Kg		75	40 - 120
4,4'-DDT	230		16.5	109	4	ug/Kg		-738	17 - 144
4,4'-DDE	490		16.5	280	4	ug/Kg		-1280	40 - 120
4,4'-DDD	9.8		16.5	16.4		ug/Kg		40	40 - 120
Endosulfan I	ND		16.5	12.1		ug/Kg		73	40 - 120
Endosulfan II	ND		16.5	12.7		ug/Kg		77	40 - 120
alpha-BHC	ND		16.5	11.3		ug/Kg		69	40 - 120
beta-BHC	ND		16.5	12.5		ug/Kg		76	40 - 120
gamma-BHC (Lindane)	ND		16.5	11.7		ug/Kg		71	58 - 120
delta-BHC	ND		16.5	11.3		ug/Kg		68	40 - 120
Endosulfan sulfate	ND		16.5	11.6		ug/Kg		70	40 - 120
Methoxychlor	ND		16.5	14.1		ug/Kg		85	40 - 120
cis-Chlordane	ND		16.5	12.9		ug/Kg		78	40 - 120
trans-Chlordane	ND		16.5	13.4		ug/Kg		81	40 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
Tetrachloro-m-xylene	73		21 - 145
DCB Decachlorobiphenyl	76		21 - 136

Lab Sample ID: 720-95291-5 MSD

Matrix: Solid

Analysis Batch: 274158

Client Sample ID: S3-1'

Prep Type: Total/NA

Prep Batch: 274168

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Aldrin	ND		16.5	12.1		ug/Kg		74	53 - 120	7	20
Dieldrin	ND		16.5	13.9		ug/Kg		84	46 - 130	13	20
Endrin aldehyde	ND		16.5	15.9	F2	ug/Kg		97	40 - 120	23	20
Endrin	ND		16.5	13.1		ug/Kg		80	32 - 143	2	20
Endrin ketone	ND		16.5	14.4		ug/Kg		87	40 - 120	8	20
Heptachlor	ND		16.5	12.7		ug/Kg		77	52 - 120	11	20
Heptachlor epoxide	ND		16.5	13.5		ug/Kg		82	40 - 120	9	20
4,4'-DDT	230		16.5	121	4	ug/Kg		-671	17 - 144	10	20
4,4'-DDE	490		16.5	342	4	ug/Kg		-905	40 - 120	20	20
4,4'-DDD	9.8		16.5	18.3		ug/Kg		51	40 - 120	11	20
Endosulfan I	ND		16.5	13.2		ug/Kg		80	40 - 120	9	20
Endosulfan II	ND		16.5	14.2		ug/Kg		86	40 - 120	11	30
alpha-BHC	ND		16.5	12.7		ug/Kg		77	40 - 120	12	20
beta-BHC	ND		16.5	14.0		ug/Kg		85	40 - 120	11	20
gamma-BHC (Lindane)	ND		16.5	13.1		ug/Kg		80	58 - 120	12	20
delta-BHC	ND		16.5	12.6		ug/Kg		76	40 - 120	11	20
Endosulfan sulfate	ND		16.5	12.0		ug/Kg		73	40 - 120	3	20
Methoxychlor	ND		16.5	13.9		ug/Kg		84	40 - 120	2	20

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-95291-5 MSD

Matrix: Solid

Analysis Batch: 274158

Client Sample ID: S3-1'

Prep Type: Total/NA

Prep Batch: 274168

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-Chlordane	ND		16.5	14.1		ug/Kg		86	40 - 120	8	20
trans-Chlordane	ND		16.5	14.7		ug/Kg		89	40 - 120	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Tetrachloro-m-xylene	84		21 - 145								
DCB Decachlorobiphenyl	88		21 - 136								

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 720-273712/1-A

Matrix: Solid

Analysis Batch: 273815

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 273712

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1221	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1232	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1242	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1248	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1254	ND		50	1.8	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
PCB-1260	ND		50	5.3	ug/Kg		09/30/19 15:13	10/02/19 18:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	55		45 - 132				09/30/19 15:13	10/02/19 18:53	1
DCB Decachlorobiphenyl	64		42 - 146				09/30/19 15:13	10/02/19 18:53	1

Lab Sample ID: LCS 720-273712/2-A

Matrix: Solid

Analysis Batch: 273898

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 273712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	133	102		ug/Kg		76	65 - 121
PCB-1260	133	113		ug/Kg		85	68 - 127
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	70		45 - 132				
DCB Decachlorobiphenyl	93		42 - 146				

Lab Sample ID: 720-95290-A-4-B MS

Matrix: Solid

Analysis Batch: 273815

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 273712

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		130	91.6		ug/Kg		71	69 - 120
PCB-1260	ND		130	109		ug/Kg		84	73 - 114
Surrogate	MS %Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	65		45 - 132						

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 720-95290-A-4-B MS
Matrix: Solid
Analysis Batch: 273815

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273712

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	77		42 - 146

Lab Sample ID: 720-95290-A-4-C MSD
Matrix: Solid
Analysis Batch: 273815

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273712

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	MSD		Limit
				Result	Qualifier				Limits	RPD	
PCB-1016	ND		131	94.8		ug/Kg		72	69 - 120	3	20
PCB-1260	ND		131	104		ug/Kg		79	73 - 114	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	67		45 - 132
DCB Decachlorobiphenyl	83		42 - 146

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-273708/1-A
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273708

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.50	0.083	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Arsenic	ND		1.0	0.085	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Barium	ND		0.50	0.071	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Beryllium	ND		0.10	0.033	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Cadmium	ND		0.13	0.012	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Chromium	ND		0.50	0.053	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Cobalt	ND		0.20	0.020	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Copper	ND		1.5	0.71	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Lead	ND		0.50	0.11	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Molybdenum	ND		0.50	0.064	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Nickel	ND		0.50	0.051	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Selenium	ND		1.0	0.15	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Silver	ND		0.25	0.051	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Thallium	ND		0.50	0.15	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Vanadium	ND		0.50	0.068	mg/Kg		10/01/19 12:21	10/02/19 10:43	1
Zinc	ND		1.5	0.64	mg/Kg		10/01/19 12:21	10/02/19 10:43	1

Lab Sample ID: LCS 720-273708/2-A
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273708

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	LCS	
		Result	Qualifier				Limits	RPD
Antimony	50.0	42.7		mg/Kg		85	80 - 120	
Arsenic	50.0	42.8		mg/Kg		86	80 - 120	
Barium	50.0	43.1		mg/Kg		86	80 - 120	
Beryllium	50.0	43.2		mg/Kg		86	80 - 120	
Cadmium	50.0	41.8		mg/Kg		84	80 - 120	
Chromium	50.0	42.8		mg/Kg		86	80 - 120	

Eurofins TestAmerica, Pleasanton

QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

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

Lab Sample ID: LCS 720-273708/2-A
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273708

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.0	43.0		mg/Kg		86	80 - 120
Copper	50.0	44.8		mg/Kg		90	80 - 120
Lead	50.0	43.0		mg/Kg		86	80 - 120
Molybdenum	50.0	42.8		mg/Kg		86	80 - 120
Nickel	50.0	43.0		mg/Kg		86	80 - 120
Selenium	50.0	40.1		mg/Kg		80	80 - 120
Silver	25.0	21.8		mg/Kg		87	80 - 120
Thallium	50.0	42.7		mg/Kg		85	80 - 120
Vanadium	50.0	42.9		mg/Kg		86	80 - 120
Zinc	50.0	42.3		mg/Kg		85	80 - 120

Lab Sample ID: 720-95286-A-5-B MS
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 273708

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.69	J F1	32.9	9.72	F1	mg/Kg		27	75 - 125
Arsenic	5.3		32.9	33.0		mg/Kg		84	75 - 125
Barium	89	F1	32.9	119		mg/Kg		91	75 - 125
Beryllium	0.13	J	32.9	29.9		mg/Kg		90	75 - 125
Cadmium	2.1		32.9	28.7		mg/Kg		81	75 - 125
Chromium	20		32.9	50.7		mg/Kg		93	75 - 125
Cobalt	4.4		32.9	31.8		mg/Kg		83	75 - 125
Copper	7.4		32.9	37.1		mg/Kg		90	75 - 125
Lead	1.4		32.9	28.8		mg/Kg		83	75 - 125
Molybdenum	2.5		32.9	27.2		mg/Kg		75	75 - 125
Nickel	21		32.9	47.2		mg/Kg		80	75 - 125
Selenium	0.54	J	32.9	26.2		mg/Kg		78	75 - 125
Silver	ND	F1 F2	16.4	30.6	F1	mg/Kg		186	75 - 125
Thallium	ND		32.9	27.2		mg/Kg		83	75 - 125
Vanadium	13		32.9	42.1		mg/Kg		89	75 - 125
Zinc	36		32.9	61.4		mg/Kg		76	75 - 125

Lab Sample ID: 720-95286-A-5-C MSD
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.69	J F1	33.1	11.2	F1	mg/Kg		32	75 - 125	14	20
Arsenic	5.3		33.1	39.5		mg/Kg		103	75 - 125	18	20
Barium	89	F1	33.1	143	F1	mg/Kg		161	75 - 125	18	20
Beryllium	0.13	J	33.1	36.6		mg/Kg		110	75 - 125	20	20
Cadmium	2.1		33.1	33.5		mg/Kg		95	75 - 125	15	20
Chromium	20		33.1	59.8		mg/Kg		120	75 - 125	16	20
Cobalt	4.4		33.1	36.5		mg/Kg		97	75 - 125	14	20
Copper	7.4		33.1	44.6		mg/Kg		112	75 - 125	18	20
Lead	1.4		33.1	33.2		mg/Kg		96	75 - 125	14	20
Molybdenum	2.5		33.1	31.1		mg/Kg		86	75 - 125	14	20
Nickel	21		33.1	54.1		mg/Kg		101	75 - 125	14	20

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

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

Lab Sample ID: 720-95286-A-5-C MSD
Matrix: Solid
Analysis Batch: 273871

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 273708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	0.54	J	33.1	31.1		mg/Kg		92	75 - 125	17	20
Silver	ND	F1 F2	16.6	17.6	F2	mg/Kg		106	75 - 125	54	20
Thallium	ND		33.1	31.6		mg/Kg		95	75 - 125	15	20
Vanadium	13		33.1	48.5		mg/Kg		108	75 - 125	14	20
Zinc	36		33.1	73.7		mg/Kg		113	75 - 125	18	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-273863/1-A
Matrix: Solid
Analysis Batch: 273949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 273863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00281	J	0.017	0.0025	mg/Kg		10/02/19 14:04	10/03/19 16:59	1

Lab Sample ID: LCS 720-273863/2-A
Matrix: Solid
Analysis Batch: 273947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 273863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.836		mg/Kg		100	80 - 120

Lab Sample ID: 720-95291-1 MS
Matrix: Solid
Analysis Batch: 273947

Client Sample ID: S1-1'
Prep Type: Total/NA
Prep Batch: 273863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.061	B	0.769	0.826		mg/Kg		99	75 - 125

Lab Sample ID: 720-95291-1 MSD
Matrix: Solid
Analysis Batch: 273947

Client Sample ID: S1-1'
Prep Type: Total/NA
Prep Batch: 273863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.061	B	0.769	0.811		mg/Kg		98	75 - 125	2	20

QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

GC/MS VOA

Prep Batch: 273621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95269-B-1-C MS	Matrix Spike	Total/NA	Solid	5030B	
720-95269-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5030B	

Prep Batch: 273703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	5030B	
720-95291-4	S2-3'	Total/NA	Solid	5030B	
720-95291-7	S3-6'	Total/NA	Solid	5030B	
720-95291-10	S4-9'	Total/NA	Solid	5030B	

Analysis Batch: 273801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	8260B/CA_LUFT MS	273703
720-95291-4	S2-3'	Total/NA	Solid	8260B/CA_LUFT MS	273703
720-95291-7	S3-6'	Total/NA	Solid	8260B/CA_LUFT MS	273703
720-95291-10	S4-9'	Total/NA	Solid	8260B/CA_LUFT MS	273703
MB 720-273801/4	Method Blank	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-273801/5	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCS 720-273801/7	Lab Control Sample	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-273801/6	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
LCSD 720-273801/8	Lab Control Sample Dup	Total/NA	Solid	8260B/CA_LUFT MS	
720-95269-B-1-C MS	Matrix Spike	Total/NA	Solid	8260B/CA_LUFT MS	273621
720-95269-B-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B/CA_LUFT MS	273621

GC/MS Semi VOA

Prep Batch: 273785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	3546	
720-95291-4	S2-3'	Total/NA	Solid	3546	
720-95291-7	S3-6'	Total/NA	Solid	3546	
720-95291-10	S4-9'	Total/NA	Solid	3546	
MB 720-273785/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-273785/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-95291-1 MS	S1-1'	Total/NA	Solid	3546	
720-95291-1 MSD	S1-1'	Total/NA	Solid	3546	

Analysis Batch: 273958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	8270C	273785
720-95291-4	S2-3'	Total/NA	Solid	8270C	273785
720-95291-7	S3-6'	Total/NA	Solid	8270C	273785
720-95291-10	S4-9'	Total/NA	Solid	8270C	273785

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QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

GC/MS Semi VOA (Continued)

Analysis Batch: 273958 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-273785/1-A	Method Blank	Total/NA	Solid	8270C	273785
LCS 720-273785/2-A	Lab Control Sample	Total/NA	Solid	8270C	273785
720-95291-1 MS	S1-1'	Total/NA	Solid	8270C	273785
720-95291-1 MSD	S1-1'	Total/NA	Solid	8270C	273785

GC Semi VOA

Prep Batch: 273711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	3546	
720-95291-4	S2-3'	Total/NA	Solid	3546	
720-95291-7	S3-6'	Total/NA	Solid	3546	
720-95291-10	S4-9'	Total/NA	Solid	3546	
MB 720-273711/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-273711/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-95284-A-5-C MS	Matrix Spike	Total/NA	Solid	3546	
720-95284-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 273712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	3546	
720-95291-4	S2-3'	Total/NA	Solid	3546	
720-95291-7	S3-6'	Total/NA	Solid	3546	
720-95291-10	S4-9'	Total/NA	Solid	3546	
MB 720-273712/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-273712/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-95290-A-4-B MS	Matrix Spike	Total/NA	Solid	3546	
720-95290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 273713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	3546	
720-95291-3	S2-1'	Total/NA	Solid	3546	
720-95291-4	S2-3'	Total/NA	Solid	3546	
720-95291-7	S3-6'	Total/NA	Solid	3546	
720-95291-8	S4-1'	Total/NA	Solid	3546	
720-95291-10	S4-9'	Total/NA	Solid	3546	
MB 720-273713/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-273713/2-A	Lab Control Sample	Total/NA	Solid	3546	
720-95290-A-4-E MS	Matrix Spike	Total/NA	Solid	3546	
720-95290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 273750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-273711/1-A	Method Blank	Total/NA	Solid	8015B	273711
LCS 720-273711/2-A	Lab Control Sample	Total/NA	Solid	8015B	273711
720-95284-A-5-C MS	Matrix Spike	Total/NA	Solid	8015B	273711
720-95284-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B	273711

QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

GC Semi VOA

Analysis Batch: 273815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	8082	273712
MB 720-273712/1-A	Method Blank	Total/NA	Solid	8082	273712
720-95290-A-4-B MS	Matrix Spike	Total/NA	Solid	8082	273712
720-95290-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8082	273712

Analysis Batch: 273816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	8015B	273711
720-95291-4	S2-3'	Total/NA	Solid	8015B	273711
720-95291-7	S3-6'	Total/NA	Solid	8015B	273711
720-95291-10	S4-9'	Total/NA	Solid	8015B	273711

Analysis Batch: 273829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	8081A	273713
720-95291-4	S2-3'	Total/NA	Solid	8081A	273713
720-95291-7	S3-6'	Total/NA	Solid	8081A	273713
720-95291-10	S4-9'	Total/NA	Solid	8081A	273713
MB 720-273713/1-A	Method Blank	Total/NA	Solid	8081A	273713
LCS 720-273713/2-A	Lab Control Sample	Total/NA	Solid	8081A	273713
720-95290-A-4-E MS	Matrix Spike	Total/NA	Solid	8081A	273713
720-95290-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8081A	273713

Analysis Batch: 273897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-4	S2-3'	Total/NA	Solid	8082	273712
720-95291-7	S3-6'	Total/NA	Solid	8082	273712
720-95291-10	S4-9'	Total/NA	Solid	8082	273712

Analysis Batch: 273898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-273712/2-A	Lab Control Sample	Total/NA	Solid	8082	273712

Analysis Batch: 273921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-3	S2-1'	Total/NA	Solid	8081A	273713
720-95291-8	S4-1'	Total/NA	Solid	8081A	273713

Analysis Batch: 274158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-5	S3-1'	Total/NA	Solid	8081A	274168
MB 720-274168/1-A	Method Blank	Total/NA	Solid	8081A	274168
LCS 720-274168/2-A	Lab Control Sample	Total/NA	Solid	8081A	274168
720-95291-5 MS	S3-1'	Total/NA	Solid	8081A	274168
720-95291-5 MSD	S3-1'	Total/NA	Solid	8081A	274168

Prep Batch: 274168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-5	S3-1'	Total/NA	Solid	3546	
MB 720-274168/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-274168/2-A	Lab Control Sample	Total/NA	Solid	3546	

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QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

GC Semi VOA (Continued)

Prep Batch: 274168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-5 MS	S3-1'	Total/NA	Solid	3546	
720-95291-5 MSD	S3-1'	Total/NA	Solid	3546	

Metals

Prep Batch: 273708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	3050B	
720-95291-4	S2-3'	Total/NA	Solid	3050B	
720-95291-7	S3-6'	Total/NA	Solid	3050B	
720-95291-10	S4-9'	Total/NA	Solid	3050B	
MB 720-273708/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-273708/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-95286-A-5-B MS	Matrix Spike	Total/NA	Solid	3050B	
720-95286-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	

Prep Batch: 273863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	7471A	
720-95291-4	S2-3'	Total/NA	Solid	7471A	
720-95291-7	S3-6'	Total/NA	Solid	7471A	
720-95291-10	S4-9'	Total/NA	Solid	7471A	
MB 720-273863/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 720-273863/2-A	Lab Control Sample	Total/NA	Solid	7471A	
720-95291-1 MS	S1-1'	Total/NA	Solid	7471A	
720-95291-1 MSD	S1-1'	Total/NA	Solid	7471A	

Analysis Batch: 273871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	6010B	273708
720-95291-4	S2-3'	Total/NA	Solid	6010B	273708
720-95291-7	S3-6'	Total/NA	Solid	6010B	273708
720-95291-10	S4-9'	Total/NA	Solid	6010B	273708
MB 720-273708/1-A	Method Blank	Total/NA	Solid	6010B	273708
LCS 720-273708/2-A	Lab Control Sample	Total/NA	Solid	6010B	273708
720-95286-A-5-B MS	Matrix Spike	Total/NA	Solid	6010B	273708
720-95286-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	273708

Analysis Batch: 273947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	Total/NA	Solid	7471A	273863
720-95291-4	S2-3'	Total/NA	Solid	7471A	273863
720-95291-7	S3-6'	Total/NA	Solid	7471A	273863
720-95291-10	S4-9'	Total/NA	Solid	7471A	273863
LCS 720-273863/2-A	Lab Control Sample	Total/NA	Solid	7471A	273863
720-95291-1 MS	S1-1'	Total/NA	Solid	7471A	273863
720-95291-1 MSD	S1-1'	Total/NA	Solid	7471A	273863

Analysis Batch: 273949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-273863/1-A	Method Blank	Total/NA	Solid	7471A	273863

Eurofins TestAmerica, Pleasanton

Lab Chronicle

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S1-1'

Date Collected: 09/27/19 09:07

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			273703	09/30/19 13:10	BMT	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	273801	10/02/19 02:19	JRM	TAL PLS
Total/NA	Prep	3546			273785	10/01/19 16:08	MAB	TAL PLS
Total/NA	Analysis	8270C		1	273958	10/04/19 05:48	MQL	TAL PLS
Total/NA	Prep	3546			273711	09/30/19 15:09	KLM	TAL PLS
Total/NA	Analysis	8015B		1	273816	10/02/19 19:29	JXL	TAL PLS
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		1	273829	10/02/19 22:42	JZT	TAL PLS
Total/NA	Prep	3546			273712	09/30/19 15:13	KLM	TAL PLS
Total/NA	Analysis	8082		1	273815	10/02/19 21:25	DCH	TAL PLS
Total/NA	Prep	3050B			273708	10/01/19 12:21	JAM	TAL PLS
Total/NA	Analysis	6010B		4	273871	10/02/19 12:01	MAG	TAL PLS
Total/NA	Prep	7471A			273863	10/02/19 14:04	MAG	TAL PLS
Total/NA	Analysis	7471A		1	273947	10/03/19 11:59	MAG	TAL PLS

Client Sample ID: S2-1'

Date Collected: 09/27/19 09:16

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		1	273921	10/03/19 20:02	LRC	TAL PLS

Client Sample ID: S2-3'

Date Collected: 09/27/19 09:18

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			273703	09/30/19 13:10	BMT	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	273801	10/02/19 02:46	JRM	TAL PLS
Total/NA	Prep	3546			273785	10/01/19 16:08	MAB	TAL PLS
Total/NA	Analysis	8270C		1	273958	10/04/19 06:13	MQL	TAL PLS
Total/NA	Prep	3546			273711	09/30/19 15:09	KLM	TAL PLS
Total/NA	Analysis	8015B		1	273816	10/02/19 19:59	JXL	TAL PLS
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		1	273829	10/02/19 22:58	JZT	TAL PLS
Total/NA	Prep	3546			273712	09/30/19 15:13	KLM	TAL PLS
Total/NA	Analysis	8082		1	273897	10/03/19 10:13	DCH	TAL PLS
Total/NA	Prep	3050B			273708	10/01/19 12:21	JAM	TAL PLS
Total/NA	Analysis	6010B		4	273871	10/02/19 12:06	MAG	TAL PLS
Total/NA	Prep	7471A			273863	10/02/19 14:04	MAG	TAL PLS
Total/NA	Analysis	7471A		1	273947	10/03/19 12:07	MAG	TAL PLS

Lab Chronicle

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S3-1'

Date Collected: 09/27/19 09:28

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			274168	10/08/19 12:39	MAB	TAL PLS
Total/NA	Analysis	8081A		2	274158	10/08/19 23:40	LRC	TAL PLS

Client Sample ID: S3-6'

Date Collected: 09/27/19 09:33

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			273703	09/30/19 13:10	BMT	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	273801	10/02/19 03:12	JRM	TAL PLS
Total/NA	Prep	3546			273785	10/01/19 16:08	MAB	TAL PLS
Total/NA	Analysis	8270C		1	273958	10/04/19 06:38	MQL	TAL PLS
Total/NA	Prep	3546			273711	09/30/19 15:09	KLM	TAL PLS
Total/NA	Analysis	8015B		1	273816	10/02/19 20:28	JXL	TAL PLS
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		1	273829	10/02/19 23:14	JZT	TAL PLS
Total/NA	Prep	3546			273712	09/30/19 15:13	KLM	TAL PLS
Total/NA	Analysis	8082		1	273897	10/03/19 10:31	DCH	TAL PLS
Total/NA	Prep	3050B			273708	10/01/19 12:21	JAM	TAL PLS
Total/NA	Analysis	6010B		4	273871	10/02/19 12:11	MAG	TAL PLS
Total/NA	Prep	7471A			273863	10/02/19 14:04	MAG	TAL PLS
Total/NA	Analysis	7471A		1	273947	10/03/19 12:09	MAG	TAL PLS

Client Sample ID: S4-1'

Date Collected: 09/27/19 09:39

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		5	273921	10/03/19 20:18	LRC	TAL PLS

Client Sample ID: S4-9'

Date Collected: 09/27/19 09:41

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			273703	09/30/19 13:10	BMT	TAL PLS
Total/NA	Analysis	8260B/CA_LUFTMS		1	273801	10/02/19 03:39	JRM	TAL PLS
Total/NA	Prep	3546			273785	10/01/19 16:08	MAB	TAL PLS
Total/NA	Analysis	8270C		1	273958	10/04/19 07:03	MQL	TAL PLS
Total/NA	Prep	3546			273711	09/30/19 15:09	KLM	TAL PLS
Total/NA	Analysis	8015B		1	273816	10/02/19 20:57	JXL	TAL PLS
Total/NA	Prep	3546			273713	09/30/19 15:19	KLM	TAL PLS
Total/NA	Analysis	8081A		1	273829	10/02/19 23:29	JZT	TAL PLS

Eurofins TestAmerica, Pleasanton

Lab Chronicle

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Client Sample ID: S4-9'

Lab Sample ID: 720-95291-10

Date Collected: 09/27/19 09:41

Matrix: Solid

Date Received: 09/27/19 14:25

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	3546			273712	09/30/19 15:13	KLM	TAL PLS
Total/NA	Analysis	8082		1	273897	10/03/19 10:48	DCH	TAL PLS
Total/NA	Prep	3050B			273708	10/01/19 12:21	JAM	TAL PLS
Total/NA	Analysis	6010B		4	273871	10/02/19 12:16	MAG	TAL PLS
Total/NA	Prep	7471A			273863	10/02/19 14:04	MAG	TAL PLS
Total/NA	Analysis	7471A		1	273947	10/03/19 12:15	MAG	TAL PLS

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Accreditation/Certification Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Laboratory: Eurofins TestAmerica, Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State Program	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTMS	8260B / CA LUFT MS	SW846	TAL PLS
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
3546	Microwave Extraction	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS
7471A	Preparation, Mercury	SW846	TAL PLS

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-95291-1	S1-1'	Solid	09/27/19 09:07	09/27/19 14:25	
720-95291-3	S2-1'	Solid	09/27/19 09:16	09/27/19 14:25	
720-95291-4	S2-3'	Solid	09/27/19 09:18	09/27/19 14:25	
720-95291-5	S3-1'	Solid	09/27/19 09:28	09/27/19 14:25	
720-95291-7	S3-6'	Solid	09/27/19 09:33	09/27/19 14:25	
720-95291-8	S4-1'	Solid	09/27/19 09:39	09/27/19 14:25	
720-95291-10	S4-9'	Solid	09/27/19 09:41	09/27/19 14:25	

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720-95291

192608

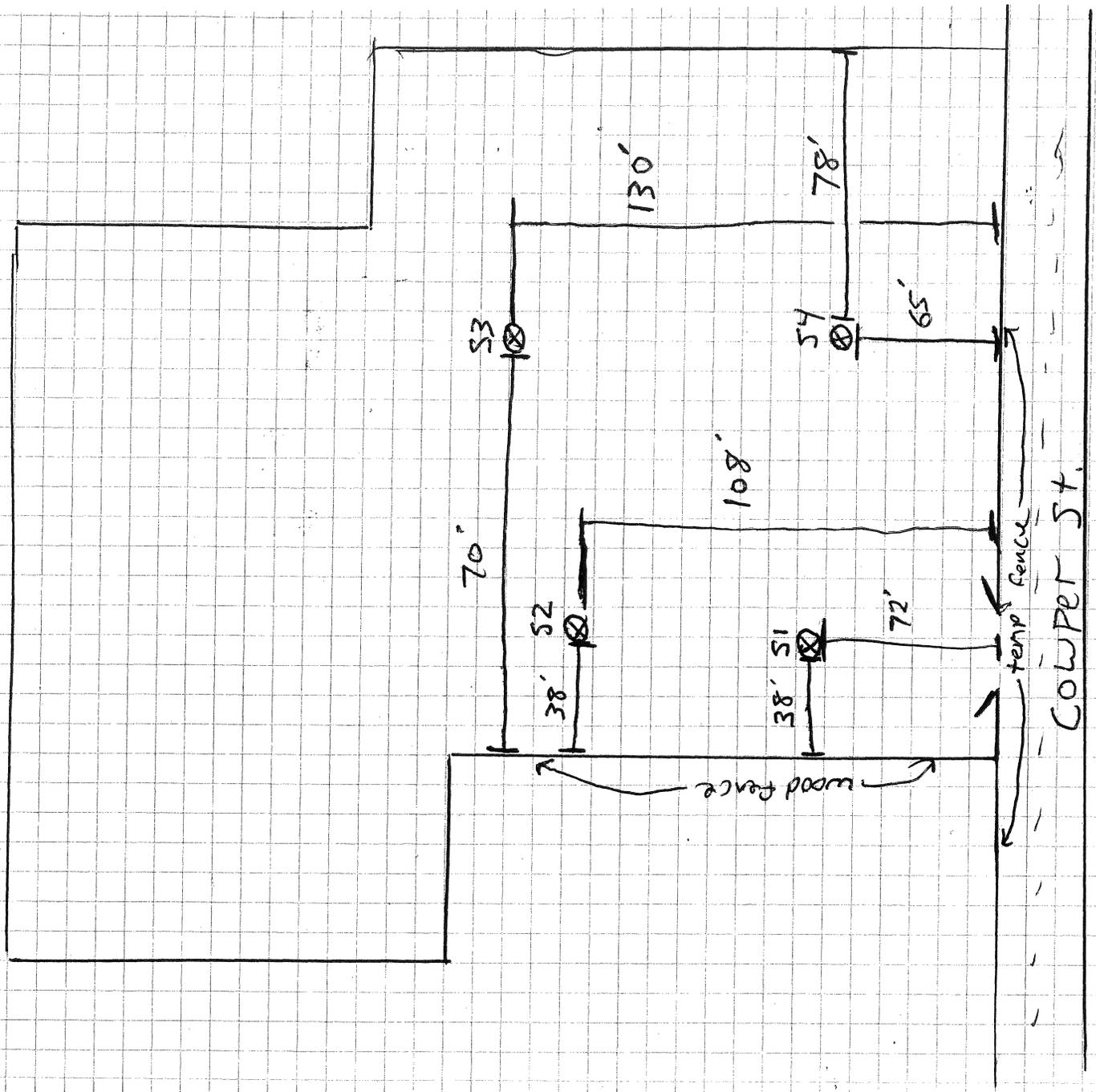
CHAIN OF CUSTODY / ANALYSIS REQUEST

Attention	Mark Dyserf	Phone	(650)799-9204	Billing (if different)	
Company Name	Dyserf Environmental	Email	environmental.data@gmail.com	Attn: Accounts Payable	
Mailing Address	P.O Box 5608	Fax	(650)627-4968	Dyserf Environmental, Inc.	
City, State & Zip	San Mateo, CA 94402	P.O. No.	16378-1	P.O Box 5608	
Lab I.D.	TASF	Sampler/s	Mike Moorefield	San Mateo, CA 94402	
Project Name	ALAN HYNES	Project Location	1107 Cowper Street PAIU AITU, CA	Sampling Code =	
Sample Matrix =		TPH-D/MO w/SGC		Estimate#:	
Solid	Sample Container Used: <input checked="" type="checkbox"/> 1 x 16oz. GL Jar <input type="checkbox"/> 1 x 8oz GL Jar <input type="checkbox"/> 1 x 2" x 6" BT <input type="checkbox"/> 1 x 2" x 6" PBI <input type="checkbox"/> 1 x 1.5" x 6" PBI	8015B(M)/3630			
Turn Around Time = 5		TPH-D/MO 8015B(M)			
Sample ID:	Date:	Time:	No. of Containers:	TPH-Gas 8260B	VOCS and TPH-Gas 8260B
S1-1'	9-27-19	0907	1 X 16OZ GL JAR	X	X
S1-3'		0910	1 X 16OZ GL JAR		
S2-1'		0916	1 X 16OZ GL JAR		
S2-3'		0918	1 X 16OZ GL JAR		
S3-1'		0928	1 X 16OZ GL JAR		
S3-3'		0930	1 X 16OZ GL JAR		
S3-6'		0933	1 X 16OZ GL JAR		
Relinquished by	Received by	Time	Date	Lab Notes:	
Relinquished by	Received by	Time	Date	Please "J" Flag results <RL and >MDL.	
Relinquished by	Received by	Time	Date	Please report TPH D/MO/G in mg/kg. Need lowest possible RL/MDL for Pesticides and SVOCS. Endrin and Endrin Aldehyde need 0.65 ug/Kg MDL. Please do not dilute.	
Relinquished by	Received by	Time	Date		
Notes:	Were samples delivered from field sampling? <i>yes</i> Were samples received in a cooler with ice? <i>yes</i> What type of ice was used? <i>wet</i> Sample Temperature and Time Upon Receipt in Lab= Dyserf Environmental, Inc. (ELAP#2764) Tel: (650) 799-9204 Web:DyserfEnviron				
Sampling Notes: ONSITE CONTACT: Sample Location Map Attached- YES or NO (circle one)			Sampling Notes: ONSITE CONTACT: Sample Location Map Attached- YES or NO (circle one)		



720-95291

X 5



Login Sample Receipt Checklist

Client: Dysert Environmental, Inc

Job Number: 720-95291-1

Login Number: 95291

List Source: Eurofins TestAmerica, Pleasanton

List Number: 1

Creator: Perry, Janae R

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

Laboratory Job ID: 720-95291-2
Client Project/Site: Alan Hynes

For:

Dysert Environmental, Inc
PO BOX 5608
San Mateo, California 94402

Attn: Mark Dysert



*Authorized for release by:
10/11/2019 4:31:03 PM*

Jenna Hunsinger, Project Manager I
(916)374-4391

jenna.hunsinger@testamericainc.com

Designee for

Criselda Caparas, Project Manager I
(925)484-1919

criselda.caparas@testamericainc.com

LINKS

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results through
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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Job ID: 720-95291-2

Laboratory: Eurofins TestAmerica, Pleasanton

Narrative

Job Narrative
720-95291-2

Comments

No additional comments.

Receipt

The samples were received on 9/27/2019 2:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.5° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.18		0.10	0.0070	mg/L	1		6010B	STLC Citrate

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.11		0.10	0.0070	mg/L	1		6010B	STLC Citrate

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.081	J	0.10	0.0070	mg/L	1		6010B	STLC Citrate

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pleasanton

Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Client Sample ID: S1-1'

Lab Sample ID: 720-95291-1

Date Collected: 09/27/19 09:07

Matrix: Solid

Date Received: 09/27/19 14:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.18		0.10	0.0070	mg/L		10/10/19 12:51	10/10/19 15:24	1

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Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Client Sample ID: S2-3'

Lab Sample ID: 720-95291-4

Date Collected: 09/27/19 09:18

Matrix: Solid

Date Received: 09/27/19 14:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.11		0.10	0.0070	mg/L		10/10/19 12:51	10/10/19 15:19	1

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Client Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Client Sample ID: S3-6'

Lab Sample ID: 720-95291-7

Date Collected: 09/27/19 09:33

Matrix: Solid

Date Received: 09/27/19 14:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.081	J	0.10	0.0070	mg/L		10/10/19 12:51	10/10/19 15:29	1

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QC Sample Results

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-274307/1-A
Matrix: Solid
Analysis Batch: 274414

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 274307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010	0.00070	mg/L		10/10/19 12:51	10/10/19 14:44	1

Lab Sample ID: LCS 720-274307/2-A
Matrix: Solid
Analysis Batch: 274414

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 274307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chromium	1.00	0.910		mg/L		91	80 - 120

Lab Sample ID: LB4 720-274078/1-B
Matrix: Solid
Analysis Batch: 274414

Client Sample ID: Method Blank
Prep Type: STLC Citrate
Prep Batch: 274307

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10	0.0070	mg/L		10/10/19 12:51	10/10/19 14:54	1

Lab Sample ID: 720-95291-4 MS
Matrix: Solid
Analysis Batch: 274414

Client Sample ID: S2-3'
Prep Type: STLC Citrate
Prep Batch: 274307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chromium	0.11		10.0	8.48		mg/L		84	75 - 125

Lab Sample ID: 720-95291-4 MSD
Matrix: Solid
Analysis Batch: 274414

Client Sample ID: S2-3'
Prep Type: STLC Citrate
Prep Batch: 274307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chromium	0.11		10.0	8.48		mg/L		84	75 - 125	0	20

QC Association Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Metals

Leach Batch: 274078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	STLC Citrate	Solid	CA WET Citrate	
720-95291-4	S2-3'	STLC Citrate	Solid	CA WET Citrate	
720-95291-7	S3-6'	STLC Citrate	Solid	CA WET Citrate	
LB4 720-274078/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	
720-95291-4 MS	S2-3'	STLC Citrate	Solid	CA WET Citrate	
720-95291-4 MSD	S2-3'	STLC Citrate	Solid	CA WET Citrate	

Prep Batch: 274307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	STLC Citrate	Solid	3005A	274078
720-95291-4	S2-3'	STLC Citrate	Solid	3005A	274078
720-95291-7	S3-6'	STLC Citrate	Solid	3005A	274078
LB4 720-274078/1-B	Method Blank	STLC Citrate	Solid	3005A	274078
MB 720-274307/1-A	Method Blank	Total Recoverable	Solid	3005A	
LCS 720-274307/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
720-95291-4 MS	S2-3'	STLC Citrate	Solid	3005A	274078
720-95291-4 MSD	S2-3'	STLC Citrate	Solid	3005A	274078

Analysis Batch: 274414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-95291-1	S1-1'	STLC Citrate	Solid	6010B	274307
720-95291-4	S2-3'	STLC Citrate	Solid	6010B	274307
720-95291-7	S3-6'	STLC Citrate	Solid	6010B	274307
LB4 720-274078/1-B	Method Blank	STLC Citrate	Solid	6010B	274307
MB 720-274307/1-A	Method Blank	Total Recoverable	Solid	6010B	274307
LCS 720-274307/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	274307
720-95291-4 MS	S2-3'	STLC Citrate	Solid	6010B	274307
720-95291-4 MSD	S2-3'	STLC Citrate	Solid	6010B	274307

Lab Chronicle

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Client Sample ID: S1-1'

Date Collected: 09/27/19 09:07

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			274078	10/07/19 18:00	BMT	TAL PLS
STLC Citrate	Prep	3005A			274307	10/10/19 12:51	JAM	TAL PLS
STLC Citrate	Analysis	6010B		1	274414	10/10/19 15:24	MAG	TAL PLS

Client Sample ID: S2-3'

Date Collected: 09/27/19 09:18

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			274078	10/07/19 18:00	BMT	TAL PLS
STLC Citrate	Prep	3005A			274307	10/10/19 12:51	JAM	TAL PLS
STLC Citrate	Analysis	6010B		1	274414	10/10/19 15:19	MAG	TAL PLS

Client Sample ID: S3-6'

Date Collected: 09/27/19 09:33

Date Received: 09/27/19 14:25

Lab Sample ID: 720-95291-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			274078	10/07/19 18:00	BMT	TAL PLS
STLC Citrate	Prep	3005A			274307	10/10/19 12:51	JAM	TAL PLS
STLC Citrate	Analysis	6010B		1	274414	10/10/19 15:29	MAG	TAL PLS

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Laboratory: Eurofins TestAmerica, Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State Program	2496	01-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
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Method Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL PLS
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL PLS
CA WET Citrate	California - Waste Extraction Test with Citrate Leach	CA-WET	TAL PLS

Protocol References:

CA-WET = California Waste Extraction Test, from Title 22

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PLS = Eurofins TestAmerica, Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



Sample Summary

Client: Dysert Environmental, Inc
Project/Site: Alan Hynes

Job ID: 720-95291-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
720-95291-1	S1-1'	Solid	09/27/19 09:07	09/27/19 14:25	
720-95291-4	S2-3'	Solid	09/27/19 09:18	09/27/19 14:25	
720-95291-7	S3-6'	Solid	09/27/19 09:33	09/27/19 14:25	

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Caparas, Criselda

From: Dysert Environmental Project Management <environmental.data@gmail.com>
Sent: Thursday, October 03, 2019 1:46 PM
To: Caparas, Criselda
Cc: Mark Dysert
Subject: Re: Eurofins TestAmerica Sample Login Confirmation files from 720-95291 Alan Hynes

-External Email-

Criselda,

Please add the following on 3 day RUSH TAT. Please confirm. Thank you!

STLC Cr, S1-1'
STLC Cr, S2-3'
STLC Cr, S3-6'

On Mon, Sep 30, 2019 at 10:56 AM Criselda Caparas <criselda.caparas@testamericainc.com> wrote:

Hello,

Attached, please find the Sample Confirmation files for job 720-95291; Alan Hynes

Please feel free to contact me if you have any questions.

Thank you.

Criselda Caparas
Project Manager

Eurofins TestAmerica, Pleasanton

E-mail: criselda.caparas@testamericainc.com
www.eurofinsus.com | www.testamericainc.com



Reference: [720-315328]
Attachments: 3

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: [Project Feedback](#)

--

Thank you,

Dysert Environmental, Inc.
ELAP #2764
Main: (650) 799-9204
Project Management: (650) 380-9096
Accounting: (650) 333-4326

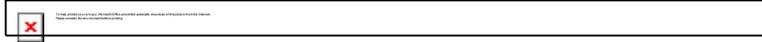
Email: markdysert@aol.com
Project Management Email: environmental.data@gmail.com
Accounting Email: dysert.finance@gmail.com
Web: dysertenvironmental.com

Mailing Address:

P.O. Box 5608
San Mateo, CA 94402

Physical Address:

955 East San Carlos Ave., Suite B
San Carlos, CA 94070



Login Sample Receipt Checklist

Client: Dysert Environmental, Inc

Job Number: 720-95291-2

Login Number: 95291
List Number: 1
Creator: Perry, Janae R

List Source: Eurofins TestAmerica, Pleasanton

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Caparas, Criselda

From: Dysert Environmental Project Management <environmental.data@gmail.com>
Sent: Thursday, October 03, 2019 1:46 PM
To: Caparas, Criselda
Cc: Mark Dysert
Subject: Re: Eurofins TestAmerica Sample Login Confirmation files from 720-95291 Alan Hynes

-External Email-

Criselda,

Please add the following on 3 day RUSH TAT. Please confirm. Thank you!

STLC Cr, S1-1'
STLC Cr, S2-3'
STLC Cr, S3-6'

On Mon, Sep 30, 2019 at 10:56 AM Criselda Caparas <criselda.caparas@testamericainc.com> wrote:

Hello,

Attached, please find the Sample Confirmation files for job 720-95291; Alan Hynes

Please feel free to contact me if you have any questions.

Thank you.

Criselda Caparas
Project Manager

Eurofins TestAmerica, Pleasanton

E-mail: criselda.caparas@testamericainc.com
www.eurofinsus.com | www.testamericainc.com



Reference: [720-315328]
Attachments: 3

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: [Project Feedback](#)

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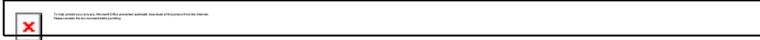
Thank you,

Dysert Environmental, Inc.
ELAP #2764
Main: (650) 799-9204
Project Management: (650) 380-9096
Accounting: (650) 333-4326

Email: markdysert@aol.com
Project Management Email: environmental.data@gmail.com
Accounting Email: dysert.finance@gmail.com
Web: dysertenvironmental.com

Mailing Address:
P.O. Box 5608
San Mateo, CA 94402

Physical Address:
955 East San Carlos Ave., Suite B
San Carlos, CA 94070



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Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

Dysert Environmental, Inc.
Mark Dysert
PO Box 5608

San Mateo, CA 94402

Client ID: L1674
Report Number: N012327
Date Received: 09/27/19
Date Analyzed: 10/03/19
Date Printed: 10/03/19

Job ID/Site: 16378-2 - Alan Hynes, 1107 Cowper Street, Palo Alto, CA

SGSFL Job ID: L1674

PLM Report Number: N/A

Total Samples Submitted: 4
Total Samples Analyzed: 4

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
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S1-1`	12219324	Brown Soil
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Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

S2-3`	12219325	Brown Soil
--------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

S3-6`	12219326	Brown Soil
--------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

S4-9`	12219327	Brown Soil
--------------	----------	-------------------

Visual Estimation Results:

Matrix percentage of entire 100

Visual estimation percentage: None Detected

Asbestos type(s) detected: None Detected

Comment: This result meets the requirements of Exception I as defined by the 435 Method.

Bulk Asbestos Material Analysis

(Air Resources Board Method 435, June 6, 1991)

Dysert Environmental, Inc.
Mark Dysert
PO Box 5608

San Mateo, CA 94402

Client ID: L1674
Report Number: N012327
Date Received: 09/27/19
Date Analyzed: 10/03/19
Date Printed: 10/03/19

Job ID/Site: 16378-2 - Alan Hynes, 1107 Cowper Street, Palo Alto, CA

SGSFL Job ID: L1674

PLM Report Number: N/A

Total Samples Submitted: 4

Total Samples Analyzed: 4

Sample Preparation and Analysis:

Samples were analyzed by the Air Resources Board's Method 435, Determination of Asbestos Content of Serpentine Aggregate. Samples were ground to 200 particle size in the laboratory. Approximately 1 pint was retained for analysis. Samples were prepared for observation according to the guidelines of Exception I and Exception II as defined by the 435 Method. Samples which contained less than 10% asbestos were prepared for observation according to the point count technique as defined by the 435 Method. This analysis was performed with a standard cross-hair reticle.

Sample ID	Lab Number	Layer Description
-----------	------------	-------------------



Tad Thrower, Laboratory Supervisor, Hayward Laboratory

Note: Limit of Quantification (LOQ) = 0.25%. Trace denotes the presence of asbestos below the LOQ. ND = None Detected.

Analytical results and reports are generated by SGS Forensic Laboratories (SGSFL) at the request of and for the exclusive use of the person or entity (client) named on such report. Results, reports or copies of same will not be released by SGSFL to any third party without prior written request from client. This report applies only to the sample(s) tested. Supporting laboratory documentation is available upon request. This report must not be reproduced except in full, unless approved by SGSFL. The client is solely responsible for the use and interpretation of test results and reports requested from SGSFL. SGSFL is not able to assess the degree of hazard resulting from materials analyzed. SGS Forensic Laboratories reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified. All samples were received in acceptable condition unless otherwise noted.

CHAIN OF CUSTODY / ANALYSIS REQUEST

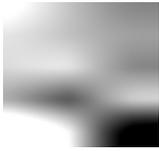
Attention	Mark Dysert	Phone	(650)799-9204	Billing (if different)
Company Name	Dysert Environmental	Email	environmental.data@gmail.com	Attn: Accounts Payable
Mailing Address	P.O Box 5608	Fax	(650)627-4968	Dysert Environmental, Inc.
City, State & Zip	San Mateo, CA 94402	P.O. No.	16378-2	P.O Box 5608
Lab I.D.	FORENSIC	Sampler/s	<i>Mike Moorefeld</i>	San Mateo, CA 94402
Project Name	<i>Aian Hynes</i>	Project Location	<i>1167 Cowper Street PALO ALTO, CA</i>	Sampling Code = Estimate#:

Sample Matrix = Solid	Sample Container Used: <input checked="" type="checkbox"/> 1 x 16oz. GL Jar <input type="checkbox"/> 1 x 8oz GL Jar <input type="checkbox"/> 1 x 2" x 6" BT <input type="checkbox"/> 1 x 2" x 6" PBT <input type="checkbox"/> 1 x 1.5" x 6" PBT																		
Turn Around Time = <i>5</i>																			
Sample ID:	Date:	Time:	No. of Containers	TPH-D/MO w/SGGU 8015B(M)/3630	TPH-D/MO 8015B(M)	VOCs and TPH-Gas 8260B	VOCs 8260B	TPH-Gas 8015B or 8260B	pH in Soil	SVOCs 8270 (including Pyridine)	HOLD	Organochlorine Pesticides/PCBs 8081A/8082A	Organochlorine Pesticides 8081A	PCBs 8082A	TTLc CAM17 METALS 6010B/7000	STLc Extract and Hold TCLP Extract and Hold	Hexavalent Chromium 7196 / 7199 <small>circle one</small>	Asbestos CARB 435	
S1-1'	<i>9-27-19</i>	<i>0907</i>	1 X 16OZ GL JAR																X
S2-3'	↓	<i>0918</i>	1 X 16OZ GL JAR																X
S3-6'	↓	<i>0933</i>	1 X 16OZ GL JAR																X
S4-9'	↓	<i>0941</i>	1 X 16OZ GL JAR																X

Relinquished by <i>Mike Moorefeld</i>	Received by		Time	Date <i>9-27-19</i>	Lab Notes: Please "J" Flag results <RL and >MDL. Please report TPH D/MO/G in mg/kg. Need lowest possible RL/MDL for Pesticides and SVOCs. Endrin and Endrin Aldehyde need 0.65 ug/Kg MDL. Please do not dilute.
Relinquished by	Received by		Time	Date	
Relinquished by	Received by		Time	Date	
Relinquished by	Received by		Time	Date	

Notes: Were samples delivered from field sampling? <i>yes</i> Were samples recieved in a cooler with ice? <i>NO</i> What type of ice was used? <i>M/A</i> Sample Temperature and Time Upon Receipt in Lab=	Sampling Notes: ONSITE CONTACT: Sample Location Map Attached- YES or NO NO (circle one)
Dysert Environmental, Inc. (ELAP#2764) Tel: (650) 799-9204 Web: DysertEnvironmental.com	Page <i>1</i> of <i>1</i>

2979 Waverly Street, Palo Alto, California



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1906C53

Report Created for: Tou Bar Equipment Company Inc.

2535 Pulgas Ave.
East Palo Alto, CA 94303

Project Contact: Kurt Crasper

Project P.O.:

Project: 2979

Project Received: 06/25/2019

Analytical Report reviewed & approved for release on 07/01/2019 by:



Susan Thompson
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Tou Bar Equipment Company Inc.
Project: 2979
WorkOrder: 1906C53

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Tou Bar Equipment Company Inc.
Project: 2979
WorkOrder: 1906C53

Analytical Qualifiers

J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
S Spike recovery outside accepted recovery limits
c2 Surrogate recovery outside of the control limits due to matrix interference.

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3060A
Analytical Method: SW7199
Unit: mg/Kg

Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	IC2 19062788.CHW	180443

Analytes	Result	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.20	1	06/27/2019 20:47

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	IC2 19062789.CHW	180443

Analytes	Result	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.20	1	06/27/2019 21:02

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	IC2 19062792.CHW	180443

Analytes	Result	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.20	1	06/27/2019 21:44

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	IC2 19062793.CHW	180443

Analytes	Result	RL	DF	Date Analyzed
Hexavalent chromium	ND	0.20	1	06/27/2019 21:58

Analyst(s): AO



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC23 06261915.d	180393

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/26/2019 18:27
a-BHC	ND	0.00010	1	06/26/2019 18:27
b-BHC	ND	0.00030	1	06/26/2019 18:27
d-BHC	ND	0.00020	1	06/26/2019 18:27
g-BHC	ND	0.00010	1	06/26/2019 18:27
Chlordane (Technical)	ND	0.0025	1	06/26/2019 18:27
a-Chlordane	ND	0.00010	1	06/26/2019 18:27
g-Chlordane	ND	0.00010	1	06/26/2019 18:27
p,p-DDD	ND	0.00010	1	06/26/2019 18:27
p,p-DDE	ND	0.00010	1	06/26/2019 18:27
p,p-DDT	ND	0.00010	1	06/26/2019 18:27
Dieldrin	ND	0.00010	1	06/26/2019 18:27
Endosulfan I	ND	0.00010	1	06/26/2019 18:27
Endosulfan II	ND	0.00010	1	06/26/2019 18:27
Endosulfan sulfate	ND	0.00010	1	06/26/2019 18:27
Endrin	ND	0.00010	1	06/26/2019 18:27
Endrin aldehyde	ND	0.00010	1	06/26/2019 18:27
Endrin ketone	ND	0.00010	1	06/26/2019 18:27
Heptachlor	ND	0.00010	1	06/26/2019 18:27
Heptachlor epoxide	ND	0.00010	1	06/26/2019 18:27
Hexachlorobenzene	ND	0.0010	1	06/26/2019 18:27
Hexachlorocyclopentadiene	ND	0.0020	1	06/26/2019 18:27
Methoxychlor	ND	0.00020	1	06/26/2019 18:27
Toxaphene	ND	0.0050	1	06/26/2019 18:27
Aroclor1016	ND	0.0050	1	06/26/2019 18:27
Aroclor1221	ND	0.0050	1	06/26/2019 18:27
Aroclor1232	ND	0.0050	1	06/26/2019 18:27
Aroclor1242	ND	0.0050	1	06/26/2019 18:27
Aroclor1248	ND	0.0050	1	06/26/2019 18:27
Aroclor1254	ND	0.0050	1	06/26/2019 18:27
Aroclor1260	ND	0.0050	1	06/26/2019 18:27
PCBs, total	ND	0.0050	1	06/26/2019 18:27

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	86	20-145	06/26/2019 18:27

Analyst(s): LT

(Cont.)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC23 06261916.d	180393

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/26/2019 18:42
a-BHC	ND	0.00010	1	06/26/2019 18:42
b-BHC	ND	0.00030	1	06/26/2019 18:42
d-BHC	ND	0.00020	1	06/26/2019 18:42
g-BHC	ND	0.00010	1	06/26/2019 18:42
Chlordane (Technical)	ND	0.0025	1	06/26/2019 18:42
a-Chlordane	ND	0.00010	1	06/26/2019 18:42
g-Chlordane	ND	0.00010	1	06/26/2019 18:42
p,p-DDD	ND	0.00010	1	06/26/2019 18:42
p,p-DDE	ND	0.00010	1	06/26/2019 18:42
p,p-DDT	ND	0.00010	1	06/26/2019 18:42
Dieldrin	ND	0.00010	1	06/26/2019 18:42
Endosulfan I	ND	0.00010	1	06/26/2019 18:42
Endosulfan II	ND	0.00010	1	06/26/2019 18:42
Endosulfan sulfate	ND	0.00010	1	06/26/2019 18:42
Endrin	ND	0.00010	1	06/26/2019 18:42
Endrin aldehyde	ND	0.00010	1	06/26/2019 18:42
Endrin ketone	ND	0.00010	1	06/26/2019 18:42
Heptachlor	ND	0.00010	1	06/26/2019 18:42
Heptachlor epoxide	ND	0.00010	1	06/26/2019 18:42
Hexachlorobenzene	ND	0.0010	1	06/26/2019 18:42
Hexachlorocyclopentadiene	ND	0.0020	1	06/26/2019 18:42
Methoxychlor	ND	0.00020	1	06/26/2019 18:42
Toxaphene	ND	0.0050	1	06/26/2019 18:42
Aroclor1016	ND	0.0050	1	06/26/2019 18:42
Aroclor1221	ND	0.0050	1	06/26/2019 18:42
Aroclor1232	ND	0.0050	1	06/26/2019 18:42
Aroclor1242	ND	0.0050	1	06/26/2019 18:42
Aroclor1248	ND	0.0050	1	06/26/2019 18:42
Aroclor1254	ND	0.0050	1	06/26/2019 18:42
Aroclor1260	ND	0.0050	1	06/26/2019 18:42
PCBs, total	ND	0.0050	1	06/26/2019 18:42

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	83	20-145	06/26/2019 18:42

Analyst(s): LT

(Cont.)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC23 06261917.d	180393

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/26/2019 18:58
a-BHC	ND	0.00010	1	06/26/2019 18:58
b-BHC	ND	0.00030	1	06/26/2019 18:58
d-BHC	ND	0.00020	1	06/26/2019 18:58
g-BHC	ND	0.00010	1	06/26/2019 18:58
Chlordane (Technical)	ND	0.0025	1	06/26/2019 18:58
a-Chlordane	ND	0.00010	1	06/26/2019 18:58
g-Chlordane	ND	0.00010	1	06/26/2019 18:58
p,p-DDD	ND	0.00010	1	06/26/2019 18:58
p,p-DDE	ND	0.00010	1	06/26/2019 18:58
p,p-DDT	ND	0.00010	1	06/26/2019 18:58
Dieldrin	ND	0.00010	1	06/26/2019 18:58
Endosulfan I	ND	0.00010	1	06/26/2019 18:58
Endosulfan II	ND	0.00010	1	06/26/2019 18:58
Endosulfan sulfate	ND	0.00010	1	06/26/2019 18:58
Endrin	ND	0.00010	1	06/26/2019 18:58
Endrin aldehyde	ND	0.00010	1	06/26/2019 18:58
Endrin ketone	ND	0.00010	1	06/26/2019 18:58
Heptachlor	ND	0.00010	1	06/26/2019 18:58
Heptachlor epoxide	ND	0.00010	1	06/26/2019 18:58
Hexachlorobenzene	ND	0.0010	1	06/26/2019 18:58
Hexachlorocyclopentadiene	ND	0.0020	1	06/26/2019 18:58
Methoxychlor	ND	0.00020	1	06/26/2019 18:58
Toxaphene	ND	0.0050	1	06/26/2019 18:58
Aroclor1016	ND	0.0050	1	06/26/2019 18:58
Aroclor1221	ND	0.0050	1	06/26/2019 18:58
Aroclor1232	ND	0.0050	1	06/26/2019 18:58
Aroclor1242	ND	0.0050	1	06/26/2019 18:58
Aroclor1248	ND	0.0050	1	06/26/2019 18:58
Aroclor1254	ND	0.0050	1	06/26/2019 18:58
Aroclor1260	ND	0.0050	1	06/26/2019 18:58
PCBs, total	ND	0.0050	1	06/26/2019 18:58

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	83	20-145	06/26/2019 18:58

Analyst(s): LT

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC23 06261918.d	180393

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00010	1	06/26/2019 19:14
a-BHC	ND	0.00010	1	06/26/2019 19:14
b-BHC	ND	0.00030	1	06/26/2019 19:14
d-BHC	ND	0.00020	1	06/26/2019 19:14
g-BHC	ND	0.00010	1	06/26/2019 19:14
Chlordane (Technical)	ND	0.0025	1	06/26/2019 19:14
a-Chlordane	ND	0.00010	1	06/26/2019 19:14
g-Chlordane	ND	0.00010	1	06/26/2019 19:14
p,p-DDD	ND	0.00010	1	06/26/2019 19:14
p,p-DDE	ND	0.00010	1	06/26/2019 19:14
p,p-DDT	ND	0.00010	1	06/26/2019 19:14
Dieldrin	ND	0.00010	1	06/26/2019 19:14
Endosulfan I	ND	0.00010	1	06/26/2019 19:14
Endosulfan II	ND	0.00010	1	06/26/2019 19:14
Endosulfan sulfate	ND	0.00010	1	06/26/2019 19:14
Endrin	ND	0.00010	1	06/26/2019 19:14
Endrin aldehyde	ND	0.00010	1	06/26/2019 19:14
Endrin ketone	ND	0.00010	1	06/26/2019 19:14
Heptachlor	ND	0.00010	1	06/26/2019 19:14
Heptachlor epoxide	ND	0.00010	1	06/26/2019 19:14
Hexachlorobenzene	ND	0.0010	1	06/26/2019 19:14
Hexachlorocyclopentadiene	ND	0.0020	1	06/26/2019 19:14
Methoxychlor	ND	0.00020	1	06/26/2019 19:14
Toxaphene	ND	0.0050	1	06/26/2019 19:14
Aroclor1016	ND	0.0050	1	06/26/2019 19:14
Aroclor1221	ND	0.0050	1	06/26/2019 19:14
Aroclor1232	ND	0.0050	1	06/26/2019 19:14
Aroclor1242	ND	0.0050	1	06/26/2019 19:14
Aroclor1248	ND	0.0050	1	06/26/2019 19:14
Aroclor1254	ND	0.0050	1	06/26/2019 19:14
Aroclor1260	ND	0.0050	1	06/26/2019 19:14
PCBs, total	ND	0.0050	1	06/26/2019 19:14

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	87	20-145	06/26/2019 19:14

Analyst(s): LT



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC38 06291905.D	180311

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/29/2019 16:44
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/29/2019 16:44
Benzene	ND	0.0050	1	06/29/2019 16:44
Bromobenzene	ND	0.0050	1	06/29/2019 16:44
Bromochloromethane	ND	0.0050	1	06/29/2019 16:44
Bromodichloromethane	ND	0.0010	1	06/29/2019 16:44
Bromoform	ND	0.0050	1	06/29/2019 16:44
Bromomethane	ND	0.0050	1	06/29/2019 16:44
2-Butanone (MEK)	ND	0.020	1	06/29/2019 16:44
t-Butyl alcohol (TBA)	ND	0.050	1	06/29/2019 16:44
n-Butyl benzene	ND	0.0050	1	06/29/2019 16:44
sec-Butyl benzene	ND	0.0050	1	06/29/2019 16:44
tert-Butyl benzene	ND	0.0050	1	06/29/2019 16:44
Carbon Disulfide	ND	0.0050	1	06/29/2019 16:44
Carbon Tetrachloride	ND	0.0050	1	06/29/2019 16:44
Chlorobenzene	ND	0.0050	1	06/29/2019 16:44
Chloroethane	ND	0.0050	1	06/29/2019 16:44
Chloroform	ND	0.0050	1	06/29/2019 16:44
Chloromethane	ND	0.0050	1	06/29/2019 16:44
2-Chlorotoluene	ND	0.0050	1	06/29/2019 16:44
4-Chlorotoluene	ND	0.0050	1	06/29/2019 16:44
Dibromochloromethane	ND	0.0050	1	06/29/2019 16:44
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/29/2019 16:44
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/29/2019 16:44
Dibromomethane	ND	0.0050	1	06/29/2019 16:44
1,2-Dichlorobenzene	ND	0.0050	1	06/29/2019 16:44
1,3-Dichlorobenzene	ND	0.0050	1	06/29/2019 16:44
1,4-Dichlorobenzene	ND	0.0050	1	06/29/2019 16:44
Dichlorodifluoromethane	ND	0.0050	1	06/29/2019 16:44
1,1-Dichloroethane	ND	0.0050	1	06/29/2019 16:44
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/29/2019 16:44
1,1-Dichloroethene	ND	0.00025	1	06/29/2019 16:44
cis-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 16:44
trans-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 16:44
1,2-Dichloropropane	ND	0.0050	1	06/29/2019 16:44
1,3-Dichloropropane	ND	0.0050	1	06/29/2019 16:44
2,2-Dichloropropane	ND	0.0050	1	06/29/2019 16:44

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC38 06291905.D	180311

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/29/2019 16:44
cis-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 16:44
trans-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 16:44
Diisopropyl ether (DIPE)	ND	0.0050	1	06/29/2019 16:44
Ethylbenzene	ND	0.0050	1	06/29/2019 16:44
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/29/2019 16:44
Freon 113	ND	0.0050	1	06/29/2019 16:44
Hexachlorobutadiene	ND	0.0050	1	06/29/2019 16:44
Hexachloroethane	ND	0.0050	1	06/29/2019 16:44
2-Hexanone	ND	0.0050	1	06/29/2019 16:44
Isopropylbenzene	ND	0.0050	1	06/29/2019 16:44
4-Isopropyl toluene	ND	0.0050	1	06/29/2019 16:44
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/29/2019 16:44
Methylene chloride	ND	0.010	1	06/29/2019 16:44
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/29/2019 16:44
Naphthalene	ND	0.0050	1	06/29/2019 16:44
n-Propyl benzene	ND	0.0050	1	06/29/2019 16:44
Styrene	ND	0.0050	1	06/29/2019 16:44
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/29/2019 16:44
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/29/2019 16:44
Tetrachloroethene	ND	0.0010	1	06/29/2019 16:44
Toluene	ND	0.0050	1	06/29/2019 16:44
1,2,3-Trichlorobenzene	ND	0.0050	1	06/29/2019 16:44
1,2,4-Trichlorobenzene	ND	0.0050	1	06/29/2019 16:44
1,1,1-Trichloroethane	ND	0.0050	1	06/29/2019 16:44
1,1,2-Trichloroethane	ND	0.0050	1	06/29/2019 16:44
Trichloroethene	ND	0.0050	1	06/29/2019 16:44
Trichlorofluoromethane	ND	0.0050	1	06/29/2019 16:44
1,2,3-Trichloropropane	ND	0.00010	1	06/29/2019 16:44
1,2,4-Trimethylbenzene	ND	0.0050	1	06/29/2019 16:44
1,3,5-Trimethylbenzene	ND	0.0050	1	06/29/2019 16:44
Vinyl Chloride	ND	0.00025	1	06/29/2019 16:44
m,p-Xylene	ND	0.0050	1	06/29/2019 16:44
o-Xylene	ND	0.0050	1	06/29/2019 16:44
Xylenes, Total	ND	0.0050	1	06/29/2019 16:44

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC38 06291905.D	180311

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	95	82-136		06/29/2019 16:44
Toluene-d8	100	92-139		06/29/2019 16:44
4-BFB	94	82-135		06/29/2019 16:44
Benzene-d6	93	55-122		06/29/2019 16:44
Ethylbenzene-d10	99	58-141		06/29/2019 16:44
1,2-DCB-d4	78	51-107		06/29/2019 16:44

Analyst(s): TK



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC38 06291906.D	180311

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/29/2019 17:21
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/29/2019 17:21
Benzene	ND	0.0050	1	06/29/2019 17:21
Bromobenzene	ND	0.0050	1	06/29/2019 17:21
Bromochloromethane	ND	0.0050	1	06/29/2019 17:21
Bromodichloromethane	ND	0.0010	1	06/29/2019 17:21
Bromoform	ND	0.0050	1	06/29/2019 17:21
Bromomethane	ND	0.0050	1	06/29/2019 17:21
2-Butanone (MEK)	ND	0.020	1	06/29/2019 17:21
t-Butyl alcohol (TBA)	ND	0.050	1	06/29/2019 17:21
n-Butyl benzene	ND	0.0050	1	06/29/2019 17:21
sec-Butyl benzene	ND	0.0050	1	06/29/2019 17:21
tert-Butyl benzene	ND	0.0050	1	06/29/2019 17:21
Carbon Disulfide	ND	0.0050	1	06/29/2019 17:21
Carbon Tetrachloride	ND	0.0050	1	06/29/2019 17:21
Chlorobenzene	ND	0.0050	1	06/29/2019 17:21
Chloroethane	ND	0.0050	1	06/29/2019 17:21
Chloroform	ND	0.0050	1	06/29/2019 17:21
Chloromethane	ND	0.0050	1	06/29/2019 17:21
2-Chlorotoluene	ND	0.0050	1	06/29/2019 17:21
4-Chlorotoluene	ND	0.0050	1	06/29/2019 17:21
Dibromochloromethane	ND	0.0050	1	06/29/2019 17:21
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/29/2019 17:21
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/29/2019 17:21
Dibromomethane	ND	0.0050	1	06/29/2019 17:21
1,2-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:21
1,3-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:21
1,4-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:21
Dichlorodifluoromethane	ND	0.0050	1	06/29/2019 17:21
1,1-Dichloroethane	ND	0.0050	1	06/29/2019 17:21
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/29/2019 17:21
1,1-Dichloroethene	ND	0.00025	1	06/29/2019 17:21
cis-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 17:21
trans-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 17:21
1,2-Dichloropropane	ND	0.0050	1	06/29/2019 17:21
1,3-Dichloropropane	ND	0.0050	1	06/29/2019 17:21
2,2-Dichloropropane	ND	0.0050	1	06/29/2019 17:21

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC38 06291906.D	180311

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/29/2019 17:21
cis-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 17:21
trans-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 17:21
Diisopropyl ether (DIPE)	ND	0.0050	1	06/29/2019 17:21
Ethylbenzene	ND	0.0050	1	06/29/2019 17:21
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/29/2019 17:21
Freon 113	ND	0.0050	1	06/29/2019 17:21
Hexachlorobutadiene	ND	0.0050	1	06/29/2019 17:21
Hexachloroethane	ND	0.0050	1	06/29/2019 17:21
2-Hexanone	ND	0.0050	1	06/29/2019 17:21
Isopropylbenzene	ND	0.0050	1	06/29/2019 17:21
4-Isopropyl toluene	ND	0.0050	1	06/29/2019 17:21
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/29/2019 17:21
Methylene chloride	ND	0.010	1	06/29/2019 17:21
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/29/2019 17:21
Naphthalene	ND	0.0050	1	06/29/2019 17:21
n-Propyl benzene	ND	0.0050	1	06/29/2019 17:21
Styrene	ND	0.0050	1	06/29/2019 17:21
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/29/2019 17:21
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/29/2019 17:21
Tetrachloroethene	ND	0.0010	1	06/29/2019 17:21
Toluene	ND	0.0050	1	06/29/2019 17:21
1,2,3-Trichlorobenzene	ND	0.0050	1	06/29/2019 17:21
1,2,4-Trichlorobenzene	ND	0.0050	1	06/29/2019 17:21
1,1,1-Trichloroethane	ND	0.0050	1	06/29/2019 17:21
1,1,2-Trichloroethane	ND	0.0050	1	06/29/2019 17:21
Trichloroethene	ND	0.0050	1	06/29/2019 17:21
Trichlorofluoromethane	ND	0.0050	1	06/29/2019 17:21
1,2,3-Trichloropropane	ND	0.00010	1	06/29/2019 17:21
1,2,4-Trimethylbenzene	ND	0.0050	1	06/29/2019 17:21
1,3,5-Trimethylbenzene	ND	0.0050	1	06/29/2019 17:21
Vinyl Chloride	ND	0.00025	1	06/29/2019 17:21
m,p-Xylene	ND	0.0050	1	06/29/2019 17:21
o-Xylene	ND	0.0050	1	06/29/2019 17:21
Xylenes, Total	ND	0.0050	1	06/29/2019 17:21

(Cont.)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC38 06291906.D	180311

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	89		82-136	06/29/2019 17:21
Toluene-d8	101		92-139	06/29/2019 17:21
4-BFB	95		82-135	06/29/2019 17:21
Benzene-d6	87		55-122	06/29/2019 17:21
Ethylbenzene-d10	100		58-141	06/29/2019 17:21
1,2-DCB-d4	78		51-107	06/29/2019 17:21

Analyst(s): TK



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC38 06291907.D	180311

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/29/2019 17:59
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/29/2019 17:59
Benzene	ND	0.0050	1	06/29/2019 17:59
Bromobenzene	ND	0.0050	1	06/29/2019 17:59
Bromochloromethane	ND	0.0050	1	06/29/2019 17:59
Bromodichloromethane	ND	0.0010	1	06/29/2019 17:59
Bromoform	ND	0.0050	1	06/29/2019 17:59
Bromomethane	ND	0.0050	1	06/29/2019 17:59
2-Butanone (MEK)	ND	0.020	1	06/29/2019 17:59
t-Butyl alcohol (TBA)	ND	0.050	1	06/29/2019 17:59
n-Butyl benzene	ND	0.0050	1	06/29/2019 17:59
sec-Butyl benzene	ND	0.0050	1	06/29/2019 17:59
tert-Butyl benzene	ND	0.0050	1	06/29/2019 17:59
Carbon Disulfide	ND	0.0050	1	06/29/2019 17:59
Carbon Tetrachloride	ND	0.0050	1	06/29/2019 17:59
Chlorobenzene	ND	0.0050	1	06/29/2019 17:59
Chloroethane	ND	0.0050	1	06/29/2019 17:59
Chloroform	ND	0.0050	1	06/29/2019 17:59
Chloromethane	ND	0.0050	1	06/29/2019 17:59
2-Chlorotoluene	ND	0.0050	1	06/29/2019 17:59
4-Chlorotoluene	ND	0.0050	1	06/29/2019 17:59
Dibromochloromethane	ND	0.0050	1	06/29/2019 17:59
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/29/2019 17:59
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/29/2019 17:59
Dibromomethane	ND	0.0050	1	06/29/2019 17:59
1,2-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:59
1,3-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:59
1,4-Dichlorobenzene	ND	0.0050	1	06/29/2019 17:59
Dichlorodifluoromethane	ND	0.0050	1	06/29/2019 17:59
1,1-Dichloroethane	ND	0.0050	1	06/29/2019 17:59
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/29/2019 17:59
1,1-Dichloroethene	ND	0.00025	1	06/29/2019 17:59
cis-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 17:59
trans-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 17:59
1,2-Dichloropropane	ND	0.0050	1	06/29/2019 17:59
1,3-Dichloropropane	ND	0.0050	1	06/29/2019 17:59
2,2-Dichloropropane	ND	0.0050	1	06/29/2019 17:59

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC38 06291907.D	180311

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/29/2019 17:59
cis-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 17:59
trans-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 17:59
Diisopropyl ether (DIPE)	ND	0.0050	1	06/29/2019 17:59
Ethylbenzene	ND	0.0050	1	06/29/2019 17:59
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/29/2019 17:59
Freon 113	ND	0.0050	1	06/29/2019 17:59
Hexachlorobutadiene	ND	0.0050	1	06/29/2019 17:59
Hexachloroethane	ND	0.0050	1	06/29/2019 17:59
2-Hexanone	ND	0.0050	1	06/29/2019 17:59
Isopropylbenzene	ND	0.0050	1	06/29/2019 17:59
4-Isopropyl toluene	ND	0.0050	1	06/29/2019 17:59
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/29/2019 17:59
Methylene chloride	ND	0.010	1	06/29/2019 17:59
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/29/2019 17:59
Naphthalene	ND	0.0050	1	06/29/2019 17:59
n-Propyl benzene	ND	0.0050	1	06/29/2019 17:59
Styrene	ND	0.0050	1	06/29/2019 17:59
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/29/2019 17:59
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/29/2019 17:59
Tetrachloroethene	ND	0.0010	1	06/29/2019 17:59
Toluene	ND	0.0050	1	06/29/2019 17:59
1,2,3-Trichlorobenzene	ND	0.0050	1	06/29/2019 17:59
1,2,4-Trichlorobenzene	ND	0.0050	1	06/29/2019 17:59
1,1,1-Trichloroethane	ND	0.0050	1	06/29/2019 17:59
1,1,2-Trichloroethane	ND	0.0050	1	06/29/2019 17:59
Trichloroethene	ND	0.0050	1	06/29/2019 17:59
Trichlorofluoromethane	ND	0.0050	1	06/29/2019 17:59
1,2,3-Trichloropropane	ND	0.00010	1	06/29/2019 17:59
1,2,4-Trimethylbenzene	ND	0.0050	1	06/29/2019 17:59
1,3,5-Trimethylbenzene	ND	0.0050	1	06/29/2019 17:59
Vinyl Chloride	ND	0.00025	1	06/29/2019 17:59
m,p-Xylene	ND	0.0050	1	06/29/2019 17:59
o-Xylene	ND	0.0050	1	06/29/2019 17:59
Xylenes, Total	ND	0.0050	1	06/29/2019 17:59

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC38 06291907.D	180311

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	96	82-136		06/29/2019 17:59
Toluene-d8	99	92-139		06/29/2019 17:59
4-BFB	91	82-135		06/29/2019 17:59
Benzene-d6	88	55-122		06/29/2019 17:59
Ethylbenzene-d10	93	58-141		06/29/2019 17:59
1,2-DCB-d4	73	51-107		06/29/2019 17:59

Analyst(s): TK



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC38 06291908.D	180311

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	06/29/2019 18:37
tert-Amyl methyl ether (TAME)	ND	0.0050	1	06/29/2019 18:37
Benzene	ND	0.0050	1	06/29/2019 18:37
Bromobenzene	ND	0.0050	1	06/29/2019 18:37
Bromochloromethane	ND	0.0050	1	06/29/2019 18:37
Bromodichloromethane	ND	0.0010	1	06/29/2019 18:37
Bromoform	ND	0.0050	1	06/29/2019 18:37
Bromomethane	ND	0.0050	1	06/29/2019 18:37
2-Butanone (MEK)	ND	0.020	1	06/29/2019 18:37
t-Butyl alcohol (TBA)	ND	0.050	1	06/29/2019 18:37
n-Butyl benzene	ND	0.0050	1	06/29/2019 18:37
sec-Butyl benzene	ND	0.0050	1	06/29/2019 18:37
tert-Butyl benzene	ND	0.0050	1	06/29/2019 18:37
Carbon Disulfide	ND	0.0050	1	06/29/2019 18:37
Carbon Tetrachloride	ND	0.0050	1	06/29/2019 18:37
Chlorobenzene	ND	0.0050	1	06/29/2019 18:37
Chloroethane	ND	0.0050	1	06/29/2019 18:37
Chloroform	ND	0.0050	1	06/29/2019 18:37
Chloromethane	ND	0.0050	1	06/29/2019 18:37
2-Chlorotoluene	ND	0.0050	1	06/29/2019 18:37
4-Chlorotoluene	ND	0.0050	1	06/29/2019 18:37
Dibromochloromethane	ND	0.0050	1	06/29/2019 18:37
1,2-Dibromo-3-chloropropane	ND	0.00025	1	06/29/2019 18:37
1,2-Dibromoethane (EDB)	ND	0.00010	1	06/29/2019 18:37
Dibromomethane	ND	0.0050	1	06/29/2019 18:37
1,2-Dichlorobenzene	ND	0.0050	1	06/29/2019 18:37
1,3-Dichlorobenzene	ND	0.0050	1	06/29/2019 18:37
1,4-Dichlorobenzene	ND	0.0050	1	06/29/2019 18:37
Dichlorodifluoromethane	ND	0.0050	1	06/29/2019 18:37
1,1-Dichloroethane	ND	0.0050	1	06/29/2019 18:37
1,2-Dichloroethane (1,2-DCA)	ND	0.00025	1	06/29/2019 18:37
1,1-Dichloroethene	ND	0.00025	1	06/29/2019 18:37
cis-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 18:37
trans-1,2-Dichloroethene	ND	0.0050	1	06/29/2019 18:37
1,2-Dichloropropane	ND	0.0050	1	06/29/2019 18:37
1,3-Dichloropropane	ND	0.0050	1	06/29/2019 18:37
2,2-Dichloropropane	ND	0.0050	1	06/29/2019 18:37

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC38 06291908.D	180311

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	06/29/2019 18:37
cis-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 18:37
trans-1,3-Dichloropropene	ND	0.0050	1	06/29/2019 18:37
Diisopropyl ether (DIPE)	ND	0.0050	1	06/29/2019 18:37
Ethylbenzene	ND	0.0050	1	06/29/2019 18:37
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	06/29/2019 18:37
Freon 113	ND	0.0050	1	06/29/2019 18:37
Hexachlorobutadiene	ND	0.0050	1	06/29/2019 18:37
Hexachloroethane	ND	0.0050	1	06/29/2019 18:37
2-Hexanone	ND	0.0050	1	06/29/2019 18:37
Isopropylbenzene	ND	0.0050	1	06/29/2019 18:37
4-Isopropyl toluene	ND	0.0050	1	06/29/2019 18:37
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	06/29/2019 18:37
Methylene chloride	ND	0.010	1	06/29/2019 18:37
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	06/29/2019 18:37
Naphthalene	ND	0.0050	1	06/29/2019 18:37
n-Propyl benzene	ND	0.0050	1	06/29/2019 18:37
Styrene	ND	0.0050	1	06/29/2019 18:37
1,1,1,2-Tetrachloroethane	ND	0.0050	1	06/29/2019 18:37
1,1,2,2-Tetrachloroethane	ND	0.00025	1	06/29/2019 18:37
Tetrachloroethene	ND	0.0010	1	06/29/2019 18:37
Toluene	ND	0.0050	1	06/29/2019 18:37
1,2,3-Trichlorobenzene	ND	0.0050	1	06/29/2019 18:37
1,2,4-Trichlorobenzene	ND	0.0050	1	06/29/2019 18:37
1,1,1-Trichloroethane	ND	0.0050	1	06/29/2019 18:37
1,1,2-Trichloroethane	ND	0.0050	1	06/29/2019 18:37
Trichloroethene	ND	0.0050	1	06/29/2019 18:37
Trichlorofluoromethane	ND	0.0050	1	06/29/2019 18:37
1,2,3-Trichloropropane	ND	0.00010	1	06/29/2019 18:37
1,2,4-Trimethylbenzene	ND	0.0050	1	06/29/2019 18:37
1,3,5-Trimethylbenzene	ND	0.0050	1	06/29/2019 18:37
Vinyl Chloride	ND	0.00025	1	06/29/2019 18:37
m,p-Xylene	ND	0.0050	1	06/29/2019 18:37
o-Xylene	ND	0.0050	1	06/29/2019 18:37
Xylenes, Total	ND	0.0050	1	06/29/2019 18:37

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC38 06291908.D	180311

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	96		82-136	06/29/2019 18:37
Toluene-d8	99		92-139	06/29/2019 18:37
4-BFB	91		82-135	06/29/2019 18:37
Benzene-d6	87		55-122	06/29/2019 18:37
Ethylbenzene-d10	90		58-141	06/29/2019 18:37
1,2-DCB-d4	71		51-107	06/29/2019 18:37

Analyst(s): TK



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC38 06291905.D	180331

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	0.25	1	06/29/2019 16:44

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	91	82-136	06/29/2019 16:44
Benzene-D6	118	55-122	06/29/2019 16:44

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC38 06291906.D	180331

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	0.25	1	06/29/2019 17:21

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	93	82-136	06/29/2019 17:21
Benzene-D6	121	55-122	06/29/2019 17:21

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC38 06291907.D	180331

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	0.25	1	06/29/2019 17:59

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	92	82-136	06/29/2019 17:59
Benzene-D6	111	55-122	06/29/2019 17:59

Analyst(s): TK

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC38 06291908.D	180331

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	ND	0.25	1	06/29/2019 18:37

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
Dibromofluoromethane	92	82-136	06/29/2019 18:37
Benzene-D6	108	55-122	06/29/2019 18:37

Analyst(s): TK



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) + Misc. in SIM Mode w/ GPC Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC17 06261926.D	180419

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzoic Acid	ND	0.96	1.2	1	06/26/2019 21:11
Acenaphthene	ND	0.0012	0.0013	1	06/26/2019 21:11
Acenaphthylene	ND	0.0012	0.0013	1	06/26/2019 21:11
Anthracene	ND	0.00096	0.0013	1	06/26/2019 21:11
Benzo (a) anthracene	ND	0.0044	0.0050	1	06/26/2019 21:11
Benzo (a) pyrene	ND	0.0011	0.0025	1	06/26/2019 21:11
Benzo (b) fluoranthene	ND	0.0012	0.0013	1	06/26/2019 21:11
Benzo (g,h,i) perylene	ND	0.0010	0.0025	1	06/26/2019 21:11
Benzo (k) fluoranthene	ND	0.0010	0.0013	1	06/26/2019 21:11
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	1	06/26/2019 21:11
Butylbenzyl Phthalate	ND	0.023	0.025	1	06/26/2019 21:11
Chrysene	ND	0.00098	0.0025	1	06/26/2019 21:11
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	1	06/26/2019 21:11
2,4-Dichlorophenol	ND	0.0017	0.013	1	06/26/2019 21:11
Diethyl Phthalate	ND	0.0023	0.0050	1	06/26/2019 21:11
Dimethyl Phthalate	ND	0.0024	0.0025	1	06/26/2019 21:11
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	06/26/2019 21:11
Fluoranthene	ND	0.0011	0.0013	1	06/26/2019 21:11
Fluorene	ND	0.0019	0.0025	1	06/26/2019 21:11
Hexachloroethane	ND	0.0012	0.0025	1	06/26/2019 21:11
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	06/26/2019 21:11
2-Methylnaphthalene	ND	0.0018	0.0025	1	06/26/2019 21:11
Naphthalene	ND	0.0013	0.0013	1	06/26/2019 21:11
Phenanthrene	ND	0.0011	0.0050	1	06/26/2019 21:11
Phenol	ND	0.0016	0.0050	1	06/26/2019 21:11
Pyrene	ND	0.0012	0.0025	1	06/26/2019 21:11
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	06/26/2019 21:11

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorophenol	101	30-130	06/26/2019 21:11
2-Fluorobiphenyl	80	30-130	06/26/2019 21:11

Analyst(s): REB

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Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) + Misc. in SIM Mode w/ GPC Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC17 06271905.D	180419

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzoic Acid	ND	0.96	1.2	1	06/27/2019 11:22
Acenaphthene	ND	0.0012	0.0013	1	06/27/2019 11:22
Acenaphthylene	ND	0.0012	0.0013	1	06/27/2019 11:22
Anthracene	ND	0.00096	0.0013	1	06/27/2019 11:22
Benzo (a) anthracene	ND	0.0044	0.0050	1	06/27/2019 11:22
Benzo (a) pyrene	ND	0.0011	0.0025	1	06/27/2019 11:22
Benzo (b) fluoranthene	ND	0.0012	0.0013	1	06/27/2019 11:22
Benzo (g,h,i) perylene	ND	0.0010	0.0025	1	06/27/2019 11:22
Benzo (k) fluoranthene	ND	0.0010	0.0013	1	06/27/2019 11:22
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	1	06/27/2019 11:22
Butylbenzyl Phthalate	ND	0.023	0.025	1	06/27/2019 11:22
Chrysene	ND	0.00098	0.0025	1	06/27/2019 11:22
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	1	06/27/2019 11:22
2,4-Dichlorophenol	ND	0.0017	0.013	1	06/27/2019 11:22
Diethyl Phthalate	ND	0.0023	0.0050	1	06/27/2019 11:22
Dimethyl Phthalate	ND	0.0024	0.0025	1	06/27/2019 11:22
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	06/27/2019 11:22
Fluoranthene	ND	0.0011	0.0013	1	06/27/2019 11:22
Fluorene	ND	0.0019	0.0025	1	06/27/2019 11:22
Hexachloroethane	ND	0.0012	0.0025	1	06/27/2019 11:22
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	06/27/2019 11:22
2-Methylnaphthalene	ND	0.0018	0.0025	1	06/27/2019 11:22
Naphthalene	ND	0.0013	0.0013	1	06/27/2019 11:22
Phenanthrene	ND	0.0011	0.0050	1	06/27/2019 11:22
Phenol	ND	0.0016	0.0050	1	06/27/2019 11:22
Pyrene	ND	0.0012	0.0025	1	06/27/2019 11:22
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	06/27/2019 11:22

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorophenol	121	30-130	06/27/2019 11:22
2-Fluorobiphenyl	97	30-130	06/27/2019 11:22

Analyst(s): REB

(Cont.)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) + Misc. in SIM Mode w/ GPC Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC17 06271906.D	180419

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzoic Acid	ND	0.96	1.2	1	06/27/2019 11:49
Acenaphthene	ND	0.0012	0.0013	1	06/27/2019 11:49
Acenaphthylene	ND	0.0012	0.0013	1	06/27/2019 11:49
Anthracene	ND	0.00096	0.0013	1	06/27/2019 11:49
Benzo (a) anthracene	ND	0.0044	0.0050	1	06/27/2019 11:49
Benzo (a) pyrene	ND	0.0011	0.0025	1	06/27/2019 11:49
Benzo (b) fluoranthene	ND	0.0012	0.0013	1	06/27/2019 11:49
Benzo (g,h,i) perylene	ND	0.0010	0.0025	1	06/27/2019 11:49
Benzo (k) fluoranthene	ND	0.0010	0.0013	1	06/27/2019 11:49
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	1	06/27/2019 11:49
Butylbenzyl Phthalate	ND	0.023	0.025	1	06/27/2019 11:49
Chrysene	ND	0.00098	0.0025	1	06/27/2019 11:49
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	1	06/27/2019 11:49
2,4-Dichlorophenol	ND	0.0017	0.013	1	06/27/2019 11:49
Diethyl Phthalate	ND	0.0023	0.0050	1	06/27/2019 11:49
Dimethyl Phthalate	ND	0.0024	0.0025	1	06/27/2019 11:49
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	06/27/2019 11:49
Fluoranthene	ND	0.0011	0.0013	1	06/27/2019 11:49
Fluorene	ND	0.0019	0.0025	1	06/27/2019 11:49
Hexachloroethane	ND	0.0012	0.0025	1	06/27/2019 11:49
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	06/27/2019 11:49
2-Methylnaphthalene	ND	0.0018	0.0025	1	06/27/2019 11:49
Naphthalene	ND	0.0013	0.0013	1	06/27/2019 11:49
Phenanthrene	ND	0.0011	0.0050	1	06/27/2019 11:49
Phenol	ND	0.0016	0.0050	1	06/27/2019 11:49
Pyrene	ND	0.0012	0.0025	1	06/27/2019 11:49
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	06/27/2019 11:49

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorophenol	121	30-130	06/27/2019 11:49
2-Fluorobiphenyl	98	30-130	06/27/2019 11:49

Analyst(s): REB

(Cont.)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/26/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) + Misc. in SIM Mode w/ GPC Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC17 06271907.D	180419

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzoic Acid	ND	0.96	1.2	1	06/27/2019 12:17
Acenaphthene	ND	0.0012	0.0013	1	06/27/2019 12:17
Acenaphthylene	ND	0.0012	0.0013	1	06/27/2019 12:17
Anthracene	ND	0.00096	0.0013	1	06/27/2019 12:17
Benzo (a) anthracene	ND	0.0044	0.0050	1	06/27/2019 12:17
Benzo (a) pyrene	ND	0.0011	0.0025	1	06/27/2019 12:17
Benzo (b) fluoranthene	ND	0.0012	0.0013	1	06/27/2019 12:17
Benzo (g,h,i) perylene	ND	0.0010	0.0025	1	06/27/2019 12:17
Benzo (k) fluoranthene	ND	0.0010	0.0013	1	06/27/2019 12:17
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	1	06/27/2019 12:17
Butylbenzyl Phthalate	ND	0.023	0.025	1	06/27/2019 12:17
Chrysene	ND	0.00098	0.0025	1	06/27/2019 12:17
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	1	06/27/2019 12:17
2,4-Dichlorophenol	ND	0.0017	0.013	1	06/27/2019 12:17
Diethyl Phthalate	ND	0.0023	0.0050	1	06/27/2019 12:17
Dimethyl Phthalate	ND	0.0024	0.0025	1	06/27/2019 12:17
2,4-Dinitrotoluene	ND	0.0011	0.0063	1	06/27/2019 12:17
Fluoranthene	ND	0.0011	0.0013	1	06/27/2019 12:17
Fluorene	ND	0.0019	0.0025	1	06/27/2019 12:17
Hexachloroethane	ND	0.0012	0.0025	1	06/27/2019 12:17
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	1	06/27/2019 12:17
2-Methylnaphthalene	ND	0.0018	0.0025	1	06/27/2019 12:17
Naphthalene	ND	0.0013	0.0013	1	06/27/2019 12:17
Phenanthrene	ND	0.0011	0.0050	1	06/27/2019 12:17
Phenol	ND	0.0016	0.0050	1	06/27/2019 12:17
Pyrene	ND	0.0012	0.0025	1	06/27/2019 12:17
2,4,6-Trichlorophenol	ND	0.0012	0.013	1	06/27/2019 12:17

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
2-Fluorophenol	153	S	30-130	06/27/2019 12:17
2-Fluorobiphenyl	126		30-130	06/27/2019 12:17

Analyst(s): REB

Analytical Comments: c2



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	ICP-MS3 115SMPLD	180334

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.60	0.50	1	06/26/2019 22:35
Arsenic	5.0	0.50	1	06/26/2019 22:35
Barium	210	5.0	1	06/26/2019 22:35
Beryllium	0.71	0.50	1	06/26/2019 22:35
Cadmium	0.49	0.25	1	06/26/2019 22:35
Chromium	78	0.50	1	06/26/2019 22:35
Cobalt	10	0.50	1	06/26/2019 22:35
Copper	39	0.50	1	06/26/2019 22:35
Lead	5.1	0.50	1	06/26/2019 22:35
Mercury	0.052	0.050	1	06/26/2019 22:35
Molybdenum	1.7	0.50	1	06/26/2019 22:35
Nickel	72	0.50	1	06/26/2019 22:35
Selenium	ND	0.50	1	06/26/2019 22:35
Silver	ND	0.50	1	06/26/2019 22:35
Thallium	ND	0.50	1	06/26/2019 22:35
Vanadium	72	0.50	1	06/26/2019 22:35
Zinc	92	5.0	1	06/26/2019 22:35

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	128	70-130	06/26/2019 22:35

Analyst(s): JC



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	ICP-MS3 116SMPL.D	180334

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.55	0.50	1	06/26/2019 22:41
Arsenic	5.1	0.50	1	06/26/2019 22:41
Barium	200	5.0	1	06/26/2019 22:41
Beryllium	0.66	0.50	1	06/26/2019 22:41
Cadmium	0.45	0.25	1	06/26/2019 22:41
Chromium	75	0.50	1	06/26/2019 22:41
Cobalt	9.3	0.50	1	06/26/2019 22:41
Copper	36	0.50	1	06/26/2019 22:41
Lead	5.3	0.50	1	06/26/2019 22:41
Mercury	0.051	0.050	1	06/26/2019 22:41
Molybdenum	1.6	0.50	1	06/26/2019 22:41
Nickel	68	0.50	1	06/26/2019 22:41
Selenium	ND	0.50	1	06/26/2019 22:41
Silver	ND	0.50	1	06/26/2019 22:41
Thallium	ND	0.50	1	06/26/2019 22:41
Vanadium	70	0.50	1	06/26/2019 22:41
Zinc	85	5.0	1	06/26/2019 22:41

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	111	70-130	06/26/2019 22:41

Analyst(s): JC



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	ICP-MS3 117SMPLD	180334

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.59	0.50	1	06/26/2019 22:47
Arsenic	5.1	0.50	1	06/26/2019 22:47
Barium	210	5.0	1	06/26/2019 22:47
Beryllium	0.74	0.50	1	06/26/2019 22:47
Cadmium	0.53	0.25	1	06/26/2019 22:47
Chromium	86	0.50	1	06/26/2019 22:47
Cobalt	12	0.50	1	06/26/2019 22:47
Copper	39	0.50	1	06/26/2019 22:47
Lead	6.0	0.50	1	06/26/2019 22:47
Mercury	ND	0.050	1	06/26/2019 22:47
Molybdenum	1.6	0.50	1	06/26/2019 22:47
Nickel	89	0.50	1	06/26/2019 22:47
Selenium	0.54	0.50	1	06/26/2019 22:47
Silver	ND	0.50	1	06/26/2019 22:47
Thallium	ND	0.50	1	06/26/2019 22:47
Vanadium	92	0.50	1	06/26/2019 22:47
Zinc	110	5.0	1	06/26/2019 22:47

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	127	70-130	06/26/2019 22:47

Analyst(s): JC



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	ICP-MS3 118SMPLD	180334

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.56	0.50	1	06/26/2019 22:53
Arsenic	4.9	0.50	1	06/26/2019 22:53
Barium	230	5.0	1	06/26/2019 22:53
Beryllium	0.76	0.50	1	06/26/2019 22:53
Cadmium	0.45	0.25	1	06/26/2019 22:53
Chromium	77	0.50	1	06/26/2019 22:53
Cobalt	9.5	0.50	1	06/26/2019 22:53
Copper	39	0.50	1	06/26/2019 22:53
Lead	5.5	0.50	1	06/26/2019 22:53
Mercury	ND	0.050	1	06/26/2019 22:53
Molybdenum	1.5	0.50	1	06/26/2019 22:53
Nickel	71	0.50	1	06/26/2019 22:53
Selenium	ND	0.50	1	06/26/2019 22:53
Silver	ND	0.50	1	06/26/2019 22:53
Thallium	ND	0.50	1	06/26/2019 22:53
Vanadium	70	0.50	1	06/26/2019 22:53
Zinc	89	5.0	1	06/26/2019 22:53

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	120	70-130	06/26/2019 22:53

Analyst(s): JC



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW7471B
Analytical Method: SW7471B
Unit: mg/Kg

Mercury by Cold Vapor Atomic Absorption

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	AA1 _28	180313

Analytes	Result	RL	DF	Date Analyzed
Mercury	0.022	0.017	1	06/27/2019 13:08

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	AA1 _29	180313

Analytes	Result	RL	DF	Date Analyzed
Mercury	0.023	0.017	1	06/27/2019 13:11

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	AA1 _30	180313

Analytes	Result	RL	DF	Date Analyzed
Mercury	0.020	0.017	1	06/27/2019 13:14

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	AA1 _35	180313

Analytes	Result	RL	DF	Date Analyzed
Mercury	0.031	0.017	1	06/27/2019 13:37

Analyst(s): JC



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW9045C
Analytical Method: SW9045C
Unit: pH units @ 25°C

pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	WetChem	180346

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.84	±0.1	1	06/25/2019 20:33

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	WetChem	180346

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.66	±0.1	1	06/25/2019 20:36

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	WetChem	180346

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.85	±0.1	1	06/25/2019 20:39

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	WetChem	180346

Analytes	Result	Accuracy	DF	Date Analyzed
pH	8.83	±0.1	1	06/25/2019 20:42

Analyst(s): PHU



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	GC6B 06281921.D	180288

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/28/2019 22:50

Surrogates	REC (%)	Limits	Date Analyzed
C9	93	74-123	06/28/2019 22:50

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	GC6B 06281925.D	180332

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2019 00:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	74-123	06/29/2019 00:08

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	GC6B 06281929.D	180332

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2019 01:27

Surrogates	REC (%)	Limits	Date Analyzed
C9	92	74-123	06/29/2019 01:27

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	GC6B 06281933.D	180332

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	06/29/2019 02:45

Surrogates	REC (%)	Limits	Date Analyzed
C9	93	74-123	06/29/2019 02:45

Analyst(s): JIS



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/27/19
Instrument: IC2
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180443
Extraction Method: SW3060A
Analytical Method: SW7199
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180443

QC Summary Report for SW7199 (Hexavalent chromium)

Analyte	MB Result	MDL	RL			
Hexavalent chromium	ND	0.20	0.20	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Hexavalent chromium	4.1	4.2	4	104	106	70-130	2.38	10



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19 - 6/27/19
Instrument: GC20, GC23
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180393
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180393

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.000036	0.00010	-	-	-
a-BHC	ND	0.000025	0.00010	-	-	-
b-BHC	ND	0.00025	0.00030	-	-	-
d-BHC	ND	0.00013	0.00020	-	-	-
g-BHC	ND	0.000066	0.00010	-	-	-
Chlordane (Technical)	ND	0.00043	0.0025	-	-	-
a-Chlordane	ND	0.000095	0.00010	-	-	-
g-Chlordane	ND	0.000047	0.00010	-	-	-
p,p-DDD	ND	0.000043	0.00010	-	-	-
p,p-DDE	ND	0.000094	0.00010	-	-	-
p,p-DDT	ND	0.000092	0.00010	-	-	-
Dieldrin	ND	0.000061	0.00010	-	-	-
Endosulfan I	ND	0.000048	0.00010	-	-	-
Endosulfan II	ND	0.000076	0.00010	-	-	-
Endosulfan sulfate	ND	0.000078	0.00010	-	-	-
Endrin	ND	0.000035	0.00010	-	-	-
Endrin aldehyde	ND	0.000067	0.00010	-	-	-
Endrin ketone	ND	0.000084	0.00010	-	-	-
Heptachlor	ND	0.000040	0.00010	-	-	-
Heptachlor epoxide	ND	0.000054	0.00010	-	-	-
Hexachlorobenzene	ND	0.00011	0.0010	-	-	-
Hexachlorocyclopentadiene	ND	0.00034	0.0020	-	-	-
Methoxychlor	ND	0.00013	0.00020	-	-	-
Toxaphene	ND	0.0034	0.0050	-	-	-
Aroclor1016	ND	0.0020	0.0050	-	-	-
Aroclor1221	ND	0.0022	0.0050	-	-	-
Aroclor1232	ND	0.0022	0.0050	-	-	-
Aroclor1242	ND	0.0022	0.0050	-	-	-
Aroclor1248	ND	0.0022	0.0050	-	-	-
Aroclor1254	ND	0.0022	0.0050	-	-	-
Aroclor1260	ND	0.0022	0.0050	-	-	-
PCBs, total	ND	N/A	0.0050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0039			0.0050	79	28-170

(Cont.)



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19 - 6/27/19
Instrument: GC20, GC23
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180393
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180393

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.0055	0.0055	0.0050	110	109	31-155	0.170	20
a-BHC	0.0050	0.0050	0.0050	100	100	32-160	0	20
b-BHC	0.0050	0.0050	0.0050	101	101	44-149	0	20
d-BHC	0.0058	0.0058	0.0050	116	116	37-157	0	20
g-BHC	0.0053	0.0053	0.0050	106	106	43-154	0	20
a-Chlordane	0.0054	0.0053	0.0050	107	107	39-150	0	20
g-Chlordane	0.0055	0.0054	0.0050	109	109	39-151	0	20
p,p-DDD	0.0046	0.0046	0.0050	92	91	30-158	0.300	20
p,p-DDE	0.0054	0.0054	0.0050	109	108	47-149	0.447	20
p,p-DDT	0.0050	0.0050	0.0050	101	101	56-166	0	20
Dieldrin	0.0056	0.0056	0.0050	112	112	50-163	0	20
Endosulfan I	0.0053	0.0053	0.0050	105	105	45-159	0	20
Endosulfan II	0.0048	0.0048	0.0050	97	97	41-155	0	20
Endosulfan sulfate	0.0050	0.0050	0.0050	101	101	45-156	0	20
Endrin	0.0053	0.0053	0.0050	105	106	54-154	0.356	20
Endrin aldehyde	0.0052	0.0052	0.0050	104	104	27-159	0	20
Endrin ketone	0.0049	0.0048	0.0050	97	97	40-147	0	20
Heptachlor	0.0054	0.0054	0.0050	108	108	52-165	0	20
Heptachlor epoxide	0.0050	0.0050	0.0050	100	99	46-145	0.120	20
Hexachlorobenzene	0.0049	0.0049	0.0050	98	98	22-156	0	20
Hexachlorocyclopentadiene	0.0047	0.0047	0.0050	93	95	43-173	1.48	20
Methoxychlor	0.0056	0.0055	0.0050	111	111	49-150	0	20
Aroclor1016	0.012	0.012	0.015	82	83	49-120	1.14	20
Aroclor1260	0.015	0.015	0.015	102	99	48-160	2.89	20
Surrogate Recovery								
Decachlorobiphenyl	0.0048	0.0047	0.0050	97	94	28-170	2.59	20



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.067	0.10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.00078	0.0050	-	-	-
Benzene	ND	0.00098	0.0050	-	-	-
Bromobenzene	ND	0.0012	0.0050	-	-	-
Bromochloromethane	ND	0.0011	0.0050	-	-	-
Bromodichloromethane	ND	0.00028	0.0010	-	-	-
Bromoform	ND	0.0017	0.0050	-	-	-
Bromomethane	ND	0.0018	0.0050	-	-	-
2-Butanone (MEK)	ND	0.011	0.020	-	-	-
t-Butyl alcohol (TBA)	ND	0.032	0.050	-	-	-
n-Butyl benzene	ND	0.0021	0.0050	-	-	-
sec-Butyl benzene	ND	0.0017	0.0050	-	-	-
tert-Butyl benzene	ND	0.0013	0.0050	-	-	-
Carbon Disulfide	ND	0.0030	0.0050	-	-	-
Carbon Tetrachloride	ND	0.00090	0.0050	-	-	-
Chlorobenzene	ND	0.00086	0.0050	-	-	-
Chloroethane	ND	0.0020	0.0050	-	-	-
Chloroform	ND	0.00011	0.0050	-	-	-
Chloromethane	ND	0.0026	0.0050	-	-	-
2-Chlorotoluene	ND	0.0016	0.0050	-	-	-
4-Chlorotoluene	ND	0.0012	0.0050	-	-	-
Dibromochloromethane	ND	0.00019	0.0050	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.00016	0.00025	-	-	-
1,2-Dibromoethane (EDB)	ND	0.000034	0.00010	-	-	-
Dibromomethane	ND	0.00081	0.0050	-	-	-
1,2-Dichlorobenzene	ND	0.0011	0.0050	-	-	-
1,3-Dichlorobenzene	ND	0.0010	0.0050	-	-	-
1,4-Dichlorobenzene	ND	0.00085	0.0050	-	-	-
Dichlorodifluoromethane	ND	0.0013	0.0050	-	-	-
1,1-Dichloroethane	ND	0.00088	0.0050	-	-	-
1,2-Dichloroethane (1,2-DCA)	0.000093,J	0.000043	0.00025	-	-	-
1,1-Dichloroethene	ND	0.000028	0.00025	-	-	-
cis-1,2-Dichloroethene	ND	0.00084	0.0050	-	-	-
trans-1,2-Dichloroethene	ND	0.0011	0.0050	-	-	-
1,2-Dichloropropane	ND	0.00080	0.0050	-	-	-
1,3-Dichloropropane	ND	0.00070	0.0050	-	-	-
2,2-Dichloropropane	ND	0.0019	0.0050	-	-	-
1,1-Dichloropropene	ND	0.00083	0.0050	-	-	-

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.0017	0.0050	-	-	-
trans-1,3-Dichloropropene	ND	0.0020	0.0050	-	-	-
Diisopropyl ether (DIPE)	ND	0.0011	0.0050	-	-	-
Ethylbenzene	ND	0.00095	0.0050	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0011	0.0050	-	-	-
Freon 113	ND	0.0011	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0023	0.0050	-	-	-
Hexachloroethane	ND	0.0014	0.0050	-	-	-
2-Hexanone	ND	0.0031	0.0050	-	-	-
Isopropylbenzene	ND	0.0017	0.0050	-	-	-
4-Isopropyl toluene	ND	0.0015	0.0050	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0017	0.0050	-	-	-
Methylene chloride	ND	0.0080	0.010	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.0029	0.0050	-	-	-
Naphthalene	ND	0.0036	0.0050	-	-	-
n-Propyl benzene	ND	0.0016	0.0050	-	-	-
Styrene	ND	0.0027	0.0050	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.00089	0.0050	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.000087	0.00025	-	-	-
Tetrachloroethene	ND	0.00020	0.0010	-	-	-
Toluene	ND	0.0016	0.0050	-	-	-
1,2,3-Trichlorobenzene	ND	0.0037	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.0018	0.0050	-	-	-
1,1,1-Trichloroethane	ND	0.00084	0.0050	-	-	-
1,1,2-Trichloroethane	ND	0.00067	0.0050	-	-	-
Trichloroethene	ND	0.0016	0.0050	-	-	-
Trichlorofluoromethane	ND	0.0014	0.0050	-	-	-
1,2,3-Trichloropropane	ND	0.000042	0.00010	-	-	-
1,2,4-Trimethylbenzene	ND	0.0015	0.0050	-	-	-
1,3,5-Trimethylbenzene	ND	0.0016	0.0050	-	-	-
Vinyl Chloride	ND	0.000053	0.00025	-	-	-
m,p-Xylene	ND	0.0023	0.0050	-	-	-
o-Xylene	ND	0.00074	0.0050	-	-	-

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.11			0.12	87	87-127
Toluene-d8	0.11			0.12	90	93-141
4-BFB	0.011			0.012	85	84-137
Benzene-d6	0.094			0.10	94	67-131
Ethylbenzene-d10	0.11			0.10	115	78-153
1,2-DCB-d4	0.074			0.10	74	63-109

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.23	0.25	0.20	116	126	48-156	8.06	30
tert-Amyl methyl ether (TAME)	0.016	0.019	0.020	81	94	56-115	14.4	30
Benzene	0.019	0.023	0.020	96	113	63-131	16.4	30
Bromobenzene	0.017	0.020	0.020	85	98	66-127	13.3	30
Bromochloromethane	0.016	0.019	0.020	82	96	64-124	16.6	30
Bromodichloromethane	0.018	0.020	0.020	88	101	64-120	14.3	30
Bromoform	0.012	0.013	0.020	58	67	48-92	14.3	30
Bromomethane	0.022	0.024	0.020	109	118	25-163	7.26	30
2-Butanone (MEK)	0.051	0.061	0.080	64	77	51-133	18.1	30
t-Butyl alcohol (TBA)	0.062	0.076	0.080	77	95	52-129	20.9	30
n-Butyl benzene	0.026	0.032	0.020	130	160	83-200	20.8	30
sec-Butyl benzene	0.026	0.034	0.020	132	169	81-199	24.7	30
tert-Butyl benzene	0.022	0.028	0.020	111	138	79-178	22.1	30
Carbon Disulfide	0.020	0.023	0.020	98	115	64-136	16.1	30
Carbon Tetrachloride	0.019	0.023	0.020	96	113	66-140	16.3	30
Chlorobenzene	0.017	0.020	0.020	85	99	73-116	15.5	30
Chloroethane	0.022	0.024	0.020	108	119	35-147	9.46	30
Chloroform	0.019	0.022	0.020	96	111	65-130	15.2	30
Chloromethane	0.023	0.025	0.020	114	124	30-137	8.13	30
2-Chlorotoluene	0.021	0.026	0.020	106	128	75-152	18.4	30
4-Chlorotoluene	0.020	0.023	0.020	98	117	71-148	17.5	30
Dibromochloromethane	0.014	0.016	0.020	71	82	61-106	14.4	30
1,2-Dibromo-3-chloropropane	0.0059	0.0067	0.010	59	67	36-120	11.4	30
1,2-Dibromoethane (EDB)	0.0078	0.0089	0.010	78	89	67-118	12.8	30
Dibromomethane	0.017	0.019	0.020	85	96	61-116	12.4	30
1,2-Dichlorobenzene	0.014	0.017	0.020	72	84	59-106	15.5	30
1,3-Dichlorobenzene	0.018	0.021	0.020	90	106	75-129	16.6	30
1,4-Dichlorobenzene	0.017	0.020	0.020	83	99	66-127	18.4	30
Dichlorodifluoromethane	0.012	0.013	0.020	61	64	13-74	3.82	30
1,1-Dichloroethane	0.020	0.024	0.020	100	118	65-134	16.7	30
1,2-Dichloroethane (1,2-DCA)	0.020	0.023	0.020	98	113	57-131	14.1	30
1,1-Dichloroethene	0.019	0.022	0.020	95	112	62-127	17.0	30
cis-1,2-Dichloroethene	0.018	0.021	0.020	91	106	66-130	15.9	30
trans-1,2-Dichloroethene	0.019	0.022	0.020	95	111	60-131	15.9	30
1,2-Dichloropropane	0.019	0.022	0.020	94	110	63-127	14.9	30
1,3-Dichloropropane	0.018	0.020	0.020	88	102	68-124	15.0	30
2,2-Dichloropropane	0.018	0.022	0.020	92	108	63-150	15.5	30
1,1-Dichloropropene	0.020	0.024	0.020	101	119	67-134	16.3	30

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.017	0.020	0.020	85	99	65-138	14.7	30
trans-1,3-Dichloropropene	0.018	0.020	0.020	88	102	66-124	14.4	30
Diisopropyl ether (DIPE)	0.020	0.023	0.020	98	113	58-129	13.9	30
Ethylbenzene	0.019	0.024	0.020	97	118	73-145	19.8	30
Ethyl tert-butyl ether (ETBE)	0.018	0.021	0.020	92	106	62-125	14.7	30
Freon 113	0.018	0.021	0.020	91	105	55-116	14.1	30
Hexachlorobutadiene	0.021	0.025	0.020	105	127	75-178	19.0	30
Hexachloroethane	0.022	0.025	0.020	110	127	75-152	14.4	30
2-Hexanone	0.015	0.017	0.020	75	85	41-113	13.1	30
Isopropylbenzene	0.024	0.029	0.020	119	144	67-172	18.8	30
4-Isopropyl toluene	0.023	0.028	0.020	114	140	88-171	21.0	30
Methyl-t-butyl ether (MTBE)	0.018	0.021	0.020	91	103	58-122	13.1	30
Methylene chloride	0.019	0.022	0.020	96	110	57-140	13.8	30
4-Methyl-2-pentanone (MIBK)	0.016	0.017	0.020	78	86	42-117	10.7	30
Naphthalene	0.0072	0.0071	0.020	36	35	29-65	1.42	30
n-Propyl benzene	0.023	0.029	0.020	114	144	85-174	22.8	30
Styrene	0.015	0.018	0.020	73	92	63-126	22.4	30
1,1,1,2-Tetrachloroethane	0.016	0.019	0.020	81	93	68-131	14.2	30
1,1,2,2-Tetrachloroethane	0.016	0.016	0.020	80	78	45-121	2.27	30
Tetrachloroethene	0.018	0.021	0.020	90	107	65-150	17.4	30
Toluene	0.019	0.022	0.020	95	112	72-135	16.4	30
1,2,3-Trichlorobenzene	0.0096	0.010	0.020	48	51	35-80	5.10	30
1,2,4-Trichlorobenzene	0.012	0.013	0.020	60	66	45-103	9.00	30
1,1,1-Trichloroethane	0.019	0.023	0.020	97	114	67-137	15.9	30
1,1,2-Trichloroethane	0.016	0.019	0.020	82	95	67-117	14.6	30
Trichloroethene	0.017	0.022	0.020	84	109	62-135	25.2	30
Trichlorofluoromethane	0.019	0.022	0.020	94	111	56-124	16.0	30
1,2,3-Trichloropropane	0.0096	0.011	0.010	96	105	58-133	8.89	30
1,2,4-Trimethylbenzene	0.021	0.026	0.020	106	129	78-161	19.2	30
1,3,5-Trimethylbenzene	0.023	0.027	0.020	115	136	85-170	16.8	30
Vinyl Chloride	0.011	0.012	0.010	109	119	32-142	9.16	30
m,p-Xylene	0.034	0.043	0.040	86	107	70-138	22.1	30
o-Xylene	0.018	0.023	0.020	90	113	69-135	22.0	30

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: GC18
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180311
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180311

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.11	0.11	0.12	85, F3	85, F3	87-127	0	30
Toluene-d8	0.12	0.12	0.12	92, F3	93	93-141	0.634	30
4-BFB	0.011	0.011	0.012	88	87	84-137	0.709	30
Benzene-d6	0.091	0.096	0.10	91	96	67-131	5.34	30
Ethylbenzene-d10	0.11	0.12	0.10	110	120	78-153	9.27	30
1,2-DCB-d4	0.078	0.085	0.10	78	85	63-109	7.69	30



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/25/19 - 6/26/19
Instrument: GC16, GC18, GC38
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180331
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS/LCSD-180331

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.25	0.25	-	-	-
Surrogate Recovery						
Dibromofluoromethane	0.11			0.12	91	70-130
Benzene-D6	0.11			0.10	113	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(g) (C6-C12)	0.99	1.0	1	99	104	67-117	5.36	20
Surrogate Recovery								
Dibromofluoromethane	0.12	0.12	0.12	94	95	87-127	0.883	20
Benzene-D6	0.12	0.12	0.10	118	120	67-131	2.47	20



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19
Instrument: GC17
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180419
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180419
 1906C53-001AMS/MSD

QC Summary Report for SW8270C w/ GPC Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
1-Methylnaphthalene	ND	0.0011	0.0013	-	-	-
Benzoic Acid	ND	0.96	1.2	-	-	-
Acenaphthene	ND	0.0012	0.0013	-	-	-
Acenaphthylene	ND	0.0012	0.0013	-	-	-
Anthracene	ND	0.00096	0.0013	-	-	-
Benzo (a) anthracene	ND	0.0044	0.0050	-	-	-
Benzo (a) pyrene	ND	0.0011	0.0025	-	-	-
Benzo (b) fluoranthene	ND	0.0012	0.0013	-	-	-
Benzo (g,h,i) perylene	ND	0.0010	0.0025	-	-	-
Benzo (k) fluoranthene	ND	0.0010	0.0013	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0019	0.0025	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0018	0.0025	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0045	0.0050	-	-	-
Butylbenzyl Phthalate	ND	0.023	0.025	-	-	-
Chrysene	ND	0.00098	0.0025	-	-	-
Dibenzo (a,h) anthracene	ND	0.0011	0.0025	-	-	-
Di-n-butyl Phthalate	ND	0.0018	0.0025	-	-	-
1,2-Dichlorobenzene	ND	0.13	0.25	-	-	-
1,3-Dichlorobenzene	ND	0.15	0.25	-	-	-
1,4-Dichlorobenzene	ND	0.15	0.25	-	-	-
3,3-Dichlorobenzidine	ND	0.00096	0.0025	-	-	-
2,4-Dichlorophenol	ND	0.0017	0.013	-	-	-
Diethyl Phthalate	ND	0.0023	0.0050	-	-	-
Dimethyl Phthalate	ND	0.0024	0.0025	-	-	-
2,4-Dinitrotoluene	ND	0.0011	0.0063	-	-	-
2,6-Dinitrotoluene	ND	0.0019	0.0025	-	-	-
Di-n-octyl Phthalate	ND	0.0032	0.0050	-	-	-
Fluoranthene	ND	0.0011	0.0013	-	-	-
Fluorene	ND	0.0019	0.0025	-	-	-
Hexachlorobutadiene	ND	0.0017	0.0025	-	-	-
Hexachloroethane	ND	0.0012	0.0025	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	-	-	-
2-Methylnaphthalene	ND	0.0018	0.0025	-	-	-
Naphthalene	ND	0.0013	0.0013	-	-	-
Phenanthrene	ND	0.0011	0.0050	-	-	-
Phenol	0.0043,J	0.0016	0.0050	-	-	-
Pyrene	ND	0.0012	0.0025	-	-	-
1,2,4-Trichlorobenzene	ND	0.15	0.25	-	-	-

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Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19
Instrument: GC17
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180419
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180419
 1906C53-001AMS/MSD

QC Summary Report for SW8270C w/ GPC Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4,6-Trichlorophenol	ND	0.0012	0.013	-	-	-
Surrogate Recovery						
2-Fluorophenol	1.3			1.25	102	71-114
2-Fluorobiphenyl	1.1			1.25	85	69-118



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19
Instrument: GC17
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180419
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180419
 1906C53-001AMS/MSD

QC Summary Report for SW8270C w/ GPC Clean-up

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzoic Acid	17	17	12.5	137	133	90-137	3.19	30
Acenaphthene	0.12	0.12	0.12	100	96	83-119	3.90	30
Acenaphthylene	0.13	0.12	0.12	102	96	80-123	5.56	30
Anthracene	0.13	0.13	0.12	103	101	84-130	2.22	30
Benzo (a) anthracene	0.12	0.12	0.12	98	98	81-123	0	30
Benzo (a) pyrene	0.14	0.14	0.12	113	111	83-137	1.69	30
Benzo (b) fluoranthene	0.14	0.14	0.12	112	112	84-137	0	30
Benzo (g,h,i) perylene	0.13	0.12	0.12	105	99	74-133	6.48	30
Benzo (k) fluoranthene	0.13	0.13	0.12	106	107	78-131	0.602	30
Bis (2-ethylhexyl) Phthalate	0.14	0.12	0.12	112	93	81-148	18.0	30
Butylbenzyl Phthalate	0.15	0.14	0.12	116	114	82-141	1.39	30
Chrysene	0.13	0.13	0.12	107	106	81-127	1.61	30
Dibenzo (a,h) anthracene	0.14	0.13	0.12	116	107	74-145	7.29	30
1,2-Dichlorobenzene	2.2	2.2	2.5	86	87	76-104	0.652	30
1,3-Dichlorobenzene	2.2	2.2	2.5	88	87	72-106	1.14	30
1,4-Dichlorobenzene	2.0	2.0	2.5	81	79	75-109	1.45	30
2,4-Dichlorophenol	2.7	2.7	2.5	108	107	83-135	1.60	30
Diethyl Phthalate	0.15	0.14	0.12	118	111	88-126	6.69	30
Dimethyl Phthalate	0.14	0.13	0.12	109	103	86-123	5.36	30
2,4-Dinitrotoluene	0.16	0.15	0.12	126	120	28-166	4.96	30
Fluoranthene	0.15	0.14	0.12	119	113	84-136	5.61	30
Fluorene	0.15	0.14	0.12	119	114	71-144	3.76	30
Hexachlorobutadiene	0.13	0.12	0.12	101	99	80-122	1.69	30
Hexachloroethane	0.10	0.10	0.12	83	83	70-106	0	30
Indeno (1,2,3-cd) pyrene	0.14	0.13	0.12	112	106	75-139	6.12	30
2-Methylnaphthalene	0.14	0.13	0.12	108	107	78-134	0.961	30
Naphthalene	0.10	0.099	0.12	81	79, F2	80-115	2.31	30
Phenanthrene	0.12	0.12	0.12	96	94	82-119	2.20	30
Phenol	0.50	0.50	0.50	99	99	66-125	0	30
Pyrene	0.12	0.12	0.12	99	100	81-132	0.638	30
1,2,4-Trichlorobenzene	2.6	2.6	2.5	105	103	73-129	2.58	30
2,4,6-Trichlorophenol	0.13	0.13	0.12	105	101	83-129	3.18	30
Surrogate Recovery								
2-Fluorophenol	1.2	1.2	1.25	99	95	71-114	4.32	30
2-Fluorobiphenyl	1.2	1.2	1.25	99	92	69-118	6.43	30

(Cont.)



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/26/19
Date Analyzed: 6/26/19
Instrument: GC17
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180419
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C-SIM
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180419
 1906C53-001AMS/MSD

QC Summary Report for SW8270C w/ GPC Clean-up

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzoic Acid	1	2.9	3.3	12.5	ND	23,F1	27,F1	30-130	12.5	30
Acenaphthene	1	0.13	0.15	0.12	ND	104	117	32-118	11.7	30
Acenaphthylene	1	0.13	0.15	0.12	ND	105	120	32-122	13.4	30
Anthracene	1	0.13	0.15	0.12	ND	107	122	36-125	13.0	30
Benzo (a) anthracene	1	0.12	0.14	0.12	ND	96	109	35-117	12.7	30
Benzo (a) pyrene	1	0.14	0.15	0.12	ND	108	121	42-138	11.3	30
Benzo (b) fluoranthene	1	0.14	0.16	0.12	ND	112	125	37-125	11.3	30
Benzo (g,h,i) perylene	1	0.12	0.14	0.12	ND	97	109	45-146	10.8	30
Benzo (k) fluoranthene	1	0.13	0.15	0.12	ND	105	117	39-124	10.8	30
Bis (2-ethylhexyl) Phthalate	1	0.14	0.16	0.12	ND	116	131,F1	34-124	12.7	30
Butylbenzyl Phthalate	1	0.14	0.16	0.12	ND	113	127	35-127	12.1	30
Chrysene	1	0.13	0.15	0.12	ND	104	118,F1	37-116	12.6	30
Dibenzo (a,h) anthracene	1	0.13	0.15	0.12	ND	104	118	43-141	12.8	30
2,4-Dichlorophenol	1	2.9	3.3	2.5	ND	116	132,F1	31-124	12.6	30
Diethyl Phthalate	1	0.14	0.16	0.12	ND	112	127,F1	35-118	12.4	30
Dimethyl Phthalate	1	0.14	0.15	0.12	ND	108	122,F1	33-118	12.1	30
2,4-Dinitrotoluene	1	0.15	0.17	0.12	ND	121,F1	136,F1	38-117	12.1	30
Fluoranthene	1	0.14	0.15	0.12	ND	108	123	38-126	13.1	30
Fluorene	1	0.14	0.15	0.12	ND	110	123,F1	34-118	11.4	30
Hexachloroethane	1	0.11	0.12	0.12	ND	91	99	32-106	8.82	30
Indeno (1,2,3-cd) pyrene	1	0.13	0.14	0.12	ND	102	114	43-138	10.9	30
2-Methylnaphthalene	1	0.15	0.17	0.12	ND	117	133,F1	30-121	13.4	30
Naphthalene	1	0.11	0.12	0.12	ND	86	97	33-113	12.7	30
Phenanthrene	1	0.12	0.14	0.12	ND	99	112	36-123	11.9	30
Phenol	1	0.54	0.59	0.50	ND	109,F1	119,F1	33-107	8.73	30
Pyrene	1	0.13	0.15	0.12	ND	107	120	38-124	11.8	30
2,4,6-Trichlorophenol	1	0.14	0.16	0.12	ND	110	127	32-128	14.4	30
Surrogate Recovery										
2-Fluorophenol	1	1.4	1.5	1.25		110	122	30-167	10.4	30
2-Fluorobiphenyl	1	1.3	1.5	1.25		101	118	59-113	15.6	30



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/26/19
Instrument: ICP-MS3
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180334
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180334

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.094	0.50	-	-	-
Arsenic	ND	0.14	0.50	-	-	-
Barium	ND	0.97	5.0	-	-	-
Beryllium	ND	0.072	0.50	-	-	-
Cadmium	ND	0.058	0.25	-	-	-
Chromium	ND	0.092	0.50	-	-	-
Cobalt	ND	0.056	0.50	-	-	-
Copper	ND	0.069	0.50	-	-	-
Lead	ND	0.094	0.50	-	-	-
Mercury	ND	0.0050	0.050	-	-	-
Molybdenum	ND	0.23	0.50	-	-	-
Nickel	ND	0.072	0.50	-	-	-
Selenium	ND	0.13	0.50	-	-	-
Silver	ND	0.055	0.50	-	-	-
Thallium	ND	0.10	0.50	-	-	-
Vanadium	ND	0.064	0.50	-	-	-
Zinc	ND	1.4	5.0	-	-	-
Surrogate Recovery						
Terbium	480			500	97	70-130



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/26/19
Instrument: ICP-MS3
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180334
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180334

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	47	47	50	94	93	75-125	1.49	20
Arsenic	42	42	50	85	85	75-125	0	20
Barium	480	480	500	97	95	75-125	1.44	20
Beryllium	49	50	50	98	99	75-125	0.749	20
Cadmium	43	43	50	86	86	75-125	0	20
Chromium	44	44	50	88	87	75-125	1.10	20
Cobalt	48	48	50	97	97	75-125	0	20
Copper	45	44	50	89	88	75-125	1.70	20
Lead	46	46	50	92	92	75-125	0	20
Mercury	1.1	1.1	1.25	87	88	75-125	0.731	20
Molybdenum	47	46	50	93	92	75-125	1.34	20
Nickel	45	44	50	89	87	75-125	2.29	20
Selenium	44	45	50	89	90	75-125	1.37	20
Silver	47	46	50	94	91	75-125	2.44	20
Thallium	45	45	50	91	91	75-125	0	20
Vanadium	44	43	50	88	86	75-125	2.24	20
Zinc	440	430	500	88	87	75-125	1.62	20
Surrogate Recovery								
Terbium	470	470	500	95	93	70-130	1.66	20



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/27/19
Instrument: AA1
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180313
Extraction Method: SW7471B
Analytical Method: SW7471B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180313

QC Summary Report for Mercury

Analyte	MB Result	MDL	RL			
Mercury	ND	0.0087	0.017	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Mercury	0.17	0.16	0.17	99	98	80-120	1.15	20



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/25/19
Instrument: WetChem
Matrix: Water
Project: 2979

WorkOrder: 1906C53
BatchID: 180346
Extraction Method: SW9045C
Analytical Method: SW9045C
Unit: pH units @ 25°C
Sample ID: CCV-180346

QC Summary Report for pH

Analyte	CCV Result	CCV Limits
pH	7.02	6.8-7.2



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/25/19 - 6/26/19
Instrument: GC6B, GC9a
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180288
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180288

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.83	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.8	5.0	-	-	-
Surrogate Recovery						
C9	24			25	94	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	44	44	40	111	110	75-128	0.311	30
Surrogate Recovery								
C9	24	24	25	94	94	72-122	0	30



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/26/19
Instrument: GC9b
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180332
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-180332

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.83	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.8	5.0	-	-	-
Surrogate Recovery						
C9	24			25	98	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43	44	40	107	110	75-128	2.91	30
Surrogate Recovery								
C9	24	24	25	96	97	72-122	0.153	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

WaterTrax WriteOn EDF

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1906C53

ClientCode: TECP

Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:

Kurt Crasper
Tou Bar Equipment Company Inc.
2535 Pulgas Ave.
East Palo Alto, CA 94303
(650) 322-1256 FAX: (650) 322-2841

Email: kurtc@touchatt.com
cc/3rd Party:
PO:
Project: 2979

Bill to:

Accounts Payable
Tou Bar Equipment Company Inc.
2535 Pulgas Ave.
East Palo Alto, CA 94303
invoices@touchatt.com

**Requested TATs: 1 day;
5 days;**

Date Received: 06/25/2019

Date Logged: 06/25/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1906C53-001	1	Soil	6/24/2019 12:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		
1906C53-002	2	Soil	6/24/2019 12:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		
1906C53-003	3	Soil	6/24/2019 12:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		
1906C53-004	4	Soil	6/24/2019 12:00	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A	A	A		

Test Legend:

1	7199_TTLC_LL_S	2	8081pcB_ESL_LL_S	3	8260B_Scan-SIM_S	4	8260GAS_S
5	70_PNASVOCSIMGPC_BAYLAND_S	6	CAM17MS_TTLC_S	7	HG_S	8	PH_S
9	STLC_MSEXTRACTONLY	10	TPH(DMO)_S	11		12	

Project Manager: Rosa Venegas

Prepared by: Agustina Venegas

The following SamplIDs: 001A, 002A, 003A, 004A contain testgroup Baylands_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TOU BAR EQUIPMENT COMPANY INC.

Project: 2979

Work Order: 1906C53

Client Contact: Kurt Crasper

QC Level: LEVEL 2

Contact's Email: kurtc@touchatt.com

Comments:

Date Logged: 6/25/2019

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1906C53-001A	1	Soil	Baylands Requirements	1	8OZ GJ, Unpres	<input type="checkbox"/>	6/24/2019 12:00	5 days		<input type="checkbox"/>	
			STLC (rotated) Extraction Only			<input type="checkbox"/>					
1906C53-002A	2	Soil	STLC (rotated) Extraction Only	1	8OZ GJ, Unpres	<input type="checkbox"/>	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
			Baylands Requirements			<input type="checkbox"/>					
1906C53-003A	3	Soil	STLC (rotated) Extraction Only	1	8OZ GJ, Unpres	<input type="checkbox"/>	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
			Baylands Requirements			<input type="checkbox"/>					
1906C53-004A	4	Soil	STLC (rotated) Extraction Only	1	8OZ GJ, Unpres	<input type="checkbox"/>	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
			Baylands Requirements			<input type="checkbox"/>					

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



Sample Receipt Checklist

Client Name: **Tou Bar Equipment Company Inc.**
 Project: **2979**
 WorkOrder No: **1906C53** Matrix: Soil
 Carrier: Benjamin Yslas (MAI Courier)

Date and Time Received: **6/25/2019 16:40**
 Date Logged: **6/25/2019**
 Received by: Agustina Venegas
 Logged by: Agustina Venegas

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

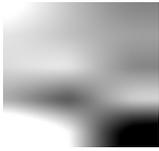
(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 0.6°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1906C53 A

Report Created for: Tou Bar Equipment Company Inc.

2535 Pulgas Ave.
East Palo Alto, CA 94303

Project Contact: Kurt Crasper

Project P.O.:

Project: 2979

Project Received: 06/25/2019

Analytical Report reviewed & approved for release on 07/02/2019 by:



Susan Thompson
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Tou Bar Equipment Company Inc.
Project: 2979
WorkOrder: 1906C53 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: Tou Bar Equipment Company Inc.
Date Received: 6/25/19 16:40
Date Prepared: 6/25/19
Project: 2979

WorkOrder: 1906C53
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1	1906C53-001A	Soil	06/24/2019 12:00	ICP-MS2 174SMPL.D	180351

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.48	0.10	1	07/02/2019 13:27

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
2	1906C53-002A	Soil	06/24/2019 12:00	ICP-MS2 175SMPL.D	180351

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	07/02/2019 13:33

Analyst(s): MIG

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
3	1906C53-003A	Soil	06/24/2019 12:00	ICP-MS2 179SMPL.D	180351

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	07/02/2019 13:58

Analyst(s): JC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
4	1906C53-004A	Soil	06/24/2019 12:00	ICP-MS2 182SMPL.D	180351

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	07/02/2019 14:16

Analyst(s): JC



Quality Control Report

Client: Tou Bar Equipment Company Inc.
Date Prepared: 6/25/19
Date Analyzed: 6/28/19
Instrument: ICP-MS2
Matrix: Soil
Project: 2979

WorkOrder: 1906C53
BatchID: 180351
Extraction Method: CA Title 22
Analytical Method: SW6020
Unit: mg/L
Sample ID: MB/LCS/LCSD-180351

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL			
Chromium	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	9.7	9.7	10	97	97	75-125	0	20

1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262



CHAIN-OF-CUSTODY RECORD

WorkOrder: 1906C53 A ClientCode: TECP

- WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:
Kurt Crasper
Tou Bar Equipment Company Inc.
2535 Pulgas Ave.
East Palo Alto, CA 94303
(650) 322-1256 FAX: (650) 322-2841

Email: kurtc@touchatt.com
cc/3rd Party:
PO:
Project: 2979

Bill to:
Accounts Payable
Tou Bar Equipment Company Inc.
2535 Pulgas Ave.
East Palo Alto, CA 94303
invoices@touchatt.com

Requested TAT: 1 day;

Date Received: 06/25/2019
Date Logged: 06/25/2019
Date Add-On: 07/01/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1906C53-001	1	Soil	6/24/2019 12:00	<input type="checkbox"/>	A													
1906C53-002	2	Soil	6/24/2019 12:00	<input type="checkbox"/>	A													
1906C53-003	3	Soil	6/24/2019 12:00	<input type="checkbox"/>	A													
1906C53-004	4	Soil	6/24/2019 12:00	<input type="checkbox"/>	A													

Test Legend:

1	CRMS_STLC_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Rosa Venegas

Prepared by: Agustina Venegas
Add-On Prepared By: Nancy Palacios

Comments: added CRMS_STLC 07/01/2019 RUSH TAT np

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TOU BAR EQUIPMENT COMPANY INC.

Project: 2979

Work Order: 1906C53

Client Contact: Kurt Crasper

QC Level: LEVEL 2

Contact's Email: kurtc@touchatt.com

Comments: added CRMS_STLC 07/01/2019 RUSH TAT np

Date Logged: 6/25/2019

Date Add-On: 7/1/2019

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1906C53-001A	1	Soil	SW6020 (Chromium) (STLC)	1	8OZ GJ, Unpres	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
1906C53-002A	2	Soil	SW6020 (Chromium) (STLC)	1	8OZ GJ, Unpres	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
1906C53-003A	3	Soil	SW6020 (Chromium) (STLC)	1	8OZ GJ, Unpres	6/24/2019 12:00	1 day*		<input type="checkbox"/>	
1906C53-004A	4	Soil	SW6020 (Chromium) (STLC)	1	8OZ GJ, Unpres	6/24/2019 12:00	1 day*		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD
PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

1906CS3

CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24 HR 48 HR 72 HR 5 DAY

GeoTracker EDF PDF Excel Write On (DW)

Check if sample is effluent and "J" flag is required

Report To: KURT CRASPER Bill To: TOUBAR

Company: TOUBAR EQUIPMENT CO. INC.

E-Mail: KURTC@TOUCHATT.COM

Tele: 408-656-3552 - cell

Fax:

Project: 2979

Project: 2979

Project Location: 2979 Waverly Street, Palo Alto CA

Sampler Signature: Kurt Crasper

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING		# Containers	Type Containers	MATRIX					METHOD PRESERVED				Analysis Request												Other		Comments							
		Date	Time			Water	Soil	Air	Sludge	Other	ICE	HCL	HNO ₃	Other	8260 VOC + G	TPH as Diesel (8015)	PH + HG	Hexa chrome	EPA 502.2 / 601 / 8010 / 8021 (HVOCS)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	EPA 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)		RCRA 8 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	CAM 17 METALS (TTLC)	Run STLC 1 day time	Hexachrome 6		
1	2 feet deep	6-24-19	12 pm	1	G		X							X	X	X	X		X	X			X		X	X							X	X	**Indicate here if these samples are potentially dangerous to handle: CRMS - STLC *	
2	5 feet deep	6-24-19	12 pm	1	G		X							X	X	X	X		X	X			X		X	X							X	X		
3	8 feet deep	6-24-19	12 pm	1	G		X							X	X	X	X		X	X			X		X	X								X		X
4	12 feet deep	6-24-19	12 pm	1	G		X							X	X	X	X		X	X			X		X	X								X		X
Do Discrete Testing																																				

**MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

Relinquished By: KURT CRASPER Date: 6-24-19 Time: 12 pm Received By: *[Signature]*

Relinquished By: *[Signature]* Date: 6/25/19 Time: 11:40 Received By: *[Signature]*

ICE/# *0.601 met*

COMMENTS:
 GOOD CONDITION PLEASE TEST PER BAYLANDS SOIL PROCESSING
 DECHLORINATED IN LAB PLEASE ANALYZE STLC IN 1 DAY TIME
 APPROPRIATE CONTAINERS PLEASE RUN HEXACHROM 6 TESTING
 PRESERVED IN LAB PLEASE RUN BAYLANDS ESL GUIDELINES ON THE RESULTS

* Added CRMS - STLC PER CLIENTS EMAIL 7.1.19 NP RUSH FAT

Alameda Landing Waterfront

November 5, 2019

Mr. Henry Wong Henry.Wong@dtsc.ca.gov
Project Manager
Site Mitigation and Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710

**RE: Phase I Stockpile Characterization
Alameda Landing Waterfront
Alameda, California
Project No. 168831**

Dear Mr. Wong,

RPS Group, Inc. (RPS) on behalf of Catellus Alameda Development, LLC (Catellus), is pleased to present this *Phase I Stockpile Characterization Letter Report* (Letter), which details the sampling and analysis of the Phase I portion of the stockpile at the Alameda Landing Redevelopment Project located in Alameda, California (the Site). The Site location shown on **Figure 1** is under regulatory oversight by the California Department of Toxic Substances Control (DTSC) and is being redeveloped for residential use. The Site location within Alameda Landing is shown on **Figure 2**, and the location of the stockpile within the Site is shown on **Figure 3**. This letter documents the collection and analysis of soil samples for soil characterization of the western portion of Subpile A and Subpiles B and C as illustrated on **Figure 4**. Characterization of the stockpile will help determine suitability of the soil for on-Site reuse.

SCOPE

The completed scope of work is based on Section 5.5 of the DTSC approved *Work Plan for Subsurface Site Investigation and Stockpile Characterization* (Work Plan; RPS 2019). The initial Phase I pilot study that involved testing Decision Unit (DU) 01 was performed on January 24, 2019. Details of the pilot study can be found in the *Initial Stockpile Pilot Study Memorandum* (Memo, RPS 2019). The initial pilot study involved sampling DU-01 in accordance with incremental sampling methodology (ISM) at a proposed volume of 6,500 cubic yards (CY) per DU; dividing this larger DU into four smaller DUs, as recommended by the DTSC, and analyzing each smaller DU in a similar fashion as the larger DU. The initial pilot study confirmed a consensus of results between the larger and smaller DUs, and the DTSC provided approval of the larger DU on April 4, 2019. The approval email can be found in Attachment A. As illustrated on **Figure 4**, this initial portion of stockpile characterization includes DUs 01-04, 13-16, and 25-27.

Pre-fieldwork Activities

Pre-field mobilization and planning activities were necessary for this investigation and included the following tasks:

- Coordinated with the property owner for Site access;
- Marked proposed boring locations, including the perimeters of DUs, grids, and target boring locations; and
- Coordinated with the analytical laboratory.

Field Sampling Activities

Initial pilot study sampling of DU-01 occurred on January 24, 2019. Ten additional composite samples were collected on March 18 and March 19, 2019 utilizing ISM, where each composite sample was collected from representative DU volumes of approximately 6,500 CY from Subpile A, 3,400 CY from Subpile B, and 5,300 CY from Subpile C as illustrated on **Figure 4**.

Incremental sampling involved the following activities:

- Advanced 24 borings into the stockpile, six borings through each DU, targeting DUs 02, 03, 04, 13, 14, 15, 16, 25, 26 and 27. A representation of boring locations can be seen on **Figure 5**.
 - Eight soil increments were collected from within each of the 6 borings to produce one 48-point composite sample representative of each DU with volumes ranging from approximately 3,400 CY to 6,500 CY.
 - The eight soil increments were collected from each of the 6 borings at depths selected through stratified random sampling, *i.e.*, one increment was randomly collected from within each of eight predefined depth intervals spanning the vertical extent of the target DU. Soil was collected into separate containers for volatile organic compounds and total petroleum hydrocarbons as gasoline (VOCs and TPH-g) analyses and non-volatile analyses.
 - Composite samples for volatiles analysis were collected from the retrieved soil cores using Terra Core® samplers to minimize loss of volatiles while sampling, in accordance with USEPA Method 5035. The soil increments obtained for VOC analyses from each DU were placed in a 500 mL methanol-preserved sample bottle.
 - Composite samples for non-volatile analyses were collected from the retrieved soil cores using Terra Core® samplers and placed in a large decontaminated bowl. The total target volume for each DU composite sample was approximately 1 kilogram or 0.5 liters of soil. The incremental composite soil samples for non-volatile analyses were then mixed by hand to break up any clumps and homogenize the sample, creating a field-composited DU sample. The homogenized composite soil sample for each DU was transferred from the bowl to a sample container consisting of a 1-gallon food-grade plastic zip-lock bag.
- Soil was screened with a Photoionization Detector (PID). No visual or olfactory evidence of potential chemical impact was encountered in any of the soil cores.
- Drilling and sampling equipment was decontaminated prior to use at each boring location using a combination of water, Alconox™ wash solution, and potable water rinse.

ANALYTICAL PROGRAM

Samples were processed and analyzed by ISM at Enthalpy Analytical (formerly Curtis & Tompkins) in Berkeley, California. As shown in **Table 1**, samples were analyzed using the following analytical methods:

- Total petroleum hydrocarbons (TPH) in the gasoline range (TPH-g) by United States Environmental Protection Agency (USEPA) Method 8015;
- TPH in the diesel (TPH-d) and motor oil (TPH-mo) range by USEPA Method 8015;
- Volatile organic compounds (VOCs) by USEPA Method 8260;
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270;
- Title 22 metals by USEPA Method 6010/6020/7470;
- Organochlorine pesticides by USEPA Method 8081; and
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082.

DATA EVALUATION

Soil analytical results are presented in **Table 2** and laboratory analytical reports are included in Attachment B.

The analytical results from the stockpile sampling have been evaluated against current DTSC-recommended risk-based soil screening levels which assume residential exposure to soils via ingestion, dermal contact, and inhalation of dust and volatiles (DTSC 2019; USEPA 2018a, 2018b). Soil sampling results for TPH-g, TPH-d, and TPH-mo are compared to the current San Francisco Bay Regional Water Quality Control Board (SFBWQCB) Tier-1 Environmental Screening Levels (ESLs) (SFBWQCB 2019a, 2019b). The Tier-1 ESLs are protective of direct contact exposures (ingestion, dermal, inhalation), under residential land use.

Soil sampling results for carcinogenic polycyclic aromatic hydrocarbons (CPAHs) expressed in benzo(a)pyrene equivalents (BaPE) were compared to regional background-based screening levels for Northern California (DTSC, 2009), with 1.0 milligrams per kilogram (mg/kg) BaPE adopted as the CPAH screening level for unrestricted use at Alameda Landing. The background concentration serves as the residential screening level.

BaPE was calculated by multiplying CPAH concentrations by the appropriate USEPA relative potency factors (RPF), as recommended by DTSC (USEPA 2018a; DTSC 2015). The relative potency factors are:

- 0.1 mg/kg for benz(a)anthracene;
- 1.0 mg/kg for benzo(a)pyrene;
- 0.1 mg/kg for benzo(b)fluoranthene;
- 0.01 mg/kg for benzo(k)fluoranthene;
- 0.001 mg/kg for chrysene;
- 1.0 mg/kg for dibenz(a,h)anthracene; and
- 0.1 mg/kg for indeno(1,2,3-c,d)pyrene.

The BaPE for each CPAH is summed to calculate the total BaPE contained within the sample, as shown in the following formula:

$$BaPE_{total} = [CPAH_1] \times RPF_1 + [CPAH_2] \times RPF_2 \cdots [CPAH_7] \times RPF_7$$

Soil sampling results for arsenic were compared to a background-based screening level of 16 mg/kg, which represents the upper end of the site-specific (Alameda Landing) background arsenic distribution in the HRA/FS/RAP (Iris Environmental 2008).

Soil Analytical Results

The soil analytical results are discussed in the following subsections.

Total Petroleum Hydrocarbons

Soil samples were analyzed for TPH-g, TPH-d, and TPH-mo. The analytical results for TPH analysis are presented in **Table 2**. Concentrations of TPH-g, TPH-d, and TPH-mo in analyzed soil samples were all below the Tier-1 ESLs of 100 mg/kg, 260 mg/kg, and 1,600 mg/kg, respectively.

Volatile Organic Compounds

VOCs concentrations were either not detected in the analyzed samples or detected at concentrations below the applicable screening levels. Two compounds, 1,2,3-trichloropropane, and vinyl chloride reported by Enthalpy as non-detected, had method detection limits (MDLs) above site-specific residential screening levels as a result of laboratory dilution required for VOC analyses performed on methanol-preserved soil samples. Dilution factors for VOC analyses performed on samples ranged from 20.74 to 25.45, which can be found in Attachment B. As shown in **Table 2**, Enthalpy provided analytical results down to the MDLs.

An evaluation of data collected during implementation of the 2019 Work Plan and existing data contained in Appendix A of the HHRA/FS/RAP (Iris Environmental 2008) showed that 1,2,3-trichloropropane has not been detected in any of the 128 soil samples previously analyzed, and that vinyl chloride was also not detected in any of the 505 soil samples previously analyzed.

Polycyclic Aromatic Hydrocarbons in Soil

BaPE was calculated for each composite soil sample and is compared to background screening levels in **Table 2**. The calculated BaPE for RPS-02 of 1.921 mg/kg was the only one of 11 analyzed samples for the initial stockpile characterization that was above the upper bound target 1.0 mg/kg. The remaining BaPE concentrations, all below the 1.0 mg/kg screening level, ranged from 0.367 mg/kg to 0.842 mg/kg.

Metals in Soil

Mercury was detected in sample RPS-26 above the screening level of 1.0 mg/kg at 1.4 mg/kg. All of the remaining results for metals analysis were either not detected or were detected at levels below the screening levels for analyzed samples.

Pesticides in Soil

Pesticides in analyzed soil samples were either not detected above laboratory reporting limits or were detected at levels below the applicable screening levels.

Polychlorinated Biphenyls

PCBs were either below laboratory reporting limits or were detected in the sample below the applicable screening levels.

SUMMARY AND CONCLUSIONS

Based on the results from the Phase I Stockpile Memo, which confirmed the consensus of results between the larger and smaller DUs, the western portion of Subpile A and Subpiles B and C were sampled to characterize this portion of the stockpile using the larger DU sampling plan. Samples were collected from DUs 01-04, 13-16, and 25-27 in accordance with ISM. Laboratory results from the stockpile soil samples indicated that except for the soil from DU 02 and DU 26, the soil can be considered for unrestricted residential reuse on Site. RPS-02 and RPS-26 had elevated levels of BaPE and mercury, respectively. The soil from DU 02 and DU 26 will not be reused at any depth within the Alameda Landing Waterfront project area. The locations of these DUs are illustrated in **Figure 4**. Additional sampling and analysis of the soil from DU 02 and DU 26 may be required for use at another site or prior to off-site disposal.

Please don't hesitate to contact us if you have any questions regarding this letter.

Sincerely,
RPS Group, Inc



Elizabeth Hightower
Senior Consultant
510-929-2007



Vincent Tilotta, PE (CA, WA)
Principal Consultant
510-929-2014

cc: Mr. Bill Kennedy, Catellus Alameda Development, LLC

Enclosures: References

Figure 1 – Site Location

Figure 2 – Site Location within Alameda Landing

Figure 3 – Existing Site Conditions

Figure 4 – Soil Stockpile Decision Units

Figure 5 – Stockpile Sampling Decision Unit Cutout

Table 1 – Summary of Sampling and Analysis Program

Table 2 – Phase I Pilot Stockpile Characterization Results

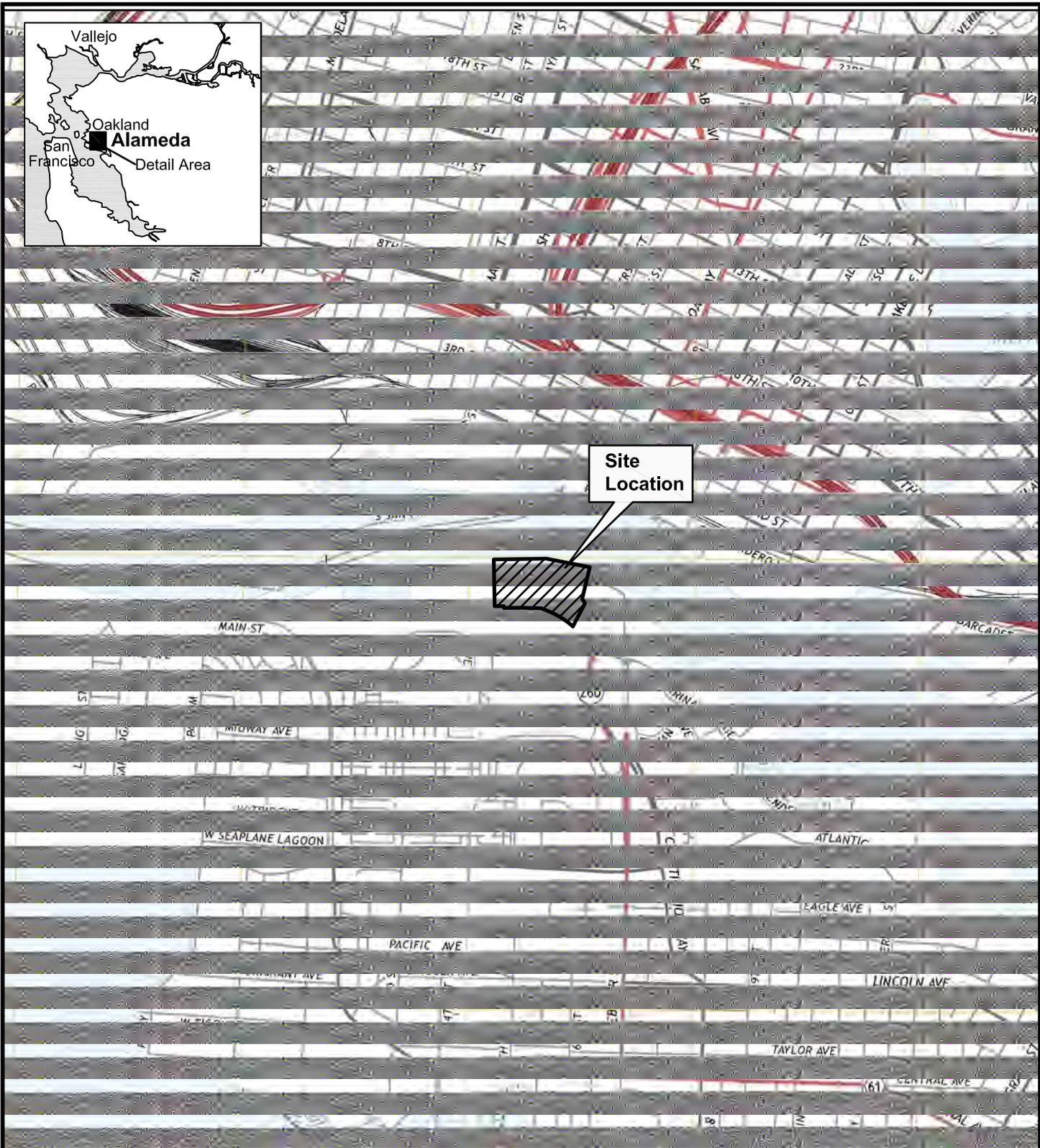
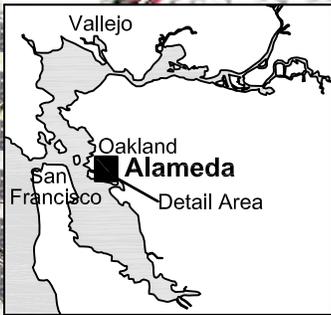
Attachment A – DTSC Approval of Sampling Plan

Attachment B – Laboratory Analytical Reports

REFERENCES

- California Environmental Protection Agency (Cal/EPA). 2015. *Advisory – Active Soil Gas Investigations*. Department of Toxic Substances Control, Los Angeles Regional Water Quality Control Board, San Francisco Bay Regional Water Quality Control Board. July.
- DTSC. 2009. *Use of the Northern and Southern California Polynuclear Aromatic Hydrocarbon (PAH) Studies in Manufactured Gas Plant Site Cleanup Process*. July 1.
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- DTSC. 2019. *Screening Level Human Health Risk Assessments*. Human Health Risk Assessment (HHRA) Note Number 4: Office of Human and Ecological Risk (HERO). May 14.
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- Iris Environmental. 2008. *Human Health Risk Assessment/Feasibility Study/Remedial Action Plan, Alameda Landing, Alameda, California*. May.
- RPS Group, Inc (RPS). 2019. *Workplan for Subsurface Site Investigation and Stockpile Characterization, Alameda Landing Waterfront, Alameda, California*. January.
- San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). 2019a. *User's Guide: Derivation and Application of Environmental Screening Levels*. Rev. 1. January 24.
- SFBRWQCB. 2019b. *Environmental Screening Levels*. Excel spreadsheet file "ESL Workbook January 2019 (Rev. 1)". January 24.
- United States Environmental Protection Agency (USEPA). 2019a. *Regional Screening Levels (RSLs) – User's Guide (May 2019)*. May.
- USEPA. 2019b. *Regional Screening Levels (RSLs) – Generic Tables (May 2019)*. May.

Figures



SOURCE: USGS 7.5' QUADRANGLE, OAKLAND WEST, CALIFORNIA, 2015



Site Location
Alameda Landing Waterfront
Alameda, California

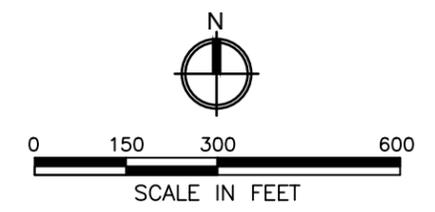
Figure
1



LEGEND:

--- APPROXIMATE SITE BOUNDARY

--- ALAMEDA LANDING AND SUB-AREAS



Site Location within Alameda Landing
 Alameda Landing Waterfront
 Alameda, California

Date: 04/19/19

Figure
2

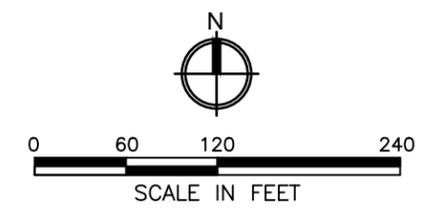
Contract Number: 16-1498E

OAKLAND INNER HARBOR



LEGEND:

- APPROXIMATE SITE BOUNDARY
- ▭ SOIL STOCKPILE

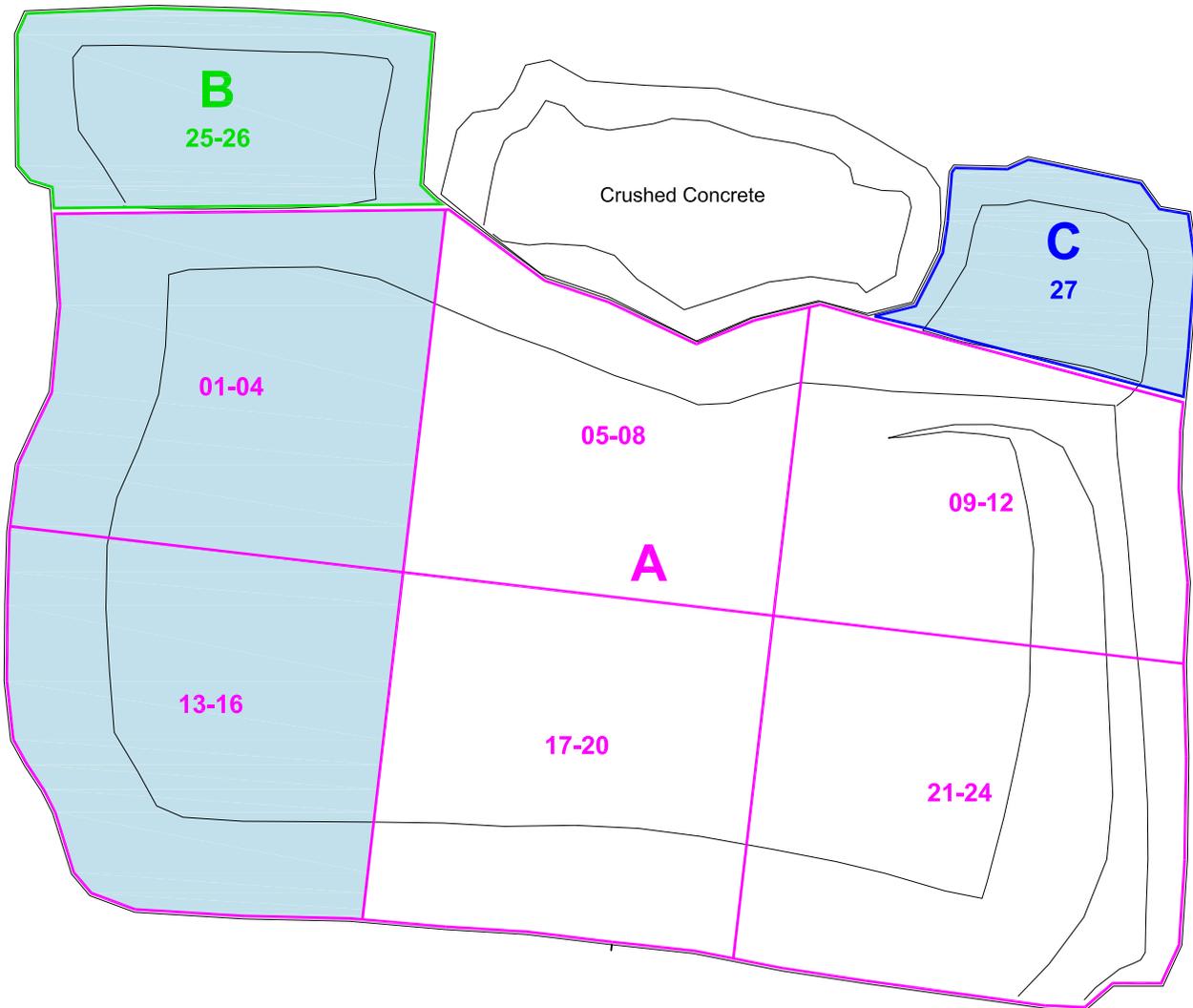


Existing Site Conditions
Alameda Landing Waterfront
Alameda, California

Date: 04/19/19

Figure
3

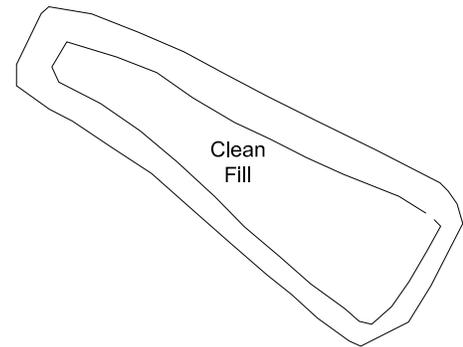
Contract Number: 16-1498E



LEGEND:

SUBPILE	THICKNESS (FT)	NO. LAYERS	LAYER THICKNESS (FT)
A	25	4	6.0–7.0
B	10	2	5.0
C	10	1	10.0

AREA TO BE TESTED AFTER PHASE 1 PILOT STUDY
 AREA TO BE TESTED AFTER PHASE 2 PILOT STUDY



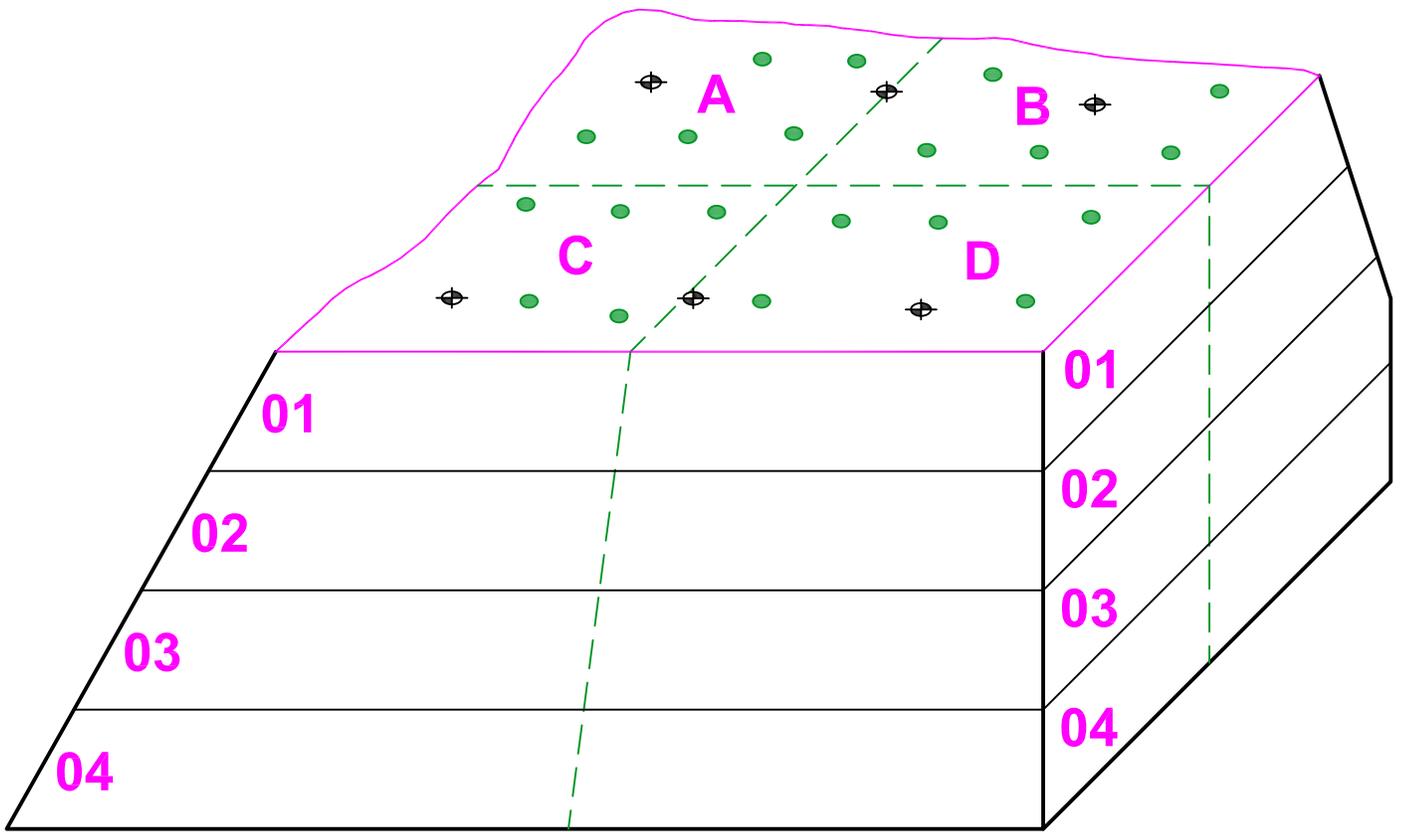
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Soil Stockpile Decision Units
 Alameda Landing Waterfront
 Alameda, California

Figure

4



LEGEND:

- LEGEND:**
- DTSC SUB-QUADRANTS
 - ORIGINAL-RESOLUTION BORINGS
 - DTSC-RESOLUTION BORINGS



Stockpile Sampling Pilot Test Cutout
Alameda Landing Waterfront
Alameda, California

Figure

5

Tables

Stockpile Phase I Sampling
Alameda Landing Waterfront
Alameda, California

Table 1. Stockpile Sampling and Analysis Program

Sample ID	Location	Matrix ⁽¹⁾	Depth (ft bgs)	TPH	VOCs	PAHs	Metals	Pesticides	PCBs	Moisture
RPS-01	RPS-01	SP	NA	X	X	X	X	X	X	X
RPS-02	RPS-02	SP	NA	X	X	X	X	X	X	X
RPS-03	RPS-03	SP	NA	X	X	X	X	X	X	X
RPS-04	RPS-04	SP	NA	X	X	X	X	X	X	X
RPS-13	RPS-13	SP	NA	X	X	X	X	X	X	X
RPS-14	RPS-14	SP	NA	X	X	X	X	X	X	X
RPS-15	RPS-15	SP	NA	X	X	X	X	X	X	X
RPS-16	RPS-16	SP	NA	X	X	X	X	X	X	X
RPS-25	RPS-25	SP	NA	X	X	X	X	X	X	X
RPS-26	RPS-26	SP	NA	X	X	X	X	X	X	X
RPS-27	RPS-27	SP	NA	X	X	X	X	X	X	X

Notes:

(1) Sample matrices are: stockpiled soil (SP).

(2) Sample analyses are:

- TPH – Total petroleum hydrocarbons in the gasoline range (TPH-g) by USEPA Method 8015 or 8260; and total petroleum hydrocarbons in the diesel and motor oil ranges (TPH-d and TPH-mo) by USEPA Method 8015
- VOCs – Volatile organic compounds by USEPA Method 8260
- PAHs – Polycyclic aromatic hydrocarbons by USEPA Method 8270
- Metals – Title 22 (CAM 17) metals by USEPA Method 6010/6020/7470
- Pesticides – Organochlorine pesticides by USEPA Method 8081
- PCBs – Polychlorinated biphenyls by USEPA Method 8082
- Moisture – Moisture content by ASTM D2216

(3) "X" indicates sample is to be analyzed.

Table 2
Phase I Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS										
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	RPS-01	RPS-02	RPS-03	RPS-04	RPS-13	RPS-14	RPS-15	RPS-16	RPS-25	RPS-26	RPS-27
	CA	NC		01/24/2019	03/18/2019	03/18/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019
▼ ANALYTE	UNITS ▶			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>														
Moisture content (CLP)	None	None	None	3.0	12	6.0	7.0	11	9.0	10	17	7.0	10	13
<i>CAM 17 Metals by USEPA 6010B/7471A</i>														
Antimony	None	31	31	<2.0	0.47 J	0.11 J	0.12 J	<2.0	<2.0	0.75 J	0.24 J	0.34 J	0.17 J	0.21 J
Arsenic	16	16	16	5.2	5.3	5.8	5.0	4.8	4.6	4.8	4.8	4.6	3.8	5.3
Barium	None	15,000	15,000	82	85	81	75	78	74	80	120	79	73	85
Beryllium	1,600	15	15	0.38	0.32	0.32	0.33	0.37	0.35	0.29	0.25	0.26	0.23	0.29
Cadmium	2,100	5.2	5.2	0.41	0.22 J	0.22 J	0.21 J	0.42	0.39	0.23 J	0.17 J	0.22 J	0.18 J	0.23 J
Chromium, total	None	36,000	36,000	47	49	47	48	51	43	47	45	46	36	46
Cobalt	420	23	23	8.8	9.1	9.1	9.4	8.4	8.1	8.4	8.0	8.0	7.0	8.7
Copper	None	3,100	3,100	22	31	30	30	24	20	30	25	24	19	29
Lead	None	80	80	30	33	36	27	26	25	51	40	31	22	29
Mercury	None	1.00	1.00	0.13	0.24	0.15	0.12	0.34	0.13	0.16	0.13	0.21	1.4	0.16
Molybdenum	None	390	390	0.32	0.59	0.57	0.51	0.57	0.26	0.55	0.46	0.44	0.40	0.51
Nickel	15,000	490	490	45	49	49	48	54	41	44	39	44	37	48
Selenium	None	390	390	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	None	390	390	<0.24	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium	None	0.78	0.78	<0.49	<0.49	<0.49	<0.49	<0.50	<0.50	<0.50	<0.50	<0.49	<0.49	<0.49
Vanadium	None	390	390	39	37	37	35	39	37	38	35	34	29	36
Zinc	None	23,000	23,000	62	66	66	69	63	57	73	68	61	51	65
<i>Organochlorine Pesticides by USEPA Method 8081A</i>														
Aldrin	0.039	2.3	0.039	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0027 CJ	0.0025 CJ	<0.085	<0.0085	0.0021 CJ	0.0023 CJ	0.0017 CJ	0.0012 CJ	0.0013 CJ	0.0012 CJ	0.0018 CJ
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	0.0038 J	0.0034 J	<0.085	<0.0085	0.0026 J	0.0035 J	9.5E-04 CJ	0.0072 C	0.0013 J	0.0023 J	0.0018 J
4,4'-DDD	2.3	1.9	1.9	<0.011	<0.017	<0.17	<0.016	0.0030 J	0.0017 CJ	0.0065 J	<0.0082	0.0018 J	<0.0084	<0.0082
4,4'-DDE	2.0	23	2.0	<0.011	<0.017	<0.17	0.0016 J	<0.016	0.0010 J	0.0028 J	0.0020 CJ	<0.0082	9.5E-04 J	9.7E-04 J
4,4'-DDT	1.9	37	1.9	0.0041 #J	<0.017	<0.17	<0.016	0.0033 J	0.0019 CJ	0.0042 J	--	0.0056 CJ	<0.0084	0.0048 #J
Dieldrin	0.034	3.2	0.034	<0.011	<0.0086	<0.085	<0.0085	0.0011 CJ	0.0018 J	5.5E-04 CJ	<0.0084	0.0027 CJ	9.8E-04 CJ	0.0014 CJ
Endosulfan I	None	None	None	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
Endosulfan II	None	None	None	<0.011	<0.017	<0.17	<0.016	<0.016	<0.0083	<0.0082	<0.0082	<0.0082	<0.0084	<0.0082
Endosulfan sulfate	None	None	None	<0.011	<0.017	<0.17	<0.016	<0.016	<0.0083	<0.0082	<0.0082	0.0016 CJ	<0.0084	<0.0082
Endrin	None	19	19	<0.011	0.0019 #J	<0.17 #ND	<0.016	<0.016	<0.0083	7.6E-04 J	<0.0082	0.0011 J	<0.0084	<0.0082
Endrin aldehyde	None	None	None	<0.011	<0.017	<0.17	<0.016	<0.016	<0.0083	<0.0082	<0.0082	<0.0082	<0.0084	<0.0082
Heptachlor	0.13	39	0.13	<0.0054	<0.0086	<0.085 #ND	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
Heptachlor epoxide	0.070	1.0	0.070	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
alpha-Hexachlorocyclohexane	0.086	510	0.086	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042

Table 2
Phase I Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS										
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	RPS-01	RPS-02	RPS-03	RPS-04	RPS-13	RPS-14	RPS-15	RPS-16	RPS-25	RPS-26	RPS-27
	CA	NC	(mg/kg)	01/24/2019	03/18/2019	03/18/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019
▼ ANALYTE	UNITS ▶		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
beta-Hexachlorocyclohexane	0.30	None	0.30	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	5.1E-04 CJ	<0.0042	<0.0043	<0.0042
delta-Hexachlorocyclohexane	None	None	None	<0.0054	<0.0086	<0.085 #ND	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
gamma-Hexachlorocyclohexane (lindane)	0.57	21	0.57	<0.0054	<0.0086	<0.085	<0.0085	<0.0084	<0.0043	<0.0042	<0.0042	<0.0042	<0.0043	<0.0042
Methoxychlor	None	320	320	<0.054	<0.086	<0.85	<0.085	<0.084	<0.043 #ND	<0.085	<0.084	<0.042	<0.043	<0.042 #ND
Toxaphene	0.49	5.7	0.49	<0.20	<0.30	<3.0	<0.30	<0.30	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>														
Aroclor-1016	6.7	4.1	4.1	<0.013	<0.0067	<0.0067	<0.0066	<0.017	<0.010	<0.0099	<0.0099	<0.0099	<0.010	<0.0099
Aroclor-1221	0.20	None	0.20	<0.026	<0.013	<0.013	<0.013	<0.033	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Aroclor-1232	0.17	None	0.17	<0.013	<0.0067	<0.0067	<0.0066	<0.017	<0.010	<0.0099	<0.0099	<0.0099	<0.010	<0.0099
Aroclor-1242	0.23	None	0.23	<0.013	<0.0067	<0.0067	<0.0066	<0.017	<0.010	<0.0099	<0.0099	<0.0099	<0.010	<0.0099
Aroclor-1248	0.23	None	0.23	<0.013	<0.0067	<0.0067	<0.0066	<0.017	<0.010	<0.0099	<0.0099	<0.0099	<0.010	<0.0099
Aroclor-1254	0.24	1.2	0.24	<0.013	<0.0067	<0.0067	<0.0066	<0.017	0.015	<0.0099	<0.0099	<0.0099	<0.010	<0.0099
Aroclor-1260	0.24	None	0.24	0.020	0.045	0.015	0.015	0.042	0.038	0.019	0.0096 J	0.14	0.036	0.042
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>														
TPH-g	None	100	100	<3.4	0.74 J	0.72 J	0.57 J	0.57 J	0.83 J	0.65 J	0.94 J	0.83 J	0.57 J	0.97 J
TPH-d	None	260	260	23 Y	52 Y	51 Y	50	46 Y	30 Y	54 Y	56 Y	34 Y	36 Y	30 Y
TPH-mo	None	1,600	1,600	160	270	320	260	260	180	300	320	210	190	170
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>														
Acetone	None	61,000	61,000	<0.68	<0.50	<0.48	<0.46	<0.52	<0.48	<0.46	<0.58	<0.47	<0.50	<0.58
Benzene	0.33	11	0.33	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Bromobenzene	None	290	290	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Bromodichloromethane	0.29	270	0.29	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Bromoform	19	1,600	19	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Bromomethane (methyl bromide)	None	6.8	6.8	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
2-Butanone (methyl ethyl ketone)	None	27,000	27,000	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
n-Butylbenzene	None	3,900	3,900	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
sec-Butylbenzene	None	2,200	2,200	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
tert-Butylbenzene	None	2,200	2,200	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Carbon disulfide	None	770	770	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Carbon tetrachloride	0.098	100	0.098	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Chlorobenzene	None	280	280	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Chlorobromomethane (bromochloromethane)	None	150	150	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Chlorodibromomethane (dibromochloromethane)	0.94	470	0.94	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Chloroethane (ethyl chloride)	None	14,000	14,000	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
Chloroform	0.32	200	0.32	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Chloromethane (methyl chloride)	None	110	110	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29

Table 2
Phase I Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS										
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	RPS-01	RPS-02	RPS-03	RPS-04	RPS-13	RPS-14	RPS-15	RPS-16	RPS-25	RPS-26	RPS-27
	CA	NC		01/24/2019	03/18/2019	03/18/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019
▼ ANALYTE	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
2-Chlorotoluene	None	470	470	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
4-Chlorotoluene	None	440	440	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Cumene (isopropylbenzene)	None	1,900	1,900	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Cymene (p-isopropyltoluene)	None	None	None	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Dibromomethane (methylene bromide)	None	24	24	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2-Dichlorobenzene	None	1,800	1,800	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,3-Dichlorobenzene	None	None	None	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Dichloromethane (methylene chloride)	1.8	350	1.8	<0.85	<0.63	<0.60	<0.58	<0.65	<0.60	<0.58	<0.72	<0.59	<0.62	<0.73
1,2-Dichloropropane	2.5	16	2.5	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,3-Dichloropropane	None	410	410	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
2,2-Dichloropropane	None	None	None	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1-Dichloropropene	None	None	None	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
cis-1,3-Dichloropropene	0.58	72	0.58	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
trans-1,3-Dichloropropene	0.58	72	0.58	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Ethylbenzene	5.8	3,400	5.8	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Hexachlorobutadiene	1.2	78	1.2	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
2-Hexanone (methyl butyl ketone)	None	200	200	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
Naphthalene	3.8	130	3.8	<0.17	0.12 J	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
n-Propylbenzene	None	3,800	3,800	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Styrene	None	6,000	6,000	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Tetrachloroethene (PCE)	0.59	81	0.59	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Toluene	None	1,100	1,100	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2,3-Trichlorobenzene	None	63	63	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15

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Phase I Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS										
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	RPS-01	RPS-02	RPS-03	RPS-04	RPS-13	RPS-14	RPS-15	RPS-16	RPS-25	RPS-26	RPS-27
	CA	NC	(mg/kg)	01/24/2019	03/18/2019	03/18/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019	03/19/2019
▼ ANALYTE	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,4-Trichlorobenzene	24	58	24	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Trichloroethene (TCE)	0.94	4.1	0.94	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,2,4-Trimethylbenzene	None	300	300	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
1,3,5-Trimethylbenzene	None	270	270	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Vinyl acetate	None	910	910	<1.7	<1.3	<1.2	<1.2	<1.3	<1.2	<1.2	<1.4	<1.2	<1.2	<1.5
Vinyl chloride	0.0087	70	0.0087	<0.34	<0.25	<0.24	<0.23	<0.26	<0.24	<0.23	<0.29	<0.24	<0.25	<0.29
m-, p-Xylene	None	550	550	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
o-Xylene	None	650	650	<0.17	<0.13	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>														
Acenaphthene	None	3,600	3,600	<0.050	0.63	<0.13	<0.25	<0.25	0.031 J	<0.17	<0.17	<0.17	0.027 J	0.022 J
Acenaphthylene	None	None	None	<0.050	0.30	0.074 J	<0.25	0.077 J	0.11	0.090 J	<0.17	0.050 J	0.033 J	0.075
Anthracene	None	18,000	18,000	<0.050	0.69	0.11 J	0.062 J	0.11 J	0.13	0.090 J	<0.17	0.067 J	0.076 J	0.087
Benz(a)anthracene	*	None	*	0.12	1.3	0.44	0.31	0.41	0.47	0.40	0.15 J	0.31	0.26	0.39
Benzo(a)pyrene	*	18	18	0.26	1.4	0.61	0.47	0.60	0.62	0.61	0.30	0.47	0.37	0.57
Benzo(b)fluoranthene	*	None	*	0.28	1.3	0.47	0.38	0.57	0.57	0.58	0.30	0.41	0.34	0.49
Benzo(g,h,i)perylene	None	None	None	0.25	1.2	0.59	0.50	0.61	0.55	0.60	0.32	0.44	0.36	0.50
Benzo(k)fluoranthene	*	None	*	0.079	0.49	0.22	0.17 J	0.17 J	0.19	0.16 J	0.099 J	0.17	0.12 J	0.22
Chrysene	*	None	*	0.17	1.2	0.56	0.38	0.49	0.53	0.46	0.21	0.37	0.32	0.44
Dibenz(a,h)anthracene	*	None	*	<0.050	0.17	0.090 J	0.058 J	0.080 J	0.076	0.072 J	0.036 J	0.060 J	0.047 J	0.066
Fluoranthene	None	2,400	2,400	0.26	3.2	0.99	0.69	0.83	0.88	0.81	0.28	0.60	0.51	0.72
Fluorene	None	2,400	2,400	<0.050	1.0	0.034 J	<0.25	<0.25	0.040 J	<0.17	<0.17	<0.17	0.026 J	0.023 J
Indeno(1,2,3-c,d)pyrene	*	None	None	0.16	0.85	0.40	0.33	0.42	0.40	0.41	0.20	0.30	0.25	0.36
Naphthalene	3.8	130	3.8	<0.17	0.12 J	<0.12	<0.12	<0.13	<0.12	<0.12	<0.14	<0.12	<0.12	<0.15
Phenanthrene	None	None	None	0.097	5.6	0.54	0.24 J	0.45	0.52	0.35	0.11 J	0.26	0.30	0.31
Pyrene	None	1,800	1,800	0.38	4.1	1.5	0.95	1.0	1.2	1.2	0.60	0.81	0.76	1.0
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.36696	1.9211	0.83376	0.63208	0.82219	0.84243	0.82306	0.4022	0.63407	0.50352	0.76264

Notes:

- (1) Soil sampling results reported in milligrams per kilogram (mg/kg) on wet-weight basis. Non-detect results shown with less-than sign (<) and method detection limit. Laboratory data qualifiers are as follows:
- C - Presence confirmed, but RPD between columns exceeds 40%
 - Y - Sample exhibits chromatographic pattern which does not resemble standard
 - J - Estimated value
 - # - CCV drift outside limits; average CCV drift within limits per method requirements
- (2) Soil screening levels for total petroleum hydrocarbons (TPH) are SFBRWQCB Environmental Screening Levels (ESLs; SFBRWQCB 2019) protective of direct contact (cancer and noncancer health effects), odor/nuisance concerns, and gross contamination concerns. Soil screening levels for arsenic and carcinogenic polycyclic aromatic hydrocarbons are based on Site-specific background concentrations (Iris Environmental 2008). All remaining screening levels are DTSC-recommended values (DTSC 2018a, USEPA 2018b) protective of direct contact (cancer and noncancer health effects).
- (3) Soil sampling detections are bolded and results that exceed any screening level are highlighted in yellow.
- * - Concentrations are converted to benzo(a)pyrene equivalents and summed for comparison to the benzo(a)pyrene equivalent screening level as recommended by the USEPA and DTSC (DTSC 2015, USEPA 2018a). Calculations appear at the bottom of this table.
- (4) Acronyms/abbreviations are defined as follows:
- mg/kg - Milligrams per kilogram
 - RBSLs - Risk based screening levels
 - CA - Cancer
 - NC - Noncancer

Attachment A

DTSC Approval of Stockpile Sample Plan

Jeff Martin

Subject: FW: Alameda Landing Waterfront - Initial Stockpile Pilot Study Results

From: Wong, Henry@DTSC <Henry.Wong@dtsc.ca.gov>

Sent: Thursday, April 4, 2019 5:06 PM

To: Elizabeth Hightower <Elizabeth.Hightower@rpsgroup.com>; Bill Kennedy <bkennedy@catellus.com>; Jeff Martin <Jeff.Martin@rpsgroup.com>

Cc: James Schwartz <James.Schwartz@rpsgroup.com>; Martin Hamann <Martin.Hamann@rpsgroup.com>; Neal Hughes <Neal.Hughes@rpsgroup.com>; Damir Priskich <dpriskich@catellus.com>; Dave Irving <dirving@catellus.com>;

Karachewski, John@DTSC <John.Karachewski@dtsc.ca.gov>; Murphy, Daniel@DTSC <Daniel.Murphy@dtsc.ca.gov>

Subject: RE: Alameda Landing Waterfront - Initial Stockpile Pilot Study Results

Hi Elizabeth, Jeff, and Bill,

DTSC has reviewed the April 3, 2019 *Initial Stockpile Pilot Study Memorandum* (Memo) and the associated responses for Alameda Landing Waterfront located at Alameda Landing Redevelopment Project within the former Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex, in Alameda, California. DTSC finds the responses and revised Memo satisfactory. Therefore, DTSC makes the following determinations:

- **DTSC approves the Memo with pilot study performed on decision unit (DU) 01.** Catellus may proceed with stockpile characterization pursuant to the January 2019 *Work Plan for Subsurface Site Investigation* (Work Plan) for DUs 02, 03, 04, 13, 14, 15, 16, 25, 26, and 27 with a decision unit volume of approximately 6,500 cubic yards.
- **Catellus may begin the subsequent phase of the pilot study on DU 18** pursuant to the Work Plan to determine the appropriate DU volume (either approximately 6,500 or 1,625 cubic yards) for DUs 05, 06, 07, 08, 09, 10, 11, 12, 17, 18, 19, 20, 21, 22, 23, and 24.

Henry Wong, P.E.

Project Manager

Site Mitigation and Restoration Program

Department of Toxic Substances Control

700 Heinz Avenue

Berkeley, California 94710-2721

(510) 540-3770

Henry.Wong@dtsc.ca.gov

Attachment B

Laboratory Analytical Reports



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 306709
ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-01A	306709-001
DTSC-01B	306709-002
DTSC-01C	306709-003
DTSC-01D	306709-004
RPS-01	306709-005

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Patrick McCarthy
Project Manager
patrick.mccarthy@enthalpy.com
(510) 204-2236 ext 13115

Date: 02/04/2019

CASE NARRATIVE

Laboratory number: 306709
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 01/25/19
Samples Received: 01/25/19

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 01/25/19. 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):

A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

High surrogate recoveries were observed for dibromofluoromethane in DTSC-01B (lab # 306709-002) and RPS-01 (lab # 306709-005); no target analytes were detected in these samples. No other analytical problems were encountered.

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

A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

No analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 306709
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 01/25/19
Samples Received: 01/25/19

***** Missing Items *****

The following items are valid in the narrative, but for some reason didn't end up in the above report:

Item 6 (no rgroup/Soil): McCampbell Analytical Inc. in Pittsburg, CA performed the analysis (not NELAP certified). Please see the McCampbell Analytical Inc. case narrative.

You can invalidate these items, or adjust rgroup/matrix/method ([C] button) for each until they appear in the main body of the report. See the operations manager or LIMS staff for assistance if necessary.

3260709



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Signature(s):

Sampler Name(s): Lizzie Hightower

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
	DTSC-01a	1/24/19		Soil	None
	DTSC-01b				
	DTSC-01c				
	DTSC-01d				
	RPS-01				

TPH-g, -d, -mo by Method	Analyses Required										Number of Containers	
	8015 VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Total Organic Carbon by SM 6310 Mod B pH by USEPA Method 9045D	Moisture Content by ASTM D2216	ISM				
X	X	X	X	X	X	X	X	X	X	X	X	2
X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	X	X	X	

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront

Project Number: 16-1498E

Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower

E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com

Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments: TPH-d and TPH-mo with Silica Gel Cleanup

RELINQUISHED BY:

Printed Name: Neal Hughes
Signature:
Company: RPS
Time/Date: 1/24/19

RECEIVED BY:

Printed Name: _____
Signature: _____
Company: _____
Time/Date: 1-24-19

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 306709
Date Received: 1-24-19

Client: RPS
Project: _____

Section 2: Samples received in a cooler? Yes, how many? 2 No (skip Section 3 below)
If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
If in cooler: Date Opened 1-24-19 By (print) SH (sign) [Signature]
Shipping info (if applicable) _____
Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
Were custody seals intact upon arrival? Yes No N/A

Important: Notify PM if temperature exceeds 6°C or arrive frozen.

Section 3:
Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
Temperature measured using Thermometer ID: _____, or IR Gun # A B
Cooler Temp (°C): #1: 3.4, #2: 12.4, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?			
If YES, what time were they transferred to freezer? <u>0100</u>			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?	/		
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?	/		
Did you change the hold time in LIMS for preserved tarracores?	/		
Are bubbles > 6mm absent in VOA samples?	/		
Was the client contacted concerning this sample delivery?	/		
If YES, who was called? _____ By _____ Date: _____	YES	NO	N/A

Section 5:
Are the samples appropriately preserved? (If N/A, skip the rest of section 5) _____
Did you check preservatives for all bottles for each sample? _____
Did you document your preservative check?
pH strip lot# _____, pH strip lot# _____, pH strip lot# _____
Preservative added:
 H2SO4 lot# _____ added to samples _____ on/at _____
 HCL lot# _____ added to samples _____ on/at _____
 HNO3 lot# _____ added to samples _____ on/at _____
 NaOH lot# _____ added to samples _____ on/at _____

Section 6:
Explanations/Comments: _____

Date Logged In 1/25/19 By (print) AC (sign) [Signature]
Date Labeled 1/25 By (print) AC (sign) [Signature]

Detections Summary for 306709

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-01A

Laboratory Sample ID :

306709-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	23	Y	2.0		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	100		9.9		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Phenanthrene	150		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	350		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	530		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	150		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	220		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	330		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	320		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	250		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	380		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Endrin	1.0	C,J	11	0.97	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
4,4'-DDT	3.0	#,J	11	2.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
alpha-Chlordane	1.6	C,J	5.7	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
gamma-Chlordane	1.9	J	5.7	1.2	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
Aroclor-1260	15		14		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3540C
Arsenic	5.4		1.5		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.38		0.099		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.44		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	23		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.99		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.19		0.017		mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.33		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.99		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	3		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-01B

Laboratory Sample ID :

306709-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	25	Y	2.0		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	140		10		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Naphthalene	100		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	230		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	69		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	590		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	770		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	340		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	460		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	460		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	320		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	65		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	460		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
4,4'-DDD	1.3	J	11	1.3	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
4,4'-DDT	3.2	J	11	2.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
alpha-Chlordane	2.5	C,J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
gamma-Chlordane	3.1	J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
Aroclor-1260	16		13		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3540C
Arsenic	5.4		1.5		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.41		0.098		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.44		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	10		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	23		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.98		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.18		0.016		mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Nickel	43		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	42		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	66		0.98		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	3		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-01C

Laboratory Sample ID :

306709-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	20	Y	2.0		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	100		10		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Phenanthrene	120		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	320		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	480		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	150		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	210		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	340		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	100		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	320		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	240		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		49		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Endrin	1.2	C,J	11	0.95	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
alpha-Chlordane	2.1	C,J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
gamma-Chlordane	2.8	J	5.6	1.4	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
Aroclor-1260	15		13		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3540C
Arsenic	5.2		1.4		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	81		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.39		0.095		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.41		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	21		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	58		0.95		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.14		0.016		mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.24		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	58		0.95		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	3		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-01D

Laboratory Sample ID :

306709-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	24	Y	2.0		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	140		10		mg/Kg	Air Dried	2.000	EPA 8015B	EPA 3550C
Phenanthrene	200		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	420		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	570		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	180		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	250		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	380		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	360		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	250		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	370		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
4,4'-DDT	4.1	#,J	11	2.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
alpha-Chlordane	3.1	C,J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
gamma-Chlordane	4.0	J	5.6	1.4	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
Aroclor-1260	20		13		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3540C
Arsenic	5.5		1.5		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	93		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.37		0.10		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.42		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	30		1.0		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.14		0.017		mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.33		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	45		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	59		1.0		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	3		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-01

Laboratory Sample ID :

306709-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	23	Y	5.0		mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		25		mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Phenanthrene	97		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	260		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	380		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	120		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	170		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	280		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	79		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	260		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	160		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	250		50		ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
4,4'-DDT	4.1	#,J	11	2.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
alpha-Chlordane	2.7	C,J	5.4	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
gamma-Chlordane	3.8	J	5.4	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3540C
Aroclor-1260	20		13		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3540C
Arsenic	5.2		1.5		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.38		0.098		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.41		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	30		0.98		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.13		0.017		mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.32		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	45		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.24		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.98		mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Moisture, Percent	3		1		%	As Recd	1.000	EPA CLP	METHOD

= CCV drift outside limits; average CCV drift within limits per method requirements

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

Gasoline by GC/FID (5035 Prep)			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	267304
Units:	mg/Kg	Sampled:	01/24/19
Basis:	air dried	Received:	01/25/19

Field ID: DTSC-01A Diln Fac: 25.00
 Type: SAMPLE Analyzed: 01/29/19
 Lab ID: 306709-001

Analyte	Result	RL
Gasoline C7-C12	ND	4.2

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	58-145

Field ID: DTSC-01B Diln Fac: 25.00
 Type: SAMPLE Analyzed: 01/29/19
 Lab ID: 306709-002

Analyte	Result	RL
Gasoline C7-C12	ND	4.3

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

Field ID: DTSC-01C Diln Fac: 25.00
 Type: SAMPLE Analyzed: 01/29/19
 Lab ID: 306709-003

Analyte	Result	RL
Gasoline C7-C12	ND	4.2

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

ND= Not Detected
 RL= Reporting Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	267304
Units:	mg/Kg	Sampled:	01/24/19
Basis:	air dried	Received:	01/25/19

Field ID: DTSC-01D Diln Fac: 25.00
 Type: SAMPLE Analyzed: 01/29/19
 Lab ID: 306709-004

Analyte	Result	RL
Gasoline C7-C12	ND	4.3

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	78	58-145

Field ID: RPS-01 Diln Fac: 25.00
 Type: SAMPLE Analyzed: 01/29/19
 Lab ID: 306709-005

Analyte	Result	RL
Gasoline C7-C12	ND	3.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	75	58-145

Type: BLANK Diln Fac: 1.000
 Lab ID: QC962826 Analyzed: 01/28/19

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	75	58-145

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	267304
Basis:	air dried	Analyzed:	01/28/19

Type: BS Lab ID: QC962827

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.052	105	80-122

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Type: BSD Lab ID: QC962828

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.040	104	80-122	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	306734-001	Batch#:	267304
Matrix:	Soil	Sampled:	01/25/19
Units:	mg/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/29/19

Type: MS Lab ID: QC962829

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.3131	9.709	11.06	114	51-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	82	58-145

Type: MSD Lab ID: QC962830

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.709	11.02	113	51-120	0	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

RPD= Relative Percent Difference

Total Extractable Hydrocarbons			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	01/24/19
Units:	mg/Kg	Received:	01/25/19
Basis:	air dried	Prepared:	01/31/19
Batch#:	267416		

Field ID: DTSC-01A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-001 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	23 Y	2.0
Motor Oil C24-C36	100	9.9

Surrogate	%REC	Limits
o-Terphenyl	65	61-130

Field ID: DTSC-01B Diln Fac: 2.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-002 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	25 Y	2.0
Motor Oil C24-C36	140	10

Surrogate	%REC	Limits
o-Terphenyl	75	61-130

Field ID: DTSC-01C Diln Fac: 2.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-003 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	20 Y	2.0
Motor Oil C24-C36	100	10

Surrogate	%REC	Limits
o-Terphenyl	72	61-130

Field ID: DTSC-01D Diln Fac: 2.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-004 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	24 Y	2.0
Motor Oil C24-C36	140	10

Surrogate	%REC	Limits
o-Terphenyl	81	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	01/24/19
Units:	mg/Kg	Received:	01/25/19
Basis:	air dried	Prepared:	01/31/19
Batch#:	267416		

Field ID: RPS-01 Diln Fac: 5.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-005 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	23 Y	5.0
Motor Oil C24-C36	160	25

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type: BLANK Analyzed: 01/31/19
 Lab ID: QC963278 Cleanup Method: EPA 3630C
 Diln Fac: 1.000

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

Surrogate	%REC	Limits
o-Terphenyl	83	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

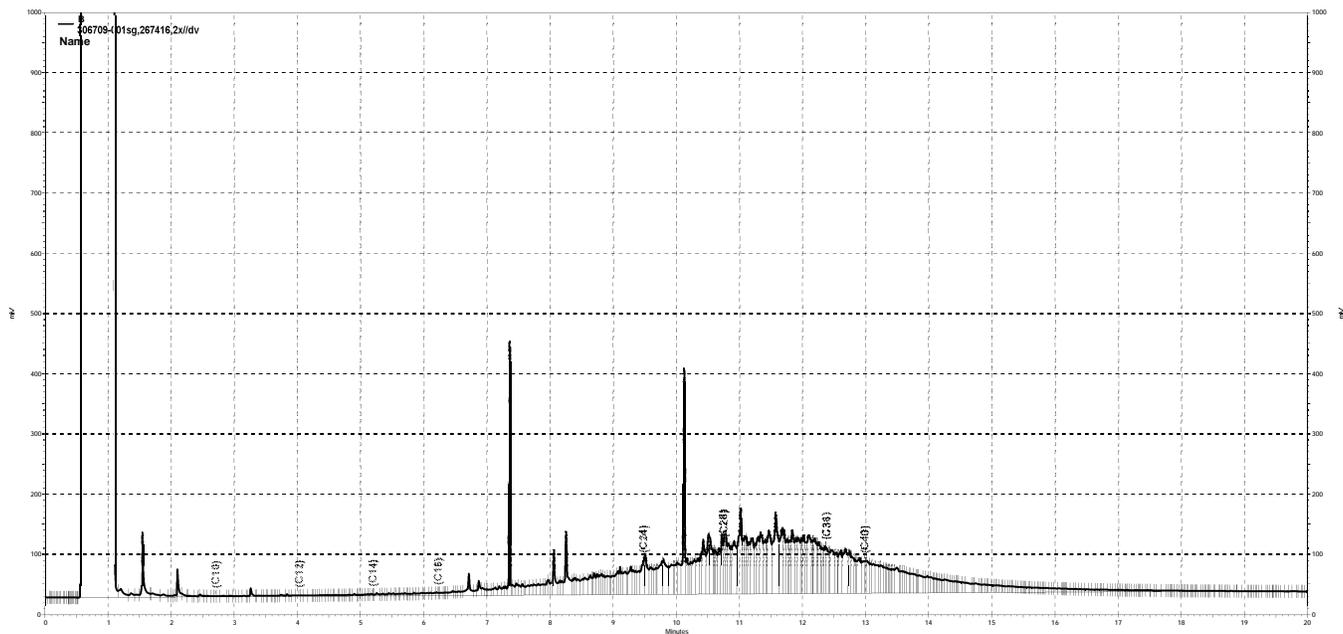
Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC963279	Batch#:	267416
Matrix:	Soil	Prepared:	01/31/19
Units:	mg/Kg	Analyzed:	01/31/19
Basis:	air dried		

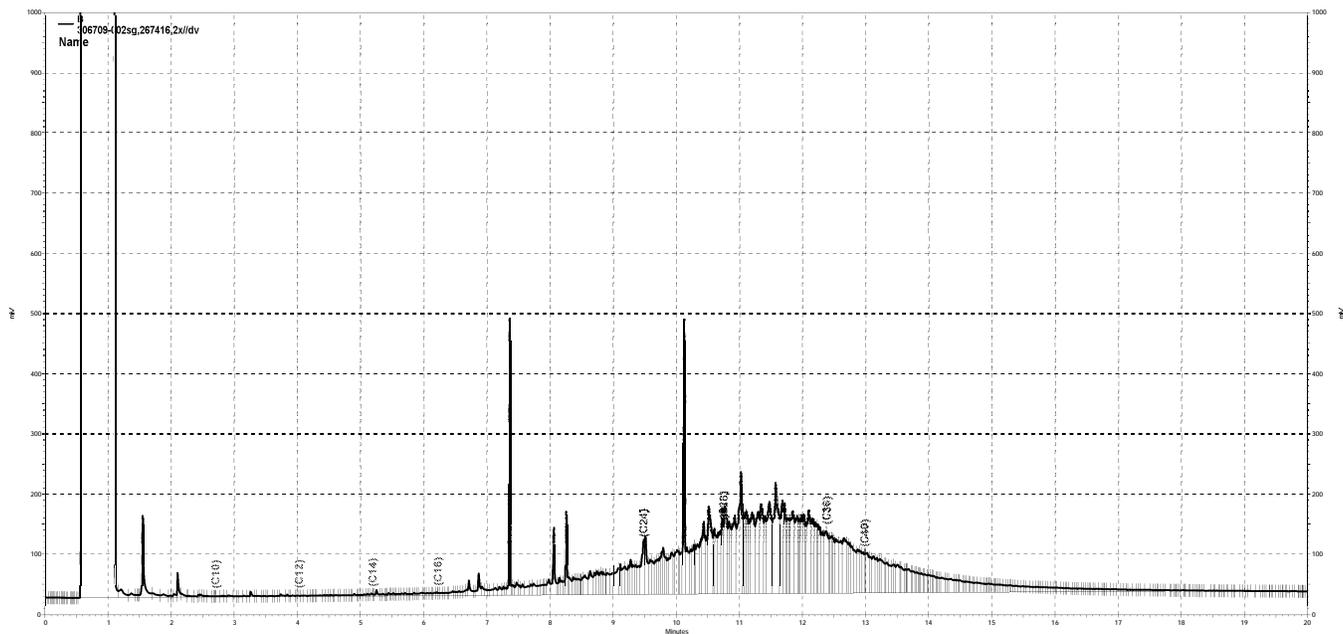
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	30.26	61	55-133

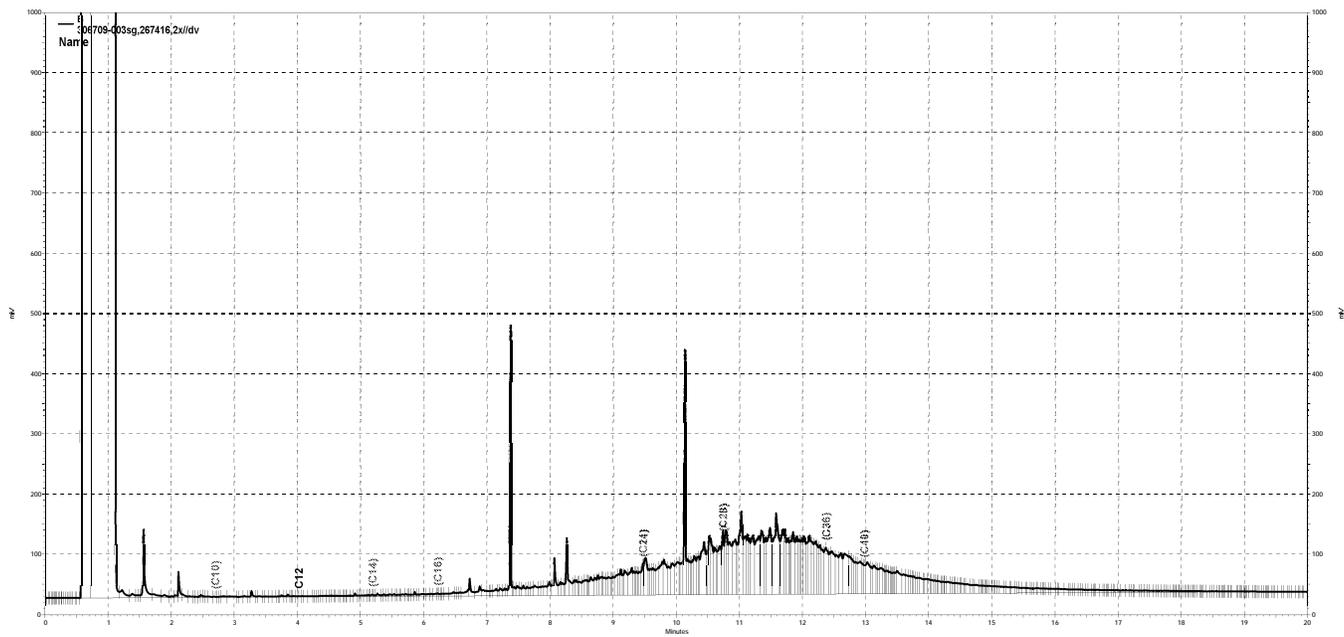
Surrogate	%REC	Limits
o-Terphenyl	62	61-130



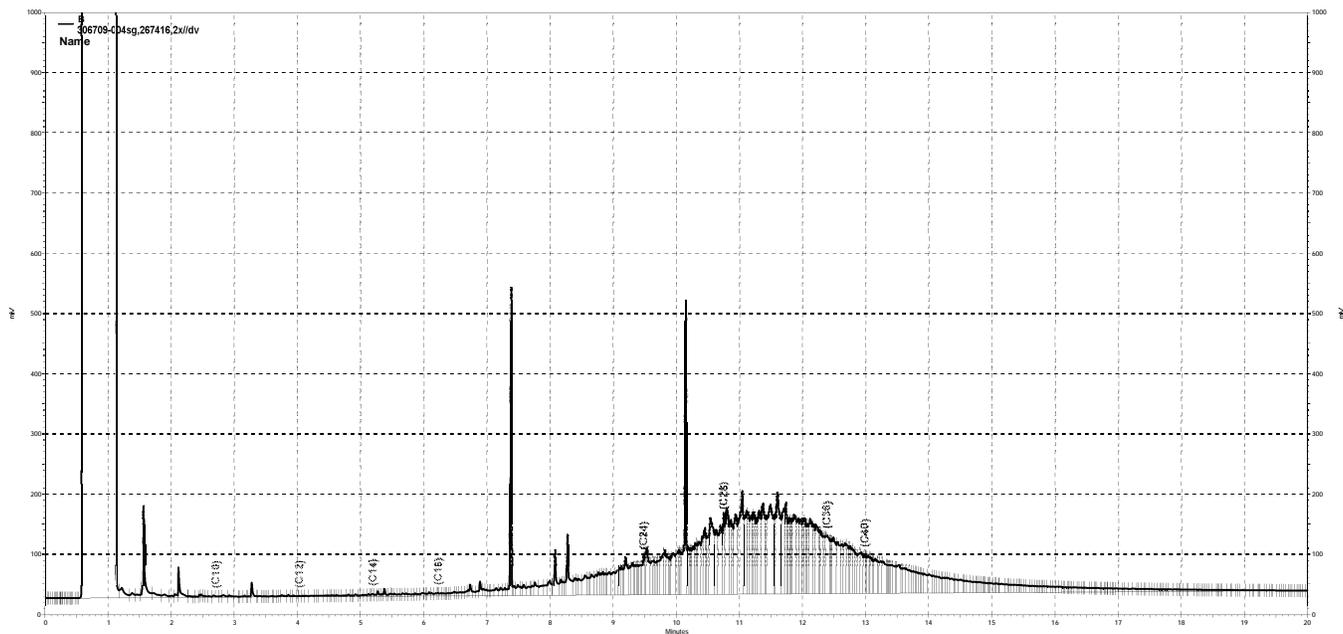
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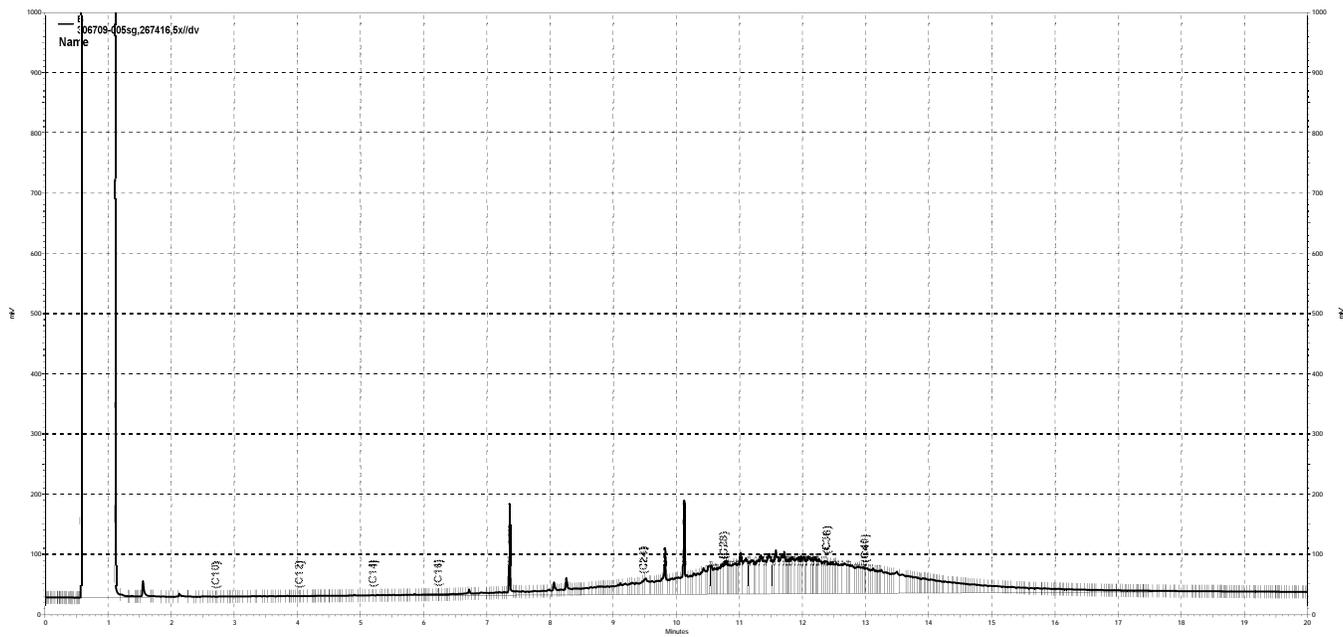
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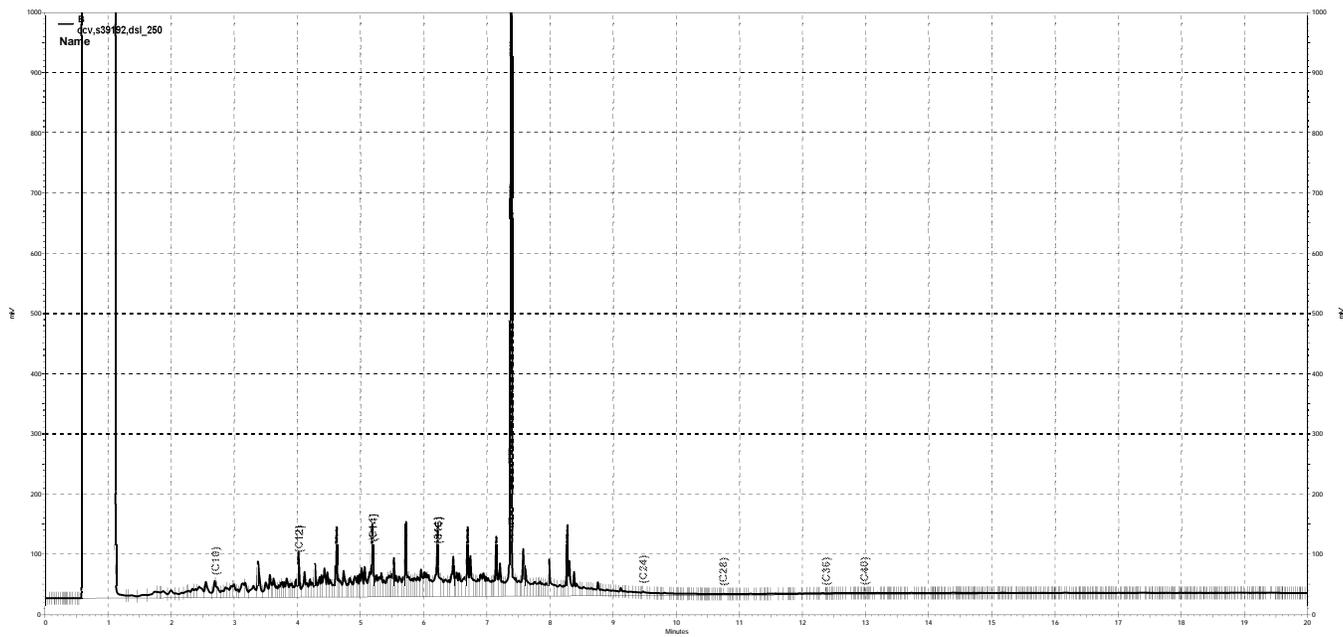
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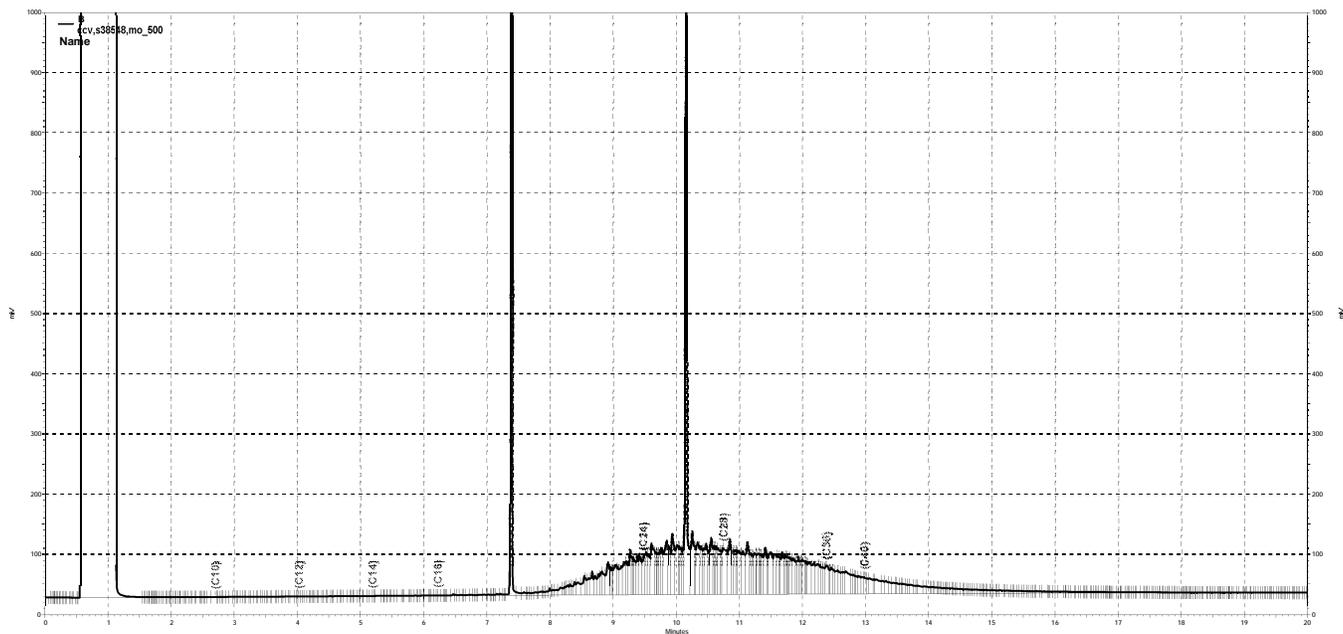
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Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01A	Diln Fac:	42.18
Lab ID:	306709-001	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
Freon 12	ND	420
Chloromethane	ND	420
Vinyl Chloride	ND	420
Bromomethane	ND	420
Chloroethane	ND	420
Trichlorofluoromethane	ND	210
Acetone	ND	840
Freon 113	ND	210
1,1-Dichloroethene	ND	210
Methylene Chloride	ND	1,100
Carbon Disulfide	ND	210
MTBE	ND	210
trans-1,2-Dichloroethene	ND	210
Vinyl Acetate	ND	2,100
1,1-Dichloroethane	ND	210
2-Butanone	ND	420
cis-1,2-Dichloroethene	ND	210
2,2-Dichloropropane	ND	210
Chloroform	ND	210
Bromochloromethane	ND	210
1,1,1-Trichloroethane	ND	210
1,1-Dichloropropene	ND	210
Carbon Tetrachloride	ND	210
1,2-Dichloroethane	ND	210
Benzene	ND	210
Trichloroethene	ND	210
1,2-Dichloropropane	ND	210
Bromodichloromethane	ND	210
Dibromomethane	ND	210
4-Methyl-2-Pentanone	ND	420
cis-1,3-Dichloropropene	ND	210
Toluene	ND	210
trans-1,3-Dichloropropene	ND	210
1,1,2-Trichloroethane	ND	210
2-Hexanone	ND	420
1,3-Dichloropropane	ND	210
Tetrachloroethene	ND	210

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01A	Diln Fac:	42.18
Lab ID:	306709-001	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
Dibromochloromethane	ND	210
1,2-Dibromoethane	ND	210
Chlorobenzene	ND	210
1,1,1,2-Tetrachloroethane	ND	210
Ethylbenzene	ND	210
m,p-Xylenes	ND	210
o-Xylene	ND	210
Styrene	ND	210
Bromoform	ND	210
Isopropylbenzene	ND	210
1,1,2,2-Tetrachloroethane	ND	210
1,2,3-Trichloropropane	ND	210
Propylbenzene	ND	210
Bromobenzene	ND	210
1,3,5-Trimethylbenzene	ND	210
2-Chlorotoluene	ND	210
4-Chlorotoluene	ND	210
tert-Butylbenzene	ND	210
1,2,4-Trimethylbenzene	ND	210
sec-Butylbenzene	ND	210
para-Isopropyl Toluene	ND	210
1,3-Dichlorobenzene	ND	210
1,4-Dichlorobenzene	ND	210
n-Butylbenzene	ND	210
1,2-Dichlorobenzene	ND	210
1,2-Dibromo-3-Chloropropane	ND	210
1,2,4-Trichlorobenzene	ND	210
Hexachlorobutadiene	ND	210
Naphthalene	ND	210
1,2,3-Trichlorobenzene	ND	210

Surrogate	%REC	Limits
Dibromofluoromethane	128	78-131
1,2-Dichloroethane-d4	122	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01B	Diln Fac:	42.60
Lab ID:	306709-002	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
Freon 12	ND	430
Chloromethane	ND	430
Vinyl Chloride	ND	430
Bromomethane	ND	430
Chloroethane	ND	430
Trichlorofluoromethane	ND	210
Acetone	ND	850
Freon 113	ND	210
1,1-Dichloroethene	ND	210
Methylene Chloride	ND	1,100
Carbon Disulfide	ND	210
MTBE	ND	210
trans-1,2-Dichloroethene	ND	210
Vinyl Acetate	ND	2,100
1,1-Dichloroethane	ND	210
2-Butanone	ND	430
cis-1,2-Dichloroethene	ND	210
2,2-Dichloropropane	ND	210
Chloroform	ND	210
Bromochloromethane	ND	210
1,1,1-Trichloroethane	ND	210
1,1-Dichloropropene	ND	210
Carbon Tetrachloride	ND	210
1,2-Dichloroethane	ND	210
Benzene	ND	210
Trichloroethene	ND	210
1,2-Dichloropropane	ND	210
Bromodichloromethane	ND	210
Dibromomethane	ND	210
4-Methyl-2-Pentanone	ND	430
cis-1,3-Dichloropropene	ND	210
Toluene	ND	210
trans-1,3-Dichloropropene	ND	210
1,1,2-Trichloroethane	ND	210
2-Hexanone	ND	430
1,3-Dichloropropane	ND	210
Tetrachloroethene	ND	210
Dibromochloromethane	ND	210
1,2-Dibromoethane	ND	210
Chlorobenzene	ND	210
1,1,1,2-Tetrachloroethane	ND	210
Ethylbenzene	ND	210
m,p-Xylenes	ND	210
o-Xylene	ND	210
Styrene	ND	210
Bromoform	ND	210
Isopropylbenzene	ND	210
1,1,2,2-Tetrachloroethane	ND	210
1,2,3-Trichloropropane	ND	210
Propylbenzene	ND	210
Bromobenzene	ND	210
1,3,5-Trimethylbenzene	ND	210
2-Chlorotoluene	ND	210

*= Value outside of QC limits; see narrative

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01B	Diln Fac:	42.60
Lab ID:	306709-002	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
4-Chlorotoluene	ND	210
tert-Butylbenzene	ND	210
1,2,4-Trimethylbenzene	ND	210
sec-Butylbenzene	ND	210
para-Isopropyl Toluene	ND	210
1,3-Dichlorobenzene	ND	210
1,4-Dichlorobenzene	ND	210
n-Butylbenzene	ND	210
1,2-Dichlorobenzene	ND	210
1,2-Dibromo-3-Chloropropane	ND	210
1,2,4-Trichlorobenzene	ND	210
Hexachlorobutadiene	ND	210
Naphthalene	ND	210
1,2,3-Trichlorobenzene	ND	210

Surrogate	%REC	Limits
Dibromofluoromethane	136 *	78-131
1,2-Dichloroethane-d4	126	80-136
Toluene-d8	106	80-120
Bromofluorobenzene	114	80-129

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit
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Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01C	Diln Fac:	41.83
Lab ID:	306709-003	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
Freon 12	ND	420
Chloromethane	ND	420
Vinyl Chloride	ND	420
Bromomethane	ND	420
Chloroethane	ND	420
Trichlorofluoromethane	ND	210
Acetone	ND	840
Freon 113	ND	210
1,1-Dichloroethene	ND	210
Methylene Chloride	ND	1,000
Carbon Disulfide	ND	210
MTBE	ND	210
trans-1,2-Dichloroethene	ND	210
Vinyl Acetate	ND	2,100
1,1-Dichloroethane	ND	210
2-Butanone	ND	420
cis-1,2-Dichloroethene	ND	210
2,2-Dichloropropane	ND	210
Chloroform	ND	210
Bromochloromethane	ND	210
1,1,1-Trichloroethane	ND	210
1,1-Dichloropropene	ND	210
Carbon Tetrachloride	ND	210
1,2-Dichloroethane	ND	210
Benzene	ND	210
Trichloroethene	ND	210
1,2-Dichloropropane	ND	210
Bromodichloromethane	ND	210
Dibromomethane	ND	210
4-Methyl-2-Pentanone	ND	420
cis-1,3-Dichloropropene	ND	210
Toluene	ND	210
trans-1,3-Dichloropropene	ND	210
1,1,2-Trichloroethane	ND	210
2-Hexanone	ND	420
1,3-Dichloropropane	ND	210
Tetrachloroethene	ND	210

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01C	Diln Fac:	41.83
Lab ID:	306709-003	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/28/19

Analyte	Result	RL
Dibromochloromethane	ND	210
1,2-Dibromoethane	ND	210
Chlorobenzene	ND	210
1,1,1,2-Tetrachloroethane	ND	210
Ethylbenzene	ND	210
m,p-Xylenes	ND	210
o-Xylene	ND	210
Styrene	ND	210
Bromoform	ND	210
Isopropylbenzene	ND	210
1,1,2,2-Tetrachloroethane	ND	210
1,2,3-Trichloropropane	ND	210
Propylbenzene	ND	210
Bromobenzene	ND	210
1,3,5-Trimethylbenzene	ND	210
2-Chlorotoluene	ND	210
4-Chlorotoluene	ND	210
tert-Butylbenzene	ND	210
1,2,4-Trimethylbenzene	ND	210
sec-Butylbenzene	ND	210
para-Isopropyl Toluene	ND	210
1,3-Dichlorobenzene	ND	210
1,4-Dichlorobenzene	ND	210
n-Butylbenzene	ND	210
1,2-Dichlorobenzene	ND	210
1,2-Dibromo-3-Chloropropane	ND	210
1,2,4-Trichlorobenzene	ND	210
Hexachlorobutadiene	ND	210
Naphthalene	ND	210
1,2,3-Trichlorobenzene	ND	210

Surrogate	%REC	Limits
Dibromofluoromethane	128	78-131
1,2-Dichloroethane-d4	119	80-136
Toluene-d8	107	80-120
Bromofluorobenzene	114	80-129

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01D	Diln Fac:	42.93
Lab ID:	306709-004	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/29/19

Analyte	Result	RL
Freon 12	ND	430
Chloromethane	ND	430
Vinyl Chloride	ND	430
Bromomethane	ND	430
Chloroethane	ND	430
Trichlorofluoromethane	ND	210
Acetone	ND	860
Freon 113	ND	210
1,1-Dichloroethene	ND	210
Methylene Chloride	ND	1,100
Carbon Disulfide	ND	210
MTBE	ND	210
trans-1,2-Dichloroethene	ND	210
Vinyl Acetate	ND	2,100
1,1-Dichloroethane	ND	210
2-Butanone	ND	430
cis-1,2-Dichloroethene	ND	210
2,2-Dichloropropane	ND	210
Chloroform	ND	210
Bromochloromethane	ND	210
1,1,1-Trichloroethane	ND	210
1,1-Dichloropropene	ND	210
Carbon Tetrachloride	ND	210
1,2-Dichloroethane	ND	210
Benzene	ND	210
Trichloroethene	ND	210
1,2-Dichloropropane	ND	210
Bromodichloromethane	ND	210
Dibromomethane	ND	210
4-Methyl-2-Pentanone	ND	430
cis-1,3-Dichloropropene	ND	210
Toluene	ND	210
trans-1,3-Dichloropropene	ND	210
1,1,2-Trichloroethane	ND	210
2-Hexanone	ND	430
1,3-Dichloropropane	ND	210
Tetrachloroethene	ND	210

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-01D	Diln Fac:	42.93
Lab ID:	306709-004	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/29/19

Analyte	Result	RL
Dibromochloromethane	ND	210
1,2-Dibromoethane	ND	210
Chlorobenzene	ND	210
1,1,1,2-Tetrachloroethane	ND	210
Ethylbenzene	ND	210
m,p-Xylenes	ND	210
o-Xylene	ND	210
Styrene	ND	210
Bromoform	ND	210
Isopropylbenzene	ND	210
1,1,2,2-Tetrachloroethane	ND	210
1,2,3-Trichloropropane	ND	210
Propylbenzene	ND	210
Bromobenzene	ND	210
1,3,5-Trimethylbenzene	ND	210
2-Chlorotoluene	ND	210
4-Chlorotoluene	ND	210
tert-Butylbenzene	ND	210
1,2,4-Trimethylbenzene	ND	210
sec-Butylbenzene	ND	210
para-Isopropyl Toluene	ND	210
1,3-Dichlorobenzene	ND	210
1,4-Dichlorobenzene	ND	210
n-Butylbenzene	ND	210
1,2-Dichlorobenzene	ND	210
1,2-Dibromo-3-Chloropropane	ND	210
1,2,4-Trichlorobenzene	ND	210
Hexachlorobutadiene	ND	210
Naphthalene	ND	210
1,2,3-Trichlorobenzene	ND	210

Surrogate	%REC	Limits
Dibromofluoromethane	128	78-131
1,2-Dichloroethane-d4	119	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-01	Diln Fac:	33.96
Lab ID:	306709-005	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/29/19

Analyte	Result	RL
Freon 12	ND	340
Chloromethane	ND	340
Vinyl Chloride	ND	340
Bromomethane	ND	340
Chloroethane	ND	340
Trichlorofluoromethane	ND	170
Acetone	ND	680
Freon 113	ND	170
1,1-Dichloroethene	ND	170
Methylene Chloride	ND	850
Carbon Disulfide	ND	170
MTBE	ND	170
trans-1,2-Dichloroethene	ND	170
Vinyl Acetate	ND	1,700
1,1-Dichloroethane	ND	170
2-Butanone	ND	340
cis-1,2-Dichloroethene	ND	170
2,2-Dichloropropane	ND	170
Chloroform	ND	170
Bromochloromethane	ND	170
1,1,1-Trichloroethane	ND	170
1,1-Dichloropropene	ND	170
Carbon Tetrachloride	ND	170
1,2-Dichloroethane	ND	170
Benzene	ND	170
Trichloroethene	ND	170
1,2-Dichloropropane	ND	170
Bromodichloromethane	ND	170
Dibromomethane	ND	170
4-Methyl-2-Pentanone	ND	340
cis-1,3-Dichloropropene	ND	170
Toluene	ND	170
trans-1,3-Dichloropropene	ND	170
1,1,2-Trichloroethane	ND	170
2-Hexanone	ND	340
1,3-Dichloropropane	ND	170
Tetrachloroethene	ND	170
Dibromochloromethane	ND	170
1,2-Dibromoethane	ND	170
Chlorobenzene	ND	170
1,1,1,2-Tetrachloroethane	ND	170
Ethylbenzene	ND	170
m,p-Xylenes	ND	170
o-Xylene	ND	170
Styrene	ND	170
Bromoform	ND	170
Isopropylbenzene	ND	170
1,1,2,2-Tetrachloroethane	ND	170
1,2,3-Trichloropropane	ND	170
Propylbenzene	ND	170
Bromobenzene	ND	170
1,3,5-Trimethylbenzene	ND	170
2-Chlorotoluene	ND	170

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-01	Diln Fac:	33.96
Lab ID:	306709-005	Batch#:	267279
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Analyzed:	01/29/19

Analyte	Result	RL
4-Chlorotoluene	ND	170
tert-Butylbenzene	ND	170
1,2,4-Trimethylbenzene	ND	170
sec-Butylbenzene	ND	170
para-Isopropyl Toluene	ND	170
1,3-Dichlorobenzene	ND	170
1,4-Dichlorobenzene	ND	170
n-Butylbenzene	ND	170
1,2-Dichlorobenzene	ND	170
1,2-Dibromo-3-Chloropropane	ND	170
1,2,4-Trichlorobenzene	ND	170
Hexachlorobutadiene	ND	170
Naphthalene	ND	170
1,2,3-Trichlorobenzene	ND	170

Surrogate	%REC	Limits
Dibromofluoromethane	132 *	78-131
1,2-Dichloroethane-d4	129	80-136
Toluene-d8	106	80-120
Bromofluorobenzene	114	80-129

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit
 Page 2 of 2

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	267279
MSS Lab ID:	306603-001	Sampled:	01/18/19
Matrix:	Soil	Received:	01/21/19
Units:	ug/Kg	Analyzed:	01/29/19
Basis:	air dried		

Type: MS Diln Fac: 0.9346
 Lab ID: QC962712

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2090	46.73	45.84	98	65-142
Benzene	<0.09328	46.73	41.28	88	62-122
Trichloroethene	1.235	46.73	41.16	85	53-145
Toluene	<0.09328	46.73	36.73	79	54-120
Chlorobenzene	<0.09328	46.73	33.63	72	48-120

Surrogate	%REC	Limits
Dibromofluoromethane	127	78-131
1,2-Dichloroethane-d4	118	80-136
Toluene-d8	106	80-120
Bromofluorobenzene	107	80-129

Type: MSD Diln Fac: 0.9901
 Lab ID: QC962713

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.50	54.87	111	65-142	12	41
Benzene	49.50	46.05	93	62-122	5	36
Trichloroethene	49.50	44.79	88	53-145	3	39
Toluene	49.50	42.35	86	54-120	8	35
Chlorobenzene	49.50	37.96	77	48-120	6	35

Surrogate	%REC	Limits
Dibromofluoromethane	131	78-131
1,2-Dichloroethane-d4	115	80-136
Toluene-d8	107	80-120
Bromofluorobenzene	104	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Basis:	air dried
Lab ID:	QC962714	Diln Fac:	1.000
Matrix:	Soil	Batch#:	267279
Units:	ug/Kg	Analyzed:	01/28/19

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	25
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 #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Basis:	air dried
Lab ID:	QC962714	Diln Fac:	1.000
Matrix:	Soil	Batch#:	267279
Units:	ug/Kg	Analyzed:	01/28/19

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	111	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	106	80-120
Bromofluorobenzene	109	80-129

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	LCS	Basis:	air dried
Lab ID:	QC962863	Diln Fac:	1.000
Matrix:	Soil	Batch#:	267279
Units:	ug/Kg	Analyzed:	01/28/19

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.17	113	69-142
Benzene	25.00	24.98	100	79-123
Trichloroethene	25.00	23.74	95	79-126
Toluene	25.00	24.65	99	78-120
Chlorobenzene	25.00	24.89	100	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	117	78-131
1,2-Dichloroethane-d4	98	80-136
Toluene-d8	107	80-120
Bromofluorobenzene	105	80-129

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-01A	Batch#:	267341
Lab ID:	306709-001	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	ND	49
Acenaphthylene	ND	49
Acenaphthene	ND	49
Fluorene	ND	49
Phenanthrene	150	49
Anthracene	ND	49
Fluoranthene	350	49
Pyrene	530	49
Benzo(a)anthracene	150	49
Chrysene	220	49
Benzo(b)fluoranthene	330	49
Benzo(k)fluoranthene	110	49
Benzo(a)pyrene	320	49
Indeno(1,2,3-cd)pyrene	250	49
Dibenz(a,h)anthracene	ND	49
Benzo(g,h,i)perylene	380	49

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-01B	Batch#:	267341
Lab ID:	306709-002	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	100	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	230	50
Anthracene	69	50
Fluoranthene	590	50
Pyrene	770	50
Benzo(a)anthracene	260	50
Chrysene	340	50
Benzo(b)fluoranthene	460	50
Benzo(k)fluoranthene	150	50
Benzo(a)pyrene	460	50
Indeno(1,2,3-cd)pyrene	320	50
Dibenz(a,h)anthracene	65	50
Benzo(g,h,i)perylene	460	50

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-01C	Batch#:	267341
Lab ID:	306709-003	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	ND	49
Acenaphthylene	ND	49
Acenaphthene	ND	49
Fluorene	ND	49
Phenanthrene	120	49
Anthracene	ND	49
Fluoranthene	320	49
Pyrene	480	49
Benzo(a)anthracene	150	49
Chrysene	210	49
Benzo(b)fluoranthene	340	49
Benzo(k)fluoranthene	100	49
Benzo(a)pyrene	320	49
Indeno(1,2,3-cd)pyrene	240	49
Dibenz(a,h)anthracene	ND	49
Benzo(g,h,i)perylene	360	49

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-01D	Batch#:	267341
Lab ID:	306709-004	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	200	50
Anthracene	ND	50
Fluoranthene	420	50
Pyrene	570	50
Benzo(a)anthracene	180	50
Chrysene	250	50
Benzo(b)fluoranthene	380	50
Benzo(k)fluoranthene	110	50
Benzo(a)pyrene	360	50
Indeno(1,2,3-cd)pyrene	250	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	370	50

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-01	Batch#:	267341
Lab ID:	306709-005	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	10.00		

Analyte	Result	RL
Naphthalene	ND	50
Acenaphthylene	ND	50
Acenaphthene	ND	50
Fluorene	ND	50
Phenanthrene	97	50
Anthracene	ND	50
Fluoranthene	260	50
Pyrene	380	50
Benzo(a)anthracene	120	50
Chrysene	170	50
Benzo(b)fluoranthene	280	50
Benzo(k)fluoranthene	79	50
Benzo(a)pyrene	260	50
Indeno(1,2,3-cd)pyrene	160	50
Dibenz(a,h)anthracene	ND	50
Benzo(g,h,i)perylene	250	50

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

DO= Diluted Out
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC962964	Batch#:	267341
Matrix:	Soil	Prepared:	01/29/19
Units:	ug/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL
Naphthalene	ND	5.0
Acenaphthylene	ND	5.0
Acenaphthene	ND	5.0
Fluorene	ND	5.0
Phenanthrene	ND	5.0
Anthracene	ND	5.0
Fluoranthene	ND	5.0
Pyrene	ND	5.0
Benzo(a)anthracene	ND	5.0
Chrysene	ND	5.0
Benzo(b)fluoranthene	ND	5.0
Benzo(k)fluoranthene	ND	5.0
Benzo(a)pyrene	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Dibenz(a,h)anthracene	ND	5.0
Benzo(g,h,i)perylene	ND	5.0

Surrogate	%REC	Limits
Nitrobenzene-d5	81	48-120
2-Fluorobiphenyl	68	39-120
Terphenyl-d14	70	61-120

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC962965	Batch#:	267341
Matrix:	Soil	Prepared:	01/29/19
Units:	ug/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.33	27.10	81	64-120
Pyrene	33.33	28.90	87	67-120

Surrogate	%REC	Limits
Nitrobenzene-d5	81	48-120
2-Fluorobiphenyl	73	39-120
Terphenyl-d14	73	61-120

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	ZZZZZZZZZZ	Batch#:	267341
MSS Lab ID:	306734-001	Sampled:	01/25/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/29/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	1.000		

Type: MS Lab ID: QC962966

Analyte	MSS Result	Spiked	Result	%REC	Limits
Acenaphthene	<0.9960	33.31	23.22	70	54-120
Pyrene	<0.9960	33.31	25.96	78	57-131

Surrogate	%REC	Limits
Nitrobenzene-d5	71	48-120
2-Fluorobiphenyl	53	39-120
Terphenyl-d14	63	61-120

Type: MSD Lab ID: QC962967

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	33.38	27.43	82	54-120	16	23
Pyrene	33.38	30.06	90	57-131	14	35

Surrogate	%REC	Limits
Nitrobenzene-d5	83	48-120
2-Fluorobiphenyl	66	39-120
Terphenyl-d14	73	61-120

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-01A	Batch#:	267407
Lab ID:	306709-001	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.76
beta-BHC	ND	5.7	1.2
gamma-BHC	ND	5.7	0.90
delta-BHC	ND	5.7	1.3
Heptachlor	ND	5.7	0.90
Aldrin	ND	5.7	0.86
Heptachlor epoxide	ND	5.7	0.83
Endosulfan I	ND	5.7	1.4
Dieldrin	ND	11	1.1
4,4'-DDE	ND	11	1.5
Endrin	1.0 C J	11	0.97
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.9
4,4'-DDD	ND	11	1.3
Endrin aldehyde	ND	11	5.2
4,4'-DDT	3.0 J #	11	2.1
alpha-Chlordane	1.6 C J	5.7	1.1
gamma-Chlordane	1.9 J	5.7	1.2
Methoxychlor	ND	57	20
Toxaphene	ND	210	62

Surrogate	%REC	Limits
TCMX	103	43-125
Decachlorobiphenyl	91	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-01B	Batch#:	267407
Lab ID:	306709-002	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.75
beta-BHC	ND	5.6	1.2
gamma-BHC	ND	5.6	0.88
delta-BHC	ND	5.6	1.2
Heptachlor	ND	5.6	0.89
Aldrin	ND	5.6	0.85
Heptachlor epoxide	ND	5.6	0.81
Endosulfan I	ND	5.6	1.4
Dieldrin	ND	11	1.1
4,4'-DDE	ND	11	1.5
Endrin	ND	11	0.96
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.9
4,4'-DDD	1.3 J	11	1.3
Endrin aldehyde	ND	11	5.1
4,4'-DDT	3.2 J	11	2.0
alpha-Chlordane	2.5 C J	5.6	1.1
gamma-Chlordane	3.1 J	5.6	1.1
Methoxychlor	ND	56	20
Toxaphene	ND	200	61

Surrogate	%REC	Limits
TCMX	103	43-125
Decachlorobiphenyl	89	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-01C	Batch#:	267407
Lab ID:	306709-003	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.74
beta-BHC	ND	5.6	1.1
gamma-BHC	ND	5.6	0.87
delta-BHC	ND	5.6	1.2
Heptachlor	ND	5.6	0.88
Aldrin	ND	5.6	0.84
Heptachlor epoxide	ND	5.6	0.81
Endosulfan I	ND	5.6	1.4
Dieldrin	ND	11	1.1
4,4'-DDE	ND	11	1.5
Endrin	1.2 C J	11	0.95
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.9
4,4'-DDD	ND	11	1.2
Endrin aldehyde	ND	11	5.0
4,4'-DDT	ND	11	2.0
alpha-Chlordane	2.1 C J	5.6	1.1
gamma-Chlordane	2.8 J	5.6	1.4
Methoxychlor	ND	56	20
Toxaphene	ND	200	60

Surrogate	%REC	Limits
TCMX	97	43-125
Decachlorobiphenyl	91	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-01D	Batch#:	267407
Lab ID:	306709-004	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.74
beta-BHC	ND	5.6	1.1
gamma-BHC	ND	5.6	0.88
delta-BHC	ND	5.6	1.2
Heptachlor	ND	5.6	0.88
Aldrin	ND	5.6	0.84
Heptachlor epoxide	ND	5.6	0.81
Endosulfan I	ND	5.6	1.4
Dieldrin	ND	11	1.1
4,4'-DDE	ND	11	1.5
Endrin	ND	11	0.95
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.9
4,4'-DDD	ND	11	1.2
Endrin aldehyde	ND	11	5.0
4,4'-DDT	4.1 J #	11	2.1
alpha-Chlordane	3.1 C J	5.6	1.1
gamma-Chlordane	4.0 J	5.6	1.4
Methoxychlor	ND	56	20
Toxaphene	ND	200	60

Surrogate	%REC	Limits
TCMX	109	43-125
Decachlorobiphenyl	86	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-01	Batch#:	267407
Lab ID:	306709-005	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.73
beta-BHC	ND	5.4	1.1
gamma-BHC	ND	5.4	0.85
delta-BHC	ND	5.4	1.2
Heptachlor	ND	5.4	0.86
Aldrin	ND	5.4	0.82
Heptachlor epoxide	ND	5.4	0.79
Endosulfan I	ND	5.4	1.3
Dieldrin	ND	11	1.1
4,4'-DDE	ND	11	1.4
Endrin	ND	11	0.93
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.8
4,4'-DDD	ND	11	1.2
Endrin aldehyde	ND	11	4.9
4,4'-DDT	4.1 J #	11	2.0
alpha-Chlordane	2.7 C J	5.4	1.1
gamma-Chlordane	3.8 J	5.4	1.1
Methoxychlor	ND	54	19
Toxaphene	ND	200	59

Surrogate	%REC	Limits
TCMX	111	43-125
Decachlorobiphenyl	93	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC963249	Batch#:	267407
Matrix:	Soil	Prepared:	01/31/19
Units:	ug/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	MDL
alpha-BHC	ND	0.85	0.11
beta-BHC	ND	0.85	0.17
gamma-BHC	ND	0.85	0.13
delta-BHC	ND	0.85	0.19
Heptachlor	ND	0.85	0.13
Aldrin	ND	0.85	0.13
Heptachlor epoxide	ND	0.85	0.12
Endosulfan I	ND	0.85	0.21
Dieldrin	ND	1.7	0.16
4,4'-DDE	ND	1.7	0.23
Endrin	ND	1.7	0.16
Endosulfan II	ND	1.7	0.20
Endosulfan sulfate	ND	1.7	0.29
4,4'-DDD	ND	1.7	0.19
Endrin aldehyde	ND	1.7	0.78
4,4'-DDT	ND	1.7	0.31
alpha-Chlordane	ND	0.85	0.16
gamma-Chlordane	ND	0.85	0.17
Methoxychlor	ND	8.5	3.0
Toxaphene	ND	31	9.2

Surrogate	%REC	Limits
TCMX	84	43-125
Decachlorobiphenyl	101	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC963250	Batch#:	267407
Matrix:	Soil	Prepared:	01/31/19
Units:	ug/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	9.785	11.09	113	58-131
Heptachlor	9.785	11.35	116	51-133
Aldrin	9.785	11.27	115	52-128
Dieldrin	9.785	9.977	102	59-133
Endrin	9.785	11.42	117	48-154
4,4'-DDT	9.785	11.49	117	54-140

Surrogate	%REC	Limits
TCMX	90	43-125
Decachlorobiphenyl	109	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	267407
MSS Lab ID:	306609-001	Sampled:	01/17/19
Matrix:	Soil	Received:	01/22/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	2.000		

Type: MS Lab ID: QC963251

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.3397	13.21	10.71	81	58-126
Heptachlor	<0.3418	13.21	12.31	93	58-127
Aldrin	0.7888	13.21	11.17	79	55-124
Dieldrin	2.834	13.21	13.43	80	48-137
Endrin	<0.4134	13.21	12.63	96	48-158
4,4'-DDT	2.384	13.21	15.81	102	38-155

Surrogate	%REC	Limits
TCMX	65	43-125
Decachlorobiphenyl	81	40-128

Type: MSD Lab ID: QC963252

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.11	9.369	71	58-126	13	36
Heptachlor	13.11	11.35	87	58-127	7	34
Aldrin	13.11	10.17	72	55-124	9	31
Dieldrin	13.11	12.33	72	48-137	8	38
Endrin	13.11	11.99	92	48-158	4	38
4,4'-DDT	13.11	13.48	85	38-155	15	42

Surrogate	%REC	Limits
TCMX	63	43-125
Decachlorobiphenyl	73	40-128

RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	01/24/19
Units:	ug/Kg	Received:	01/25/19
Basis:	air dried	Prepared:	01/31/19
Batch#:	267407		

Field ID: DTSC-01D Diln Fac: 2.000
 Type: SAMPLE Analyzed: 01/31/19
 Lab ID: 306709-004

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	27
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	20	13

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

Field ID: RPS-01 Diln Fac: 2.000
 Type: SAMPLE Analyzed: 02/01/19
 Lab ID: 306709-005

Analyte	Result	RL
Aroclor-1016	ND	13
Aroclor-1221	ND	26
Aroclor-1232	ND	13
Aroclor-1242	ND	13
Aroclor-1248	ND	13
Aroclor-1254	ND	13
Aroclor-1260	20	13

Surrogate	%REC	Limits
Decachlorobiphenyl	74	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC963249 Analyzed: 01/31/19

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
Decachlorobiphenyl	108	49-157

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC963253	Batch#:	267407
Matrix:	Soil	Prepared:	01/31/19
Units:	ug/Kg	Analyzed:	01/31/19
Basis:	air dried		

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	126.6	100.5	79	63-143
Aroclor-1260	126.6	121.6	96	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	91	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3540C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	267407
MSS Lab ID:	306721-020	Sampled:	01/25/19
Matrix:	Soil	Received:	01/25/19
Units:	ug/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	01/31/19
Diln Fac:	1.000		

Type: MS Lab ID: QC963254

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<2.334	165.9	137.9	83	62-160
Aroclor-1260	<1.526	165.9	155.5	94	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	92	49-157

Type: MSD Lab ID: QC963255

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	169.8	141.2	83	62-160	0	43
Aroclor-1260	169.8	166.0	98	53-172	4	44

Surrogate	%REC	Limits
Decachlorobiphenyl	104	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	306709	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-01A	Diln Fac:	1.000
Lab ID:	306709-001	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Arsenic	5.4	1.5	267433	01/31/19	EPA 3050B	EPA 6010B
Barium	80	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Beryllium	0.38	0.099	267433	01/31/19	EPA 3050B	EPA 6010B
Cadmium	0.44	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Chromium	47	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Cobalt	9.0	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Copper	23	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Lead	33	0.99	267433	01/31/19	EPA 3050B	EPA 6010B
Mercury	0.19	0.017	267447	02/01/19	METHOD	EPA 7471A
Molybdenum	0.33	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Nickel	42	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	267433	01/31/19	EPA 3050B	EPA 6010B
Vanadium	39	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Zinc	62	0.99	267433	01/31/19	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals

Lab #:	306709	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-01B	Diln Fac:	1.000
Lab ID:	306709-002	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Arsenic	5.4	1.5	267433	01/31/19	EPA 3050B	EPA 6010B
Barium	80	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Beryllium	0.41	0.098	267433	01/31/19	EPA 3050B	EPA 6010B
Cadmium	0.44	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Chromium	48	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Cobalt	10	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Copper	23	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Lead	25	0.98	267433	01/31/19	EPA 3050B	EPA 6010B
Mercury	0.18	0.016	267447	02/01/19	METHOD	EPA 7471A
Molybdenum	ND	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Nickel	43	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Silver	ND	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	267433	01/31/19	EPA 3050B	EPA 6010B
Vanadium	42	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Zinc	66	0.98	267433	01/31/19	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals

Lab #:	306709	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-01C	Diln Fac:	1.000
Lab ID:	306709-003	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	1.9	267433	01/31/19	EPA 3050B	EPA 6010B
Arsenic	5.2	1.4	267433	01/31/19	EPA 3050B	EPA 6010B
Barium	81	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Beryllium	0.39	0.095	267433	01/31/19	EPA 3050B	EPA 6010B
Cadmium	0.41	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Chromium	44	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Cobalt	8.8	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Copper	21	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Lead	58	0.95	267433	01/31/19	EPA 3050B	EPA 6010B
Mercury	0.14	0.016	267447	02/01/19	METHOD	EPA 7471A
Molybdenum	0.24	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Nickel	43	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Selenium	ND	1.9	267433	01/31/19	EPA 3050B	EPA 6010B
Silver	ND	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Thallium	ND	0.48	267433	01/31/19	EPA 3050B	EPA 6010B
Vanadium	38	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Zinc	58	0.95	267433	01/31/19	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals

Lab #:	306709	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-01D	Diln Fac:	1.000
Lab ID:	306709-004	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Arsenic	5.5	1.5	267433	01/31/19	EPA 3050B	EPA 6010B
Barium	93	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Beryllium	0.37	0.10	267433	01/31/19	EPA 3050B	EPA 6010B
Cadmium	0.42	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Chromium	43	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Cobalt	9.1	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Copper	24	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Lead	30	1.0	267433	01/31/19	EPA 3050B	EPA 6010B
Mercury	0.14	0.017	267447	02/01/19	METHOD	EPA 7471A
Molybdenum	0.33	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Nickel	45	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	267433	01/31/19	EPA 3050B	EPA 6010B
Vanadium	37	0.25	267433	01/31/19	EPA 3050B	EPA 6010B
Zinc	59	1.0	267433	01/31/19	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

California Title 22 Metals

Lab #:	306709	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-01	Diln Fac:	1.000
Lab ID:	306709-005	Sampled:	01/24/19
Matrix:	Soil	Received:	01/25/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL	Batch#	Prepared	Prep	Analysis
Antimony	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Arsenic	5.2	1.5	267433	01/31/19	EPA 3050B	EPA 6010B
Barium	82	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Beryllium	0.38	0.098	267433	01/31/19	EPA 3050B	EPA 6010B
Cadmium	0.41	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Chromium	47	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Cobalt	8.8	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Copper	22	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Lead	30	0.98	267433	01/31/19	EPA 3050B	EPA 6010B
Mercury	0.13	0.017	267447	02/01/19	METHOD	EPA 7471A
Molybdenum	0.32	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Nickel	45	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	267433	01/31/19	EPA 3050B	EPA 6010B
Silver	ND	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	267433	01/31/19	EPA 3050B	EPA 6010B
Vanadium	39	0.24	267433	01/31/19	EPA 3050B	EPA 6010B
Zinc	62	0.98	267433	01/31/19	EPA 3050B	EPA 6010B

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC963346	Batch#:	267433
Matrix:	Soil	Prepared:	01/31/19
Units:	mg/Kg	Analyzed:	02/01/19
Basis:	air dried		

Analyte	Result	RL
Antimony	ND	2.0
Arsenic	ND	1.5
Barium	ND	0.25
Beryllium	ND	0.10
Cadmium	ND	0.25
Chromium	ND	0.25
Cobalt	ND	0.25
Copper	ND	0.25
Lead	ND	1.0
Molybdenum	ND	0.25
Nickel	ND	0.25
Selenium	ND	2.0
Silver	ND	0.25
Thallium	ND	0.50
Vanadium	ND	0.25
Zinc	ND	1.0

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	267433
Units:	mg/Kg	Prepared:	01/31/19
Basis:	air dried	Analyzed:	02/01/19
Diln Fac:	1.000		

Type: BS Lab ID: QC963347

Analyte	Spiked	Result	%REC	Limits
Antimony	49.60	49.92	101	80-120
Arsenic	49.60	49.92	101	80-120
Barium	49.60	49.54	100	80-120
Beryllium	24.80	23.80	96	80-120
Cadmium	49.60	46.60	94	80-120
Chromium	49.60	49.45	100	80-120
Cobalt	49.60	47.76	96	80-120
Copper	49.60	47.05	95	80-120
Lead	49.60	47.11	95	80-120
Molybdenum	49.60	46.07	93	80-120
Nickel	49.60	44.99	91	80-120
Selenium	49.60	49.14	99	80-120
Silver	4.960	4.395	89	80-120
Thallium	49.60	50.74	102	80-120
Vanadium	49.60	50.34	101	80-120
Zinc	49.60	48.23	97	80-120

Type: BSD Lab ID: QC963348

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.70	50.21	101	80-120	0	20
Arsenic	49.70	50.37	101	80-120	1	20
Barium	49.70	49.67	100	80-120	0	20
Beryllium	24.85	24.07	97	80-120	1	20
Cadmium	49.70	47.42	95	80-120	2	20
Chromium	49.70	50.32	101	80-120	2	20
Cobalt	49.70	48.56	98	80-120	1	20
Copper	49.70	47.94	96	80-120	2	20
Lead	49.70	47.82	96	80-120	1	20
Molybdenum	49.70	46.47	94	80-120	1	20
Nickel	49.70	45.90	92	80-120	2	20
Selenium	49.70	49.43	99	80-120	0	20
Silver	4.970	4.442	89	80-120	1	20
Thallium	49.70	50.84	102	80-120	0	20
Vanadium	49.70	51.09	103	80-120	1	20
Zinc	49.70	49.20	99	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Basis:	air dried
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC963386	Batch#:	267447
Matrix:	Soil	Prepared:	02/01/19
Units:	mg/Kg	Analyzed:	02/01/19

Result	RL
ND	0.016

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

California Title 22 Metals			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	267447
Units:	mg/Kg	Prepared:	02/01/19
Basis:	air dried	Analyzed:	02/01/19

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC963387	0.1563	0.1440	92	80-120		
BSD	QC963388	0.1613	0.1380	86	80-120	7	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	I-03-S-1.5	Batch#:	267447
MSS Lab ID:	306705-001	Sampled:	01/24/19
Matrix:	Soil	Received:	01/24/19
Units:	mg/Kg	Prepared:	02/01/19
Basis:	air dried	Analyzed:	02/01/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC963389	0.02616	0.1538	0.1735	96	80-120		
MSD	QC963390		0.1667	0.1819	93	80-120	2	20

RPD= Relative Percent Difference

Moisture			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	267364
Matrix:	Soil	Sampled:	01/24/19
Units:	%	Received:	01/25/19
Diln Fac:	1.000	Analyzed:	01/30/19

Field ID	Lab ID	Result	RL
DTSC-01A	306709-001	3	1
DTSC-01B	306709-002	3	1
DTSC-01C	306709-003	3	1
DTSC-01D	306709-004	3	1
RPS-01	306709-005	3	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	306709	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	267364
MSS Lab ID:	306776-001	Sampled:	01/28/19
Lab ID:	QC963079	Received:	01/28/19
Matrix:	Soil	Analyzed:	01/30/19

MSS Result	Result	RL	RPD	Lim
15.36	15.51	1.000	1	26

RL= Reporting Limit
 RPD= Relative Percent Difference
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ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 308185
ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
RPS-02	308185-001
RPS-03	308185-002
RPS-04	308185-003
EB-190318	308185-004
RPS-02	308185-005
RPS-03	308185-006
RPS-04	308185-007

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 04/08/2019

Tracy Babjar
Project Manager
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(510) 204-2226 Ext 13107

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 308185
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/18/19
Samples Received: 03/18/19

This data package contains sample and QC results for three soil samples and one water sample, requested for the above referenced project on 03/18/19. The samples were received cold and intact. This report was re-issued on 05/21/19 to include BaPE Calculations.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 268734; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 268738. No other analytical problems were encountered.

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

RPS-02 (lab # 308185-001), RPS-03 (lab # 308185-002), and RPS-04 (lab # 308185-003) were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 268758 due to insufficient sample amount. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes QC969009, QC969010 (batch 268796) were not reported because the parent sample required a dilution that would have diluted out the spikes. RPS-03 (lab # 308185-002) and RPS-04 (lab # 308185-003) were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A) Water:

All samples underwent sulfur cleanup using the copper option in EPA Method

CASE NARRATIVE

Laboratory number: 308185
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/18/19
Samples Received: 03/18/19

Pesticides (EPA 8081A) Water:

3660B. High recovery was observed for gamma-BHC in the BSD for batch 268692; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Pesticides (EPA 8081A) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. RPS-02 (lab # 308185-001), RPS-03 (lab # 308185-002), and RPS-04 (lab # 308185-003) were diluted due to the color of the sample extracts. RPS-03 (lab # 308185-002) was diluted due to the dark and viscous nature of the sample extract. 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.

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. RPS-02 (lab # 308185-001), RPS-03 (lab # 308185-002), and RPS-04 (lab # 308185-003) were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A) Water:

Beryllium, lead, and selenium were detected between the MDL and the RL in the method blank for batch 268727; these analytes were not detected in the sample at or above the RL. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A) Soil:

Low recoveries were observed for antimony in the MS/MSD of RPS-04 (lab # 308185-003); the BS/BSD were within limits, and the associated RPD was within limits. Barium, copper, and zinc were detected between the MDL and the RL in the method blank for batch 268807; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 308185

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : RPS-02

Laboratory Sample ID :

308185-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	52	Y	5.0	1.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	270		25	7.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Naphthalene	230		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	300		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	630		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	1,000		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	5,600		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	690		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	3,200		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	4,100		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	1,300		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	1,200		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,300		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	490		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,400		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	850		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	170		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	1,200		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,900				ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Endrin	1.9	#,J	17	0.95	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
alpha-Chlordane	2.5	C,J	8.6	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
gamma-Chlordane	3.4	J	8.6	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1260	45		6.7	1.6	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Antimony	0.47	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.3		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	85		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.32		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	49		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	31		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.24		0.018	0.0054	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.59		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	49		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	66		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-03

Laboratory Sample ID :

308185-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	51	Y	5.0	1.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	320		25	7.6	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	74	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	34	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	540		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	110	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	990		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,500		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	440		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	560		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	470		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	220		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	610		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	400		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	90	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	590		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	840				ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Aroclor-1260	15		6.7	1.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Antimony	0.11	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.8		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	81		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.32		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	30		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	36		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.15		0.017	0.0052	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.57		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	49		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	66		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-04

Laboratory Sample ID :

308185-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	50		5.0	1.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	260		25	7.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Phenanthrene	240	J	250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	62	J	250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	690		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	950		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	310		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	380		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	380		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	170	J	250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	470		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	330		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	58	J	250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	500		250	49	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	630				ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
4,4'-DDE	1.6	J	16	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1260	15		6.6	1.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Antimony	0.12	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.0		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	75		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.21	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.4		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	30		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.12		0.017	0.0050	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.51		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	48		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	69		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : EB-190318

Laboratory Sample ID :

308185-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	19	J	50	9.4	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	67	Y	50	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Motor Oil C24-C36	98	J	300	96	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Acetone	3.4	J	10	1.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Carbon Disulfide	0.1	J	0.5	0.1	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Beryllium	0.20	J	2.0	0.13	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Lead	3.0	J	5.0	0.86	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Selenium	2.6	J	10	2.0	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Zinc	4.7	J	20	2.9	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A

Client Sample ID : RPS-02

Laboratory Sample ID :

308185-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.74	J	2.5	0.10	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Naphthalene	120	J	130	27	ug/Kg	Dry	22.14	EPA 8260B	EPA 5035
Moisture, Percent	12		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-03

Laboratory Sample ID :

308185-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.72	J	2.4	0.098	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	6		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-04

Laboratory Sample ID :

308185-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.57	J	2.3	0.095	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	7		1		%	As Recd	1.000	EPA CLP	METHOD

= CCV drift outside limits; average CCV drift within limits per method requirements
 C = Presence confirmed, but RPD between columns exceeds 40%
 J = Estimated value
 Y = Sample exhibits chromatographic pattern which does not resemble standard

308185

RPS
 1438 Webster Street, Suite 302
 Oakland, California 94612
 (510) 834-4747 tel
 (510) 834-4199 fax

CHAIN-OF-CUSTODY

Sampler Name(s): *Neal Hughes*
Mayra Dudrenova
 Signature(s): *Neal Hughes*
Mayra Dudrenova

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
RPS-02		3/18/19	1225	soil	none
RPS-03		↓	1225	↓	MediH
RPS-04		↓	1230	↓	↓
ER-190318		3/18/19	1600	Water	RWS, H4 none

TPH-8: d-mo by Method	8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	Multi Incremental Sampling (MIS)	Number of Containers
X	X	X	X	X	X	X	X	X	2
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
X	X	X	X	X	X	X	X	X	15

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
 Project Number: 16-1498E
 Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower
 E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com; mayra.dudrenova@rpsgroup.com
 Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture - No chry. All other analyses are M15 Dry

RELINQUISHED BY:

Printed Name: *Neal Hughes*
 Signature: *Neal Hughes*
 Company: *RPS*

Time/Date: 3/18/19 1745

RECEIVED BY:

Printed Name: *Halley Campbell*
 Signature: *Halley Campbell*
 Company: *EA*

Time/Date: 3/18/19 1745

RELINQUISHED BY:

Printed Name
 Signature
 Company
 Time/Date

RECEIVED BY:

Printed Name
 Signature
 Company
 Time/Date

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 308185
 Date Received: 3.18.19

Client: RPS
 Project: Alameda Landing waterfront

Section 2: Samples received in a cooler? Yes, how many? 2 No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun

If in cooler: Date Opened 3.18.19 By (print) AK (sign) af

Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gal, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 13.5, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	<input checked="" type="checkbox"/>		
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>		
If YES, what time were they transferred to freezer? <u>@ 3/19/19 10:52</u>			
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>		
Are there any missing / extra samples?		<input checked="" type="checkbox"/>	
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>		
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>		
Does the container count match the CDC?	<input checked="" type="checkbox"/>		
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for unpreserved VOAs?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>		
Are bubbles > 6mm absent in VOA samples?	<input checked="" type="checkbox"/>		
Was the client contacted concerning this sample delivery?		<input checked="" type="checkbox"/>	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (If N/A, skip the rest of section 5)	<input checked="" type="checkbox"/>		
Did you check preservatives for all bottles for each sample?	<input checked="" type="checkbox"/>		
Did you document your preservative check? pH strip lot# <u>505243881</u> , pH strip lot# _____, pH strip lot# _____	<input checked="" type="checkbox"/>		
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged In 3/19/19 By (print) VE (sign) VE
 Date Labeled 3/19/19 By (print) AK (sign) A

Enthalpy Sample Preservation for 308185

Sample	pH: <2	>9	>12	Other
-004a	[]	[]	[]	_____
b	[]	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
g	[]	[]	[]	_____
h	[]	[]	[]	_____
i	[]	[]	[]	_____
j	[]	[]	[]	_____
k	[]	[]	[]	_____
l	[]	[]	[]	_____
m	[]	[]	[]	_____
n	[]	[]	[]	_____
o	[]	[]	[]	_____

Analyst: A
Date: 3/19/19

Total Volatile Hydrocarbons			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190318	Batch#:	268734
Matrix:	Water	Sampled:	03/18/19
Units:	ug/L	Received:	03/18/19
Diln Fac:	1.000	Analyzed:	03/19/19

Type: SAMPLE Lab ID: 308185-004

Analyte	Result	RL	MDL
Gasoline C7-C12	19 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	80-120

Type: BLANK Lab ID: QC968747

Analyte	Result	RL	MDL
Gasoline C7-C12	22 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-120

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190318	Batch#:	268734
MSS Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Analyzed:	03/19/19
Diln Fac:	1.000		

Type: MS Lab ID: QC968750

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	19.48	2,000	2,129	105	78-120

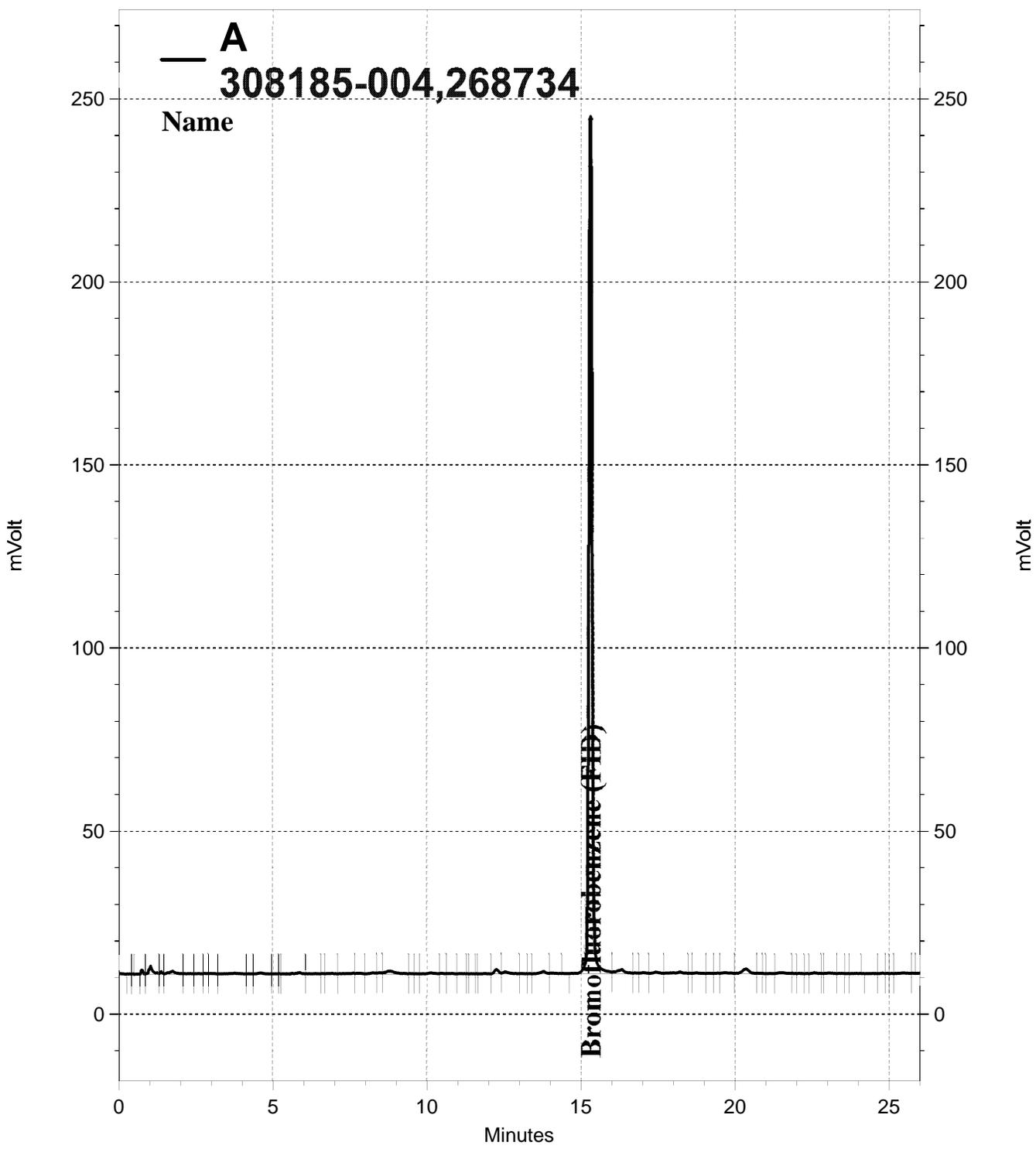
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	80-120

Type: MSD Lab ID: QC968751

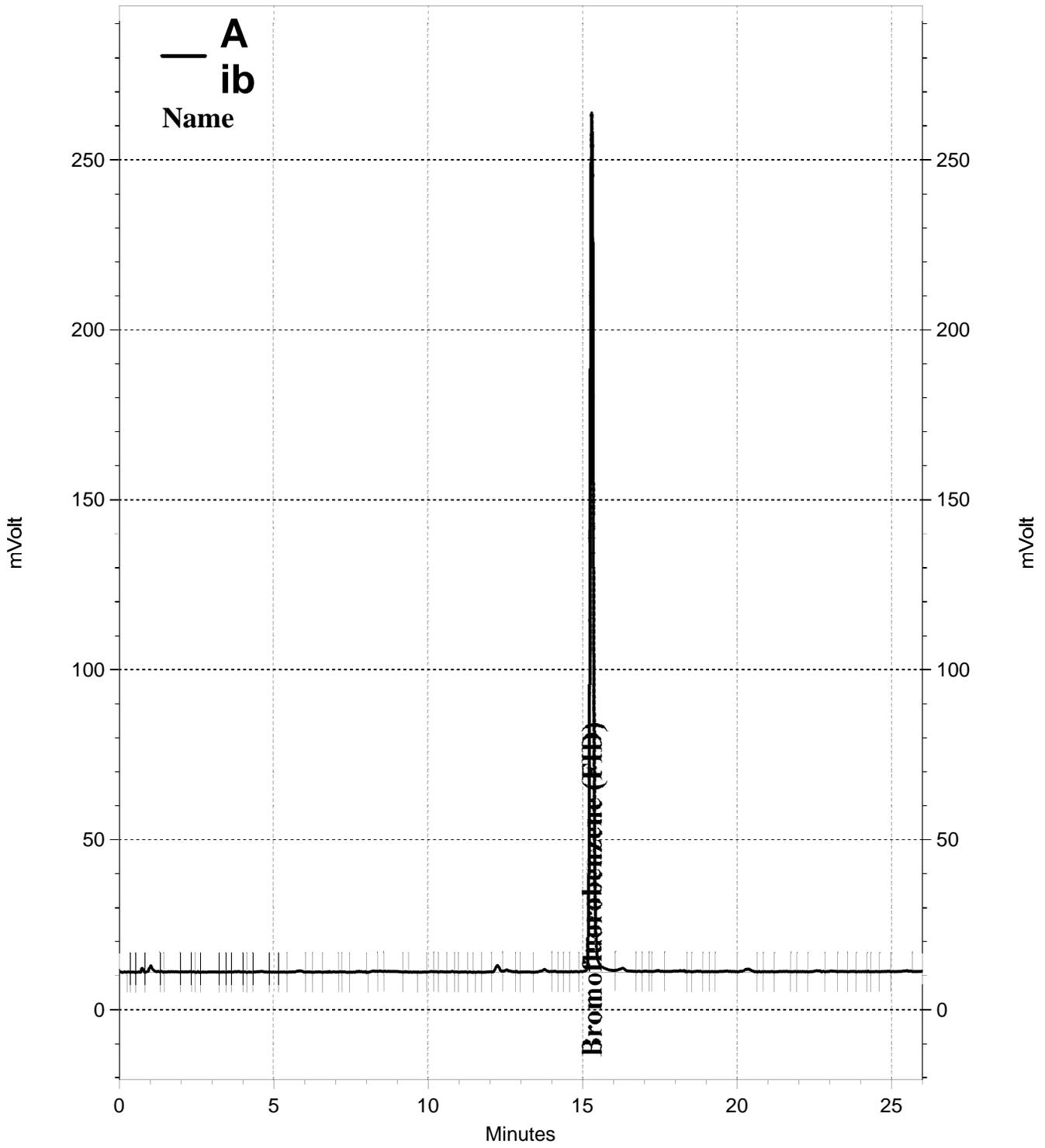
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,208	109	78-120	4	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	107	80-120

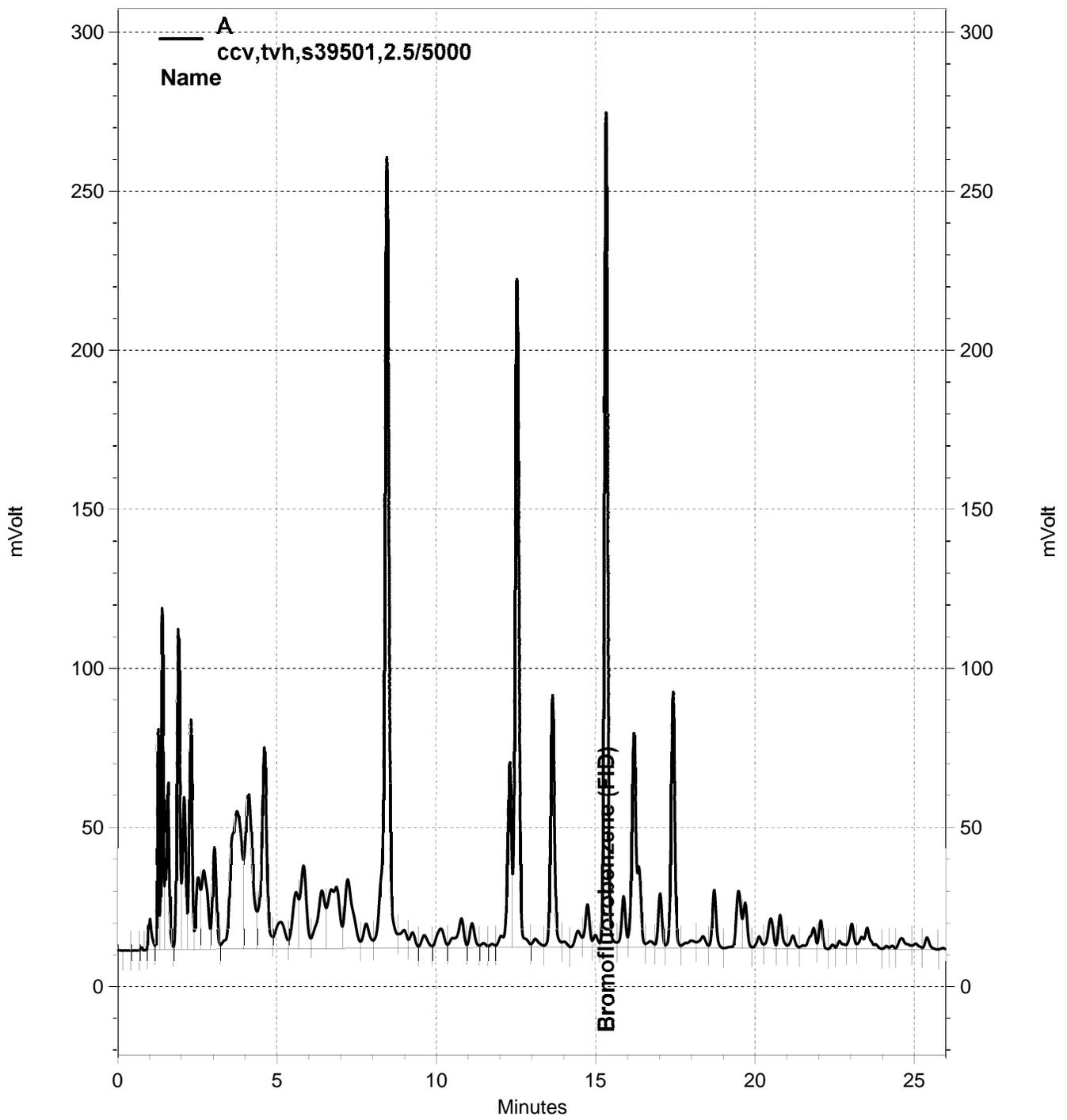
RPD= Relative Percent Difference



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\2019\078-009, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\2019\078-007, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\2019\078-002, A

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	308201-001	Batch#:	268732
Matrix:	Soil	Sampled:	03/19/19
Units:	mg/Kg	Received:	03/19/19
Basis:	as received	Analyzed:	03/19/19

Type: MS Lab ID: QC968805

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.2897	9.434	9.878	105	51-120

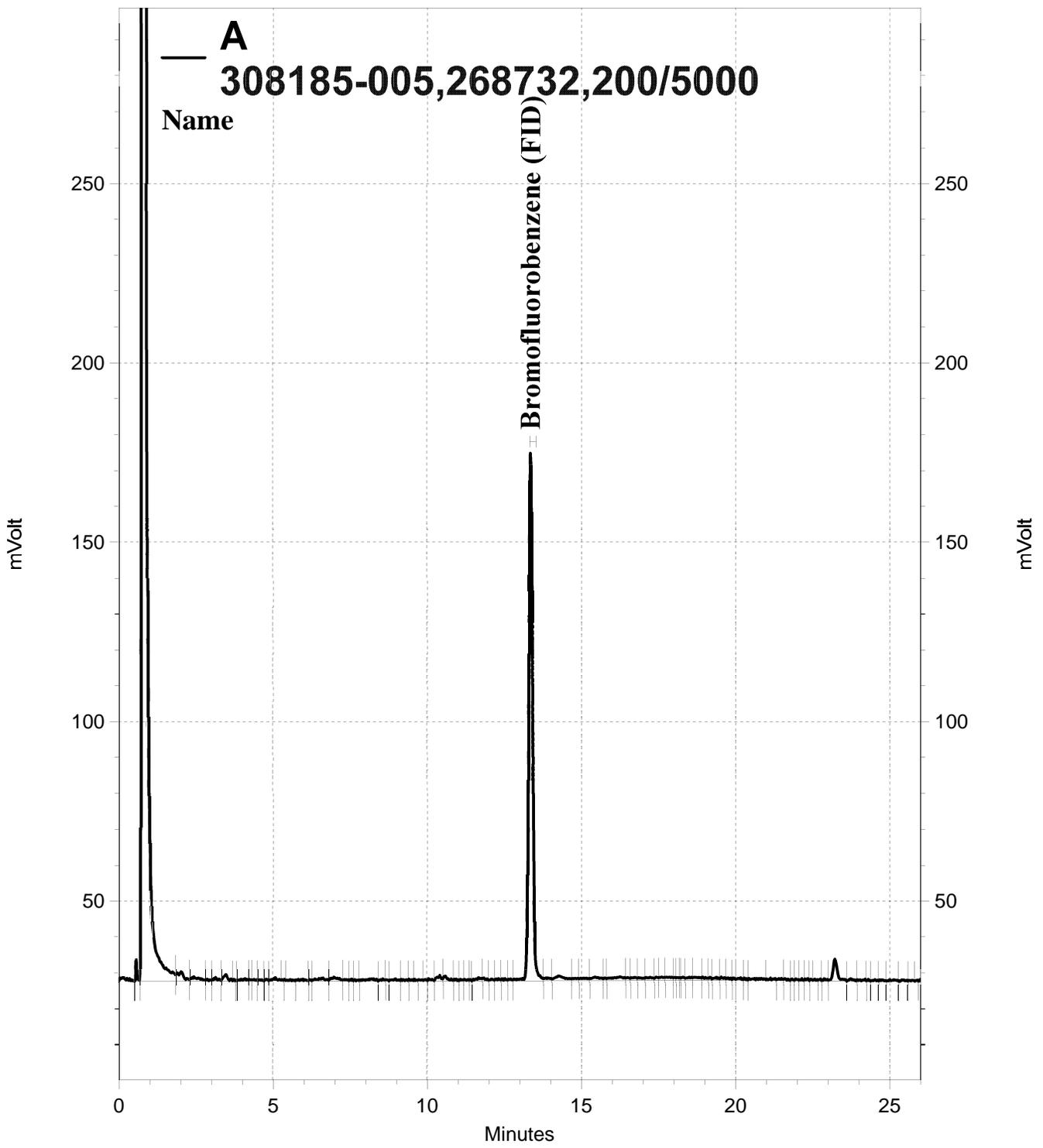
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	58-145

Type: MSD Lab ID: QC968806

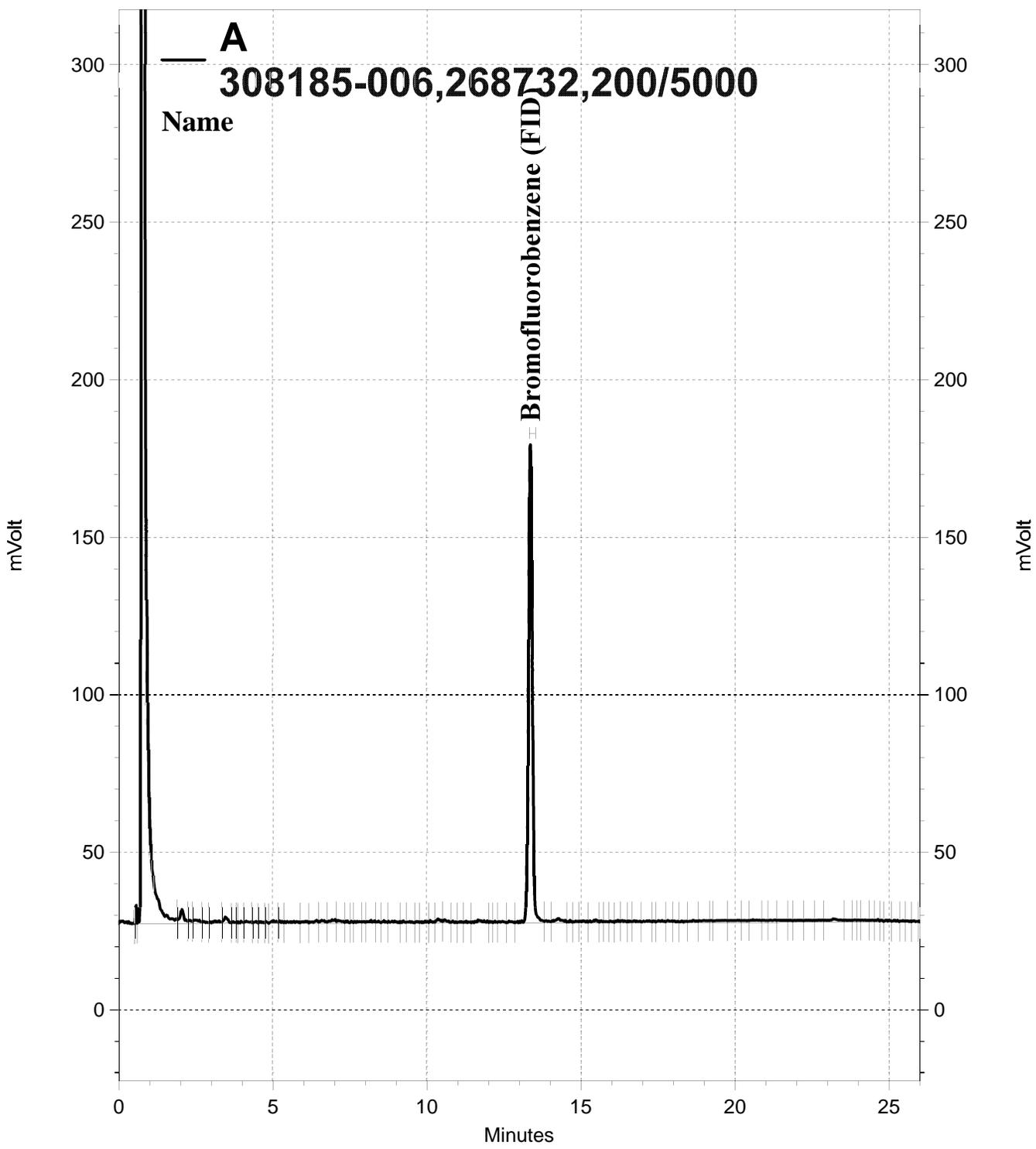
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.091	9.623	106	51-120	1	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	58-145

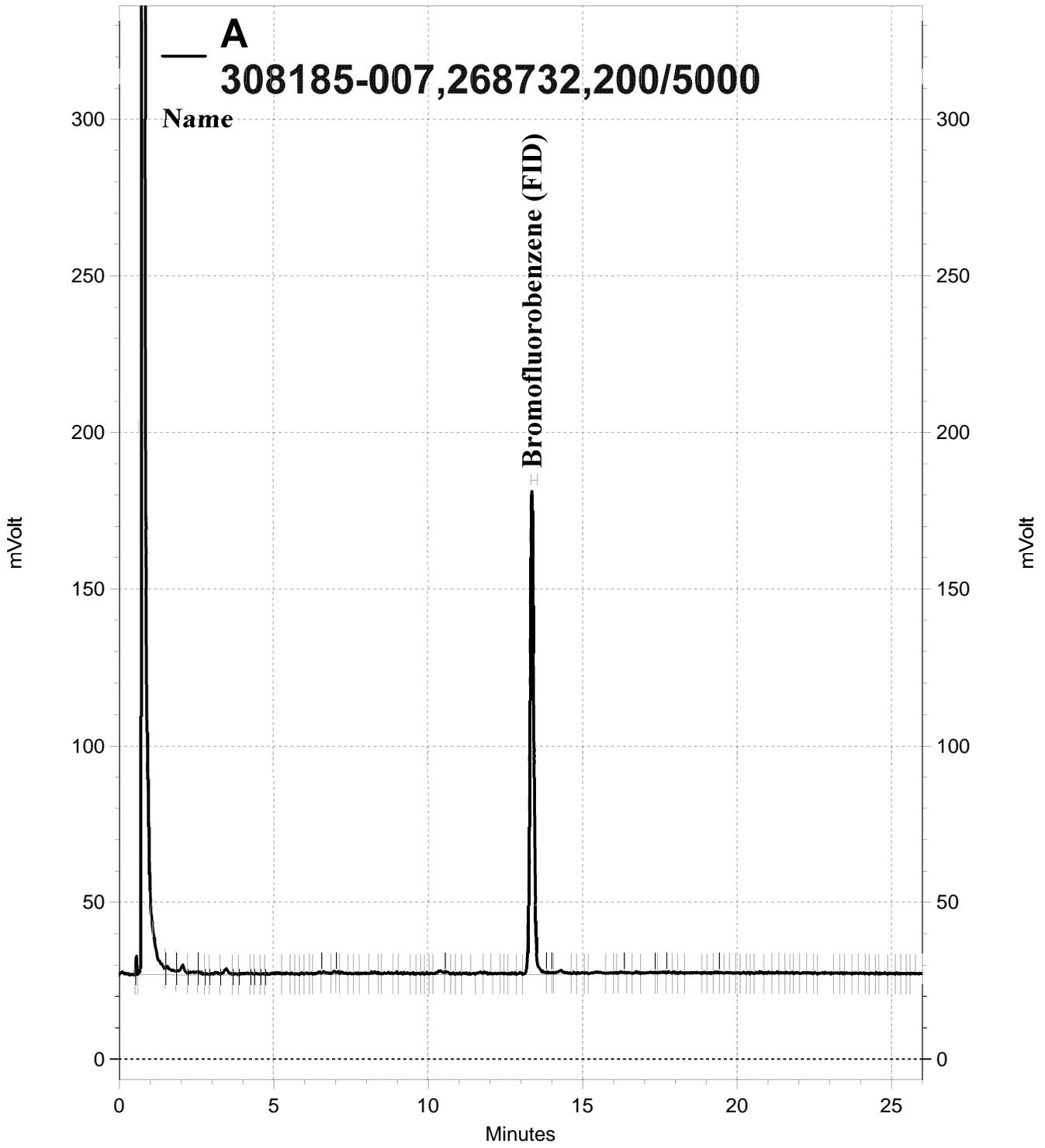
RPD= Relative Percent Difference



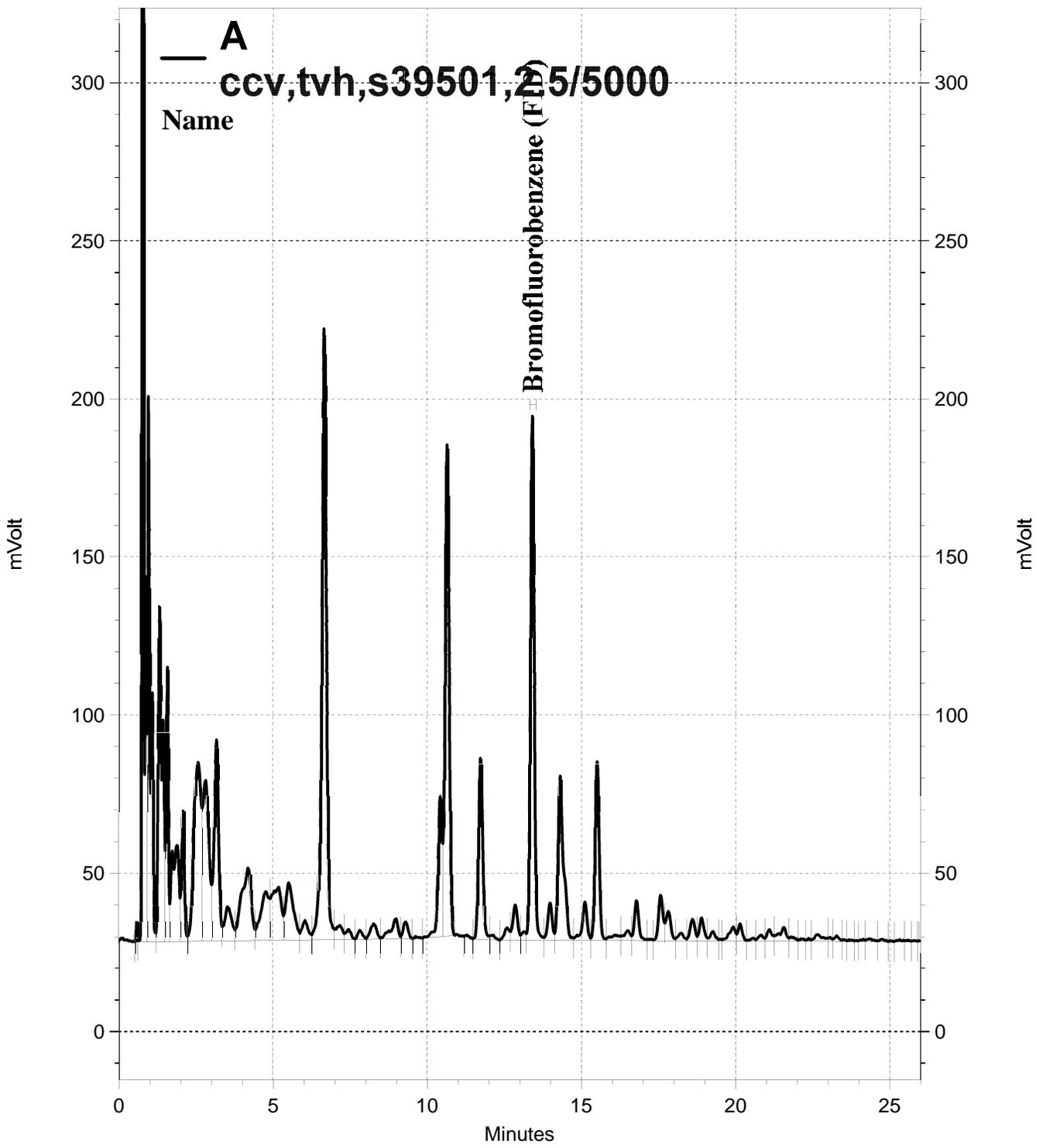
\\Lims\gdrive\ezchrom\Projects\GC05\Data\2019\078-008, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\2019\078-009, A



\\Lims\gdrive\ezchrom\Projects\GC05\Data\2019\078-010, A



— \\Lims\gdrive\ezchrom\Projects\GC05\Data\2019\078-002, A

Total Extractable Hydrocarbons			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190318	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Prepared:	03/19/19
Diln Fac:	1.000	Analyzed:	03/20/19
Batch#:	268738		

Type: SAMPLE Lab ID: 308185-004

Analyte	Result	RL	MDL
Diesel C10-C24	67 Y	50	16
Motor Oil C24-C36	98 J	300	96

Surrogate	%REC	Limits
o-Terphenyl	104	68-124

Type: BLANK Lab ID: QC968769

Analyte	Result	RL	MDL
Diesel C10-C24	19 J	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	104	68-124

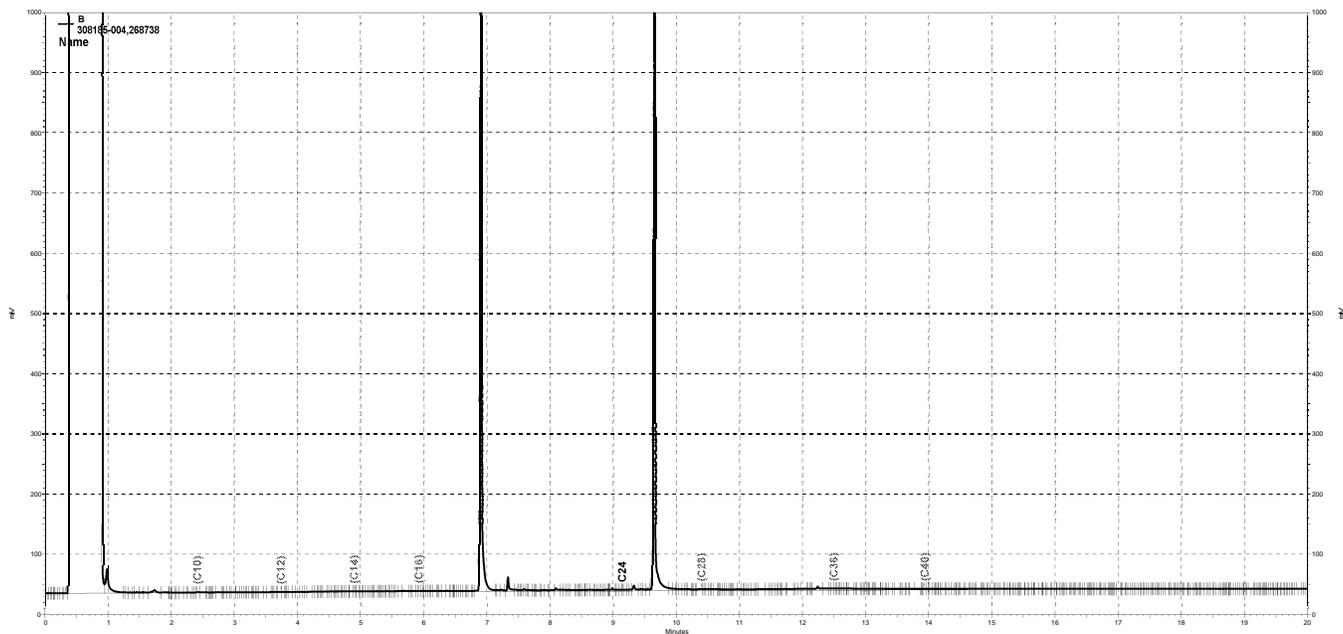
J= Estimated value

Y= Sample exhibits chromatographic pattern which does not resemble standard

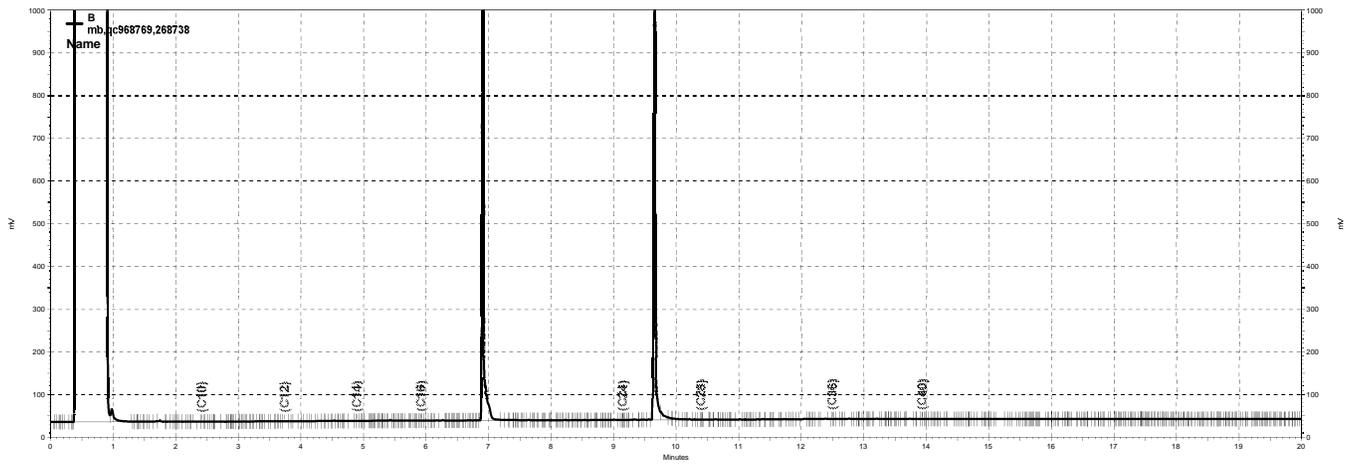
ND= Not Detected at or above MDL

RL= Reporting Limit

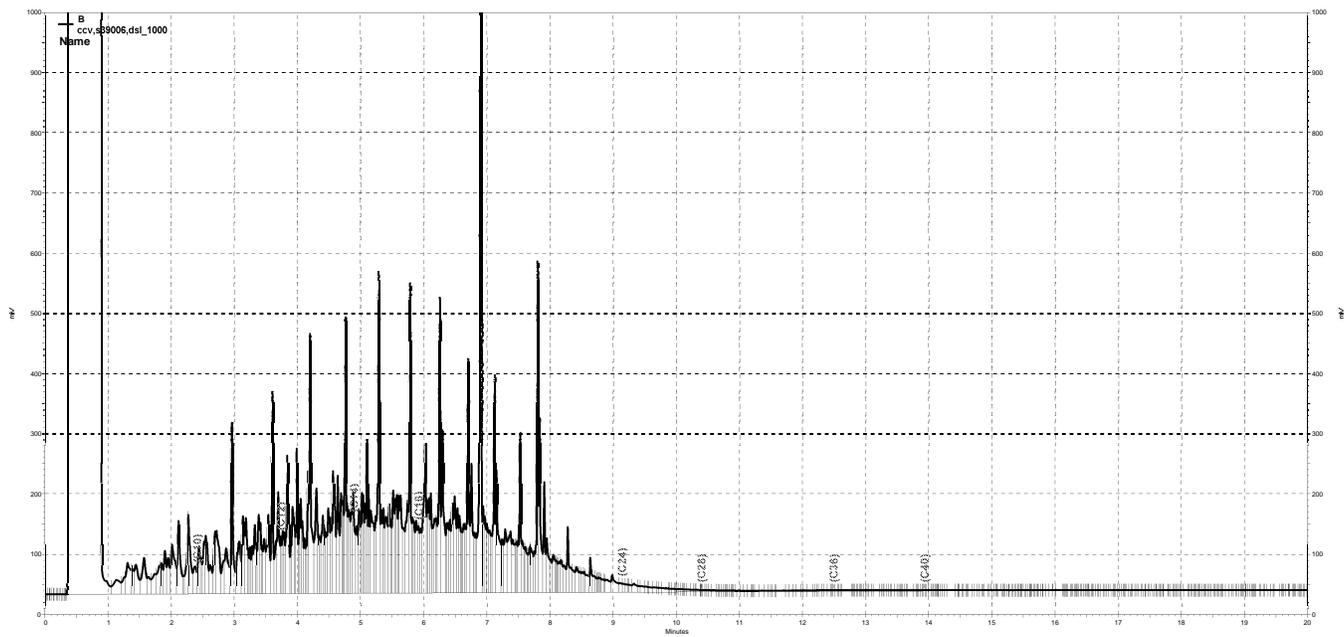
MDL= Method Detection Limit



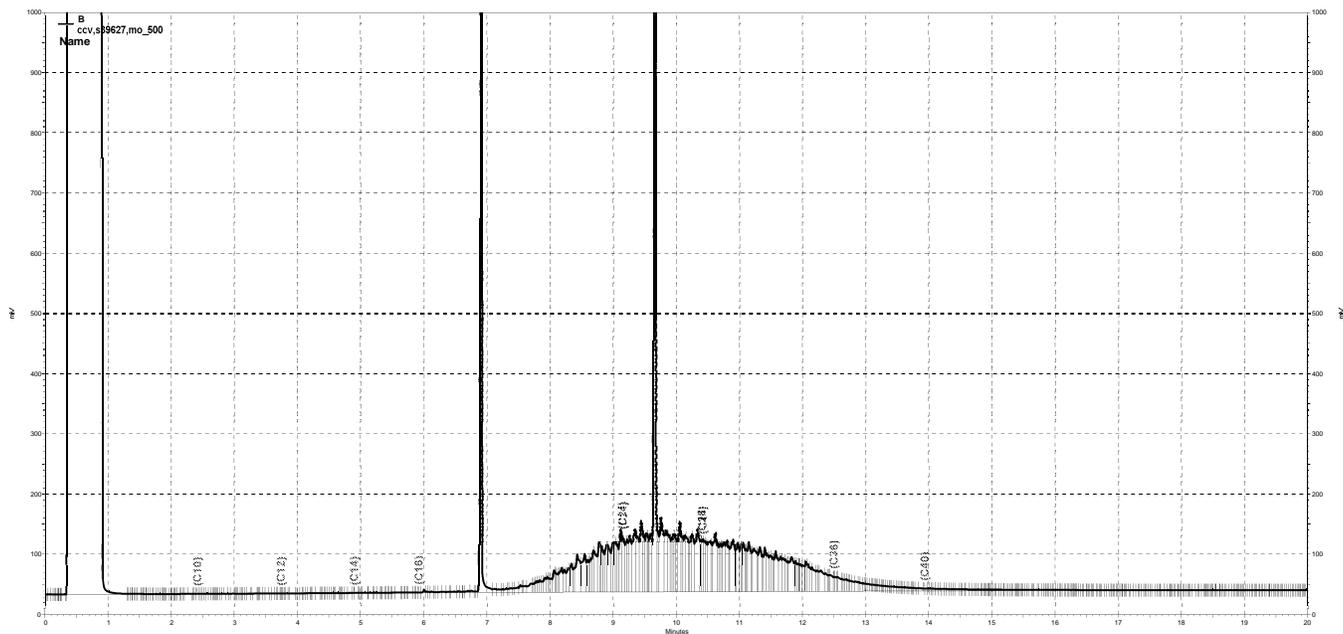
— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\077b135, B



— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\077b114, B



— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\077b104, B



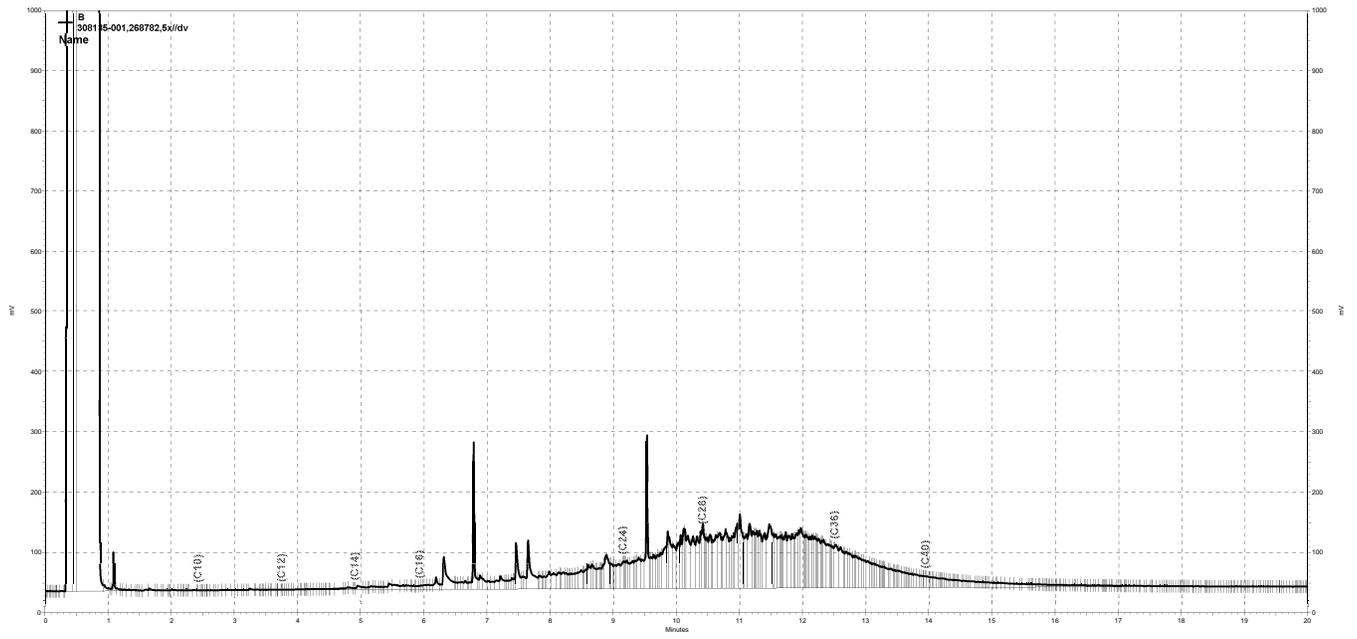
— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\077b105, B

Batch QC Report

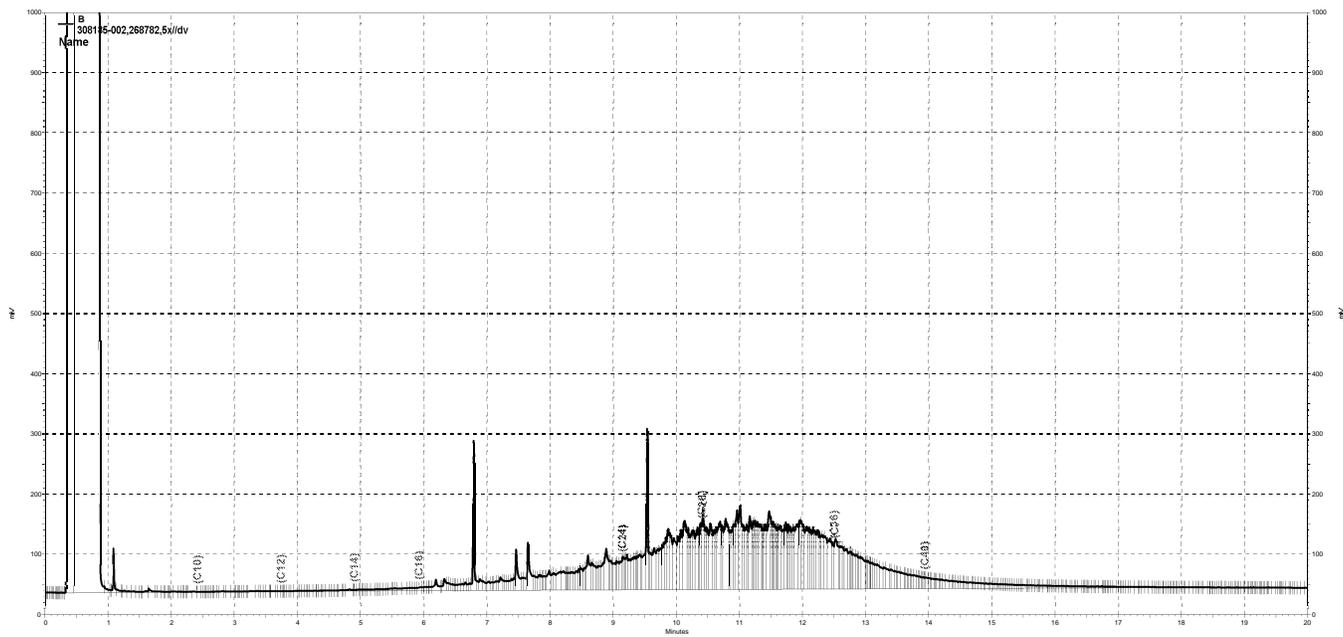
Total Extractable Hydrocarbons			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC968946	Batch#:	268782
Matrix:	Soil	Prepared:	03/20/19
Units:	mg/Kg	Analyzed:	03/22/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	50.86	102	55-133

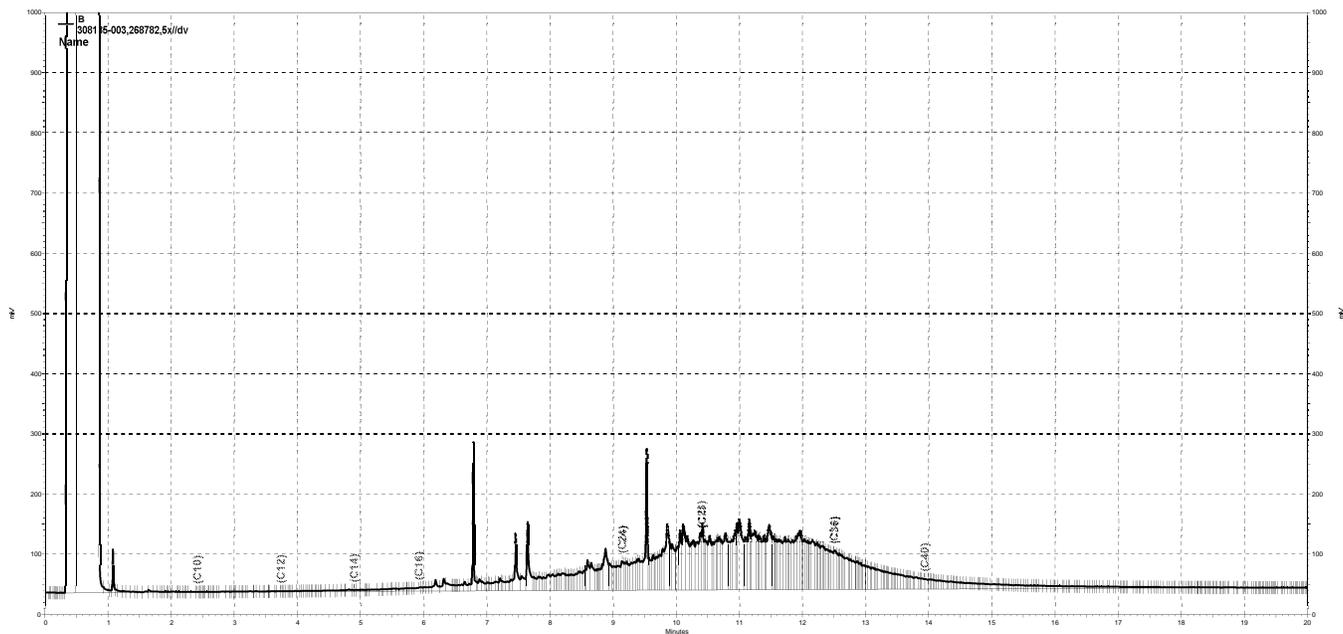
Surrogate	%REC	Limits
o-Terphenyl	122	61-130



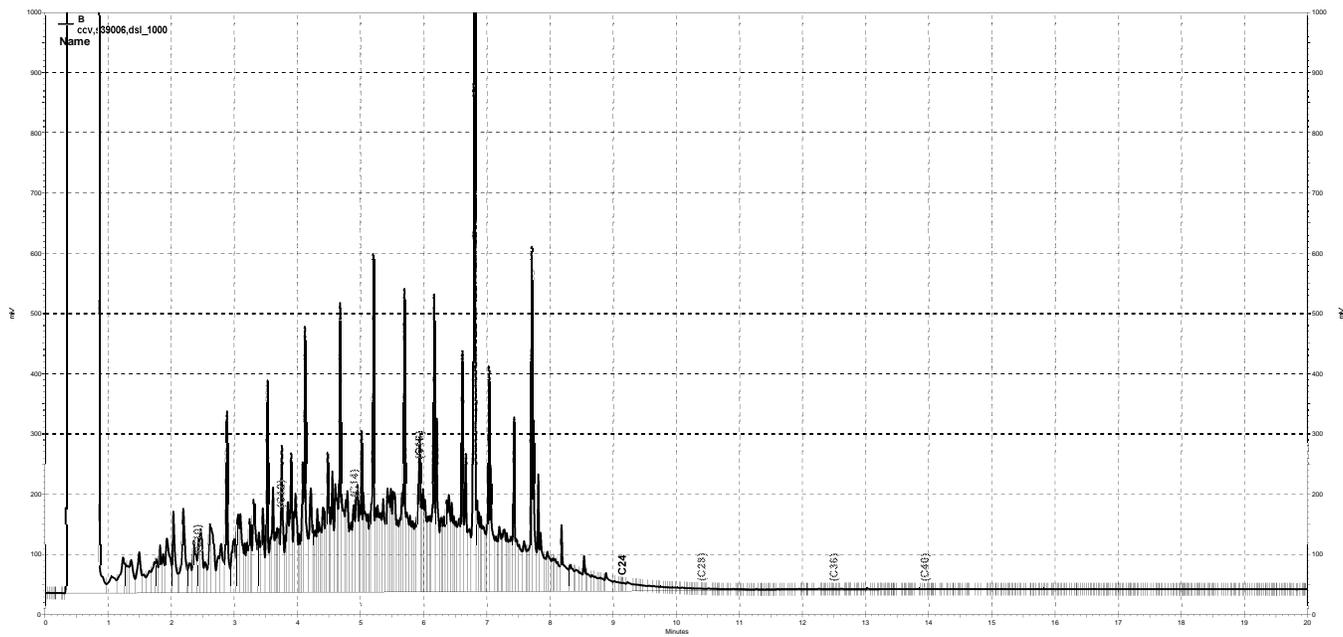
— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\080b032, B



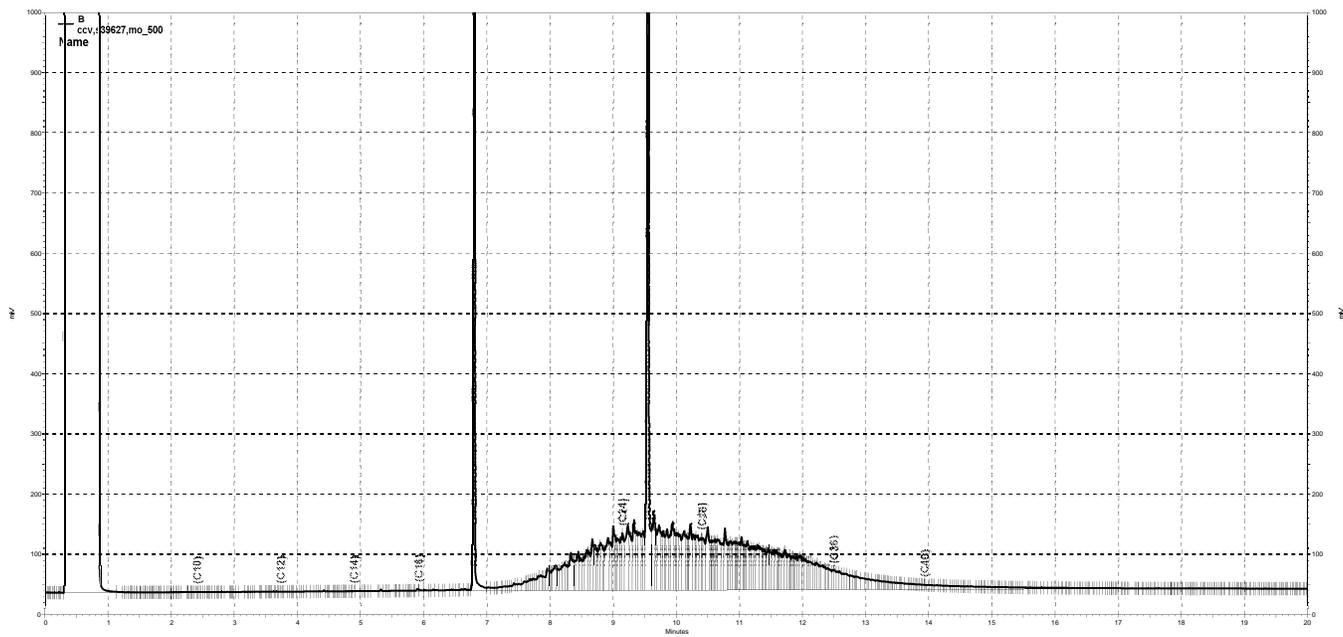
— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\080b035, B



— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\080b036, B



— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\080b026, B



— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\080b027, B

Purgeable Organics by GC/MS

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190318	Batch#:	268722
Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Analyzed:	03/19/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	3.4 J	10	1.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.9
Carbon Disulfide	0.1 J	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190318	Batch#:	268722
Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Analyzed:	03/19/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	1.0	0.2
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-121
1,2-Dichloroethane-d4	110	80-134
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-120

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968703	Batch#:	268722
Matrix:	Water	Analyzed:	03/19/19
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	1.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.9
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968703	Batch#:	268722
Matrix:	Water	Analyzed:	03/19/19
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	1.0	0.2
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-121
1,2-Dichloroethane-d4	110	80-134
Toluene-d8	98	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	268722
Units:	ug/L	Analyzed:	03/19/19
Diln Fac:	1.000		

Type: BS Lab ID: QC968704

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	15.00	13.84	92	65-133
Benzene	15.00	14.82	99	75-122
Trichloroethene	15.00	14.05	94	73-121
Toluene	15.00	14.17	94	78-120
Chlorobenzene	15.00	14.28	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-121
1,2-Dichloroethane-d4	109	80-134
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC968705

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	15.00	13.83	92	65-133	0	23
Benzene	15.00	14.45	96	75-122	3	20
Trichloroethene	15.00	14.04	94	73-121	0	20
Toluene	15.00	14.00	93	78-120	1	20
Chlorobenzene	15.00	14.22	95	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-121
1,2-Dichloroethane-d4	108	80-134
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-02	Diln Fac:	22.14
Lab ID:	308185-005	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	250	26
Chloromethane	ND	250	21
Vinyl Chloride	ND	250	19
Bromomethane	ND	250	88
Chloroethane	ND	250	18
Trichlorofluoromethane	ND	130	20
Acetone	ND	500	65
Freon 113	ND	130	25
1,1-Dichloroethene	ND	130	21
Methylene Chloride	ND	630	110
Carbon Disulfide	ND	130	24
MTBE	ND	130	23
trans-1,2-Dichloroethene	ND	130	26
Vinyl Acetate	ND	1,300	29
1,1-Dichloroethane	ND	130	24
2-Butanone	ND	250	55
cis-1,2-Dichloroethene	ND	130	25
2,2-Dichloropropane	ND	130	25
Chloroform	ND	130	27
Bromochloromethane	ND	130	27
1,1,1-Trichloroethane	ND	130	27
1,1-Dichloropropene	ND	130	25
Carbon Tetrachloride	ND	130	23
1,2-Dichloroethane	ND	130	21
Benzene	ND	130	22
Trichloroethene	ND	130	25
1,2-Dichloropropane	ND	130	22
Bromodichloromethane	ND	130	22
Dibromomethane	ND	130	21
4-Methyl-2-Pentanone	ND	250	20
cis-1,3-Dichloropropene	ND	130	28
Toluene	ND	130	23
trans-1,3-Dichloropropene	ND	130	23
1,1,2-Trichloroethane	ND	130	24
2-Hexanone	ND	250	23
1,3-Dichloropropane	ND	130	24
Tetrachloroethene	ND	130	24
Dibromochloromethane	ND	130	21
1,2-Dibromoethane	ND	130	22
Chlorobenzene	ND	130	24
1,1,1,2-Tetrachloroethane	ND	130	27
Ethylbenzene	ND	130	26
m,p-Xylenes	ND	130	16
o-Xylene	ND	130	26
Styrene	ND	130	26
Bromoform	ND	130	25
Isopropylbenzene	ND	130	28
1,1,2,2-Tetrachloroethane	ND	130	21
1,2,3-Trichloropropane	ND	130	26
Propylbenzene	ND	130	26

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-02	Diln Fac:	22.14
Lab ID:	308185-005	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Analyte	Result	RL	MDL
Bromobenzene	ND	130	24
1,3,5-Trimethylbenzene	ND	130	26
2-Chlorotoluene	ND	130	29
4-Chlorotoluene	ND	130	26
tert-Butylbenzene	ND	130	29
1,2,4-Trimethylbenzene	ND	130	27
sec-Butylbenzene	ND	130	29
para-Isopropyl Toluene	ND	130	27
1,3-Dichlorobenzene	ND	130	26
1,4-Dichlorobenzene	ND	130	25
n-Butylbenzene	ND	130	28
1,2-Dichlorobenzene	ND	130	28
1,2-Dibromo-3-Chloropropane	ND	130	26
1,2,4-Trichlorobenzene	ND	130	35
Hexachlorobutadiene	ND	130	31
Naphthalene	120 J	130	27
1,2,3-Trichlorobenzene	ND	130	34

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-131
1,2-Dichloroethane-d4	102	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	100	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-03	Diln Fac:	22.42
Lab ID:	308185-006	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Moisture: 6%

Analyte	Result	RL	MDL
Freon 12	ND	240	25
Chloromethane	ND	240	20
Vinyl Chloride	ND	240	18
Bromomethane	ND	240	83
Chloroethane	ND	240	17
Trichlorofluoromethane	ND	120	19
Acetone	ND	480	61
Freon 113	ND	120	24
1,1-Dichloroethene	ND	120	20
Methylene Chloride	ND	600	100
Carbon Disulfide	ND	120	23
MTBE	ND	120	21
trans-1,2-Dichloroethene	ND	120	24
Vinyl Acetate	ND	1,200	28
1,1-Dichloroethane	ND	120	22
2-Butanone	ND	240	52
cis-1,2-Dichloroethene	ND	120	24
2,2-Dichloropropane	ND	120	24
Chloroform	ND	120	26
Bromochloromethane	ND	120	25
1,1,1-Trichloroethane	ND	120	25
1,1-Dichloropropene	ND	120	24
Carbon Tetrachloride	ND	120	22
1,2-Dichloroethane	ND	120	20
Benzene	ND	120	21
Trichloroethene	ND	120	24
1,2-Dichloropropane	ND	120	21
Bromodichloromethane	ND	120	21
Dibromomethane	ND	120	20
4-Methyl-2-Pentanone	ND	240	19
cis-1,3-Dichloropropene	ND	120	26
Toluene	ND	120	22
trans-1,3-Dichloropropene	ND	120	22
1,1,2-Trichloroethane	ND	120	23
2-Hexanone	ND	240	22
1,3-Dichloropropane	ND	120	22
Tetrachloroethene	ND	120	23
Dibromochloromethane	ND	120	20
1,2-Dibromoethane	ND	120	21
Chlorobenzene	ND	120	23
1,1,1,2-Tetrachloroethane	ND	120	26
Ethylbenzene	ND	120	24
m,p-Xylenes	ND	120	15
o-Xylene	ND	120	24
Styrene	ND	120	25
Bromoform	ND	120	24
Isopropylbenzene	ND	120	26
1,1,2,2-Tetrachloroethane	ND	120	20
1,2,3-Trichloropropane	ND	120	25
Propylbenzene	ND	120	25
Bromobenzene	ND	120	23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-03	Diln Fac:	22.42
Lab ID:	308185-006	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	25
2-Chlorotoluene	ND	120	27
4-Chlorotoluene	ND	120	25
tert-Butylbenzene	ND	120	28
1,2,4-Trimethylbenzene	ND	120	25
sec-Butylbenzene	ND	120	27
para-Isopropyl Toluene	ND	120	26
1,3-Dichlorobenzene	ND	120	25
1,4-Dichlorobenzene	ND	120	24
n-Butylbenzene	ND	120	26
1,2-Dichlorobenzene	ND	120	27
1,2-Dibromo-3-Chloropropane	ND	120	24
1,2,4-Trichlorobenzene	ND	120	33
Hexachlorobutadiene	ND	120	29
Naphthalene	ND	120	26
1,2,3-Trichlorobenzene	ND	120	32

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	99	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	99	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-04	Diln Fac:	21.46
Lab ID:	308185-007	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Moisture: 7%

Analyte	Result	RL	MDL
Freon 12	ND	230	24
Chloromethane	ND	230	19
Vinyl Chloride	ND	230	17
Bromomethane	ND	230	81
Chloroethane	ND	230	16
Trichlorofluoromethane	ND	120	18
Acetone	ND	460	59
Freon 113	ND	120	23
1,1-Dichloroethene	ND	120	20
Methylene Chloride	ND	580	100
Carbon Disulfide	ND	120	22
MTBE	ND	120	21
trans-1,2-Dichloroethene	ND	120	24
Vinyl Acetate	ND	1,200	27
1,1-Dichloroethane	ND	120	22
2-Butanone	ND	230	51
cis-1,2-Dichloroethene	ND	120	23
2,2-Dichloropropane	ND	120	23
Chloroform	ND	120	25
Bromochloromethane	ND	120	25
1,1,1-Trichloroethane	ND	120	25
1,1-Dichloropropene	ND	120	23
Carbon Tetrachloride	ND	120	21
1,2-Dichloroethane	ND	120	19
Benzene	ND	120	20
Trichloroethene	ND	120	23
1,2-Dichloropropane	ND	120	20
Bromodichloromethane	ND	120	21
Dibromomethane	ND	120	19
4-Methyl-2-Pentanone	ND	230	19
cis-1,3-Dichloropropene	ND	120	25
Toluene	ND	120	22
trans-1,3-Dichloropropene	ND	120	21
1,1,2-Trichloroethane	ND	120	22
2-Hexanone	ND	230	21
1,3-Dichloropropane	ND	120	22
Tetrachloroethene	ND	120	22
Dibromochloromethane	ND	120	20
1,2-Dibromoethane	ND	120	20
Chlorobenzene	ND	120	22
1,1,1,2-Tetrachloroethane	ND	120	25
Ethylbenzene	ND	120	24
m,p-Xylenes	ND	120	14
o-Xylene	ND	120	23
Styrene	ND	120	24
Bromoform	ND	120	23
Isopropylbenzene	ND	120	25
1,1,2,2-Tetrachloroethane	ND	120	19
1,2,3-Trichloropropane	ND	120	24
Propylbenzene	ND	120	24
Bromobenzene	ND	120	22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-04	Diln Fac:	21.46
Lab ID:	308185-007	Batch#:	268758
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	dry	Analyzed:	03/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	24
2-Chlorotoluene	ND	120	26
4-Chlorotoluene	ND	120	24
tert-Butylbenzene	ND	120	27
1,2,4-Trimethylbenzene	ND	120	24
sec-Butylbenzene	ND	120	27
para-Isopropyl Toluene	ND	120	25
1,3-Dichlorobenzene	ND	120	24
1,4-Dichlorobenzene	ND	120	23
n-Butylbenzene	ND	120	25
1,2-Dichlorobenzene	ND	120	26
1,2-Dibromo-3-Chloropropane	ND	120	23
1,2,4-Trichlorobenzene	ND	120	32
Hexachlorobutadiene	ND	120	28
Naphthalene	ND	120	25
1,2,3-Trichlorobenzene	ND	120	31

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	95	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	101	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968851	Batch#:	268758
Matrix:	Soil	Analyzed:	03/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.16
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	0.97
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.0
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.7
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.11
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.10
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.13
1,1,2-Trichloroethane	ND	5.0	0.22
2-Hexanone	ND	10	0.24
1,3-Dichloropropane	ND	5.0	0.13
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.16
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.24
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.18
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15
2-Chlorotoluene	ND	5.0	0.12

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968851	Batch#:	268758
Matrix:	Soil	Analyzed:	03/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.22
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	93	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	EB-190318	Batch#:	268694
Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Prepared:	03/19/19
Diln Fac:	1.000	Analyzed:	04/08/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	125	58-134
2-Fluorobiphenyl	92	53-120
Terphenyl-d14	114	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968590	Batch#:	268694
Matrix:	Water	Prepared:	03/18/19
Units:	ug/L	Analyzed:	03/21/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	107	58-134
2-Fluorobiphenyl	86	53-120
Terphenyl-d14	99	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	268694
Units:	ug/L	Prepared:	03/18/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC968591

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	1.000	0.8558	86	69-120
Pyrene	1.000	1.012	101	69-123

Surrogate	%REC	Limits
Nitrobenzene-d5	111	58-134
2-Fluorobiphenyl	87	53-120
Terphenyl-d14	105	18-128

Type: BSD Lab ID: QC968592

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	1.000	0.8797	88	69-120	3	21
Pyrene	1.000	0.9950	100	69-123	2	32

Surrogate	%REC	Limits
Nitrobenzene-d5	114	58-134
2-Fluorobiphenyl	92	53-120
Terphenyl-d14	105	18-128

RPD= Relative Percent Difference

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-02	Batch#:	268796
Lab ID:	308185-001	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	ug/Kg	Prepared:	03/20/19
Basis:	air dried	Analyzed:	04/08/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ	Diln Fac
Naphthalene	230	50	10			10.00
Acenaphthylene	300	50	10			10.00
Acenaphthene	630	50	10			10.00
Fluorene	1,000	50	10			10.00
Phenanthrene	5,600	130	25			25.00
Anthracene	690	50	10			10.00
Fluoranthene	3,200	50	10			10.00
Pyrene	4,100	130	25			25.00
Benzo(a)anthracene	1,300	50	10	0.10	130	10.00
Chrysene	1,200	50	10	0.0010	1.2	10.00
Benzo(b)fluoranthene	1,300	50	10	0.10	130	10.00
Benzo(k)fluoranthene	490	50	10	0.010	4.9	10.00
Benzo(a)pyrene	1,400	50	10	1.0	1,400	10.00
Indeno(1,2,3-cd)pyrene	850	50	10	0.10	85	10.00
Dibenz(a,h)anthracene	170	50	10	1.0	170	10.00
Benzo(g,h,i)perylene	1,200	50	10			10.00
Total Benzo(a)pyrene Equiv.					1,900	10.00

Surrogate	%REC	Limits	Diln Fac
Nitrobenzene-d5	DO	48-120	10.00
2-Fluorobiphenyl	DO	39-120	10.00
Terphenyl-d14	DO	61-120	10.00

DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-03	Batch#:	268796
Lab ID:	308185-002	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	ug/Kg	Prepared:	03/20/19
Basis:	air dried	Analyzed:	04/04/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	130	25		
Acenaphthylene	74 J	130	25		
Acenaphthene	ND	130	25		
Fluorene	34 J	130	25		
Phenanthrene	540	130	25		
Anthracene	110 J	130	25		
Fluoranthene	990	130	25		
Pyrene	1,500	130	25		
Benzo(a)anthracene	440	130	25	0.10	44
Chrysene	560	130	25	0.0010	0.56
Benzo(b)fluoranthene	470	130	25	0.10	47
Benzo(k)fluoranthene	220	130	25	0.010	2.2
Benzo(a)pyrene	610	130	25	1.0	610
Indeno(1,2,3-cd)pyrene	400	130	25	0.10	40
Dibenz(a,h)anthracene	90 J	130	25	1.0	90
Benzo(g,h,i)perylene	590	130	25		
Total Benzo(a)pyrene Equiv.					840

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-04	Batch#:	268796
Lab ID:	308185-003	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	ug/Kg	Prepared:	03/20/19
Basis:	air dried	Analyzed:	04/08/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	250	49		
Acenaphthylene	ND	250	49		
Acenaphthene	ND	250	49		
Fluorene	ND	250	49		
Phenanthrene	240 J	250	49		
Anthracene	62 J	250	49		
Fluoranthene	690	250	49		
Pyrene	950	250	49		
Benzo(a)anthracene	310	250	49	0.10	31
Chrysene	380	250	49	0.0010	0.38
Benzo(b)fluoranthene	380	250	49	0.10	38
Benzo(k)fluoranthene	170 J	250	49	0.010	1.7
Benzo(a)pyrene	470	250	49	1.0	470
Indeno(1,2,3-cd)pyrene	330	250	49	0.10	33
Dibenz(a,h)anthracene	58 J	250	49	1.0	58
Benzo(g,h,i)perylene	500	250	49		
Total Benzo(a)pyrene Equiv.					630

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969007	Batch#:	268796
Matrix:	Soil	Prepared:	03/20/19
Units:	ug/Kg	Analyzed:	04/04/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	113	48-120
2-Fluorobiphenyl	87	39-120
Terphenyl-d14	109	61-120

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969008	Batch#:	268796
Matrix:	Soil	Prepared:	03/20/19
Units:	ug/Kg	Analyzed:	04/04/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	27.73	83	57-120
Acenaphthylene	33.33	27.51	83	60-120
Acenaphthene	33.33	26.71	80	64-120
Fluorene	33.33	27.47	82	67-120
Phenanthrene	33.33	29.41	88	64-120
Anthracene	33.33	30.85	93	66-120
Fluoranthene	33.33	30.96	93	73-121
Pyrene	33.33	34.18	103	67-120
Benzo(a)anthracene	33.33	33.45	100	69-121
Chrysene	33.33	18.26	55	48-120
Benzo(b)fluoranthene	33.33	34.72	104	66-120
Benzo(k)fluoranthene	33.33	27.24	82	62-125
Benzo(a)pyrene	33.33	30.29	91	66-120
Indeno(1,2,3-cd)pyrene	33.33	26.56	80	57-120
Dibenz(a,h)anthracene	33.33	16.97	51	45-120
Benzo(g,h,i)perylene	33.33	28.93	87	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	113	48-120
2-Fluorobiphenyl	88	39-120
Terphenyl-d14	111	61-120

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	EB-190318	Batch#:	268692
Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Prepared:	03/19/19
Diln Fac:	1.000	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.02
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	154	16-167
Decachlorobiphenyl	151	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968581	Batch#:	268692
Matrix:	Water	Prepared:	03/18/19
Units:	ug/L	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.03
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	112	16-167
Decachlorobiphenyl	117	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	268692
Units:	ug/L	Prepared:	03/18/19
Diln Fac:	1.000	Analyzed:	03/27/19

Type: BS Lab ID: QC968582

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.2744	137	73-149
Heptachlor	0.2000	0.2334	117	57-132
Aldrin	0.2000	0.2281	114	56-134
Dieldrin	0.2000	0.2432 #	122	64-152
Endrin	0.2000	0.2436	122	58-155
4,4'-DDT	0.2000	0.2538 #	127	49-147

Surrogate	%REC	Limits
TCMX	105	16-167
Decachlorobiphenyl	118	28-164

Type: BSD Lab ID: QC968583

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.3028	151 *	73-149	10	30
Heptachlor	0.2000	0.2564	128	57-132	9	36
Aldrin	0.2000	0.2492	125	56-134	9	38
Dieldrin	0.2000	0.2692 #	135	64-152	10	43
Endrin	0.2000	0.2761	138	58-155	13	47
4,4'-DDT	0.2000	0.2864 #	143	49-147	12	44

Surrogate	%REC	Limits
TCMX	113	16-167
Decachlorobiphenyl	132	28-164

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-02	Diln Fac:	10.00
Lab ID:	308185-001	Batch#:	268735
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	air dried	Prepared:	03/19/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	8.6	0.76	03/26/19
beta-BHC	ND	8.6	1.0	03/26/19
gamma-BHC	ND	8.6	0.83	03/26/19
delta-BHC	ND	8.6	1.1	03/20/19
Heptachlor	ND	8.6	1.1	03/20/19
Aldrin	ND	8.6	1.2	03/26/19
Heptachlor epoxide	ND	8.6	0.96	03/26/19
Endosulfan I	ND	8.6	1.5	03/26/19
Dieldrin	ND	8.6	1.1	03/26/19
4,4'-DDE	ND	17	1.5	03/20/19
Endrin	1.9 J #	17	0.95	03/26/19
Endosulfan II	ND	17	1.2	03/26/19
Endosulfan sulfate	ND	17	2.0	03/26/19
4,4'-DDD	ND	17	1.1	03/20/19
Endrin aldehyde	ND	17	5.1	03/26/19
4,4'-DDT	ND	17	2.0	03/26/19
alpha-Chlordane	2.5 C J	8.6	1.1	03/26/19
gamma-Chlordane	3.4 J	8.6	1.4	03/26/19
Methoxychlor	ND	86	20	03/26/19
Toxaphene	ND	300	60	03/26/19

Surrogate	%REC	Limits	Analyzed
TCMX	DO	43-125	03/26/19
Decachlorobiphenyl	DO	40-128	03/26/19

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-03	Diln Fac:	100.0
Lab ID:	308185-002	Batch#:	268735
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	air dried	Prepared:	03/19/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	85	7.5	03/26/19
beta-BHC	ND	85	10	03/26/19
gamma-BHC	ND	85	8.3	03/26/19
delta-BHC	ND #	85	11	03/26/19
Heptachlor	ND #	85	11	03/26/19
Aldrin	ND	85	12	03/26/19
Heptachlor epoxide	ND	85	9.5	03/26/19
Endosulfan I	ND	85	15	03/26/19
Dieldrin	ND	85	11	03/26/19
4,4'-DDE	ND	170	15	03/20/19
Endrin	ND #	170	9.5	03/26/19
Endosulfan II	ND	170	12	03/26/19
Endosulfan sulfate	ND	170	20	03/26/19
4,4'-DDD	ND	170	11	03/20/19
Endrin aldehyde	ND	170	50	03/26/19
4,4'-DDT	ND	170	20	03/26/19
alpha-Chlordane	ND	85	11	03/26/19
gamma-Chlordane	ND	85	14	03/26/19
Methoxychlor	ND	850	200	03/26/19
Toxaphene	ND	3,000	590	03/26/19

Surrogate	%REC	Limits	Analyzed
TCMX	DO	43-125	03/26/19
Decachlorobiphenyl	DO	40-128	03/26/19

#= CCV drift outside limits; average CCV drift within limits per method requirements
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-04	Diln Fac:	10.00
Lab ID:	308185-003	Batch#:	268735
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	air dried	Prepared:	03/19/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	8.5	0.75	03/26/19
beta-BHC	ND	8.5	1.0	03/26/19
gamma-BHC	ND	8.5	0.83	03/26/19
delta-BHC	ND	8.5	1.1	03/20/19
Heptachlor	ND	8.5	1.1	03/20/19
Aldrin	ND	8.5	1.2	03/26/19
Heptachlor epoxide	ND	8.5	0.95	03/26/19
Endosulfan I	ND	8.5	1.5	03/26/19
Dieldrin	ND	8.5	1.1	03/26/19
4,4'-DDE	1.6 J	16	1.5	03/20/19
Endrin	ND	16	0.94	03/20/19
Endosulfan II	ND	16	1.2	03/26/19
Endosulfan sulfate	ND	16	2.0	03/26/19
4,4'-DDD	ND	16	1.1	03/20/19
Endrin aldehyde	ND	16	5.0	03/26/19
4,4'-DDT	ND	16	2.0	03/26/19
alpha-Chlordane	ND	8.5	1.1	03/26/19
gamma-Chlordane	ND	8.5	1.3	03/26/19
Methoxychlor	ND	85	19	03/26/19
Toxaphene	ND	300	59	03/26/19

Surrogate	%REC	Limits	Analyzed
TCMX	DO	43-125	03/26/19
Decachlorobiphenyl	DO	40-128	03/26/19

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968752	Batch#:	268735
Matrix:	Soil	Prepared:	03/19/19
Units:	ug/Kg	Analyzed:	03/19/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.85	0.074
beta-BHC	ND	0.85	0.11
gamma-BHC	ND	0.85	0.087
delta-BHC	ND	0.85	0.12
Heptachlor	ND #	0.85	0.088
Aldrin	ND	0.85	0.084
Heptachlor epoxide	ND	0.85	0.080
Endosulfan I	ND	0.85	0.14
Dieldrin	ND	0.85	0.11
4,4'-DDE	ND	1.7	0.15
Endrin	ND	1.7	0.11
Endosulfan II	ND	1.7	0.13
Endosulfan sulfate	ND	1.7	0.19
4,4'-DDD	ND	1.7	0.12
Endrin aldehyde	ND	1.7	0.51
4,4'-DDT	ND	1.7	0.20
alpha-Chlordane	ND	0.85	0.10
gamma-Chlordane	ND	0.85	0.11
Methoxychlor	ND	8.5	1.9
Toxaphene	ND	30	6.0

Surrogate	%REC	Limits
TCMX	87	43-125
Decachlorobiphenyl	112	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC968753	Batch#:	268735
Matrix:	Soil	Prepared:	03/19/19
Units:	ug/Kg	Analyzed:	03/19/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	6.667	7.180	108	58-131
Heptachlor	6.667	6.059 #	91	51-133
Aldrin	6.667	7.204 #	108	52-128
Dieldrin	6.667	6.816 #	102	59-133
Endrin	6.667	6.744	101	48-154
4,4'-DDT	6.667	6.944	104	54-140

Surrogate	%REC	Limits
TCMX	74	43-125
Decachlorobiphenyl	107	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	268735
MSS Lab ID:	308164-003	Sampled:	03/15/19
Matrix:	Soil	Received:	03/15/19
Units:	ug/Kg	Prepared:	03/19/19
Basis:	air dried	Analyzed:	03/20/19
Diln Fac:	1.000		

Type: MS Lab ID: QC968754

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.08817	6.739	8.091	120	58-126
Heptachlor	<0.1126	6.739	6.670	99	58-127
Aldrin	<0.08466	6.739	7.638	113	55-124
Dieldrin	<0.1088	6.739	7.536 #	112	48-137
Endrin	<0.1073	6.739	8.269 #	123	48-158
4,4'-DDT	<0.2024	6.739	8.042	119	38-155

Surrogate	%REC	Limits
TCMX	119	43-125
Decachlorobiphenyl	99	40-128

Type: MSD Lab ID: QC968755

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	6.752	8.399	124	58-126	4	36
Heptachlor	6.752	6.963	103	58-127	4	34
Aldrin	6.752	7.791	115	55-124	2	31
Dieldrin	6.752	7.808 #	116	48-137	3	38
Endrin	6.752	8.770 #	130	48-158	6	38
4,4'-DDT	6.752	8.544	127	38-155	6	42

Surrogate	%REC	Limits
TCMX	119	43-125
Decachlorobiphenyl	101	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Polychlorinated Biphenyls (PCBs)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	EB-190318	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19
Batch#:	268791		

Type: SAMPLE Lab ID: 308185-004

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.19	0.061
Aroclor-1221	ND	0.38	0.12
Aroclor-1232	ND	0.19	0.054
Aroclor-1242	ND	0.19	0.060
Aroclor-1248	ND	0.19	0.061
Aroclor-1254	ND	0.19	0.060
Aroclor-1260	ND	0.19	0.051

Surrogate	%REC	Limits
Decachlorobiphenyl	126	40-136

Type: BLANK Lab ID: QC968989

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.20	0.064
Aroclor-1221	ND	0.40	0.13
Aroclor-1232	ND	0.20	0.057
Aroclor-1242	ND	0.20	0.063
Aroclor-1248	ND	0.20	0.064
Aroclor-1254	ND	0.20	0.063
Aroclor-1260	ND	0.20	0.054

Surrogate	%REC	Limits
Decachlorobiphenyl	122	40-136

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Water	Batch#:	268791
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC969000

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	2.500	2.559	102	68-123
Aroclor-1260	2.500	2.564	103	63-137

Surrogate	%REC	Limits
Decachlorobiphenyl	111	40-136

Type: BSD Lab ID: QC969001

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	2.500	2.053	82	68-123	22	29
Aroclor-1260	2.500	2.630	105	63-137	3	34

Surrogate	%REC	Limits
Decachlorobiphenyl	109	40-136

RPD= Relative Percent Difference

Polychlorinated Biphenyls (PCBs)

Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	air dried	Prepared:	03/19/19
Batch#:	268735	Analyzed:	03/19/19

Field ID: RPS-02 Lab ID: 308185-001
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	6.7	2.4
Aroclor-1221	ND	13	6.4
Aroclor-1232	ND	6.7	3.1
Aroclor-1242	ND	6.7	2.9
Aroclor-1248	ND	6.7	3.1
Aroclor-1254	ND	6.7	2.5
Aroclor-1260	45	6.7	1.6

Surrogate	%REC	Limits
Decachlorobiphenyl	123	49-157

Field ID: RPS-03 Lab ID: 308185-002
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	6.7	2.4
Aroclor-1221	ND	13	6.4
Aroclor-1232	ND	6.7	3.1
Aroclor-1242	ND	6.7	2.9
Aroclor-1248	ND	6.7	3.1
Aroclor-1254	ND	6.7	2.4
Aroclor-1260	15	6.7	1.5

Surrogate	%REC	Limits
Decachlorobiphenyl	80	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Polychlorinated Biphenyls (PCBs)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	03/18/19
Units:	ug/Kg	Received:	03/18/19
Basis:	air dried	Prepared:	03/19/19
Batch#:	268735	Analyzed:	03/19/19

Field ID: RPS-04 Lab ID: 308185-003
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	6.6	2.4
Aroclor-1221	ND	13	6.4
Aroclor-1232	ND	6.6	3.1
Aroclor-1242	ND	6.6	2.9
Aroclor-1248	ND	6.6	3.0
Aroclor-1254	ND	6.6	2.4
Aroclor-1260	15	6.6	1.5

Surrogate	%REC	Limits
Decachlorobiphenyl	87	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC968752

Analyte	Result	RL	MDL
Aroclor-1016	ND	4.8	1.2
Aroclor-1221	ND	9.6	3.2
Aroclor-1232	ND	4.8	1.6
Aroclor-1242	ND	4.8	1.4
Aroclor-1248	ND	4.8	1.5
Aroclor-1254	ND	4.8	1.2
Aroclor-1260	ND	4.8	0.77

Surrogate	%REC	Limits
Decachlorobiphenyl	104	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC968756	Batch#:	268735
Matrix:	Soil	Prepared:	03/19/19
Units:	ug/Kg	Analyzed:	03/19/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	83.33	88.89	107	63-143
Aroclor-1260	83.33	109.6	132	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	106	49-157

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	268735
MSS Lab ID:	308173-001	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	ug/Kg	Prepared:	03/19/19
Basis:	air dried	Analyzed:	03/19/19
Diln Fac:	1.000		

Type: MS Lab ID: QC968757

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<1.166	82.81	95.56	115	62-160
Aroclor-1260	<0.7624	82.81	95.90	116	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	109	49-157

Type: MSD Lab ID: QC968758

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	83.42	88.94	107	62-160	8	43
Aroclor-1260	83.42	92.17	110	53-172	5	44

Surrogate	%REC	Limits
Decachlorobiphenyl	107	49-157

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	308185	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	EB-190318	Diln Fac:	1.000
Lab ID:	308185-004	Sampled:	03/18/19
Matrix:	Water	Received:	03/18/19
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	10	1.2	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Arsenic	ND	10	2.4	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Barium	ND	5.0	0.85	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Beryllium	0.20 J	2.0	0.13	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	0.32	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Chromium	ND	5.0	0.91	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	0.32	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Copper	ND	5.0	0.55	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Lead	3.0 J	5.0	0.86	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Mercury	ND	0.20	0.040	268810	03/21/19	03/21/19	METHOD	EPA 7470A
Molybdenum	ND	5.0	1.5	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Nickel	ND	5.0	0.43	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Selenium	2.6 J	10	2.0	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Silver	ND	5.0	0.32	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Thallium	ND	10	2.0	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.1	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B
Zinc	4.7 J	20	2.9	268727	03/19/19	03/20/19	EPA 3010A	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968721	Batch#:	268727
Matrix:	Water	Prepared:	03/19/19
Units:	ug/L	Analyzed:	03/20/19

Analyte	Result	RL	MDL
Antimony	ND	10	1.2
Arsenic	ND	10	2.4
Barium	ND	5.0	0.85
Beryllium	0.13 J	2.0	0.13
Cadmium	ND	5.0	0.32
Chromium	ND	5.0	0.91
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.55
Lead	1.0 J	5.0	0.86
Molybdenum	ND	5.0	1.5
Nickel	ND	5.0	0.43
Selenium	3.2 J	10	2.0
Silver	ND	5.0	0.32
Thallium	ND	10	2.0
Vanadium	ND	5.0	1.1
Zinc	ND	20	2.9

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	268727
Units:	ug/L	Prepared:	03/19/19
Diln Fac:	1.000	Analyzed:	03/20/19

Type: BS Lab ID: QC968722

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	103.5	103	80-120
Arsenic	100.0	106.5	107	80-120
Barium	100.0	103.2	103	80-120
Beryllium	100.0	98.86	99	80-120
Cadmium	100.0	101.9	102	80-120
Chromium	100.0	104.6	105	80-120
Cobalt	100.0	103.4	103	80-120
Copper	100.0	99.98	100	80-120
Lead	100.0	106.9	107	80-120
Molybdenum	100.0	102.6	103	80-120
Nickel	100.0	105.0	105	80-120
Selenium	100.0	112.9	113	80-120
Silver	100.0	100.6	101	80-120
Thallium	50.00	52.74	105	80-120
Vanadium	100.0	104.5	104	80-120
Zinc	100.0	111.0	111	80-120

Type: BSD Lab ID: QC968723

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	108.7	109	80-120	5	20
Arsenic	100.0	107.2	107	80-120	1	20
Barium	100.0	103.9	104	80-120	1	20
Beryllium	100.0	98.34	98	80-120	1	20
Cadmium	100.0	102.7	103	80-120	1	20
Chromium	100.0	105.4	105	80-120	1	20
Cobalt	100.0	103.8	104	80-120	0	20
Copper	100.0	99.61	100	80-120	0	20
Lead	100.0	108.9	109	80-120	2	20
Molybdenum	100.0	103.0	103	80-120	0	20
Nickel	100.0	105.6	106	80-120	0	20
Selenium	100.0	114.3	114	80-120	1	20
Silver	100.0	100.8	101	80-120	0	20
Thallium	50.00	52.27	105	80-120	1	20
Vanadium	100.0	105.6	106	80-120	1	20
Zinc	100.0	111.0	111	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	268727
MSS Lab ID:	308128-001	Sampled:	03/13/19
Matrix:	Water	Received:	03/14/19
Units:	ug/L	Prepared:	03/19/19
Diln Fac:	1.000	Analyzed:	03/20/19

Type: MS Lab ID: QC968724

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<1.189	100.0	105.0	105	76-125
Arsenic	14.82	100.0	128.9	114	80-125
Barium	134.8	100.0	220.9	86	78-120
Beryllium	<0.1251	100.0	99.35	99	80-120
Cadmium	<0.3200	100.0	105.8	106	80-125
Chromium	<0.9092	100.0	103.6	104	80-123
Cobalt	0.6799	100.0	101.5	101	80-121
Copper	0.7205	100.0	103.7	103	79-121
Lead	<0.8570	100.0	104.6	105	75-125
Molybdenum	14.67	100.0	118.4	104	80-120
Nickel	2.507	100.0	103.1	101	79-123
Selenium	6.328	100.0	120.8	114	75-125
Silver	<0.3242	100.0	104.2	104	75-120
Thallium	<1.955	50.00	49.40	99	75-124
Vanadium	2.152	100.0	108.3	106	80-125
Zinc	8.518	100.0	115.5	107	80-125

Type: MSD Lab ID: QC968725

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	106.3	106	76-125	1	20
Arsenic	100.0	127.4	113	80-125	1	20
Barium	100.0	219.7	85	78-120	1	20
Beryllium	100.0	98.99	99	80-120	0	20
Cadmium	100.0	105.1	105	80-125	1	20
Chromium	100.0	102.6	103	80-123	1	20
Cobalt	100.0	101.3	101	80-121	0	20
Copper	100.0	103.5	103	79-121	0	20
Lead	100.0	105.4	105	75-125	1	20
Molybdenum	100.0	118.0	103	80-120	0	20
Nickel	100.0	103.4	101	79-123	0	20
Selenium	100.0	117.0	111	75-125	3	20
Silver	100.0	103.5	103	75-120	1	20
Thallium	50.00	52.23	104	75-124	6	20
Vanadium	100.0	106.8	105	80-125	1	20
Zinc	100.0	115.0	106	80-125	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268810
Lab ID:	QC969063	Prepared:	03/21/19
Matrix:	Water	Analyzed:	03/21/19
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268810
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969064	2.000	1.982	99	80-120		
BSD	QC969065	2.000	1.670	83	80-120	17	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268810
Field ID:	ZZZZZZZZZZ	Sampled:	03/19/19
MSS Lab ID:	308192-003	Received:	03/19/19
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC969066	<0.04000	2.000	1.629	81	68-120		
MSD	QC969067		2.000	1.871	94	68-120	14	37

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	308185	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-02	Diln Fac:	1.000
Lab ID:	308185-001	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	mg/Kg	Prepared:	03/21/19
Basis:	air dried		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.47 J	2.0	0.068	268807	03/22/19	EPA 3050B	EPA 6010B
Arsenic	5.3	1.5	0.065	268807	03/22/19	EPA 3050B	EPA 6010B
Barium	85	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Beryllium	0.32	0.099	0.0099	268807	03/22/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.016	268807	03/22/19	EPA 3050B	EPA 6010B
Chromium	49	0.25	0.049	268807	03/22/19	EPA 3050B	EPA 6010B
Cobalt	9.1	0.25	0.014	268807	03/22/19	EPA 3050B	EPA 6010B
Copper	31	0.25	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Lead	33	0.99	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Mercury	0.24	0.018	0.0054	268819	03/21/19	METHOD	EPA 7471A
Molybdenum	0.59	0.25	0.026	268807	03/22/19	EPA 3050B	EPA 6010B
Nickel	49	0.25	0.049	268807	03/22/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268807	03/22/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268807	03/22/19	EPA 3050B	EPA 6010B
Vanadium	37	0.25	0.052	268807	03/22/19	EPA 3050B	EPA 6010B
Zinc	66	0.99	0.21	268807	03/22/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	308185	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-03	Diln Fac:	1.000
Lab ID:	308185-002	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	mg/Kg	Prepared:	03/21/19
Basis:	air dried		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.11 J	2.0	0.068	268807	03/22/19	EPA 3050B	EPA 6010B
Arsenic	5.8	1.5	0.065	268807	03/22/19	EPA 3050B	EPA 6010B
Barium	81	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Beryllium	0.32	0.099	0.0099	268807	03/22/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.016	268807	03/22/19	EPA 3050B	EPA 6010B
Chromium	47	0.25	0.048	268807	03/22/19	EPA 3050B	EPA 6010B
Cobalt	9.1	0.25	0.014	268807	03/22/19	EPA 3050B	EPA 6010B
Copper	30	0.25	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Lead	36	0.99	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Mercury	0.15	0.017	0.0052	268819	03/21/19	METHOD	EPA 7471A
Molybdenum	0.57	0.25	0.026	268807	03/22/19	EPA 3050B	EPA 6010B
Nickel	49	0.25	0.049	268807	03/22/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268807	03/22/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268807	03/22/19	EPA 3050B	EPA 6010B
Vanadium	37	0.25	0.052	268807	03/22/19	EPA 3050B	EPA 6010B
Zinc	66	0.99	0.21	268807	03/22/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308185	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-04	Diln Fac:	1.000
Lab ID:	308185-003	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	mg/Kg	Prepared:	03/21/19
Basis:	air dried		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.12 J	2.0	0.068	268807	03/22/19	EPA 3050B	EPA 6010B
Arsenic	5.0	1.5	0.065	268807	03/22/19	EPA 3050B	EPA 6010B
Barium	75	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Beryllium	0.33	0.099	0.0099	268807	03/22/19	EPA 3050B	EPA 6010B
Cadmium	0.21 J	0.25	0.016	268807	03/22/19	EPA 3050B	EPA 6010B
Chromium	48	0.25	0.048	268807	03/22/19	EPA 3050B	EPA 6010B
Cobalt	9.4	0.25	0.014	268807	03/22/19	EPA 3050B	EPA 6010B
Copper	30	0.25	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Lead	27	0.99	0.056	268807	03/22/19	EPA 3050B	EPA 6010B
Mercury	0.12	0.017	0.0050	268819	03/21/19	METHOD	EPA 7471A
Molybdenum	0.51	0.25	0.026	268807	03/22/19	EPA 3050B	EPA 6010B
Nickel	48	0.25	0.049	268807	03/22/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268807	03/22/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268807	03/22/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268807	03/22/19	EPA 3050B	EPA 6010B
Vanadium	35	0.25	0.052	268807	03/22/19	EPA 3050B	EPA 6010B
Zinc	69	0.99	0.21	268807	03/22/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969047	Batch#:	268807
Matrix:	Soil	Prepared:	03/21/19
Units:	mg/Kg	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	ND	1.5	0.066
Barium	0.17 J	0.25	0.030
Beryllium	ND	0.099	0.010
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.049
Cobalt	ND	0.25	0.014
Copper	0.13 J	0.25	0.057
Lead	ND	0.99	0.056
Molybdenum	ND	0.25	0.026
Nickel	ND	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	ND	0.25	0.052
Zinc	0.79 J	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	268807
Units:	mg/Kg	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: BS Lab ID: QC969048

Analyte	Spiked	Result	%REC	Limits
Antimony	49.90	48.68	98	80-120
Arsenic	49.90	49.59	99	80-120
Barium	49.90	50.37	101	80-120
Beryllium	24.95	24.03	96	80-120
Cadmium	49.90	48.70	98	80-120
Chromium	49.90	50.04	100	80-120
Cobalt	49.90	49.22	99	80-120
Copper	49.90	49.58	99	80-120
Lead	49.90	49.83	100	80-120
Molybdenum	49.90	48.76	98	80-120
Nickel	49.90	49.58	99	80-120
Selenium	49.90	49.36	99	80-120
Silver	4.990	4.815	96	80-120
Thallium	49.90	49.67	100	80-120
Vanadium	49.90	49.34	99	80-120
Zinc	49.90	49.46	99	80-120

Type: BSD Lab ID: QC969049

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.46	48.55	98	80-120	1	20
Arsenic	49.46	48.37	98	80-120	2	20
Barium	49.46	49.83	101	80-120	0	20
Beryllium	24.73	23.71	96	80-120	0	20
Cadmium	49.46	47.87	97	80-120	1	20
Chromium	49.46	49.72	101	80-120	0	20
Cobalt	49.46	48.77	99	80-120	0	20
Copper	49.46	48.56	98	80-120	1	20
Lead	49.46	49.25	100	80-120	0	20
Molybdenum	49.46	48.59	98	80-120	1	20
Nickel	49.46	49.09	99	80-120	0	20
Selenium	49.46	48.18	97	80-120	2	20
Silver	4.946	4.687	95	80-120	2	20
Thallium	49.46	48.84	99	80-120	1	20
Vanadium	49.46	48.42	98	80-120	1	20
Zinc	49.46	48.18	97	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	RPS-04	Batch#:	268807
MSS Lab ID:	308185-003	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	mg/Kg	Prepared:	03/21/19
Basis:	air dried	Analyzed:	03/22/19
Diln Fac:	1.000		

Type: MS Lab ID: QC969050

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.1211	49.36	8.488	17 *	75-120
Arsenic	4.988	49.36	53.23	98	80-121
Barium	75.03	49.36	119.4	90	75-125
Beryllium	0.3265	24.68	22.81	91	80-120
Cadmium	0.2143	49.36	49.38	100	80-120
Chromium	48.20	49.36	100.3	105	75-125
Cobalt	9.364	49.36	54.56	92	75-120
Copper	29.84	49.36	81.37	104	80-125
Lead	27.18	49.36	72.36	92	75-125
Molybdenum	0.5070	49.36	40.16	80	75-120
Nickel	47.61	49.36	96.52	99	75-125
Selenium	<0.1857	49.36	46.46	94	80-120
Silver	<0.02959	4.936	4.755	96	75-120
Thallium	<0.08868	49.36	43.25	88	75-120
Vanadium	35.10	49.36	85.14	101	78-125
Zinc	68.53	49.36	114.3	93	75-125

Type: MSD Lab ID: QC969051

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.70	8.512	17 *	75-120	0	20
Arsenic	49.70	53.93	98	80-121	1	20
Barium	49.70	124.0	99	75-125	3	20
Beryllium	24.85	23.03	91	80-120	0	20
Cadmium	49.70	49.63	99	80-120	0	20
Chromium	49.70	101.4	107	75-125	1	20
Cobalt	49.70	54.70	91	75-120	0	20
Copper	49.70	81.81	105	80-125	0	20
Lead	49.70	72.74	92	75-125	0	20
Molybdenum	49.70	40.91	81	75-120	1	20
Nickel	49.70	97.99	101	75-125	1	20
Selenium	49.70	47.07	95	80-120	1	20
Silver	4.970	5.060	102	75-120	6	20
Thallium	49.70	43.47	87	75-120	0	20
Vanadium	49.70	87.45	105	78-125	2	20
Zinc	49.70	116.4	96	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268819
Lab ID:	QC969102	Prepared:	03/21/19
Matrix:	Soil	Analyzed:	03/21/19
Units:	mg/Kg		

Result	RL	MDL
ND	0.016	0.0048

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	268819
Matrix:	Soil	Prepared:	03/21/19
Units:	mg/Kg	Analyzed:	03/21/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969103	0.1724	0.1718	100	80-120		
BSD	QC969104	0.1538	0.1584	103	80-120	3	20

RPD= Relative Percent Difference

Moisture			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	268750
Matrix:	Soil	Sampled:	03/18/19
Units:	%	Received:	03/18/19
Diln Fac:	1.000	Analyzed:	03/19/19

Field ID	Lab ID	Result	RL
RPS-02	308185-005	12	1
RPS-03	308185-006	6	1
RPS-04	308185-007	7	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	308185	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	268750
MSS Lab ID:	308187-006	Sampled:	03/15/19
Lab ID:	QC968816	Received:	03/15/19
Matrix:	Soil	Analyzed:	03/19/19

MSS Result	Result	RL	RPD	Lim
20.31	20.68	1.000	2	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 308209
ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
RPS-13	308209-001
RPS-14	308209-002
RPS-15	308209-003
RPS-16	308209-004
RPS-25	308209-005
RPS-26	308209-006
RPS-27	308209-007
RPS-18	308209-008
EB-190319	308209-009
RPS-13	308209-010
RPS-14	308209-011
RPS-15	308209-012
RPS-16	308209-013
RPS-25	308209-014
RPS-26	308209-015
RPS-27	308209-016
RPS-18	308209-017

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: 
Tracy Babjar
Project Manager
tracy.babjar@enthalpy.com
(510) 204-2226 Ext 13107

Date: 04/09/2019

CASE NARRATIVE

Laboratory number: 308209
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/19/19
Samples Received: 03/19/19

This data package contains sample and QC results for sixteen soil samples and one water sample, requested for the above referenced project on 03/19/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 268776; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 268777; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes QC969127, QC969128 (batch 268824) were not reported because the parent sample required a dilution that would have diluted out the spikes. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

1,2,4-trichlorobenzene was detected between the MDL and the RL in the method blank for batch 268764; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 268803 due to insufficient sample amount. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes QC969009, QC969010 (batch 268796) were not reported because the parent sample required a dilution that would have diluted out the spikes. Matrix spikes QC969243, QC969244 (batch 268855) were not reported because the parent sample required a dilution that would have diluted out the spikes. Many samples were diluted due to the dark and viscous nature of the sample

CASE NARRATIVE

Laboratory number: 308209
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/19/19
Samples Received: 03/19/19

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

extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A) Water:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. High responses were observed for 4,4'-DDT, dieldrin, and endrin in the CCV analyzed 03/26/19 15:25; affected data was qualified with "b". High recoveries were observed for many analytes in the BS/BSD for batch 268791; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Pesticides (EPA 8081A) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Low response was observed for heptachlor in the CCV analyzed 03/25/19 16:09; affected data was qualified with "b". Low response was observed for gamma-BHC in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". High response was observed for gamma-BHC in the CCV analyzed 03/25/19 16:09; affected data was qualified with "b". Low response was observed for heptachlor in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". Low response was observed for aldrin in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". High response was observed for aldrin in the CCV analyzed 03/25/19 16:09; affected data was qualified with "b". Low response was observed for dieldrin in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". High response was observed for dieldrin in the CCV analyzed 03/25/19 16:09; affected data was qualified with "b". Low response was observed for endrin in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". Low response was observed for 4,4'-DDT in the CCV analyzed 03/25/19 10:18; affected data was qualified with "b". Many samples were diluted due to the color of the sample extracts. 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.

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.

CASE NARRATIVE

Laboratory number: 308209
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/19/19
Samples Received: 03/19/19

PCBs (EPA 8082) Soil:

Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A) Water:

Barium and zinc were detected between the MDL and the RL in the method blank for batch 268816; these analytes were not detected in the sample at or above the RL. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A) Soil:

High response was observed for arsenic in the CCV analyzed 03/21/19 20:09; affected data was qualified with "b". Low recoveries were observed for molybdenum and antimony in the MS/MSD of RPS-04 (lab # 308185-003); the BS/BSD were within limits, and the associated RPDs were within limits. Low recoveries were observed for lead and antimony in the MS/MSD of RPS-15 (lab # 308209-003); the BS/BSD were within limits, and the associated RPDs were within limits. Barium, copper, and zinc were detected between the MDL and the RL in the method blank for batch 268807; these analytes were detected in samples at a level at least 10 times that of the blank. A number of analytes were detected between the MDL and the RL in the method blank for batch 268913; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 308209
 Date Received: 3/19/19

Client: RPO
 Project: _____

Section 2: Samples received in a cooler? Yes, how many? 2 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 3/19/19 By (print) AL (sign) _____
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**
 Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, Nons, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 7.2, #2: 6.8, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	—	—	—
Were Method 5035 sampling containers present?	—	—	—
If YES, what time were they transferred to freezer? <u>3/20/19 11:29</u>	—	—	—
Did all bottles arrive unbroken/unopened?	—	—	—
Are there any missing / extra samples?	—	—	—
Are samples in the appropriate containers for indicated tests?	—	—	—
Are sample labels present, in good condition and complete?	—	—	—
Does the container count match the COC?	—	—	—
Do the sample labels agree with custody papers?	—	—	—
Was sufficient amount of sample sent for tests requested?	—	—	—
Did you change the hold time in LIMS for unpreserved VOAs?	—	—	—
Did you change the hold time in LIMS for preserved terracores?	—	—	—
Are bubbles > 6mm absent in VOA samples?	—	—	—
Was the client contacted concerning this sample delivery?	—	—	—
If YES, who was called? _____ By _____ Date: _____	—	—	—

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)	—	—	—
Did you check preservatives for all bottles for each sample?	—	—	—
Did you document your preservative check? pH strip lot# <u>31547720</u> , pH strip lot# _____, pH strip lot# _____	—	—	—

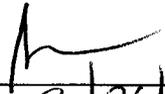
Preservative added:
 H2SO4 lot# _____ added to samples _____ on/at _____
 HCL lot# _____ added to samples _____ on/at _____
 HNO3 lot# _____ added to samples _____ on/at _____
 NaOH lot# _____ added to samples _____ on/at _____

Section 6:
 Explanations/Comments: _____

Date Logged in 5/19/19 By (print) AL (sign) _____
 Date Labeled 3/28/19 By (print) AL (sign) _____

Enthalpy Sample Preservation for 308209

Sample	pH: <2	>9	>12	Other
-009a	[]	[]	[]	_____
b	[]	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
g	[]	[]	[]	_____
h	[]	[]	[]	_____
i	[]	[]	[]	_____
j	[]	[]	[]	_____
k	[]	[]	[]	_____
l	[]	[]	[]	_____
m	[]	[]	[]	_____
n	[]	[]	[]	_____
o	[]	[]	[]	_____

Analyst: 

Date: 3/20/19

Detections Summary for 308209

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : RPS-13

Laboratory Sample ID :

308209-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	46	Y	9.9	3.0	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	260		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	77	J	250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	450		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	110	J	250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	830		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,000		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	410		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	490		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	570		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	170	J	250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	600		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	420		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	80	J	250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	610		250	50	ug/Kg	Air Dried	50.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.1	C,J	8.4	1.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
4,4'-DDD	3.0	J	16	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
4,4'-DDT	3.3	J	16	2.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
alpha-Chlordane	2.1	C,J	8.4	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
gamma-Chlordane	2.6	J	8.4	1.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1260	42		17	3.8	ug/Kg	Air Dried	5.000	EPA 8082	EPA 3550C
Arsenic	4.8		1.5	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	78		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.37		0.10	0.020	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.42		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	51		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		1.0	0.13	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.34		0.018	0.0031	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.57		0.25	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	54		0.25	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	63		1.0	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-14

Laboratory Sample ID :

308209-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	30	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	180		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Naphthalene	33	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	110		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	31	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	40	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	520		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	130		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	880		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,200		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	470		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	530		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	570		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	190		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	620		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	400		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	76		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	550		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.8	J	4.3	0.53	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	1.0	J	8.3	0.74	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDD	1.7	C,J	8.3	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	1.9	C,J	8.3	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	2.3	C,J	4.3	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	3.5	J	4.3	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1254	15		10	3.7	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Aroclor-1260	38		10	2.3	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Arsenic	4.6		1.5	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	74		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.35		0.099	0.020	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.39		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.1		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	20		0.25	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.99	0.13	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.13		0.018	0.0031	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.26		0.25	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	41		0.25	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	57		0.99	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-15

Laboratory Sample ID :

308209-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	54	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	300		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	90	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Phenanthrene	350		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	90	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	810		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	1,200		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	400		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	460		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	580		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	160	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	610		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	410		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	72	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	600		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Dieldrin	0.55	C,J	4.2	0.53	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	2.8	J	8.2	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Endrin	0.76	J	8.2	0.47	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDD	6.5	J	8.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	4.2	J	16	2.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
alpha-Chlordane	1.7	C,J	4.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	0.95	C,J	4.2	0.67	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	19		9.9	2.3	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Antimony	0.75	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.8		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.23	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	30		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	51		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.16		0.017	0.0030	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.55		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	73		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-16

Laboratory Sample ID :

308209-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	56	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	320		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Phenanthrene	110	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	280		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	600		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	150	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	210		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	300		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	99	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	300		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	200		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	36	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	320		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
beta-BHC	0.51	C,J	4.2	0.49	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	2.0	C,J	8.2	0.74	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.2	C,J	4.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	7.2	C	4.2	0.67	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	9.6	J	9.9	2.3	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Antimony	0.24	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.8		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	120		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.17	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	40		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.13		0.017	0.0030	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.46		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	68		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-25

Laboratory Sample ID :

308209-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	34	Y	10	3.0	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	210		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	50	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Phenanthrene	260		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	67	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	600		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	810		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	310		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	370		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	410		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	170		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	470		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	300		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	60	J	170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	440		170	33	ug/Kg	Air Dried	33.33	EPA 8270C-SIM	EPA 3550C
Dieldrin	2.7	C,J	4.2	0.52	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Endrin	1.1	J	8.2	0.47	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Endosulfan sulfate	1.6	C,J	8.2	0.93	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDD	1.8	J	8.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	5.6	C,J	8.2	0.99	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.3	C,J	4.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	1.3	J	4.2	0.67	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	140		9.9	2.3	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Antimony	0.34	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.6		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	79		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	46		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	31		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.21		0.018	0.0031	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.44		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	61		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-26

Laboratory Sample ID :

308209-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	36	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	33	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	27	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	26	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	300		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	76	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	510		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	760		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	320		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	340		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	370		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	250		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	47	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	0.98	C,J	4.3	0.54	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	0.95	J	8.4	0.75	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.2	C,J	4.3	0.57	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	2.3	J	4.3	0.69	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	36		10	2.4	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Antimony	0.17	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.8		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	73		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	36		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	19		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	22		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	1.4		0.083	0.015	mg/Kg	Air Dried	5.000	EPA 7471A	METHOD
Molybdenum	0.40		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	29		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	51		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-27

Laboratory Sample ID :

308209-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	30	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	170		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Naphthalene	30	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	75		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	22	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	23	J	50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	310		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	87		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	720		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,000		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	390		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	440		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	490		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	220		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	570		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	360		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	66		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	500		50	10	ug/Kg	Air Dried	10.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.4	C,J	4.2	0.52	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	0.97	J	8.2	0.74	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	4.8	#,J	8.2	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.8	C,J	4.2	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	1.8	J	4.2	0.67	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	42		9.9	2.3	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3550C
Antimony	0.21	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.3		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	85		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.23	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	46		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.7		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	29		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.16		0.017	0.0030	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.51		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	48		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : RPS-18

Laboratory Sample ID :

308209-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	41	Y	5.0	1.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		25	7.5	mg/Kg	Air Dried	5.000	EPA 8015B	EPA 3550C
Naphthalene	35	J	100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	88	J	100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Fluorene	23	J	100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	300		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	80	J	100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	760		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,100		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	410		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	510		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	620		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	140		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	650		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	480		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	83	J	100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	700		100	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.3	J	4.3	0.53	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDE	1.0	J	8.3	0.75	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDD	2.4	C,J	8.3	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	4.1	#,C,J	8.3	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	2.0	C,J	4.3	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	1.1	C,J	4.3	0.68	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	46		17	3.9	ug/Kg	Air Dried	5.000	EPA 8082	EPA 3550C
Antimony	0.33	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.2		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.30		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.017	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.25	0.015	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	29		1.0	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.066		0.016	0.0029	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.61		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	47		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	69		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : EB-190319

Laboratory Sample ID :

308209-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	26	J	50	9.4	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	51	Y	48	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Acetone	8.6	J	10	1.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Copper	0.67	J	5.0	0.55	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A

Client Sample ID : RPS-13

Laboratory Sample ID :

308209-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.57	J	2.6	0.11	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-14

Laboratory Sample ID :

308209-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.83	J	2.4	0.099	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-15

Laboratory Sample ID :

308209-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.65	J	2.3	0.095	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-16

Laboratory Sample ID :

308209-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.94	J	2.9	0.12	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	17		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-25

Laboratory Sample ID :

308209-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.83	J	2.4	0.097	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	7		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-26

Laboratory Sample ID :

308209-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.57	J	2.5	0.10	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-27

Laboratory Sample ID :

308209-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.97	J	2.9	0.12	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	13		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : RPS-18

Laboratory Sample ID :

308209-017

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.64	J	2.5	0.10	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	13		1		%	As Recd	1.000	EPA CLP	METHOD

= CCV drift outside limits; average CCV drift within limits per method requirements
 C = Presence confirmed, but RPD between columns exceeds 40%
 J = Estimated value
 Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Volatile Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190319	Batch#:	268776
Matrix:	Water	Sampled:	03/19/19
Units:	ug/L	Received:	03/19/19
Diln Fac:	1.000	Analyzed:	03/20/19

Type: SAMPLE Lab ID: 308209-009

Analyte	Result	RL	MDL
Gasoline C7-C12	26 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	80-120

Type: BLANK Lab ID: QC968919

Analyte	Result	RL	MDL
Gasoline C7-C12	11 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	80-120

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC968920	Batch#:	268776
Matrix:	Water	Analyzed:	03/20/19
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,229	111	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	80-120

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190319	Batch#:	268776
MSS Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Analyzed:	03/20/19
Diln Fac:	1.000		

Type: MS Lab ID: QC968922

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	25.76	2,000	2,156	107	78-120

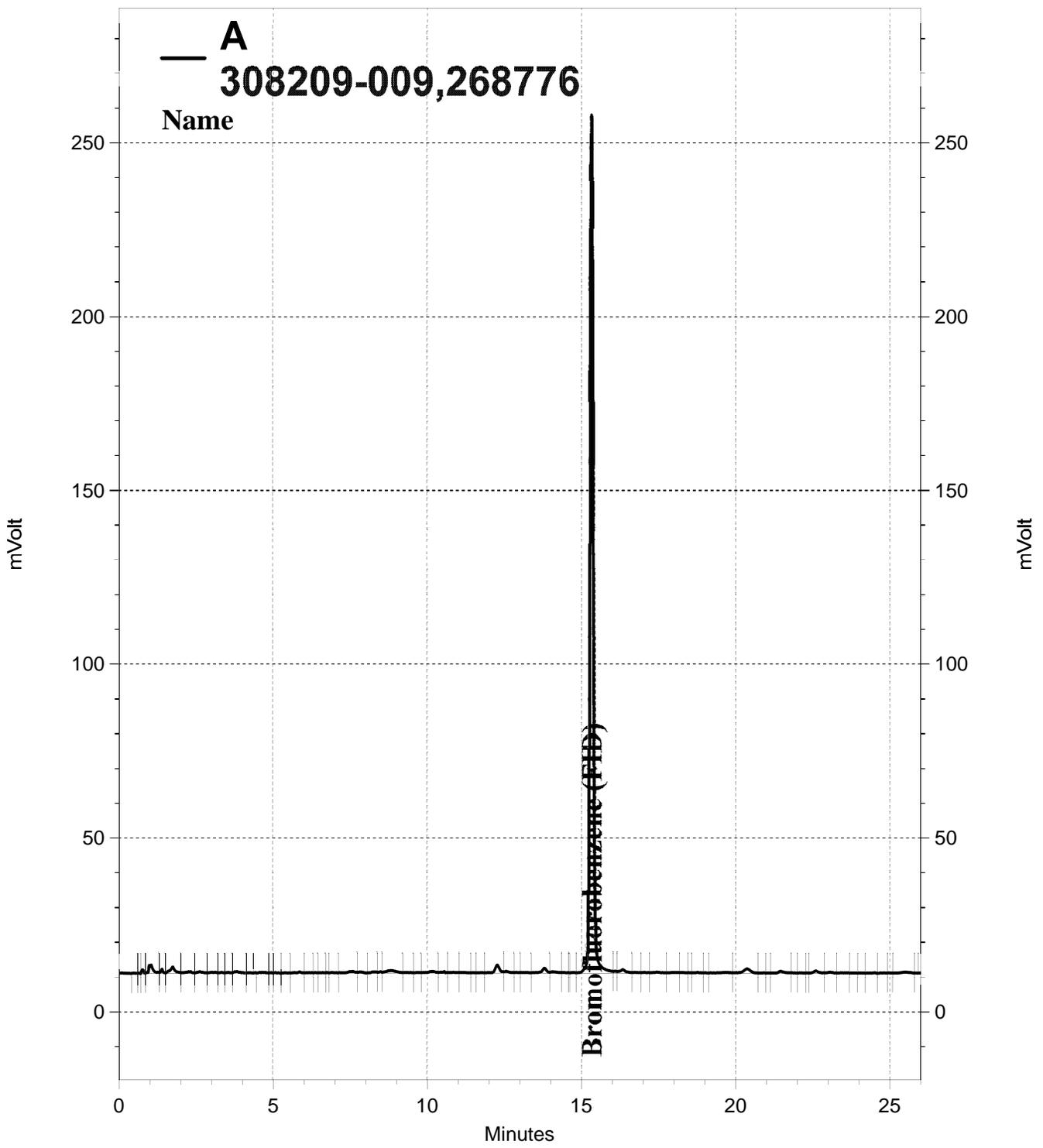
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	80-120

Type: MSD Lab ID: QC968923

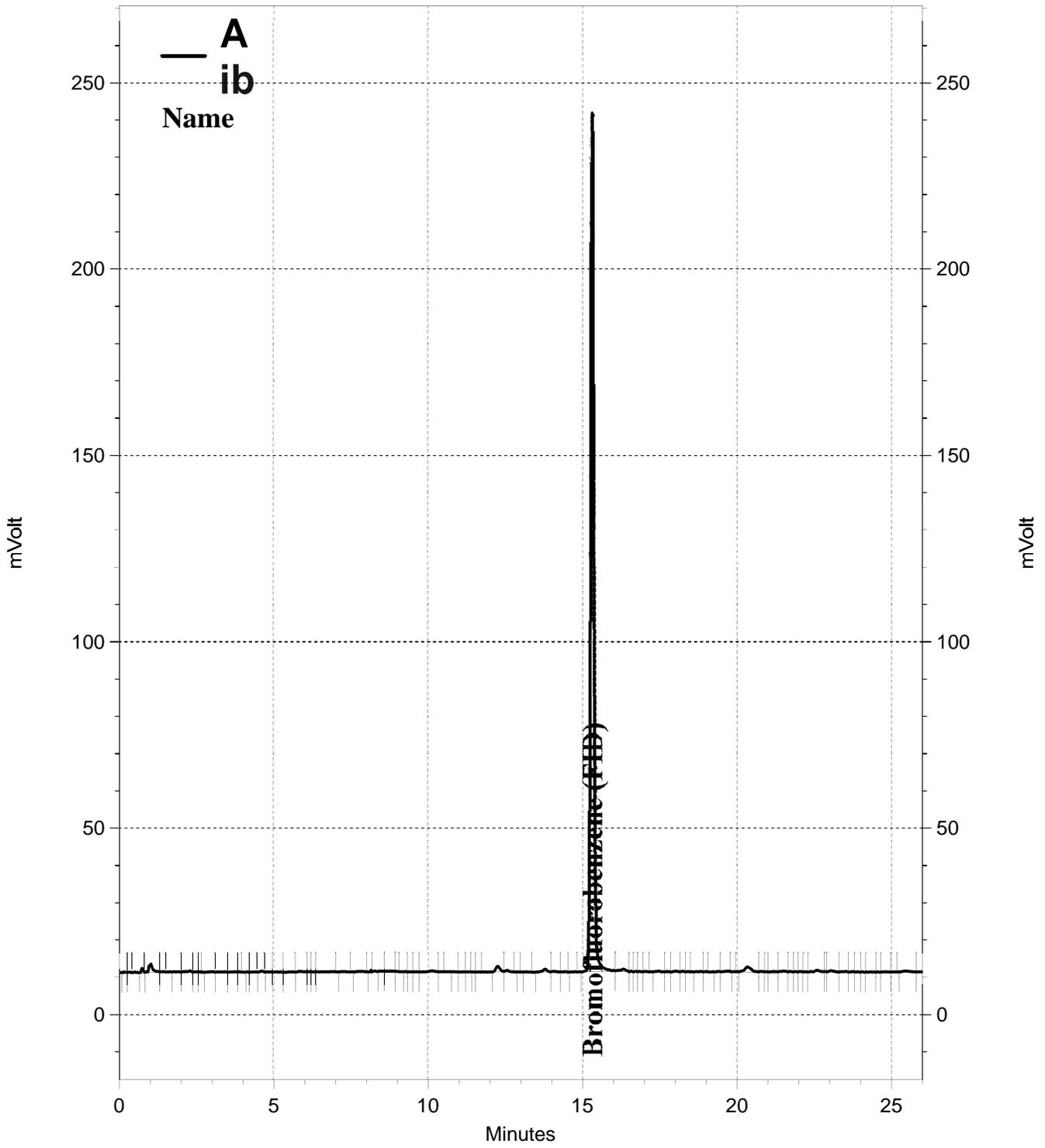
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,120	105	78-120	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	80-120

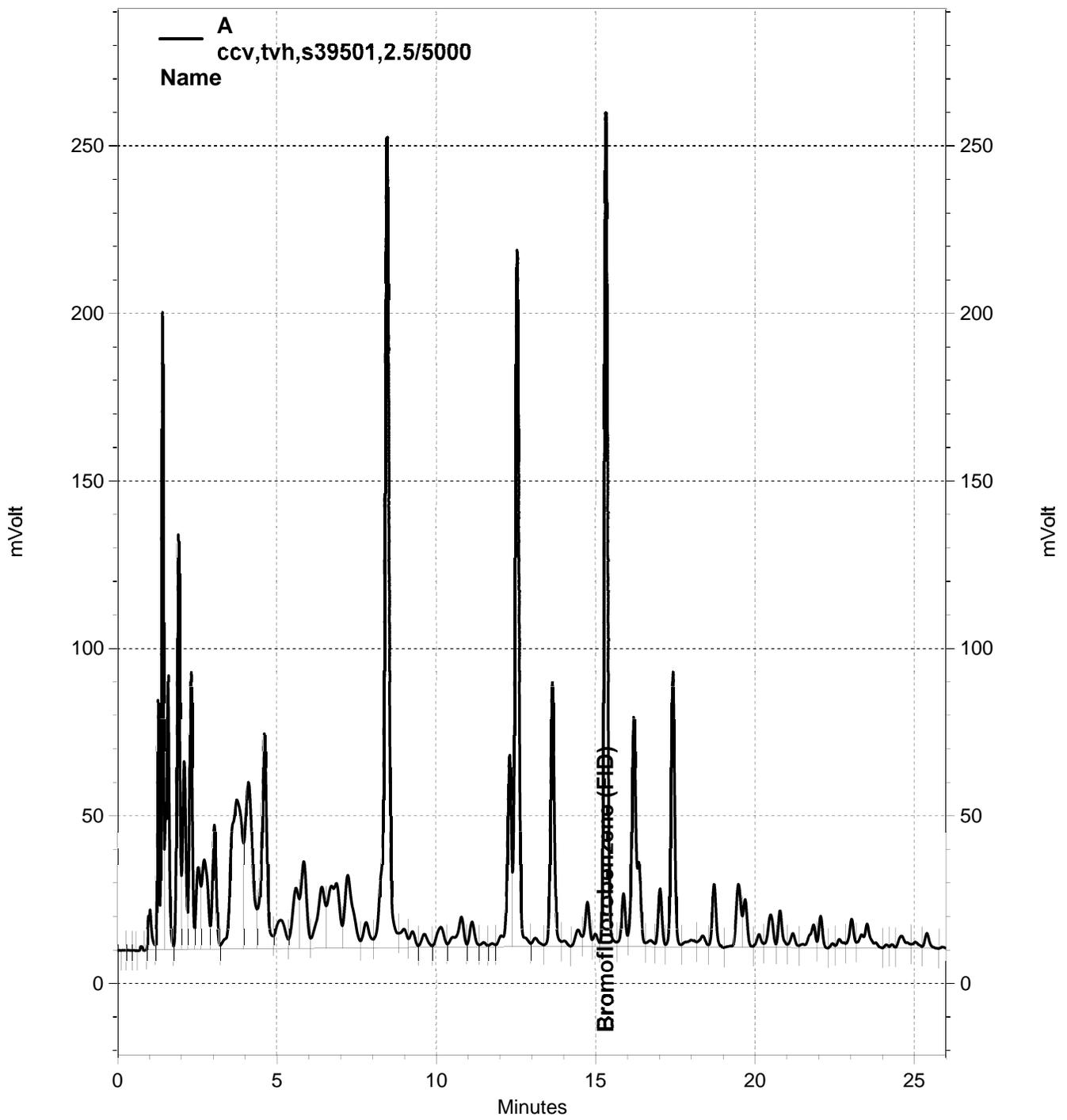
RPD= Relative Percent Difference



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Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	268777
Units:	mg/Kg	Analyzed:	03/20/19
Diln Fac:	1.000		

Type: BS Lab ID: QC968925

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.065	107	80-122

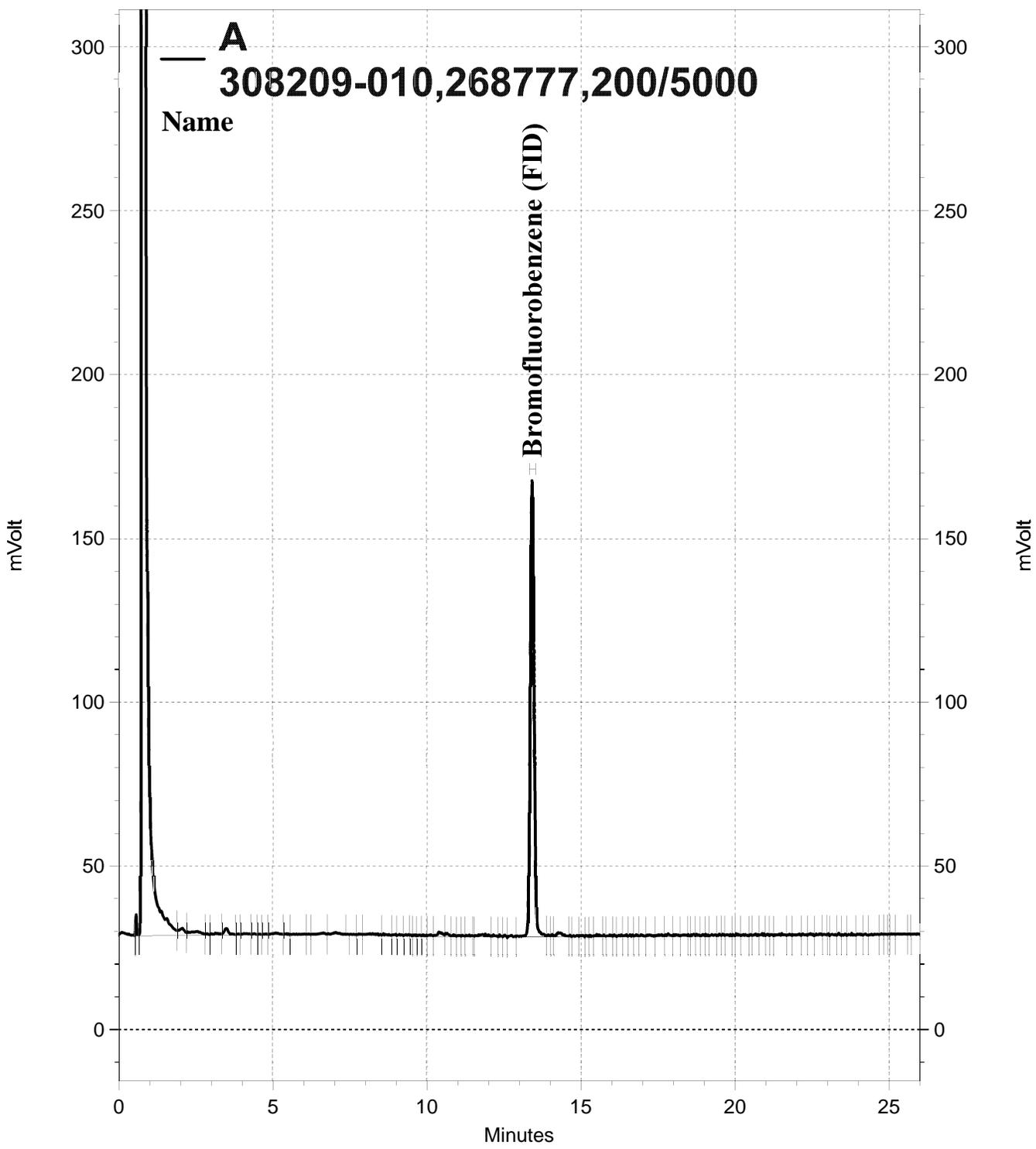
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Type: BSD Lab ID: QC968926

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.040	104	80-122	2	20

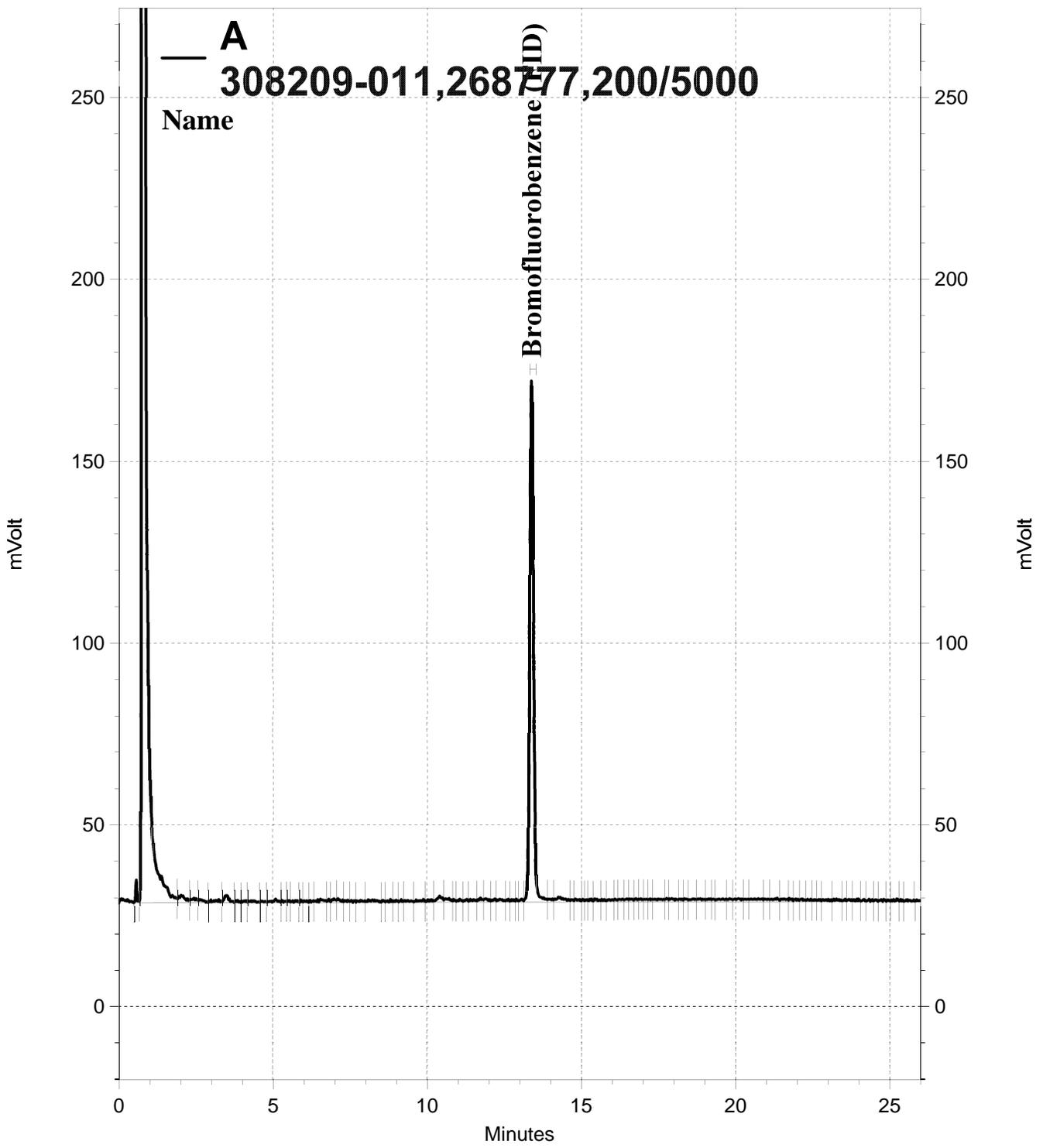
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

RPD= Relative Percent Difference



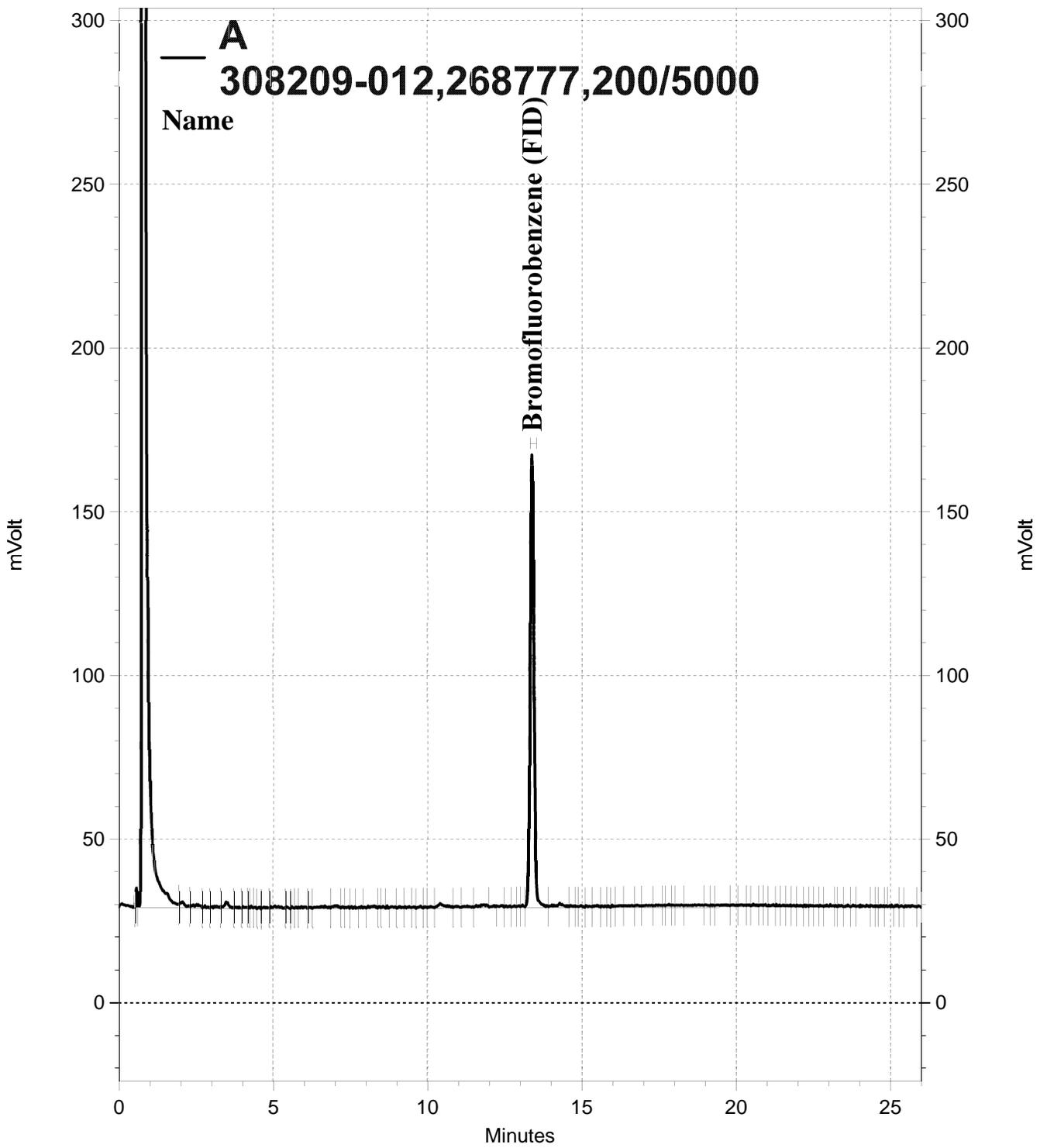
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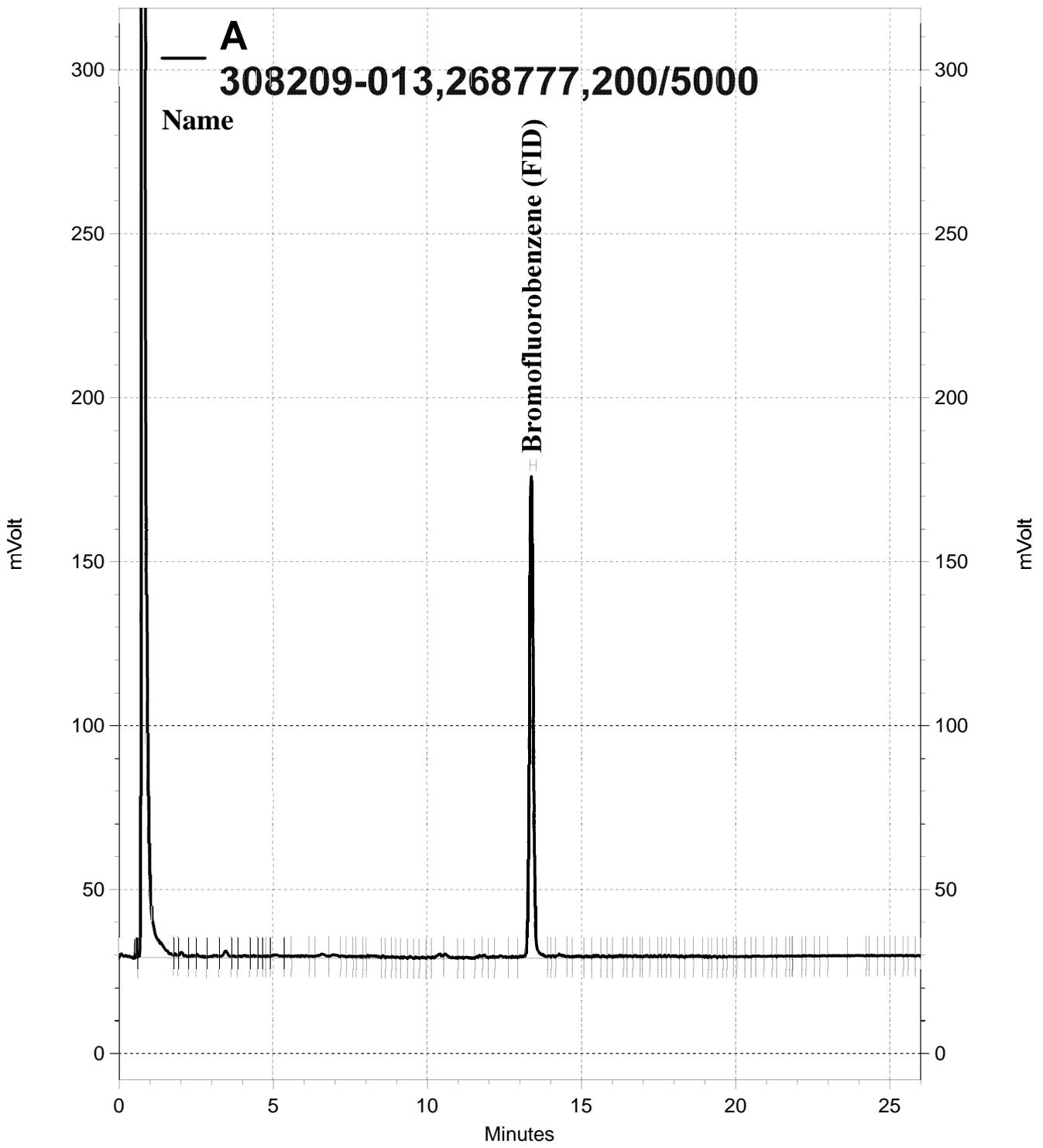


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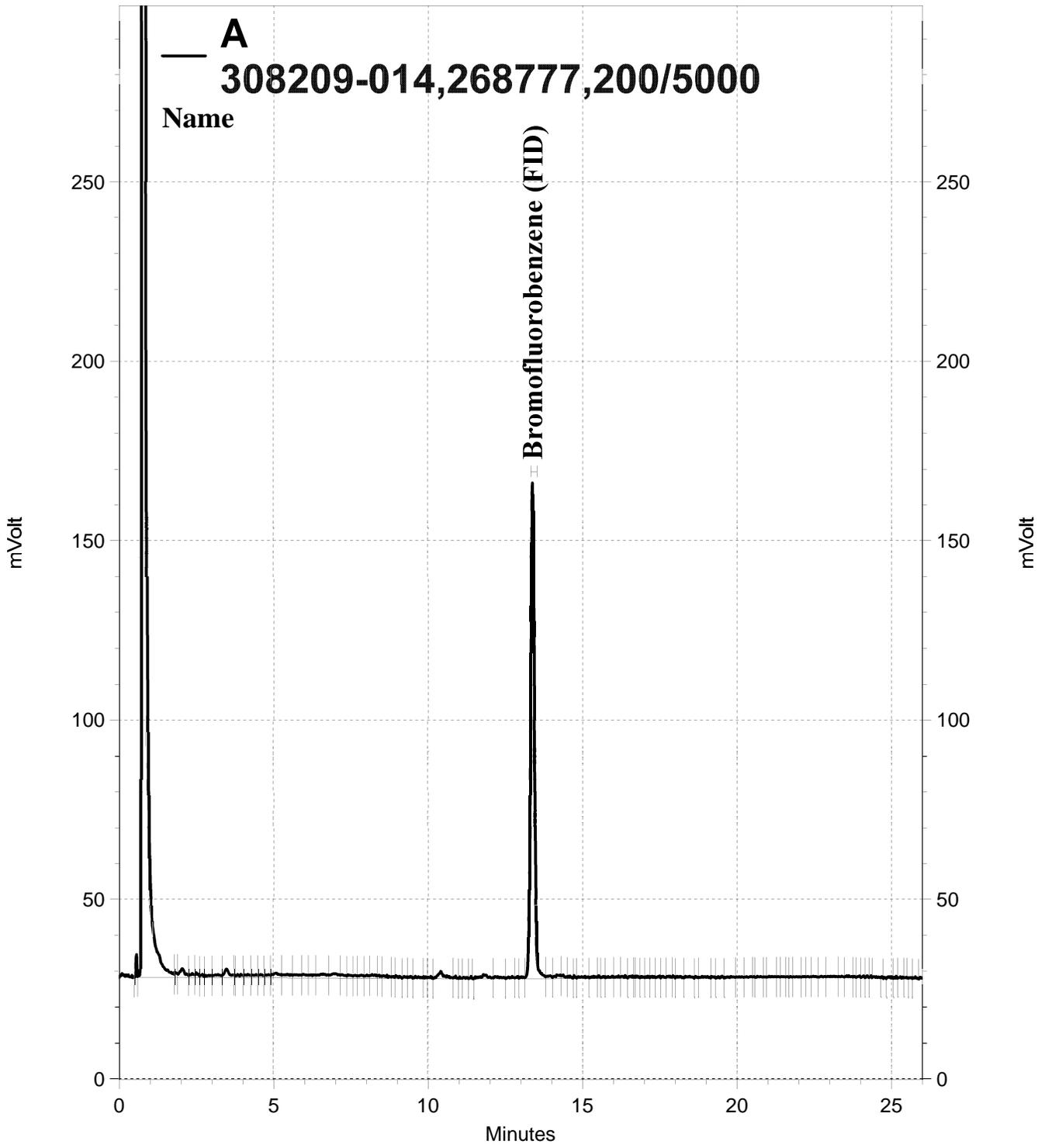


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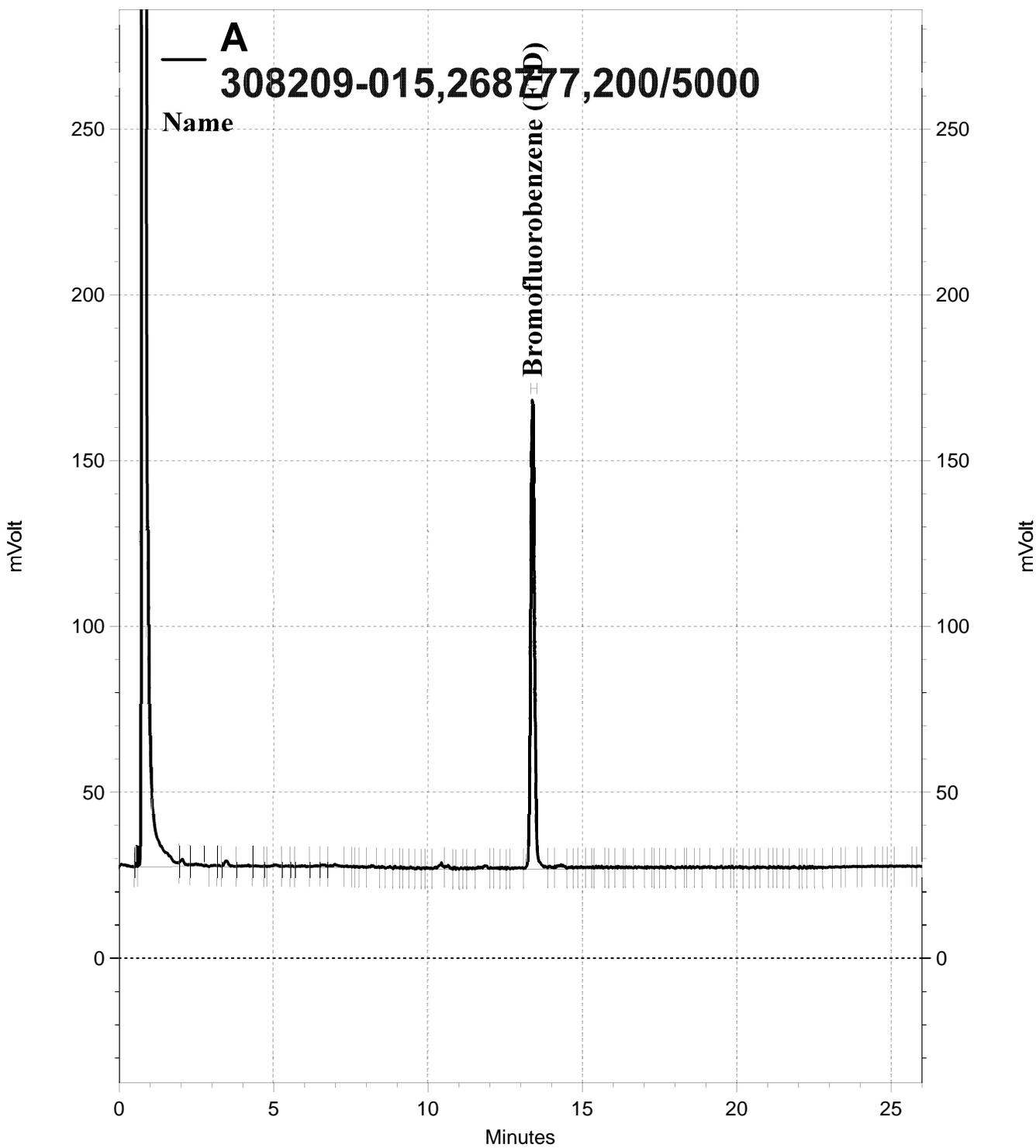
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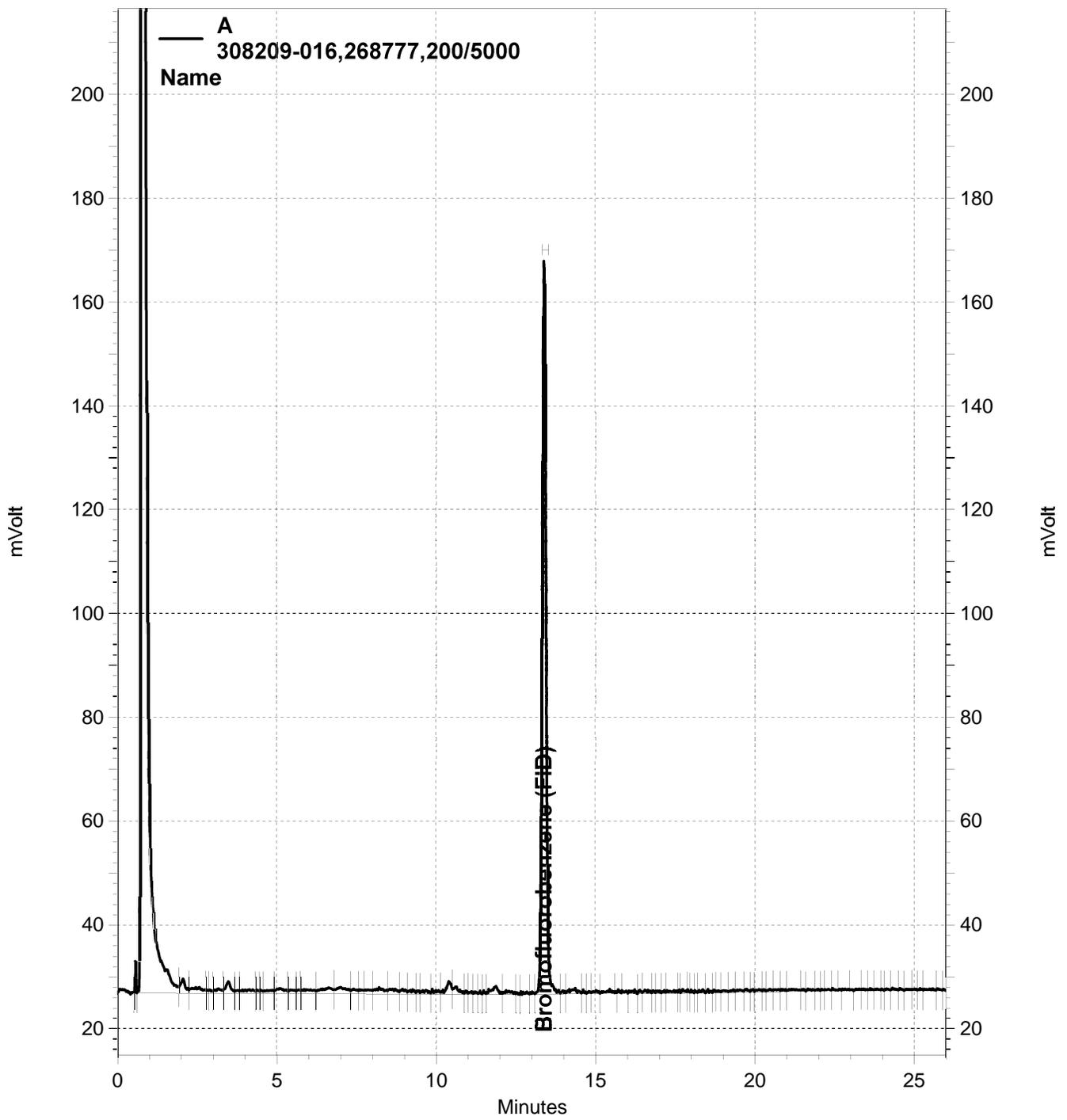


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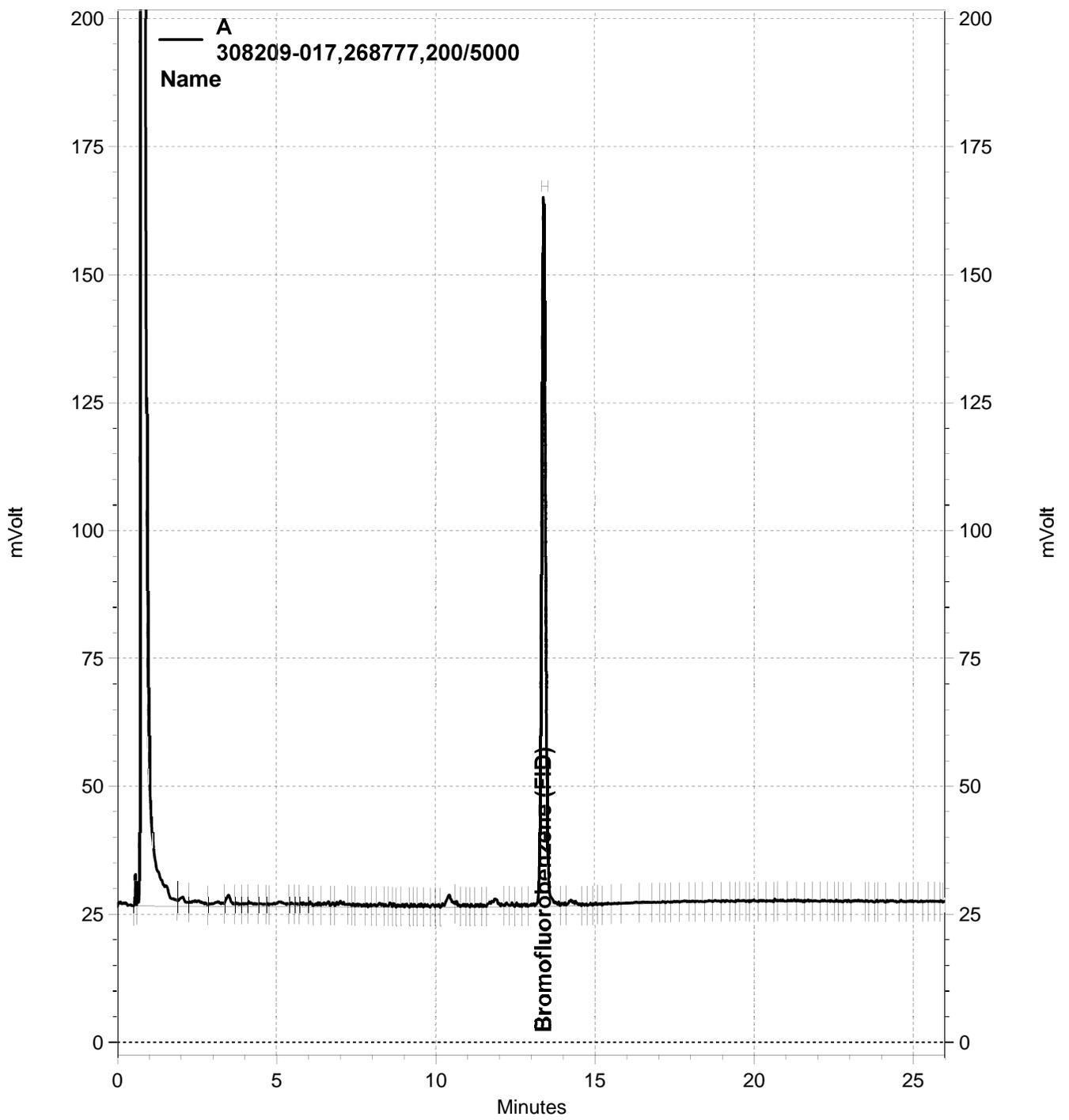
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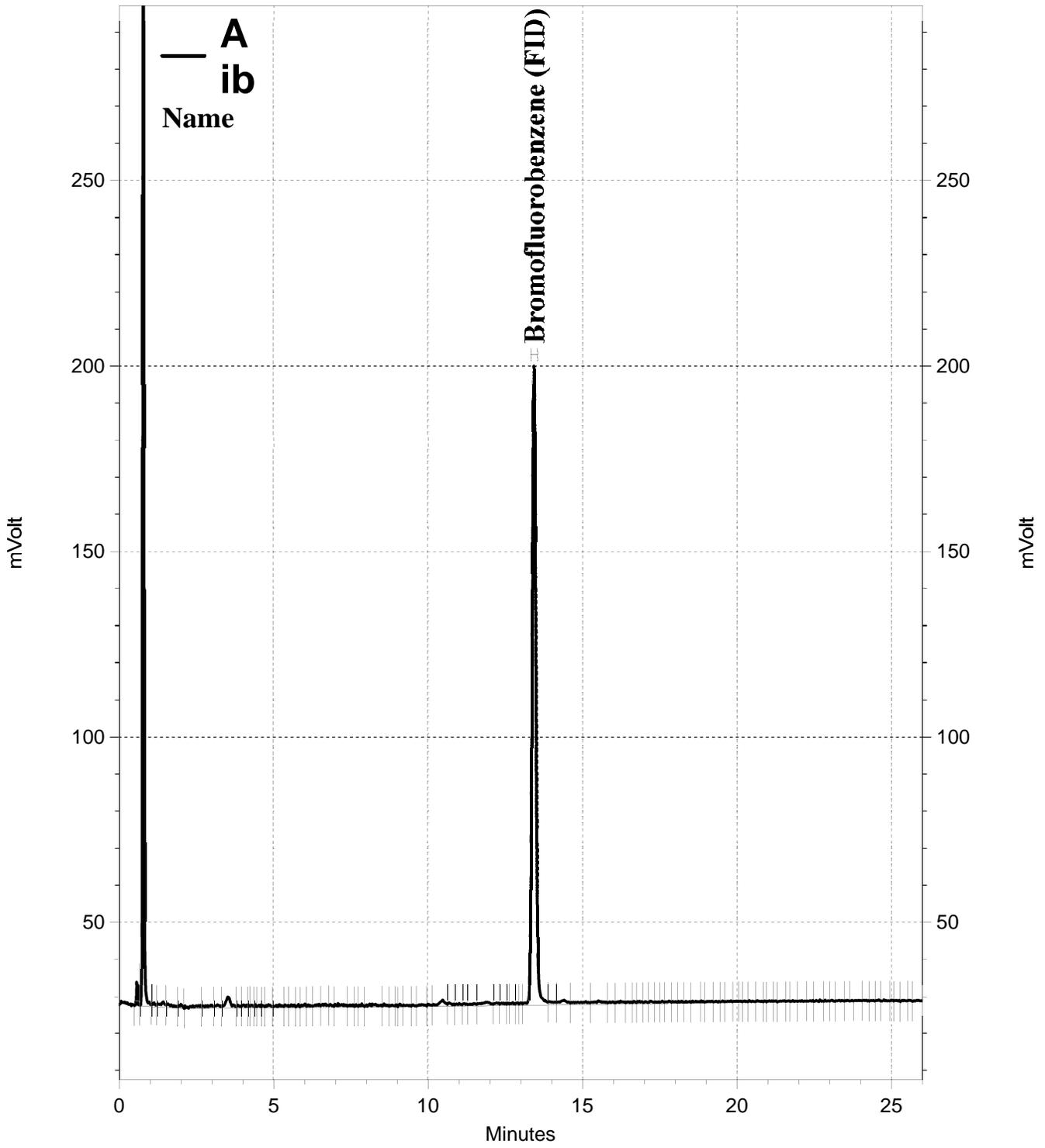
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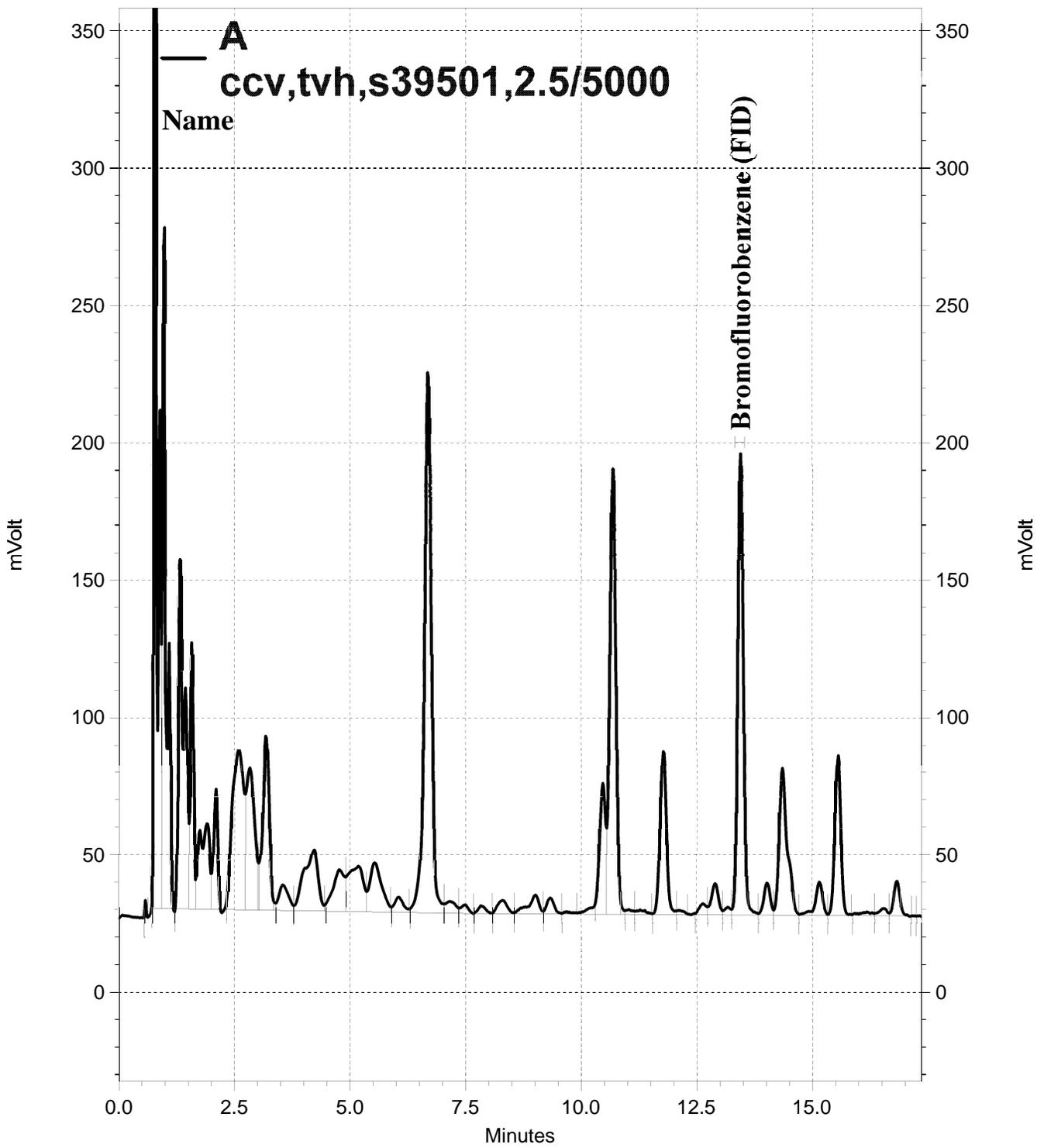
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Total Extractable Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190319	Batch#:	268820
Matrix:	Water	Sampled:	03/19/19
Units:	ug/L	Received:	03/19/19
Diln Fac:	1.000	Prepared:	03/21/19

Type: SAMPLE Analyzed: 03/23/19
 Lab ID: 308209-009

Analyte	Result	RL	MDL
Diesel C10-C24	51 Y	48	16
Motor Oil C24-C36	ND	290	92

Surrogate	%REC	Limits
o-Terphenyl	113	68-124

Type: BLANK Analyzed: 03/22/19
 Lab ID: QC969107

Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	111	68-124

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	268820
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: BS Lab ID: QC969108

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,460	98	64-120

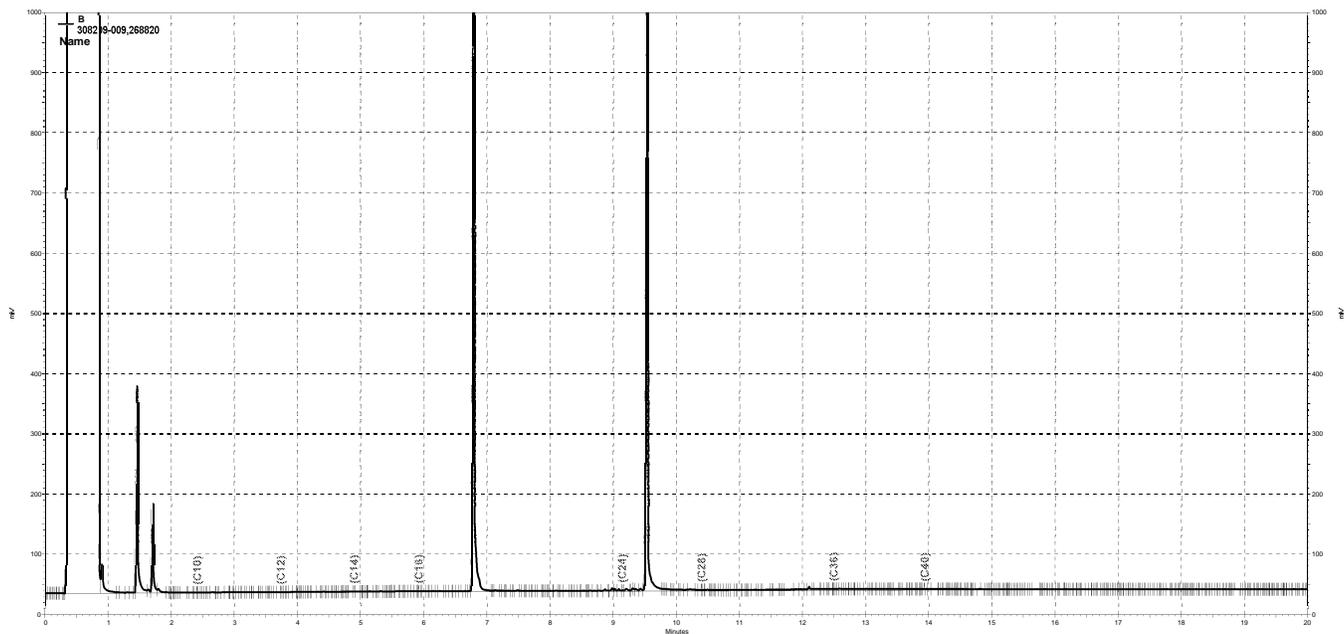
Surrogate	%REC	Limits
o-Terphenyl	120	68-124

Type: BSD Lab ID: QC969109

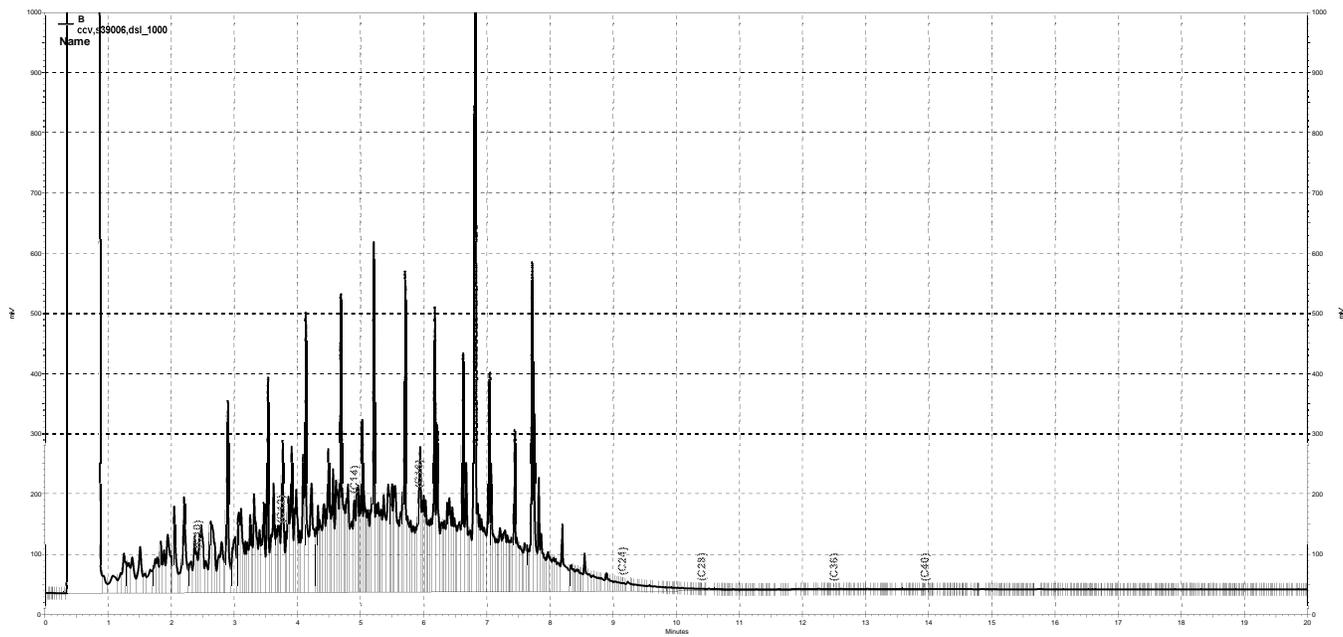
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,391	96	64-120	3	30

Surrogate	%REC	Limits
o-Terphenyl	110	68-124

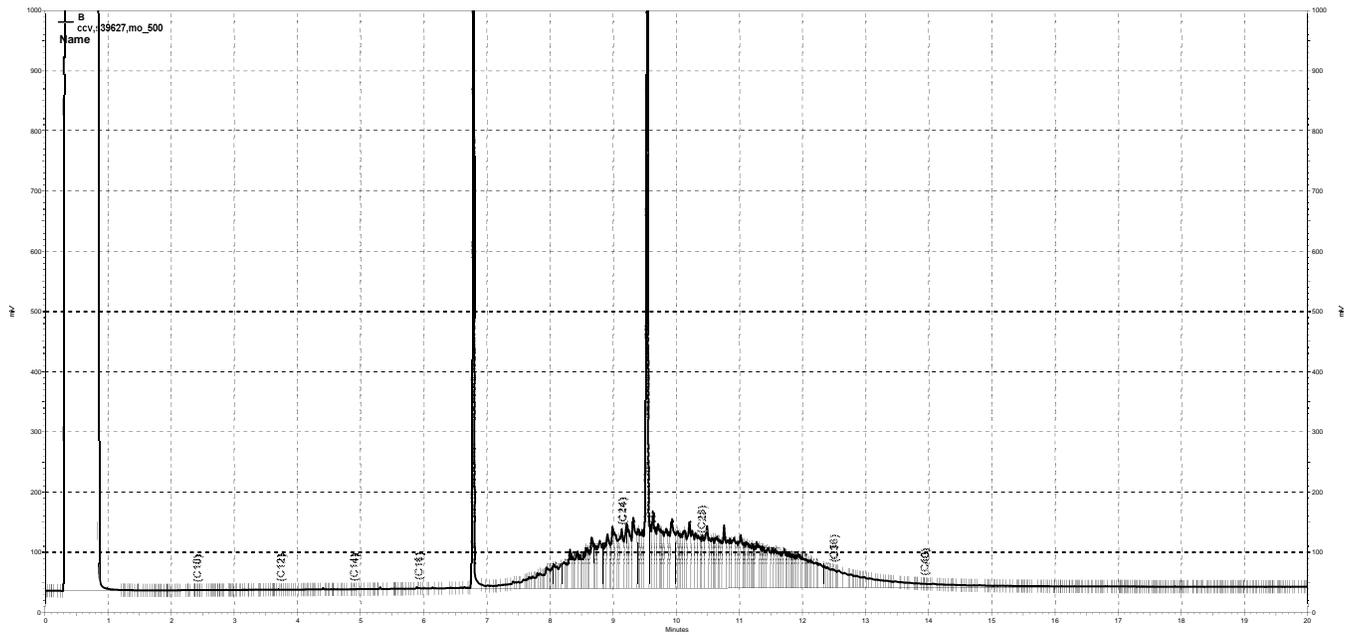
RPD= Relative Percent Difference



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Total Extractable Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/19/19
Units:	mg/Kg	Received:	03/19/19
Batch#:	268824	Prepared:	03/21/19

Type: BLANK Diln Fac: 1.000
 Lab ID: QC969125 Analyzed: 03/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

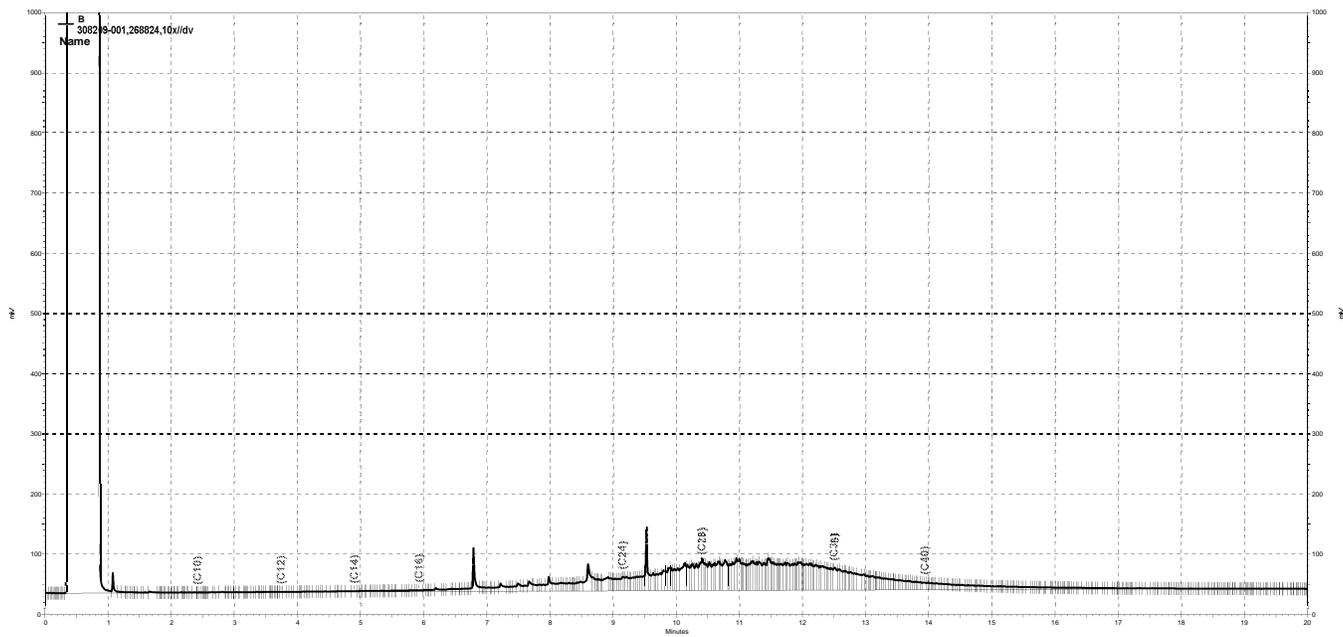
Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

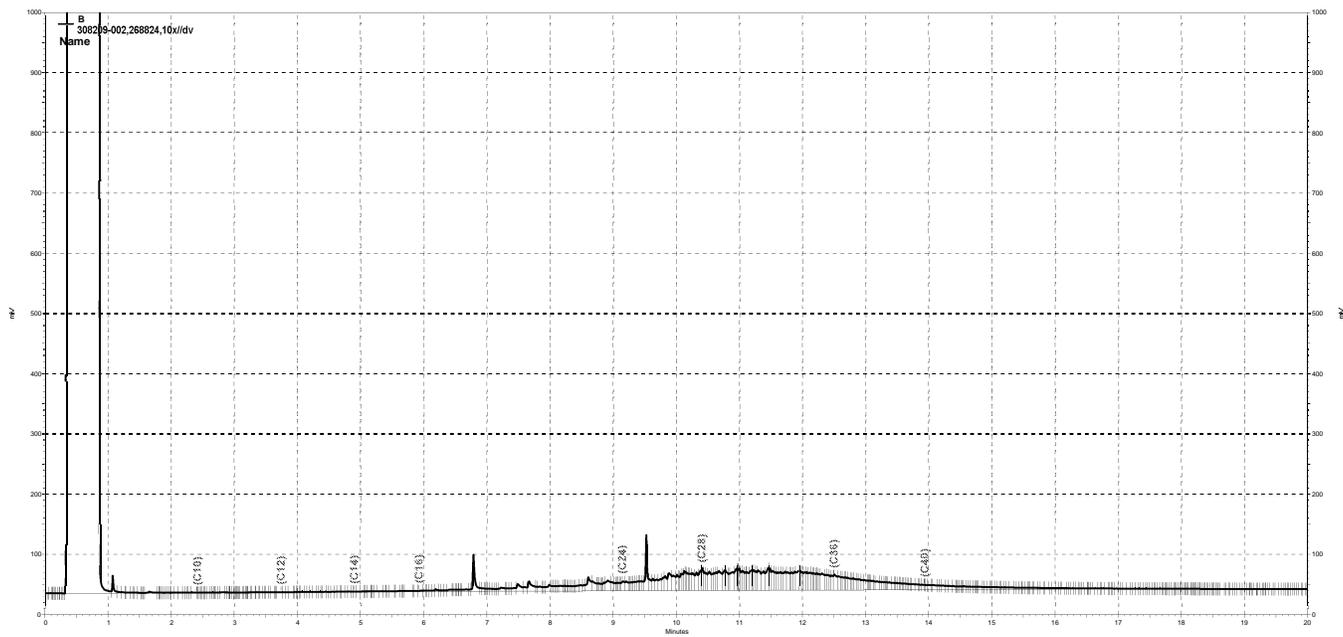
Total Extractable Hydrocarbons			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969126	Batch#:	268824
Matrix:	Soil	Prepared:	03/21/19
Units:	mg/Kg	Analyzed:	03/22/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	54.09	108	55-133

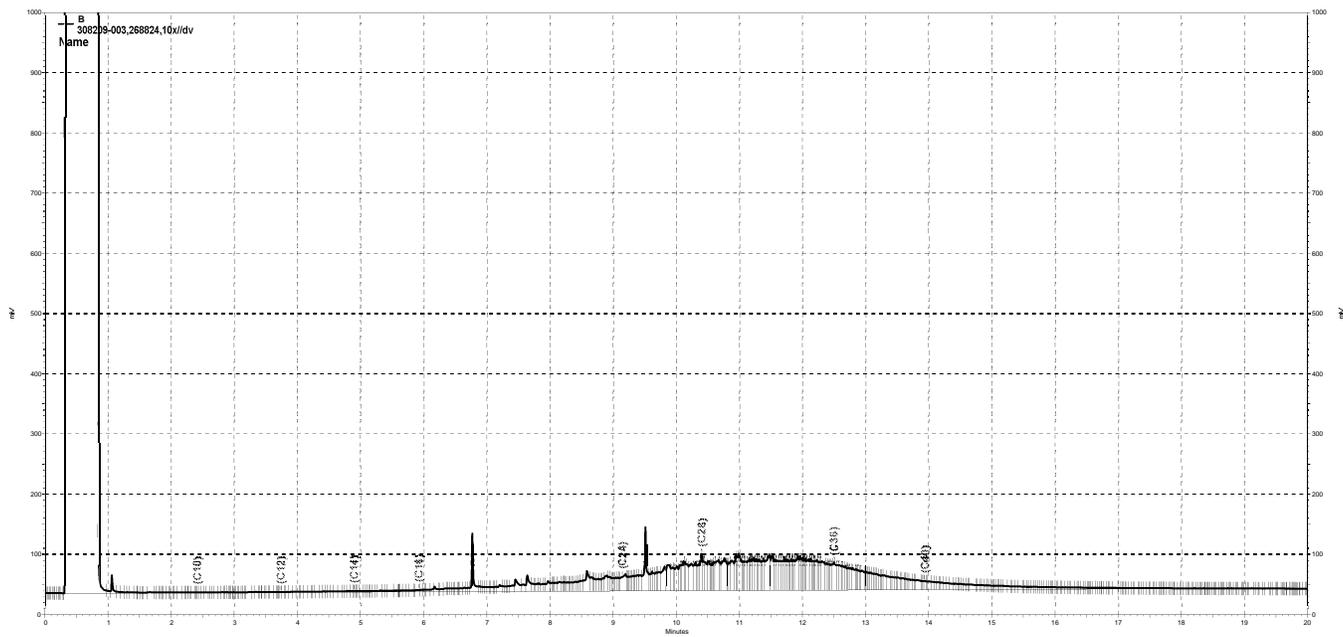
Surrogate	%REC	Limits
o-Terphenyl	123	61-130



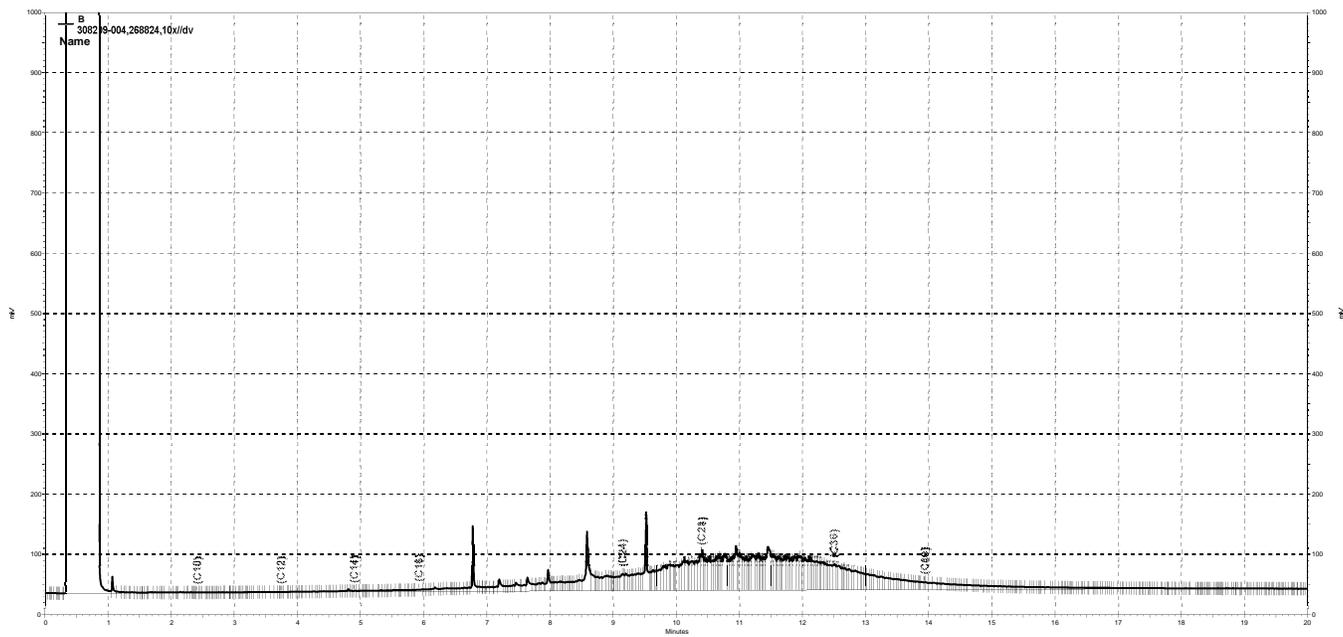
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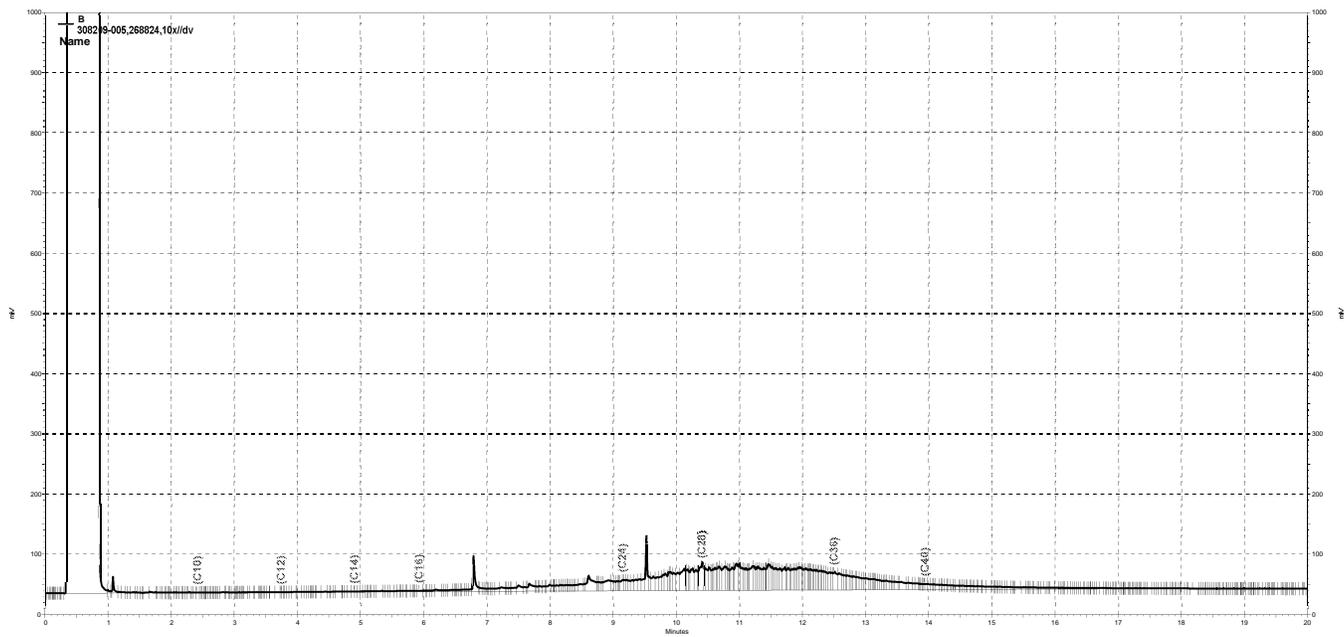
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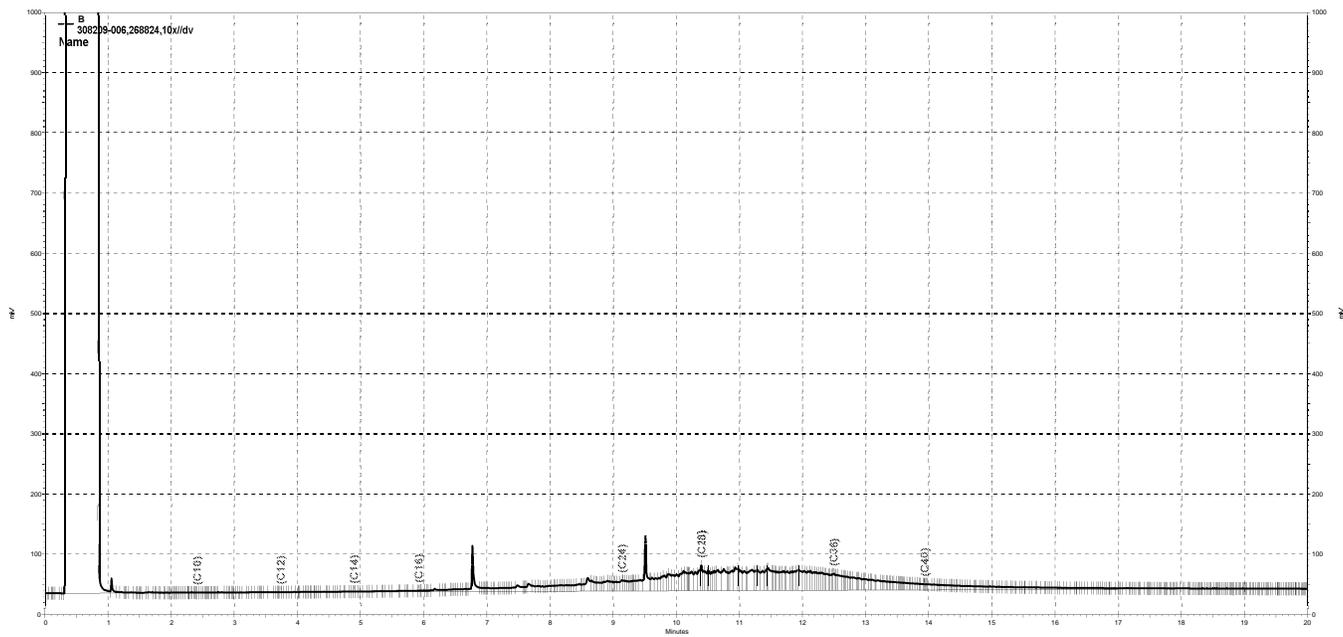
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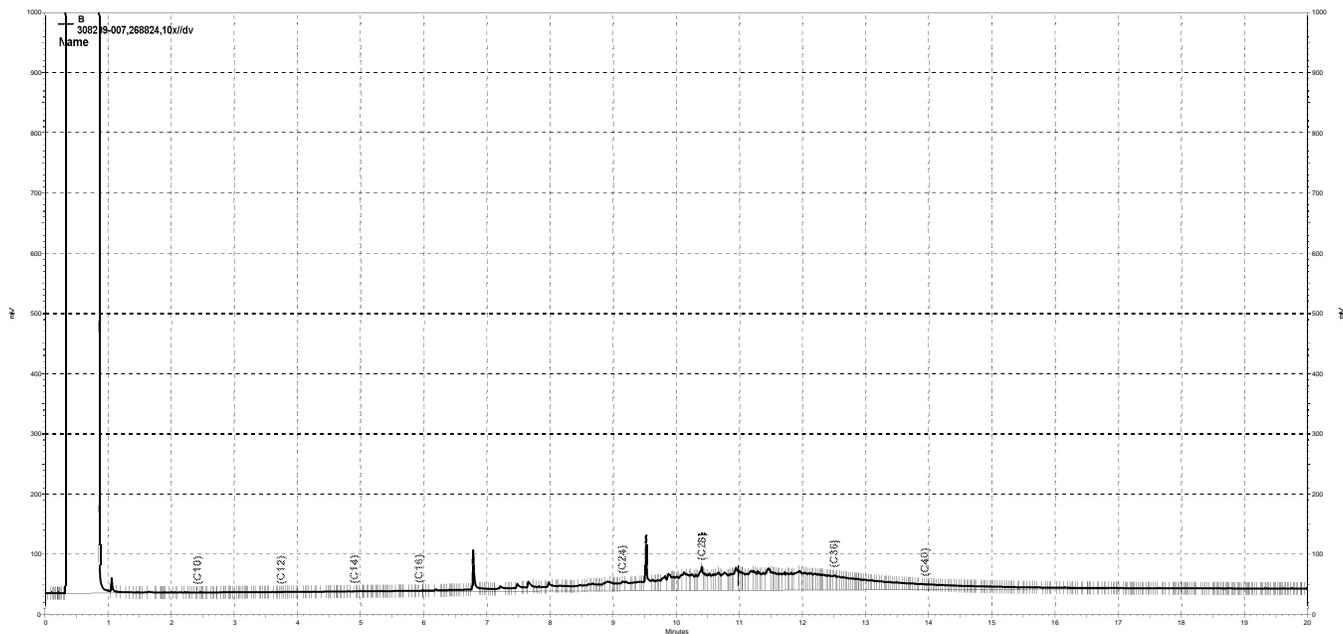
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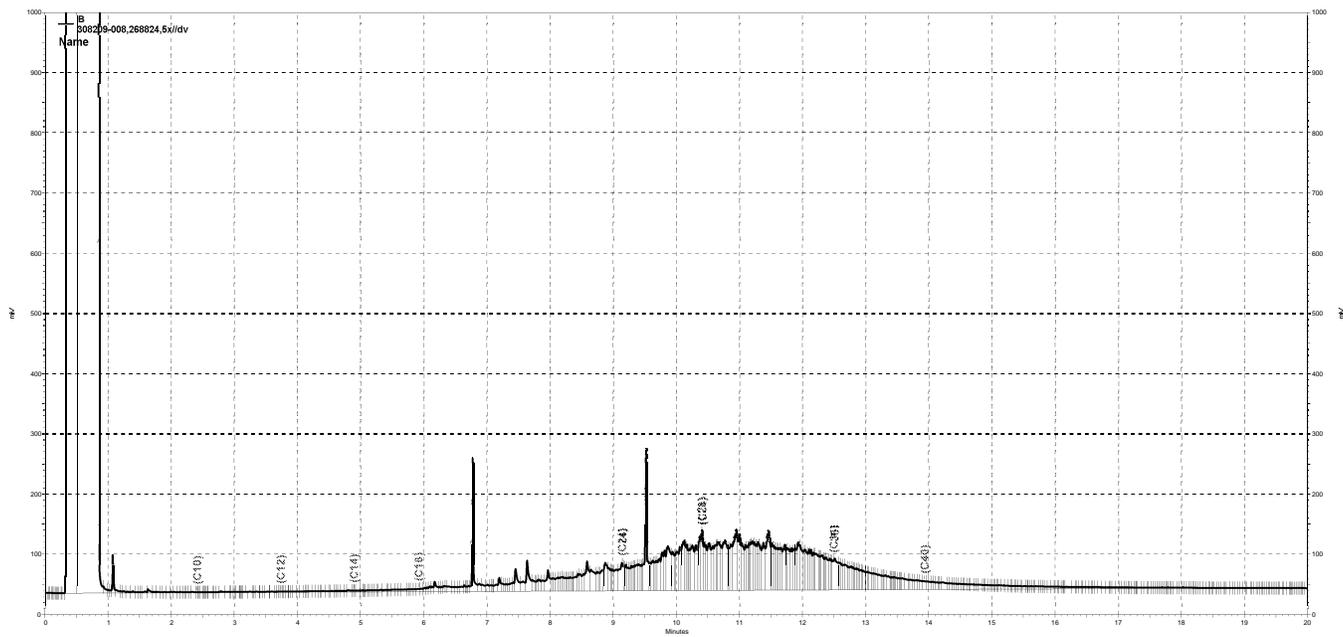
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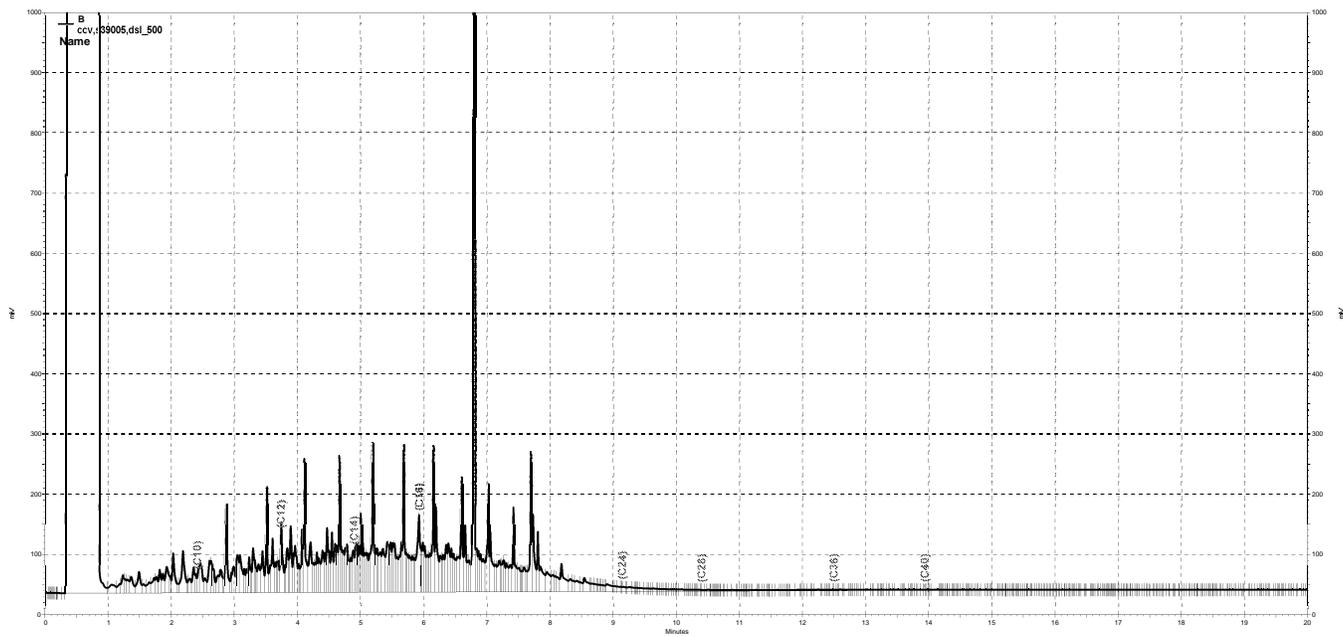
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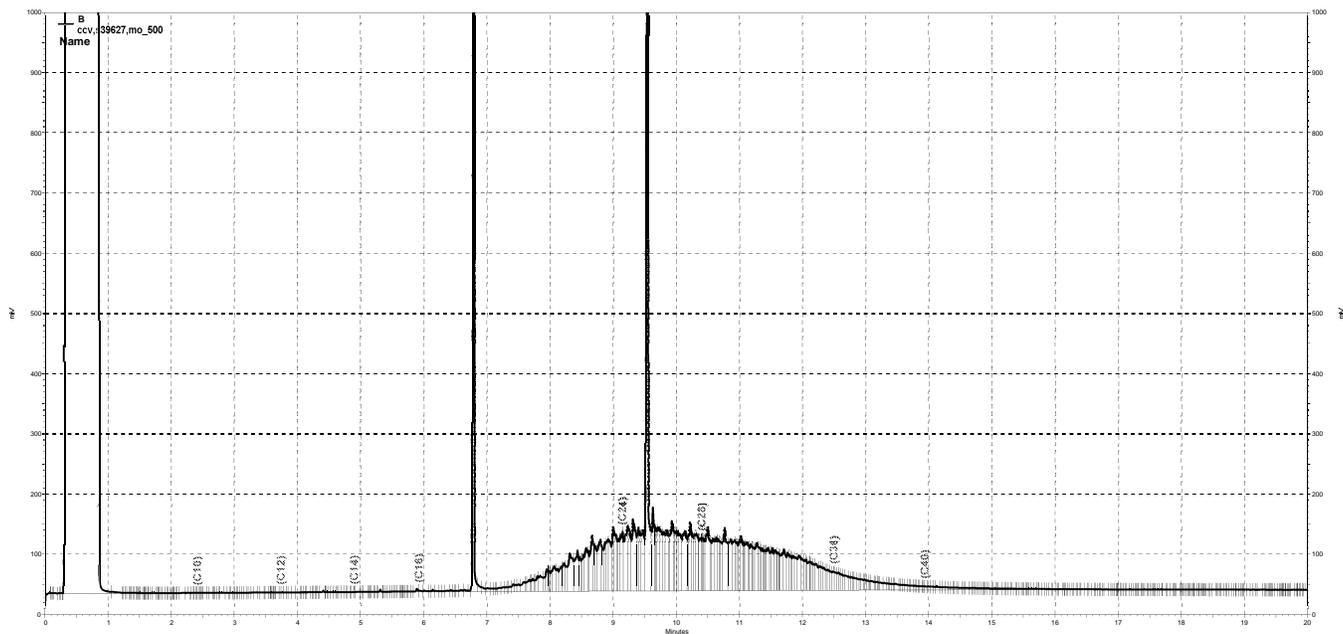
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Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190319	Batch#:	268764
Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Analyzed:	03/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	8.6 J	10	1.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.9
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190319	Batch#:	268764
Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Analyzed:	03/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	1.0	0.2
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-121
1,2-Dichloroethane-d4	109	80-134
Toluene-d8	97	80-120
Bromofluorobenzene	103	80-120

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968873	Batch#:	268764
Matrix:	Water	Analyzed:	03/20/19
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	1.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.9
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968873	Batch#:	268764
Matrix:	Water	Analyzed:	03/20/19
Units:	ug/L		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	0.5	0.1
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	0.2 J	1.0	0.2
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-121
1,2-Dichloroethane-d4	109	80-134
Toluene-d8	96	80-120
Bromofluorobenzene	106	80-120

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	268764
Units:	ug/L	Analyzed:	03/20/19
Diln Fac:	1.000		

Type: BS Lab ID: QC968874

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	15.00	14.99	100	65-133
Benzene	15.00	15.21	101	75-122
Trichloroethene	15.00	14.54	97	73-121
Toluene	15.00	14.69	98	78-120
Chlorobenzene	15.00	14.70	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-121
1,2-Dichloroethane-d4	109	80-134
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC968875

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	15.00	14.51	97	65-133	3	23
Benzene	15.00	15.21	101	75-122	0	20
Trichloroethene	15.00	14.81	99	73-121	2	20
Toluene	15.00	14.42	96	78-120	2	20
Chlorobenzene	15.00	14.62	97	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-121
1,2-Dichloroethane-d4	110	80-134
Toluene-d8	98	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-13	Diln Fac:	23.08
Lab ID:	308209-010	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	260	27
Chloromethane	ND	260	22
Vinyl Chloride	ND	260	20
Bromomethane	ND	260	91
Chloroethane	ND	260	18
Trichlorofluoromethane	ND	130	20
Acetone	ND	520	67
Freon 113	ND	130	26
1,1-Dichloroethene	ND	130	22
Methylene Chloride	ND	650	110
Carbon Disulfide	ND	130	25
MTBE	ND	130	23
trans-1,2-Dichloroethene	ND	130	27
Vinyl Acetate	ND	1,300	30
1,1-Dichloroethane	ND	130	24
2-Butanone	ND	260	57
cis-1,2-Dichloroethene	ND	130	26
2,2-Dichloropropane	ND	130	26
Chloroform	ND	130	28
Bromochloromethane	ND	130	28
1,1,1-Trichloroethane	ND	130	28
1,1-Dichloropropene	ND	130	26
Carbon Tetrachloride	ND	130	24
1,2-Dichloroethane	ND	130	22
Benzene	ND	130	23
Trichloroethene	ND	130	26
1,2-Dichloropropane	ND	130	22
Bromodichloromethane	ND	130	23
Dibromomethane	ND	130	22
4-Methyl-2-Pentanone	ND	260	21
cis-1,3-Dichloropropene	ND	130	28
Toluene	ND	130	24
trans-1,3-Dichloropropene	ND	130	24
1,1,2-Trichloroethane	ND	130	25
2-Hexanone	ND	260	24
1,3-Dichloropropane	ND	130	24
Tetrachloroethene	ND	130	25
Dibromochloromethane	ND	130	22
1,2-Dibromoethane	ND	130	23
Chlorobenzene	ND	130	25
1,1,1,2-Tetrachloroethane	ND	130	28
Ethylbenzene	ND	130	27
m,p-Xylenes	ND	130	16
o-Xylene	ND	130	26
Styrene	ND	130	27
Bromoform	ND	130	26
Isopropylbenzene	ND	130	29
1,1,2,2-Tetrachloroethane	ND	130	21
1,2,3-Trichloropropane	ND	130	27
Propylbenzene	ND	130	27
Bromobenzene	ND	130	25

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-13	Diln Fac:	23.08
Lab ID:	308209-010	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	130	27
2-Chlorotoluene	ND	130	30
4-Chlorotoluene	ND	130	27
tert-Butylbenzene	ND	130	30
1,2,4-Trimethylbenzene	ND	130	27
sec-Butylbenzene	ND	130	30
para-Isopropyl Toluene	ND	130	28
1,3-Dichlorobenzene	ND	130	27
1,4-Dichlorobenzene	ND	130	26
n-Butylbenzene	ND	130	29
1,2-Dichlorobenzene	ND	130	29
1,2-Dibromo-3-Chloropropane	ND	130	26
1,2,4-Trichlorobenzene	ND	130	36
Hexachlorobutadiene	ND	130	32
Naphthalene	ND	130	28
1,2,3-Trichlorobenzene	ND	130	35

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	104	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	101	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-14	Diln Fac:	22.01
Lab ID:	308209-011	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	240	25
Chloromethane	ND	240	20
Vinyl Chloride	ND	240	18
Bromomethane	ND	240	85
Chloroethane	ND	240	17
Trichlorofluoromethane	ND	120	19
Acetone	ND	480	62
Freon 113	ND	120	24
1,1-Dichloroethene	ND	120	21
Methylene Chloride	ND	600	110
Carbon Disulfide	ND	120	23
MTBE	ND	120	22
trans-1,2-Dichloroethene	ND	120	25
Vinyl Acetate	ND	1,200	28
1,1-Dichloroethane	ND	120	23
2-Butanone	ND	240	53
cis-1,2-Dichloroethene	ND	120	24
2,2-Dichloropropane	ND	120	24
Chloroform	ND	120	26
Bromochloromethane	ND	120	26
1,1,1-Trichloroethane	ND	120	26
1,1-Dichloropropene	ND	120	24
Carbon Tetrachloride	ND	120	22
1,2-Dichloroethane	ND	120	20
Benzene	ND	120	21
Trichloroethene	ND	120	24
1,2-Dichloropropane	ND	120	21
Bromodichloromethane	ND	120	22
Dibromomethane	ND	120	20
4-Methyl-2-Pentanone	ND	240	19
cis-1,3-Dichloropropene	ND	120	27
Toluene	ND	120	23
trans-1,3-Dichloropropene	ND	120	22
1,1,2-Trichloroethane	ND	120	24
2-Hexanone	ND	240	22
1,3-Dichloropropane	ND	120	23
Tetrachloroethene	ND	120	23
Dibromochloromethane	ND	120	21
1,2-Dibromoethane	ND	120	21
Chlorobenzene	ND	120	23
1,1,1,2-Tetrachloroethane	ND	120	26
Ethylbenzene	ND	120	25
m,p-Xylenes	ND	120	15
o-Xylene	ND	120	25
Styrene	ND	120	25
Bromoform	ND	120	24
Isopropylbenzene	ND	120	27
1,1,2,2-Tetrachloroethane	ND	120	20
1,2,3-Trichloropropane	ND	120	25
Propylbenzene	ND	120	25
Bromobenzene	ND	120	23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-14	Diln Fac:	22.01
Lab ID:	308209-011	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	25
2-Chlorotoluene	ND	120	28
4-Chlorotoluene	ND	120	25
tert-Butylbenzene	ND	120	28
1,2,4-Trimethylbenzene	ND	120	26
sec-Butylbenzene	ND	120	28
para-Isopropyl Toluene	ND	120	26
1,3-Dichlorobenzene	ND	120	25
1,4-Dichlorobenzene	ND	120	24
n-Butylbenzene	ND	120	27
1,2-Dichlorobenzene	ND	120	27
1,2-Dibromo-3-Chloropropane	ND	120	25
1,2,4-Trichlorobenzene	ND	120	34
Hexachlorobutadiene	ND	120	30
Naphthalene	ND	120	26
1,2,3-Trichlorobenzene	ND	120	32

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	102	80-136
Toluene-d8	93	80-120
Bromofluorobenzene	98	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-15	Diln Fac:	20.74
Lab ID:	308209-012	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	230	24
Chloromethane	ND	230	19
Vinyl Chloride	ND	230	17
Bromomethane	ND	230	81
Chloroethane	ND	230	16
Trichlorofluoromethane	ND	120	18
Acetone	ND	460	59
Freon 113	ND	120	23
1,1-Dichloroethene	ND	120	20
Methylene Chloride	ND	580	100
Carbon Disulfide	ND	120	22
MTBE	ND	120	21
trans-1,2-Dichloroethene	ND	120	24
Vinyl Acetate	ND	1,200	27
1,1-Dichloroethane	ND	120	22
2-Butanone	ND	230	51
cis-1,2-Dichloroethene	ND	120	23
2,2-Dichloropropane	ND	120	23
Chloroform	ND	120	25
Bromochloromethane	ND	120	25
1,1,1-Trichloroethane	ND	120	25
1,1-Dichloropropene	ND	120	23
Carbon Tetrachloride	ND	120	21
1,2-Dichloroethane	ND	120	19
Benzene	ND	120	20
Trichloroethene	ND	120	23
1,2-Dichloropropane	ND	120	20
Bromodichloromethane	ND	120	21
Dibromomethane	ND	120	19
4-Methyl-2-Pentanone	ND	230	19
cis-1,3-Dichloropropene	ND	120	25
Toluene	ND	120	22
trans-1,3-Dichloropropene	ND	120	21
1,1,2-Trichloroethane	ND	120	22
2-Hexanone	ND	230	21
1,3-Dichloropropane	ND	120	22
Tetrachloroethene	ND	120	22
Dibromochloromethane	ND	120	20
1,2-Dibromoethane	ND	120	20
Chlorobenzene	ND	120	22
1,1,1,2-Tetrachloroethane	ND	120	25
Ethylbenzene	ND	120	24
m,p-Xylenes	ND	120	14
o-Xylene	ND	120	23
Styrene	ND	120	24
Bromoform	ND	120	23
Isopropylbenzene	ND	120	25
1,1,2,2-Tetrachloroethane	ND	120	19
1,2,3-Trichloropropane	ND	120	24
Propylbenzene	ND	120	24
Bromobenzene	ND	120	22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-15	Diln Fac:	20.74
Lab ID:	308209-012	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	24
2-Chlorotoluene	ND	120	26
4-Chlorotoluene	ND	120	24
tert-Butylbenzene	ND	120	27
1,2,4-Trimethylbenzene	ND	120	24
sec-Butylbenzene	ND	120	27
para-Isopropyl Toluene	ND	120	25
1,3-Dichlorobenzene	ND	120	24
1,4-Dichlorobenzene	ND	120	23
n-Butylbenzene	ND	120	25
1,2-Dichlorobenzene	ND	120	26
1,2-Dibromo-3-Chloropropane	ND	120	23
1,2,4-Trichlorobenzene	ND	120	32
Hexachlorobutadiene	ND	120	28
Naphthalene	ND	120	25
1,2,3-Trichlorobenzene	ND	120	31

Surrogate	%REC	Limits
Dibromofluoromethane	103	78-131
1,2-Dichloroethane-d4	102	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	99	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-16	Diln Fac:	23.87
Lab ID:	308209-013	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 17%

Analyte	Result	RL	MDL
Freon 12	ND	290	30
Chloromethane	ND	290	24
Vinyl Chloride	ND	290	22
Bromomethane	ND	290	100
Chloroethane	ND	290	20
Trichlorofluoromethane	ND	140	23
Acetone	ND	580	74
Freon 113	ND	140	28
1,1-Dichloroethene	ND	140	25
Methylene Chloride	ND	720	130
Carbon Disulfide	ND	140	28
MTBE	ND	140	26
trans-1,2-Dichloroethene	ND	140	29
Vinyl Acetate	ND	1,400	33
1,1-Dichloroethane	ND	140	27
2-Butanone	ND	290	63
cis-1,2-Dichloroethene	ND	140	29
2,2-Dichloropropane	ND	140	28
Chloroform	ND	140	31
Bromochloromethane	ND	140	31
1,1,1-Trichloroethane	ND	140	31
1,1-Dichloropropene	ND	140	29
Carbon Tetrachloride	ND	140	26
1,2-Dichloroethane	ND	140	24
Benzene	ND	140	25
Trichloroethene	ND	140	29
1,2-Dichloropropane	ND	140	25
Bromodichloromethane	ND	140	26
Dibromomethane	ND	140	24
4-Methyl-2-Pentanone	ND	290	23
cis-1,3-Dichloropropene	ND	140	32
Toluene	ND	140	27
trans-1,3-Dichloropropene	ND	140	26
1,1,2-Trichloroethane	ND	140	28
2-Hexanone	ND	290	26
1,3-Dichloropropane	ND	140	27
Tetrachloroethene	ND	140	28
Dibromochloromethane	ND	140	24
1,2-Dibromoethane	ND	140	25
Chlorobenzene	ND	140	27
1,1,1,2-Tetrachloroethane	ND	140	31
Ethylbenzene	ND	140	29
m,p-Xylenes	ND	140	18
o-Xylene	ND	140	29
Styrene	ND	140	30
Bromoform	ND	140	29
Isopropylbenzene	ND	140	32
1,1,2,2-Tetrachloroethane	ND	140	24
1,2,3-Trichloropropane	ND	140	30
Propylbenzene	ND	140	30
Bromobenzene	ND	140	28

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-16	Diln Fac:	23.87
Lab ID:	308209-013	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	140	30
2-Chlorotoluene	ND	140	33
4-Chlorotoluene	ND	140	30
tert-Butylbenzene	ND	140	34
1,2,4-Trimethylbenzene	ND	140	30
sec-Butylbenzene	ND	140	33
para-Isopropyl Toluene	ND	140	31
1,3-Dichlorobenzene	ND	140	30
1,4-Dichlorobenzene	ND	140	28
n-Butylbenzene	ND	140	32
1,2-Dichlorobenzene	ND	140	33
1,2-Dibromo-3-Chloropropane	ND	140	29
1,2,4-Trichlorobenzene	ND	140	40
Hexachlorobutadiene	ND	140	35
Naphthalene	ND	140	31
1,2,3-Trichlorobenzene	ND	140	39

Surrogate	%REC	Limits
Dibromofluoromethane	98	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	93	80-120
Bromofluorobenzene	101	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-25	Diln Fac:	22.04
Lab ID:	308209-014	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 7%

Analyte	Result	RL	MDL
Freon 12	ND	240	25
Chloromethane	ND	240	20
Vinyl Chloride	ND	240	18
Bromomethane	ND	240	83
Chloroethane	ND	240	17
Trichlorofluoromethane	ND	120	19
Acetone	ND	470	61
Freon 113	ND	120	23
1,1-Dichloroethene	ND	120	20
Methylene Chloride	ND	590	100
Carbon Disulfide	ND	120	23
MTBE	ND	120	21
trans-1,2-Dichloroethene	ND	120	24
Vinyl Acetate	ND	1,200	27
1,1-Dichloroethane	ND	120	22
2-Butanone	ND	240	52
cis-1,2-Dichloroethene	ND	120	24
2,2-Dichloropropane	ND	120	23
Chloroform	ND	120	25
Bromochloromethane	ND	120	25
1,1,1-Trichloroethane	ND	120	25
1,1-Dichloropropene	ND	120	24
Carbon Tetrachloride	ND	120	22
1,2-Dichloroethane	ND	120	20
Benzene	ND	120	21
Trichloroethene	ND	120	24
1,2-Dichloropropane	ND	120	20
Bromodichloromethane	ND	120	21
Dibromomethane	ND	120	20
4-Methyl-2-Pentanone	ND	240	19
cis-1,3-Dichloropropene	ND	120	26
Toluene	ND	120	22
trans-1,3-Dichloropropene	ND	120	22
1,1,2-Trichloroethane	ND	120	23
2-Hexanone	ND	240	22
1,3-Dichloropropane	ND	120	22
Tetrachloroethene	ND	120	23
Dibromochloromethane	ND	120	20
1,2-Dibromoethane	ND	120	21
Chlorobenzene	ND	120	23
1,1,1,2-Tetrachloroethane	ND	120	26
Ethylbenzene	ND	120	24
m,p-Xylenes	ND	120	15
o-Xylene	ND	120	24
Styrene	ND	120	25
Bromoform	ND	120	24
Isopropylbenzene	ND	120	26
1,1,2,2-Tetrachloroethane	ND	120	20
1,2,3-Trichloropropane	ND	120	25
Propylbenzene	ND	120	25
Bromobenzene	ND	120	23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-25	Diln Fac:	22.04
Lab ID:	308209-014	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	25
2-Chlorotoluene	ND	120	27
4-Chlorotoluene	ND	120	25
tert-Butylbenzene	ND	120	28
1,2,4-Trimethylbenzene	ND	120	25
sec-Butylbenzene	ND	120	27
para-Isopropyl Toluene	ND	120	26
1,3-Dichlorobenzene	ND	120	25
1,4-Dichlorobenzene	ND	120	23
n-Butylbenzene	ND	120	26
1,2-Dichlorobenzene	ND	120	27
1,2-Dibromo-3-Chloropropane	ND	120	24
1,2,4-Trichlorobenzene	ND	120	33
Hexachlorobutadiene	ND	120	29
Naphthalene	ND	120	26
1,2,3-Trichlorobenzene	ND	120	32

Surrogate	%REC	Limits
Dibromofluoromethane	102	78-131
1,2-Dichloroethane-d4	105	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-26	Diln Fac:	22.35
Lab ID:	308209-015	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	250	26
Chloromethane	ND	250	21
Vinyl Chloride	ND	250	19
Bromomethane	ND	250	87
Chloroethane	ND	250	18
Trichlorofluoromethane	ND	120	20
Acetone	ND	500	64
Freon 113	ND	120	24
1,1-Dichloroethene	ND	120	21
Methylene Chloride	ND	620	110
Carbon Disulfide	ND	120	24
MTBE	ND	120	22
trans-1,2-Dichloroethene	ND	120	25
Vinyl Acetate	ND	1,200	29
1,1-Dichloroethane	ND	120	23
2-Butanone	ND	250	55
cis-1,2-Dichloroethene	ND	120	25
2,2-Dichloropropane	ND	120	25
Chloroform	ND	120	27
Bromochloromethane	ND	120	26
1,1,1-Trichloroethane	ND	120	26
1,1-Dichloropropene	ND	120	25
Carbon Tetrachloride	ND	120	23
1,2-Dichloroethane	ND	120	21
Benzene	ND	120	22
Trichloroethene	ND	120	25
1,2-Dichloropropane	ND	120	21
Bromodichloromethane	ND	120	22
Dibromomethane	ND	120	21
4-Methyl-2-Pentanone	ND	250	20
cis-1,3-Dichloropropene	ND	120	27
Toluene	ND	120	23
trans-1,3-Dichloropropene	ND	120	23
1,1,2-Trichloroethane	ND	120	24
2-Hexanone	ND	250	23
1,3-Dichloropropane	ND	120	23
Tetrachloroethene	ND	120	24
Dibromochloromethane	ND	120	21
1,2-Dibromoethane	ND	120	22
Chlorobenzene	ND	120	24
1,1,1,2-Tetrachloroethane	ND	120	27
Ethylbenzene	ND	120	25
m,p-Xylenes	ND	120	15
o-Xylene	ND	120	25
Styrene	ND	120	26
Bromoform	ND	120	25
Isopropylbenzene	ND	120	27
1,1,2,2-Tetrachloroethane	ND	120	20
1,2,3-Trichloropropane	ND	120	26
Propylbenzene	ND	120	26
Bromobenzene	ND	120	24

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-26	Diln Fac:	22.35
Lab ID:	308209-015	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	26
2-Chlorotoluene	ND	120	28
4-Chlorotoluene	ND	120	26
tert-Butylbenzene	ND	120	29
1,2,4-Trimethylbenzene	ND	120	26
sec-Butylbenzene	ND	120	29
para-Isopropyl Toluene	ND	120	27
1,3-Dichlorobenzene	ND	120	26
1,4-Dichlorobenzene	ND	120	25
n-Butylbenzene	ND	120	27
1,2-Dichlorobenzene	ND	120	28
1,2-Dibromo-3-Chloropropane	ND	120	25
1,2,4-Trichlorobenzene	ND	120	35
Hexachlorobutadiene	ND	120	30
Naphthalene	ND	120	27
1,2,3-Trichlorobenzene	ND	120	33

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	102	80-136
Toluene-d8	94	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-27	Diln Fac:	25.45
Lab ID:	308209-016	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	290	30
Chloromethane	ND	290	25
Vinyl Chloride	ND	290	22
Bromomethane	ND	290	100
Chloroethane	ND	290	21
Trichlorofluoromethane	ND	150	23
Acetone	ND	580	75
Freon 113	ND	150	29
1,1-Dichloroethene	ND	150	25
Methylene Chloride	ND	730	130
Carbon Disulfide	ND	150	28
MTBE	ND	150	26
trans-1,2-Dichloroethene	ND	150	30
Vinyl Acetate	ND	1,500	34
1,1-Dichloroethane	ND	150	28
2-Butanone	ND	290	64
cis-1,2-Dichloroethene	ND	150	29
2,2-Dichloropropane	ND	150	29
Chloroform	ND	150	31
Bromochloromethane	ND	150	31
1,1,1-Trichloroethane	ND	150	31
1,1-Dichloropropene	ND	150	29
Carbon Tetrachloride	ND	150	27
1,2-Dichloroethane	ND	150	24
Benzene	ND	150	26
Trichloroethene	ND	150	29
1,2-Dichloropropane	ND	150	25
Bromodichloromethane	ND	150	26
Dibromomethane	ND	150	24
4-Methyl-2-Pentanone	ND	290	24
cis-1,3-Dichloropropene	ND	150	32
Toluene	ND	150	27
trans-1,3-Dichloropropene	ND	150	27
1,1,2-Trichloroethane	ND	150	28
2-Hexanone	ND	290	27
1,3-Dichloropropane	ND	150	28
Tetrachloroethene	ND	150	28
Dibromochloromethane	ND	150	25
1,2-Dibromoethane	ND	150	26
Chlorobenzene	ND	150	28
1,1,1,2-Tetrachloroethane	ND	150	32
Ethylbenzene	ND	150	30
m,p-Xylenes	ND	150	18
o-Xylene	ND	150	30
Styrene	ND	150	31
Bromoform	ND	150	29
Isopropylbenzene	ND	150	32
1,1,2,2-Tetrachloroethane	ND	150	24
1,2,3-Trichloropropane	ND	150	30
Propylbenzene	ND	150	30
Bromobenzene	ND	150	28

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-27	Diln Fac:	25.45
Lab ID:	308209-016	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	150	30
2-Chlorotoluene	ND	150	33
4-Chlorotoluene	ND	150	31
tert-Butylbenzene	ND	150	34
1,2,4-Trimethylbenzene	ND	150	31
sec-Butylbenzene	ND	150	34
para-Isopropyl Toluene	ND	150	32
1,3-Dichlorobenzene	ND	150	31
1,4-Dichlorobenzene	ND	150	29
n-Butylbenzene	ND	150	32
1,2-Dichlorobenzene	ND	150	33
1,2-Dibromo-3-Chloropropane	ND	150	30
1,2,4-Trichlorobenzene	ND	150	41
Hexachlorobutadiene	ND	150	36
Naphthalene	ND	150	32
1,2,3-Trichlorobenzene	ND	150	39

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-131
1,2-Dichloroethane-d4	104	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-18	Diln Fac:	21.61
Lab ID:	308209-017	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	250	26
Chloromethane	ND	250	21
Vinyl Chloride	ND	250	19
Bromomethane	ND	250	87
Chloroethane	ND	250	18
Trichlorofluoromethane	ND	120	20
Acetone	ND	500	64
Freon 113	ND	120	24
1,1-Dichloroethene	ND	120	21
Methylene Chloride	ND	620	110
Carbon Disulfide	ND	120	24
MTBE	ND	120	22
trans-1,2-Dichloroethene	ND	120	25
Vinyl Acetate	ND	1,200	29
1,1-Dichloroethane	ND	120	23
2-Butanone	ND	250	55
cis-1,2-Dichloroethene	ND	120	25
2,2-Dichloropropane	ND	120	25
Chloroform	ND	120	27
Bromochloromethane	ND	120	26
1,1,1-Trichloroethane	ND	120	26
1,1-Dichloropropene	ND	120	25
Carbon Tetrachloride	ND	120	23
1,2-Dichloroethane	ND	120	21
Benzene	ND	120	22
Trichloroethene	ND	120	25
1,2-Dichloropropane	ND	120	21
Bromodichloromethane	ND	120	22
Dibromomethane	ND	120	21
4-Methyl-2-Pentanone	ND	250	20
cis-1,3-Dichloropropene	ND	120	27
Toluene	ND	120	23
trans-1,3-Dichloropropene	ND	120	23
1,1,2-Trichloroethane	ND	120	24
2-Hexanone	ND	250	23
1,3-Dichloropropane	ND	120	23
Tetrachloroethene	ND	120	24
Dibromochloromethane	ND	120	21
1,2-Dibromoethane	ND	120	22
Chlorobenzene	ND	120	24
1,1,1,2-Tetrachloroethane	ND	120	27
Ethylbenzene	ND	120	25
m,p-Xylenes	ND	120	15
o-Xylene	ND	120	25
Styrene	ND	120	26
Bromoform	ND	120	25
Isopropylbenzene	ND	120	27
1,1,2,2-Tetrachloroethane	ND	120	20
1,2,3-Trichloropropane	ND	120	26
Propylbenzene	ND	120	26
Bromobenzene	ND	120	24

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	RPS-18	Diln Fac:	21.61
Lab ID:	308209-017	Batch#:	268803
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	dry	Analyzed:	03/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	120	26
2-Chlorotoluene	ND	120	28
4-Chlorotoluene	ND	120	26
tert-Butylbenzene	ND	120	29
1,2,4-Trimethylbenzene	ND	120	26
sec-Butylbenzene	ND	120	29
para-Isopropyl Toluene	ND	120	27
1,3-Dichlorobenzene	ND	120	26
1,4-Dichlorobenzene	ND	120	25
n-Butylbenzene	ND	120	27
1,2-Dichlorobenzene	ND	120	28
1,2-Dibromo-3-Chloropropane	ND	120	25
1,2,4-Trichlorobenzene	ND	120	35
Hexachlorobutadiene	ND	120	30
Naphthalene	ND	120	27
1,2,3-Trichlorobenzene	ND	120	33

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	99	80-136
Toluene-d8	93	80-120
Bromofluorobenzene	100	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	268803
Units:	ug/Kg	Analyzed:	03/21/19
Diln Fac:	1.000		

Type: BS Lab ID: QC969031

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.95	100	69-142
Benzene	25.00	26.56	106	79-123
Trichloroethene	25.00	30.24	121	79-126
Toluene	25.00	25.29	101	78-120
Chlorobenzene	25.00	24.47	98	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	94	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	97	80-129

Type: BSD Lab ID: QC969032

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.09	96	69-142	3	23
Benzene	25.00	25.97	104	79-123	2	20
Trichloroethene	25.00	29.91	120	79-126	1	20
Toluene	25.00	24.89	100	78-120	2	20
Chlorobenzene	25.00	23.95	96	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	91	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	97	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969033	Batch#:	268803
Matrix:	Soil	Analyzed:	03/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.16
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	0.97
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.0
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.7
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.11
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.10
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.13
1,1,2-Trichloroethane	ND	5.0	0.22
2-Hexanone	ND	10	0.24
1,3-Dichloropropane	ND	5.0	0.13
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.16
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.24
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.18
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15
2-Chlorotoluene	ND	5.0	0.12

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969033	Batch#:	268803
Matrix:	Soil	Analyzed:	03/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.22
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	94	80-120
Bromofluorobenzene	103	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	EB-190319	Batch#:	268852
Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/22/19
Diln Fac:	1.000	Analyzed:	04/08/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	109	58-134
2-Fluorobiphenyl	75	53-120
Terphenyl-d14	94	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969233	Batch#:	268852
Matrix:	Water	Prepared:	03/22/19
Units:	ug/L	Analyzed:	04/08/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	132	58-134
2-Fluorobiphenyl	92	53-120
Terphenyl-d14	116	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	268852
Units:	ug/L	Prepared:	03/22/19
Diln Fac:	1.000	Analyzed:	04/08/19

Type: BS Lab ID: QC969234

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	1.000	0.8002	80	69-120
Pyrene	1.000	1.011	101	69-123

Surrogate	%REC	Limits
Nitrobenzene-d5	125	58-134
2-Fluorobiphenyl	88	53-120
Terphenyl-d14	109	18-128

Type: BSD Lab ID: QC969235

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	1.000	0.8059	81	69-120	1	21
Pyrene	1.000	0.9866	99	69-123	2	32

Surrogate	%REC	Limits
Nitrobenzene-d5	122	58-134
2-Fluorobiphenyl	87	53-120
Terphenyl-d14	107	18-128

RPD= Relative Percent Difference

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-13	Batch#:	268796
Lab ID:	308209-001	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	air dried	Analyzed:	04/08/19
Diln Fac:	50.00		

Analyte	Result	RL	MDL
Naphthalene	ND	250	50
Acenaphthylene	77 J	250	50
Acenaphthene	ND	250	50
Fluorene	ND	250	50
Phenanthrene	450	250	50
Anthracene	110 J	250	50
Fluoranthene	830	250	50
Pyrene	1,000	250	50
Benzo(a)anthracene	410	250	50
Chrysene	490	250	50
Benzo(b)fluoranthene	570	250	50
Benzo(k)fluoranthene	170 J	250	50
Benzo(a)pyrene	600	250	50
Indeno(1,2,3-cd)pyrene	420	250	50
Dibenz(a,h)anthracene	80 J	250	50
Benzo(g,h,i)perylene	610	250	50

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-14	Batch#:	268796
Lab ID:	308209-002	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	air dried	Analyzed:	04/08/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
Naphthalene	33 J	50	10
Acenaphthylene	110	50	10
Acenaphthene	31 J	50	10
Fluorene	40 J	50	10
Phenanthrene	520	50	10
Anthracene	130	50	10
Fluoranthene	880	50	10
Pyrene	1,200	50	10
Benzo(a)anthracene	470	50	10
Chrysene	530	50	10
Benzo(b)fluoranthene	570	50	10
Benzo(k)fluoranthene	190	50	10
Benzo(a)pyrene	620	50	10
Indeno(1,2,3-cd)pyrene	400	50	10
Dibenz(a,h)anthracene	76	50	10
Benzo(g,h,i)perylene	550	50	10

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-15	Batch#:	268796
Lab ID:	308209-003	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	air dried	Analyzed:	04/08/19
Diln Fac:	33.33		

Analyte	Result	RL	MDL
Naphthalene	ND	170	33
Acenaphthylene	90 J	170	33
Acenaphthene	ND	170	33
Fluorene	ND	170	33
Phenanthrene	350	170	33
Anthracene	90 J	170	33
Fluoranthene	810	170	33
Pyrene	1,200	170	33
Benzo(a)anthracene	400	170	33
Chrysene	460	170	33
Benzo(b)fluoranthene	580	170	33
Benzo(k)fluoranthene	160 J	170	33
Benzo(a)pyrene	610	170	33
Indeno(1,2,3-cd)pyrene	410	170	33
Dibenz(a,h)anthracene	72 J	170	33
Benzo(g,h,i)perylene	600	170	33

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-16	Batch#:	268796
Lab ID:	308209-004	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received	Analyzed:	04/08/19
Diln Fac:	33.33		

Analyte	Result	RL	MDL
Naphthalene	ND	170	33
Acenaphthylene	ND	170	33
Acenaphthene	ND	170	33
Fluorene	ND	170	33
Phenanthrene	110 J	170	33
Anthracene	ND	170	33
Fluoranthene	280	170	33
Pyrene	600	170	33
Benzo(a)anthracene	150 J	170	33
Chrysene	210	170	33
Benzo(b)fluoranthene	300	170	33
Benzo(k)fluoranthene	99 J	170	33
Benzo(a)pyrene	300	170	33
Indeno(1,2,3-cd)pyrene	200	170	33
Dibenz(a,h)anthracene	36 J	170	33
Benzo(g,h,i)perylene	320	170	33

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-25	Batch#:	268796
Lab ID:	308209-005	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received	Analyzed:	04/08/19
Diln Fac:	33.33		

Analyte	Result	RL	MDL
Naphthalene	ND	170	33
Acenaphthylene	50 J	170	33
Acenaphthene	ND	170	33
Fluorene	ND	170	33
Phenanthrene	260	170	33
Anthracene	67 J	170	33
Fluoranthene	600	170	33
Pyrene	810	170	33
Benzo(a)anthracene	310	170	33
Chrysene	370	170	33
Benzo(b)fluoranthene	410	170	33
Benzo(k)fluoranthene	170	170	33
Benzo(a)pyrene	470	170	33
Indeno(1,2,3-cd)pyrene	300	170	33
Dibenz(a,h)anthracene	60 J	170	33
Benzo(g,h,i)perylene	440	170	33

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-26	Batch#:	268855
Lab ID:	308209-006	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	as received	Analyzed:	04/08/19
Diln Fac:	25.00		

Analyte	Result	RL	MDL
Naphthalene	ND	120	25
Acenaphthylene	33 J	120	25
Acenaphthene	27 J	120	25
Fluorene	26 J	120	25
Phenanthrene	300	120	25
Anthracene	76 J	120	25
Fluoranthene	510	120	25
Pyrene	760	120	25
Benzo(a)anthracene	260	120	25
Chrysene	320	120	25
Benzo(b)fluoranthene	340	120	25
Benzo(k)fluoranthene	120 J	120	25
Benzo(a)pyrene	370	120	25
Indeno(1,2,3-cd)pyrene	250	120	25
Dibenz(a,h)anthracene	47 J	120	25
Benzo(g,h,i)perylene	360	120	25

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-27	Batch#:	268855
Lab ID:	308209-007	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	as received	Analyzed:	04/08/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
Naphthalene	30 J	50	10
Acenaphthylene	75	50	10
Acenaphthene	22 J	50	10
Fluorene	23 J	50	10
Phenanthrene	310	50	10
Anthracene	87	50	10
Fluoranthene	720	50	10
Pyrene	1,000	50	10
Benzo(a)anthracene	390	50	10
Chrysene	440	50	10
Benzo(b)fluoranthene	490	50	10
Benzo(k)fluoranthene	220	50	10
Benzo(a)pyrene	570	50	10
Indeno(1,2,3-cd)pyrene	360	50	10
Dibenz(a,h)anthracene	66	50	10
Benzo(g,h,i)perylene	500	50	10

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	RPS-18	Batch#:	268855
Lab ID:	308209-008	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	as received	Analyzed:	04/09/19
Diln Fac:	20.00		

Analyte	Result	RL	MDL
Naphthalene	35 J	100	20
Acenaphthylene	88 J	100	20
Acenaphthene	ND	100	20
Fluorene	23 J	100	20
Phenanthrene	300	100	20
Anthracene	80 J	100	20
Fluoranthene	760	100	20
Pyrene	1,100	100	20
Benzo(a)anthracene	410	100	20
Chrysene	510	100	20
Benzo(b)fluoranthene	620	100	20
Benzo(k)fluoranthene	140	100	20
Benzo(a)pyrene	650	100	20
Indeno(1,2,3-cd)pyrene	480	100	20
Dibenz(a,h)anthracene	83 J	100	20
Benzo(g,h,i)perylene	700	100	20

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969007	Batch#:	268796
Matrix:	Soil	Prepared:	03/20/19
Units:	ug/Kg	Analyzed:	04/04/19

Analyte	Result	RL	MDL
Naphthalene	ND	5.0	1.0
Acenaphthylene	ND	5.0	1.0
Acenaphthene	ND	5.0	1.0
Fluorene	ND	5.0	1.0
Phenanthrene	ND	5.0	1.0
Anthracene	ND	5.0	1.0
Fluoranthene	ND	5.0	1.0
Pyrene	ND	5.0	1.0
Benzo(a)anthracene	ND	5.0	1.0
Chrysene	ND	5.0	1.0
Benzo(b)fluoranthene	ND	5.0	1.0
Benzo(k)fluoranthene	ND	5.0	1.0
Benzo(a)pyrene	ND	5.0	1.0
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0
Dibenz(a,h)anthracene	ND	5.0	1.0
Benzo(g,h,i)perylene	ND	5.0	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	113	48-120
2-Fluorobiphenyl	87	39-120
Terphenyl-d14	109	61-120

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969008	Batch#:	268796
Matrix:	Soil	Prepared:	03/20/19
Units:	ug/Kg	Analyzed:	04/04/19

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.33	26.71	80	64-120
Pyrene	33.33	34.18	103	67-120

Surrogate	%REC	Limits
Nitrobenzene-d5	113	48-120
2-Fluorobiphenyl	88	39-120
Terphenyl-d14	111	61-120

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969241	Batch#:	268855
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	04/05/19

Analyte	Result	RL	MDL
Naphthalene	ND	5.0	1.0
Acenaphthylene	ND	5.0	1.0
Acenaphthene	ND	5.0	1.0
Fluorene	ND	5.0	1.0
Phenanthrene	ND	5.0	1.0
Anthracene	ND	5.0	1.0
Fluoranthene	ND	5.0	1.0
Pyrene	ND	5.0	1.0
Benzo(a)anthracene	ND	5.0	1.0
Chrysene	ND	5.0	1.0
Benzo(b)fluoranthene	ND	5.0	1.0
Benzo(k)fluoranthene	ND	5.0	1.0
Benzo(a)pyrene	ND	5.0	1.0
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0
Dibenz(a,h)anthracene	ND	5.0	1.0
Benzo(g,h,i)perylene	ND	5.0	1.0

Surrogate	%REC	Limits
Nitrobenzene-d5	112	48-120
2-Fluorobiphenyl	86	39-120
Terphenyl-d14	111	61-120

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969242	Batch#:	268855
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	04/05/19

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	33.33	25.56	77	64-120
Pyrene	33.33	32.75	98	67-120

Surrogate	%REC	Limits
Nitrobenzene-d5	120	48-120
2-Fluorobiphenyl	87	39-120
Terphenyl-d14	110	61-120

Organochlorine Pesticides

Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	EB-190319	Batch#:	268791
Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.02
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	134	16-167
Decachlorobiphenyl	144	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968989	Batch#:	268791
Matrix:	Water	Prepared:	03/20/19
Units:	ug/L	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.03
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	112	16-167
Decachlorobiphenyl	119	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	268791
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/26/19

Type: BS Lab ID: QC968990

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.3482	174 *	73-149
Heptachlor	0.2000	0.2998	150 *	57-132
Aldrin	0.2000	0.2963	148 *	56-134
Dieldrin	0.2000	0.3143 # b	157 *	64-152
Endrin	0.2000	0.3314 b	166 *	58-155
4,4'-DDT	0.2000	0.3310 # b	166 *	49-147

Surrogate	%REC	Limits
TCMX	138	16-167
Decachlorobiphenyl	132	28-164

Type: BSD Lab ID: QC968991

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.3546	177 *	73-149	2	30
Heptachlor	0.2000	0.2881	144 *	57-132	4	36
Aldrin	0.2000	0.2981	149 *	56-134	1	38
Dieldrin	0.2000	0.3244 # b	162 *	64-152	3	43
Endrin	0.2000	0.3424 b	171 *	58-155	3	47
4,4'-DDT	0.2000	0.3547 # b	177 *	49-147	7	44

Surrogate	%REC	Limits
TCMX	138	16-167
Decachlorobiphenyl	157	28-164

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-13	Diln Fac:	10.00
Lab ID:	308209-001	Batch#:	268823
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	air dried	Prepared:	03/21/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	8.4	0.74	03/25/19
beta-BHC	ND	8.4	0.99	03/25/19
gamma-BHC	ND	8.4	0.82	03/25/19
delta-BHC	ND	8.4	1.0	03/25/19
Heptachlor	ND	8.4	1.1	03/25/19
Aldrin	ND	8.4	1.2	03/25/19
Heptachlor epoxide	ND	8.4	0.94	03/25/19
Endosulfan I	ND	8.4	1.5	03/25/19
Dieldrin	1.1 C J	8.4	1.0	03/25/19
4,4'-DDE	ND	16	1.5	03/25/19
Endrin	ND	16	0.94	03/25/19
Endosulfan II	ND	16	1.2	03/25/19
Endosulfan sulfate	ND	16	2.0	03/25/19
4,4'-DDD	3.0 J	16	1.1	03/25/19
Endrin aldehyde	ND	16	5.0	03/25/19
4,4'-DDT	3.3 J	16	2.0	03/28/19
alpha-Chlordane	2.1 C J	8.4	1.1	03/25/19
gamma-Chlordane	2.6 J	8.4	1.3	03/25/19
Methoxychlor	ND	84	19	03/28/19
Toxaphene	ND	300	59	03/25/19

Surrogate	%REC	Limits	Analyzed
TCMX	DO	43-125	03/25/19
Decachlorobiphenyl	DO	40-128	03/25/19

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-14	Diln Fac:	5.000
Lab ID:	308209-002	Batch#:	268823
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	air dried	Prepared:	03/21/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	4.3	0.38	03/25/19
beta-BHC	ND	4.3	0.50	03/25/19
gamma-BHC	ND	4.3	0.42	03/25/19
delta-BHC	ND	4.3	0.53	03/25/19
Heptachlor	ND	4.3	0.56	03/25/19
Aldrin	ND	4.3	0.59	03/25/19
Heptachlor epoxide	ND	4.3	0.48	03/25/19
Endosulfan I	ND	4.3	0.75	03/25/19
Dieldrin	1.8 J	4.3	0.53	03/25/19
4,4'-DDE	1.0 J	8.3	0.74	03/25/19
Endrin	ND	8.3	0.47	03/25/19
Endosulfan II	ND	8.3	0.61	03/25/19
Endosulfan sulfate	ND	8.3	1.0	03/25/19
4,4'-DDD	1.7 C J	8.3	0.56	03/25/19
Endrin aldehyde	ND	8.3	2.5	03/25/19
4,4'-DDT	1.9 C J	8.3	1.0	03/28/19
alpha-Chlordane	2.3 C J	4.3	0.56	03/25/19
gamma-Chlordane	3.5 J	4.3	0.56	03/28/19
Methoxychlor	ND #	43	8.9	03/25/19
Toxaphene	ND	150	30	03/25/19

Surrogate	%REC	Limits	Analyzed
TCMX	106	43-125	03/25/19
Decachlorobiphenyl	86	40-128	03/25/19

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-15	Batch#:	268823
Lab ID:	308209-003	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	air dried		

Analyte	Result	RL	MDL	Diln Fac	Analyzed
alpha-BHC	ND	4.2	0.37	5.000	03/25/19
beta-BHC	ND	4.2	0.50	5.000	03/25/19
gamma-BHC	ND	4.2	0.41	5.000	03/25/19
delta-BHC	ND	4.2	0.53	5.000	03/25/19
Heptachlor	ND	4.2	0.55	5.000	03/25/19
Aldrin	ND	4.2	0.59	5.000	03/25/19
Heptachlor epoxide	ND	4.2	0.47	5.000	03/25/19
Endosulfan I	ND	4.2	0.75	5.000	03/25/19
Dieldrin	0.55 C J	4.2	0.53	5.000	03/25/19
4,4'-DDE	2.8 J	8.2	0.73	5.000	03/25/19
Endrin	0.76 J	8.2	0.47	5.000	03/25/19
Endosulfan II	ND	8.2	0.60	5.000	03/25/19
Endosulfan sulfate	ND	8.2	0.99	5.000	03/25/19
4,4'-DDD	6.5 J	8.2	0.55	5.000	03/25/19
Endrin aldehyde	ND	8.2	2.5	5.000	03/25/19
4,4'-DDT	4.2 J	16	2.0	10.00	03/26/19
alpha-Chlordane	1.7 C J	4.2	0.55	5.000	03/25/19
gamma-Chlordane	0.95 C J	4.2	0.67	5.000	03/25/19
Methoxychlor	ND	85	19	10.00	03/26/19
Toxaphene	ND	150	29	5.000	03/25/19

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	112	43-125	5.000	03/25/19
Decachlorobiphenyl	88	40-128	5.000	03/25/19

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-16	Batch#:	268823
Lab ID:	308209-004	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received		

Analyte	Result	RL	MDL	Diln Fac	Analyzed
alpha-BHC	ND	4.2	0.37	5.000	03/25/19
beta-BHC	0.51 C J	4.2	0.49	5.000	03/25/19
gamma-BHC	ND	4.2	0.41	5.000	03/25/19
delta-BHC	ND	4.2	0.52	5.000	03/25/19
Heptachlor	ND	4.2	0.55	5.000	03/25/19
Aldrin	ND	4.2	0.59	5.000	03/25/19
Heptachlor epoxide	ND	4.2	0.47	5.000	03/25/19
Endosulfan I	ND	4.2	0.74	5.000	03/25/19
Dieldrin	ND	8.4	1.1	10.00	03/26/19
4,4'-DDE	2.0 C J	8.2	0.74	5.000	03/25/19
Endrin	ND	8.2	0.47	5.000	03/25/19
Endosulfan II	ND	8.2	0.60	5.000	03/25/19
Endosulfan sulfate	ND	8.2	0.99	5.000	03/25/19
4,4'-DDD	ND	8.2	0.55	5.000	03/25/19
Endrin aldehyde	ND	8.2	2.5	5.000	03/25/19
alpha-Chlordane	1.2 C J	4.2	0.55	5.000	03/25/19
gamma-Chlordane	7.2 C	4.2	0.67	5.000	03/25/19
Methoxychlor	ND	84	19	10.00	03/26/19
Toxaphene	ND	150	29	5.000	03/25/19

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	80	43-125	5.000	03/25/19
Decachlorobiphenyl	74	40-128	5.000	03/25/19

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-25	Diln Fac:	5.000
Lab ID:	308209-005	Batch#:	268823
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	as received	Prepared:	03/21/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	4.2	0.37	03/25/19
beta-BHC	ND	4.2	0.49	03/25/19
gamma-BHC	ND	4.2	0.41	03/25/19
delta-BHC	ND	4.2	0.52	03/25/19
Heptachlor	ND	4.2	0.55	03/25/19
Aldrin	ND	4.2	0.59	03/25/19
Heptachlor epoxide	ND	4.2	0.47	03/25/19
Endosulfan I	ND	4.2	0.74	03/25/19
Dieldrin	2.7 C J	4.2	0.52	03/25/19
4,4'-DDE	ND	8.2	0.74	03/25/19
Endrin	1.1 J	8.2	0.47	03/25/19
Endosulfan II	ND	8.2	0.60	03/25/19
Endosulfan sulfate	1.6 C J	8.2	0.93	03/28/19
4,4'-DDD	1.8 J	8.2	0.55	03/25/19
Endrin aldehyde	ND	8.2	2.5	03/25/19
4,4'-DDT	5.6 C J	8.2	0.99	03/28/19
alpha-Chlordane	1.3 C J	4.2	0.55	03/25/19
gamma-Chlordane	1.3 J	4.2	0.67	03/25/19
Methoxychlor	ND	42	9.6	03/28/19
Toxaphene	ND	150	29	03/25/19

Surrogate	%REC	Limits	Analyzed
TCMX	105	43-125	03/25/19
Decachlorobiphenyl	89	40-128	03/25/19

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-26	Diln Fac:	5.000
Lab ID:	308209-006	Batch#:	268823
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	as received	Prepared:	03/21/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	4.3	0.38	03/25/19
beta-BHC	ND	4.3	0.51	03/25/19
gamma-BHC	ND	4.3	0.42	03/25/19
delta-BHC	ND	4.3	0.54	03/25/19
Heptachlor	ND	4.3	0.57	03/25/19
Aldrin	ND	4.3	0.60	03/25/19
Heptachlor epoxide	ND	4.3	0.48	03/25/19
Endosulfan I	ND	4.3	0.76	03/25/19
Dieldrin	0.98 C J	4.3	0.54	03/25/19
4,4'-DDE	0.95 J	8.4	0.75	03/25/19
Endrin	ND	8.4	0.48	03/25/19
Endosulfan II	ND	8.4	0.62	03/25/19
Endosulfan sulfate	ND	8.4	1.0	03/25/19
4,4'-DDD	ND	8.4	0.57	03/25/19
Endrin aldehyde	ND	8.4	2.5	03/25/19
4,4'-DDT	ND	8.4	1.0	03/28/19
alpha-Chlordane	1.2 C J	4.3	0.57	03/25/19
gamma-Chlordane	2.3 J	4.3	0.69	03/25/19
Methoxychlor	ND	43	9.9	03/28/19
Toxaphene	ND	150	30	03/25/19

Surrogate	%REC	Limits	Analyzed
TCMX	113	43-125	03/25/19
Decachlorobiphenyl	77	40-128	03/25/19

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-27	Batch#:	268823
Lab ID:	308209-007	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received	Analyzed:	03/25/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	4.2	0.37
beta-BHC	ND	4.2	0.49
gamma-BHC	ND	4.2	0.41
delta-BHC	ND	4.2	0.52
Heptachlor	ND	4.2	0.55
Aldrin	ND	4.2	0.59
Heptachlor epoxide	ND	4.2	0.47
Endosulfan I	ND	4.2	0.74
Dieldrin	1.4 C J	4.2	0.52
4,4'-DDE	0.97 J	8.2	0.74
Endrin	ND	8.2	0.47
Endosulfan II	ND	8.2	0.60
Endosulfan sulfate	ND	8.2	0.99
4,4'-DDD	ND	8.2	0.55
Endrin aldehyde	ND	8.2	2.5
4,4'-DDT	4.8 J #	8.2	1.0
alpha-Chlordane	1.8 C J	4.2	0.55
gamma-Chlordane	1.8 J	4.2	0.67
Methoxychlor	ND #	42	8.8
Toxaphene	ND	150	29

Surrogate	%REC	Limits
TCMX	119	43-125
Decachlorobiphenyl	91	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-18	Diln Fac:	5.000
Lab ID:	308209-008	Batch#:	268823
Matrix:	Soil	Sampled:	03/19/19
Units:	ug/Kg	Received:	03/19/19
Basis:	as received	Prepared:	03/21/19

Analyte	Result	RL	MDL	Analyzed
alpha-BHC	ND	4.3	0.38	03/25/19
beta-BHC	ND	4.3	0.50	03/25/19
gamma-BHC	ND	4.3	0.41	03/25/19
delta-BHC	ND	4.3	0.53	03/25/19
Heptachlor	ND	4.3	0.56	03/25/19
Aldrin	ND	4.3	0.59	03/25/19
Heptachlor epoxide	ND	4.3	0.48	03/25/19
Endosulfan I	ND	4.3	0.75	03/25/19
Dieldrin	1.3 J	4.3	0.53	03/25/19
4,4'-DDE	1.0 J	8.3	0.75	03/25/19
Endrin	ND	8.3	0.47	03/25/19
Endosulfan II	ND	8.3	0.61	03/25/19
Endosulfan sulfate	ND	8.3	1.0	03/25/19
4,4'-DDD	2.4 C J	8.3	0.56	03/25/19
Endrin aldehyde	ND	8.3	2.5	03/25/19
4,4'-DDT	4.1 C J #	8.3	1.0	03/25/19
alpha-Chlordane	2.0 C J	4.3	0.56	03/25/19
gamma-Chlordane	1.1 C J	4.3	0.68	03/25/19
Methoxychlor	ND	43	9.8	03/28/19
Toxaphene	ND	150	30	03/25/19

Surrogate	%REC	Limits	Analyzed
TCMX	83	43-125	03/25/19
Decachlorobiphenyl	100	40-128	03/25/19

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969118	Batch#:	268823
Matrix:	Soil	Prepared:	03/21/19
Units:	ug/Kg	Analyzed:	03/25/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.85	0.075
beta-BHC	ND	0.85	0.10
gamma-BHC	ND	0.85	0.083
delta-BHC	ND	0.85	0.11
Heptachlor	ND	0.85	0.11
Aldrin	ND	0.85	0.12
Heptachlor epoxide	ND	0.85	0.095
Endosulfan I	ND	0.85	0.15
Dieldrin	ND	0.85	0.11
4,4'-DDE	ND	1.7	0.15
Endrin	ND	1.7	0.095
Endosulfan II	ND	1.7	0.12
Endosulfan sulfate	ND	1.7	0.20
4,4'-DDD	ND	1.7	0.11
Endrin aldehyde	ND	1.7	0.50
4,4'-DDT	ND #	1.7	0.21
alpha-Chlordane	ND	0.85	0.11
gamma-Chlordane	ND	0.85	0.14
Methoxychlor	ND #	8.5	1.8
Toxaphene	ND	30	5.9

Surrogate	%REC	Limits
TCMX	103	43-125
Decachlorobiphenyl	81	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969122	Batch#:	268823
Matrix:	Soil	Prepared:	03/21/19
Units:	ug/Kg	Analyzed:	03/25/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	6.667	7.427 b	111	58-131
Heptachlor	6.667	5.752 b	86	51-133
Aldrin	6.667	7.302 b	110	52-128
Dieldrin	6.667	7.089 b	106	59-133
Endrin	6.667	6.852 b	103	48-154
4,4'-DDT	6.667	6.668 b	100	54-140

Surrogate	%REC	Limits
TCMX	80	43-125
Decachlorobiphenyl	98	40-128

b= See narrative

Batch QC Report

Organochlorine Pesticides			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	RPS-18	Batch#:	268823
MSS Lab ID:	308209-008	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received	Analyzed:	03/25/19
Diln Fac:	5.000		

Type: MS Lab ID: QC969123

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.4148	6.640	7.346	111	58-126
Heptachlor	<0.5574	6.640	5.507	83	58-127
Aldrin	<0.5936	6.640	6.445	97	55-124
Dieldrin	1.669	6.640	7.547	89	48-137
Endrin	<0.4740	6.640	6.505	98	48-158
4,4'-DDT	2.312	6.640	9.702 #	111	38-155

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	81	40-128

Type: MSD Lab ID: QC969124

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	6.656	7.590	114	58-126	3	36
Heptachlor	6.656	6.095	92	58-127	10	34
Aldrin	6.656	6.872	103	55-124	6	31
Dieldrin	6.656	7.927	94	48-137	5	38
Endrin	6.656	6.452	97	48-158	1	38
4,4'-DDT	6.656	10.22 #	119	38-155	5	42

Surrogate	%REC	Limits
TCMX	101	43-125
Decachlorobiphenyl	90	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Polychlorinated Biphenyls (PCBs)			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	EB-190319	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19
Batch#:	268791		

Type: SAMPLE Lab ID: 308209-009

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.19	0.061
Aroclor-1221	ND	0.38	0.12
Aroclor-1232	ND	0.19	0.054
Aroclor-1242	ND	0.19	0.060
Aroclor-1248	ND	0.19	0.061
Aroclor-1254	ND	0.19	0.060
Aroclor-1260	ND	0.19	0.051

Surrogate	%REC	Limits
Decachlorobiphenyl	115	40-136

Type: BLANK Lab ID: QC968989

Analyte	Result	RL	MDL
Aroclor-1016	ND	0.20	0.064
Aroclor-1221	ND	0.40	0.13
Aroclor-1232	ND	0.20	0.057
Aroclor-1242	ND	0.20	0.063
Aroclor-1248	ND	0.20	0.064
Aroclor-1254	ND	0.20	0.063
Aroclor-1260	ND	0.20	0.054

Surrogate	%REC	Limits
Decachlorobiphenyl	122	40-136

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Water	Batch#:	268791
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC969000

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	2.500	2.559	102	68-123
Aroclor-1260	2.500	2.564	103	63-137

Surrogate	%REC	Limits
Decachlorobiphenyl	111	40-136

Type: BSD Lab ID: QC969001

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	2.500	2.053	82	68-123	22	29
Aroclor-1260	2.500	2.630	105	63-137	3	34

Surrogate	%REC	Limits
Decachlorobiphenyl	109	40-136

RPD= Relative Percent Difference

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969119	Batch#:	268823
Matrix:	Soil	Prepared:	03/21/19
Units:	ug/Kg	Analyzed:	03/22/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	83.33	95.57	115	63-143
Aroclor-1260	83.33	117.2	141	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	114	49-157

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	RPS-18	Batch#:	268823
MSS Lab ID:	308209-008	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	ug/Kg	Prepared:	03/21/19
Basis:	as received	Analyzed:	03/22/19
Diln Fac:	5.000		

Type: MS Lab ID: QC969120

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<5.925	84.20	132.8	158	62-160
Aroclor-1260	45.79	84.20	124.2	93	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	116	49-157

Type: MSD Lab ID: QC969121

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	82.35	127.5	155	62-160	2	43
Aroclor-1260	82.35	128.9	101	53-172	5	44

Surrogate	%REC	Limits
Decachlorobiphenyl	124	49-157

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	EB-190319	Diln Fac:	1.000
Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/21/19

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	ND	10	1.2	268816	03/22/19	EPA 3010A	EPA 6010B
Arsenic	ND	10	2.4	268816	03/22/19	EPA 3010A	EPA 6010B
Barium	ND	5.0	0.85	268816	03/22/19	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	0.13	268816	03/22/19	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	0.32	268816	03/22/19	EPA 3010A	EPA 6010B
Chromium	ND	5.0	0.91	268816	03/22/19	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	0.32	268816	03/22/19	EPA 3010A	EPA 6010B
Copper	0.67 J	5.0	0.55	268816	03/22/19	EPA 3010A	EPA 6010B
Lead	ND	5.0	0.86	268816	03/22/19	EPA 3010A	EPA 6010B
Mercury	ND	0.20	0.040	268810	03/21/19	METHOD	EPA 7470A
Molybdenum	ND	5.0	1.5	268816	03/22/19	EPA 3010A	EPA 6010B
Nickel	ND	5.0	0.43	268816	03/22/19	EPA 3010A	EPA 6010B
Selenium	ND	10	2.0	268816	03/22/19	EPA 3010A	EPA 6010B
Silver	ND	5.0	0.32	268816	03/22/19	EPA 3010A	EPA 6010B
Thallium	ND	10	2.0	268816	03/22/19	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.1	268816	03/22/19	EPA 3010A	EPA 6010B
Zinc	ND	20	2.9	268816	03/22/19	EPA 3010A	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268810
Lab ID:	QC969063	Prepared:	03/21/19
Matrix:	Water	Analyzed:	03/21/19
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268810
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969064	2.000	1.982	99	80-120		
BSD	QC969065	2.000	1.670	83	80-120	17	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268810
Field ID:	ZZZZZZZZZZ	Sampled:	03/19/19
MSS Lab ID:	308192-003	Received:	03/19/19
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC969066	<0.04000	2.000	1.629	81	68-120		
MSD	QC969067		2.000	1.871	94	68-120	14	37

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969085	Batch#:	268816
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Antimony	ND	10	1.2
Arsenic	ND	10	2.4
Barium	1.0 J	5.0	0.85
Beryllium	ND	2.0	0.13
Cadmium	ND	5.0	0.32
Chromium	ND	5.0	0.91
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.55
Lead	ND	5.0	0.86
Molybdenum	ND	5.0	1.5
Nickel	ND	5.0	0.43
Selenium	ND	10	2.0
Silver	ND	5.0	0.32
Thallium	ND	10	2.0
Vanadium	ND	5.0	1.1
Zinc	6.9 J	20	2.9

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	268816
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: BS Lab ID: QC969086

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	100.7	101	80-120
Arsenic	100.0	103.6	104	80-120
Barium	100.0	104.8	105	80-120
Beryllium	100.0	97.34	97	80-120
Cadmium	100.0	101.2	101	80-120
Chromium	100.0	106.4	106	80-120
Cobalt	100.0	104.0	104	80-120
Copper	100.0	100.9	101	80-120
Lead	100.0	106.0	106	80-120
Molybdenum	100.0	105.5	105	80-120
Nickel	100.0	105.6	106	80-120
Selenium	100.0	99.58	100	80-120
Silver	100.0	97.67	98	80-120
Thallium	50.00	53.04	106	80-120
Vanadium	100.0	103.7	104	80-120
Zinc	100.0	102.9	103	80-120

Type: BSD Lab ID: QC969087

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	106.3	106	80-120	5	20
Arsenic	100.0	104.4	104	80-120	1	20
Barium	100.0	106.2	106	80-120	1	20
Beryllium	100.0	97.88	98	80-120	1	20
Cadmium	100.0	102.4	102	80-120	1	20
Chromium	100.0	107.4	107	80-120	1	20
Cobalt	100.0	105.1	105	80-120	1	20
Copper	100.0	102.0	102	80-120	1	20
Lead	100.0	106.3	106	80-120	0	20
Molybdenum	100.0	108.0	108	80-120	2	20
Nickel	100.0	106.3	106	80-120	1	20
Selenium	100.0	99.77	100	80-120	0	20
Silver	100.0	98.93	99	80-120	1	20
Thallium	50.00	51.56	103	80-120	3	20
Vanadium	100.0	104.7	105	80-120	1	20
Zinc	100.0	104.1	104	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	EB-190319	Batch#:	268816
MSS Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: MS Lab ID: QC969088

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<1.189	100.0	104.3	104	76-125
Arsenic	<2.446	100.0	102.0	102	80-125
Barium	<0.8500	100.0	105.8	106	78-120
Beryllium	<0.1251	100.0	97.85	98	80-120
Cadmium	<0.3200	100.0	101.9	102	80-125
Chromium	<0.9092	100.0	107.6	108	80-123
Cobalt	<0.3200	100.0	105.0	105	80-121
Copper	0.6665	100.0	103.0	102	79-121
Lead	<0.8570	100.0	104.1	104	75-125
Molybdenum	<1.475	100.0	107.3	107	80-120
Nickel	<0.4325	100.0	105.6	106	79-123
Selenium	<2.000	100.0	101.4	101	75-125
Silver	<0.3242	100.0	98.48	98	75-120
Thallium	<1.955	50.00	50.81	102	75-124
Vanadium	<1.056	100.0	103.6	104	80-125
Zinc	<2.944	100.0	104.5	104	80-125

Type: MSD Lab ID: QC969089

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	103.2	103	76-125	1	20
Arsenic	100.0	100.7	101	80-125	1	20
Barium	100.0	104.4	104	78-120	1	20
Beryllium	100.0	96.33	96	80-120	2	20
Cadmium	100.0	100.8	101	80-125	1	20
Chromium	100.0	105.7	106	80-123	2	20
Cobalt	100.0	103.0	103	80-121	2	20
Copper	100.0	101.0	100	79-121	2	20
Lead	100.0	103.0	103	75-125	1	20
Molybdenum	100.0	106.2	106	80-120	1	20
Nickel	100.0	104.5	105	79-123	1	20
Selenium	100.0	98.23	98	75-125	3	20
Silver	100.0	96.49	96	75-120	2	20
Thallium	50.00	53.41	107	75-124	5	20
Vanadium	100.0	101.6	102	80-125	2	20
Zinc	100.0	103.1	103	80-125	1	20

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-13	Basis:	air dried
Lab ID:	308209-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/19/19
Units:	mg/Kg	Received:	03/19/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	2.0	0.13	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Arsenic	4.8	1.5	0.20	268807	03/21/19	03/25/19	EPA 3050B	EPA 6010B
Barium	78	0.25	0.029	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Beryllium	0.37	0.10	0.020	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Cadmium	0.42	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Chromium	51	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Cobalt	8.4	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Copper	24	0.25	0.056	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Lead	26	1.0	0.13	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Mercury	0.34	0.018	0.0031	268894	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.57	0.25	0.055	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Nickel	54	0.25	0.069	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.22	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.15	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Vanadium	39	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Zinc	63	1.0	0.20	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-14	Basis:	air dried
Lab ID:	308209-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/19/19
Units:	mg/Kg	Received:	03/19/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	2.0	0.13	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Arsenic	4.6	1.5	0.20	268807	03/21/19	03/25/19	EPA 3050B	EPA 6010B
Barium	74	0.25	0.029	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Beryllium	0.35	0.099	0.020	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Cadmium	0.39	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Chromium	43	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Cobalt	8.1	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Copper	20	0.25	0.055	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Lead	25	0.99	0.13	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Mercury	0.13	0.018	0.0031	268894	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.26	0.25	0.055	268807	03/21/19	03/25/19	EPA 3050B	EPA 6010B
Nickel	41	0.25	0.069	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.22	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.15	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Vanadium	37	0.25	0.050	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B
Zinc	57	0.99	0.20	268807	03/21/19	03/21/19	EPA 3050B	EPA 6010B

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

California Title 22 Metals

Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-15	Diln Fac:	1.000
Lab ID:	308209-003	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	air dried		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.75 J	2.0	0.068	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	4.8	1.5	0.066	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	80	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.29	0.10	0.010	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.23 J	0.25	0.016	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	47	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.4	0.25	0.014	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	30	0.25	0.057	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	51	1.0	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.16	0.017	0.0030	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.55	0.25	0.026	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	44	0.25	0.050	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.090	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	38	0.25	0.052	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	73	1.0	0.21	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-16	Diln Fac:	1.000
Lab ID:	308209-004	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	as received		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.24 J	2.0	0.068	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	4.8	1.5	0.066	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	120	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.25	0.10	0.010	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.17 J	0.25	0.016	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	45	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.0	0.25	0.014	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	25	0.25	0.057	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	40	1.0	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.13	0.017	0.0030	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.46	0.25	0.026	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	39	0.25	0.050	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.090	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	35	0.25	0.052	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	68	1.0	0.21	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-25	Diln Fac:	1.000
Lab ID:	308209-005	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	as received		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.34 J	2.0	0.068	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	4.6	1.5	0.065	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	79	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.26	0.099	0.0099	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.016	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	46	0.25	0.048	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.0	0.25	0.014	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	24	0.25	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	31	0.99	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.21	0.018	0.0031	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.44	0.25	0.026	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	44	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	34	0.25	0.052	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	61	0.99	0.21	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-26	Basis:	as received
Lab ID:	308209-006	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19

Analyte	Result	RL	MDL	Diln Fac	Batch#	Analyzed	Prep	Analysis
Antimony	0.17 J	2.0	0.067	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	3.8	1.5	0.065	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	73	0.25	0.029	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.23	0.098	0.0098	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.18 J	0.25	0.016	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	36	0.25	0.048	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	7.0	0.25	0.014	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	19	0.25	0.056	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	22	0.98	0.055	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	1.4	0.083	0.015	5.000	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.40	0.25	0.026	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	37	0.25	0.049	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.18	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.029	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.088	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	29	0.25	0.051	1.000	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	51	0.98	0.21	1.000	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-27	Diln Fac:	1.000
Lab ID:	308209-007	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	as received		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.21 J	2.0	0.068	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	5.3	1.5	0.065	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	85	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.29	0.099	0.0099	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.23 J	0.25	0.016	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	46	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.7	0.25	0.014	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	29	0.25	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	29	0.99	0.056	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.16	0.017	0.0030	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.51	0.25	0.026	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	48	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	36	0.25	0.052	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	65	0.99	0.21	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308209	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	RPS-18	Diln Fac:	1.000
Lab ID:	308209-008	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	as received		

Analyte	Result	RL	MDL	Batch#	Analyzed	Prep	Analysis
Antimony	0.33 J	2.0	0.069	268913	03/26/19	EPA 3050B	EPA 6010B
Arsenic	5.2	1.5	0.066	268913	03/26/19	EPA 3050B	EPA 6010B
Barium	82	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.30	0.10	0.010	268913	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.017	268913	03/26/19	EPA 3050B	EPA 6010B
Chromium	47	0.25	0.049	268913	03/26/19	EPA 3050B	EPA 6010B
Cobalt	9.0	0.25	0.015	268913	03/26/19	EPA 3050B	EPA 6010B
Copper	29	0.25	0.057	268913	03/26/19	EPA 3050B	EPA 6010B
Lead	29	1.0	0.057	268913	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.066	0.016	0.0029	268894	03/25/19	METHOD	EPA 7471A
Molybdenum	0.61	0.25	0.026	268913	03/26/19	EPA 3050B	EPA 6010B
Nickel	47	0.25	0.050	268913	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.090	268913	03/26/19	EPA 3050B	EPA 6010B
Vanadium	38	0.25	0.052	268913	03/26/19	EPA 3050B	EPA 6010B
Zinc	69	1.0	0.21	268913	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969047	Batch#:	268807
Matrix:	Soil	Prepared:	03/21/19
Units:	mg/Kg	Analyzed:	03/21/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	ND	1.5	0.20
Barium	0.14 J	0.25	0.029
Beryllium	ND	0.099	0.020
Cadmium	ND	0.25	0.050
Chromium	ND	0.25	0.050
Cobalt	ND	0.25	0.050
Copper	0.12 J	0.25	0.055
Lead	ND	0.99	0.13
Molybdenum	ND	0.25	0.055
Nickel	ND	0.25	0.069
Selenium	ND	2.0	0.22
Silver	ND	0.25	0.050
Thallium	ND	0.50	0.15
Vanadium	ND	0.25	0.050
Zinc	0.82 J	0.99	0.20

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	268807
Units:	mg/Kg	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC969048

Analyte	Spiked	Result	%REC	Limits
Antimony	49.90	51.70	104	80-120
Arsenic	49.90	51.18 b	103	80-120
Barium	49.90	46.76	94	80-120
Beryllium	24.95	23.76	95	80-120
Cadmium	49.90	47.16	95	80-120
Chromium	49.90	49.68	100	80-120
Cobalt	49.90	48.40	97	80-120
Copper	49.90	47.11	94	80-120
Lead	49.90	47.93	96	80-120
Molybdenum	49.90	46.34	93	80-120
Nickel	49.90	45.89	92	80-120
Selenium	49.90	49.59	99	80-120
Silver	4.990	4.337	87	80-120
Thallium	49.90	51.47	103	80-120
Vanadium	49.90	50.68	102	80-120
Zinc	49.90	50.61	101	80-120

Type: BSD Lab ID: QC969049

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.46	51.05	103	80-120	0	20
Arsenic	49.46	50.52 b	102	80-120	0	20
Barium	49.46	46.48	94	80-120	0	20
Beryllium	24.73	23.25	94	80-120	1	20
Cadmium	49.46	46.59	94	80-120	0	20
Chromium	49.46	49.21	100	80-120	0	20
Cobalt	49.46	47.89	97	80-120	0	20
Copper	49.46	46.68	94	80-120	0	20
Lead	49.46	47.12	95	80-120	1	20
Molybdenum	49.46	46.17	93	80-120	1	20
Nickel	49.46	45.15	91	80-120	1	20
Selenium	49.46	48.67	98	80-120	1	20
Silver	4.946	4.228	85	80-120	2	20
Thallium	49.46	50.89	103	80-120	0	20
Vanadium	49.46	50.44	102	80-120	0	20
Zinc	49.46	49.18	99	80-120	2	20

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

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	RPS-04	Batch#:	268807
MSS Lab ID:	308185-003	Sampled:	03/18/19
Matrix:	Soil	Received:	03/18/19
Units:	mg/Kg	Prepared:	03/21/19
Basis:	air dried	Analyzed:	03/21/19
Diln Fac:	1.000		

Type: MS Lab ID: QC969050

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.1299	49.36	6.160	12 *	75-120
Arsenic	5.083	49.36	53.97 b	99	80-121
Barium	71.73	49.36	119.6	97	75-125
Beryllium	0.3942	24.68	23.31	93	80-120
Cadmium	0.4058	49.36	47.53	95	80-120
Chromium	47.07	49.36	98.78	105	75-125
Cobalt	8.449	49.36	52.56	89	75-120
Copper	26.49	49.36	77.27	103	80-125
Lead	28.79	49.36	69.05	82	75-125
Molybdenum	0.2781	49.36	36.49	73 *	75-120
Nickel	44.07	49.36	90.18	93	75-125
Selenium	<0.2216	49.36	47.82	97	80-120
Silver	<0.04931	4.936	4.390	89	75-120
Thallium	<0.1485	49.36	43.37	88	75-120
Vanadium	38.09	49.36	91.65	109	78-125
Zinc	68.06	49.36	115.2	96	75-125

Type: MSD Lab ID: QC969051

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.70	5.668	11 *	75-120	9	20
Arsenic	49.70	54.86 b	100	80-121	1	20
Barium	49.70	124.8	107	75-125	4	20
Beryllium	24.85	23.26	92	80-120	1	20
Cadmium	49.70	47.56	95	80-120	1	20
Chromium	49.70	99.24	105	75-125	0	20
Cobalt	49.70	52.58	89	75-120	1	20
Copper	49.70	76.95	102	80-125	1	20
Lead	49.70	69.34	82	75-125	0	20
Molybdenum	49.70	37.10	74 *	75-120	1	20
Nickel	49.70	90.68	94	75-125	0	20
Selenium	49.70	48.57	98	80-120	1	20
Silver	4.970	4.668	94	75-120	5	20
Thallium	49.70	43.59	88	75-120	0	20
Vanadium	49.70	93.88	112	78-125	2	20
Zinc	49.70	116.5	98	75-125	1	20

*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268894
Lab ID:	QC969407	Prepared:	03/25/19
Matrix:	Soil	Analyzed:	03/25/19
Units:	mg/Kg		

Result	RL	MDL
ND	0.017	0.0030

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	268894
Matrix:	Soil	Prepared:	03/25/19
Units:	mg/Kg	Analyzed:	03/25/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969408	0.1639	0.1545	94	80-120		
BSD	QC969409	0.1724	0.1563	91	80-120	4	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	268894
MSS Lab ID:	308203-001	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	air dried	Analyzed:	03/25/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC969410	0.03488	0.1613	0.1879	95	80-120		
MSD	QC969411		0.1639	0.1904	95	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969483	Batch#:	268913
Matrix:	Soil	Prepared:	03/25/19
Units:	mg/Kg	Analyzed:	03/26/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	0.069 J	1.5	0.066
Barium	0.13 J	0.25	0.030
Beryllium	ND	0.099	0.010
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.049
Cobalt	ND	0.25	0.014
Copper	0.12 J	0.25	0.057
Lead	ND	0.99	0.056
Molybdenum	ND	0.25	0.026
Nickel	ND	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	ND	0.25	0.052
Zinc	0.22 J	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	268913
Units:	mg/Kg	Prepared:	03/25/19
Diln Fac:	1.000	Analyzed:	03/26/19

Type: BS Lab ID: QC969484

Analyte	Spiked	Result	%REC	Limits
Antimony	49.41	48.50	98	80-120
Arsenic	49.41	48.62	98	80-120
Barium	49.41	50.15	102	80-120
Beryllium	24.70	23.86	97	80-120
Cadmium	49.41	47.78	97	80-120
Chromium	49.41	50.03	101	80-120
Cobalt	49.41	49.05	99	80-120
Copper	49.41	48.17	97	80-120
Lead	49.41	49.87	101	80-120
Molybdenum	49.41	48.54	98	80-120
Nickel	49.41	49.53	100	80-120
Selenium	49.41	47.96	97	80-120
Silver	4.941	4.597	93	80-120
Thallium	49.41	49.34	100	80-120
Vanadium	49.41	48.57	98	80-120
Zinc	49.41	48.56	98	80-120

Type: BSD Lab ID: QC969485

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.65	48.33	97	80-120	1	20
Arsenic	49.65	47.95	97	80-120	2	20
Barium	49.65	49.39	99	80-120	2	20
Beryllium	24.83	23.16	93	80-120	3	20
Cadmium	49.65	47.21	95	80-120	2	20
Chromium	49.65	49.15	99	80-120	2	20
Cobalt	49.65	48.28	97	80-120	2	20
Copper	49.65	48.37	97	80-120	0	20
Lead	49.65	49.04	99	80-120	2	20
Molybdenum	49.65	47.83	96	80-120	2	20
Nickel	49.65	48.87	98	80-120	2	20
Selenium	49.65	47.27	95	80-120	2	20
Silver	4.965	4.564	92	80-120	1	20
Thallium	49.65	48.93	99	80-120	1	20
Vanadium	49.65	47.99	97	80-120	2	20
Zinc	49.65	47.65	96	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	RPS-15	Batch#:	268913
MSS Lab ID:	308209-003	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	1.000		

Type: MS Lab ID: QC969486

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.7468	49.95	9.589	18 *	75-120
Arsenic	4.785	49.95	55.49	102	80-121
Barium	79.54	49.95	132.9	107	75-125
Beryllium	0.2868	24.98	23.17	92	80-120
Cadmium	0.2310	49.95	50.50	101	80-120
Chromium	46.81	49.95	100.2	107	75-125
Cobalt	8.403	49.95	54.99	93	75-120
Copper	29.51	49.95	83.77	109	80-125
Lead	51.03	49.95	82.79	64 *	75-125
Molybdenum	0.5503	49.95	42.74	84	75-120
Nickel	43.84	49.95	93.25	99	75-125
Selenium	<0.1879	49.95	47.27	95	80-120
Silver	<0.02994	4.995	4.697	94	75-120
Thallium	<0.08974	49.95	44.30	89	75-120
Vanadium	38.22	49.95	90.81	105	78-125
Zinc	73.08	49.95	119.4	93	75-125

Type: MSD Lab ID: QC969487

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.16	9.594	18 *	75-120	2	20
Arsenic	49.16	54.27	101	80-121	1	20
Barium	49.16	130.1	103	75-125	2	20
Beryllium	24.58	22.58	91	80-120	1	20
Cadmium	49.16	49.25	100	80-120	1	20
Chromium	49.16	98.14	104	75-125	1	20
Cobalt	49.16	53.50	92	75-120	1	20
Copper	49.16	79.77	102	80-125	4	20
Lead	49.16	84.02	67 *	75-125	2	20
Molybdenum	49.16	41.81	84	75-120	1	20
Nickel	49.16	91.67	97	75-125	1	20
Selenium	49.16	46.87	95	80-120	1	20
Silver	4.916	4.590	93	75-120	1	20
Thallium	49.16	43.28	88	75-120	1	20
Vanadium	49.16	86.97	99	78-125	3	20
Zinc	49.16	117.7	91	75-125	1	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	268799
Matrix:	Soil	Sampled:	03/19/19
Units:	%	Received:	03/19/19
Diln Fac:	1.000	Analyzed:	03/21/19

Field ID	Lab ID	Result	RL
308209-001	308209-010	11	1
308209-002	308209-011	9	1
308209-003	308209-012	10	1
308209-004	308209-013	17	1
308209-005	308209-014	7	1
308209-006	308209-015	10	1
308209-007	308209-016	13	1
308209-008	308209-017	13	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	308209	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	IDW-C	Diln Fac:	1.000
Type:	SDUP	Batch#:	268799
MSS Lab ID:	308263-003	Sampled:	03/20/19
Lab ID:	QC969025	Received:	03/20/19
Matrix:	Soil	Analyzed:	03/21/19

MSS Result	Result	RL	RPD	Lim
8.237	9.703	1.000	16	26

RL= Reporting Limit

RPD= Relative Percent Difference

November 6, 2019

Mr. Henry Wong Henry.Wong@dtsc.ca.gov
Project Manager
Site Mitigation and Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710

**RE: Phase II Stockpile Characterization
Alameda Landing Waterfront
Alameda, California
Project No. 168831**

Dear Mr. Wong,

RPS Group, Inc. (RPS) on behalf of Catellus Alameda Development, LLC (Catellus), is pleased to present this *Phase II Stockpile Characterization Letter Report* (Letter), which details the sampling and analysis of the Phase II portion of the stockpile at the Alameda Landing Redevelopment Project located in Alameda, California (the Site). The Site location shown on **Figure 1** is under regulatory oversight by the California Department of Toxic Substances Control (DTSC) and is being redeveloped for residential use. The Site location within Alameda Landing is shown on **Figure 2**, and the location of the stockpile within the Site is shown on **Figure 3**. This letter documents the collection and analysis of soil samples for soil characterization of the eastern portion of Subpile A as illustrated on **Figure 4A**. Characterization of the stockpile will help determine suitability of the soil for on-Site reuse.

SCOPE

The completed scope of work is based on Section 5.5 of the DTSC approved *Work Plan for Subsurface Site Investigation and Stockpile Characterization* (Work Plan; RPS 2019a). The Phase II pilot study that involved testing Decision Unit (DU) 18 was performed on March 20, 2019. Details of the Phase II pilot study can be found in the *Phase II Stockpile Pilot Study Memorandum* (Memo, RPS 2019b). The Phase II pilot study involved sampling DU-18 in accordance with incremental sampling methodology (ISM) at a proposed volume of 6,500 cubic yards (CY), dividing this larger DU into four smaller sub-DUs of approximately 1,650 CY each, as recommended by the DTSC, and analyzing each of the four smaller sub-DUs in a similar fashion as the larger DU. The Phase II pilot study did not confirm a consensus of results between the larger and smaller DUs. The DTSC provided approval of the smaller DUs in an April 30, 2019 email that can be found in Attachment A. As illustrated on **Figure 4A**, the Phase II stockpile characterization includes DUs 05-12 and 17-24.

Pre-fieldwork Activities

Pre-field mobilization and planning activities were necessary for this investigation and included the following tasks:

- Coordinated with the property owner for Site access;
- Marked proposed boring locations, including the perimeters of DUs, grids, and target boring locations; and
- Coordinated with the analytical laboratory.

Field Sampling Activities

Phase II pilot study sampling of DU-18 occurred on March 20, 2019. Sixty (60) additional composite samples were collected on May 2, 3, 14, 15, 16, 17, and 20, 2019 utilizing ISM, where each composite sample was collected from a smaller representative DU volume of approximately 1,625 CY from Subpile A as illustrated on **Figure 4A**.

DU-24, depicted as an approximate 6-foot layer of soil within the DU-21 through DU-24 portion of Subpile A in the Work Plan (RPS 2019a), was subsequently reassigned to the ramp portion of the stockpile. The reassignment of DU-24 to an alternate 6,500 CY volume of soil, as depicted on **Figure 4A**, was due to the shallow overall depth of stockpiled soil in the ramp area. The DU-21 through DU-24 area of Subpile A as depicted in the Work Plan (RPS 2019a), has been reassigned DU-21 through DU-23, and sampled accordingly as three layers of soil, each approximately 6,500 CY with 4 sub-DUs of approximately 1,625 CY each.

Incremental sampling involved the following activities:

- Advanced 100 borings into the stockpile, including five borings in each sub-DU, targeting DUs DTSC-05a through DTSC-12d and DTSC-17a through DTSC-23d, and 20 borings in DU DTSC-24a through DTSC-24d due to the shallow depth of the ramp area. A representation of boring locations can be seen on **Figure 5**.
 - Eight soil increments were collected from within each of the five borings to produce one 40-point composite sample representative of each sub-DU with volumes of approximately 1,650 CY.
 - The eight soil increments were collected from each of the five borings at depths selected through stratified random sampling, *i.e.*, one increment was randomly collected from within each of eight predefined depth intervals spanning the vertical extent of the target DU. Soil was collected into separate containers for volatile organic compounds and total petroleum hydrocarbons as gasoline (VOCs and TPH-g) analyses and non-volatile analyses.
 - Composite samples for volatiles analysis were collected from the retrieved soil cores using Terra Core® samplers to minimize loss of volatiles while sampling, in accordance with USEPA Method 5035. The soil increments obtained for VOC analyses from each DU were placed in a 500 mL methanol-preserved sample bottle.
 - Composite samples for non-volatile analyses were collected from the retrieved soil cores using Terra Core® samplers and placed in a large decontaminated bowl. The total target volume for each DU composite sample was approximately 1 kilogram or 0.5 liters of soil. The incremental composite soil samples for non-volatile analyses were then mixed by hand to break up any clumps and homogenize the sample, creating a field-composited DU sample. The homogenized composite soil sample for each DU was transferred from the bowl to a sample container consisting of a 1-gallon food-grade plastic zip-lock bag.
- Soil was screened with a Photoionization Detector (PID). No visual or olfactory evidence of potential chemical impact was encountered in any of the soil cores.
- Drilling and sampling equipment was decontaminated prior to use at each boring location using a combination of water, Alconox™ wash solution, and potable water rinse.

ANALYTICAL PROGRAM

Samples were processed and analyzed by ISM at Enthalpy Analytical (formerly Curtis & Tompkins) in Berkeley, California. As shown in **Table 1**, samples were analyzed using the following analytical methods:

- Total petroleum hydrocarbons (TPH) in the gasoline range (TPH-g) by United States Environmental Protection Agency (USEPA) Method 8015;
- TPH in the diesel (TPH-d) and motor oil (TPH-mo) range by USEPA Method 8015;
- Volatile organic compounds (VOCs) by USEPA Method 8260;
- Polycyclic aromatic hydrocarbons (PAHs) by USEPA Method 8270;
- Title 22 metals by USEPA Method 6010/6020/7470;
- Organochlorine pesticides by USEPA Method 8081; and
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082.

DATA EVALUATION

Soil analytical results are presented in **Table 2** and laboratory analytical reports are included in Attachment B.

The analytical results from the stockpile sampling have been evaluated against current DTSC-recommended risk-based soil screening levels which assume residential exposure to soils via ingestion, dermal contact, and inhalation of dust and volatiles (DTSC 2019; USEPA 2019a, 2019b). Soil sampling results for TPH-g, TPH-d, and TPH-mo are compared to the current San Francisco Bay Regional Water Quality Control Board (SFBWQCB) Tier-1 Environmental Screening Levels (ESLs) (SFBWQCB 2019a, 2019b). The Tier-1 ESLs are protective of direct contact exposures (ingestion, dermal, inhalation), under residential land use.

Soil sampling results for carcinogenic polycyclic aromatic hydrocarbons (CPAHs) expressed in benzo(a)pyrene equivalents (BaPE) were compared to regional background-based screening levels for Northern California (DTSC, 2009), with 1.0 milligrams per kilogram (mg/kg) BaPE adopted as the CPAH screening level for unrestricted use at Alameda Landing. The background concentration serves as the residential screening level.

BaPE was calculated by multiplying CPAH concentrations by the appropriate USEPA relative potency factors (RPF), as recommended by DTSC (USEPA 2019a; DTSC 2015). The relative potency factors are:

- 0.1 mg/kg for benz(a)anthracene;
- 1.0 mg/kg for benzo(a)pyrene;
- 0.1 mg/kg for benzo(b)fluoranthene;
- 0.01 mg/kg for benzo(k)fluoranthene;
- 0.001 mg/kg for chrysene;
- 1.0 mg/kg for dibenz(a,h)anthracene; and
- 0.1 mg/kg for indeno(1,2,3-c,d)pyrene.

The BaPE for each CPAH is summed to calculate the total BaPE contained within the sample, as shown in the following formula:

$$BaPE_{total} = [CPAH_1] \times RPF_1 + [CPAH_2] \times RPF_2 \cdots [CPAH_7] \times RPF_7$$

Soil sampling results for arsenic were compared to a background-based screening level of 16 mg/kg, which represents the upper end of the site-specific (Alameda Landing) background arsenic distribution in the HRA/FS/RAP (Iris Environmental 2008).

Soil Analytical Results

The soil analytical results are discussed in the following subsections.

Total Petroleum Hydrocarbons

Soil samples were analyzed for TPH-g, TPH-d, and TPH-mo. The analytical results for TPH analysis are presented in **Table 2**. Concentrations of TPH-g, TPH-d, and TPH-mo in analyzed soil samples were all below the Tier-1 ESLs of 100 mg/kg, 260 mg/kg, and 1,600 mg/kg, respectively.

Volatile Organic Compounds

VOCs concentrations were either not detected in the analyzed samples or detected at concentrations below the applicable screening levels. Two compounds, 1,2,3-trichloropropane and vinyl chloride, reported by Enthalpy as non-detected, had method detection limits (MDLs) above site-specific residential screening levels as a result of laboratory dilution required for VOC analyses performed on the methanol-preserved soil samples. Dilution factors for VOC analyses performed on the Phase II stockpile samples ranged from approximately 30 to 50, which can be found in Attachment B. As shown in **Table 2**, Enthalpy provided analytical results down to the MDLs.

An evaluation of data collected during implementation of the 2019 Work Plan and existing data contained in Appendix A of the HHRA/FS/RAP (Iris Environmental 2008) showed that 1,2,3-trichloropropane has not been detected in any of the 128 soil samples previously analyzed, and that vinyl chloride has also not detected in any of the 505 soil samples previously analyzed.

Polycyclic Aromatic Hydrocarbons

BaPE was calculated for each composite soil sample and is compared to background screening levels in **Table 2**. The calculated BaPE for 14 of the 64 composite soil samples were above the screening level of 1.0 mg/kg. Samples that exceeded the BaPE screening level included DTSC-06a, DTSC-06b, DTSC-06c, DTSC-11c, DTSC-17a, DTSC-18c, DTSC-18d, DTSC-19a, DTSC-19c, DTSC-20d, DTSC-23c, DTSC-23d, DTSC-24b, and DTSC-24c. All of the BaPE exceedances were between 1.0 mg/kg and 2.1 mg/kg, with the exception of DTSC-20d, which had a BaPE value of 8.9 mg/kg.

All other BaPE concentrations were below the 1.0 mg/kg screening level.

Metals in Soil

Lead was detected in samples DTSC-10a and DTSC-21b in concentrations above the screening level of 80 mg/kg at 99 mg/kg and 86 mg/kg, respectively. All of the remaining results for metals analysis were either not detected or were detected at levels below site-specific screening levels for analyzed samples.

A site-specific screening level for arsenic was established as 16 mg/kg (Iris Environmental 2008). Arsenic was not detected above the site-specific screening level in any of the soil samples collected in this sampling event.

Pesticides in Soil

Two organochlorine pesticides, aldrin and dieldrin, were detected above their respective screening levels of 0.039 and 0.034 mg/kg in sample DTSC-12a, at 0.092 and 0.097 mg/kg, respectively.

All other pesticide concentrations in analyzed soil samples were either not detected above laboratory reporting limits or were detected at levels below the applicable screening levels.

Polychlorinated Biphenyls

PCBs were detected above the screening level of 0.24 mg/kg in three samples, DTSC-11d, DTSC-12b, and DTSC-12d, in concentrations of 0.64 mg/kg, 1.6 mg/kg, and 4.6 mg/kg respectively.

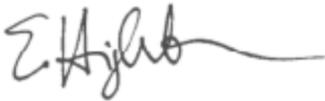
All other PCBs concentrations in analyzed soils were either below laboratory reporting limits or were detected in the sample below the applicable screening levels.

SUMMARY AND CONCLUSIONS

Based on the results of the *Phase II Stockpile Pilot Study Memorandum*, which confirmed there was not a consensus of results between the larger and smaller DUs, the characterization sampling of the eastern portion of Subpile A was completed using the smaller DU sampling plan. Samples were collected from DUs 05a-12d and 17a-24d in accordance with ISM. Laboratory results from the stockpile soil samples indicated that soil in 44 of the 64 DUs can be considered for unrestricted residential reuse on Site. Twenty DUs depicted on **Figure 4B** had elevated levels of either CPAHs, PCBs, lead, or pesticides, and cannot be considered for unrestricted residential reuse on Site. The soil from these 20 DUs will not be reused at any depth within the Alameda Landing Waterfront project area. The lateral dimensions of the DUs and the depths and locations of screening level exceedances are illustrated in **Figures 4A** and **4B**, respectively. Additional sampling and analysis of the soil in these twenty DUs may be required for use at another site or for off-site disposal.

Please don't hesitate to contact us if you have any questions regarding this memo.

Sincerely,
RPS Group, Inc



Elizabeth Hightower
Senior Consultant
510-929-2007



Vincent Tilotta, PE (CA, WA)
Manager I
510-929-2014

cc: Mr. Bill Kennedy, Catellus Alameda Development, LLC

Enclosures: References

Figure 1 – Site Location

Figure 2 – Site Location within Alameda Landing

Figure 3 – Existing Site Conditions

Figure 4A – Soil Stockpile Decision Units Dimensions

Figure 4B – Screening Level Exceedances

Figure 5 – Stockpile Sampling Decision Unit Cutout

Table 1 – Stockpile Sampling and Analysis Program

Table 2 – Phase II Stockpile Characterization Results

Table 3 – Phase II Stockpile Characterization Detections Above Screening Levels

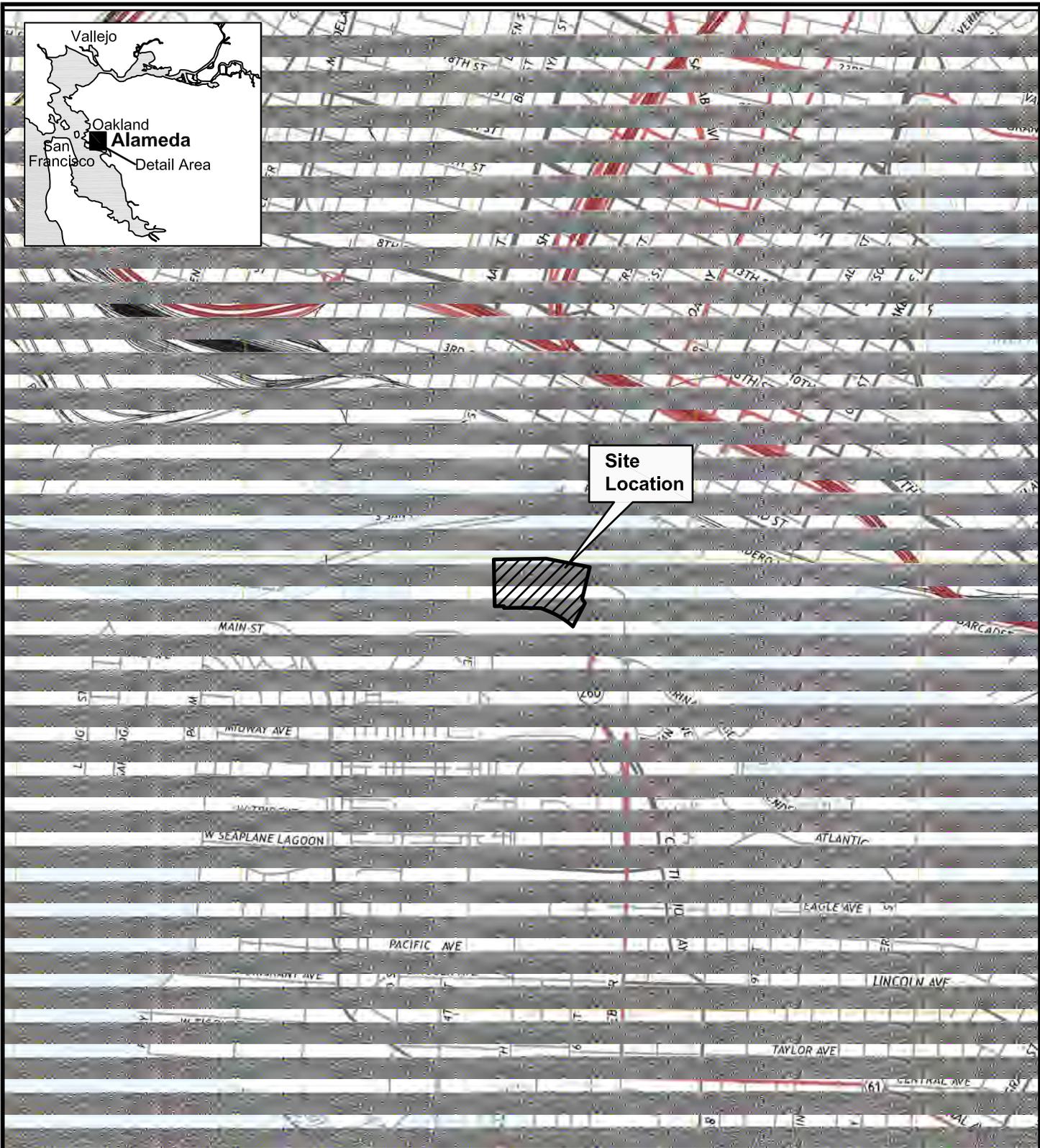
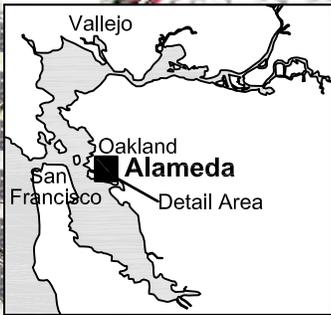
Attachment A – DTSC Approval of Sampling Plan

Attachment B – Laboratory Analytical Reports

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- SFBRWQCB. 2019b. *Environmental Screening Levels*. Excel spreadsheet file "ESL Workbook January 2019 (Rev. 1)". January 24.
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- USEPA. 2019b. *Regional Screening Levels (RSLs) – Generic Tables* (May 2019). May.

Figures



SOURCE: USGS 7.5' QUADRANGLE, OAKLAND WEST, CALIFORNIA, 2015



Site Location
Alameda Landing Waterfront
Alameda, California

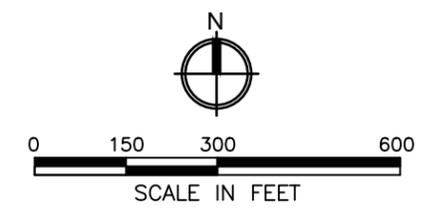
Figure
1



LEGEND:

--- APPROXIMATE SITE BOUNDARY

--- ALAMEDA LANDING AND SUB-AREAS



Site Location within Alameda Landing
 Alameda Landing Waterfront
 Alameda, California

Date: 04/19/19

Figure
2

Contract Number: 16-1498E

OAKLAND INNER HARBOR



LEGEND:

- APPROXIMATE SITE BOUNDARY
- ▭ SOIL STOCKPILE

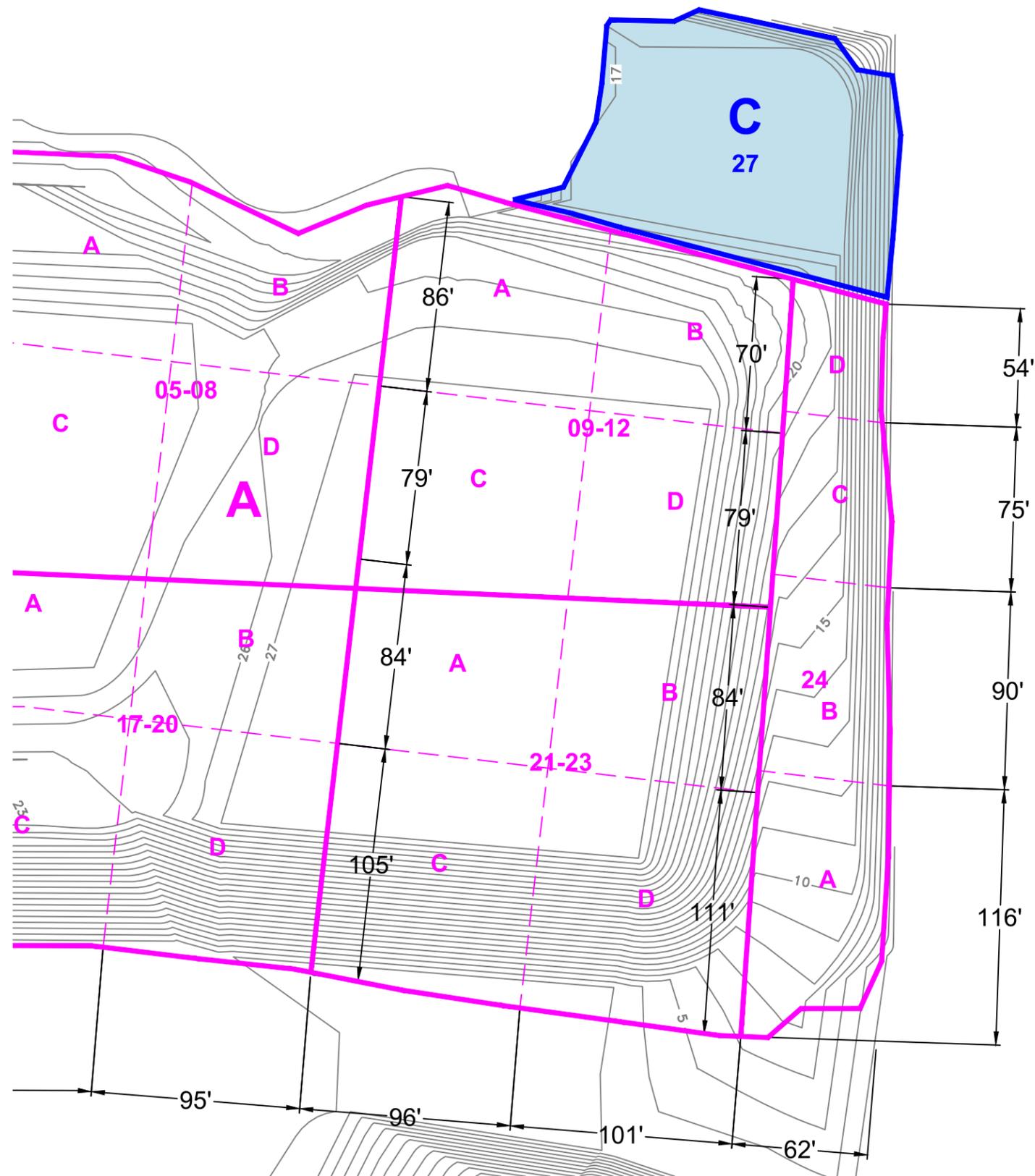


Existing Site Conditions
Alameda Landing Waterfront
Alameda, California

Date: 04/19/19

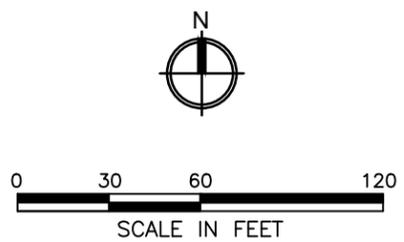
Figure
3

Contract Number: 16-1498E



LEGEND:

- AREA TESTED IN PHASE 1
- AREA TESTED IN PHASE 2

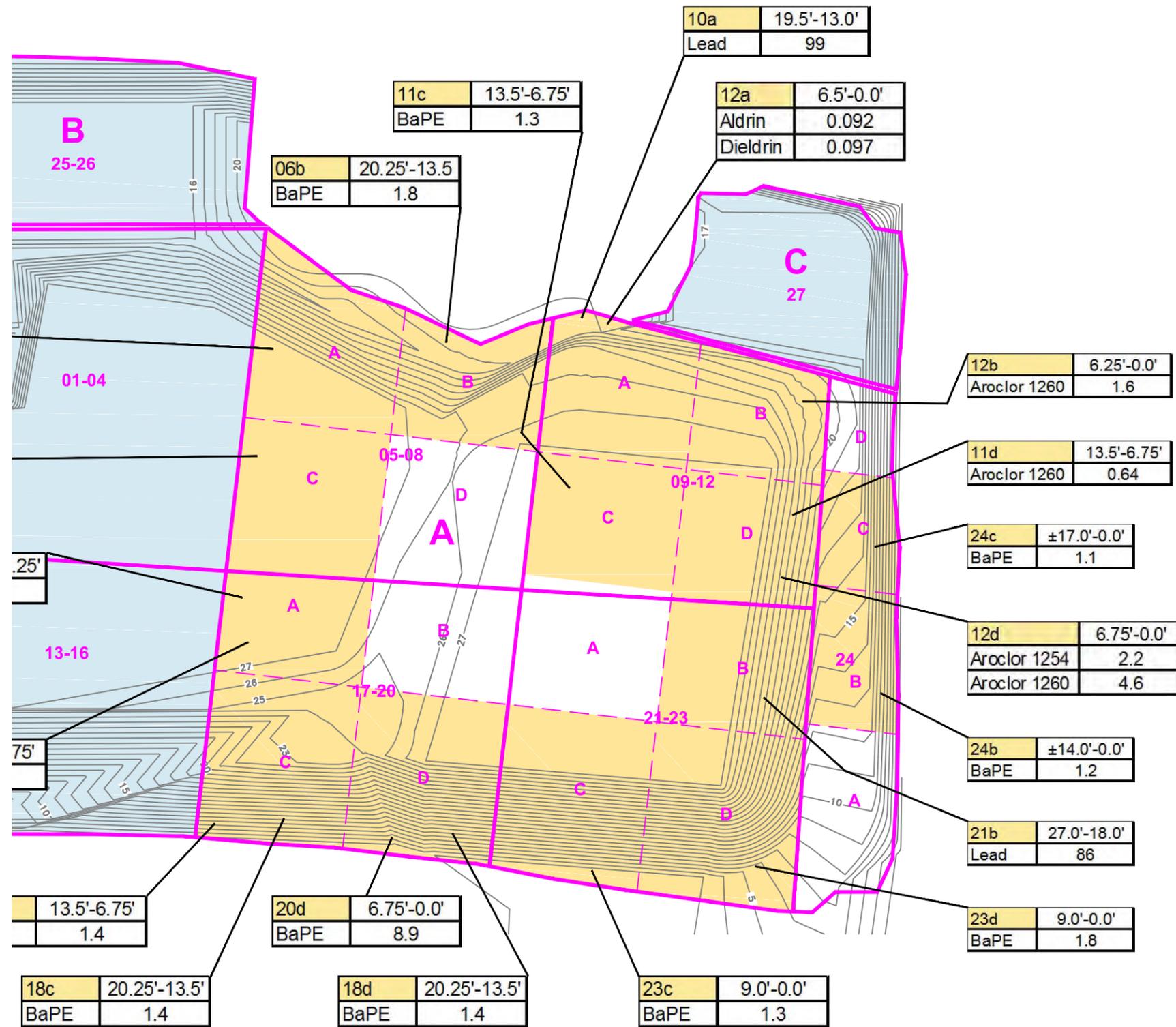


Soil Stockpile Decision Units Dimensions
 Alameda Landing Waterfront
 Alameda, California

Date: 06/05/19

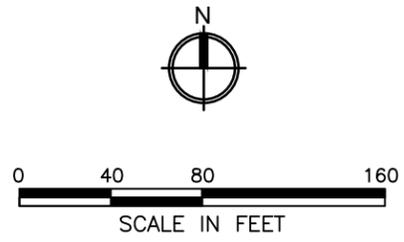
Figure
4A

Contract Number: 16-1498E



LEGEND:

- DU BOUNDARY
- SUB DU BOUNDARY
- AREA TESTED IN PHASE 1

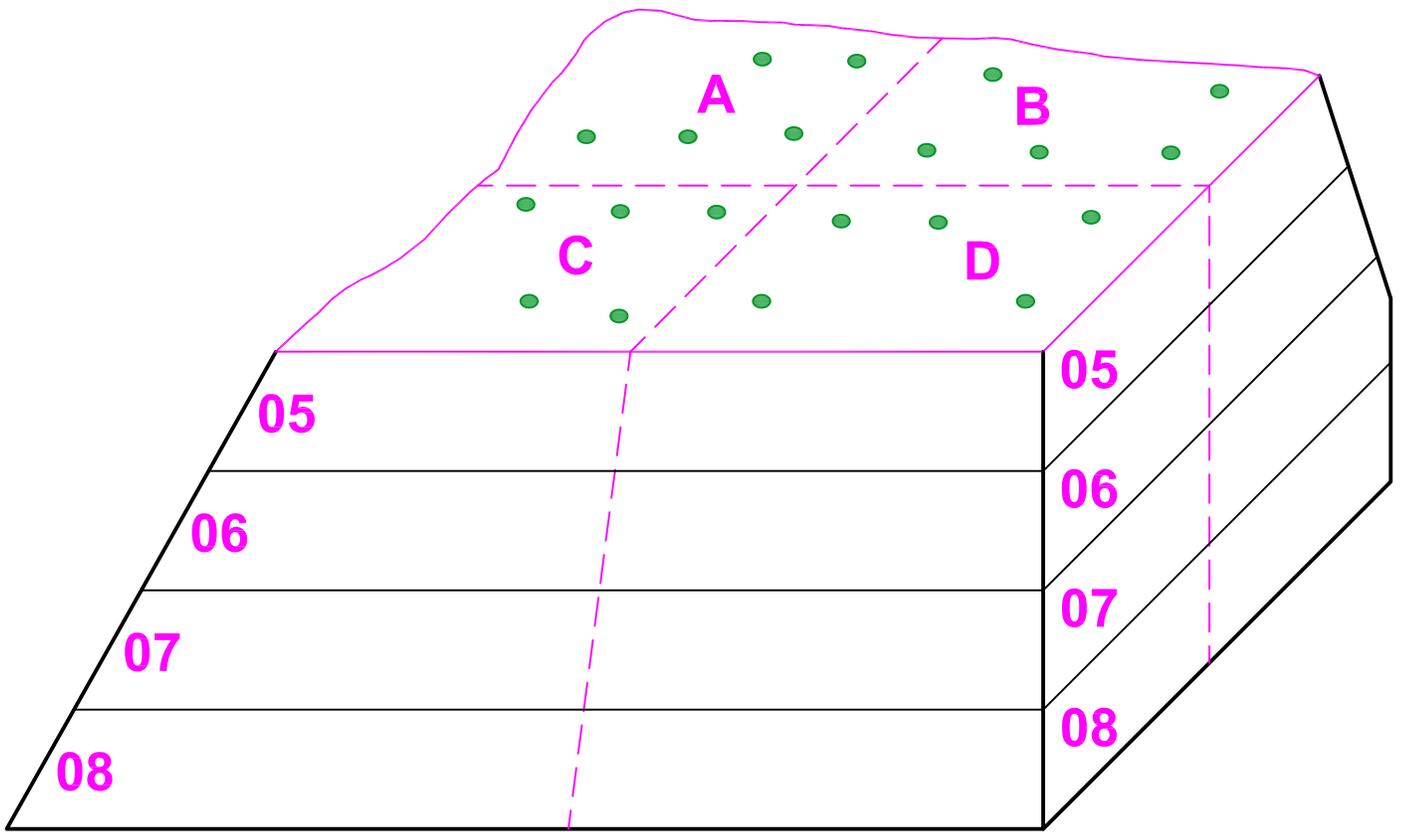


Screening Level Exceedances
 Alameda Landing Waterfront
 Alameda, California

Date: 06/06/19

Figure
4B

Contract Number: 16-1498E



LEGEND:

LEGEND:

- DTSC SUB-QUADRANTS
- DTSC-RESOLUTION BORINGS



I:\CAD\1616-1498-E\soil\stockpile for 18 with topo.dwg



Stockpile Sampling Decision Unit Cutout
Alameda Landing Waterfront
Alameda, California

Figure

5

Tables

Stockpile Phase II Sampling
 Alameda Landing Waterfront
 Alameda, California

Table 1. Stockpile Sampling and Analysis Program

Sample ID	Location	Matrix ⁽¹⁾	TPH	VOCs	PAHs	Metals	Pesticides	PCBs	Moisture
DTSC-05a	DTSC-05a	SP	X	X	X	X	X	X	X
DTSC-05b	DTSC-05b	SP	X	X	X	X	X	X	X
DTSC-05c	DTSC-05c	SP	X	X	X	X	X	X	X
DTSC-05d	DTSC-05d	SP	X	X	X	X	X	X	X
DTSC-06a	DTSC-06a	SP	X	X	X	X	X	X	X
DTSC-06b	DTSC-06b	SP	X	X	X	X	X	X	X
DTSC-06c	DTSC-06c	SP	X	X	X	X	X	X	X
DTSC-06d	DTSC-06d	SP	X	X	X	X	X	X	X
DTSC-07a	DTSC-07a	SP	X	X	X	X	X	X	X
DTSC-07b	DTSC-07b	SP	X	X	X	X	X	X	X
DTSC-07c	DTSC-07c	SP	X	X	X	X	X	X	X
DTSC-07d	DTSC-07d	SP	X	X	X	X	X	X	X
DTSC-08a	DTSC-08a	SP	X	X	X	X	X	X	X
DTSC-08b	DTSC-08b	SP	X	X	X	X	X	X	X
DTSC-08c	DTSC-08c	SP	X	X	X	X	X	X	X
DTSC-08d	DTSC-08d	SP	X	X	X	X	X	X	X
DTSC-9a	DTSC-9a	SP	X	X	X	X	X	X	X
DTSC-9b	DTSC-9b	SP	X	X	X	X	X	X	X
DTSC-9c	DTSC-9c	SP	X	X	X	X	X	X	X
DTSC-9d	DTSC-9d	SP	X	X	X	X	X	X	X
DTSC-10a	DTSC-10a	SP	X	X	X	X	X	X	X
DTSC-10b	DTSC-10b	SP	X	X	X	X	X	X	X
DTSC-10c	DTSC-10c	SP	X	X	X	X	X	X	X
DTSC-10d	DTSC-10d	SP	X	X	X	X	X	X	X
DTSC-11a	DTSC-11a	SP	X	X	X	X	X	X	X
DTSC-11b	DTSC-11b	SP	X	X	X	X	X	X	X
DTSC-11c	DTSC-11c	SP	X	X	X	X	X	X	X
DTSC-11d	DTSC-11d	SP	X	X	X	X	X	X	X

Stockpile Phase II Sampling
 Alameda Landing Waterfront
 Alameda, California

Sample ID	Location	Matrix ⁽¹⁾	TPH	VOCs	PAHs	Metals	Pesticides	PCBs	Moisture
DTSC-12a	DTSC-12a	SP	X	X	X	X	X	X	X
DTSC-12b	DTSC-12b	SP	X	X	X	X	X	X	X
DTSC-12c	DTSC-12c	SP	X	X	X	X	X	X	X
DTSC-12d	DTSC-12d	SP	X	X	X	X	X	X	X
DTSC-17a	DTSC-17a	SP	X	X	X	X	X	X	X
DTSC-17b	DTSC-17b	SP	X	X	X	X	X	X	X
DTSC-17c	DTSC-17c	SP	X	X	X	X	X	X	X
DTSC-17d	DTSC-17d	SP	X	X	X	X	X	X	X
DTSC-18a	DTSC-18a	SP	X	X	X	X	X	X	X
DTSC-18b	DTSC-18b	SP	X	X	X	X	X	X	X
DTSC-18c	DTSC-18c	SP	X	X	X	X	X	X	X
DTSC-18d	DTSC-18d	SP	X	X	X	X	X	X	X
DTSC-19a	DTSC-19a	SP	X	X	X	X	X	X	X
DTSC-19b	DTSC-19b	SP	X	X	X	X	X	X	X
DTSC-19c	DTSC-19c	SP	X	X	X	X	X	X	X
DTSC-19d	DTSC-19d	SP	X	X	X	X	X	X	X
DTSC-20a	DTSC-20a	SP	X	X	X	X	X	X	X
DTSC-20b	DTSC-20b	SP	X	X	X	X	X	X	X
DTSC-20c	DTSC-20c	SP	X	X	X	X	X	X	X
DTSC-20d	DTSC-20d	SP	X	X	X	X	X	X	X
DTSC-21a	DTSC-21a	SP	X	X	X	X	X	X	X
DTSC-21b	DTSC-21b	SP	X	X	X	X	X	X	X
DTSC-21c	DTSC-21c	SP	X	X	X	X	X	X	X
DTSC-21d	DTSC-21d	SP	X	X	X	X	X	X	X
DTSC-22a	DTSC-22a	SP	X	X	X	X	X	X	X
DTSC-22b	DTSC-22b	SP	X	X	X	X	X	X	X
DTSC-22c	DTSC-22c	SP	X	X	X	X	X	X	X
DTSC-22d	DTSC-22d	SP	X	X	X	X	X	X	X
DTSC-23a	DTSC-23a	SP	X	X	X	X	X	X	X
DTSC-23b	DTSC-23b	SP	X	X	X	X	X	X	X

Stockpile Phase II Sampling
 Alameda Landing Waterfront
 Alameda, California

Sample ID	Location	Matrix ⁽¹⁾	TPH	VOCs	PAHs	Metals	Pesticides	PCBs	Moisture
DTSC-23c	DTSC-23c	SP	X	X	X	X	X	X	X
DTSC-23d	DTSC-23d	SP	X	X	X	X	X	X	X
DTSC-24a	DTSC-24a	SP	X	X	X	X	X	X	X
DTSC-24b	DTSC-24b	SP	X	X	X	X	X	X	X
DTSC-24c	DTSC-24c	SP	X	X	X	X	X	X	X
DTSC-24d	DTSC-24d	SP	X	X	X	X	X	X	X

Notes:

- (1) Sample matrices are: stockpiled soil (SP).
- (2) Sample analyses are:
 - TPH – Total petroleum hydrocarbons in the gasoline range (TPH-g) by USEPA Method 8015 or 8260; and total petroleum hydrocarbons in the diesel and motor oil ranges (TPH-d and TPH-mo) by USEPA Method 8015
 - VOCs – Volatile organic compounds by USEPA Method 8260
 - PAHs – Polycyclic aromatic hydrocarbons by USEPA Method 8270
 - Metals – Title 22 (CAM 17) metals by USEPA Method 6010/6020/7470
 - Pesticides – Organochlorine pesticides by USEPA Method 8081
 - PCBs – Polychlorinated biphenyls by USEPA Method 8082
 - Moisture – Moisture content by ASTM D2216
- (3) "X" indicates sample is to be analyzed.

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-05a	DTSC-05b	DTSC-05c	DTSC-05d	DTSC-06a	DTSC-06b	DTSC-06c	DTSC-06d	DTSC-07a	DTSC-07b	DTSC-07c	DTSC-07d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/20/2019
▼ ANALYTE	UNITS ▶			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>															
Moisture content (CLP)	None	None	None	5.0	10	8.0	10	11	9.0	11	12	9.0	9.0	9.0	13
<i>CAM 17 Metals by USEPA 6010B/7471A</i>															
Antimony	None	31	31	0.44 J	0.029	0.30 J	<2.0	0.55 J	<2.0	0.55 J	<2.0	0.35 J	<2.0	0.21 J	<2.0
Arsenic	16	16	16	4.6	0.098	5.0	4.1	4.8	6.5	4.6	4.6	4.9	6.1	5.1	3.1
Barium	None	15,000	15,000	82	0.13	78	74	79	87	65	80	75	80	84	41
Beryllium	1,600	15	15	0.28	0.096	0.27	0.28	0.25	0.34	0.26	0.29	0.25	0.36	0.30	0.21
Cadmium	2,100	5.2	5.2	0.23 J	0.099	0.15 J	0.25	0.22 J	0.35	0.16 J	0.30	0.18 J	0.38	0.20 J	0.21 J
Chromium, total	None	36,000	36,000	42	0.096	44	41	37	42	42	40	42	45	47	35
Cobalt	420	23	23	8.8	0.088	8.8	7.2	8.7	9.1	8.0	7.1	9.3	9.5	9.0	5.5
Copper	None	3,100	3,100	27	0.10	22	21	28	28	21	22	27	28	27	14
Lead	None	80	80	26	0.097	23	23	25	24	19	54	25	25	38	33
Mercury	None	1.00	1.00	0.17	0.19	0.13	0.12	0.59	0.17	0.14	0.13	0.23	0.16	0.28	0.11
Molybdenum	None	390	390	1.1	0.081	0.80	0.52	0.84	1.0	0.68	0.40	0.85	0.67	0.77	0.40
Nickel	15,000	490	490	43	0.087	47	38	41	46	41	38	42	43	50	29
Selenium	None	390	390	<2.0	0.095	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0
Silver	None	390	390	<0.25	0.099	<0.24	<0.25	<0.25	0.097 J	<0.25	0.080 J	<0.24	<0.25	<0.25	<0.25
Thallium	None	0.78	0.78	<0.50	0.086	<0.49	<0.50	<0.50	<0.50	<0.50	<0.50	<0.49	<0.50	<0.50	<0.49
Vanadium	None	390	390	36	0.10	34	32	31	37	33	34	35	40	37	25
Zinc	None	23,000	23,000	69	0.19	54	54	65	71	78	54	62	70	68	43
<i>Organochlorine Pesticides by USEPA Method 8081A</i>															
Aldrin	0.039	2.3	0.039	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0034 CJ	0.0018 CJ	0.0025 CJ	<0.011	0.0036 CJ	0.0033 CJ	0.0038 CJ	0.0028 CJ	0.0018 CJ	0.0019 CJ	0.0018 CJ	0.0027 CJ
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	0.0049 J	0.0025 J	0.0034 J	0.0021 J	0.0045 J	0.0040 J	0.0053 J	0.0039 J	0.0022 J	0.0022 J	0.0027 J	0.0023 CJ
4,4'-DDD	2.3	1.9	1.9	0.0014 J	0.0044 CJ	<0.011	<0.023	6.0E-04 CJ	<0.011	<0.022	<0.022	<0.011	<0.011	0.0024 J	9.8E-04 CJ
4,4'-DDE	2.0	23	2.0	0.0011 J	<0.011	5.6E-04 J	0.0021 J	4.8E-04 CJ	<0.011	<0.022	8.2E-04 CJ	0.0014 J	<0.011	0.0029 J	0.0023 J
4,4'-DDT	1.9	37	1.9	0.0036 CJ	0.0040 J	0.0014 CJ	<0.023	0.0025 CJ	0.0030 J	<0.022	0.0045 J	<0.011	0.0024 CJ	0.0035 J	<0.011
Dieldrin	0.034	3.2	0.034	0.0012 CJ	0.0019 J	0.0012 J	0.0011 CJ	0.0015 J	0.0014 CJ	<0.022	0.0028 J	0.0010 CJ	<0.011	9.1E-04 CJ	<0.011
Endosulfan I	None	None	None	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
Endosulfan II	None	None	None	<0.011	<0.011	<0.011	<0.023	<0.011	<0.011	<0.022	<0.022	<0.011	<0.011	<0.011	<0.011
Endosulfan sulfate	None	None	None	<0.011	<0.011	<0.011	<0.023	0.0016 CJ	<0.011	<0.022	<0.022	<0.011	<0.011	<0.011	<0.011
Endrin	None	19	19	0.0016 J	<0.011	<0.011	<0.023	<0.011	0.0019 CJ	<0.022	<0.022	<0.011	<0.011	5.2E-04 CJ	<0.011
Endrin aldehyde	None	None	None	<0.011	<0.013	<0.011	<0.023	<0.011	<0.013	<0.022	<0.022	<0.011	<0.013	<0.011	<0.011
Heptachlor	0.13	39	0.13	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
Heptachlor epoxide	0.070	1.0	0.070	5.6E-04 CJ	<0.0056	<0.0056	<0.011	4.7E-04 J	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-05a	DTSC-05b	DTSC-05c	DTSC-05d	DTSC-06a	DTSC-06b	DTSC-06c	DTSC-06d	DTSC-07a	DTSC-07b	DTSC-07c	DTSC-07d	
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/20/2019	
▼ ANALYTE	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
alpha-Hexachlorocyclohexane		0.086	510	0.086	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
beta-Hexachlorocyclohexane		0.30	None	0.30	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
delta-Hexachlorocyclohexane		None	None	None	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
gamma-Hexachlorocyclohexane (lindane)		0.57	21	0.57	<0.0057	<0.0056	<0.0056	<0.011	<0.0056	<0.0055	<0.011	<0.011	<0.0054	<0.0054	<0.0055	<0.0055
Methoxychlor		None	320	320	<0.057	<0.056	<0.056	<0.11	<0.056	<0.055	<0.11	<0.11	<0.054	<0.054 #ND	<0.055	<0.055
Toxaphene		0.49	5.7	0.49	<0.20	<0.20	<0.20	<0.41	<0.20	<0.20	<0.39	<0.40	<0.20	<0.19	<0.20	<0.20
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>																
Aroclor-1016		6.7	4.1	4.1	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Aroclor-1221		0.20	None	0.20	<0.027	<0.027	<0.027	<0.027	<0.027	<0.026	<0.026	<0.027	<0.026	<0.026	<0.026	<0.026
Aroclor-1232		0.17	None	0.17	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Aroclor-1242		0.23	None	0.23	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Aroclor-1248		0.23	None	0.23	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Aroclor-1254		0.24	1.2	0.24	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013
Aroclor-1260		0.24	None	0.24	0.033	0.032	0.022	0.023	0.015	0.016	0.012 J	0.031	0.024	0.011 J	0.015	0.0098 J
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>																
TPH-g		None	100	100	0.48 J	1.4 J	0.58 J	1.1 J	0.64 J	1.2 J	0.75 J	1.1 J	0.67 J	1.3 J	1.9 J	1.7 J
TPH-d		None	260	260	58 Y	48 Y	42 Y	34 Y	52 Y	32 Y	48 Y	34 Y	35 Y	45 Y	41 Y	25 Y
TPH-mo		None	1,600	1,600	--	--	--	--	--	--	--	--	--	--	--	--
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>																
Acetone		None	61,000	61,000	<0.92	<0.97	<0.94	<1.0	<0.98	<0.99	<0.95	<1.0	<0.96	<0.96	<0.95	<1.0
Benzene		0.33	11	0.33	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Bromobenzene		None	290	290	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Bromodichloromethane		0.29	270	0.29	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Bromoform		19	1,600	19	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Bromomethane (methyl bromide)		None	6.8	6.8	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
2-Butanone (methyl ethyl ketone)		None	27,000	27,000	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
n-Butylbenzene		None	3,900	3,900	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
sec-Butylbenzene		None	2,200	2,200	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
tert-Butylbenzene		None	2,200	2,200	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Carbon disulfide		None	770	770	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Carbon tetrachloride		0.098	100	0.098	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Chlorobenzene		None	280	280	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Chlorobromomethane (bromochloromethane)		None	150	150	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Chlorodibromomethane (dibromochloromethane)		0.94	470	0.94	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Chloroethane (ethyl chloride)		None	14,000	14,000	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
Chloroform		0.32	200	0.32	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-05a	DTSC-05b	DTSC-05c	DTSC-05d	DTSC-06a	DTSC-06b	DTSC-06c	DTSC-06d	DTSC-07a	DTSC-07b	DTSC-07c	DTSC-07d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/20/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
2-Chlorotoluene	None	470	470	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
4-Chlorotoluene	None	440	440	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Cumene (isopropylbenzene)	None	1,900	1,900	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Cymene (p-isopropyltoluene)	None	None	None	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Dibromomethane (methylene bromide)	None	24	24	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2-Dichlorobenzene	None	1,800	1,800	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,3-Dichlorobenzene	None	None	None	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.1	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.3	<1.2	<1.2	<1.2	<1.2
1,2-Dichloropropane	2.5	16	2.5	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,3-Dichloropropane	None	410	410	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
2,2-Dichloropropane	None	None	None	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1-Dichloropropene	None	None	None	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
cis-1,3-Dichloropropene	0.58	72	0.58	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
trans-1,3-Dichloropropene	0.58	72	0.58	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Ethylbenzene	5.8	3,400	5.8	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Hexachlorobutadiene	1.2	78	1.2	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
2-Hexanone (methyl butyl ketone)	None	200	200	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
Naphthalene	3.8	130	3.8	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
n-Propylbenzene	None	3,800	3,800	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Styrene	None	6,000	6,000	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Tetrachloroethene (PCE)	0.59	81	0.59	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Toluene	None	1,100	1,100	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-05a	DTSC-05b	DTSC-05c	DTSC-05d	DTSC-06a	DTSC-06b	DTSC-06c	DTSC-06d	DTSC-07a	DTSC-07b	DTSC-07c	DTSC-07d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/16/2019	05/20/2019	05/17/2019	05/20/2019	05/20/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	None	63	63	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2,4-Trichlorobenzene	24	58	24	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Trichloroethene (TCE)	0.94	4.1	0.94	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,2,4-Trimethylbenzene	None	300	300	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
1,3,5-Trimethylbenzene	None	270	270	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Vinyl acetate	None	910	910	<2.3	<2.4	<2.4	<2.5	<2.5	<2.5	<2.4	<2.5	<2.4	<2.4	<2.4	<2.5
Vinyl chloride	0.0087	70	0.0087	<0.46	<0.48	<0.47	<0.50	<0.49	<0.49	<0.47	<0.51	<0.48	<0.48	<0.47	<0.50
m-, p-Xylene	None	550	550	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
o-Xylene	None	650	650	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>															
Acenaphthene	None	3,600	3,600	0.018 J	<0.14	<0.27	<0.11	0.024 J	<0.18	<0.28	<0.094	0.018 J	0.017 J	<0.14	0.011 J
Acenaphthylene	None	None	None	0.045 J	0.046 J	0.082 J	0.030 J	0.21	0.35	0.13 J	0.10	0.041 J	0.13	0.029 J	0.046 J
Anthracene	None	18,000	18,000	0.063 J	0.059 J	0.068 J	0.050 J	0.13	0.24	0.088 J	0.063 J	0.054 J	0.10	0.075 J	0.036 J
Benz(a)anthracene	*	None	*	0.24	0.23	0.30	0.19	0.46	0.80	0.51	0.26	0.27	0.35	0.29	0.16
Benzo(a)pyrene	*	18	18	0.39	0.34	0.49	0.26	0.85	1.3	1.1	0.49	0.44	0.59	0.52	0.28
Benzo(b)fluoranthene	*	None	*	0.47	0.35	0.61	0.34	0.93	1.3	0.95	0.55	0.55	0.56	0.55	0.33
Benzo(g,h,i)perylene	None	None	None	0.33	0.36	0.46	0.23	0.70	1.2	0.73	0.40	0.36	0.59	0.33	0.24
Benzo(k)fluoranthene	*	None	*	0.15	0.12 J	0.19 J	0.11 J	0.26	0.39	0.35	0.12	0.15	0.18	0.15	0.085
Chrysene	*	None	*	0.28	0.27	0.35	0.23	0.53	0.80	0.66	0.31	0.33	0.41	0.38	0.19
Dibenz(a,h)anthracene	*	None	*	0.044 J	0.047 J	0.057 J	0.036 J	0.088	0.15 J	0.098 J	0.050 J	0.048 J	0.073	0.045 J	0.030 J
Fluoranthene	None	2,400	2,400	0.47	0.46	0.60	0.33	0.90	1.7	1.0	0.48	0.44	0.71	0.66	0.32
Fluorene	None	2,400	2,400	<0.087	<0.14	<0.27	<0.11	0.034 J	0.12 J	<0.28	<0.094	0.016 J	0.031 J	<0.14	<0.057
Indeno(1,2,3-c,d)pyrene	*	None	None	0.22	0.23	0.27	0.15	0.50	0.85	0.59	0.28	0.25	0.42	0.27	0.17
Naphthalene	3.8	130	3.8	<0.23	<0.24	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.24	<0.24	<0.24	<0.25
Phenanthrene	None	None	None	0.25	0.24	0.25 J	0.19	0.51	1.4	0.42	0.23	0.20	0.42	0.32	0.14
Pyrene	None	1,800	1,800	0.75	0.69	0.91	0.52	1.7	2.5	1.6	0.83	0.94	1.2	0.96	0.51
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.53	0.47	0.67	0.37	1.10	1.80	1.40	0.65	0.60	0.79	0.68	0.38

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-08a	DTSC-08b	DTSC-08c	DTSC-08d	DTSC-9a	DTSC-9b	DTSC-9c	DTSC-9d	DTSC-10a	DTSC-10b	DTSC-10c	DTSC-10d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/20/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019
	UNITS ▶	UNITS ▶	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>															
Moisture content (CLP)	None	None	None	8.0	8.0	7.0	10	25	4.0	11	8.0	24	5.0	19	11
<i>CAM 17 Metals by USEPA 6010B/7471A</i>															
Antimony	None	31	31	0.32 J	<1.9	0.86 J	<2.0	0.11 J	1.0 J	0.32 J	0.14 J	<2.0	0.55 J	<2.0	0.12 J
Arsenic	16	16	16	3.6	5.0	5.6	3.6	4.3	4.2	4.5	4.1	4.4	4.2	4.0	4.7
Barium	None	15,000	15,000	59	71	71	48	85	70	77	75	82	72	73	84
Beryllium	1,600	15	15	0.22	0.27	0.22	0.23	0.27	0.24	0.28	0.24	0.28	0.23	0.26	0.26
Cadmium	2,100	5.2	5.2	0.095 J	0.29	0.16 J	0.25	0.18 J	0.14 J	0.19 J	0.15 J	0.24 J	0.17 J	0.15 J	0.20 J
Chromium, total	None	36,000	36,000	36	39	38	39	42	39	44	40	47	37	43	41
Cobalt	420	23	23	6.3	8.4	8.3	6.7	8.6	8.0	9.2	8.2	8.8	7.8	7.7	8.3
Copper	None	3,100	3,100	15	27	24	22	25	19	23	22	24	25	22	26
Lead	None	80	80	16	30	23	21	29	27	37	28	99	27	26	51
Mercury	None	1.00	1.00	0.087	0.096	0.12	0.10	0.14	0.15	0.14	0.16	0.16	0.16	0.11	0.19
Molybdenum	None	390	390	0.47	0.50	0.65	0.35	0.63	0.79	0.57	0.58	0.67	0.73	0.66	0.70
Nickel	15,000	490	490	33	37	37	31	43	38	53	44	44	38	42	39
Selenium	None	390	390	<2.0	<1.9	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	None	390	390	<0.25	0.074 J	<0.25	<0.25	<0.25	<0.24	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium	None	0.78	0.78	<0.50	<0.48	<0.50	<0.49	<0.50	<0.48	<0.50	<0.49	<0.49	<0.50	<0.50	<0.49
Vanadium	None	390	390	29	35	32	33	33	31	32	32	36	32	33	36
Zinc	None	23,000	23,000	41	64	62	49	64	53	69	58	62	60	56	68
<i>Organochlorine Pesticides by USEPA Method 8081A</i>															
Aldrin	0.039	2.3	0.039	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	5.1E-04 J
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	7.5E-04 CJ	<0.011	7.2E-04 CJ	9.6E-04 CJ	0.0019 CJ	0.0015 J	0.0012 CJ	0.0033 #CJ	0.0017 CJ	0.0015 CJ	0.0013 CJ	0.0017 CJ
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	<0.0056	<0.011	9.9E-04 J	0.0012 J	0.0023 J	0.0010 CJ	8.4E-04 CJ	0.0021 CJ	0.0017 CJ	0.0019 J	0.0021 CJ	0.0012 CJ
4,4'-DDD	2.3	1.9	1.9	<0.011	<0.022	0.0013 J	<0.011	<0.023	<0.011	<0.011	<0.011	0.0011 J	<0.022	0.0032 J	0.0013 CJ
4,4'-DDE	2.0	23	2.0	0.0016 J	<0.022	0.0021 J	0.0013 J	<0.023	<0.011	0.0028 J	9.8E-04 J	0.0015 J	0.0012 CJ	0.0011 J	0.0010 J
4,4'-DDT	1.9	37	1.9	<0.011	<0.022	0.0016 CJ	0.0024 J	0.0049 J	0.0055 CJ	0.0045 J	0.0049 #CJ	0.0027 J	0.0048 CJ	0.0024 J	0.0027 #CJ
Dieldrin	0.034	3.2	0.034	9.1E-04 J	<0.022	0.0014 J	<0.011	<0.023	0.0041 J	0.0021 CJ	4.6E-04 CJ	0.0015 J	0.0044 J	0.0020 J	0.0022 J
Endosulfan I	None	None	None	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
Endosulfan II	None	None	None	<0.011	<0.022	<0.011	<0.011	<0.023	<0.011	<0.011	<0.011	5.1E-04 CJ	<0.022	<0.011	<0.011
Endosulfan sulfate	None	None	None	<0.011	<0.022	<0.011	<0.011	<0.023	<0.011	<0.011	<0.011	<0.011	<0.022	7.4E-04 CJ	<0.011
Endrin	None	19	19	<0.011	<0.022	0.0010 J	<0.011	<0.023	4.3E-04 CJ	<0.011	5.7E-04 CJ	3.9E-04 CJ	<0.022	<0.011	<0.011
Endrin aldehyde	None	None	None	<0.011	<0.026	<0.011	<0.011	<0.023	0.0034 CJ	<0.011	<0.011	<0.011	<0.022	<0.011	<0.011
Heptachlor	0.13	39	0.13	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
Heptachlor epoxide	0.070	1.0	0.070	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	5.7E-04 J	<0.0056

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-08a	DTSC-08b	DTSC-08c	DTSC-08d	DTSC-9a	DTSC-9b	DTSC-9c	DTSC-9d	DTSC-10a	DTSC-10b	DTSC-10c	DTSC-10d	
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/20/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	
▼ ANALYTE	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
alpha-Hexachlorocyclohexane		0.086	510	0.086	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
beta-Hexachlorocyclohexane		0.30	None	0.30	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
delta-Hexachlorocyclohexane		None	None	None	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
gamma-Hexachlorocyclohexane (lindane)		0.57	21	0.57	<0.0056	<0.011	<0.0055	<0.0056	<0.011	<0.0057	<0.0056	<0.0054	<0.0057	<0.011	<0.0054	<0.0056
Methoxychlor		None	320	320	<0.056	<0.11	<0.055	<0.056	<0.11	<0.057	<0.056	<0.054	<0.057	<0.11	<0.054	<0.056
Toxaphene		0.49	5.7	0.49	<0.20	<0.39	<0.20	<0.20	<0.41	<0.21	<0.20	<0.20	<0.20	<0.39	<0.20	<0.20
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>																
Aroclor-1016		6.7	4.1	4.1	<0.013	<0.013	<0.013	<0.013	<0.014	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013
Aroclor-1221		0.20	None	0.20	<0.027	<0.026	<0.027	<0.027	<0.027	<0.028	<0.027	<0.026	<0.027	<0.026	<0.026	<0.027
Aroclor-1232		0.17	None	0.17	<0.013	<0.013	<0.013	<0.013	<0.014	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013
Aroclor-1242		0.23	None	0.23	<0.013	<0.013	<0.013	<0.013	<0.014	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013
Aroclor-1248		0.23	None	0.23	<0.013	<0.013	<0.013	<0.013	<0.014	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013
Aroclor-1254		0.24	1.2	0.24	<0.013	<0.013	<0.013	--	<0.014	<0.014	<0.013	<0.013	<0.014	<0.013	<0.013	<0.013
Aroclor-1260		0.24	None	0.24	<0.013	0.0083 J	0.022	0.010 J	0.023	0.062	0.020	0.028	0.015	0.035	0.011 J	0.017
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>																
TPH-g		None	100	100	0.95 J	1.1 J	0.83 J	1.7 J	1.1 J	0.84 J	0.87 J	0.65 J	1.1 J	0.67 J	2.3 J	0.79 J
TPH-d		None	260	260	68 Y	54 Y	71 Y	89 Y	40 Y	40 Y	43 Y	40 Y	33 Y	53 Y	6.7 Y	61 Y
TPH-mo		None	1,600	1,600	--	--	--	<0.013	--	--	--	--	--	--	--	--
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>																
Acetone		None	61,000	61,000	<1.0	<0.90	<1.0	<0.92	<1.2	<0.90	<1.0	<0.94	<1.1	<0.97	<1.0	<0.94
Benzene		0.33	11	0.33	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Bromobenzene		None	290	290	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Bromodichloromethane		0.29	270	0.29	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Bromoform		19	1,600	19	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Bromomethane (methyl bromide)		None	6.8	6.8	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
2-Butanone (methyl ethyl ketone)		None	27,000	27,000	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
n-Butylbenzene		None	3,900	3,900	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
sec-Butylbenzene		None	2,200	2,200	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
tert-Butylbenzene		None	2,200	2,200	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Carbon disulfide		None	770	770	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Carbon tetrachloride		0.098	100	0.098	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Chlorobenzene		None	280	280	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Chlorobromomethane (bromochloromethane)		None	150	150	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Chlorodibromomethane (dibromochloromethane)		0.94	470	0.94	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Chloroethane (ethyl chloride)		None	14,000	14,000	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
Chloroform		0.32	200	0.32	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-08a	DTSC-08b	DTSC-08c	DTSC-08d	DTSC-9a	DTSC-9b	DTSC-9c	DTSC-9d	DTSC-10a	DTSC-10b	DTSC-10c	DTSC-10d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/20/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
2-Chlorotoluene	None	470	470	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
4-Chlorotoluene	None	440	440	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Cumene (isopropylbenzene)	None	1,900	1,900	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Cymene (p-isopropyltoluene)	None	None	None	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Dibromomethane (methylene bromide)	None	24	24	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2-Dichlorobenzene	None	1,800	1,800	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,3-Dichlorobenzene	None	None	None	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.3	<1.1	<1.3	<1.1	<1.5	<1.1	<1.3	<1.2	<1.4	<1.2	<1.3	<1.2
1,2-Dichloropropane	2.5	16	2.5	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,3-Dichloropropane	None	410	410	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
2,2-Dichloropropane	None	None	None	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1-Dichloropropene	None	None	None	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
cis-1,3-Dichloropropene	0.58	72	0.58	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
trans-1,3-Dichloropropene	0.58	72	0.58	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Ethylbenzene	5.8	3,400	5.8	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Hexachlorobutadiene	1.2	78	1.2	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
2-Hexanone (methyl butyl ketone)	None	200	200	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
Naphthalene	3.8	130	3.8	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
n-Propylbenzene	None	3,800	3,800	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Styrene	None	6,000	6,000	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Tetrachloroethene (PCE)	0.59	81	0.59	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Toluene	None	1,100	1,100	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-08a	DTSC-08b	DTSC-08c	DTSC-08d	DTSC-9a	DTSC-9b	DTSC-9c	DTSC-9d	DTSC-10a	DTSC-10b	DTSC-10c	DTSC-10d
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/20/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	None	63	63	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2,4-Trichlorobenzene	24	58	24	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Trichloroethene (TCE)	0.94	4.1	0.94	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,2,4-Trimethylbenzene	None	300	300	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
1,3,5-Trimethylbenzene	None	270	270	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Vinyl acetate	None	910	910	<2.6	<2.2	<2.6	<2.3	<3.0	<2.2	<2.6	<2.4	<2.7	<2.4	<2.5	<2.4
Vinyl chloride	0.0087	70	0.0087	<0.52	<0.45	<0.52	<0.46	<0.61	<0.45	<0.51	<0.47	<0.54	<0.49	<0.51	<0.47
m-, p-Xylene	None	550	550	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
o-Xylene	None	650	650	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>															
Acenaphthene	None	3,600	3,600	0.040 J	<0.13	0.027 J	<0.055	0.022 J	<0.10	0.020 J	<0.055	<0.11	0.012 J	<0.062	<0.056
Acenaphthylene	None	None	None	0.037 J	0.065 J	0.014 J	0.039 J	0.047 J	0.038 J	0.036 J	0.020 J	0.040 J	0.033 J	0.019 J	0.040 J
Anthracene	None	18,000	18,000	0.085	0.058 J	0.049 J	0.035 J	0.071	0.054 J	0.065 J	0.026 J	0.046 J	0.047 J	0.027 J	0.033 J
Benz(a)anthracene	*	None	*	0.29	0.26	0.19	0.14	0.23	0.19	0.25	0.12	0.20	0.20	0.078	0.17
Benzo(a)pyrene	*	18	18	0.48	0.41	0.30	0.24	0.31	0.28	0.31	0.19	0.32	0.30	0.12	0.30
Benzo(b)fluoranthene	*	None	*	0.62	0.43	0.35	0.29	0.39	0.26	0.40	0.19	0.39	0.35	0.15	0.29
Benzo(g,h,i)perylene	None	None	None	0.41	0.42	0.14	0.21	0.25	0.24	0.23	0.20	0.27	0.26	0.097	0.29
Benzo(k)fluoranthene	*	None	*	0.17	0.13 J	0.098	0.087	0.13	0.10 J	0.13	0.083	0.12	0.12	0.040 J	0.093
Chrysene	*	None	*	0.35	0.33	0.25	0.17	0.27	0.22	0.28	0.15	0.24	0.26	0.093	0.21
Dibenz(a,h)anthracene	*	None	*	0.055	0.053 J	0.026 J	0.027 J	0.040 J	0.034 J	0.038 J	0.030 J	0.037 J	0.041 J	<0.062	0.039 J
Fluoranthene	None	2,400	2,400	0.55	0.50	0.39	0.27	0.46	0.40	0.44	0.23	0.36	0.36	0.16	0.31
Fluorene	None	2,400	2,400	0.029 J	<0.13	0.018 J	<0.055	0.021 J	<0.10	<0.093	<0.055	<0.11	0.012 J	<0.062	<0.056
Indeno(1,2,3-c,d)pyrene	*	None	None	0.29	0.28	0.13	0.14	0.18	0.16	0.16	0.14	0.18	0.18	0.058 J	0.21
Naphthalene	3.8	130	3.8	<0.26	<0.22	<0.26	<0.23	<0.30	<0.22	<0.26	<0.24	<0.27	<0.24	<0.25	<0.24
Phenanthrene	None	None	None	0.30	0.25	0.20	0.13	0.33	0.22	0.25	0.10	0.16	0.19	0.11	0.11
Pyrene	None	1,800	1,800	1.3	0.84	0.57	0.51	0.69	0.51	0.65	0.33	0.58	0.56	0.27	0.48
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.66	0.56	0.39	0.32	0.44	0.37	0.43	0.27	0.44	0.42	0.18	0.41

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-11a	DTSC-11b	DTSC-11c	DTSC-11d	DTSC-12a	DTSC-12b	DTSC-12c	DTSC-12d	DTSC-17a	DTSC-17b	DTSC-17c	DTSC-17d
	CA	NC		05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
▼ ANALYTE	UNITS ▶														
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>															
Moisture content (CLP)	None	None	None	25	9.0	11	17	9.0	8.0	11	21	8.0	8.0	7.0	10
<i>CAM 17 Metals by USEPA 6010B/7471A</i>															
Antimony	None	31	31	0.024	0.12 J	0.12 J	0.27 J	0.13 J	0.15 J	0.20 J	0.30 J	<2.0	<2.0	<2.0	<2.0
Arsenic	16	16	16	0.10	5.6	3.5	5.1	3.1	4.4	3.2	5.1	5.4	4.2	6.2	3.7
Barium	None	15,000	15,000	0.095	98	70	96	44	94	59	100	110	70	83	69
Beryllium	1,600	15	15	0.095	0.31	0.23	0.27	0.18	0.25	0.20	0.31	0.36	0.26	0.33	0.31
Cadmium	2,100	5.2	5.2	0.099	0.25	0.19 J	0.27	0.16 J	0.46	0.16 J	0.36	0.32	0.26	0.33	0.22 J
Chromium, total	None	36,000	36,000	0.11	43	40	41	32	40	39	44	48	39	41	37
Cobalt	420	23	23	0.094	9.4	6.8	8.8	5.8	8.5	6.0	9.1	9.1	7.1	9.0	6.8
Copper	None	3,100	3,100	0.10	30	20	29	17	40	32	51	26	21	29	17
Lead	None	80	80	0.087	33	23	31	22	52	29	33	30	25	25	22
Mercury	None	1.00	1.00	0.12	0.20	0.12	0.040	0.13	0.24	0.16	0.52	0.21	0.12	0.16	0.13
Molybdenum	None	390	390	0.090	0.90	0.52	0.73	0.42	1.1	0.41	0.81	0.91	0.58	0.54	0.42
Nickel	15,000	490	490	0.099	44	37	41	29	44	33	42	44	37	44	38
Selenium	None	390	390	0.096	<1.9	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	None	390	390	0.097	<0.24	<0.25	<0.25	<0.25	<0.24	<0.25	<0.25	0.11 J	<0.25	<0.24	<0.25
Thallium	None	0.78	0.78	0.091	<0.49	<0.50	<0.50	<0.49	<0.48	<0.49	<0.49	<0.50	<0.50	<0.49	<0.50
Vanadium	None	390	390	0.10	41	32	39	23	36	28	43	42	31	39	31
Zinc	None	23,000	23,000	0.098	78	49	72	48	77	50	70	63	51	62	48
<i>Organochlorine Pesticides by USEPA Method 8081A</i>															
Aldrin	0.039	2.3	0.039	<0.0056	6.2E-04 CJ	<0.011	9.7E-04 CJ	0.092	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0015 CJ	0.0059 CJ	0.0052 CJ	0.013 C	0.0016 CJ	0.024 CJ	0.0010 CJ	<0.11	0.0027 CJ	0.0017 CJ	<0.0054	0.0015 CJ
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	0.0011 CJ	0.0075 J	0.0040 CJ	0.012 C	0.0018 J	0.033 J	<0.0056	0.015 CJ	<0.011	0.0023 J	<0.0054	0.0018 CJ
4,4'-DDD	2.3	1.9	1.9	<0.011	0.0019 CJ	0.0012 CJ	0.0054 CJ	<0.011	<0.22	<0.011	<0.22	<0.023	<0.022	<0.011	<0.022
4,4'-DDE	2.0	23	2.0	6.7E-04 CJ	0.0046 J	0.0011 CJ	0.0071 CJ	<0.011	<0.22	0.0010 J	<0.22	<0.023	<0.022	<0.011	<0.022
4,4'-DDT	1.9	37	1.9	0.0017 J	0.0035 CJ	0.0054 J	0.13 #	0.12	0.31	<0.011	0.91	0.0046 J	<0.022	<0.011 #ND	<0.022
Dieldrin	0.034	3.2	0.034	<0.011	0.0024 J	0.0015 J	0.027 C	0.097	0.062 CJ	<0.011	0.17 CJ	<0.023	9.7E-04 J	<0.011	9.2E-04 CJ
Endosulfan I	None	None	None	<0.0056	<0.011	<0.011	<0.011	<0.0056	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
Endosulfan II	None	None	None	<0.011	<0.022	<0.022	0.0010 CJ	<0.011	<0.22	<0.011	<0.22	<0.023	<0.022	<0.011	<0.022
Endosulfan sulfate	None	None	None	9.2E-04 CJ	<0.022	0.0024 CJ	<0.023	<0.011	<0.22	0.0011 CJ	<0.22	<0.023	<0.022	<0.011	<0.022
Endrin	None	19	19	<0.011	<0.022	0.0022 J	<0.023	0.11	0.041 CJ	<0.011	<0.22	<0.023	<0.022	<0.011	<0.022
Endrin aldehyde	None	None	None	<0.011	<0.022	<0.022	0.013 #CJ	<0.011	<0.22	<0.011	0.074 CJ	<0.027	<0.022	<0.013	<0.022
Heptachlor	0.13	39	0.13	<0.0056	<0.011	<0.011	0.0022 CJ	0.088	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
Heptachlor epoxide	0.070	1.0	0.070	<0.0056	0.0017 CJ	<0.011	<0.011	<0.0056	0.019 CJ	<0.0056	0.040 CJ	<0.011	<0.011	<0.0054	<0.011

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-11a	DTSC-11b	DTSC-11c	DTSC-11d	DTSC-12a	DTSC-12b	DTSC-12c	DTSC-12d	DTSC-17a	DTSC-17b	DTSC-17c	DTSC-17d	
	CA	NC		05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	
▼ ANALYTE	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
alpha-Hexachlorocyclohexane		0.086	510	0.086	<0.0056	<0.011	<0.011	<0.011	<0.0056	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
beta-Hexachlorocyclohexane		0.30	None	0.30	<0.0056	<0.011	<0.011	<0.011	<0.0056	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
delta-Hexachlorocyclohexane		None	None	None	<0.0056	<0.011	<0.011	<0.011	<0.0056	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
gamma-Hexachlorocyclohexane (lindane)		0.57	21	0.57	<0.0056	<0.011	<0.011	<0.011	0.11	<0.11	<0.0056	<0.11	<0.011	<0.011	<0.0054	<0.011
Methoxychlor		None	320	320	<0.056	<0.11	<0.11	<0.11	<0.056	<1.1	<0.056	<1.1	<0.11	<0.11	<0.054	<0.11
Toxaphene		0.49	5.7	0.49	<0.20	<0.39	<0.39	<0.41	<0.20	<4.0	<0.20	<4.0	<0.41	<0.40	<0.20	<0.40
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>																
Aroclor-1016		6.7	4.1	4.1	<0.014	<0.020	<0.020	<0.020	0.089	<0.020	<0.013	<0.33	<0.014	<0.013	<0.013	<0.013
Aroclor-1221		0.20	None	0.20	<0.027	<0.039	<0.039	<0.041	<0.027	<0.040	<0.027	<0.66	<0.027	<0.026	<0.026	<0.026
Aroclor-1232		0.17	None	0.17	<0.014	<0.020	<0.020	<0.020	<0.014	<0.020	<0.013	<0.33	<0.014	<0.013	<0.013	<0.013
Aroclor-1242		0.23	None	0.23	<0.014	<0.020	<0.020	<0.020	<0.014	<0.020	<0.013	<0.33	<0.014	<0.013	<0.013	<0.013
Aroclor-1248		0.23	None	0.23	<0.014	<0.020	<0.020	<0.020	<0.014	<0.020	<0.013	<0.33	<0.014	<0.013	<0.013	<0.013
Aroclor-1254		0.24	1.2	0.24	<0.014	<0.020	<0.020	<0.020	<0.014	<0.020	<0.013	2.2	<0.014	<0.013	<0.013	<0.013
Aroclor-1260		0.24	None	0.24	0.012 J	0.045	0.025	0.64	0.090	1.6	0.010 J	4.6	0.024	0.017	0.014	0.030
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>																
TPH-g		None	100	100	1.1 J	0.73 J	0.81 J	0.71 J	1.1 J	0.84 J	0.98 J	1.4 J	1.2 J	1.2 J	1.0 J	1.4 J
TPH-d		None	260	260	19 Y	91 Y	45 Y	100 Y	41 Y	80 Y	37 Y	81 Y	47 Y	35 Y	30 Y	28 Y
TPH-mo		None	1,600	1,600	--	--	--	--	--	--	--	--	--	--	--	--
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>																
Acetone		None	61,000	61,000	<1.3	<1.0	<1.1	<1.1	<1.1	<0.94	<1.1	<1.1	<0.81	<0.99	<0.96	<0.97
Benzene		0.33	11	0.33	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Bromobenzene		None	290	290	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Bromodichloromethane		0.29	270	0.29	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Bromoform		19	1,600	19	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Bromomethane (methyl bromide)		None	6.8	6.8	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
2-Butanone (methyl ethyl ketone)		None	27,000	27,000	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
n-Butylbenzene		None	3,900	3,900	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
sec-Butylbenzene		None	2,200	2,200	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
tert-Butylbenzene		None	2,200	2,200	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Carbon disulfide		None	770	770	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Carbon tetrachloride		0.098	100	0.098	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Chlorobenzene		None	280	280	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Chlorobromomethane (bromochloromethane)		None	150	150	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Chlorodibromomethane (dibromochloromethane)		0.94	470	0.94	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Chloroethane (ethyl chloride)		None	14,000	14,000	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
Chloroform		0.32	200	0.32	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ ▼ ANALYTE UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-11a	DTSC-11b	DTSC-11c	DTSC-11d	DTSC-12a	DTSC-12b	DTSC-12c	DTSC-12d	DTSC-17a	DTSC-17b	DTSC-17c	DTSC-17d
	CA	NC		05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
2-Chlorotoluene	None	470	470	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
4-Chlorotoluene	None	440	440	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Cumene (isopropylbenzene)	None	1,900	1,900	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Cymene (p-isopropyltoluene)	None	None	None	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Dibromomethane (methylene bromide)	None	24	24	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2-Dichlorobenzene	None	1,800	1,800	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,3-Dichlorobenzene	None	None	None	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.6	<1.3	<1.3	<1.3	<1.3	<1.2	<1.4	<1.3	<1.0	<1.2	<1.2	<1.2
1,2-Dichloropropane	2.5	16	2.5	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,3-Dichloropropane	None	410	410	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
2,2-Dichloropropane	None	None	None	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1-Dichloropropene	None	None	None	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
cis-1,3-Dichloropropene	0.58	72	0.58	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
trans-1,3-Dichloropropene	0.58	72	0.58	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Ethylbenzene	5.8	3,400	5.8	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Hexachlorobutadiene	1.2	78	1.2	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
2-Hexanone (methyl butyl ketone)	None	200	200	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
Naphthalene	3.8	130	3.8	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
n-Propylbenzene	None	3,800	3,800	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Styrene	None	6,000	6,000	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Tetrachloroethene (PCE)	0.59	81	0.59	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Toluene	None	1,100	1,100	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-11a	DTSC-11b	DTSC-11c	DTSC-11d	DTSC-12a	DTSC-12b	DTSC-12c	DTSC-12d	DTSC-17a	DTSC-17b	DTSC-17c	DTSC-17d
	CA	NC		05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/15/2019	05/03/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	None	63	63	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2,4-Trichlorobenzene	24	58	24	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Trichloroethene (TCE)	0.94	4.1	0.94	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,2,4-Trimethylbenzene	None	300	300	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
1,3,5-Trimethylbenzene	None	270	270	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Vinyl acetate	None	910	910	<3.1	<2.5	<2.6	<2.7	<2.6	<2.4	<2.7	<2.7	<2.0	<2.5	<2.4	<2.4
Vinyl chloride	0.0087	70	0.0087	<0.63	<0.51	<0.53	<0.54	<0.53	<0.47	<0.54	<0.53	<0.41	<0.49	<0.48	<0.49
m-, p-Xylene	None	550	550	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
o-Xylene	None	650	650	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>															
Acenaphthene	None	3,600	3,600	0.015 J	<0.18	<0.28	0.14 J	<0.055	<0.11	0.018 J	<0.21	<0.27	<0.090	<0.054	<0.055
Acenaphthylene	None	None	None	0.039 J	<0.18	0.11 J	<0.30	0.081	<0.11	0.18	<0.21	0.082 J	0.054 J	0.028 J	0.032 J
Anthracene	None	18,000	18,000	0.052 J	0.045 J	0.096 J	0.078 J	0.052 J	0.036 J	0.19	0.052 J	0.14 J	0.070 J	0.033 J	0.034 J
Benz(a)anthracene	*	None	*	0.18	0.26	0.53	0.30 J	0.20	0.13	0.53	0.37	1.1	0.24	0.16	0.15
Benzo(a)pyrene	*	18	18	0.27	0.34	0.99	0.35	0.36	0.19	0.74	0.37	1.6	0.37	0.26	0.24
Benzo(b)fluoranthene	*	None	*	0.32	0.41	1.1	0.35	0.39	0.21	0.73	0.43	1.7	0.42	0.28	0.28
Benzo(g,h,i)perylene	None	None	None	0.21	0.31	0.70	0.36	0.30	0.17	0.64	0.26	1.3	0.32	0.26	0.24
Benzo(k)fluoranthene	*	None	*	0.094	0.15 J	0.29	0.13 J	0.11	0.069 J	0.23	0.15 J	0.46	0.13	0.091	0.075
Chrysene	*	None	*	0.20	0.30	0.70	0.35	0.26	0.18	0.59	0.38	1.9	0.28	0.19	0.18
Dibenz(a,h)anthracene	*	None	*	0.029 J	0.046 J	0.084 J	<0.30	0.039 J	0.025 J	0.091	0.052 J	0.15 J	0.044 J	0.034 J	0.033 J
Fluoranthene	None	2,400	2,400	0.34	0.41	1.3	0.58	0.38	0.27	1.1	0.58	3.0	0.55	0.29	0.28
Fluorene	None	2,400	2,400	0.015 J	<0.18	<0.28	0.063 J	0.012 J	<0.11	0.053 J	<0.21	<0.27	<0.090	<0.054	<0.055
Indeno(1,2,3-c,d)pyrene	*	None	None	0.15	0.20	0.48	0.20 J	0.21	0.098 J	0.46	0.17 J	0.98	0.22	0.18	0.16
Naphthalene	3.8	130	3.8	<0.31	<0.25	<0.26	<0.27	<0.26	<0.24	<0.27	<0.27	<0.20	<0.25	<0.24	<0.24
Phenanthrene	None	None	None	0.18	0.19	0.25 J	0.34	0.18	0.13	0.83	0.22	0.43	0.34	0.13	0.14
Pyrene	None	1,800	1,800	0.56	0.60	2.0	0.74	0.68	0.39	1.8	0.72	4.6	0.86	0.48	0.47
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.36	0.48	1.30	0.59	0.48	0.26	1.00	0.52	2.10	0.50	0.35	0.33

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-18a	DTSC-18b	DTSC-18c	DTSC-18d	DTSC-19a	DTSC-19b	DTSC-19c	DTSC-19d	DTSC-20a	DTSC-20b	DTSC-20c	DTSC-20d
	CA	NC		03/20/2019	03/20/2019	03/20/2019	03/20/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
▼ ANALYTE	UNITS ▶														
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>															
Moisture content (CLP)	None	None	None	15	14	14	14	11	12	7.0	12	10	30	8.0	19
<i>CAM 17 Metals by USEPA 6010B/7471A</i>															
Antimony	None	31	31	0.20 J	0.32 J	0.21 J	0.40 J	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0
Arsenic	16	16	16	4.4	4.2	5.0	5.3	5.4	4.9	9.0	4.8	4.5	5.1	6.3	4.7
Barium	None	15,000	15,000	74	75	87	86	82	82	98	81	62	68	83	77
Beryllium	1,600	15	15	0.25	0.23	0.25	0.28	0.32	0.31	0.36	0.32	0.23	0.29	0.31	0.31
Cadmium	2,100	5.2	5.2	0.22 J	0.18 J	0.22 J	0.27	0.29	0.38	0.35	0.34	0.42	0.34	0.32	0.28
Chromium, total	None	36,000	36,000	38	35	39	41	44	40	44	41	36	46	45	40
Cobalt	420	23	23	8.5	8.2	8.4	9.2	7.9	8.1	8.9	8.5	7.7	8.6	8.1	7.6
Copper	None	3,100	3,100	26	23	27	29	25	28	29	25	25	28	29	22
Lead	None	80	80	27	26	47	31	27	26	32	25	33	24	33	22
Mercury	None	1.00	1.00	0.18	0.15	0.17	0.25	0.21	0.12	0.18	0.14	0.17	0.34	0.22	0.13
Molybdenum	None	390	390	0.69	0.68	0.78	0.81	0.53	0.54	0.77	0.59	0.71	0.51	0.71	0.58
Nickel	15,000	490	490	43	39	42	46	42	39	43	38	31	36	37	39
Selenium	None	390	390	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0
Silver	None	390	390	<0.25	<0.25	<0.25	<0.25	0.17 J	<0.25	0.065 J	<0.25	0.051 J	<0.25	0.10 J	<0.25
Thallium	None	0.78	0.78	<0.49	<0.50	<0.49	<0.50	<0.50	<0.50	<0.49	<0.50	<0.49	<0.49	<0.50	<0.50
Vanadium	None	390	390	32	31	33	37	37	37	42	38	32	40	41	35
Zinc	None	23,000	23,000	63	58	65	70	63	64	67	61	76	60	65	55
<i>Organochlorine Pesticides by USEPA Method 8081A</i>															
Aldrin	0.039	2.3	0.039	<0.0055	<0.0055	<0.0055	<0.011	3.0E-04 CJ	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0022 CJ	0.0020 CJ	0.0041 CJ	0.0031 CJ	0.0026 CJ	0.0021 CJ	0.0038 CJ	0.0020 CJ	<0.011	<0.011	<0.011	<0.011
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	<0.0055	<0.0055	7.6E-04 CJ	0.0037 J	0.0030 J	0.0023 J	0.0039 J	0.0016 CJ	<0.011	0.0018 J	<0.011	0.0015 CJ
4,4'-DDD	2.3	1.9	1.9	0.0030 J	0.0022 J	0.0019 CJ	0.0050 J	8.0E-04 CJ	<0.022	0.010 CJ	0.0053 CJ	0.0046 CJ	<0.022	<0.022	<0.022
4,4'-DDE	2.0	23	2.0	<0.011	0.0015 CJ	<0.011	0.0048 J	6.6E-04 CJ	0.0029 CJ	<0.023	0.0023 J	0.0023 J	0.0010 CJ	<0.022	<0.022
4,4'-DDT	1.9	37	1.9	0.0020 J	<0.011	<0.011	0.013 J	0.0028 J	0.0072 J	<0.023	0.0025 CJ	0.0046 J	<0.022	0.0082 J	0.0067 J
Dieldrin	0.034	3.2	0.034	0.0014 CJ	0.0017 CJ	<0.011	<0.022	0.0016 J	0.0021 J	0.0023 CJ	<0.023	<0.022	<0.022	<0.022	9.2E-04 CJ
Endosulfan I	None	None	None	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Endosulfan II	None	None	None	7.4E-04 CJ	<0.011	<0.011	<0.022	<0.011	<0.022	<0.023	<0.023	<0.022	<0.022	<0.022	<0.022
Endosulfan sulfate	None	None	None	<0.011	<0.011	0.0011 CJ	<0.022	<0.011	<0.022	<0.023	0.0012 CJ	<0.022	<0.022	<0.022	0.0044 CJ
Endrin	None	19	19	<0.011 #ND	<0.011	0.0015 #CJ	9.8E-04 CJ	<0.011	0.0032 J	<0.023	<0.023	<0.022	<0.022	<0.022	<0.022
Endrin aldehyde	None	None	None	<0.011	<0.011	<0.011	<0.022	<0.011	<0.022	<0.027	<0.023	<0.022	<0.022	<0.027	<0.022
Heptachlor	0.13	39	0.13	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Heptachlor epoxide	0.070	1.0	0.070	<0.0055	<0.0055	8.8E-04 CJ	<0.011	<0.0055	0.0012 CJ	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-18a	DTSC-18b	DTSC-18c	DTSC-18d	DTSC-19a	DTSC-19b	DTSC-19c	DTSC-19d	DTSC-20a	DTSC-20b	DTSC-20c	DTSC-20d	
	CA	NC		03/20/2019	03/20/2019	03/20/2019	03/20/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	
	UNITS ▶	UNITS ▶	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
▼ ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
alpha-Hexachlorocyclohexane	0.086	510	0.086	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
beta-Hexachlorocyclohexane	0.30	None	0.30	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
delta-Hexachlorocyclohexane	None	None	None	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
gamma-Hexachlorocyclohexane (lindane)	0.57	21	0.57	<0.0055	<0.0055	<0.0055	<0.011	<0.0055	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
Methoxychlor	None	320	320	<0.055	<0.055	<0.055	<0.11	<0.055	<0.11	<0.11 #ND	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Toxaphene	0.49	5.7	0.49	<0.20	<0.20	<0.20	<0.39	<0.20	<0.39	<0.41	<0.41	<0.39	<0.40	<0.40	<0.40	<0.40
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>																
Aroclor-1016	6.7	4.1	4.1	<0.020	<0.020	<0.020	<0.019	<0.020	<0.013	<0.014	<0.014	<0.020	<0.013	<0.013	<0.013	<0.013
Aroclor-1221	0.20	None	0.20	<0.040	<0.039	<0.039	<0.039	<0.039	<0.026	<0.027	<0.027	<0.039	<0.027	<0.027	<0.027	<0.027
Aroclor-1232	0.17	None	0.17	<0.020	<0.020	<0.020	<0.019	<0.020	<0.013	<0.014	<0.014	<0.020	<0.013	<0.013	<0.013	<0.013
Aroclor-1242	0.23	None	0.23	<0.020	<0.020	<0.020	<0.019	<0.020	<0.013	<0.014	<0.014	<0.020	<0.013	<0.013	<0.013	<0.013
Aroclor-1248	0.23	None	0.23	<0.020	<0.020	<0.020	<0.019	<0.020	<0.013	<0.014	<0.014	<0.020	<0.013	<0.013	<0.013	<0.013
Aroclor-1254	0.24	1.2	0.24	0.019 J	0.020 J	0.044	0.020	<0.020	<0.013	0.041	<0.014	<0.020	<0.013	0.039	<0.013	<0.013
Aroclor-1260	0.24	None	0.24	0.021	0.031	0.043	0.040	0.024	0.061	0.042	0.033	0.038	0.015	0.034	0.017	0.017
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>																
TPH-g	None	100	100	1.8 J	2.1 J	0.91 J	1.3 J	1.6 J	1.5 J	1.4 J	1.1 J	1.4 J	1.3 J	0.86 J	1.8 J	1.8 J
TPH-d	None	260	260	39 Y	26 Y	43 Y	38 Y	33 Y	53 Y	27 Y	38 Y	66 Y	55 Y	56 Y	200 Y	200 Y
TPH-mo	None	1,600	1,600	--	--	--	--	--	--	--	--	--	--	--	--	--
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>																
Acetone	None	61,000	61,000	<1.0	0.12 J	<0.91	<0.96	<1.0	<1.0	<1.1	<1.0	<0.94	<1.2	<0.89	<1.2	<1.2
Benzene	0.33	11	0.33	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Bromobenzene	None	290	290	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Bromodichloromethane	0.29	270	0.29	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Bromoform	19	1,600	19	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Bromomethane (methyl bromide)	None	6.8	6.8	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61	<0.61
2-Butanone (methyl ethyl ketone)	None	27,000	27,000	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61	<0.61
n-Butylbenzene	None	3,900	3,900	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
sec-Butylbenzene	None	2,200	2,200	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
tert-Butylbenzene	None	2,200	2,200	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Carbon disulfide	None	770	770	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Carbon tetrachloride	0.098	100	0.098	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Chlorobenzene	None	280	280	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Chlorobromomethane (bromochloromethane)	None	150	150	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Chlorodibromomethane (dibromochloromethane)	0.94	470	0.94	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30
Chloroethane (ethyl chloride)	None	14,000	14,000	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61	<0.61
Chloroform	0.32	200	0.32	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30	<0.30

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ ▼ ANALYTE UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-18a	DTSC-18b	DTSC-18c	DTSC-18d	DTSC-19a	DTSC-19b	DTSC-19c	DTSC-19d	DTSC-20a	DTSC-20b	DTSC-20c	DTSC-20d
	CA	NC		03/20/2019	03/20/2019	03/20/2019	03/20/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61
2-Chlorotoluene	None	470	470	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
4-Chlorotoluene	None	440	440	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Cumene (isopropylbenzene)	None	1,900	1,900	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Cymene (p-isopropyltoluene)	None	None	None	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Dibromomethane (methylene bromide)	None	24	24	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2-Dichlorobenzene	None	1,800	1,800	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,3-Dichlorobenzene	None	None	None	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.3	<1.2	<1.1	<1.2	<1.3	<1.2	<1.3	<1.3	<1.2	<1.5	<1.1	<1.5
1,2-Dichloropropane	2.5	16	2.5	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,3-Dichloropropane	None	410	410	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
2,2-Dichloropropane	None	None	None	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1-Dichloropropene	None	None	None	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
cis-1,3-Dichloropropene	0.58	72	0.58	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
trans-1,3-Dichloropropene	0.58	72	0.58	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Ethylbenzene	5.8	3,400	5.8	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Hexachlorobutadiene	1.2	78	1.2	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
2-Hexanone (methyl butyl ketone)	None	200	200	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61
Naphthalene	3.8	130	3.8	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
n-Propylbenzene	None	3,800	3,800	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Styrene	None	6,000	6,000	0.061 J	0.057 J	0.058 J	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Tetrachloroethene (PCE)	0.59	81	0.59	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Toluene	None	1,100	1,100	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-18a	DTSC-18b	DTSC-18c	DTSC-18d	DTSC-19a	DTSC-19b	DTSC-19c	DTSC-19d	DTSC-20a	DTSC-20b	DTSC-20c	DTSC-20d
	CA	NC		03/20/2019	03/20/2019	03/20/2019	03/20/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019	05/17/2019	05/16/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	None	63	63	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2,4-Trichlorobenzene	24	58	24	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Trichloroethene (TCE)	0.94	4.1	0.94	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,2,4-Trimethylbenzene	None	300	300	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
1,3,5-Trimethylbenzene	None	270	270	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Vinyl acetate	None	910	910	<2.5	<2.4	<2.3	<2.4	<2.5	<2.5	<2.7	<2.6	<2.3	<3.1	<2.2	<3.0
Vinyl chloride	0.0087	70	0.0087	<0.51	<0.47	<0.45	<0.48	<0.51	<0.50	<0.54	<0.52	<0.47	<0.61	<0.45	<0.61
m-, p-Xylene	None	550	550	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
o-Xylene	None	650	650	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>															
Acenaphthene	None	3,600	3,600	0.035 J	<0.13	0.034 J	<0.49	0.024 J	0.053 J	<0.13	<0.095	<0.14	0.031 J	0.027 J	0.25 J
Acenaphthylene	None	None	None	0.085 J	0.048 J	0.19	0.17 J	0.23	0.037 J	0.18	0.025 J	0.060 J	0.15	0.073	1.8
Anthracene	None	18,000	18,000	0.10 J	0.053 J	0.18	0.24 J	0.22	0.095	0.11 J	0.030 J	0.11 J	0.16	0.084	1.3
Benz(a)anthracene	*	None	*	0.40	0.29	0.71	0.76	0.68	0.32	0.49	0.14	0.32	0.53	0.32	4.0
Benzo(a)pyrene	*	18	18	0.63	0.44	0.98	1.1	0.94	0.39	0.86	0.23	0.51	0.77	0.53	6.7
Benzo(b)fluoranthene	*	None	*	0.68	0.51	1.1	1.1	0.98	0.50	0.90	0.29	0.52	0.84	0.59	6.8
Benzo(g,h,i)perylene	None	None	None	0.65	0.46	0.88	0.96	0.66	0.31	0.76	0.24	0.37	0.59	0.46	5.4
Benzo(k)fluoranthene	*	None	*	0.33	0.24	0.49	0.52	0.30	0.16	0.24	0.078 J	0.18	0.25	0.17	2.1
Chrysene	*	None	*	0.51	0.35	0.80	0.90	0.70	0.39	0.58	0.18	0.39	0.61	0.37	4.7
Dibenz(a,h)anthracene	*	None	*	0.078 J	0.052 J	0.13	0.13 J	0.099	0.051 J	0.098 J	0.032 J	0.050 J	0.082	0.063	0.71
Fluoranthene	None	2,400	2,400	0.81	0.55	1.4	1.7	1.3	0.62	0.89	0.26	0.68	1.1	0.55	7.1
Fluorene	None	2,400	2,400	0.036 J	<0.13	0.047 J	<0.49	0.071	0.037 J	0.031 J	<0.095	0.036 J	0.042 J	0.026 J	0.35
Indeno(1,2,3-c,d)pyrene	*	None	None	0.45	0.32	0.62	0.65	0.52	0.22	0.54	0.15	0.24	0.44	0.33	4.1
Naphthalene	3.8	130	3.8	<0.25	<0.24	<0.23	<0.24	<0.25	<0.25	<0.27	<0.26	<0.23	<0.31	<0.22	<0.30
Phenanthrene	None	None	None	0.46	0.21	0.76	1.1	0.97	0.41	0.43	0.11	0.46	0.71	0.29	4.9
Pyrene	None	1,800	1,800	1.2	0.81	2.1	2.4	2.2	0.94	1.5	0.47	1.4	2.0	1.2	14
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.86	0.61	1.40	1.40	1.30	0.54	1.20	0.32	0.67	1.00	0.72	8.90

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBLSs		FINAL SCREENING LEVEL	DTSC-21a	DTSC-21b	DTSC-21c	DTSC-21d	DTSC-22a	DTSC-22b	DTSC-22c	DTSC-22d	DTSC-23A	DTSC-23b	DTSC-23c	DTSC-23d
	CA	NC		05/15/2019	05/03/2019	05/14/2019	05/03/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019
▼ ANALYTE	UNITS ▶			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>															
Moisture content (CLP)	None	None	None	14	10	10	11	18	24	15	17	21	15	29	20
<i>CAM 17 Metals by USEPA 6010B/7471A</i>															
Antimony	None	31	31	0.21 J	0.30 J	0.25 J	0.12 J	0.17 J	0.24 J	0.27 J	0.18 J	<2.0	0.28 J	0.47 J	0.20 J
Arsenic	16	16	16	4.1	4.1	4.4	3.7	4.6	4.1	4.4	4.7	4.3	3.3	4.5	3.6
Barium	None	15,000	15,000	76	79	76	67	89	91	74	67	81	56	69	53
Beryllium	1,600	15	15	0.29	0.27	0.23	0.23	0.29	0.27	0.29	0.28	0.27	0.19	0.28	0.21
Cadmium	2,100	5.2	5.2	0.16 J	0.20 J	0.18 J	0.15 J	0.19 J	0.14 J	0.21 J	0.21 J	0.23 J	0.19 J	0.19 J	0.45
Chromium, total	None	36,000	36,000	45	44	39	40	46	42	43	43	42	32	42	35
Cobalt	420	23	23	9.0	8.6	8.5	8.0	8.5	8.3	8.6	8.6	8.0	6.7	8.0	6.5
Copper	None	3,100	3,100	24	140	24	22	34	23	27	26	39	21	25	18
Lead	None	80	80	35	86	26	24	38	20	26	25	35	27	22	21
Mercury	None	1.00	1.00	0.32	0.50	0.24	0.17	0.14	0.25	0.21	0.24	0.16	0.15	0.21	0.32
Molybdenum	None	390	390	0.62	0.65	0.64	0.55	0.87	0.65	0.73	0.94	0.77	0.59	1.0	0.70
Nickel	15,000	490	490	55	52	50	46	43	38	44	44	39	30	41	36
Selenium	None	390	390	<2.0	<2.0	<1.9	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.9	<2.0	<2.0
Silver	None	390	390	<0.25	<0.25	<0.24	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.24	<0.25	<0.25
Thallium	None	0.78	0.78	<0.50	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.50	<0.50	<0.49	<0.50	<0.50
Vanadium	None	390	390	34	34	30	29	37	37	37	35	33	29	35	28
Zinc	None	23,000	23,000	67	61	59	51	65	62	64	65	61	74	56	48
<i>Organochlorine Pesticides by USEPA Method 8081A</i>															
Aldrin	0.039	2.3	0.039	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	7.1E-04 CJ	<0.0054	6.3E-04 CJ	<0.0056	6.3E-04 J	<0.011
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0017 CJ	0.0022 J	0.0051 CJ	0.0016 CJ	0.0040 CJ	0.0019 CJ	0.0062 C	0.0088	0.0052 CJ	0.0026 CJ	0.0058 C	0.0057 CJ
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	0.0018 CJ	0.0019 J	0.0066 J	0.0027 CJ	<0.0056	0.0017 J	<0.0054	<0.0054	0.0012 CJ	0.0033 J	0.0050 CJ	0.0081 J
4,4'-DDD	2.3	1.9	1.9	<0.022	<0.011	0.0016 CJ	<0.022	<0.011	<0.011	0.0030 J	8.4E-04 CJ	0.0047 CJ	<0.011	5.2E-04 CJ	<0.022
4,4'-DDE	2.0	23	2.0	0.0015 J	0.0011 J	0.0023 J	<0.022	0.0015 CJ	0.0020 J	0.0031 J	0.0079 J	0.0021 CJ	5.8E-04 CJ	0.0032 J	0.0056 CJ
4,4'-DDT	1.9	37	1.9	0.0065 J	0.0039 CJ	0.0083 J	0.0052 #J	7.0E-04 CJ	0.0010 CJ	0.0027 CJ	0.0035 CJ	0.0017 CJ	0.0018 CJ	0.0022 CJ	0.0092 CJ
Dieldrin	0.034	3.2	0.034	<0.022	4.8E-04 CJ	0.0021 CJ	<0.022	0.0014 CJ	<0.011	0.0014 CJ	0.0021 CJ	7.3E-04 CJ	0.0030 CJ	<0.011	0.0051 CJ
Endosulfan I	None	None	None	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	<0.0057	<0.011
Endosulfan II	None	None	None	<0.022	<0.011	<0.022	<0.022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.022
Endosulfan sulfate	None	None	None	<0.022	<0.011	<0.022	<0.022	0.0010 CJ	<0.011	<0.011	<0.011	0.0010 CJ	7.1E-04 CJ	<0.011	0.0049 CJ
Endrin	None	19	19	<0.022	<0.011	<0.022	<0.022	<0.011	<0.011	6.1E-04 CJ	<0.011	3.6E-04 CJ	0.0014 CJ	<0.011	0.0036 CJ
Endrin aldehyde	None	None	None	<0.022	<0.011	<0.022	<0.022	<0.011	<0.011	0.0070 J	<0.011	<0.011	<0.011	<0.011	<0.022
Heptachlor	0.13	39	0.13	<0.011	<0.0055	<0.011	<0.011 #ND	0.0031 CJ	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	<0.0057	<0.011
Heptachlor epoxide	0.070	1.0	0.070	<0.011	5.9E-04 J	<0.011	<0.011	8.0E-04 CJ	<0.0055	<0.0054	7.6E-04 J	9.2E-04 CJ	<0.0056	<0.0057	0.0022 CJ

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-21a	DTSC-21b	DTSC-21c	DTSC-21d	DTSC-22a	DTSC-22b	DTSC-22c	DTSC-22d	DTSC-23A	DTSC-23b	DTSC-23c	DTSC-23d	
	CA	NC		05/15/2019	05/03/2019	05/14/2019	05/03/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019	
	UNITS ▶	UNITS ▶	UNITS ▶	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
▼ ANALYTE																
alpha-Hexachlorocyclohexane	0.086	510	0.086	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	<0.0057	<0.011	
beta-Hexachlorocyclohexane	0.30	None	0.30	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	<0.0057	<0.011	
delta-Hexachlorocyclohexane	None	None	None	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	<0.0057	<0.011	
gamma-Hexachlorocyclohexane (lindane)	0.57	21	0.57	<0.011	<0.0055	<0.011	<0.011	<0.0056	<0.0055	<0.0054	<0.0054	<0.0055	<0.0056	5.4E-04 CJ	<0.011	
Methoxychlor	None	320	320	<0.11	<0.055	<0.11	<0.11	<0.056	<0.055	<0.054	<0.054	<0.055	<0.056	<0.057	<0.11	
Toxaphene	0.49	5.7	0.49	<0.39	<0.20	<0.39	<0.39	<0.20	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20	<0.39	
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>																
Aroclor-1016	6.7	4.1	4.1	<0.013	<0.013	<0.020	<0.013	<0.013	<0.013	<0.019	<0.013	<0.013	<0.013	<0.020	<0.020	
Aroclor-1221	0.20	None	0.20	<0.026	<0.026	<0.039	<0.026	<0.027	<0.027	<0.039	<0.026	<0.026	<0.027	<0.041	<0.039	
Aroclor-1232	0.17	None	0.17	<0.013	<0.013	<0.020	<0.013	<0.013	<0.013	<0.019	<0.013	<0.013	<0.013	<0.020	<0.020	
Aroclor-1242	0.23	None	0.23	<0.013	<0.013	<0.020	<0.013	<0.013	<0.013	<0.019	<0.013	<0.013	<0.013	<0.020	<0.020	
Aroclor-1248	0.23	None	0.23	<0.013	<0.013	<0.020	<0.013	<0.013	<0.013	<0.019	<0.013	<0.013	<0.013	<0.020	<0.020	
Aroclor-1254	0.24	1.2	0.24	<0.013	<0.013	<0.020	<0.013	<0.013	<0.013	<0.019	<0.013	<0.013	0.055	<0.020	<0.020	
Aroclor-1260	0.24	None	0.24	0.023	<0.013	0.036	0.023	0.016	0.016	0.063	0.031	0.031	0.14	0.022	0.21	
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>																
TPH-g	None	100	100	0.82 J	0.82 J	0.70 J	0.93 J	0.92 J	2.2 J	0.79 J	1.1 J	1.1 J	0.86 J	0.76 J	1.8 J	
TPH-d	None	260	260	40 Y	51 Y	58 Y	54 Y	26 Y	55 Y	50 Y	30 Y	18 Y	26 Y	58 Y	110 Y	
TPH-mo	None	1,600	1,600	--	--	--	--	--	--	--	--	--	--	--	--	
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>																
Acetone	None	61,000	61,000	<1.0	<1.0	<0.96	<0.99	<1.1	<1.1	<0.98	<0.98	<1.1	<0.97	<1.2	<1.2	
Benzene	0.33	11	0.33	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Bromobenzene	None	290	290	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Bromodichloromethane	0.29	270	0.29	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Bromoform	19	1,600	19	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Bromomethane (methyl bromide)	None	6.8	6.8	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61	
2-Butanone (methyl ethyl ketone)	None	27,000	27,000	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61	
n-Butylbenzene	None	3,900	3,900	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
sec-Butylbenzene	None	2,200	2,200	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
tert-Butylbenzene	None	2,200	2,200	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Carbon disulfide	None	770	770	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Carbon tetrachloride	0.098	100	0.098	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Chlorobenzene	None	280	280	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Chlorobromomethane (bromochloromethane)	None	150	150	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Chlorodibromomethane (dibromochloromethane)	0.94	470	0.94	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	
Chloroethane (ethyl chloride)	None	14,000	14,000	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61	
Chloroform	0.32	200	0.32	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31	

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-21a	DTSC-21b	DTSC-21c	DTSC-21d	DTSC-22a	DTSC-22b	DTSC-22c	DTSC-22d	DTSC-23A	DTSC-23b	DTSC-23c	DTSC-23d
	CA	NC		05/15/2019	05/03/2019	05/14/2019	05/03/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61
2-Chlorotoluene	None	470	470	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
4-Chlorotoluene	None	440	440	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Cumene (isopropylbenzene)	None	1,900	1,900	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Cymene (p-isopropyltoluene)	None	None	None	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Dibromomethane (methylene bromide)	None	24	24	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2-Dichlorobenzene	None	1,800	1,800	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,3-Dichlorobenzene	None	None	None	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.3	<1.3	<1.2	<1.2	<1.4	<1.3	<1.2	<1.2	<1.4	<1.2	<1.5	<1.5
1,2-Dichloropropane	2.5	16	2.5	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,3-Dichloropropane	None	410	410	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
2,2-Dichloropropane	None	None	None	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1-Dichloropropene	None	None	None	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
cis-1,3-Dichloropropene	0.58	72	0.58	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
trans-1,3-Dichloropropene	0.58	72	0.58	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Ethylbenzene	5.8	3,400	5.8	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Hexachlorobutadiene	1.2	78	1.2	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
2-Hexanone (methyl butyl ketone)	None	200	200	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61
Naphthalene	3.8	130	3.8	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
n-Propylbenzene	None	3,800	3,800	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Styrene	None	6,000	6,000	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Tetrachloroethene (PCE)	0.59	81	0.59	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Toluene	None	1,100	1,100	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS				SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-21a	DTSC-21b	DTSC-21c	DTSC-21d	DTSC-22a	DTSC-22b	DTSC-22c	DTSC-22d	DTSC-23A	DTSC-23b	DTSC-23c	DTSC-23d
	CA	NC		05/15/2019	05/03/2019	05/14/2019	05/03/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019	05/15/2019	05/03/2019	05/14/2019	05/14/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
1,2,3-Trichlorobenzene	None	63	63	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2,4-Trichlorobenzene	24	58	24	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Trichloroethene (TCE)	0.94	4.1	0.94	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,2,4-Trimethylbenzene	None	300	300	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
1,3,5-Trimethylbenzene	None	270	270	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Vinyl acetate	None	910	910	<2.6	<2.6	<2.4	<2.5	<2.8	<2.7	<2.4	<2.5	<2.8	<2.4	<3.0	<3.1
Vinyl chloride	0.0087	70	0.0087	<0.52	<0.52	<0.48	<0.49	<0.56	<0.54	<0.49	<0.49	<0.55	<0.48	<0.60	<0.61
m-, p-Xylene	None	550	550	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
o-Xylene	None	650	650	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>															
Acenaphthene	None	3,600	3,600	<0.059	<0.28	<0.19	<0.056	0.015 J	<0.13	0.027 J	0.024 J	0.026 J	<0.20	0.021 J	0.058 J
Acenaphthylene	None	None	None	0.023 J	<0.28	0.046 J	0.044 J	0.042 J	<0.13	0.034 J	0.014 J	0.027 J	<0.20	0.15	0.79
Anthracene	None	18,000	18,000	0.032 J	<0.28	0.055 J	0.052 J	0.12	<0.13	0.059	0.046 J	0.063 J	<0.20	0.10	0.71
Benz(a)anthracene	*	None	*	0.14	0.20 J	0.25	0.20	0.34	0.12 J	0.26	0.17	0.21	0.13 J	0.59	1.1
Benzo(a)pyrene	*	18	18	0.21	0.33	0.39	0.29	0.39	0.17	0.41	0.30	0.29	0.25	0.96	1.3
Benzo(b)fluoranthene	*	None	*	0.26	0.33	0.47	0.30	0.42	0.17	0.48	0.32	0.33	0.22	1.1	1.3
Benzo(g,h,i)perylene	None	None	None	0.22	0.36	0.42	0.28	0.23	0.15	0.37	0.29	0.20	0.23	0.86	1.0
Benzo(k)fluoranthene	*	None	*	0.071	0.11 J	0.15 J	0.090	0.12	0.069 J	0.15	0.10	0.097	0.087 J	0.26	0.34
Chrysene	*	None	*	0.18	0.24 J	0.31	0.23	0.37	0.13	0.30	0.20	0.24	0.15 J	0.70	1.2
Dibenz(a,h)anthracene	*	None	*	0.030 J	<0.28	0.056 J	0.043 J	0.045 J	<0.13	0.052 J	0.036 J	0.030 J	<0.20	0.11	0.15 J
Fluoranthene	None	2,400	2,400	0.27	0.38	0.47	0.40	0.75	0.20	0.45	0.29	0.50	0.26	0.94	2.7
Fluorene	None	2,400	2,400	<0.059	<0.28	<0.19	0.016 J	0.030 J	<0.13	0.018 J	0.021 J	0.016 J	<0.20	0.018 J	0.48
Indeno(1,2,3-c,d)pyrene	*	None	None	0.14	0.21 J	0.27	0.19	0.18	0.086 J	0.27	0.19	0.15	0.14 J	0.63	0.77
Naphthalene	3.8	130	3.8	<0.26	<0.26	<0.24	<0.25	<0.28	<0.27	<0.24	<0.25	<0.28	<0.24	<0.30	<0.31
Phenanthrene	None	None	None	0.14	0.16 J	0.23	0.24	0.63	0.089 J	0.22	0.15	0.30	0.099 J	0.27	4.1
Pyrene	None	1,800	1,800	0.42	0.52	0.75	0.56	1.1	0.37	0.95	0.81	0.69	0.51	1.8	4.2
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.30	0.55	0.54	0.41	0.53	0.28	0.57	0.40	0.39	0.39	1.30	1.80

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ ▼ ANALYTE UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-24a	DTSC-24b	DTSC-24c	DTSC-24d
	CA	NC		05/02/2019	05/02/2019	05/02/2019	05/02/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>Moisture Content by USEPA Contract Laboratory Procedure (CLP)</i>							
Moisture content (CLP)	None	None	None	12	13	10	9.0
<i>CAM 17 Metals by USEPA 6010B/7471A</i>							
Antimony	None	31	31	0.42 J	0.42 J	0.44 J	0.38 J
Arsenic	16	16	16	5.4	4.8	4.5	4.6
Barium	None	15,000	15,000	81	84	80	79
Beryllium	1,600	15	15	0.26	0.26	0.28	0.29
Cadmium	2,100	5.2	5.2	0.21 J	0.24	0.20 J	0.19 J
Chromium, total	None	36,000	36,000	39	40	45	47
Cobalt	420	23	23	8.8	9.0	8.4	8.8
Copper	None	3,100	3,100	27	26	24	25
Lead	None	80	80	32	31	28	36
Mercury	None	1.00	1.00	0.19	0.20	0.21	0.19
Molybdenum	None	390	390	0.79	0.84	0.87	0.71
Nickel	15,000	490	490	44	49	44	46
Selenium	None	390	390	<2.0	<1.9	<2.0	<2.0
Silver	None	390	390	<0.25	<0.24	<0.25	<0.25
Thallium	None	0.78	0.78	<0.50	<0.48	<0.49	<0.49
Vanadium	None	390	390	35	34	36	38
Zinc	None	23,000	23,000	68	69	67	65
<i>Organochlorine Pesticides by USEPA Method 8081A</i>							
Aldrin	0.039	2.3	0.039	<0.011	<0.0057	5.3E-04 CJ	<0.0054
alpha-Chlordane (cis-chlordane)	0.44	None	0.44	0.0025 CJ	<0.0057	0.0012 CJ	0.0026 J
gamma-Chlordane (trans-chlordane)	0.44	None	0.44	0.0027 J	<0.0057	<0.0056	0.0011 CJ
4,4'-DDD	2.3	1.9	1.9	0.0014 CJ	<0.011	<0.011	0.0018 J
4,4'-DDE	2.0	23	2.0	0.0010 J	0.0031 CJ	8.9E-04 CJ	0.0012 J
4,4'-DDT	1.9	37	1.9	0.0049 CJ	0.0039 CJ	0.0034 J	0.0065 J
Dieldrin	0.034	3.2	0.034	<0.022	6.2E-04 CJ	<0.011	9.3E-04 CJ
Endosulfan I	None	None	None	<0.011	<0.0057	<0.0056	<0.0054
Endosulfan II	None	None	None	<0.022	<0.011	<0.011	<0.011
Endosulfan sulfate	None	None	None	<0.022	0.0033 J	0.0044 CJ	0.0013 J
Endrin	None	19	19	<0.022	4.0E-04 CJ	0.0015 CJ	<0.011
Endrin aldehyde	None	None	None	<0.022	<0.011	<0.011	<0.011
Heptachlor	0.13	39	0.13	<0.011	<0.0057	<0.0056	<0.0054
Heptachlor epoxide	0.070	1.0	0.070	<0.011	6.1E-04 CJ	<0.0056	5.7E-04 J

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-24a	DTSC-24b	DTSC-24c	DTSC-24d
	CA	NC		05/02/2019	05/02/2019	05/02/2019	05/02/2019
▼ ANALYTE	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
alpha-Hexachlorocyclohexane	0.086	510	0.086	<0.011	<0.0057	<0.0056	<0.0054
beta-Hexachlorocyclohexane	0.30	None	0.30	<0.011	<0.0057	<0.0056	<0.0054
delta-Hexachlorocyclohexane	None	None	None	<0.011	<0.0057	<0.0056	<0.0054
gamma-Hexachlorocyclohexane (lindane)	0.57	21	0.57	<0.011	<0.0057	<0.0056	<0.0054
Methoxychlor	None	320	320	<0.11	<0.057	<0.056	<0.054
Toxaphene	0.49	5.7	0.49	<0.39	<0.20	<0.20	<0.20
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>							
Aroclor-1016	6.7	4.1	4.1	<0.013	<0.014	<0.014	<0.013
Aroclor-1221	0.20	None	0.20	<0.026	<0.027	<0.027	<0.026
Aroclor-1232	0.17	None	0.17	<0.013	<0.014	<0.014	<0.013
Aroclor-1242	0.23	None	0.23	<0.013	<0.014	<0.014	<0.013
Aroclor-1248	0.23	None	0.23	<0.013	<0.014	<0.014	<0.013
Aroclor-1254	0.24	1.2	0.24	<0.013	<0.014	<0.014	<0.013
Aroclor-1260	0.24	None	0.24	0.016	0.036	0.020	0.021
<i>Total Petroleum Hydrocarbons (TPH) by USEPA 8015B</i>							
TPH-g	None	100	100	0.81 J	0.63 J	0.47 J	0.54 J
TPH-d	None	260	260	25 Y	31 Y	36 Y	34 Y
TPH-mo	None	1,600	1,600	--	--	--	--
<i>Volatile Organic Compounds (VOCs) by USEPA 8260B</i>							
Acetone	None	61,000	61,000	<0.94	<0.93	<0.89	<0.89
Benzene	0.33	11	0.33	<0.24	<0.23	<0.22	<0.22
Bromobenzene	None	290	290	<0.24	<0.23	<0.22	<0.22
Bromodichloromethane	0.29	270	0.29	<0.24	<0.23	<0.22	<0.22
Bromoform	19	1,600	19	<0.24	<0.23	<0.22	<0.22
Bromomethane (methyl bromide)	None	6.8	6.8	<0.47	<0.46	<0.45	<0.45
2-Butanone (methyl ethyl ketone)	None	27,000	27,000	<0.47	<0.46	<0.45	<0.45
n-Butylbenzene	None	3,900	3,900	<0.24	<0.23	<0.22	<0.22
sec-Butylbenzene	None	2,200	2,200	<0.24	<0.23	<0.22	<0.22
tert-Butylbenzene	None	2,200	2,200	<0.24	<0.23	<0.22	<0.22
Carbon disulfide	None	770	770	<0.24	<0.23	<0.22	<0.22
Carbon tetrachloride	0.098	100	0.098	<0.24	<0.23	<0.22	<0.22
Chlorobenzene	None	280	280	<0.24	<0.23	<0.22	<0.22
Chlorobromomethane (bromochloromethane)	None	150	150	<0.24	<0.23	<0.22	<0.22
Chlorodibromomethane (dibromochloromethane)	0.94	470	0.94	<0.24	<0.23	<0.22	<0.22
Chloroethane (ethyl chloride)	None	14,000	14,000	<0.47	<0.46	<0.45	<0.45
Chloroform	0.32	200	0.32	<0.24	<0.23	<0.22	<0.22

Table 2
Phase II Stockpile Characterization Results

▼ ANALYTE	SAMPLE ID ► DATE ► UNITS ►	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS			
		SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-24a	DTSC-24b	DTSC-24c	DTSC-24d
		CA	NC		05/02/2019	05/02/2019	05/02/2019	05/02/2019
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Chloromethane (methyl chloride)	None	110	110	<0.47	<0.46	<0.45	<0.45	
2-Chlorotoluene	None	470	470	<0.24	<0.23	<0.22	<0.22	
4-Chlorotoluene	None	440	440	<0.24	<0.23	<0.22	<0.22	
Cumene (isopropylbenzene)	None	1,900	1,900	<0.24	<0.23	<0.22	<0.22	
Cymene (p-isopropyltoluene)	None	None	None	<0.24	<0.23	<0.22	<0.22	
1,2-Dibromo-3-chloropropane	0.0053	4.7	0.0053	<0.24	<0.23	<0.22	<0.22	
1,2-Dibromoethane (ethylene dibromide)	0.036	7.1	0.036	<0.24	<0.23	<0.22	<0.22	
Dibromomethane (methylene bromide)	None	24	24	<0.24	<0.23	<0.22	<0.22	
1,2-Dichlorobenzene	None	1,800	1,800	<0.24	<0.23	<0.22	<0.22	
1,3-Dichlorobenzene	None	None	None	<0.24	<0.23	<0.22	<0.22	
1,4-Dichlorobenzene	2.6	3,400	2.6	<0.24	<0.23	<0.22	<0.22	
Dichlorodifluoromethane (Freon 12)	None	87	87	<0.47	<0.46	<0.45	<0.45	
1,1-Dichloroethane (1,1-DCA)	3.6	1,600	3.6	<0.24	<0.23	<0.22	<0.22	
1,2-Dichloroethane (1,2-DCA)	0.46	31	0.46	<0.24	<0.23	<0.22	<0.22	
1,1-Dichloroethene (1,1-DCE)	None	230	230	<0.24	<0.23	<0.22	<0.22	
cis-1,2-Dichloroethene (cis-1,2-DCE)	None	18	18	<0.24	<0.23	<0.22	<0.22	
trans-1,2-Dichloroethene (trans-1,2-DCE)	None	130	130	<0.24	<0.23	<0.22	<0.22	
Dichloromethane (methylene chloride)	1.8	350	1.8	<1.2	<1.2	<1.1	<1.1	
1,2-Dichloropropane	2.5	16	2.5	<0.24	<0.23	<0.22	<0.22	
1,3-Dichloropropane	None	410	410	<0.24	<0.23	<0.22	<0.22	
2,2-Dichloropropane	None	None	None	<0.24	<0.23	<0.22	<0.22	
1,1-Dichloropropene	None	None	None	<0.24	<0.23	<0.22	<0.22	
cis-1,3-Dichloropropene	0.58	72	0.58	<0.24	<0.23	<0.22	<0.22	
trans-1,3-Dichloropropene	0.58	72	0.58	<0.24	<0.23	<0.22	<0.22	
Ethylbenzene	5.8	3,400	5.8	<0.24	<0.23	<0.22	<0.22	
Hexachlorobutadiene	1.2	78	1.2	<0.24	<0.23	<0.22	<0.22	
2-Hexanone (methyl butyl ketone)	None	200	200	<0.47	<0.46	<0.45	<0.45	
Methyl tert-butyl ether (MTBE)	47	15,000	47	<0.24	<0.23	<0.22	<0.22	
4-Methyl-2-pentanone (methyl isobutyl ketone)	None	33,000	33,000	<0.47	<0.46	<0.45	<0.45	
Naphthalene	3.8	130	3.8	<0.24	<0.23	<0.22	<0.22	
n-Propylbenzene	None	3,800	3,800	<0.24	<0.23	<0.22	<0.22	
Styrene	None	6,000	6,000	<0.24	<0.23	<0.22	<0.22	
1,1,1,2-Tetrachloroethane	2.0	550	2.0	<0.24	<0.23	<0.22	<0.22	
1,1,2,2-Tetrachloroethane	0.60	1,600	0.60	<0.24	<0.23	<0.22	<0.22	
Tetrachloroethene (PCE)	0.59	81	0.59	<0.24	<0.23	<0.22	<0.22	
Toluene	None	1,100	1,100	<0.24	<0.23	<0.22	<0.22	

Table 2
Phase II Stockpile Characterization Results

SAMPLE ID ▶ DATE ▶ UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS			
	SITE-SPECIFIC RESIDENTIAL RBSLs		FINAL SCREENING LEVEL	DTSC-24a	DTSC-24b	DTSC-24c	DTSC-24d
	CA	NC		05/02/2019	05/02/2019	05/02/2019	05/02/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
▼ ANALYTE							
1,2,3-Trichlorobenzene	None	63	63	<0.24	<0.23	<0.22	<0.22
1,2,4-Trichlorobenzene	24	58	24	<0.24	<0.23	<0.22	<0.22
1,1,1-Trichloroethane (1,1,1-TCA)	None	1,700	1,700	<0.24	<0.23	<0.22	<0.22
1,1,2-Trichloroethane (1,1,2-TCA)	1.1	1.5	1.1	<0.24	<0.23	<0.22	<0.22
Trichloroethene (TCE)	0.94	4.1	0.94	<0.24	<0.23	<0.22	<0.22
Trichlorofluoromethane (Freon 11)	None	1,200	1,200	<0.24	<0.23	<0.22	<0.22
1,2,3-Trichloropropane	0.0015	4.8	0.0015	<0.24	<0.23	<0.22	<0.22
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	None	6,700	6,700	<0.24	<0.23	<0.22	<0.22
1,2,4-Trimethylbenzene	None	300	300	<0.24	<0.23	<0.22	<0.22
1,3,5-Trimethylbenzene	None	270	270	<0.24	<0.23	<0.22	<0.22
Vinyl acetate	None	910	910	<2.4	<2.3	<2.2	<2.2
Vinyl chloride	0.0087	70	0.0087	<0.47	<0.46	<0.45	<0.45
m-, p-Xylene	None	550	550	<0.24	<0.23	<0.22	<0.22
o-Xylene	None	650	650	<0.24	<0.23	<0.22	<0.22
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>							
Acenaphthene	None	3,600	3,600	0.012 J	<0.11	0.026 J	<0.11
Acenaphthylene	None	None	None	0.030 J	0.068 J	0.12	0.035 J
Anthracene	None	18,000	18,000	0.038 J	0.083 J	0.11	0.045 J
Benz(a)anthracene	*	None	*	0.20	0.59	0.56	0.27
Benzo(a)pyrene	*	18	18	0.32	0.83	0.78	0.42
Benzo(b)fluoranthene	*	None	*	0.36	0.99	0.86	0.48
Benzo(g,h,i)perylene	None	None	None	0.36	0.89	0.75	0.43
Benzo(k)fluoranthene	*	None	*	0.11	0.34	0.29	0.12
Chrysene	*	None	*	0.23	0.66	0.59	0.31
Dibenz(a,h)anthracene	*	None	*	0.045 J	0.12	0.10 J	0.055 J
Fluoranthene	None	2,400	2,400	0.40	1.1	1.1	0.50
Fluorene	None	2,400	2,400	<0.057	<0.11	0.031 J	<0.11
Indeno(1,2,3-c,d)pyrene	*	None	None	0.25	0.65	0.54	0.29
Naphthalene	3.8	130	3.8	<0.24	<0.23	<0.22	<0.22
Phenanthrene	None	None	None	0.16	0.28	0.63	0.18
Pyrene	None	1,800	1,800	0.61	1.7	1.6	0.73
Benzo(a)pyrene Equivalents	1.00	None	1.00	0.44	1.20	1.10	0.58

Notes:

- (1) Soil sampling results reported in milligrams per kilogram (mg/kg) on wet-weight basis. Non-detect results shown with less-than sign (<) and method detection limit. Laboratory data qualifiers are as follows:
- C - Presence confirmed, but RPD between columns exceeds 40%
 - Y - Sample exhibits chromatographic pattern which does not resemble standard
 - J - Estimated value
 - # - CCV drift outside limits; average CCV drift within limits per method requirements
- (2) Soil screening levels for total petroleum hydrocarbons (TPH) are SFBRWQCB Environmental Screening Levels (ESLs; SFBRWQCB 2019b) protective of direct contact (cancer and noncancer health effects), odor/nuisance concerns, and gross contamination concerns. Soil screening levels for arsenic and carcinogenic polycyclic aromatic hydrocarbons are based on Site-specific background concentrations (Iris Environmental 2008). All remaining screening levels are DTSC-recommended values (DTSC 2019b, USEPA 2019) protective of direct contact (cancer and noncancer health effects).
- (3) Acronyms/abbreviations are defined as follows:
- mg/kg - Milligrams per kilogram
 - RBSLs - Risk based screening levels
 - CA - Cancer
 - NC - Noncancer

Table 3
Phase II Stockpile Characterization Detections Above Screening Levels

SAMPLE ID ▶ DATE ▶ ▼ ANALYTE UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS									
	Site-Specific Residential RBSLs		Final Screening Levels	DTSC-06a	DTSC-06b	DTSC-06c	DTSC-10a	DTSC-11c	DTSC-11d	DTSC-12a	DTSC-12b	DTSC-12d	DTSC-17a
	CA	NC		05/20/2019	05/17/2019	05/20/2019	05/15/2019	05/15/2019	05/03/2019	05/15/2019	05/02/2019	05/03/2019	05/17/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>CAM 17 Metals by USEPA 6010B/7471A</i>													
Lead	None	80	80	25	24	19	99	23	31	22	52	33	30
<i>Organochlorine Pesticides by USEPA Method 8081A</i>													
Aldrin	0.039	2.3	0.039	<0.0056	<0.0055	<0.011	<0.0057	<0.011	9.7E-04 CJ	0.092	<0.11	<0.11	<0.011
Dieldrin	0.034	3.2	0.034	0.0015 J	0.0014 CJ	<0.022	0.0015 J	0.0015 J	0.027 C	0.097	0.062 CJ	0.17 CJ	<0.023
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>													
Aroclor-1254	0.24	1.2	0.24	<0.013	<0.013	<0.013	<0.014	<0.020	<0.020	<0.014	<0.020	2.2	<0.014
Aroclor-1260	0.24	None	0.24	0.015	0.016	0.012 J	0.015	0.025	0.64	0.090	1.6	4.6	0.024
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>													
Benzo(a)pyrene Equivalents	1.00	None	1.00	1.10	1.80	1.40	0.44	1.30	0.59	0.48	0.26	0.52	2.10

Notes:

- Soil sampling results reported in milligrams per kilogram (mg/kg) on wet-weight basis. Non-detect results shown with less-than sign (<) and method detection limit. Laboratory data qualifiers are as follows:
 - C – Presence confirmed, but RPD between columns exceeds 40%
 - Y – Sample exhibits
 - J – Estimated value
 - # – CCV drift outside limits; average CCV drift within limits per method requirements
- Soil screening levels for petroleum hydrocarbons (TPH) are SFBRWQCB Environmental Screening Levels (ESLs; SFBRWQCB 2019b) protective of direct contact (cancer and noncancer health effects), odor/nuisance concerns, and gross contamination concerns. Soil Screening levels for arsenic and carcinogenic polycyclic aromatic hydrocarbons are based on site-specific background concentrations (Iris Environmental 2008). All remaining screening levels are DTSC-recommended values (DTSC 2019b, USEPA 2019) protective of direct contact (cancer and noncancer health effects).
- Acronyms/abbreviations are defined as follows:
 - mg/kg – Milligrams per kilogram
 - RBSLs – Risk based screening levels
 - CA – Cancer
 - NC – Noncancer

Table 3
 Phase II Stockpile Characterization Detections Above Screening Levels

SAMPLE ID ▶ DATE ▶ ▼ ANALYTE UNITS ▶	SOIL SCREENING LEVELS			SOIL SAMPLING RESULTS									
	Site-Specific Residential RBSLs		Final Screening Levels	DTSC-18c	DTSC-18d	DTSC-19a	DTSC-19c	DTSC-20d	DTSC-21b	DTSC-23c	DTSC-23d	DTSC-24b	DTSC-24c
	CA	NC		03/20/2019	03/20/2019	05/17/2019	05/17/2019	05/16/2019	05/03/2019	05/14/2019	05/14/2019	05/02/2019	05/02/2019
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
<i>CAM 17 Metals by USEPA 6010B/7471A</i>													
Lead	None	80	80	47	31	27	32	22	86	22	21	31	28
<i>Organochlorine Pesticides by USEPA Method 8081A</i>													
Aldrin	0.039	2.3	0.039	<0.0055	<0.011	3.0E-04 CJ	<0.011	<0.011	<0.0055	6.3E-04 J	<0.011	<0.0057	5.3E-04 CJ
Dieldrin	0.034	3.2	0.034	<0.011	<0.022	0.0016 J	0.0023 CJ	9.2E-04 CJ	4.8E-04 CJ	<0.011	0.0051 CJ	6.2E-04 CJ	<0.011
<i>Polychlorinated Biphenyls (PCBs) by USEPA 8082</i>													
Aroclor-1254	0.24	1.2	0.24	0.044	0.020	<0.020	0.041	<0.013	<0.013	<0.020	<0.020	<0.014	<0.014
Aroclor-1260	0.24	None	0.24	0.043	0.040	0.024	0.042	0.017	<0.013	0.022	0.21	0.036	0.020
<i>Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA Method 8270-SIM</i>													
Benzo(a)pyrene Equivalents	1.00	None	1.00	1.40	1.40	1.30	1.20	8.90	0.55	1.30	1.80	1.20	1.10

Notes:

- Soil sampling results reported in milligrams per kilogram (mg/kg) on wet-weight basis. Non-detect results show with less-than sign (<) and method detection limit. Laboratory data qualifiers are as follows:
 - C – Presence confirmed, but RPD between columns exceeds 40%
 - Y – Sample exhibits
 - J – Estimated value
 - # – CCV drift outside limits; average CCV drift within limits per method requirements
- Soil screening levels for petroleum hydrocarbons (TPH) are SFBRWQCB Environmental Screening Levels (ESLs; SFBRWQCB 2019b) protective of direct contact (cancer and noncancer health effects), odor/nuisance concerns, and gross contamination concerns. Soil Screening levels for arsenic and carcinogenic polycyclic aromatic hydrocarbons are based on site-specific background concentrations (Iris Environmental 2008). All remaining screening levels are DTSC-recommended values (DTSC 2019b, USEPA 2019) protective of direct contact (cancer and noncancer health effects).
- Acronyms/abbreviations are defined as follows:
 - mg/kg – Milligrams per kilogram
 - RBSLs – Risk based screening levels
 - CA – Cancer
 - NC – Noncancer

Attachment A

DTSC Approval of Stockpile Sample Plan

Jeff Martin

Subject: FW: Alameda Landing Waterfront - Phase II Stockpile Study Results

From: Wong, Henry@DTSC <Henry.Wong@dtsc.ca.gov>

Sent: Tuesday, April 30, 2019 4:12 PM

To: Jeff Martin <Jeff.Martin@rpsgroup.com>; Bill Kennedy <bkennedy@catellus.com>

Cc: dpriskich@catellus.com; dirving@catellus.com; James Schwartz <James.Schwartz@rpsgroup.com>; Vincent Tilotta <Vincent.Tilotta@rpsgroup.com>; Elizabeth Hightower <Elizabeth.Hightower@rpsgroup.com>; Neal Hughes <Neal.Hughes@rpsgroup.com>; Karachewski, John@DTSC <John.Karachewski@dtsc.ca.gov>; Murphy, Daniel@DTSC <Daniel.Murphy@dtsc.ca.gov>

Subject: RE: Alameda Landing Waterfront - Phase II Stockpile Study Results

Hi Jeff and Bill,

DTSC has received the April 30, 2019 *Phase II Stockpile Pilot Study Memorandum* (Memo) for the Alameda Landing Waterfront located at Alameda Landing Redevelopment Project within the former Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex, in Alameda, California. DTSC had provided comments on previous drafts and Catellus responded to comments and revised the document satisfactorily. Therefore, **DTSC approves the Memo**. Please submit one hard copy of the Memo to me for record retention.

Catellus may begin stockpile characterization as described in the January 2019 *Work Plan for Site Investigation* using a decision unit (DU) volume of approximately 1,625 cubic yards for DUs 05 through 12 and DUs 17 through 24 (i.e., DU-05a, DU-05b, DU-5c, DU-5d, DU-6a, DU-6b, etc.).

Henry Wong, P.E.
Project Manager
Site Mitigation and Restoration Program
Department of Toxic Substances Control
700 Heinz Avenue
Berkeley, California 94710-2721
(510) 540-3770
Henry.Wong@dtsc.ca.gov

Attachment B

Laboratory Analytical Reports



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 308268
ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-18A	308268-001
DTSC-18B	308268-002
DTSC-18C	308268-003
DTSC-18D	308268-004
EB-190320	308268-005
DTSC-18A	308268-006
DTSC-18B	308268-007
DTSC-18C	308268-008
DTSC-18D	308268-009

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 06/03/2019

John Goyette
Director, Client Services
john.goyette@enthalpy.com
(510) 204-2233 Ext 13112

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 308268
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/20/19
Samples Received: 03/20/19

This data package contains sample and QC results for four soil samples and one water sample, requested for the above referenced project on 03/20/19. The samples were received cold and intact. This report was revised and reissued on 06/03/19 to include PAH TEQ values.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 268808; this analyte was not detected in the sample at or above the RL. No other analytical problems were encountered.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 268814; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes QC969127, QC969128 (batch 268824) were not reported because the parent sample required a dilution that would have diluted out the spikes. A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

No analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 268833 because matrix or site history indicated the recoveries would be non-meaningful. High recovery was observed for trichloroethene in the BSD for batch 268833; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. Styrene was detected between the MDL and the RL in the method blank for batch 268833; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

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

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 308268
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/20/19
Samples Received: 03/20/19

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

Matrix spikes QC969243, QC969244 (batch 268855) were not reported because the parent sample required a dilution that would have diluted out the spikes. A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A) Water:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. High recoveries were observed for a number of analytes in the BS/BSD for batch 268791; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Pesticides (EPA 8081A) Soil:

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Aldrin was detected between the MDL and the RL in the method blank for batch 268859; this analyte was not detected in samples at or above the RL. A number of samples were diluted due to the color of the sample extracts. 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.

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. A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7470A) Water:

Barium and zinc were detected between the MDL and the RL in the method blank for batch 268816; these analytes were not detected in the sample at or above the RL. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A) Soil:

Low recoveries were observed for lead and antimony in the MS/MSD of RPS-15 (lab # 308209-003); the BS/BSD were within limits, and the associated RPDs were within limits. A number of analytes were detected between the MDL and

CASE NARRATIVE

Laboratory number: 308268
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 03/20/19
Samples Received: 03/20/19

Metals (EPA 6010B and EPA 7471A) Soil:

the RL in the method blank for batch 268913; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 308268

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-18A

Laboratory Sample ID :

308268-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	39	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	260		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Naphthalene	41	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	85	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	35	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	36	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	460		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	100	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	810		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,200		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	400		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	510		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	680		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	330		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	630		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	450		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	78	J	120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	650		120	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	860				ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.4	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan II	0.74	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	3.0	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.0	J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.2	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1254	19	J	20	10	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Aroclor-1260	21		20	9.5	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.20	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.4		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	74		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	38		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.5		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	26		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.18		0.016	0.0028	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.69		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	63		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-18B

Laboratory Sample ID :

308268-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	26	Y	9.9	3.0	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	240		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	48	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	210		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	53	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	550		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	810		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	290		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	350		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	510		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	240		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	440		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	320		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	52	J	130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	460		130	25	ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	600				ug/Kg	Air Dried	25.00	EPA 8270C-SIM	EPA 3550C
Dieldrin	1.7	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.5	C,J	11	0.49	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	2.2	J	11	0.74	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.0	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1254	20	J	20	9.9	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Aroclor-1260	31		20	9.5	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.32	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.2		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	75		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.2		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	23		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.15		0.017	0.0030	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.68		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	58		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-18C

Laboratory Sample ID :

308268-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	43	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	290		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Naphthalene	50	J	99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	190		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	34	J	99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Fluorene	47	J	99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	760		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	180		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,400		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	2,100		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	710		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	800		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,100		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	490		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	980		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	620		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	130		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	880		99	20	ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,400				ug/Kg	Air Dried	20.00	EPA 8270C-SIM	EPA 3550C
Heptachlor epoxide	0.88	C,J	5.5	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.5	#,C,J	11	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.1	C,J	11	0.88	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.9	C,J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	4.1	C,J	5.5	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.76	C,J	5.5	0.68	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1254	44		20	9.9	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Aroclor-1260	43		20	9.5	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.21	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.0		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	87		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	47		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.17		0.017	0.0030	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.78		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-18D

Laboratory Sample ID :

308268-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	38	Y	10	3.1	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	310		50	15	mg/Kg	Air Dried	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	170	J	490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Phenanthrene	1,100		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Anthracene	240	J	490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,700		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Pyrene	2,400		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	760		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Chrysene	900		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,100		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	520		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,100		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	650		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	130	J	490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	960		490	99	ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,400				ug/Kg	Air Dried	100.0	EPA 8270C-SIM	EPA 3550C
4,4'-DDE	4.8	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endrin	0.98	C,J	22	0.65	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	5.0	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	13	J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	3.1	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	3.7	J	11	1.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1254	20		19	9.8	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Aroclor-1260	40		19	9.4	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.40	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.3		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	86		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.27		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.2		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	31		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Mercury	0.25		0.018	0.0031	mg/Kg	Air Dried	1.000	EPA 7471A	METHOD
Molybdenum	0.81		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	46		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	70		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : EB-190320

Laboratory Sample ID :

308268-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	27	J	50	9.4	ug/L	As Recd	1.000	EPA 8015B	EPA 5030B
Diesel C10-C24	48		48	16	ug/L	As Recd	1.000	EPA 8015B	EPA 3520C
Acetone	40		10	1.7	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Butanone	6.1	J	10	0.5	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
2-Hexanone	1.6	J	10	0.2	ug/L	As Recd	1.000	EPA 8260B	EPA 5030B
Chromium	1.3	J	5.0	0.91	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A
Copper	0.72	J	5.0	0.55	ug/L	TOTAL	1.000	EPA 6010B	EPA 3010A

Client Sample ID : DTSC-18A

Laboratory Sample ID :

308268-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.8	J	5.1	0.21	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Styrene	61	J	250	53	ug/Kg	Dry	43.04	EPA 8260B	EPA 5035
Moisture, Percent	15		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-18B

Laboratory Sample ID :

308268-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	2.1	J	4.7	0.19	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Acetone	120	J	940	120	ug/Kg	Dry	40.47	EPA 8260B	EPA 5035
Styrene	57	J	240	50	ug/Kg	Dry	40.47	EPA 8260B	EPA 5035
Moisture, Percent	14		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-18C

Laboratory Sample ID :

308268-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.91	J	4.5	0.19	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Styrene	58	J	230	48	ug/Kg	Dry	39.07	EPA 8260B	EPA 5035
Moisture, Percent	14		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-18D

Laboratory Sample ID :

308268-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.3	J	4.8	0.20	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Moisture, Percent	14		1		%	As Recd	1.000	EPA CLP	METHOD

= CCV drift outside limits; average CCV drift within limits per method requirements

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

30826X



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Sampler Name(s): Neal Hughes
Mayra Dudrenova
Signature(s): *Neal Hughes*
Mayra Dudrenova

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES	TPH-g; -d; -mo by Method 8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	Multi Incremental Sampling (MIS)	Number of Containers
1	DTSC-18a	03/20/19	1045	SOIL	MECH/NONE	X	X	X	X	X	X	X	X	2
2	DTSC-18b	03/20/19	1127	SOIL	MECH/NONE	X	X	X	X	X	X	X	X	2
3	DTSC-18c	03/20/19	1330	SOIL	MECH/NONE	X	X	X	X	X	X	X	X	2
4	DTSC-18d	03/20/19	1500	SOIL	MECH/NONE	X	X	X	X	X	X	X	X	2
5	EB- 18e 190324	03/20/19	1651	H2O	NONE/HIGH	X	X	X	X	X	X	X	X	15

PROJECT INFORMATION
Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com; mayra.dudrenova@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

REPORTING
Routine (Level 2) Level 3 Level 4 EDD
TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

SPECIAL INSTRUCTIONS/COMMENTS:
Moisture MIS no dry. All other soil samples MIS dry.

RELINQUISHED BY:	RECEIVED BY:
Printed Name: Neal Hughes	Printed Name: KURT A. BUSS
Signature: <i>Neal Hughes</i>	Signature: <i>Kurt A. Buss</i>
Company: RPS	Company: EnthalpV
Time/Date: 3/20/19 1410	Time/Date: 3-20-19 1712

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 38826Y Client: RPS
 Date Received: 3/20/19 Project: _____

Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 3/20/19 By (print) AL (sign) _____
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**
 Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 16.6, #2: 2.3, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?	/		
If YES, what time were they transferred to freezer?			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?	/		
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?	/		
Did you change the hold time in LIMS for preserved terracores?	/		
Are bubbles > 6mm absent in VOA samples?	/		
Was the client contacted concerning this sample delivery?	/		
If YES, who was called? _____ By _____ Date: _____			

Section 5:
 Are the samples appropriately preserved? (If N/A, skip the rest of section 5) YES NO N/A
 Did you check preservatives for all bottles for each sample? YES NO N/A
 Did you document your preservative check?
 pH strip lot# 90BDH3081, pH strip lot# _____, pH strip lot# _____
 Preservative added:
 H2SO4 lot# _____ added to samples _____ on/at _____
 HCL lot# _____ added to samples _____ on/at _____
 HNOS lot# _____ added to samples _____ on/at _____
 NaOH lot# _____ added to samples _____ on/at _____

Section 6:
 Explanations/Comments: sample 5: 1/6 VOA labels did not match COC. Label stated "EB-190319", was assumed to be sample "EB-190320".

Date Logged In 3/20/19 By (print) AL (sign) _____
 Date Labeled 3/21/19 By (print) RV (sign) _____

Enthalpy Sample Preservation for 308268

Sample	pH: <2	>9	>12	Other
-005a	[]	[]	[]	_____
b	[]	[]	[]	_____
c	[]	[]	[]	_____
d	[]	[]	[]	_____
e	[]	[]	[]	_____
f	[]	[]	[]	_____
g	[]	[]	[]	_____
h	[]	[]	[]	_____
i	[]	[]	[]	_____
j	[]	[]	[]	_____
k	[]	[]	[]	_____
l	[]	[]	[]	_____
m	[]	[]	[]	_____
n	[]	[]	[]	_____
o	[]	[]	[]	_____

Analyst: RV
Date: 3/21/18

Total Volatile Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190320	Batch#:	268808
Matrix:	Water	Sampled:	03/20/19
Units:	ug/L	Received:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: SAMPLE Lab ID: 308268-005

Analyte	Result	RL	MDL
Gasoline C7-C12	27 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	80-120

Type: BLANK Lab ID: QC969052

Analyte	Result	RL	MDL
Gasoline C7-C12	21 J	50	9.4

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	80-120

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190320	Batch#:	268808
MSS Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type: MS Lab ID: QC969060

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	26.57	2,000	2,255	111	78-120

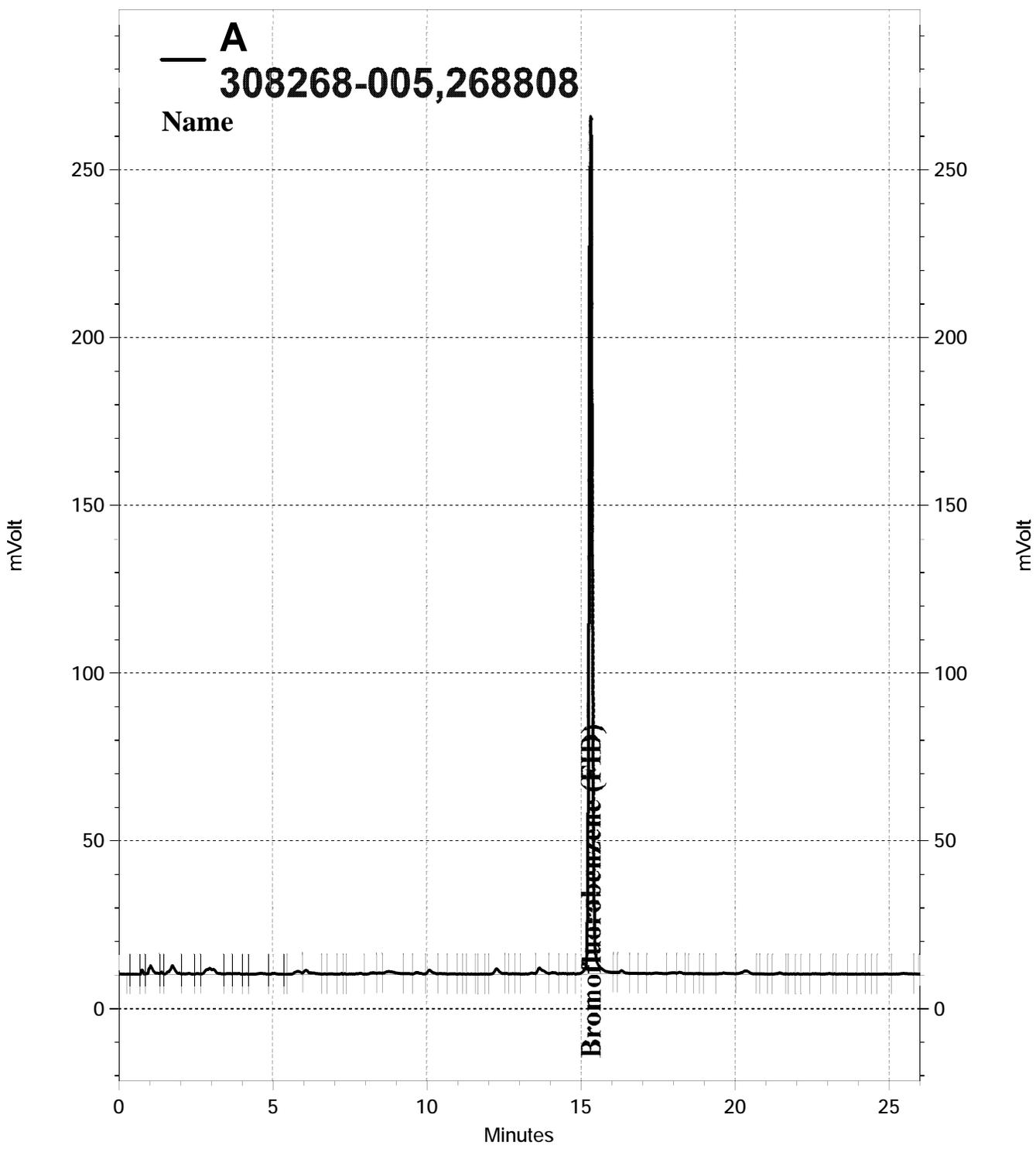
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	80-120

Type: MSD Lab ID: QC969061

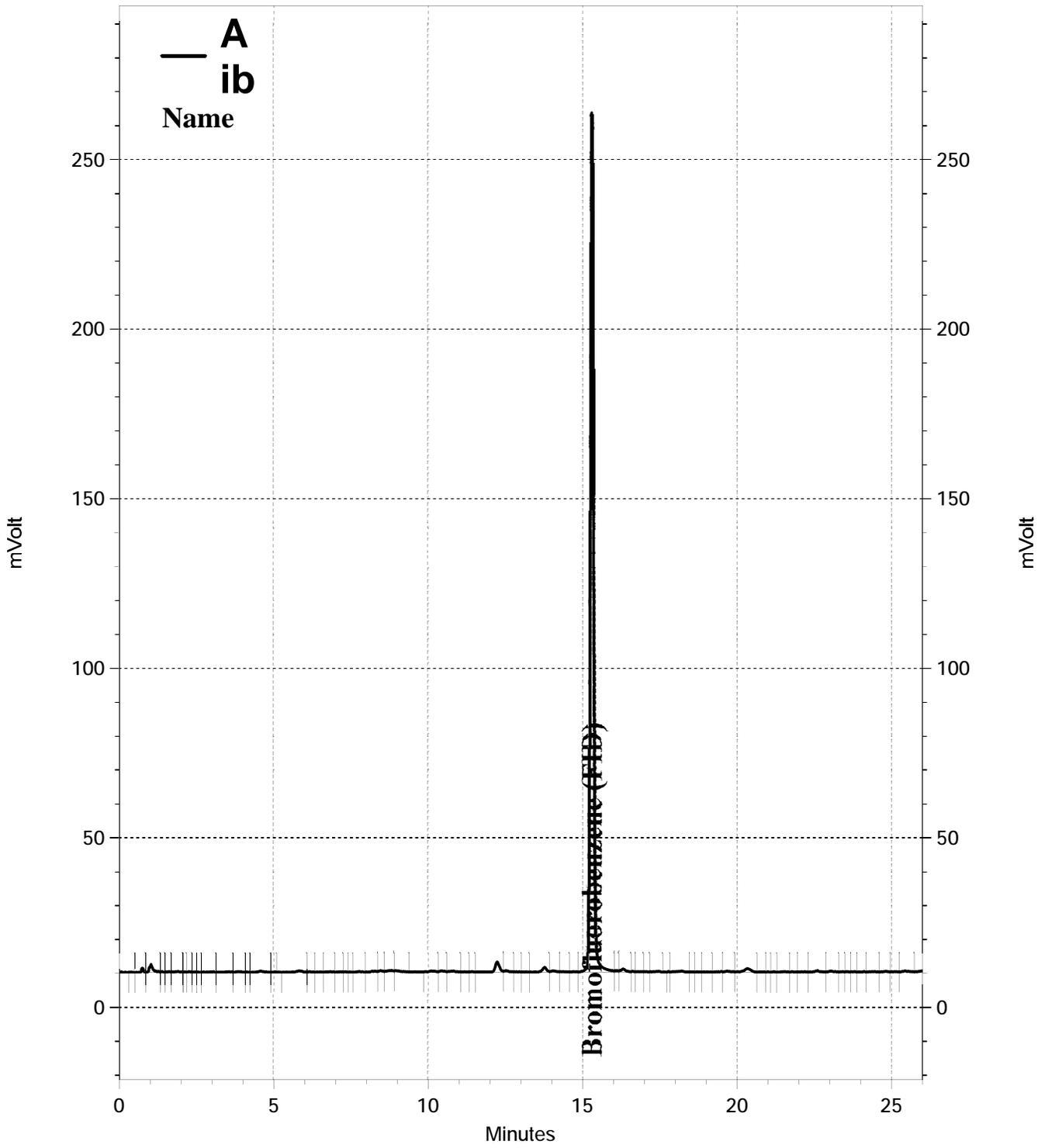
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,243	111	78-120	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	80-120

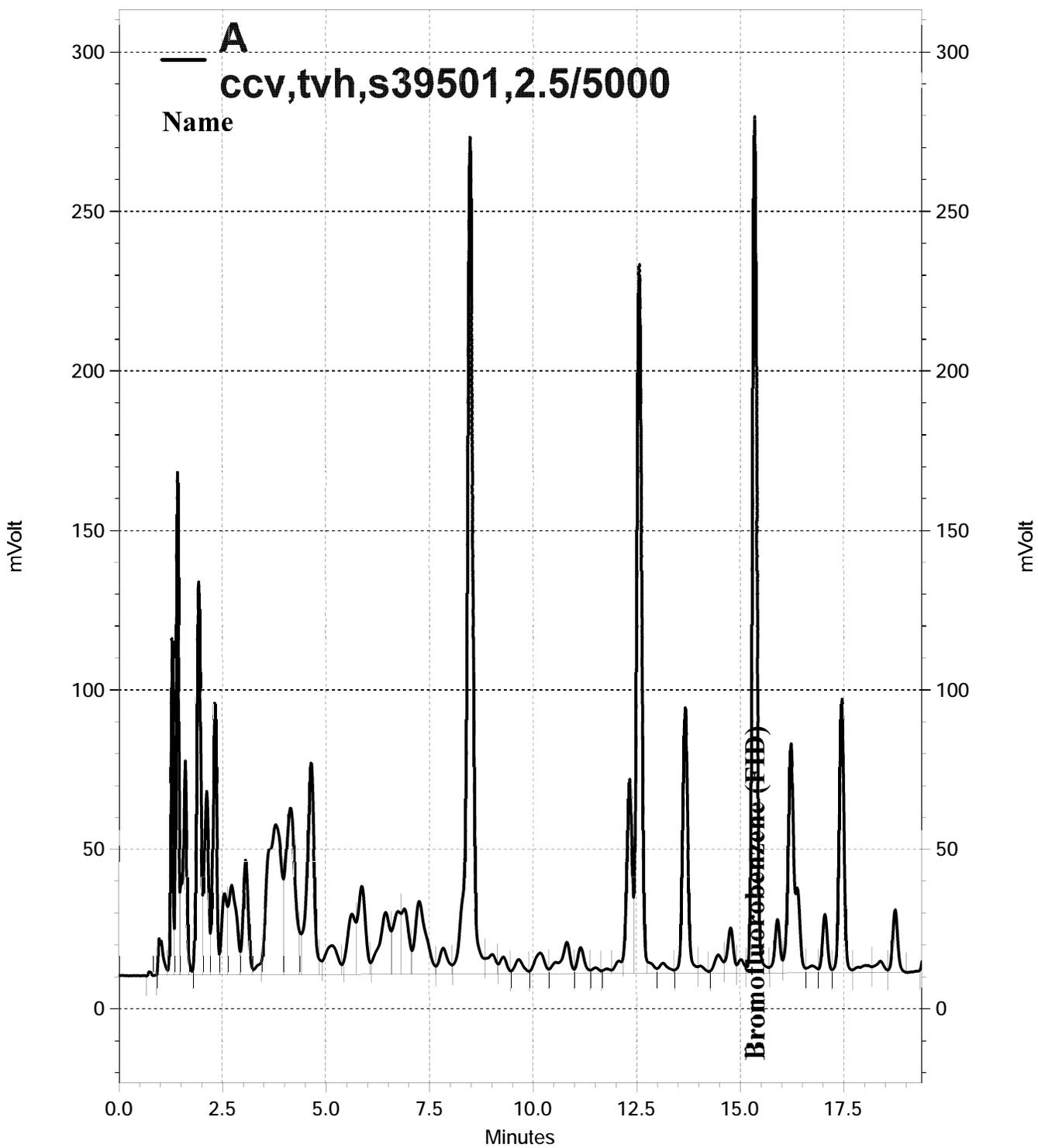
RPD= Relative Percent Difference



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— \\Lims\gdrive\ezchrom\Projects\GC07\Data\2019\080-006, A



— \\Lims\gdrive\ezchrom\Projects\GC07\Data\2019\080-001, A

Gasoline by GC/FID (5035 Prep)			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/21/19
Batch#:	268814		

Field ID: DTSC-18A Moisture: 15%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 308268-006

Analyte	Result	RL	MDL
Gasoline C7-C12	1.8 J	5.1	0.21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	74	58-145

Field ID: DTSC-18B Moisture: 14%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 308268-007

Analyte	Result	RL	MDL
Gasoline C7-C12	2.1 J	4.7	0.19

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	73	58-145

Field ID: DTSC-18C Moisture: 14%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 308268-008

Analyte	Result	RL	MDL
Gasoline C7-C12	0.91 J	4.5	0.19

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	70	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	268814
Units:	mg/Kg	Analyzed:	03/21/19
Diln Fac:	1.000		

Type: BS Lab ID: QC969082

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.114	111	80-122

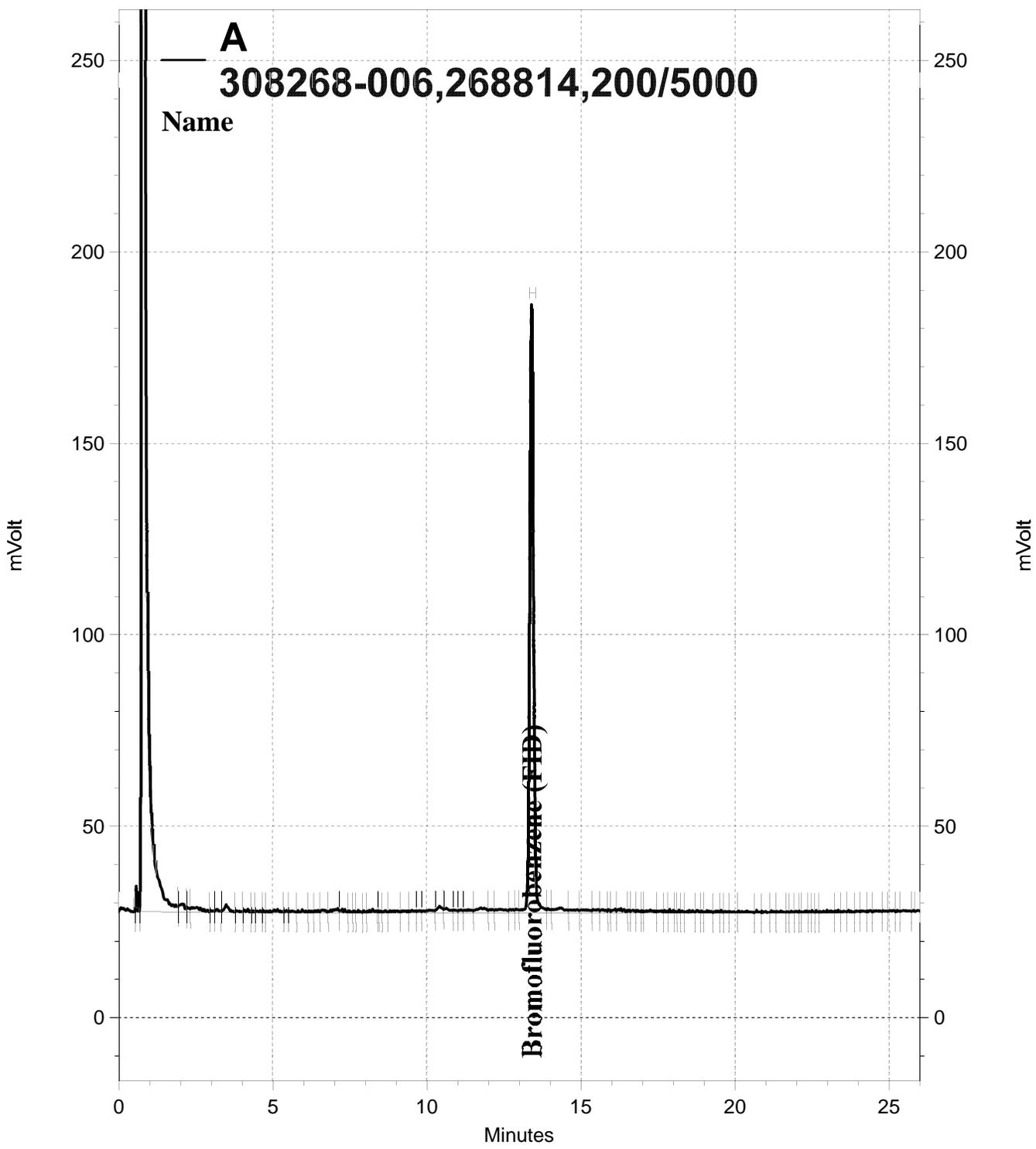
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Type: BSD Lab ID: QC969083

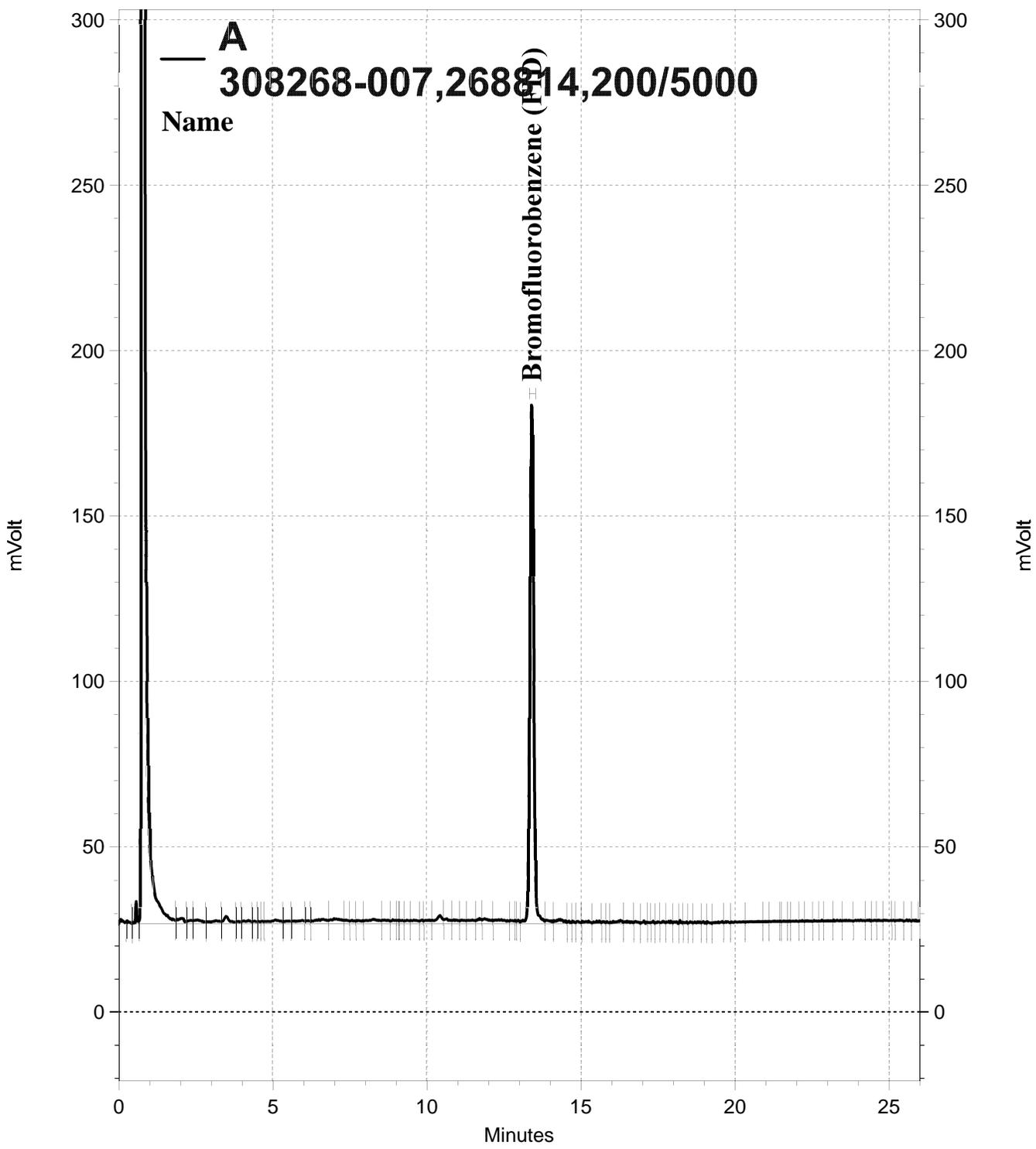
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.084	108	80-122	3	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

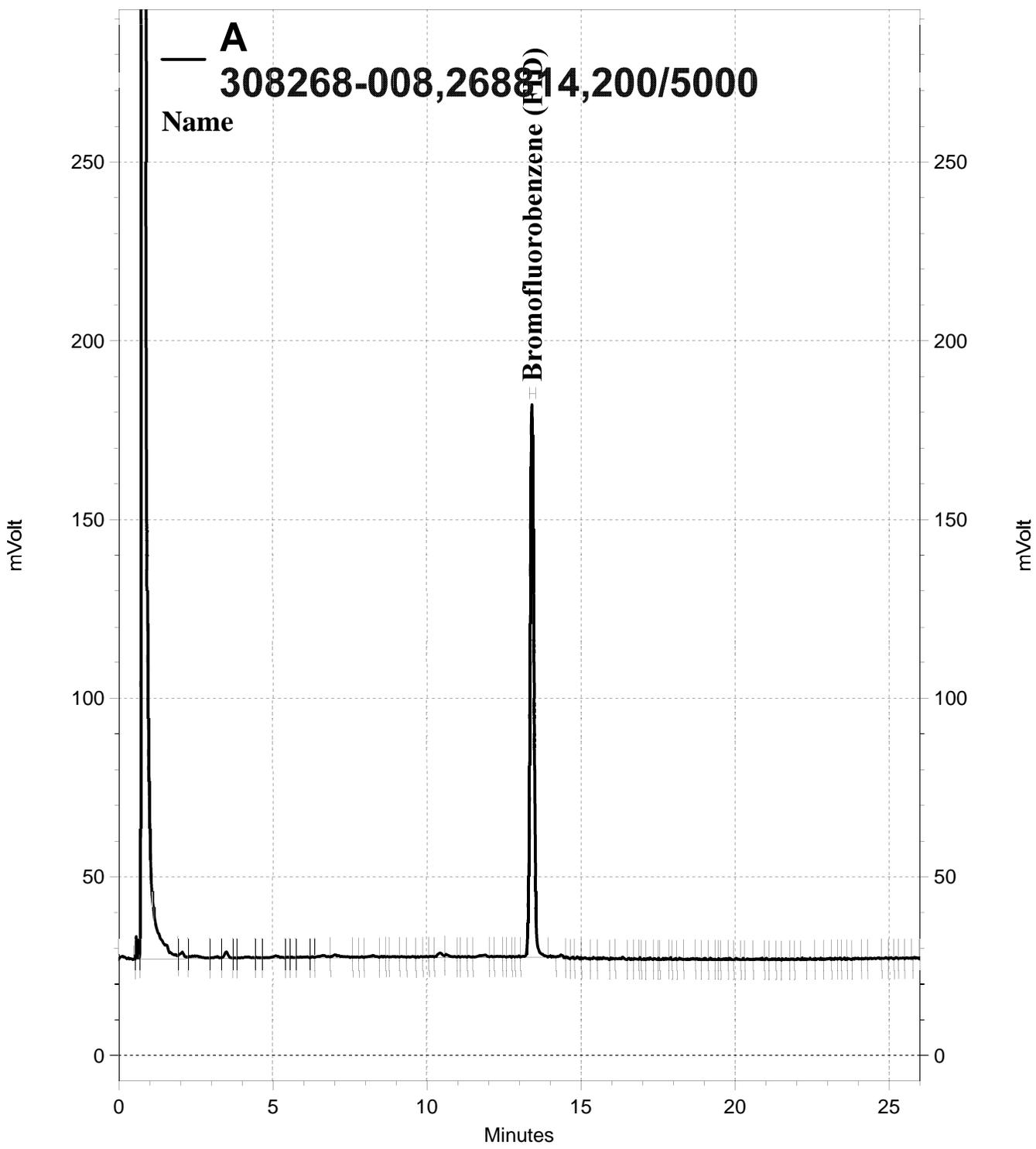
RPD= Relative Percent Difference



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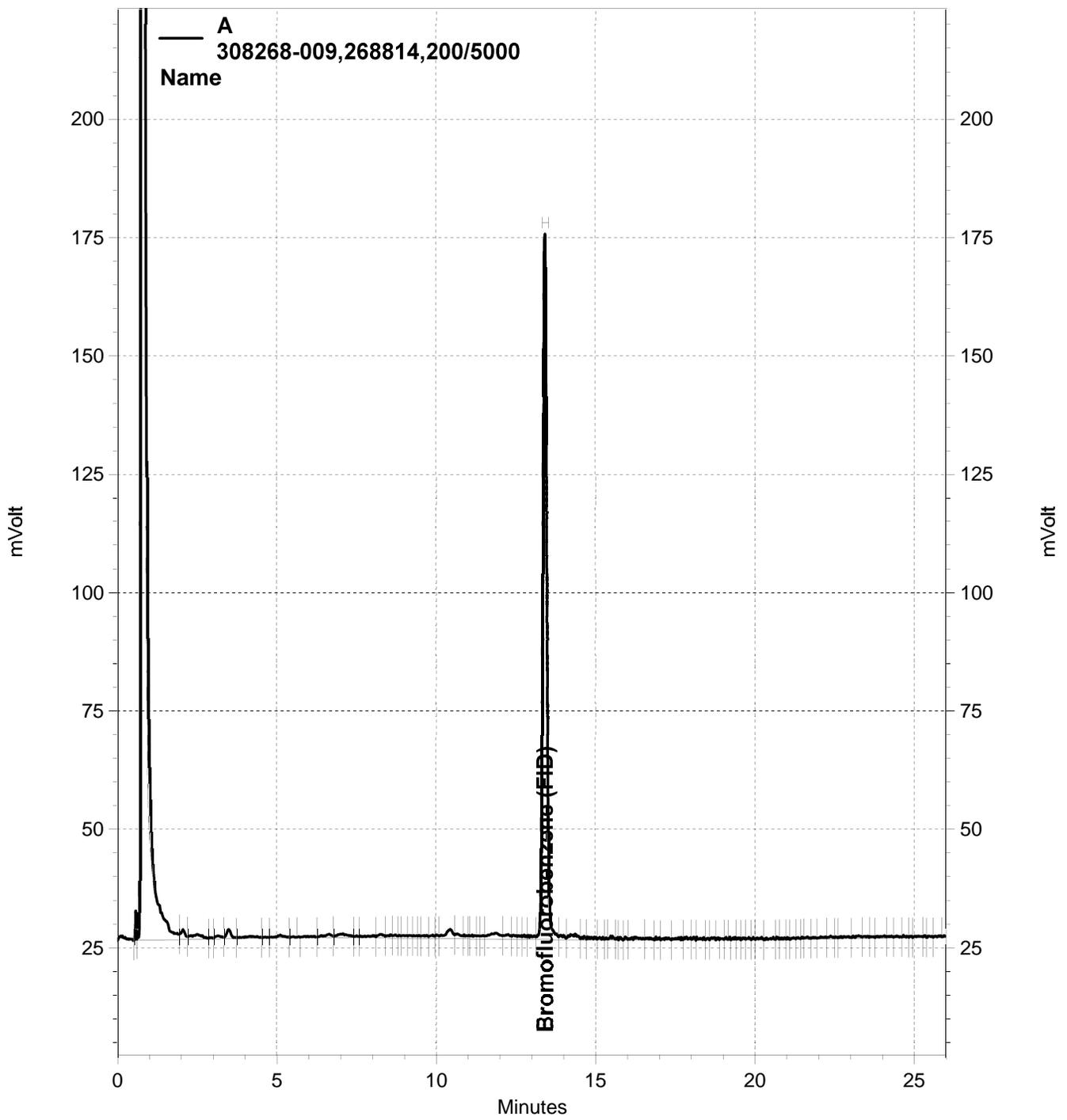


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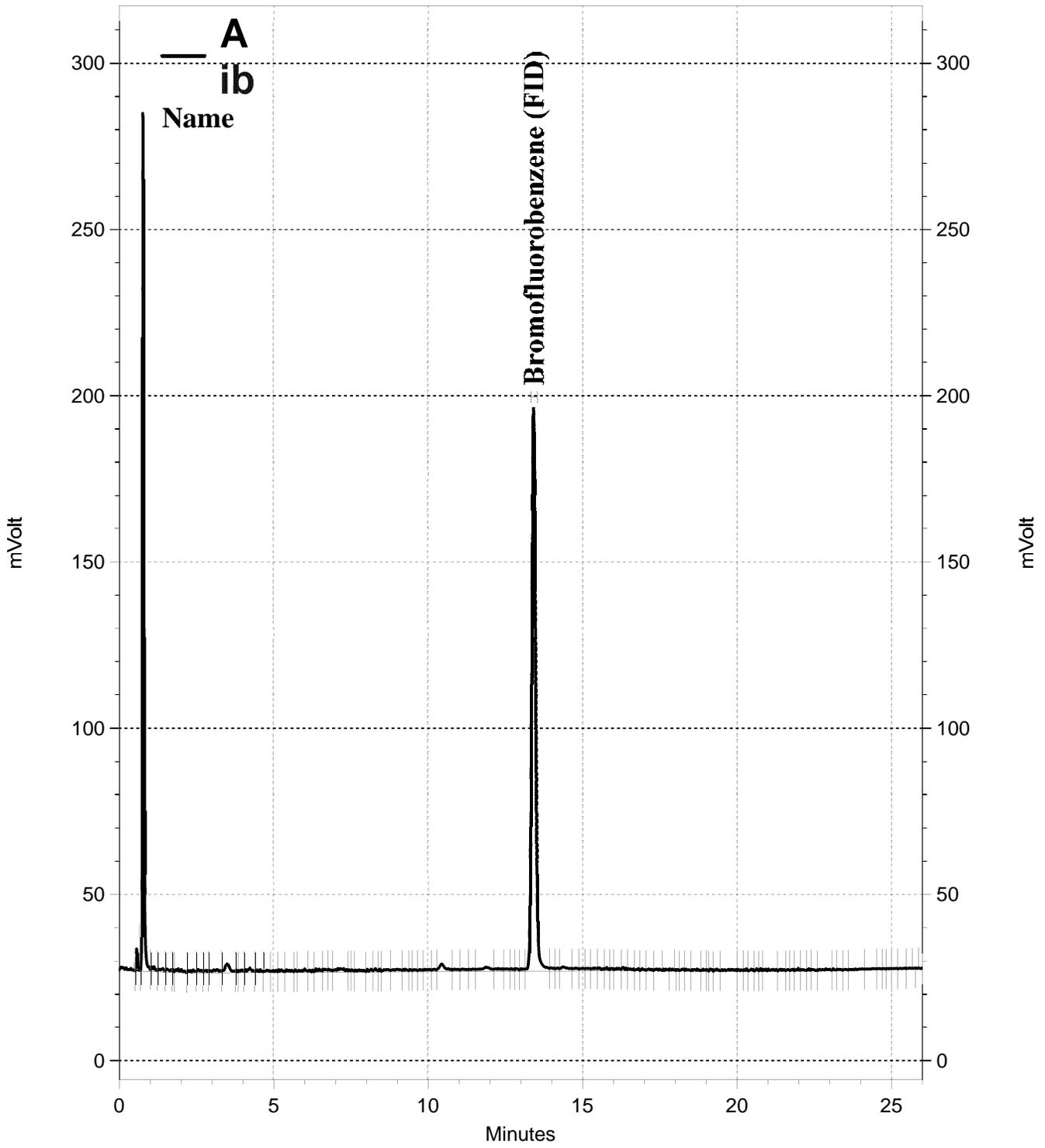


A
308268-008,268814,200/5000
Name

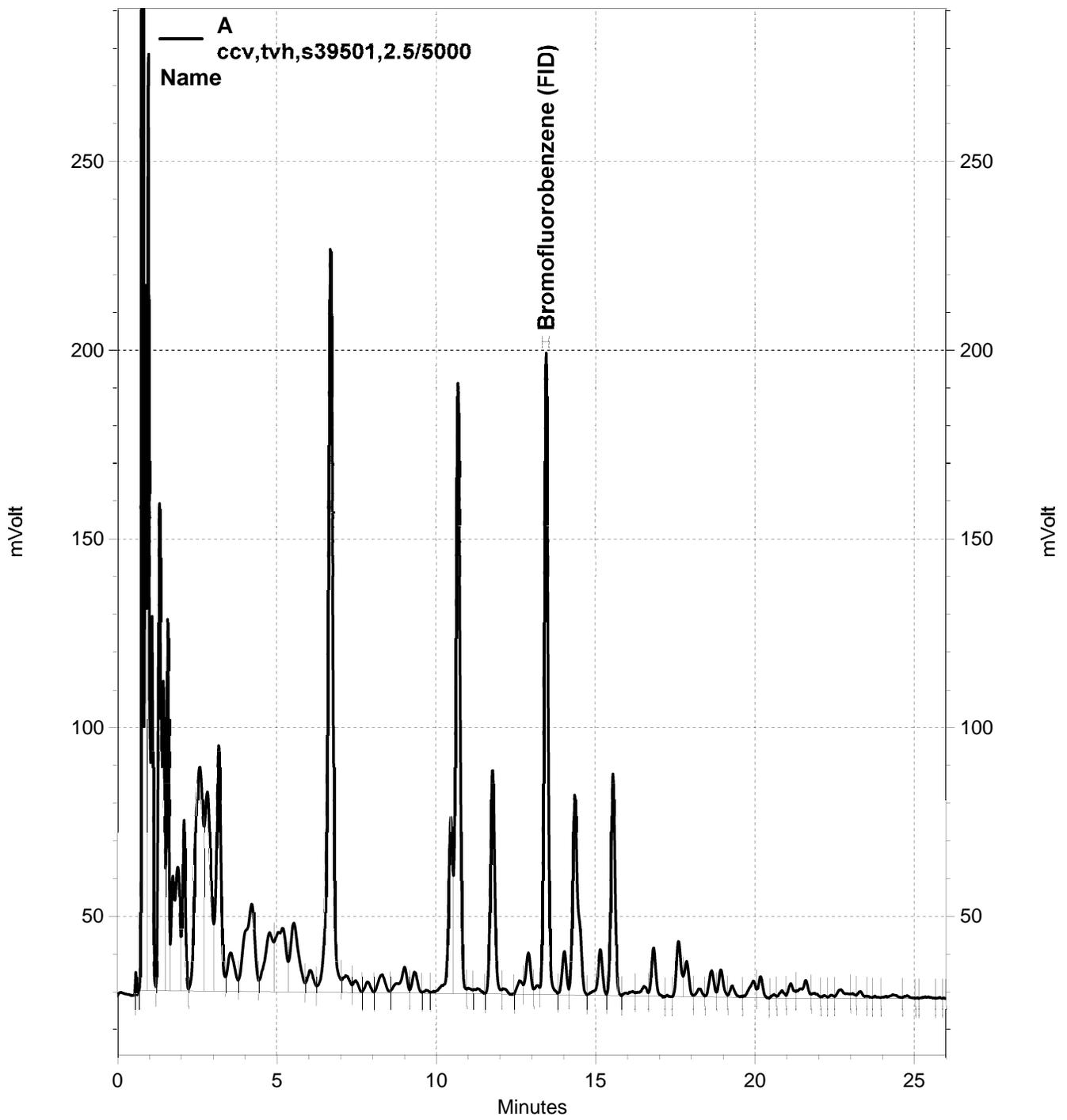
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Total Extractable Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	EB-190320	Batch#:	268820
Matrix:	Water	Sampled:	03/20/19
Units:	ug/L	Received:	03/20/19
Diln Fac:	1.000	Prepared:	03/21/19

Type: SAMPLE Analyzed: 03/25/19
 Lab ID: 308268-005

Analyte	Result	RL	MDL
Diesel C10-C24	48	48	16
Motor Oil C24-C36	ND	290	92

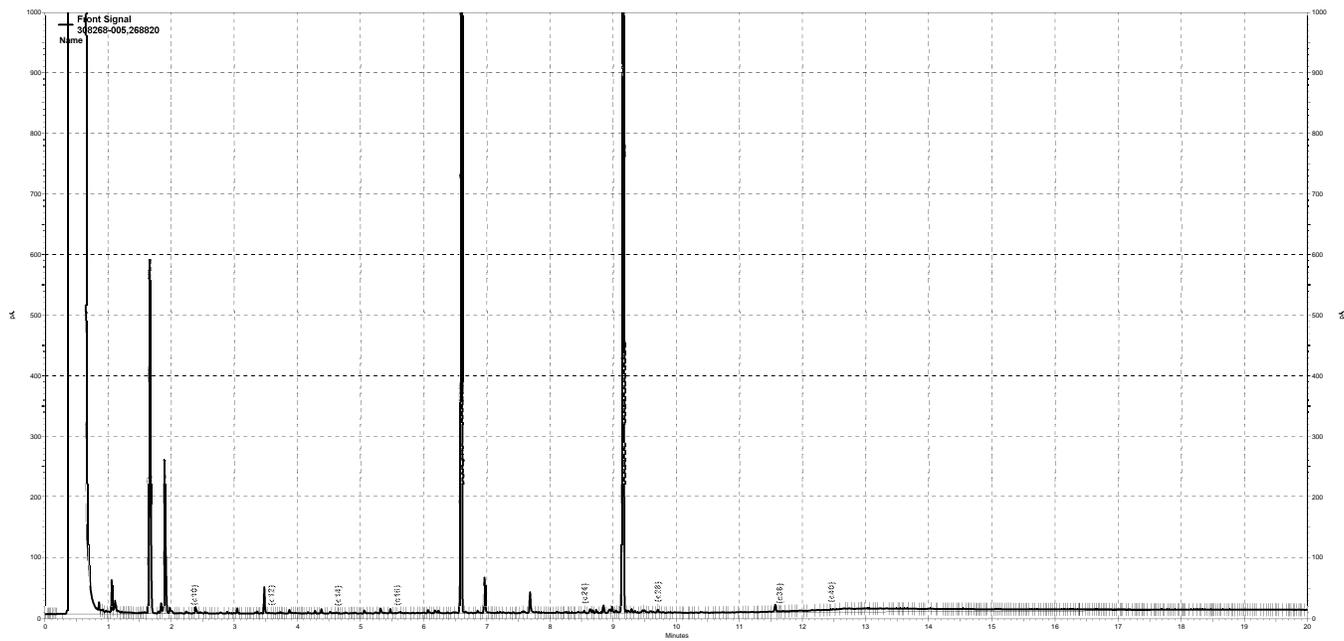
Surrogate	%REC	Limits
o-Terphenyl	101	68-124

Type: BLANK Analyzed: 03/22/19
 Lab ID: QC969107

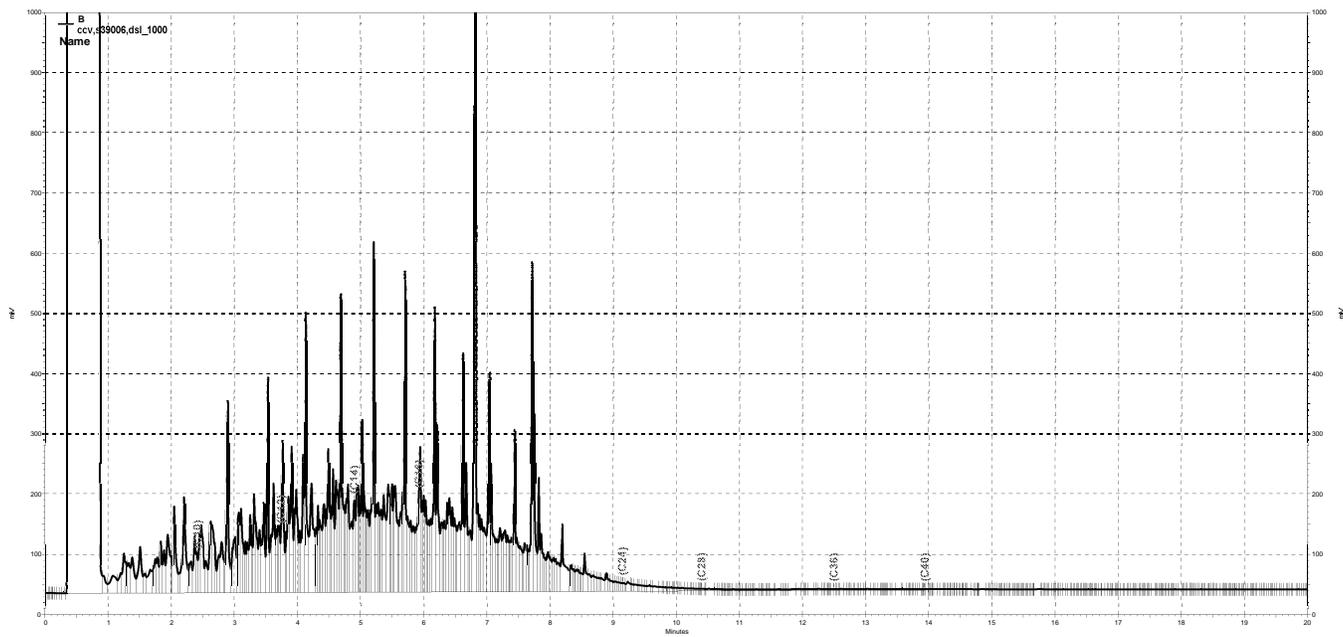
Analyte	Result	RL	MDL
Diesel C10-C24	ND	50	16
Motor Oil C24-C36	ND	300	96

Surrogate	%REC	Limits
o-Terphenyl	111	68-124

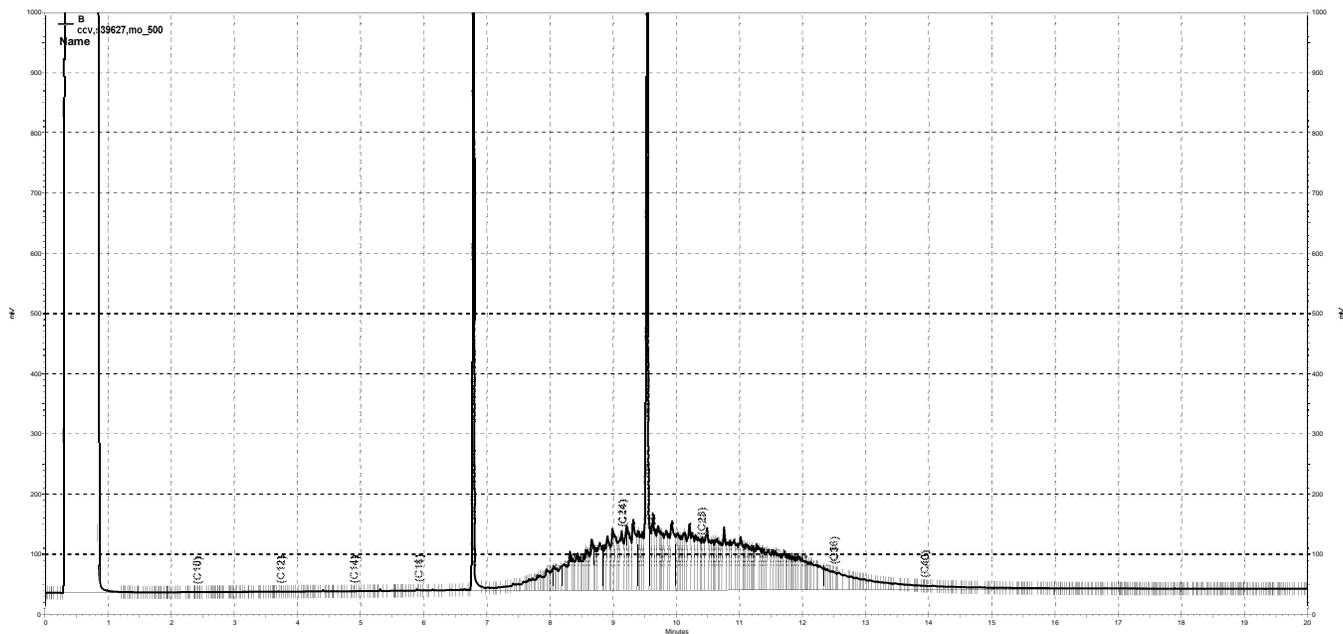
ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit



— G:\ezchrom\Projects\GC27\Data\2019\084a011.dat, Front Signal



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Total Extractable Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19
Basis:	air dried	Prepared:	03/21/19
Batch#:	268824		

Field ID: DTSC-18A Diln Fac: 10.00
 Type: SAMPLE Analyzed: 03/23/19
 Lab ID: 308268-001

Analyte	Result	RL	MDL
Diesel C10-C24	39 Y	10	3.1
Motor Oil C24-C36	260	50	15

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-18B Diln Fac: 10.00
 Type: SAMPLE Analyzed: 03/25/19
 Lab ID: 308268-002

Analyte	Result	RL	MDL
Diesel C10-C24	26 Y	9.9	3.0
Motor Oil C24-C36	240	50	15

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-18C Diln Fac: 10.00
 Type: SAMPLE Analyzed: 03/25/19
 Lab ID: 308268-003

Analyte	Result	RL	MDL
Diesel C10-C24	43 Y	10	3.1
Motor Oil C24-C36	290	50	15

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-18D Diln Fac: 10.00
 Type: SAMPLE Analyzed: 03/25/19
 Lab ID: 308268-004

Analyte	Result	RL	MDL
Diesel C10-C24	38 Y	10	3.1
Motor Oil C24-C36	310	50	15

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19
Basis:	air dried	Prepared:	03/21/19
Batch#:	268824		

Type: BLANK Diln Fac: 1.000
 Lab ID: QC969125 Analyzed: 03/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

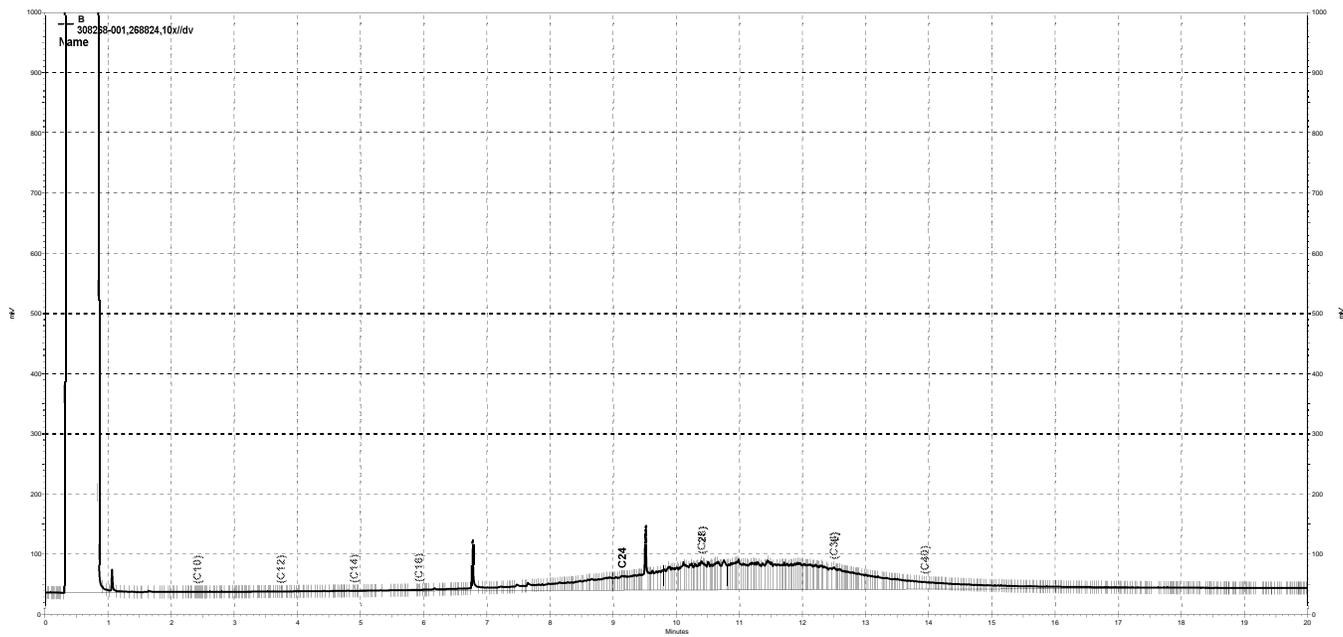
Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

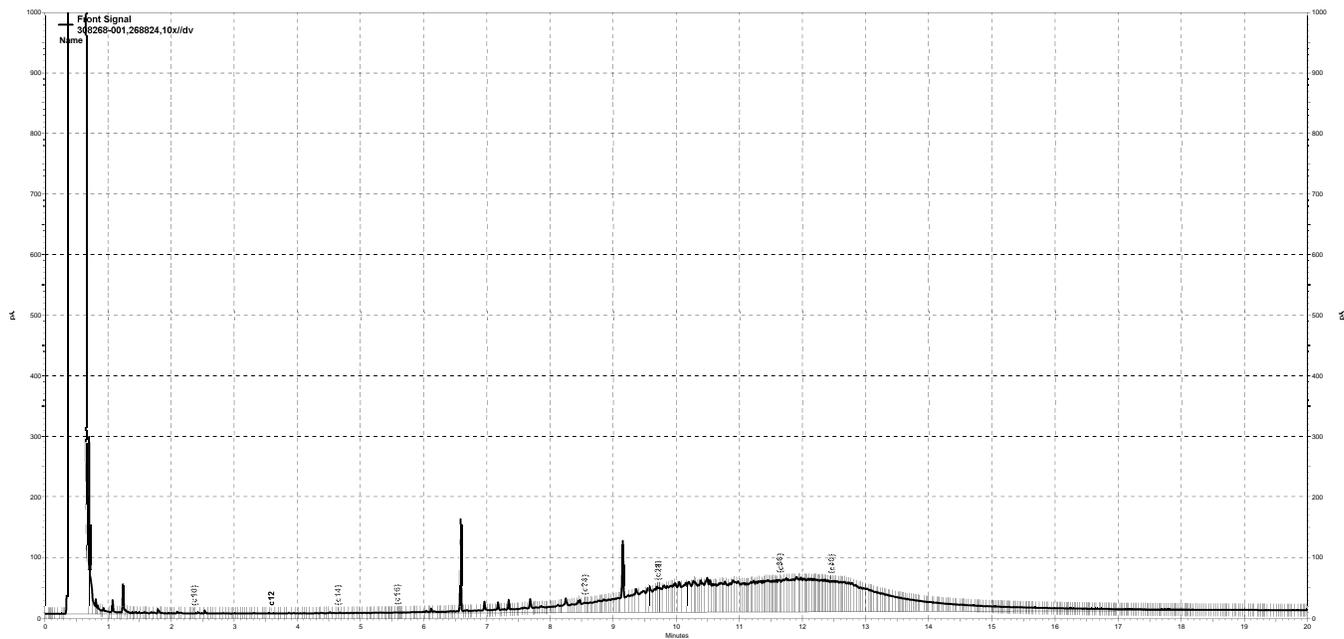
Total Extractable Hydrocarbons			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969126	Batch#:	268824
Matrix:	Soil	Prepared:	03/21/19
Units:	mg/Kg	Analyzed:	03/22/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	54.09	108	55-133

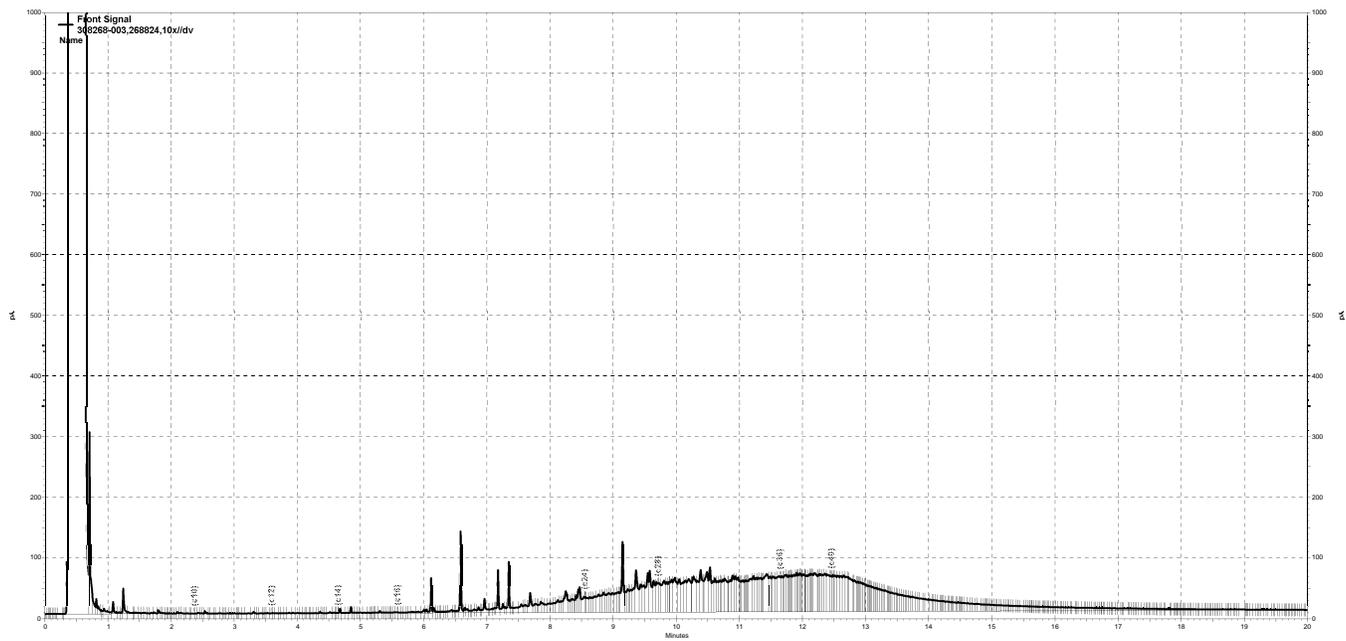
Surrogate	%REC	Limits
o-Terphenyl	123	61-130



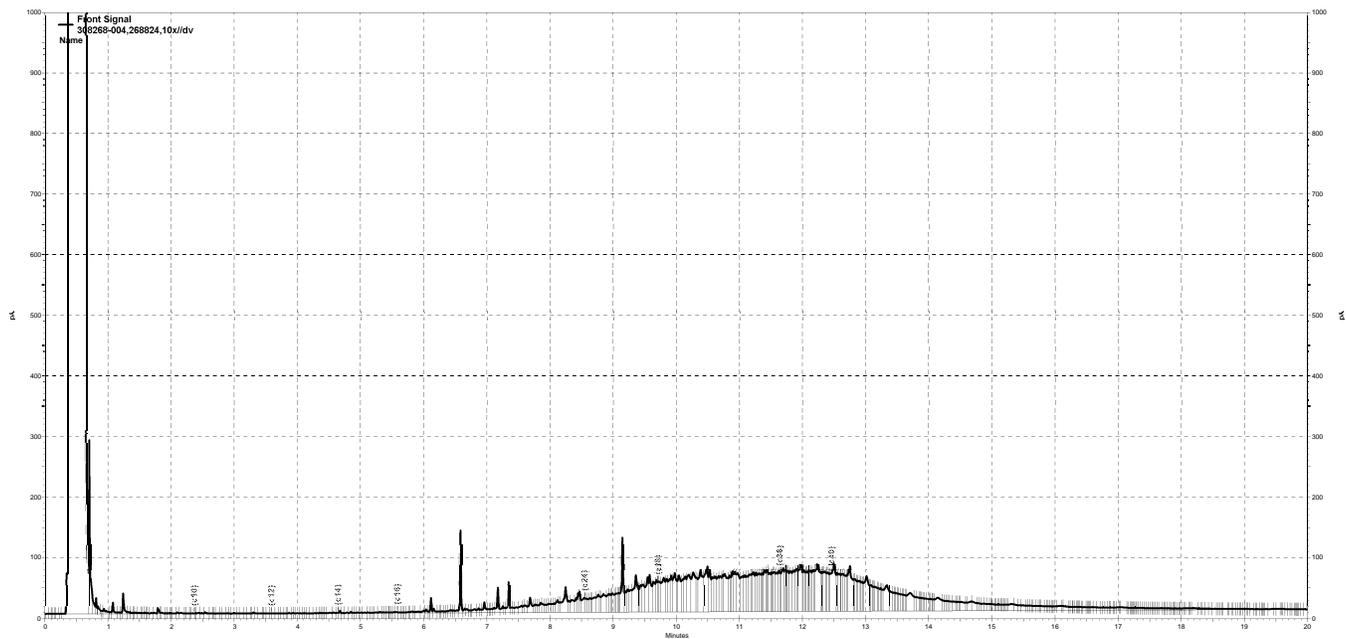
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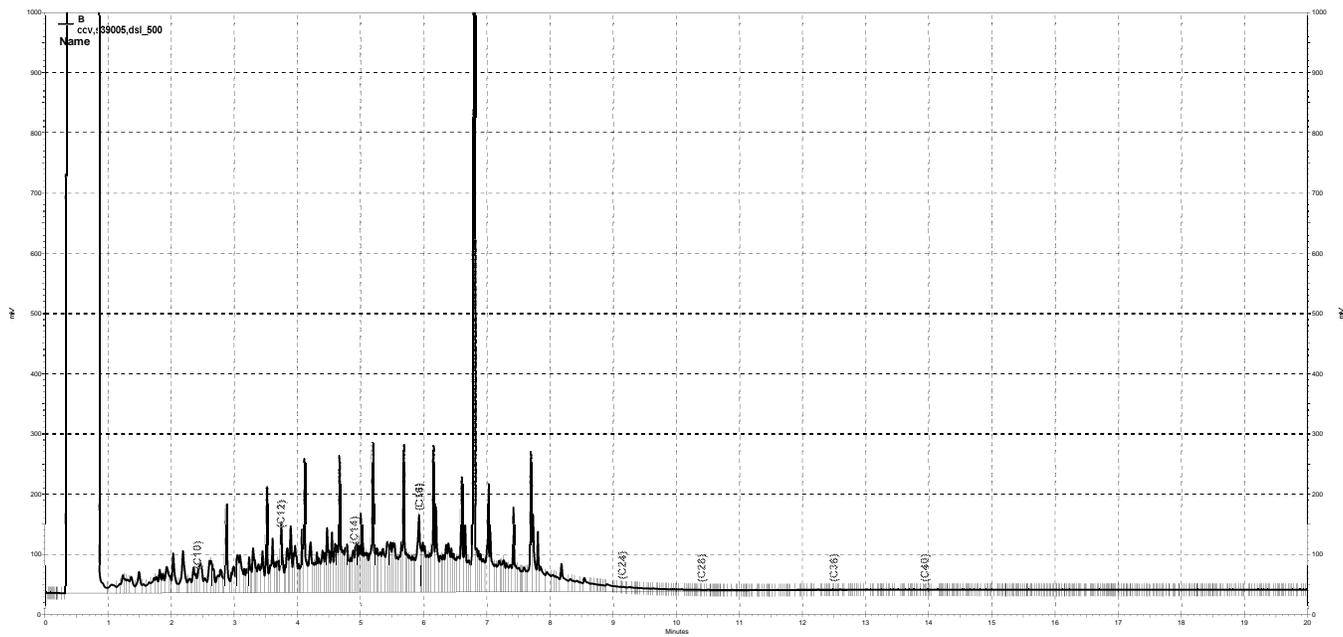
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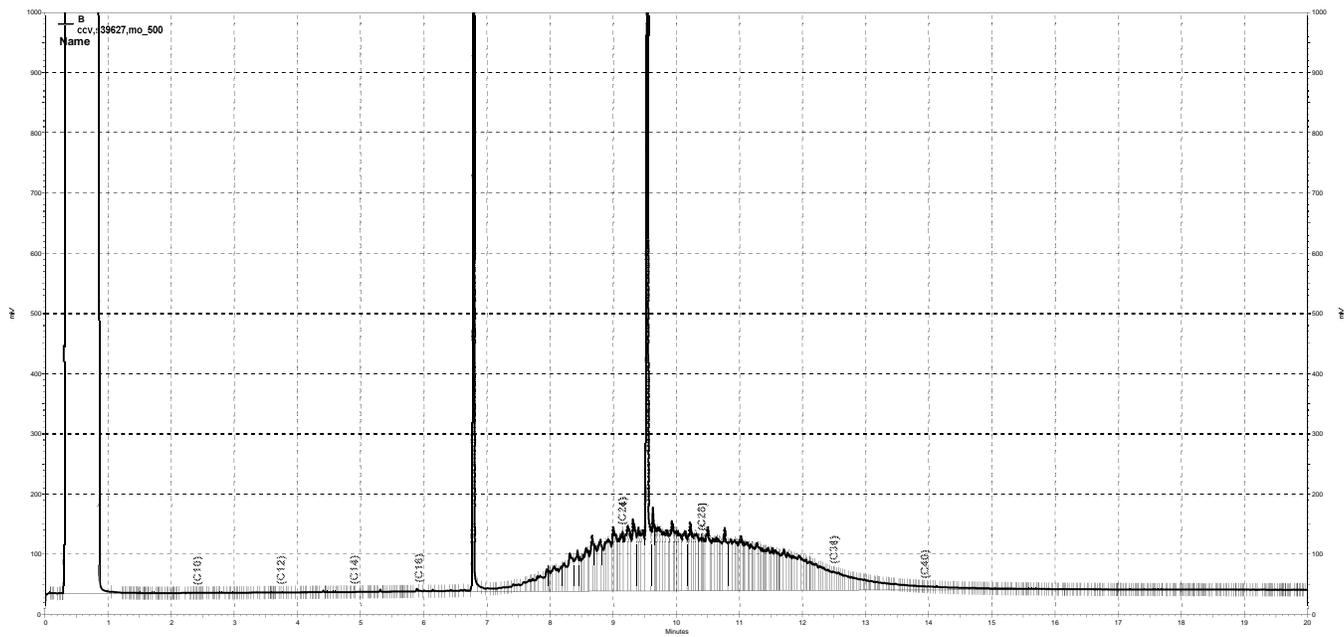
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Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190320	Diln Fac:	1.000
Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Analyzed
Freon 12	ND	1.0	0.1	268822	03/21/19
Chloromethane	ND	1.0	0.1	268822	03/21/19
Vinyl Chloride	ND	0.5	0.1	268822	03/21/19
Bromomethane	ND	1.0	0.2	268822	03/21/19
Chloroethane	ND	1.0	0.1	268822	03/21/19
Trichlorofluoromethane	ND	1.0	0.1	268822	03/21/19
Acetone	40	10	1.7	268864	03/23/19
Freon 113	ND	2.0	0.1	268822	03/21/19
1,1-Dichloroethene	ND	0.5	0.1	268822	03/21/19
Methylene Chloride	ND	10	0.9	268822	03/21/19
Carbon Disulfide	ND	0.5	0.1	268822	03/21/19
MTBE	ND	0.5	0.1	268822	03/21/19
trans-1,2-Dichloroethene	ND	0.5	0.1	268822	03/21/19
Vinyl Acetate	ND	10	0.2	268822	03/21/19
1,1-Dichloroethane	ND	0.5	0.1	268822	03/21/19
2-Butanone	6.1 J	10	0.5	268822	03/21/19
cis-1,2-Dichloroethene	ND	0.5	0.1	268822	03/21/19
2,2-Dichloropropane	ND	0.5	0.1	268822	03/21/19
Chloroform	ND	0.5	0.2	268822	03/21/19
Bromochloromethane	ND	0.5	0.1	268822	03/21/19
1,1,1-Trichloroethane	ND	0.5	0.1	268822	03/21/19
1,1-Dichloropropene	ND	0.5	0.1	268822	03/21/19
Carbon Tetrachloride	ND	0.5	0.1	268822	03/21/19
1,2-Dichloroethane	ND	0.5	0.2	268822	03/21/19
Benzene	ND	0.5	0.1	268822	03/21/19
Trichloroethene	ND	0.5	0.1	268822	03/21/19
1,2-Dichloropropane	ND	0.5	0.1	268822	03/21/19
Bromodichloromethane	ND	0.5	0.1	268822	03/21/19
Dibromomethane	ND	0.5	0.1	268822	03/21/19
4-Methyl-2-Pentanone	ND	10	0.1	268822	03/21/19
cis-1,3-Dichloropropene	ND	0.5	0.1	268822	03/21/19
Toluene	ND	0.5	0.1	268822	03/21/19
trans-1,3-Dichloropropene	ND	0.5	0.1	268822	03/21/19
1,1,2-Trichloroethane	ND	0.5	0.1	268822	03/21/19
2-Hexanone	1.6 J	10	0.2	268822	03/21/19
1,3-Dichloropropane	ND	0.5	0.1	268822	03/21/19
Tetrachloroethene	ND	0.5	0.1	268822	03/21/19
Dibromochloromethane	ND	0.5	0.1	268822	03/21/19
1,2-Dibromoethane	ND	0.5	0.1	268822	03/21/19
Chlorobenzene	ND	0.5	0.1	268822	03/21/19
1,1,1,2-Tetrachloroethane	ND	0.5	0.1	268822	03/21/19
Ethylbenzene	ND	0.5	0.1	268822	03/21/19
m,p-Xylenes	ND	0.5	0.1	268822	03/21/19
o-Xylene	ND	0.5	0.1	268822	03/21/19
Styrene	ND	0.5	0.1	268822	03/21/19
Bromoform	ND	1.0	0.1	268822	03/21/19
Isopropylbenzene	ND	0.5	0.1	268822	03/21/19
1,1,2,2-Tetrachloroethane	ND	0.5	0.1	268822	03/21/19
1,2,3-Trichloropropane	ND	0.5	0.1	268822	03/21/19
Propylbenzene	ND	0.5	0.1	268822	03/21/19
Bromobenzene	ND	0.5	0.1	268822	03/21/19
1,3,5-Trimethylbenzene	ND	0.5	0.1	268822	03/21/19
2-Chlorotoluene	ND	0.5	0.1	268822	03/21/19

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	EB-190320	Diln Fac:	1.000
Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L		

Analyte	Result	RL	MDL	Batch#	Analyzed
4-Chlorotoluene	ND	0.5	0.1	268822	03/21/19
tert-Butylbenzene	ND	0.5	0.1	268822	03/21/19
1,2,4-Trimethylbenzene	ND	0.5	0.1	268822	03/21/19
sec-Butylbenzene	ND	0.5	0.1	268822	03/21/19
para-Isopropyl Toluene	ND	0.5	0.1	268822	03/21/19
1,3-Dichlorobenzene	ND	0.5	0.1	268822	03/21/19
1,4-Dichlorobenzene	ND	0.5	0.1	268822	03/21/19
n-Butylbenzene	ND	0.5	0.1	268822	03/21/19
1,2-Dichlorobenzene	ND	0.5	0.1	268822	03/21/19
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2	268822	03/21/19
1,2,4-Trichlorobenzene	ND	1.0	0.2	268822	03/21/19
Hexachlorobutadiene	ND	2.0	0.1	268822	03/21/19
Naphthalene	ND	2.0	0.4	268822	03/21/19
1,2,3-Trichlorobenzene	ND	1.0	0.3	268822	03/21/19

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	102	80-121	268822	03/21/19
1,2-Dichloroethane-d4	107	80-134	268822	03/21/19
Toluene-d8	96	80-120	268822	03/21/19
Bromofluorobenzene	103	80-120	268822	03/21/19

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	268822
Units:	ug/L	Analyzed:	03/21/19
Diln Fac:	1.000		

Type: BS Lab ID: QC969113

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	15.00	14.41	96	65-133
Benzene	15.00	15.02	100	75-122
Trichloroethene	15.00	14.32	95	73-121
Toluene	15.00	14.26	95	78-120
Chlorobenzene	15.00	14.10	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-121
1,2-Dichloroethane-d4	108	80-134
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC969114

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	15.00	15.12	101	65-133	5	23
Benzene	15.00	15.44	103	75-122	3	20
Trichloroethene	15.00	15.02	100	73-121	5	20
Toluene	15.00	14.60	97	78-120	2	20
Chlorobenzene	15.00	14.52	97	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-121
1,2-Dichloroethane-d4	110	80-134
Toluene-d8	98	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969115	Batch#:	268822
Matrix:	Water	Analyzed:	03/21/19
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.1
Chloromethane	ND	1.0	0.1
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.2
Chloroethane	ND	1.0	0.1
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	1.5
Freon 113	ND	2.0	0.1
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.9
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	0.2
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.5
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.1
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.1
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.1
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969115	Batch#:	268822
Matrix:	Water	Analyzed:	03/21/19
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.1
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.2
1,2,4-Trichlorobenzene	ND	1.0	0.2
Hexachlorobutadiene	ND	2.0	0.1
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-121
1,2-Dichloroethane-d4	108	80-134
Toluene-d8	95	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	268864
Units:	ug/L	Analyzed:	03/23/19
Diln Fac:	1.000		

Type: BS Lab ID: QC969289

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	10.00	9.943	99	65-133
Benzene	10.00	10.53	105	75-122
Trichloroethene	10.00	9.862	99	73-121
Toluene	10.00	10.05	101	78-120
Chlorobenzene	10.00	8.947	89	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	90	80-134
Toluene-d8	95	80-120
Bromofluorobenzene	94	80-120

Type: BSD Lab ID: QC969290

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	10.00	9.553	96	65-133	4	23
Benzene	10.00	10.21	102	75-122	3	20
Trichloroethene	10.00	9.616	96	73-121	3	20
Toluene	10.00	10.45	104	78-120	4	20
Chlorobenzene	10.00	10.19	102	80-120	13	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-121
1,2-Dichloroethane-d4	90	80-134
Toluene-d8	99	80-120
Bromofluorobenzene	93	80-120

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969291	Batch#:	268864
Matrix:	Water	Analyzed:	03/23/19
Units:	ug/L		

Analyte	Result	RL	MDL
Freon 12	ND	1.0	0.3
Chloromethane	ND	1.0	0.3
Vinyl Chloride	ND	0.5	0.1
Bromomethane	ND	1.0	0.1
Chloroethane	ND	1.0	0.2
Trichlorofluoromethane	ND	1.0	0.1
Acetone	ND	10	1.7
Freon 113	ND	2.0	0.3
1,1-Dichloroethene	ND	0.5	0.1
Methylene Chloride	ND	10	0.5
Carbon Disulfide	ND	0.5	0.1
MTBE	ND	0.5	0.1
trans-1,2-Dichloroethene	ND	0.5	0.1
Vinyl Acetate	ND	10	2.0
1,1-Dichloroethane	ND	0.5	0.1
2-Butanone	ND	10	0.4
cis-1,2-Dichloroethene	ND	0.5	0.1
2,2-Dichloropropane	ND	0.5	0.1
Chloroform	ND	0.5	0.2
Bromochloromethane	ND	0.5	0.1
1,1,1-Trichloroethane	ND	0.5	0.1
1,1-Dichloropropene	ND	0.5	0.1
Carbon Tetrachloride	ND	0.5	0.1
1,2-Dichloroethane	ND	0.5	0.2
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	0.1
Bromodichloromethane	ND	0.5	0.1
Dibromomethane	ND	0.5	0.1
4-Methyl-2-Pentanone	ND	10	0.2
cis-1,3-Dichloropropene	ND	0.5	0.1
Toluene	ND	0.5	0.1
trans-1,3-Dichloropropene	ND	0.5	0.1
1,1,2-Trichloroethane	ND	0.5	0.1
2-Hexanone	ND	10	0.2
1,3-Dichloropropane	ND	0.5	0.1
Tetrachloroethene	ND	0.5	0.1
Dibromochloromethane	ND	0.5	0.1
1,2-Dibromoethane	ND	0.5	0.1
Chlorobenzene	ND	0.5	0.1
1,1,1,2-Tetrachloroethane	ND	0.5	0.1
Ethylbenzene	ND	0.5	0.2
m,p-Xylenes	ND	0.5	0.1
o-Xylene	ND	0.5	0.1
Styrene	ND	0.5	0.1
Bromoform	ND	1.0	0.1
Isopropylbenzene	ND	0.5	0.1
1,1,2,2-Tetrachloroethane	ND	0.5	0.1
1,2,3-Trichloropropane	ND	0.5	0.1
Propylbenzene	ND	0.5	0.1
Bromobenzene	ND	0.5	0.1
1,3,5-Trimethylbenzene	ND	0.5	0.2
2-Chlorotoluene	ND	0.5	0.1

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969291	Batch#:	268864
Matrix:	Water	Analyzed:	03/23/19
Units:	ug/L		

Analyte	Result	RL	MDL
4-Chlorotoluene	ND	0.5	0.2
tert-Butylbenzene	ND	0.5	0.1
1,2,4-Trimethylbenzene	ND	0.5	0.1
sec-Butylbenzene	ND	0.5	0.1
para-Isopropyl Toluene	ND	0.5	0.1
1,3-Dichlorobenzene	ND	0.5	0.1
1,4-Dichlorobenzene	ND	0.5	0.1
n-Butylbenzene	ND	0.5	0.1
1,2-Dichlorobenzene	ND	0.5	0.1
1,2-Dibromo-3-Chloropropane	ND	2.0	0.3
1,2,4-Trichlorobenzene	ND	1.0	0.1
Hexachlorobutadiene	ND	2.0	0.4
Naphthalene	ND	2.0	0.4
1,2,3-Trichlorobenzene	ND	1.0	0.3

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	93	80-134
Toluene-d8	100	80-120
Bromofluorobenzene	96	80-120

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	268864
MSS Lab ID:	308131-031	Sampled:	03/14/19
Matrix:	Water	Received:	03/14/19
Units:	ug/L	Analyzed:	03/23/19
Diln Fac:	10.00		

Type: MS Lab ID: QC969307

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<1.439	62.50	53.91	86	54-148
Benzene	18.85	62.50	70.51	83	58-134
Trichloroethene	<1.290	62.50	49.55	79	47-141
Toluene	3.250	62.50	54.19	82	56-132
Chlorobenzene	<1.163	62.50	50.03	80	57-131

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	93	80-134
Toluene-d8	101	80-120
Bromofluorobenzene	95	80-120

Type: MSD Lab ID: QC969308

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	62.50	56.95	91	54-148	5	54
Benzene	62.50	73.77	88	58-134	5	54
Trichloroethene	62.50	51.51	82	47-141	4	52
Toluene	62.50	58.12	88	56-132	7	55
Chlorobenzene	62.50	53.32	85	57-131	6	55

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-121
1,2-Dichloroethane-d4	90	80-134
Toluene-d8	103	80-120
Bromofluorobenzene	96	80-120

RPD= Relative Percent Difference

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18A	Diln Fac:	43.04
Lab ID:	308268-006	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	510	52
Chloromethane	ND	510	42
Vinyl Chloride	ND	510	38
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	250	40
Acetone	ND	1,000	130
Freon 113	ND	250	50
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,300	220
Carbon Disulfide	ND	250	49
MTBE	ND	250	46
trans-1,2-Dichloroethene	ND	250	52
Vinyl Acetate	ND	2,500	59
1,1-Dichloroethane	ND	250	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	250	51
2,2-Dichloropropane	ND	250	50
Chloroform	ND	250	54
Bromochloromethane	ND	250	54
1,1,1-Trichloroethane	ND	250	54
1,1-Dichloropropene	ND	250	51
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	42
Benzene	ND	250	44
Trichloroethene	ND	250	51
1,2-Dichloropropane	ND	250	44
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	250	56
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	46
1,1,2-Trichloroethane	ND	250	49
2-Hexanone	ND	510	46
1,3-Dichloropropane	ND	250	48
Tetrachloroethene	ND	250	49
Dibromochloromethane	ND	250	43
1,2-Dibromoethane	ND	250	44
Chlorobenzene	ND	250	48
1,1,1,2-Tetrachloroethane	ND	250	55
Ethylbenzene	ND	250	52
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	52
Styrene	61 J	250	53
Bromoform	ND	250	50
Isopropylbenzene	ND	250	56
1,1,2,2-Tetrachloroethane	ND	250	42
1,2,3-Trichloropropane	ND	250	53
Propylbenzene	ND	250	53

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18A	Diln Fac:	43.04
Lab ID:	308268-006	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Bromobenzene	ND	250	49
1,3,5-Trimethylbenzene	ND	250	53
2-Chlorotoluene	ND	250	58
4-Chlorotoluene	ND	250	53
tert-Butylbenzene	ND	250	59
1,2,4-Trimethylbenzene	ND	250	54
sec-Butylbenzene	ND	250	58
para-Isopropyl Toluene	ND	250	55
1,3-Dichlorobenzene	ND	250	53
1,4-Dichlorobenzene	ND	250	50
n-Butylbenzene	ND	250	56
1,2-Dichlorobenzene	ND	250	57
1,2-Dibromo-3-Chloropropane	ND	250	51
1,2,4-Trichlorobenzene	ND	250	70
Hexachlorobutadiene	ND	250	62
Naphthalene	ND	250	55
1,2,3-Trichlorobenzene	ND	250	68

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	102	80-136
Toluene-d8	94	80-120
Bromofluorobenzene	105	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18B	Diln Fac:	40.47
Lab ID:	308268-007	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	39
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	160
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	120 J	940	120
Freon 113	ND	240	46
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	54
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	47
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	44
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	57 J	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18B	Diln Fac:	40.47
Lab ID:	308268-007	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Bromobenzene	ND	240	46
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	53
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	65
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	101	80-136
Toluene-d8	94	80-120
Bromofluorobenzene	105	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18C	Diln Fac:	39.07
Lab ID:	308268-008	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	450	47
Chloromethane	ND	450	38
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	230	36
Acetone	ND	910	120
Freon 113	ND	230	45
1,1-Dichloroethene	ND	230	39
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	230	44
MTBE	ND	230	41
trans-1,2-Dichloroethene	ND	230	47
Vinyl Acetate	ND	2,300	52
1,1-Dichloroethane	ND	230	43
2-Butanone	ND	450	100
cis-1,2-Dichloroethene	ND	230	45
2,2-Dichloropropane	ND	230	45
Chloroform	ND	230	49
Bromochloromethane	ND	230	48
1,1,1-Trichloroethane	ND	230	48
1,1-Dichloropropene	ND	230	46
Carbon Tetrachloride	ND	230	42
1,2-Dichloroethane	ND	230	38
Benzene	ND	230	40
Trichloroethene	ND	230	45
1,2-Dichloropropane	ND	230	39
Bromodichloromethane	ND	230	41
Dibromomethane	ND	230	38
4-Methyl-2-Pentanone	ND	450	37
cis-1,3-Dichloropropene	ND	230	50
Toluene	ND	230	42
trans-1,3-Dichloropropene	ND	230	41
1,1,2-Trichloroethane	ND	230	44
2-Hexanone	ND	450	42
1,3-Dichloropropane	ND	230	43
Tetrachloroethene	ND	230	44
Dibromochloromethane	ND	230	39
1,2-Dibromoethane	ND	230	40
Chlorobenzene	ND	230	43
1,1,1,2-Tetrachloroethane	ND	230	49
Ethylbenzene	ND	230	47
m,p-Xylenes	ND	230	28
o-Xylene	ND	230	46
Styrene	58 J	230	48
Bromoform	ND	230	45
Isopropylbenzene	ND	230	50
1,1,2,2-Tetrachloroethane	ND	230	38
1,2,3-Trichloropropane	ND	230	47
Propylbenzene	ND	230	47

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18C	Diln Fac:	39.07
Lab ID:	308268-008	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Bromobenzene	ND	230	44
1,3,5-Trimethylbenzene	ND	230	47
2-Chlorotoluene	ND	230	52
4-Chlorotoluene	ND	230	48
tert-Butylbenzene	ND	230	53
1,2,4-Trimethylbenzene	ND	230	48
sec-Butylbenzene	ND	230	52
para-Isopropyl Toluene	ND	230	49
1,3-Dichlorobenzene	ND	230	48
1,4-Dichlorobenzene	ND	230	45
n-Butylbenzene	ND	230	50
1,2-Dichlorobenzene	ND	230	51
1,2-Dibromo-3-Chloropropane	ND	230	46
1,2,4-Trichlorobenzene	ND	230	63
Hexachlorobutadiene	ND	230	56
Naphthalene	ND	230	49
1,2,3-Trichlorobenzene	ND	230	61

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	100	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	106	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18D	Diln Fac:	41.40
Lab ID:	308268-009	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	40
Vinyl Chloride	ND	480	36
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	960	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	47
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	56
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-18D	Diln Fac:	41.40
Lab ID:	308268-009	Batch#:	268833
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	dry	Analyzed:	03/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	55
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	65

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	103	80-136
Toluene-d8	92	80-120
Bromofluorobenzene	100	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	268833
Units:	ug/Kg	Analyzed:	03/22/19
Diln Fac:	1.000		

Type: BS Lab ID: QC969159

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.09	96	69-142
Benzene	25.00	25.94	104	79-123
Trichloroethene	25.00	30.23	121	79-126
Toluene	25.00	24.81	99	78-120
Chlorobenzene	25.00	24.13	97	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	100	80-129

Type: BSD Lab ID: QC969160

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.96	108	69-142	11	23
Benzene	25.00	28.51	114	79-123	9	20
Trichloroethene	25.00	32.28	129 *	79-126	7	20
Toluene	25.00	27.11	108	78-120	9	20
Chlorobenzene	25.00	25.97	104	80-122	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	95	80-120
Bromofluorobenzene	100	80-129

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969161	Batch#:	268833
Matrix:	Soil	Analyzed:	03/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.16
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	0.97
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.0
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.7
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.11
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.10
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.13
1,1,2-Trichloroethane	ND	5.0	0.22
2-Hexanone	ND	10	0.24
1,3-Dichloropropane	ND	5.0	0.13
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.16
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.60 J	5.0	0.40
Bromoform	ND	5.0	0.24
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.18
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969161	Batch#:	268833
Matrix:	Soil	Analyzed:	03/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.22
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	94	80-136
Toluene-d8	94	80-120
Bromofluorobenzene	104	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	EB-190320	Batch#:	268852
Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L	Prepared:	03/22/19
Diln Fac:	1.000	Analyzed:	04/10/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	125	58-134
2-Fluorobiphenyl	89	53-120
Terphenyl-d14	115	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969233	Batch#:	268852
Matrix:	Water	Prepared:	03/22/19
Units:	ug/L	Analyzed:	04/08/19

Analyte	Result	RL	MDL
Naphthalene	ND	0.1	0.02
Acenaphthylene	ND	0.1	0.02
Acenaphthene	ND	0.1	0.02
Fluorene	ND	0.1	0.02
Phenanthrene	ND	0.1	0.02
Anthracene	ND	0.1	0.02
Fluoranthene	ND	0.1	0.02
Pyrene	ND	0.1	0.02
Benzo(a)anthracene	ND	0.1	0.02
Chrysene	ND	0.1	0.02
Benzo(b)fluoranthene	ND	0.1	0.02
Benzo(k)fluoranthene	ND	0.1	0.02
Benzo(a)pyrene	ND	0.1	0.02
Indeno(1,2,3-cd)pyrene	ND	0.1	0.02
Dibenz(a,h)anthracene	ND	0.1	0.02
Benzo(g,h,i)perylene	ND	0.1	0.02

Surrogate	%REC	Limits
Nitrobenzene-d5	132	58-134
2-Fluorobiphenyl	92	53-120
Terphenyl-d14	116	18-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Matrix:	Water	Batch#:	268852
Units:	ug/L	Prepared:	03/22/19
Diln Fac:	1.000	Analyzed:	04/08/19

Type: BS Lab ID: QC969234

Analyte	Spiked	Result	%REC	Limits
Acenaphthene	1.000	0.8002	80	69-120
Pyrene	1.000	1.011	101	69-123

Surrogate	%REC	Limits
Nitrobenzene-d5	125	58-134
2-Fluorobiphenyl	88	53-120
Terphenyl-d14	109	18-128

Type: BSD Lab ID: QC969235

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Acenaphthene	1.000	0.8059	81	69-120	1	21
Pyrene	1.000	0.9866	99	69-123	2	32

Surrogate	%REC	Limits
Nitrobenzene-d5	122	58-134
2-Fluorobiphenyl	87	53-120
Terphenyl-d14	107	18-128

RPD= Relative Percent Difference

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-18A	Batch#:	268855
Lab ID:	308268-001	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	04/10/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	41 J	120	25		
Acenaphthylene	85 J	120	25		
Acenaphthene	35 J	120	25		
Fluorene	36 J	120	25		
Phenanthrene	460	120	25		
Anthracene	100 J	120	25		
Fluoranthene	810	120	25		
Pyrene	1,200	120	25		
Benzo(a)anthracene	400	120	25	0.10	40
Chrysene	510	120	25	0.0010	0.51
Benzo(b)fluoranthene	680	120	25	0.10	68
Benzo(k)fluoranthene	330	120	25	0.010	3.3
Benzo(a)pyrene	630	120	25	1.0	630
Indeno(1,2,3-cd)pyrene	450	120	25	0.10	45
Dibenz(a,h)anthracene	78 J	120	25	1.0	78
Benzo(g,h,i)perylene	650	120	25		
Total Benzo(a)pyrene Equiv.					860

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-18B	Batch#:	268855
Lab ID:	308268-002	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	04/10/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	130	25		
Acenaphthylene	48 J	130	25		
Acenaphthene	ND	130	25		
Fluorene	ND	130	25		
Phenanthrene	210	130	25		
Anthracene	53 J	130	25		
Fluoranthene	550	130	25		
Pyrene	810	130	25		
Benzo(a)anthracene	290	130	25	0.10	29
Chrysene	350	130	25	0.0010	0.35
Benzo(b)fluoranthene	510	130	25	0.10	51
Benzo(k)fluoranthene	240	130	25	0.010	2.4
Benzo(a)pyrene	440	130	25	1.0	440
Indeno(1,2,3-cd)pyrene	320	130	25	0.10	32
Dibenz(a,h)anthracene	52 J	130	25	1.0	52
Benzo(g,h,i)perylene	460	130	25		
Total Benzo(a)pyrene Equiv.					600

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-18C	Batch#:	268855
Lab ID:	308268-003	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	04/10/19
Diln Fac:	20.00		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	50 J	99	20		
Acenaphthylene	190	99	20		
Acenaphthene	34 J	99	20		
Fluorene	47 J	99	20		
Phenanthrene	760	99	20		
Anthracene	180	99	20		
Fluoranthene	1,400	99	20		
Pyrene	2,100	99	20		
Benzo(a)anthracene	710	99	20	0.10	71
Chrysene	800	99	20	0.0010	0.80
Benzo(b)fluoranthene	1,100	99	20	0.10	110
Benzo(k)fluoranthene	490	99	20	0.010	4.9
Benzo(a)pyrene	980	99	20	1.0	980
Indeno(1,2,3-cd)pyrene	620	99	20	0.10	62
Dibenz(a,h)anthracene	130	99	20	1.0	130
Benzo(g,h,i)perylene	880	99	20		
Total Benzo(a)pyrene Equiv.					1,400

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-18D	Batch#:	268855
Lab ID:	308268-004	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	04/10/19
Diln Fac:	100.0		

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	490	99		
Acenaphthylene	170 J	490	99		
Acenaphthene	ND	490	99		
Fluorene	ND	490	99		
Phenanthrene	1,100	490	99		
Anthracene	240 J	490	99		
Fluoranthene	1,700	490	99		
Pyrene	2,400	490	99		
Benzo(a)anthracene	760	490	99	0.10	76
Chrysene	900	490	99	0.0010	0.90
Benzo(b)fluoranthene	1,100	490	99	0.10	110
Benzo(k)fluoranthene	520	490	99	0.010	5.2
Benzo(a)pyrene	1,100	490	99	1.0	1,100
Indeno(1,2,3-cd)pyrene	650	490	99	0.10	65
Dibenz(a,h)anthracene	130 J	490	99	1.0	130
Benzo(g,h,i)perylene	960	490	99		
Total Benzo(a)pyrene Equiv.					1,400

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969241	Batch#:	268855
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	04/05/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	112	48-120
2-Fluorobiphenyl	86	39-120
Terphenyl-d14	111	61-120

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969242	Batch#:	268855
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	04/05/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	26.39	79	57-120
Acenaphthylene	33.33	28.04	84	60-120
Acenaphthene	33.33	25.56	77	64-120
Fluorene	33.33	27.57	83	67-120
Phenanthrene	33.33	28.54	86	64-120
Anthracene	33.33	31.12	93	66-120
Fluoranthene	33.33	30.64	92	73-121
Pyrene	33.33	32.75	98	67-120
Benzo(a)anthracene	33.33	33.95	102	69-121
Chrysene	33.33	18.38	55	48-120
Benzo(b)fluoranthene	33.33	27.70	83	66-120
Benzo(k)fluoranthene	33.33	27.10	81	62-125
Benzo(a)pyrene	33.33	30.28	91	66-120
Indeno(1,2,3-cd)pyrene	33.33	24.27	73	57-120
Dibenz(a,h)anthracene	33.33	15.68	47	45-120
Benzo(g,h,i)perylene	33.33	25.77	77	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	120	48-120
2-Fluorobiphenyl	87	39-120
Terphenyl-d14	110	61-120

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	EB-190320	Batch#:	268791
Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.02
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	134	16-167
Decachlorobiphenyl	144	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC968989	Batch#:	268791
Matrix:	Water	Prepared:	03/20/19
Units:	ug/L	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	0.05	0.009
beta-BHC	ND	0.05	0.01
gamma-BHC	ND	0.05	0.01
delta-BHC	ND	0.05	0.008
Heptachlor	ND	0.05	0.01
Aldrin	ND	0.05	0.01
Heptachlor epoxide	ND	0.05	0.01
Endosulfan I	ND	0.05	0.01
Dieldrin	ND	0.1	0.02
4,4'-DDE	ND	0.1	0.02
Endrin	ND	0.1	0.02
Endosulfan II	ND	0.1	0.01
Endosulfan sulfate	ND	0.1	0.02
4,4'-DDD	ND	0.1	0.03
Endrin aldehyde	ND	0.1	0.02
4,4'-DDT	ND	0.1	0.02
alpha-Chlordane	ND	0.05	0.01
gamma-Chlordane	ND	0.05	0.01
Methoxychlor	ND	0.5	0.07
Toxaphene	ND	1.0	0.2

Surrogate	%REC	Limits
TCMX	112	16-167
Decachlorobiphenyl	119	28-164

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	268791
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC968990

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.3204 #	160 *	73-149
Heptachlor	0.2000	0.2649 #	132	57-132
Aldrin	0.2000	0.2764 #	138 *	56-134
Dieldrin	0.2000	0.2990	150	64-152
Endrin	0.2000	0.3294	165 *	58-155
4,4'-DDT	0.2000	0.2999	150 *	49-147

Surrogate	%REC	Limits
TCMX	125	16-167
Decachlorobiphenyl	135	28-164

Type: BSD Lab ID: QC968991

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.3147 #	157 *	73-149	2	30
Heptachlor	0.2000	0.2543 #	127	57-132	4	36
Aldrin	0.2000	0.2625 #	131	56-134	5	38
Dieldrin	0.2000	0.2904	145	64-152	3	43
Endrin	0.2000	0.3151	158 *	58-155	4	47
4,4'-DDT	0.2000	0.2828	141	49-147	6	44

Surrogate	%REC	Limits
TCMX	122	16-167
Decachlorobiphenyl	134	28-164

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-18A	Batch#:	268859
Lab ID:	308268-001	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.40
Heptachlor	ND	5.5	0.40
Aldrin	ND	5.5	0.30
Heptachlor epoxide	ND	5.5	0.38
Endosulfan I	ND	5.5	0.40
Dieldrin	1.4 C J	11	0.44
4,4'-DDE	ND	11	0.40
Endrin	ND #	11	1.0
Endosulfan II	0.74 C J	11	0.40
Endosulfan sulfate	ND	11	0.88
4,4'-DDD	3.0 J	11	0.40
Endrin aldehyde	ND	11	3.4
4,4'-DDT	2.0 J	11	0.45
alpha-Chlordane	2.2 C J	5.5	0.71
gamma-Chlordane	ND	5.5	0.68
Methoxychlor	ND	55	7.6
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	102	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-18B	Batch#:	268859
Lab ID:	308268-002	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.44
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.62
delta-BHC	ND	5.5	0.78
Heptachlor	ND	5.5	0.39
Aldrin	ND	5.5	0.46
Heptachlor epoxide	ND	5.5	0.42
Endosulfan I	ND	5.5	0.53
Dieldrin	1.7 C J	11	0.44
4,4'-DDE	1.5 C J	11	0.49
Endrin	ND	11	1.0
Endosulfan II	ND	11	0.61
Endosulfan sulfate	ND	11	0.88
4,4'-DDD	2.2 J	11	0.74
Endrin aldehyde	ND	11	3.4
4,4'-DDT	ND	11	0.45
alpha-Chlordane	2.0 C J	5.5	0.71
gamma-Chlordane	ND	5.5	0.68
Methoxychlor	ND	55	7.5
Toxaphene	ND	200	57

Surrogate	%REC	Limits
TCMX	116	43-125
Decachlorobiphenyl	95	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-18C	Batch#:	268859
Lab ID:	308268-003	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.44
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.61
delta-BHC	ND	5.5	0.39
Heptachlor	ND	5.5	0.39
Aldrin	ND	5.5	0.46
Heptachlor epoxide	0.88 C J	5.5	0.38
Endosulfan I	ND	5.5	0.53
Dieldrin	ND	11	0.43
4,4'-DDE	ND	11	0.39
Endrin	1.5 C J #	11	1.0
Endosulfan II	ND	11	0.60
Endosulfan sulfate	1.1 C J	11	0.88
4,4'-DDD	1.9 C J	11	0.39
Endrin aldehyde	ND	11	3.4
4,4'-DDT	ND	11	0.44
alpha-Chlordane	4.1 C J	5.5	0.70
gamma-Chlordane	0.76 C J	5.5	0.68
Methoxychlor	ND	55	7.5
Toxaphene	ND	200	65

Surrogate	%REC	Limits
TCMX	108	43-125
Decachlorobiphenyl	116	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-18D	Batch#:	268859
Lab ID:	308268-004	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.87
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	0.78
Heptachlor	ND	11	0.78
Aldrin	ND	11	0.91
Heptachlor epoxide	ND	11	0.83
Endosulfan I	ND	11	1.1
Dieldrin	ND	22	0.86
4,4'-DDE	4.8 J	22	0.78
Endrin	0.98 C J	22	0.65
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.7
4,4'-DDD	5.0 J	22	0.78
Endrin aldehyde	ND	22	6.7
4,4'-DDT	13 J	22	0.88
alpha-Chlordane	3.1 C J	11	1.4
gamma-Chlordane	3.7 J	11	1.3
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969258	Batch#:	268859
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	03/26/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.087
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.12
delta-BHC	ND	1.1	0.15
Heptachlor	ND	1.1	0.078
Aldrin	0.17 J	1.1	0.091
Heptachlor epoxide	ND	1.1	0.083
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.086
4,4'-DDE	ND	2.2	0.097
Endrin	ND	2.2	0.20
Endosulfan II	ND	2.2	0.12
Endosulfan sulfate	ND	2.2	0.17
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.67
4,4'-DDT	ND	2.2	0.088
alpha-Chlordane	ND	1.1	0.14
gamma-Chlordane	ND	1.1	0.13
Methoxychlor	ND	11	1.5
Toxaphene	ND	39	11

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	86	40-128

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969262	Batch#:	268859
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	03/26/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	16.70	125	58-131
Heptachlor	13.33	12.82 #	96	51-133
Aldrin	13.33	16.11	121	52-128
Dieldrin	13.33	15.79	118	59-133
Endrin	13.33	16.22	122	48-154
4,4'-DDT	13.33	15.72 #	118	54-140

Surrogate	%REC	Limits
TCMX	110	43-125
Decachlorobiphenyl	90	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-18B	Batch#:	268859
MSS Lab ID:	308268-002	Sampled:	03/20/19
Matrix:	Soil	Received:	03/20/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	5.000		

Type: MS Lab ID: QC969263

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.6172	13.32	14.02	105	58-126
Heptachlor	<0.3950	13.32	13.54	102	58-127
Aldrin	<0.4622	13.32	12.98	97	55-124
Dieldrin	1.675	13.32	14.46	96	48-137
Endrin	<1.022	13.32	13.65	102	48-158
4,4'-DDT	<0.4455	13.32	15.63 #	117	38-155

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	81	40-128

Type: MSD Lab ID: QC969264

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.36	16.00	120	58-126	13	36
Heptachlor	13.36	16.49	123	58-127	19	34
Aldrin	13.36	14.37	108	55-124	10	31
Dieldrin	13.36	17.96	122	48-137	21	38
Endrin	13.36	13.27	99	48-158	3	38
4,4'-DDT	13.36	15.89 #	119	38-155	1	42

Surrogate	%REC	Limits
TCMX	118	43-125
Decachlorobiphenyl	90	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3520C
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Water	Batch#:	268791
Units:	ug/L	Prepared:	03/20/19
Diln Fac:	1.000	Analyzed:	03/21/19

Type: BS Lab ID: QC969000

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	2.500	2.559	102	68-123
Aroclor-1260	2.500	2.564	103	63-137

Surrogate	%REC	Limits
Decachlorobiphenyl	111	40-136

Type: BSD Lab ID: QC969001

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	2.500	2.053	82	68-123	22	29
Aroclor-1260	2.500	2.630	105	63-137	3	34

Surrogate	%REC	Limits
Decachlorobiphenyl	109	40-136

RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	air dried	Prepared:	03/22/19
Batch#:	268859		

Field ID: DTSC-18A Diln Fac: 3.000
 Type: SAMPLE Analyzed: 03/26/19
 Lab ID: 308268-001

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	40	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	4.9
Aroclor-1254	19 J	20	10
Aroclor-1260	21	20	9.5

Surrogate	%REC	Limits
Decachlorobiphenyl	73	49-157

Field ID: DTSC-18B Diln Fac: 3.000
 Type: SAMPLE Analyzed: 03/26/19
 Lab ID: 308268-002

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	39	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	4.9
Aroclor-1254	20 J	20	9.9
Aroclor-1260	31	20	9.5

Surrogate	%REC	Limits
Decachlorobiphenyl	106	49-157

Field ID: DTSC-18C Diln Fac: 3.000
 Type: SAMPLE Analyzed: 03/26/19
 Lab ID: 308268-003

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	39	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	4.8
Aroclor-1254	44	20	9.9
Aroclor-1260	43	20	9.5

Surrogate	%REC	Limits
Decachlorobiphenyl	95	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	03/20/19
Units:	ug/Kg	Received:	03/20/19
Basis:	air dried	Prepared:	03/22/19
Batch#:	268859		

Field ID: DTSC-18D Diln Fac: 3.000
 Type: SAMPLE Analyzed: 03/26/19
 Lab ID: 308268-004

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	13
Aroclor-1221	ND	39	22
Aroclor-1232	ND	19	11
Aroclor-1242	ND	19	11
Aroclor-1248	ND	19	4.8
Aroclor-1254	20	19	9.8
Aroclor-1260	40	19	9.4

Surrogate	%REC	Limits
Decachlorobiphenyl	103	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC969258 Analyzed: 03/25/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.3
Aroclor-1221	ND	24	7.5
Aroclor-1232	ND	12	3.7
Aroclor-1242	ND	12	3.8
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.3
Aroclor-1260	ND	12	3.1

Surrogate	%REC	Limits
Decachlorobiphenyl	120	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC969259	Batch#:	268859
Matrix:	Soil	Prepared:	03/22/19
Units:	ug/Kg	Analyzed:	03/25/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	203.5	122	63-143
Aroclor-1260	166.7	200.3	120	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	110	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	268859
MSS Lab ID:	308323-006	Sampled:	03/19/19
Matrix:	Soil	Received:	03/22/19
Units:	ug/Kg	Prepared:	03/22/19
Basis:	air dried	Analyzed:	03/25/19
Diln Fac:	10.00		

Type: MS Lab ID: QC969260

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<43.58	165.6	215.7	130	62-160
Aroclor-1260	106.3	165.6	241.5	82	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	DO	49-157

Type: MSD Lab ID: QC969261

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	163.5	226.2	138	62-160	6	43
Aroclor-1260	163.5	227.1	74	53-172	5	44

Surrogate	%REC	Limits
Decachlorobiphenyl	DO	49-157

DO= Diluted Out

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	308268	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	EB-190320	Diln Fac:	1.000
Lab ID:	308268-005	Sampled:	03/20/19
Matrix:	Water	Received:	03/20/19
Units:	ug/L	Analyzed:	03/22/19

Analyte	Result	RL	MDL	Batch#	Prepared	Prep	Analysis
Antimony	ND	10	1.2	268816	03/21/19	EPA 3010A	EPA 6010B
Arsenic	ND	10	2.4	268816	03/21/19	EPA 3010A	EPA 6010B
Barium	ND	5.0	0.85	268816	03/21/19	EPA 3010A	EPA 6010B
Beryllium	ND	2.0	0.13	268816	03/21/19	EPA 3010A	EPA 6010B
Cadmium	ND	5.0	0.32	268816	03/21/19	EPA 3010A	EPA 6010B
Chromium	1.3 J	5.0	0.91	268816	03/21/19	EPA 3010A	EPA 6010B
Cobalt	ND	5.0	0.32	268816	03/21/19	EPA 3010A	EPA 6010B
Copper	0.72 J	5.0	0.55	268816	03/21/19	EPA 3010A	EPA 6010B
Lead	ND	5.0	0.86	268816	03/21/19	EPA 3010A	EPA 6010B
Mercury	ND	0.20	0.040	268837	03/22/19	METHOD	EPA 7470A
Molybdenum	ND	5.0	1.5	268816	03/21/19	EPA 3010A	EPA 6010B
Nickel	ND	5.0	0.43	268816	03/21/19	EPA 3010A	EPA 6010B
Selenium	ND	10	2.0	268816	03/21/19	EPA 3010A	EPA 6010B
Silver	ND	5.0	0.32	268816	03/21/19	EPA 3010A	EPA 6010B
Thallium	ND	10	2.0	268816	03/21/19	EPA 3010A	EPA 6010B
Vanadium	ND	5.0	1.1	268816	03/21/19	EPA 3010A	EPA 6010B
Zinc	ND	20	2.9	268816	03/21/19	EPA 3010A	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969085	Batch#:	268816
Matrix:	Water	Prepared:	03/21/19
Units:	ug/L	Analyzed:	03/22/19

Analyte	Result	RL	MDL
Antimony	ND	10	1.2
Arsenic	ND	10	2.4
Barium	1.0 J	5.0	0.85
Beryllium	ND	2.0	0.13
Cadmium	ND	5.0	0.32
Chromium	ND	5.0	0.91
Cobalt	ND	5.0	0.32
Copper	ND	5.0	0.55
Lead	ND	5.0	0.86
Molybdenum	ND	5.0	1.5
Nickel	ND	5.0	0.43
Selenium	ND	10	2.0
Silver	ND	5.0	0.32
Thallium	ND	10	2.0
Vanadium	ND	5.0	1.1
Zinc	6.9 J	20	2.9

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Water	Batch#:	268816
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: BS Lab ID: QC969086

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	100.7	101	80-120
Arsenic	100.0	103.6	104	80-120
Barium	100.0	104.8	105	80-120
Beryllium	100.0	97.34	97	80-120
Cadmium	100.0	101.2	101	80-120
Chromium	100.0	106.4	106	80-120
Cobalt	100.0	104.0	104	80-120
Copper	100.0	100.9	101	80-120
Lead	100.0	106.0	106	80-120
Molybdenum	100.0	105.5	105	80-120
Nickel	100.0	105.6	106	80-120
Selenium	100.0	99.58	100	80-120
Silver	100.0	97.67	98	80-120
Thallium	50.00	53.04	106	80-120
Vanadium	100.0	103.7	104	80-120
Zinc	100.0	102.9	103	80-120

Type: BSD Lab ID: QC969087

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	106.3	106	80-120	5	20
Arsenic	100.0	104.4	104	80-120	1	20
Barium	100.0	106.2	106	80-120	1	20
Beryllium	100.0	97.88	98	80-120	1	20
Cadmium	100.0	102.4	102	80-120	1	20
Chromium	100.0	107.4	107	80-120	1	20
Cobalt	100.0	105.1	105	80-120	1	20
Copper	100.0	102.0	102	80-120	1	20
Lead	100.0	106.3	106	80-120	0	20
Molybdenum	100.0	108.0	108	80-120	2	20
Nickel	100.0	106.3	106	80-120	1	20
Selenium	100.0	99.77	100	80-120	0	20
Silver	100.0	98.93	99	80-120	1	20
Thallium	50.00	51.56	103	80-120	3	20
Vanadium	100.0	104.7	105	80-120	1	20
Zinc	100.0	104.1	104	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3010A
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	EB-190319	Batch#:	268816
MSS Lab ID:	308209-009	Sampled:	03/19/19
Matrix:	Water	Received:	03/19/19
Units:	ug/L	Prepared:	03/21/19
Diln Fac:	1.000	Analyzed:	03/22/19

Type: MS Lab ID: QC969088

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<1.189	100.0	104.3	104	76-125
Arsenic	<2.446	100.0	102.0	102	80-125
Barium	<0.8500	100.0	105.8	106	78-120
Beryllium	<0.1251	100.0	97.85	98	80-120
Cadmium	<0.3200	100.0	101.9	102	80-125
Chromium	<0.9092	100.0	107.6	108	80-123
Cobalt	<0.3200	100.0	105.0	105	80-121
Copper	0.6665	100.0	103.0	102	79-121
Lead	<0.8570	100.0	104.1	104	75-125
Molybdenum	<1.475	100.0	107.3	107	80-120
Nickel	<0.4325	100.0	105.6	106	79-123
Selenium	<2.000	100.0	101.4	101	75-125
Silver	<0.3242	100.0	98.48	98	75-120
Thallium	<1.955	50.00	50.81	102	75-124
Vanadium	<1.056	100.0	103.6	104	80-125
Zinc	<2.944	100.0	104.5	104	80-125

Type: MSD Lab ID: QC969089

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	103.2	103	76-125	1	20
Arsenic	100.0	100.7	101	80-125	1	20
Barium	100.0	104.4	104	78-120	1	20
Beryllium	100.0	96.33	96	80-120	2	20
Cadmium	100.0	100.8	101	80-125	1	20
Chromium	100.0	105.7	106	80-123	2	20
Cobalt	100.0	103.0	103	80-121	2	20
Copper	100.0	101.0	100	79-121	2	20
Lead	100.0	103.0	103	75-125	1	20
Molybdenum	100.0	106.2	106	80-120	1	20
Nickel	100.0	104.5	105	79-123	1	20
Selenium	100.0	98.23	98	75-125	3	20
Silver	100.0	96.49	96	75-120	2	20
Thallium	50.00	53.41	107	75-124	5	20
Vanadium	100.0	101.6	102	80-125	2	20
Zinc	100.0	103.1	103	80-125	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268837
Lab ID:	QC969175	Prepared:	03/22/19
Matrix:	Water	Analyzed:	03/22/19
Units:	ug/L		

Result	RL	MDL
ND	0.20	0.040

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268837
Matrix:	Water	Prepared:	03/22/19
Units:	ug/L	Analyzed:	03/22/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969176	2.000	1.950	97	80-120		
BSD	QC969177	2.000	2.018	101	80-120	3	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	268837
Field ID:	ZZZZZZZZZZ	Sampled:	03/20/19
MSS Lab ID:	308279-001	Received:	03/21/19
Matrix:	Water	Prepared:	03/22/19
Units:	ug/L	Analyzed:	03/22/19
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC969178	<0.04000	2.000	1.882	94	68-120		
MSD	QC969179		2.000	1.880	94	68-120	0	37

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	308268	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-18A	Basis:	air dried
Lab ID:	308268-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.20 J	2.0	0.068	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Arsenic	4.4	1.5	0.065	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Barium	74	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.25	0.099	0.0099	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.016	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Chromium	38	0.25	0.049	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.5	0.25	0.014	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Copper	26	0.25	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Lead	27	0.99	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.18	0.016	0.0028	268895	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.69	0.25	0.026	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Nickel	43	0.25	0.049	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Vanadium	32	0.25	0.052	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Zinc	63	0.99	0.21	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308268	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-18B	Basis:	air dried
Lab ID:	308268-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.32 J	2.0	0.068	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Arsenic	4.2	1.5	0.066	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Barium	75	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.23	0.10	0.010	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.18 J	0.25	0.016	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Chromium	35	0.25	0.049	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.2	0.25	0.014	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Copper	23	0.25	0.057	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Lead	26	1.0	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.15	0.017	0.0030	268895	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.68	0.25	0.026	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Nickel	39	0.25	0.050	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.089	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Vanadium	31	0.25	0.052	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Zinc	58	1.0	0.21	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308268	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-18C	Basis:	air dried
Lab ID:	308268-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.21 J	2.0	0.068	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Arsenic	5.0	1.5	0.065	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Barium	87	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.25	0.099	0.0099	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.22 J	0.25	0.016	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Chromium	39	0.25	0.048	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cobalt	8.4	0.25	0.014	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Copper	27	0.25	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Lead	47	0.99	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.17	0.017	0.0030	268895	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.78	0.25	0.026	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Nickel	42	0.25	0.049	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.49	0.089	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Vanadium	33	0.25	0.052	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Zinc	65	0.99	0.21	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	308268	Project#:	16-1498E
Client:	RPS	Location:	Alameda Landing
Field ID:	DTSC-18D	Basis:	air dried
Lab ID:	308268-004	Diln Fac:	1.000
Matrix:	Soil	Sampled:	03/20/19
Units:	mg/Kg	Received:	03/20/19

Analyte	Result	RL	MDL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.40 J	2.0	0.068	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Arsenic	5.3	1.5	0.066	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Barium	86	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Beryllium	0.28	0.10	0.010	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cadmium	0.27	0.25	0.016	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Chromium	41	0.25	0.049	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Cobalt	9.2	0.25	0.014	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Copper	29	0.25	0.057	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Lead	31	1.0	0.056	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Mercury	0.25	0.018	0.0031	268895	03/25/19	03/25/19	METHOD	EPA 7471A
Molybdenum	0.81	0.25	0.026	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Nickel	46	0.25	0.050	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Selenium	ND	2.0	0.19	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Silver	ND	0.25	0.030	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Thallium	ND	0.50	0.089	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Vanadium	37	0.25	0.052	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B
Zinc	70	1.0	0.21	268913	03/26/16	03/26/19	EPA 3050B	EPA 6010B

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	268895
Lab ID:	QC969412	Prepared:	03/25/19
Matrix:	Soil	Analyzed:	03/25/19
Units:	mg/Kg		

Result	RL	MDL
ND	0.016	0.0029

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	268895
Matrix:	Soil	Prepared:	03/25/19
Units:	mg/Kg	Analyzed:	03/25/19
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC969413	0.1587	0.1514	95	80-120		
BSD	QC969414	0.1695	0.1542	91	80-120	5	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	268895
MSS Lab ID:	308275-001	Sampled:	03/14/19
Matrix:	Soil	Received:	03/21/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	air dried	Analyzed:	03/25/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC969415	0.04848	0.1538	0.1792	85	80-120		
MSD	QC969416		0.1639	0.1920	88	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC969483	Batch#:	268913
Matrix:	Soil	Prepared:	03/25/19
Units:	mg/Kg	Analyzed:	03/26/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	0.069 J	1.5	0.066
Barium	0.13 J	0.25	0.030
Beryllium	ND	0.099	0.010
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.049
Cobalt	ND	0.25	0.014
Copper	0.12 J	0.25	0.057
Lead	ND	0.99	0.056
Molybdenum	ND	0.25	0.026
Nickel	ND	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	ND	0.25	0.052
Zinc	0.22 J	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	268913
Units:	mg/Kg	Prepared:	03/25/19
Diln Fac:	1.000	Analyzed:	03/26/19

Type: BS Lab ID: QC969484

Analyte	Spiked	Result	%REC	Limits
Antimony	49.41	48.50	98	80-120
Arsenic	49.41	48.62	98	80-120
Barium	49.41	50.15	102	80-120
Beryllium	24.70	23.86	97	80-120
Cadmium	49.41	47.78	97	80-120
Chromium	49.41	50.03	101	80-120
Cobalt	49.41	49.05	99	80-120
Copper	49.41	48.17	97	80-120
Lead	49.41	49.87	101	80-120
Molybdenum	49.41	48.54	98	80-120
Nickel	49.41	49.53	100	80-120
Selenium	49.41	47.96	97	80-120
Silver	4.941	4.597	93	80-120
Thallium	49.41	49.34	100	80-120
Vanadium	49.41	48.57	98	80-120
Zinc	49.41	48.56	98	80-120

Type: BSD Lab ID: QC969485

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.65	48.33	97	80-120	1	20
Arsenic	49.65	47.95	97	80-120	2	20
Barium	49.65	49.39	99	80-120	2	20
Beryllium	24.83	23.16	93	80-120	3	20
Cadmium	49.65	47.21	95	80-120	2	20
Chromium	49.65	49.15	99	80-120	2	20
Cobalt	49.65	48.28	97	80-120	2	20
Copper	49.65	48.37	97	80-120	0	20
Lead	49.65	49.04	99	80-120	2	20
Molybdenum	49.65	47.83	96	80-120	2	20
Nickel	49.65	48.87	98	80-120	2	20
Selenium	49.65	47.27	95	80-120	2	20
Silver	4.965	4.564	92	80-120	1	20
Thallium	49.65	48.93	99	80-120	1	20
Vanadium	49.65	47.99	97	80-120	2	20
Zinc	49.65	47.65	96	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	RPS-15	Batch#:	268913
MSS Lab ID:	308209-003	Sampled:	03/19/19
Matrix:	Soil	Received:	03/19/19
Units:	mg/Kg	Prepared:	03/25/19
Basis:	air dried	Analyzed:	03/26/19
Diln Fac:	1.000		

Type: MS Lab ID: QC969486

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.7468	49.95	9.589	18 *	75-120
Arsenic	4.785	49.95	55.49	102	80-121
Barium	79.54	49.95	132.9	107	75-125
Beryllium	0.2868	24.98	23.17	92	80-120
Cadmium	0.2310	49.95	50.50	101	80-120
Chromium	46.81	49.95	100.2	107	75-125
Cobalt	8.403	49.95	54.99	93	75-120
Copper	29.51	49.95	83.77	109	80-125
Lead	51.03	49.95	82.79	64 *	75-125
Molybdenum	0.5503	49.95	42.74	84	75-120
Nickel	43.84	49.95	93.25	99	75-125
Selenium	<0.1879	49.95	47.27	95	80-120
Silver	<0.02994	4.995	4.697	94	75-120
Thallium	<0.08974	49.95	44.30	89	75-120
Vanadium	38.22	49.95	90.81	105	78-125
Zinc	73.08	49.95	119.4	93	75-125

Type: MSD Lab ID: QC969487

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.16	9.594	18 *	75-120	2	20
Arsenic	49.16	54.27	101	80-121	1	20
Barium	49.16	130.1	103	75-125	2	20
Beryllium	24.58	22.58	91	80-120	1	20
Cadmium	49.16	49.25	100	80-120	1	20
Chromium	49.16	98.14	104	75-125	1	20
Cobalt	49.16	53.50	92	75-120	1	20
Copper	49.16	79.77	102	80-125	4	20
Lead	49.16	84.02	67 *	75-125	2	20
Molybdenum	49.16	41.81	84	75-120	1	20
Nickel	49.16	91.67	97	75-125	1	20
Selenium	49.16	46.87	95	80-120	1	20
Silver	4.916	4.590	93	75-120	1	20
Thallium	49.16	43.28	88	75-120	1	20
Vanadium	49.16	86.97	99	78-125	3	20
Zinc	49.16	117.7	91	75-125	1	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	268875
Matrix:	Soil	Sampled:	03/20/19
Units:	%	Received:	03/20/19
Diln Fac:	1.000	Analyzed:	03/24/19

Field ID	Lab ID	Result	RL
DTSC-18A	308268-006	15	1
DTSC-18B	308268-007	14	1
DTSC-18C	308268-008	14	1
DTSC-18D	308268-009	14	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	308268	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	268875
MSS Lab ID:	308335-016	Sampled:	03/22/19
Lab ID:	QC969325	Received:	03/22/19
Matrix:	Soil	Analyzed:	03/24/19

MSS Result	Result	RL	RPD	Lim
16.86	19.36	1.000	14	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309445 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-9B	309445-001
DTSC-10B	309445-002
DTSC-11B	309445-003
DTSC-12B	309445-004
DTSC-24A	309445-005
DTSC-24B	309445-006
DTSC-24C	309445-007
DTSC-24D	309445-008
DTSC-9B	309445-009
DTSC-10B	309445-010
DTSC-11B	309445-011
DTSC-12B	309445-012
DTSC-24A	309445-013
DTSC-24B	309445-014
DTSC-24C	309445-015
DTSC-24D	309445-016

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 05/16/2019

Tracy Babjar
Project Manager
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CASE NARRATIVE

Laboratory number: 309445
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/02/19
Samples Received: 05/02/19

This data package contains sample and QC results for eight soil samples, requested for the above referenced project on 05/02/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270170; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 270337 due to insufficient sample amount. Toluene and styrene were detected between the MDL and the RL in the method blank for batch 270337; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC974544, QC974545 (batch 270190) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recovery was observed for nitrobenzene-d5 in the LCS for batch 270190. Benzo(g,h,i)perylene was detected between the MDL and the RL in the method blank for batch 270190; this analyte was detected in samples at a level at least 10 times that of the blank. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Endosulfan II was detected between the MDL and the RL in the method blank for batch 270192; this analyte was not detected in samples at or above the RL. Many samples were diluted due to the color of the sample extracts. DTSC-12B (lab # 309445-004) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All

CASE NARRATIVE

Laboratory number: 309445
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/02/19
Samples Received: 05/02/19

PCBs (EPA 8082):

samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-9B (lab # 309445-001); the BS/BSD were within limits, and the associated RPD was within limits. High recovery was observed for lead in the MS of DTSC-9B (lab # 309445-001); the BS/BSD were within limits. High RPD was also observed for lead in the MS/MSD of DTSC-9B (lab # 309445-001); the RPD was acceptable in the BS/BSD. Barium, chromium, and molybdenum were detected between the MDL and the RL in the method blank for batch 270270; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 309445

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-9B

Laboratory Sample ID :

309445-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	4.1	J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.43	C,J	11	0.34	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin aldehyde	3.4	C,J	11	3.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	5.5	C,J	11	0.47	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.5	J	5.7	0.93	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.0	C,J	5.7	0.57	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	62		14	6.6	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	1.0	J	1.9	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.2		1.5	0.064	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	70		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.24		0.097	0.0097	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.14	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	19		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		0.97	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.79		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	53		0.97	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-10B

Laboratory Sample ID :

309445-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	4.4	J	22	0.87	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	1.2	C,J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	4.8	C,J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.5	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.9	J	11	1.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	35		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.55	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.2		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	72		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.17	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	37		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.73		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	60		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-11B

Laboratory Sample ID :

309445-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.62	C,J	11	0.60	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Heptachlor epoxide	1.7	C,J	11	0.76	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Dieldrin	2.4	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	4.6	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	1.9	C,J	22	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	3.5	C,J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	5.9	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	7.5	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	45		20	9.4	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.12	J	1.9	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.6		1.5	0.064	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	98		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.097	0.0097	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.25		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.4		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	30		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.97	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.90		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	41		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	78		0.97	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-12B

Laboratory Sample ID :

309445-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	19	C,J	110	7.7	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Dieldrin	62	C,J	220	8.8	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Endrin	41	C,J	220	6.6	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
4,4'-DDT	310		220	9.0	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
alpha-Chlordane	24	C,J	110	14	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
gamma-Chlordane	33	J	110	11	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Aroclor-1260	1,600		20	9.6	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.15	J	1.9	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.4		1.4	0.063	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	94		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.095	0.0096	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.46		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.24	0.047	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.5		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	40		0.24	0.054	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	52		0.95	0.054	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	1.1		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	77		0.95	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-24A

Laboratory Sample ID :

309445-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	1.0	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	1.4	C,J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	4.9	C,J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	2.5	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.7	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	16		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.42	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.4		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	81		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.21	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	32		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.79		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	68		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-24B

Laboratory Sample ID :

309445-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.61	C,J	5.7	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	0.62	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	3.1	C,J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.40	C,J	11	0.34	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	3.3	J	11	0.91	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.9	C,J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	36		14	6.6	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.42	J	1.9	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.8		1.4	0.063	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	84		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.096	0.0096	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.24		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.24	0.047	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	26		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	31		0.96	0.054	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.84		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	49		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	69		0.96	0.20	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-24C

Laboratory Sample ID :

309445-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.53	C,J	5.6	0.48	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.89	C,J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.5	C,J	11	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	4.4	C,J	11	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.4	J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.2	C,J	5.6	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	20		14	6.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.44	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.5		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	28		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.87		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	67		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-24D

Laboratory Sample ID :

309445-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.57	J	5.4	0.42	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	0.93	C,J	11	0.43	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.2	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.3	J	11	0.87	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.8	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	6.5	J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.6	J	5.4	0.88	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.1	C,J	5.4	0.67	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	21		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.38	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.6		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	79		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	36		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.71		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	46		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-9B

Laboratory Sample ID :

309445-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.84	J	4.5	0.32	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	40	Y	5.2	1.6	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		26	7.9	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	38	J	100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	220		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	54	J	100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	400		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	510		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	190		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	220		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	260		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	100	J	100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	280		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	160		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	34	J	100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	240		100	21	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	370				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.15		0.017	0.0031	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	4		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-10B

Laboratory Sample ID :

309445-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.67	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	53	Y	5.2	1.6	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	260		26	7.9	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	12	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	33	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	12	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	12	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	190		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	47	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	360		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	560		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	260		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	350		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	300		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	180		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	41	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	260		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	420				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.017	0.0029	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	5		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-11B

Laboratory Sample ID :

309445-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.73	J	5.1	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	91	Y	5.5	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	430		28	8.3	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Phenanthrene	190		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	45	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	410		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	600		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	300		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	410		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	340		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	200		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	46	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	310		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	480				ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Mercury	0.20		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-12B

Laboratory Sample ID :

309445-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.84	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	80	Y	22	6.6	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	640		110	33	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Phenanthrene	130		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	36	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	270		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	390		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	130		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	180		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	210		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	69	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	190		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	98	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	25	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	170		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	260				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.24		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-24A

Laboratory Sample ID :

309445-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.81	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	25	Y	11	3.5	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	170		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	16	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	30	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	12	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	160		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	38	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	400		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	610		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	230		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	360		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	320		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	250		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	45	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	440				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.19		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	12		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-24B

Laboratory Sample ID :

309445-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.63	J	4.6	0.33	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	31	Y	11	3.5	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		57	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	29	J	110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	68	J	110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	280		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	83	J	110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,100		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,700		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	590		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	660		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	990		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	340		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	830		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	650		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	120		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	890		110	23	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,200				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.20		0.020	0.0035	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	13		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-24C

Laboratory Sample ID :

309445-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.47	J	4.5	0.32	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	36	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	26	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	120		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	26	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluorene	31	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	630		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	110		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,100		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,600		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	560		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	590		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	860		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	290		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	780		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	540		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	100	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	750		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,100				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.21		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-24D

Laboratory Sample ID :

309445-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.54	J	4.5	0.32	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	34	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	210		55	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	35	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	180		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	45	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	500		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	730		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	270		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	310		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	480		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	420		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	290		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	55	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	430		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	580				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.19		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

309445



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Sampler Name(s): Neal Hughes Signature(s): *Neal Hughes*

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
1	DTSC-96	5/2/19	1615	soil	None
2	DTSC-106		1620		
3	DTSC-126		1610		
4	DTSC-126		1557		
5	DTSC-24a		959		
6	DTSC-24b		1110		
7	DTSC-24c		1215		
8	DTSC-24d		1303		

Date: 5/2/19 Page: 1 of 1

Analyses Required

TPH-g; -d; -mo by Method	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
X	X	X	X	X	X	X	X	2

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
 Project Number: 16-1498E
 Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower
 E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com
 Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:
 Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:
 Printed Name: Neal Hughes
 Signature: *Neal Hughes*
 Company: RPS
 Time/Date: 5/2/19 17:30

RECEIVED BY:
 Printed Name: Haley Campbell
 Signature: *Haley Campbell*
 Company: EA
 Time/Date: 5/2/19 17:30

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 309445
Date Received: 5/2/19

Client: RPS
Project: 16-1493E

Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B

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

If in cooler: Date Opened 5/2/19 By (print) RV (sign) RV

Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package

Date: _____ How many _____ Signature, Initials, None

Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) _____

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

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

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Temperature measured using Thermometer ID: _____, or IR Gun # A B

Cooler Temp (°C): #1: 7.3, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?	/		
If YES, what time were they transferred to freezer? <u>1841</u>			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?			/
Did you change the hold time in LIMS for preserved terracores?	/		
Are bubbles > 6mm absent in VOA samples?			/
Was the client contacted concerning this sample delivery?		/	
If YES, who was called? _____ By _____ Date: _____			

Section 5: YES NO N/A

Are the samples appropriately preserved? (if N/A, skip the rest of section 5)

Did you check preservatives for all bottles for each sample?

Did you document your preservative check?

pH strip lot# _____, pH strip lot# _____, pH strip lot# _____

Preservative added:

H2SO4 lot# _____ added to samples _____ on/at _____

HCL lot# _____ added to samples _____ on/at _____

HNO3 lot# _____ added to samples _____ on/at _____

NaOH lot# _____ added to samples _____ on/at _____

Section 6:
Explanations/Comments: _____

Date Logged in 5/2/19
Date Labeled 5/3/19

By (print) RV (sign) RV
By (print) AC (sign) AC

Gasoline by GC/FID (5035 Prep)			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/02/19
Units:	mg/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/03/19
Batch#:	270170		

Field ID: DTSC-24C Moisture: 10%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309445-015

Analyte	Result	RL	MDL
Gasoline C7-C12	0.47 J	4.5	0.32

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	58-145

Field ID: DTSC-24D Moisture: 9%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309445-016

Analyte	Result	RL	MDL
Gasoline C7-C12	0.54 J	4.5	0.32

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	58	58-145

Type: BLANK Diln Fac: 1.000
 Lab ID: QC974467

Analyte	Result	RL	MDL
Gasoline C7-C12	0.034 J	0.20	0.021

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270170
Units:	mg/Kg	Analyzed:	05/03/19
Diln Fac:	1.000		

Type: BS Lab ID: QC974468

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9787	98	80-122

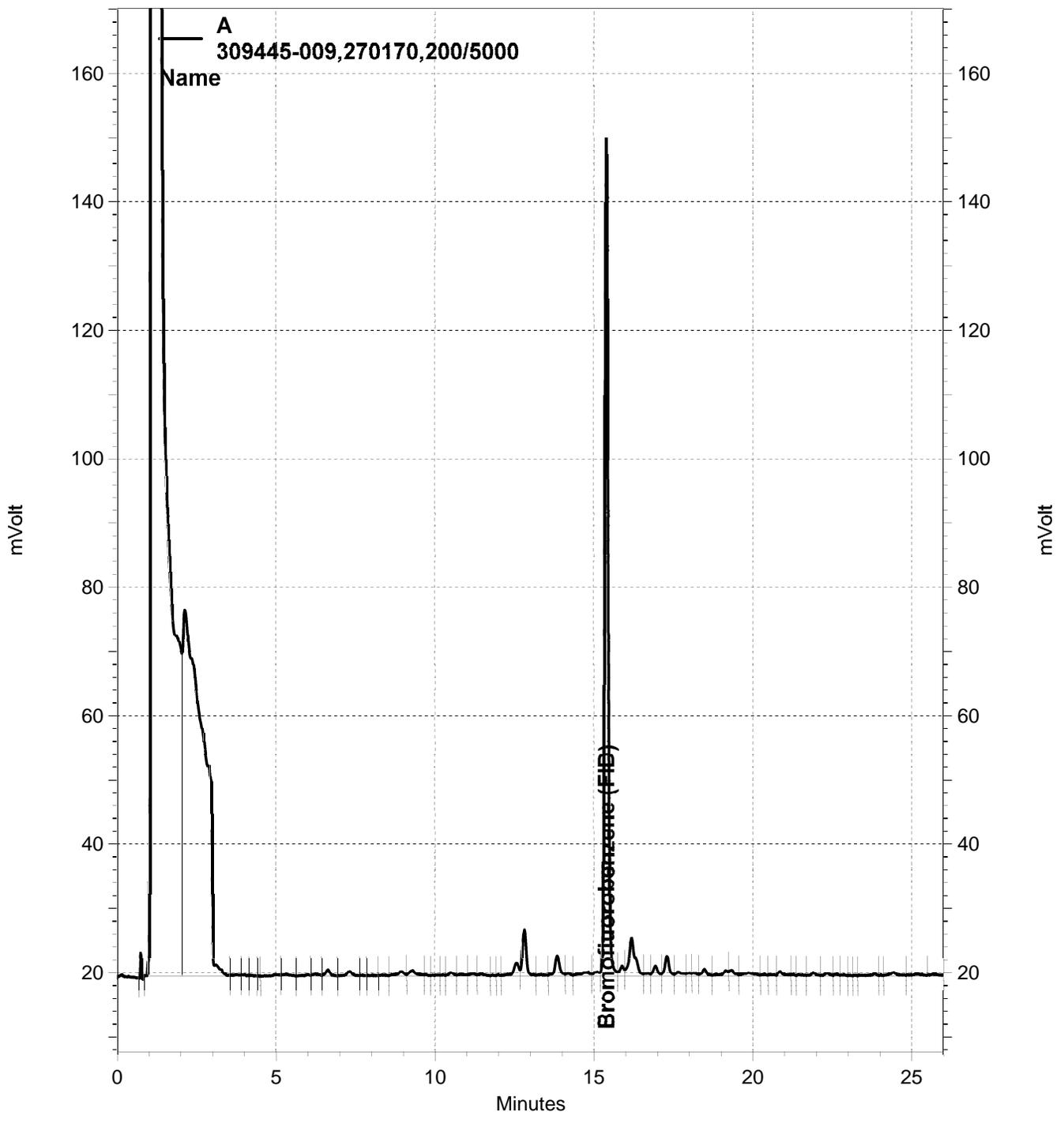
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	86	58-145

Type: BSD Lab ID: QC974469

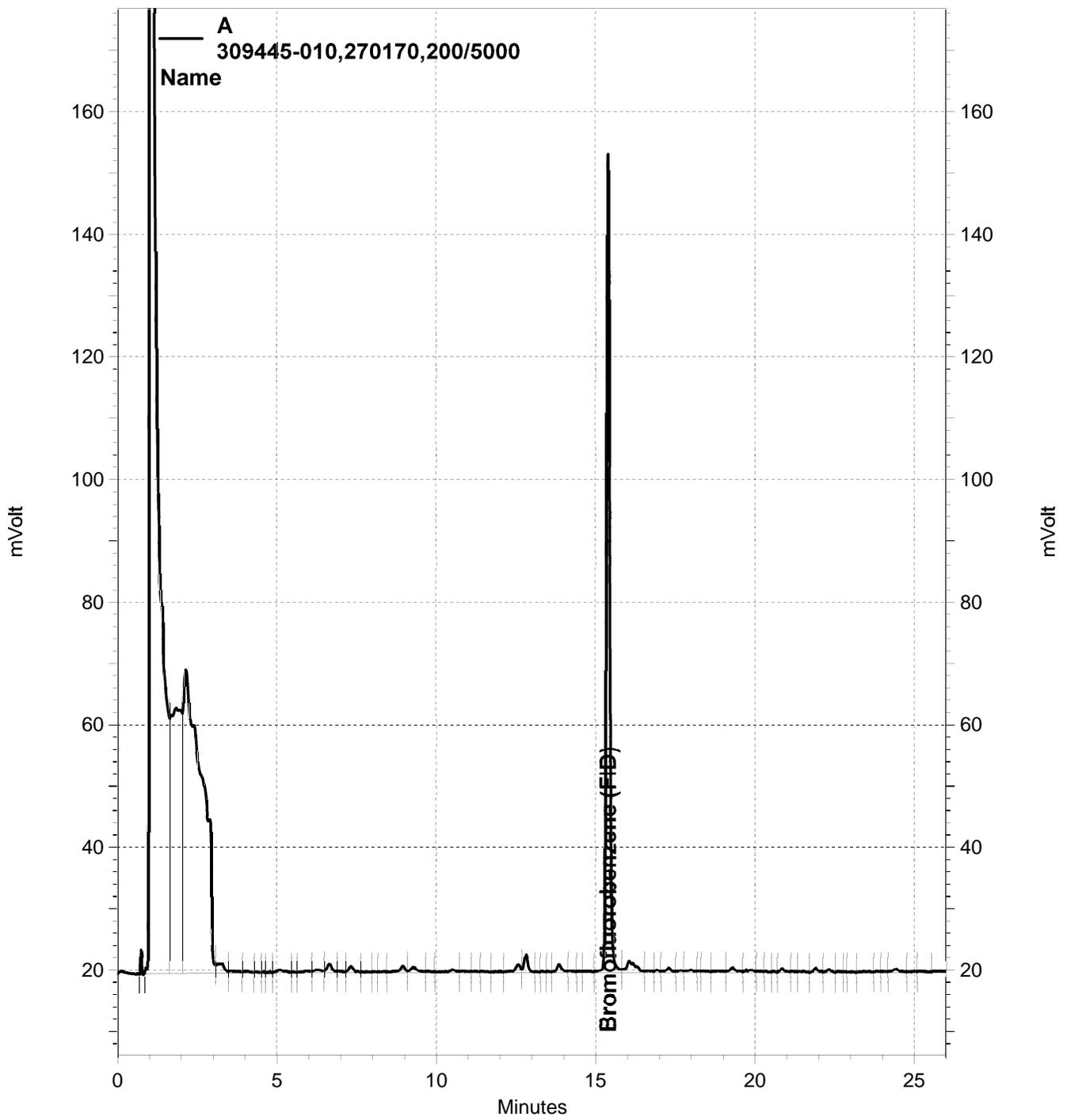
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	0.9730	97	80-122	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	58-145

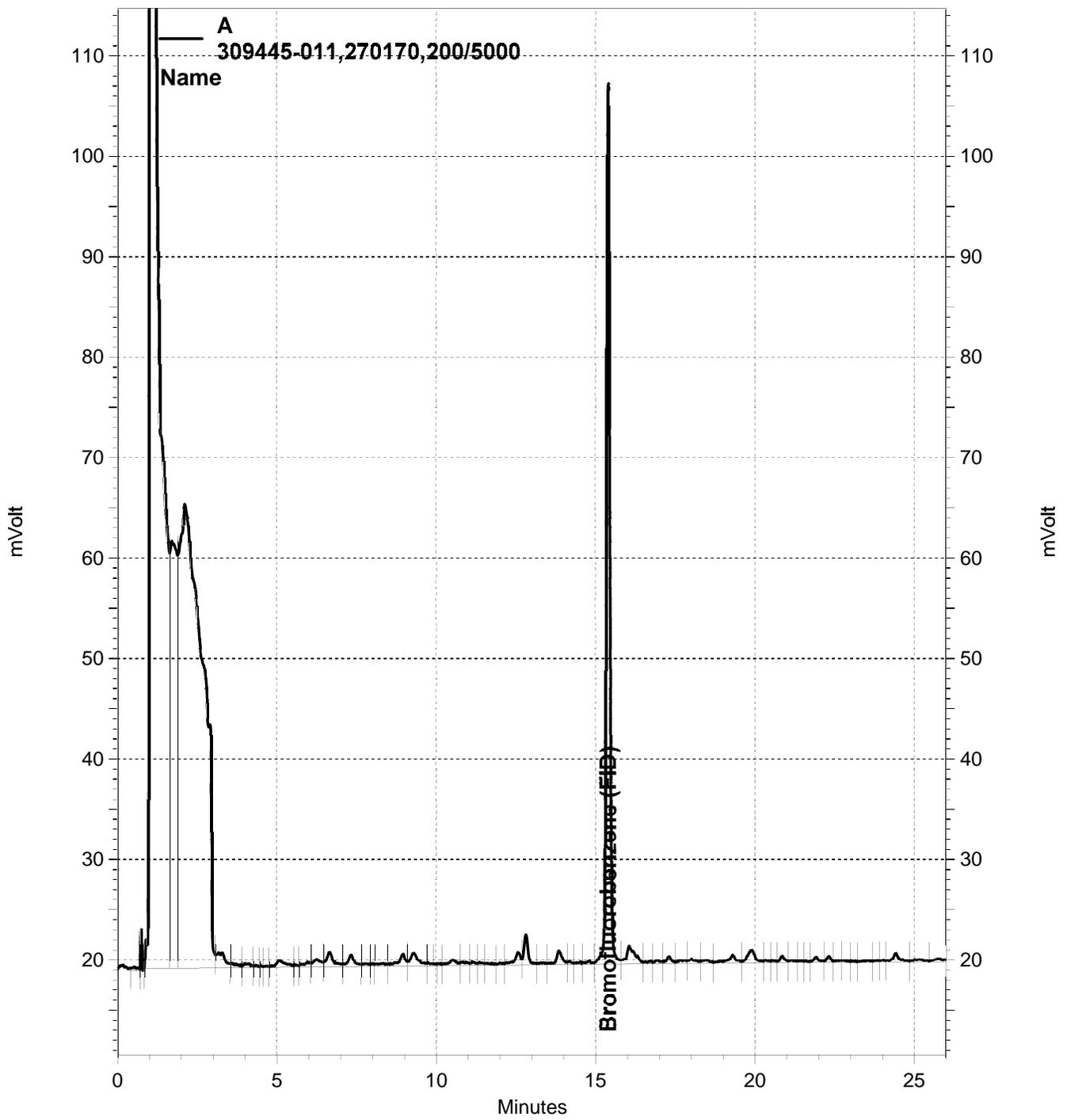
RPD= Relative Percent Difference



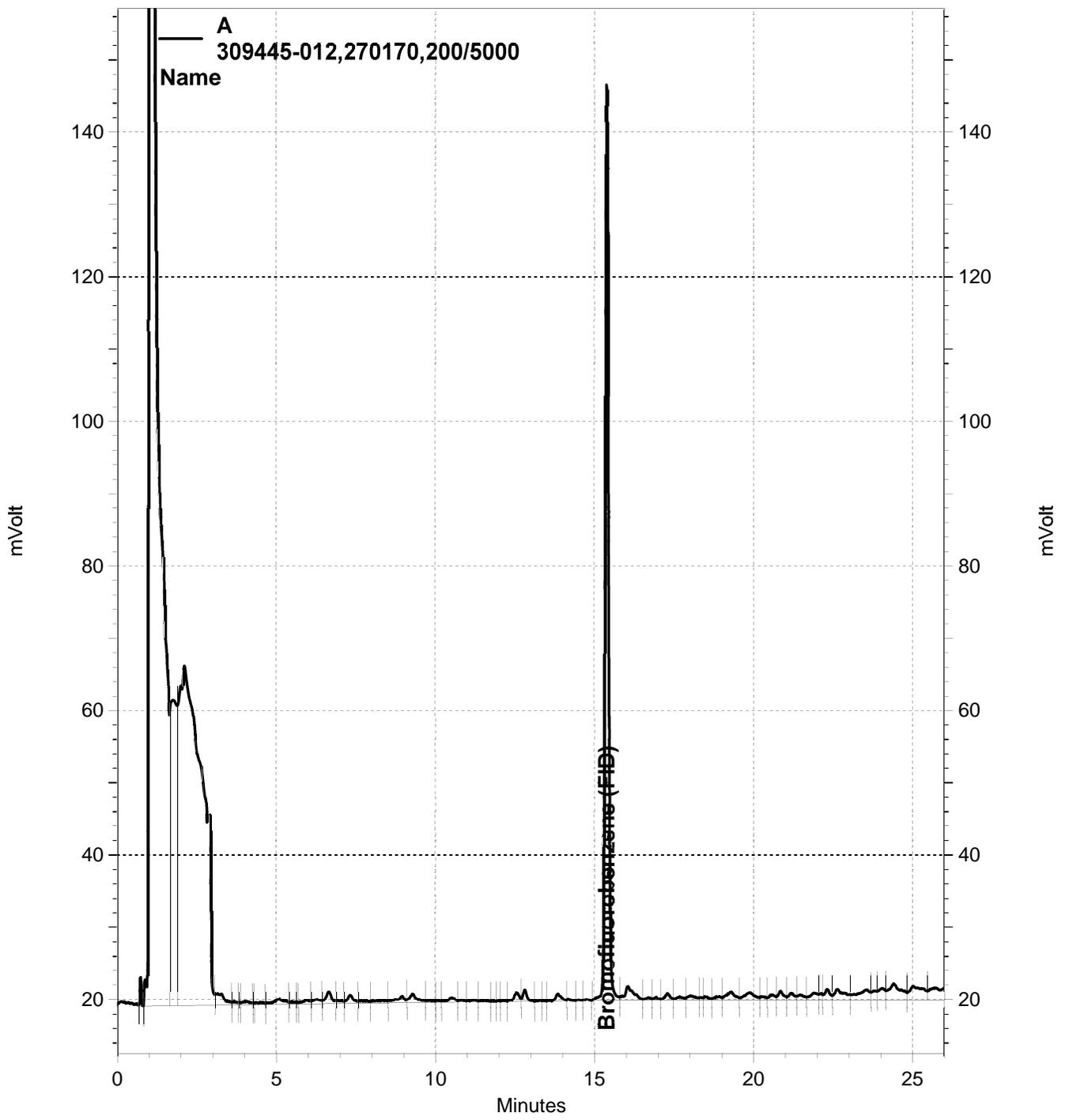
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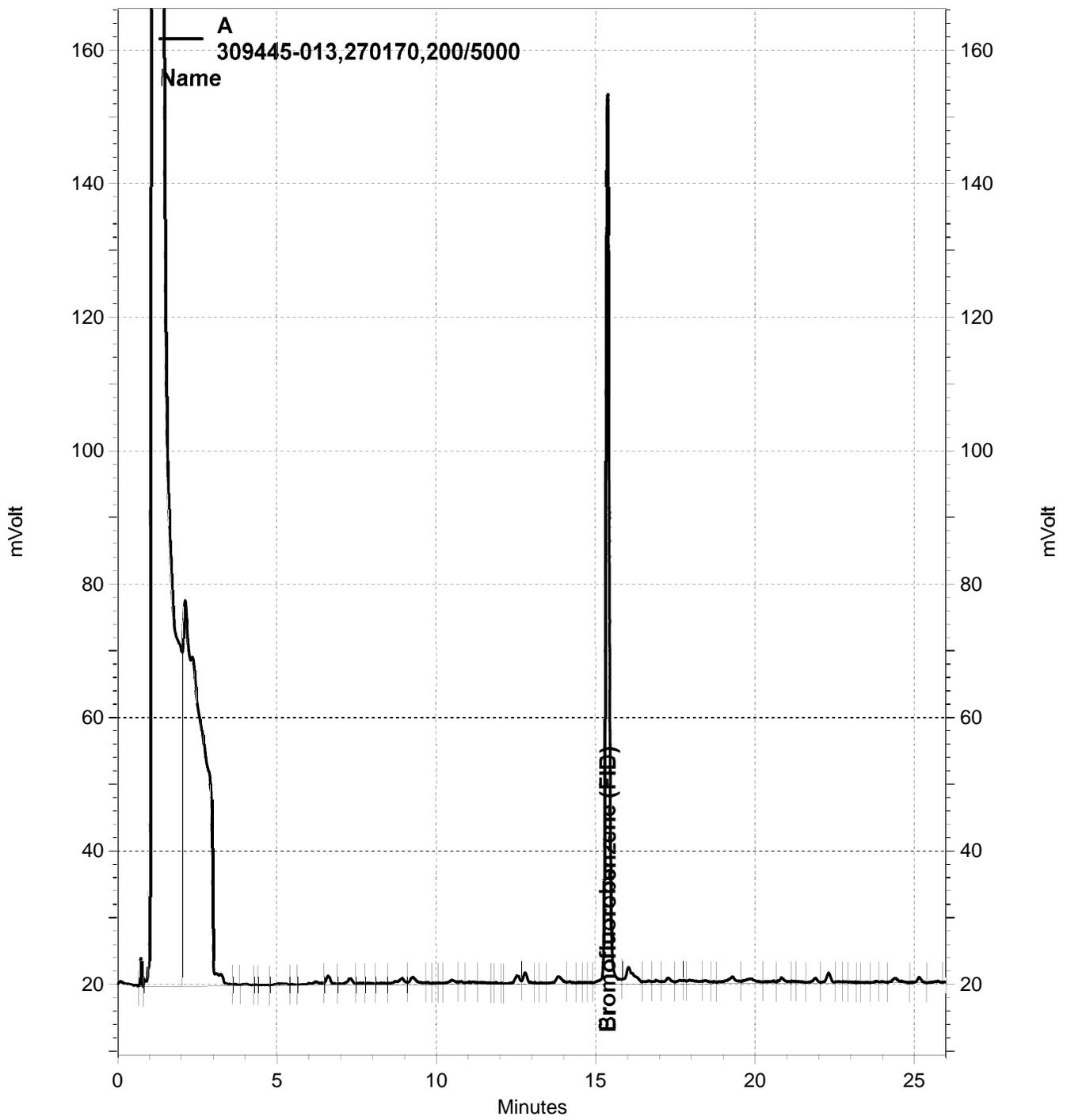
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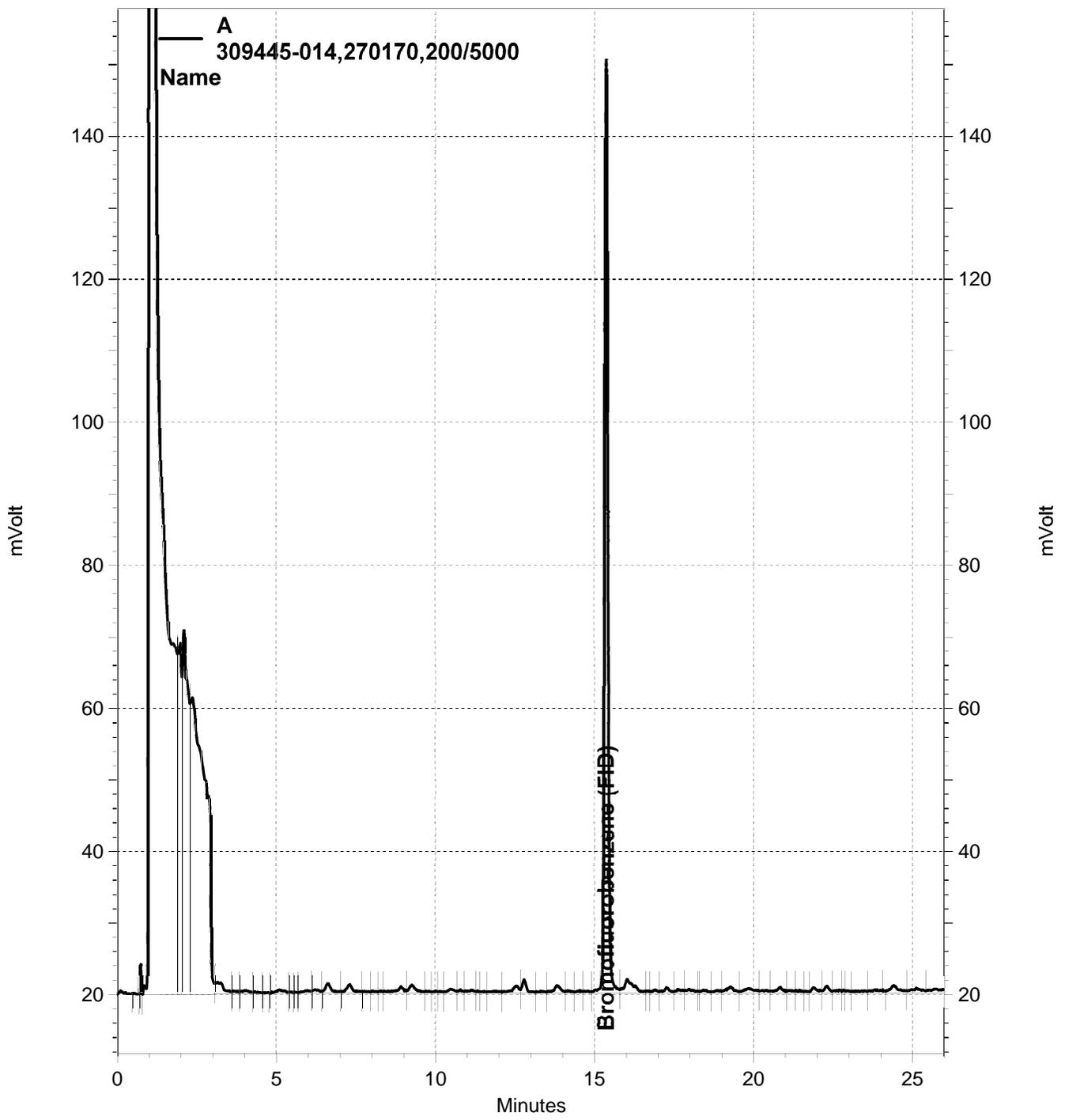
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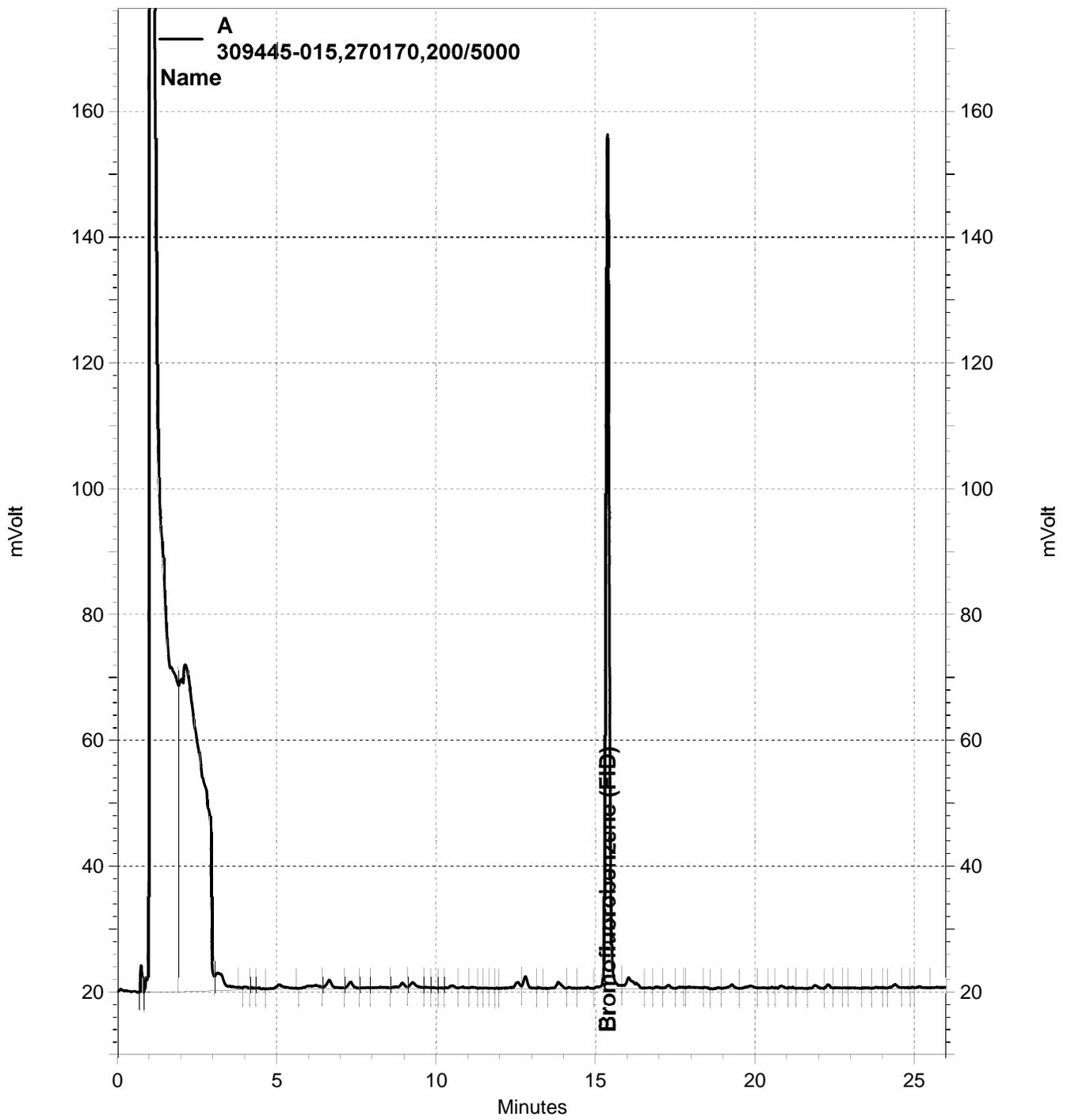
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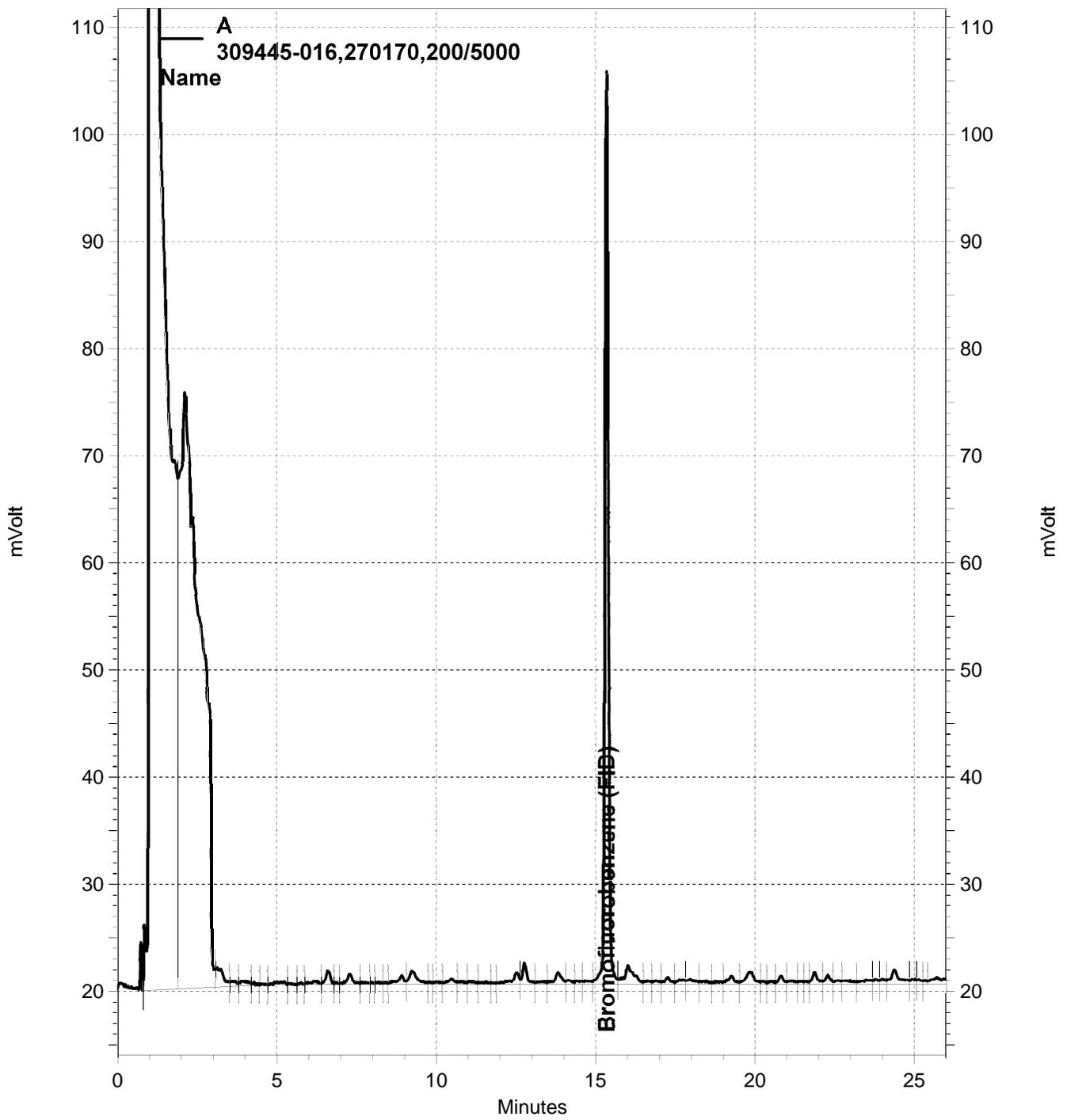
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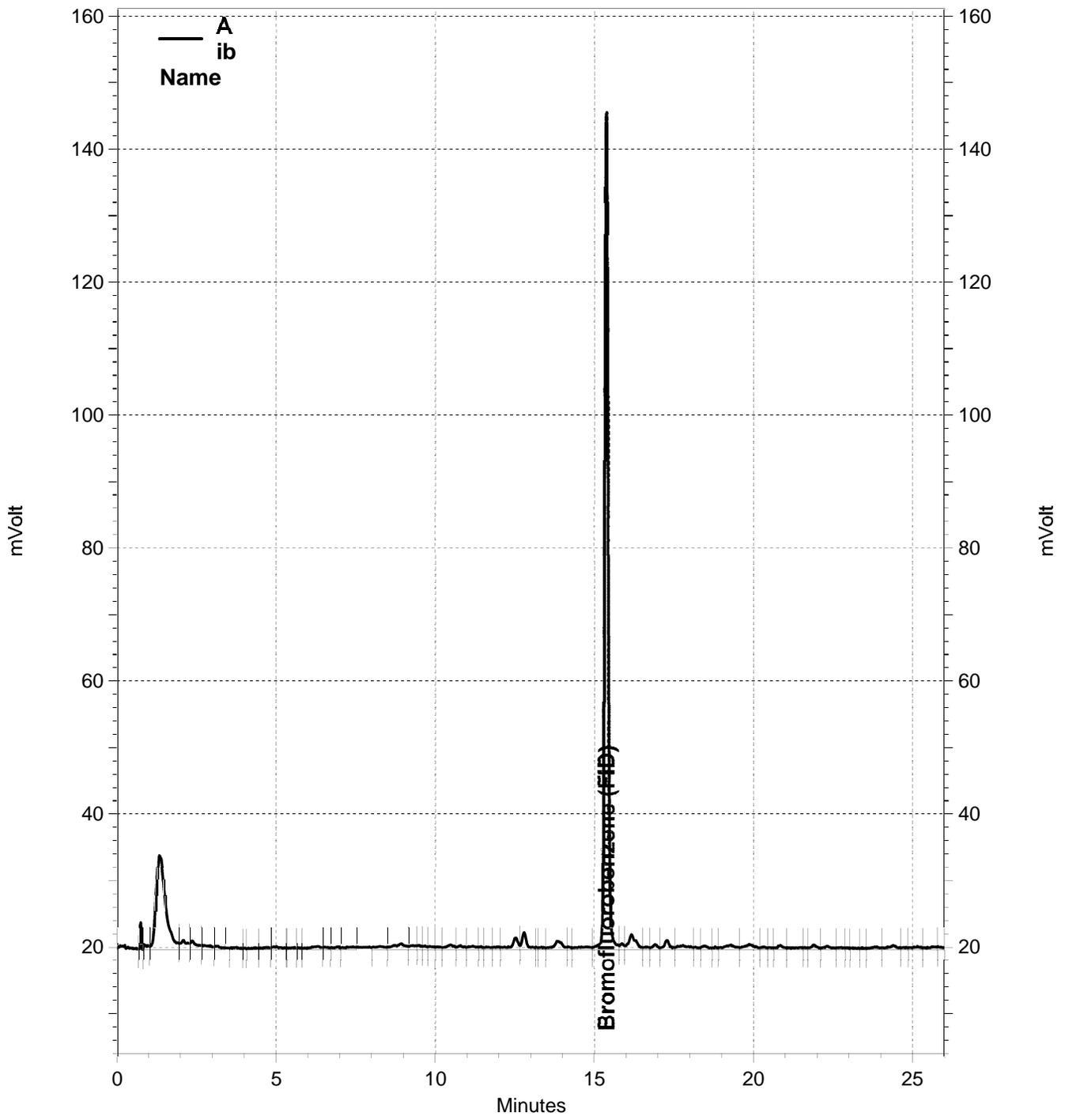
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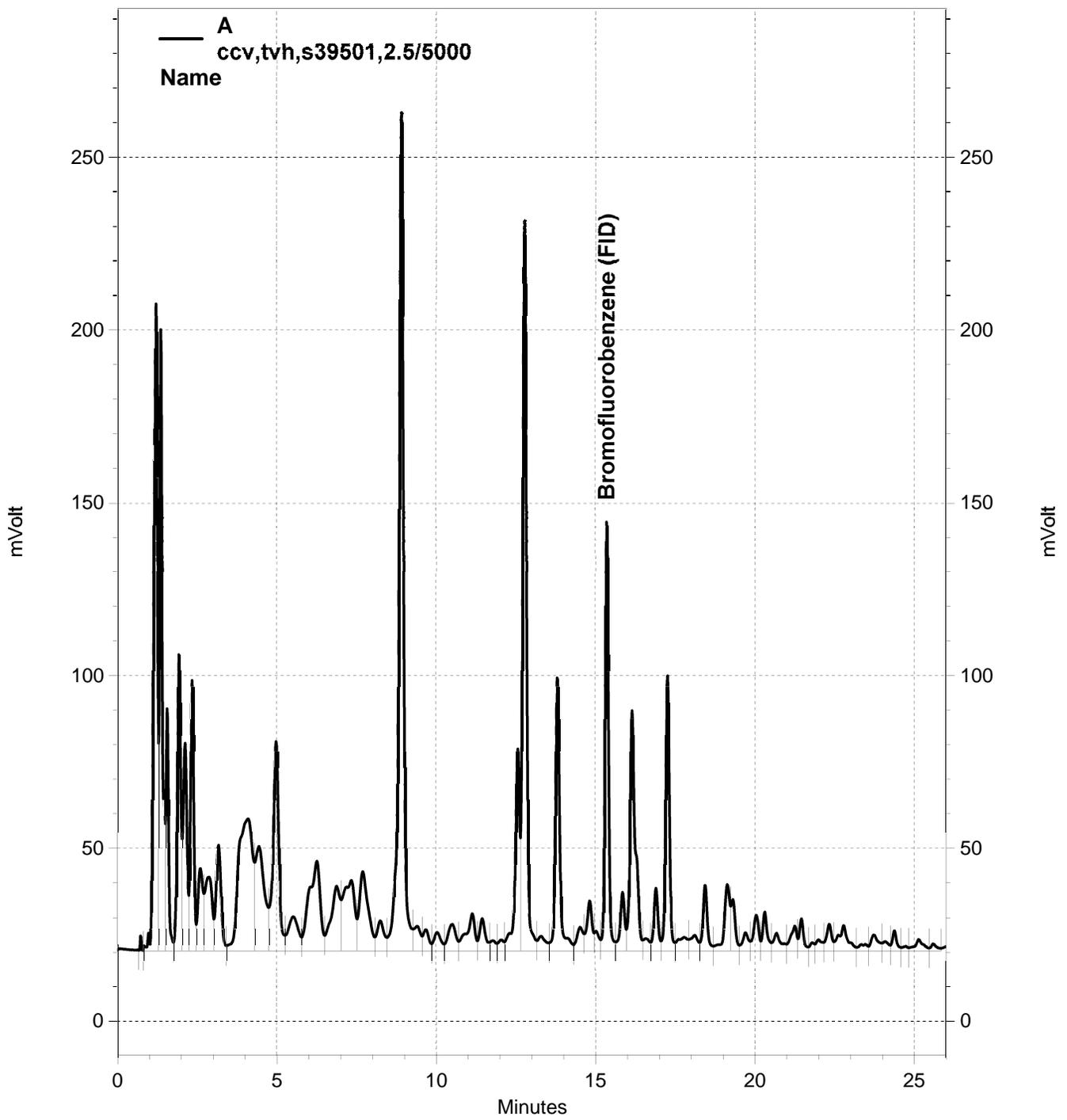
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Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/02/19
Units:	mg/Kg	Received:	05/02/19
Basis:	dry		

Field ID:	DTSC-9B	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270320
Lab ID:	309445-009	Prepared:	05/09/19
Moisture:	4%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	40 Y	5.2	1.6
Motor Oil C24-C36	230	26	7.9

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-10B	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270320
Lab ID:	309445-010	Prepared:	05/09/19
Moisture:	5%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	53 Y	5.2	1.6
Motor Oil C24-C36	260	26	7.9

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-11B	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270320
Lab ID:	309445-011	Prepared:	05/09/19
Moisture:	9%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	91 Y	5.5	1.7
Motor Oil C24-C36	430	28	8.3

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/02/19
Units:	mg/Kg	Received:	05/02/19
Basis:	dry		

Field ID:	DTSC-12B	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	270364
Lab ID:	309445-012	Prepared:	05/10/19
Moisture:	8%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	80 Y	22	6.6
Motor Oil C24-C36	640	110	33

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-24A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270364
Lab ID:	309445-013	Prepared:	05/10/19
Moisture:	12%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	25 Y	11	3.5
Motor Oil C24-C36	170	56	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-24B	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270364
Lab ID:	309445-014	Prepared:	05/10/19
Moisture:	13%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	31 Y	11	3.5
Motor Oil C24-C36	160	57	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/02/19
Units:	mg/Kg	Received:	05/02/19
Basis:	dry		

Field ID:	DTSC-24C	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270364
Lab ID:	309445-015	Prepared:	05/10/19
Moisture:	10%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	36 Y	11	3.4
Motor Oil C24-C36	230	56	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-24D	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270364
Lab ID:	309445-016	Prepared:	05/10/19
Moisture:	9%	Analyzed:	05/14/19

Analyte	Result	RL	MDL
Diesel C10-C24	34 Y	11	3.4
Motor Oil C24-C36	210	55	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type:	BLANK	Batch#:	270320
Lab ID:	QC975048	Prepared:	05/09/19
Diln Fac:	1.000	Analyzed:	05/10/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	108	61-130

Type:	BLANK	Batch#:	270364
Lab ID:	QC975237	Prepared:	05/10/19
Diln Fac:	1.000	Analyzed:	05/11/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	110	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975049	Batch#:	270320
Matrix:	Soil	Prepared:	05/09/19
Units:	mg/Kg	Analyzed:	05/11/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	56.05	112	55-133

Surrogate	%REC	Limits
o-Terphenyl	109	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270320
MSS Lab ID:	309628-001	Sampled:	05/08/19
Matrix:	Soil	Received:	05/08/19
Units:	mg/Kg	Prepared:	05/09/19
Basis:	as received	Analyzed:	05/11/19
Diln Fac:	1.000		

Type: MS Lab ID: QC975050

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	1.991	50.28	54.99	105	56-125

Surrogate	%REC	Limits
o-Terphenyl	99	61-130

Type: MSD Lab ID: QC975051

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.09	56.61	109	56-125	3	33

Surrogate	%REC	Limits
o-Terphenyl	91	61-130

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975238	Batch#:	270364
Matrix:	Soil	Prepared:	05/10/19
Units:	mg/Kg	Analyzed:	05/11/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	53.67	107	55-133

Surrogate	%REC	Limits
o-Terphenyl	110	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270364
MSS Lab ID:	309502-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/06/19
Units:	mg/Kg	Prepared:	05/10/19
Basis:	as received	Analyzed:	05/11/19
Diln Fac:	2.000		

Type: MS Lab ID: QC975239

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	7.979	49.66	64.23	113	56-125

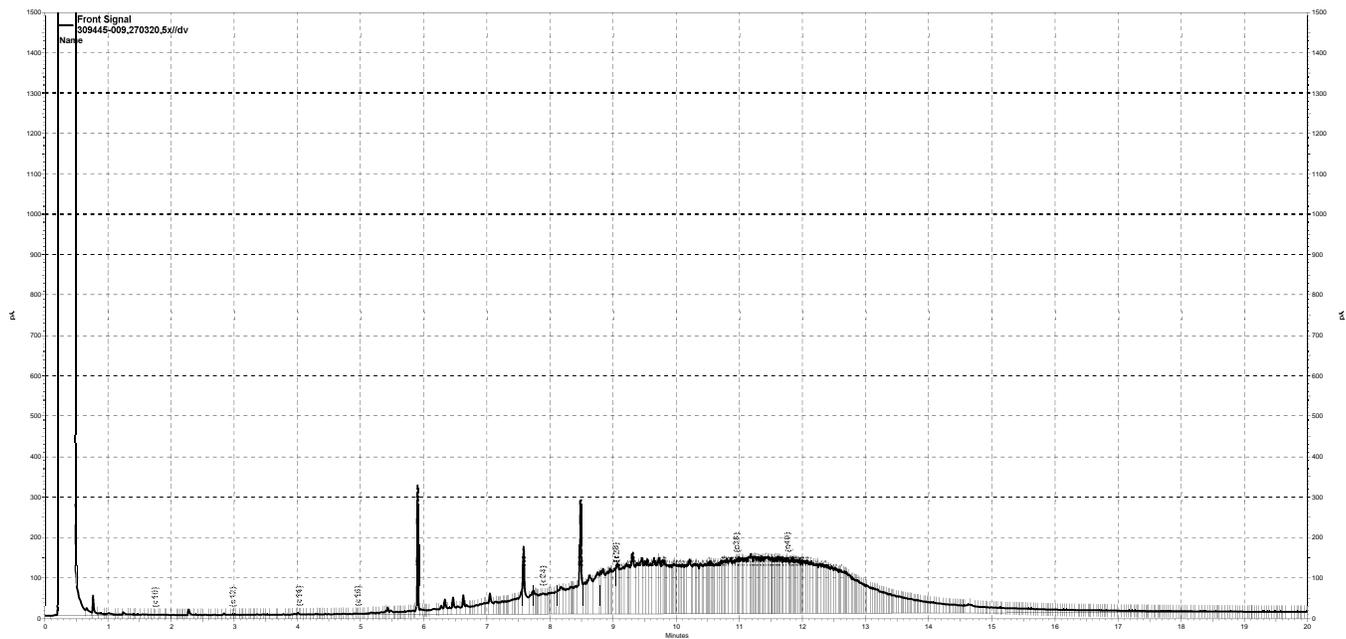
Surrogate	%REC	Limits
o-Terphenyl	104	61-130

Type: MSD Lab ID: QC975240

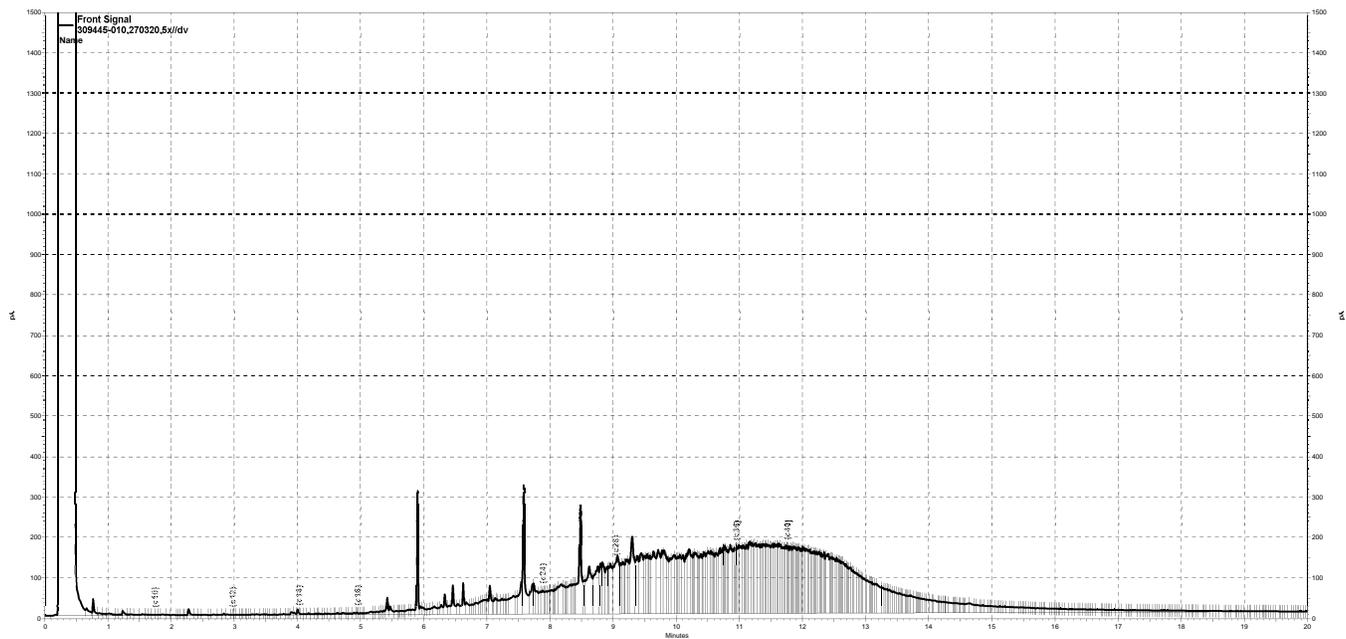
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.99	63.14	110	56-125	2	33

Surrogate	%REC	Limits
o-Terphenyl	101	61-130

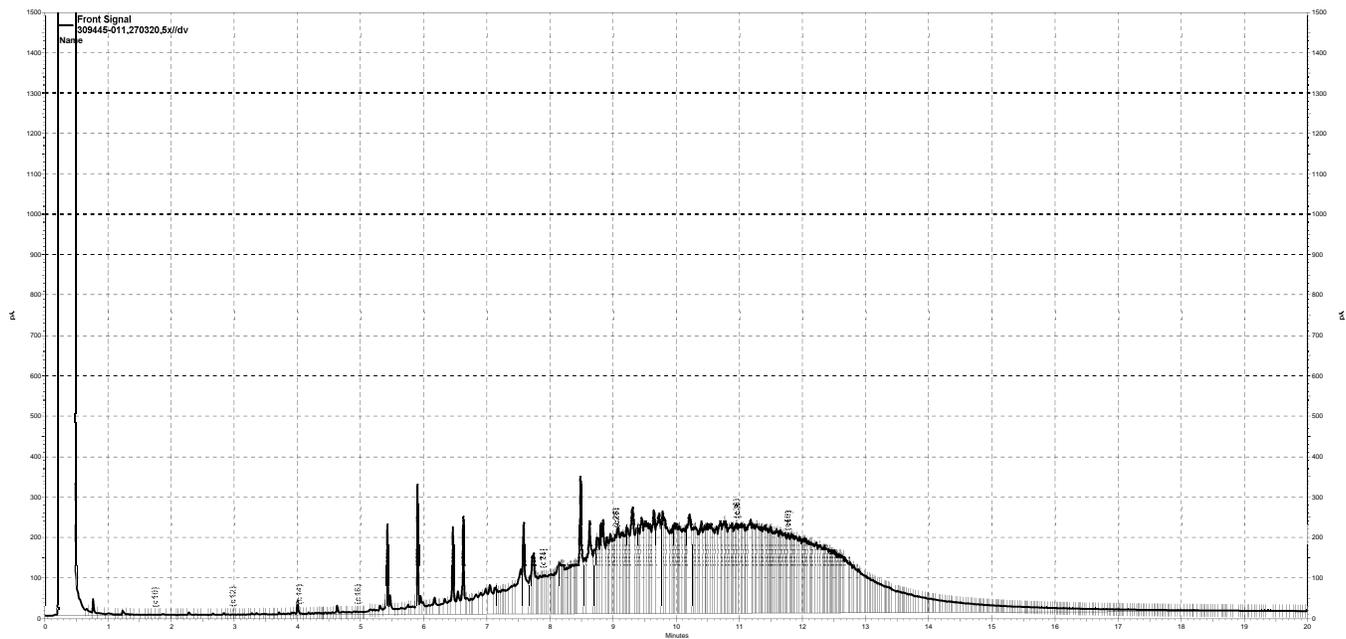
RPD= Relative Percent Difference



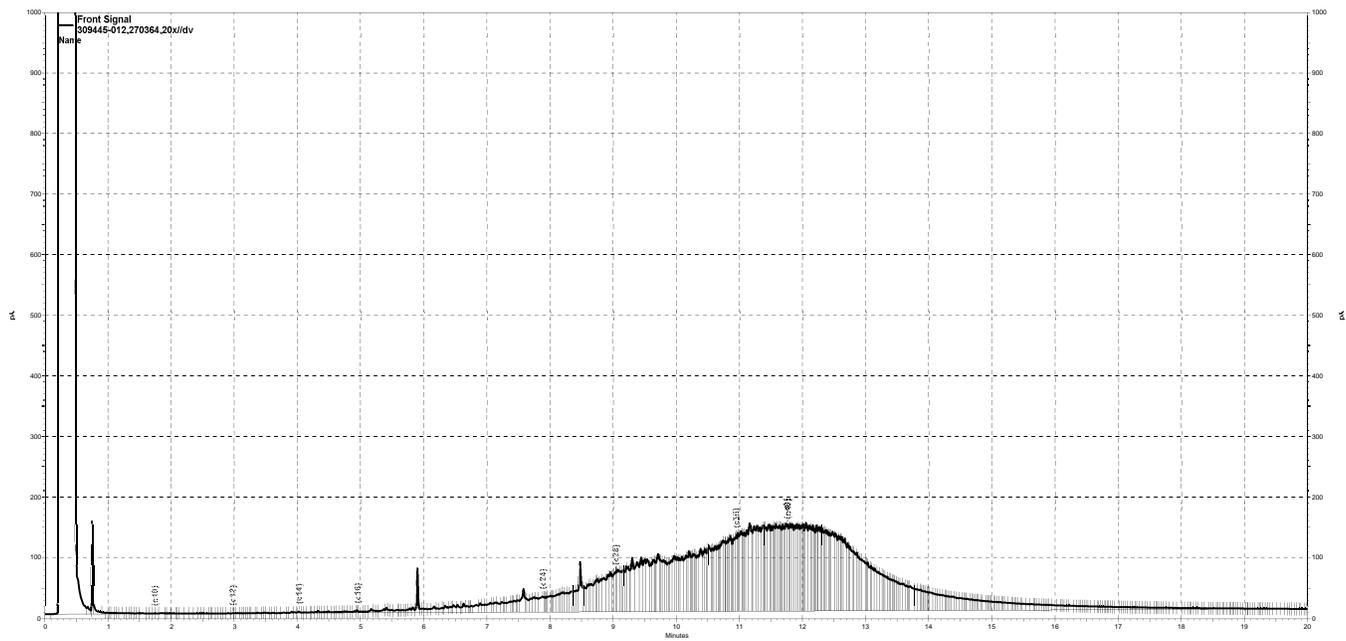
— G:\ezchrom\Projects\GC27\Data\2019\133a065.dat, Front Signal



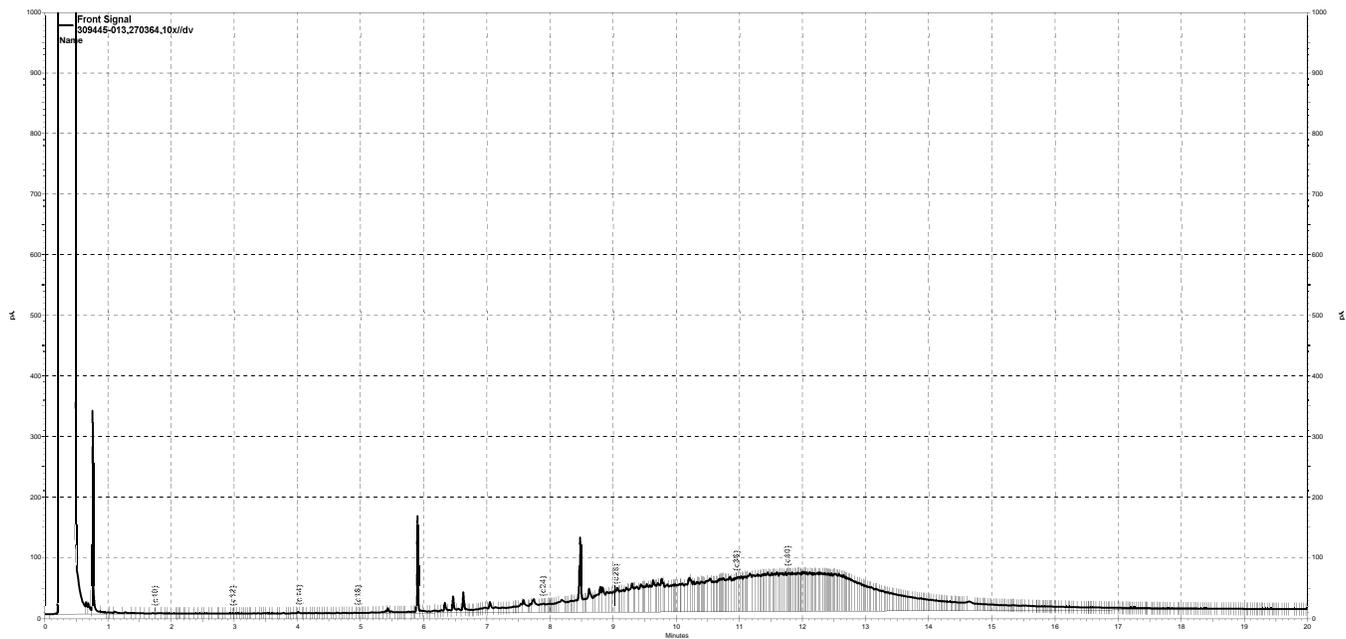
— G:\ezchrom\Projects\GC27\Data\2019\133a066.dat, Front Signal



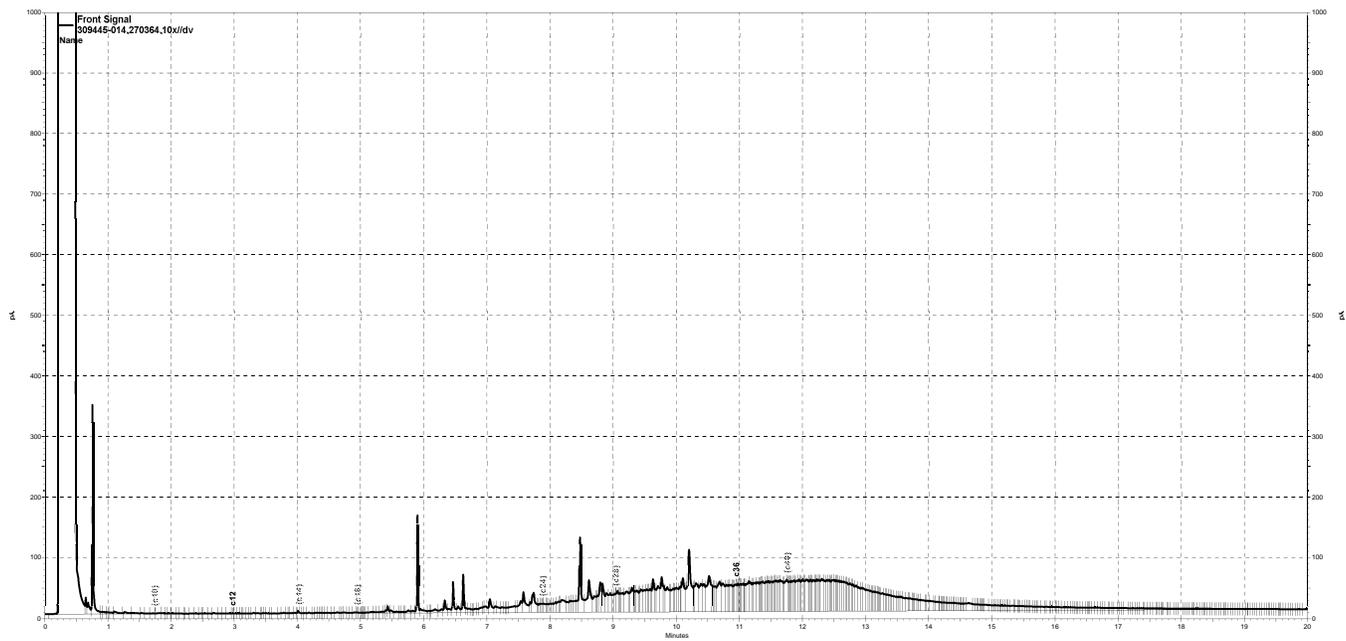
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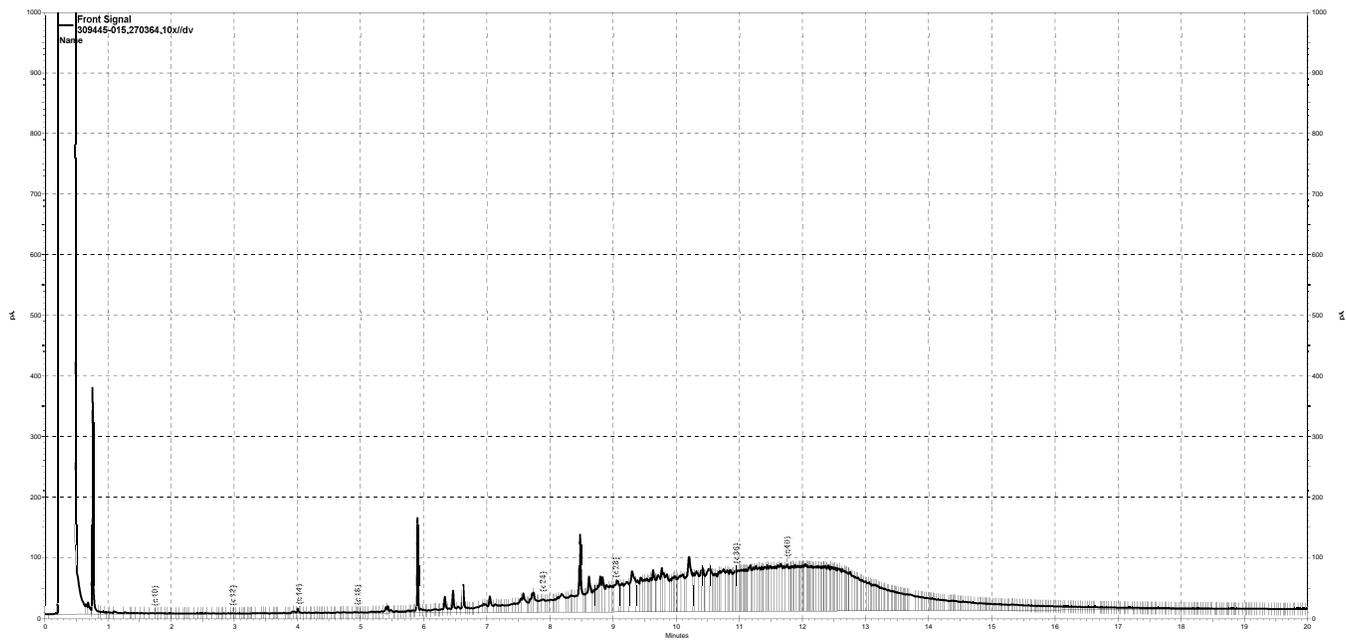
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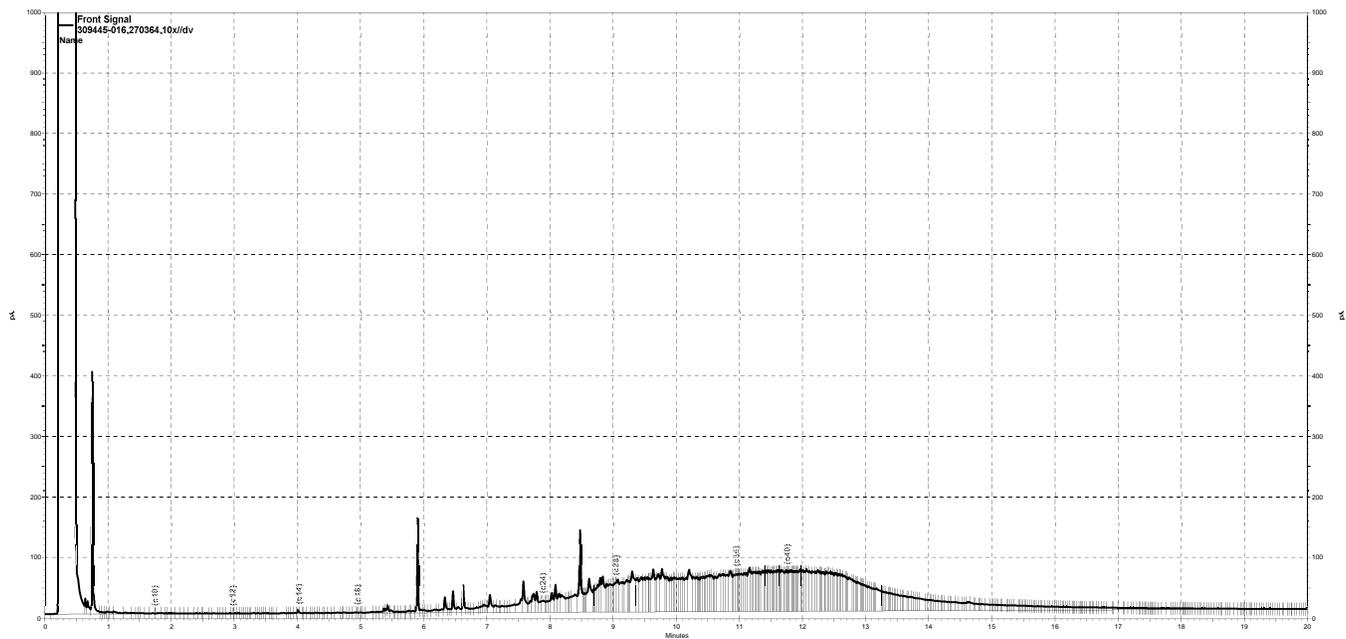
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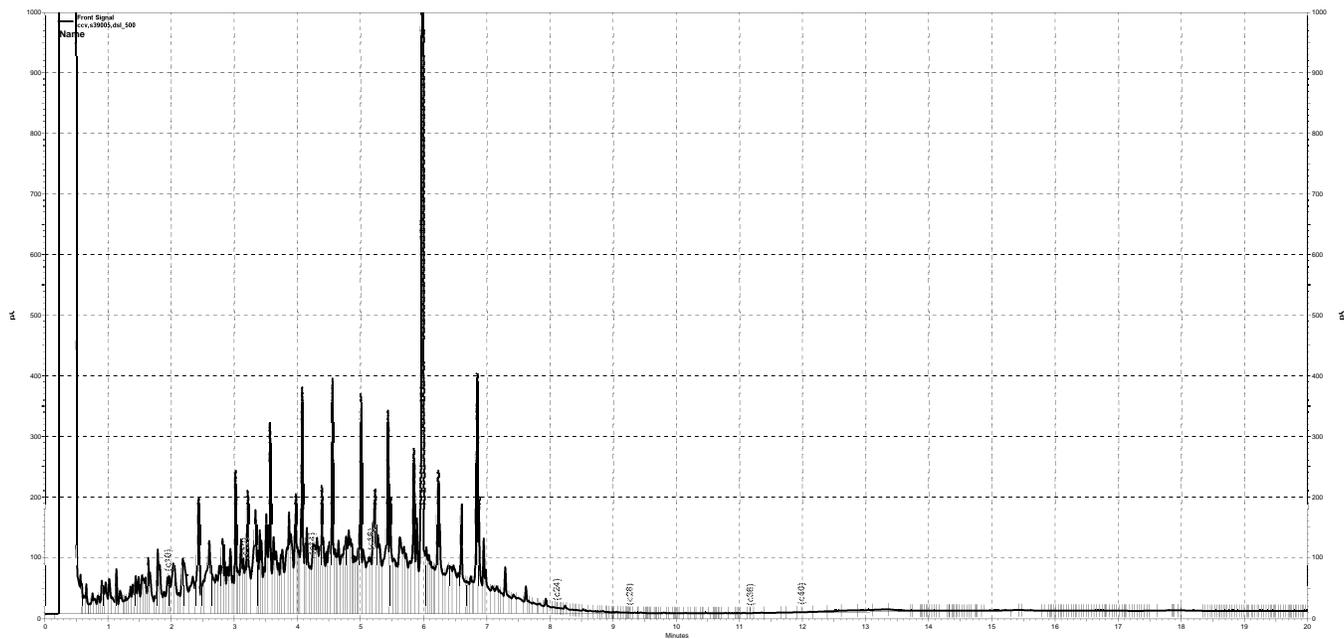
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— G:\ezchrom\Projects\GC27\Data\2019\133a058.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\133a059.dat, Front Signal



— G:\ezchrom\Projects\GC27\Data\2019\128a097.dat, Front Signal

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9B	Diln Fac:	43.07
Lab ID:	309445-009	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 4%

Analyte	Result	RL	MDL
Freon 12	ND	450	46
Chloromethane	ND	450	38
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	220	35
Acetone	ND	900	120
Freon 113	ND	220	44
1,1-Dichloroethene	ND	220	38
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	220	43
MTBE	ND	220	40
trans-1,2-Dichloroethene	ND	220	46
Vinyl Acetate	ND	2,200	52
1,1-Dichloroethane	ND	220	42
2-Butanone	ND	450	99
cis-1,2-Dichloroethene	ND	220	45
2,2-Dichloropropane	ND	220	44
Chloroform	ND	220	48
Bromochloromethane	ND	220	48
1,1,1-Trichloroethane	ND	220	48
1,1-Dichloropropene	ND	220	45
Carbon Tetrachloride	ND	220	41
1,2-Dichloroethane	ND	220	37
Benzene	ND	220	39
Trichloroethene	ND	220	45
1,2-Dichloropropane	ND	220	39
Bromodichloromethane	ND	220	40
Dibromomethane	ND	220	37
4-Methyl-2-Pentanone	ND	450	36
cis-1,3-Dichloropropene	ND	220	49
Toluene	ND	220	42
trans-1,3-Dichloropropene	ND	220	41
1,1,2-Trichloroethane	ND	220	44
2-Hexanone	ND	450	41
1,3-Dichloropropane	ND	220	42
Tetrachloroethene	ND	220	43
Dibromochloromethane	ND	220	38
1,2-Dibromoethane	ND	220	39
Chlorobenzene	ND	220	43
1,1,1,2-Tetrachloroethane	ND	220	48
Ethylbenzene	ND	220	46
m,p-Xylenes	ND	220	28
o-Xylene	ND	220	46
Styrene	ND	220	47
Bromoform	ND	220	44
Isopropylbenzene	ND	220	50
1,1,2,2-Tetrachloroethane	ND	220	37
1,2,3-Trichloropropane	ND	220	47
Propylbenzene	ND	220	47
Bromobenzene	ND	220	43

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9B	Diln Fac:	43.07
Lab ID:	309445-009	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	220	47
2-Chlorotoluene	ND	220	51
4-Chlorotoluene	ND	220	47
tert-Butylbenzene	ND	220	52
1,2,4-Trimethylbenzene	ND	220	47
sec-Butylbenzene	ND	220	52
para-Isopropyl Toluene	ND	220	49
1,3-Dichlorobenzene	ND	220	47
1,4-Dichlorobenzene	ND	220	44
n-Butylbenzene	ND	220	49
1,2-Dichlorobenzene	ND	220	51
1,2-Dibromo-3-Chloropropane	ND	220	45
1,2,4-Trichlorobenzene	ND	220	62
Hexachlorobutadiene	ND	220	55
Naphthalene	ND	220	49
1,2,3-Trichlorobenzene	ND	220	60

Surrogate	%REC	Limits
Dibromofluoromethane	90	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10B	Diln Fac:	46.10
Lab ID:	309445-010	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 5%

Analyte	Result	RL	MDL
Freon 12	ND	490	50
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	240	38
Acetone	ND	970	120
Freon 113	ND	240	48
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	47
MTBE	ND	240	44
trans-1,2-Dichloroethene	ND	240	50
Vinyl Acetate	ND	2,400	56
1,1-Dichloroethane	ND	240	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	52
1,1,1-Trichloroethane	ND	240	52
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	43
Trichloroethene	ND	240	49
1,2-Dichloropropane	ND	240	42
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	41
4-Methyl-2-Pentanone	ND	490	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	240	46
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	50
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	54
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10B	Diln Fac:	46.10
Lab ID:	309445-010	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	51
2-Chlorotoluene	ND	240	56
4-Chlorotoluene	ND	240	51
tert-Butylbenzene	ND	240	57
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	56
para-Isopropyl Toluene	ND	240	53
1,3-Dichlorobenzene	ND	240	51
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	54
1,2-Dichlorobenzene	ND	240	55
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	68
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	53
1,2,3-Trichlorobenzene	ND	240	65

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	86	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11B	Diln Fac:	46.21
Lab ID:	309445-011	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	510	53
Chloromethane	ND	510	43
Vinyl Chloride	ND	510	38
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	250	40
Acetone	ND	1,000	130
Freon 113	ND	250	50
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,300	220
Carbon Disulfide	ND	250	49
MTBE	ND	250	46
trans-1,2-Dichloroethene	ND	250	52
Vinyl Acetate	ND	2,500	59
1,1-Dichloroethane	ND	250	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	250	51
2,2-Dichloropropane	ND	250	50
Chloroform	ND	250	55
Bromochloromethane	ND	250	54
1,1,1-Trichloroethane	ND	250	54
1,1-Dichloropropene	ND	250	51
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	42
Benzene	ND	250	45
Trichloroethene	ND	250	51
1,2-Dichloropropane	ND	250	44
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	250	56
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	46
1,1,2-Trichloroethane	ND	250	49
2-Hexanone	ND	510	47
1,3-Dichloropropane	ND	250	48
Tetrachloroethene	ND	250	49
Dibromochloromethane	ND	250	43
1,2-Dibromoethane	ND	250	44
Chlorobenzene	ND	250	49
1,1,1,2-Tetrachloroethane	ND	250	55
Ethylbenzene	ND	250	52
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	52
Styrene	ND	250	53
Bromoform	ND	250	50
Isopropylbenzene	ND	250	56
1,1,2,2-Tetrachloroethane	ND	250	42
1,2,3-Trichloropropane	ND	250	53
Propylbenzene	ND	250	53
Bromobenzene	ND	250	49

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11B	Diln Fac:	46.21
Lab ID:	309445-011	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	53
2-Chlorotoluene	ND	250	58
4-Chlorotoluene	ND	250	53
tert-Butylbenzene	ND	250	59
1,2,4-Trimethylbenzene	ND	250	54
sec-Butylbenzene	ND	250	58
para-Isopropyl Toluene	ND	250	55
1,3-Dichlorobenzene	ND	250	53
1,4-Dichlorobenzene	ND	250	50
n-Butylbenzene	ND	250	56
1,2-Dichlorobenzene	ND	250	58
1,2-Dibromo-3-Chloropropane	ND	250	52
1,2,4-Trichlorobenzene	ND	250	71
Hexachlorobutadiene	ND	250	62
Naphthalene	ND	250	55
1,2,3-Trichlorobenzene	ND	250	68

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12B	Diln Fac:	43.31
Lab ID:	309445-012	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	39
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	160
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	940	120
Freon 113	ND	240	46
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	54
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	47
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	44
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12B	Diln Fac:	43.31
Lab ID:	309445-012	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	53
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	88	78-131
1,2-Dichloroethane-d4	83	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	104	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24A	Diln Fac:	41.49
Lab ID:	309445-013	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	40
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	160
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	940	120
Freon 113	ND	240	46
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	54
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	44
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24A	Diln Fac:	41.49
Lab ID:	309445-013	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	53
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	82	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24B	Diln Fac:	40.34
Lab ID:	309445-014	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	460	48
Chloromethane	ND	460	39
Vinyl Chloride	ND	460	35
Bromomethane	ND	460	160
Chloroethane	ND	460	33
Trichlorofluoromethane	ND	230	36
Acetone	ND	930	120
Freon 113	ND	230	46
1,1-Dichloroethene	ND	230	40
Methylene Chloride	ND	1,200	200
Carbon Disulfide	ND	230	45
MTBE	ND	230	42
trans-1,2-Dichloroethene	ND	230	47
Vinyl Acetate	ND	2,300	54
1,1-Dichloroethane	ND	230	44
2-Butanone	ND	460	100
cis-1,2-Dichloroethene	ND	230	46
2,2-Dichloropropane	ND	230	46
Chloroform	ND	230	50
Bromochloromethane	ND	230	49
1,1,1-Trichloroethane	ND	230	49
1,1-Dichloropropene	ND	230	47
Carbon Tetrachloride	ND	230	42
1,2-Dichloroethane	ND	230	38
Benzene	ND	230	41
Trichloroethene	ND	230	46
1,2-Dichloropropane	ND	230	40
Bromodichloromethane	ND	230	41
Dibromomethane	ND	230	39
4-Methyl-2-Pentanone	ND	460	37
cis-1,3-Dichloropropene	ND	230	51
Toluene	ND	230	43
trans-1,3-Dichloropropene	ND	230	42
1,1,2-Trichloroethane	ND	230	45
2-Hexanone	ND	460	43
1,3-Dichloropropane	ND	230	44
Tetrachloroethene	ND	230	45
Dibromochloromethane	ND	230	39
1,2-Dibromoethane	ND	230	40
Chlorobenzene	ND	230	44
1,1,1,2-Tetrachloroethane	ND	230	50
Ethylbenzene	ND	230	48
m,p-Xylenes	ND	230	29
o-Xylene	ND	230	47
Styrene	ND	230	49
Bromoform	ND	230	46
Isopropylbenzene	ND	230	51
1,1,2,2-Tetrachloroethane	ND	230	38
1,2,3-Trichloropropane	ND	230	48
Propylbenzene	ND	230	48
Bromobenzene	ND	230	45

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24B	Diln Fac:	40.34
Lab ID:	309445-014	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	230	48
2-Chlorotoluene	ND	230	53
4-Chlorotoluene	ND	230	49
tert-Butylbenzene	ND	230	54
1,2,4-Trimethylbenzene	ND	230	49
sec-Butylbenzene	ND	230	53
para-Isopropyl Toluene	ND	230	50
1,3-Dichlorobenzene	ND	230	49
1,4-Dichlorobenzene	ND	230	46
n-Butylbenzene	ND	230	51
1,2-Dichlorobenzene	ND	230	53
1,2-Dibromo-3-Chloropropane	ND	230	47
1,2,4-Trichlorobenzene	ND	230	65
Hexachlorobutadiene	ND	230	57
Naphthalene	ND	230	50
1,2,3-Trichlorobenzene	ND	230	62

Surrogate	%REC	Limits
Dibromofluoromethane	86	78-131
1,2-Dichloroethane-d4	82	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24C	Diln Fac:	40.05
Lab ID:	309445-015	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	450	46
Chloromethane	ND	450	37
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	220	35
Acetone	ND	890	110
Freon 113	ND	220	44
1,1-Dichloroethene	ND	220	38
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	220	43
MTBE	ND	220	40
trans-1,2-Dichloroethene	ND	220	46
Vinyl Acetate	ND	2,200	51
1,1-Dichloroethane	ND	220	42
2-Butanone	ND	450	98
cis-1,2-Dichloroethene	ND	220	44
2,2-Dichloropropane	ND	220	44
Chloroform	ND	220	48
Bromochloromethane	ND	220	47
1,1,1-Trichloroethane	ND	220	47
1,1-Dichloropropene	ND	220	45
Carbon Tetrachloride	ND	220	41
1,2-Dichloroethane	ND	220	37
Benzene	ND	220	39
Trichloroethene	ND	220	44
1,2-Dichloropropane	ND	220	38
Bromodichloromethane	ND	220	40
Dibromomethane	ND	220	37
4-Methyl-2-Pentanone	ND	450	36
cis-1,3-Dichloropropene	ND	220	49
Toluene	ND	220	42
trans-1,3-Dichloropropene	ND	220	40
1,1,2-Trichloroethane	ND	220	43
2-Hexanone	ND	450	41
1,3-Dichloropropane	ND	220	42
Tetrachloroethene	ND	220	43
Dibromochloromethane	ND	220	38
1,2-Dibromoethane	ND	220	39
Chlorobenzene	ND	220	43
1,1,1,2-Tetrachloroethane	ND	220	48
Ethylbenzene	ND	220	46
m,p-Xylenes	ND	220	27
o-Xylene	ND	220	45
Styrene	ND	220	47
Bromoform	ND	220	44
Isopropylbenzene	ND	220	49
1,1,2,2-Tetrachloroethane	ND	220	37
1,2,3-Trichloropropane	ND	220	46
Propylbenzene	ND	220	46
Bromobenzene	ND	220	43

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24C	Diln Fac:	40.05
Lab ID:	309445-015	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	220	46
2-Chlorotoluene	ND	220	51
4-Chlorotoluene	ND	220	47
tert-Butylbenzene	ND	220	52
1,2,4-Trimethylbenzene	ND	220	47
sec-Butylbenzene	ND	220	51
para-Isopropyl Toluene	ND	220	48
1,3-Dichlorobenzene	ND	220	47
1,4-Dichlorobenzene	ND	220	44
n-Butylbenzene	ND	220	49
1,2-Dichlorobenzene	ND	220	50
1,2-Dibromo-3-Chloropropane	ND	220	45
1,2,4-Trichlorobenzene	ND	220	62
Hexachlorobutadiene	ND	220	54
Naphthalene	ND	220	48
1,2,3-Trichlorobenzene	ND	220	60

Surrogate	%REC	Limits
Dibromofluoromethane	88	78-131
1,2-Dichloroethane-d4	82	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24D	Diln Fac:	40.66
Lab ID:	309445-016	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	450	46
Chloromethane	ND	450	37
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	220	35
Acetone	ND	890	120
Freon 113	ND	220	44
1,1-Dichloroethene	ND	220	38
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	220	43
MTBE	ND	220	40
trans-1,2-Dichloroethene	ND	220	46
Vinyl Acetate	ND	2,200	52
1,1-Dichloroethane	ND	220	42
2-Butanone	ND	450	98
cis-1,2-Dichloroethene	ND	220	45
2,2-Dichloropropane	ND	220	44
Chloroform	ND	220	48
Bromochloromethane	ND	220	48
1,1,1-Trichloroethane	ND	220	48
1,1-Dichloropropene	ND	220	45
Carbon Tetrachloride	ND	220	41
1,2-Dichloroethane	ND	220	37
Benzene	ND	220	39
Trichloroethene	ND	220	45
1,2-Dichloropropane	ND	220	38
Bromodichloromethane	ND	220	40
Dibromomethane	ND	220	37
4-Methyl-2-Pentanone	ND	450	36
cis-1,3-Dichloropropene	ND	220	49
Toluene	ND	220	42
trans-1,3-Dichloropropene	ND	220	41
1,1,2-Trichloroethane	ND	220	43
2-Hexanone	ND	450	41
1,3-Dichloropropane	ND	220	42
Tetrachloroethene	ND	220	43
Dibromochloromethane	ND	220	38
1,2-Dibromoethane	ND	220	39
Chlorobenzene	ND	220	43
1,1,1,2-Tetrachloroethane	ND	220	48
Ethylbenzene	ND	220	46
m,p-Xylenes	ND	220	28
o-Xylene	ND	220	45
Styrene	ND	220	47
Bromoform	ND	220	44
Isopropylbenzene	ND	220	49
1,1,2,2-Tetrachloroethane	ND	220	37
1,2,3-Trichloropropane	ND	220	46
Propylbenzene	ND	220	46
Bromobenzene	ND	220	43

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-24D	Diln Fac:	40.66
Lab ID:	309445-016	Batch#:	270337
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	220	47
2-Chlorotoluene	ND	220	51
4-Chlorotoluene	ND	220	47
tert-Butylbenzene	ND	220	52
1,2,4-Trimethylbenzene	ND	220	47
sec-Butylbenzene	ND	220	51
para-Isopropyl Toluene	ND	220	48
1,3-Dichlorobenzene	ND	220	47
1,4-Dichlorobenzene	ND	220	44
n-Butylbenzene	ND	220	49
1,2-Dichlorobenzene	ND	220	51
1,2-Dibromo-3-Chloropropane	ND	220	45
1,2,4-Trichlorobenzene	ND	220	62
Hexachlorobutadiene	ND	220	55
Naphthalene	ND	220	49
1,2,3-Trichlorobenzene	ND	220	60

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	84	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	103	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270337
Units:	ug/Kg	Analyzed:	05/09/19
Diln Fac:	1.000		

Type: BS Lab ID: QC975131

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.06	100	69-142
Benzene	25.00	23.52	94	79-123
Trichloroethene	25.00	23.20	93	79-126
Toluene	25.00	25.11	100	78-120
Chlorobenzene	25.00	24.20	97	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-129

Type: BSD Lab ID: QC975132

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.89	104	69-142	3	23
Benzene	25.00	25.51	102	79-123	8	20
Trichloroethene	25.00	25.28	101	79-126	9	20
Toluene	25.00	26.90	108	78-120	7	20
Chlorobenzene	25.00	25.84	103	80-122	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975133	Batch#:	270337
Matrix:	Soil	Analyzed:	05/09/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	0.17 J	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.43 J	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975133	Batch#:	270337
Matrix:	Soil	Analyzed:	05/09/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	81	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-11B	Batch#:	270190
Lab ID:	309445-011	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	33.33		

TEQ ND Factor: 0.5

Moisture: 9%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	180	37		
Acenaphthylene	ND	180	37		
Acenaphthene	ND	180	37		
Fluorene	ND	180	37		
Phenanthrene	190	180	37		
Anthracene	45 J	180	37		
Fluoranthene	410	180	37		
Pyrene	600	180	37		
Benzo(a)anthracene	260	180	37	0.10	26
Chrysene	300	180	37	0.0010	0.30
Benzo(b)fluoranthene	410	180	37	0.10	41
Benzo(k)fluoranthene	150 J	180	37	0.010	1.5
Benzo(a)pyrene	340	180	37	1.0	340
Indeno(1,2,3-cd)pyrene	200	180	37	0.10	20
Dibenz(a,h)anthracene	46 J	180	37	1.0	46
Benzo(g,h,i)perylene	310	180	37		
Total Benzo(a)pyrene Equiv.					480

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-24A	Batch#:	270190
Lab ID:	309445-013	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/15/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 12%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	16 J	57	11		
Acenaphthylene	30 J	57	11		
Acenaphthene	12 J	57	11		
Fluorene	ND	57	11		
Phenanthrene	160	57	11		
Anthracene	38 J	57	11		
Fluoranthene	400	57	11		
Pyrene	610	57	11		
Benzo(a)anthracene	200	57	11	0.10	20
Chrysene	230	57	11	0.0010	0.23
Benzo(b)fluoranthene	360	57	11	0.10	36
Benzo(k)fluoranthene	110	57	11	0.010	1.1
Benzo(a)pyrene	320	57	11	1.0	320
Indeno(1,2,3-cd)pyrene	250	57	11	0.10	25
Dibenz(a,h)anthracene	45 J	57	11	1.0	45
Benzo(g,h,i)perylene	360	57	11		
Total Benzo(a)pyrene Equiv.					440

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-24C	Batch#:	270190
Lab ID:	309445-015	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/15/19
Diln Fac:	20.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	26 J	110	22		
Acenaphthylene	120	110	22		
Acenaphthene	26 J	110	22		
Fluorene	31 J	110	22		
Phenanthrene	630	110	22		
Anthracene	110	110	22		
Fluoranthene	1,100	110	22		
Pyrene	1,600	110	22		
Benzo(a)anthracene	560	110	22	0.10	56
Chrysene	590	110	22	0.0010	0.59
Benzo(b)fluoranthene	860	110	22	0.10	86
Benzo(k)fluoranthene	290	110	22	0.010	2.9
Benzo(a)pyrene	780	110	22	1.0	780
Indeno(1,2,3-cd)pyrene	540	110	22	0.10	54
Dibenz(a,h)anthracene	100 J	110	22	1.0	100
Benzo(g,h,i)perylene	750	110	22		
Total Benzo(a)pyrene Equiv.					1,100

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974542	Batch#:	270190
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/13/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	1.6 J	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	108	48-120
2-Fluorobiphenyl	78	39-120
Terphenyl-d14	93	61-120

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974543	Batch#:	270190
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/14/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	31.51	95	57-120
Acenaphthylene	33.33	33.32	100	60-120
Acenaphthene	33.33	31.88	96	64-120
Fluorene	33.33	31.53	95	67-120
Phenanthrene	33.33	33.94	102	64-120
Anthracene	33.33	35.39	106	66-120
Fluoranthene	33.33	34.15	102	73-121
Pyrene	33.33	37.29	112	67-120
Benzo(a)anthracene	33.33	35.85	108	69-121
Chrysene	33.33	19.39	58	48-120
Benzo(b)fluoranthene	33.33	26.18	79	66-120
Benzo(k)fluoranthene	33.33	32.82	98	62-125
Benzo(a)pyrene	33.33	35.51	107	66-120
Indeno(1,2,3-cd)pyrene	33.33	31.27	94	57-120
Dibenz(a,h)anthracene	33.33	20.36	61	45-120
Benzo(g,h,i)perylene	33.33	33.52	101	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	127 *	48-120
2-Fluorobiphenyl	84	39-120
Terphenyl-d14	97	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-9B	Batch#:	270192
Lab ID:	309445-001	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.52
beta-BHC	ND	5.7	0.33
gamma-BHC	ND	5.7	0.65
delta-BHC	ND	5.7	0.41
Heptachlor	ND	5.7	0.41
Aldrin	ND	5.7	0.32
Heptachlor epoxide	ND	5.7	0.40
Endosulfan I	ND	5.7	0.41
Dieldrin	4.1 J	11	0.46
4,4'-DDE	ND	11	0.51
Endrin	0.43 C J	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	ND	11	0.41
Endrin aldehyde	3.4 C J	11	3.1
4,4'-DDT	5.5 C J	11	0.47
alpha-Chlordane	1.5 J	5.7	0.93
gamma-Chlordane	1.0 C J	5.7	0.57
Methoxychlor	ND	57	7.9
Toxaphene	ND	210	69

Surrogate	%REC	Limits
TCMX	103	43-125
Decachlorobiphenyl	87	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-10B	Batch#:	270192
Lab ID:	309445-002	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.63
gamma-BHC	ND	11	0.79
delta-BHC	ND	11	0.78
Heptachlor	ND	11	0.78
Aldrin	ND	11	0.60
Heptachlor epoxide	ND	11	0.76
Endosulfan I	ND	11	0.78
Dieldrin	4.4 J	22	0.87
4,4'-DDE	1.2 C J	22	0.78
Endrin	ND	22	0.65
Endosulfan II	ND	22	0.78
Endosulfan sulfate	ND	22	0.73
4,4'-DDD	ND	22	0.78
Endrin aldehyde	ND	22	5.8
4,4'-DDT	4.8 C J	22	0.88
alpha-Chlordane	1.5 C J	11	1.4
gamma-Chlordane	1.9 J	11	1.3
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-11B	Batch#:	270192
Lab ID:	309445-003	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.63
gamma-BHC	ND	11	0.79
delta-BHC	ND	11	0.78
Heptachlor	ND	11	0.78
Aldrin	0.62 C J	11	0.60
Heptachlor epoxide	1.7 C J	11	0.76
Endosulfan I	ND	11	1.1
Dieldrin	2.4 J	22	0.78
4,4'-DDE	4.6 J	22	0.78
Endrin	ND	22	0.65
Endosulfan II	ND	22	0.78
Endosulfan sulfate	ND	22	1.7
4,4'-DDD	1.9 C J	22	1.5
Endrin aldehyde	ND	22	5.8
4,4'-DDT	3.5 C J	22	0.88
alpha-Chlordane	5.9 C J	11	1.4
gamma-Chlordane	7.5 J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12B	Batch#:	270192
Lab ID:	309445-004	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	100.0		

Analyte	Result	RL	MDL
alpha-BHC	ND	110	10
beta-BHC	ND	110	6.4
gamma-BHC	ND	110	8.0
delta-BHC	ND	110	8.0
Heptachlor	ND	110	8.0
Aldrin	ND	110	6.1
Heptachlor epoxide	19 C J	110	7.7
Endosulfan I	ND	110	8.0
Dieldrin	62 C J	220	8.8
4,4'-DDE	ND	220	8.0
Endrin	41 C J	220	6.6
Endosulfan II	ND	220	8.0
Endosulfan sulfate	ND	220	7.4
4,4'-DDD	ND	220	8.0
Endrin aldehyde	ND	220	59
4,4'-DDT	310	220	9.0
alpha-Chlordane	24 C J	110	14
gamma-Chlordane	33 J	110	11
Methoxychlor	ND	1,100	150
Toxaphene	ND	4,000	1,300

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-24A	Batch#:	270192
Lab ID:	309445-005	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.98
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	0.79
delta-BHC	ND	11	0.78
Heptachlor	ND	11	0.78
Aldrin	ND	11	0.60
Heptachlor epoxide	ND	11	0.75
Endosulfan I	ND	11	0.78
Dieldrin	ND	22	0.86
4,4'-DDE	1.0 J	22	0.78
Endrin	ND	22	2.0
Endosulfan II	ND	22	0.78
Endosulfan sulfate	ND	22	1.7
4,4'-DDD	1.4 C J	22	0.78
Endrin aldehyde	ND	22	5.7
4,4'-DDT	4.9 C J	22	0.88
alpha-Chlordane	2.5 C J	11	1.4
gamma-Chlordane	2.7 J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-24B	Batch#:	270192
Lab ID:	309445-006	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.52
beta-BHC	ND	5.7	0.58
gamma-BHC	ND	5.7	0.41
delta-BHC	ND	5.7	0.41
Heptachlor	ND	5.7	0.41
Aldrin	ND	5.7	0.31
Heptachlor epoxide	0.61 C J	5.7	0.40
Endosulfan I	ND	5.7	0.55
Dieldrin	0.62 C J	11	0.45
4,4'-DDE	3.1 C J	11	0.41
Endrin	0.40 C J	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	3.3 J	11	0.91
4,4'-DDD	ND	11	0.41
Endrin aldehyde	ND	11	3.5
4,4'-DDT	3.9 C J	11	0.46
alpha-Chlordane	ND	5.7	0.92
gamma-Chlordane	ND	5.7	0.70
Methoxychlor	ND	57	7.8
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	98	43-125
Decachlorobiphenyl	83	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-24C	Batch#:	270192
Lab ID:	309445-007	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.46
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.80
Heptachlor	ND	5.6	0.41
Aldrin	0.53 C J	5.6	0.48
Heptachlor epoxide	ND	5.6	0.43
Endosulfan I	ND	5.6	0.41
Dieldrin	ND	11	0.45
4,4'-DDE	0.89 C J	11	0.41
Endrin	1.5 C J	11	1.1
Endosulfan II	ND	11	0.62
Endosulfan sulfate	4.4 C J	11	0.38
4,4'-DDD	ND	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	3.4 J	11	0.46
alpha-Chlordane	1.2 C J	5.6	0.73
gamma-Chlordane	ND	5.6	0.70
Methoxychlor	ND	56	7.8
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	108	43-125
Decachlorobiphenyl	92	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-24D	Batch#:	270192
Lab ID:	309445-008	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.49
beta-BHC	ND	5.4	0.32
gamma-BHC	ND	5.4	0.40
delta-BHC	ND	5.4	0.39
Heptachlor	ND	5.4	0.39
Aldrin	ND	5.4	0.30
Heptachlor epoxide	0.57 J	5.4	0.42
Endosulfan I	ND	5.4	0.39
Dieldrin	0.93 C J	11	0.43
4,4'-DDE	1.2 J	11	0.39
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	1.3 J	11	0.87
4,4'-DDD	1.8 J	11	0.39
Endrin aldehyde	ND	11	2.9
4,4'-DDT	6.5 J	11	0.44
alpha-Chlordane	2.6 J	5.4	0.88
gamma-Chlordane	1.1 C J	5.4	0.67
Methoxychlor	ND	54	7.5
Toxaphene	ND	200	65

Surrogate	%REC	Limits
TCMX	98	43-125
Decachlorobiphenyl	74	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974558	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.090
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.13
delta-BHC	ND	1.1	0.16
Heptachlor	ND	1.1	0.12
Aldrin	ND	1.1	0.094
Heptachlor epoxide	ND	1.1	0.085
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.088
4,4'-DDE	ND	2.2	0.099
Endrin	ND	2.2	0.21
Endosulfan II	0.13 C J	2.2	0.12
Endosulfan sulfate	ND	2.2	0.18
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.69
4,4'-DDT	ND	2.2	0.34
alpha-Chlordane	ND	1.1	0.14
gamma-Chlordane	ND	1.1	0.14
Methoxychlor	ND	11	2.7
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	110	43-125
Decachlorobiphenyl	125	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974559	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	12.09 #	91	58-131
Heptachlor	13.33	12.57 #	94	51-133
Aldrin	13.33	12.29 #	92	52-128
Dieldrin	13.33	8.805 #	66	59-133
Endrin	13.33	14.42 #	108	48-154
4,4'-DDT	13.33	14.41	108	54-140

Surrogate	%REC	Limits
TCMX	82	43-125
Decachlorobiphenyl	89	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	270192
MSS Lab ID:	309471-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/07/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974560

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.1214	13.50	12.19 #	90	58-126
Heptachlor	<0.1187	13.50	12.83 #	95	58-127
Aldrin	0.2814	13.50	12.39 #	90	55-124
Dieldrin	<0.08582	13.50	10.93 #	81	48-137
Endrin	0.2975	13.50	14.70 #	107	48-158
4,4'-DDT	1.984	13.50	15.82	102	38-155

Surrogate	%REC	Limits
TCMX	83	43-125
Decachlorobiphenyl	85	40-128

Type: MSD Lab ID: QC974561

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.68	13.12 #	96	58-126	6	36
Heptachlor	13.68	12.98 #	95	58-127	0	34
Aldrin	13.68	12.76 #	91	55-124	2	31
Dieldrin	13.68	11.91 #	87	48-137	7	38
Endrin	13.68	14.65 #	105	48-158	2	38
4,4'-DDT	13.68	16.92	109	38-155	6	42

Surrogate	%REC	Limits
TCMX	82	43-125
Decachlorobiphenyl	83	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	air dried	Prepared:	05/06/19
Batch#:	270192		

Field ID: DTSC-9B Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-001

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	9.1
Aroclor-1221	ND	28	16
Aroclor-1232	ND	14	7.8
Aroclor-1242	ND	14	8.1
Aroclor-1248	ND	14	3.4
Aroclor-1254	ND	14	6.9
Aroclor-1260	62	14	6.6

Surrogate	%REC	Limits
Decachlorobiphenyl	84	49-157

Field ID: DTSC-10B Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-002

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.6
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.6
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	35	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	58	49-157

Field ID: DTSC-11B Diln Fac: 3.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-003

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	39	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	11
Aroclor-1248	ND	20	4.8
Aroclor-1254	ND	20	9.9
Aroclor-1260	45	20	9.4

Surrogate	%REC	Limits
Decachlorobiphenyl	132	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	air dried	Prepared:	05/06/19
Batch#:	270192		

Field ID: DTSC-12B Diln Fac: 3.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-004

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	40	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	4.9
Aroclor-1254	ND	20	10
Aroclor-1260	1,600	20	9.6

Surrogate	%REC	Limits
Decachlorobiphenyl	77	49-157

Field ID: DTSC-24A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-005

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.6
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.3
Aroclor-1242	ND	13	7.6
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.5
Aroclor-1260	16	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	58	49-157

Field ID: DTSC-24B Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-006

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	9.0
Aroclor-1221	ND	27	16
Aroclor-1232	ND	14	7.7
Aroclor-1242	ND	14	8.0
Aroclor-1248	ND	14	3.4
Aroclor-1254	ND	14	6.9
Aroclor-1260	36	14	6.6

Surrogate	%REC	Limits
Decachlorobiphenyl	78	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/02/19
Units:	ug/Kg	Received:	05/02/19
Basis:	air dried	Prepared:	05/06/19
Batch#:	270192		

Field ID: DTSC-24C Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-007

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	9.0
Aroclor-1221	ND	27	16
Aroclor-1232	ND	14	7.7
Aroclor-1242	ND	14	7.9
Aroclor-1248	ND	14	3.3
Aroclor-1254	ND	14	6.8
Aroclor-1260	20	14	6.5

Surrogate	%REC	Limits
Decachlorobiphenyl	85	49-157

Field ID: DTSC-24D Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/08/19
 Lab ID: 309445-008

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.6
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.7
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	21	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	93	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC974558 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.4
Aroclor-1221	ND	24	7.7
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.9
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.4
Aroclor-1260	ND	12	3.2

Surrogate	%REC	Limits
Decachlorobiphenyl	97	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974562	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	122.0	73	63-143
Aroclor-1260	166.7	110.4	66	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	100	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	270192
MSS Lab ID:	309471-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/07/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974563

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<4.282	163.1	129.9	80	62-160
Aroclor-1260	8.068	163.1	145.6	84	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	96	49-157

Type: MSD Lab ID: QC974564

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	163.4	140.7	86	62-160	8	43
Aroclor-1260	163.4	160.1	93	53-172	9	44

Surrogate	%REC	Limits
Decachlorobiphenyl	106	49-157

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9B	Batch#:	270270
Lab ID:	309445-001	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	1.0 J	1.9	0.066
Arsenic	4.2	1.5	0.064
Barium	70	0.24	0.029
Beryllium	0.24	0.097	0.0097
Cadmium	0.14 J	0.24	0.016
Chromium	39	0.24	0.048
Cobalt	8.0	0.24	0.014
Copper	19	0.24	0.055
Lead	27	0.97	0.055
Molybdenum	0.79	0.24	0.025
Nickel	38	0.24	0.048
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.48	0.087
Vanadium	31	0.24	0.051
Zinc	53	0.97	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-10B	Batch#:	270270
Lab ID:	309445-002	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.55 J	2.0	0.069
Arsenic	4.2	1.5	0.066
Barium	72	0.25	0.030
Beryllium	0.23	0.10	0.010
Cadmium	0.17 J	0.25	0.016
Chromium	37	0.25	0.049
Cobalt	7.8	0.25	0.014
Copper	25	0.25	0.057
Lead	27	1.0	0.056
Molybdenum	0.73	0.25	0.026
Nickel	38	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	32	0.25	0.052
Zinc	60	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-11B	Batch#:	270270
Lab ID:	309445-003	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.12 J	1.9	0.067
Arsenic	5.6	1.5	0.064
Barium	98	0.24	0.029
Beryllium	0.31	0.097	0.0097
Cadmium	0.25	0.24	0.016
Chromium	43	0.24	0.048
Cobalt	9.4	0.24	0.014
Copper	30	0.24	0.055
Lead	33	0.97	0.055
Molybdenum	0.90	0.24	0.025
Nickel	44	0.24	0.049
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.087
Vanadium	41	0.24	0.051
Zinc	78	0.97	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-12B	Batch#:	270270
Lab ID:	309445-004	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.15 J	1.9	0.065
Arsenic	4.4	1.4	0.063
Barium	94	0.24	0.029
Beryllium	0.25	0.095	0.0096
Cadmium	0.46	0.24	0.016
Chromium	40	0.24	0.047
Cobalt	8.5	0.24	0.014
Copper	40	0.24	0.054
Lead	52	0.95	0.054
Molybdenum	1.1	0.24	0.025
Nickel	44	0.24	0.048
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.48	0.086
Vanadium	36	0.24	0.050
Zinc	77	0.95	0.20

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-24A	Batch#:	270270
Lab ID:	309445-005	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.42 J	2.0	0.068
Arsenic	5.4	1.5	0.066
Barium	81	0.25	0.030
Beryllium	0.26	0.099	0.0099
Cadmium	0.21 J	0.25	0.016
Chromium	39	0.25	0.049
Cobalt	8.8	0.25	0.014
Copper	27	0.25	0.056
Lead	32	0.99	0.056
Molybdenum	0.79	0.25	0.026
Nickel	44	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	35	0.25	0.052
Zinc	68	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-24B	Batch#:	270270
Lab ID:	309445-006	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.42 J	1.9	0.066
Arsenic	4.8	1.4	0.063
Barium	84	0.24	0.029
Beryllium	0.26	0.096	0.0096
Cadmium	0.24	0.24	0.016
Chromium	40	0.24	0.047
Cobalt	9.0	0.24	0.014
Copper	26	0.24	0.055
Lead	31	0.96	0.054
Molybdenum	0.84	0.24	0.025
Nickel	49	0.24	0.048
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.48	0.086
Vanadium	34	0.24	0.050
Zinc	69	0.96	0.20

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-24C	Batch#:	270270
Lab ID:	309445-007	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.44 J	2.0	0.067
Arsenic	4.5	1.5	0.065
Barium	80	0.25	0.029
Beryllium	0.28	0.098	0.0098
Cadmium	0.20 J	0.25	0.016
Chromium	45	0.25	0.048
Cobalt	8.4	0.25	0.014
Copper	24	0.25	0.056
Lead	28	0.98	0.055
Molybdenum	0.87	0.25	0.026
Nickel	44	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	36	0.25	0.051
Zinc	67	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-24D	Batch#:	270270
Lab ID:	309445-008	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.38 J	2.0	0.068
Arsenic	4.6	1.5	0.065
Barium	79	0.25	0.030
Beryllium	0.29	0.099	0.0099
Cadmium	0.19 J	0.25	0.016
Chromium	47	0.25	0.048
Cobalt	8.8	0.25	0.014
Copper	25	0.25	0.056
Lead	36	0.99	0.056
Molybdenum	0.71	0.25	0.026
Nickel	46	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	38	0.25	0.052
Zinc	65	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270193
Matrix:	Soil	Sampled:	05/02/19
Units:	mg/Kg	Received:	05/02/19
Basis:	dry	Prepared:	05/06/19
Diln Fac:	1.000	Analyzed:	05/06/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-9B	SAMPLE	309445-009	0.15	0.017	0.0031	4%
DTSC-10B	SAMPLE	309445-010	0.16	0.017	0.0029	5%
DTSC-11B	SAMPLE	309445-011	0.20	0.019	0.0033	9%
DTSC-12B	SAMPLE	309445-012	0.24	0.019	0.0034	8%
DTSC-24A	SAMPLE	309445-013	0.19	0.019	0.0033	12%
DTSC-24B	SAMPLE	309445-014	0.20	0.020	0.0035	13%
DTSC-24C	SAMPLE	309445-015	0.21	0.018	0.0032	10%
DTSC-24D	SAMPLE	309445-016	0.19	0.018	0.0032	9%
	BLANK	QC974565	ND	0.016	0.0029	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270193
MSS Lab ID:	309471-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/06/19
Basis:	as received	Analyzed:	05/06/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC974566		0.1563	0.1638	105	80-120		
BSD	QC974567		0.1667	0.1639	98	80-120	6	20
MS	QC974568	0.007169	0.1613	0.1820	108	80-120		
MSD	QC974569		0.1563	0.1770	109	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974846	Batch#:	270270
Matrix:	Soil	Prepared:	05/08/19
Units:	mg/Kg	Analyzed:	05/08/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	ND	1.5	0.065
Barium	0.11 J	0.25	0.030
Beryllium	ND	0.099	0.0099
Cadmium	ND	0.25	0.016
Chromium	0.052 J	0.25	0.048
Cobalt	ND	0.25	0.014
Copper	ND	0.25	0.056
Lead	ND	0.99	0.056
Molybdenum	0.036 J	0.25	0.026
Nickel	ND	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	ND	0.25	0.052
Zinc	ND	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270270
Units:	mg/Kg	Prepared:	05/08/19
Diln Fac:	1.000	Analyzed:	05/08/19

Type: BS Lab ID: QC974847

Analyte	Spiked	Result	%REC	Limits
Antimony	49.70	47.70	96	80-120
Arsenic	49.70	49.87	100	80-120
Barium	49.70	50.12	101	80-120
Beryllium	24.85	24.33	98	80-120
Cadmium	49.70	48.21	97	80-120
Chromium	49.70	50.74	102	80-120
Cobalt	49.70	49.39	99	80-120
Copper	49.70	49.31	99	80-120
Lead	49.70	50.10	101	80-120
Molybdenum	49.70	50.13	101	80-120
Nickel	49.70	49.70	100	80-120
Selenium	49.70	47.87	96	80-120
Silver	4.970	4.806	97	80-120
Thallium	49.70	49.72	100	80-120
Vanadium	49.70	50.57	102	80-120
Zinc	49.70	50.92	102	80-120

Type: BSD Lab ID: QC974848

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.36	47.89	97	80-120	1	20
Arsenic	49.36	49.75	101	80-120	0	20
Barium	49.36	50.01	101	80-120	0	20
Beryllium	24.68	24.24	98	80-120	0	20
Cadmium	49.36	48.11	97	80-120	0	20
Chromium	49.36	50.58	102	80-120	0	20
Cobalt	49.36	49.28	100	80-120	0	20
Copper	49.36	48.75	99	80-120	0	20
Lead	49.36	50.05	101	80-120	1	20
Molybdenum	49.36	50.00	101	80-120	0	20
Nickel	49.36	49.49	100	80-120	0	20
Selenium	49.36	47.45	96	80-120	0	20
Silver	4.936	4.771	97	80-120	0	20
Thallium	49.36	49.74	101	80-120	1	20
Vanadium	49.36	50.45	102	80-120	0	20
Zinc	49.36	50.78	103	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9B	Batch#:	270270
MSS Lab ID:	309445-001	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974849

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	1.044	49.80	23.92	46 *	75-120
Arsenic	4.189	49.80	55.50	103	80-121
Barium	69.74	49.80	113.1	87	75-125
Beryllium	0.2417	24.90	24.39	97	80-120
Cadmium	0.1406	49.80	50.56	101	80-120
Chromium	39.49	49.80	90.44	102	75-125
Cobalt	7.954	49.80	54.79	94	75-120
Copper	18.70	49.80	70.18	103	80-125
Lead	27.28	49.80	100.8	148 *	75-125
Molybdenum	0.7938	49.80	49.25	97	75-120
Nickel	38.49	49.80	85.91	95	75-125
Selenium	<0.1825	49.80	49.29	99	80-120
Silver	<0.02907	4.980	4.950	99	75-120
Thallium	<0.08713	49.80	45.64	92	75-120
Vanadium	31.27	49.80	82.60	103	78-125
Zinc	52.94	49.80	102.7	100	75-125

Type: MSD Lab ID: QC974850

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.07	20.32	39 *	75-120	15	20
Arsenic	49.07	54.37	102	80-121	1	20
Barium	49.07	125.6	114	75-125	11	20
Beryllium	24.53	23.63	95	80-120	2	20
Cadmium	49.07	49.24	100	80-120	1	20
Chromium	49.07	90.96	105	75-125	1	20
Cobalt	49.07	53.29	92	75-120	1	20
Copper	49.07	71.02	107	80-125	2	20
Lead	49.07	71.51	90	75-125	33 *	20
Molybdenum	49.07	47.41	95	75-120	2	20
Nickel	49.07	85.32	95	75-125	0	20
Selenium	49.07	47.88	98	80-120	1	20
Silver	4.907	4.826	98	75-120	1	20
Thallium	49.07	43.85	89	75-120	3	20
Vanadium	49.07	84.19	108	78-125	3	20
Zinc	49.07	105.8	108	75-125	4	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270229
Matrix:	Soil	Sampled:	05/02/19
Units:	%	Received:	05/02/19
Diln Fac:	1.000	Analyzed:	05/07/19

Field ID	Lab ID	Result	RL
DTSC-9B	309445-009	4	1
DTSC-10B	309445-010	5	1
DTSC-11B	309445-011	9	1
DTSC-12B	309445-012	8	1
DTSC-24A	309445-013	12	1
DTSC-24B	309445-014	13	1
DTSC-24C	309445-015	10	1
DTSC-24D	309445-016	9	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309445	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	DTSC-9B	Diln Fac:	1.000
Type:	SDUP	Batch#:	270229
MSS Lab ID:	309445-009	Sampled:	05/02/19
Lab ID:	QC974695	Received:	05/02/19
Matrix:	Soil	Analyzed:	05/07/19

MSS Result	Result	RL	RPD	Lim
4.040	3.871	1.000	4	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309481 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-21D	309481-001
DTSC-9D	309481-002
DTSC-10D	309481-003
DTSC-11D	309481-004
DTSC-12D	309481-005
DTSC-21B	309481-006
DTSC-22B	309481-007
DTSC-23B	309481-008
DTSC-21D	309481-009
DTSC-9D	309481-010
DTSC-10D	309481-011
DTSC-11D	309481-012
DTSC-12D	309481-013
DTSC-21B	309481-014
DTSC-22B	309481-015
DTSC-23B	309481-016

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: 
Tracy Babjar
Project Manager
tracy.babjar@enthalpy.com
(510) 204-2226 Ext 13107

Date: 05/15/2019

CASE NARRATIVE

Laboratory number: 309481
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/03/19
Samples Received: 05/03/19

This data package contains sample and QC results for eight soil samples, requested for the above referenced project on 05/03/19. The samples were received cold and intact.

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

Matrix spikes QC974647, QC974648 (batch 270215) were not reported because the autosampler had an error that stopped the sequence. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270215; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

High recoveries were observed for diesel C10-C24 in the MS/MSD for batch 270199; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 270199; this analyte was detected in samples at a level at least 10 times that of the blank. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 270337 due to insufficient sample amount. Naphthalene and 1,2,3-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 270273; these analytes were not detected in samples at or above the RL. Toluene and styrene were detected between the MDL and the RL in the method blank for batch 270337; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC974544, QC974545 (batch 270190) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recovery was observed for nitrobenzene-d5 in the LCS for batch 270190. Benzo(g,h,i)perylene was detected between the MDL and the RL in the method blank for batch 270190; this analyte was detected in samples at a level at least 10 times that of the blank. DTSC-21D (lab # 309481-009), DTSC-9D (lab # 309481-010), and DTSC-10D (lab # 309481-011) were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 309481
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/03/19
Samples Received: 05/03/19

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Matrix spikes QC974907, QC974908 (batch 270286) were not reported because the parent sample required a dilution that would have diluted out the spikes. Endosulfan II was detected between the MDL and the RL in the method blank for batch 270192; this analyte was not detected in samples at or above the RL. Many samples were diluted due to the color of the sample extracts. DTSC-12D (lab # 309481-005) was diluted due to the dark and viscous nature of the sample extract. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-9B (lab # 309445-001); the BS/BSD were within limits, and the associated RPD was within limits. High recovery was observed for lead in the MS of DTSC-9B (lab # 309445-001); the BS/BSD were within limits. High RPD was also observed for lead in the MS/MSD of DTSC-9B (lab # 309445-001); the RPD was acceptable in the BS/BSD. Barium, chromium, and molybdenum were detected between the MDL and the RL in the method blank for batch 270270; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

High RPD was observed for moisture, percent in the SDUP for batch 270243; the parent sample was not a project sample. No other analytical problems were encountered.

Detections Summary for 309481

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-21D

Laboratory Sample ID :

309481-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	5.2	#,J	22	0.89	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.6	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.7	C,J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	23		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.12	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.7		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	67		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	24		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.55		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	46		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	29		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	51		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-9D

Laboratory Sample ID :

309481-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.46	C,J	11	0.43	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.98	J	11	0.49	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.57	C,J	11	0.33	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	4.9	#,C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	3.3	#,C,J	5.4	0.88	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.1	C,J	5.4	0.54	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	28		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.14	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	75		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.24		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.2		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	28		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.58		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	58		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-10D

Laboratory Sample ID :

309481-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.51	J	5.6	0.47	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	2.2	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.0	J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.3	C,J	11	0.76	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.7	#,C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.7	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.2	C,J	5.6	0.69	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	17		13	6.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.12	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.7		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	84		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.3		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	26		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	51		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.70		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	68		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-11D

Laboratory Sample ID :

309481-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor	2.2	C,J	11	1.2	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aldrin	0.97	C,J	11	0.96	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Dieldrin	27	C	23	0.90	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	7.1	C,J	23	1.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endosulfan II	1.0	C,J	23	0.82	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	5.4	C,J	23	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endrin aldehyde	13	#,C,J	23	6.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	130	#	23	0.92	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	13	C	11	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	12	C	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	640		20	9.8	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.27	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.1		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	96		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.27		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	31		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.73		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	41		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	72		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-12D

Laboratory Sample ID :

309481-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	40	C,J	110	7.7	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Dieldrin	170	C,J	220	8.8	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Endrin aldehyde	74	C,J	220	59	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
4,4'-DDT	910		220	9.0	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
gamma-Chlordane	15	C,J	110	14	ug/Kg	Air Dried	100.0	EPA 8081A	EPA 3546
Aroclor-1254	2,200		330	170	ug/Kg	Air Dried	50.00	EPA 8082	EPA 3546
Aroclor-1260	4,600		330	160	ug/Kg	Air Dried	50.00	EPA 8082	EPA 3546
Antimony	0.30	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.1		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	100		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.36		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	51		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.81		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	43		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	70		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-21B

Laboratory Sample ID :

309481-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.59	J	5.5	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	0.48	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.1	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.9	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.2	J	5.5	0.88	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.9	J	5.5	0.68	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Antimony	0.30	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	79		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	140		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	86		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.65		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	52		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	61		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-22B

Laboratory Sample ID :

309481-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	2.0	J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.0	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.9	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.7	J	5.5	0.69	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	16		13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.24	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	91		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.14	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.3		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	23		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	20		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.65		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-23B

Laboratory Sample ID :

309481-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	3.0	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.58	C,J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.4	C,J	11	0.33	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	0.71	C,J	11	0.37	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.8	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.6	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	3.3	J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1254	55		13	6.7	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Aroclor-1260	140		13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.28	J	1.9	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.3		1.5	0.064	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	56		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.19		0.097	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	32		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.7		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	21		0.24	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		0.97	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.59		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	30		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	29		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	74		0.97	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-21D

Laboratory Sample ID :

309481-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.93	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	54	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	300		28	8.5	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	14	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	44	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	16	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	240		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	52	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	400		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	560		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	230		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	300		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	90		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	290		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	190		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	43	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	280		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	410				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.17		0.020	0.0035	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-9D

Laboratory Sample ID :

309481-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.65	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	40	Y	5.5	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		27	8.3	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	20	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	100		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	26	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	230		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	330		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	120		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	150		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	190		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	83		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	190		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	140		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	30	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	200		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	270				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-10D

Laboratory Sample ID :

309481-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.79	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	61	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	270		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	13	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	40	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	110		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	33	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	310		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	480		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	170		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	210		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	290		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	93		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	300		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	210		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	39	J	56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	290		56	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	410				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.19		0.018	0.0031	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-11D

Laboratory Sample ID :

309481-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.71	J	5.4	0.38	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	100	Y	12	3.7	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	450		60	18	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Acenaphthene	140	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluorene	63	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	340		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	78	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	580		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	740		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	300	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	350		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	350		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	130	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	350		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	200	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	590				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.040		0.020	0.0036	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	17		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-12D

Laboratory Sample ID :

309481-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.4	J	5.3	0.38	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	81	Y	13	3.9	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	370		63	19	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Phenanthrene	220		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	52	J	210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	580		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	720		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	370		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	380		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	430		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150	J	210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	370		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	170	J	210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	52	J	210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	260		210	42	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	520				ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Mercury	0.52		0.022	0.0038	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	21		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-21B

Laboratory Sample ID :

309481-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.82	J	5.2	0.37	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	51	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Phenanthrene	160	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	380		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	520		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	240	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	330		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	330		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	210	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	550				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.50		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-22B

Laboratory Sample ID :

309481-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	2.2	J	5.4	0.38	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	55	Y	13	4.0	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		66	20	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Phenanthrene	89	J	130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	200		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	370		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	120	J	130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	130		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	170		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	69	J	130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	170		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	86	J	130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	150		130	26	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	280				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.25		0.022	0.0038	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	24		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-23B

Laboratory Sample ID :

309481-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.86	J	4.8	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	26	Y	3.5	1.1	mg/Kg	Dry	3.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	97		18	5.4	mg/Kg	Dry	3.000	EPA 8015B	EPA 3550C
Phenanthrene	99	J	200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	260		200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	510		200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	130	J	200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	150	J	200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	220		200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	87	J	200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	250		200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	140	J	200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	230		200	39	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	390				ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Mercury	0.15		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	15		1		%	As Recd	1.000	EPA CLP	METHOD

= CCV drift outside limits; average CCV drift within limits per method requirements

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

30948

Analyses Required

TPH-g; -d; -mo by Method	8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 8270	Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
X	X	X	X	X	X	X	X	X	X	2

RPS
 1438 Webster Street, Suite 302
 Oakland, California 94612
 (510) 834-4747 tel
 (510) 834-4199 fax

Sampler Name(s): Neal Hughes
 Signature(s): *Neal Hughes*

CHAIN-OF-CUSTODY

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
1	DTSC-27d	5/3/19	920	soil	Moist
2	DTSC-9d		1135		
3	DTSC-20d		1148		
4	DTSC-27d		1140		
5	DTSC-22d		1148		
6	DTSC-276		1335		
7	DTSC-226		1350		
8	DTSC-236		1342		

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
 Project Number: 16-1498E
 Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower
 E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com
 Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report Routine (Level 2) Level 3 Level 4 EDD
 TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:

Printed Name: Neal Hughes
 Signature: *Neal Hughes*
 Company: RPS

RECEIVED BY:

Printed Name: *Spencer*
 Signature: *Spencer*
 Company: JFA
 Time/Date: 5/13/19
 Time/Date: 5/13/19

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 209481
Date Received: 5/3/19

Client: PPS
Project: _____



Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B

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

If in cooler: Date Opened 5/3/19 By (print) AL (sign) _____

Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package

Date: _____ How many _____ Signature, Initials, None

Were custody seals intact upon arrival? Yes No N/A

Section 3:

Important: Notify PM if temperature exceeds 6°C or arrive frozen.

Packing in cooler: (if other, describe) _____

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

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

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Temperature measured using Thermometer ID: _____, or IR Gun # A B

Cooler Temp (°C): #1: 13.9, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	<input checked="" type="checkbox"/>		
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>		
If YES, what time were they transferred to freezer? <u>1745</u>			
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>		
Are there any missing / extra samples?		<input checked="" type="checkbox"/>	
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>		
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>		
Does the container count match the COC?	<input checked="" type="checkbox"/>		
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for unpreserved VOAs?			<input checked="" type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?			<input checked="" type="checkbox"/>
Are bubbles > 6mm absent in VOA samples?			<input checked="" type="checkbox"/>
Was the client contacted concerning this sample delivery?		<input checked="" type="checkbox"/>	
If YES, who was called? _____ By _____ Date: _____			

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			<input checked="" type="checkbox"/>
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check?			
pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:

Explanations/Comments: _____

Date Logged in 5/3/19 By (print) AL (sign) _____
Date Labeled 5/3/19 By (print) RV (sign) _____

Gasoline by GC/FID (5035 Prep)			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry		

Field ID: DTSC-21D Diln Fac: 25.00
 Type: SAMPLE Batch#: 270252
 Lab ID: 309481-009 Analyzed: 05/07/19
 Moisture: 11%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.93 J	4.9	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	58-145

Field ID: DTSC-9D Diln Fac: 25.00
 Type: SAMPLE Batch#: 270215
 Lab ID: 309481-010 Analyzed: 05/07/19
 Moisture: 8%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.65 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	58-145

Field ID: DTSC-10D Diln Fac: 25.00
 Type: SAMPLE Batch#: 270215
 Lab ID: 309481-011 Analyzed: 05/07/19
 Moisture: 11%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.79 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	58-145

Field ID: DTSC-11D Diln Fac: 25.00
 Type: SAMPLE Batch#: 270215
 Lab ID: 309481-012 Analyzed: 05/07/19
 Moisture: 17%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.71 J	5.4	0.38

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	58-145

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry		

Field ID: DTSC-12D Diln Fac: 25.00
 Type: SAMPLE Batch#: 270215
 Lab ID: 309481-013 Analyzed: 05/07/19
 Moisture: 21%

Analyte	Result	RL	MDL
Gasoline C7-C12	1.4 J	5.3	0.38

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	58-145

Field ID: DTSC-21B Diln Fac: 25.00
 Type: SAMPLE Batch#: 270252
 Lab ID: 309481-014 Analyzed: 05/07/19
 Moisture: 10%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.82 J	5.2	0.37

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	58-145

Field ID: DTSC-22B Diln Fac: 25.00
 Type: SAMPLE Batch#: 270252
 Lab ID: 309481-015 Analyzed: 05/07/19
 Moisture: 24%

Analyte	Result	RL	MDL
Gasoline C7-C12	2.2 J	5.4	0.38

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	58-145

Field ID: DTSC-23B Diln Fac: 25.00
 Type: SAMPLE Batch#: 270252
 Lab ID: 309481-016 Analyzed: 05/07/19
 Moisture: 15%

Analyte	Result	RL	MDL
Gasoline C7-C12	0.86 J	4.8	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	58-145

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270215
Units:	mg/Kg	Analyzed:	05/06/19
Diln Fac:	1.000		

Type: BS Lab ID: QC974645

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9774	98	80-122

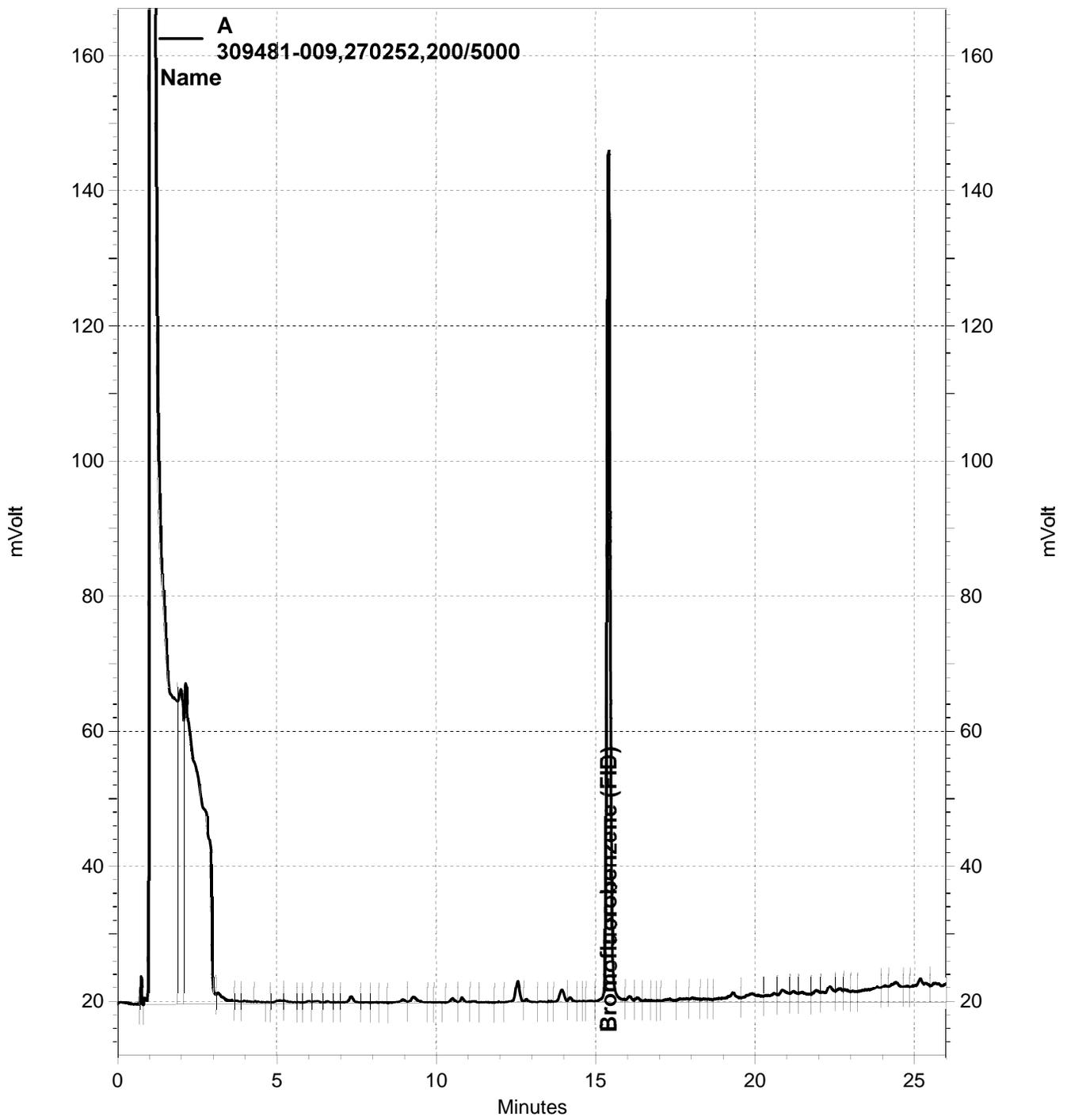
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	84	58-145

Type: BSD Lab ID: QC974646

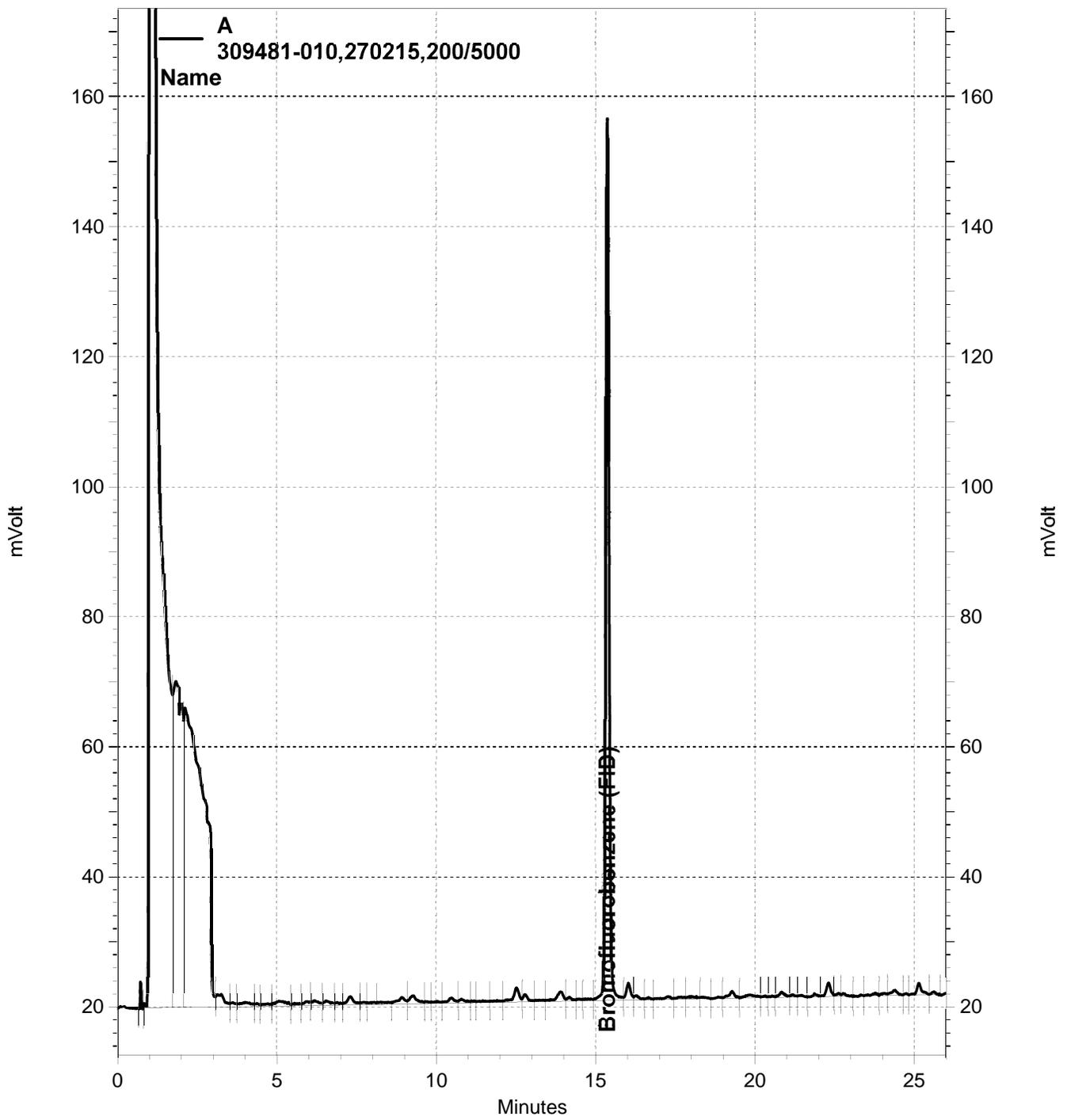
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	0.9927	99	80-122	2	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	58-145

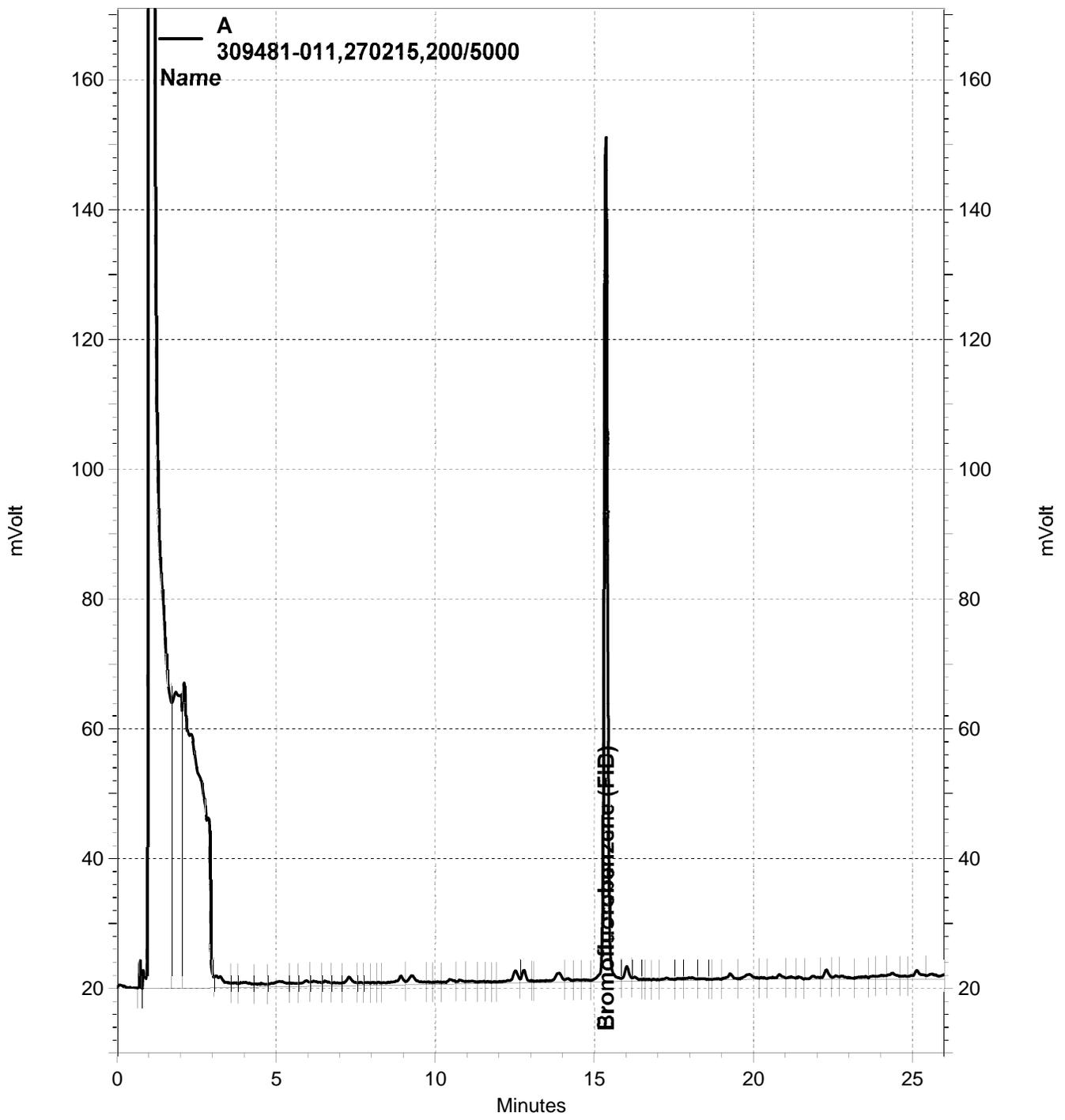
RPD= Relative Percent Difference



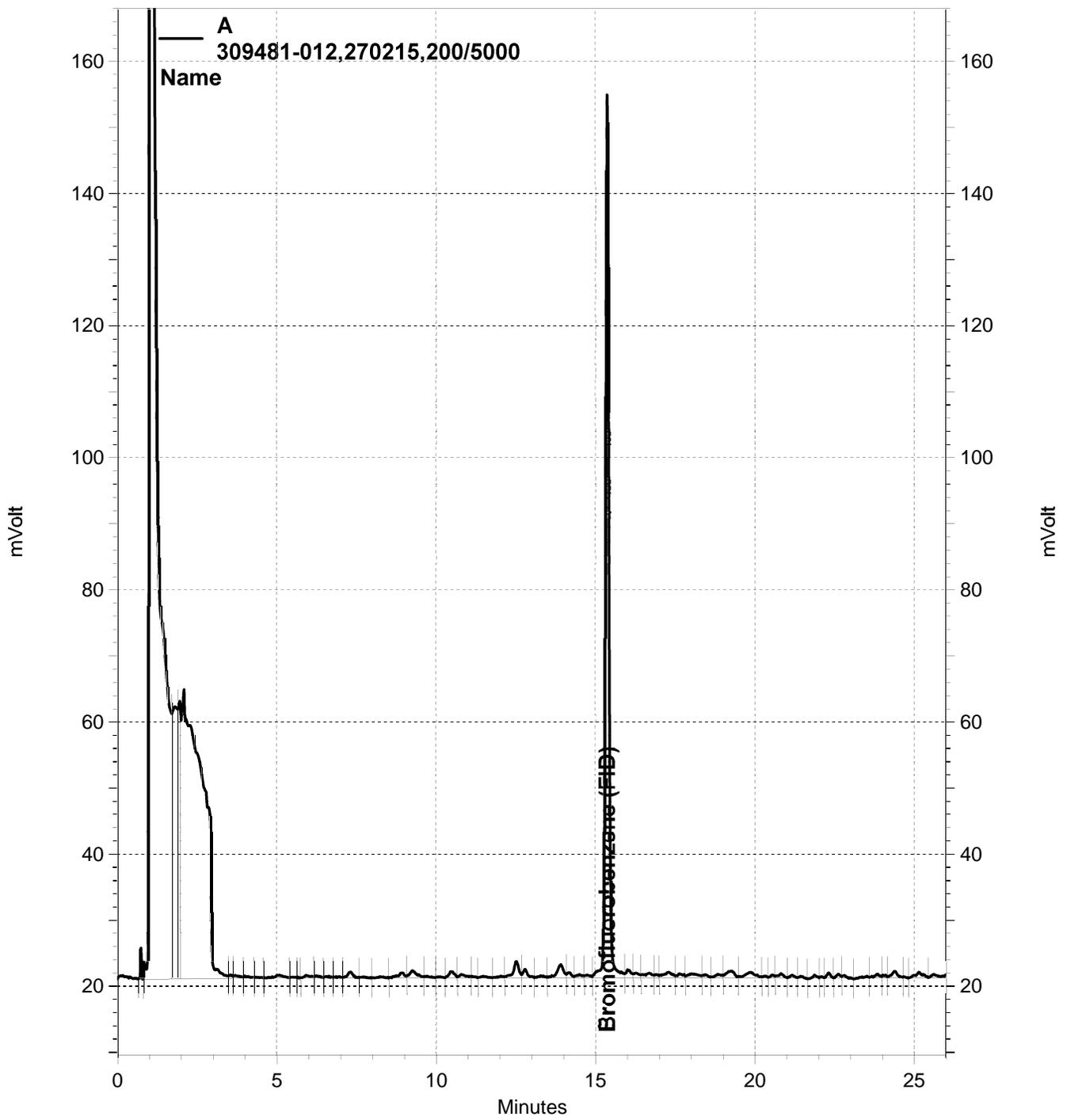
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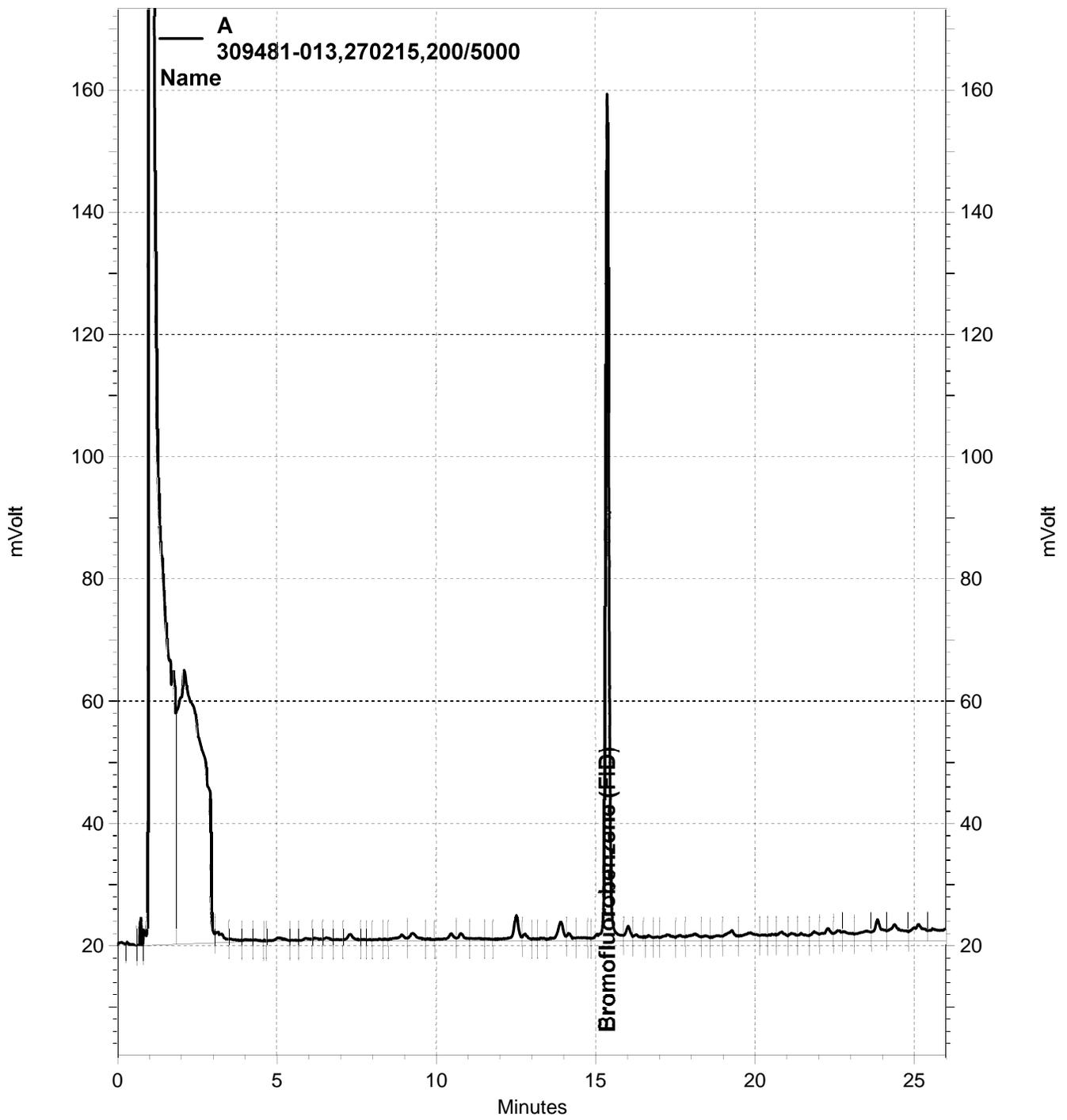
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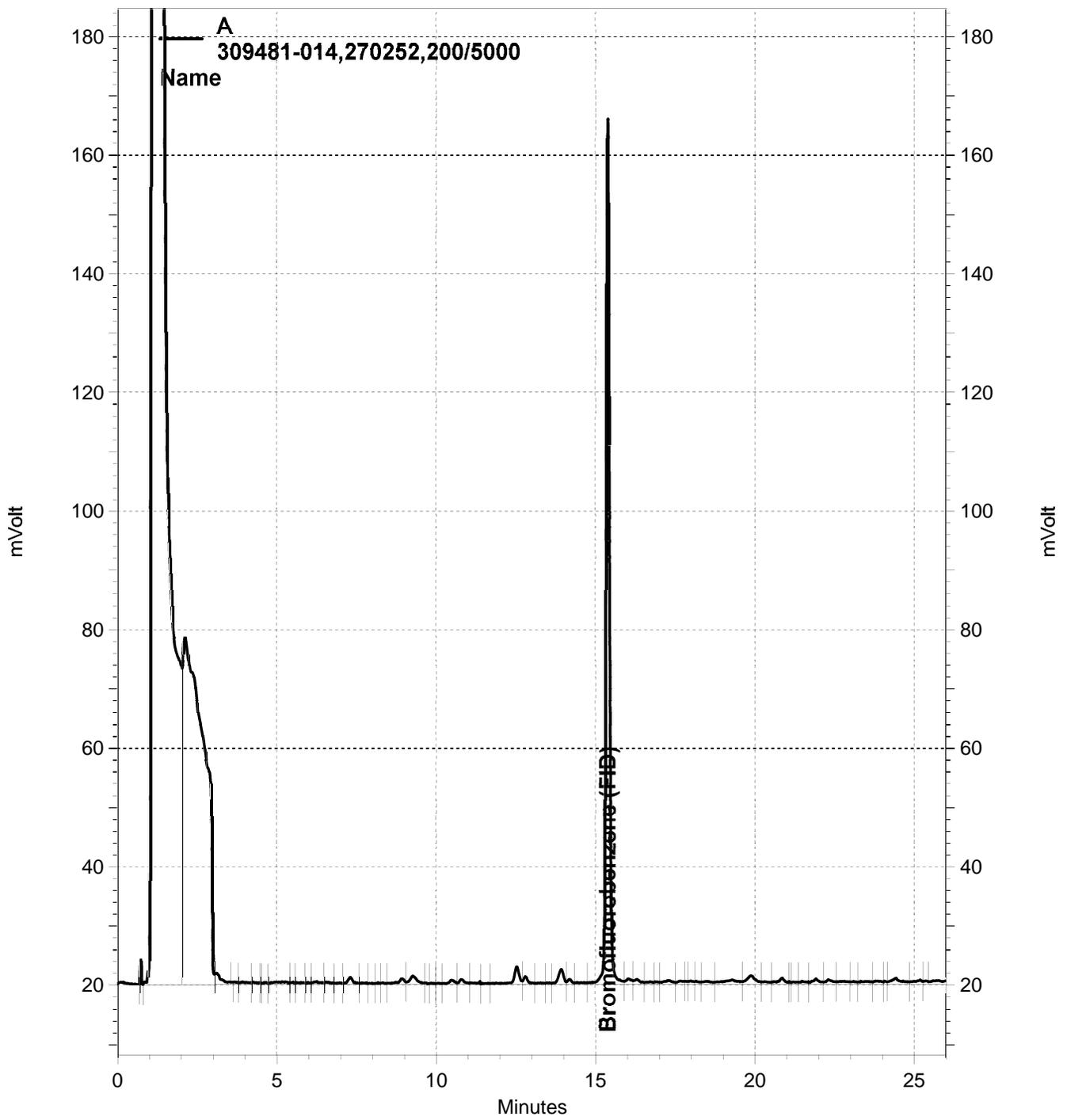
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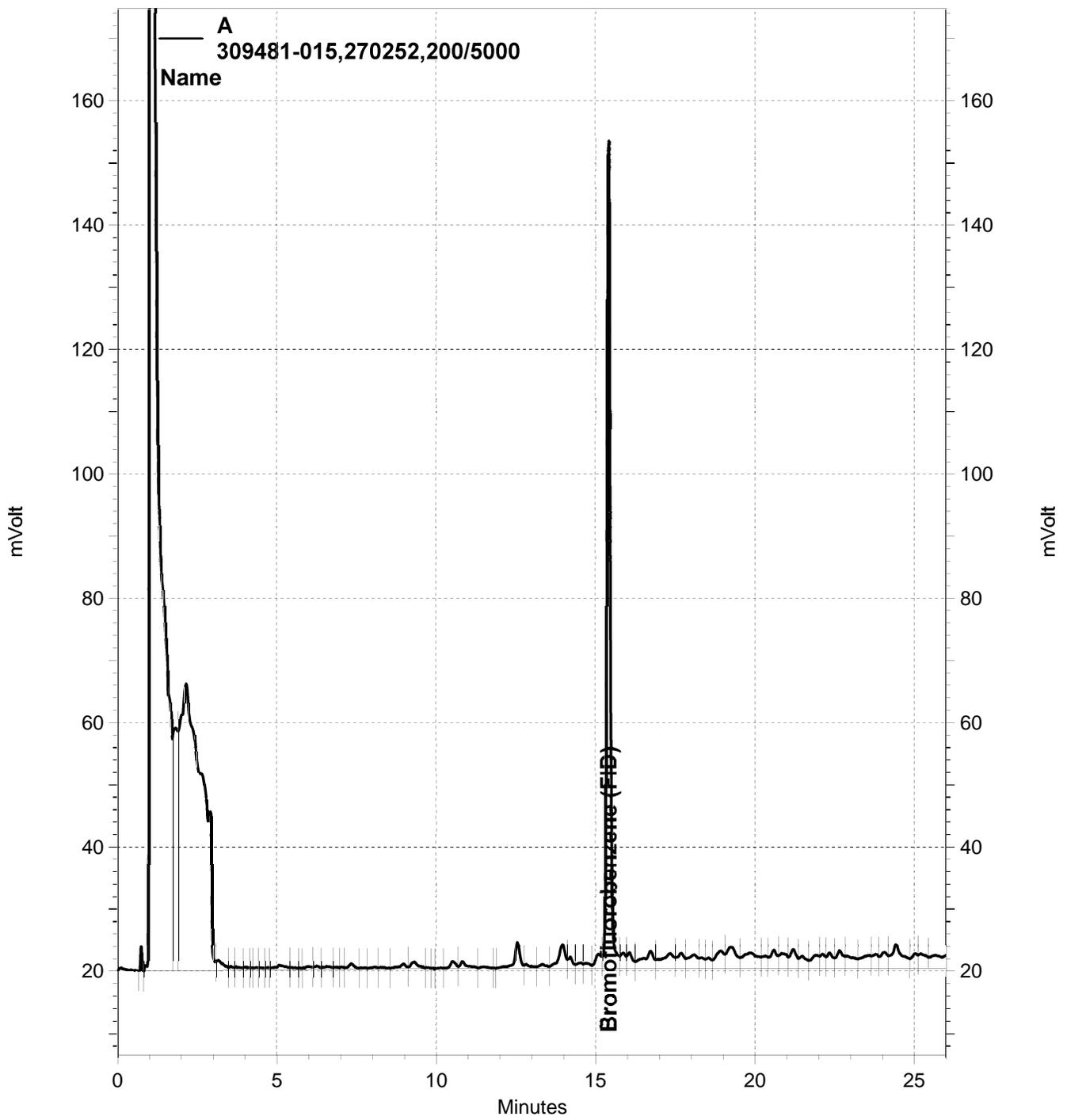
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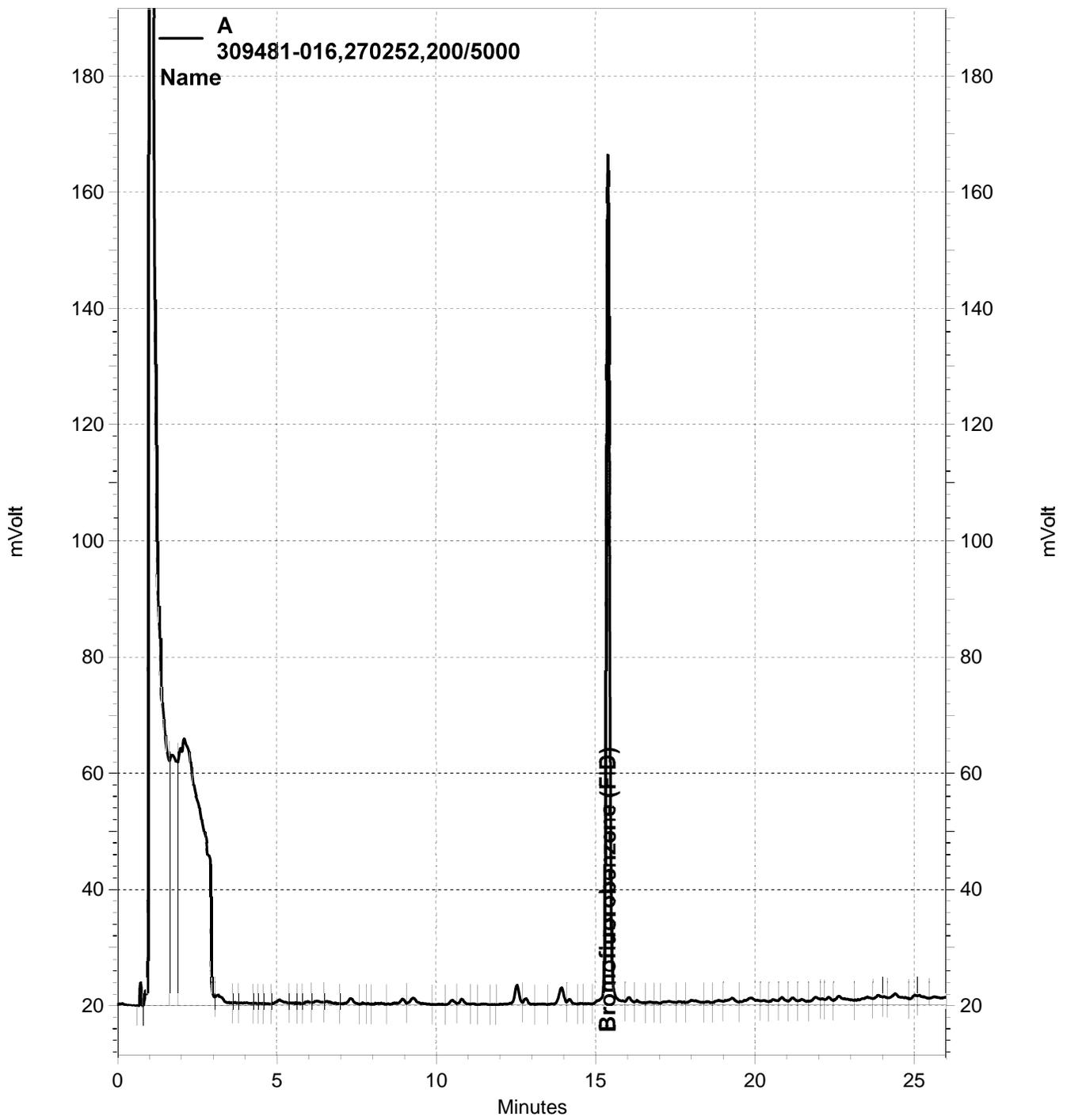
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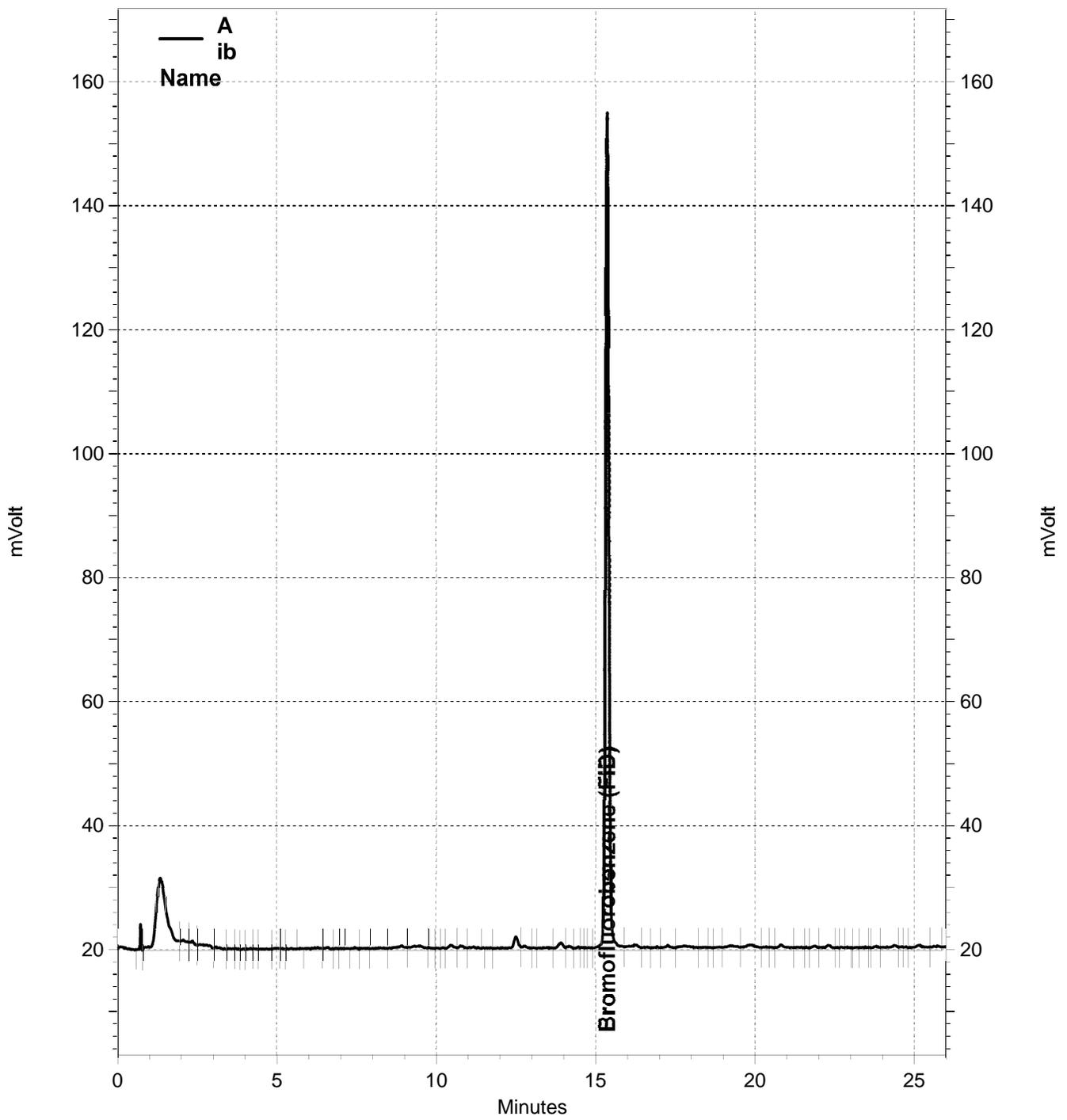
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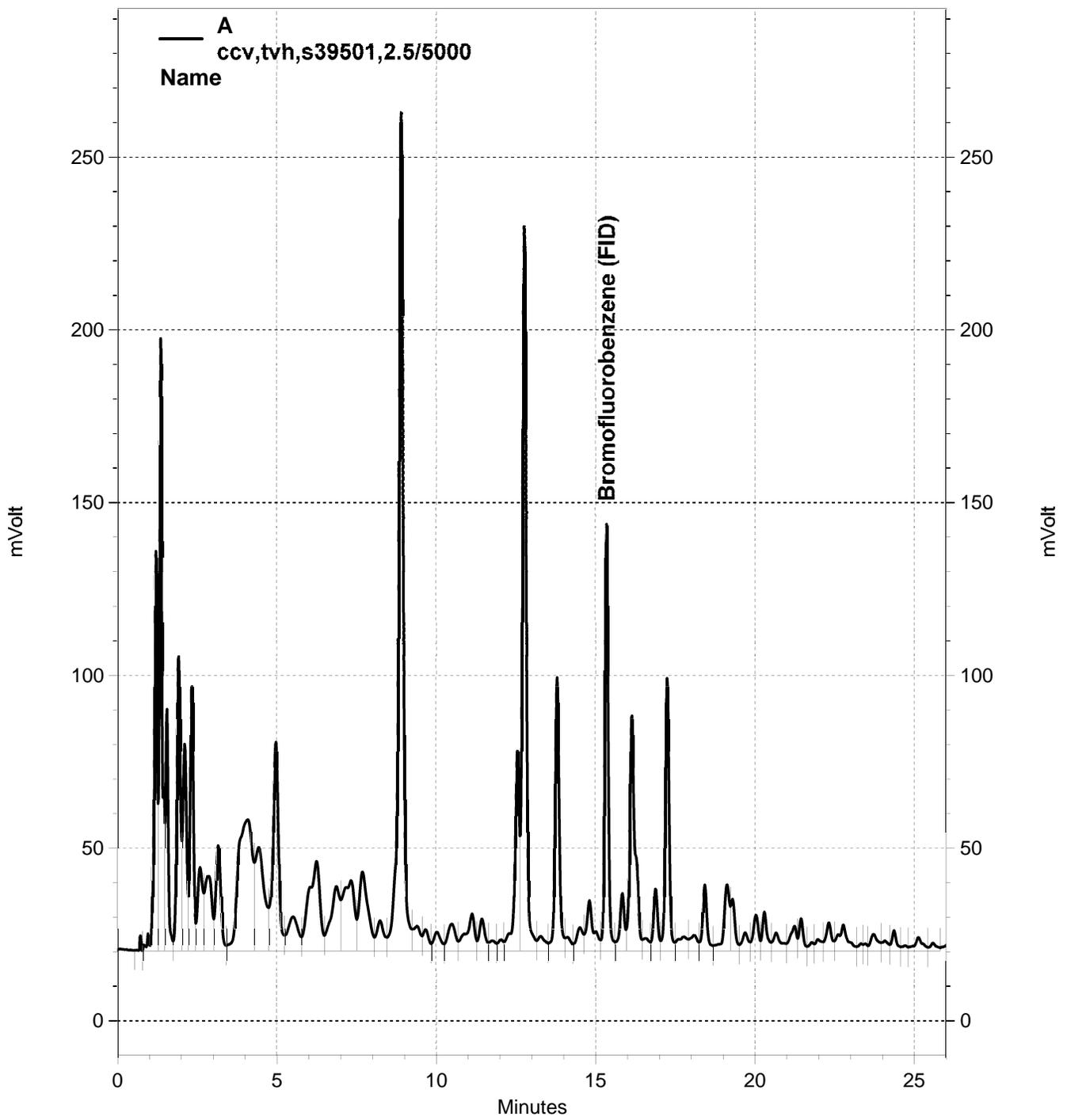
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Total Extractable Hydrocarbons			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry	Prepared:	05/06/19
Batch#:	270199		

Field ID: DTSC-21D Moisture: 11%
 Type: SAMPLE Diln Fac: 5.000
 Lab ID: 309481-009 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	54 Y	5.6	1.7
Motor Oil C24-C36	300	28	8.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-9D Moisture: 8%
 Type: SAMPLE Diln Fac: 5.000
 Lab ID: 309481-010 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	40 Y	5.5	1.7
Motor Oil C24-C36	190	27	8.3

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-10D Moisture: 11%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 309481-011 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	61 Y	11	3.4
Motor Oil C24-C36	270	56	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-11D Moisture: 17%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 309481-012 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	100 Y	12	3.7
Motor Oil C24-C36	450	60	18

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry	Prepared:	05/06/19
Batch#:	270199		

Field ID: DTSC-12D Moisture: 21%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 309481-013 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	81 Y	13	3.9
Motor Oil C24-C36	370	63	19

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-21B Moisture: 10%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 309481-014 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	51 Y	11	3.4
Motor Oil C24-C36	230	56	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-22B Moisture: 24%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 309481-015 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	55 Y	13	4.0
Motor Oil C24-C36	160	66	20

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-23B Moisture: 15%
 Type: SAMPLE Diln Fac: 3.000
 Lab ID: 309481-016 Analyzed: 05/07/19

Analyte	Result	RL	MDL
Diesel C10-C24	26 Y	3.5	1.1
Motor Oil C24-C36	97	18	5.4

Surrogate	%REC	Limits
o-Terphenyl	103	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry	Prepared:	05/06/19
Batch#:	270199		

Type: BLANK Diln Fac: 1.000
 Lab ID: QC974589 Analyzed: 05/06/19

Analyte	Result	RL	MDL
Diesel C10-C24	0.36 J	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	92	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974590	Batch#:	270199
Matrix:	Soil	Prepared:	05/06/19
Units:	mg/Kg	Analyzed:	05/06/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	50.60	101	55-133

Surrogate	%REC	Limits
o-Terphenyl	92	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270199
MSS Lab ID:	309494-001	Sampled:	05/06/19
Matrix:	Soil	Received:	05/06/19
Units:	mg/Kg	Prepared:	05/06/19
Basis:	as received	Analyzed:	05/06/19
Diln Fac:	2.000		

Type: MS Lab ID: QC974591

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	55.27	50.03	164.1	217 *	56-125

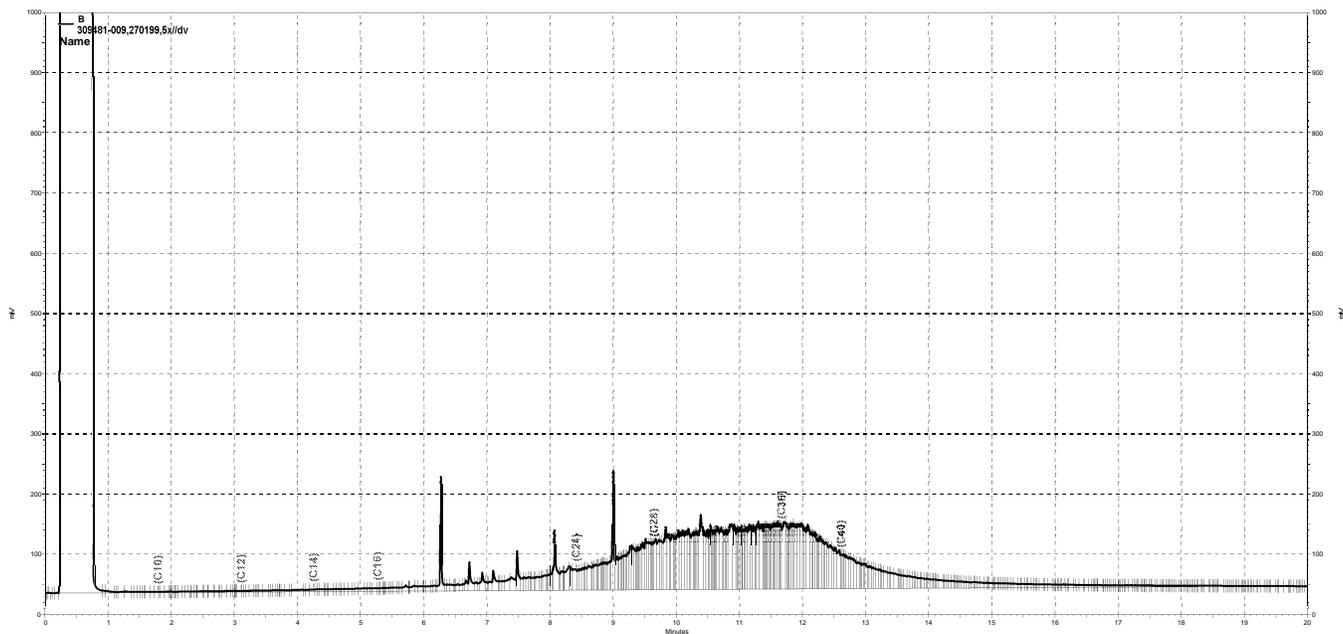
Surrogate	%REC	Limits
o-Terphenyl	104	61-130

Type: MSD Lab ID: QC974592

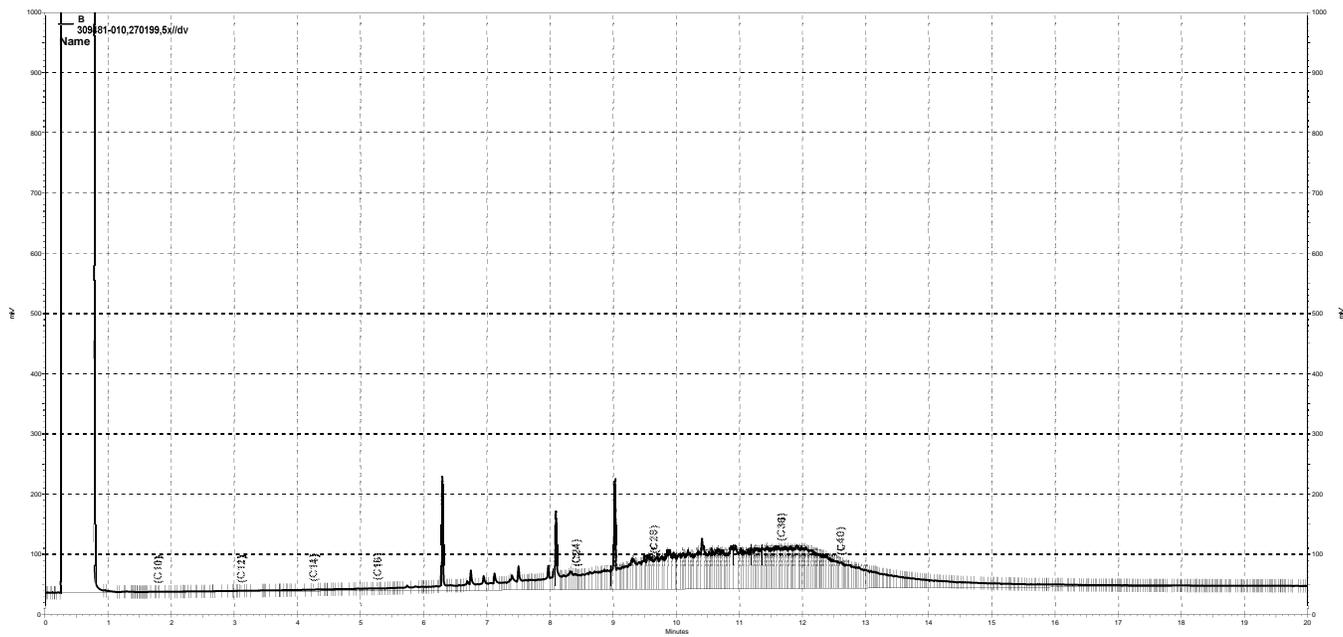
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.11	123.8	137 *	56-125	28	33

Surrogate	%REC	Limits
o-Terphenyl	99	61-130

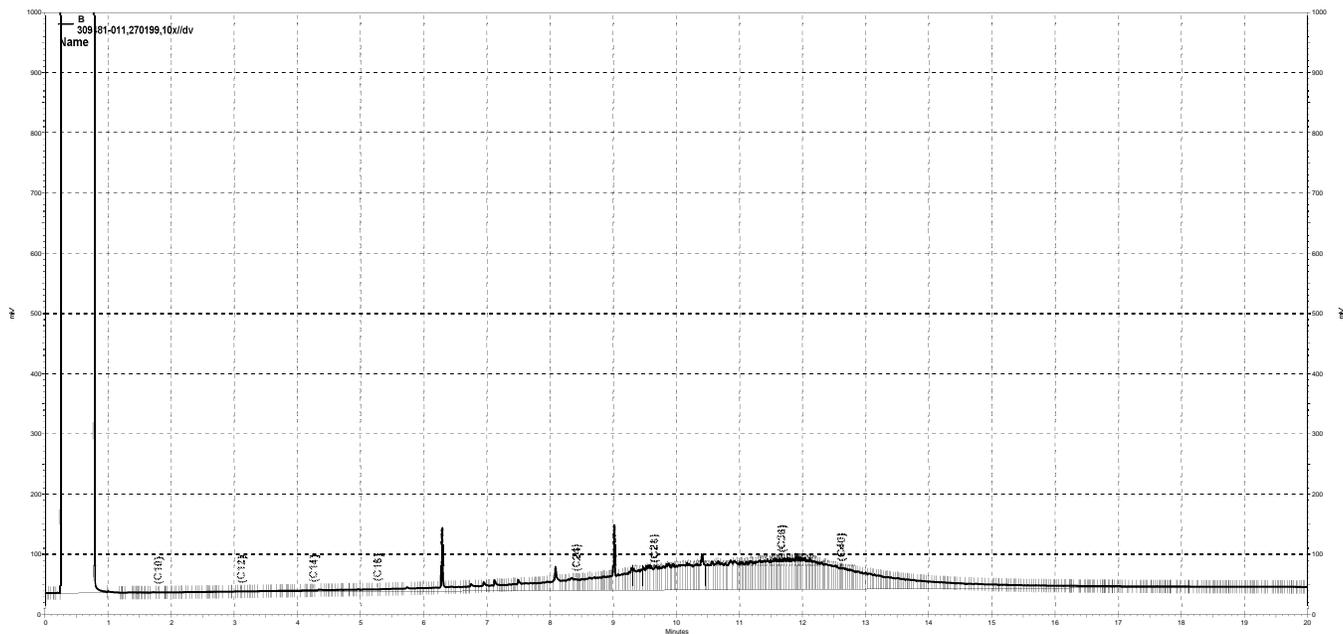
*= Value outside of QC limits; see narrative
 RPD= Relative Percent Difference



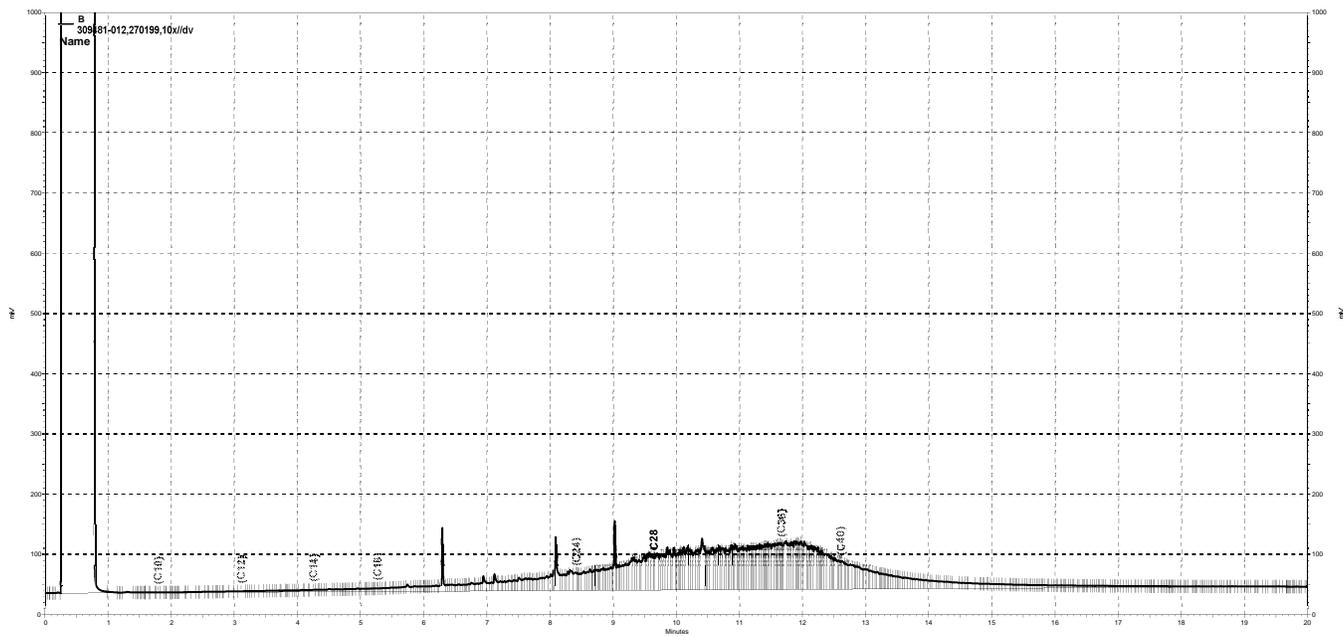
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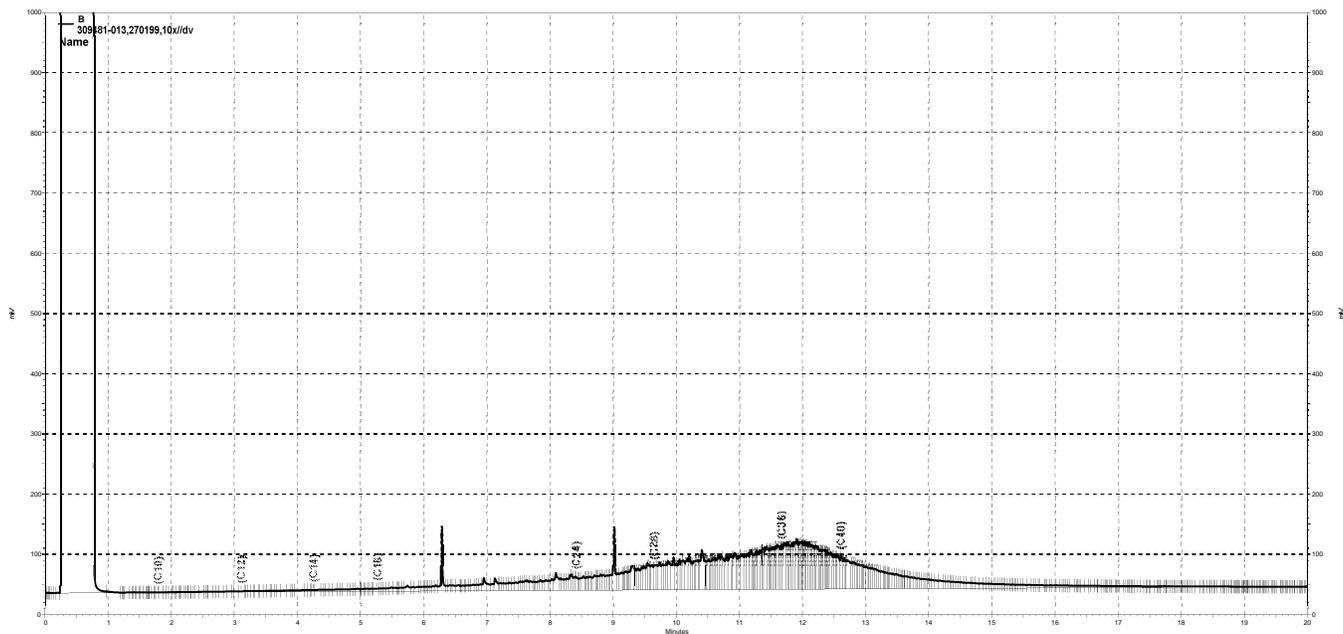
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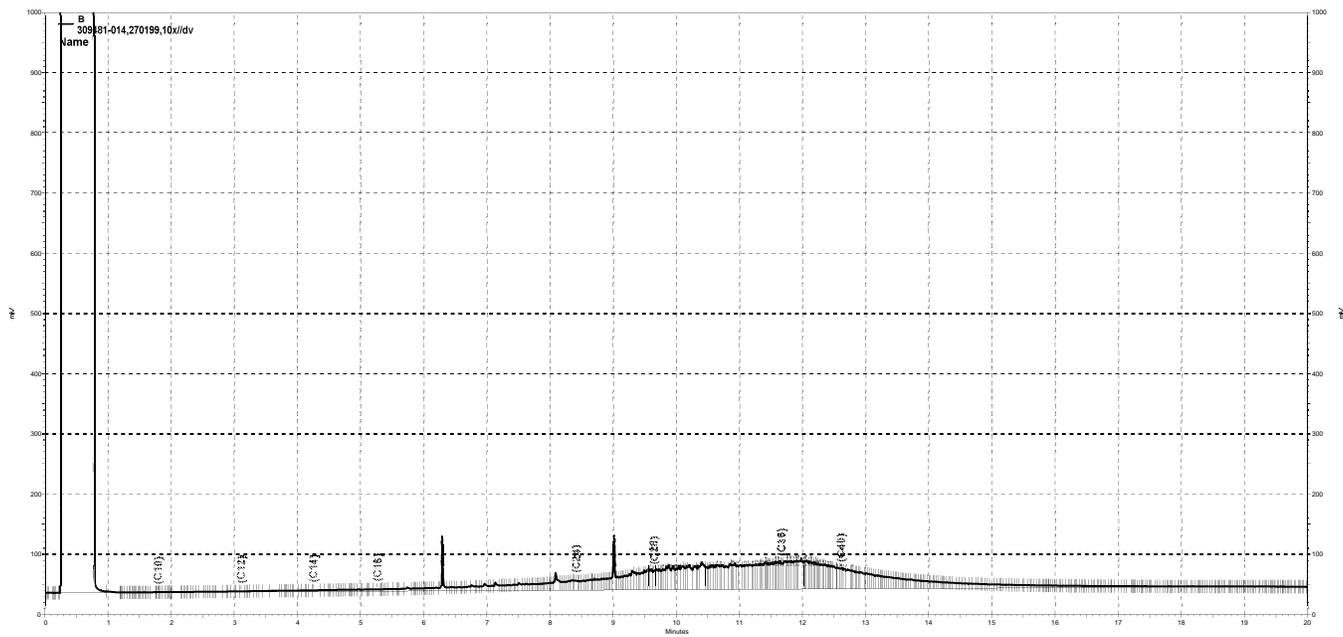
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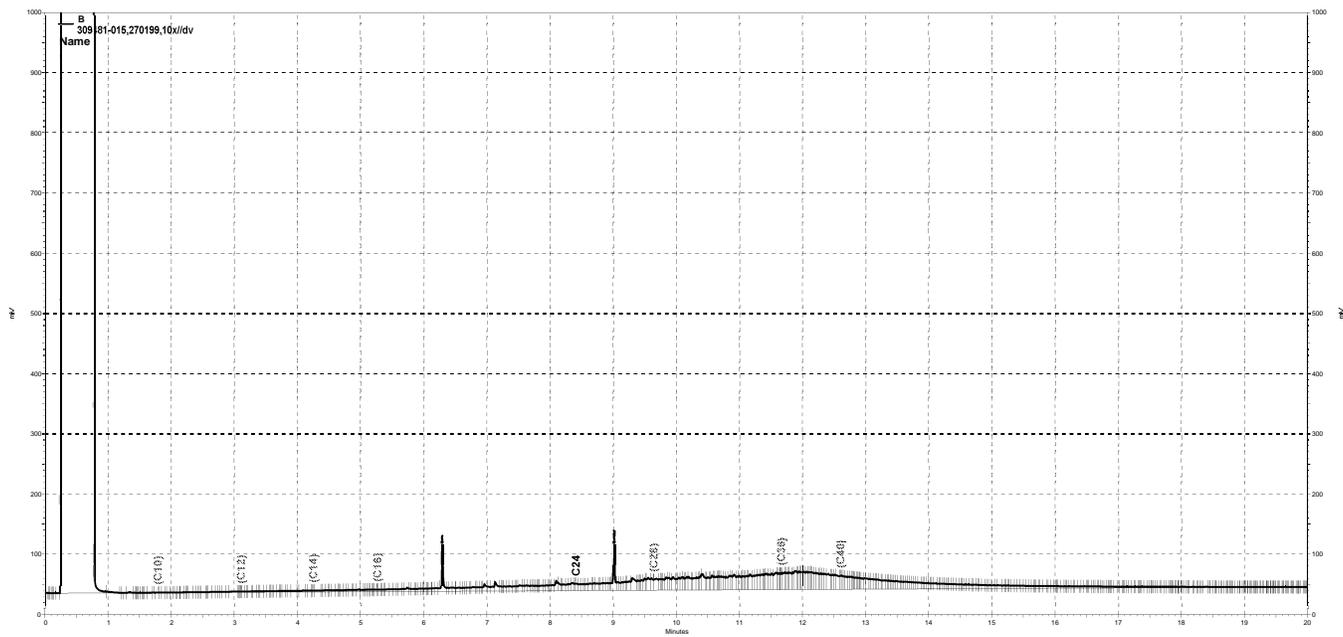
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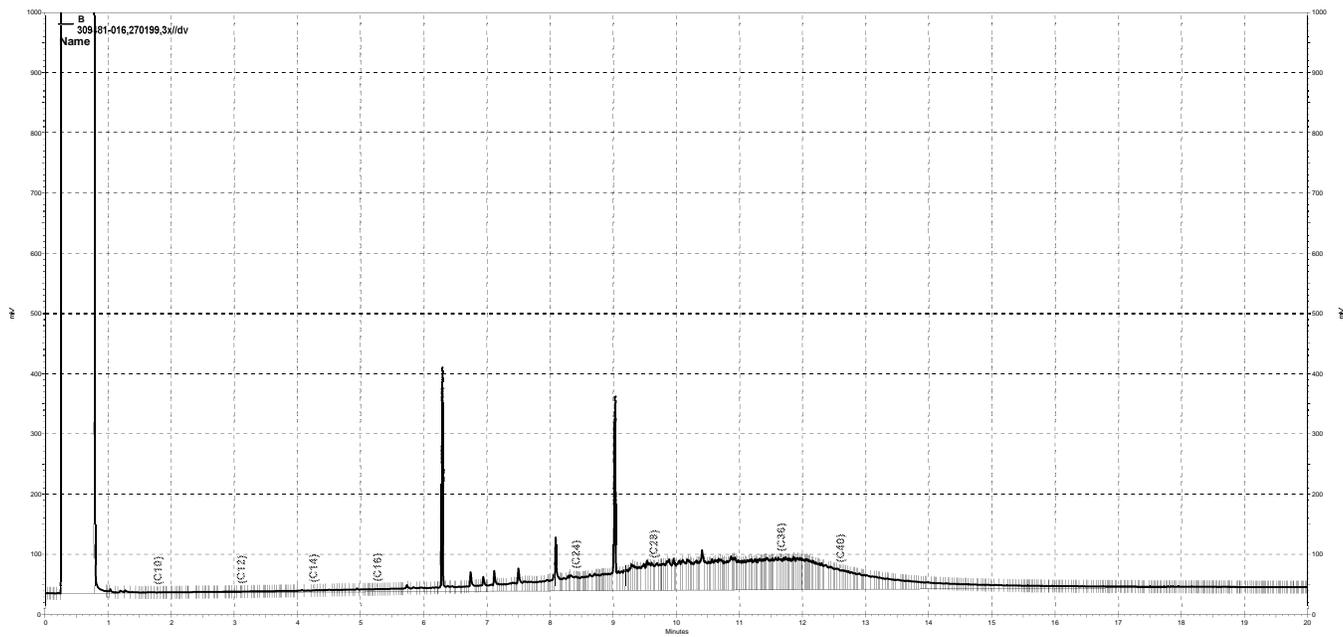
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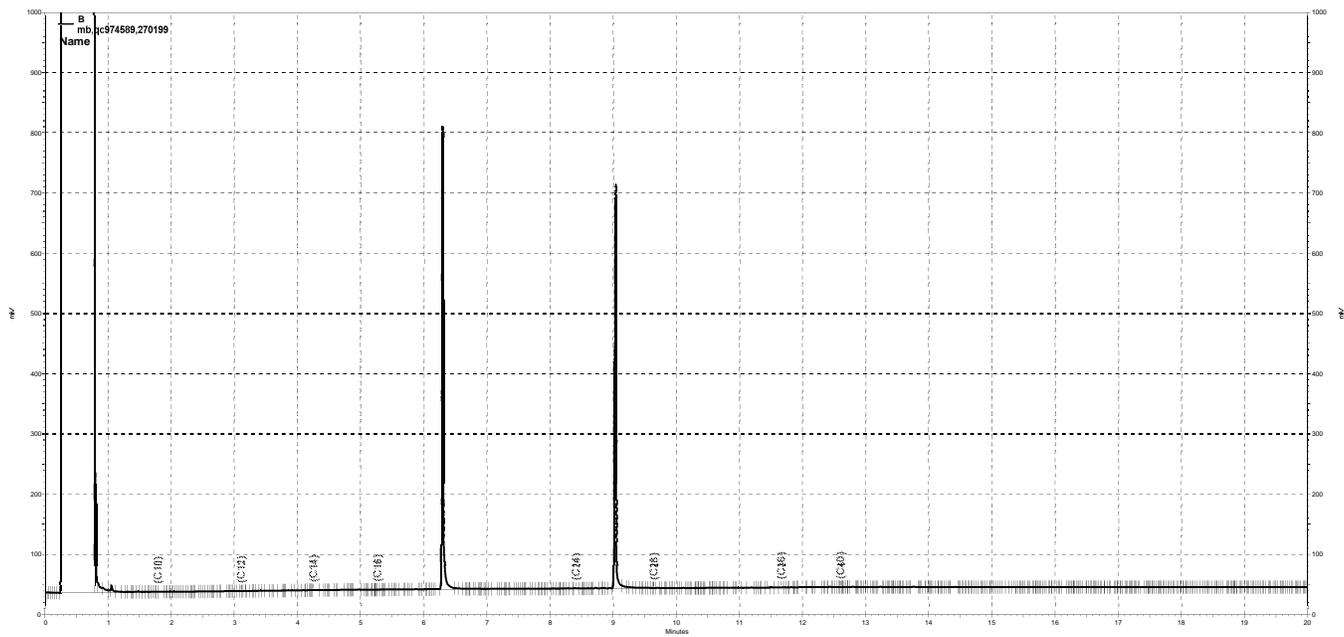
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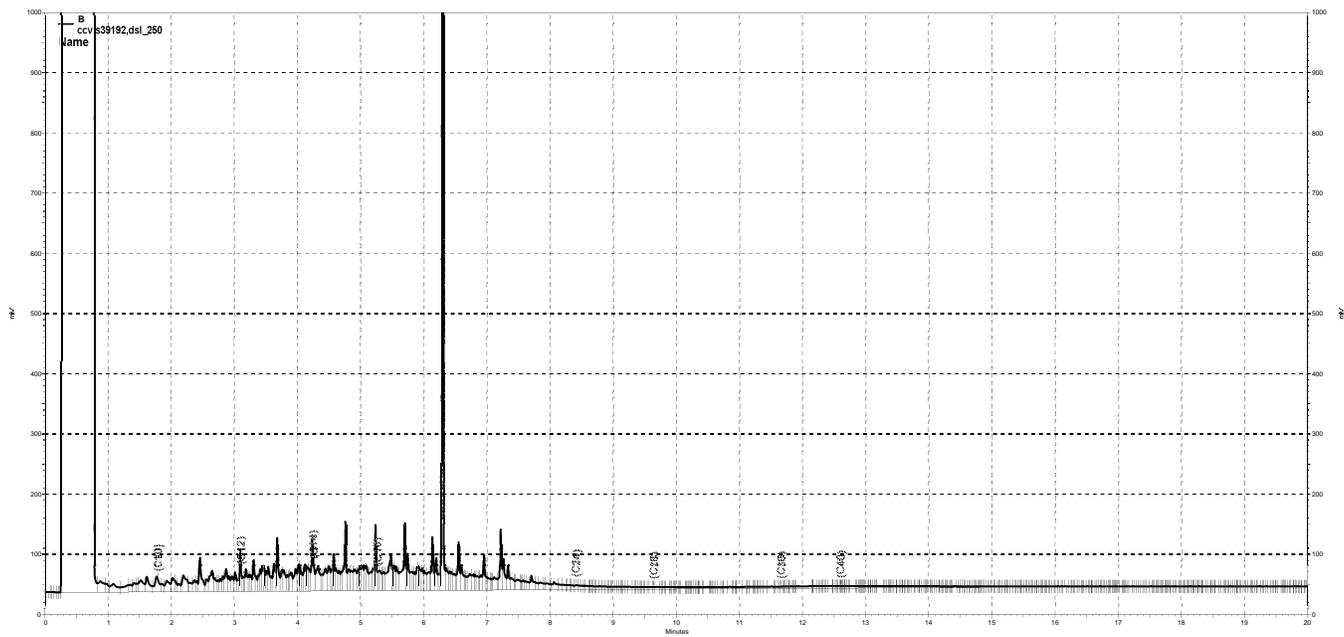
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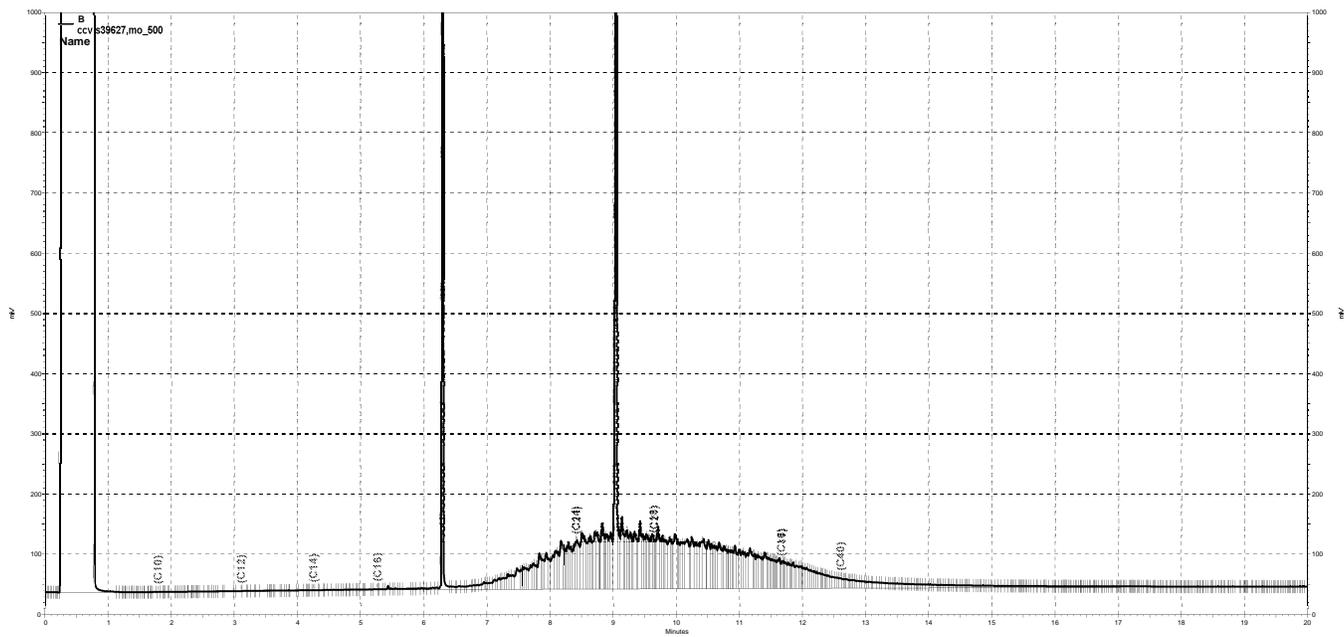
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— \\kraken\gdrive\ezchrom\Projects\GC14B\Data\2019\126B018, B

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21D	Diln Fac:	43.89
Lab ID:	309481-009	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	990	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	44
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	57
1,1-Dichloroethane	ND	250	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	250	49
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	52
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	45
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	43
Trichloroethene	ND	250	49
1,2-Dichloropropane	ND	250	42
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	41
4-Methyl-2-Pentanone	ND	490	40
cis-1,3-Dichloropropene	ND	250	54
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	250	46
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	47
1,1,1,2-Tetrachloroethane	ND	250	53
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	30
o-Xylene	ND	250	50
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	54
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	51
Propylbenzene	ND	250	51
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21D	Diln Fac:	43.89
Lab ID:	309481-009	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	51
2-Chlorotoluene	ND	250	56
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	52
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	53
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	54
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	60
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	66

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	102	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9D	Diln Fac:	43.26
Lab ID:	309481-010	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	39
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	160
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	940	120
Freon 113	ND	240	46
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	54
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	47
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	40
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	44
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	49
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9D	Diln Fac:	43.26
Lab ID:	309481-010	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	46
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	53
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	65
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10D	Diln Fac:	41.96
Lab ID:	309481-011	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	40
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	170
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	940	120
Freon 113	ND	240	46
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	54
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	44
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10D	Diln Fac:	41.96
Lab ID:	309481-011	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	53
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11D	Diln Fac:	44.56
Lab ID:	309481-012	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 17%

Analyte	Result	RL	MDL
Freon 12	ND	540	56
Chloromethane	ND	540	45
Vinyl Chloride	ND	540	41
Bromomethane	ND	540	190
Chloroethane	ND	540	38
Trichlorofluoromethane	ND	270	42
Acetone	ND	1,100	140
Freon 113	ND	270	53
1,1-Dichloroethene	ND	270	46
Methylene Chloride	ND	1,300	240
Carbon Disulfide	ND	270	52
MTBE	ND	270	48
trans-1,2-Dichloroethene	ND	270	55
Vinyl Acetate	ND	2,700	62
1,1-Dichloroethane	ND	270	51
2-Butanone	ND	540	120
cis-1,2-Dichloroethene	ND	270	54
2,2-Dichloropropane	ND	270	53
Chloroform	ND	270	58
Bromochloromethane	ND	270	57
1,1,1-Trichloroethane	ND	270	57
1,1-Dichloropropene	ND	270	54
Carbon Tetrachloride	ND	270	49
1,2-Dichloroethane	ND	270	45
Benzene	ND	270	47
Trichloroethene	ND	270	54
1,2-Dichloropropane	ND	270	46
Bromodichloromethane	ND	270	48
Dibromomethane	ND	270	45
4-Methyl-2-Pentanone	ND	540	43
cis-1,3-Dichloropropene	ND	270	59
Toluene	ND	270	50
trans-1,3-Dichloropropene	ND	270	49
1,1,2-Trichloroethane	ND	270	52
2-Hexanone	ND	540	49
1,3-Dichloropropane	ND	270	51
Tetrachloroethene	ND	270	52
Dibromochloromethane	ND	270	46
1,2-Dibromoethane	ND	270	47
Chlorobenzene	ND	270	51
1,1,1,2-Tetrachloroethane	ND	270	58
Ethylbenzene	ND	270	55
m,p-Xylenes	ND	270	33
o-Xylene	ND	270	55
Styrene	ND	270	56
Bromoform	ND	270	53
Isopropylbenzene	ND	270	59
1,1,2,2-Tetrachloroethane	ND	270	44
1,2,3-Trichloropropane	ND	270	56
Propylbenzene	ND	270	56
Bromobenzene	ND	270	52

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11D	Diln Fac:	44.56
Lab ID:	309481-012	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	56
2-Chlorotoluene	ND	270	61
4-Chlorotoluene	ND	270	56
tert-Butylbenzene	ND	270	63
1,2,4-Trimethylbenzene	ND	270	57
sec-Butylbenzene	ND	270	62
para-Isopropyl Toluene	ND	270	58
1,3-Dichlorobenzene	ND	270	56
1,4-Dichlorobenzene	ND	270	53
n-Butylbenzene	ND	270	59
1,2-Dichlorobenzene	ND	270	61
1,2-Dibromo-3-Chloropropane	ND	270	54
1,2,4-Trichlorobenzene	ND	270	75
Hexachlorobutadiene	ND	270	66
Naphthalene	ND	270	58
1,2,3-Trichlorobenzene	ND	270	72

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	100	80-120
Bromofluorobenzene	102	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12D	Diln Fac:	41.92
Lab ID:	309481-013	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 21%

Analyte	Result	RL	MDL
Freon 12	ND	530	55
Chloromethane	ND	530	45
Vinyl Chloride	ND	530	40
Bromomethane	ND	530	190
Chloroethane	ND	530	38
Trichlorofluoromethane	ND	270	42
Acetone	ND	1,100	140
Freon 113	ND	270	52
1,1-Dichloroethene	ND	270	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	270	51
MTBE	ND	270	48
trans-1,2-Dichloroethene	ND	270	54
Vinyl Acetate	ND	2,700	61
1,1-Dichloroethane	ND	270	50
2-Butanone	ND	530	120
cis-1,2-Dichloroethene	ND	270	53
2,2-Dichloropropane	ND	270	53
Chloroform	ND	270	57
Bromochloromethane	ND	270	56
1,1,1-Trichloroethane	ND	270	57
1,1-Dichloropropene	ND	270	53
Carbon Tetrachloride	ND	270	49
1,2-Dichloroethane	ND	270	44
Benzene	ND	270	47
Trichloroethene	ND	270	53
1,2-Dichloropropane	ND	270	46
Bromodichloromethane	ND	270	47
Dibromomethane	ND	270	44
4-Methyl-2-Pentanone	ND	530	43
cis-1,3-Dichloropropene	ND	270	58
Toluene	ND	270	50
trans-1,3-Dichloropropene	ND	270	48
1,1,2-Trichloroethane	ND	270	52
2-Hexanone	ND	530	49
1,3-Dichloropropane	ND	270	50
Tetrachloroethene	ND	270	51
Dibromochloromethane	ND	270	45
1,2-Dibromoethane	ND	270	46
Chlorobenzene	ND	270	51
1,1,1,2-Tetrachloroethane	ND	270	57
Ethylbenzene	ND	270	54
m,p-Xylenes	ND	270	33
o-Xylene	ND	270	54
Styrene	ND	270	56
Bromoform	ND	270	53
Isopropylbenzene	ND	270	59
1,1,2,2-Tetrachloroethane	ND	270	44
1,2,3-Trichloropropane	ND	270	55
Propylbenzene	ND	270	55
Bromobenzene	ND	270	51

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12D	Diln Fac:	41.92
Lab ID:	309481-013	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	55
2-Chlorotoluene	ND	270	61
4-Chlorotoluene	ND	270	56
tert-Butylbenzene	ND	270	62
1,2,4-Trimethylbenzene	ND	270	56
sec-Butylbenzene	ND	270	61
para-Isopropyl Toluene	ND	270	58
1,3-Dichlorobenzene	ND	270	56
1,4-Dichlorobenzene	ND	270	52
n-Butylbenzene	ND	270	59
1,2-Dichlorobenzene	ND	270	60
1,2-Dibromo-3-Chloropropane	ND	270	54
1,2,4-Trichlorobenzene	ND	270	74
Hexachlorobutadiene	ND	270	65
Naphthalene	ND	270	58
1,2,3-Trichlorobenzene	ND	270	71

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	99	80-120
Bromofluorobenzene	103	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21B	Diln Fac:	46.80
Lab ID:	309481-014	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	520	54
Chloromethane	ND	520	44
Vinyl Chloride	ND	520	39
Bromomethane	ND	520	180
Chloroethane	ND	520	37
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,000	130
Freon 113	ND	260	51
1,1-Dichloroethene	ND	260	44
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	50
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	53
Vinyl Acetate	ND	2,600	60
1,1-Dichloroethane	ND	260	49
2-Butanone	ND	520	110
cis-1,2-Dichloroethene	ND	260	52
2,2-Dichloropropane	ND	260	51
Chloroform	ND	260	56
Bromochloromethane	ND	260	55
1,1,1-Trichloroethane	ND	260	55
1,1-Dichloropropene	ND	260	52
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	43
Benzene	ND	260	46
Trichloroethene	ND	260	52
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	46
Dibromomethane	ND	260	43
4-Methyl-2-Pentanone	ND	520	42
cis-1,3-Dichloropropene	ND	260	57
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	47
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	520	48
1,3-Dichloropropane	ND	260	49
Tetrachloroethene	ND	260	50
Dibromochloromethane	ND	260	44
1,2-Dibromoethane	ND	260	45
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	56
Ethylbenzene	ND	260	53
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	53
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	57
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	54
Propylbenzene	ND	260	54
Bromobenzene	ND	260	50

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21B	Diln Fac:	46.80
Lab ID:	309481-014	Batch#:	270273
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/08/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	54
2-Chlorotoluene	ND	260	59
4-Chlorotoluene	ND	260	54
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	55
sec-Butylbenzene	ND	260	60
para-Isopropyl Toluene	ND	260	56
1,3-Dichlorobenzene	ND	260	54
1,4-Dichlorobenzene	ND	260	51
n-Butylbenzene	ND	260	57
1,2-Dichlorobenzene	ND	260	59
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	72
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	56
1,2,3-Trichlorobenzene	ND	260	70

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	95	80-136
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22B	Diln Fac:	40.82
Lab ID:	309481-015	Batch#:	270337
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 24%

Analyte	Result	RL	MDL
Freon 12	ND	540	56
Chloromethane	ND	540	45
Vinyl Chloride	ND	540	41
Bromomethane	ND	540	190
Chloroethane	ND	540	38
Trichlorofluoromethane	ND	270	42
Acetone	ND	1,100	140
Freon 113	ND	270	53
1,1-Dichloroethene	ND	270	46
Methylene Chloride	ND	1,300	240
Carbon Disulfide	ND	270	52
MTBE	ND	270	48
trans-1,2-Dichloroethene	ND	270	55
Vinyl Acetate	ND	2,700	62
1,1-Dichloroethane	ND	270	51
2-Butanone	ND	540	120
cis-1,2-Dichloroethene	ND	270	54
2,2-Dichloropropane	ND	270	53
Chloroform	ND	270	58
Bromochloromethane	ND	270	57
1,1,1-Trichloroethane	ND	270	57
1,1-Dichloropropene	ND	270	54
Carbon Tetrachloride	ND	270	49
1,2-Dichloroethane	ND	270	45
Benzene	ND	270	47
Trichloroethene	ND	270	54
1,2-Dichloropropane	ND	270	46
Bromodichloromethane	ND	270	48
Dibromomethane	ND	270	45
4-Methyl-2-Pentanone	ND	540	43
cis-1,3-Dichloropropene	ND	270	59
Toluene	ND	270	50
trans-1,3-Dichloropropene	ND	270	49
1,1,2-Trichloroethane	ND	270	52
2-Hexanone	ND	540	49
1,3-Dichloropropane	ND	270	51
Tetrachloroethene	ND	270	52
Dibromochloromethane	ND	270	46
1,2-Dibromoethane	ND	270	47
Chlorobenzene	ND	270	51
1,1,1,2-Tetrachloroethane	ND	270	58
Ethylbenzene	ND	270	55
m,p-Xylenes	ND	270	33
o-Xylene	ND	270	55
Styrene	ND	270	57
Bromoform	ND	270	53
Isopropylbenzene	ND	270	59
1,1,2,2-Tetrachloroethane	ND	270	44
1,2,3-Trichloropropane	ND	270	56
Propylbenzene	ND	270	56
Bromobenzene	ND	270	52

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22B	Diln Fac:	40.82
Lab ID:	309481-015	Batch#:	270337
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	56
2-Chlorotoluene	ND	270	61
4-Chlorotoluene	ND	270	56
tert-Butylbenzene	ND	270	63
1,2,4-Trimethylbenzene	ND	270	57
sec-Butylbenzene	ND	270	62
para-Isopropyl Toluene	ND	270	58
1,3-Dichlorobenzene	ND	270	56
1,4-Dichlorobenzene	ND	270	53
n-Butylbenzene	ND	270	59
1,2-Dichlorobenzene	ND	270	61
1,2-Dibromo-3-Chloropropane	ND	270	54
1,2,4-Trichlorobenzene	ND	270	75
Hexachlorobutadiene	ND	270	66
Naphthalene	ND	270	58
1,2,3-Trichlorobenzene	ND	270	72

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	86	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23B	Diln Fac:	41.09
Lab ID:	309481-016	Batch#:	270337
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/09/19

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	41
Vinyl Chloride	ND	480	37
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	970	120
Freon 113	ND	240	48
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	47
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	50
Vinyl Acetate	ND	2,400	56
1,1-Dichloroethane	ND	240	46
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	52
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	42
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	46
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	50
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23B	Diln Fac:	41.09
Lab ID:	309481-016	Batch#:	270337
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	dry	Analyzed:	05/09/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	51
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	56
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	51
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	55
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	65

Surrogate	%REC	Limits
Dibromofluoromethane	90	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	103	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270273
Units:	ug/Kg	Analyzed:	05/08/19
Diln Fac:	1.000		

Type: BS Lab ID: QC974856

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.95	104	69-142
Benzene	25.00	24.85	99	79-123
Trichloroethene	25.00	24.45	98	79-126
Toluene	25.00	25.19	101	78-120
Chlorobenzene	25.00	25.43	102	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	100	80-129

Type: BSD Lab ID: QC974857

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.78	103	69-142	1	23
Benzene	25.00	24.73	99	79-123	0	20
Trichloroethene	25.00	24.43	98	79-126	0	20
Toluene	25.00	24.67	99	78-120	2	20
Chlorobenzene	25.00	24.71	99	80-122	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-131
1,2-Dichloroethane-d4	91	80-136
Toluene-d8	99	80-120
Bromofluorobenzene	102	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974858	Batch#:	270273
Matrix:	Soil	Analyzed:	05/08/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974858	Batch#:	270273
Matrix:	Soil	Analyzed:	05/08/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene		5.0	0.13
1,2,3-Trichlorobenzene	0.19 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	89	80-136
Toluene-d8	100	80-120
Bromofluorobenzene	105	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270337
Units:	ug/Kg	Analyzed:	05/09/19
Diln Fac:	1.000		

Type: BS Lab ID: QC975131

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.06	100	69-142
Benzene	25.00	23.52	94	79-123
Trichloroethene	25.00	23.20	93	79-126
Toluene	25.00	25.11	100	78-120
Chlorobenzene	25.00	24.20	97	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	100	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	108	80-129

Type: BSD Lab ID: QC975132

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.89	104	69-142	3	23
Benzene	25.00	25.51	102	79-123	8	20
Trichloroethene	25.00	25.28	101	79-126	9	20
Toluene	25.00	26.90	108	78-120	7	20
Chlorobenzene	25.00	25.84	103	80-122	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	106	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975133	Batch#:	270337
Matrix:	Soil	Analyzed:	05/09/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	0.17 J	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.43 J	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975133	Batch#:	270337
Matrix:	Soil	Analyzed:	05/09/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	81	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	104	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-21D	Batch#:	270190
Lab ID:	309481-009	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 11%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	14 J	56	11		
Acenaphthylene	44 J	56	11		
Acenaphthene	ND	56	11		
Fluorene	16 J	56	11		
Phenanthrene	240	56	11		
Anthracene	52 J	56	11		
Fluoranthene	400	56	11		
Pyrene	560	56	11		
Benzo(a)anthracene	200	56	11	0.10	20
Chrysene	230	56	11	0.0010	0.23
Benzo(b)fluoranthene	300	56	11	0.10	30
Benzo(k)fluoranthene	90	56	11	0.010	0.90
Benzo(a)pyrene	290	56	11	1.0	290
Indeno(1,2,3-cd)pyrene	190	56	11	0.10	19
Dibenz(a,h)anthracene	43 J	56	11	1.0	43
Benzo(g,h,i)perylene	280	56	11		
Total Benzo(a)pyrene Equiv.					410

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-10D	Batch#:	270190
Lab ID:	309481-011	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 11%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	13 J	56	11		
Acenaphthylene	40 J	56	11		
Acenaphthene	ND	56	11		
Fluorene	ND	56	11		
Phenanthrene	110	56	11		
Anthracene	33 J	56	11		
Fluoranthene	310	56	11		
Pyrene	480	56	11		
Benzo(a)anthracene	170	56	11	0.10	17
Chrysene	210	56	11	0.0010	0.21
Benzo(b)fluoranthene	290	56	11	0.10	29
Benzo(k)fluoranthene	93	56	11	0.010	0.93
Benzo(a)pyrene	300	56	11	1.0	300
Indeno(1,2,3-cd)pyrene	210	56	11	0.10	21
Dibenz(a,h)anthracene	39 J	56	11	1.0	39
Benzo(g,h,i)perylene	290	56	11		
Total Benzo(a)pyrene Equiv.					410

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-11D	Batch#:	270190
Lab ID:	309481-012	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 17%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	300	61		
Acenaphthylene	ND	300	61		
Acenaphthene	140 J	300	61		
Fluorene	63 J	300	61		
Phenanthrene	340	300	61		
Anthracene	78 J	300	61		
Fluoranthene	580	300	61		
Pyrene	740	300	61		
Benzo(a)anthracene	300 J	300	61	0.10	30
Chrysene	350	300	61	0.0010	0.35
Benzo(b)fluoranthene	350	300	61	0.10	35
Benzo(k)fluoranthene	130 J	300	61	0.010	1.3
Benzo(a)pyrene	350	300	61	1.0	350
Indeno(1,2,3-cd)pyrene	200 J	300	61	0.10	20
Dibenz(a,h)anthracene	ND	300	61	1.0	150
Benzo(g,h,i)perylene	360	300	61		
Total Benzo(a)pyrene Equiv.					590

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-21B	Batch#:	270190
Lab ID:	309481-014	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	280	56		
Acenaphthylene	ND	280	56		
Acenaphthene	ND	280	56		
Fluorene	ND	280	56		
Phenanthrene	160 J	280	56		
Anthracene	ND	280	56		
Fluoranthene	380	280	56		
Pyrene	520	280	56		
Benzo(a)anthracene	200 J	280	56	0.10	20
Chrysene	240 J	280	56	0.0010	0.24
Benzo(b)fluoranthene	330	280	56	0.10	33
Benzo(k)fluoranthene	110 J	280	56	0.010	1.1
Benzo(a)pyrene	330	280	56	1.0	330
Indeno(1,2,3-cd)pyrene	210 J	280	56	0.10	21
Dibenz(a,h)anthracene	ND	280	56	1.0	140
Benzo(g,h,i)perylene	360	280	56		
Total Benzo(a)pyrene Equiv.					550

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-22B	Batch#:	270190
Lab ID:	309481-015	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	20.00		

TEQ ND Factor: 0.5

Moisture: 24%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	130	26		
Acenaphthylene	ND	130	26		
Acenaphthene	ND	130	26		
Fluorene	ND	130	26		
Phenanthrene	89 J	130	26		
Anthracene	ND	130	26		
Fluoranthene	200	130	26		
Pyrene	370	130	26		
Benzo(a)anthracene	120 J	130	26	0.10	12
Chrysene	130	130	26	0.0010	0.13
Benzo(b)fluoranthene	170	130	26	0.10	17
Benzo(k)fluoranthene	69 J	130	26	0.010	0.69
Benzo(a)pyrene	170	130	26	1.0	170
Indeno(1,2,3-cd)pyrene	86 J	130	26	0.10	8.6
Dibenz(a,h)anthracene	ND	130	26	1.0	65
Benzo(g,h,i)perylene	150	130	26		
Total Benzo(a)pyrene Equiv.					280

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-23B	Batch#:	270190
Lab ID:	309481-016	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	dry	Analyzed:	05/14/19
Diln Fac:	33.33		

TEQ ND Factor: 0.5

Moisture: 15%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	200	39		
Acenaphthylene	ND	200	39		
Acenaphthene	ND	200	39		
Fluorene	ND	200	39		
Phenanthrene	99 J	200	39		
Anthracene	ND	200	39		
Fluoranthene	260	200	39		
Pyrene	510	200	39		
Benzo(a)anthracene	130 J	200	39	0.10	13
Chrysene	150 J	200	39	0.0010	0.15
Benzo(b)fluoranthene	220	200	39	0.10	22
Benzo(k)fluoranthene	87 J	200	39	0.010	0.87
Benzo(a)pyrene	250	200	39	1.0	250
Indeno(1,2,3-cd)pyrene	140 J	200	39	0.10	14
Dibenz(a,h)anthracene	ND	200	39	1.0	98
Benzo(g,h,i)perylene	230	200	39		
Total Benzo(a)pyrene Equiv.					390

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974542	Batch#:	270190
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/13/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	1.6 J	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	108	48-120
2-Fluorobiphenyl	78	39-120
Terphenyl-d14	93	61-120

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974543	Batch#:	270190
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/14/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	31.51	95	57-120
Acenaphthylene	33.33	33.32	100	60-120
Acenaphthene	33.33	31.88	96	64-120
Fluorene	33.33	31.53	95	67-120
Phenanthrene	33.33	33.94	102	64-120
Anthracene	33.33	35.39	106	66-120
Fluoranthene	33.33	34.15	102	73-121
Pyrene	33.33	37.29	112	67-120
Benzo(a)anthracene	33.33	35.85	108	69-121
Chrysene	33.33	19.39	58	48-120
Benzo(b)fluoranthene	33.33	26.18	79	66-120
Benzo(k)fluoranthene	33.33	32.82	98	62-125
Benzo(a)pyrene	33.33	35.51	107	66-120
Indeno(1,2,3-cd)pyrene	33.33	31.27	94	57-120
Dibenz(a,h)anthracene	33.33	20.36	61	45-120
Benzo(g,h,i)perylene	33.33	33.52	101	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	127 *	48-120
2-Fluorobiphenyl	84	39-120
Terphenyl-d14	97	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-21D	Batch#:	270192
Lab ID:	309481-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.88
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.6
Heptachlor	ND #	11	0.79
Aldrin	ND	11	0.92
Heptachlor epoxide	ND	11	0.84
Endosulfan I	ND	11	1.1
Dieldrin	ND	22	0.87
4,4'-DDE	ND	22	0.98
Endrin	ND	22	2.0
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.8
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.8
4,4'-DDT	5.2 J #	22	0.89
alpha-Chlordane	1.6 C J	11	1.4
gamma-Chlordane	2.7 C J	11	1.1
Methoxychlor	ND	110	26
Toxaphene	ND	390	110

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-9D	Batch#:	270192
Lab ID:	309481-002	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.44
beta-BHC	ND	5.4	0.56
gamma-BHC	ND	5.4	0.61
delta-BHC	ND	5.4	0.77
Heptachlor	ND	5.4	0.60
Aldrin	ND	5.4	0.30
Heptachlor epoxide	ND	5.4	0.42
Endosulfan I	ND	5.4	0.53
Dieldrin	0.46 C J	11	0.43
4,4'-DDE	0.98 J	11	0.49
Endrin	0.57 C J	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	ND	11	0.87
4,4'-DDD	ND	11	0.74
Endrin aldehyde	ND	11	3.4
4,4'-DDT	4.9 C J #	11	0.44
alpha-Chlordane	3.3 C J #	5.4	0.88
gamma-Chlordane	2.1 C J	5.4	0.54
Methoxychlor	ND	54	13
Toxaphene	ND	200	57

Surrogate	%REC	Limits
TCMX	92	43-125
Decachlorobiphenyl	85	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-10D	Batch#:	270192
Lab ID:	309481-003	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.45
beta-BHC	ND	5.6	0.57
gamma-BHC	ND	5.6	0.63
delta-BHC	ND	5.6	0.79
Heptachlor	ND	5.6	0.61
Aldrin	0.51 J	5.6	0.47
Heptachlor epoxide	ND	5.6	0.43
Endosulfan I	ND	5.6	0.54
Dieldrin	2.2 J	11	0.40
4,4'-DDE	1.0 J	11	0.50
Endrin	ND	11	1.0
Endosulfan II	ND	11	0.62
Endosulfan sulfate	ND	11	0.90
4,4'-DDD	1.3 C J	11	0.76
Endrin aldehyde	ND	11	3.5
4,4'-DDT	2.7 C J #	11	0.45
alpha-Chlordane	1.7 C J	5.6	0.72
gamma-Chlordane	1.2 C J	5.6	0.69
Methoxychlor	ND	56	14
Toxaphene	ND	200	58

Surrogate	%REC	Limits
TCMX	85	43-125
Decachlorobiphenyl	80	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-11D	Batch#:	270192
Lab ID:	309481-004	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.91
beta-BHC	ND	11	1.2
gamma-BHC	ND	11	1.3
delta-BHC	ND	11	1.6
Heptachlor	2.2 C J	11	1.2
Aldrin	0.97 C J	11	0.96
Heptachlor epoxide	ND	11	0.87
Endosulfan I	ND	11	1.1
Dieldrin	27 C	23	0.90
4,4'-DDE	7.1 C J	23	1.0
Endrin	ND	23	2.1
Endosulfan II	1.0 C J	23	0.82
Endosulfan sulfate	ND	23	1.8
4,4'-DDD	5.4 C J	23	1.5
Endrin aldehyde	13 C J #	23	6.0
4,4'-DDT	130 #	23	0.92
alpha-Chlordane	13 C	11	1.5
gamma-Chlordane	12 C	11	1.4
Methoxychlor	ND	110	27
Toxaphene	ND	410	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12D	Batch#:	270286
Lab ID:	309481-005	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	100.0		

Analyte	Result	RL	MDL
alpha-BHC	ND	110	10
beta-BHC	ND	110	6.4
gamma-BHC	ND	110	8.0
delta-BHC	ND	110	7.9
Heptachlor	ND	110	12
Aldrin	ND	110	6.1
Heptachlor epoxide	40 C J	110	7.7
Endosulfan I	ND	110	7.9
Dieldrin	170 C J	220	8.8
4,4'-DDE	ND	220	9.9
Endrin	ND	220	21
Endosulfan II	ND	220	7.9
Endosulfan sulfate	ND	220	18
4,4'-DDD	ND	220	7.9
Endrin aldehyde	74 C J	220	59
4,4'-DDT	910	220	9.0
alpha-Chlordane	ND	110	14
gamma-Chlordane	15 C J	110	14
Methoxychlor	ND	1,100	150
Toxaphene	ND	4,000	1,300

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-21B	Batch#:	270286
Lab ID:	309481-006	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.32
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.39
Heptachlor	ND	5.5	0.39
Aldrin	ND	5.5	0.30
Heptachlor epoxide	0.59 J	5.5	0.38
Endosulfan I	ND	5.5	0.39
Dieldrin	0.48 C J	11	0.44
4,4'-DDE	1.1 J	11	0.39
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	ND	11	0.88
4,4'-DDD	ND	11	0.39
Endrin aldehyde	ND	11	2.9
4,4'-DDT	3.9 C J	11	0.44
alpha-Chlordane	2.2 J	5.5	0.88
gamma-Chlordane	1.9 J	5.5	0.68
Methoxychlor	ND	55	7.5
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	86	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-22B	Batch#:	270286
Lab ID:	309481-007	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.57
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.40
Heptachlor	ND	5.5	0.40
Aldrin	ND	5.5	0.31
Heptachlor epoxide	ND	5.5	0.42
Endosulfan I	ND	5.5	0.40
Dieldrin	ND	11	0.44
4,4'-DDE	2.0 J	11	0.50
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.89
4,4'-DDD	ND	11	0.40
Endrin aldehyde	ND	11	2.9
4,4'-DDT	1.0 C J	11	0.45
alpha-Chlordane	1.9 C J	5.5	0.71
gamma-Chlordane	1.7 J	5.5	0.69
Methoxychlor	ND	55	7.6
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	78	43-125
Decachlorobiphenyl	62	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-23B	Batch#:	270286
Lab ID:	309481-008	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.57
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.43
Endosulfan I	ND	5.6	0.40
Dieldrin	3.0 C J	11	0.44
4,4'-DDE	0.58 C J	11	0.50
Endrin	1.4 C J	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	0.71 C J	11	0.37
4,4'-DDD	ND	11	0.75
Endrin aldehyde	ND	11	3.0
4,4'-DDT	1.8 C J	11	0.45
alpha-Chlordane	2.6 C J	5.6	0.72
gamma-Chlordane	3.3 J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	86	43-125
Decachlorobiphenyl	74	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974558	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.090
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.13
delta-BHC	ND	1.1	0.16
Heptachlor	ND	1.1	0.12
Aldrin	ND	1.1	0.094
Heptachlor epoxide	ND	1.1	0.085
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.088
4,4'-DDE	ND	2.2	0.099
Endrin	ND	2.2	0.21
Endosulfan II	0.13 C J	2.2	0.12
Endosulfan sulfate	ND	2.2	0.18
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.69
4,4'-DDT	ND	2.2	0.34
alpha-Chlordane	ND	1.1	0.14
gamma-Chlordane	ND	1.1	0.14
Methoxychlor	ND	11	2.7
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	110	43-125
Decachlorobiphenyl	125	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974559	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	12.09 #	91	58-131
Heptachlor	13.33	12.57 #	94	51-133
Aldrin	13.33	12.29 #	92	52-128
Dieldrin	13.33	8.805 #	66	59-133
Endrin	13.33	14.42 #	108	48-154
4,4'-DDT	13.33	14.41	108	54-140

Surrogate	%REC	Limits
TCMX	82	43-125
Decachlorobiphenyl	89	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	270192
MSS Lab ID:	309471-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/07/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974560

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.1214	13.50	12.19 #	90	58-126
Heptachlor	<0.1187	13.50	12.83 #	95	58-127
Aldrin	0.2814	13.50	12.39 #	90	55-124
Dieldrin	<0.08582	13.50	10.93 #	81	48-137
Endrin	0.2975	13.50	14.70 #	107	48-158
4,4'-DDT	1.984	13.50	15.82	102	38-155

Surrogate	%REC	Limits
TCMX	83	43-125
Decachlorobiphenyl	85	40-128

Type: MSD Lab ID: QC974561

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.68	13.12 #	96	58-126	6	36
Heptachlor	13.68	12.98 #	95	58-127	0	34
Aldrin	13.68	12.76 #	91	55-124	2	31
Dieldrin	13.68	11.91 #	87	48-137	7	38
Endrin	13.68	14.65 #	105	48-158	2	38
4,4'-DDT	13.68	16.92	109	38-155	6	42

Surrogate	%REC	Limits
TCMX	82	43-125
Decachlorobiphenyl	83	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Batch QC Report

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974905	Batch#:	270286
Matrix:	Soil	Prepared:	05/08/19
Units:	ug/Kg	Analyzed:	05/09/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.10
beta-BHC	ND	1.1	0.065
gamma-BHC	ND	1.1	0.081
delta-BHC	ND	1.1	0.080
Heptachlor	ND	1.1	0.080
Aldrin	ND	1.1	0.061
Heptachlor epoxide	ND	1.1	0.077
Endosulfan I	ND	1.1	0.080
Dieldrin	ND	2.2	0.080
4,4'-DDE	ND	2.2	0.080
Endrin	ND	2.2	0.067
Endosulfan II	ND	2.2	0.080
Endosulfan sulfate	ND	2.2	0.074
4,4'-DDD	ND	2.2	0.080
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.14
Methoxychlor	ND	11	1.5
Toxaphene	ND	40	13

Surrogate	%REC	Limits
TCMX	74	43-125
Decachlorobiphenyl	70	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974906	Batch#:	270286
Matrix:	Soil	Prepared:	05/08/19
Units:	ug/Kg	Analyzed:	05/09/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	12.19	91	58-131
Heptachlor	13.33	12.76	96	51-133
Aldrin	13.33	12.42 #	93	52-128
Dieldrin	13.33	11.84	89	59-133
Endrin	13.33	14.36 #	108	48-154
4,4'-DDT	13.33	13.46	101	54-140

Surrogate	%REC	Limits
TCMX	79	43-125
Decachlorobiphenyl	81	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	air dried		

Field ID:	DTSC-21D	Batch#:	270192
Type:	SAMPLE	Prepared:	05/06/19
Lab ID:	309481-001	Analyzed:	05/08/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.7
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.7
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	23	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	73	49-157

Field ID:	DTSC-9D	Batch#:	270192
Type:	SAMPLE	Prepared:	05/06/19
Lab ID:	309481-002	Analyzed:	05/08/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.6
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.6
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	28	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	56	49-157

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	air dried		

Field ID:	DTSC-10D	Batch#:	270192
Type:	SAMPLE	Prepared:	05/06/19
Lab ID:	309481-003	Analyzed:	05/08/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.9
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.6
Aroclor-1242	ND	13	7.9
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.8
Aroclor-1260	17	13	6.5

Surrogate	%REC	Limits
Decachlorobiphenyl	64	49-157

Field ID:	DTSC-11D	Batch#:	270192
Type:	SAMPLE	Prepared:	05/06/19
Lab ID:	309481-004	Analyzed:	05/08/19
Diln Fac:	3.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	14
Aroclor-1221	ND	41	23
Aroclor-1232	ND	20	12
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	5.0
Aroclor-1254	ND	20	10
Aroclor-1260	640	20	9.8

Surrogate	%REC	Limits
Decachlorobiphenyl	83	49-157

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	air dried		

Field ID:	DTSC-12D	Batch#:	270286
Type:	SAMPLE	Prepared:	05/08/19
Lab ID:	309481-005	Analyzed:	05/09/19
Diln Fac:	50.00		

Analyte	Result	RL	MDL
Aroclor-1016	ND	330	220
Aroclor-1221	ND	660	380
Aroclor-1232	ND	330	190
Aroclor-1242	ND	330	190
Aroclor-1248	ND	330	82
Aroclor-1254	2,200	330	170
Aroclor-1260	4,600	330	160

Surrogate	%REC	Limits
Decachlorobiphenyl	DO	49-157

Field ID:	DTSC-21B	Batch#:	270286
Type:	SAMPLE	Prepared:	05/08/19
Lab ID:	309481-006	Analyzed:	05/09/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.7
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.7
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	ND	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	95	49-157

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	air dried		

Field ID:	DTSC-22B	Batch#:	270286
Type:	SAMPLE	Prepared:	05/08/19
Lab ID:	309481-007	Analyzed:	05/09/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.8
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.5
Aroclor-1242	ND	13	7.8
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.7
Aroclor-1260	16	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	64	49-157

Field ID:	DTSC-23B	Batch#:	270286
Type:	SAMPLE	Prepared:	05/08/19
Lab ID:	309481-008	Analyzed:	05/09/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.8
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.5
Aroclor-1242	ND	13	7.8
Aroclor-1248	ND	13	3.3
Aroclor-1254	55	13	6.7
Aroclor-1260	140	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	103	49-157

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/03/19
Units:	ug/Kg	Received:	05/03/19
Basis:	air dried		

Type:	BLANK	Batch#:	270192
Lab ID:	QC974558	Prepared:	05/06/19
Diln Fac:	1.000	Analyzed:	05/07/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.4
Aroclor-1221	ND	24	7.7
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.9
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.4
Aroclor-1260	ND	12	3.2

Surrogate	%REC	Limits
Decachlorobiphenyl	97	49-157

Type:	BLANK	Batch#:	270286
Lab ID:	QC974905	Prepared:	05/08/19
Diln Fac:	1.000	Analyzed:	05/09/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.4
Aroclor-1221	ND	24	7.7
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.9
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.4
Aroclor-1260	ND	12	3.2

Surrogate	%REC	Limits
Decachlorobiphenyl	87	49-157

DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974562	Batch#:	270192
Matrix:	Soil	Prepared:	05/06/19
Units:	ug/Kg	Analyzed:	05/07/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	122.0	73	63-143
Aroclor-1260	166.7	110.4	66	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	100	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	270192
MSS Lab ID:	309471-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/06/19
Basis:	air dried	Analyzed:	05/07/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974563

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<4.282	163.1	129.9	80	62-160
Aroclor-1260	8.068	163.1	145.6	84	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	96	49-157

Type: MSD Lab ID: QC974564

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	163.4	140.7	86	62-160	8	43
Aroclor-1260	163.4	160.1	93	53-172	9	44

Surrogate	%REC	Limits
Decachlorobiphenyl	106	49-157

RPD= Relative Percent Difference

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC974909	Batch#:	270286
Matrix:	Soil	Prepared:	05/08/19
Units:	ug/Kg	Analyzed:	05/09/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	134.3	81	63-143
Aroclor-1260	166.7	151.5	91	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	101	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	270286
MSS Lab ID:	309450-006	Sampled:	05/02/19
Matrix:	Soil	Received:	05/03/19
Units:	ug/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/09/19
Diln Fac:	2.000		

Type: MS Lab ID: QC974910

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<8.792	163.5	168.4	103	62-160
Aroclor-1260	21.98	163.5	168.5	90	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	102	49-157

Type: MSD Lab ID: QC974911

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	167.6	120.6	72	62-160	35	43
Aroclor-1260	167.6	122.8	60	53-172	34	44

Surrogate	%REC	Limits
Decachlorobiphenyl	68	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-21D	Batch#:	270270
Lab ID:	309481-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.12 J	2.0	0.067
Arsenic	3.7	1.5	0.065
Barium	67	0.25	0.029
Beryllium	0.23	0.098	0.0098
Cadmium	0.15 J	0.25	0.016
Chromium	40	0.25	0.048
Cobalt	8.0	0.25	0.014
Copper	22	0.25	0.056
Lead	24	0.98	0.055
Molybdenum	0.55	0.25	0.026
Nickel	46	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	29	0.25	0.051
Zinc	51	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9D	Batch#:	270270
Lab ID:	309481-002	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.14 J	2.0	0.068
Arsenic	4.1	1.5	0.065
Barium	75	0.25	0.030
Beryllium	0.24	0.099	0.0099
Cadmium	0.15 J	0.25	0.016
Chromium	40	0.25	0.048
Cobalt	8.2	0.25	0.014
Copper	22	0.25	0.056
Lead	28	0.99	0.056
Molybdenum	0.58	0.25	0.026
Nickel	44	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	32	0.25	0.052
Zinc	58	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-10D	Batch#:	270270
Lab ID:	309481-003	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.12 J	2.0	0.068
Arsenic	4.7	1.5	0.065
Barium	84	0.25	0.030
Beryllium	0.26	0.099	0.0099
Cadmium	0.20 J	0.25	0.016
Chromium	41	0.25	0.048
Cobalt	8.3	0.25	0.014
Copper	26	0.25	0.056
Lead	51	0.99	0.056
Molybdenum	0.70	0.25	0.026
Nickel	39	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	36	0.25	0.052
Zinc	68	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-11D	Batch#:	270270
Lab ID:	309481-004	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.27 J	2.0	0.068
Arsenic	5.1	1.5	0.066
Barium	96	0.25	0.030
Beryllium	0.27	0.10	0.010
Cadmium	0.27	0.25	0.016
Chromium	41	0.25	0.049
Cobalt	8.8	0.25	0.014
Copper	29	0.25	0.057
Lead	31	1.0	0.056
Molybdenum	0.73	0.25	0.026
Nickel	41	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	39	0.25	0.052
Zinc	72	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-12D	Batch#:	270270
Lab ID:	309481-005	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.30 J	2.0	0.067
Arsenic	5.1	1.5	0.065
Barium	100	0.25	0.029
Beryllium	0.31	0.098	0.0098
Cadmium	0.36	0.25	0.016
Chromium	44	0.25	0.048
Cobalt	9.1	0.25	0.014
Copper	51	0.25	0.056
Lead	33	0.98	0.055
Molybdenum	0.81	0.25	0.026
Nickel	42	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	43	0.25	0.051
Zinc	70	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-21B	Batch#:	270270
Lab ID:	309481-006	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.30 J	2.0	0.067
Arsenic	4.1	1.5	0.065
Barium	79	0.25	0.029
Beryllium	0.27	0.098	0.0098
Cadmium	0.20 J	0.25	0.016
Chromium	44	0.25	0.048
Cobalt	8.6	0.25	0.014
Copper	140	0.25	0.056
Lead	86	0.98	0.055
Molybdenum	0.65	0.25	0.026
Nickel	52	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	34	0.25	0.051
Zinc	61	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-22B	Batch#:	270270
Lab ID:	309481-007	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.24 J	2.0	0.068
Arsenic	4.1	1.5	0.065
Barium	91	0.25	0.030
Beryllium	0.27	0.099	0.0099
Cadmium	0.14 J	0.25	0.016
Chromium	42	0.25	0.048
Cobalt	8.3	0.25	0.014
Copper	23	0.25	0.056
Lead	20	0.99	0.056
Molybdenum	0.65	0.25	0.026
Nickel	38	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	37	0.25	0.052
Zinc	62	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-23B	Batch#:	270270
Lab ID:	309481-008	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.28 J	1.9	0.067
Arsenic	3.3	1.5	0.064
Barium	56	0.24	0.029
Beryllium	0.19	0.097	0.0098
Cadmium	0.19 J	0.24	0.016
Chromium	32	0.24	0.048
Cobalt	6.7	0.24	0.014
Copper	21	0.24	0.056
Lead	27	0.97	0.055
Molybdenum	0.59	0.24	0.025
Nickel	30	0.24	0.049
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.088
Vanadium	29	0.24	0.051
Zinc	74	0.97	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA

Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270352
Matrix:	Soil	Sampled:	05/03/19
Units:	mg/Kg	Received:	05/03/19
Basis:	dry	Prepared:	05/10/19
Diln Fac:	1.000	Analyzed:	05/10/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-21D	SAMPLE	309481-009	0.17	0.020	0.0035	11%
DTSC-9D	SAMPLE	309481-010	0.16	0.019	0.0034	8%
DTSC-10D	SAMPLE	309481-011	0.19	0.018	0.0031	11%
DTSC-11D	SAMPLE	309481-012	0.040	0.020	0.0036	17%
DTSC-12D	SAMPLE	309481-013	0.52	0.022	0.0038	21%
DTSC-21B	SAMPLE	309481-014	0.50	0.019	0.0034	10%
DTSC-22B	SAMPLE	309481-015	0.25	0.022	0.0038	24%
DTSC-23B	SAMPLE	309481-016	0.15	0.019	0.0034	15%
	BLANK	QC975186	ND	0.018	0.0031	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC974846	Batch#:	270270
Matrix:	Soil	Prepared:	05/08/19
Units:	mg/Kg	Analyzed:	05/08/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	ND	1.5	0.065
Barium	0.11 J	0.25	0.030
Beryllium	ND	0.099	0.0099
Cadmium	ND	0.25	0.016
Chromium	0.052 J	0.25	0.048
Cobalt	ND	0.25	0.014
Copper	ND	0.25	0.056
Lead	ND	0.99	0.056
Molybdenum	0.036 J	0.25	0.026
Nickel	ND	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	ND	0.25	0.052
Zinc	ND	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270270
Units:	mg/Kg	Prepared:	05/08/19
Diln Fac:	1.000	Analyzed:	05/08/19

Type: BS Lab ID: QC974847

Analyte	Spiked	Result	%REC	Limits
Antimony	49.70	47.70	96	80-120
Arsenic	49.70	49.87	100	80-120
Barium	49.70	50.12	101	80-120
Beryllium	24.85	24.33	98	80-120
Cadmium	49.70	48.21	97	80-120
Chromium	49.70	50.74	102	80-120
Cobalt	49.70	49.39	99	80-120
Copper	49.70	49.31	99	80-120
Lead	49.70	50.10	101	80-120
Molybdenum	49.70	50.13	101	80-120
Nickel	49.70	49.70	100	80-120
Selenium	49.70	47.87	96	80-120
Silver	4.970	4.806	97	80-120
Thallium	49.70	49.72	100	80-120
Vanadium	49.70	50.57	102	80-120
Zinc	49.70	50.92	102	80-120

Type: BSD Lab ID: QC974848

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.36	47.89	97	80-120	1	20
Arsenic	49.36	49.75	101	80-120	0	20
Barium	49.36	50.01	101	80-120	0	20
Beryllium	24.68	24.24	98	80-120	0	20
Cadmium	49.36	48.11	97	80-120	0	20
Chromium	49.36	50.58	102	80-120	0	20
Cobalt	49.36	49.28	100	80-120	0	20
Copper	49.36	48.75	99	80-120	0	20
Lead	49.36	50.05	101	80-120	1	20
Molybdenum	49.36	50.00	101	80-120	0	20
Nickel	49.36	49.49	100	80-120	0	20
Selenium	49.36	47.45	96	80-120	0	20
Silver	4.936	4.771	97	80-120	0	20
Thallium	49.36	49.74	101	80-120	1	20
Vanadium	49.36	50.45	102	80-120	0	20
Zinc	49.36	50.78	103	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9B	Batch#:	270270
MSS Lab ID:	309445-001	Sampled:	05/02/19
Matrix:	Soil	Received:	05/02/19
Units:	mg/Kg	Prepared:	05/08/19
Basis:	air dried	Analyzed:	05/08/19
Diln Fac:	1.000		

Type: MS Lab ID: QC974849

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	1.044	49.80	23.92	46 *	75-120
Arsenic	4.189	49.80	55.50	103	80-121
Barium	69.74	49.80	113.1	87	75-125
Beryllium	0.2417	24.90	24.39	97	80-120
Cadmium	0.1406	49.80	50.56	101	80-120
Chromium	39.49	49.80	90.44	102	75-125
Cobalt	7.954	49.80	54.79	94	75-120
Copper	18.70	49.80	70.18	103	80-125
Lead	27.28	49.80	100.8	148 *	75-125
Molybdenum	0.7938	49.80	49.25	97	75-120
Nickel	38.49	49.80	85.91	95	75-125
Selenium	<0.1825	49.80	49.29	99	80-120
Silver	<0.02907	4.980	4.950	99	75-120
Thallium	<0.08713	49.80	45.64	92	75-120
Vanadium	31.27	49.80	82.60	103	78-125
Zinc	52.94	49.80	102.7	100	75-125

Type: MSD Lab ID: QC974850

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.07	20.32	39 *	75-120	15	20
Arsenic	49.07	54.37	102	80-121	1	20
Barium	49.07	125.6	114	75-125	11	20
Beryllium	24.53	23.63	95	80-120	2	20
Cadmium	49.07	49.24	100	80-120	1	20
Chromium	49.07	90.96	105	75-125	1	20
Cobalt	49.07	53.29	92	75-120	1	20
Copper	49.07	71.02	107	80-125	2	20
Lead	49.07	71.51	90	75-125	33 *	20
Molybdenum	49.07	47.41	95	75-120	2	20
Nickel	49.07	85.32	95	75-125	0	20
Selenium	49.07	47.88	98	80-120	1	20
Silver	4.907	4.826	98	75-120	1	20
Thallium	49.07	43.85	89	75-120	3	20
Vanadium	49.07	84.19	108	78-125	3	20
Zinc	49.07	105.8	108	75-125	4	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270352
MSS Lab ID:	309482-001	Sampled:	05/03/19
Matrix:	Soil	Received:	05/03/19
Units:	mg/Kg	Prepared:	05/10/19
Basis:	as received	Analyzed:	05/10/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC975187		0.1538	0.1547	101	80-120		
BSD	QC975188		0.1667	0.1701	102	80-120	1	20
MS	QC975189	0.06822	0.1667	0.2447	106	80-120		
MSD	QC975190		0.1695	0.2396	101	80-120	3	20

RPD= Relative Percent Difference

Moisture			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270243
Matrix:	Soil	Sampled:	05/03/19
Units:	%	Received:	05/03/19
Diln Fac:	1.000	Analyzed:	05/07/19

Field ID	Lab ID	Result	RL
DTSC-21D	309481-009	11	1
DTSC-9D	309481-010	8	1
DTSC-10D	309481-011	11	1
DTSC-11D	309481-012	17	1
DTSC-12D	309481-013	21	1
DTSC-21B	309481-014	10	1
DTSC-22B	309481-015	24	1
DTSC-23B	309481-016	15	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309481	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	270243
MSS Lab ID:	309475-001	Sampled:	05/02/19
Lab ID:	QC974738	Received:	05/03/19
Matrix:	Soil	Analyzed:	05/07/19

MSS Result	Result	RL	RPD	Lim
3.404	4.777	1.000	34 *	26

*= Value outside of QC limits; see narrative

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309810
ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-22D	309810-001
DTSC-23D	309810-002
DTSC-21C	309810-003
DTSC-22C	309810-004
DTSC-23C	309810-005
DTSC-22D	309810-006
DTSC-23D	309810-007
DTSC-21C	309810-008
DTSC-22C	309810-009
DTSC-23C	309810-010

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

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Date: 05/22/2019

CA ELAP# 2896, NELAP# 4044-001

CASE NARRATIVE

Laboratory number: 309810
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/14/19
Samples Received: 05/14/19

This data package contains sample and QC results for five soil samples, requested for the above referenced project on 05/14/19. The samples were received cold and intact. This report was revised on 05/30/19 to report Technical Chlordane.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270530; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

High recoveries were observed for diesel C10-C24 in the MS/MSD for batch 270503; the parent sample was not a project sample, the LCS was within limits, and the associated RPD was within limits. A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 270544 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 270590 due to insufficient sample amount. Naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 270544; these analytes were not detected in the sample at or above the RL. Toluene and styrene were detected between the MDL and the RL in the method blank for batch 270590; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC975976, QC975977 (batch 270543) were not reported because the parent sample required a dilution that would have diluted out the spikes. Matrix spikes QC975719, QC975720 (batch 270475) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recoveries were observed for nitrobenzene-d5 in the method blank/LCS for batch 270475 and the method blank/LCS for batch 270543. A number of samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Matrix

CASE NARRATIVE

Laboratory number: 309810
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/14/19
Samples Received: 05/14/19

Pesticides (EPA 8081A):

spikes QC975916, QC975917 (batch 270526) were not reported because the parent sample required a dilution that would have diluted out the spikes. A number of samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Matrix spikes QC975916, QC975917 (batch 270526) were not reported because the parent sample required a dilution that would have diluted out the spikes. DTSC-22C (lab # 309810-004) and DTSC-23C (lab # 309810-005) were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-23C (lab # 309810-005); the BS/BSD were within limits, and the associated RPD was within limits. High recovery was observed for chromium in the MSD of DTSC-23C (lab # 309810-005); the BS/BSD were within limits, and the associated RPD was within limits. Barium and copper were detected between the MDL and the RL in the method blank for batch 270583; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 309810

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-22D

Laboratory Sample ID :

309810-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.50	C,J	5.6	0.31	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Heptachlor epoxide	0.72	J	5.6	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	2.5	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	4.4	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.46	C,J	11	0.34	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.8	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.2	C,J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	3.6	C,J	5.6	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	5.0	J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	31		13	6.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Total PCBs	31		13		ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.18	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.7		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	67		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.21	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	26		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.94		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-23D

Laboratory Sample ID :

309810-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	2.2	C,J	11	0.76	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Dieldrin	5.1	C,J	22	0.87	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	5.6	C,J	22	0.79	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endrin	3.6	C,J	22	0.65	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endosulfan sulfate	4.9	C,J	22	0.73	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	9.2	C,J	22	0.89	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Chlordane (Technical)	46	J	260	39	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	5.7	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	8.1	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	210		20	13	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Total PCBs	210		20		ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.20	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.6		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	53		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.21		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.45		0.25	0.017	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.5		0.25	0.015	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	18		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	21		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.70		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	36		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	28		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	48		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-21C

Laboratory Sample ID :

309810-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	2.1	C,J	22	0.87	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	2.3	J	22	0.79	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	1.6	C,J	22	0.79	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	8.3	J	22	0.89	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Chlordane (Technical)	49	J	260	39	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	5.1	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	6.6	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	36		20	13	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Total PCBs	36		20		ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.25	J	1.9	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.4		1.5	0.064	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	76		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.097	0.0097	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.5		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		0.97	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.64		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	50		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	59		0.97	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-22C

Laboratory Sample ID :

309810-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.54	J	5.5	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	0.55	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.9	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.4	J	11	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.6	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	7.0	J	11	1.7	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.0	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.9	J	5.5	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	63		19	13	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Total PCBs	63		19		ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.27	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.4		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	74		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.21	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.73		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	64		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-23C

Laboratory Sample ID :

309810-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
gamma-BHC	0.54	C,J	5.7	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aldrin	0.63	J	5.7	0.48	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	3.2	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	0.52	C,J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.2	C,J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Chlordane (Technical)	38	J	140	20	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	5.8	C	5.7	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	5.0	J	5.7	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	22		20	11	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Total PCBs	22		20		ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.47	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.5		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	69		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.099	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	22		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	1.0		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	41		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	56		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-22D

Laboratory Sample ID :

309810-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	4.9	0.23	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	30	Y	12	3.7	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	180		60	18	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	29	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	14	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	24	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	21	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	150		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	46	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	290		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	810		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	170		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	200		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	320		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	100		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	300		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	190		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	36	J	61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	290		61	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	400				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.24		0.020	0.0061	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	17		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-23D

Laboratory Sample ID :

309810-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.8	J	6.1	0.29	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	110	Y	13	3.8	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	570		63	19	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	690		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	790		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	58	J	150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	480		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	4,100		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	710		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	2,700		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	4,200		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	1,100		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	1,200		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,300		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	340		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,300		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	770		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	150	J	150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	1,000		150	31	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,800				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.32		0.020	0.0060	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	20		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-21C

Laboratory Sample ID :

309810-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.70	J	4.8	0.23	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	58	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	410		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	46	J	190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Phenanthrene	230		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	55	J	190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	470		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	750		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	250		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	310		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	470		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150	J	190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	390		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	270		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	56	J	190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	420		190	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	540				ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Mercury	0.24		0.018	0.0055	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-22C

Laboratory Sample ID :

309810-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.79	J	4.9	0.23	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	50	Y	5.8	1.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	250		29	8.9	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	21	J	58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	34	J	58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	27	J	58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	18	J	58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	220		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	59		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	450		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	950		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	300		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	480		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	410		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	270		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	52	J	58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	370		58	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	570				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.21		0.020	0.0061	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	15		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-23C

Laboratory Sample ID :

309810-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.76	J	6.0	0.28	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	58	Y	7.1	2.2	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	270		35	11	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	37	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	150		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	21	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	18	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	270		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	100		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	940		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,800		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	590		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	700		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,100		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	260		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	960		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	630		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	110		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	860		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,300				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.21		0.022	0.0065	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	29		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

309810



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Sampler Name(s):
Lizzie Hightower
Mayra Dadroneva
Kevin Halpin

Signature(s):
[Signatures]

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
1	DTSC-22d	5/14/19	1125	SOIL	NONE
2	DTSC-23d	↓	1130	↓	↓
3	DTSC-21C	↓	1450	↓	↓
4	DTSC-22DC	↓	1505	↓	↓
5	DTSC-23C	↓	1458	↓	↓

Date: 5/14/19 Page: 1 of 1

Analyses Required

TPH-g, d, -mo by Method	8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
1	X	X	X	X	X	X	X	X	2
2	X	X	X	X	X	X	X	X	↓
3	X	X	X	X	X	X	X	X	↓
4	X	X	X	X	X	X	X	X	↓
5	X	X	X	X	X	X	X	X	↓

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Neal Hughes; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; neal.hughes@rpsgroup.com; elizabeth.hightower@rpsgroup.com, mayra.dadroneva@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report: Routine (Level 2) Level 3 Level 4 EDD
TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:

Printed Name: Kevin Halpin
Signature: *[Signature]*
Company: RPS
Time/Date: 5/14/19 @ 16:21

RECEIVED BY:

Printed Name: Pat Gonzalez
Signature: *[Signature]*
Company: Enthality
Time/Date: 5/14/19 16:21

RELINQUISHED BY:

Printed Name
Signature
Company
Time/Date

RECEIVED BY:

Printed Name
Signature
Company
Time/Date

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 300810 Client: RPS
 Date Received: 5/14/19 Project: 16-1408E

Section 2: Samples received in a cooler? Yes, how many? 2 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 5/14/19 By (print) RV (sign) RV
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: Important : Notify PM if temperature exceeds 6°C or arrive frozen.

Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 5.6, #2: 8.6, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	<input checked="" type="checkbox"/>		
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>		
If YES, what time were they transferred to freezer? <u>1730</u> <u>RV</u>			
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>		
Are there any missing / extra samples?		<input checked="" type="checkbox"/>	
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>		
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>		
Does the container count match the COC?	<input checked="" type="checkbox"/>		
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for unpreserved VOAs?			<input checked="" type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>		
Are bubbles > 6mm absent in VOA samples?			<input checked="" type="checkbox"/>
Was the client contacted concerning this sample delivery?		<input checked="" type="checkbox"/>	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			<input checked="" type="checkbox"/>
Did you check preservatives for all bottles for each sample?			<input checked="" type="checkbox"/>
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			<input checked="" type="checkbox"/>
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged in 5/14/19 By (print) RV (sign) RV
 Date Labeled 5/14/19 By (print) RV (sign) RV

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270530
Units:	mg/Kg	Analyzed:	05/16/19
Diln Fac:	1.000		

Type: BS Lab ID: QC975933

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.088	109	80-122

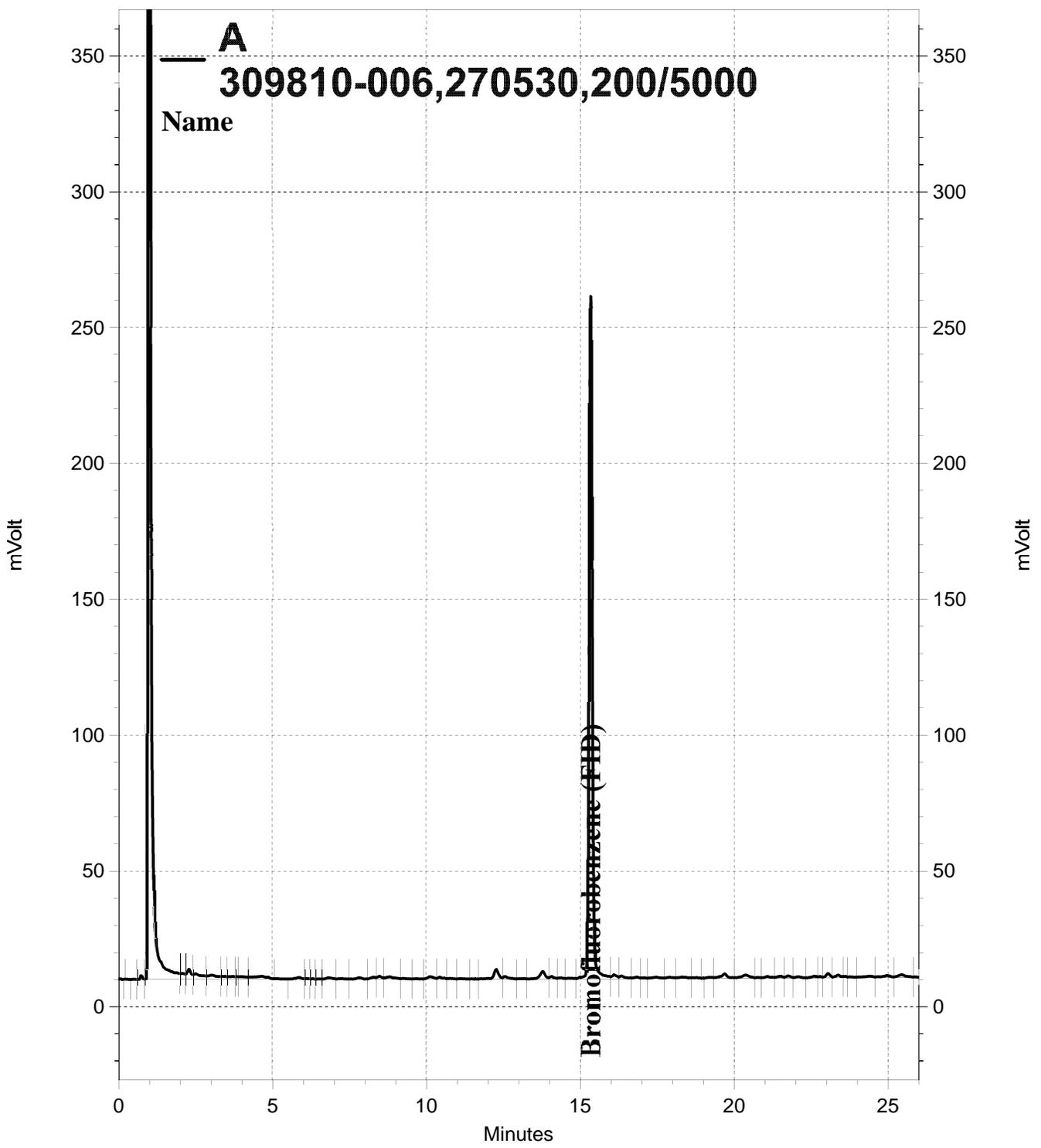
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	58-145

Type: BSD Lab ID: QC975934

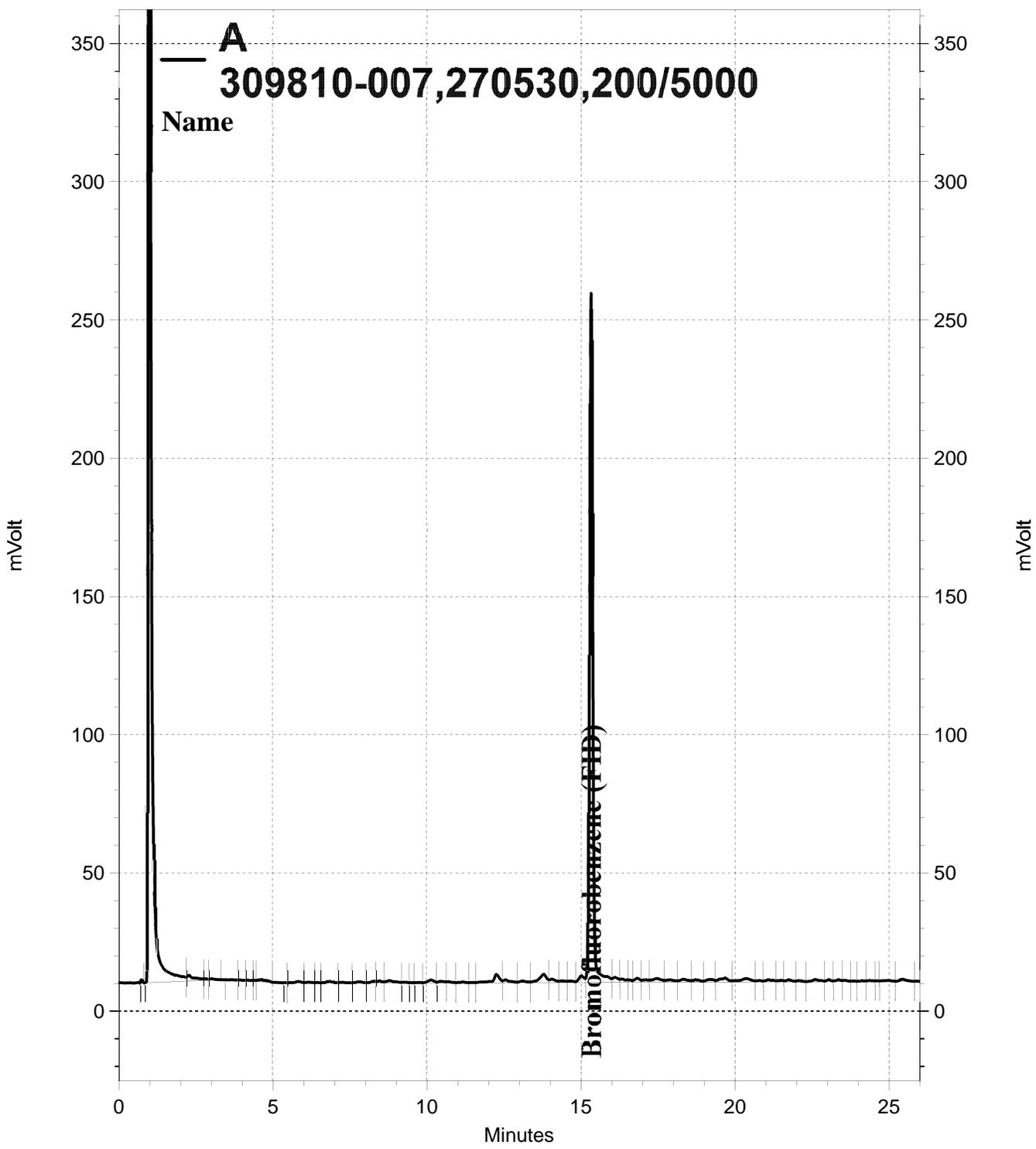
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.073	107	80-122	1	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	95	58-145

RPD= Relative Percent Difference

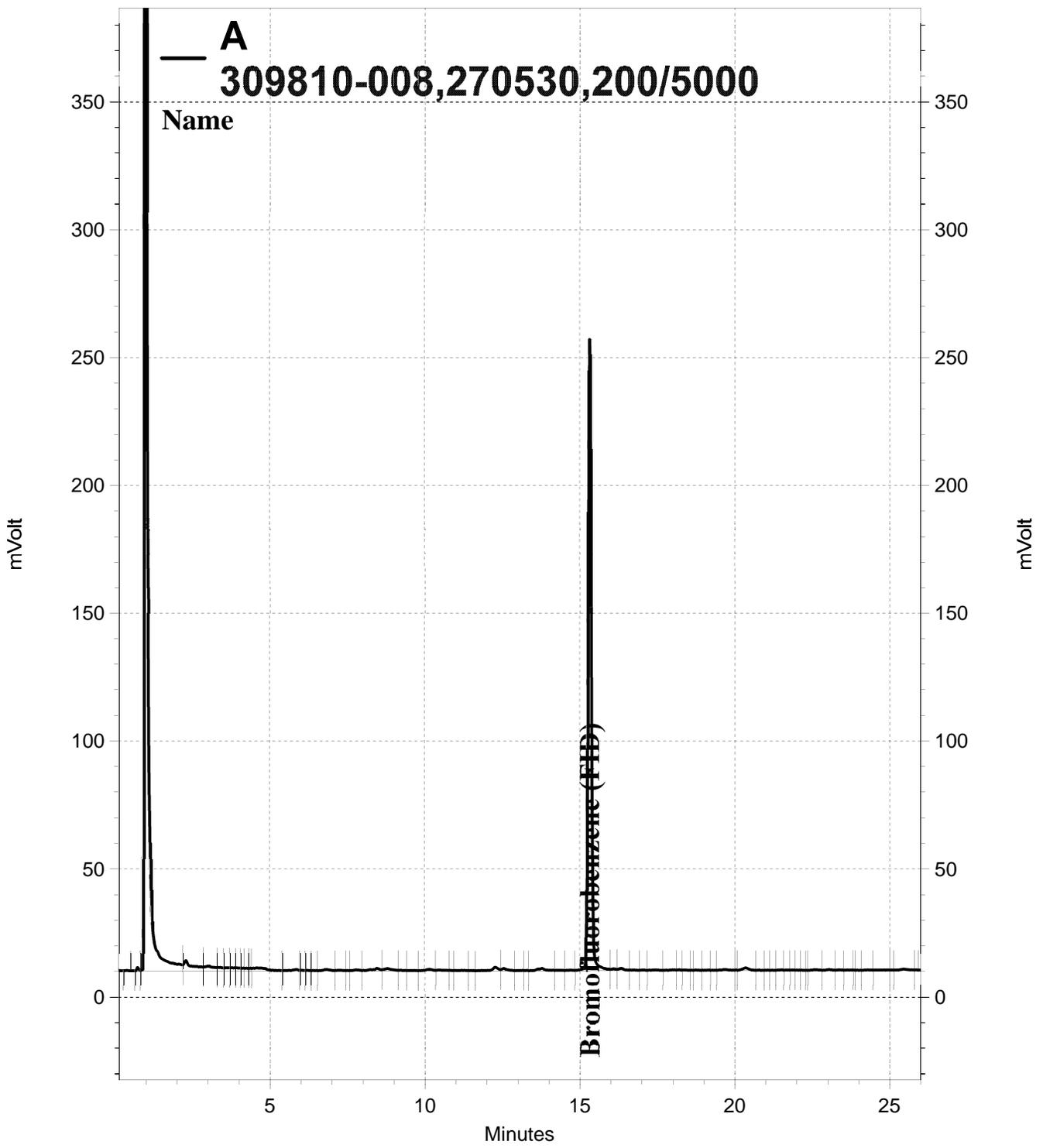


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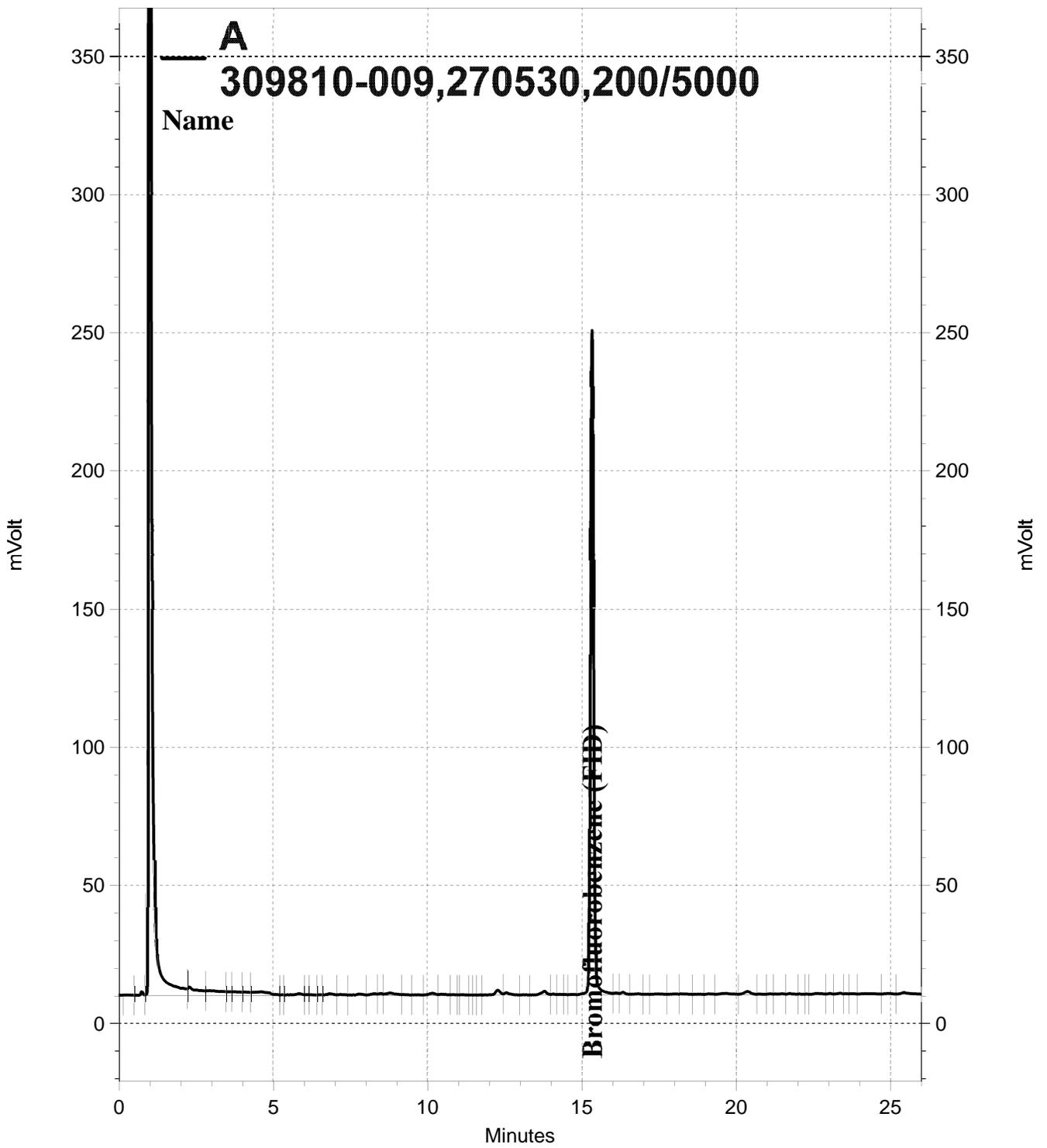


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Name

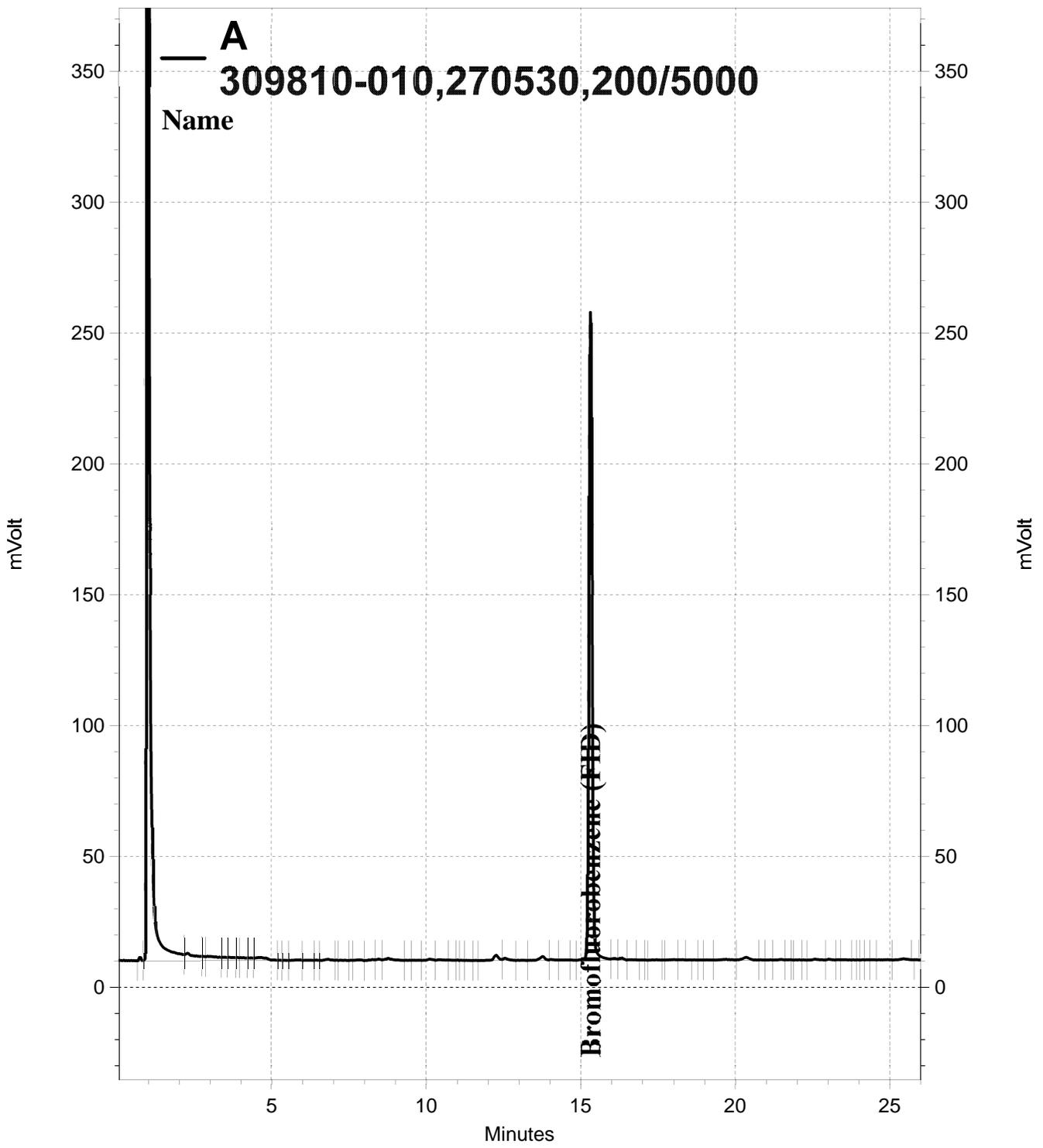
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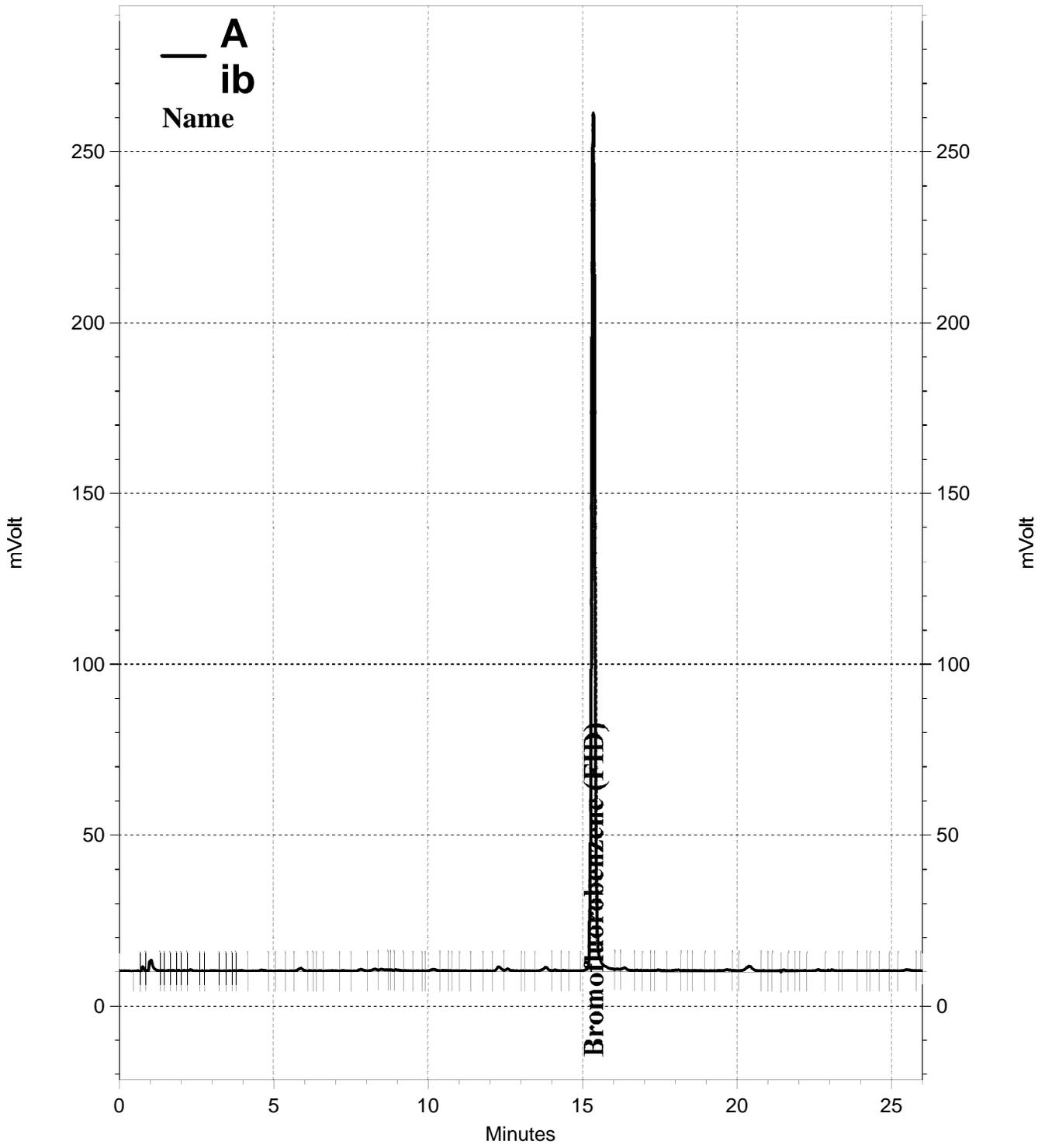
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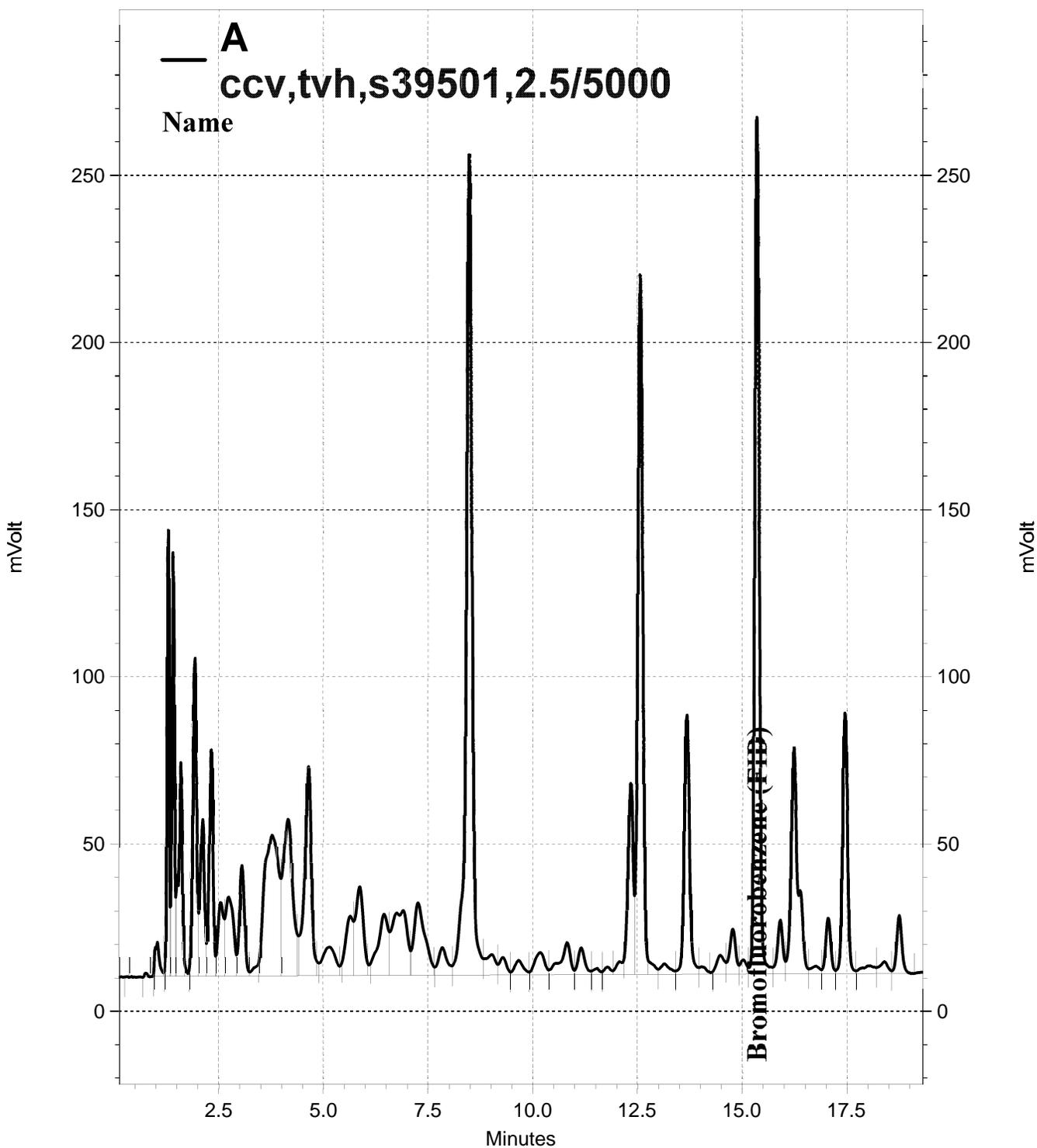
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Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975929	Batch#:	270503
Matrix:	Soil	Prepared:	05/16/19
Units:	mg/Kg	Analyzed:	05/16/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	60.09	120	55-133

Surrogate	%REC	Limits
o-Terphenyl	113	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270503
MSS Lab ID:	309769-001	Sampled:	05/09/19
Matrix:	Soil	Received:	05/13/19
Units:	mg/Kg	Prepared:	05/16/19
Basis:	as received	Analyzed:	05/16/19
Diln Fac:	1.000		

Type: MS Lab ID: QC975930

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	33.67	50.12	104.7	142 *	56-125

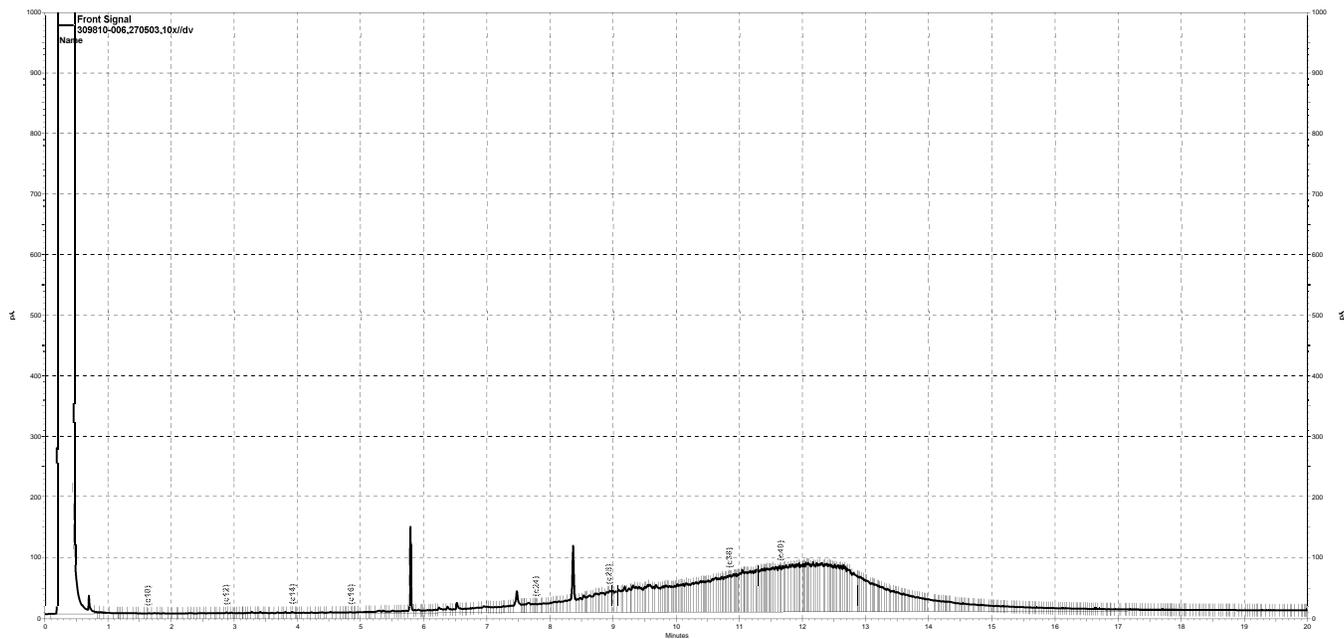
Surrogate	%REC	Limits
o-Terphenyl	89	61-130

Type: MSD Lab ID: QC975931

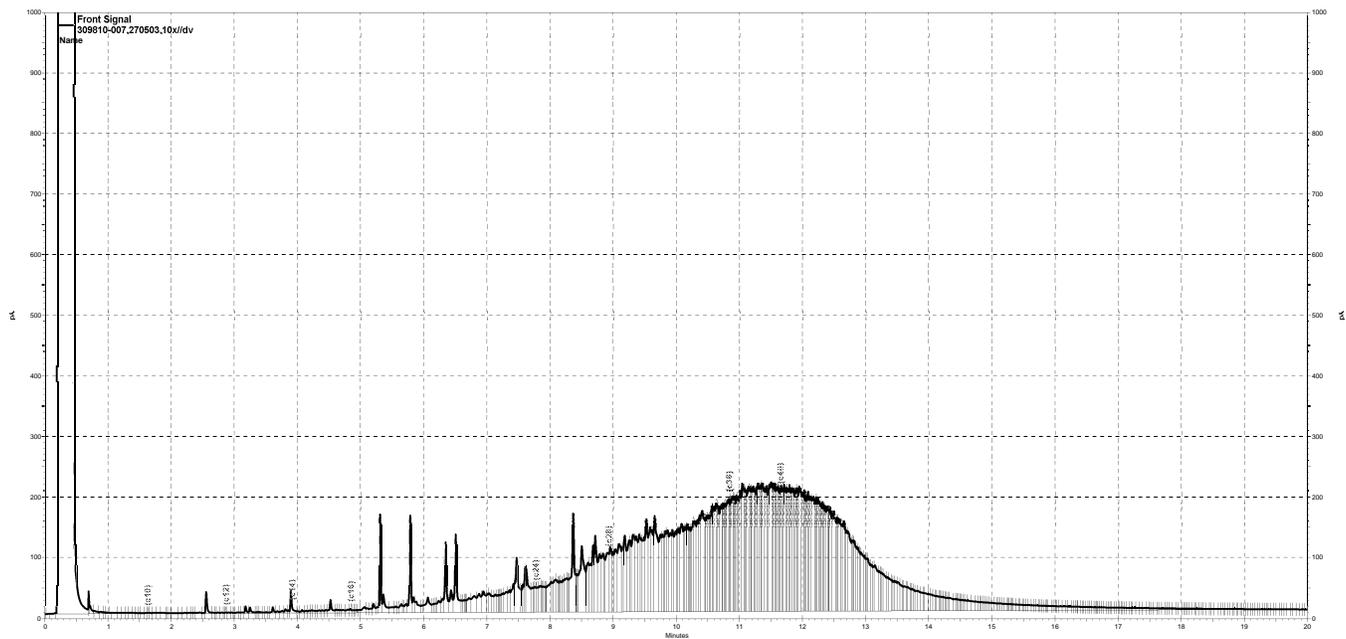
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.98	97.82	128 *	56-125	7	33

Surrogate	%REC	Limits
o-Terphenyl	95	61-130

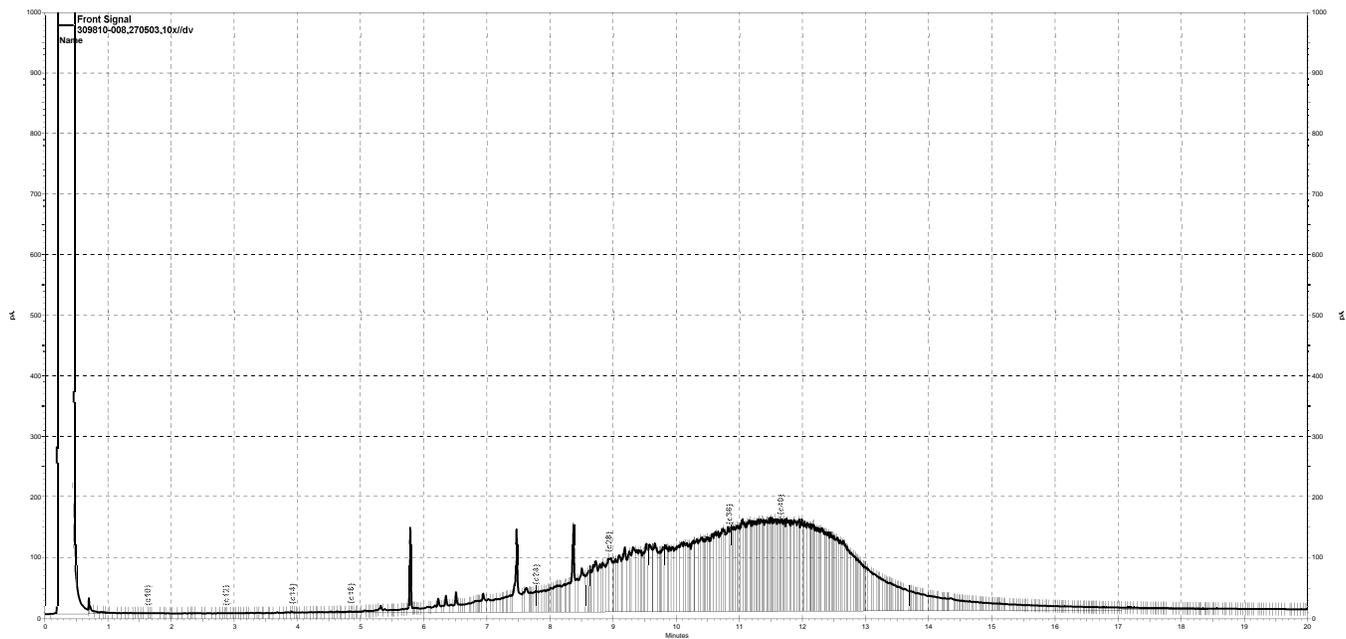
*= Value outside of QC limits; see narrative
 RPD= Relative Percent Difference



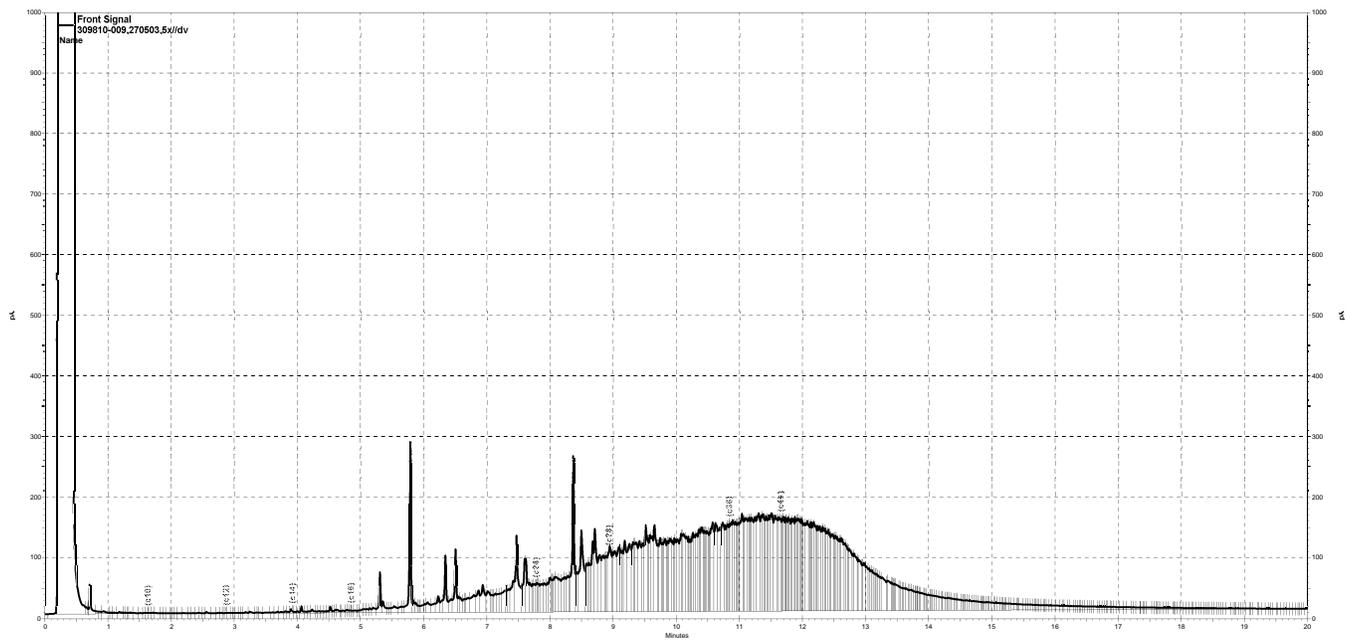
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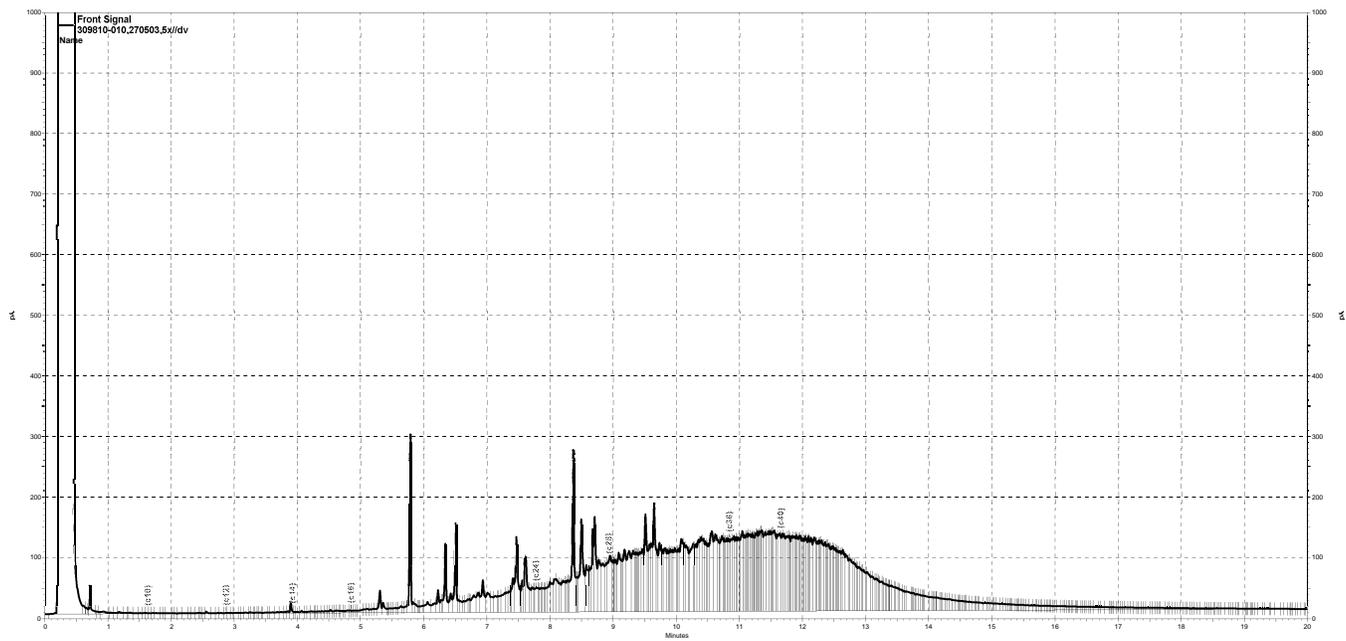
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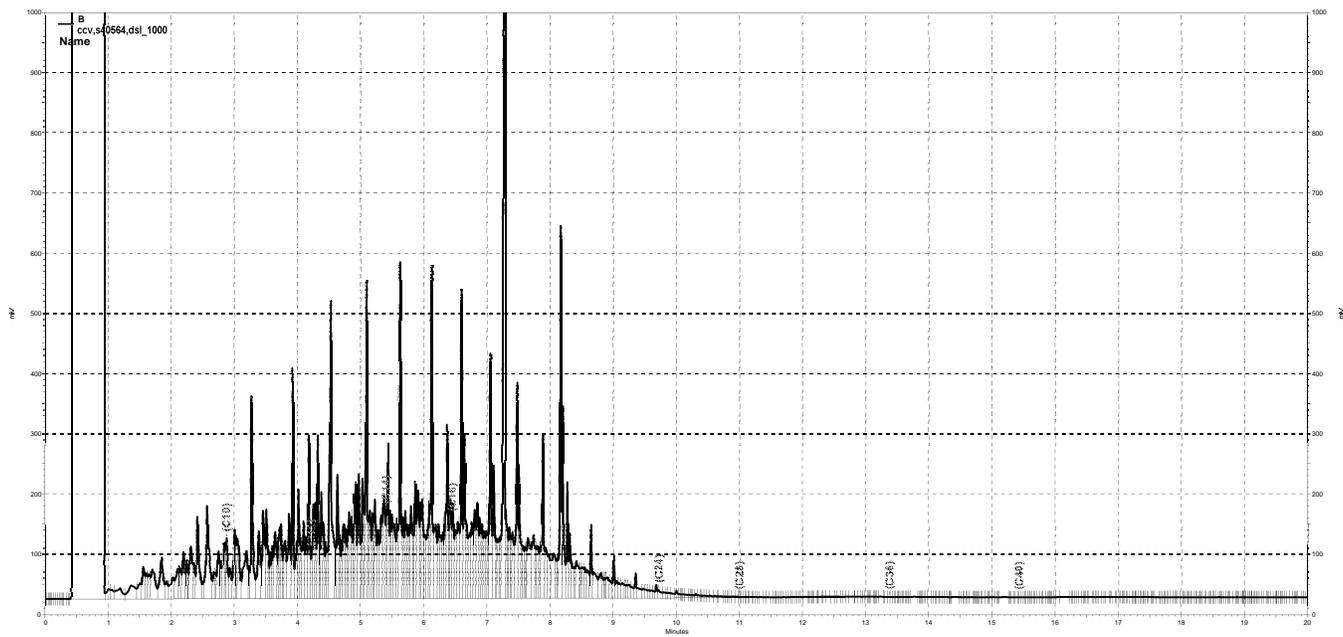
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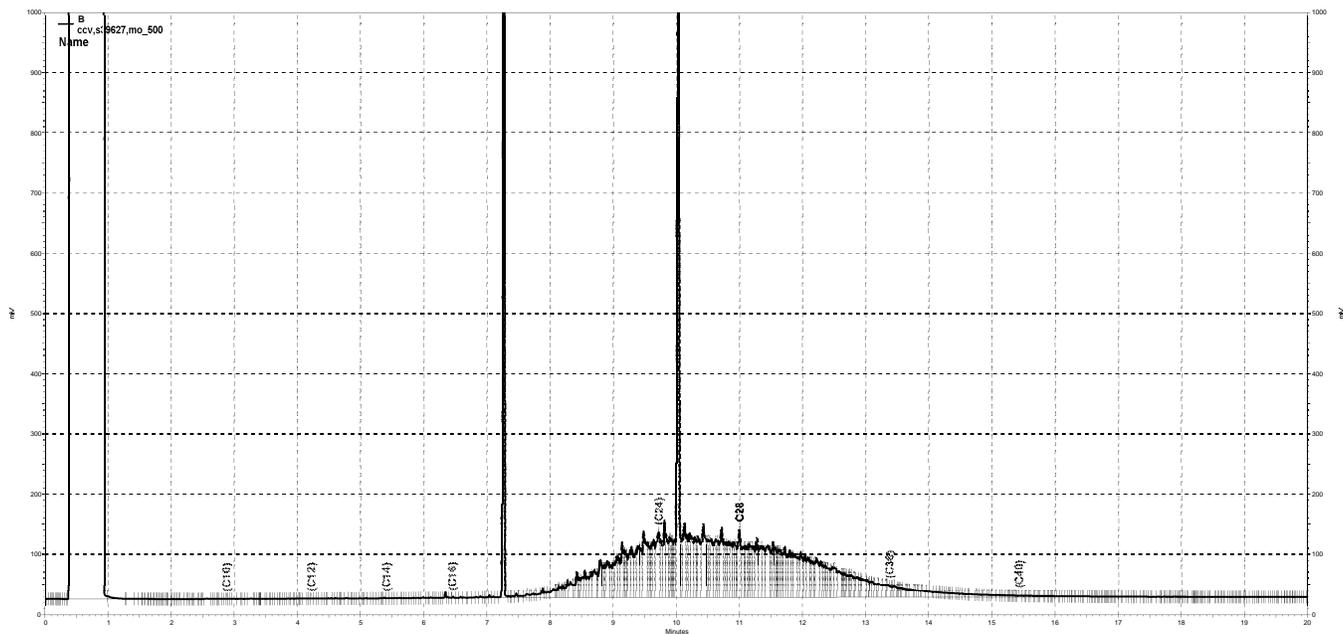
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Purgeable Organics by GC/MS

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22D	Diln Fac:	40.77
Lab ID:	309810-006	Batch#:	270544
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/18/19

Moisture: 17%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	980	130
Freon 113	ND	250	48
1,1-Dichloroethene	ND	250	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	44
trans-1,2-Dichloroethene	ND	250	50
Vinyl Acetate	ND	2,500	57
1,1-Dichloroethane	ND	250	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	250	49
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	52
1,1,1-Trichloroethane	ND	250	52
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	45
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	43
Trichloroethene	ND	250	49
1,2-Dichloropropane	ND	250	42
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	41
4-Methyl-2-Pentanone	ND	490	40
cis-1,3-Dichloropropene	ND	250	54
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	250	46
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	47
1,1,1,2-Tetrachloroethane	ND	250	53
Ethylbenzene	ND	250	50
m,p-Xylenes	ND	250	30
o-Xylene	ND	250	50
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	54
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	51
Propylbenzene	ND	250	51
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22D	Diln Fac:	40.77
Lab ID:	309810-006	Batch#:	270544
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/18/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	51
2-Chlorotoluene	ND	250	56
4-Chlorotoluene	ND	250	51
tert-Butylbenzene	ND	250	57
1,2,4-Trimethylbenzene	ND	250	52
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	53
1,3-Dichlorobenzene	ND	250	51
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	54
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	68
Hexachlorobutadiene	ND	250	60
Naphthalene	ND	250	53
1,2,3-Trichlorobenzene	ND	250	66

Surrogate	%REC	Limits
Dibromofluoromethane	84	78-131
1,2-Dichloroethane-d4	80	80-136
Toluene-d8	100	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23D	Diln Fac:	49.07
Lab ID:	309810-007	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 20%

Analyte	Result	RL	MDL
Freon 12	ND	610	64
Chloromethane	ND	610	51
Vinyl Chloride	ND	610	46
Bromomethane	ND	610	210
Chloroethane	ND	610	44
Trichlorofluoromethane	ND	310	48
Acetone	ND	1,200	160
Freon 113	ND	310	60
1,1-Dichloroethene	ND	310	52
Methylene Chloride	ND	1,500	270
Carbon Disulfide	ND	310	59
MTBE	ND	310	55
trans-1,2-Dichloroethene	ND	310	63
Vinyl Acetate	ND	3,100	71
1,1-Dichloroethane	ND	310	58
2-Butanone	ND	610	130
cis-1,2-Dichloroethene	ND	310	61
2,2-Dichloropropane	ND	310	61
Chloroform	ND	310	66
Bromochloromethane	ND	310	65
1,1,1-Trichloroethane	ND	310	65
1,1-Dichloropropene	ND	310	62
Carbon Tetrachloride	ND	310	56
1,2-Dichloroethane	ND	310	51
Benzene	ND	310	54
Trichloroethene	ND	310	61
1,2-Dichloropropane	ND	310	53
Bromodichloromethane	ND	310	55
Dibromomethane	ND	310	51
4-Methyl-2-Pentanone	ND	610	49
cis-1,3-Dichloropropene	ND	310	67
Toluene	ND	310	57
trans-1,3-Dichloropropene	ND	310	56
1,1,2-Trichloroethane	ND	310	60
2-Hexanone	ND	610	56
1,3-Dichloropropane	ND	310	58
Tetrachloroethene	ND	310	59
Dibromochloromethane	ND	310	52
1,2-Dibromoethane	ND	310	53
Chlorobenzene	ND	310	59
1,1,1,2-Tetrachloroethane	ND	310	66
Ethylbenzene	ND	310	63
m,p-Xylenes	ND	310	38
o-Xylene	ND	310	62
Styrene	ND	310	65
Bromoform	ND	310	61
Isopropylbenzene	ND	310	68
1,1,2,2-Tetrachloroethane	ND	310	51
1,2,3-Trichloropropane	ND	310	64
Propylbenzene	ND	310	64
Bromobenzene	ND	310	59

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23D	Diln Fac:	49.07
Lab ID:	309810-007	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	310	64
2-Chlorotoluene	ND	310	70
4-Chlorotoluene	ND	310	64
tert-Butylbenzene	ND	310	72
1,2,4-Trimethylbenzene	ND	310	65
sec-Butylbenzene	ND	310	71
para-Isopropyl Toluene	ND	310	67
1,3-Dichlorobenzene	ND	310	64
1,4-Dichlorobenzene	ND	310	61
n-Butylbenzene	ND	310	68
1,2-Dichlorobenzene	ND	310	69
1,2-Dibromo-3-Chloropropane	ND	310	62
1,2,4-Trichlorobenzene	ND	310	85
Hexachlorobutadiene	ND	310	75
Naphthalene	ND	310	67
1,2,3-Trichlorobenzene	ND	310	82

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	93	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21C	Diln Fac:	43.22
Lab ID:	309810-008	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	40
Vinyl Chloride	ND	480	36
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	960	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21C	Diln Fac:	43.22
Lab ID:	309810-008	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	64

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22C	Diln Fac:	41.65
Lab ID:	309810-009	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 15%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	240	39
Acetone	ND	980	130
Freon 113	ND	240	48
1,1-Dichloroethene	ND	240	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	240	47
MTBE	ND	240	44
trans-1,2-Dichloroethene	ND	240	50
Vinyl Acetate	ND	2,400	57
1,1-Dichloroethane	ND	240	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	240	49
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	53
Bromochloromethane	ND	240	52
1,1,1-Trichloroethane	ND	240	52
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	45
1,2-Dichloroethane	ND	240	41
Benzene	ND	240	43
Trichloroethene	ND	240	49
1,2-Dichloropropane	ND	240	42
Bromodichloromethane	ND	240	44
Dibromomethane	ND	240	41
4-Methyl-2-Pentanone	ND	490	39
cis-1,3-Dichloropropene	ND	240	54
Toluene	ND	240	46
trans-1,3-Dichloropropene	ND	240	45
1,1,2-Trichloroethane	ND	240	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	240	46
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	42
1,2-Dibromoethane	ND	240	43
Chlorobenzene	ND	240	47
1,1,1,2-Tetrachloroethane	ND	240	53
Ethylbenzene	ND	240	50
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	50
Styrene	ND	240	52
Bromoform	ND	240	49
Isopropylbenzene	ND	240	54
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	51
Propylbenzene	ND	240	51
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22C	Diln Fac:	41.65
Lab ID:	309810-009	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	51
2-Chlorotoluene	ND	240	56
4-Chlorotoluene	ND	240	51
tert-Butylbenzene	ND	240	57
1,2,4-Trimethylbenzene	ND	240	52
sec-Butylbenzene	ND	240	56
para-Isopropyl Toluene	ND	240	53
1,3-Dichlorobenzene	ND	240	51
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	54
1,2-Dichlorobenzene	ND	240	56
1,2-Dibromo-3-Chloropropane	ND	240	50
1,2,4-Trichlorobenzene	ND	240	68
Hexachlorobutadiene	ND	240	60
Naphthalene	ND	240	53
1,2,3-Trichlorobenzene	ND	240	66

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23C	Diln Fac:	42.78
Lab ID:	309810-010	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 29%

Analyte	Result	RL	MDL
Freon 12	ND	600	62
Chloromethane	ND	600	51
Vinyl Chloride	ND	600	46
Bromomethane	ND	600	210
Chloroethane	ND	600	43
Trichlorofluoromethane	ND	300	47
Acetone	ND	1,200	160
Freon 113	ND	300	59
1,1-Dichloroethene	ND	300	51
Methylene Chloride	ND	1,500	270
Carbon Disulfide	ND	300	58
MTBE	ND	300	54
trans-1,2-Dichloroethene	ND	300	62
Vinyl Acetate	ND	3,000	70
1,1-Dichloroethane	ND	300	57
2-Butanone	ND	600	130
cis-1,2-Dichloroethene	ND	300	60
2,2-Dichloropropane	ND	300	60
Chloroform	ND	300	65
Bromochloromethane	ND	300	64
1,1,1-Trichloroethane	ND	300	64
1,1-Dichloropropene	ND	300	61
Carbon Tetrachloride	ND	300	55
1,2-Dichloroethane	ND	300	50
Benzene	ND	300	53
Trichloroethene	ND	300	60
1,2-Dichloropropane	ND	300	52
Bromodichloromethane	ND	300	54
Dibromomethane	ND	300	50
4-Methyl-2-Pentanone	ND	600	49
cis-1,3-Dichloropropene	ND	300	66
Toluene	ND	300	56
trans-1,3-Dichloropropene	ND	300	55
1,1,2-Trichloroethane	ND	300	59
2-Hexanone	ND	600	55
1,3-Dichloropropane	ND	300	57
Tetrachloroethene	ND	300	58
Dibromochloromethane	ND	300	51
1,2-Dibromoethane	ND	300	53
Chlorobenzene	ND	300	58
1,1,1,2-Tetrachloroethane	ND	300	65
Ethylbenzene	ND	300	62
m,p-Xylenes	ND	300	37
o-Xylene	ND	300	61
Styrene	ND	300	63
Bromoform	ND	300	60
Isopropylbenzene	ND	300	67
1,1,2,2-Tetrachloroethane	ND	300	50
1,2,3-Trichloropropane	ND	300	62
Propylbenzene	ND	300	62
Bromobenzene	ND	300	58

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23C	Diln Fac:	42.78
Lab ID:	309810-010	Batch#:	270590
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	300	63
2-Chlorotoluene	ND	300	69
4-Chlorotoluene	ND	300	63
tert-Butylbenzene	ND	300	70
1,2,4-Trimethylbenzene	ND	300	64
sec-Butylbenzene	ND	300	69
para-Isopropyl Toluene	ND	300	65
1,3-Dichlorobenzene	ND	300	63
1,4-Dichlorobenzene	ND	300	60
n-Butylbenzene	ND	300	66
1,2-Dichlorobenzene	ND	300	68
1,2-Dibromo-3-Chloropropane	ND	300	61
1,2,4-Trichlorobenzene	ND	300	84
Hexachlorobutadiene	ND	300	74
Naphthalene	ND	300	65
1,2,3-Trichlorobenzene	ND	300	81

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270544
Units:	ug/Kg	Analyzed:	05/17/19
Diln Fac:	1.000		

Type: BS Lab ID: QC975982

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.92	112	69-142
Benzene	25.00	26.98	108	79-123
Trichloroethene	25.00	26.44	106	79-126
Toluene	25.00	27.46	110	78-120
Chlorobenzene	25.00	26.07	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	83	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	116	80-129

Type: BSD Lab ID: QC975983

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.66	103	69-142	8	23
Benzene	25.00	25.19	101	79-123	7	20
Trichloroethene	25.00	25.24	101	79-126	5	20
Toluene	25.00	25.75	103	78-120	6	20
Chlorobenzene	25.00	24.68	99	80-122	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	116	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975984	Batch#:	270544
Matrix:	Soil	Analyzed:	05/17/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975984	Batch#:	270544
Matrix:	Soil	Analyzed:	05/17/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	0.23 J	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	0.34 J	5.0	0.13
1,2,3-Trichlorobenzene	0.32 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270590
Units:	ug/Kg	Analyzed:	05/20/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976168

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.47	98	69-142
Benzene	25.00	26.77	107	79-123
Trichloroethene	25.00	25.45	102	79-126
Toluene	25.00	27.63	111	78-120
Chlorobenzene	25.00	26.06	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

Type: BSD Lab ID: QC976169

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.67	95	69-142	3	23
Benzene	25.00	26.20	105	79-123	2	20
Trichloroethene	25.00	25.05	100	79-126	2	20
Toluene	25.00	26.41	106	78-120	5	20
Chlorobenzene	25.00	25.03	100	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	101	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	0.13 J	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.56 J	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-22D	Batch#:	270475
Lab ID:	309810-006	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/15/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 17%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	29 J	61	12		
Acenaphthylene	14 J	61	12		
Acenaphthene	24 J	61	12		
Fluorene	21 J	61	12		
Phenanthrene	150	61	12		
Anthracene	46 J	61	12		
Fluoranthene	290	61	12		
Pyrene	810	61	12		
Benzo(a)anthracene	170	61	12	0.10	17
Chrysene	200	61	12	0.0010	0.20
Benzo(b)fluoranthene	320	61	12	0.10	32
Benzo(k)fluoranthene	100	61	12	0.010	1.0
Benzo(a)pyrene	300	61	12	1.0	300
Indeno(1,2,3-cd)pyrene	190	61	12	0.10	19
Dibenz(a,h)anthracene	36 J	61	12	1.0	36
Benzo(g,h,i)perylene	290	61	12		
Total Benzo(a)pyrene Equiv.					400

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-23D	Batch#:	270475
Lab ID:	309810-007	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/15/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Moisture: 20%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	690	150	31		
Acenaphthylene	790	150	31		
Acenaphthene	58 J	150	31		
Fluorene	480	150	31		
Phenanthrene	4,100	150	31		
Anthracene	710	150	31		
Fluoranthene	2,700	150	31		
Pyrene	4,200	150	31		
Benzo(a)anthracene	1,100	150	31	0.10	110
Chrysene	1,200	150	31	0.0010	1.2
Benzo(b)fluoranthene	1,300	150	31	0.10	130
Benzo(k)fluoranthene	340	150	31	0.010	3.4
Benzo(a)pyrene	1,300	150	31	1.0	1,300
Indeno(1,2,3-cd)pyrene	770	150	31	0.10	77
Dibenz(a,h)anthracene	150 J	150	31	1.0	150
Benzo(g,h,i)perylene	1,000	150	31		
Total Benzo(a)pyrene Equiv.					1,800

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value

DO= Diluted Out

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-21C	Batch#:	270475
Lab ID:	309810-008	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/15/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	33.33		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	190	37		
Acenaphthylene	46 J	190	37		
Acenaphthene	ND	190	37		
Fluorene	ND	190	37		
Phenanthrene	230	190	37		
Anthracene	55 J	190	37		
Fluoranthene	470	190	37		
Pyrene	750	190	37		
Benzo(a)anthracene	250	190	37	0.10	25
Chrysene	310	190	37	0.0010	0.31
Benzo(b)fluoranthene	470	190	37	0.10	47
Benzo(k)fluoranthene	150 J	190	37	0.010	1.5
Benzo(a)pyrene	390	190	37	1.0	390
Indeno(1,2,3-cd)pyrene	270	190	37	0.10	27
Dibenz(a,h)anthracene	56 J	190	37	1.0	56
Benzo(g,h,i)perylene	420	190	37		
Total Benzo(a)pyrene Equiv.					540

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-22C	Batch#:	270543
Lab ID:	309810-009	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 15%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	21 J	58	12		
Acenaphthylene	34 J	58	12		
Acenaphthene	27 J	58	12		
Fluorene	18 J	58	12		
Phenanthrene	220	58	12		
Anthracene	59	58	12		
Fluoranthene	450	58	12		
Pyrene	950	58	12		
Benzo(a)anthracene	260	58	12	0.10	26
Chrysene	300	58	12	0.0010	0.30
Benzo(b)fluoranthene	480	58	12	0.10	48
Benzo(k)fluoranthene	150	58	12	0.010	1.5
Benzo(a)pyrene	410	58	12	1.0	410
Indeno(1,2,3-cd)pyrene	270	58	12	0.10	27
Dibenz(a,h)anthracene	52 J	58	12	1.0	52
Benzo(g,h,i)perylene	370	58	12		
Total Benzo(a)pyrene Equiv.					570

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-23C	Batch#:	270543
Lab ID:	309810-010	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 29%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	37 J	71	14		
Acenaphthylene	150	71	14		
Acenaphthene	21 J	71	14		
Fluorene	18 J	71	14		
Phenanthrene	270	71	14		
Anthracene	100	71	14		
Fluoranthene	940	71	14		
Pyrene	1,800	71	14		
Benzo(a)anthracene	590	71	14	0.10	59
Chrysene	700	71	14	0.0010	0.70
Benzo(b)fluoranthene	1,100	71	14	0.10	110
Benzo(k)fluoranthene	260	71	14	0.010	2.6
Benzo(a)pyrene	960	71	14	1.0	960
Indeno(1,2,3-cd)pyrene	630	71	14	0.10	63
Dibenz(a,h)anthracene	110	71	14	1.0	110
Benzo(g,h,i)perylene	860	71	14		
Total Benzo(a)pyrene Equiv.					1,300

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975717	Batch#:	270475
Matrix:	Soil	Prepared:	05/15/19
Units:	ug/Kg	Analyzed:	05/16/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	146 *	48-120
2-Fluorobiphenyl	72	39-120
Terphenyl-d14	84	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975718	Batch#:	270475
Matrix:	Soil	Prepared:	05/15/19
Units:	ug/Kg	Analyzed:	05/16/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	31.51	95	57-120
Acenaphthylene	33.33	31.76	95	60-120
Acenaphthene	33.33	30.21	91	64-120
Fluorene	33.33	28.86	87	67-120
Phenanthrene	33.33	31.68	95	64-120
Anthracene	33.33	32.67	98	66-120
Fluoranthene	33.33	30.29	91	73-121
Pyrene	33.33	33.42	100	67-120
Benzo(a)anthracene	33.33	30.26	91	69-121
Chrysene	33.33	20.57	62	48-120
Benzo(b)fluoranthene	33.33	24.91	75	66-120
Benzo(k)fluoranthene	33.33	30.26	91	62-125
Benzo(a)pyrene	33.33	32.38	97	66-120
Indeno(1,2,3-cd)pyrene	33.33	28.11	84	57-120
Dibenz(a,h)anthracene	33.33	23.25	70	45-120
Benzo(g,h,i)perylene	33.33	28.01	84	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	163 *	48-120
2-Fluorobiphenyl	80	39-120
Terphenyl-d14	89	61-120

*= Value outside of QC limits; see narrative

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975974	Batch#:	270543
Matrix:	Soil	Prepared:	05/17/19
Units:	ug/Kg	Analyzed:	05/21/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	159 *	48-120
2-Fluorobiphenyl	82	39-120
Terphenyl-d14	91	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975975	Batch#:	270543
Matrix:	Soil	Prepared:	05/17/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	28.33	85	57-120
Acenaphthylene	33.33	28.40	85	60-120
Acenaphthene	33.33	27.28	82	64-120
Fluorene	33.33	26.15	78	67-120
Phenanthrene	33.33	28.44	85	64-120
Anthracene	33.33	29.04	87	66-120
Fluoranthene	33.33	27.25	82	73-121
Pyrene	33.33	30.44	91	67-120
Benzo(a)anthracene	33.33	26.96	81	69-121
Chrysene	33.33	17.99	54	48-120
Benzo(b)fluoranthene	33.33	29.39	88	66-120
Benzo(k)fluoranthene	33.33	27.92	84	62-125
Benzo(a)pyrene	33.33	28.11	84	66-120
Indeno(1,2,3-cd)pyrene	33.33	26.58	80	57-120
Dibenz(a,h)anthracene	33.33	21.90	66	45-120
Benzo(g,h,i)perylene	33.33	27.48	82	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	148 *	48-120
2-Fluorobiphenyl	73	39-120
Terphenyl-d14	80	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-22D	Batch#:	270797
Lab ID:	309810-001	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/28/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.41
Heptachlor	ND	5.6	0.41
Aldrin	0.50 C J	5.6	0.31
Heptachlor epoxide	0.72 J	5.6	0.39
Endosulfan I	ND	5.6	0.41
Dieldrin	2.5 J	11	0.41
4,4'-DDE	4.4 J	11	0.41
Endrin	0.46 C J	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	1.8 J	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	3.2 C J	11	0.46
Chlordane (Technical)	ND	100	20
alpha-Chlordane	3.6 C J	5.6	0.73
gamma-Chlordane	5.0 J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	90	43-125
Decachlorobiphenyl	63	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-23D	Batch#:	270526
Lab ID:	309810-002	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/16/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.64
gamma-BHC	ND	11	0.80
delta-BHC	ND	11	0.79
Heptachlor	ND	11	0.79
Aldrin	ND	11	0.60
Heptachlor epoxide	2.2 C J	11	0.76
Endosulfan I	ND	11	0.79
Dieldrin	5.1 C J	22	0.87
4,4'-DDE	5.6 C J	22	0.79
Endrin	3.6 C J	22	0.65
Endosulfan II	ND	22	0.79
Endosulfan sulfate	4.9 C J	22	0.73
4,4'-DDD	ND	22	0.79
Endrin aldehyde	ND	22	5.8
4,4'-DDT	9.2 C J	22	0.89
Chlordane (Technical)	46 J	260	39
alpha-Chlordane	5.7 C J	11	1.4
gamma-Chlordane	8.1 J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-21C	Batch#:	270526
Lab ID:	309810-003	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/16/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.64
gamma-BHC	ND	11	0.80
delta-BHC	ND	11	0.79
Heptachlor	ND	11	0.79
Aldrin	ND	11	0.60
Heptachlor epoxide	ND	11	0.76
Endosulfan I	ND	11	0.79
Dieldrin	2.1 C J	22	0.87
4,4'-DDE	2.3 J	22	0.79
Endrin	ND	22	0.65
Endosulfan II	ND	22	0.79
Endosulfan sulfate	ND	22	0.73
4,4'-DDD	1.6 C J	22	0.79
Endrin aldehyde	ND	22	5.8
4,4'-DDT	8.3 J	22	0.89
Chlordane (Technical)	49 J	260	39
alpha-Chlordane	5.1 C J	11	1.4
gamma-Chlordane	6.6 J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-22C	Batch#:	270797
Lab ID:	309810-004	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/28/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.32
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.40
Heptachlor	ND	5.5	0.40
Aldrin	ND	5.5	0.30
Heptachlor epoxide	0.54 J	5.5	0.38
Endosulfan I	ND	5.5	0.40
Dieldrin	0.55 C J	11	0.44
4,4'-DDE	1.9 J	11	0.40
Endrin	1.4 J	11	1.0
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.37
4,4'-DDD	1.6 J	11	0.40
Endrin aldehyde	ND	11	2.9
4,4'-DDT	7.0 J	11	1.7
Chlordane (Technical)	ND	99	20
alpha-Chlordane	2.0 C J	5.5	0.71
gamma-Chlordane	2.9 J	5.5	0.55
Methoxychlor	ND	55	7.6
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	84	43-125
Decachlorobiphenyl	63	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-23C	Batch#:	270526
Lab ID:	309810-005	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/16/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.51
beta-BHC	ND	5.7	0.33
gamma-BHC	0.54 C J	5.7	0.41
delta-BHC	ND	5.7	0.41
Heptachlor	ND	5.7	0.41
Aldrin	0.63 J	5.7	0.48
Heptachlor epoxide	ND	5.7	0.39
Endosulfan I	ND	5.7	0.41
Dieldrin	ND	11	0.41
4,4'-DDE	3.2 J	11	0.41
Endrin	ND	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	0.52 C J	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	2.2 C J	11	0.46
Chlordane (Technical)	38 J	140	20
alpha-Chlordane	5.8 C	5.7	0.73
gamma-Chlordane	5.0 J	5.7	0.70
Methoxychlor	ND	57	7.8
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	113	43-125
Decachlorobiphenyl	93	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975906	Batch#:	270526
Matrix:	Soil	Prepared:	05/16/19
Units:	ug/Kg	Analyzed:	05/20/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.090
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.13
delta-BHC	ND	1.1	0.16
Heptachlor	ND	1.1	0.12
Aldrin	ND	1.1	0.094
Heptachlor epoxide	ND	1.1	0.085
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.088
4,4'-DDE	ND	2.2	0.099
Endrin	ND	2.2	0.21
Endosulfan II	ND	2.2	0.12
Endosulfan sulfate	ND	2.2	0.18
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
Chlordane (Technical)	ND	27	4.0
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.11
Methoxychlor	ND	11	2.7
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	64	43-125
Decachlorobiphenyl	69	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975915	Batch#:	270526
Matrix:	Soil	Prepared:	05/16/19
Units:	ug/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	11.96	90	58-131
Heptachlor	13.33	12.18	91	51-133
Aldrin	13.33	11.21	84	52-128
Dieldrin	13.33	10.73	80	59-133
Endrin	13.33	11.98	90	48-154
4,4'-DDT	13.33	10.02 #	75	54-140

Surrogate	%REC	Limits
TCMX	72	43-125
Decachlorobiphenyl	69	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC977004	Batch#:	270797
Matrix:	Soil	Prepared:	05/28/19
Units:	ug/Kg	Analyzed:	05/29/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.10
beta-BHC	ND	1.1	0.065
gamma-BHC	ND	1.1	0.081
delta-BHC	ND	1.1	0.080
Heptachlor	ND	1.1	0.080
Aldrin	ND	1.1	0.061
Heptachlor epoxide	ND	1.1	0.077
Endosulfan I	ND	1.1	0.080
Dieldrin	ND	2.2	0.080
4,4'-DDE	ND	2.2	0.080
Endrin	ND	2.2	0.067
Endosulfan II	ND	2.2	0.080
Endosulfan sulfate	ND	2.2	0.074
4,4'-DDD	ND	2.2	0.080
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
Chlordane (Technical)	ND	20	4.0
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.11
Methoxychlor	ND	11	1.5
Toxaphene	ND	40	13

Surrogate	%REC	Limits
TCMX	76	43-125
Decachlorobiphenyl	78	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC977008	Batch#:	270797
Matrix:	Soil	Prepared:	05/28/19
Units:	ug/Kg	Analyzed:	05/29/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	15.83	119	58-131
Heptachlor	13.33	16.69	125	51-133
Aldrin	13.33	16.11	121	52-128
Dieldrin	13.33	16.69	125	59-133
Endrin	13.33	17.85	134	48-154
4,4'-DDT	13.33	14.10	106	54-140

Surrogate	%REC	Limits
TCMX	105	43-125
Decachlorobiphenyl	111	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-22C	Batch#:	270797
MSS Lab ID:	309810-004	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/28/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Type: MS Lab ID: QC977009

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.4014	13.59	11.49	85	58-126
Heptachlor	<0.3966	13.59	11.78	87	58-127
Aldrin	<0.3035	13.59	10.88	80	55-124
Dieldrin	0.5536	13.59	11.43	80	48-137
Endrin	1.412	13.59	11.79	76	48-158
4,4'-DDT	6.980	13.59	12.94	44	38-155

Surrogate	%REC	Limits
TCMX	81	43-125
Decachlorobiphenyl	59	40-128

Type: MSD Lab ID: QC977010

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.43	11.56	86	58-126	2	36
Heptachlor	13.43	11.68	87	58-127	0	34
Aldrin	13.43	10.79	80	55-124	0	31
Dieldrin	13.43	11.40	81	48-137	1	38
Endrin	13.43	10.86	70	48-158	7	38
4,4'-DDT	13.43	13.42	48	38-155	4	42

Surrogate	%REC	Limits
TCMX	90	43-125
Decachlorobiphenyl	63	40-128

RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	air dried	Prepared:	05/16/19
Batch#:	270526	Analyzed:	05/17/19

Field ID: DTSC-22D Lab ID: 309810-001
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.1
Aroclor-1221	ND	26	8.6
Aroclor-1232	ND	13	7.2
Aroclor-1242	ND	13	9.5
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.3
Aroclor-1260	31	13	6.9
Total PCBs	31	13	

Surrogate	%REC	Limits
Decachlorobiphenyl	112	49-157

Field ID: DTSC-23D Lab ID: 309810-002
 Type: SAMPLE Diln Fac: 3.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	11
Aroclor-1221	ND	39	13
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	14
Aroclor-1248	ND	20	15
Aroclor-1254	ND	20	8.0
Aroclor-1260	210	20	13
Total PCBs	210	20	

Surrogate	%REC	Limits
Decachlorobiphenyl	92	49-157

Field ID: DTSC-21C Lab ID: 309810-003
 Type: SAMPLE Diln Fac: 3.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	11
Aroclor-1221	ND	39	13
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	14
Aroclor-1248	ND	20	15
Aroclor-1254	ND	20	8.0
Aroclor-1260	36	20	13
Total PCBs	36	20	

Surrogate	%REC	Limits
Decachlorobiphenyl	75	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/14/19
Units:	ug/Kg	Received:	05/14/19
Basis:	air dried	Prepared:	05/16/19
Batch#:	270526	Analyzed:	05/17/19

Field ID: DTSC-22C Lab ID: 309810-004
 Type: SAMPLE Diln Fac: 3.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	19	11
Aroclor-1221	ND	39	13
Aroclor-1232	ND	19	11
Aroclor-1242	ND	19	14
Aroclor-1248	ND	19	15
Aroclor-1254	ND	19	8.0
Aroclor-1260	63	19	13
Total PCBs	63	19	

Surrogate	%REC	Limits
Decachlorobiphenyl	134	49-157

Field ID: DTSC-23C Lab ID: 309810-005
 Type: SAMPLE Diln Fac: 3.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	11
Aroclor-1221	ND	41	13
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	15
Aroclor-1248	ND	20	16
Aroclor-1254	ND	20	8.3
Aroclor-1260	22	20	11
Total PCBs	22	20	

Surrogate	%REC	Limits
Decachlorobiphenyl	87	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC975906

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.6
Aroclor-1221	ND	24	4.4
Aroclor-1232	ND	12	3.7
Aroclor-1242	ND	12	4.8
Aroclor-1248	ND	12	5.1
Aroclor-1254	ND	12	2.7
Aroclor-1260	ND	12	4.6
Total PCBs	ND	12	

Surrogate	%REC	Limits
Decachlorobiphenyl	68	49-157

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975907	Batch#:	270526
Matrix:	Soil	Prepared:	05/16/19
Units:	ug/Kg	Analyzed:	05/17/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	140.8	84	63-143
Aroclor-1260	166.7	138.1	83	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	75	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	DTSC-21C	Batch#:	270526
MSS Lab ID:	309810-003	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	ug/Kg	Prepared:	05/16/19
Basis:	air dried	Analyzed:	05/17/19
Diln Fac:	3.000		

Type: MS Lab ID: QC975908

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<10.74	165.0	151.7	92	62-160
Aroclor-1260	36.13	165.0	166.4	79	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	72	49-157

Type: MSD Lab ID: QC975909

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	165.9	179.2	108	62-160	16	43
Aroclor-1260	165.9	255.9	133	53-172	42	44

Surrogate	%REC	Limits
Decachlorobiphenyl	108	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-22D	Batch#:	270583
Lab ID:	309810-001	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.18 J	2.0	0.068
Arsenic	4.7	1.5	0.066
Barium	67	0.25	0.030
Beryllium	0.28	0.099	0.0099
Cadmium	0.21 J	0.25	0.016
Chromium	43	0.25	0.049
Cobalt	8.6	0.25	0.014
Copper	26	0.25	0.057
Lead	25	0.99	0.056
Molybdenum	0.94	0.25	0.026
Nickel	44	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	35	0.25	0.052
Zinc	65	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-23D	Batch#:	270583
Lab ID:	309810-002	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.20 J	2.0	0.069
Arsenic	3.6	1.5	0.066
Barium	53	0.25	0.030
Beryllium	0.21	0.10	0.010
Cadmium	0.45	0.25	0.017
Chromium	35	0.25	0.049
Cobalt	6.5	0.25	0.015
Copper	18	0.25	0.057
Lead	21	1.0	0.056
Molybdenum	0.70	0.25	0.026
Nickel	36	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	28	0.25	0.052
Zinc	48	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-21C	Batch#:	270583
Lab ID:	309810-003	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.25 J	1.9	0.067
Arsenic	4.4	1.5	0.064
Barium	76	0.24	0.029
Beryllium	0.23	0.097	0.0097
Cadmium	0.18 J	0.24	0.016
Chromium	39	0.24	0.048
Cobalt	8.5	0.24	0.014
Copper	24	0.24	0.055
Lead	26	0.97	0.055
Molybdenum	0.64	0.24	0.025
Nickel	50	0.24	0.049
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.087
Vanadium	30	0.24	0.051
Zinc	59	0.97	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-22C	Batch#:	270583
Lab ID:	309810-004	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.27 J	2.0	0.068
Arsenic	4.4	1.5	0.065
Barium	74	0.25	0.030
Beryllium	0.29	0.099	0.0099
Cadmium	0.21 J	0.25	0.016
Chromium	43	0.25	0.049
Cobalt	8.6	0.25	0.014
Copper	27	0.25	0.056
Lead	26	0.99	0.056
Molybdenum	0.73	0.25	0.026
Nickel	44	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	37	0.25	0.052
Zinc	64	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-23C	Batch#:	270583
Lab ID:	309810-005	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.47 J	2.0	0.068
Arsenic	4.5	1.5	0.066
Barium	69	0.25	0.030
Beryllium	0.28	0.099	0.010
Cadmium	0.19 J	0.25	0.016
Chromium	42	0.25	0.049
Cobalt	8.0	0.25	0.014
Copper	25	0.25	0.057
Lead	22	0.99	0.056
Molybdenum	1.0	0.25	0.026
Nickel	41	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	35	0.25	0.052
Zinc	56	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270550
Matrix:	Soil	Sampled:	05/14/19
Units:	mg/Kg	Received:	05/14/19
Basis:	dry	Prepared:	05/17/19
Diln Fac:	1.000	Analyzed:	05/17/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-22D	SAMPLE	309810-006	0.24	0.020	0.0061	17%
DTSC-23D	SAMPLE	309810-007	0.32	0.020	0.0060	20%
DTSC-21C	SAMPLE	309810-008	0.24	0.018	0.0055	10%
DTSC-22C	SAMPLE	309810-009	0.21	0.020	0.0061	15%
DTSC-23C	SAMPLE	309810-010	0.21	0.022	0.0065	29%
	BLANK	QC976012	ND	0.017	0.0051	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270550
MSS Lab ID:	309787-001	Sampled:	05/13/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/17/19
Basis:	as received	Analyzed:	05/17/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC976013		0.1613	0.1695	105	80-120		
BSD	QC976014		0.1563	0.1559	100	80-120	5	20
MS	QC976015	0.03950	0.1639	0.1964	96	80-120		
MSD	QC976016		0.1613	0.1942	96	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976134	Batch#:	270583
Matrix:	Soil	Prepared:	05/20/19
Units:	mg/Kg	Analyzed:	05/20/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.067
Arsenic	ND	1.5	0.065
Barium	0.12 J	0.25	0.029
Beryllium	ND	0.098	0.0098
Cadmium	ND	0.25	0.016
Chromium	ND	0.25	0.048
Cobalt	ND	0.25	0.014
Copper	0.064 J	0.25	0.056
Lead	ND	0.98	0.055
Molybdenum	ND	0.25	0.026
Nickel	ND	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	ND	0.25	0.051
Zinc	ND	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270583
Units:	mg/Kg	Prepared:	05/20/19
Diln Fac:	1.000	Analyzed:	05/20/19

Type: BS Lab ID: QC976135

Analyte	Spiked	Result	%REC	Limits
Antimony	49.95	46.89	94	80-120
Arsenic	49.95	47.83	96	80-120
Barium	49.95	47.25	95	80-120
Beryllium	24.98	23.45	94	80-120
Cadmium	49.95	45.60	91	80-120
Chromium	49.95	48.15	96	80-120
Cobalt	49.95	47.13	94	80-120
Copper	49.95	46.87	94	80-120
Lead	49.95	48.19	96	80-120
Molybdenum	49.95	47.50	95	80-120
Nickel	49.95	47.34	95	80-120
Selenium	49.95	46.63	93	80-120
Silver	4.995	4.615	92	80-120
Thallium	49.95	47.25	95	80-120
Vanadium	49.95	48.09	96	80-120
Zinc	49.95	47.74	96	80-120

Type: BSD Lab ID: QC976136

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.75	46.65	94	80-120	0	20
Arsenic	49.75	47.47	95	80-120	0	20
Barium	49.75	47.44	95	80-120	1	20
Beryllium	24.88	23.22	93	80-120	1	20
Cadmium	49.75	45.69	92	80-120	1	20
Chromium	49.75	47.90	96	80-120	0	20
Cobalt	49.75	46.94	94	80-120	0	20
Copper	49.75	47.05	95	80-120	1	20
Lead	49.75	48.03	97	80-120	0	20
Molybdenum	49.75	47.59	96	80-120	1	20
Nickel	49.75	47.18	95	80-120	0	20
Selenium	49.75	46.43	93	80-120	0	20
Silver	4.975	4.650	93	80-120	1	20
Thallium	49.75	47.48	95	80-120	1	20
Vanadium	49.75	48.20	97	80-120	1	20
Zinc	49.75	47.64	96	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-23C	Batch#:	270583
MSS Lab ID:	309810-005	Sampled:	05/14/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976137

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.4668	49.70	21.34	42 *	75-120
Arsenic	4.539	49.70	54.06	100	80-121
Barium	69.38	49.70	116.2	94	75-125
Beryllium	0.2780	24.85	22.93	91	80-120
Cadmium	0.1887	49.70	48.20	97	80-120
Chromium	42.20	49.70	95.99	108	75-125
Cobalt	7.972	49.70	52.56	90	75-120
Copper	24.65	49.70	76.14	104	80-125
Lead	21.99	49.70	66.12	89	75-125
Molybdenum	1.002	49.70	46.01	91	75-120
Nickel	40.68	49.70	88.68	97	75-125
Selenium	<0.1872	49.70	47.56	96	80-120
Silver	<0.02982	4.970	4.766	96	75-120
Thallium	<0.08938	49.70	43.22	87	75-120
Vanadium	34.66	49.70	84.47	100	78-125
Zinc	55.82	49.70	105.5	100	75-125

Type: MSD Lab ID: QC976138

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.12	19.66	39 *	75-120	7	20
Arsenic	49.12	54.72	102	80-121	2	20
Barium	49.12	117.6	98	75-125	2	20
Beryllium	24.56	23.07	93	80-120	2	20
Cadmium	49.12	48.67	99	80-120	2	20
Chromium	49.12	115.5	149 *	75-125	19	20
Cobalt	49.12	52.97	92	75-120	2	20
Copper	49.12	75.55	104	80-125	0	20
Lead	49.12	67.11	92	75-125	2	20
Molybdenum	49.12	45.98	92	75-120	1	20
Nickel	49.12	89.51	99	75-125	2	20
Selenium	49.12	47.73	97	80-120	2	20
Silver	4.912	4.772	97	75-120	1	20
Thallium	49.12	42.87	87	75-120	0	20
Vanadium	49.12	85.76	104	78-125	2	20
Zinc	49.12	107.5	105	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270537
Matrix:	Soil	Sampled:	05/14/19
Units:	%	Received:	05/14/19
Diln Fac:	1.000	Analyzed:	05/17/19

Field ID	Lab ID	Result	RL
DTSC-22D	309810-006	17	1
DTSC-23D	309810-007	20	1
DTSC-21C	309810-008	10	1
DTSC-22C	309810-009	15	1
DTSC-23C	309810-010	29	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309810	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	270537
MSS Lab ID:	309796-001	Sampled:	05/14/19
Lab ID:	QC975962	Received:	05/14/19
Matrix:	Miscell.	Analyzed:	05/17/19

MSS Result	Result	RL	RPD	Lim
4.982	5.445	1.000	9	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309851 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-21A	309851-001
DTSC-22A	309851-002
DTSC-23A	309851-003
DTSC-9A	309851-004
DTSC-10A	309851-005
DTSC-11A	309851-006
DTSC-12A	309851-007
DTSC-9C	309851-008
DTSC-10C	309851-009
DTSC-11C	309851-010
DTSC-12C	309851-011
DTSC-21A	309851-012
DTSC-22A	309851-013
DTSC-23A	309851-014
DTSC-9A	309851-015
DTSC-10A	309851-016
DTSC-11A	309851-017
DTSC-12A	309851-018
DTSC-9C	309851-019
DTSC-10C	309851-020
DTSC-11C	309851-021
DTSC-12C	309851-022

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Tracy Babjar
Project Manager

tracy.babjar@enthalpy.com
(510) 204-2226 Ext 13107

Date: 05/23/2019

CASE NARRATIVE

Laboratory number: 309851
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/16/19
Samples Received: 05/15/19

This data package contains sample and QC results for eleven soil samples, requested for the above referenced project on 05/16/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270687; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Matrix spikes QC976226, QC976227 (batch 270602) were not reported because the parent sample required a dilution that would have diluted out the spikes. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 270544 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 270590 due to insufficient sample amount. Naphthalene, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 270544; these analytes were not detected in samples at or above the RL. Toluene and styrene were detected between the MDL and the RL in the method blank for batch 270590; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC975976, QC975977 (batch 270543) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recoveries were observed for nitrobenzene-d5 in the method blank/LCS for batch 270543. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 309851
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/16/19
Samples Received: 05/15/19

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-11A (lab # 309851-006); the BS/BSD were within limits, and the associated RPD was within limits. A number of analytes were detected between the MDL and the RL in the method blank for batch 270694; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 309851

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-21A

Laboratory Sample ID :

309851-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	1.5	J	22	0.97	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	6.5	J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.7	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.8	C,J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	23		13	6.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.21	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	76		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.16	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	35		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.62		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	55		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	67		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-22A

Laboratory Sample ID :

309851-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor	3.1	C,J	5.6	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Heptachlor epoxide	0.80	C,J	5.6	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	1.4	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.5	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.0	C,J	11	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	0.70	C,J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	4.0	C,J	5.6	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	16		13	9.2	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.17	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.6		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	89		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.098	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	46		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.5		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	34		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	38		0.98	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.87		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-23A

Laboratory Sample ID :

309851-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.63	C,J	5.5	0.30	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Heptachlor epoxide	0.92	C,J	5.5	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	0.73	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	2.1	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.36	C,J	11	0.33	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.0	C,J	11	0.37	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	4.7	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.7	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	5.2	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.2	C,J	5.5	0.68	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	31		13	7.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.3		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	81		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.23	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	39		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	35		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.77		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	61		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-9A

Laboratory Sample ID :

309851-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	4.9	J	23	0.92	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.9	C,J	11	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.3	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	23		14	7.2	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.11	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.3		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	85		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.099	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	29		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.63		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	64		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-10A

Laboratory Sample ID :

309851-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.5	J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.5	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.39	C,J	11	0.34	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan II	0.51	C,J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.1	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.7	J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.7	C,J	5.7	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.7	C,J	5.7	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	15		14	9.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.4		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.24	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	99		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.67		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-11A

Laboratory Sample ID :

309851-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	0.67	C,J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	0.92	C,J	11	0.38	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.7	J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.5	C,J	5.6	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.1	C,J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	12	J	14	9.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.77	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.4		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	56		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.12	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.8		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	16		0.24	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	20		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.51		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	46		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-12A

Laboratory Sample ID :

309851-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
alpha-Chlordane	1.6	C,J	5.6	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.8	J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Antimony	0.13	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.1		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	44		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.18		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.16	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	32		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	5.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	17		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	22		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.42		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	29		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	23		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	48		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-9C

Laboratory Sample ID :

309851-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	2.1	C,J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	2.8	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	4.5	J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.2	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.84	C,J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	20		13	9.2	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.32	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.5		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	77		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.2		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	23		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	37		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.57		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	53		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	69		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-10C

Laboratory Sample ID :

309851-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.57	J	5.4	0.42	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	2.0	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.1	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	0.74	C,J	11	0.36	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	3.2	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.4	J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.3	C,J	5.4	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.1	C,J	5.4	0.54	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	11	J	13	9.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.0		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	73		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.7		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.66		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	56		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-11C

Laboratory Sample ID :

309851-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.5	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	1.1	C,J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endrin	2.2	J	22	0.65	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endosulfan sulfate	2.4	C,J	22	1.7	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	1.2	C,J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	5.4	J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	5.2	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	4.0	C,J	11	1.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	25		20	13	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Antimony	0.12	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.5		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	70		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.099	0.0099	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.19	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.8		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	20		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	23		0.99	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.52		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	49		0.99	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-12C

Laboratory Sample ID :

309851-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	1.0	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.1	C,J	11	0.37	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.0	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	10	J	13	9.1	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.20	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.2		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	59		0.25	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.20		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.16	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.25	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	32		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	29		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.41		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	33		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	28		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	50		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-21A

Laboratory Sample ID :

309851-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.82	J	5.2	0.25	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	40	Y	5.8	1.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	210		29	8.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	23	J	59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	140		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	32	J	59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	270		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	420		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	140		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	180		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	260		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	71		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	210		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	140		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	30	J	59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	220		59	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	300				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.32		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	14		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-22A

Laboratory Sample ID :

309851-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.92	J	5.6	0.26	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	26	Y	6.0	1.9	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	140		30	9.1	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	42	J	60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	15	J	60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	30	J	60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	630		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	120		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	750		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,100		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	340		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	370		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	420		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	390		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	180		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	45	J	60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	230		60	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	530				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.14		0.021	0.0038	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	18		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-23A

Laboratory Sample ID :

309851-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.5	0.26	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	18	Y	1.3	0.38	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	57		6.3	1.9	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Naphthalene	17	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	27	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	26	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	16	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	300		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	63	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	500		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	690		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	210		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	240		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	330		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	97		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	290		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	150		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	30	J	63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	200		63	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	390				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.020	0.0035	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	21		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-9A

Laboratory Sample ID :

309851-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	6.1	0.29	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	40	Y	2.7	0.81	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	200		13	4.0	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Naphthalene	21	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	47	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	22	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	21	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	330		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	71		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	460		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	690		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	230		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	270		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	390		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	130		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	310		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	180		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	40	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	250		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	440				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.14		0.022	0.0038	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	25		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-10A

Laboratory Sample ID :

309851-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.4	0.26	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	33	Y	2.6	0.80	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	170		13	4.0	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Acenaphthylene	40	J	110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	160		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	46	J	110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	360		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	580		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	240		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	390		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	320		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	180		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	37	J	110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	270		110	22	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	440				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.022	0.0039	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	24		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-11A

Laboratory Sample ID :

309851-017

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	6.3	0.30	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	19	Y	1.3	0.41	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	65		6.7	2.0	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Naphthalene	16	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	39	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	15	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	15	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	180		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	52	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	340		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	560		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	180		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	200		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	320		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	94		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	270		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	150		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	29	J	67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	210		67	13	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	360				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.022	0.0039	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	25		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-12A

Laboratory Sample ID :

309851-018

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.3	0.25	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	41	Y	2.2	0.67	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		11	3.3	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Naphthalene	34	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	81		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	12	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	180		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	52	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	380		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	680		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	200		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	260		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	390		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	360		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	210		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	39	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	300		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	480				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.13		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-9C

Laboratory Sample ID :

309851-019

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.87	J	5.1	0.24	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	43	Y	2.2	0.68	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		11	3.4	mg/Kg	Dry	2.000	EPA 8015B	EPA 3550C
Acenaphthylene	36	J	93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthene	20	J	93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	250		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	65	J	93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	440		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	650		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	250		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	280		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	400		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	130		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	310		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	160		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	38	J	93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	230		93	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	430				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.14		0.017	0.0030	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-10C

Laboratory Sample ID :

309851-020

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	2.3	J	5.1	0.24	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	6.7	Y	1.2	0.38	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	34		6.1	1.9	mg/Kg	Dry	1.000	EPA 8015B	EPA 3550C
Acenaphthylene	19	J	62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	110		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	27	J	62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	160		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	270		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	78		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	93		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	150		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	40	J	62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	120		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	58	J	62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	97		62	12	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	180				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.11		0.020	0.0036	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	19		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-11C

Laboratory Sample ID :

309851-021

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.81	J	5.3	0.25	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	45	Y	3.4	1.0	mg/Kg	Dry	3.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		17	5.1	mg/Kg	Dry	3.000	EPA 8015B	EPA 3550C
Acenaphthylene	110	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	250	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	96	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,300		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	2,000		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	530		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	700		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,100		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	290		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	990		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	480		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	84	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	700		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,300				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-12C

Laboratory Sample ID :

309851-022

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.98	J	5.4	0.25	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	37	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	140		28	8.5	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	44	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	180		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	18	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	53	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	830		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	190		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,100		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,800		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	530		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	590		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	730		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	230		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	740		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	460		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	91		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	640		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,000				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.020	0.0035	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Date: 5/15/19

Page: 1 of 2

Analyses Required

Sampler Name(s): Lizzie Hightower, Kevin Halpin, Mayra Dindorova
Signature(s): [Signatures]

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES	TPH-g; -d; -mo by Method 8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
1	DTSC-21a	5/15/19	1015	Soil	None meat	X	X	X	X	X	X	X	X	2
2	DTSC-22a		1010			X	X	X	X	X	X	X	X	
3	DTSC-23a		1005			X	X	X	X	X	X	X	X	
4	DTSC-9a		1646			X	X	X	X	X	X	X	X	
5	DTSC-10a		1642			X	X	X	X	X	X	X	X	
6	DTSC-11a		1644			X	X	X	X	X	X	X	X	
7	DTSC-12a		1646			X	X	X	X	X	X	X	X	
8	DTSC-9c		1315			X	X	X	X	X	X	X	X	
9	DTSC-10c		1310			X	X	X	X	X	X	X	X	
10	DTSC-11c		1300			X	X	X	X	X	X	X	X	

PROJECT INFORMATION
Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Kevin Halpin; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; kevin.halpin@rpsgroup.com; elizabeth.hightower@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955
Report: Routine (Level 2) Level 3 Level 4 EDD
TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

RELINQUISHED BY:
Printed Name: Lizzie Hightower
Signature: [Signature]
Company: RPS
Time/Date: 5/15/19 18:10

RECEIVED BY:
Printed Name: Halley Campbell
Signature: [Signature]
Company: EA
Time/Date: 5/15/19 18:10

Special Instructions/Comments:
Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:
Printed Name
Signature
Company
Time/Date

RECEIVED BY:
Printed Name
Signature
Company
Time/Date



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

309851

Date: 5/15/19

Page: 2 of 2

Analyses Required

Sampler Name(s):

Lizzie Hightower
Kevin Halpin
Mayra Durbrenova

Signature(s):

[Signatures]

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
11	DTSC-12c	5/15/19	1305	Soil	None moist

TPH-g; -mo by Method 8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
X	X	X	X	X	X	X	X	2

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Kevin Halpin; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; kevin.halpin@rpsgroup.com;
elizabeth.hightower@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:

Printed Name
Lizzie Hightower
Signature
[Signature]
Company
RPS
Time/Date
5/15/19 1810

RECEIVED BY:

Printed Name
Haley Campbell
Signature
[Signature]
Company
EA
Time/Date
5/15/19 18:10

RELINQUISHED BY:

Printed Name
Signature
Company
Time/Date

RECEIVED BY:

Printed Name
Signature
Company
Time/Date

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 309851 Client: RPS
 Date Received: 5.15.19 Project: _____

Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 5.15.19 By (print) af (sign) af
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**
 Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 12.0, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If YES, what time were they transferred to freezer? <u>1900</u> <u>rv</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any missing / extra samples?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the container count match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for unpreserved VOAs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are bubbles > 6mm absent in VOA samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Was the client contacted concerning this sample delivery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If YES, who was called? _____ By _____ Date: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Did you check preservatives for all bottles for each sample?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Preservative added:
 H2SO4 lot# _____ added to samples _____ on/at _____
 HCL lot# _____ added to samples _____ on/at _____
 HNO3 lot# _____ added to samples _____ on/at _____
 NaOH lot# _____ added to samples _____ on/at _____

Section 6:
 Explanations/Comments: Samples 2, 3, 4 and 5 arrived with water damage to labels. The sample IDs and times were still legible.

Date Logged in 5/16/19 By (print) AC (sign) A
 Date Labeled 5/16/19 By (print) AC (sign) A

Gasoline by GC/FID (5035 Prep)			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270687
Units:	mg/Kg	Sampled:	05/15/19
Basis:	dry	Received:	05/15/19

Field ID: DTSC-21A Moisture: 14%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309851-012 Analyzed: 05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.82 J	5.2	0.25

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	58-145

Field ID: DTSC-22A Moisture: 18%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309851-013 Analyzed: 05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.92 J	5.6	0.26

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	104	58-145

Field ID: DTSC-23A Moisture: 21%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309851-014 Analyzed: 05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	5.5	0.26

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	58-145

Field ID: DTSC-9A Moisture: 25%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309851-015 Analyzed: 05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	6.1	0.29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit
 Page 1 of 3

Gasoline by GC/FID (5035 Prep)			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270687
Units:	mg/Kg	Sampled:	05/15/19
Basis:	dry	Received:	05/15/19

Field ID:	DTSC-10A	Moisture:	24%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-016	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	5.4	0.26

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	58-145

Field ID:	DTSC-11A	Moisture:	25%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-017	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	6.3	0.30

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	58-145

Field ID:	DTSC-12A	Moisture:	9%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-018	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	5.3	0.25

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	58-145

Field ID:	DTSC-9C	Moisture:	11%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-019	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.87 J	5.1	0.24

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270687
Units:	mg/Kg	Sampled:	05/15/19
Basis:	dry	Received:	05/15/19

Field ID:	DTSC-10C	Moisture:	19%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-020	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Gasoline C7-C12	2.3 J	5.1	0.24

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	58-145

Field ID:	DTSC-11C	Moisture:	11%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-021	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.81 J	5.3	0.25

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	58-145

Field ID:	DTSC-12C	Moisture:	11%
Type:	SAMPLE	Diln Fac:	25.00
Lab ID:	309851-022	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.98 J	5.4	0.25

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	58-145

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976586	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Gasoline C7-C12	0.057 J	0.20	0.020

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	270687

Type: BS Analyzed: 05/22/19
 Lab ID: QC976587

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2.000	2.165	108	80-122

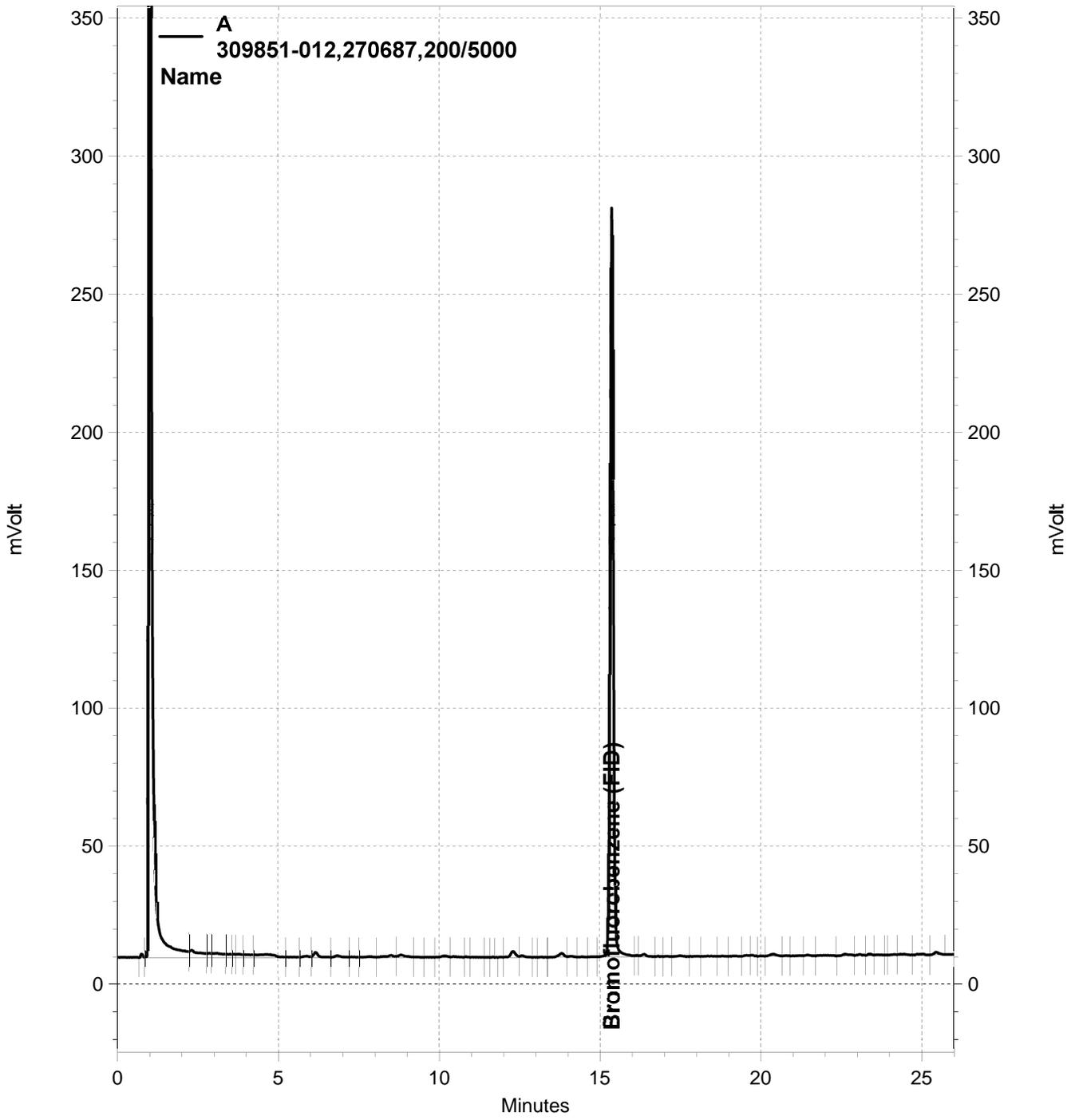
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	58-145

Type: BSD Analyzed: 05/23/19
 Lab ID: QC976588

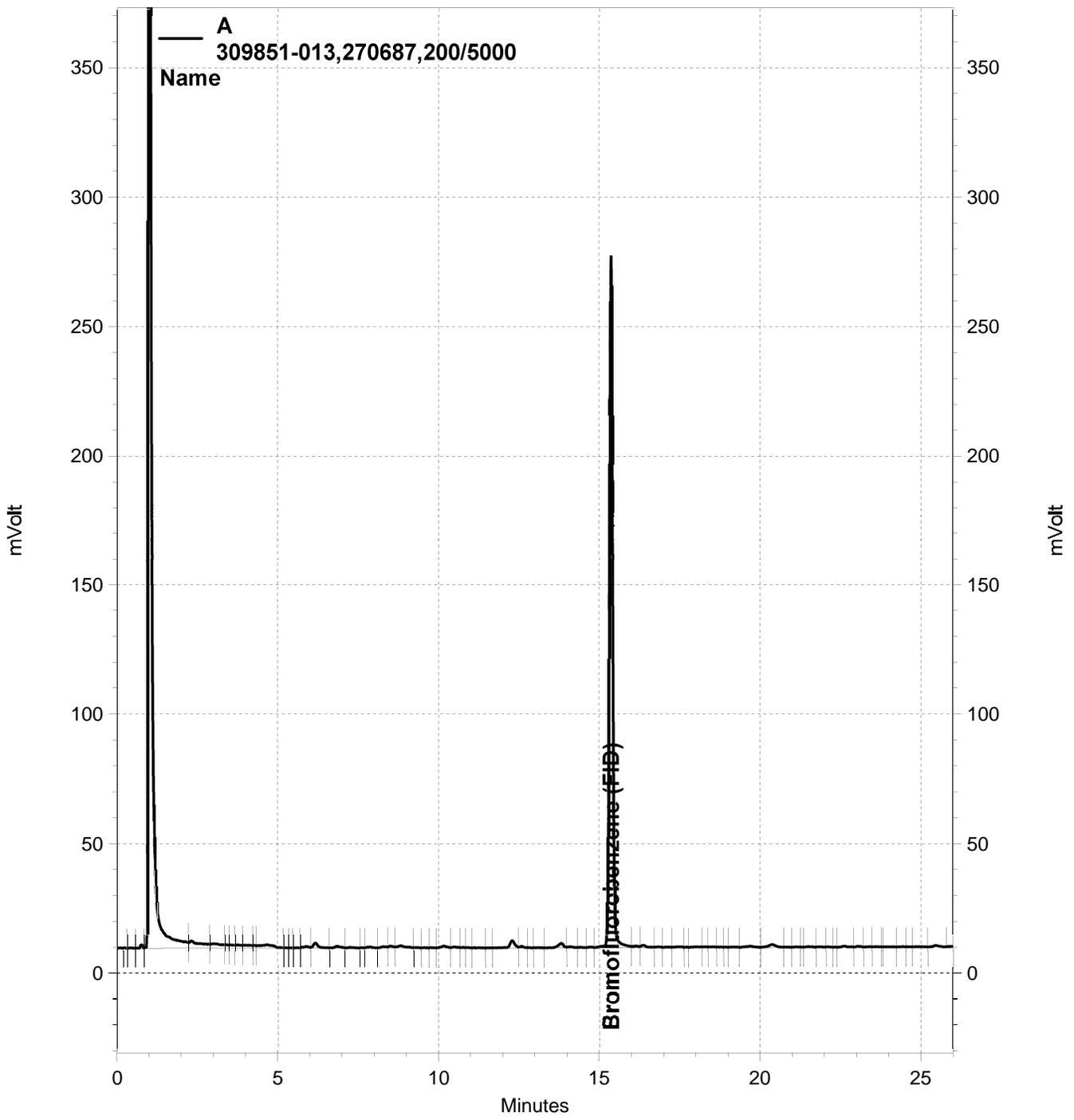
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	3.000	3.132	104	80-122	4	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	58-145

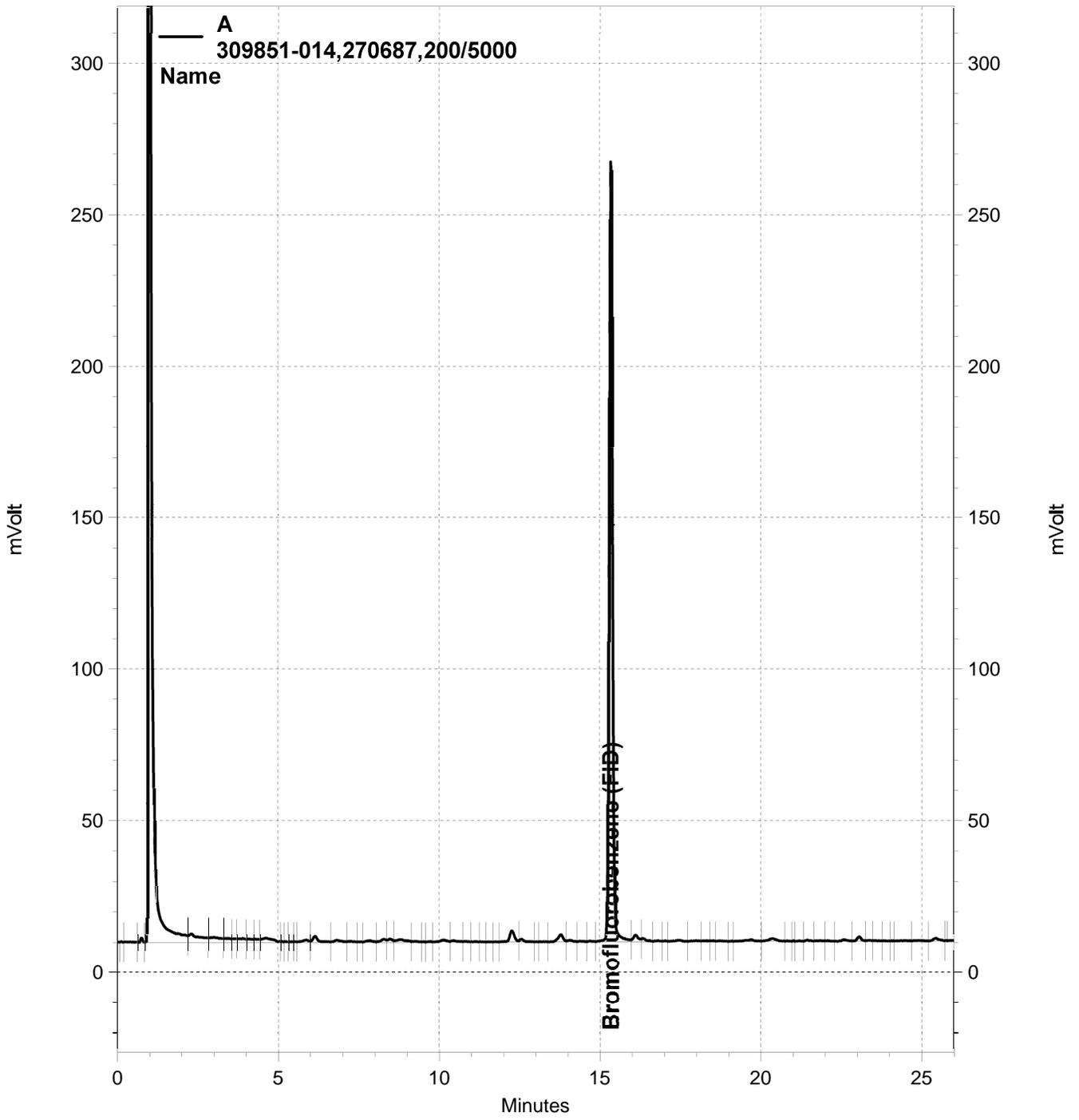
RPD= Relative Percent Difference



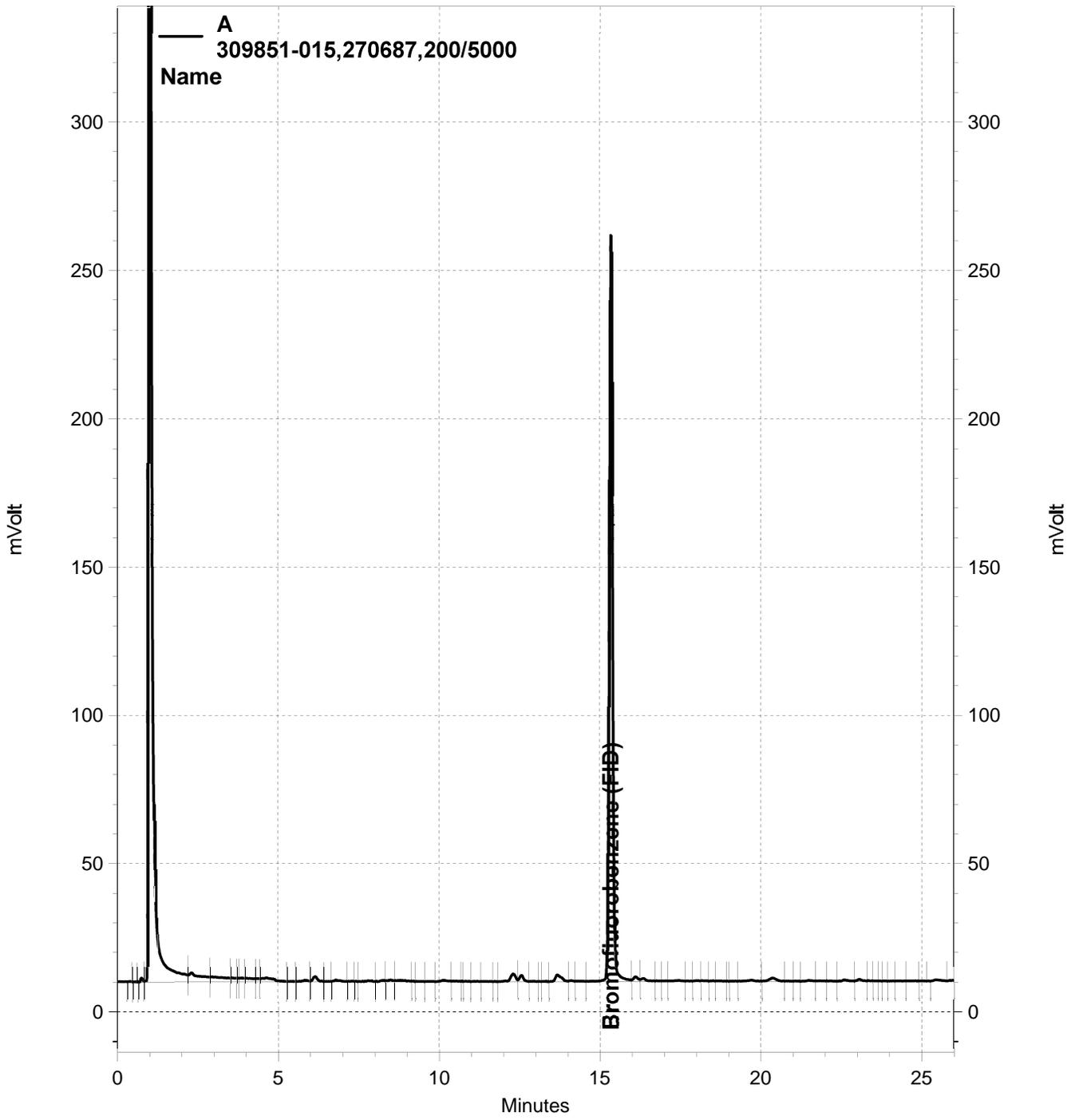
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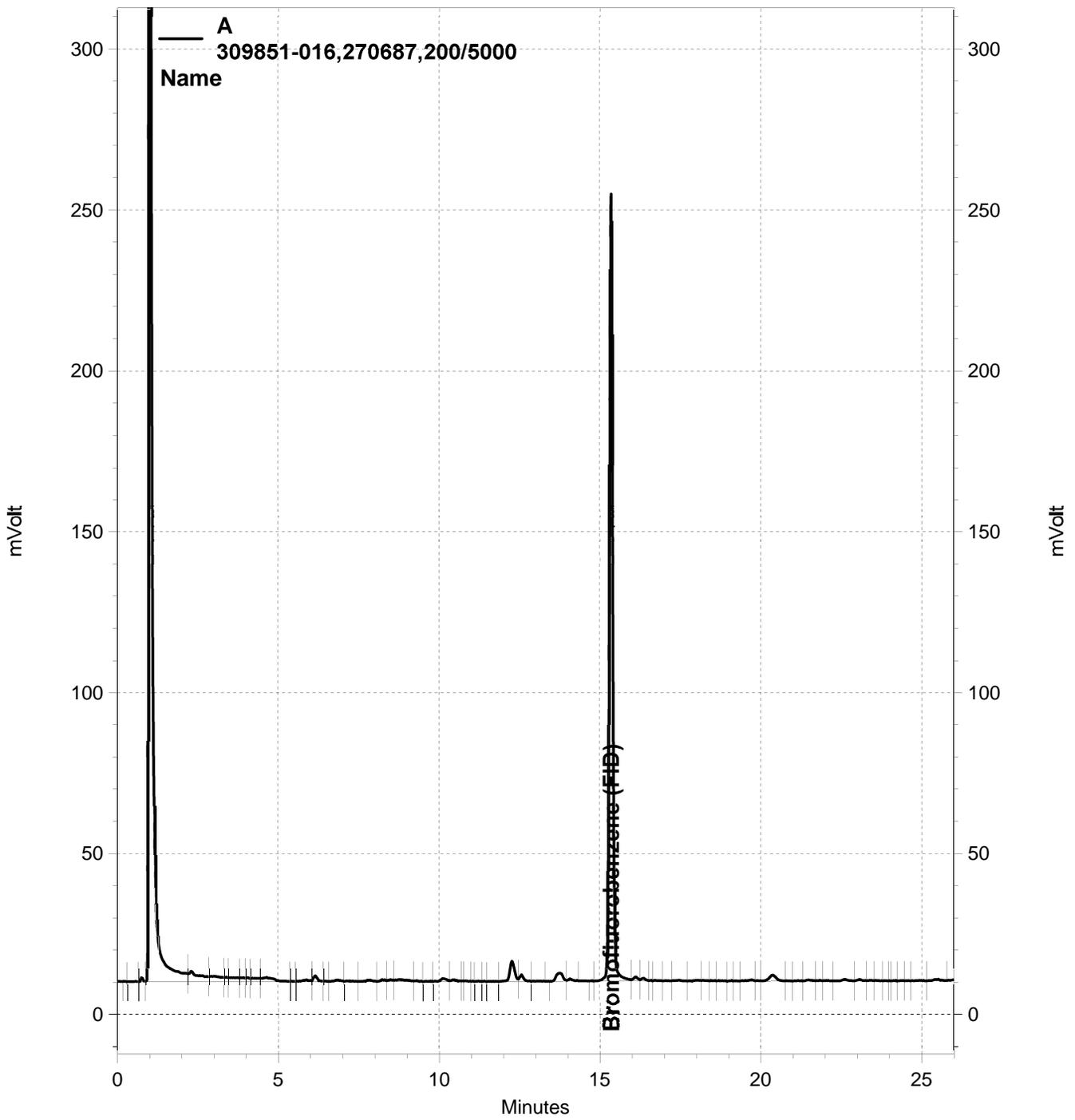
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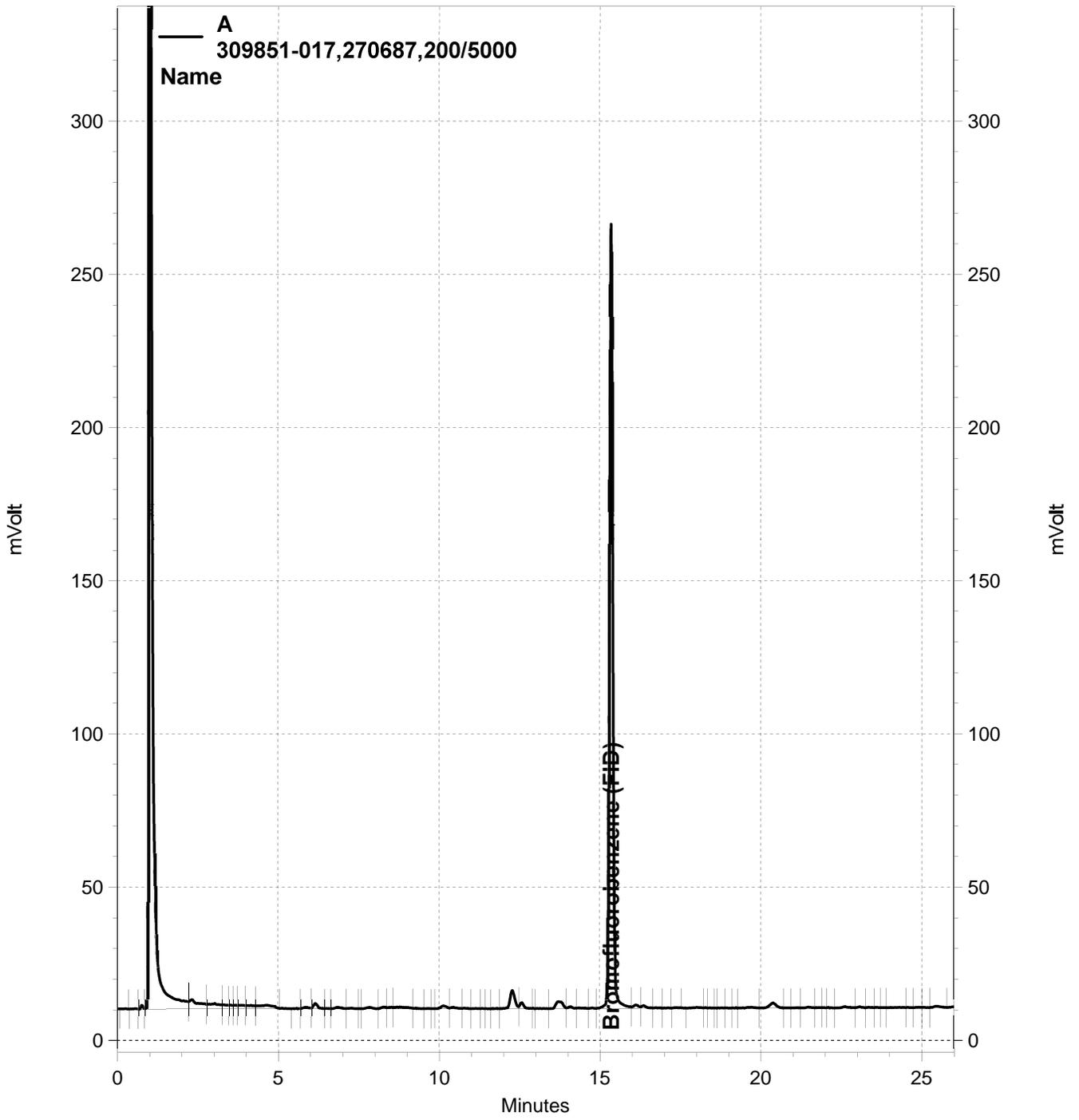
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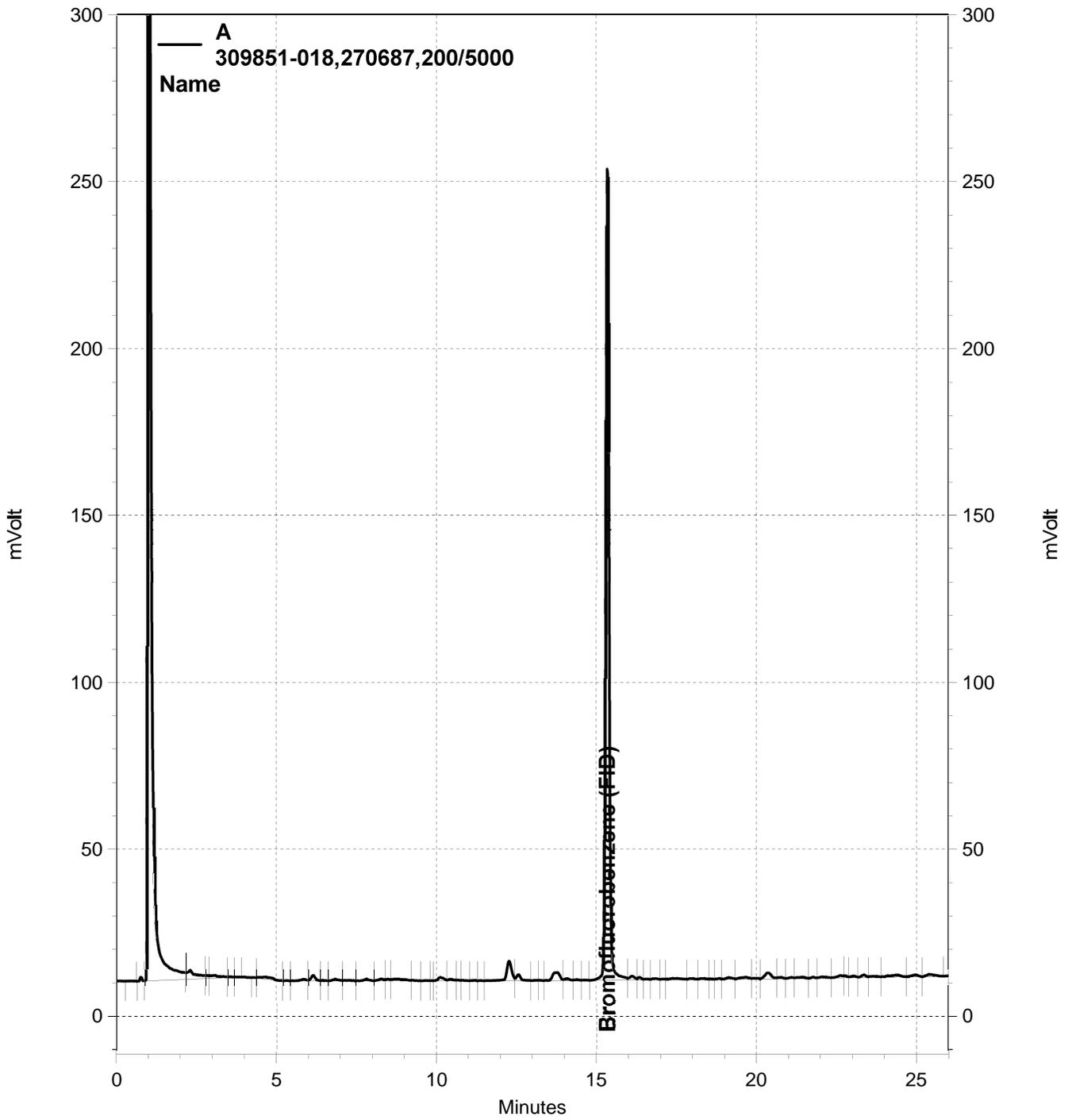
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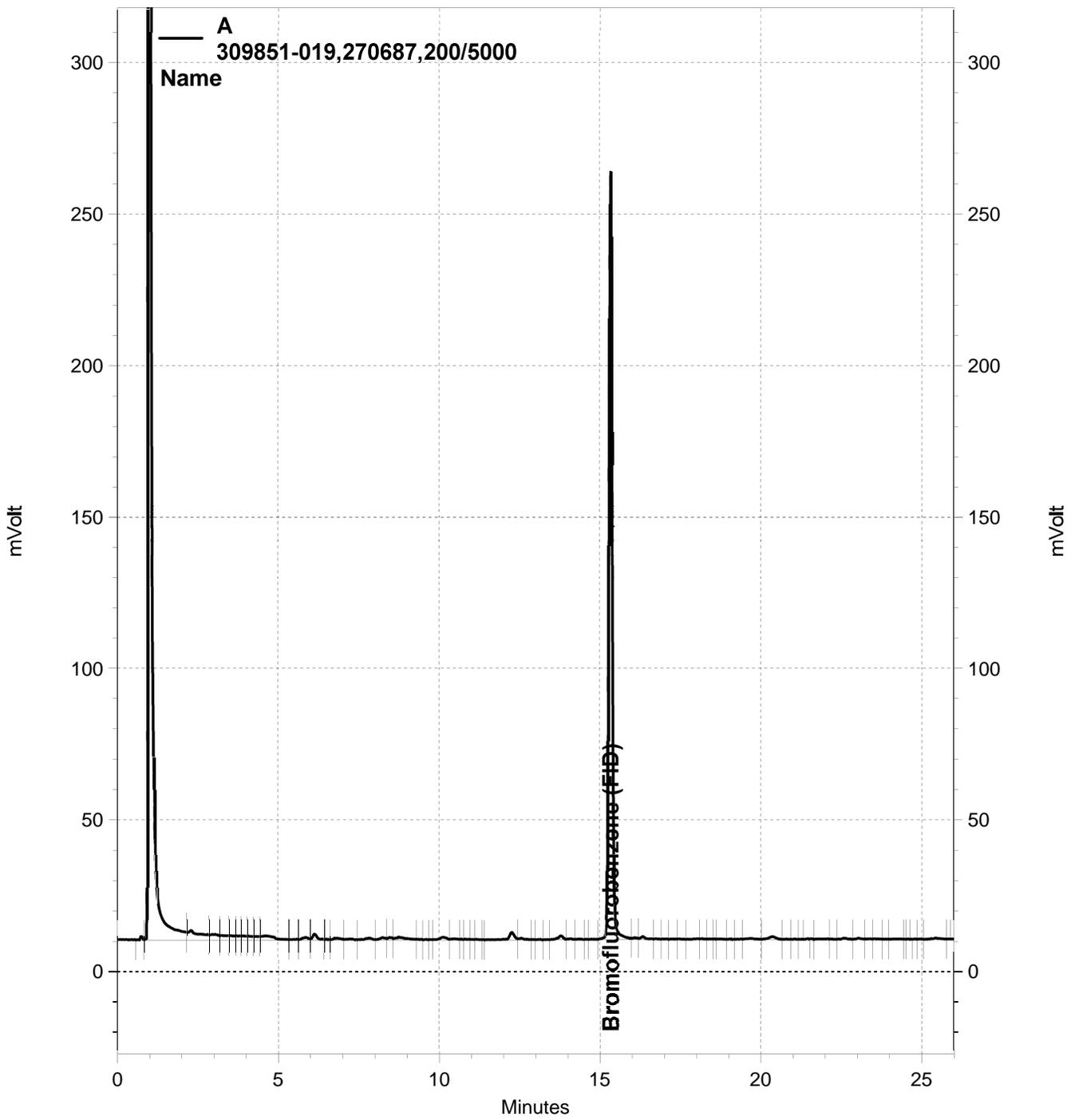
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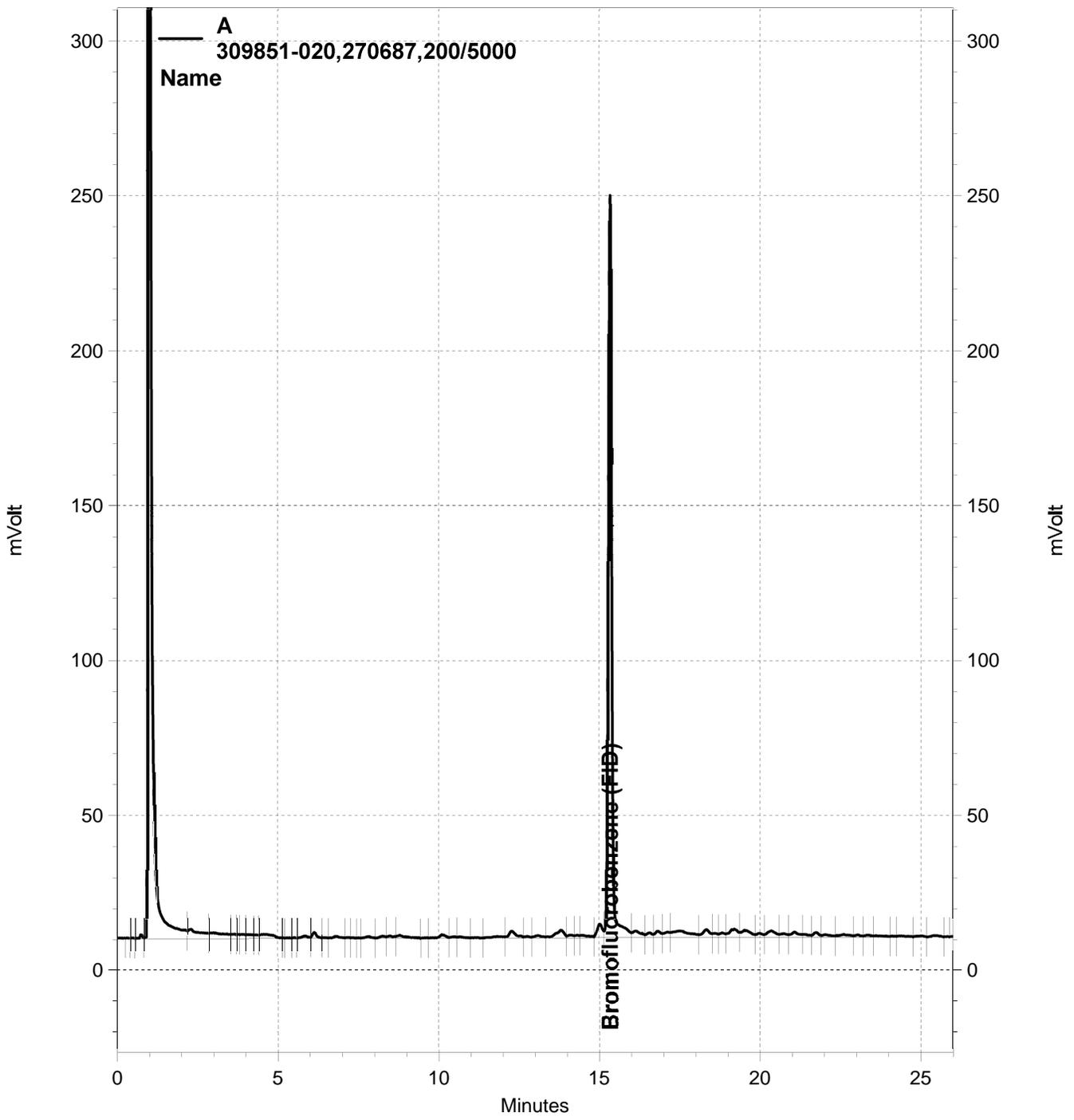
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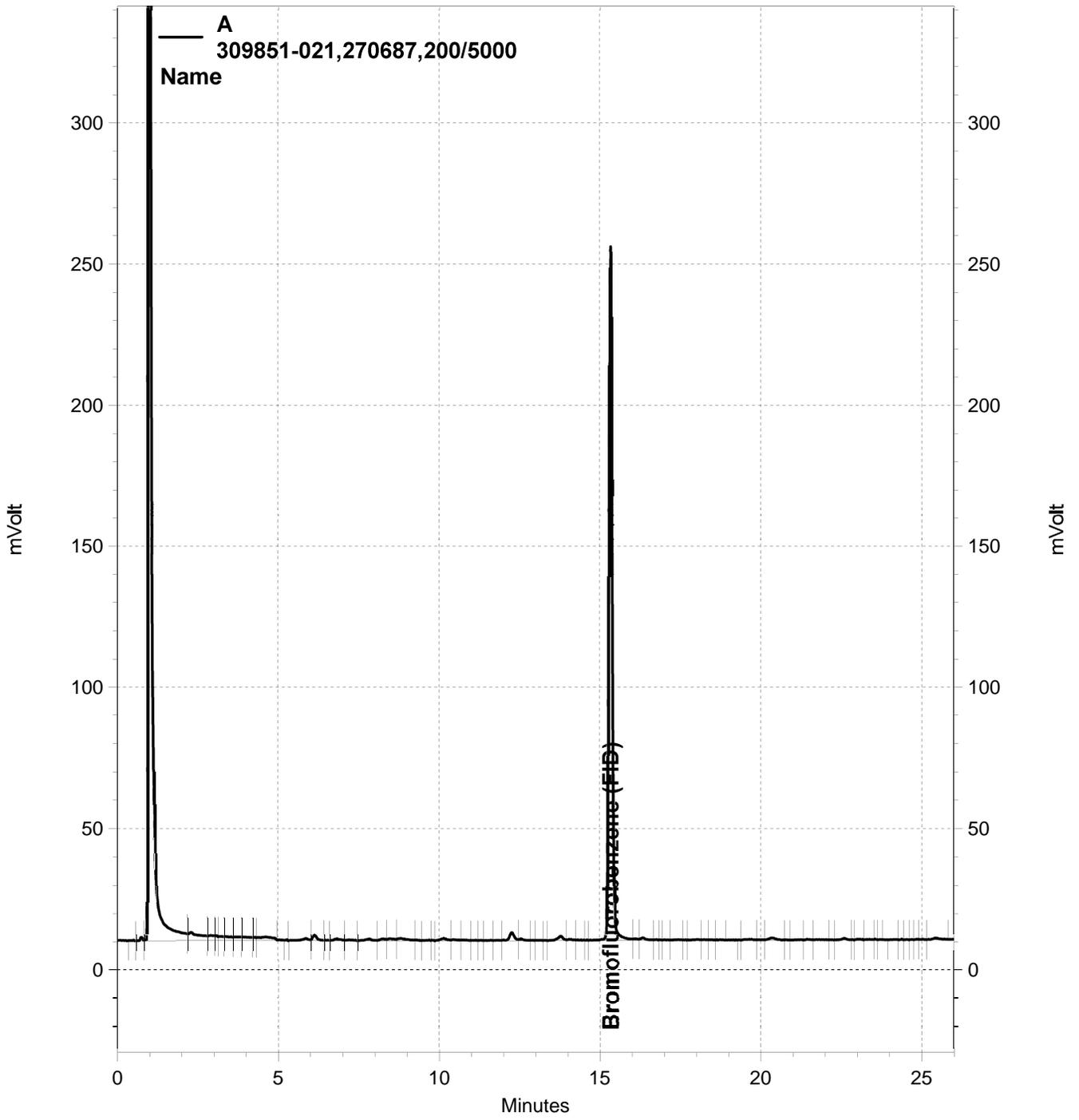
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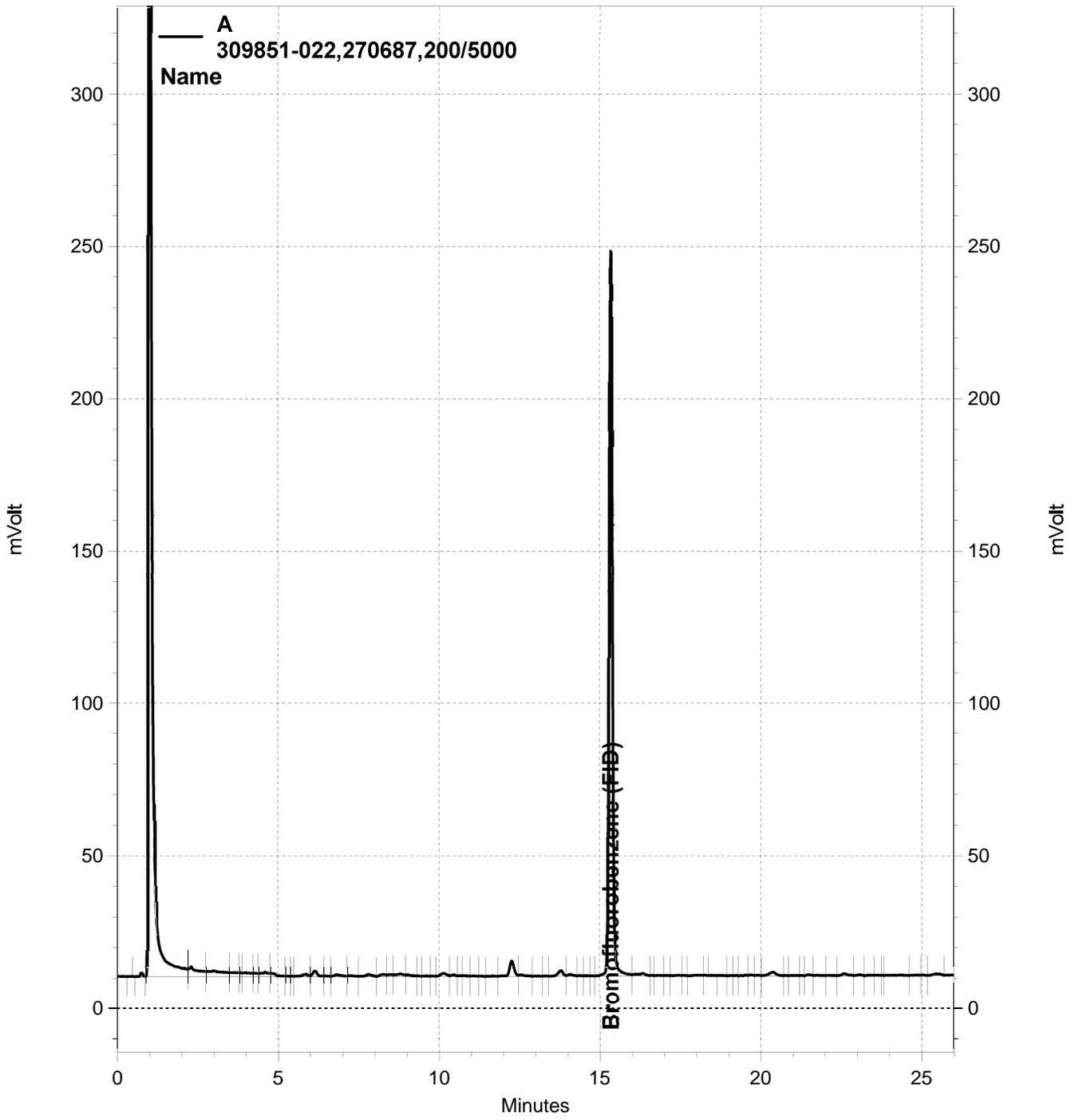
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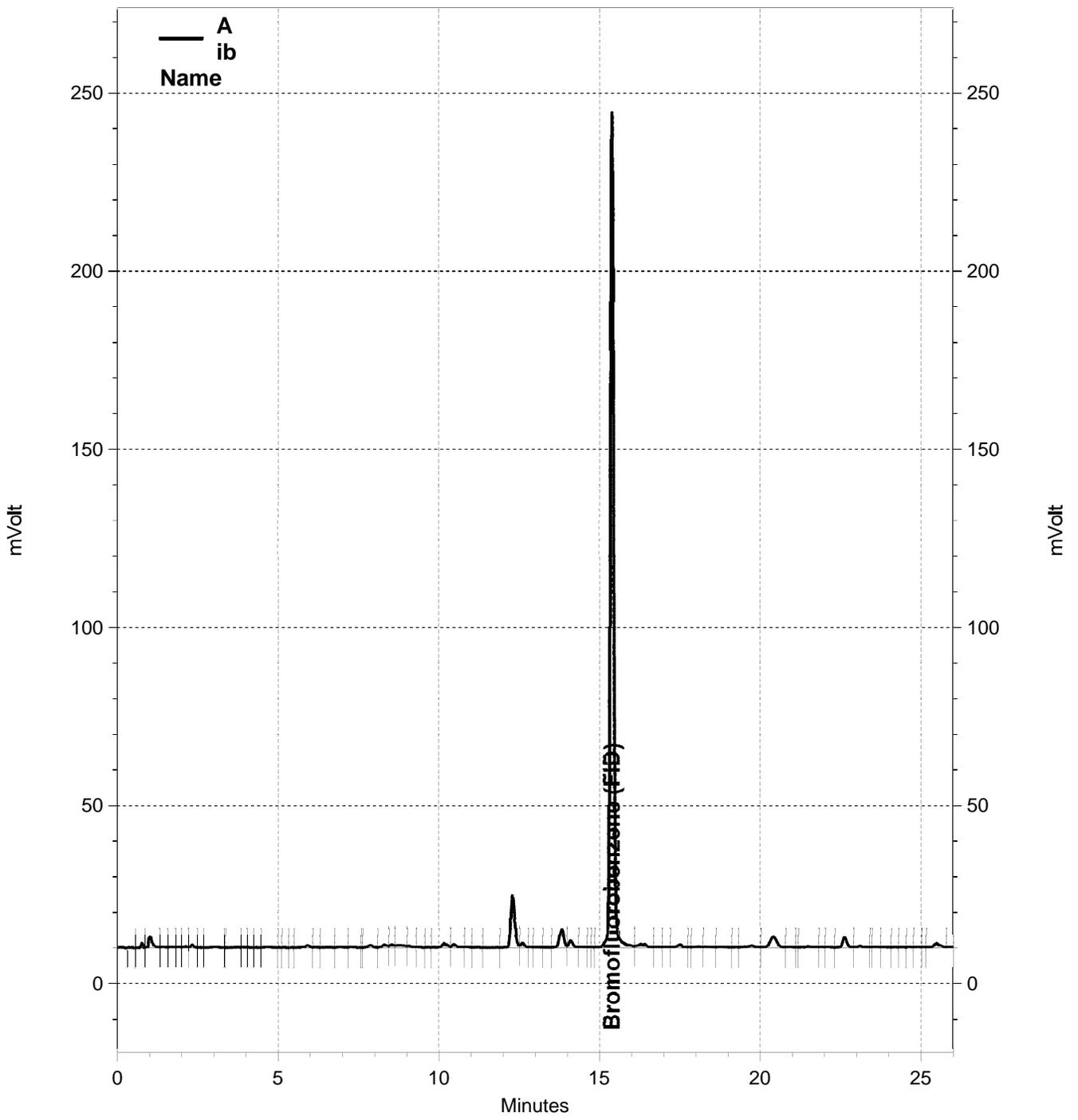
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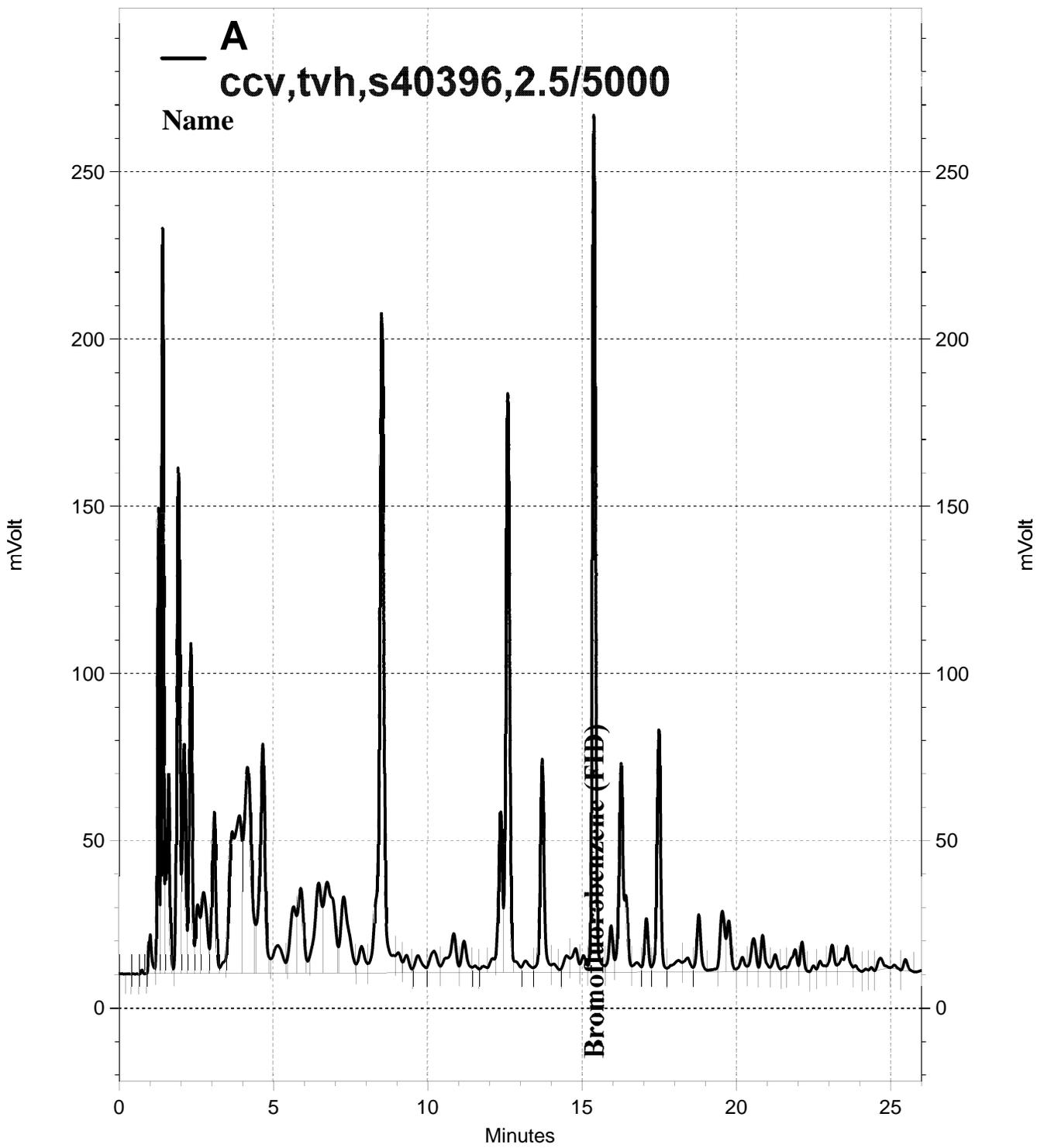
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Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/15/19
Units:	mg/Kg	Received:	05/15/19
Basis:	dry		

Field ID:	DTSC-21A	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-012	Prepared:	05/17/19
Moisture:	14%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	40 Y	5.8	1.8
Motor Oil C24-C36	210	29	8.8

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-22A	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-013	Prepared:	05/17/19
Moisture:	18%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	26 Y	6.0	1.9
Motor Oil C24-C36	140	30	9.1

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-23A	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-014	Prepared:	05/17/19
Moisture:	21%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	18 Y	1.3	0.38
Motor Oil C24-C36	57	6.3	1.9

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/15/19
Units:	mg/Kg	Received:	05/15/19
Basis:	dry		

Field ID:	DTSC-9A	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-015	Prepared:	05/17/19
Moisture:	25%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	40 Y	2.7	0.81
Motor Oil C24-C36	200	13	4.0

Surrogate	%REC	Limits
o-Terphenyl	103	61-130

Field ID:	DTSC-10A	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-016	Prepared:	05/17/19
Moisture:	24%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	33 Y	2.6	0.80
Motor Oil C24-C36	170	13	4.0

Surrogate	%REC	Limits
o-Terphenyl	97	61-130

Field ID:	DTSC-11A	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-017	Prepared:	05/17/19
Moisture:	25%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	19 Y	1.3	0.41
Motor Oil C24-C36	65	6.7	2.0

Surrogate	%REC	Limits
o-Terphenyl	81	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/15/19
Units:	mg/Kg	Received:	05/15/19
Basis:	dry		

Field ID:	DTSC-12A	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-018	Prepared:	05/17/19
Moisture:	9%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	41 Y	2.2	0.67
Motor Oil C24-C36	160	11	3.3

Surrogate	%REC	Limits
o-Terphenyl	114	61-130

Field ID:	DTSC-9C	Diln Fac:	2.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-019	Prepared:	05/17/19
Moisture:	11%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	43 Y	2.2	0.68
Motor Oil C24-C36	160	11	3.4

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

Field ID:	DTSC-10C	Diln Fac:	1.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-020	Prepared:	05/17/19
Moisture:	19%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	6.7 Y	1.2	0.38
Motor Oil C24-C36	34	6.1	1.9

Surrogate	%REC	Limits
o-Terphenyl	115	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/15/19
Units:	mg/Kg	Received:	05/15/19
Basis:	dry		

Field ID:	DTSC-11C	Diln Fac:	3.000
Type:	SAMPLE	Batch#:	270558
Lab ID:	309851-021	Prepared:	05/17/19
Moisture:	11%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	45 Y	3.4	1.0
Motor Oil C24-C36	160	17	5.1

Surrogate	%REC	Limits
o-Terphenyl	116	61-130

Field ID:	DTSC-12C	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270602
Lab ID:	309851-022	Prepared:	05/20/19
Moisture:	11%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	37 Y	5.6	1.7
Motor Oil C24-C36	140	28	8.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type:	BLANK	Batch#:	270558
Lab ID:	QC976050	Prepared:	05/17/19
Diln Fac:	1.000	Analyzed:	05/20/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	107	61-130

Type:	BLANK	Batch#:	270602
Lab ID:	QC976224	Prepared:	05/20/19
Diln Fac:	1.000	Analyzed:	05/20/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	105	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976051	Batch#:	270558
Matrix:	Soil	Prepared:	05/17/19
Units:	mg/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	58.59	117	55-133

Surrogate	%REC	Limits
o-Terphenyl	114	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270558
MSS Lab ID:	309787-001	Sampled:	05/13/19
Matrix:	Soil	Received:	05/14/19
Units:	mg/Kg	Prepared:	05/17/19
Basis:	as received	Analyzed:	05/20/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976052

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	9.465	49.84	70.06	122	56-125

Surrogate	%REC	Limits
o-Terphenyl	102	61-130

Type: MSD Lab ID: QC976053

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.96	64.38	110	56-125	9	33

Surrogate	%REC	Limits
o-Terphenyl	97	61-130

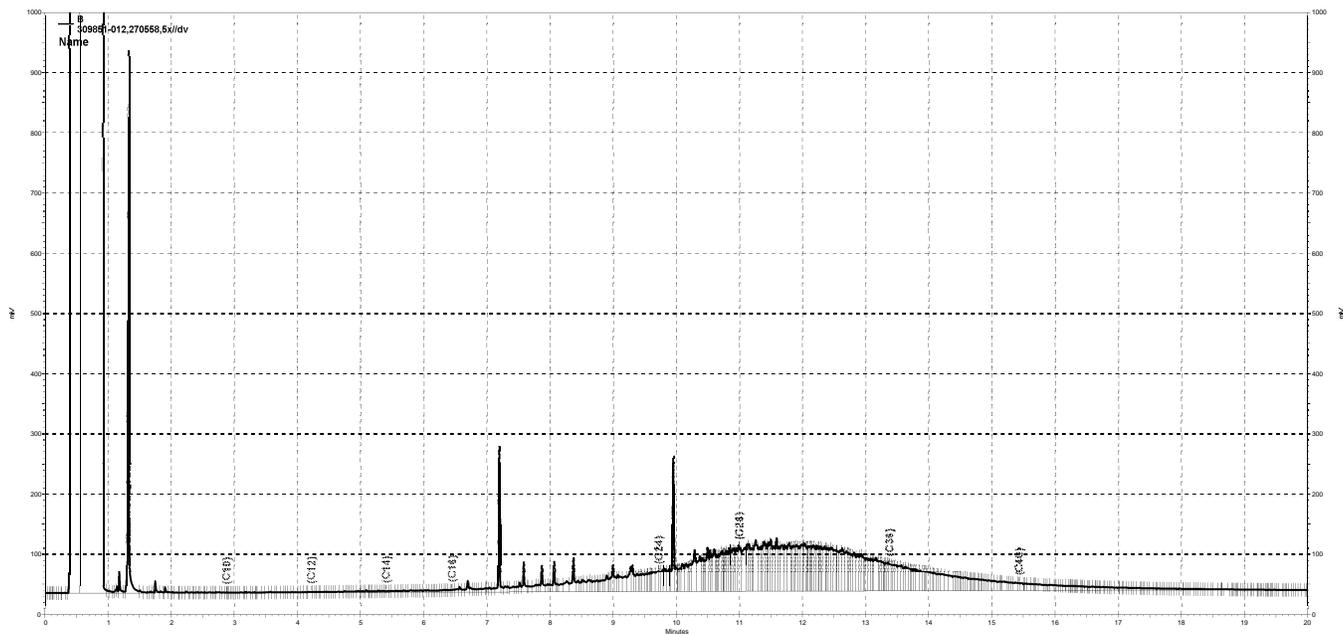
RPD= Relative Percent Difference

Batch QC Report

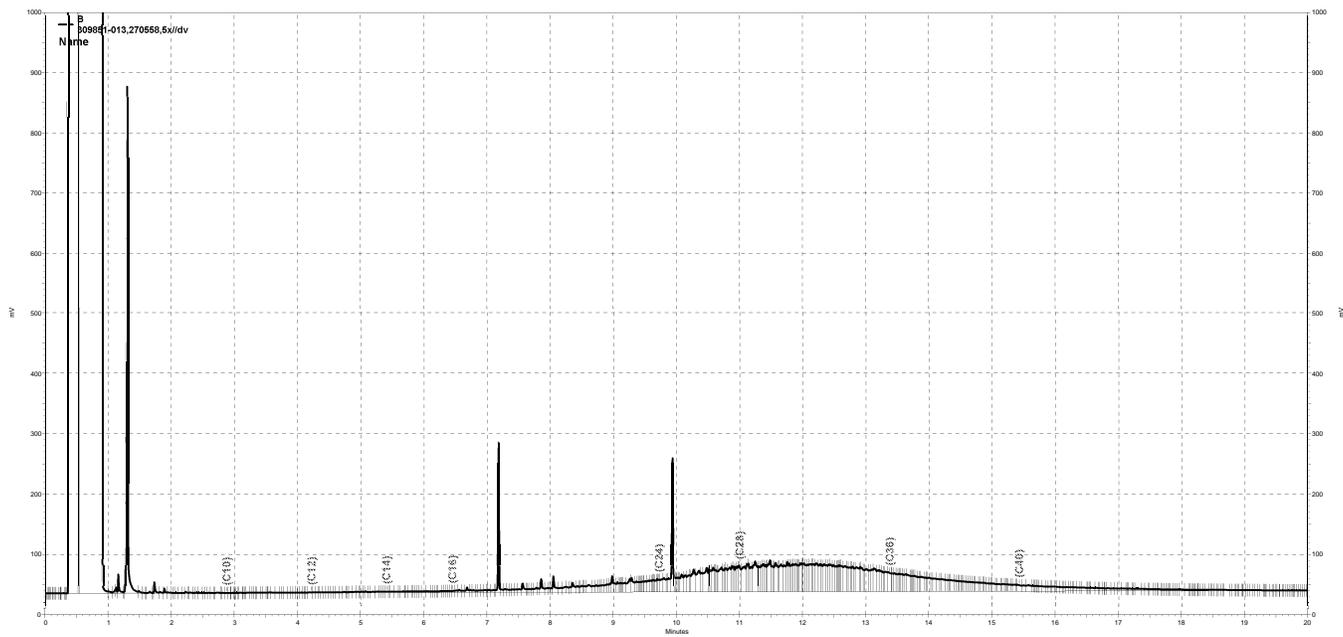
Total Extractable Hydrocarbons			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976225	Batch#:	270602
Matrix:	Soil	Prepared:	05/20/19
Units:	mg/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	53.46	107	55-133

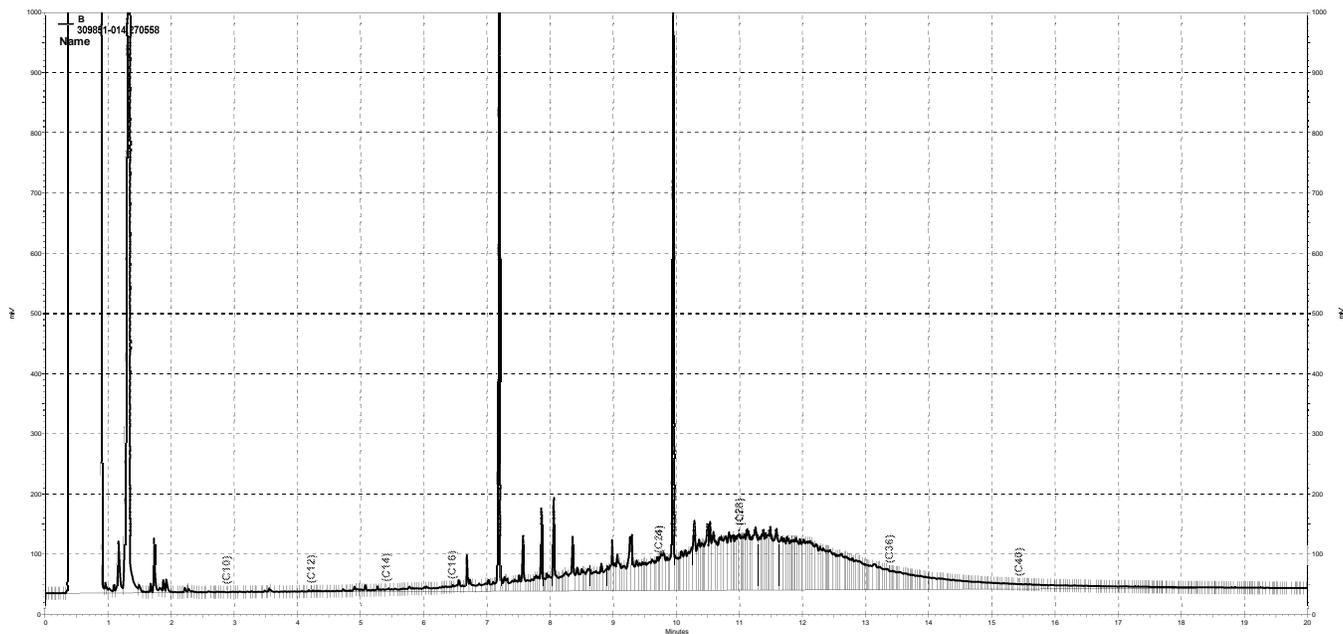
Surrogate	%REC	Limits
o-Terphenyl	110	61-130



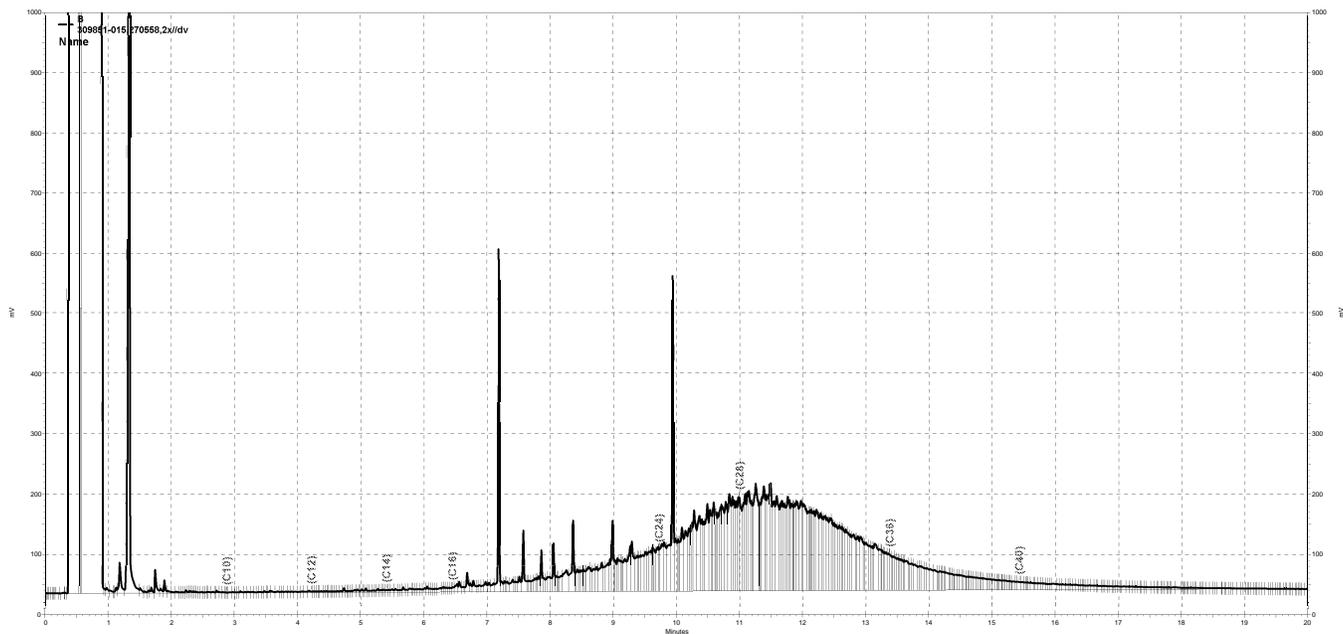
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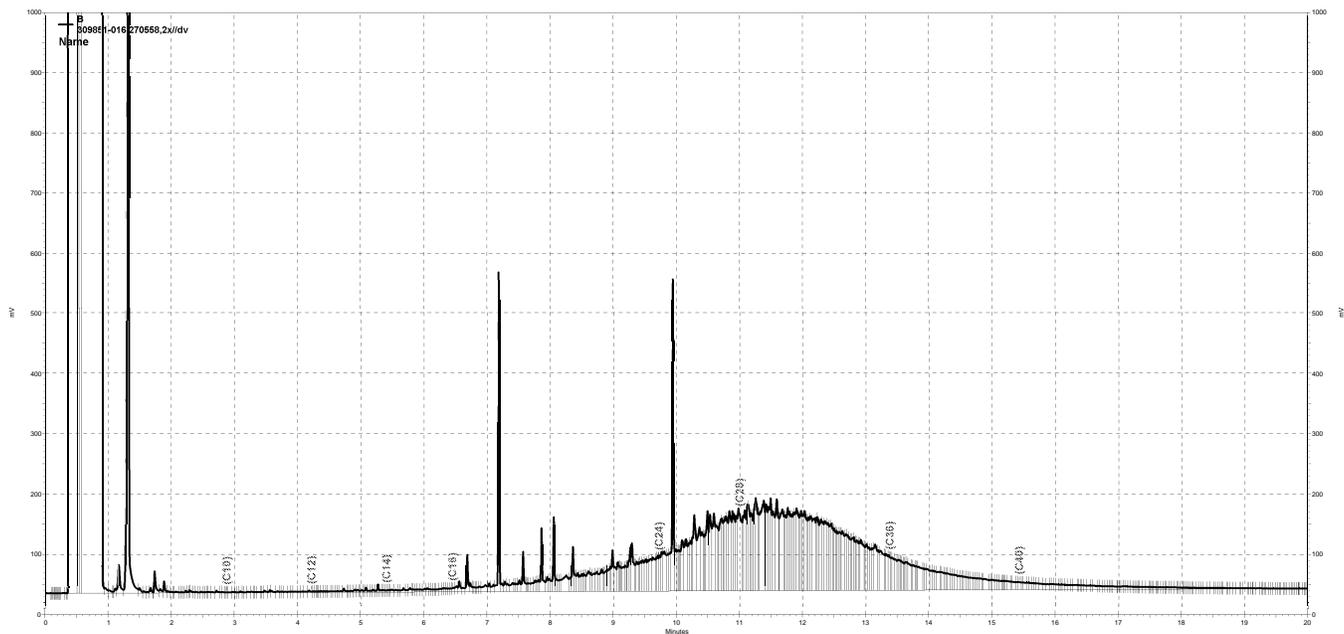
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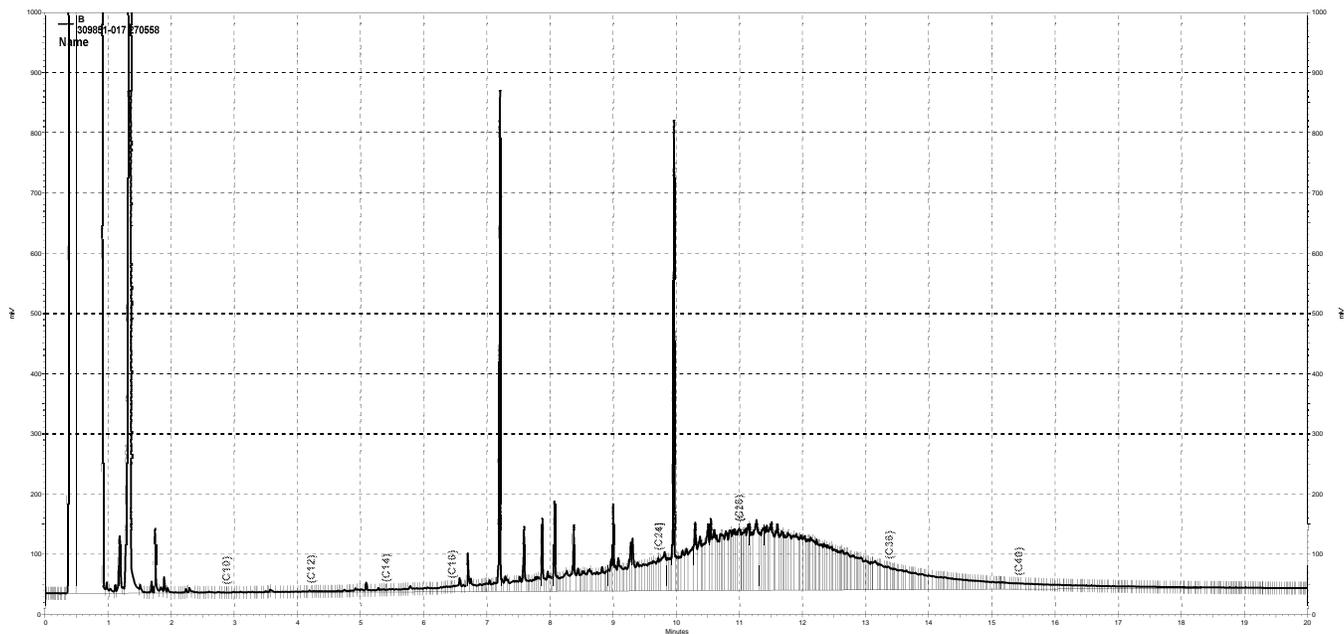
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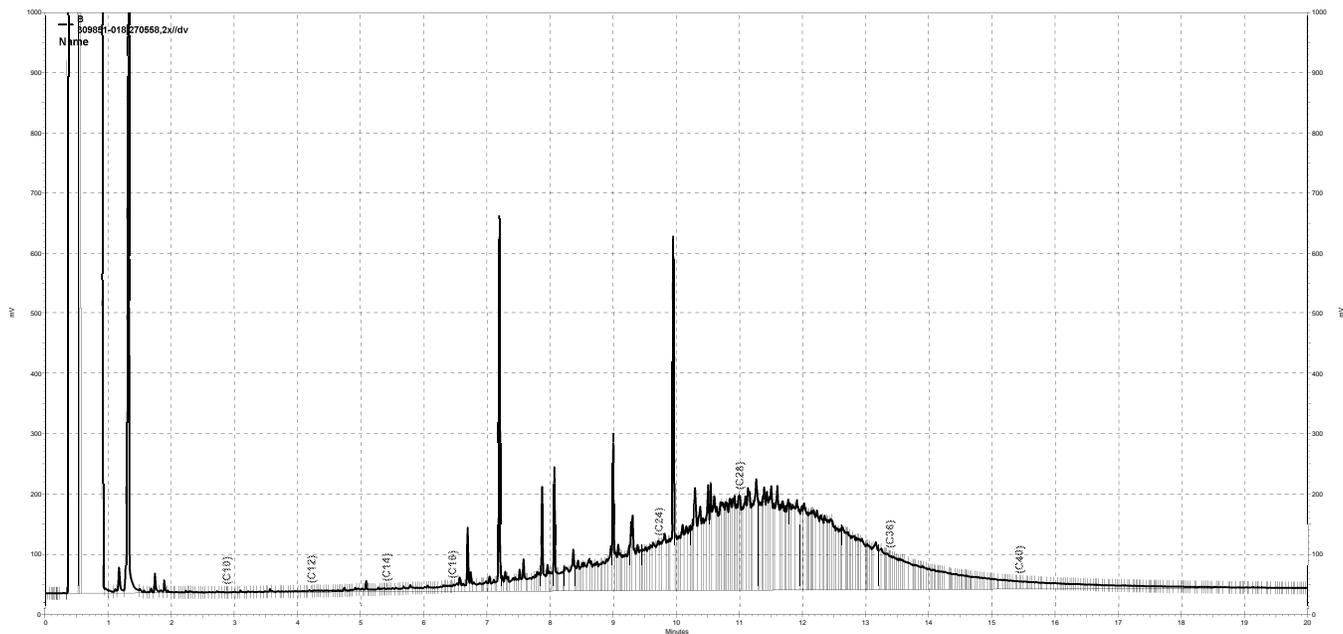
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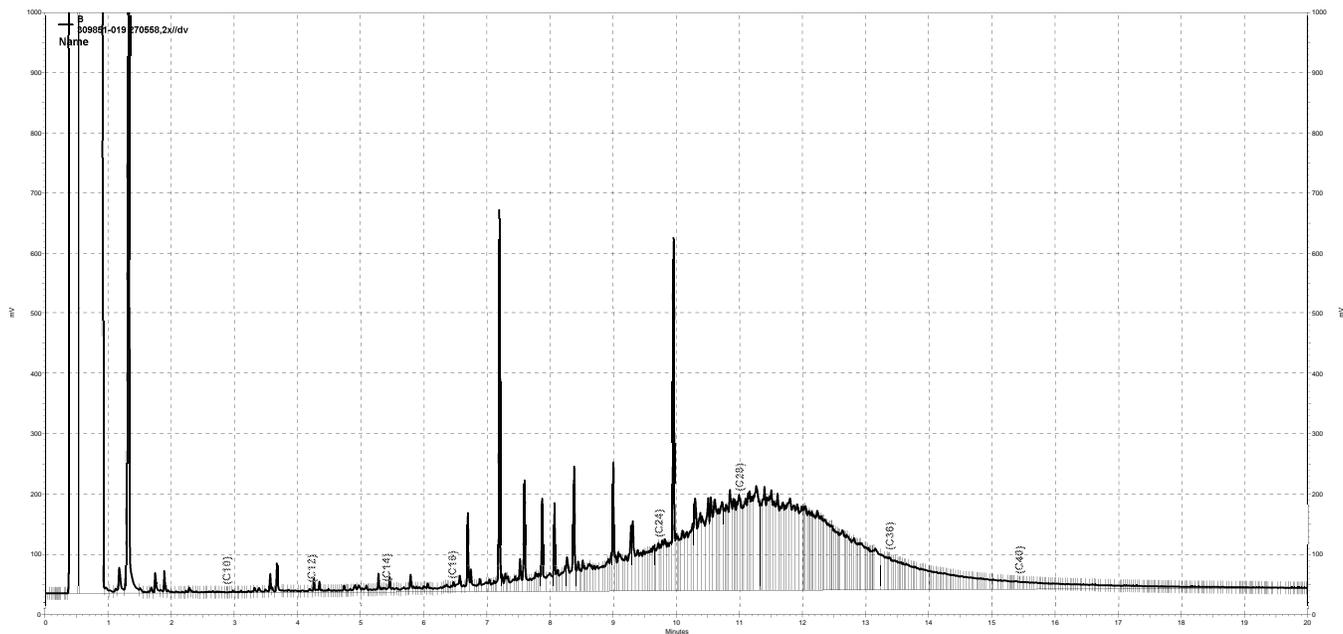
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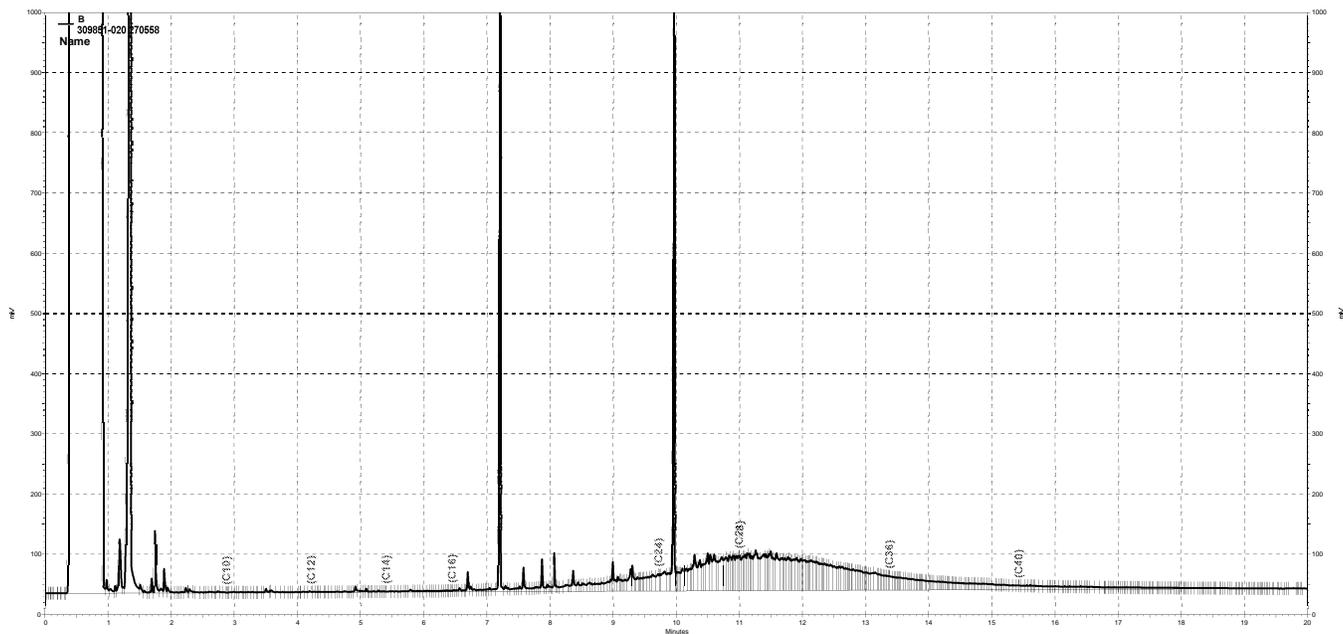
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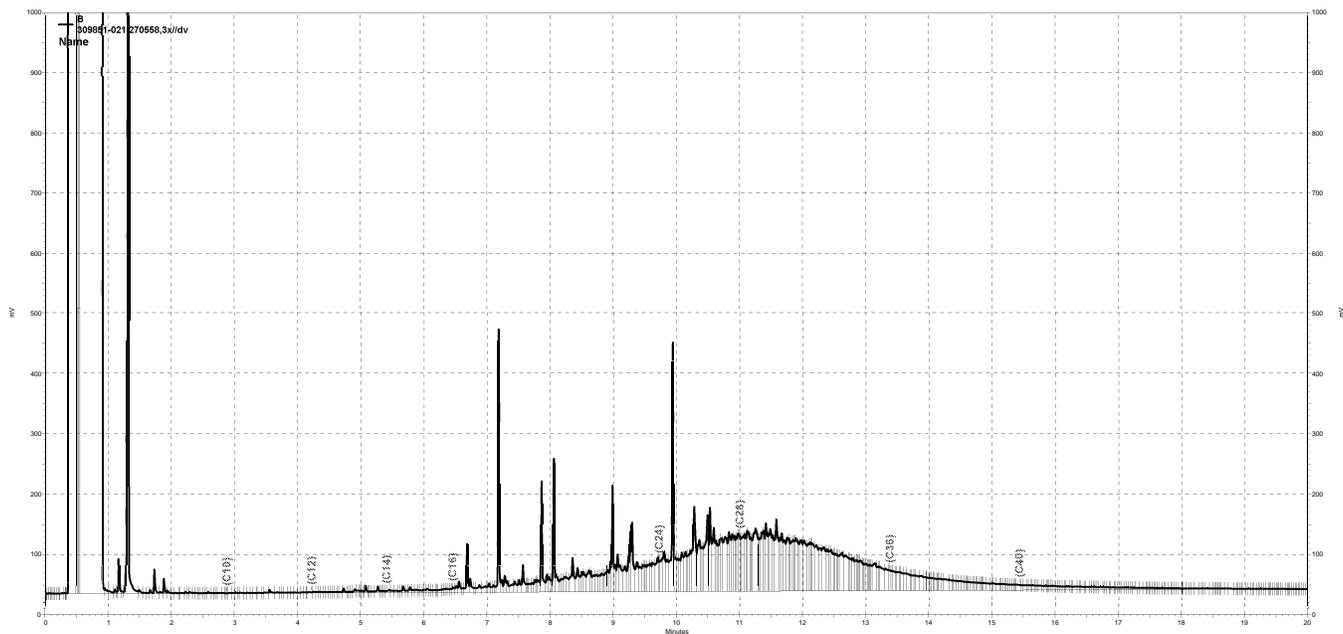
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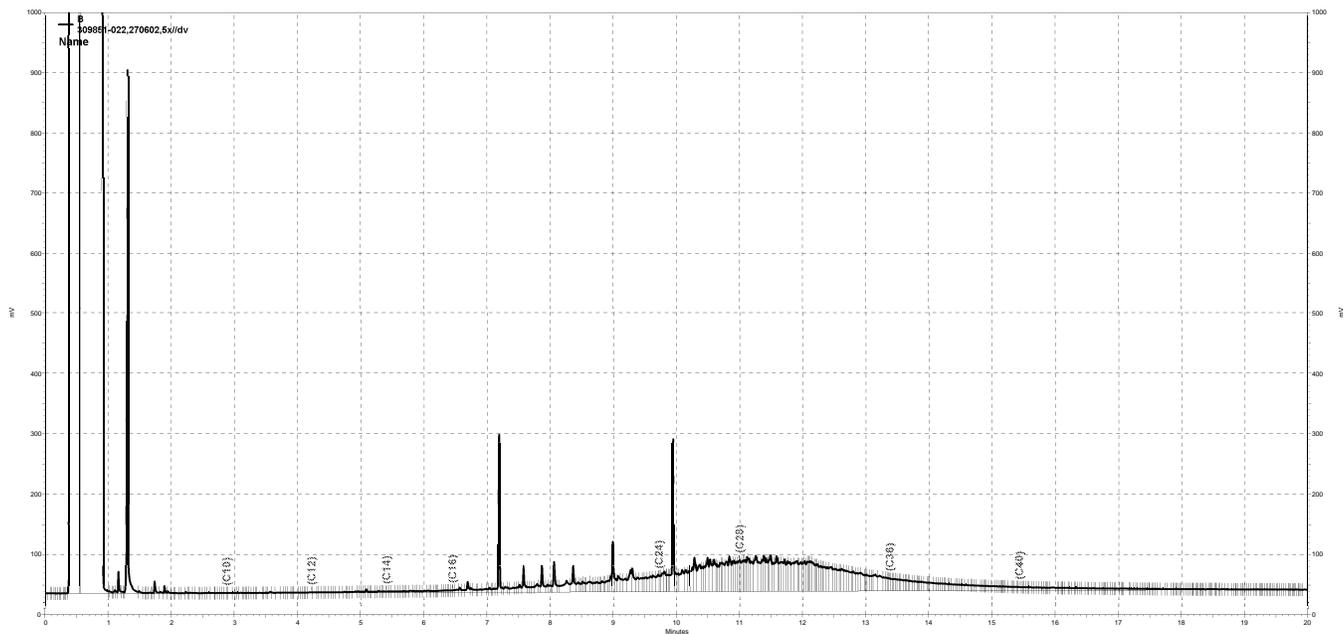
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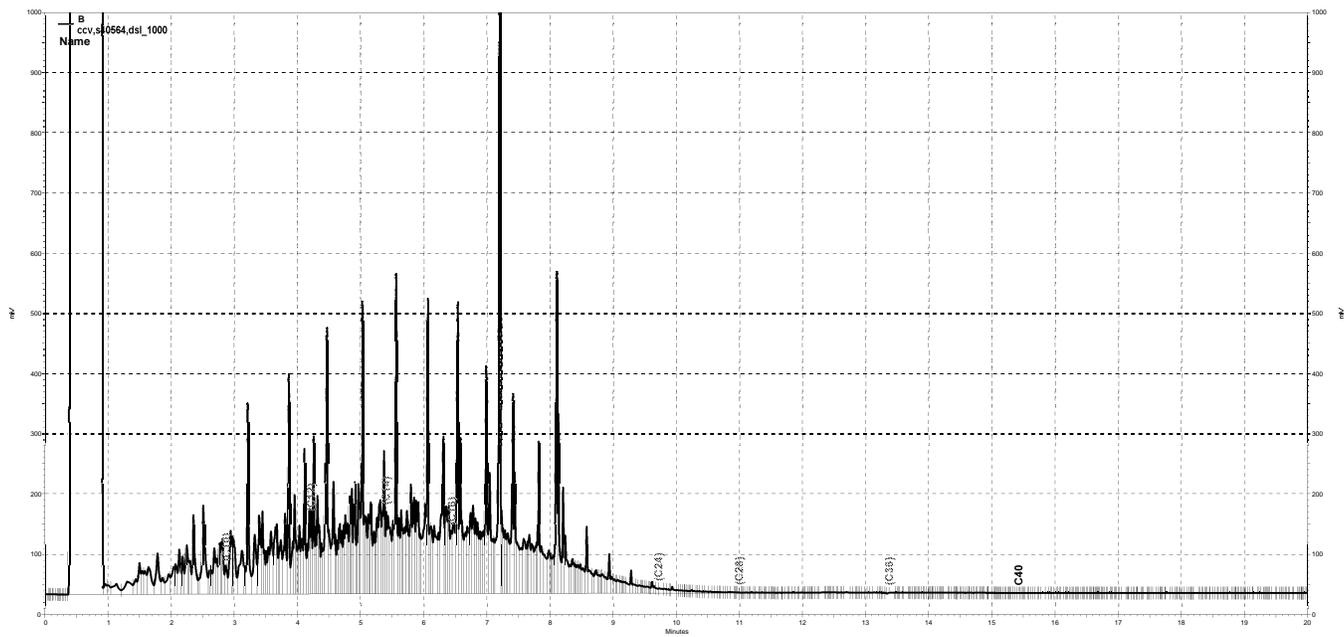
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Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21A	Diln Fac:	45.07
Lab ID:	309851-012	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Moisture: 14%

Analyte	Result	RL	MDL
Freon 12	ND	520	54
Chloromethane	ND	520	44
Vinyl Chloride	ND	520	40
Bromomethane	ND	520	180
Chloroethane	ND	520	37
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,000	130
Freon 113	ND	260	52
1,1-Dichloroethene	ND	260	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	51
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	54
Vinyl Acetate	ND	2,600	61
1,1-Dichloroethane	ND	260	49
2-Butanone	ND	520	120
cis-1,2-Dichloroethene	ND	260	52
2,2-Dichloropropane	ND	260	52
Chloroform	ND	260	56
Bromochloromethane	ND	260	56
1,1,1-Trichloroethane	ND	260	56
1,1-Dichloropropene	ND	260	53
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	43
Benzene	ND	260	46
Trichloroethene	ND	260	52
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	47
Dibromomethane	ND	260	44
4-Methyl-2-Pentanone	ND	520	42
cis-1,3-Dichloropropene	ND	260	57
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	48
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	520	48
1,3-Dichloropropane	ND	260	49
Tetrachloroethene	ND	260	51
Dibromochloromethane	ND	260	45
1,2-Dibromoethane	ND	260	46
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	57
Ethylbenzene	ND	260	54
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	53
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	58
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	54
Propylbenzene	ND	260	54
Bromobenzene	ND	260	51

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-21A	Diln Fac:	45.07
Lab ID:	309851-012	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	55
2-Chlorotoluene	ND	260	60
4-Chlorotoluene	ND	260	55
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	55
sec-Butylbenzene	ND	260	60
para-Isopropyl Toluene	ND	260	57
1,3-Dichlorobenzene	ND	260	55
1,4-Dichlorobenzene	ND	260	52
n-Butylbenzene	ND	260	58
1,2-Dichlorobenzene	ND	260	59
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	73
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	57
1,2,3-Trichlorobenzene	ND	260	70

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22A	Diln Fac:	45.59
Lab ID:	309851-013	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Moisture: 18%

Analyte	Result	RL	MDL
Freon 12	ND	560	58
Chloromethane	ND	560	47
Vinyl Chloride	ND	560	42
Bromomethane	ND	560	190
Chloroethane	ND	560	40
Trichlorofluoromethane	ND	280	44
Acetone	ND	1,100	140
Freon 113	ND	280	55
1,1-Dichloroethene	ND	280	48
Methylene Chloride	ND	1,400	240
Carbon Disulfide	ND	280	54
MTBE	ND	280	50
trans-1,2-Dichloroethene	ND	280	57
Vinyl Acetate	ND	2,800	64
1,1-Dichloroethane	ND	280	52
2-Butanone	ND	560	120
cis-1,2-Dichloroethene	ND	280	56
2,2-Dichloropropane	ND	280	55
Chloroform	ND	280	60
Bromochloromethane	ND	280	59
1,1,1-Trichloroethane	ND	280	59
1,1-Dichloropropene	ND	280	56
Carbon Tetrachloride	ND	280	51
1,2-Dichloroethane	ND	280	46
Benzene	ND	280	49
Trichloroethene	ND	280	56
1,2-Dichloropropane	ND	280	48
Bromodichloromethane	ND	280	50
Dibromomethane	ND	280	46
4-Methyl-2-Pentanone	ND	560	45
cis-1,3-Dichloropropene	ND	280	61
Toluene	ND	280	52
trans-1,3-Dichloropropene	ND	280	51
1,1,2-Trichloroethane	ND	280	54
2-Hexanone	ND	560	51
1,3-Dichloropropane	ND	280	52
Tetrachloroethene	ND	280	54
Dibromochloromethane	ND	280	47
1,2-Dibromoethane	ND	280	48
Chlorobenzene	ND	280	53
1,1,1,2-Tetrachloroethane	ND	280	60
Ethylbenzene	ND	280	57
m,p-Xylenes	ND	280	34
o-Xylene	ND	280	57
Styrene	ND	280	59
Bromoform	ND	280	55
Isopropylbenzene	ND	280	61
1,1,2,2-Tetrachloroethane	ND	280	46
1,2,3-Trichloropropane	ND	280	58
Propylbenzene	ND	280	58
Bromobenzene	ND	280	54

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-22A	Diln Fac:	45.59
Lab ID:	309851-013	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	280	58
2-Chlorotoluene	ND	280	64
4-Chlorotoluene	ND	280	58
tert-Butylbenzene	ND	280	65
1,2,4-Trimethylbenzene	ND	280	59
sec-Butylbenzene	ND	280	64
para-Isopropyl Toluene	ND	280	60
1,3-Dichlorobenzene	ND	280	58
1,4-Dichlorobenzene	ND	280	55
n-Butylbenzene	ND	280	61
1,2-Dichlorobenzene	ND	280	63
1,2-Dibromo-3-Chloropropane	ND	280	56
1,2,4-Trichlorobenzene	ND	280	77
Hexachlorobutadiene	ND	280	68
Naphthalene	ND	280	60
1,2,3-Trichlorobenzene	ND	280	74

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	81	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23A	Diln Fac:	43.67
Lab ID:	309851-014	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 21%

Analyte	Result	RL	MDL
Freon 12	ND	550	57
Chloromethane	ND	550	46
Vinyl Chloride	ND	550	42
Bromomethane	ND	550	190
Chloroethane	ND	550	39
Trichlorofluoromethane	ND	280	44
Acetone	ND	1,100	140
Freon 113	ND	280	55
1,1-Dichloroethene	ND	280	47
Methylene Chloride	ND	1,400	240
Carbon Disulfide	ND	280	54
MTBE	ND	280	50
trans-1,2-Dichloroethene	ND	280	57
Vinyl Acetate	ND	2,800	64
1,1-Dichloroethane	ND	280	52
2-Butanone	ND	550	120
cis-1,2-Dichloroethene	ND	280	55
2,2-Dichloropropane	ND	280	55
Chloroform	ND	280	59
Bromochloromethane	ND	280	59
1,1,1-Trichloroethane	ND	280	59
1,1-Dichloropropene	ND	280	56
Carbon Tetrachloride	ND	280	51
1,2-Dichloroethane	ND	280	46
Benzene	ND	280	48
Trichloroethene	ND	280	55
1,2-Dichloropropane	ND	280	48
Bromodichloromethane	ND	280	49
Dibromomethane	ND	280	46
4-Methyl-2-Pentanone	ND	550	45
cis-1,3-Dichloropropene	ND	280	61
Toluene	ND	280	52
trans-1,3-Dichloropropene	ND	280	50
1,1,2-Trichloroethane	ND	280	54
2-Hexanone	ND	550	51
1,3-Dichloropropane	ND	280	52
Tetrachloroethene	ND	280	54
Dibromochloromethane	ND	280	47
1,2-Dibromoethane	ND	280	48
Chlorobenzene	ND	280	53
1,1,1,2-Tetrachloroethane	ND	280	60
Ethylbenzene	ND	280	57
m,p-Xylenes	ND	280	34
o-Xylene	ND	280	56
Styrene	ND	280	58
Bromoform	ND	280	55
Isopropylbenzene	ND	280	61
1,1,2,2-Tetrachloroethane	ND	280	46
1,2,3-Trichloropropane	ND	280	57
Propylbenzene	ND	280	57
Bromobenzene	ND	280	54

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-23A	Diln Fac:	43.67
Lab ID:	309851-014	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	280	58
2-Chlorotoluene	ND	280	63
4-Chlorotoluene	ND	280	58
tert-Butylbenzene	ND	280	64
1,2,4-Trimethylbenzene	ND	280	58
sec-Butylbenzene	ND	280	64
para-Isopropyl Toluene	ND	280	60
1,3-Dichlorobenzene	ND	280	58
1,4-Dichlorobenzene	ND	280	55
n-Butylbenzene	ND	280	61
1,2-Dichlorobenzene	ND	280	63
1,2-Dibromo-3-Chloropropane	ND	280	56
1,2,4-Trichlorobenzene	ND	280	77
Hexachlorobutadiene	ND	280	68
Naphthalene	ND	280	60
1,2,3-Trichlorobenzene	ND	280	74

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9A	Diln Fac:	45.68
Lab ID:	309851-015	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Moisture: 25%

Analyte	Result	RL	MDL
Freon 12	ND	610	63
Chloromethane	ND	610	51
Vinyl Chloride	ND	610	46
Bromomethane	ND	610	210
Chloroethane	ND	610	43
Trichlorofluoromethane	ND	300	48
Acetone	ND	1,200	160
Freon 113	ND	300	60
1,1-Dichloroethene	ND	300	52
Methylene Chloride	ND	1,500	270
Carbon Disulfide	ND	300	59
MTBE	ND	300	55
trans-1,2-Dichloroethene	ND	300	62
Vinyl Acetate	ND	3,000	70
1,1-Dichloroethane	ND	300	57
2-Butanone	ND	610	130
cis-1,2-Dichloroethene	ND	300	61
2,2-Dichloropropane	ND	300	60
Chloroform	ND	300	65
Bromochloromethane	ND	300	65
1,1,1-Trichloroethane	ND	300	65
1,1-Dichloropropene	ND	300	61
Carbon Tetrachloride	ND	300	56
1,2-Dichloroethane	ND	300	51
Benzene	ND	300	53
Trichloroethene	ND	300	61
1,2-Dichloropropane	ND	300	52
Bromodichloromethane	ND	300	54
Dibromomethane	ND	300	51
4-Methyl-2-Pentanone	ND	610	49
cis-1,3-Dichloropropene	ND	300	67
Toluene	ND	300	57
trans-1,3-Dichloropropene	ND	300	55
1,1,2-Trichloroethane	ND	300	59
2-Hexanone	ND	610	56
1,3-Dichloropropane	ND	300	57
Tetrachloroethene	ND	300	59
Dibromochloromethane	ND	300	52
1,2-Dibromoethane	ND	300	53
Chlorobenzene	ND	300	58
1,1,1,2-Tetrachloroethane	ND	300	66
Ethylbenzene	ND	300	62
m,p-Xylenes	ND	300	38
o-Xylene	ND	300	62
Styrene	ND	300	64
Bromoform	ND	300	60
Isopropylbenzene	ND	300	67
1,1,2,2-Tetrachloroethane	ND	300	50
1,2,3-Trichloropropane	ND	300	63
Propylbenzene	ND	300	63
Bromobenzene	ND	300	59

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9A	Diln Fac:	45.68
Lab ID:	309851-015	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	300	63
2-Chlorotoluene	ND	300	70
4-Chlorotoluene	ND	300	64
tert-Butylbenzene	ND	300	71
1,2,4-Trimethylbenzene	ND	300	64
sec-Butylbenzene	ND	300	70
para-Isopropyl Toluene	ND	300	66
1,3-Dichlorobenzene	ND	300	64
1,4-Dichlorobenzene	ND	300	60
n-Butylbenzene	ND	300	67
1,2-Dichlorobenzene	ND	300	69
1,2-Dibromo-3-Chloropropane	ND	300	62
1,2,4-Trichlorobenzene	ND	300	85
Hexachlorobutadiene	ND	300	74
Naphthalene	ND	300	66
1,2,3-Trichlorobenzene	ND	300	82

Surrogate	%REC	Limits
Dibromofluoromethane	90	78-131
1,2-Dichloroethane-d4	86	80-136
Toluene-d8	98	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10A	Diln Fac:	41.33
Lab ID:	309851-016	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Moisture: 24%

Analyte	Result	RL	MDL
Freon 12	ND	540	56
Chloromethane	ND	540	46
Vinyl Chloride	ND	540	41
Bromomethane	ND	540	190
Chloroethane	ND	540	39
Trichlorofluoromethane	ND	270	43
Acetone	ND	1,100	140
Freon 113	ND	270	54
1,1-Dichloroethene	ND	270	46
Methylene Chloride	ND	1,400	240
Carbon Disulfide	ND	270	53
MTBE	ND	270	49
trans-1,2-Dichloroethene	ND	270	56
Vinyl Acetate	ND	2,700	63
1,1-Dichloroethane	ND	270	51
2-Butanone	ND	540	120
cis-1,2-Dichloroethene	ND	270	54
2,2-Dichloropropane	ND	270	54
Chloroform	ND	270	58
Bromochloromethane	ND	270	58
1,1,1-Trichloroethane	ND	270	58
1,1-Dichloropropene	ND	270	55
Carbon Tetrachloride	ND	270	50
1,2-Dichloroethane	ND	270	45
Benzene	ND	270	48
Trichloroethene	ND	270	54
1,2-Dichloropropane	ND	270	47
Bromodichloromethane	ND	270	49
Dibromomethane	ND	270	45
4-Methyl-2-Pentanone	ND	540	44
cis-1,3-Dichloropropene	ND	270	60
Toluene	ND	270	51
trans-1,3-Dichloropropene	ND	270	49
1,1,2-Trichloroethane	ND	270	53
2-Hexanone	ND	540	50
1,3-Dichloropropane	ND	270	51
Tetrachloroethene	ND	270	53
Dibromochloromethane	ND	270	46
1,2-Dibromoethane	ND	270	47
Chlorobenzene	ND	270	52
1,1,1,2-Tetrachloroethane	ND	270	59
Ethylbenzene	ND	270	56
m,p-Xylenes	ND	270	34
o-Xylene	ND	270	55
Styrene	ND	270	57
Bromoform	ND	270	54
Isopropylbenzene	ND	270	60
1,1,2,2-Tetrachloroethane	ND	270	45
1,2,3-Trichloropropane	ND	270	56
Propylbenzene	ND	270	56
Bromobenzene	ND	270	53

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10A	Diln Fac:	41.33
Lab ID:	309851-016	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	57
2-Chlorotoluene	ND	270	62
4-Chlorotoluene	ND	270	57
tert-Butylbenzene	ND	270	63
1,2,4-Trimethylbenzene	ND	270	57
sec-Butylbenzene	ND	270	63
para-Isopropyl Toluene	ND	270	59
1,3-Dichlorobenzene	ND	270	57
1,4-Dichlorobenzene	ND	270	54
n-Butylbenzene	ND	270	60
1,2-Dichlorobenzene	ND	270	62
1,2-Dibromo-3-Chloropropane	ND	270	55
1,2,4-Trichlorobenzene	ND	270	76
Hexachlorobutadiene	ND	270	67
Naphthalene	ND	270	59
1,2,3-Trichlorobenzene	ND	270	73

Surrogate	%REC	Limits
Dibromofluoromethane	86	78-131
1,2-Dichloroethane-d4	80	80-136
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11A	Diln Fac:	47.03
Lab ID:	309851-017	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 25%

Analyte	Result	RL	MDL
Freon 12	ND	630	65
Chloromethane	ND	630	53
Vinyl Chloride	ND	630	47
Bromomethane	ND	630	220
Chloroethane	ND	630	45
Trichlorofluoromethane	ND	310	49
Acetone	ND	1,300	160
Freon 113	ND	310	62
1,1-Dichloroethene	ND	310	54
Methylene Chloride	ND	1,600	280
Carbon Disulfide	ND	310	61
MTBE	ND	310	56
trans-1,2-Dichloroethene	ND	310	64
Vinyl Acetate	ND	3,100	72
1,1-Dichloroethane	ND	310	59
2-Butanone	ND	630	140
cis-1,2-Dichloroethene	ND	310	63
2,2-Dichloropropane	ND	310	62
Chloroform	ND	310	67
Bromochloromethane	ND	310	67
1,1,1-Trichloroethane	ND	310	67
1,1-Dichloropropene	ND	310	63
Carbon Tetrachloride	ND	310	57
1,2-Dichloroethane	ND	310	52
Benzene	ND	310	55
Trichloroethene	ND	310	63
1,2-Dichloropropane	ND	310	54
Bromodichloromethane	ND	310	56
Dibromomethane	ND	310	52
4-Methyl-2-Pentanone	ND	630	51
cis-1,3-Dichloropropene	ND	310	69
Toluene	ND	310	59
trans-1,3-Dichloropropene	ND	310	57
1,1,2-Trichloroethane	ND	310	61
2-Hexanone	ND	630	58
1,3-Dichloropropane	ND	310	59
Tetrachloroethene	ND	310	61
Dibromochloromethane	ND	310	53
1,2-Dibromoethane	ND	310	55
Chlorobenzene	ND	310	60
1,1,1,2-Tetrachloroethane	ND	310	68
Ethylbenzene	ND	310	64
m,p-Xylenes	ND	310	39
o-Xylene	ND	310	64
Styrene	ND	310	66
Bromoform	ND	310	62
Isopropylbenzene	ND	310	69
1,1,2,2-Tetrachloroethane	ND	310	52
1,2,3-Trichloropropane	ND	310	65
Propylbenzene	ND	310	65
Bromobenzene	ND	310	61

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11A	Diln Fac:	47.03
Lab ID:	309851-017	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	310	65
2-Chlorotoluene	ND	310	72
4-Chlorotoluene	ND	310	66
tert-Butylbenzene	ND	310	73
1,2,4-Trimethylbenzene	ND	310	66
sec-Butylbenzene	ND	310	72
para-Isopropyl Toluene	ND	310	68
1,3-Dichlorobenzene	ND	310	66
1,4-Dichlorobenzene	ND	310	62
n-Butylbenzene	ND	310	69
1,2-Dichlorobenzene	ND	310	71
1,2-Dibromo-3-Chloropropane	ND	310	64
1,2,4-Trichlorobenzene	ND	310	87
Hexachlorobutadiene	ND	310	77
Naphthalene	ND	310	68
1,2,3-Trichlorobenzene	ND	310	84

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	101	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	109	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12A	Diln Fac:	47.95
Lab ID:	309851-018	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	530	55
Chloromethane	ND	530	44
Vinyl Chloride	ND	530	40
Bromomethane	ND	530	180
Chloroethane	ND	530	38
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,100	140
Freon 113	ND	260	52
1,1-Dichloroethene	ND	260	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	51
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	54
Vinyl Acetate	ND	2,600	61
1,1-Dichloroethane	ND	260	50
2-Butanone	ND	530	120
cis-1,2-Dichloroethene	ND	260	53
2,2-Dichloropropane	ND	260	52
Chloroform	ND	260	57
Bromochloromethane	ND	260	56
1,1,1-Trichloroethane	ND	260	56
1,1-Dichloropropene	ND	260	53
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	44
Benzene	ND	260	46
Trichloroethene	ND	260	53
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	47
Dibromomethane	ND	260	44
4-Methyl-2-Pentanone	ND	530	42
cis-1,3-Dichloropropene	ND	260	58
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	48
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	530	48
1,3-Dichloropropane	ND	260	50
Tetrachloroethene	ND	260	51
Dibromochloromethane	ND	260	45
1,2-Dibromoethane	ND	260	46
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	57
Ethylbenzene	ND	260	54
m,p-Xylenes	ND	260	33
o-Xylene	ND	260	54
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	58
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	55
Propylbenzene	ND	260	55
Bromobenzene	ND	260	51

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12A	Diln Fac:	47.95
Lab ID:	309851-018	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	55
2-Chlorotoluene	ND	260	60
4-Chlorotoluene	ND	260	55
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	56
sec-Butylbenzene	ND	260	61
para-Isopropyl Toluene	ND	260	57
1,3-Dichlorobenzene	ND	260	55
1,4-Dichlorobenzene	ND	260	52
n-Butylbenzene	ND	260	58
1,2-Dichlorobenzene	ND	260	60
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	73
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	57
1,2,3-Trichlorobenzene	ND	260	71

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9C	Diln Fac:	45.52
Lab ID:	309851-019	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	510	53
Chloromethane	ND	510	43
Vinyl Chloride	ND	510	39
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	260	40
Acetone	ND	1,000	130
Freon 113	ND	260	50
1,1-Dichloroethene	ND	260	44
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	50
MTBE	ND	260	46
trans-1,2-Dichloroethene	ND	260	52
Vinyl Acetate	ND	2,600	59
1,1-Dichloroethane	ND	260	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	260	51
2,2-Dichloropropane	ND	260	51
Chloroform	ND	260	55
Bromochloromethane	ND	260	54
1,1,1-Trichloroethane	ND	260	55
1,1-Dichloropropene	ND	260	52
Carbon Tetrachloride	ND	260	47
1,2-Dichloroethane	ND	260	42
Benzene	ND	260	45
Trichloroethene	ND	260	51
1,2-Dichloropropane	ND	260	44
Bromodichloromethane	ND	260	46
Dibromomethane	ND	260	43
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	260	56
Toluene	ND	260	48
trans-1,3-Dichloropropene	ND	260	46
1,1,2-Trichloroethane	ND	260	50
2-Hexanone	ND	510	47
1,3-Dichloropropane	ND	260	48
Tetrachloroethene	ND	260	50
Dibromochloromethane	ND	260	43
1,2-Dibromoethane	ND	260	45
Chlorobenzene	ND	260	49
1,1,1,2-Tetrachloroethane	ND	260	55
Ethylbenzene	ND	260	52
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	52
Styrene	ND	260	54
Bromoform	ND	260	51
Isopropylbenzene	ND	260	56
1,1,2,2-Tetrachloroethane	ND	260	42
1,2,3-Trichloropropane	ND	260	53
Propylbenzene	ND	260	53
Bromobenzene	ND	260	50

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-9C	Diln Fac:	45.52
Lab ID:	309851-019	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	53
2-Chlorotoluene	ND	260	59
4-Chlorotoluene	ND	260	54
tert-Butylbenzene	ND	260	60
1,2,4-Trimethylbenzene	ND	260	54
sec-Butylbenzene	ND	260	59
para-Isopropyl Toluene	ND	260	55
1,3-Dichlorobenzene	ND	260	54
1,4-Dichlorobenzene	ND	260	51
n-Butylbenzene	ND	260	56
1,2-Dichlorobenzene	ND	260	58
1,2-Dibromo-3-Chloropropane	ND	260	52
1,2,4-Trichlorobenzene	ND	260	71
Hexachlorobutadiene	ND	260	63
Naphthalene	ND	260	56
1,2,3-Trichlorobenzene	ND	260	69

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	99	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10C	Diln Fac:	41.20
Lab ID:	309851-020	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Moisture: 19%

Analyte	Result	RL	MDL
Freon 12	ND	510	53
Chloromethane	ND	510	43
Vinyl Chloride	ND	510	38
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	250	40
Acetone	ND	1,000	130
Freon 113	ND	250	50
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,300	220
Carbon Disulfide	ND	250	49
MTBE	ND	250	46
trans-1,2-Dichloroethene	ND	250	52
Vinyl Acetate	ND	2,500	59
1,1-Dichloroethane	ND	250	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	250	51
2,2-Dichloropropane	ND	250	50
Chloroform	ND	250	55
Bromochloromethane	ND	250	54
1,1,1-Trichloroethane	ND	250	54
1,1-Dichloropropene	ND	250	51
Carbon Tetrachloride	ND	250	47
1,2-Dichloroethane	ND	250	42
Benzene	ND	250	45
Trichloroethene	ND	250	51
1,2-Dichloropropane	ND	250	44
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	43
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	250	56
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	46
1,1,2-Trichloroethane	ND	250	49
2-Hexanone	ND	510	47
1,3-Dichloropropane	ND	250	48
Tetrachloroethene	ND	250	49
Dibromochloromethane	ND	250	43
1,2-Dibromoethane	ND	250	44
Chlorobenzene	ND	250	49
1,1,1,2-Tetrachloroethane	ND	250	55
Ethylbenzene	ND	250	52
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	52
Styrene	ND	250	54
Bromoform	ND	250	50
Isopropylbenzene	ND	250	56
1,1,2,2-Tetrachloroethane	ND	250	42
1,2,3-Trichloropropane	ND	250	53
Propylbenzene	ND	250	53
Bromobenzene	ND	250	49

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-10C	Diln Fac:	41.20
Lab ID:	309851-020	Batch#:	270544
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/17/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	53
2-Chlorotoluene	ND	250	58
4-Chlorotoluene	ND	250	53
tert-Butylbenzene	ND	250	59
1,2,4-Trimethylbenzene	ND	250	54
sec-Butylbenzene	ND	250	59
para-Isopropyl Toluene	ND	250	55
1,3-Dichlorobenzene	ND	250	53
1,4-Dichlorobenzene	ND	250	50
n-Butylbenzene	ND	250	56
1,2-Dichlorobenzene	ND	250	58
1,2-Dibromo-3-Chloropropane	ND	250	52
1,2,4-Trichlorobenzene	ND	250	71
Hexachlorobutadiene	ND	250	62
Naphthalene	ND	250	55
1,2,3-Trichlorobenzene	ND	250	68

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	80	80-136
Toluene-d8	98	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11C	Diln Fac:	46.87
Lab ID:	309851-021	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	530	55
Chloromethane	ND	530	44
Vinyl Chloride	ND	530	40
Bromomethane	ND	530	180
Chloroethane	ND	530	38
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,100	140
Freon 113	ND	260	52
1,1-Dichloroethene	ND	260	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	51
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	54
Vinyl Acetate	ND	2,600	61
1,1-Dichloroethane	ND	260	50
2-Butanone	ND	530	120
cis-1,2-Dichloroethene	ND	260	53
2,2-Dichloropropane	ND	260	52
Chloroform	ND	260	57
Bromochloromethane	ND	260	56
1,1,1-Trichloroethane	ND	260	56
1,1-Dichloropropene	ND	260	53
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	44
Benzene	ND	260	46
Trichloroethene	ND	260	53
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	47
Dibromomethane	ND	260	44
4-Methyl-2-Pentanone	ND	530	42
cis-1,3-Dichloropropene	ND	260	58
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	48
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	530	48
1,3-Dichloropropane	ND	260	50
Tetrachloroethene	ND	260	51
Dibromochloromethane	ND	260	45
1,2-Dibromoethane	ND	260	46
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	57
Ethylbenzene	ND	260	54
m,p-Xylenes	ND	260	33
o-Xylene	ND	260	54
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	58
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	55
Propylbenzene	ND	260	55
Bromobenzene	ND	260	51

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-11C	Diln Fac:	46.87
Lab ID:	309851-021	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	55
2-Chlorotoluene	ND	260	60
4-Chlorotoluene	ND	260	55
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	56
sec-Butylbenzene	ND	260	61
para-Isopropyl Toluene	ND	260	57
1,3-Dichlorobenzene	ND	260	55
1,4-Dichlorobenzene	ND	260	52
n-Butylbenzene	ND	260	58
1,2-Dichlorobenzene	ND	260	60
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	73
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	57
1,2,3-Trichlorobenzene	ND	260	71

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	95	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12C	Diln Fac:	48.07
Lab ID:	309851-022	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	540	56
Chloromethane	ND	540	45
Vinyl Chloride	ND	540	41
Bromomethane	ND	540	190
Chloroethane	ND	540	39
Trichlorofluoromethane	ND	270	43
Acetone	ND	1,100	140
Freon 113	ND	270	53
1,1-Dichloroethene	ND	270	46
Methylene Chloride	ND	1,400	240
Carbon Disulfide	ND	270	52
MTBE	ND	270	49
trans-1,2-Dichloroethene	ND	270	55
Vinyl Acetate	ND	2,700	62
1,1-Dichloroethane	ND	270	51
2-Butanone	ND	540	120
cis-1,2-Dichloroethene	ND	270	54
2,2-Dichloropropane	ND	270	53
Chloroform	ND	270	58
Bromochloromethane	ND	270	57
1,1,1-Trichloroethane	ND	270	58
1,1-Dichloropropene	ND	270	54
Carbon Tetrachloride	ND	270	49
1,2-Dichloroethane	ND	270	45
Benzene	ND	270	47
Trichloroethene	ND	270	54
1,2-Dichloropropane	ND	270	47
Bromodichloromethane	ND	270	48
Dibromomethane	ND	270	45
4-Methyl-2-Pentanone	ND	540	44
cis-1,3-Dichloropropene	ND	270	59
Toluene	ND	270	50
trans-1,3-Dichloropropene	ND	270	49
1,1,2-Trichloroethane	ND	270	52
2-Hexanone	ND	540	50
1,3-Dichloropropane	ND	270	51
Tetrachloroethene	ND	270	52
Dibromochloromethane	ND	270	46
1,2-Dibromoethane	ND	270	47
Chlorobenzene	ND	270	52
1,1,1,2-Tetrachloroethane	ND	270	58
Ethylbenzene	ND	270	55
m,p-Xylenes	ND	270	33
o-Xylene	ND	270	55
Styrene	ND	270	57
Bromoform	ND	270	54
Isopropylbenzene	ND	270	60
1,1,2,2-Tetrachloroethane	ND	270	45
1,2,3-Trichloropropane	ND	270	56
Propylbenzene	ND	270	56
Bromobenzene	ND	270	52

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-12C	Diln Fac:	48.07
Lab ID:	309851-022	Batch#:	270590
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	56
2-Chlorotoluene	ND	270	62
4-Chlorotoluene	ND	270	57
tert-Butylbenzene	ND	270	63
1,2,4-Trimethylbenzene	ND	270	57
sec-Butylbenzene	ND	270	62
para-Isopropyl Toluene	ND	270	59
1,3-Dichlorobenzene	ND	270	57
1,4-Dichlorobenzene	ND	270	53
n-Butylbenzene	ND	270	60
1,2-Dichlorobenzene	ND	270	61
1,2-Dibromo-3-Chloropropane	ND	270	55
1,2,4-Trichlorobenzene	ND	270	75
Hexachlorobutadiene	ND	270	66
Naphthalene	ND	270	59
1,2,3-Trichlorobenzene	ND	270	72

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270544
Units:	ug/Kg	Analyzed:	05/17/19
Diln Fac:	1.000		

Type: BS Lab ID: QC975982

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	27.92	112	69-142
Benzene	25.00	26.98	108	79-123
Trichloroethene	25.00	26.44	106	79-126
Toluene	25.00	27.46	110	78-120
Chlorobenzene	25.00	26.07	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	83	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	116	80-129

Type: BSD Lab ID: QC975983

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.66	103	69-142	8	23
Benzene	25.00	25.19	101	79-123	7	20
Trichloroethene	25.00	25.24	101	79-126	5	20
Toluene	25.00	25.75	103	78-120	6	20
Chlorobenzene	25.00	24.68	99	80-122	5	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	116	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975984	Batch#:	270544
Matrix:	Soil	Analyzed:	05/17/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975984	Batch#:	270544
Matrix:	Soil	Analyzed:	05/17/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	0.23 J	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	0.34 J	5.0	0.13
1,2,3-Trichlorobenzene	0.32 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270590
Units:	ug/Kg	Analyzed:	05/20/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976168

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.47	98	69-142
Benzene	25.00	26.77	107	79-123
Trichloroethene	25.00	25.45	102	79-126
Toluene	25.00	27.63	111	78-120
Chlorobenzene	25.00	26.06	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

Type: BSD Lab ID: QC976169

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.67	95	69-142	3	23
Benzene	25.00	26.20	105	79-123	2	20
Trichloroethene	25.00	25.05	100	79-126	2	20
Toluene	25.00	26.41	106	78-120	5	20
Chlorobenzene	25.00	25.03	100	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	101	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	0.13 J	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.56 J	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-21A	Batch#:	270543
Lab ID:	309851-012	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/21/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 14%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	59	12		
Acenaphthylene	23 J	59	12		
Acenaphthene	ND	59	12		
Fluorene	ND	59	12		
Phenanthrene	140	59	12		
Anthracene	32 J	59	12		
Fluoranthene	270	59	12		
Pyrene	420	59	12		
Benzo(a)anthracene	140	59	12	0.10	14
Chrysene	180	59	12	0.0010	0.18
Benzo(b)fluoranthene	260	59	12	0.10	26
Benzo(k)fluoranthene	71	59	12	0.010	0.71
Benzo(a)pyrene	210	59	12	1.0	210
Indeno(1,2,3-cd)pyrene	140	59	12	0.10	14
Dibenz(a,h)anthracene	30 J	59	12	1.0	30
Benzo(g,h,i)perylene	220	59	12		
Total Benzo(a)pyrene Equiv.					300

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-22A	Batch#:	270543
Lab ID:	309851-013	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 18%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	60	12		
Acenaphthylene	42 J	60	12		
Acenaphthene	15 J	60	12		
Fluorene	30 J	60	12		
Phenanthrene	630	60	12		
Anthracene	120	60	12		
Fluoranthene	750	60	12		
Pyrene	1,100	60	12		
Benzo(a)anthracene	340	60	12	0.10	34
Chrysene	370	60	12	0.0010	0.37
Benzo(b)fluoranthene	420	60	12	0.10	42
Benzo(k)fluoranthene	120	60	12	0.010	1.2
Benzo(a)pyrene	390	60	12	1.0	390
Indeno(1,2,3-cd)pyrene	180	60	12	0.10	18
Dibenz(a,h)anthracene	45 J	60	12	1.0	45
Benzo(g,h,i)perylene	230	60	12		
Total Benzo(a)pyrene Equiv.					530

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-12A	Batch#:	270543
Lab ID:	309851-018	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 9%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	34 J	55	11		
Acenaphthylene	81	55	11		
Acenaphthene	ND	55	11		
Fluorene	12 J	55	11		
Phenanthrene	180	55	11		
Anthracene	52 J	55	11		
Fluoranthene	380	55	11		
Pyrene	680	55	11		
Benzo(a)anthracene	200	55	11	0.10	20
Chrysene	260	55	11	0.0010	0.26
Benzo(b)fluoranthene	390	55	11	0.10	39
Benzo(k)fluoranthene	110	55	11	0.010	1.1
Benzo(a)pyrene	360	55	11	1.0	360
Indeno(1,2,3-cd)pyrene	210	55	11	0.10	21
Dibenz(a,h)anthracene	39 J	55	11	1.0	39
Benzo(g,h,i)perylene	300	55	11		
Total Benzo(a)pyrene Equiv.					480

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-10C	Batch#:	270543
Lab ID:	309851-020	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 19%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	62	12		
Acenaphthylene	19 J	62	12		
Acenaphthene	ND	62	12		
Fluorene	ND	62	12		
Phenanthrene	110	62	12		
Anthracene	27 J	62	12		
Fluoranthene	160	62	12		
Pyrene	270	62	12		
Benzo(a)anthracene	78	62	12	0.10	7.8
Chrysene	93	62	12	0.0010	0.093
Benzo(b)fluoranthene	150	62	12	0.10	15
Benzo(k)fluoranthene	40 J	62	12	0.010	0.40
Benzo(a)pyrene	120	62	12	1.0	120
Indeno(1,2,3-cd)pyrene	58 J	62	12	0.10	5.8
Dibenz(a,h)anthracene	ND	62	12	1.0	31
Benzo(g,h,i)perylene	97	62	12		
Total Benzo(a)pyrene Equiv.					180

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-11C	Batch#:	270543
Lab ID:	309851-021	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/17/19
Basis:	dry	Analyzed:	05/22/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 11%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	280	56		
Acenaphthylene	110 J	280	56		
Acenaphthene	ND	280	56		
Fluorene	ND	280	56		
Phenanthrene	250 J	280	56		
Anthracene	96 J	280	56		
Fluoranthene	1,300	280	56		
Pyrene	2,000	280	56		
Benzo(a)anthracene	530	280	56	0.10	53
Chrysene	700	280	56	0.0010	0.70
Benzo(b)fluoranthene	1,100	280	56	0.10	110
Benzo(k)fluoranthene	290	280	56	0.010	2.9
Benzo(a)pyrene	990	280	56	1.0	990
Indeno(1,2,3-cd)pyrene	480	280	56	0.10	48
Dibenz(a,h)anthracene	84 J	280	56	1.0	84
Benzo(g,h,i)perylene	700	280	56		
Total Benzo(a)pyrene Equiv.					1,300

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC975974	Batch#:	270543
Matrix:	Soil	Prepared:	05/17/19
Units:	ug/Kg	Analyzed:	05/21/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	159 *	48-120
2-Fluorobiphenyl	82	39-120
Terphenyl-d14	91	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC975975	Batch#:	270543
Matrix:	Soil	Prepared:	05/17/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	28.33	85	57-120
Acenaphthylene	33.33	28.40	85	60-120
Acenaphthene	33.33	27.28	82	64-120
Fluorene	33.33	26.15	78	67-120
Phenanthrene	33.33	28.44	85	64-120
Anthracene	33.33	29.04	87	66-120
Fluoranthene	33.33	27.25	82	73-121
Pyrene	33.33	30.44	91	67-120
Benzo(a)anthracene	33.33	26.96	81	69-121
Chrysene	33.33	17.99	54	48-120
Benzo(b)fluoranthene	33.33	29.39	88	66-120
Benzo(k)fluoranthene	33.33	27.92	84	62-125
Benzo(a)pyrene	33.33	28.11	84	66-120
Indeno(1,2,3-cd)pyrene	33.33	26.58	80	57-120
Dibenz(a,h)anthracene	33.33	21.90	66	45-120
Benzo(g,h,i)perylene	33.33	27.48	82	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	148 *	48-120
2-Fluorobiphenyl	73	39-120
Terphenyl-d14	80	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-21A	Batch#:	270589
Lab ID:	309851-001	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.88
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.5
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.91
Heptachlor epoxide	ND	11	0.83
Endosulfan I	ND	11	1.1
Dieldrin	ND	22	0.86
4,4'-DDE	1.5 J	22	0.97
Endrin	ND	22	2.0
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.7
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.7
4,4'-DDT	6.5 J	22	0.88
alpha-Chlordane	1.7 C J	11	1.4
gamma-Chlordane	1.8 C J	11	1.1
Methoxychlor	ND	110	26
Toxaphene	ND	390	110

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-22A	Batch#:	270589
Lab ID:	309851-002	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.45
beta-BHC	ND	5.6	0.58
gamma-BHC	ND	5.6	0.63
delta-BHC	ND	5.6	0.80
Heptachlor	3.1 C J	5.6	0.40
Aldrin	ND	5.6	0.47
Heptachlor epoxide	0.80 C J	5.6	0.39
Endosulfan I	ND	5.6	0.55
Dieldrin	1.4 C J	11	0.40
4,4'-DDE	1.5 C J	11	0.40
Endrin	ND	11	1.0
Endosulfan II	ND	11	0.62
Endosulfan sulfate	1.0 C J	11	0.38
4,4'-DDD	ND	11	0.76
Endrin aldehyde	ND	11	3.5
4,4'-DDT	0.70 C J	11	0.46
alpha-Chlordane	4.0 C J	5.6	0.73
gamma-Chlordane	ND	5.6	0.70
Methoxychlor	ND	56	14
Toxaphene	ND	200	59

Surrogate	%REC	Limits
TCMX	102	43-125
Decachlorobiphenyl	72	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-23A	Batch#:	270589
Lab ID:	309851-003	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.40
Heptachlor	ND	5.5	0.40
Aldrin	0.63 C J	5.5	0.30
Heptachlor epoxide	0.92 C J	5.5	0.38
Endosulfan I	ND	5.5	0.54
Dieldrin	0.73 C J	11	0.44
4,4'-DDE	2.1 C J	11	0.40
Endrin	0.36 C J	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	1.0 C J	11	0.37
4,4'-DDD	4.7 C J	11	0.40
Endrin aldehyde	ND	11	2.9
4,4'-DDT	1.7 C J	11	0.45
alpha-Chlordane	5.2 C J	5.5	0.71
gamma-Chlordane	1.2 C J	5.5	0.68
Methoxychlor	ND	55	7.6
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	84	43-125
Decachlorobiphenyl	60	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-9A	Batch#:	270589
Lab ID:	309851-004	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.0
beta-BHC	ND	11	0.66
gamma-BHC	ND	11	0.83
delta-BHC	ND	11	0.82
Heptachlor	ND	11	0.82
Aldrin	ND	11	0.62
Heptachlor epoxide	ND	11	0.79
Endosulfan I	ND	11	0.82
Dieldrin	ND	23	0.90
4,4'-DDE	ND	23	0.82
Endrin	ND	23	0.68
Endosulfan II	ND	23	0.82
Endosulfan sulfate	ND	23	0.76
4,4'-DDD	ND	23	0.82
Endrin aldehyde	ND	23	6.0
4,4'-DDT	4.9 J	23	0.92
alpha-Chlordane	1.9 C J	11	1.5
gamma-Chlordane	2.3 J	11	1.1
Methoxychlor	ND	110	16
Toxaphene	ND	410	140

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-10A	Batch#:	270589
Lab ID:	309851-005	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.51
beta-BHC	ND	5.7	0.33
gamma-BHC	ND	5.7	0.41
delta-BHC	ND	5.7	0.41
Heptachlor	ND	5.7	0.41
Aldrin	ND	5.7	0.31
Heptachlor epoxide	ND	5.7	0.43
Endosulfan I	ND	5.7	0.41
Dieldrin	1.5 J	11	0.45
4,4'-DDE	1.5 J	11	0.41
Endrin	0.39 C J	11	0.34
Endosulfan II	0.51 C J	11	0.41
Endosulfan sulfate	ND	11	0.91
4,4'-DDD	1.1 J	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	2.7 J	11	0.46
alpha-Chlordane	1.7 C J	5.7	0.73
gamma-Chlordane	1.7 C J	5.7	0.70
Methoxychlor	ND	57	7.8
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	107	43-125
Decachlorobiphenyl	79	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-11A	Batch#:	270589
Lab ID:	309851-006	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.41
Heptachlor	ND	5.6	0.41
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.41
Dieldrin	ND	11	0.45
4,4'-DDE	0.67 C J	11	0.41
Endrin	ND	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	0.92 C J	11	0.38
4,4'-DDD	ND	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	1.7 J	11	0.46
alpha-Chlordane	1.5 C J	5.6	0.73
gamma-Chlordane	1.1 C J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	100	43-125
Decachlorobiphenyl	81	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12A	Batch#:	270589
Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.41
Heptachlor	ND	5.6	0.41
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.41
Dieldrin	ND	11	0.41
4,4'-DDE	ND	11	0.41
Endrin	ND	11	0.34
Endosulfan II	ND	11	0.41
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	ND	11	0.41
Endrin aldehyde	ND	11	3.0
4,4'-DDT	ND	11	0.46
alpha-Chlordane	1.6 C J	5.6	0.73
gamma-Chlordane	1.8 J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	60	43-125
Decachlorobiphenyl	42	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-9C	Batch#:	270589
Lab ID:	309851-008	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.32
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.40
Dieldrin	2.1 C J	11	0.44
4,4'-DDE	2.8 J	11	0.40
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.37
4,4'-DDD	ND	11	0.40
Endrin aldehyde	ND	11	3.0
4,4'-DDT	4.5 J	11	0.45
alpha-Chlordane	1.2 C J	5.6	0.72
gamma-Chlordane	0.84 C J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	102	43-125
Decachlorobiphenyl	75	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-10C	Batch#:	270589
Lab ID:	309851-009	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.49
beta-BHC	ND	5.4	0.32
gamma-BHC	ND	5.4	0.40
delta-BHC	ND	5.4	0.39
Heptachlor	ND	5.4	0.39
Aldrin	ND	5.4	0.30
Heptachlor epoxide	0.57 J	5.4	0.42
Endosulfan I	ND	5.4	0.39
Dieldrin	2.0 J	11	0.39
4,4'-DDE	1.1 J	11	0.39
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	0.74 C J	11	0.36
4,4'-DDD	3.2 J	11	0.39
Endrin aldehyde	ND	11	2.9
4,4'-DDT	2.4 J	11	0.44
alpha-Chlordane	1.3 C J	5.4	0.70
gamma-Chlordane	2.1 C J	5.4	0.54
Methoxychlor	ND	54	7.5
Toxaphene	ND	200	65

Surrogate	%REC	Limits
TCMX	78	43-125
Decachlorobiphenyl	55	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-11C	Batch#:	270589
Lab ID:	309851-010	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.63
gamma-BHC	ND	11	0.79
delta-BHC	ND	11	0.78
Heptachlor	ND	11	0.78
Aldrin	ND	11	0.60
Heptachlor epoxide	ND	11	0.83
Endosulfan I	ND	11	0.78
Dieldrin	1.5 J	22	0.78
4,4'-DDE	1.1 C J	22	0.78
Endrin	2.2 J	22	0.65
Endosulfan II	ND	22	0.78
Endosulfan sulfate	2.4 C J	22	1.7
4,4'-DDD	1.2 C J	22	0.78
Endrin aldehyde	ND	22	5.8
4,4'-DDT	5.4 J	22	0.88
alpha-Chlordane	5.2 C J	11	1.4
gamma-Chlordane	4.0 C J	11	1.3
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12C	Batch#:	270589
Lab ID:	309851-011	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.32
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.40
Dieldrin	ND	11	0.44
4,4'-DDE	1.0 J	11	0.40
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	1.1 C J	11	0.37
4,4'-DDD	ND	11	0.40
Endrin aldehyde	ND	11	3.0
4,4'-DDT	ND	11	0.45
alpha-Chlordane	1.0 C J	5.6	0.72
gamma-Chlordane	ND	5.6	0.69
Methoxychlor	ND	56	7.6
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	93	43-125
Decachlorobiphenyl	59	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976161	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.10
beta-BHC	ND	1.1	0.065
gamma-BHC	ND	1.1	0.081
delta-BHC	ND	1.1	0.080
Heptachlor	ND	1.1	0.080
Aldrin	ND	1.1	0.061
Heptachlor epoxide	ND	1.1	0.077
Endosulfan I	ND	1.1	0.080
Dieldrin	ND	2.2	0.080
4,4'-DDE	ND	2.2	0.080
Endrin	ND	2.2	0.067
Endosulfan II	ND	2.2	0.080
Endosulfan sulfate	ND	2.2	0.074
4,4'-DDD	ND	2.2	0.080
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.11
Methoxychlor	ND	11	1.5
Toxaphene	ND	40	13

Surrogate	%REC	Limits
TCMX	110	43-125
Decachlorobiphenyl	110	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976165	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	16.09	121	58-131
Heptachlor	13.33	17.26	129	51-133
Aldrin	13.33	14.36	108	52-128
Dieldrin	13.33	15.12	113	59-133
Endrin	13.33	16.45	123	48-154
4,4'-DDT	13.33	16.71	125	54-140

Surrogate	%REC	Limits
TCMX	100	43-125
Decachlorobiphenyl	99	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12A	Batch#:	270589
MSS Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Type: MS Lab ID: QC976166

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.4109	13.62	14.48	106	58-126
Heptachlor	<0.4060	13.62	12.03	88	58-127
Aldrin	<0.3106	13.62	12.54	92	55-124
Dieldrin	<0.4060	13.62	13.19	97	48-137
Endrin	<0.3375	13.62	14.81	109	48-158
4,4'-DDT	<0.4579	13.62	16.20	119	38-155

Surrogate	%REC	Limits
TCMX	91	43-125
Decachlorobiphenyl	73	40-128

Type: MSD Lab ID: QC976167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.27	10.79	81	58-126	27	36
Heptachlor	13.27	12.33	93	58-127	5	34
Aldrin	13.27	9.131	69	55-124	29	31
Dieldrin	13.27	9.659	73	48-137	28	38
Endrin	13.27	11.16	84	48-158	26	38
4,4'-DDT	13.27	11.20	84	38-155	34	42

Surrogate	%REC	Limits
TCMX	86	43-125
Decachlorobiphenyl	61	40-128

RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	air dried	Prepared:	05/20/19
Batch#:	270589		

Field ID: DTSC-21A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-001

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.1
Aroclor-1221	ND	26	8.5
Aroclor-1232	ND	13	7.2
Aroclor-1242	ND	13	9.5
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.3
Aroclor-1260	23	13	6.9

Surrogate	%REC	Limits
Decachlorobiphenyl	92	49-157

Field ID: DTSC-22A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-002

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.4
Aroclor-1221	ND	27	8.8
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	9.8
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.5
Aroclor-1260	16	13	9.2

Surrogate	%REC	Limits
Decachlorobiphenyl	80	49-157

Field ID: DTSC-23A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-003

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.2
Aroclor-1221	ND	26	8.6
Aroclor-1232	ND	13	7.3
Aroclor-1242	ND	13	9.6
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.4
Aroclor-1260	31	13	7.0

Surrogate	%REC	Limits
Decachlorobiphenyl	69	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	air dried	Prepared:	05/20/19
Batch#:	270589		

Field ID: DTSC-9A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-004

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	14	7.5
Aroclor-1242	ND	14	9.9
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.6
Aroclor-1260	23	14	7.2

Surrogate	%REC	Limits
Decachlorobiphenyl	85	49-157

Field ID: DTSC-10A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-005

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	14	7.5
Aroclor-1242	ND	14	9.9
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.6
Aroclor-1260	15	14	9.3

Surrogate	%REC	Limits
Decachlorobiphenyl	86	49-157

Field ID: DTSC-11A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-006

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.8
Aroclor-1232	ND	14	7.4
Aroclor-1242	ND	14	9.8
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.5
Aroclor-1260	12 J	14	9.3

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	air dried	Prepared:	05/20/19
Batch#:	270589		

Field ID: DTSC-12A Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/20/19
 Lab ID: 309851-007

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	14	7.5
Aroclor-1242	ND	14	9.8
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.5
Aroclor-1260	ND	14	9.3

Surrogate	%REC	Limits
Decachlorobiphenyl	52	49-157

Field ID: DTSC-9C Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-008

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.3
Aroclor-1221	ND	27	8.8
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	9.7
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.5
Aroclor-1260	20	13	9.2

Surrogate	%REC	Limits
Decachlorobiphenyl	76	49-157

Field ID: DTSC-10C Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-009

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	5.4
Aroclor-1221	ND	26	8.6
Aroclor-1232	ND	13	7.2
Aroclor-1242	ND	13	9.5
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.3
Aroclor-1260	11 J	13	9.0

Surrogate	%REC	Limits
Decachlorobiphenyl	64	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/15/19
Units:	ug/Kg	Received:	05/15/19
Basis:	air dried	Prepared:	05/20/19
Batch#:	270589		

Field ID: DTSC-11C Diln Fac: 3.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-010

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	11
Aroclor-1221	ND	39	13
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	14
Aroclor-1248	ND	20	15
Aroclor-1254	ND	20	8.0
Aroclor-1260	25	20	13

Surrogate	%REC	Limits
Decachlorobiphenyl	77	49-157

Field ID: DTSC-12C Diln Fac: 2.000
 Type: SAMPLE Analyzed: 05/21/19
 Lab ID: 309851-011

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.3
Aroclor-1221	ND	27	8.7
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	9.7
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.5
Aroclor-1260	10 J	13	9.1

Surrogate	%REC	Limits
Decachlorobiphenyl	81	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC976161 Analyzed: 05/20/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.6
Aroclor-1221	ND	24	4.4
Aroclor-1232	ND	12	3.7
Aroclor-1242	ND	12	4.8
Aroclor-1248	ND	12	5.1
Aroclor-1254	ND	12	2.7
Aroclor-1260	ND	12	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	117	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976162	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	183.7	110	63-143
Aroclor-1260	166.7	181.4	109	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	100	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	DTSC-12A	Batch#:	270589
MSS Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976163

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<7.389	168.8	150.9	89	62-160
Aroclor-1260	<9.265	168.8	151.2	90	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	74	49-157

Type: MSD Lab ID: QC976164

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	167.7	111.7	67	62-160	29	43
Aroclor-1260	167.7	102.7	61	53-172	38	44

Surrogate	%REC	Limits
Decachlorobiphenyl	49	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-21A	Batch#:	270694
Lab ID:	309851-001	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.21 J	2.0	0.068
Arsenic	4.1	1.5	0.066
Barium	76	0.25	0.030
Beryllium	0.29	0.10	0.010
Cadmium	0.16 J	0.25	0.016
Chromium	45	0.25	0.049
Cobalt	9.0	0.25	0.014
Copper	24	0.25	0.057
Lead	35	1.0	0.056
Molybdenum	0.62	0.25	0.026
Nickel	55	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	34	0.25	0.052
Zinc	67	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-22A	Batch#:	270694
Lab ID:	309851-002	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.17 J	2.0	0.068
Arsenic	4.6	1.5	0.065
Barium	89	0.25	0.030
Beryllium	0.29	0.098	0.0099
Cadmium	0.19 J	0.25	0.016
Chromium	46	0.25	0.048
Cobalt	8.5	0.25	0.014
Copper	34	0.25	0.056
Lead	38	0.98	0.056
Molybdenum	0.87	0.25	0.026
Nickel	43	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	37	0.25	0.052
Zinc	65	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-23A	Batch#:	270694
Lab ID:	309851-003	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	4.3	1.5	0.066
Barium	81	0.25	0.030
Beryllium	0.27	0.10	0.010
Cadmium	0.23 J	0.25	0.016
Chromium	42	0.25	0.049
Cobalt	8.0	0.25	0.014
Copper	39	0.25	0.057
Lead	35	1.0	0.056
Molybdenum	0.77	0.25	0.026
Nickel	39	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	33	0.25	0.052
Zinc	61	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9A	Batch#:	270694
Lab ID:	309851-004	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.11 J	2.0	0.068
Arsenic	4.3	1.5	0.066
Barium	85	0.25	0.030
Beryllium	0.27	0.099	0.010
Cadmium	0.18 J	0.25	0.016
Chromium	42	0.25	0.049
Cobalt	8.6	0.25	0.014
Copper	25	0.25	0.057
Lead	29	0.99	0.056
Molybdenum	0.63	0.25	0.026
Nickel	43	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	33	0.25	0.052
Zinc	64	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-10A	Batch#:	270694
Lab ID:	309851-005	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	4.4	1.5	0.065
Barium	82	0.25	0.030
Beryllium	0.28	0.099	0.0099
Cadmium	0.24 J	0.25	0.016
Chromium	47	0.25	0.048
Cobalt	8.8	0.25	0.014
Copper	24	0.25	0.056
Lead	99	0.99	0.056
Molybdenum	0.67	0.25	0.026
Nickel	44	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	36	0.25	0.052
Zinc	62	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-11A	Batch#:	270694
Lab ID:	309851-006	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.77 J	2.0	0.067
Arsenic	3.4	1.5	0.065
Barium	56	0.24	0.029
Beryllium	0.25	0.098	0.0098
Cadmium	0.12 J	0.24	0.016
Chromium	41	0.24	0.048
Cobalt	6.8	0.24	0.014
Copper	16	0.24	0.056
Lead	20	0.98	0.055
Molybdenum	0.51	0.24	0.025
Nickel	37	0.24	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.088
Vanadium	30	0.24	0.051
Zinc	46	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-12A	Batch#:	270694
Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.13 J	2.0	0.068
Arsenic	3.1	1.5	0.065
Barium	44	0.25	0.030
Beryllium	0.18	0.099	0.0099
Cadmium	0.16 J	0.25	0.016
Chromium	32	0.25	0.048
Cobalt	5.8	0.25	0.014
Copper	17	0.25	0.056
Lead	22	0.99	0.056
Molybdenum	0.42	0.25	0.026
Nickel	29	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	23	0.25	0.052
Zinc	48	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-9C	Batch#:	270694
Lab ID:	309851-008	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.32 J	2.0	0.068
Arsenic	4.5	1.5	0.066
Barium	77	0.25	0.030
Beryllium	0.28	0.099	0.0099
Cadmium	0.19 J	0.25	0.016
Chromium	44	0.25	0.049
Cobalt	9.2	0.25	0.014
Copper	23	0.25	0.057
Lead	37	0.99	0.056
Molybdenum	0.57	0.25	0.026
Nickel	53	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	32	0.25	0.052
Zinc	69	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-10C	Batch#:	270694
Lab ID:	309851-009	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	4.0	1.5	0.066
Barium	73	0.25	0.030
Beryllium	0.26	0.099	0.0099
Cadmium	0.15 J	0.25	0.016
Chromium	43	0.25	0.049
Cobalt	7.7	0.25	0.014
Copper	22	0.25	0.056
Lead	26	0.99	0.056
Molybdenum	0.66	0.25	0.026
Nickel	42	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	33	0.25	0.052
Zinc	56	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-11C	Batch#:	270694
Lab ID:	309851-010	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.12 J	2.0	0.068
Arsenic	3.5	1.5	0.066
Barium	70	0.25	0.030
Beryllium	0.23	0.099	0.0099
Cadmium	0.19 J	0.25	0.016
Chromium	40	0.25	0.049
Cobalt	6.8	0.25	0.014
Copper	20	0.25	0.057
Lead	23	0.99	0.056
Molybdenum	0.52	0.25	0.026
Nickel	37	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	32	0.25	0.052
Zinc	49	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-12C	Batch#:	270694
Lab ID:	309851-011	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.20 J	2.0	0.067
Arsenic	3.2	1.5	0.065
Barium	59	0.25	0.029
Beryllium	0.20	0.098	0.0098
Cadmium	0.16 J	0.25	0.016
Chromium	39	0.25	0.048
Cobalt	6.0	0.25	0.014
Copper	32	0.25	0.056
Lead	29	0.98	0.055
Molybdenum	0.41	0.25	0.026
Nickel	33	0.25	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.25	0.029
Thallium	ND	0.49	0.088
Vanadium	28	0.25	0.051
Zinc	50	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270640
Matrix:	Soil	Sampled:	05/15/19
Units:	mg/Kg	Received:	05/15/19
Basis:	dry	Prepared:	05/21/19
Diln Fac:	1.000	Analyzed:	05/21/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-21A	SAMPLE	309851-012	0.32	0.018	0.0032	14%
DTSC-22A	SAMPLE	309851-013	0.14	0.021	0.0038	18%
DTSC-23A	SAMPLE	309851-014	0.16	0.020	0.0035	21%
DTSC-9A	SAMPLE	309851-015	0.14	0.022	0.0038	25%
DTSC-10A	SAMPLE	309851-016	0.16	0.022	0.0039	24%
DTSC-11A	SAMPLE	309851-017	0.12	0.022	0.0039	25%
DTSC-12A	SAMPLE	309851-018	0.13	0.019	0.0034	9%
DTSC-9C	SAMPLE	309851-019	0.14	0.017	0.0030	11%
DTSC-10C	SAMPLE	309851-020	0.11	0.020	0.0036	19%
DTSC-11C	SAMPLE	309851-021	0.12	0.019	0.0033	11%
DTSC-12C	SAMPLE	309851-022	0.16	0.020	0.0035	11%
	BLANK	QC976385	ND	0.017	0.0029	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270640
MSS Lab ID:	309986-009	Sampled:	05/18/19
Matrix:	Soil	Received:	05/19/19
Units:	mg/Kg	Prepared:	05/21/19
Basis:	as received	Analyzed:	05/21/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC976386		0.1538	0.1454	95	80-120		
BSD	QC976387		0.1587	0.1443	91	80-120	4	20
MS	QC976388	0.03458	0.1724	0.1977	95	80-120		
MSD	QC976389		0.1613	0.1856	94	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976614	Batch#:	270694
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	ND	1.5	0.066
Barium	0.13 J	0.25	0.030
Beryllium	ND	0.099	0.0099
Cadmium	ND	0.25	0.016
Chromium	0.052 J	0.25	0.049
Cobalt	ND	0.25	0.014
Copper	0.093 J	0.25	0.057
Lead	ND	0.99	0.056
Molybdenum	ND	0.25	0.026
Nickel	ND	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.089
Vanadium	ND	0.25	0.052
Zinc	0.24 J	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270694
Units:	mg/Kg	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/23/19

Type: BS Lab ID: QC976615

Analyte	Spiked	Result	%REC	Limits
Antimony	49.36	48.48	98	80-120
Arsenic	49.36	50.23	102	80-120
Barium	49.36	50.52	102	80-120
Beryllium	24.68	25.05	102	80-120
Cadmium	49.36	48.66	99	80-120
Chromium	49.36	51.13	104	80-120
Cobalt	49.36	49.76	101	80-120
Copper	49.36	49.40	100	80-120
Lead	49.36	50.43	102	80-120
Molybdenum	49.36	50.62	103	80-120
Nickel	49.36	50.16	102	80-120
Selenium	49.36	48.56	98	80-120
Silver	4.936	4.782	97	80-120
Thallium	49.36	50.80	103	80-120
Vanadium	49.36	50.33	102	80-120
Zinc	49.36	50.67	103	80-120

Type: BSD Lab ID: QC976616

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.70	48.39	97	80-120	1	20
Arsenic	49.70	50.45	102	80-120	0	20
Barium	49.70	50.32	101	80-120	1	20
Beryllium	24.85	24.39	98	80-120	3	20
Cadmium	49.70	48.74	98	80-120	1	20
Chromium	49.70	50.80	102	80-120	1	20
Cobalt	49.70	49.58	100	80-120	1	20
Copper	49.70	48.55	98	80-120	2	20
Lead	49.70	50.35	101	80-120	1	20
Molybdenum	49.70	50.47	102	80-120	1	20
Nickel	49.70	49.79	100	80-120	1	20
Selenium	49.70	49.14	99	80-120	1	20
Silver	4.970	4.756	96	80-120	1	20
Thallium	49.70	50.56	102	80-120	1	20
Vanadium	49.70	49.63	100	80-120	2	20
Zinc	49.70	50.54	102	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-11A	Batch#:	270694
MSS Lab ID:	309851-006	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976617

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.7666	49.36	12.54	24 *	75-120
Arsenic	3.377	49.36	53.32	101	80-121
Barium	56.20	49.36	102.9	95	75-125
Beryllium	0.2487	24.68	23.76	95	80-120
Cadmium	0.1248	49.36	49.20	99	80-120
Chromium	40.91	49.36	94.43	108	75-125
Cobalt	6.850	49.36	53.27	94	75-120
Copper	16.00	49.36	66.70	103	80-125
Lead	19.56	49.36	62.61	87	75-125
Molybdenum	0.5101	49.36	44.71	90	75-120
Nickel	36.59	49.36	85.60	99	75-125
Selenium	<0.1839	49.36	47.50	96	80-120
Silver	<0.02930	4.936	4.791	97	75-120
Thallium	<0.08781	49.36	45.10	91	75-120
Vanadium	30.44	49.36	81.80	104	78-125
Zinc	45.67	49.36	93.81	98	75-125

Type: MSD Lab ID: QC976618

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.12	12.43	24 *	75-120	0	20
Arsenic	49.12	52.77	101	80-121	1	20
Barium	49.12	100.2	89	75-125	3	20
Beryllium	24.56	23.48	95	80-120	1	20
Cadmium	49.12	48.44	98	80-120	1	20
Chromium	49.12	93.34	107	75-125	1	20
Cobalt	49.12	52.60	93	75-120	1	20
Copper	49.12	66.09	102	80-125	1	20
Lead	49.12	61.80	86	75-125	1	20
Molybdenum	49.12	43.90	88	75-120	1	20
Nickel	49.12	84.64	98	75-125	1	20
Selenium	49.12	46.83	95	80-120	1	20
Silver	4.912	4.756	97	75-120	0	20
Thallium	49.12	44.21	90	75-120	2	20
Vanadium	49.12	81.33	104	78-125	0	20
Zinc	49.12	95.01	100	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270557
Matrix:	Soil	Sampled:	05/15/19
Units:	%	Received:	05/15/19
Diln Fac:	1.000	Analyzed:	05/17/19

Field ID	Lab ID	Result	RL
DTSC-21A	309851-012	14	1
DTSC-22A	309851-013	18	1
DTSC-23A	309851-014	21	1
DTSC-9A	309851-015	25	1
DTSC-10A	309851-016	24	1
DTSC-11A	309851-017	25	1
DTSC-12A	309851-018	9	1
DTSC-9C	309851-019	11	1
DTSC-10C	309851-020	19	1
DTSC-11C	309851-021	11	1
DTSC-12C	309851-022	11	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309851	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	270557
MSS Lab ID:	309867-002	Sampled:	05/08/19
Lab ID:	QC976049	Received:	05/08/19
Matrix:	Soil	Analyzed:	05/17/19

MSS Result	Result	RL	RPD	Lim
8.607	8.571	1.000	0	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309882 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-17D	309882-001
DTSC-19D	309882-002
DTSC-20D	309882-003
DTSC-17B	309882-004
DTSC-19B	309882-005
DTSC-20B	309882-006
DTSC-05D	309882-007
DTSC-06D	309882-008
DTSC-07D	309882-009
DTSC-08D	309882-010
DTSC-17D	309882-011
DTSC-19D	309882-012
DTSC-20D	309882-013
DTSC-17B	309882-014
DTSC-19B	309882-015
DTSC-20B	309882-016
DTSC-05D	309882-017
DTSC-06D	309882-018
DTSC-07D	309882-019
DTSC-08D	309882-020

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: _____

Date: 05/24/2019

Will Rice
Project Manager
will.rice@enthalpy.com
(510) 204-2221 Ext 13102

CASE NARRATIVE

Laboratory number: 309882
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/17/19
Samples Received: 05/16/19

This data package contains sample and QC results for ten soil samples, requested for the above referenced project on 05/17/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270726; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Matrix spikes QC976226, QC976227 (batch 270602) were not reported because the parent sample required a dilution that would have diluted out the spikes. Matrix spikes QC976684, QC976685 (batch 270717) were not reported because the parent sample required a dilution that would have diluted out the spikes. Matrix spikes QC976511, QC976512 (batch 270669) were not reported because the parent sample required a dilution that would have diluted out the spikes. Diesel C10-C24 was detected between the MDL and the RL in the method blank for batch 270717; this analyte was detected in samples at a level at least 10 times that of the blank. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

High response was observed for bromomethane in the CCV analyzed 05/21/19 12:39; affected data was qualified with "b". Matrix spikes were not performed for this analysis in batch 270590 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 270628 due to insufficient sample amount. Toluene and styrene were detected between the MDL and the RL in the method blank for batch 270590; these analytes were not detected in samples at or above the RL. A number of analytes were detected between the MDL and the RL in the method blank for batch 270628; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC976213, QC976214 (batch 270599) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recoveries were observed for nitrobenzene-d5 in the method blank/LCS for batch 270599. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

CASE NARRATIVE

Laboratory number: **309882**
Client: **RPS**
Project: **16-1498E**
Location: **Alameda Landing**
Request Date: **05/17/19**
Samples Received: **05/16/19**

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-05B (lab # 309926-001); the BS/BSD were within limits, and the associated RPD was within limits. High recoveries were observed for barium and zinc in the MS of DTSC-05B (lab # 309926-001); the BS/BSD were within limits. High RPD was observed for zinc in the MS/MSD of DTSC-05B (lab # 309926-001); the RPD was acceptable in the BS/BSD. High recovery was observed for mercury in the MS for batch 270745; the parent sample was not a project sample, and the BS/BSD were within limits. High RPD was also observed for mercury in the MS/MSD for batch 270745; the RPD was acceptable in the BS/BSD. A number of analytes were detected between the MDL and the RL in the method blank for batch 270707; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 309882

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-17D

Laboratory Sample ID :

309882-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.92	C,J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.5	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.8	C,J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	30		13	7.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	3.7		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	69		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	37		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.8		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	17		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	22		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.42		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	48		0.99	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-19D

Laboratory Sample ID :

309882-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	2.3	J	23	0.81	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endosulfan sulfate	1.2	C,J	23	0.75	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	5.3	C,J	23	0.81	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	2.5	C,J	23	0.92	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	2.0	C,J	11	1.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.6	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	33		14	9.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.8		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	81		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.32		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.34		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.5		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.59		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	38		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	61		0.99	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-20D

Laboratory Sample ID :

309882-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.92	C,J	22	0.81	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endosulfan sulfate	4.4	C,J	22	1.8	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	6.7	J	22	0.91	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.5	C,J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	17		13	6.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.7		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	77		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.28		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.6		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	22		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.58		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	55		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-17B

Laboratory Sample ID :

309882-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.97	J	22	0.88	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	1.7	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.3	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	17		13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.2		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	70		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.10	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.26		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	21		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		1.0	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.58		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	51		1.0	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-19B

Laboratory Sample ID :

309882-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	1.2	C,J	11	0.83	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Dieldrin	2.1	J	22	0.78	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	2.9	C,J	22	0.97	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Endrin	3.2	J	22	2.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	7.2	J	22	3.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	2.1	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.3	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	61		13	6.3	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.9		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.38		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.54		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	39		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	64		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-20B

Laboratory Sample ID :

309882-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	1.0	C,J	22	0.80	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	1.8	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	15		13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	5.1		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	68		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.099	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.34		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	46		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	24		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.51		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	36		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	40		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	60		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-05D

Laboratory Sample ID :

309882-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.1	C,J	23	0.90	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	2.1	J	23	0.82	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	2.1	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	23		14	6.6	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.1		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	74		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.25		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.2		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	21		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	23		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.52		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	54		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-06D

Laboratory Sample ID :

309882-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	2.8	J	22	0.81	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDE	0.82	C,J	22	0.81	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	4.5	J	22	0.91	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
alpha-Chlordane	2.8	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	3.9	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	31		13	6.5	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	4.6		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.29		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.30		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	54		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.40		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	38		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.080	J	0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	54		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-07D

Laboratory Sample ID :

309882-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	2.3	J	11	0.49	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	0.98	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.7	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.3	C,J	5.5	0.68	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	9.8	J	13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	3.1		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	41		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.21		0.099	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.21	J	0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	5.5		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	14		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.40		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	29		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	25		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	43		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-08D

Laboratory Sample ID :

309882-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	1.3	J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.4	J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	0.96	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	1.2	J	5.6	0.69	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	10	J	13	6.4	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Arsenic	3.6		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	48		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.098	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.25		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.7		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.25	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	21		0.98	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.35		0.25	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	31		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	49		0.98	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-17D

Laboratory Sample ID :

309882-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.4	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	28	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	130		55	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	24	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	32	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	140		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	34	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	280		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	470		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	150		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	180		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	280		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	75		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	240		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	160		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	33	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	240		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	330				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.13		0.019	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-19D

Laboratory Sample ID :

309882-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.2	0.37	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	38	Y	11	3.5	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		57	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	21	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	25	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	110		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	30	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	260		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	470		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	140		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	180		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	290		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	78	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	230		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	150		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	32	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	240		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	320				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.14		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	12		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-20D

Laboratory Sample ID :

309882-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.8	J	6.1	0.43	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	200	Y	25	7.5	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	640		120	37	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Naphthalene	510		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	1,800		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	250	J	300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluorene	350		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	4,900		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	1,300		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	7,100		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	14,000		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	4,000		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	4,700		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	6,800		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	2,100		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	6,700		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	4,100		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	710		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	5,400		300	61	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	8,900				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.13		0.020	0.0036	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	19		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-17B

Laboratory Sample ID :

309882-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.2	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	35	Y	11	3.3	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		54	16	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	23	J	90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	54	J	90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	340		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	70	J	90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	550		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	860		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	240		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	280		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	420		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	130		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	370		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	220		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	44	J	90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	320		90	18	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	500				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-19B

Laboratory Sample ID :

309882-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.5	J	5.0	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	53	Y	11	3.5	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	330		57	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	28	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	37	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthene	53	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluorene	37	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	410		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	95		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	620		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	940		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	320		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	390		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	500		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	160		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	390		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	220		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	51	J	95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	310		95	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	540				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.020	0.0036	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	12		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-20B

Laboratory Sample ID :

309882-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.3	J	6.1	0.44	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	55	Y	7.1	2.2	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	240		36	11	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	56	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	150		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	31	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	42	J	71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	710		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	160		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,100		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	2,000		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	530		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	610		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	840		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	250		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	770		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	440		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	82		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	590		71	14	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,000				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.34		0.023	0.0040	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	30		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-05D

Laboratory Sample ID :

309882-017

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.0	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	34	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	200		28	8.4	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	30	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	190		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Anthracene	50	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	330		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Pyrene	520		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	190		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Chrysene	230		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	340		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	110	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	260		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	150		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	36	J	110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	230		110	22	ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	370				ug/Kg	Dry	20.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-06D

Laboratory Sample ID :

309882-018

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	5.1	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	34	Y	5.7	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	180		28	8.6	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	37	J	94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	100		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	230		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	63	J	94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	480		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	830		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	310		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	550		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	490		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	280		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	50	J	94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	400		94	19	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	650				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.13		0.020	0.0034	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	12		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-07D

Laboratory Sample ID :

309882-019

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.7	J	5.0	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	25	Y	5.7	1.8	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	140		29	8.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	16	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	46	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	11	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	140		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	36	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	320		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	510		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	160		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	190		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	330		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	85		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	280		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	170		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	30	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	240		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	380				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.11		0.018	0.0031	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	13		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-08D

Laboratory Sample ID :

309882-020

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.7	J	4.6	0.33	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	89	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	360		28	8.4	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	18	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	39	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	130		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	35	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	270		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	510		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	140		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	170		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	290		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	87		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	240		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	140		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	27	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	210		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	320				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.10		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%
J = Estimated value
Y = Sample exhibits chromatographic pattern which does not resemble standard



1438 Webster Street, Suite 302
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CHAIN-OF-CUSTODY

Sampler Name(s):
Lizzie Hightower
Kevin Halpin
Mayra Dudrenera
Signature(s):

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
1	DTSC-17d	5/16/19	1018	Soil	None, fresh
2	DTSC-19d		1025		
3	DTSC-20d		1015		
4	DTSC-17b		1240		
5	DTSC-19b		1245		
6	DTSC-20b		1250		
7	DTSC-05d		1530		
8	DTSC-06d		1535		
9	DTSC-07d		1540		
10	DTSC-08d		1545		

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Kevin Halpin; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; kevin.halpin@rpsgroup.com; elizabeth.hightower@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report Routine (Level 2) Level 3 Level 4 EDD
TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

Date: 5/16/19 Page: 1 of 1

Analyses Required

TPH-g; d- mo by Method	8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
1	X	X	X	X	X	X	X	X	2
2	X	X	X	X	X	X	X	X	
3	X	X	X	X	X	X	X	X	
4	X	X	X	X	X	X	X	X	
5	X	X	X	X	X	X	X	X	
6	X	X	X	X	X	X	X	X	
7	X	X	X	X	X	X	X	X	
8	X	X	X	X	X	X	X	X	
9	X	X	X	X	X	X	X	X	
10	X	X	X	X	X	X	X	X	

RELINQUISHED BY:

Printed Name: Mayra Dudrenera
Signature:
Company: RPS

RELINQUISHED BY:

Printed Name: EAP
Signature:
Company: EAP
Time/Date: 1740 / 5/16/19

RECEIVED BY:

Printed Name: Robert Welch
Signature:
Company: [Blank]

RECEIVED BY:

Printed Name: [Blank]
Signature: [Blank]
Company: [Blank]
Time/Date: [Blank]

SAMPLE RECEIPT CHECKLIST



Section 1: Login # 304882 Client: RPS
 Date Received: 5.16.19 Project: _____

Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B

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

If in cooler: Date Opened 5.16.19 By (print) af (sign) af

Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package

Date: _____ How many _____ Signature, Initials, None

Were custody seals intact upon arrival? Yes No N/A

Section 3: **Important: Notify PM if temperature exceeds 6°C or arrive frozen.**

Packing in cooler: (if other, describe) _____

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

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

Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No

Temperature measured using Thermometer ID: _____, or IR Gun # A B

Cooler Temp (°C): #1: 7.5, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	/		
Were Method 5035 sampling containers present?	/		
If YES, what time were they transferred to freezer? <u>17:50 5/16</u>			
Did all bottles arrive unbroken/unopened?	/		
Are there any missing / extra samples?		/	
Are samples in the appropriate containers for indicated tests?	/		
Are sample labels present, in good condition and complete?	/		
Does the container count match the COC?	/		
Do the sample labels agree with custody papers?	/		
Was sufficient amount of sample sent for tests requested?	/		
Did you change the hold time in LIMS for unpreserved VOAs?	/		
Did you change the hold time in LIMS for preserved terracores?	/		
Are bubbles > 6mm absent in VOA samples?			/
Was the client contacted concerning this sample delivery?		/	
If YES, who was called? _____ By _____ Date: _____			

Section 5:	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			/
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check?			
pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged in 5/17/19 By (print) AL (sign) AL
 Date Labeled 5/17/19 By (print) AL (sign) AL

Gasoline by GC/FID (5035 Prep)			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/23/19
Batch#:	270726		

Field ID: DTSC-17D Moisture: 10%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309882-011

Analyte	Result	RL	MDL
Gasoline C7-C12	1.4 J	4.9	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Field ID: DTSC-19D Moisture: 12%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309882-012

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	5.2	0.37

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

Field ID: DTSC-20D Moisture: 19%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309882-013

Analyte	Result	RL	MDL
Gasoline C7-C12	1.8 J	6.1	0.43

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	58-145

Field ID: DTSC-17B Moisture: 8%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 309882-014

Analyte	Result	RL	MDL
Gasoline C7-C12	1.2 J	4.9	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit
 Page 1 of 3

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270726
Units:	mg/Kg	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976725

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.041	104	80-122

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

Type: BSD Lab ID: QC976726

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.042	104	80-122	0	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	64	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	310028-003	Batch#:	270726
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	as received	Analyzed:	05/24/19

Type: MS Lab ID: QC976782

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.2090	10.42	8.467	79	51-120

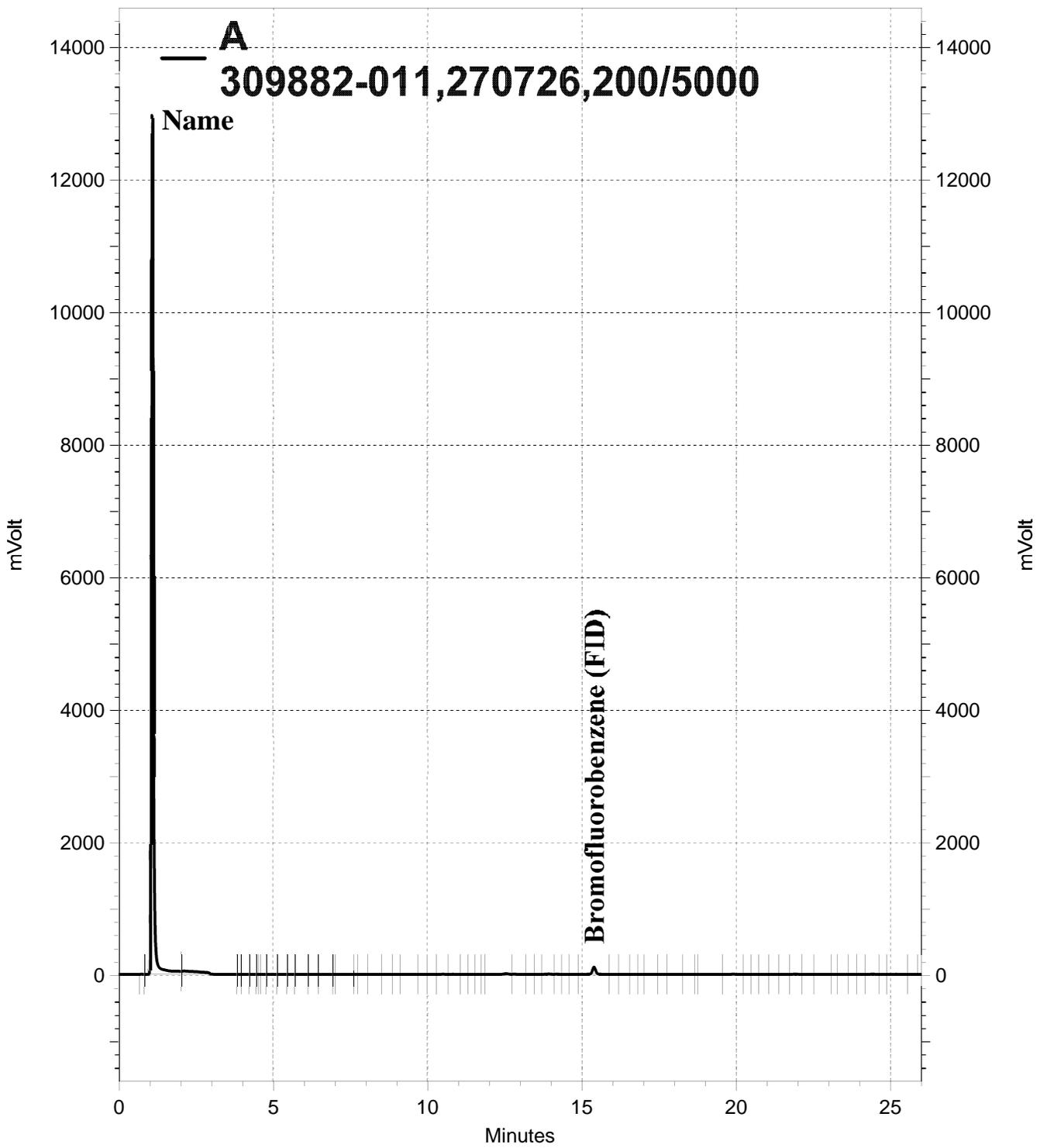
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

Type: MSD Lab ID: QC976783

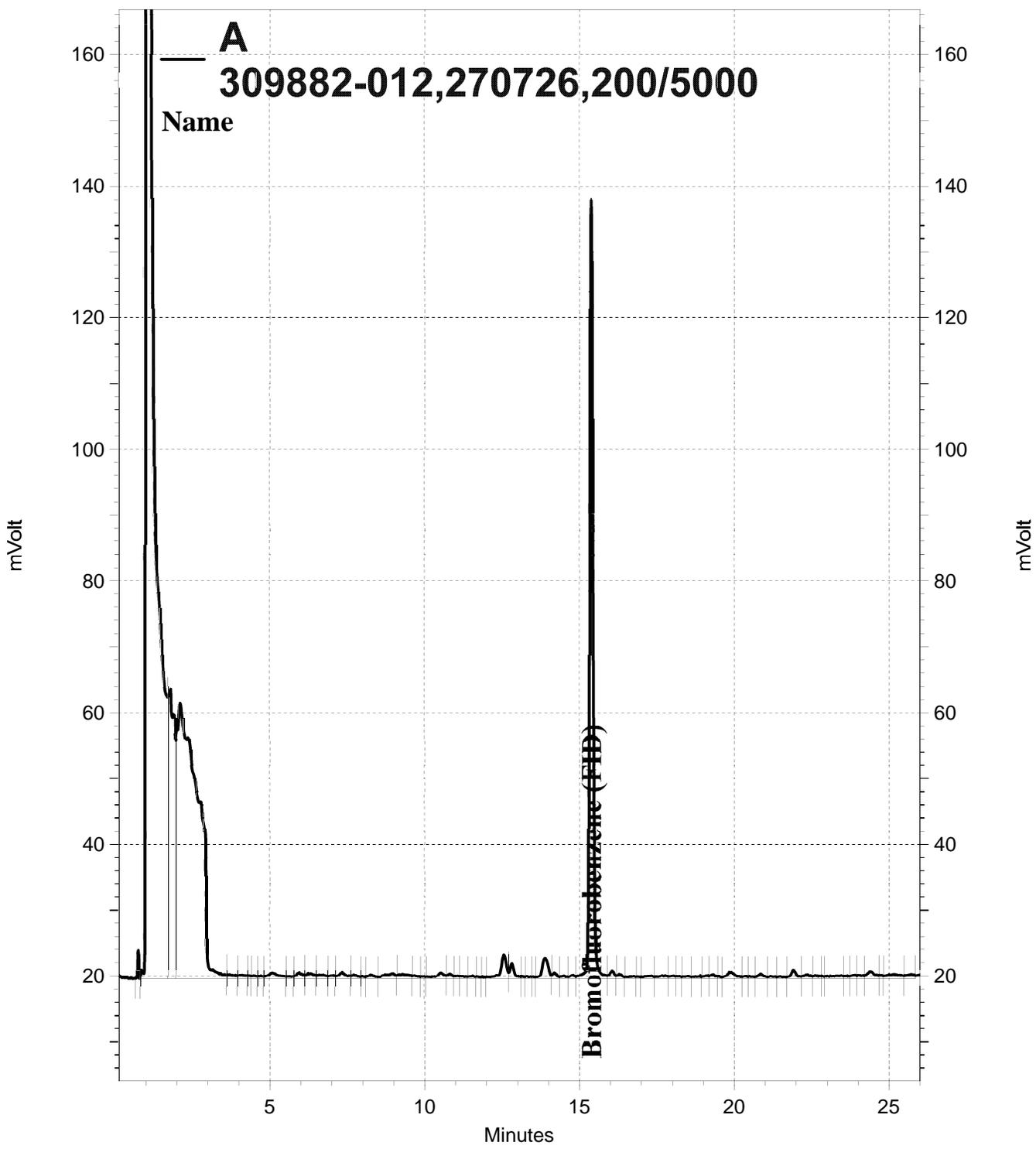
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.10	8.533	82	51-120	4	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

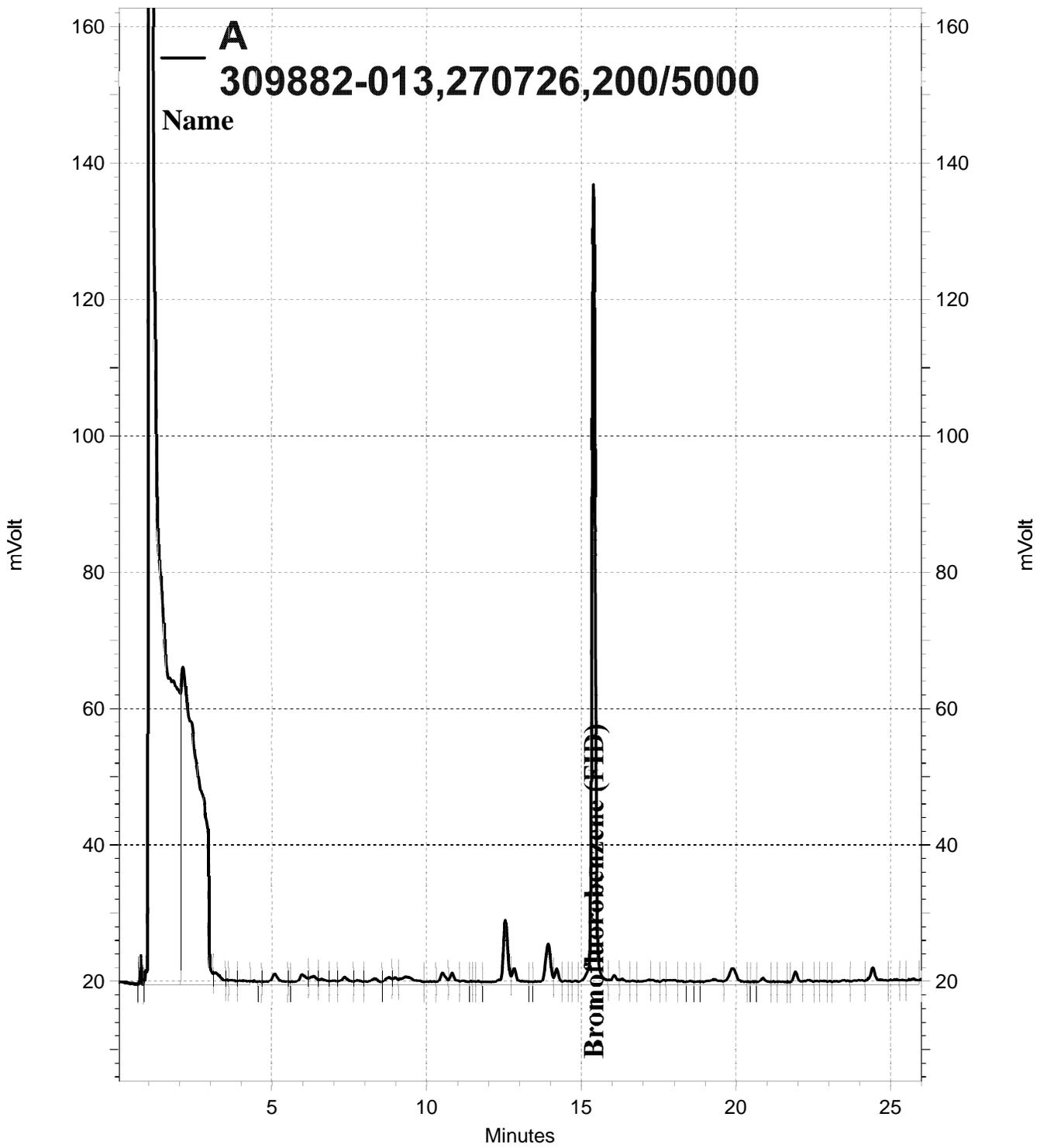
RPD= Relative Percent Difference



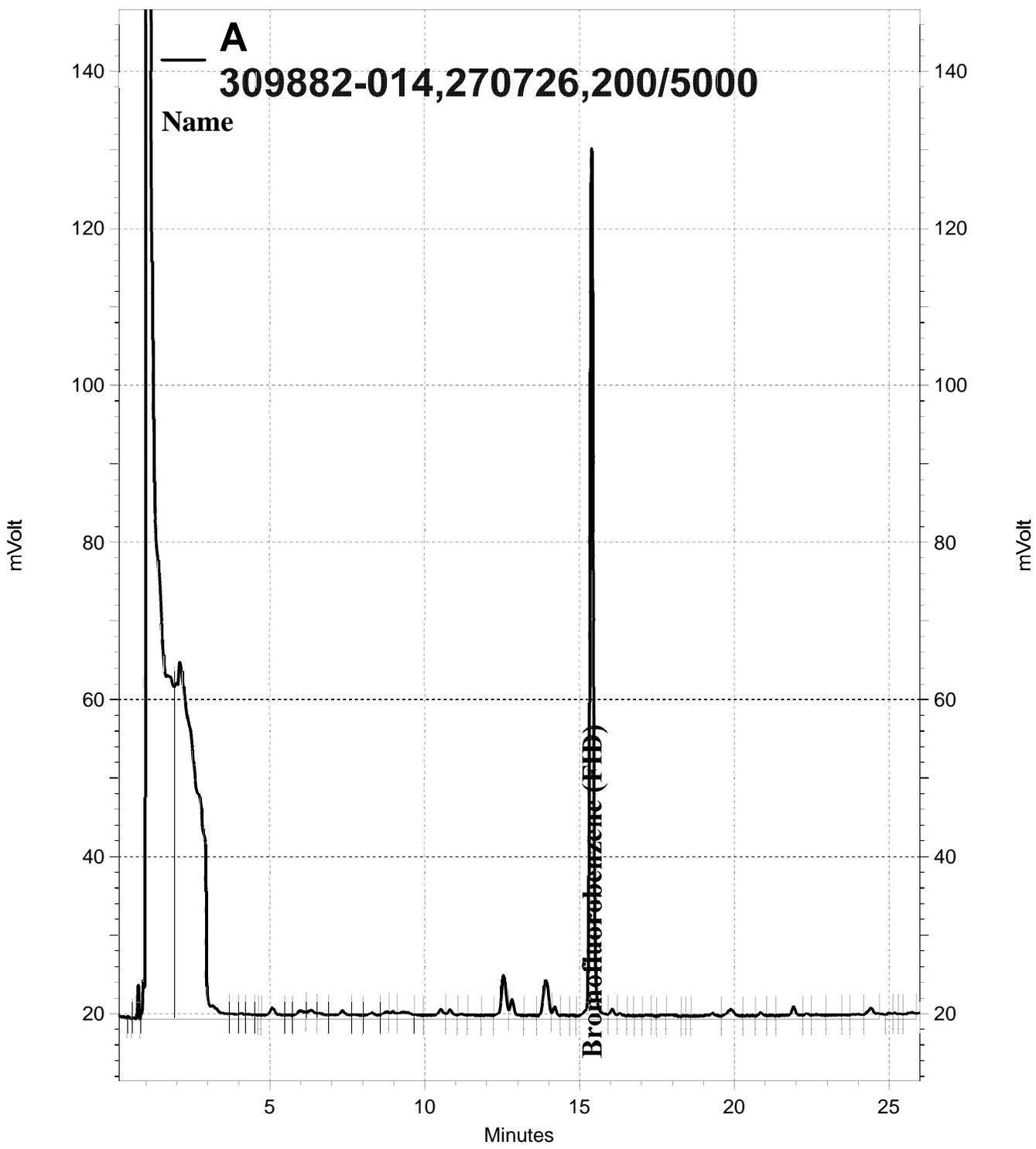
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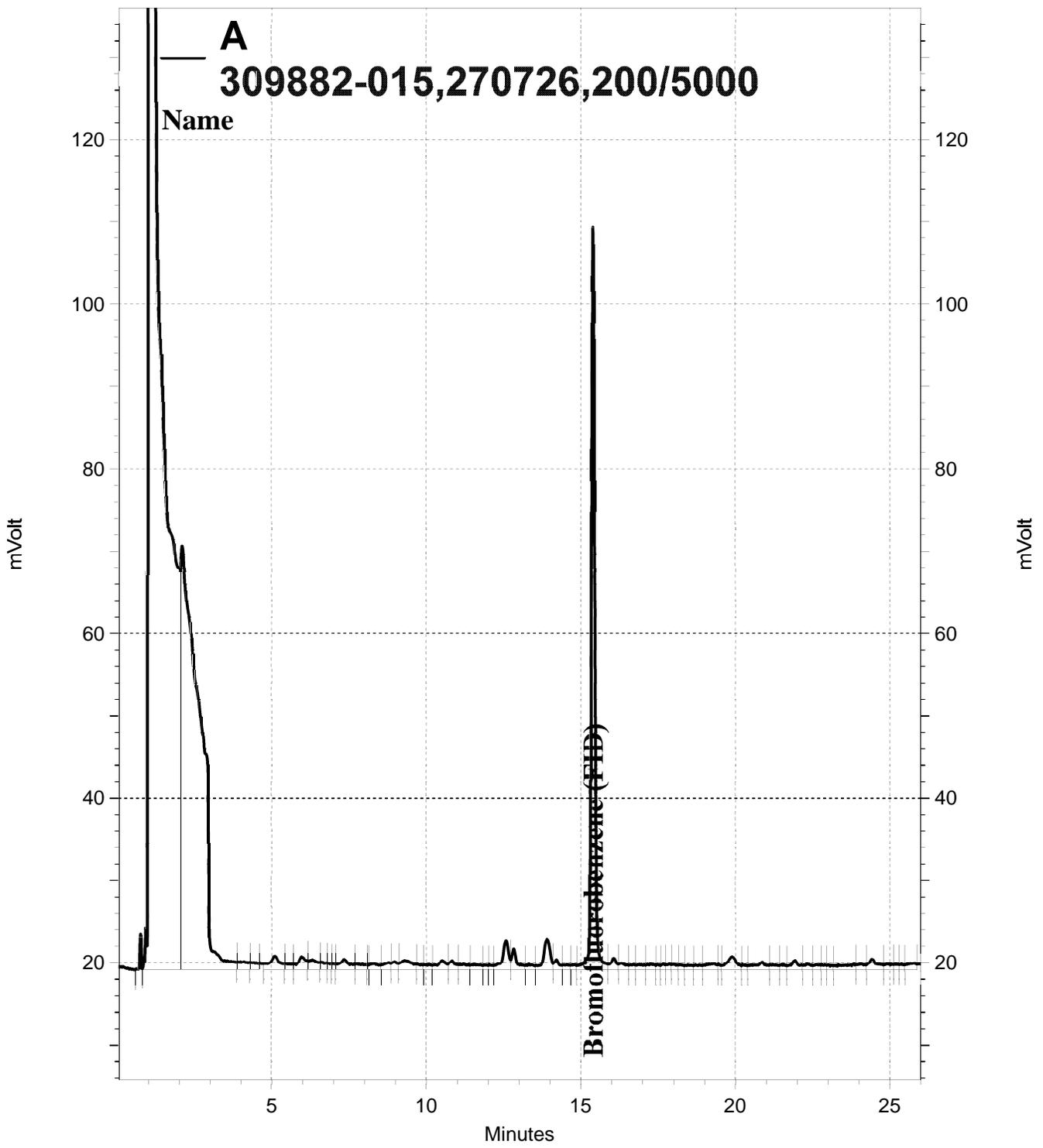
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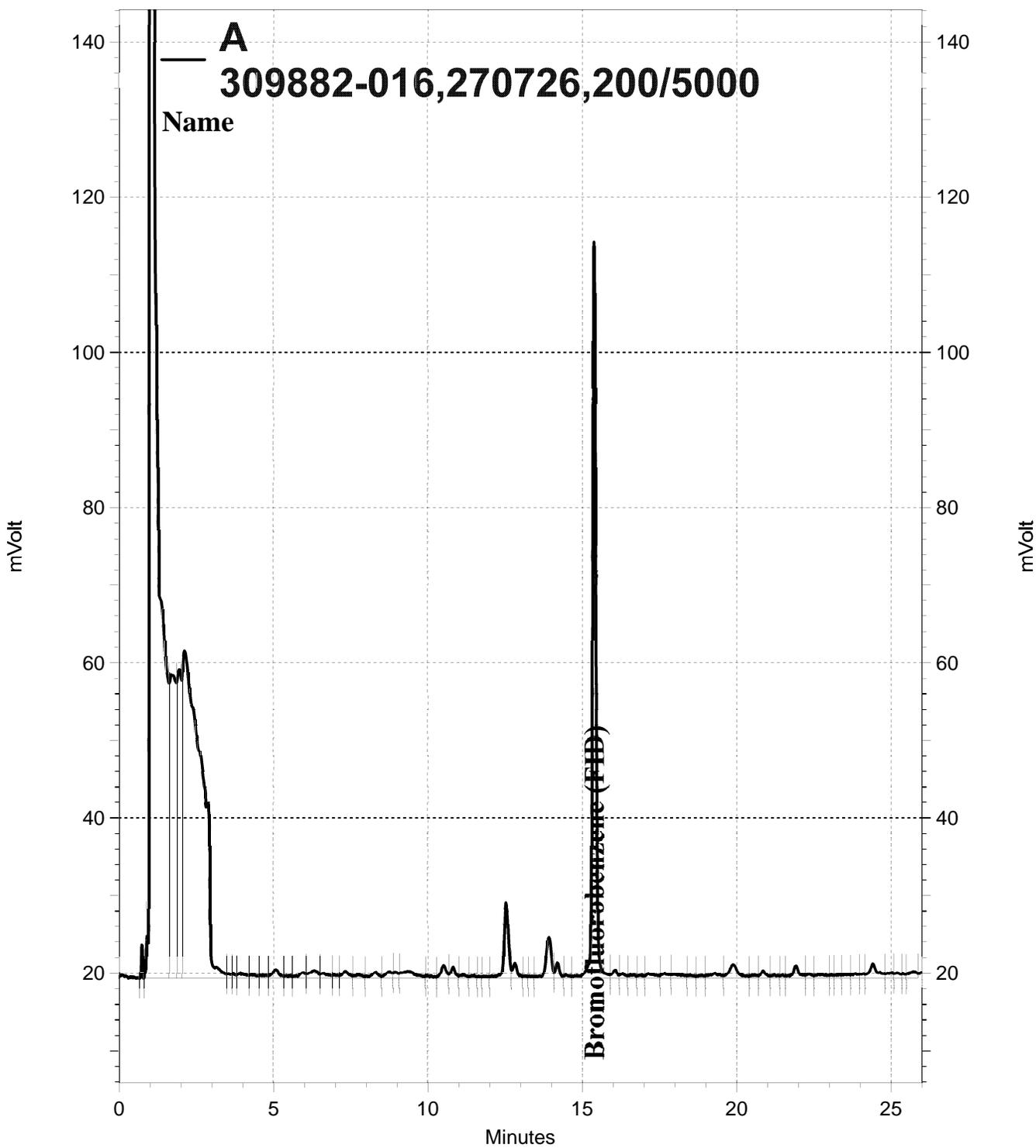
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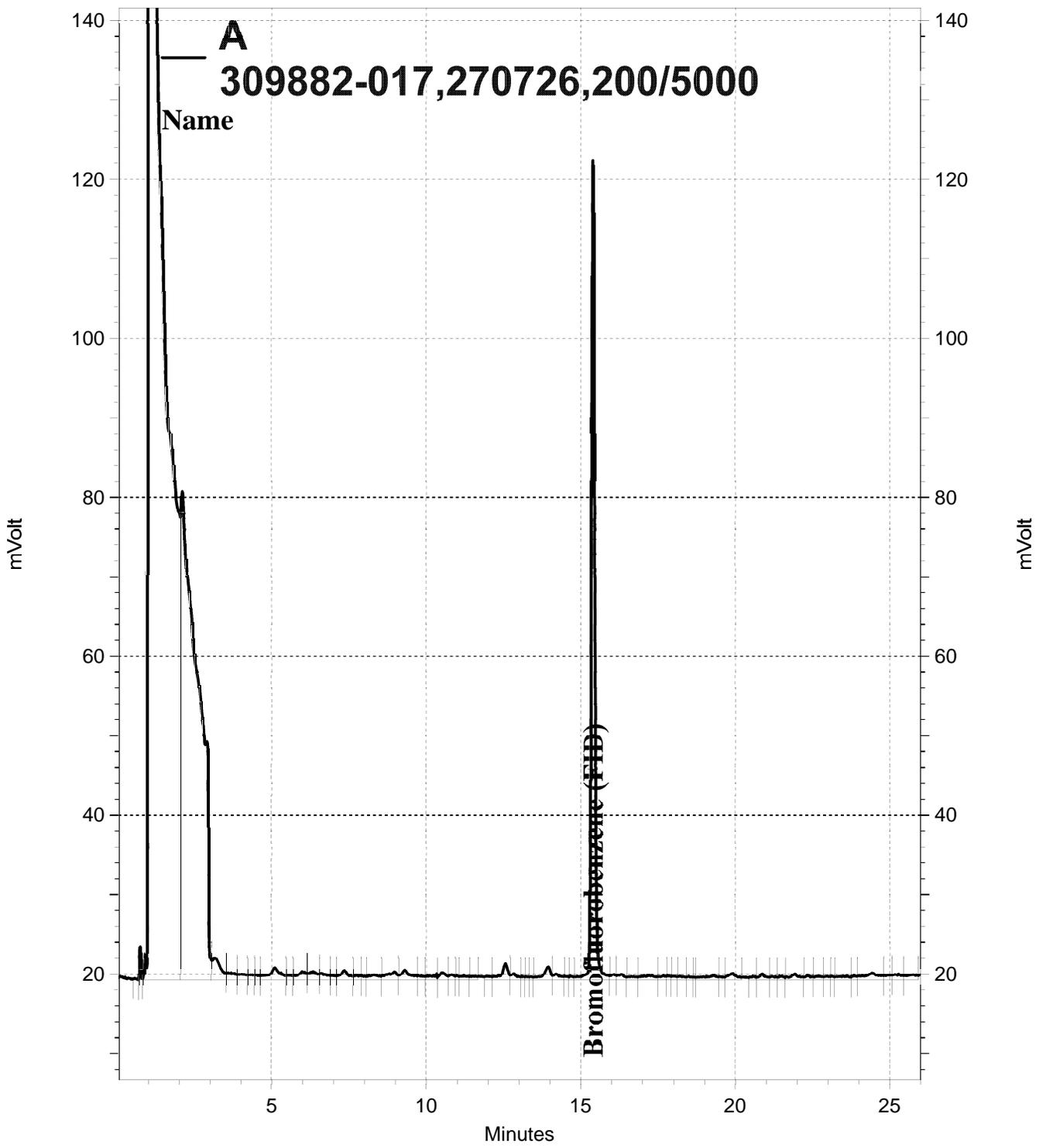
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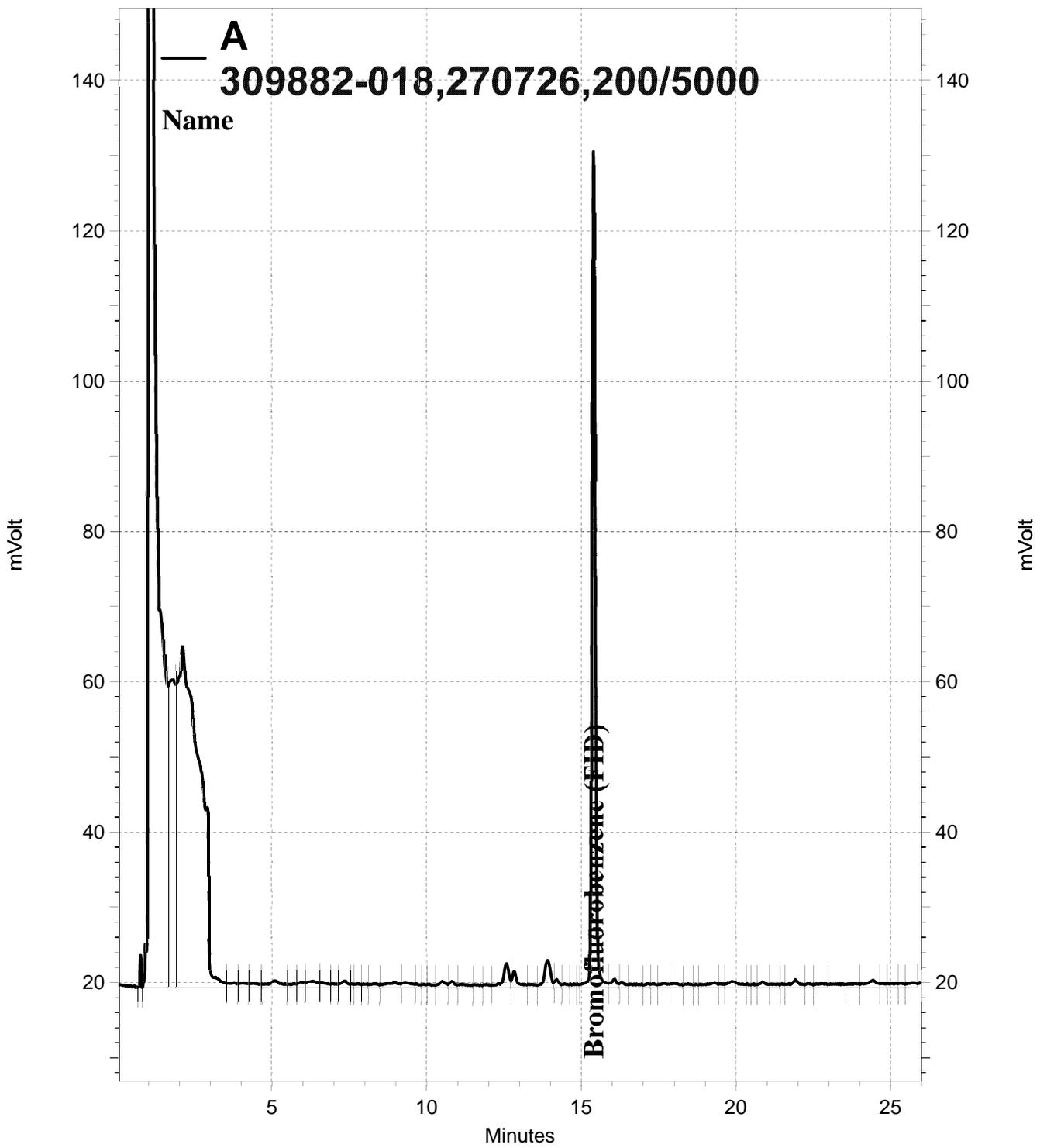
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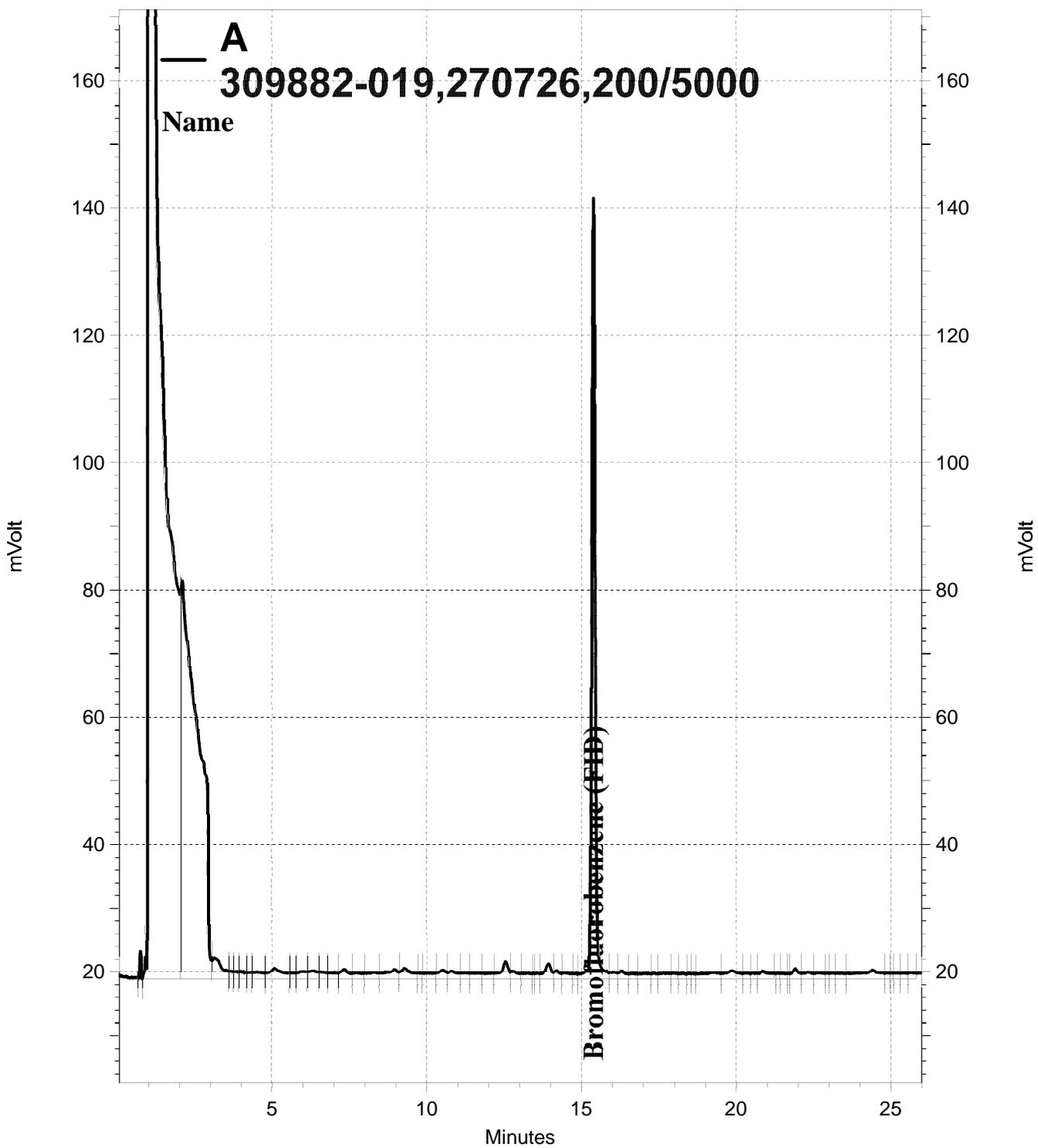
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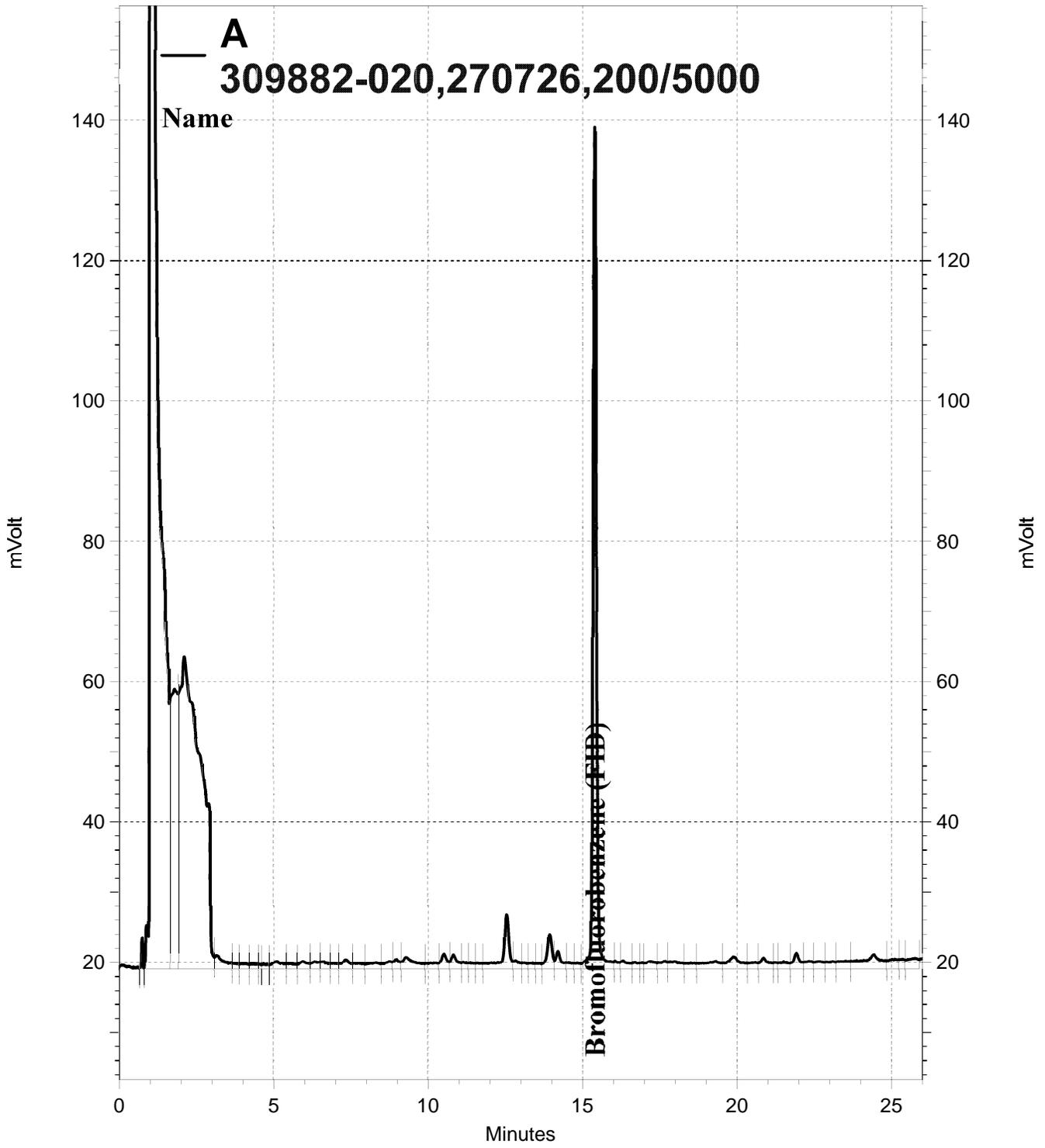
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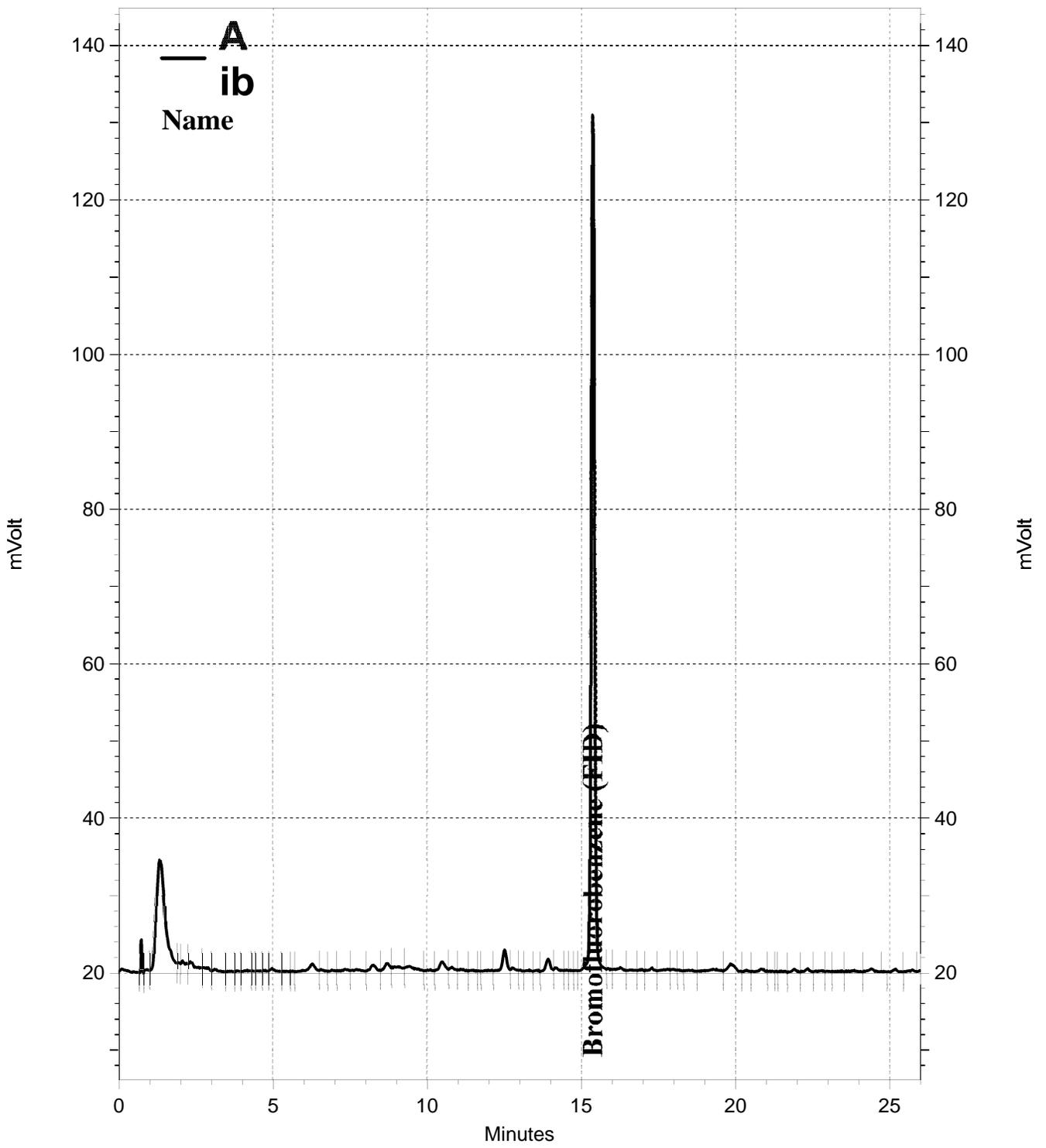
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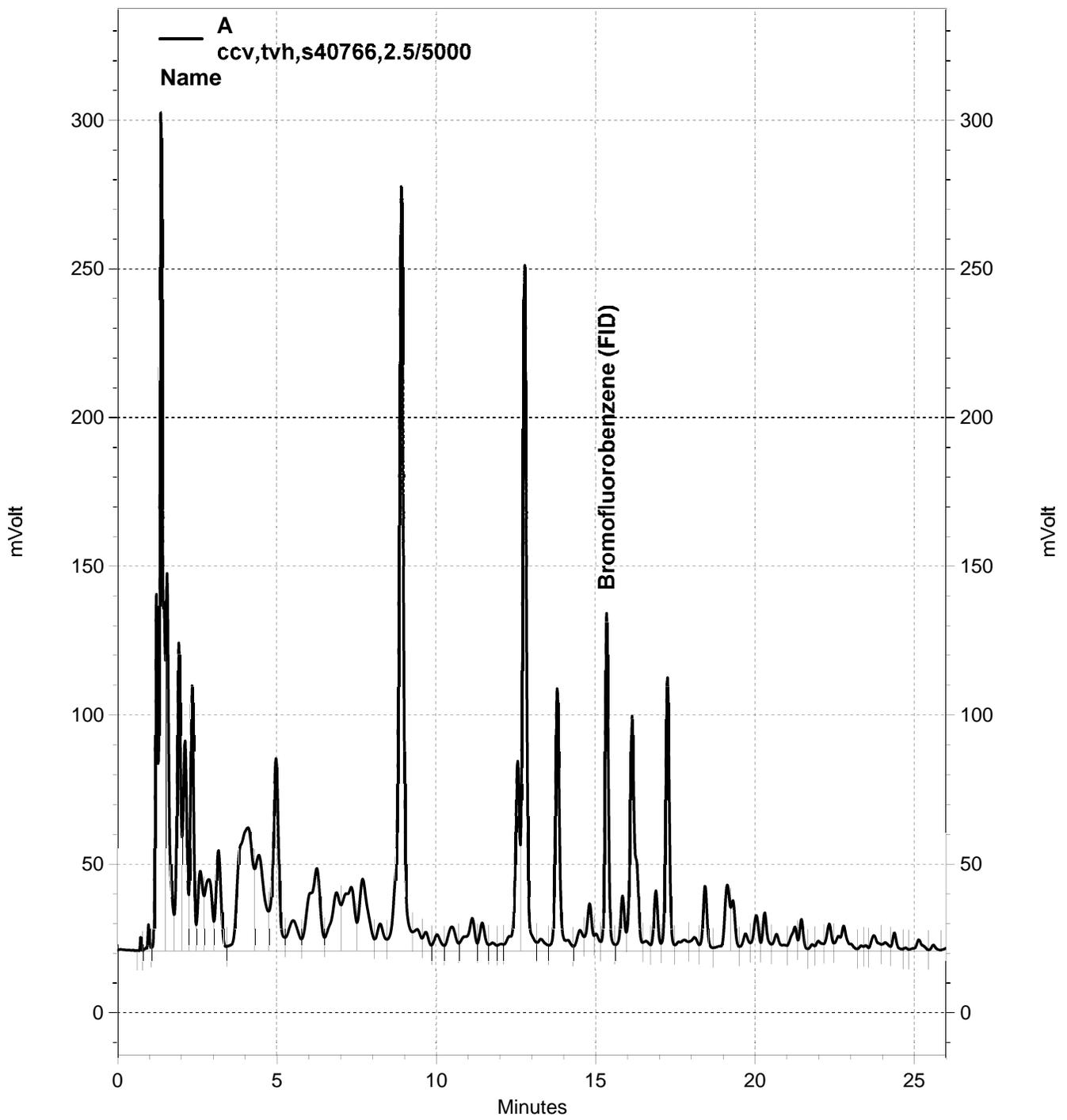
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Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry		

Field ID:	DTSC-17D	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270602
Lab ID:	309882-011	Prepared:	05/20/19
Moisture:	10%	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	28 Y	11	3.4
Motor Oil C24-C36	130	55	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-19D	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-012	Prepared:	05/22/19
Moisture:	12%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	38 Y	11	3.5
Motor Oil C24-C36	230	57	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-20D	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-013	Prepared:	05/22/19
Moisture:	19%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	200 Y	25	7.5
Motor Oil C24-C36	640	120	37

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry		

Field ID:	DTSC-17B	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-014	Prepared:	05/22/19
Moisture:	8%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	35 Y	11	3.3
Motor Oil C24-C36	190	54	16

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-19B	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-015	Prepared:	05/22/19
Moisture:	12%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	53 Y	11	3.5
Motor Oil C24-C36	330	57	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-20B	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-016	Prepared:	05/22/19
Moisture:	30%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	55 Y	7.1	2.2
Motor Oil C24-C36	240	36	11

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry		

Field ID:	DTSC-05D	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270669
Lab ID:	309882-017	Prepared:	05/22/19
Moisture:	10%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	34 Y	5.6	1.7
Motor Oil C24-C36	200	28	8.4

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-06D	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270717
Lab ID:	309882-018	Prepared:	05/23/19
Moisture:	12%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	34 Y	5.7	1.7
Motor Oil C24-C36	180	28	8.6

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-07D	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270717
Lab ID:	309882-019	Prepared:	05/23/19
Moisture:	13%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	25 Y	5.7	1.8
Motor Oil C24-C36	140	29	8.7

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry		

Field ID:	DTSC-08D	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270717
Lab ID:	309882-020	Prepared:	05/23/19
Moisture:	10%	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	89 Y	5.6	1.7
Motor Oil C24-C36	360	28	8.4

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type:	BLANK	Batch#:	270602
Lab ID:	QC976224	Prepared:	05/20/19
Diln Fac:	1.000	Analyzed:	05/20/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	105	61-130

Type:	BLANK	Batch#:	270669
Lab ID:	QC976509	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	105	61-130

Type:	BLANK	Batch#:	270717
Lab ID:	QC976682	Prepared:	05/23/19
Diln Fac:	1.000	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Diesel C10-C24	0.32 J	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	99	61-130

J= Estimated value
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976225	Batch#:	270602
Matrix:	Soil	Prepared:	05/20/19
Units:	mg/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	53.46	107	55-133

Surrogate	%REC	Limits
o-Terphenyl	110	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976510	Batch#:	270669
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	50.97	102	55-133

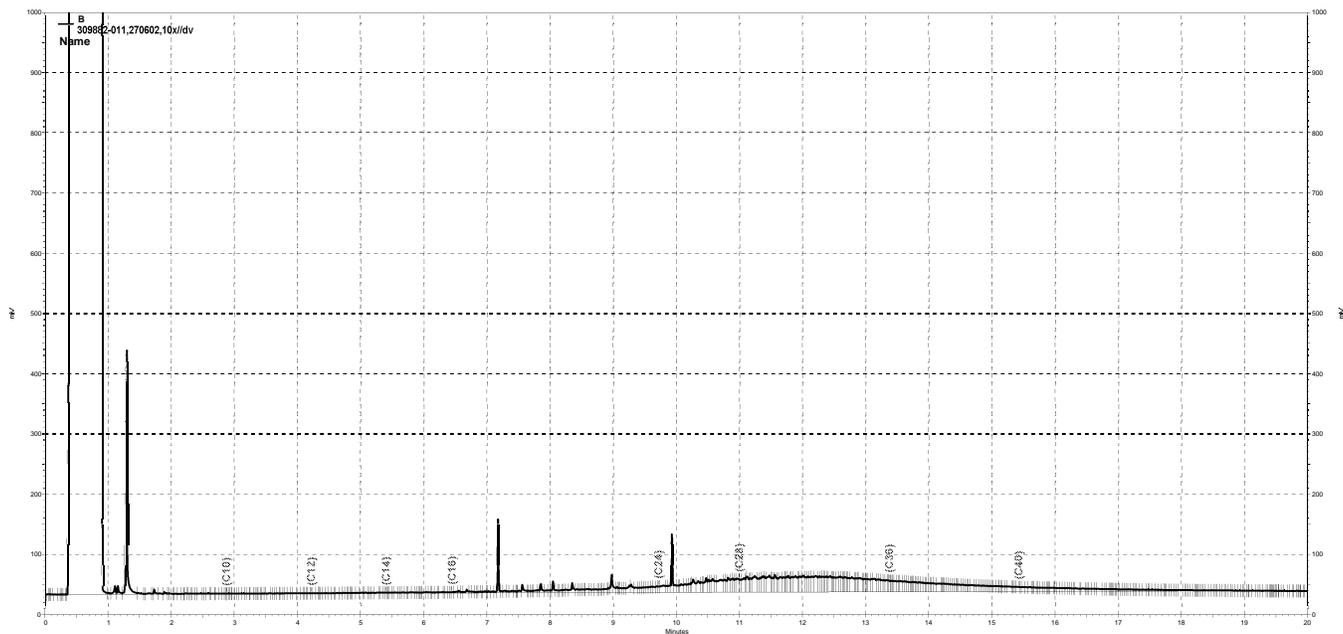
Surrogate	%REC	Limits
o-Terphenyl	103	61-130

Batch QC Report

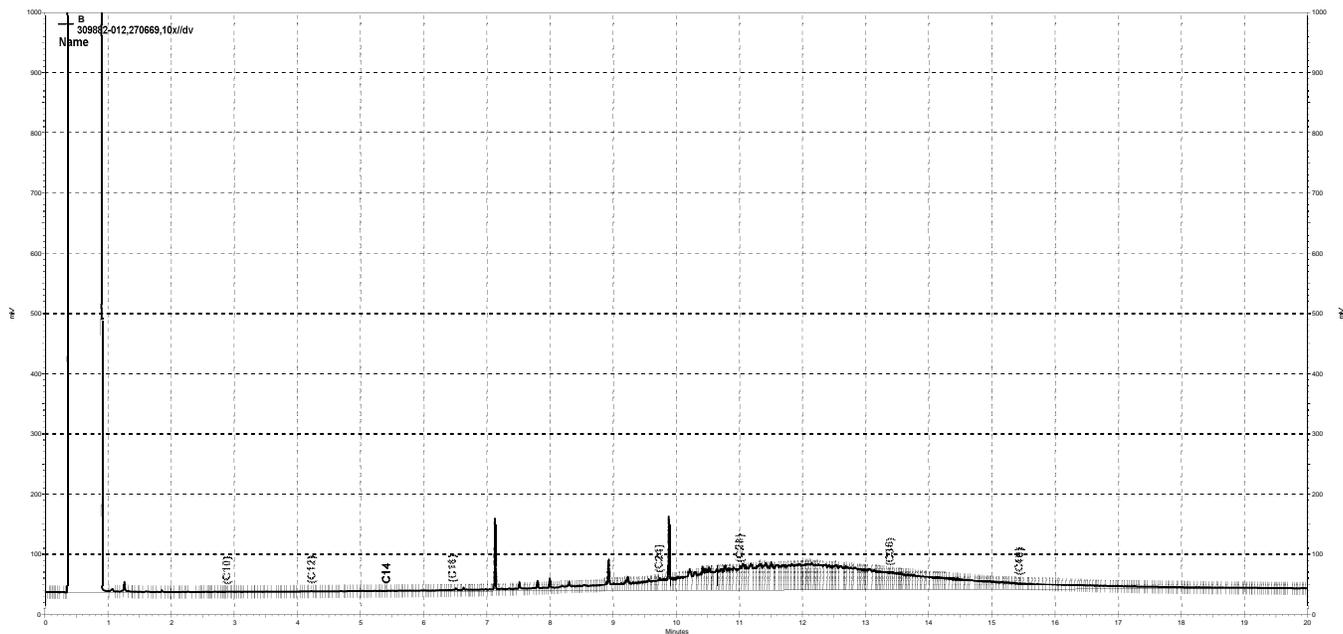
Total Extractable Hydrocarbons			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976683	Batch#:	270717
Matrix:	Soil	Prepared:	05/23/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	48.46	97	55-133

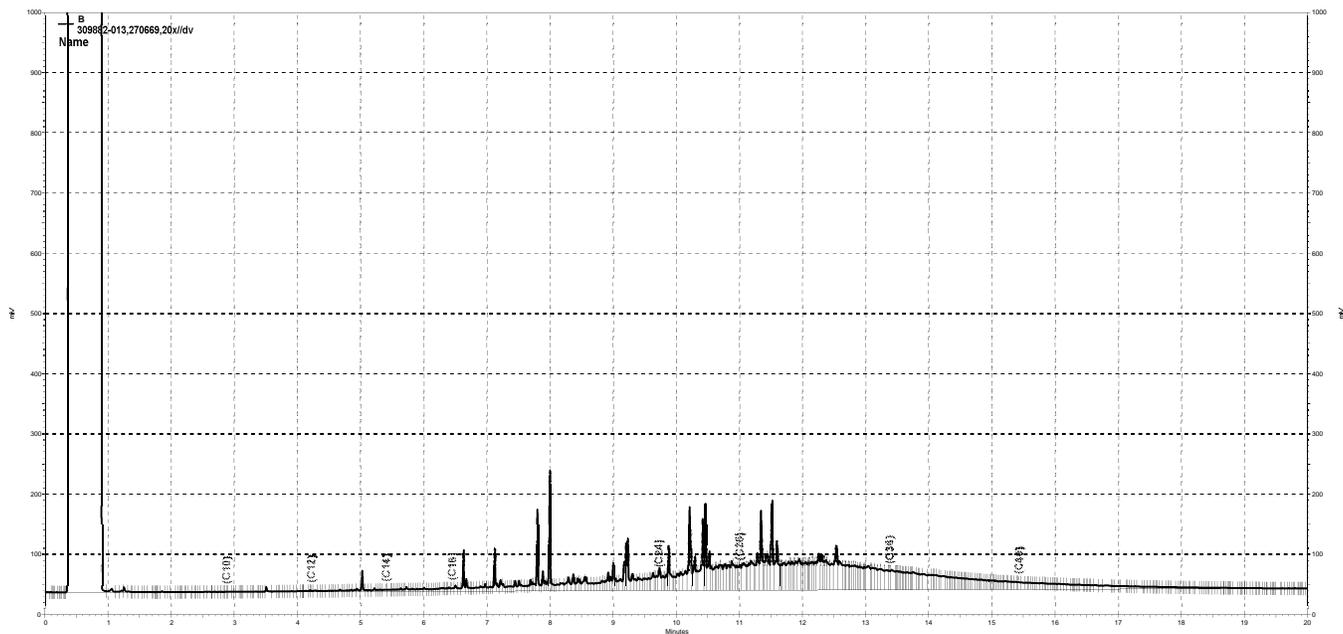
Surrogate	%REC	Limits
o-Terphenyl	104	61-130



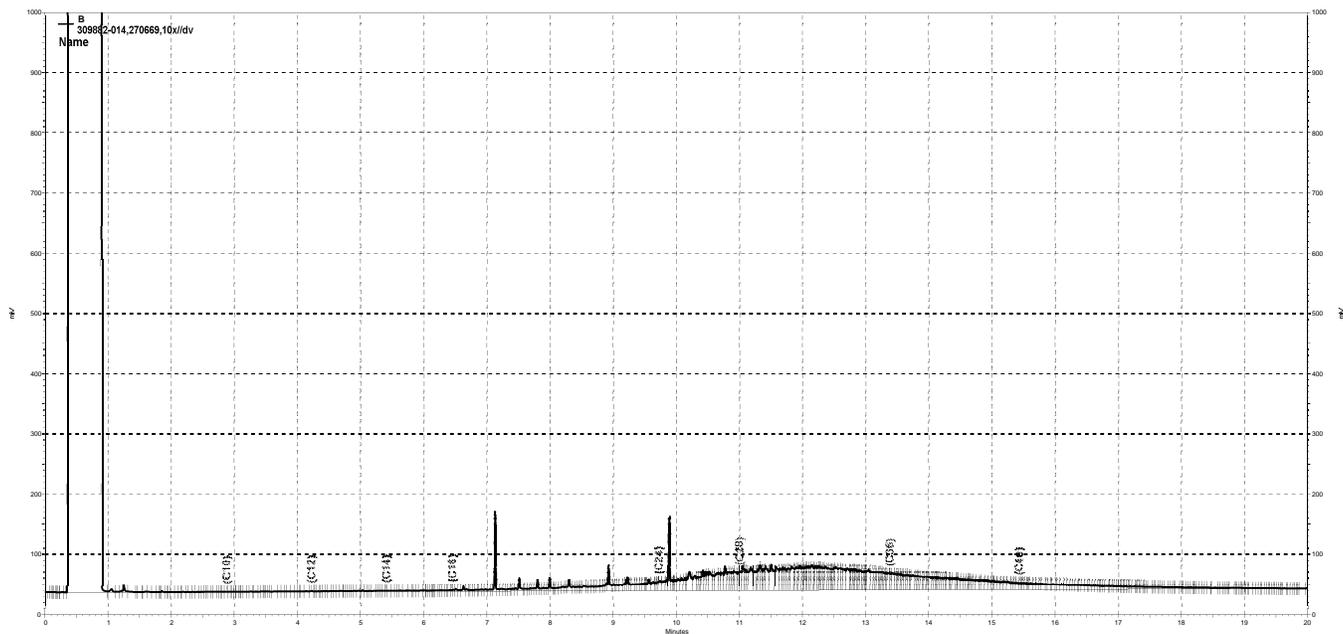
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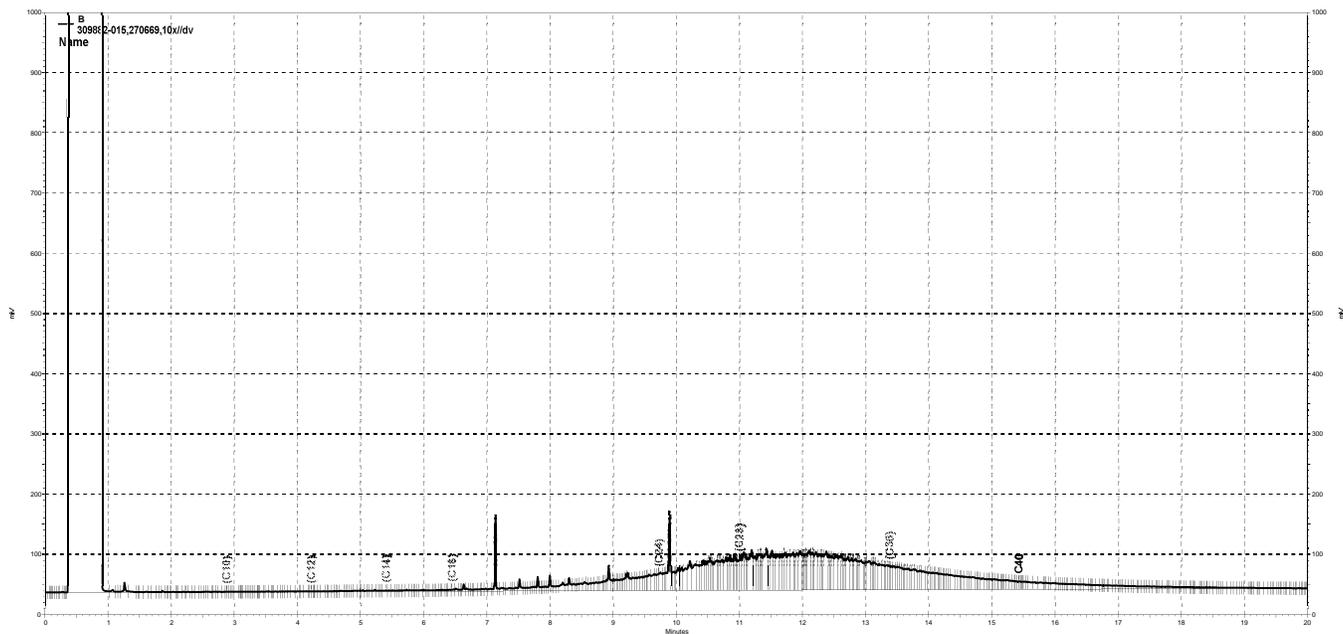
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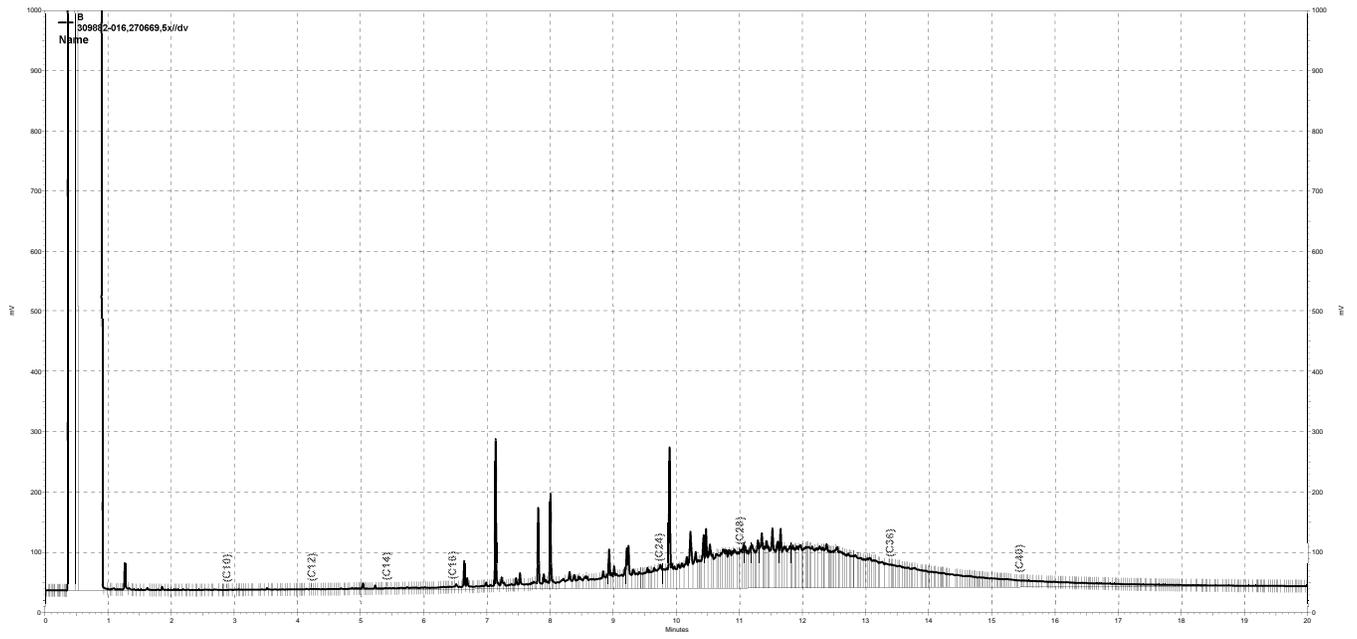
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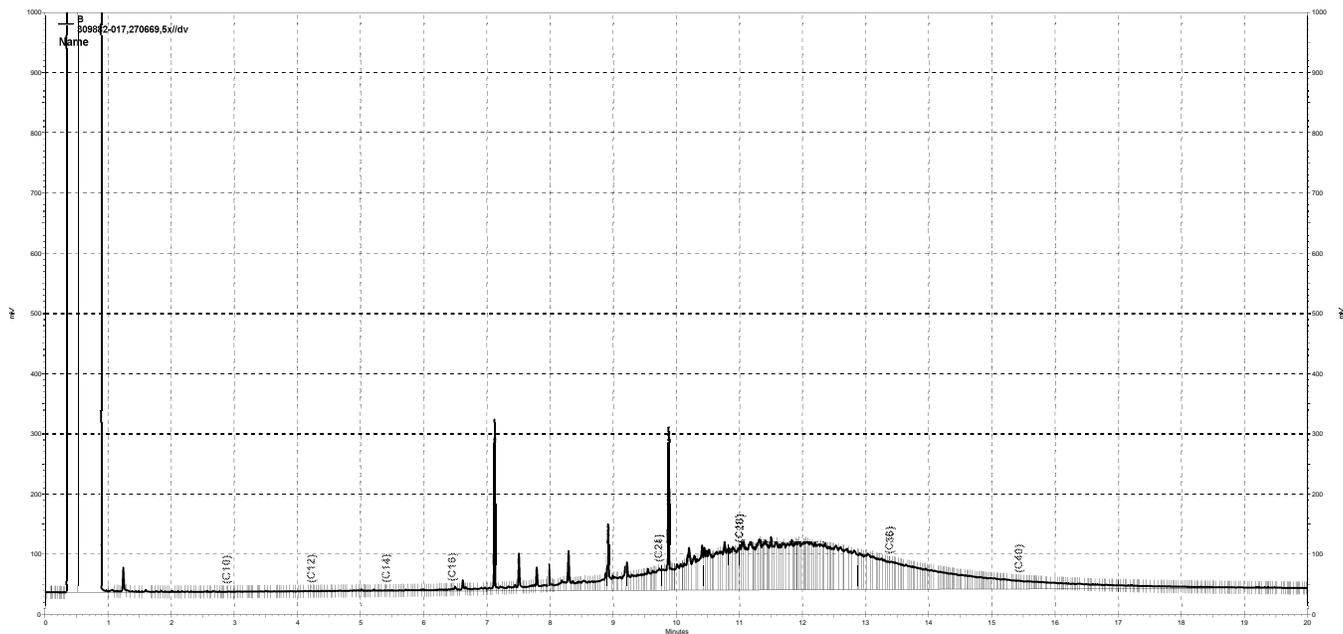
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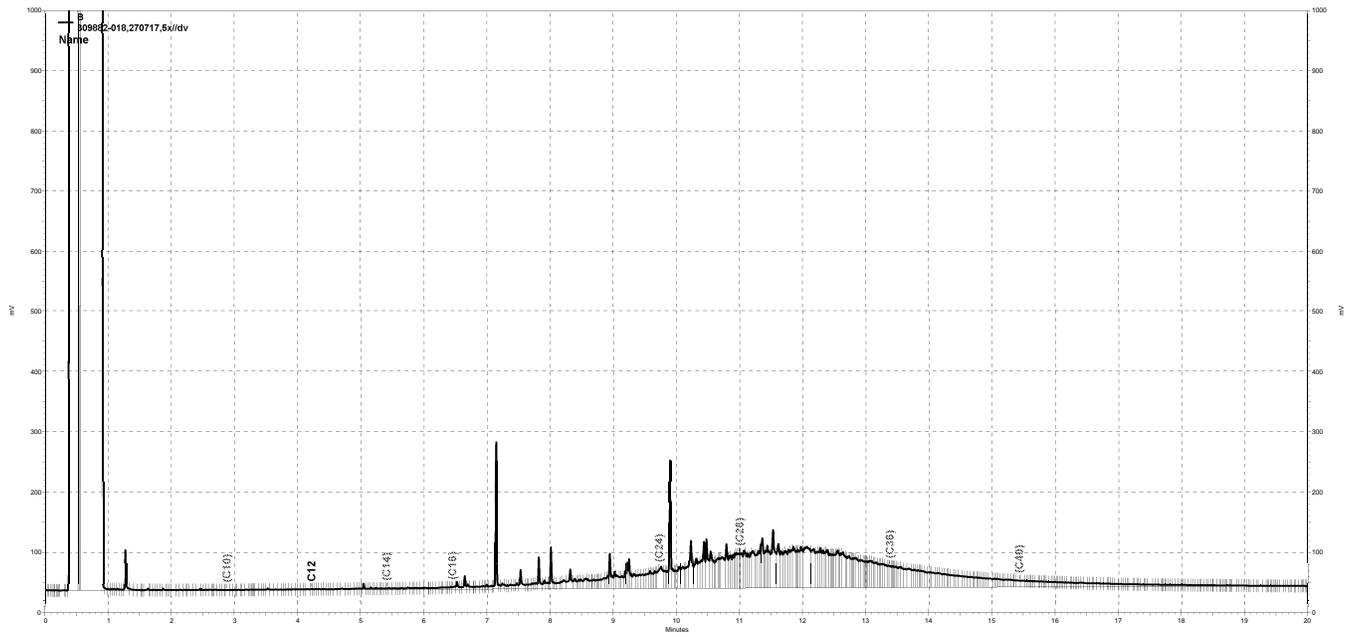
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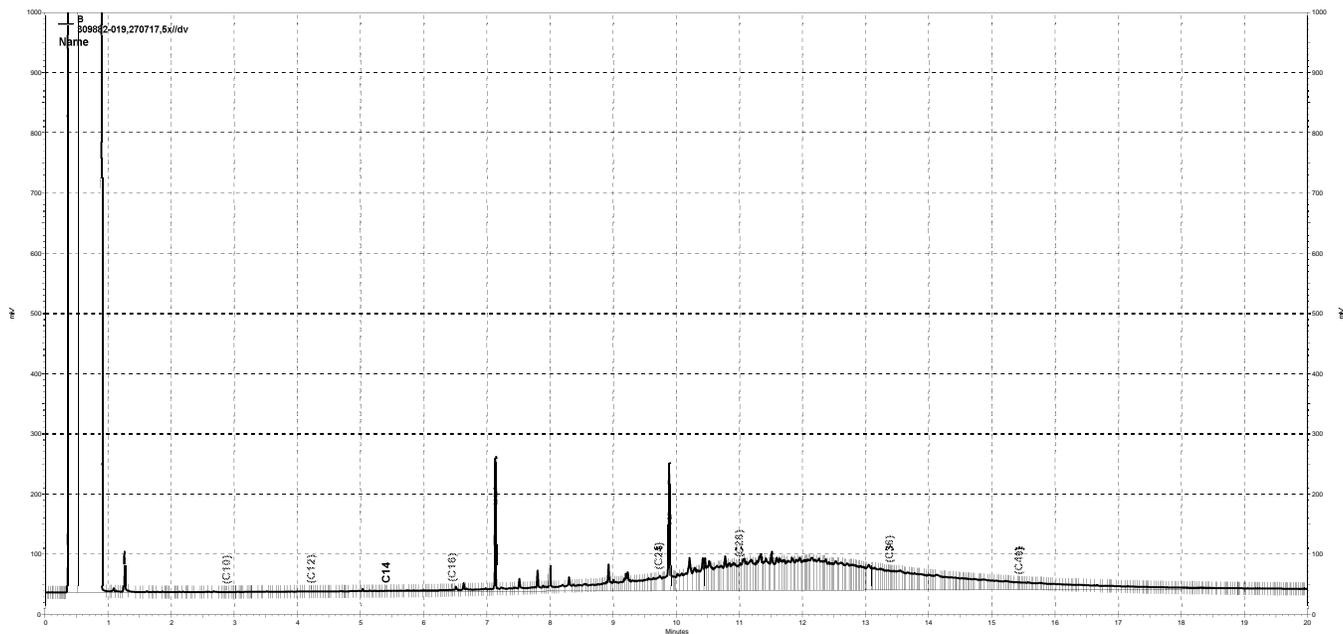
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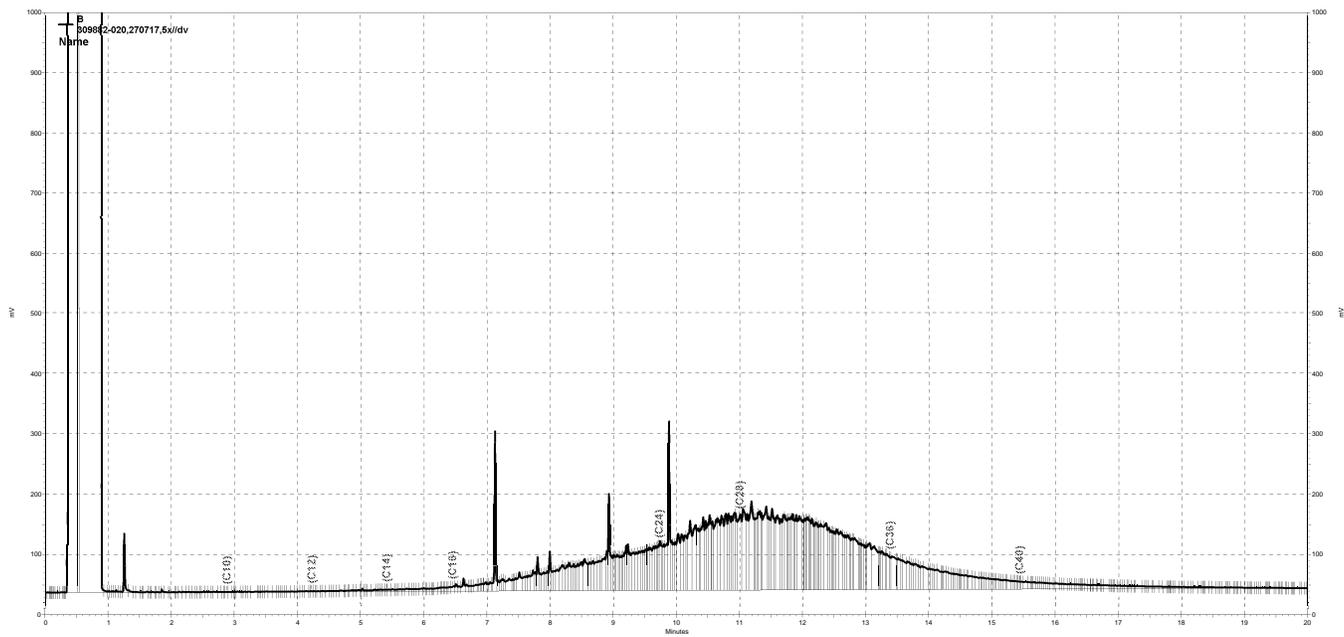
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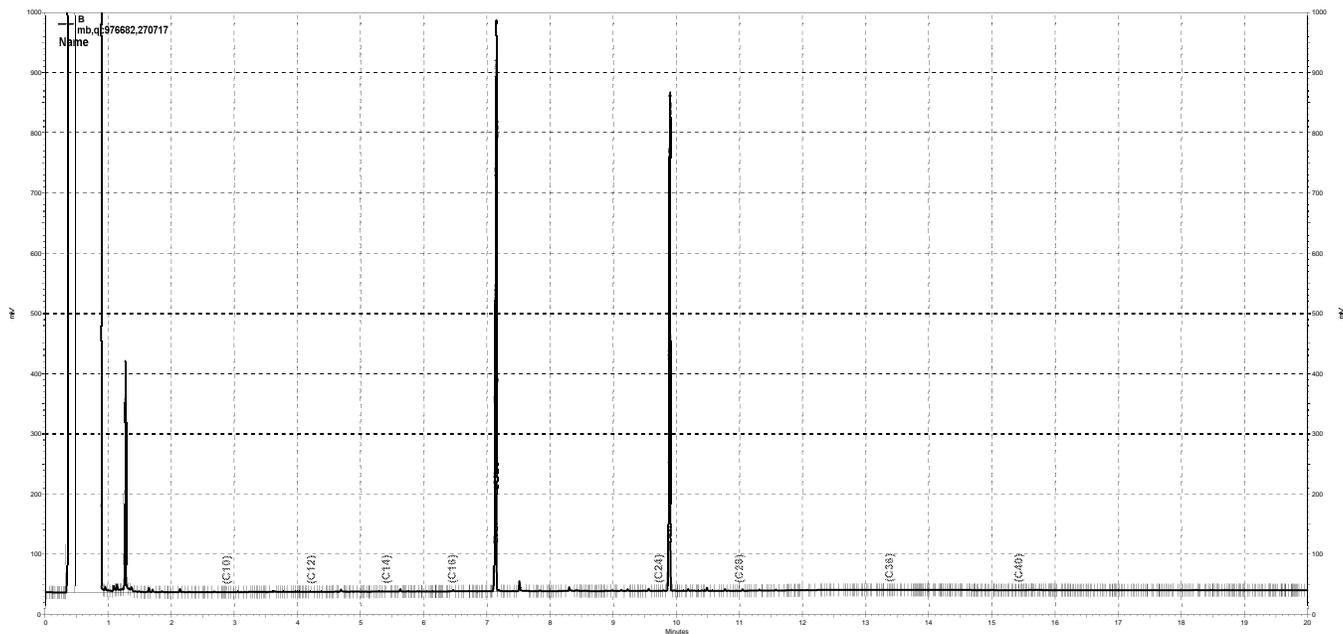
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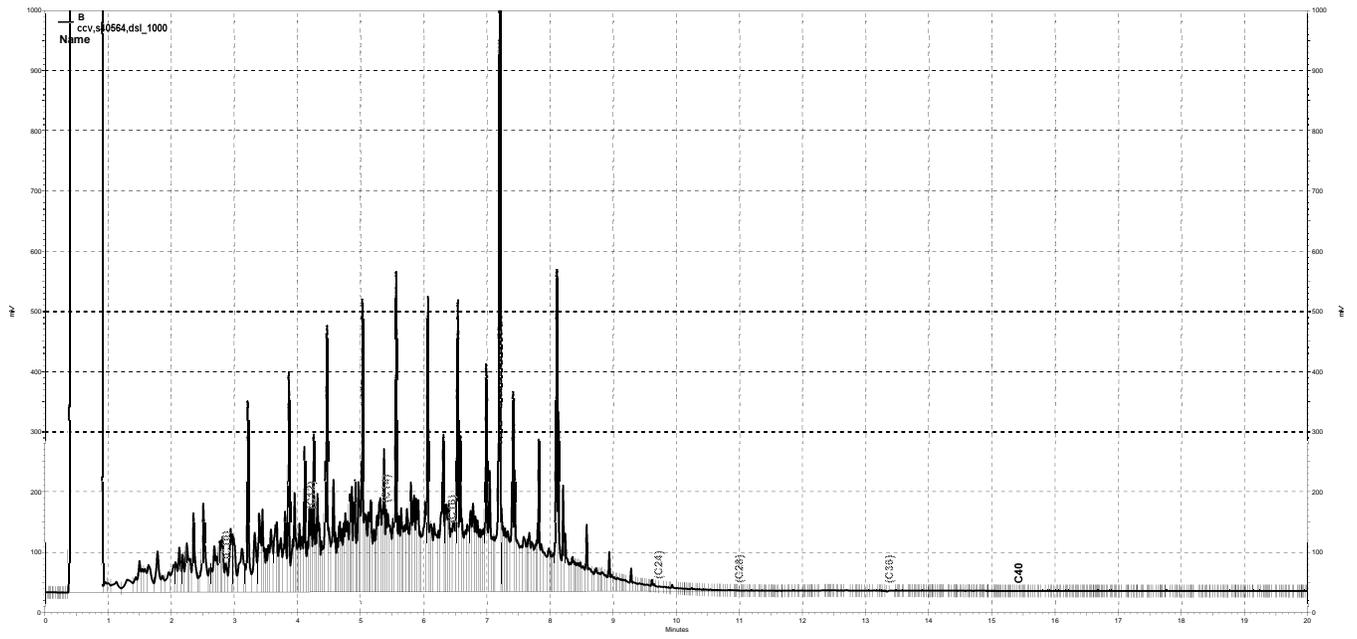
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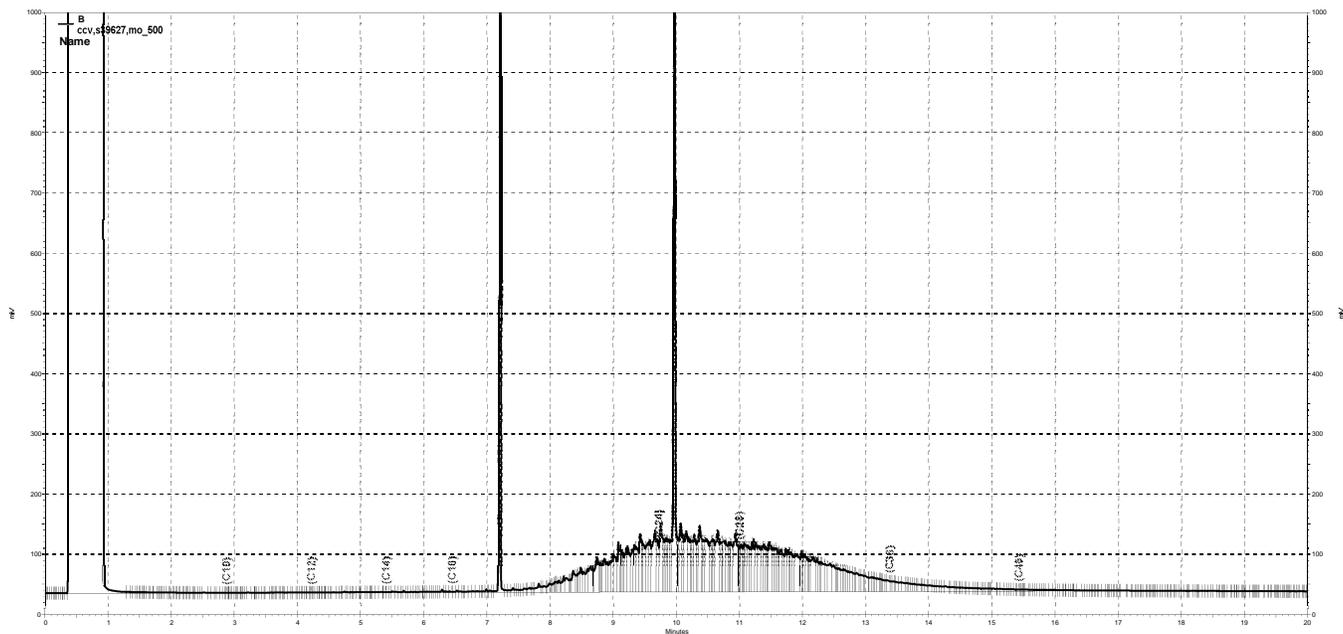
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Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17D	Diln Fac:	43.74
Lab ID:	309882-011	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	490	50
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	240	38
Acetone	ND	970	130
Freon 113	ND	240	48
1,1-Dichloroethene	ND	240	42
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	47
MTBE	ND	240	44
trans-1,2-Dichloroethene	ND	240	50
Vinyl Acetate	ND	2,400	56
1,1-Dichloroethane	ND	240	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	240	49
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	52
1,1,1-Trichloroethane	ND	240	52
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	43
Trichloroethene	ND	240	49
1,2-Dichloropropane	ND	240	42
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	41
4-Methyl-2-Pentanone	ND	490	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	240	46
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	50
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	54
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17D	Diln Fac:	43.74
Lab ID:	309882-011	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	51
2-Chlorotoluene	ND	240	56
4-Chlorotoluene	ND	240	51
tert-Butylbenzene	ND	240	57
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	56
para-Isopropyl Toluene	ND	240	53
1,3-Dichlorobenzene	ND	240	51
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	54
1,2-Dichlorobenzene	ND	240	55
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	68
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	53
1,2,3-Trichlorobenzene	ND	240	65

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	95	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19D	Diln Fac:	45.88
Lab ID:	309882-012	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	520	54
Chloromethane	ND	520	44
Vinyl Chloride	ND	520	39
Bromomethane	ND	520	180
Chloroethane	ND	520	37
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,000	130
Freon 113	ND	260	51
1,1-Dichloroethene	ND	260	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	50
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	53
Vinyl Acetate	ND	2,600	60
1,1-Dichloroethane	ND	260	49
2-Butanone	ND	520	110
cis-1,2-Dichloroethene	ND	260	52
2,2-Dichloropropane	ND	260	52
Chloroform	ND	260	56
Bromochloromethane	ND	260	55
1,1,1-Trichloroethane	ND	260	56
1,1-Dichloropropene	ND	260	53
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	43
Benzene	ND	260	46
Trichloroethene	ND	260	52
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	47
Dibromomethane	ND	260	44
4-Methyl-2-Pentanone	ND	520	42
cis-1,3-Dichloropropene	ND	260	57
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	47
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	520	48
1,3-Dichloropropane	ND	260	49
Tetrachloroethene	ND	260	50
Dibromochloromethane	ND	260	44
1,2-Dibromoethane	ND	260	45
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	56
Ethylbenzene	ND	260	53
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	53
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	58
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	54
Propylbenzene	ND	260	54
Bromobenzene	ND	260	50

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19D	Diln Fac:	45.88
Lab ID:	309882-012	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	54
2-Chlorotoluene	ND	260	60
4-Chlorotoluene	ND	260	55
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	55
sec-Butylbenzene	ND	260	60
para-Isopropyl Toluene	ND	260	57
1,3-Dichlorobenzene	ND	260	55
1,4-Dichlorobenzene	ND	260	52
n-Butylbenzene	ND	260	58
1,2-Dichlorobenzene	ND	260	59
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	73
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	57
1,2,3-Trichlorobenzene	ND	260	70

Surrogate	%REC	Limits
Dibromofluoromethane	86	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20D	Diln Fac:	49.06
Lab ID:	309882-013	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 19%

Analyte	Result	RL	MDL
Freon 12	ND	610	63
Chloromethane	ND	610	51
Vinyl Chloride	ND	610	46
Bromomethane	ND	610	210
Chloroethane	ND	610	43
Trichlorofluoromethane	ND	300	48
Acetone	ND	1,200	160
Freon 113	ND	300	60
1,1-Dichloroethene	ND	300	52
Methylene Chloride	ND	1,500	270
Carbon Disulfide	ND	300	59
MTBE	ND	300	54
trans-1,2-Dichloroethene	ND	300	62
Vinyl Acetate	ND	3,000	70
1,1-Dichloroethane	ND	300	57
2-Butanone	ND	610	130
cis-1,2-Dichloroethene	ND	300	61
2,2-Dichloropropane	ND	300	60
Chloroform	ND	300	65
Bromochloromethane	ND	300	64
1,1,1-Trichloroethane	ND	300	65
1,1-Dichloropropene	ND	300	61
Carbon Tetrachloride	ND	300	55
1,2-Dichloroethane	ND	300	50
Benzene	ND	300	53
Trichloroethene	ND	300	61
1,2-Dichloropropane	ND	300	52
Bromodichloromethane	ND	300	54
Dibromomethane	ND	300	51
4-Methyl-2-Pentanone	ND	610	49
cis-1,3-Dichloropropene	ND	300	66
Toluene	ND	300	57
trans-1,3-Dichloropropene	ND	300	55
1,1,2-Trichloroethane	ND	300	59
2-Hexanone	ND	610	56
1,3-Dichloropropane	ND	300	57
Tetrachloroethene	ND	300	59
Dibromochloromethane	ND	300	51
1,2-Dibromoethane	ND	300	53
Chlorobenzene	ND	300	58
1,1,1,2-Tetrachloroethane	ND	300	65
Ethylbenzene	ND	300	62
m,p-Xylenes	ND	300	37
o-Xylene	ND	300	62
Styrene	ND	300	64
Bromoform	ND	300	60
Isopropylbenzene	ND	300	67
1,1,2,2-Tetrachloroethane	ND	300	50
1,2,3-Trichloropropane	ND	300	63
Propylbenzene	ND	300	63
Bromobenzene	ND	300	59

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20D	Diln Fac:	49.06
Lab ID:	309882-013	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	300	63
2-Chlorotoluene	ND	300	69
4-Chlorotoluene	ND	300	63
tert-Butylbenzene	ND	300	71
1,2,4-Trimethylbenzene	ND	300	64
sec-Butylbenzene	ND	300	70
para-Isopropyl Toluene	ND	300	66
1,3-Dichlorobenzene	ND	300	63
1,4-Dichlorobenzene	ND	300	60
n-Butylbenzene	ND	300	67
1,2-Dichlorobenzene	ND	300	69
1,2-Dibromo-3-Chloropropane	ND	300	61
1,2,4-Trichlorobenzene	ND	300	84
Hexachlorobutadiene	ND	300	74
Naphthalene	ND	300	66
1,2,3-Trichlorobenzene	ND	300	81

Surrogate	%REC	Limits
Dibromofluoromethane	84	78-131
1,2-Dichloroethane-d4	84	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17B	Diln Fac:	45.47
Lab ID:	309882-014	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	990	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	44
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	57
1,1-Dichloroethane	ND	250	47
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	250	49
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	53
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	45
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	43
Trichloroethene	ND	250	49
1,2-Dichloropropane	ND	250	43
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	41
4-Methyl-2-Pentanone	ND	490	40
cis-1,3-Dichloropropene	ND	250	54
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	250	47
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	47
1,1,1,2-Tetrachloroethane	ND	250	53
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	50
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	55
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	51
Propylbenzene	ND	250	51
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17B	Diln Fac:	45.47
Lab ID:	309882-014	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/20/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	51
2-Chlorotoluene	ND	250	57
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	52
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	54
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	55
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	60
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	66

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19B	Diln Fac:	43.85
Lab ID:	309882-015	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	500	52
Chloromethane	ND	500	42
Vinyl Chloride	ND	500	38
Bromomethane	ND	500	170
Chloroethane	ND	500	36
Trichlorofluoromethane	ND	250	39
Acetone	ND	1,000	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	45
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	58
1,1-Dichloroethane	ND	250	47
2-Butanone	ND	500	110
cis-1,2-Dichloroethene	ND	250	50
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	54
Bromochloromethane	ND	250	53
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	44
Trichloroethene	ND	250	50
1,2-Dichloropropane	ND	250	43
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	500	40
cis-1,3-Dichloropropene	ND	250	55
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	500	46
1,3-Dichloropropane	ND	250	47
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	48
1,1,1,2-Tetrachloroethane	ND	250	54
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	51
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	55
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	52
Propylbenzene	ND	250	52
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19B	Diln Fac:	43.85
Lab ID:	309882-015	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	52
2-Chlorotoluene	ND	250	57
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	53
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	54
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	55
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	51
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	61
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	67

Surrogate	%REC	Limits
Dibromofluoromethane	83	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20B	Diln Fac:	42.91
Lab ID:	309882-016	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 30%

Analyte	Result	RL	MDL
Freon 12	ND	610	64
Chloromethane	ND	610	51
Vinyl Chloride	ND	610	46
Bromomethane	ND	610	210
Chloroethane	ND	610	44
Trichlorofluoromethane	ND	310	48
Acetone	ND	1,200	160
Freon 113	ND	310	60
1,1-Dichloroethene	ND	310	52
Methylene Chloride	ND	1,500	270
Carbon Disulfide	ND	310	59
MTBE	ND	310	55
trans-1,2-Dichloroethene	ND	310	63
Vinyl Acetate	ND	3,100	71
1,1-Dichloroethane	ND	310	58
2-Butanone	ND	610	130
cis-1,2-Dichloroethene	ND	310	61
2,2-Dichloropropane	ND	310	61
Chloroform	ND	310	66
Bromochloromethane	ND	310	65
1,1,1-Trichloroethane	ND	310	65
1,1-Dichloropropene	ND	310	62
Carbon Tetrachloride	ND	310	56
1,2-Dichloroethane	ND	310	51
Benzene	ND	310	54
Trichloroethene	ND	310	61
1,2-Dichloropropane	ND	310	53
Bromodichloromethane	ND	310	55
Dibromomethane	ND	310	51
4-Methyl-2-Pentanone	ND	610	49
cis-1,3-Dichloropropene	ND	310	67
Toluene	ND	310	57
trans-1,3-Dichloropropene	ND	310	56
1,1,2-Trichloroethane	ND	310	60
2-Hexanone	ND	610	56
1,3-Dichloropropane	ND	310	58
Tetrachloroethene	ND	310	59
Dibromochloromethane	ND	310	52
1,2-Dibromoethane	ND	310	53
Chlorobenzene	ND	310	59
1,1,1,2-Tetrachloroethane	ND	310	66
Ethylbenzene	ND	310	63
m,p-Xylenes	ND	310	38
o-Xylene	ND	310	62
Styrene	ND	310	65
Bromoform	ND	310	61
Isopropylbenzene	ND	310	68
1,1,2,2-Tetrachloroethane	ND	310	51
1,2,3-Trichloropropane	ND	310	64
Propylbenzene	ND	310	64
Bromobenzene	ND	310	59

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20B	Diln Fac:	42.91
Lab ID:	309882-016	Batch#:	270590
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	310	64
2-Chlorotoluene	ND	310	70
4-Chlorotoluene	ND	310	64
tert-Butylbenzene	ND	310	71
1,2,4-Trimethylbenzene	ND	310	65
sec-Butylbenzene	ND	310	71
para-Isopropyl Toluene	ND	310	66
1,3-Dichlorobenzene	ND	310	64
1,4-Dichlorobenzene	ND	310	61
n-Butylbenzene	ND	310	68
1,2-Dichlorobenzene	ND	310	69
1,2-Dibromo-3-Chloropropane	ND	310	62
1,2,4-Trichlorobenzene	ND	310	85
Hexachlorobutadiene	ND	310	75
Naphthalene	ND	310	67
1,2,3-Trichlorobenzene	ND	310	82

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	91	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05D	Diln Fac:	44.82
Lab ID:	309882-017	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	500	52
Chloromethane	ND	500	42
Vinyl Chloride	ND	500	38
Bromomethane	ND	500	170
Chloroethane	ND	500	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	1,000	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	45
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	58
1,1-Dichloroethane	ND	250	47
2-Butanone	ND	500	110
cis-1,2-Dichloroethene	ND	250	50
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	54
Bromochloromethane	ND	250	53
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	44
Trichloroethene	ND	250	50
1,2-Dichloropropane	ND	250	43
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	500	40
cis-1,3-Dichloropropene	ND	250	55
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	500	46
1,3-Dichloropropane	ND	250	47
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	48
1,1,1,2-Tetrachloroethane	ND	250	54
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	51
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	55
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	52
Propylbenzene	ND	250	52
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05D	Diln Fac:	44.82
Lab ID:	309882-017	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	52
2-Chlorotoluene	ND	250	57
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	53
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	54
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	55
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	51
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	61
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	67

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	84	80-136
Toluene-d8	101	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06D	Diln Fac:	44.65
Lab ID:	309882-018	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 12%

Analyte	Result	RL	MDL
Freon 12	ND	510	53
Chloromethane	ND	510	43
Vinyl Chloride	ND	510	38
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	250	40
Acetone	ND	1,000	130
Freon 113	ND	250	50
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,300	220
Carbon Disulfide	ND	250	49
MTBE	ND	250	46
trans-1,2-Dichloroethene	ND	250	52
Vinyl Acetate	ND	2,500	59
1,1-Dichloroethane	ND	250	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	250	51
2,2-Dichloropropane	ND	250	50
Chloroform	ND	250	55
Bromochloromethane	ND	250	54
1,1,1-Trichloroethane	ND	250	54
1,1-Dichloropropene	ND	250	51
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	42
Benzene	ND	250	44
Trichloroethene	ND	250	51
1,2-Dichloropropane	ND	250	44
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	250	56
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	46
1,1,2-Trichloroethane	ND	250	49
2-Hexanone	ND	510	47
1,3-Dichloropropane	ND	250	48
Tetrachloroethene	ND	250	49
Dibromochloromethane	ND	250	43
1,2-Dibromoethane	ND	250	44
Chlorobenzene	ND	250	49
1,1,1,2-Tetrachloroethane	ND	250	55
Ethylbenzene	ND	250	52
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	52
Styrene	ND	250	53
Bromoform	ND	250	50
Isopropylbenzene	ND	250	56
1,1,2,2-Tetrachloroethane	ND	250	42
1,2,3-Trichloropropane	ND	250	53
Propylbenzene	ND	250	53
Bromobenzene	ND	250	49

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06D	Diln Fac:	44.65
Lab ID:	309882-018	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	53
2-Chlorotoluene	ND	250	58
4-Chlorotoluene	ND	250	53
tert-Butylbenzene	ND	250	59
1,2,4-Trimethylbenzene	ND	250	54
sec-Butylbenzene	ND	250	58
para-Isopropyl Toluene	ND	250	55
1,3-Dichlorobenzene	ND	250	53
1,4-Dichlorobenzene	ND	250	50
n-Butylbenzene	ND	250	56
1,2-Dichlorobenzene	ND	250	57
1,2-Dibromo-3-Chloropropane	ND	250	51
1,2,4-Trichlorobenzene	ND	250	71
Hexachlorobutadiene	ND	250	62
Naphthalene	ND	250	55
1,2,3-Trichlorobenzene	ND	250	68

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07D	Diln Fac:	43.30
Lab ID:	309882-019	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 13%

Analyte	Result	RL	MDL
Freon 12	ND	500	52
Chloromethane	ND	500	42
Vinyl Chloride	ND	500	38
Bromomethane	ND	500	170
Chloroethane	ND	500	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	1,000	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	45
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	58
1,1-Dichloroethane	ND	250	47
2-Butanone	ND	500	110
cis-1,2-Dichloroethene	ND	250	50
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	53
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	46
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	44
Trichloroethene	ND	250	50
1,2-Dichloropropane	ND	250	43
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	42
4-Methyl-2-Pentanone	ND	500	40
cis-1,3-Dichloropropene	ND	250	55
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	500	46
1,3-Dichloropropane	ND	250	47
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	48
1,1,1,2-Tetrachloroethane	ND	250	54
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	51
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	55
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	52
Propylbenzene	ND	250	52
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07D	Diln Fac:	43.30
Lab ID:	309882-019	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	52
2-Chlorotoluene	ND	250	57
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	53
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	54
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	55
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	61
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	67

Surrogate	%REC	Limits
Dibromofluoromethane	85	78-131
1,2-Dichloroethane-d4	83	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	109	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08D	Diln Fac:	41.37
Lab ID:	309882-020	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	460	48
Chloromethane	ND	460	39
Vinyl Chloride	ND	460	35
Bromomethane	ND	460	160
Chloroethane	ND	460	33
Trichlorofluoromethane	ND	230	36
Acetone	ND	920	120
Freon 113	ND	230	45
1,1-Dichloroethene	ND	230	39
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	230	45
MTBE	ND	230	41
trans-1,2-Dichloroethene	ND	230	47
Vinyl Acetate	ND	2,300	53
1,1-Dichloroethane	ND	230	43
2-Butanone	ND	460	100
cis-1,2-Dichloroethene	ND	230	46
2,2-Dichloropropane	ND	230	46
Chloroform	ND	230	49
Bromochloromethane	ND	230	49
1,1,1-Trichloroethane	ND	230	49
1,1-Dichloropropene	ND	230	46
Carbon Tetrachloride	ND	230	42
1,2-Dichloroethane	ND	230	38
Benzene	ND	230	40
Trichloroethene	ND	230	46
1,2-Dichloropropane	ND	230	40
Bromodichloromethane	ND	230	41
Dibromomethane	ND	230	38
4-Methyl-2-Pentanone	ND	460	37
cis-1,3-Dichloropropene	ND	230	50
Toluene	ND	230	43
trans-1,3-Dichloropropene	ND	230	42
1,1,2-Trichloroethane	ND	230	45
2-Hexanone	ND	460	42
1,3-Dichloropropane	ND	230	43
Tetrachloroethene	ND	230	45
Dibromochloromethane	ND	230	39
1,2-Dibromoethane	ND	230	40
Chlorobenzene	ND	230	44
1,1,1,2-Tetrachloroethane	ND	230	50
Ethylbenzene	ND	230	47
m,p-Xylenes	ND	230	28
o-Xylene	ND	230	47
Styrene	ND	230	48
Bromoform	ND	230	46
Isopropylbenzene	ND	230	51
1,1,2,2-Tetrachloroethane	ND	230	38
1,2,3-Trichloropropane	ND	230	48
Propylbenzene	ND	230	48
Bromobenzene	ND	230	45

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08D	Diln Fac:	41.37
Lab ID:	309882-020	Batch#:	270628
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	230	48
2-Chlorotoluene	ND	230	53
4-Chlorotoluene	ND	230	48
tert-Butylbenzene	ND	230	54
1,2,4-Trimethylbenzene	ND	230	49
sec-Butylbenzene	ND	230	53
para-Isopropyl Toluene	ND	230	50
1,3-Dichlorobenzene	ND	230	48
1,4-Dichlorobenzene	ND	230	45
n-Butylbenzene	ND	230	51
1,2-Dichlorobenzene	ND	230	52
1,2-Dibromo-3-Chloropropane	ND	230	47
1,2,4-Trichlorobenzene	ND	230	64
Hexachlorobutadiene	ND	230	56
Naphthalene	ND	230	50
1,2,3-Trichlorobenzene	ND	230	62

Surrogate	%REC	Limits
Dibromofluoromethane	90	78-131
1,2-Dichloroethane-d4	92	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270590
Units:	ug/Kg	Analyzed:	05/20/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976168

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.47	98	69-142
Benzene	25.00	26.77	107	79-123
Trichloroethene	25.00	25.45	102	79-126
Toluene	25.00	27.63	111	78-120
Chlorobenzene	25.00	26.06	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	97	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

Type: BSD Lab ID: QC976169

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.67	95	69-142	3	23
Benzene	25.00	26.20	105	79-123	2	20
Trichloroethene	25.00	25.05	100	79-126	2	20
Toluene	25.00	26.41	106	78-120	5	20
Chlorobenzene	25.00	25.03	100	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	99	78-131
1,2-Dichloroethane-d4	101	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	0.13 J	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	0.56 J	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976170	Batch#:	270590
Matrix:	Soil	Analyzed:	05/20/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	ND	5.0	0.13
1,2,3-Trichlorobenzene	ND	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270628
Units:	ug/Kg	Analyzed:	05/21/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976332

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	30.07	120	69-142
Benzene	25.00	28.53	114	79-123
Trichloroethene	25.00	26.71	107	79-126
Toluene	25.00	27.98	112	78-120
Chlorobenzene	25.00	26.09	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	88	78-131
1,2-Dichloroethane-d4	82	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

Type: BSD Lab ID: QC976333

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.28	109	69-142	10	23
Benzene	25.00	26.78	107	79-123	6	20
Trichloroethene	25.00	24.71	99	79-126	8	20
Toluene	25.00	26.47	106	78-120	6	20
Chlorobenzene	25.00	25.32	101	80-122	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	113	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976334	Batch#:	270628
Matrix:	Soil	Analyzed:	05/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	0.51 J b	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20

J= Estimated value
b= See narrative
ND= Not Detected at or above MDL
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976334	Batch#:	270628
Matrix:	Soil	Analyzed:	05/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	5.0	0.15
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	0.35 J	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	0.44 J	5.0	0.13
1,2,3-Trichlorobenzene	0.47 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	100	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-129

J= Estimated value
 b= See narrative
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-20D	Batch#:	270599
Lab ID:	309882-013	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 19%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	510	300	61		
Acenaphthylene	1,800	300	61		
Acenaphthene	250 J	300	61		
Fluorene	350	300	61		
Phenanthrene	4,900	300	61		
Anthracene	1,300	300	61		
Fluoranthene	7,100	300	61		
Pyrene	14,000	300	61		
Benzo(a)anthracene	4,000	300	61	0.10	400
Chrysene	4,700	300	61	0.0010	4.7
Benzo(b)fluoranthene	6,800	300	61	0.10	680
Benzo(k)fluoranthene	2,100	300	61	0.010	21
Benzo(a)pyrene	6,700	300	61	1.0	6,700
Indeno(1,2,3-cd)pyrene	4,100	300	61	0.10	410
Dibenz(a,h)anthracene	710	300	61	1.0	710
Benzo(g,h,i)perylene	5,400	300	61		
Total Benzo(a)pyrene Equiv.					8,900

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-05D	Batch#:	270599
Lab ID:	309882-017	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	20.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	110	22		
Acenaphthylene	30 J	110	22		
Acenaphthene	ND	110	22		
Fluorene	ND	110	22		
Phenanthrene	190	110	22		
Anthracene	50 J	110	22		
Fluoranthene	330	110	22		
Pyrene	520	110	22		
Benzo(a)anthracene	190	110	22	0.10	19
Chrysene	230	110	22	0.0010	0.23
Benzo(b)fluoranthene	340	110	22	0.10	34
Benzo(k)fluoranthene	110 J	110	22	0.010	1.1
Benzo(a)pyrene	260	110	22	1.0	260
Indeno(1,2,3-cd)pyrene	150	110	22	0.10	15
Dibenz(a,h)anthracene	36 J	110	22	1.0	36
Benzo(g,h,i)perylene	230	110	22		
Total Benzo(a)pyrene Equiv.					370

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-07D	Batch#:	270599
Lab ID:	309882-019	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 13%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	16 J	57	11		
Acenaphthylene	46 J	57	11		
Acenaphthene	11 J	57	11		
Fluorene	ND	57	11		
Phenanthrene	140	57	11		
Anthracene	36 J	57	11		
Fluoranthene	320	57	11		
Pyrene	510	57	11		
Benzo(a)anthracene	160	57	11	0.10	16
Chrysene	190	57	11	0.0010	0.19
Benzo(b)fluoranthene	330	57	11	0.10	33
Benzo(k)fluoranthene	85	57	11	0.010	0.85
Benzo(a)pyrene	280	57	11	1.0	280
Indeno(1,2,3-cd)pyrene	170	57	11	0.10	17
Dibenz(a,h)anthracene	30 J	57	11	1.0	30
Benzo(g,h,i)perylene	240	57	11		
Total Benzo(a)pyrene Equiv.					380

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-08D	Batch#:	270599
Lab ID:	309882-020	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	18 J	55	11		
Acenaphthylene	39 J	55	11		
Acenaphthene	ND	55	11		
Fluorene	ND	55	11		
Phenanthrene	130	55	11		
Anthracene	35 J	55	11		
Fluoranthene	270	55	11		
Pyrene	510	55	11		
Benzo(a)anthracene	140	55	11	0.10	14
Chrysene	170	55	11	0.0010	0.17
Benzo(b)fluoranthene	290	55	11	0.10	29
Benzo(k)fluoranthene	87	55	11	0.010	0.87
Benzo(a)pyrene	240	55	11	1.0	240
Indeno(1,2,3-cd)pyrene	140	55	11	0.10	14
Dibenz(a,h)anthracene	27 J	55	11	1.0	27
Benzo(g,h,i)perylene	210	55	11		
Total Benzo(a)pyrene Equiv.					320

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976211	Batch#:	270599
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/23/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	155 *	48-120
2-Fluorobiphenyl	71	39-120
Terphenyl-d14	81	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976212	Batch#:	270599
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	26.55	80	57-120
Acenaphthylene	33.33	27.28	82	60-120
Acenaphthene	33.33	25.56	77	64-120
Fluorene	33.33	24.70	74	67-120
Phenanthrene	33.33	27.89	84	64-120
Anthracene	33.33	28.91	87	66-120
Fluoranthene	33.33	26.68	80	73-121
Pyrene	33.33	31.73	95	67-120
Benzo(a)anthracene	33.33	26.51	80	69-121
Chrysene	33.33	18.20	55	48-120
Benzo(b)fluoranthene	33.33	29.87	90	66-120
Benzo(k)fluoranthene	33.33	26.96	81	62-125
Benzo(a)pyrene	33.33	28.77	86	66-120
Indeno(1,2,3-cd)pyrene	33.33	26.78	80	57-120
Dibenz(a,h)anthracene	33.33	22.01	66	45-120
Benzo(g,h,i)perylene	33.33	27.25	82	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	142 *	48-120
2-Fluorobiphenyl	68	39-120
Terphenyl-d14	83	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-17D	Batch#:	270589
Lab ID:	309882-001	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.0
beta-BHC	ND	11	0.64
gamma-BHC	ND	11	0.80
delta-BHC	ND	11	0.79
Heptachlor	ND	11	0.79
Aldrin	ND	11	0.61
Heptachlor epoxide	ND	11	0.76
Endosulfan I	ND	11	0.79
Dieldrin	0.92 C J	22	0.88
4,4'-DDE	ND	22	0.79
Endrin	ND	22	0.66
Endosulfan II	ND	22	0.79
Endosulfan sulfate	ND	22	0.74
4,4'-DDD	ND	22	0.79
Endrin aldehyde	ND	22	5.8
4,4'-DDT	ND	22	0.89
alpha-Chlordane	1.5 C J	11	1.4
gamma-Chlordane	1.8 C J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	400	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-19D	Batch#:	270589
Lab ID:	309882-002	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.0
beta-BHC	ND	11	0.66
gamma-BHC	ND	11	0.82
delta-BHC	ND	11	0.81
Heptachlor	ND	11	0.81
Aldrin	ND	11	0.62
Heptachlor epoxide	ND	11	0.78
Endosulfan I	ND	11	0.81
Dieldrin	ND	23	0.90
4,4'-DDE	2.3 J	23	0.81
Endrin	ND	23	0.68
Endosulfan II	ND	23	0.81
Endosulfan sulfate	1.2 C J	23	0.75
4,4'-DDD	5.3 C J	23	0.81
Endrin aldehyde	ND	23	6.0
4,4'-DDT	2.5 C J	23	0.92
alpha-Chlordane	2.0 C J	11	1.5
gamma-Chlordane	1.6 C J	11	1.4
Methoxychlor	ND	110	16
Toxaphene	ND	410	140

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-20D	Batch#:	270651
Lab ID:	309882-003	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.90
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.3
delta-BHC	ND	11	1.6
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.94
Heptachlor epoxide	ND	11	0.86
Endosulfan I	ND	11	1.1
Dieldrin	0.92 C J	22	0.81
4,4'-DDE	ND	22	1.0
Endrin	ND	22	2.1
Endosulfan II	ND	22	1.2
Endosulfan sulfate	4.4 C J	22	1.8
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.9
4,4'-DDT	6.7 J	22	0.91
alpha-Chlordane	ND	11	1.4
gamma-Chlordane	1.5 C J	11	1.1
Methoxychlor	ND	110	27
Toxaphene	ND	400	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-17B	Batch#:	270651
Lab ID:	309882-004	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.89
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.6
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.93
Heptachlor epoxide	ND	11	0.84
Endosulfan I	ND	11	1.1
Dieldrin	0.97 J	22	0.88
4,4'-DDE	ND	22	0.99
Endrin	ND	22	2.1
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.8
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.8
4,4'-DDT	ND	22	3.3
alpha-Chlordane	1.7 C J	11	1.4
gamma-Chlordane	2.3 J	11	1.1
Methoxychlor	ND	110	27
Toxaphene	ND	400	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-19B	Batch#:	270651
Lab ID:	309882-005	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.88
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.5
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.92
Heptachlor epoxide	1.2 C J	11	0.83
Endosulfan I	ND	11	1.1
Dieldrin	2.1 J	22	0.78
4,4'-DDE	2.9 C J	22	0.97
Endrin	3.2 J	22	2.0
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.7
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.7
4,4'-DDT	7.2 J	22	3.3
alpha-Chlordane	2.1 C J	11	1.4
gamma-Chlordane	2.3 J	11	1.1
Methoxychlor	ND	110	26
Toxaphene	ND	390	110

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-20B	Batch#:	270651
Lab ID:	309882-006	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.89
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.6
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.93
Heptachlor epoxide	ND	11	0.85
Endosulfan I	ND	11	1.1
Dieldrin	ND	22	0.88
4,4'-DDE	1.0 C J	22	0.80
Endrin	ND	22	2.1
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.8
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.9
4,4'-DDT	ND	22	3.4
alpha-Chlordane	ND	11	1.4
gamma-Chlordane	1.8 J	11	1.1
Methoxychlor	ND	110	27
Toxaphene	ND	400	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-05D	Batch#:	270651
Lab ID:	309882-007	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.92
beta-BHC	ND	11	1.2
gamma-BHC	ND	11	1.3
delta-BHC	ND	11	1.6
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.96
Heptachlor epoxide	ND	11	0.87
Endosulfan I	ND	11	1.1
Dieldrin	1.1 C J	23	0.90
4,4'-DDE	2.1 J	23	0.82
Endrin	ND	23	2.1
Endosulfan II	ND	23	1.3
Endosulfan sulfate	ND	23	1.8
4,4'-DDD	ND	23	1.5
Endrin aldehyde	ND	23	7.0
4,4'-DDT	ND	23	3.4
alpha-Chlordane	ND	11	1.5
gamma-Chlordane	2.1 J	11	1.1
Methoxychlor	ND	110	27
Toxaphene	ND	410	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-06D	Batch#:	270651
Lab ID:	309882-008	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.91
beta-BHC	ND	11	1.2
gamma-BHC	ND	11	1.3
delta-BHC	ND	11	1.6
Heptachlor	ND	11	1.2
Aldrin	ND	11	0.95
Heptachlor epoxide	ND	11	0.86
Endosulfan I	ND	11	1.1
Dieldrin	2.8 J	22	0.81
4,4'-DDE	0.82 C J	22	0.81
Endrin	ND	22	2.1
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.8
4,4'-DDD	ND	22	1.5
Endrin aldehyde	ND	22	6.9
4,4'-DDT	4.5 J	22	0.91
alpha-Chlordane	2.8 C J	11	1.4
gamma-Chlordane	3.9 J	11	1.1
Methoxychlor	ND	110	27
Toxaphene	ND	400	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-07D	Batch#:	270651
Lab ID:	309882-009	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.44
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.62
delta-BHC	ND	5.5	0.78
Heptachlor	ND	5.5	0.60
Aldrin	ND	5.5	0.46
Heptachlor epoxide	ND	5.5	0.42
Endosulfan I	ND	5.5	0.53
Dieldrin	ND	11	0.44
4,4'-DDE	2.3 J	11	0.49
Endrin	ND	11	1.0
Endosulfan II	ND	11	0.61
Endosulfan sulfate	ND	11	0.88
4,4'-DDD	0.98 C J	11	0.40
Endrin aldehyde	ND	11	3.4
4,4'-DDT	ND	11	1.7
alpha-Chlordane	2.7 C J	5.5	0.71
gamma-Chlordane	2.3 C J	5.5	0.68
Methoxychlor	ND	55	13
Toxaphene	ND	200	57

Surrogate	%REC	Limits
TCMX	71	43-125
Decachlorobiphenyl	59	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-08D	Batch#:	270651
Lab ID:	309882-010	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.45
beta-BHC	ND	5.6	0.57
gamma-BHC	ND	5.6	0.63
delta-BHC	ND	5.6	0.79
Heptachlor	ND	5.6	0.61
Aldrin	ND	5.6	0.47
Heptachlor epoxide	ND	5.6	0.43
Endosulfan I	ND	5.6	0.54
Dieldrin	ND	11	0.44
4,4'-DDE	1.3 J	11	0.50
Endrin	ND	11	1.0
Endosulfan II	ND	11	0.61
Endosulfan sulfate	ND	11	0.89
4,4'-DDD	ND	11	0.75
Endrin aldehyde	ND	11	3.4
4,4'-DDT	2.4 J	11	0.45
alpha-Chlordane	0.96 C J	5.6	0.72
gamma-Chlordane	1.2 J	5.6	0.69
Methoxychlor	ND	56	13
Toxaphene	ND	200	58

Surrogate	%REC	Limits
TCMX	95	43-125
Decachlorobiphenyl	71	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976161	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.10
beta-BHC	ND	1.1	0.065
gamma-BHC	ND	1.1	0.081
delta-BHC	ND	1.1	0.080
Heptachlor	ND	1.1	0.080
Aldrin	ND	1.1	0.061
Heptachlor epoxide	ND	1.1	0.077
Endosulfan I	ND	1.1	0.080
Dieldrin	ND	2.2	0.080
4,4'-DDE	ND	2.2	0.080
Endrin	ND	2.2	0.067
Endosulfan II	ND	2.2	0.080
Endosulfan sulfate	ND	2.2	0.074
4,4'-DDD	ND	2.2	0.080
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.11
Methoxychlor	ND	11	1.5
Toxaphene	ND	40	13

Surrogate	%REC	Limits
TCMX	110	43-125
Decachlorobiphenyl	110	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976165	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/21/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	16.09	121	58-131
Heptachlor	13.33	17.26	129	51-133
Aldrin	13.33	14.36	108	52-128
Dieldrin	13.33	15.12	113	59-133
Endrin	13.33	16.45	123	48-154
4,4'-DDT	13.33	16.71	125	54-140

Surrogate	%REC	Limits
TCMX	100	43-125
Decachlorobiphenyl	99	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-12A	Batch#:	270589
MSS Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/21/19
Diln Fac:	5.000		

Type: MS Lab ID: QC976166

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.4109	13.62	14.48	106	58-126
Heptachlor	<0.4060	13.62	12.03	88	58-127
Aldrin	<0.3106	13.62	12.54	92	55-124
Dieldrin	<0.4060	13.62	13.19	97	48-137
Endrin	<0.3375	13.62	14.81	109	48-158
4,4'-DDT	<0.4579	13.62	16.20	119	38-155

Surrogate	%REC	Limits
TCMX	91	43-125
Decachlorobiphenyl	73	40-128

Type: MSD Lab ID: QC976167

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.27	10.79	81	58-126	27	36
Heptachlor	13.27	12.33	93	58-127	5	34
Aldrin	13.27	9.131	69	55-124	29	31
Dieldrin	13.27	9.659	73	48-137	28	38
Endrin	13.27	11.16	84	48-158	26	38
4,4'-DDT	13.27	11.20	84	38-155	34	42

Surrogate	%REC	Limits
TCMX	86	43-125
Decachlorobiphenyl	61	40-128

RPD= Relative Percent Difference

Batch QC Report

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976433	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.090
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.13
delta-BHC	ND	1.1	0.16
Heptachlor	ND	1.1	0.12
Aldrin	ND	1.1	0.094
Heptachlor epoxide	ND	1.1	0.085
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.088
4,4'-DDE	ND	2.2	0.099
Endrin	ND	2.2	0.21
Endosulfan II	ND	2.2	0.12
Endosulfan sulfate	ND	2.2	0.18
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.69
4,4'-DDT	ND	2.2	0.34
alpha-Chlordane	ND	1.1	0.14
gamma-Chlordane	ND	1.1	0.14
Methoxychlor	ND	11	2.7
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	71	43-125
Decachlorobiphenyl	68	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976437	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	11.65	87	58-131
Heptachlor	13.33	11.76	88	51-133
Aldrin	13.33	11.55	87	52-128
Dieldrin	13.33	11.10	83	59-133
Endrin	13.33	12.06	90	48-154
4,4'-DDT	13.33	9.265	69	54-140

Surrogate	%REC	Limits
TCMX	65	43-125
Decachlorobiphenyl	65	40-128

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Field ID:	DTSC-17D	Batch#:	270589
Type:	SAMPLE	Prepared:	05/20/19
Lab ID:	309882-001	Analyzed:	05/20/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.2
Aroclor-1221	ND	26	8.6
Aroclor-1232	ND	13	7.3
Aroclor-1242	ND	13	9.6
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.4
Aroclor-1260	30	13	7.0

Surrogate	%REC	Limits
Decachlorobiphenyl	86	49-157

Field ID:	DTSC-19D	Batch#:	270589
Type:	SAMPLE	Prepared:	05/20/19
Lab ID:	309882-002	Analyzed:	05/20/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	14	7.5
Aroclor-1242	ND	14	9.8
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.5
Aroclor-1260	33	14	9.3

Surrogate	%REC	Limits
Decachlorobiphenyl	73	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Field ID:	DTSC-20D	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-003	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.9
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.6
Aroclor-1242	ND	13	7.9
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.8
Aroclor-1260	17	13	6.5

Surrogate	%REC	Limits
Decachlorobiphenyl	111	49-157

Field ID:	DTSC-17B	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-004	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.8
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.5
Aroclor-1242	ND	13	7.7
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.7
Aroclor-1260	17	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	113	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Field ID:	DTSC-19B	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-005	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.6
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.6
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	61	13	6.3

Surrogate	%REC	Limits
Decachlorobiphenyl	114	49-157

Field ID:	DTSC-20B	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-006	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.8
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.5
Aroclor-1242	ND	13	7.8
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.7
Aroclor-1260	15	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	117	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Field ID:	DTSC-05D	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-007	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	9.0
Aroclor-1221	ND	27	16
Aroclor-1232	ND	14	7.7
Aroclor-1242	ND	14	8.0
Aroclor-1248	ND	14	3.4
Aroclor-1254	ND	14	6.9
Aroclor-1260	23	14	6.6

Surrogate	%REC	Limits
Decachlorobiphenyl	145	49-157

Field ID:	DTSC-06D	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-008	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.9
Aroclor-1221	ND	27	16
Aroclor-1232	ND	13	7.6
Aroclor-1242	ND	13	7.9
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.8
Aroclor-1260	31	13	6.5

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Field ID:	DTSC-07D	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-009	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.7
Aroclor-1221	ND	26	15
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	7.7
Aroclor-1248	ND	13	3.2
Aroclor-1254	ND	13	6.6
Aroclor-1260	9.8 J	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	126	49-157

Field ID:	DTSC-08D	Batch#:	270651
Type:	SAMPLE	Prepared:	05/21/19
Lab ID:	309882-010	Analyzed:	05/22/19
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	8.8
Aroclor-1221	ND	27	15
Aroclor-1232	ND	13	7.5
Aroclor-1242	ND	13	7.8
Aroclor-1248	ND	13	3.3
Aroclor-1254	ND	13	6.7
Aroclor-1260	10 J	13	6.4

Surrogate	%REC	Limits
Decachlorobiphenyl	106	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/16/19
Units:	ug/Kg	Received:	05/16/19
Basis:	air dried		

Type:	BLANK	Batch#:	270589
Lab ID:	QC976161	Prepared:	05/20/19
Diln Fac:	1.000	Analyzed:	05/20/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.6
Aroclor-1221	ND	24	4.4
Aroclor-1232	ND	12	3.7
Aroclor-1242	ND	12	4.8
Aroclor-1248	ND	12	5.1
Aroclor-1254	ND	12	2.7
Aroclor-1260	ND	12	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	117	49-157

Type:	BLANK	Batch#:	270651
Lab ID:	QC976433	Prepared:	05/21/19
Diln Fac:	1.000	Analyzed:	05/22/19

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.4
Aroclor-1221	ND	24	7.7
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.9
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.4
Aroclor-1260	ND	12	3.2

Surrogate	%REC	Limits
Decachlorobiphenyl	74	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976162	Batch#:	270589
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/20/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	183.7	110	63-143
Aroclor-1260	166.7	181.4	109	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	100	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	DTSC-12A	Batch#:	270589
MSS Lab ID:	309851-007	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	air dried	Analyzed:	05/20/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976163

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<7.389	168.8	150.9	89	62-160
Aroclor-1260	<9.265	168.8	151.2	90	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	74	49-157

Type: MSD Lab ID: QC976164

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	167.7	111.7	67	62-160	29	43
Aroclor-1260	167.7	102.7	61	53-172	38	44

Surrogate	%REC	Limits
Decachlorobiphenyl	49	49-157

RPD= Relative Percent Difference

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976434	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	174.0	104	63-143
Aroclor-1260	166.7	204.9	123	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	118	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	270651
MSS Lab ID:	310026-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976435

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<8.862	166.3	177.2	107	62-160
Aroclor-1260	<6.456	166.3	187.3	113	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	103	49-157

Type: MSD Lab ID: QC976436

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	163.9	159.9	98	62-160	9	43
Aroclor-1260	163.9	167.9	102	53-172	9	44

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

RPD= Relative Percent Difference

California Title 22 Metals			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-17D	Batch#:	270707
Lab ID:	309882-001	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	3.7	1.5	0.18
Barium	69	0.25	0.036
Beryllium	0.31	0.099	0.0050
Cadmium	0.22 J	0.25	0.023
Chromium	37	0.25	0.037
Cobalt	6.8	0.25	0.016
Copper	17	0.25	0.056
Lead	22	0.99	0.12
Molybdenum	0.42	0.25	0.019
Nickel	38	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	31	0.25	0.052
Zinc	48	0.99	0.23

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-19D	Batch#:	270707
Lab ID:	309882-002	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.8	1.5	0.18
Barium	81	0.25	0.036
Beryllium	0.32	0.099	0.0050
Cadmium	0.34	0.25	0.023
Chromium	41	0.25	0.037
Cobalt	8.5	0.25	0.016
Copper	25	0.25	0.056
Lead	25	0.99	0.12
Molybdenum	0.59	0.25	0.019
Nickel	38	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	38	0.25	0.052
Zinc	61	0.99	0.23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-20D	Batch#:	270707
Lab ID:	309882-003	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.7	1.5	0.18
Barium	77	0.25	0.036
Beryllium	0.31	0.099	0.0050
Cadmium	0.28	0.25	0.023
Chromium	40	0.25	0.037
Cobalt	7.6	0.25	0.016
Copper	22	0.25	0.056
Lead	22	0.99	0.12
Molybdenum	0.58	0.25	0.019
Nickel	39	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	35	0.25	0.052
Zinc	55	0.99	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-17B	Batch#:	270707
Lab ID:	309882-004	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.2	1.5	0.18
Barium	70	0.25	0.036
Beryllium	0.26	0.10	0.0050
Cadmium	0.26	0.25	0.023
Chromium	39	0.25	0.037
Cobalt	7.1	0.25	0.016
Copper	21	0.25	0.056
Lead	25	1.0	0.12
Molybdenum	0.58	0.25	0.019
Nickel	37	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	31	0.25	0.052
Zinc	51	1.0	0.23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-19B	Batch#:	270707
Lab ID:	309882-005	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.9	1.5	0.18
Barium	82	0.25	0.036
Beryllium	0.31	0.099	0.0050
Cadmium	0.38	0.25	0.023
Chromium	40	0.25	0.037
Cobalt	8.1	0.25	0.016
Copper	28	0.25	0.056
Lead	26	0.99	0.12
Molybdenum	0.54	0.25	0.019
Nickel	39	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	37	0.25	0.052
Zinc	64	0.99	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-20B	Batch#:	270707
Lab ID:	309882-006	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	5.1	1.5	0.18
Barium	68	0.25	0.036
Beryllium	0.29	0.099	0.0049
Cadmium	0.34	0.25	0.023
Chromium	46	0.25	0.037
Cobalt	8.6	0.25	0.016
Copper	28	0.25	0.056
Lead	24	0.99	0.12
Molybdenum	0.51	0.25	0.019
Nickel	36	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.49	0.16
Vanadium	40	0.25	0.052
Zinc	60	0.99	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05D	Batch#:	270707
Lab ID:	309882-007	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.1	1.5	0.18
Barium	74	0.25	0.036
Beryllium	0.28	0.099	0.0050
Cadmium	0.25	0.25	0.023
Chromium	41	0.25	0.037
Cobalt	7.2	0.25	0.016
Copper	21	0.25	0.056
Lead	23	0.99	0.12
Molybdenum	0.52	0.25	0.019
Nickel	38	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	32	0.25	0.052
Zinc	54	0.99	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-06D	Batch#:	270707
Lab ID:	309882-008	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	4.6	1.5	0.18
Barium	80	0.25	0.036
Beryllium	0.29	0.099	0.0050
Cadmium	0.30	0.25	0.023
Chromium	40	0.25	0.037
Cobalt	7.1	0.25	0.016
Copper	22	0.25	0.056
Lead	54	0.99	0.12
Molybdenum	0.40	0.25	0.019
Nickel	38	0.25	0.043
Selenium	ND	2.0	0.19
Silver	0.080 J	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	34	0.25	0.052
Zinc	54	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-07D	Batch#:	270707
Lab ID:	309882-009	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	3.1	1.5	0.18
Barium	41	0.25	0.036
Beryllium	0.21	0.099	0.0049
Cadmium	0.21 J	0.25	0.023
Chromium	35	0.25	0.037
Cobalt	5.5	0.25	0.016
Copper	14	0.25	0.056
Lead	33	0.99	0.12
Molybdenum	0.40	0.25	0.019
Nickel	29	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.49	0.16
Vanadium	25	0.25	0.052
Zinc	43	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-08D	Batch#:	270707
Lab ID:	309882-010	Sampled:	05/16/19
Matrix:	Soil	Received:	05/16/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	3.6	1.5	0.18
Barium	48	0.25	0.036
Beryllium	0.23	0.098	0.0049
Cadmium	0.25	0.25	0.023
Chromium	39	0.25	0.036
Cobalt	6.7	0.25	0.016
Copper	22	0.25	0.055
Lead	21	0.98	0.12
Molybdenum	0.35	0.25	0.018
Nickel	31	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.49	0.16
Vanadium	33	0.25	0.051
Zinc	49	0.98	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270745
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	dry	Prepared:	05/24/19
Diln Fac:	1.000	Analyzed:	05/24/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-17D	SAMPLE	309882-011	0.13	0.019	0.0034	10%
DTSC-19D	SAMPLE	309882-012	0.14	0.019	0.0033	12%
DTSC-20D	SAMPLE	309882-013	0.13	0.020	0.0036	19%
DTSC-17B	SAMPLE	309882-014	0.12	0.018	0.0032	8%
DTSC-19B	SAMPLE	309882-015	0.12	0.020	0.0036	12%
DTSC-20B	SAMPLE	309882-016	0.34	0.023	0.0040	30%
DTSC-05D	SAMPLE	309882-017	0.12	0.019	0.0033	10%
DTSC-06D	SAMPLE	309882-018	0.13	0.020	0.0034	12%
DTSC-07D	SAMPLE	309882-019	0.11	0.018	0.0031	13%
DTSC-08D	SAMPLE	309882-020	0.10	0.018	0.0032	10%
	BLANK	QC976805	ND	0.018	0.0031	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976650	Batch#:	270707
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	ND	1.5	0.18
Barium	0.12 J	0.25	0.036
Beryllium	ND	0.099	0.0050
Cadmium	ND	0.25	0.023
Chromium	0.043 J	0.25	0.037
Cobalt	ND	0.25	0.016
Copper	0.10 J	0.25	0.056
Lead	ND	0.99	0.12
Molybdenum	0.024 J	0.25	0.019
Nickel	ND	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	ND	0.25	0.052
Zinc	ND	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270707
Units:	mg/Kg	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/23/19

Type: BS Lab ID: QC976651

Analyte	Spiked	Result	%REC	Limits
Antimony	49.95	46.11	92	80-120
Arsenic	49.95	48.47	97	80-120
Barium	49.95	48.52	97	80-120
Beryllium	24.98	23.46	94	80-120
Cadmium	49.95	48.14	96	80-120
Chromium	49.95	50.60	101	80-120
Cobalt	49.95	47.64	95	80-120
Copper	49.95	48.62	97	80-120
Lead	49.95	47.37	95	80-120
Molybdenum	49.95	47.08	94	80-120
Nickel	49.95	46.23	93	80-120
Selenium	49.95	47.15	94	80-120
Silver	4.995	4.496	90	80-120
Thallium	49.95	50.23	101	80-120
Vanadium	49.95	50.84	102	80-120
Zinc	49.95	46.14	92	80-120

Type: BSD Lab ID: QC976652

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.75	48.46	97	80-120	5	20
Arsenic	49.75	48.09	97	80-120	0	20
Barium	49.75	47.84	96	80-120	1	20
Beryllium	24.88	23.87	96	80-120	2	20
Cadmium	49.75	48.04	97	80-120	0	20
Chromium	49.75	49.07	99	80-120	3	20
Cobalt	49.75	47.58	96	80-120	0	20
Copper	49.75	47.92	96	80-120	1	20
Lead	49.75	49.39	99	80-120	5	20
Molybdenum	49.75	46.15	93	80-120	2	20
Nickel	49.75	46.09	93	80-120	0	20
Selenium	49.75	47.31	95	80-120	1	20
Silver	4.975	4.541	91	80-120	1	20
Thallium	49.75	49.49	99	80-120	1	20
Vanadium	49.75	50.12	101	80-120	1	20
Zinc	49.75	45.63	92	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05B	Batch#:	270707
MSS Lab ID:	309926-001	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976653

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.1279	49.46	14.41	29 *	75-120
Arsenic	5.370	49.46	54.04	98	80-121
Barium	87.54	49.46	151.3	129 *	75-125
Beryllium	0.3336	24.73	23.96	96	80-120
Cadmium	0.3334	49.46	49.50	99	80-120
Chromium	43.17	49.46	90.41	96	75-125
Cobalt	9.366	49.46	53.08	88	75-120
Copper	29.63	49.46	80.10	102	80-125
Lead	27.35	49.46	75.41	97	75-125
Molybdenum	0.6565	49.46	40.74	81	75-120
Nickel	47.90	49.46	90.96	87	75-125
Selenium	<0.1861	49.46	46.90	95	80-120
Silver	0.07046	4.946	4.962	99	75-120
Thallium	<0.1618	49.46	42.61	86	75-120
Vanadium	39.07	49.46	89.45	102	78-125
Zinc	67.45	49.46	160.6	188 *	75-125

Type: MSD Lab ID: QC976654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.85	17.69	35 *	75-120	20	20
Arsenic	49.85	53.65	97	80-121	1	20
Barium	49.85	146.8	119	75-125	3	20
Beryllium	24.93	23.97	95	80-120	1	20
Cadmium	49.85	49.51	99	80-120	1	20
Chromium	49.85	90.88	96	75-125	0	20
Cobalt	49.85	52.70	87	75-120	1	20
Copper	49.85	81.99	105	80-125	2	20
Lead	49.85	71.00	88	75-125	7	20
Molybdenum	49.85	41.95	83	75-120	2	20
Nickel	49.85	86.81	78	75-125	5	20
Selenium	49.85	46.13	93	80-120	2	20
Silver	4.985	4.747	94	75-120	5	20
Thallium	49.85	42.09	84	75-120	2	20
Vanadium	49.85	90.48	103	78-125	1	20
Zinc	49.85	107.9	81	75-125	40 *	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270745
MSS Lab ID:	310033-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/24/19
Basis:	as received	Analyzed:	05/24/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC976806		0.1563	0.1527	98	80-120		
BSD	QC976807		0.1639	0.1600	98	80-120	0	20
MS	QC976808	0.1431	0.1667	0.5358	236 *	80-120		
MSD	QC976809		0.1613	0.3102	104	80-120	52 *	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270573
Matrix:	Soil	Sampled:	05/16/19
Units:	%	Received:	05/16/19
Diln Fac:	1.000	Analyzed:	05/19/19

Field ID	Lab ID	Result	RL
DTSC-17D	309882-011	10	1
DTSC-19D	309882-012	12	1
DTSC-20D	309882-013	19	1
DTSC-17B	309882-014	8	1
DTSC-19B	309882-015	12	1
DTSC-20B	309882-016	30	1
DTSC-05D	309882-017	10	1
DTSC-06D	309882-018	12	1
DTSC-07D	309882-019	13	1
DTSC-08D	309882-020	10	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309882	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	270573
MSS Lab ID:	309913-001	Sampled:	05/17/19
Lab ID:	QC976100	Received:	05/17/19
Matrix:	Miscell.	Analyzed:	05/19/19

MSS Result	Result	RL	RPD	Lim
5.441	5.758	1.000	6	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 309926 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-05B	309926-001
DTSC-06B	309926-002
DTSC-07B	309926-003
DTSC-08B	309926-004
DTSC-17C	309926-005
DTSC-19C	309926-006
DTSC-20C	309926-007
DTSC-17A	309926-008
DTSC-19A	309926-009
DTSC-20A	309926-010
DTSC-05B	309926-011
DTSC-06B	309926-012
DTSC-07B	309926-013
DTSC-08B	309926-014
DTSC-17C	309926-015
DTSC-19C	309926-016
DTSC-20C	309926-017
DTSC-17A	309926-018
DTSC-19A	309926-019
DTSC-20A	309926-020

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: 
Tracy Babjar
Project Manager
tracy.babjar@enthalpy.com
(510) 204-2226 Ext 13107

Date: 05/29/2019

CASE NARRATIVE

Laboratory number: 309926
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/17/19
Samples Received: 05/17/19

This data package contains sample and QC results for ten soil samples, requested for the above referenced project on 05/17/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270675; this analyte was not detected in samples at or above the RL. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270687; this analyte was not detected in the sample at or above the RL. Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270726; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

High response was observed for bromomethane in the CCV analyzed 05/21/19 12:39; affected data was qualified with "b". Matrix spikes were not performed for this analysis in batch 270628 due to insufficient sample amount. Matrix spikes were not performed for this analysis in batch 270667 due to insufficient sample amount. A number of analytes were detected between the MDL and the RL in the method blank for batch 270628; these analytes were not detected in samples at or above the RL. Naphthalene and 1,2,3-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 270667; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC976213, QC976214 (batch 270599) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recoveries were observed for nitrobenzene-d5 in the method blank/LCS for batch 270599. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Matrix spikes QC976397, QC976398 (batch 270642) were not reported because the parent

CASE NARRATIVE

Laboratory number: 309926
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/17/19
Samples Received: 05/17/19

Pesticides (EPA 8081A):

sample required a dilution that would have diluted out the spikes. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Matrix spikes QC976397, QC976398 (batch 270642) were not reported because the parent sample required a dilution that would have diluted out the spikes. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-05B (lab # 309926-001); the BS/BSD were within limits, and the associated RPD was within limits. High recoveries were observed for barium and zinc in the MS of DTSC-05B (lab # 309926-001); the BS/BSD were within limits. High RPD was observed for zinc in the MS/MSD of DTSC-05B (lab # 309926-001); the RPD was acceptable in the BS/BSD. A number of analytes were detected between the MDL and the RL in the method blank for batch 270707; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 309926

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-05B

Laboratory Sample ID :

309926-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.9	J	11	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDD	4.4	C,J	11	1.2	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	4.0	J	11	2.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.8	C,J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	2.5	J	5.6	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	32		13	3.1	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	5.4		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	88		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.097	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.33		0.24	0.022	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	43		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.4		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	30		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		0.97	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.66		0.24	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	48		0.24	0.042	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.070	J	0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	67		0.97	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-06B

Laboratory Sample ID :

309926-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.4	C,J	11	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Endrin	1.9	C,J	11	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
4,4'-DDT	3.0	J	11	2.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	3.3	C,J	5.5	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	4.0	J	5.5	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	16		13	3.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	6.5		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	87		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.34		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.35		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	24		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	1.0		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	46		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.097	J	0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	71		0.99	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-07B

Laboratory Sample ID :

309926-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	2.4	C,J	11	1.9	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
alpha-Chlordane	1.9	C,J	5.4	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
gamma-Chlordane	2.2	J	5.4	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3550C
Aroclor-1260	11	J	13	3.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	6.1		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	80		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.36		0.10	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.38		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.5		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		1.0	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.67		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	40		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	70		1.0	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-08B

Laboratory Sample ID :

309926-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1260	8.3	J	13	3.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	5.0		1.4	0.17	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	71		0.24	0.035	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.096	0.0048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.29		0.24	0.022	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.24	0.035	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.24	0.054	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	30		0.96	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.50		0.24	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.24	0.041	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.074	J	0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	64		0.96	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-17C

Laboratory Sample ID :

309926-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aroclor-1260	14		13	3.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	6.2		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	83		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.33		0.098	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.33		0.24	0.022	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	41		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.98	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.54		0.24	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.24	0.042	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	39		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.98	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-19C

Laboratory Sample ID :

309926-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	2.3	C,J	23	2.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
4,4'-DDD	10	C,J	23	2.5	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
alpha-Chlordane	3.8	C,J	11	2.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
gamma-Chlordane	3.9	J	11	2.7	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1254	41		14	4.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Aroclor-1260	42		14	3.1	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	9.0		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	98		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.36		0.098	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.35		0.24	0.022	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.9		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	32		0.98	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.77		0.24	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.24	0.042	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.065	J	0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	42		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	67		0.98	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-20C

Laboratory Sample ID :

309926-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	8.2	J	22	4.0	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1254	39		13	4.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Aroclor-1260	34		13	3.1	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	6.3		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	83		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.31		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.32		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	45		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	29		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.71		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.10	J	0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	41		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-17A

Laboratory Sample ID :

309926-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	4.6	J	23	4.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
alpha-Chlordane	2.7	C,J	11	2.3	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3550C
Aroclor-1260	24		14	3.1	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3550C
Arsenic	5.4		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	110		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.36		0.099	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.32		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	48		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	26		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	30		0.99	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.91		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	44		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.11	J	0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	42		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	63		0.99	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-19A

Laboratory Sample ID :

309926-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Aldrin	0.30	C,J	5.5	0.30	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	1.6	J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.66	C,J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	0.80	C,J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.8	J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.6	C,J	5.5	0.71	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	3.0	J	5.5	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	24		20	9.5	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Arsenic	5.4		1.5	0.18	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.25	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.32		0.10	0.0050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.29		0.25	0.023	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.25	0.037	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.9		0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.25	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	27		1.0	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.53		0.25	0.019	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.25	0.043	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.17	J	0.25	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	63		1.0	0.23	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-20A

Laboratory Sample ID :

309926-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
4,4'-DDE	2.3	J	22	0.79	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDD	4.6	C,J	22	0.79	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
4,4'-DDT	4.6	J	22	0.89	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	38		20	9.5	ug/Kg	Air Dried	3.000	EPA 8082	EPA 3546
Arsenic	4.5		1.5	0.17	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	62		0.24	0.035	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.23		0.097	0.0049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.42		0.24	0.022	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	36		0.24	0.036	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	7.7		0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	25		0.24	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	33		0.97	0.12	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.71		0.24	0.018	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	31		0.24	0.042	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Silver	0.051	J	0.24	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	76		0.97	0.22	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-05B

Laboratory Sample ID :

309926-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.4	J	4.8	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	48	Y	22	6.8	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	290		110	34	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Acenaphthylene	46	J	140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	240		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	59	J	140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	460		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	690		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	230		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	270		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	350		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	120	J	140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	340		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	230		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	47	J	140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		140	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	470				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.19		0.018	0.0055	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-06B

Laboratory Sample ID :

309926-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.2	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	32	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	230		55	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	100	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	350		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluorene	120	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Phenanthrene	1,400		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Anthracene	240		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,700		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Pyrene	2,500		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	800		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Chrysene	800		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,300		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	390		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,300		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	850		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	150	J	180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	1,200		180	37	ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,800				ug/Kg	Dry	33.33	EPA 8270C-SIM	EPA 3550C
Mercury	0.17		0.018	0.0053	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-07B

Laboratory Sample ID :

309926-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.3	J	4.8	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	45	Y	5.5	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	220		27	8.3	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	82		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	130		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	17	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	31	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	420		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	100		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	710		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,200		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	350		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	410		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	560		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	180		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	590		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	420		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	73		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	590		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	790				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.019	0.0056	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-08B

Laboratory Sample ID :

309926-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.1	J	4.5	0.32	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	54	Y	22	6.6	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	300		110	33	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Naphthalene	30	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	65	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	250		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	58	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	500		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	840		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	260		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	330		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	430		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	130	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	410		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	280		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	53	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	420		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	560				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.096		0.018	0.0054	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-17C

Laboratory Sample ID :

309926-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.0	J	4.8	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	30	Y	11	3.3	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	160		54	16	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	17	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	28	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	130		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	33	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	290		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	480		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	160		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	190		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	280		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	91		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	260		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	180		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	34	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	260		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	350				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.16		0.019	0.0056	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	7		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-19C

Laboratory Sample ID :

309926-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.4	J	5.4	0.39	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	27	Y	11	3.3	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	240		53	16	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	64	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	180		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	31	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	430		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	110	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	890		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,500		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	490		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	580		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	900		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	240		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	860		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	540		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	98	J	130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	760		130	27	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,200				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.18		0.018	0.0055	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	7		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-20C

Laboratory Sample ID :

309926-017

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.86	J	4.5	0.21	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	56	Y	22	6.7	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	350		110	33	mg/Kg	Dry	20.00	EPA 8015B	EPA 3550C
Naphthalene	36	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	73		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	27	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	26	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	290		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	84		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	550		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,200		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	320		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	370		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	590		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	170		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	530		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	330		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	63		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	460		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	720				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.22		0.018	0.0053	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-17A

Laboratory Sample ID :

309926-018

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.2	J	4.1	0.29	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	47	Y	11	3.3	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	280		54	16	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	79	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	82	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	430		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	140	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	3,000		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	4,600		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	1,100		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	1,900		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	1,700		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	460		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,600		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	980		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	150	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	1,300		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	2,100				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.21		0.020	0.0059	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-19A

Laboratory Sample ID :

309926-019

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.6	J	5.1	0.36	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	33	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		28	8.5	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	56		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	230		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	24	J	55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	71		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	970		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	220		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,300		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	2,200		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	680		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	700		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	980		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	300		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	940		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	520		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	99		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	660		55	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,300				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.21		0.019	0.0057	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-20A

Laboratory Sample ID :

309926-020

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.4	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	66	Y	11	3.4	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	400		56	17	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Acenaphthylene	60	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluorene	36	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	460		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	110	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	680		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,400		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	320		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	390		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	520		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	180		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	510		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	240		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	50	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	370		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	670				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.17		0.017	0.0051	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	10		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard

309926



1438 Webster Street, Suite 302
Oakland, California 94612
(510) 834-4747 tel
(510) 834-4199 fax

CHAIN-OF-CUSTODY

Sampler Name(s):
Lizzie Hightower
Kevin Halpin
Mauro Padruvona
Signature(s):
[Signatures]

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES
1	DTSC-05b	5/17/19	1005	Soil	NOA MSD
2	DTSC-06b		1010		
3	DTSC-07b		1015		
4	DTSC-08b		1020		
5	DTSC-17c		1215		
6	DTSC-19c		1200		
7	DTSC-19c		1210		
8	DTSC-17a		1445		
9	DTSC-19a		1440		
10	DTSC-20a		1450		

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront
Project Number: 16-1498E
Contact Person: Jeff Martin; Kevin Halpin; Lizzie Hightower
E-mail: jeff.martin@rpsgroup.com; kevin.halpin@rpsgroup.com; elizabeth.hightower@rpsgroup.com
Contact Telephone: (510)685-2098; (231)903-2728; (650) 919-4955

Report: Routine (Level 2) Level 3 Level 4 EDD
TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

Date: 5/17/19 Page: 1 of 1

Analyses Required

TPH-g; -d; -mo by Method	8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
X	X	X	X	X	X	X	X	X	2
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	
X	X	X	X	X	X	X	X	X	

RELINQUISHED BY:

Printed Name: Mayra Dudrionova
Signature: *[Signature]*
Company: RPS
Time/Date: 1612/5/17/19

RECEIVED BY:

Printed Name: Pat Gonzalez
Signature: *[Signature]*
Company: Pat Gonzalez, Earthhelp
Time/Date: 1612/5/17/19

RELINQUISHED BY:

Printed Name
Signature
Company
Time/Date

RECEIVED BY:

Printed Name
Signature
Company
Time/Date

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 309926
 Date Received: 5/17/19

Client: RPS
 Project: _____



Section 2: Samples received in a cooler? Yes, how many? 1 No (skip Section 3 below)

If no cooler Sample Temp (°C): _____ using IR Gun # A, or B

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

If in cooler: Date Opened 5.17.19 By (print) af (sign) af

Shipping info (if applicable) _____

Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package

Date: _____ How many _____ Signature, Initials, None

Were custody seals intact upon arrival? Yes No N/A

Section 3:

Important: Notify PM if temperature exceeds 6°C or arrive frozen.

Packing in cooler: (if other, describe) _____

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

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

Type of ice used: Wet, Blue/Gel, None

Temperature blank(s) included? Yes, No

Temperature measured using Thermometer ID: _____ or IR Gun # A B

Cooler Temp (°C): #1: 4.1, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:

	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable			
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If YES, what time were they transferred to freezer? <u>5.18.19 11:00</u>			
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are there any missing / extra samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the container count match the COC?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for unpreserved VOAs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are bubbles > 6mm absent in VOA samples?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was the client contacted concerning this sample delivery?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If YES, who was called? _____ By _____ Date: _____			

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you check preservatives for all bottles for each sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did you document your preservative check?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:

Explanations/Comments: _____

Date Logged in 5/17/19
 Date Labeled 5.18.19

By (print) af (sign) af
 By (print) af (sign) af

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-05B	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270675
Lab ID:	309926-011	Analyzed:	05/23/19
Moisture:	10%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.4 J	4.8	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Field ID:	DTSC-06B	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270675
Lab ID:	309926-012	Analyzed:	05/23/19
Moisture:	9%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.2 J	4.9	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	74	58-145

Field ID:	DTSC-07B	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270675
Lab ID:	309926-013	Analyzed:	05/23/19
Moisture:	9%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.3 J	4.8	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

Field ID:	DTSC-08B	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270675
Lab ID:	309926-014	Analyzed:	05/23/19
Moisture:	8%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.1 J	4.5	0.32

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit
 Page 1 of 4

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-17C	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270726
Lab ID:	309926-015	Analyzed:	05/23/19
Moisture:	7%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.0 J	4.8	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	75	58-145

Field ID:	DTSC-19C	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270726
Lab ID:	309926-016	Analyzed:	05/23/19
Moisture:	7%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.4 J	5.4	0.39

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	70	58-145

Field ID:	DTSC-20C	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270687
Lab ID:	309926-017	Analyzed:	05/23/19
Moisture:	8%		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.86 J	4.5	0.21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	58-145

Field ID:	DTSC-17A	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270726
Lab ID:	309926-018	Analyzed:	05/23/19
Moisture:	8%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.2 J	4.1	0.29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-19A	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270726
Lab ID:	309926-019	Analyzed:	05/23/19
Moisture:	11%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.6 J	5.1	0.36

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	78	58-145

Field ID:	DTSC-20A	Diln Fac:	25.00
Type:	SAMPLE	Batch#:	270726
Lab ID:	309926-020	Analyzed:	05/23/19
Moisture:	10%		

Analyte	Result	RL	MDL
Gasoline C7-C12	1.4 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	58-145

Type:	BLANK	Batch#:	270675
Lab ID:	QC976535	Analyzed:	05/22/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.046 J	0.20	0.021

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

Type:	BLANK	Batch#:	270687
Lab ID:	QC976586	Analyzed:	05/22/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.057 J	0.20	0.020

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	94	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Type:	BLANK	Batch#:	270726
Lab ID:	QC976724	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Gasoline C7-C12	0.035 J	0.20	0.021

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit
 Page 4 of 4

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270675
Units:	mg/Kg	Analyzed:	05/22/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976536

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	1.018	102	80-122

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	71	58-145

Type: BSD Lab ID: QC976537

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	0.9761	98	80-122	4	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Diln Fac:	1.000
Units:	mg/Kg	Batch#:	270687

Type: BS Analyzed: 05/22/19
 Lab ID: QC976587

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2.000	2.165	108	80-122

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	106	58-145

Type: BSD Analyzed: 05/23/19
 Lab ID: QC976588

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	3.000	3.132	104	80-122	4	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	309877-002	Batch#:	270675
Matrix:	Soil	Sampled:	05/16/19
Units:	mg/Kg	Received:	05/16/19
Basis:	as received	Analyzed:	05/22/19

Type: MS Lab ID: QC976592

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1375	10.31	6.413	61	51-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

Type: MSD Lab ID: QC976593

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.091	4.969	53	51-120	13	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	70	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	310028-003	Batch#:	270726
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	as received	Analyzed:	05/24/19

Type: MS Lab ID: QC976782

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.2090	10.42	8.467	79	51-120

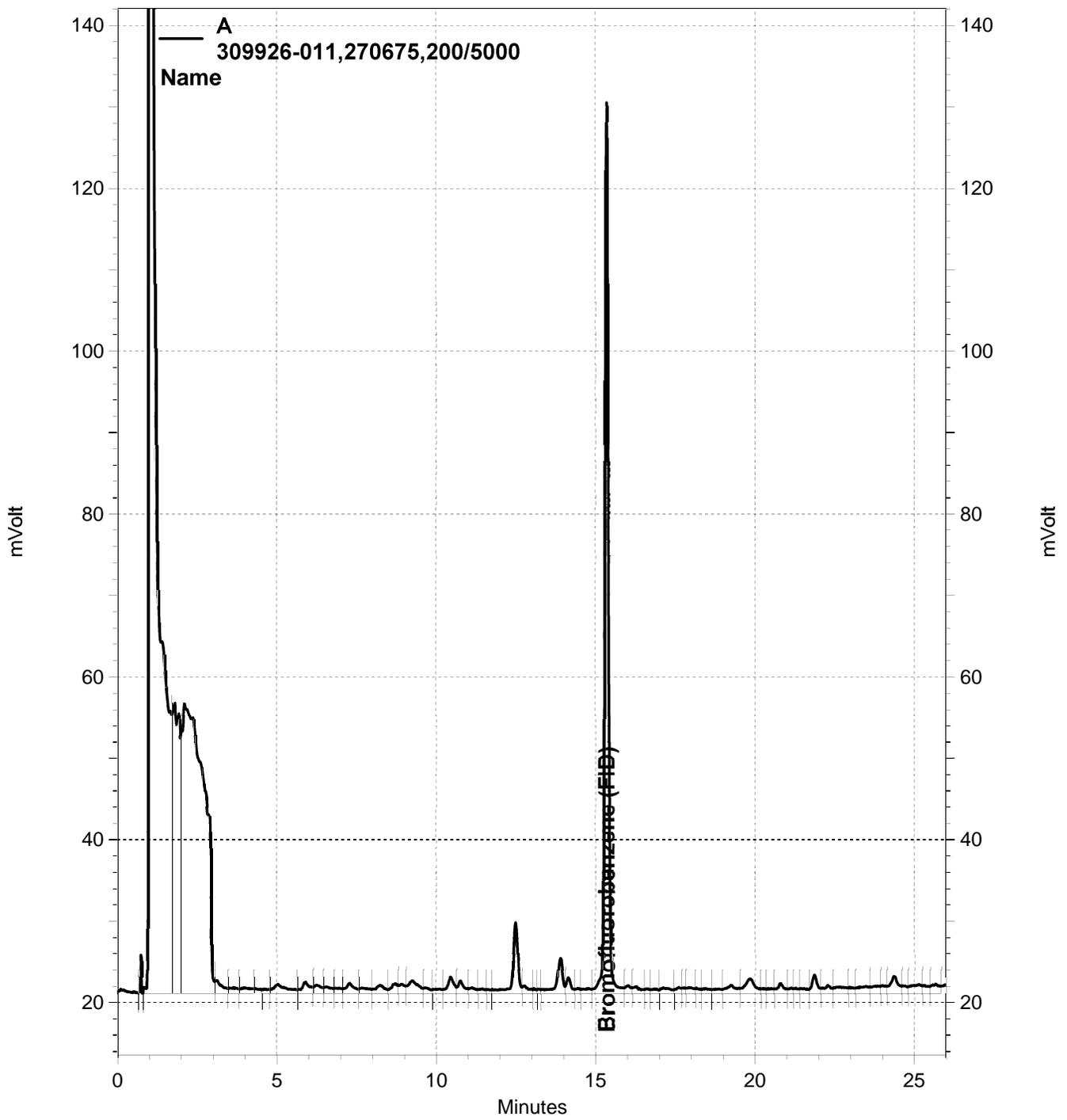
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

Type: MSD Lab ID: QC976783

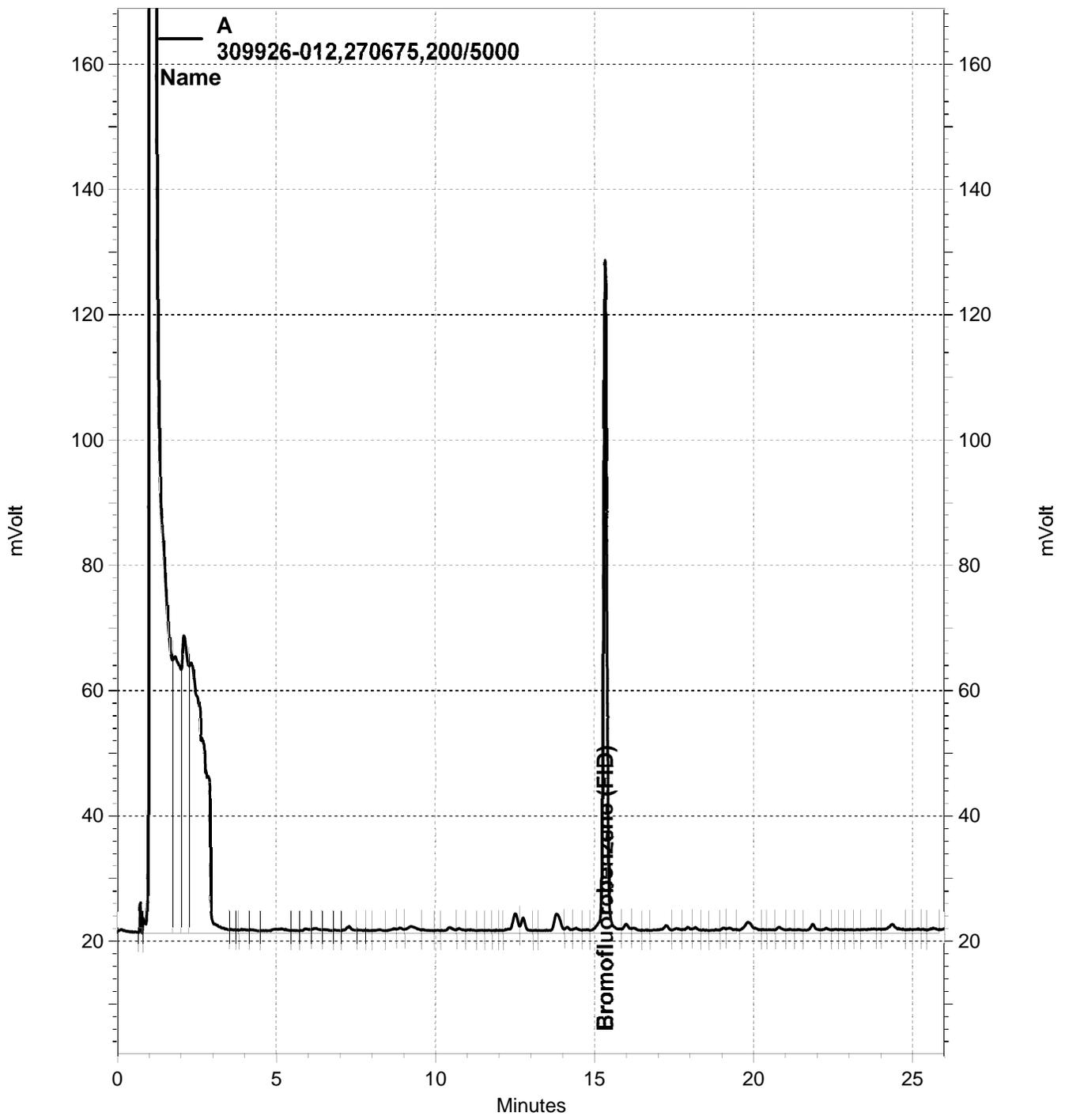
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.10	8.533	82	51-120	4	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	69	58-145

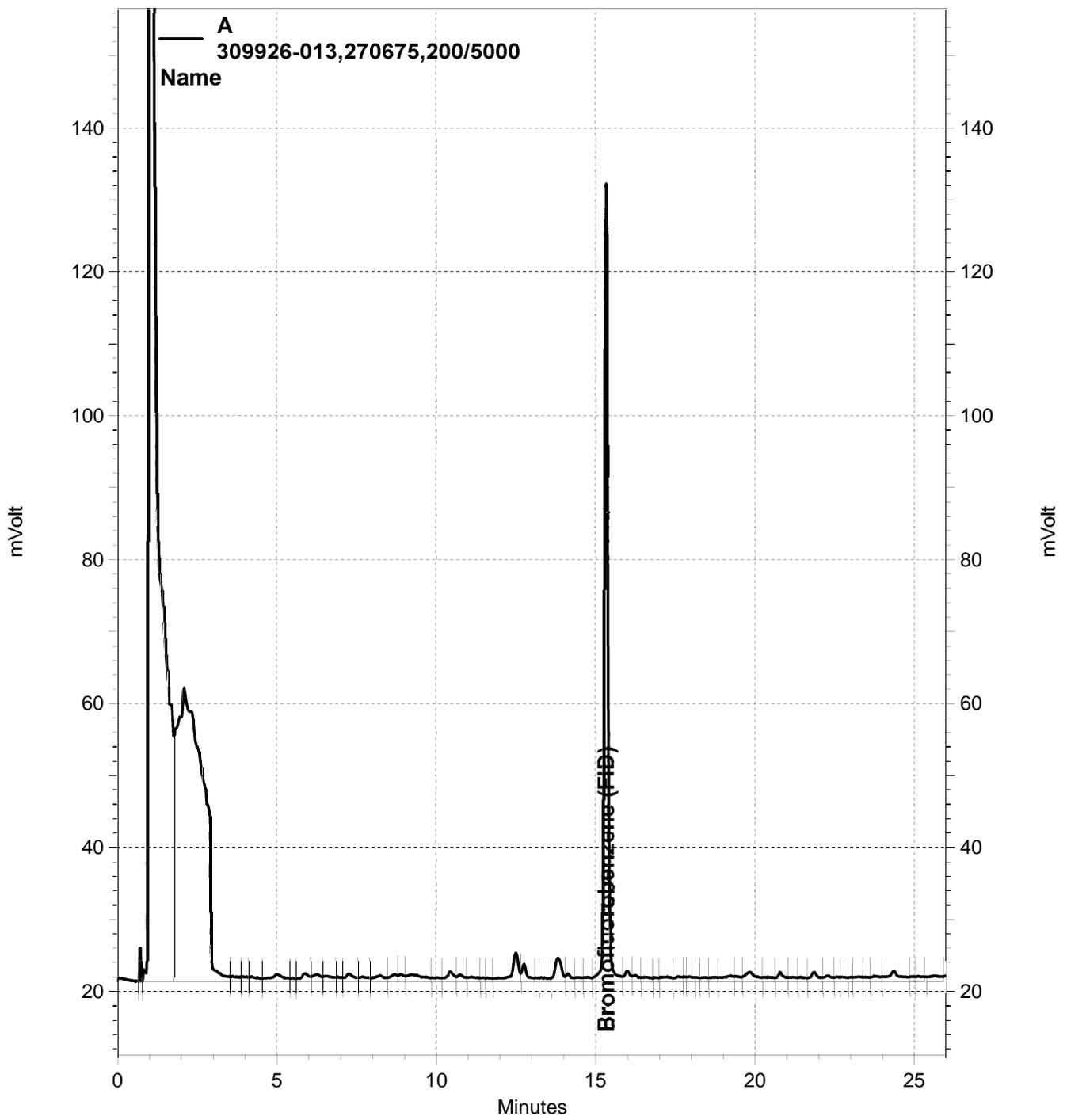
RPD= Relative Percent Difference



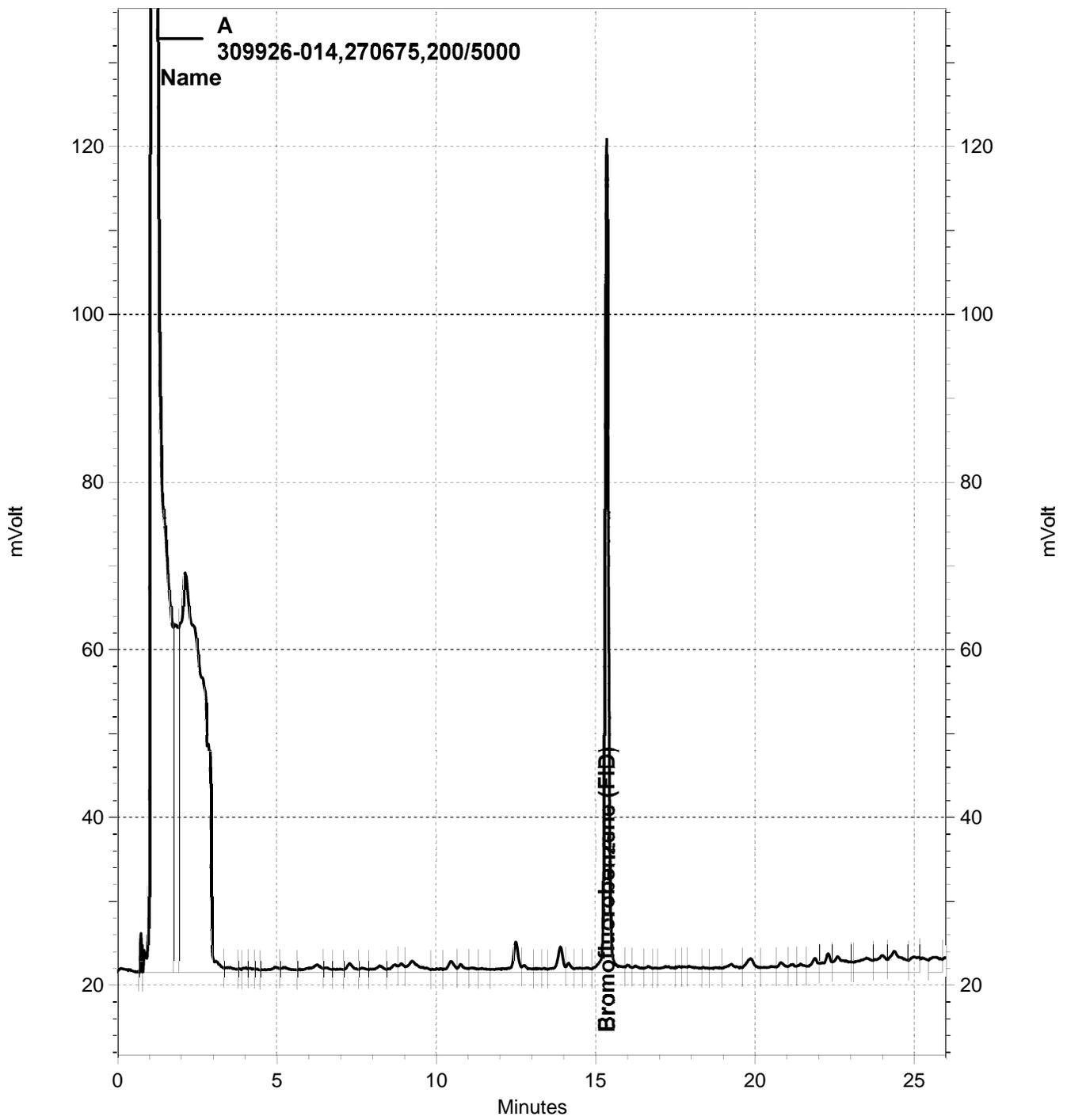
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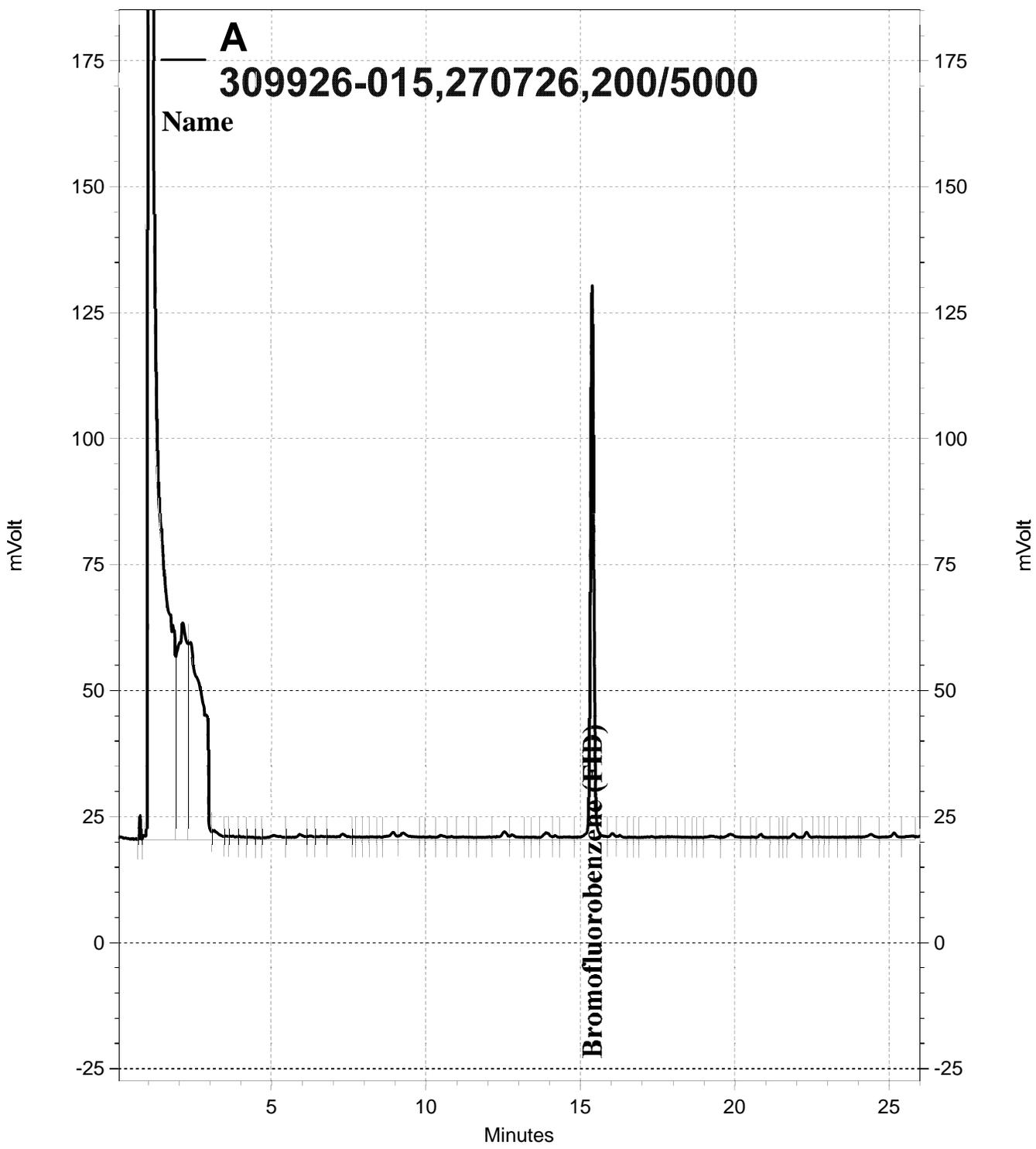
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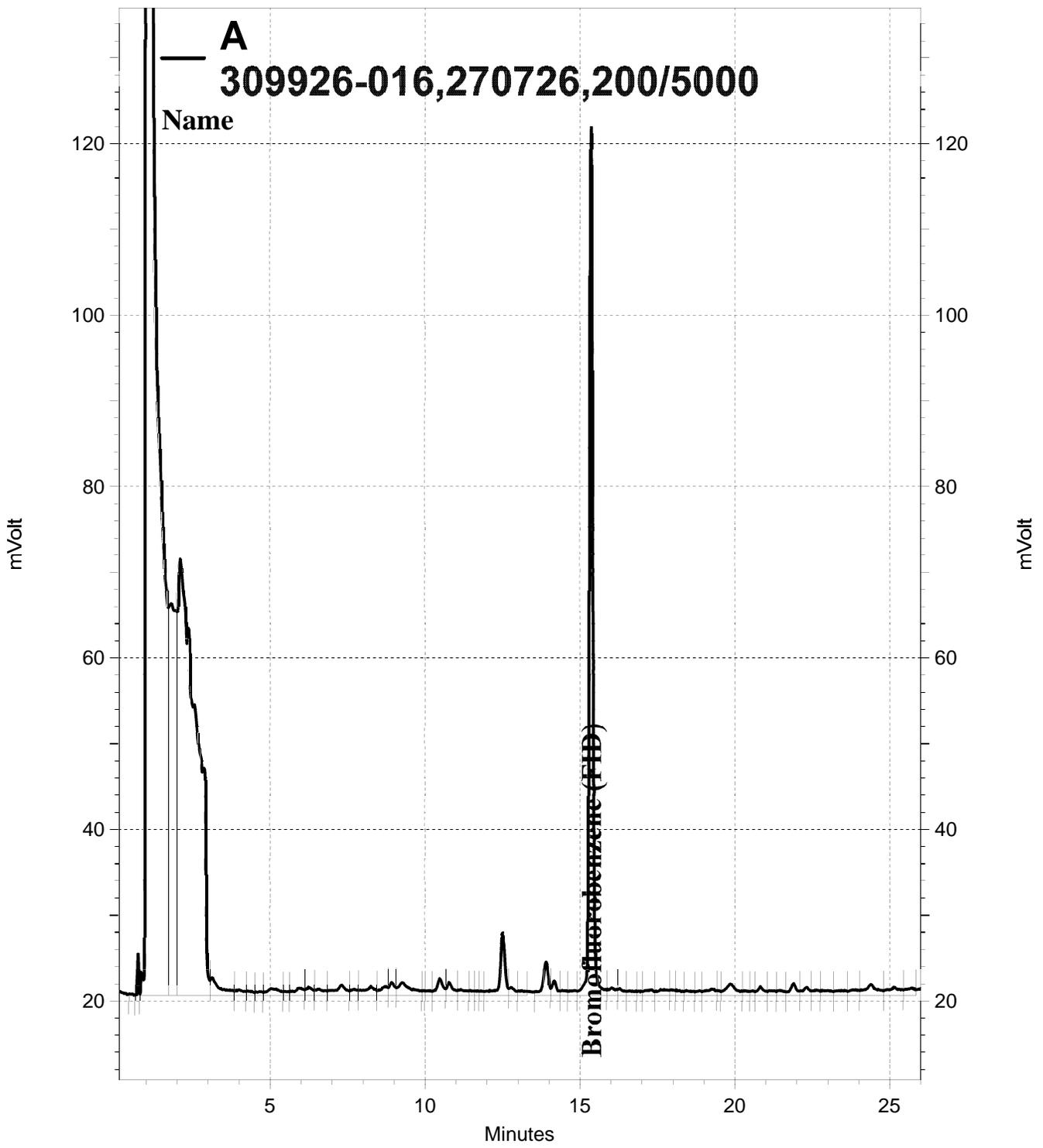
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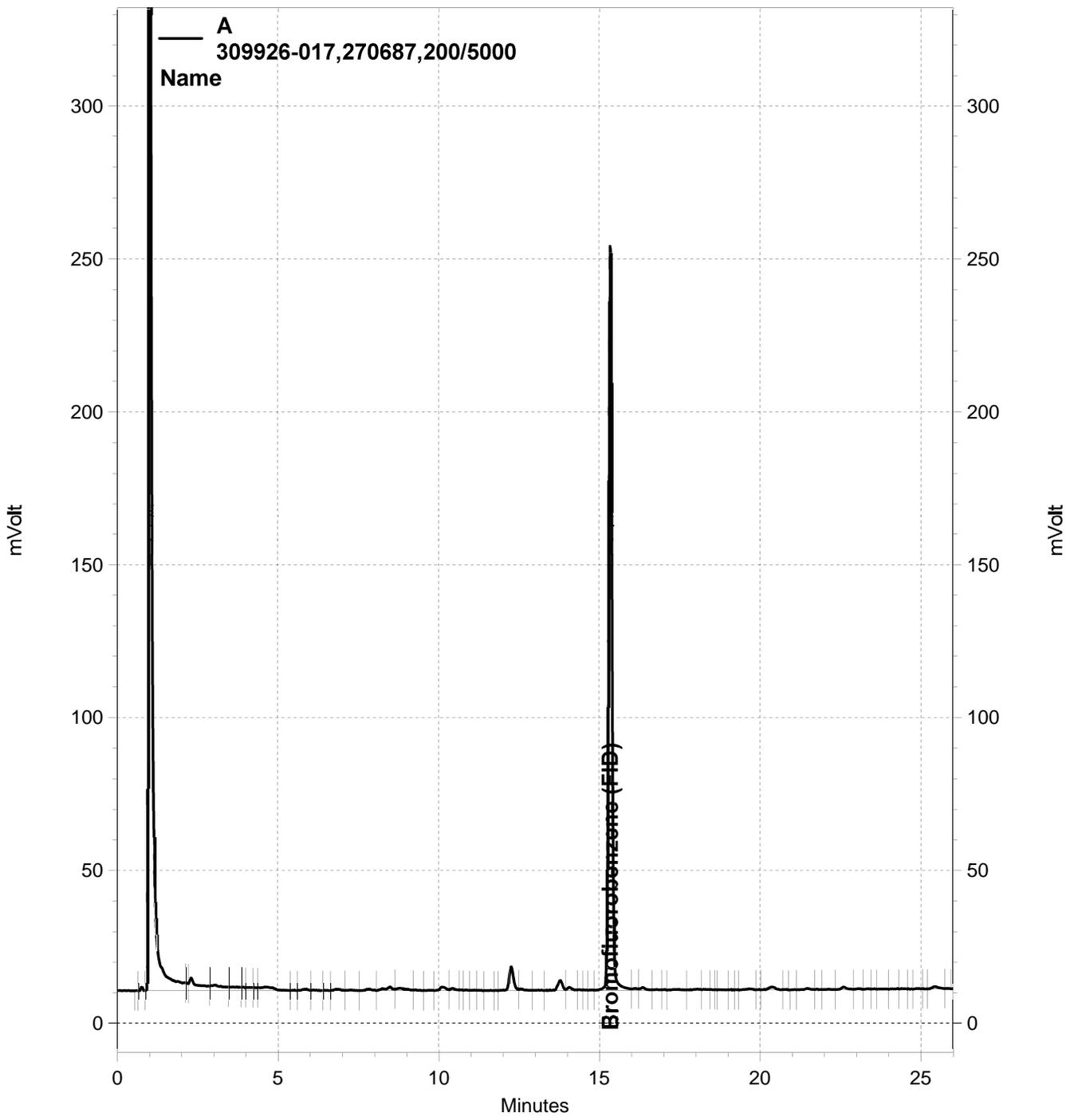
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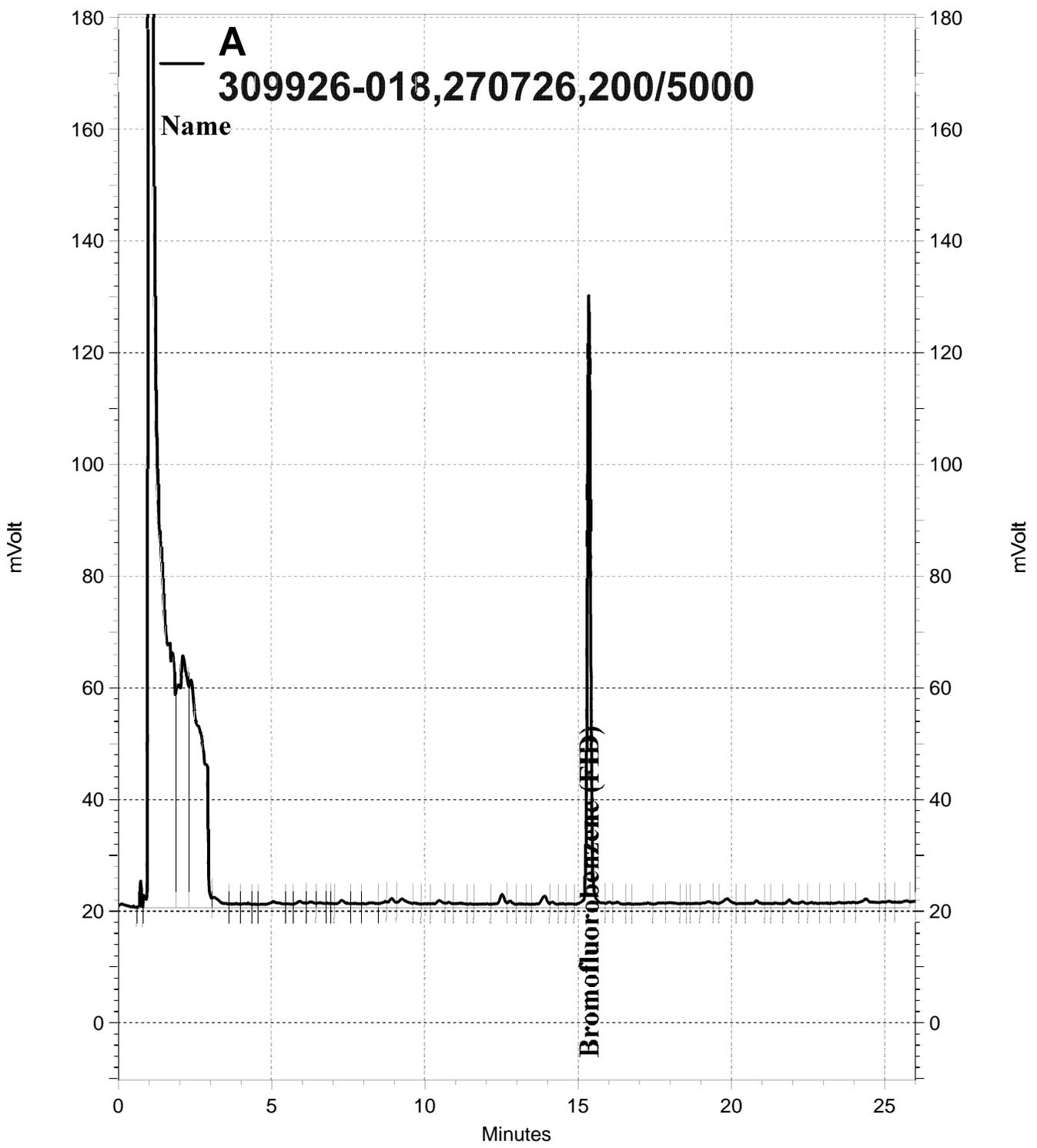
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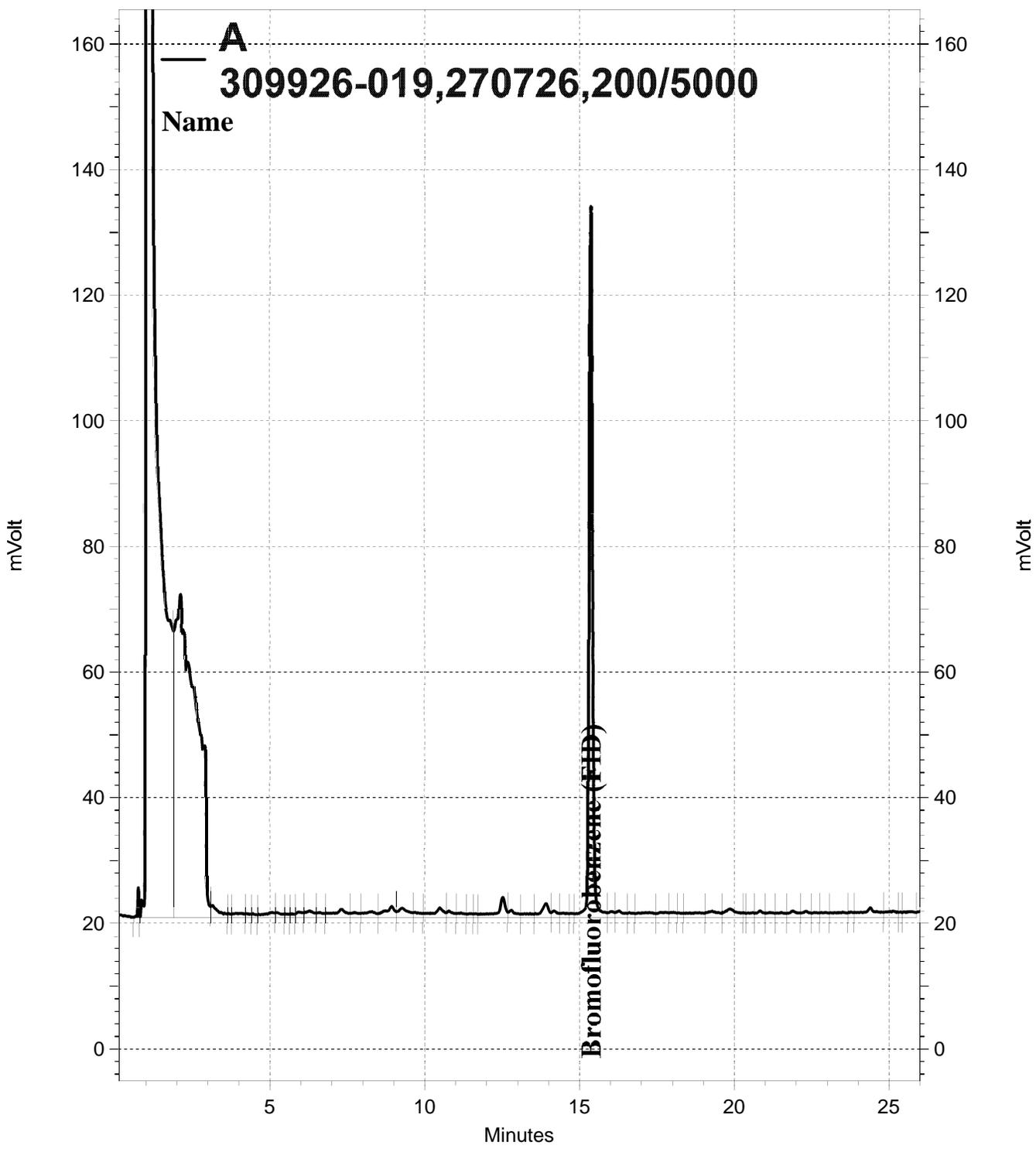


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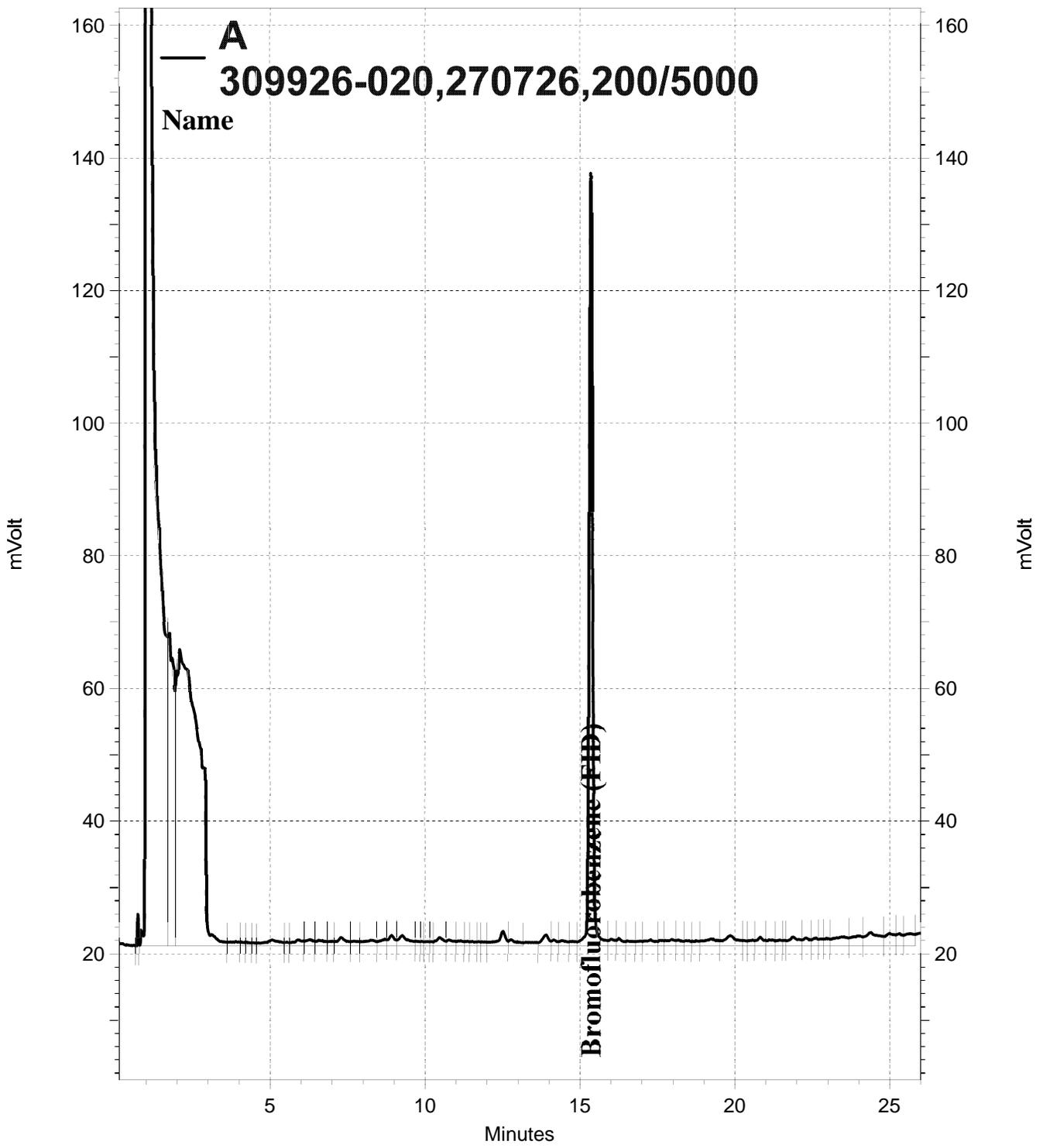
Name

Bromofluorobenzene (FID)

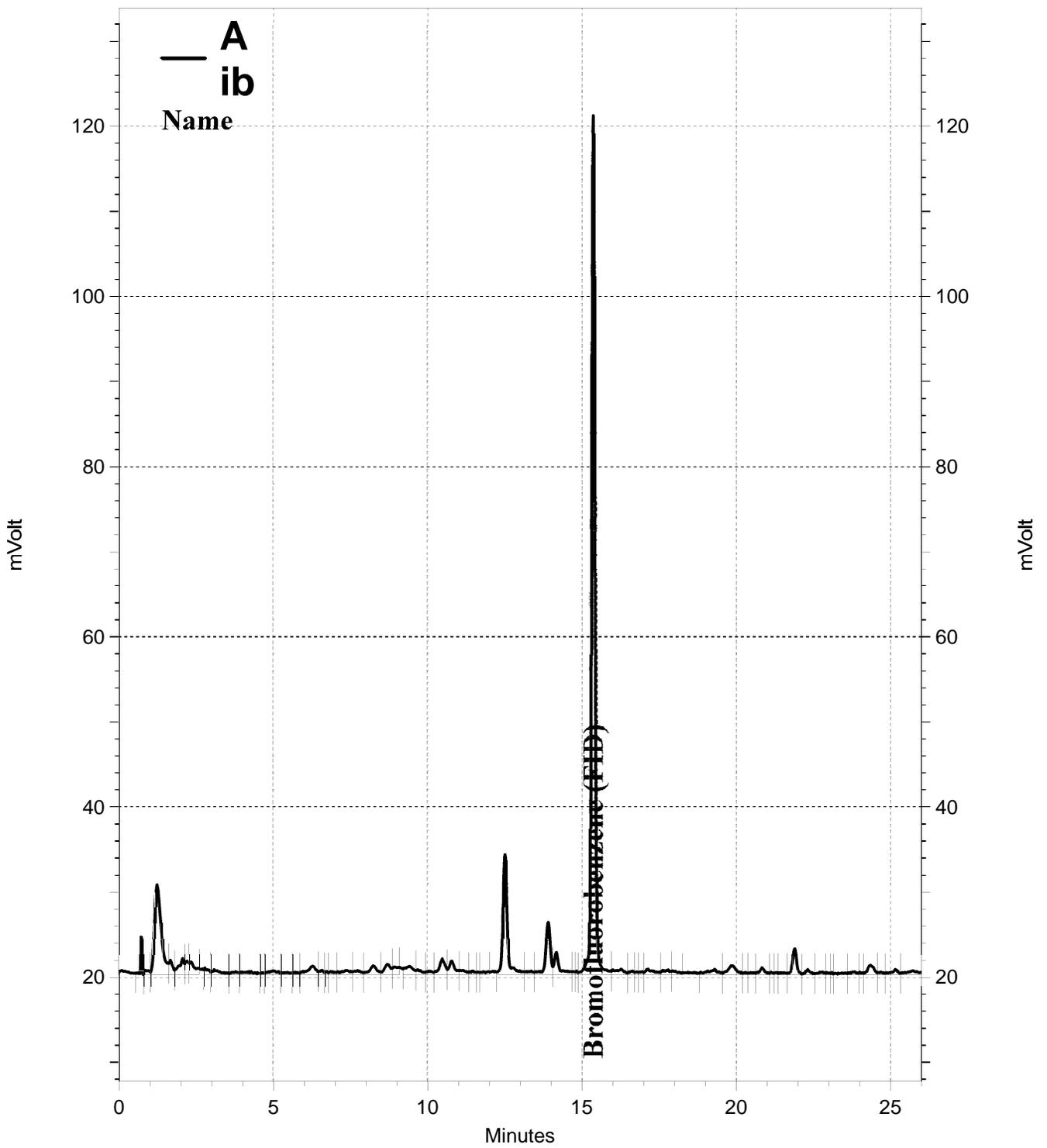
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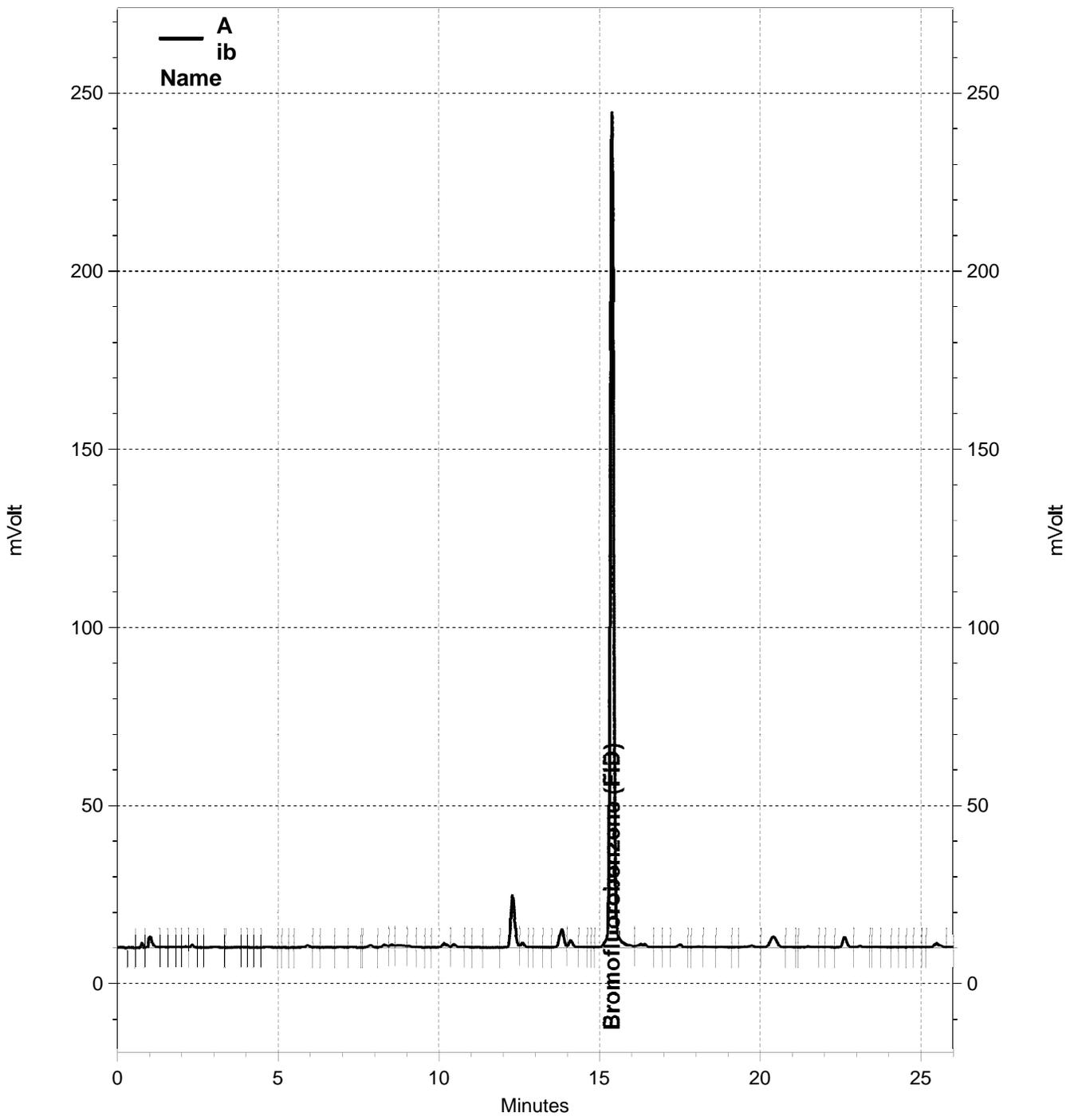
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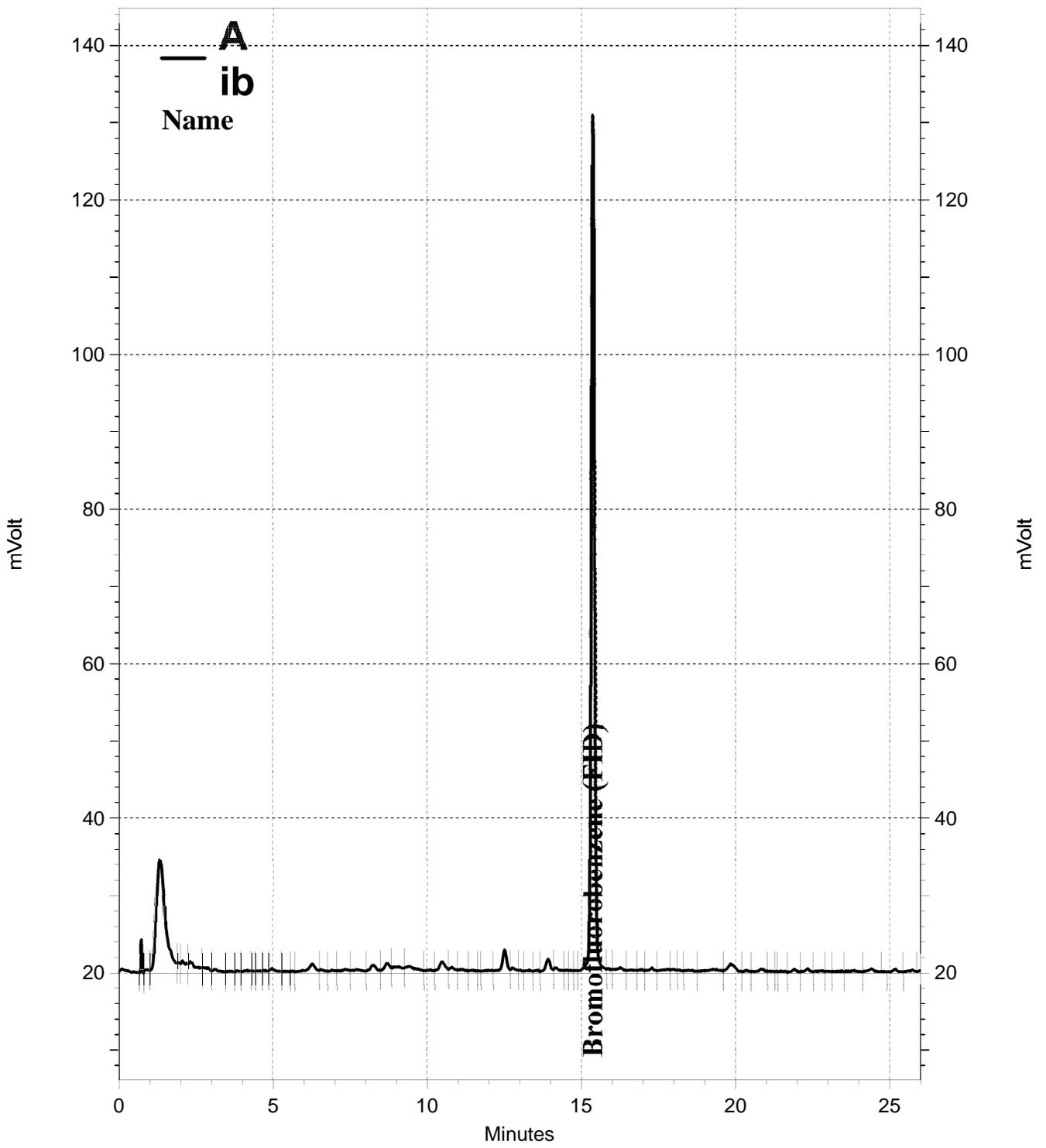
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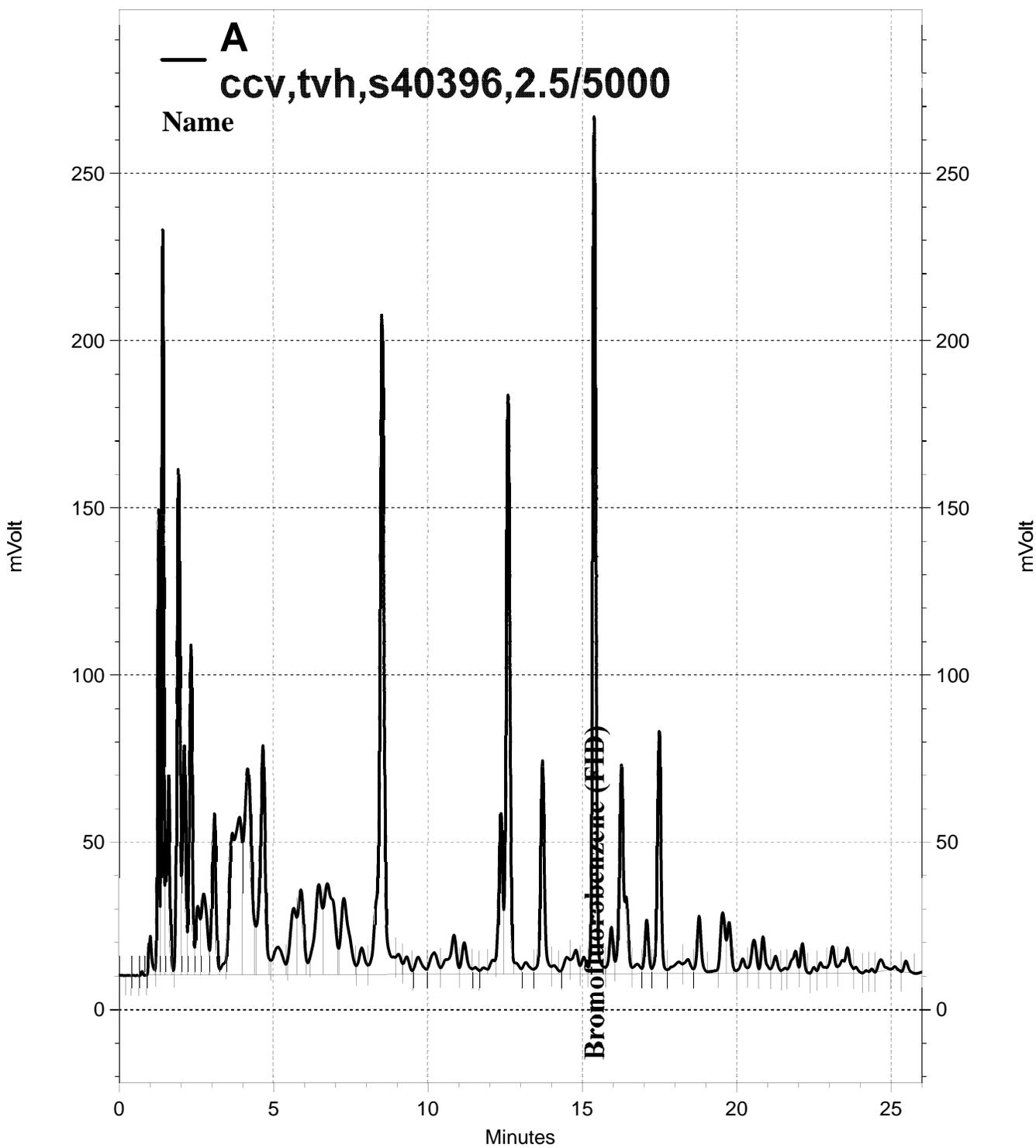
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Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-05B	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-011	Prepared:	05/21/19
Moisture:	10%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	48 Y	22	6.8
Motor Oil C24-C36	290	110	34

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-06B	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-012	Prepared:	05/21/19
Moisture:	9%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	32 Y	11	3.4
Motor Oil C24-C36	230	55	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-07B	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-013	Prepared:	05/21/19
Moisture:	9%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	45 Y	5.5	1.7
Motor Oil C24-C36	220	27	8.3

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-08B	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-014	Prepared:	05/21/19
Moisture:	8%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	54 Y	22	6.6
Motor Oil C24-C36	300	110	33

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-17C	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-015	Prepared:	05/21/19
Moisture:	7%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	30 Y	11	3.3
Motor Oil C24-C36	160	54	16

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-19C	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-016	Prepared:	05/21/19
Moisture:	7%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	27 Y	11	3.3
Motor Oil C24-C36	240	53	16

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-20C	Diln Fac:	20.00
Type:	SAMPLE	Batch#:	270630
Lab ID:	309926-017	Prepared:	05/21/19
Moisture:	8%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	56 Y	22	6.7
Motor Oil C24-C36	350	110	33

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-17A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270695
Lab ID:	309926-018	Prepared:	05/22/19
Moisture:	8%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	47 Y	11	3.3
Motor Oil C24-C36	280	54	16

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID:	DTSC-19A	Diln Fac:	5.000
Type:	SAMPLE	Batch#:	270695
Lab ID:	309926-019	Prepared:	05/22/19
Moisture:	11%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	33 Y	5.6	1.7
Motor Oil C24-C36	190	28	8.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry		

Field ID:	DTSC-20A	Diln Fac:	10.00
Type:	SAMPLE	Batch#:	270695
Lab ID:	309926-020	Prepared:	05/22/19
Moisture:	10%	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	66 Y	11	3.4
Motor Oil C24-C36	400	56	17

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Type:	BLANK	Batch#:	270630
Lab ID:	QC976338	Prepared:	05/21/19
Diln Fac:	1.000	Analyzed:	05/21/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	120	61-130

Type:	BLANK	Batch#:	270695
Lab ID:	QC976619	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	121	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976339	Batch#:	270630
Matrix:	Soil	Prepared:	05/21/19
Units:	mg/Kg	Analyzed:	05/21/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	55.73	111	55-133

Surrogate	%REC	Limits
o-Terphenyl	117	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270630
MSS Lab ID:	309828-001	Sampled:	05/15/19
Matrix:	Soil	Received:	05/15/19
Units:	mg/Kg	Prepared:	05/21/19
Basis:	as received	Analyzed:	05/21/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976340

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	1.075	49.84	53.57	105	56-125

Surrogate	%REC	Limits
o-Terphenyl	113	61-130

Type: MSD Lab ID: QC976341

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.98	50.66	99	56-125	6	33

Surrogate	%REC	Limits
o-Terphenyl	109	61-130

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976620	Batch#:	270695
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	52.66	105	55-133

Surrogate	%REC	Limits
o-Terphenyl	102	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270695
MSS Lab ID:	310026-002	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	as received	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976621

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2.016	50.13	63.76	123	56-125

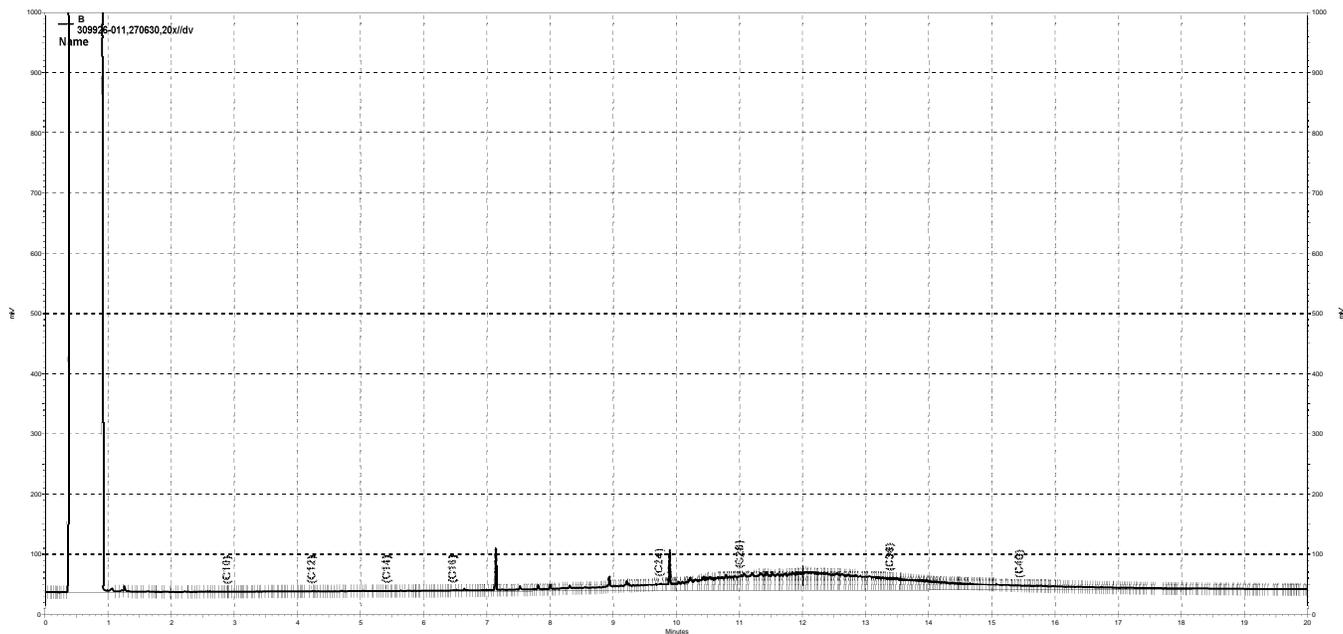
Surrogate	%REC	Limits
o-Terphenyl	88	61-130

Type: MSD Lab ID: QC976622

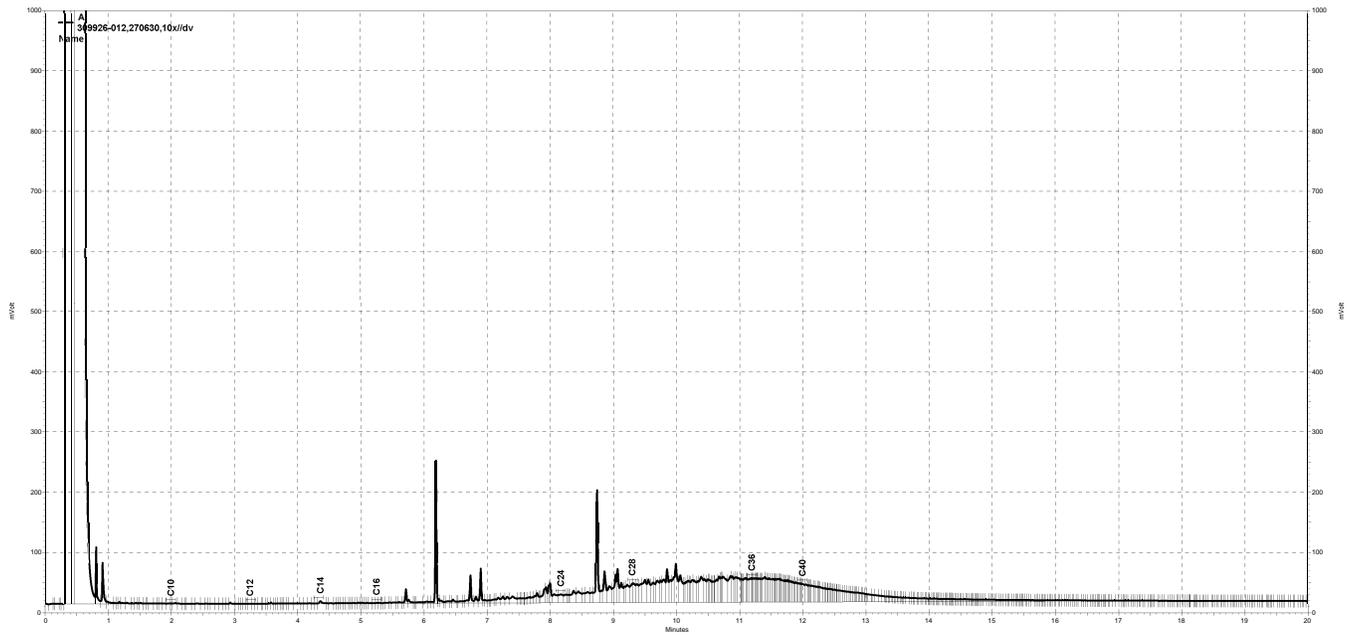
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.19	63.06	122	56-125	1	33

Surrogate	%REC	Limits
o-Terphenyl	90	61-130

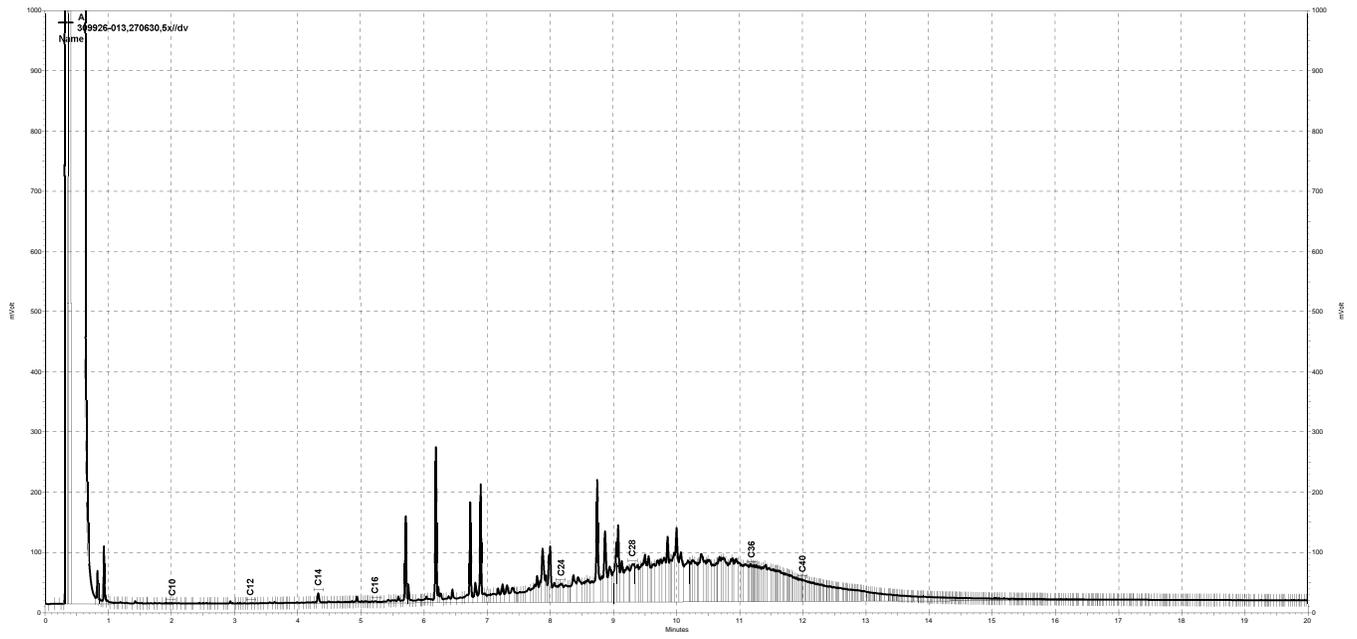
RPD= Relative Percent Difference



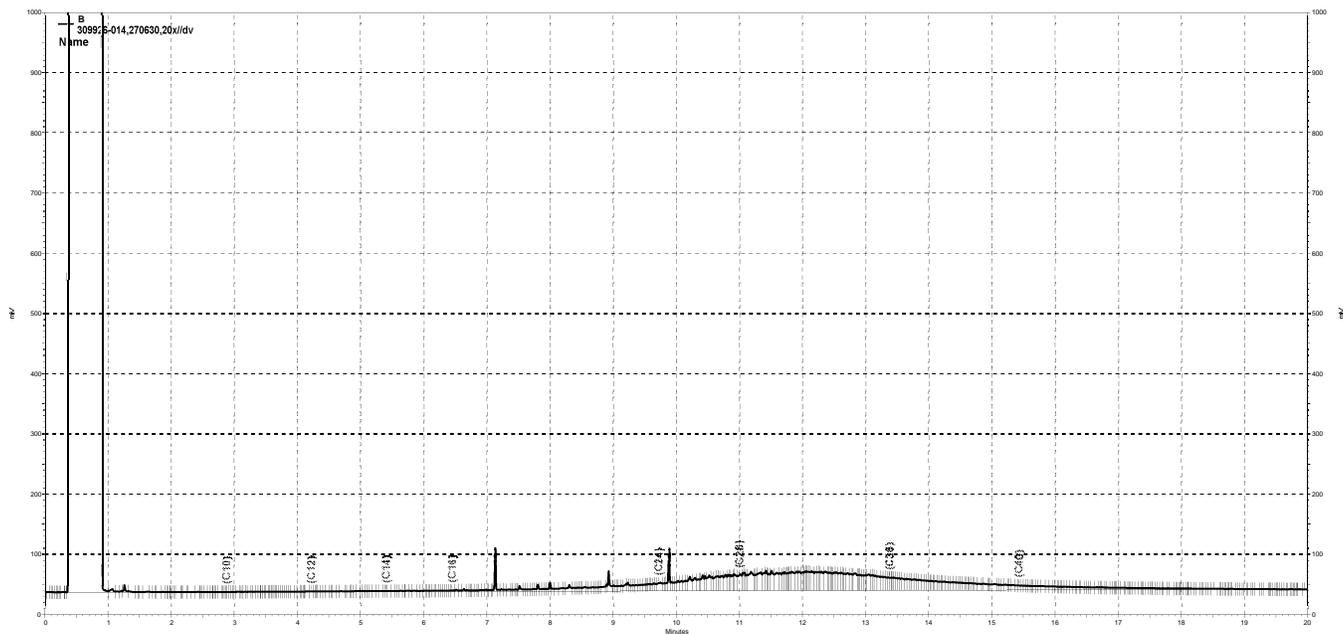
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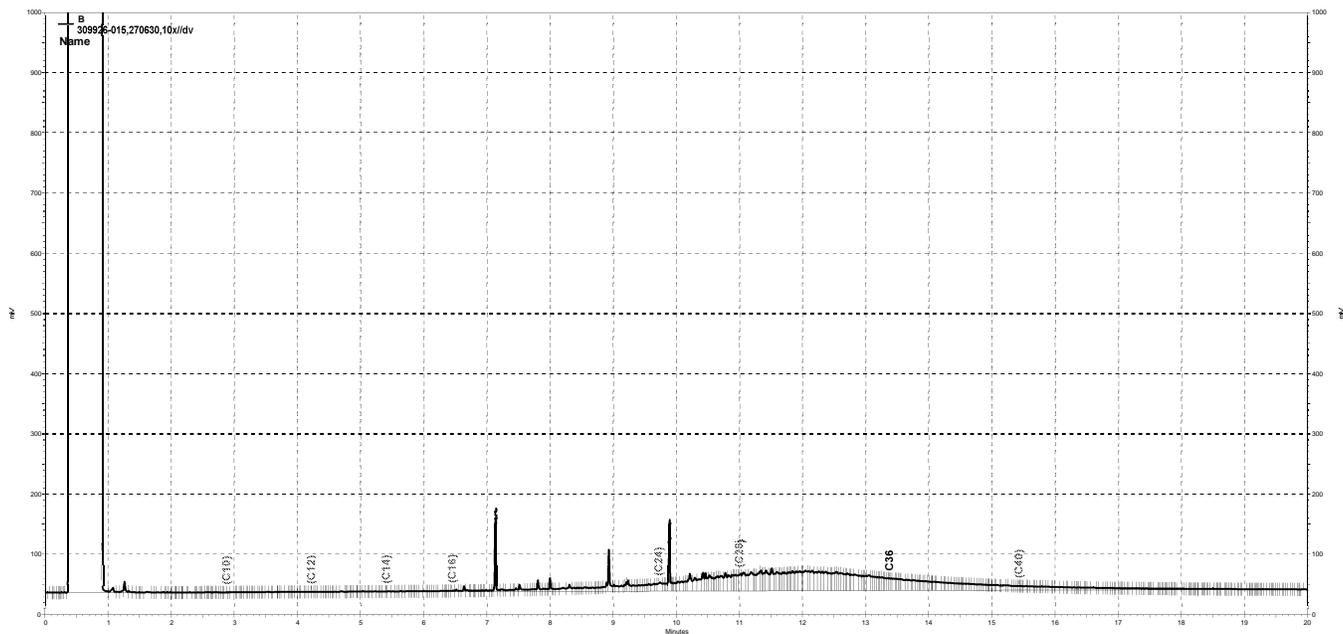
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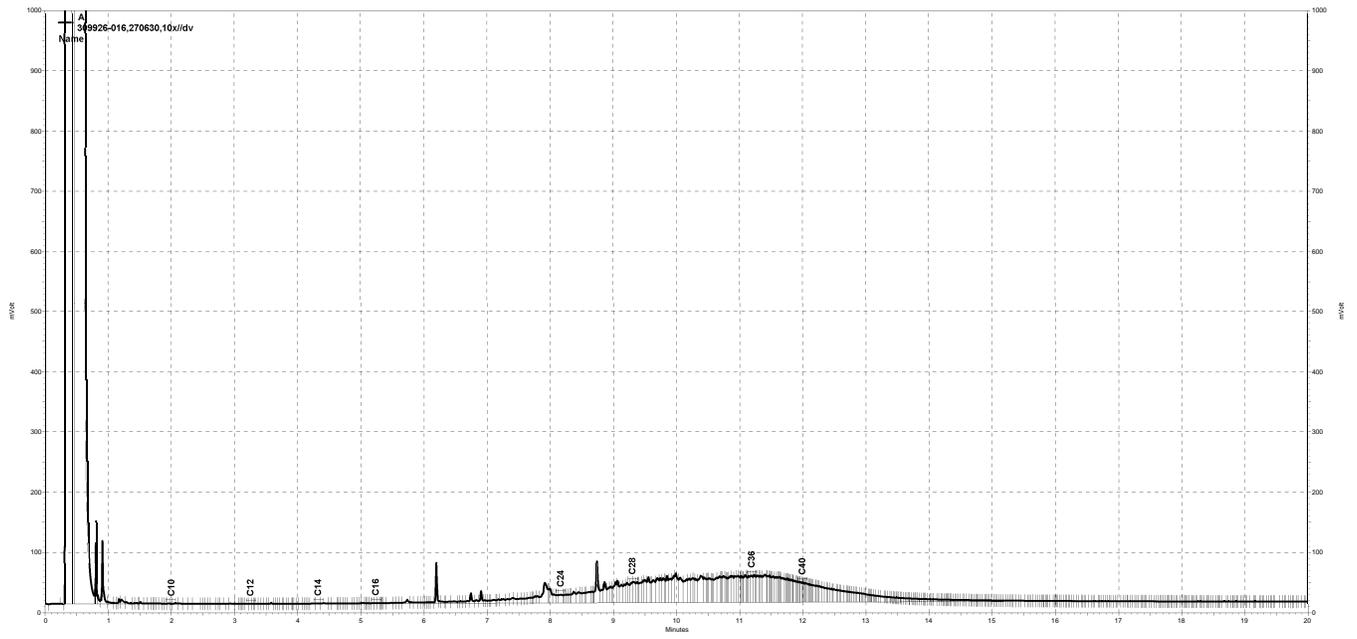
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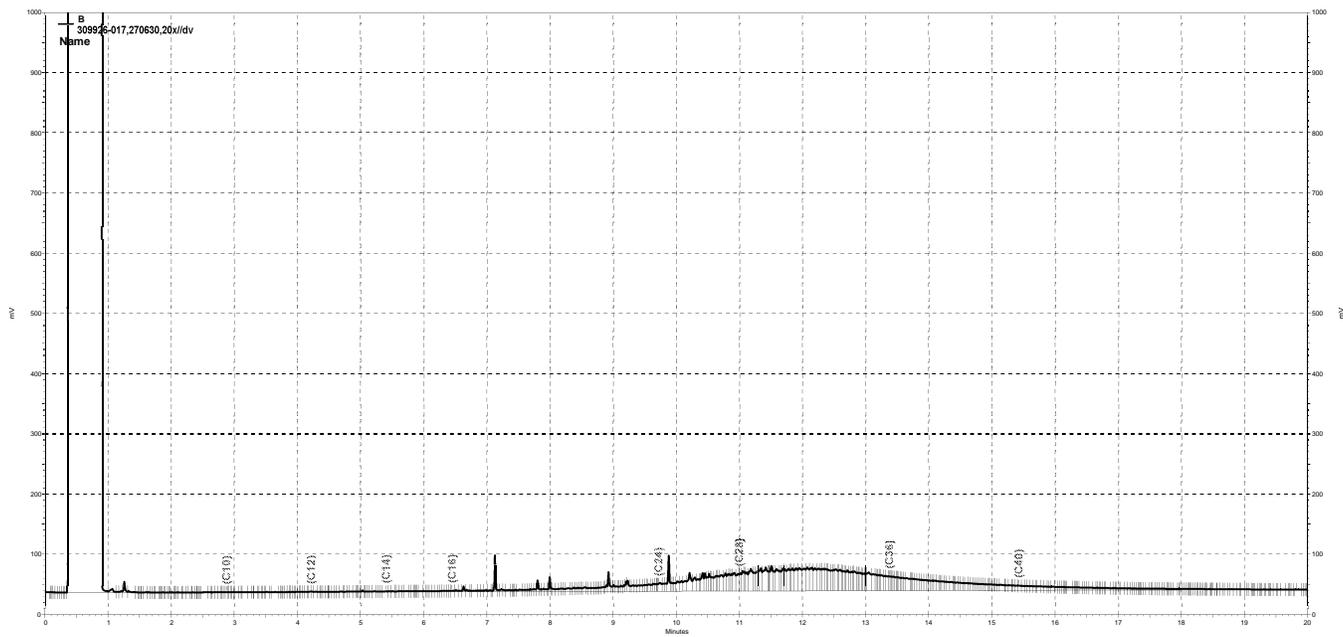
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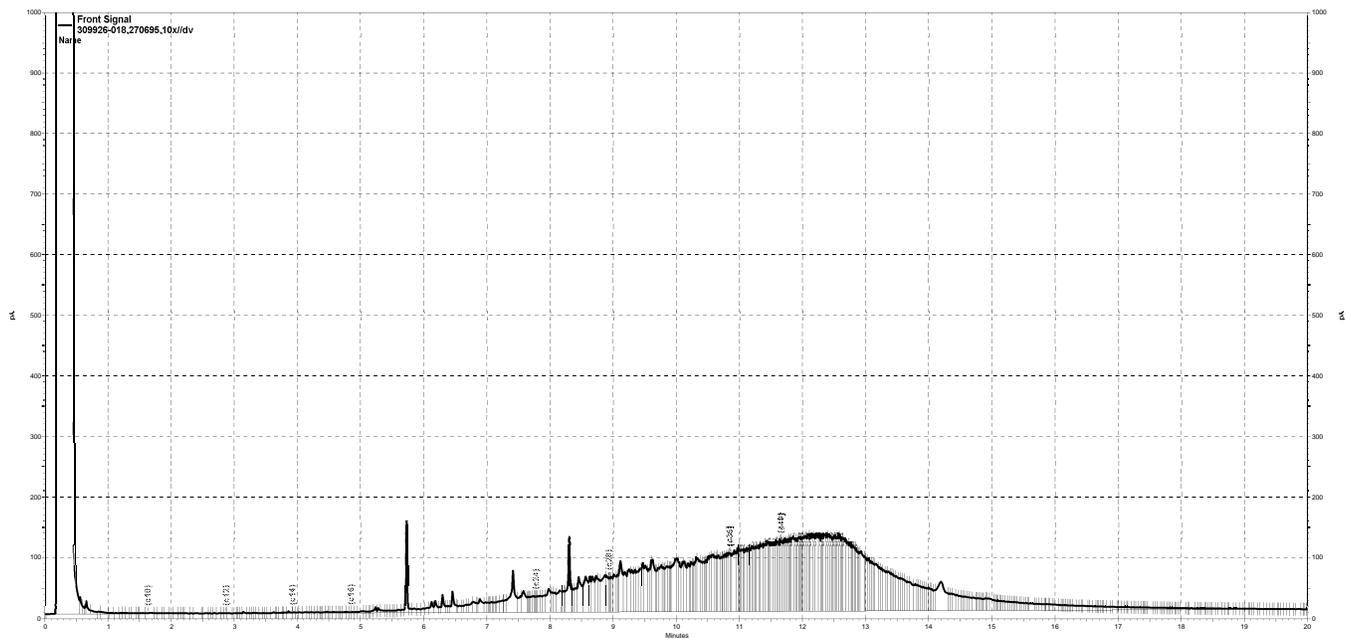
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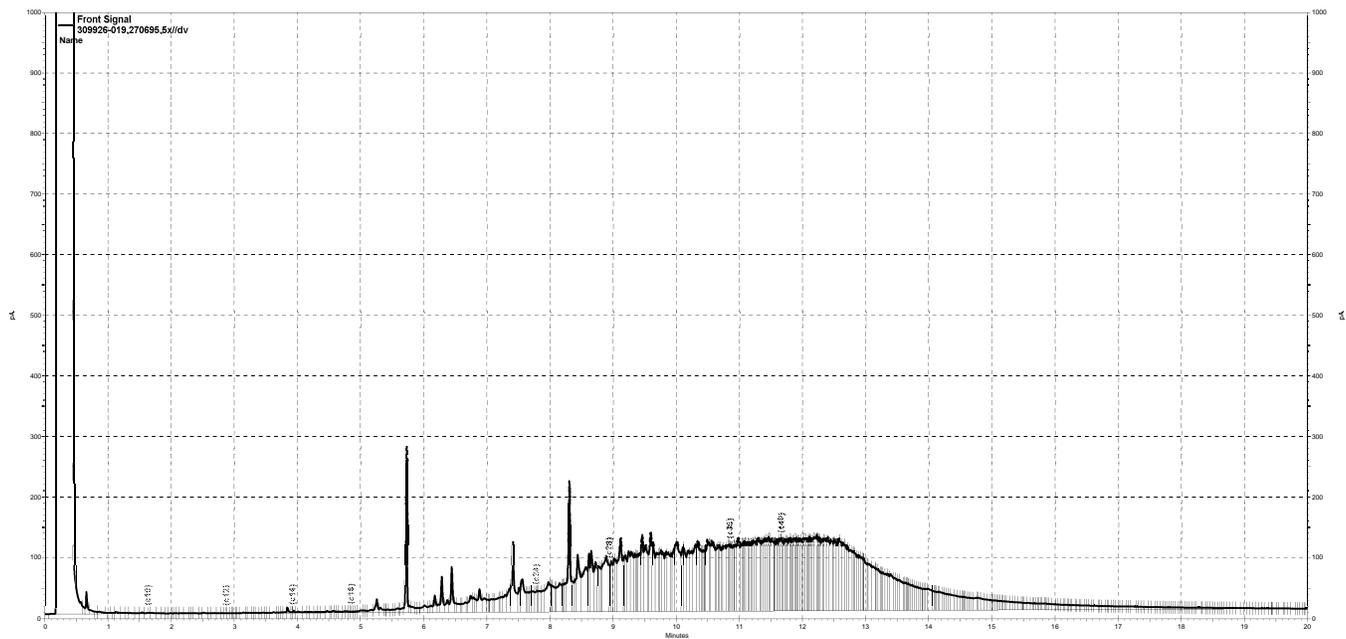
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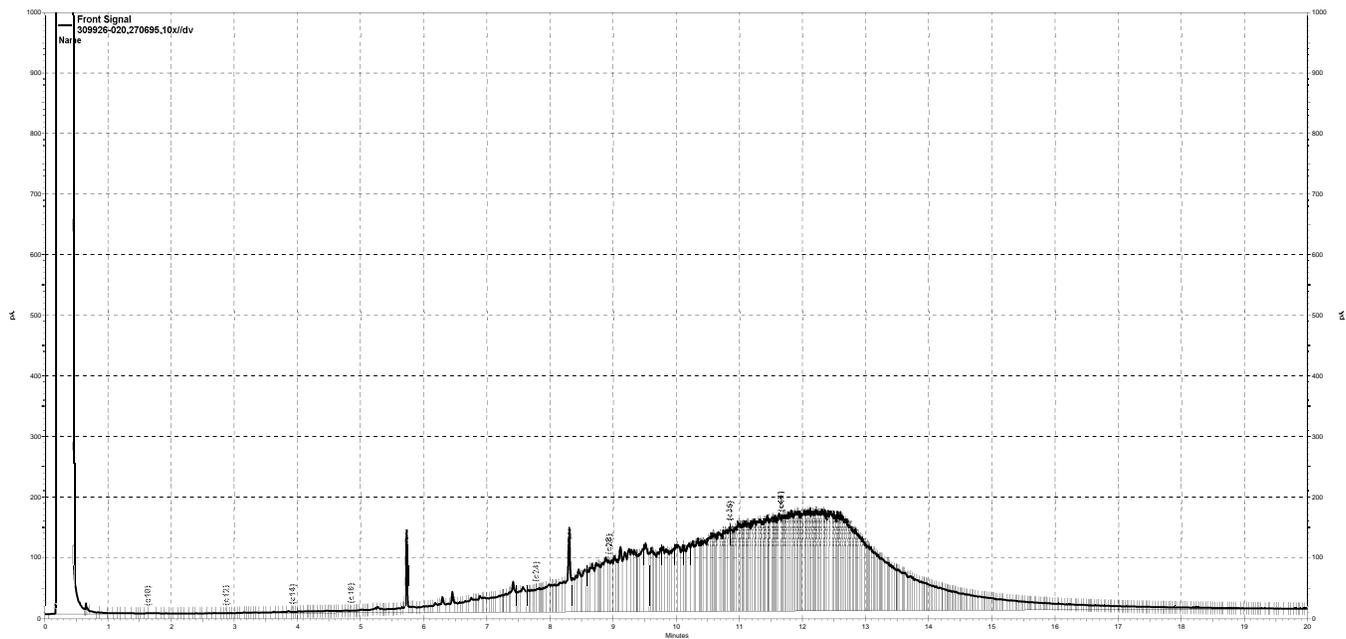
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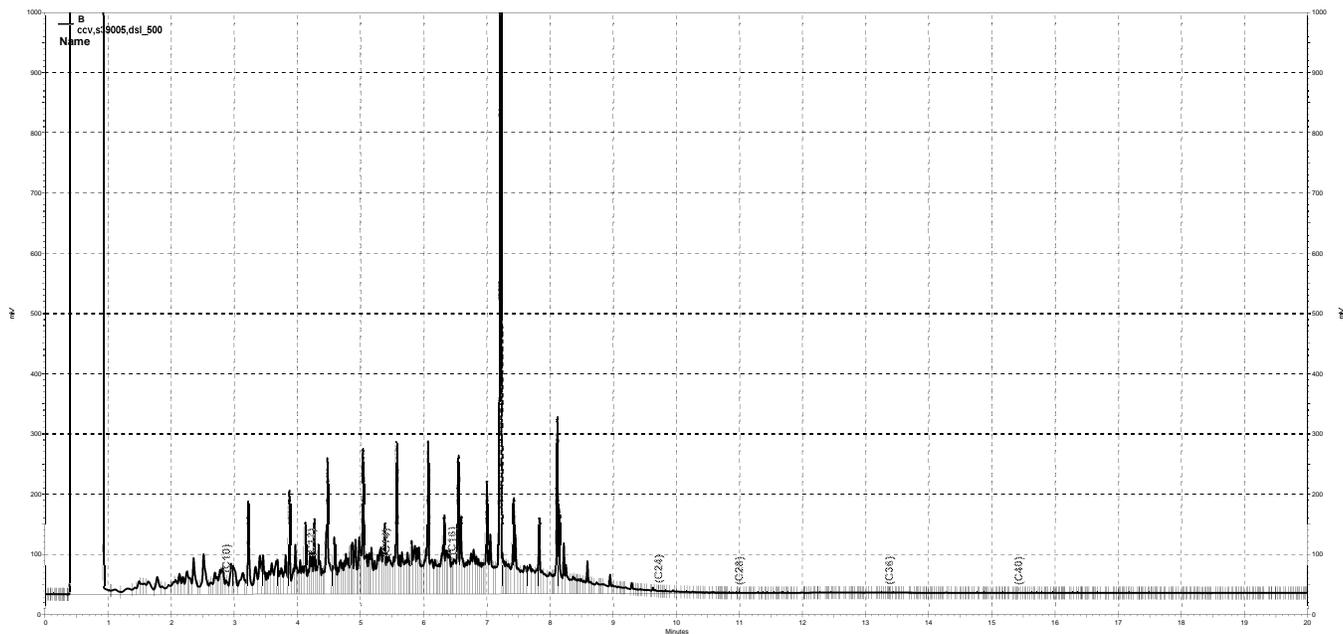
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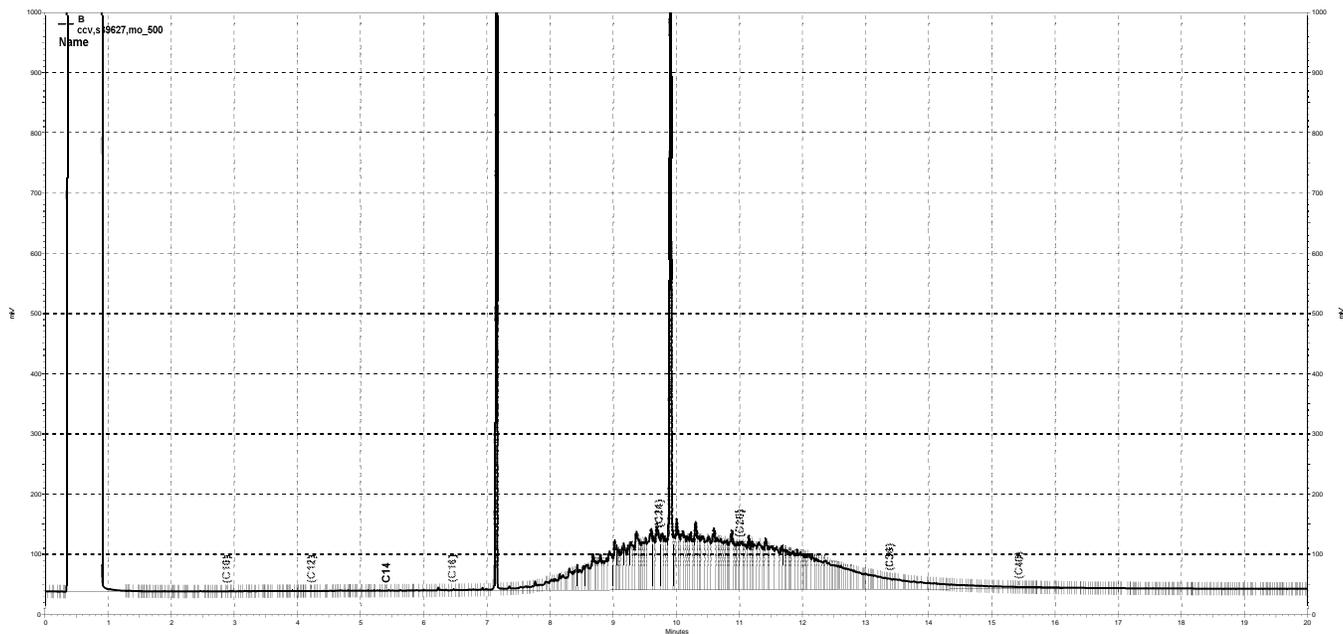
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Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05B	Diln Fac:	43.58
Lab ID:	309926-011	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	41
Vinyl Chloride	ND	480	37
Bromomethane	ND	480	170
Chloroethane	ND	480	35
Trichlorofluoromethane	ND	240	38
Acetone	ND	970	120
Freon 113	ND	240	48
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	47
MTBE	ND	240	44
trans-1,2-Dichloroethene	ND	240	50
Vinyl Acetate	ND	2,400	56
1,1-Dichloroethane	ND	240	46
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	48
Chloroform	ND	240	52
Bromochloromethane	ND	240	52
1,1,1-Trichloroethane	ND	240	52
1,1-Dichloropropene	ND	240	49
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	42
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	46
Tetrachloroethene	ND	240	47
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	50
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	51
Bromoform	ND	240	48
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	47

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05B	Diln Fac:	43.58
Lab ID:	309926-011	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	51
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	56
para-Isopropyl Toluene	ND	240	53
1,3-Dichlorobenzene	ND	240	51
1,4-Dichlorobenzene	ND	240	48
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	55
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	53
1,2,3-Trichlorobenzene	ND	240	65

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	98	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06B	Diln Fac:	45.04
Lab ID:	309926-012	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	42
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	990	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	44
trans-1,2-Dichloroethene	ND	250	51
Vinyl Acetate	ND	2,500	57
1,1-Dichloroethane	ND	250	47
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	250	49
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	53
1,1,1-Trichloroethane	ND	250	53
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	45
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	43
Trichloroethene	ND	250	49
1,2-Dichloropropane	ND	250	43
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	41
4-Methyl-2-Pentanone	ND	490	40
cis-1,3-Dichloropropene	ND	250	54
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	250	47
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	47
1,1,1,2-Tetrachloroethane	ND	250	53
Ethylbenzene	ND	250	51
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	50
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	55
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	51
Propylbenzene	ND	250	51
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06B	Diln Fac:	45.04
Lab ID:	309926-012	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	52
2-Chlorotoluene	ND	250	57
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	58
1,2,4-Trimethylbenzene	ND	250	52
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	54
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	55
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	69
Hexachlorobutadiene	ND	250	61
Naphthalene	ND	250	54
1,2,3-Trichlorobenzene	ND	250	66

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07B	Diln Fac:	43.51
Lab ID:	309926-013	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	40
Vinyl Chloride	ND	480	36
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	960	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07B	Diln Fac:	43.51
Lab ID:	309926-013	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	64

Surrogate	%REC	Limits
Dibromofluoromethane	90	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08B	Diln Fac:	41.28
Lab ID:	309926-014	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	450	46
Chloromethane	ND	450	38
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	220	35
Acetone	ND	900	120
Freon 113	ND	220	44
1,1-Dichloroethene	ND	220	38
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	220	43
MTBE	ND	220	40
trans-1,2-Dichloroethene	ND	220	46
Vinyl Acetate	ND	2,200	52
1,1-Dichloroethane	ND	220	42
2-Butanone	ND	450	99
cis-1,2-Dichloroethene	ND	220	45
2,2-Dichloropropane	ND	220	44
Chloroform	ND	220	48
Bromochloromethane	ND	220	48
1,1,1-Trichloroethane	ND	220	48
1,1-Dichloropropene	ND	220	45
Carbon Tetrachloride	ND	220	41
1,2-Dichloroethane	ND	220	37
Benzene	ND	220	39
Trichloroethene	ND	220	45
1,2-Dichloropropane	ND	220	39
Bromodichloromethane	ND	220	40
Dibromomethane	ND	220	38
4-Methyl-2-Pentanone	ND	450	36
cis-1,3-Dichloropropene	ND	220	49
Toluene	ND	220	42
trans-1,3-Dichloropropene	ND	220	41
1,1,2-Trichloroethane	ND	220	44
2-Hexanone	ND	450	41
1,3-Dichloropropane	ND	220	42
Tetrachloroethene	ND	220	43
Dibromochloromethane	ND	220	38
1,2-Dibromoethane	ND	220	39
Chlorobenzene	ND	220	43
1,1,1,2-Tetrachloroethane	ND	220	48
Ethylbenzene	ND	220	46
m,p-Xylenes	ND	220	28
o-Xylene	ND	220	46
Styrene	ND	220	47
Bromoform	ND	220	45
Isopropylbenzene	ND	220	50
1,1,2,2-Tetrachloroethane	ND	220	37
1,2,3-Trichloropropane	ND	220	47
Propylbenzene	ND	220	47
Bromobenzene	ND	220	43

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08B	Diln Fac:	41.28
Lab ID:	309926-014	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	220	47
2-Chlorotoluene	ND	220	51
4-Chlorotoluene	ND	220	47
tert-Butylbenzene	ND	220	52
1,2,4-Trimethylbenzene	ND	220	47
sec-Butylbenzene	ND	220	52
para-Isopropyl Toluene	ND	220	49
1,3-Dichlorobenzene	ND	220	47
1,4-Dichlorobenzene	ND	220	44
n-Butylbenzene	ND	220	50
1,2-Dichlorobenzene	ND	220	51
1,2-Dibromo-3-Chloropropane	ND	220	46
1,2,4-Trichlorobenzene	ND	220	62
Hexachlorobutadiene	ND	220	55
Naphthalene	ND	220	49
1,2,3-Trichlorobenzene	ND	220	60

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	96	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17C	Diln Fac:	44.54
Lab ID:	309926-015	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 7%

Analyte	Result	RL	MDL
Freon 12	ND	480	50
Chloromethane	ND	480	40
Vinyl Chloride	ND	480	36
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	960	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	39
cis-1,3-Dichloropropene	ND	240	53
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	44
1,1,2-Trichloroethane	ND	240	47
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	30
o-Xylene	ND	240	49
Styrene	ND	240	50
Bromoform	ND	240	48
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	40
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17C	Diln Fac:	44.54
Lab ID:	309926-015	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	51
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	49
1,2,4-Trichlorobenzene	ND	240	67
Hexachlorobutadiene	ND	240	59
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	64

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19C	Diln Fac:	50.00
Lab ID:	309926-016	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Moisture: 7%

Analyte	Result	RL	MDL
Freon 12	ND	540	56
Chloromethane	ND	540	45
Vinyl Chloride	ND	540	41
Bromomethane	ND	540	190
Chloroethane	ND	540	38
Trichlorofluoromethane	ND	270	42
Acetone	ND	1,100	140
Freon 113	ND	270	53
1,1-Dichloroethene	ND	270	46
Methylene Chloride	ND	1,300	240
Carbon Disulfide	ND	270	52
MTBE	ND	270	48
trans-1,2-Dichloroethene	ND	270	55
Vinyl Acetate	ND	2,700	62
1,1-Dichloroethane	ND	270	51
2-Butanone	ND	540	120
cis-1,2-Dichloroethene	ND	270	54
2,2-Dichloropropane	ND	270	53
Chloroform	ND	270	58
Bromochloromethane	ND	270	57
1,1,1-Trichloroethane	ND	270	57
1,1-Dichloropropene	ND	270	54
Carbon Tetrachloride	ND	270	49
1,2-Dichloroethane	ND	270	45
Benzene	ND	270	47
Trichloroethene	ND	270	54
1,2-Dichloropropane	ND	270	46
Bromodichloromethane	ND	270	48
Dibromomethane	ND	270	45
4-Methyl-2-Pentanone	ND	540	43
cis-1,3-Dichloropropene	ND	270	59
Toluene	ND	270	50
trans-1,3-Dichloropropene	ND	270	49
1,1,2-Trichloroethane	ND	270	52
2-Hexanone	ND	540	49
1,3-Dichloropropane	ND	270	51
Tetrachloroethene	ND	270	52
Dibromochloromethane	ND	270	46
1,2-Dibromoethane	ND	270	47
Chlorobenzene	ND	270	51
1,1,1,2-Tetrachloroethane	ND	270	58
Ethylbenzene	ND	270	55
m,p-Xylenes	ND	270	33
o-Xylene	ND	270	55
Styrene	ND	270	57
Bromoform	ND	270	53
Isopropylbenzene	ND	270	59
1,1,2,2-Tetrachloroethane	ND	270	44
1,2,3-Trichloropropane	ND	270	56
Propylbenzene	ND	270	56
Bromobenzene	ND	270	52

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19C	Diln Fac:	50.00
Lab ID:	309926-016	Batch#:	270628
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/21/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	270	56
2-Chlorotoluene	ND	270	62
4-Chlorotoluene	ND	270	56
tert-Butylbenzene	ND	270	63
1,2,4-Trimethylbenzene	ND	270	57
sec-Butylbenzene	ND	270	62
para-Isopropyl Toluene	ND	270	58
1,3-Dichlorobenzene	ND	270	56
1,4-Dichlorobenzene	ND	270	53
n-Butylbenzene	ND	270	59
1,2-Dichlorobenzene	ND	270	61
1,2-Dibromo-3-Chloropropane	ND	270	55
1,2,4-Trichlorobenzene	ND	270	75
Hexachlorobutadiene	ND	270	66
Naphthalene	ND	270	58
1,2,3-Trichlorobenzene	ND	270	72

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	94	80-136
Toluene-d8	105	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20C	Diln Fac:	41.06
Lab ID:	309926-017	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	450	46
Chloromethane	ND	450	37
Vinyl Chloride	ND	450	34
Bromomethane	ND	450	160
Chloroethane	ND	450	32
Trichlorofluoromethane	ND	220	35
Acetone	ND	890	110
Freon 113	ND	220	44
1,1-Dichloroethene	ND	220	38
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	220	43
MTBE	ND	220	40
trans-1,2-Dichloroethene	ND	220	46
Vinyl Acetate	ND	2,200	52
1,1-Dichloroethane	ND	220	42
2-Butanone	ND	450	98
cis-1,2-Dichloroethene	ND	220	45
2,2-Dichloropropane	ND	220	44
Chloroform	ND	220	48
Bromochloromethane	ND	220	47
1,1,1-Trichloroethane	ND	220	48
1,1-Dichloropropene	ND	220	45
Carbon Tetrachloride	ND	220	41
1,2-Dichloroethane	ND	220	37
Benzene	ND	220	39
Trichloroethene	ND	220	45
1,2-Dichloropropane	ND	220	38
Bromodichloromethane	ND	220	40
Dibromomethane	ND	220	37
4-Methyl-2-Pentanone	ND	450	36
cis-1,3-Dichloropropene	ND	220	49
Toluene	ND	220	42
trans-1,3-Dichloropropene	ND	220	41
1,1,2-Trichloroethane	ND	220	43
2-Hexanone	ND	450	41
1,3-Dichloropropane	ND	220	42
Tetrachloroethene	ND	220	43
Dibromochloromethane	ND	220	38
1,2-Dibromoethane	ND	220	39
Chlorobenzene	ND	220	43
1,1,1,2-Tetrachloroethane	ND	220	48
Ethylbenzene	ND	220	46
m,p-Xylenes	ND	220	28
o-Xylene	ND	220	45
Styrene	ND	220	47
Bromoform	ND	220	44
Isopropylbenzene	ND	220	49
1,1,2,2-Tetrachloroethane	ND	220	37
1,2,3-Trichloropropane	ND	220	46
Propylbenzene	ND	220	46
Bromobenzene	ND	220	43

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20C	Diln Fac:	41.06
Lab ID:	309926-017	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	220	46
2-Chlorotoluene	ND	220	51
4-Chlorotoluene	ND	220	47
tert-Butylbenzene	ND	220	52
1,2,4-Trimethylbenzene	ND	220	47
sec-Butylbenzene	ND	220	51
para-Isopropyl Toluene	ND	220	48
1,3-Dichlorobenzene	ND	220	47
1,4-Dichlorobenzene	ND	220	44
n-Butylbenzene	ND	220	49
1,2-Dichlorobenzene	ND	220	51
1,2-Dibromo-3-Chloropropane	ND	220	45
1,2,4-Trichlorobenzene	ND	220	62
Hexachlorobutadiene	ND	220	55
Naphthalene	ND	220	48
1,2,3-Trichlorobenzene	ND	220	60

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17A	Diln Fac:	37.41
Lab ID:	309926-018	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	410	42
Chloromethane	ND	410	34
Vinyl Chloride	ND	410	31
Bromomethane	ND	410	140
Chloroethane	ND	410	29
Trichlorofluoromethane	ND	200	32
Acetone	ND	810	100
Freon 113	ND	200	40
1,1-Dichloroethene	ND	200	35
Methylene Chloride	ND	1,000	180
Carbon Disulfide	ND	200	39
MTBE	ND	200	37
trans-1,2-Dichloroethene	ND	200	42
Vinyl Acetate	ND	2,000	47
1,1-Dichloroethane	ND	200	38
2-Butanone	ND	410	89
cis-1,2-Dichloroethene	ND	200	41
2,2-Dichloropropane	ND	200	40
Chloroform	ND	200	44
Bromochloromethane	ND	200	43
1,1,1-Trichloroethane	ND	200	43
1,1-Dichloropropene	ND	200	41
Carbon Tetrachloride	ND	200	37
1,2-Dichloroethane	ND	200	34
Benzene	ND	200	36
Trichloroethene	ND	200	41
1,2-Dichloropropane	ND	200	35
Bromodichloromethane	ND	200	36
Dibromomethane	ND	200	34
4-Methyl-2-Pentanone	ND	410	33
cis-1,3-Dichloropropene	ND	200	45
Toluene	ND	200	38
trans-1,3-Dichloropropene	ND	200	37
1,1,2-Trichloroethane	ND	200	40
2-Hexanone	ND	410	37
1,3-Dichloropropane	ND	200	38
Tetrachloroethene	ND	200	39
Dibromochloromethane	ND	200	35
1,2-Dibromoethane	ND	200	35
Chlorobenzene	ND	200	39
1,1,1,2-Tetrachloroethane	ND	200	44
Ethylbenzene	ND	200	42
m,p-Xylenes	ND	200	25
o-Xylene	ND	200	41
Styrene	ND	200	43
Bromoform	ND	200	40
Isopropylbenzene	ND	200	45
1,1,2,2-Tetrachloroethane	ND	200	34
1,2,3-Trichloropropane	ND	200	42
Propylbenzene	ND	200	42
Bromobenzene	ND	200	39

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-17A	Diln Fac:	37.41
Lab ID:	309926-018	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	200	42
2-Chlorotoluene	ND	200	47
4-Chlorotoluene	ND	200	43
tert-Butylbenzene	ND	200	47
1,2,4-Trimethylbenzene	ND	200	43
sec-Butylbenzene	ND	200	47
para-Isopropyl Toluene	ND	200	44
1,3-Dichlorobenzene	ND	200	43
1,4-Dichlorobenzene	ND	200	40
n-Butylbenzene	ND	200	45
1,2-Dichlorobenzene	ND	200	46
1,2-Dibromo-3-Chloropropane	ND	200	41
1,2,4-Trichlorobenzene	ND	200	57
Hexachlorobutadiene	ND	200	50
Naphthalene	ND	200	44
1,2,3-Trichlorobenzene	ND	200	54

Surrogate	%REC	Limits
Dibromofluoromethane	89	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19A	Diln Fac:	45.30
Lab ID:	309926-019	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	510	53
Chloromethane	ND	510	43
Vinyl Chloride	ND	510	38
Bromomethane	ND	510	180
Chloroethane	ND	510	36
Trichlorofluoromethane	ND	250	40
Acetone	ND	1,000	130
Freon 113	ND	250	50
1,1-Dichloroethene	ND	250	43
Methylene Chloride	ND	1,300	220
Carbon Disulfide	ND	250	49
MTBE	ND	250	46
trans-1,2-Dichloroethene	ND	250	52
Vinyl Acetate	ND	2,500	59
1,1-Dichloroethane	ND	250	48
2-Butanone	ND	510	110
cis-1,2-Dichloroethene	ND	250	51
2,2-Dichloropropane	ND	250	50
Chloroform	ND	250	55
Bromochloromethane	ND	250	54
1,1,1-Trichloroethane	ND	250	54
1,1-Dichloropropene	ND	250	51
Carbon Tetrachloride	ND	250	47
1,2-Dichloroethane	ND	250	42
Benzene	ND	250	45
Trichloroethene	ND	250	51
1,2-Dichloropropane	ND	250	44
Bromodichloromethane	ND	250	45
Dibromomethane	ND	250	43
4-Methyl-2-Pentanone	ND	510	41
cis-1,3-Dichloropropene	ND	250	56
Toluene	ND	250	47
trans-1,3-Dichloropropene	ND	250	46
1,1,2-Trichloroethane	ND	250	49
2-Hexanone	ND	510	47
1,3-Dichloropropane	ND	250	48
Tetrachloroethene	ND	250	49
Dibromochloromethane	ND	250	43
1,2-Dibromoethane	ND	250	44
Chlorobenzene	ND	250	49
1,1,1,2-Tetrachloroethane	ND	250	55
Ethylbenzene	ND	250	52
m,p-Xylenes	ND	250	31
o-Xylene	ND	250	52
Styrene	ND	250	54
Bromoform	ND	250	50
Isopropylbenzene	ND	250	56
1,1,2,2-Tetrachloroethane	ND	250	42
1,2,3-Trichloropropane	ND	250	53
Propylbenzene	ND	250	53
Bromobenzene	ND	250	49

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-19A	Diln Fac:	45.30
Lab ID:	309926-019	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	53
2-Chlorotoluene	ND	250	58
4-Chlorotoluene	ND	250	53
tert-Butylbenzene	ND	250	59
1,2,4-Trimethylbenzene	ND	250	54
sec-Butylbenzene	ND	250	59
para-Isopropyl Toluene	ND	250	55
1,3-Dichlorobenzene	ND	250	53
1,4-Dichlorobenzene	ND	250	50
n-Butylbenzene	ND	250	56
1,2-Dichlorobenzene	ND	250	58
1,2-Dibromo-3-Chloropropane	ND	250	52
1,2,4-Trichlorobenzene	ND	250	71
Hexachlorobutadiene	ND	250	62
Naphthalene	ND	250	55
1,2,3-Trichlorobenzene	ND	250	68

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	89	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20A	Diln Fac:	42.20
Lab ID:	309926-020	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 10%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	39
Vinyl Chloride	ND	470	35
Bromomethane	ND	470	160
Chloroethane	ND	470	33
Trichlorofluoromethane	ND	230	37
Acetone	ND	940	120
Freon 113	ND	230	46
1,1-Dichloroethene	ND	230	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	230	45
MTBE	ND	230	42
trans-1,2-Dichloroethene	ND	230	48
Vinyl Acetate	ND	2,300	54
1,1-Dichloroethane	ND	230	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	230	47
2,2-Dichloropropane	ND	230	46
Chloroform	ND	230	50
Bromochloromethane	ND	230	50
1,1,1-Trichloroethane	ND	230	50
1,1-Dichloropropene	ND	230	47
Carbon Tetrachloride	ND	230	43
1,2-Dichloroethane	ND	230	39
Benzene	ND	230	41
Trichloroethene	ND	230	47
1,2-Dichloropropane	ND	230	40
Bromodichloromethane	ND	230	42
Dibromomethane	ND	230	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	230	51
Toluene	ND	230	44
trans-1,3-Dichloropropene	ND	230	43
1,1,2-Trichloroethane	ND	230	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	230	44
Tetrachloroethene	ND	230	45
Dibromochloromethane	ND	230	40
1,2-Dibromoethane	ND	230	41
Chlorobenzene	ND	230	45
1,1,1,2-Tetrachloroethane	ND	230	51
Ethylbenzene	ND	230	48
m,p-Xylenes	ND	230	29
o-Xylene	ND	230	48
Styrene	ND	230	49
Bromoform	ND	230	47
Isopropylbenzene	ND	230	52
1,1,2,2-Tetrachloroethane	ND	230	39
1,2,3-Trichloropropane	ND	230	49
Propylbenzene	ND	230	49
Bromobenzene	ND	230	45

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-20A	Diln Fac:	42.20
Lab ID:	309926-020	Batch#:	270667
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	230	49
2-Chlorotoluene	ND	230	54
4-Chlorotoluene	ND	230	49
tert-Butylbenzene	ND	230	55
1,2,4-Trimethylbenzene	ND	230	50
sec-Butylbenzene	ND	230	54
para-Isopropyl Toluene	ND	230	51
1,3-Dichlorobenzene	ND	230	49
1,4-Dichlorobenzene	ND	230	46
n-Butylbenzene	ND	230	52
1,2-Dichlorobenzene	ND	230	53
1,2-Dibromo-3-Chloropropane	ND	230	48
1,2,4-Trichlorobenzene	ND	230	65
Hexachlorobutadiene	ND	230	57
Naphthalene	ND	230	51
1,2,3-Trichlorobenzene	ND	230	63

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	91	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270628
Units:	ug/Kg	Analyzed:	05/21/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976332

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	30.07	120	69-142
Benzene	25.00	28.53	114	79-123
Trichloroethene	25.00	26.71	107	79-126
Toluene	25.00	27.98	112	78-120
Chlorobenzene	25.00	26.09	104	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	88	78-131
1,2-Dichloroethane-d4	82	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-129

Type: BSD Lab ID: QC976333

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.28	109	69-142	10	23
Benzene	25.00	26.78	107	79-123	6	20
Trichloroethene	25.00	24.71	99	79-126	8	20
Toluene	25.00	26.47	106	78-120	6	20
Chlorobenzene	25.00	25.32	101	80-122	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	85	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	113	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976334	Batch#:	270628
Matrix:	Soil	Analyzed:	05/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	0.51 J b	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20

J= Estimated value
 b= See narrative
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976334	Batch#:	270628
Matrix:	Soil	Analyzed:	05/21/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	5.0	0.15
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	0.35 J	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene	0.44 J	5.0	0.13
1,2,3-Trichlorobenzene	0.47 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	100	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-129

J= Estimated value
 b= See narrative
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270667
Units:	ug/Kg	Analyzed:	05/22/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976499

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.54	114	69-142
Benzene	25.00	28.00	112	79-123
Trichloroethene	25.00	27.71	111	79-126
Toluene	25.00	28.26	113	78-120
Chlorobenzene	25.00	26.49	106	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

Type: BSD Lab ID: QC976500

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.19	109	69-142	5	23
Benzene	25.00	26.97	108	79-123	4	20
Trichloroethene	25.00	26.37	105	79-126	5	20
Toluene	25.00	27.29	109	78-120	3	20
Chlorobenzene	25.00	25.57	102	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976501	Batch#:	270667
Matrix:	Soil	Analyzed:	05/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976501	Batch#:	270667
Matrix:	Soil	Analyzed:	05/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene		5.0	0.13
1,2,3-Trichlorobenzene	0.25 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-05B	Batch#:	270599
Lab ID:	309926-011	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/24/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	140	27		
Acenaphthylene	46 J	140	27		
Acenaphthene	ND	140	27		
Fluorene	ND	140	27		
Phenanthrene	240	140	27		
Anthracene	59 J	140	27		
Fluoranthene	460	140	27		
Pyrene	690	140	27		
Benzo(a)anthracene	230	140	27	0.10	23
Chrysene	270	140	27	0.0010	0.27
Benzo(b)fluoranthene	350	140	27	0.10	35
Benzo(k)fluoranthene	120 J	140	27	0.010	1.2
Benzo(a)pyrene	340	140	27	1.0	340
Indeno(1,2,3-cd)pyrene	230	140	27	0.10	23
Dibenz(a,h)anthracene	47 J	140	27	1.0	47
Benzo(g,h,i)perylene	360	140	27		
Total Benzo(a)pyrene Equiv.					470

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-06B	Batch#:	270599
Lab ID:	309926-012	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/28/19
Diln Fac:	33.33		

TEQ ND Factor: 0.5

Moisture: 9%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	100 J	180	37		
Acenaphthylene	350	180	37		
Acenaphthene	ND	180	37		
Fluorene	120 J	180	37		
Phenanthrene	1,400	180	37		
Anthracene	240	180	37		
Fluoranthene	1,700	180	37		
Pyrene	2,500	180	37		
Benzo(a)anthracene	800	180	37	0.10	80
Chrysene	800	180	37	0.0010	0.80
Benzo(b)fluoranthene	1,300	180	37	0.10	130
Benzo(k)fluoranthene	390	180	37	0.010	3.9
Benzo(a)pyrene	1,300	180	37	1.0	1,300
Indeno(1,2,3-cd)pyrene	850	180	37	0.10	85
Dibenz(a,h)anthracene	150 J	180	37	1.0	150
Benzo(g,h,i)perylene	1,200	180	37		
Total Benzo(a)pyrene Equiv.					1,800

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-17A	Batch#:	270599
Lab ID:	309926-018	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/24/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 8%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	79 J	270	54		
Acenaphthylene	82 J	270	54		
Acenaphthene	ND	270	54		
Fluorene	ND	270	54		
Phenanthrene	430	270	54		
Anthracene	140 J	270	54		
Fluoranthene	3,000	270	54		
Pyrene	4,600	270	54		
Benzo(a)anthracene	1,100	270	54	0.10	110
Chrysene	1,900	270	54	0.0010	1.9
Benzo(b)fluoranthene	1,700	270	54	0.10	170
Benzo(k)fluoranthene	460	270	54	0.010	4.6
Benzo(a)pyrene	1,600	270	54	1.0	1,600
Indeno(1,2,3-cd)pyrene	980	270	54	0.10	98
Dibenz(a,h)anthracene	150 J	270	54	1.0	150
Benzo(g,h,i)perylene	1,300	270	54		
Total Benzo(a)pyrene Equiv.					2,100

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-20A	Batch#:	270599
Lab ID:	309926-020	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/20/19
Basis:	dry	Analyzed:	05/24/19
Diln Fac:	25.00		

TEQ ND Factor: 0.5

Moisture: 10%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	140	28		
Acenaphthylene	60 J	140	28		
Acenaphthene	ND	140	28		
Fluorene	36 J	140	28		
Phenanthrene	460	140	28		
Anthracene	110 J	140	28		
Fluoranthene	680	140	28		
Pyrene	1,400	140	28		
Benzo(a)anthracene	320	140	28	0.10	32
Chrysene	390	140	28	0.0010	0.39
Benzo(b)fluoranthene	520	140	28	0.10	52
Benzo(k)fluoranthene	180	140	28	0.010	1.8
Benzo(a)pyrene	510	140	28	1.0	510
Indeno(1,2,3-cd)pyrene	240	140	28	0.10	24
Dibenz(a,h)anthracene	50 J	140	28	1.0	50
Benzo(g,h,i)perylene	370	140	28		
Total Benzo(a)pyrene Equiv.					670

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976211	Batch#:	270599
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/23/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	155 *	48-120
2-Fluorobiphenyl	71	39-120
Terphenyl-d14	81	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976212	Batch#:	270599
Matrix:	Soil	Prepared:	05/20/19
Units:	ug/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	26.55	80	57-120
Acenaphthylene	33.33	27.28	82	60-120
Acenaphthene	33.33	25.56	77	64-120
Fluorene	33.33	24.70	74	67-120
Phenanthrene	33.33	27.89	84	64-120
Anthracene	33.33	28.91	87	66-120
Fluoranthene	33.33	26.68	80	73-121
Pyrene	33.33	31.73	95	67-120
Benzo(a)anthracene	33.33	26.51	80	69-121
Chrysene	33.33	18.20	55	48-120
Benzo(b)fluoranthene	33.33	29.87	90	66-120
Benzo(k)fluoranthene	33.33	26.96	81	62-125
Benzo(a)pyrene	33.33	28.77	86	66-120
Indeno(1,2,3-cd)pyrene	33.33	26.78	80	57-120
Dibenz(a,h)anthracene	33.33	22.01	66	45-120
Benzo(g,h,i)perylene	33.33	27.25	82	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	142 *	48-120
2-Fluorobiphenyl	68	39-120
Terphenyl-d14	83	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-05B	Batch#:	270642
Lab ID:	309926-001	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.75
beta-BHC	ND	5.6	1.0
gamma-BHC	ND	5.6	0.83
delta-BHC	ND	5.6	1.1
Heptachlor	ND	5.6	1.1
Aldrin	ND	5.6	1.2
Heptachlor epoxide	ND	5.6	0.95
Endosulfan I	ND	5.6	1.5
Dieldrin	1.9 J	11	1.1
4,4'-DDE	ND	11	1.5
Endrin	ND	11	1.1
Endosulfan II	ND	11	1.2
Endosulfan sulfate	ND	11	2.0
4,4'-DDD	4.4 C J	11	1.2
Endrin aldehyde	ND	13	5.1
4,4'-DDT	4.0 J	11	2.0
alpha-Chlordane	1.8 C J	5.6	1.1
gamma-Chlordane	2.5 J	5.6	1.1
Methoxychlor	ND	56	20
Toxaphene	ND	200	59

Surrogate	%REC	Limits
TCMX	70	43-125
Decachlorobiphenyl	54	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-06B	Batch#:	270642
Lab ID:	309926-002	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.74
beta-BHC	ND	5.5	0.98
gamma-BHC	ND	5.5	0.81
delta-BHC	ND	5.5	1.0
Heptachlor	ND	5.5	1.1
Aldrin	ND	5.5	1.2
Heptachlor epoxide	ND	5.5	0.93
Endosulfan I	ND	5.5	1.5
Dieldrin	1.4 C J	11	1.1
4,4'-DDE	ND	11	1.4
Endrin	1.9 C J	11	1.0
Endosulfan II	ND	11	1.2
Endosulfan sulfate	ND	11	2.0
4,4'-DDD	ND	11	1.2
Endrin aldehyde	ND	13	5.0
4,4'-DDT	3.0 J	11	2.0
alpha-Chlordane	3.3 C J	5.5	1.1
gamma-Chlordane	4.0 J	5.5	1.1
Methoxychlor	ND	55	19
Toxaphene	ND	200	58

Surrogate	%REC	Limits
TCMX	97	43-125
Decachlorobiphenyl	85	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-07B	Batch#:	270642
Lab ID:	309926-003	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.73
beta-BHC	ND	5.4	0.97
gamma-BHC	ND	5.4	0.80
delta-BHC	ND	5.4	1.0
Heptachlor	ND	5.4	1.1
Aldrin	ND	5.4	1.1
Heptachlor epoxide	ND	5.4	0.92
Endosulfan I	ND	5.4	1.5
Dieldrin	ND	11	1.0
4,4'-DDE	ND	11	1.4
Endrin	ND	11	1.0
Endosulfan II	ND	11	1.2
Endosulfan sulfate	ND	11	1.9
4,4'-DDD	ND	11	1.2
Endrin aldehyde	ND	13	4.9
4,4'-DDT	2.4 C J	11	1.9
alpha-Chlordane	1.9 C J	5.4	1.1
gamma-Chlordane	2.2 J	5.4	1.1
Methoxychlor	ND #	54	17
Toxaphene	ND	190	57

Surrogate	%REC	Limits
TCMX	81	43-125
Decachlorobiphenyl	73	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-08B	Batch#:	270642
Lab ID:	309926-004	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.5
beta-BHC	ND	11	2.0
gamma-BHC	ND	11	1.6
delta-BHC	ND	11	2.1
Heptachlor	ND	11	2.2
Aldrin	ND	11	2.3
Heptachlor epoxide	ND	11	1.9
Endosulfan I	ND	11	2.9
Dieldrin	ND	22	2.1
4,4'-DDE	ND	22	2.9
Endrin	ND	22	2.1
Endosulfan II	ND	22	2.4
Endosulfan sulfate	ND	22	3.9
4,4'-DDD	ND	22	2.4
Endrin aldehyde	ND	26	10
4,4'-DDT	ND	22	3.9
alpha-Chlordane	ND	11	2.2
gamma-Chlordane	ND	11	2.6
Methoxychlor	ND	110	38
Toxaphene	ND	390	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-17C	Batch#:	270642
Lab ID:	309926-005	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.73
beta-BHC	ND	5.4	1.1
gamma-BHC	ND	5.4	0.85
delta-BHC	ND	5.4	1.2
Heptachlor	ND	5.4	0.86
Aldrin	ND	5.4	0.82
Heptachlor epoxide	ND	5.4	0.79
Endosulfan I	ND	5.4	1.3
Dieldrin	ND	11	1.0
4,4'-DDE	ND	11	1.4
Endrin	ND	11	1.0
Endosulfan II	ND	11	1.3
Endosulfan sulfate	ND	11	1.8
4,4'-DDD	ND	11	1.1
Endrin aldehyde	ND	13	5.0
4,4'-DDT	ND #	11	2.0
alpha-Chlordane	ND	5.4	1.1
gamma-Chlordane	ND	5.4	1.3
Methoxychlor	ND	54	19
Toxaphene	ND	200	59

Surrogate	%REC	Limits
TCMX	117	43-125
Decachlorobiphenyl	86	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-19C	Batch#:	270642
Lab ID:	309926-006	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.5
beta-BHC	ND	11	2.0
gamma-BHC	ND	11	1.7
delta-BHC	ND	11	2.1
Heptachlor	ND	11	2.3
Aldrin	ND	11	2.4
Heptachlor epoxide	ND	11	1.9
Endosulfan I	ND	11	3.0
Dieldrin	2.3 C J	23	2.1
4,4'-DDE	ND	23	3.0
Endrin	ND	23	2.2
Endosulfan II	ND	23	2.5
Endosulfan sulfate	ND	23	4.1
4,4'-DDD	10 C J	23	2.5
Endrin aldehyde	ND	27	10
4,4'-DDT	ND	23	4.1
alpha-Chlordane	3.8 C J	11	2.3
gamma-Chlordane	3.9 J	11	2.7
Methoxychlor	ND #	110	36
Toxaphene	ND	410	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-20C	Batch#:	270642
Lab ID:	309926-007	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.5
beta-BHC	ND	11	2.0
gamma-BHC	ND	11	1.7
delta-BHC	ND	11	2.1
Heptachlor	ND	11	1.8
Aldrin	ND	11	2.4
Heptachlor epoxide	ND	11	1.9
Endosulfan I	ND	11	3.0
Dieldrin	ND	22	2.1
4,4'-DDE	ND	22	2.9
Endrin	ND	22	2.1
Endosulfan II	ND	22	2.4
Endosulfan sulfate	ND	22	4.0
4,4'-DDD	ND	22	2.5
Endrin aldehyde	ND	27	10
4,4'-DDT	8.2 J	22	4.0
alpha-Chlordane	ND	11	2.2
gamma-Chlordane	ND	11	2.7
Methoxychlor	ND	110	39
Toxaphene	ND	400	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-17A	Batch#:	270642
Lab ID:	309926-008	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	1.5
beta-BHC	ND	11	2.0
gamma-BHC	ND	11	1.7
delta-BHC	ND	11	2.1
Heptachlor	ND	11	1.8
Aldrin	ND	11	2.4
Heptachlor epoxide	ND	11	1.9
Endosulfan I	ND	11	3.0
Dieldrin	ND	23	2.1
4,4'-DDE	ND	23	3.0
Endrin	ND	23	2.2
Endosulfan II	ND	23	2.5
Endosulfan sulfate	ND	23	4.1
4,4'-DDD	ND	23	2.5
Endrin aldehyde	ND	27	10
4,4'-DDT	4.6 J	23	4.1
alpha-Chlordane	2.7 C J	11	2.3
gamma-Chlordane	ND	11	2.7
Methoxychlor	ND	110	40
Toxaphene	ND	410	120

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-19A	Batch#:	270651
Lab ID:	309926-009	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.44
beta-BHC	ND	5.5	0.56
gamma-BHC	ND	5.5	0.62
delta-BHC	ND	5.5	0.78
Heptachlor	ND	5.5	0.39
Aldrin	0.30 C J	5.5	0.30
Heptachlor epoxide	ND	5.5	0.42
Endosulfan I	ND	5.5	0.53
Dieldrin	1.6 J	11	0.44
4,4'-DDE	0.66 C J	11	0.39
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.60
Endosulfan sulfate	ND	11	0.88
4,4'-DDD	0.80 C J	11	0.39
Endrin aldehyde	ND	11	2.9
4,4'-DDT	2.8 J	11	0.44
alpha-Chlordane	2.6 C J	5.5	0.71
gamma-Chlordane	3.0 J	5.5	0.55
Methoxychlor	ND	55	7.5
Toxaphene	ND	200	57

Surrogate	%REC	Limits
TCMX	68	43-125
Decachlorobiphenyl	59	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-20A	Batch#:	270651
Lab ID:	309926-010	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.88
beta-BHC	ND	11	1.1
gamma-BHC	ND	11	1.2
delta-BHC	ND	11	1.5
Heptachlor	ND	11	0.79
Aldrin	ND	11	0.92
Heptachlor epoxide	ND	11	0.84
Endosulfan I	ND	11	1.1
Dieldrin	ND	22	0.87
4,4'-DDE	2.3 J	22	0.79
Endrin	ND	22	0.65
Endosulfan II	ND	22	1.2
Endosulfan sulfate	ND	22	1.8
4,4'-DDD	4.6 C J	22	0.79
Endrin aldehyde	ND	22	5.8
4,4'-DDT	4.6 J	22	0.89
alpha-Chlordane	ND	11	1.4
gamma-Chlordane	ND	11	1.4
Methoxychlor	ND	110	15
Toxaphene	ND	390	110

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976395	Batch#:	270642
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.15
beta-BHC	ND	1.1	0.20
gamma-BHC	ND	1.1	0.17
delta-BHC	ND	1.1	0.21
Heptachlor	ND	1.1	0.22
Aldrin	ND	1.1	0.24
Heptachlor epoxide	ND	1.1	0.19
Endosulfan I	ND	1.1	0.30
Dieldrin	ND	2.2	0.21
4,4'-DDE	ND	2.2	0.30
Endrin	ND	2.2	0.19
Endosulfan II	ND	2.2	0.24
Endosulfan sulfate	ND	2.2	0.40
4,4'-DDD	ND	2.2	0.22
Endrin aldehyde	ND	2.7	1.0
4,4'-DDT	ND	2.2	0.41
alpha-Chlordane	ND	1.1	0.22
gamma-Chlordane	ND	1.1	0.27
Methoxychlor	ND	11	3.6
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	80	43-125
Decachlorobiphenyl	81	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976396	Batch#:	270642
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	13.60	102	58-131
Heptachlor	13.33	13.04	98	51-133
Aldrin	13.33	13.03	98	52-128
Dieldrin	13.33	12.91	97	59-133
Endrin	13.33	13.58	102	48-154
4,4'-DDT	13.33	10.20	77	54-140

Surrogate	%REC	Limits
TCMX	74	43-125
Decachlorobiphenyl	74	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976433	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.090
beta-BHC	ND	1.1	0.11
gamma-BHC	ND	1.1	0.13
delta-BHC	ND	1.1	0.16
Heptachlor	ND	1.1	0.12
Aldrin	ND	1.1	0.094
Heptachlor epoxide	ND	1.1	0.085
Endosulfan I	ND	1.1	0.11
Dieldrin	ND	2.2	0.088
4,4'-DDE	ND	2.2	0.099
Endrin	ND	2.2	0.21
Endosulfan II	ND	2.2	0.12
Endosulfan sulfate	ND	2.2	0.18
4,4'-DDD	ND	2.2	0.15
Endrin aldehyde	ND	2.2	0.69
4,4'-DDT	ND	2.2	0.34
alpha-Chlordane	ND	1.1	0.14
gamma-Chlordane	ND	1.1	0.14
Methoxychlor	ND	11	2.7
Toxaphene	ND	40	12

Surrogate	%REC	Limits
TCMX	71	43-125
Decachlorobiphenyl	68	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976437	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	11.65	87	58-131
Heptachlor	13.33	11.76	88	51-133
Aldrin	13.33	11.55	87	52-128
Dieldrin	13.33	11.10	83	59-133
Endrin	13.33	12.06	90	48-154
4,4'-DDT	13.33	9.265	69	54-140

Surrogate	%REC	Limits
TCMX	65	43-125
Decachlorobiphenyl	65	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	270651
MSS Lab ID:	310026-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976438

Analyte	Result
gamma-BHC	NA
Heptachlor	NA
Aldrin	NA
Dieldrin	NA
Endrin	NA
4,4'-DDT	NA

Surrogate	Result
TCMX	NA
Decachlorobiphenyl	NA

Type: MSD Lab ID: QC976439

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.53	13.17	97	58-126	4	36
Heptachlor	13.53	15.05	111	58-127	16	34
Aldrin	13.53	13.00	91	55-124	8	31
Dieldrin	13.53	10.96	80	48-137	5	38
Endrin	13.53	12.08	89	48-158	3	38
4,4'-DDT	13.53	9.886	73	38-155	8	42

Surrogate	%REC	Limits
TCMX	81	43-125
Decachlorobiphenyl	57	40-128

NA= Not Analyzed

RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Field ID:	DTSC-05B	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-001	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.7
Aroclor-1221	ND	27	13
Aroclor-1232	ND	13	6.2
Aroclor-1242	ND	13	5.7
Aroclor-1248	ND	13	6.1
Aroclor-1254	ND	13	4.9
Aroclor-1260	32	13	3.1

Surrogate	%REC	Limits
Decachlorobiphenyl	69	49-157

Field ID:	DTSC-06B	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-002	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.6
Aroclor-1221	ND	26	13
Aroclor-1232	ND	13	6.1
Aroclor-1242	ND	13	5.6
Aroclor-1248	ND	13	6.0
Aroclor-1254	ND	13	4.8
Aroclor-1260	16	13	3.0

Surrogate	%REC	Limits
Decachlorobiphenyl	114	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Field ID:	DTSC-07B	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-003	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.6
Aroclor-1221	ND	26	12
Aroclor-1232	ND	13	6.0
Aroclor-1242	ND	13	5.6
Aroclor-1248	ND	13	5.9
Aroclor-1254	ND	13	4.7
Aroclor-1260	11 J	13	3.0

Surrogate	%REC	Limits
Decachlorobiphenyl	81	49-157

Field ID:	DTSC-08B	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-004	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.6
Aroclor-1221	ND	26	12
Aroclor-1232	ND	13	6.1
Aroclor-1242	ND	13	5.6
Aroclor-1248	ND	13	6.0
Aroclor-1254	ND	13	4.8
Aroclor-1260	8.3 J	13	3.0

Surrogate	%REC	Limits
Decachlorobiphenyl	68	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Field ID:	DTSC-17C	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/22/19
Lab ID:	309926-005	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.6
Aroclor-1221	ND	26	12
Aroclor-1232	ND	13	6.1
Aroclor-1242	ND	13	5.6
Aroclor-1248	ND	13	6.0
Aroclor-1254	ND	13	4.8
Aroclor-1260	14	13	3.0

Surrogate	%REC	Limits
Decachlorobiphenyl	86	49-157

Field ID:	DTSC-19C	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-006	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	4.8
Aroclor-1221	ND	27	13
Aroclor-1232	ND	14	6.3
Aroclor-1242	ND	14	5.8
Aroclor-1248	ND	14	6.2
Aroclor-1254	41	14	4.9
Aroclor-1260	42	14	3.1

Surrogate	%REC	Limits
Decachlorobiphenyl	91	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Field ID:	DTSC-20C	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-007	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	4.7
Aroclor-1221	ND	27	13
Aroclor-1232	ND	13	6.2
Aroclor-1242	ND	13	5.7
Aroclor-1248	ND	13	6.1
Aroclor-1254	39	13	4.9
Aroclor-1260	34	13	3.1

Surrogate	%REC	Limits
Decachlorobiphenyl	95	49-157

Field ID:	DTSC-17A	Batch#:	270642
Type:	SAMPLE	Analyzed:	05/23/19
Lab ID:	309926-008	Prep:	EPA 3550C
Diln Fac:	2.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	4.8
Aroclor-1221	ND	27	13
Aroclor-1232	ND	14	6.3
Aroclor-1242	ND	14	5.8
Aroclor-1248	ND	14	6.2
Aroclor-1254	ND	14	5.0
Aroclor-1260	24	14	3.1

Surrogate	%REC	Limits
Decachlorobiphenyl	86	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Field ID:	DTSC-19A	Batch#:	270651
Type:	SAMPLE	Analyzed:	05/22/19
Lab ID:	309926-009	Prep:	EPA 3546
Diln Fac:	3.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	39	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	12
Aroclor-1248	ND	20	4.8
Aroclor-1254	ND	20	9.9
Aroclor-1260	24	20	9.5

Surrogate	%REC	Limits
Decachlorobiphenyl	136	49-157

Field ID:	DTSC-20A	Batch#:	270651
Type:	SAMPLE	Analyzed:	05/22/19
Lab ID:	309926-010	Prep:	EPA 3546
Diln Fac:	3.000		

Analyte	Result	RL	MDL
Aroclor-1016	ND	20	13
Aroclor-1221	ND	39	23
Aroclor-1232	ND	20	11
Aroclor-1242	ND	20	11
Aroclor-1248	ND	20	4.8
Aroclor-1254	ND	20	9.9
Aroclor-1260	38	20	9.5

Surrogate	%REC	Limits
Decachlorobiphenyl	122	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Analysis:	EPA 8082
Project#:	16-1498E		
Matrix:	Soil	Sampled:	05/17/19
Units:	ug/Kg	Received:	05/17/19
Basis:	air dried	Prepared:	05/21/19

Type:	BLANK	Batch#:	270642
Lab ID:	QC976395	Analyzed:	05/22/19
Diln Fac:	1.000	Prep:	EPA 3550C

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	2.4
Aroclor-1221	ND	24	6.4
Aroclor-1232	ND	12	3.1
Aroclor-1242	ND	12	2.9
Aroclor-1248	ND	12	3.0
Aroclor-1254	ND	12	2.4
Aroclor-1260	ND	12	1.5

Surrogate	%REC	Limits
Decachlorobiphenyl	96	49-157

Type:	BLANK	Batch#:	270651
Lab ID:	QC976433	Analyzed:	05/22/19
Diln Fac:	1.000	Prep:	EPA 3546

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	4.4
Aroclor-1221	ND	24	7.7
Aroclor-1232	ND	12	3.8
Aroclor-1242	ND	12	3.9
Aroclor-1248	ND	12	1.6
Aroclor-1254	ND	12	3.4
Aroclor-1260	ND	12	3.2

Surrogate	%REC	Limits
Decachlorobiphenyl	74	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976403	Batch#:	270642
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	146.7	88	63-143
Aroclor-1260	166.7	147.6	89	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	89	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	DTSC-17C	Batch#:	270642
MSS Lab ID:	309926-005	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976404

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<4.640	165.2	150.7	91	62-160
Aroclor-1260	13.55	165.2	155.0	86	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	81	49-157

Type: MSD Lab ID: QC976405

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	166.9	171.4	103	62-160	12	43
Aroclor-1260	166.9	175.8	97	53-172	12	44

Surrogate	%REC	Limits
Decachlorobiphenyl	91	49-157

RPD= Relative Percent Difference

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976434	Batch#:	270651
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/22/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	174.0	104	63-143
Aroclor-1260	166.7	204.9	123	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	118	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	ZZZZZZZZZZ	Batch#:	270651
MSS Lab ID:	310026-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	air dried	Analyzed:	05/22/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976435

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<8.862	166.3	177.2	107	62-160
Aroclor-1260	<6.456	166.3	187.3	113	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	103	49-157

Type: MSD Lab ID: QC976436

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	163.9	159.9	98	62-160	9	43
Aroclor-1260	163.9	167.9	102	53-172	9	44

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05B	Batch#:	270707
Lab ID:	309926-001	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	1.9	0.13
Arsenic	5.4	1.5	0.18
Barium	88	0.24	0.036
Beryllium	0.33	0.097	0.0049
Cadmium	0.33	0.24	0.022
Chromium	43	0.24	0.036
Cobalt	9.4	0.24	0.016
Copper	30	0.24	0.055
Lead	27	0.97	0.12
Molybdenum	0.66	0.24	0.018
Nickel	48	0.24	0.042
Selenium	ND	1.9	0.19
Silver	0.070 J	0.24	0.050
Thallium	ND	0.49	0.16
Vanadium	39	0.24	0.051
Zinc	67	0.97	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-06B	Batch#:	270707
Lab ID:	309926-002	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	6.5	1.5	0.18
Barium	87	0.25	0.036
Beryllium	0.34	0.099	0.0050
Cadmium	0.35	0.25	0.023
Chromium	42	0.25	0.037
Cobalt	9.1	0.25	0.016
Copper	28	0.25	0.056
Lead	24	0.99	0.12
Molybdenum	1.0	0.25	0.019
Nickel	46	0.25	0.043
Selenium	ND	2.0	0.19
Silver	0.097 J	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	37	0.25	0.052
Zinc	71	0.99	0.23

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-07B	Batch#:	270707
Lab ID:	309926-003	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	6.1	1.5	0.18
Barium	80	0.25	0.036
Beryllium	0.36	0.10	0.0050
Cadmium	0.38	0.25	0.023
Chromium	45	0.25	0.037
Cobalt	9.5	0.25	0.016
Copper	28	0.25	0.056
Lead	25	1.0	0.12
Molybdenum	0.67	0.25	0.019
Nickel	43	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	40	0.25	0.052
Zinc	70	1.0	0.23

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-08B	Batch#:	270707
Lab ID:	309926-004	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	1.9	0.13
Arsenic	5.0	1.4	0.17
Barium	71	0.24	0.035
Beryllium	0.27	0.096	0.0048
Cadmium	0.29	0.24	0.022
Chromium	39	0.24	0.035
Cobalt	8.4	0.24	0.016
Copper	27	0.24	0.054
Lead	30	0.96	0.12
Molybdenum	0.50	0.24	0.018
Nickel	37	0.24	0.041
Selenium	ND	1.9	0.18
Silver	0.074 J	0.24	0.049
Thallium	ND	0.48	0.16
Vanadium	35	0.24	0.050
Zinc	64	0.96	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-17C	Batch#:	270707
Lab ID:	309926-005	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	6.2	1.5	0.18
Barium	83	0.24	0.036
Beryllium	0.33	0.098	0.0049
Cadmium	0.33	0.24	0.022
Chromium	41	0.24	0.036
Cobalt	9.0	0.24	0.016
Copper	29	0.24	0.055
Lead	25	0.98	0.12
Molybdenum	0.54	0.24	0.018
Nickel	44	0.24	0.042
Selenium	ND	2.0	0.19
Silver	ND	0.24	0.050
Thallium	ND	0.49	0.16
Vanadium	39	0.24	0.051
Zinc	62	0.98	0.22

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-19C	Batch#:	270707
Lab ID:	309926-006	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	9.0	1.5	0.18
Barium	98	0.24	0.036
Beryllium	0.36	0.098	0.0049
Cadmium	0.35	0.24	0.022
Chromium	44	0.24	0.036
Cobalt	8.9	0.24	0.016
Copper	29	0.24	0.055
Lead	32	0.98	0.12
Molybdenum	0.77	0.24	0.018
Nickel	43	0.24	0.042
Selenium	ND	2.0	0.19
Silver	0.065 J	0.24	0.050
Thallium	ND	0.49	0.16
Vanadium	42	0.24	0.051
Zinc	67	0.98	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-20C	Batch#:	270707
Lab ID:	309926-007	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	6.3	1.5	0.18
Barium	83	0.25	0.036
Beryllium	0.31	0.099	0.0050
Cadmium	0.32	0.25	0.023
Chromium	45	0.25	0.037
Cobalt	8.1	0.25	0.016
Copper	29	0.25	0.056
Lead	33	0.99	0.12
Molybdenum	0.71	0.25	0.019
Nickel	37	0.25	0.043
Selenium	ND	2.0	0.19
Silver	0.10 J	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	41	0.25	0.052
Zinc	65	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-17A	Batch#:	270707
Lab ID:	309926-008	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	5.4	1.5	0.18
Barium	110	0.25	0.036
Beryllium	0.36	0.099	0.0050
Cadmium	0.32	0.25	0.023
Chromium	48	0.25	0.037
Cobalt	9.1	0.25	0.016
Copper	26	0.25	0.056
Lead	30	0.99	0.12
Molybdenum	0.91	0.25	0.019
Nickel	44	0.25	0.043
Selenium	ND	2.0	0.19
Silver	0.11 J	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	42	0.25	0.052
Zinc	63	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-19A	Batch#:	270707
Lab ID:	309926-009	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	5.4	1.5	0.18
Barium	82	0.25	0.036
Beryllium	0.32	0.10	0.0050
Cadmium	0.29	0.25	0.023
Chromium	44	0.25	0.037
Cobalt	7.9	0.25	0.016
Copper	25	0.25	0.056
Lead	27	1.0	0.12
Molybdenum	0.53	0.25	0.019
Nickel	42	0.25	0.043
Selenium	ND	2.0	0.19
Silver	0.17 J	0.25	0.051
Thallium	ND	0.50	0.17
Vanadium	37	0.25	0.052
Zinc	63	1.0	0.23

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-20A	Batch#:	270707
Lab ID:	309926-010	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	ND	1.9	0.13
Arsenic	4.5	1.5	0.17
Barium	62	0.24	0.035
Beryllium	0.23	0.097	0.0049
Cadmium	0.42	0.24	0.022
Chromium	36	0.24	0.036
Cobalt	7.7	0.24	0.016
Copper	25	0.24	0.055
Lead	33	0.97	0.12
Molybdenum	0.71	0.24	0.018
Nickel	31	0.24	0.042
Selenium	ND	1.9	0.19
Silver	0.051 J	0.24	0.050
Thallium	ND	0.49	0.16
Vanadium	32	0.24	0.051
Zinc	76	0.97	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270679
Matrix:	Soil	Sampled:	05/17/19
Units:	mg/Kg	Received:	05/17/19
Basis:	dry	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/22/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-05B	SAMPLE	309926-011	0.19	0.018	0.0055	10%
DTSC-06B	SAMPLE	309926-012	0.17	0.018	0.0053	9%
DTSC-07B	SAMPLE	309926-013	0.16	0.019	0.0056	9%
DTSC-08B	SAMPLE	309926-014	0.096	0.018	0.0054	8%
DTSC-17C	SAMPLE	309926-015	0.16	0.019	0.0056	7%
DTSC-19C	SAMPLE	309926-016	0.18	0.018	0.0055	7%
DTSC-20C	SAMPLE	309926-017	0.22	0.018	0.0053	8%
DTSC-17A	SAMPLE	309926-018	0.21	0.020	0.0059	8%
DTSC-19A	SAMPLE	309926-019	0.21	0.019	0.0057	11%
DTSC-20A	SAMPLE	309926-020	0.17	0.017	0.0051	10%
	BLANK	QC976548	ND	0.016	0.0049	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270679
MSS Lab ID:	310057-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/21/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	as received	Analyzed:	05/22/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC976549		0.1587	0.1696	107	80-120		
BSD	QC976550		0.1724	0.1779	103	80-120	3	20
MS	QC976551	7.250	0.1538	4.561 >LR	-1748 NM	80-120		
MSD	QC976552		0.1667	6.369 >LR	-529 NM	80-120	NC	20

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976650	Batch#:	270707
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.13
Arsenic	ND	1.5	0.18
Barium	0.12 J	0.25	0.036
Beryllium	ND	0.099	0.0050
Cadmium	ND	0.25	0.023
Chromium	0.043 J	0.25	0.037
Cobalt	ND	0.25	0.016
Copper	0.10 J	0.25	0.056
Lead	ND	0.99	0.12
Molybdenum	0.024 J	0.25	0.019
Nickel	ND	0.25	0.043
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.051
Thallium	ND	0.50	0.16
Vanadium	ND	0.25	0.052
Zinc	ND	0.99	0.22

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270707
Units:	mg/Kg	Prepared:	05/22/19
Diln Fac:	1.000	Analyzed:	05/23/19

Type: BS Lab ID: QC976651

Analyte	Spiked	Result	%REC	Limits
Antimony	49.95	46.11	92	80-120
Arsenic	49.95	48.47	97	80-120
Barium	49.95	48.52	97	80-120
Beryllium	24.98	23.46	94	80-120
Cadmium	49.95	48.14	96	80-120
Chromium	49.95	50.60	101	80-120
Cobalt	49.95	47.64	95	80-120
Copper	49.95	48.62	97	80-120
Lead	49.95	47.37	95	80-120
Molybdenum	49.95	47.08	94	80-120
Nickel	49.95	46.23	93	80-120
Selenium	49.95	47.15	94	80-120
Silver	4.995	4.496	90	80-120
Thallium	49.95	50.23	101	80-120
Vanadium	49.95	50.84	102	80-120
Zinc	49.95	46.14	92	80-120

Type: BSD Lab ID: QC976652

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.75	48.46	97	80-120	5	20
Arsenic	49.75	48.09	97	80-120	0	20
Barium	49.75	47.84	96	80-120	1	20
Beryllium	24.88	23.87	96	80-120	2	20
Cadmium	49.75	48.04	97	80-120	0	20
Chromium	49.75	49.07	99	80-120	3	20
Cobalt	49.75	47.58	96	80-120	0	20
Copper	49.75	47.92	96	80-120	1	20
Lead	49.75	49.39	99	80-120	5	20
Molybdenum	49.75	46.15	93	80-120	2	20
Nickel	49.75	46.09	93	80-120	0	20
Selenium	49.75	47.31	95	80-120	1	20
Silver	4.975	4.541	91	80-120	1	20
Thallium	49.75	49.49	99	80-120	1	20
Vanadium	49.75	50.12	101	80-120	1	20
Zinc	49.75	45.63	92	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05B	Batch#:	270707
MSS Lab ID:	309926-001	Sampled:	05/17/19
Matrix:	Soil	Received:	05/17/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	air dried	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976653

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	<0.1279	49.46	14.41	29 *	75-120
Arsenic	5.370	49.46	54.04	98	80-121
Barium	87.54	49.46	151.3	129 *	75-125
Beryllium	0.3336	24.73	23.96	96	80-120
Cadmium	0.3334	49.46	49.50	99	80-120
Chromium	43.17	49.46	90.41	96	75-125
Cobalt	9.366	49.46	53.08	88	75-120
Copper	29.63	49.46	80.10	102	80-125
Lead	27.35	49.46	75.41	97	75-125
Molybdenum	0.6565	49.46	40.74	81	75-120
Nickel	47.90	49.46	90.96	87	75-125
Selenium	<0.1861	49.46	46.90	95	80-120
Silver	0.07046	4.946	4.962	99	75-120
Thallium	<0.1618	49.46	42.61	86	75-120
Vanadium	39.07	49.46	89.45	102	78-125
Zinc	67.45	49.46	160.6	188 *	75-125

Type: MSD Lab ID: QC976654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.85	17.69	35 *	75-120	20	20
Arsenic	49.85	53.65	97	80-121	1	20
Barium	49.85	146.8	119	75-125	3	20
Beryllium	24.93	23.97	95	80-120	1	20
Cadmium	49.85	49.51	99	80-120	1	20
Chromium	49.85	90.88	96	75-125	0	20
Cobalt	49.85	52.70	87	75-120	1	20
Copper	49.85	81.99	105	80-125	2	20
Lead	49.85	71.00	88	75-125	7	20
Molybdenum	49.85	41.95	83	75-120	2	20
Nickel	49.85	86.81	78	75-125	5	20
Selenium	49.85	46.13	93	80-120	2	20
Silver	4.985	4.747	94	75-120	5	20
Thallium	49.85	42.09	84	75-120	2	20
Vanadium	49.85	90.48	103	78-125	1	20
Zinc	49.85	107.9	81	75-125	40 *	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270705
Matrix:	Soil	Sampled:	05/17/19
Units:	%	Received:	05/17/19
Diln Fac:	1.000	Analyzed:	05/23/19

Field ID	Lab ID	Result	RL
DTSC-05B	309926-011	10	1
DTSC-06B	309926-012	9	1
DTSC-07B	309926-013	9	1
DTSC-08B	309926-014	8	1
DTSC-17C	309926-015	7	1
DTSC-19C	309926-016	7	1
DTSC-20C	309926-017	8	1
DTSC-17A	309926-018	8	1
DTSC-19A	309926-019	11	1
DTSC-20A	309926-020	10	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	309926	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	DTSC-19C	Diln Fac:	1.000
Type:	SDUP	Batch#:	270705
MSS Lab ID:	309926-016	Sampled:	05/17/19
Lab ID:	QC976648	Received:	05/17/19
Matrix:	Soil	Analyzed:	05/23/19

MSS Result	Result	RL	RPD	Lim
7.069	7.117	1.000	1	26

RL= Reporting Limit

RPD= Relative Percent Difference



ENTHALPY

ANALYTICAL



Enthalpy Analytical

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

Laboratory Job Number 310051 ANALYTICAL REPORT

RPS
1438 Webster Street
Oakland, CA 94612

Project : 16-1498E
Location : Alameda Landing
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
DTSC-05A	310051-001
DTSC-06A	310051-002
DTSC-07A	310051-003
DTSC-08A	310051-004
DTSC-05C	310051-005
DTSC-06C	310051-006
DTSC-07C	310051-007
DTSC-08C	310051-008
DTSC-05A	310051-009
DTSC-06A	310051-010
DTSC-07A	310051-011
DTSC-08A	310051-012
DTSC-05C	310051-013
DTSC-06C	310051-014
DTSC-07C	310051-015
DTSC-08C	310051-016

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 which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

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Date: 05/30/2019

CASE NARRATIVE

Laboratory number: 310051
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/21/19
Samples Received: 05/20/19

This data package contains sample and QC results for eight soil samples, requested for the above referenced project on 05/21/19. The samples were received cold and intact.

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

Gasoline C7-C12 was detected between the MDL and the RL in the method blank for batch 270817; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

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

Matrix spikes were not performed for this analysis in batch 270667 due to insufficient sample amount. Naphthalene and 1,2,3-trichlorobenzene were detected between the MDL and the RL in the method blank for batch 270667; these analytes were not detected in samples at or above the RL. No other analytical problems were encountered.

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

Matrix spikes QC976364, QC976365 (batch 270633) were not reported because the parent sample required a dilution that would have diluted out the spikes. High surrogate recoveries were observed for nitrobenzene-d5 in the method blank/LCS for batch 270633. Many samples were diluted due to the dark and viscous nature of the sample extracts. No other analytical problems were encountered.

Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisol cleanup using EPA Method 3620C. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

PCBs (EPA 8082):

All samples underwent sulfuric acid cleanup using EPA Method 3665A. All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. Many samples were diluted due to the color of the sample extracts. No other analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 310051
Client: RPS
Project: 16-1498E
Location: Alameda Landing
Request Date: 05/21/19
Samples Received: 05/20/19

Metals (EPA 6010B and EPA 7471A):

Low recoveries were observed for antimony in the MS/MSD of DTSC-08C (lab # 310051-008); the BS/BSD were within limits, and the associated RPD was within limits. High RPD was observed for mercury in the MS/MSD for batch 270851; the parent sample was not a project sample, and the RPD was acceptable in the BS/BSD. A number of analytes were detected between the MDL and the RL in the method blank for batch 270836; these analytes were detected in samples at a level at least 10 times that of the blank. No other analytical problems were encountered.

Moisture (EPA CLP):

No analytical problems were encountered.

Detections Summary for 310051

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

Client : RPS
 Project : 16-1498E
 Location : Alameda Landing

Client Sample ID : DTSC-05A

Laboratory Sample ID :

310051-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.56	C,J	5.7	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	1.2	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.1	J	11	0.41	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.6	J	11	1.1	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.4	J	11	0.77	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.6	C,J	11	0.46	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	3.4	C,J	5.7	0.73	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	4.9	J	5.7	0.57	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	33		14	7.2	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.44	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.6		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	82		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.28		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.23	J	0.25	0.017	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.015	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	26		1.0	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	1.1		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	43		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	69		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-06A

Laboratory Sample ID :

310051-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	0.47	J	5.6	0.43	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Dieldrin	1.5	J	11	0.44	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.48	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endosulfan sulfate	1.6	C,J	11	0.90	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	0.60	C,J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	2.5	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	3.6	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	4.5	J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	15		13	9.2	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.55	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.8		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	79		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.22	J	0.25	0.017	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	37		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.7		0.25	0.015	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	28		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		1.0	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.84		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	41		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	31		0.25	0.053	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	65		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-07A

Laboratory Sample ID :

310051-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.0	C,J	11	0.43	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.4	J	11	0.49	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.8	C,J	5.4	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.2	J	5.4	0.54	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	24		13	8.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.35	J	1.9	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.9		1.5	0.064	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	75		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.25		0.097	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.18	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.3		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.24	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	25		0.97	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.85		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	42		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		0.97	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-08A

Laboratory Sample ID :

310051-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.91	J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	1.6	J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	0.75	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Antimony	0.32	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	3.6		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	59		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.22		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.095	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	36		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	6.3		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	15		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	16		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.47		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	33		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	29		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	41		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-05C

Laboratory Sample ID :

310051-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.2	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	0.56	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.4	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	2.5	C,J	5.6	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	3.4	J	5.6	0.56	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	22		13	7.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.30	J	2.0	0.067	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.0		1.5	0.065	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	78		0.24	0.029	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.27		0.098	0.0098	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.15	J	0.24	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.24	0.048	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.24	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	22		0.24	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	23		0.98	0.055	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.80		0.24	0.025	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	47		0.24	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.24	0.051	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	54		0.98	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-06C

Laboratory Sample ID :

310051-006

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
alpha-Chlordane	3.8	C,J	11	1.4	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
gamma-Chlordane	5.3	J	11	1.1	ug/Kg	Air Dried	10.00	EPA 8081A	EPA 3546
Aroclor-1260	12	J	13	6.9	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.55	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	4.6		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	65		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.26		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.16	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	42		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.0		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	21		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	19		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.68		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	41		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	78		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-07C

Laboratory Sample ID :

310051-007

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	0.91	C,J	11	0.43	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	2.9	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	0.52	C,J	11	0.33	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	2.4	J	11	0.39	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	3.5	J	11	1.7	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	1.8	C,J	5.5	0.70	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	2.7	J	5.5	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	15		13	9.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.21	J	2.0	0.069	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.1		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	84		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.30		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.20	J	0.25	0.017	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	47		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	9.0		0.25	0.015	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	27		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	38		1.0	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.77		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	50		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	37		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	68		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-08C

Laboratory Sample ID :

310051-008

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Dieldrin	1.4	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDE	2.1	J	11	0.50	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Endrin	1.0	J	11	1.0	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDD	1.3	J	11	0.40	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
4,4'-DDT	1.6	C,J	11	0.45	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
alpha-Chlordane	0.72	C,J	5.5	0.72	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
gamma-Chlordane	0.99	J	5.5	0.55	ug/Kg	Air Dried	5.000	EPA 8081A	EPA 3546
Aroclor-1260	22		13	7.0	ug/Kg	Air Dried	2.000	EPA 8082	EPA 3546
Antimony	0.86	J	2.0	0.068	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Arsenic	5.6		1.5	0.066	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Barium	71		0.25	0.030	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Beryllium	0.22		0.10	0.010	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cadmium	0.16	J	0.25	0.016	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Chromium	38		0.25	0.049	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Cobalt	8.3		0.25	0.014	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Copper	24		0.25	0.057	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Lead	23		1.0	0.056	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Molybdenum	0.65		0.25	0.026	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Nickel	37		0.25	0.050	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Vanadium	32		0.25	0.052	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B
Zinc	62		1.0	0.21	mg/Kg	Air Dried	1.000	EPA 6010B	EPA 3050B

Client Sample ID : DTSC-05A

Laboratory Sample ID :

310051-009

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.48	J	4.6	0.33	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	58	Y	11	3.2	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Motor Oil C24-C36	350		53	16	mg/Kg	Dry	10.00	EPA 8015B	EPA 3550C
Naphthalene	19	J	87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	45	J	87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Acenaphthene	18	J	87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Phenanthrene	250		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Anthracene	63	J	87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Fluoranthene	470		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Pyrene	750		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	240		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Chrysene	280		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	470		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	390		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	220		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	44	J	87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	330		87	17	ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	530				ug/Kg	Dry	16.67	EPA 8270C-SIM	EPA 3550C
Mercury	0.17		0.017	0.0030	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	5		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-06A

Laboratory Sample ID :

310051-010

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.64	J	4.9	0.35	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	52	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	200		28	8.5	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	60		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	210		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	24	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	34	J	57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	510		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	130		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	900		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,700		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	460		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	530		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	930		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	260		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	850		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	500		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	88		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	700		57	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,100				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.59		0.017	0.0030	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-07A

Laboratory Sample ID :

310051-011

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.67	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	35	Y	5.5	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	180		28	8.4	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	22	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	41	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	18	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	16	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	200		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	54	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	440		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	940		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	270		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	330		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	550		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	440		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	250		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	48	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	360		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	600				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.23		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-08A

Laboratory Sample ID :

310051-012

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.95	J	5.2	0.37	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	68	Y	5.4	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	290		27	8.2	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	22	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	37	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	40	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	29	J	53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	300		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	85		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	550		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,300		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	290		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	350		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	620		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	170		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	480		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	290		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	55		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	410		53	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	660				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.087		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-05C

Laboratory Sample ID :

310051-013

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.58	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	42	Y	5.4	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	290		27	8.2	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	82	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	250	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	68	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	600		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	910		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	300		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	350		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	610		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	190	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	490		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	270		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	57	J	270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	460		270	54	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	670				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.13		0.018	0.0031	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	8		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-06C

Laboratory Sample ID :

310051-014

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.75	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	48	Y	5.6	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		28	8.5	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	130	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	420		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Anthracene	88	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	1,000		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Pyrene	1,600		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	510		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Chrysene	660		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	950		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	350		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	1,100		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	590		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	98	J	280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	730		280	56	ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	1,400				ug/Kg	Dry	50.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.14		0.019	0.0033	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	11		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-07C

Laboratory Sample ID :

310051-015

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	1.9	J	4.7	0.34	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	41	Y	5.5	1.7	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	190		27	8.3	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Acenaphthylene	29	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	320		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Anthracene	75	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	660		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Pyrene	960		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	290		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Chrysene	380		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	550		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	150		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	520		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	270		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	45	J	140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	330		140	28	ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	680				ug/Kg	Dry	25.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.28		0.020	0.0035	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	9		1		%	As Recd	1.000	EPA CLP	METHOD

Client Sample ID : DTSC-08C

Laboratory Sample ID :

310051-016

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Gasoline C7-C12	0.83	J	5.2	0.38	mg/Kg	Dry	25.00	EPA 8015B	EPA 5035
Diesel C10-C24	71	Y	5.3	1.6	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Motor Oil C24-C36	410		27	8.1	mg/Kg	Dry	5.000	EPA 8015B	EPA 3550C
Naphthalene	13	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthylene	14	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Acenaphthene	27	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluorene	18	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Phenanthrene	200		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Anthracene	49	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Fluoranthene	390		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Pyrene	570		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)anthracene	190		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Chrysene	250		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(b)fluoranthene	350		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(k)fluoranthene	98		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(a)pyrene	300		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Indeno(1,2,3-cd)pyrene	130		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Dibenz(a,h)anthracene	26	J	54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Benzo(g,h,i)perylene	140		54	11	ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Total Benzo(a)pyrene Equiv.	390				ug/Kg	Dry	10.00	EPA 8270C-SIM	EPA 3550C
Mercury	0.12		0.018	0.0032	mg/Kg	Dry	1.000	EPA 7471A	METHOD
Moisture, Percent	7		1		%	As Recd	1.000	EPA CLP	METHOD

C = Presence confirmed, but RPD between columns exceeds 40%

J = Estimated value

Y = Sample exhibits chromatographic pattern which does not resemble standard



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 (510) 834-4199 fax

CHAIN-OF-CUSTODY

Date: 5/20/19

Page: 1 of 1

Analyses Required

Sampler Name(s):
 Lizzie Hightower
 Mayra Dudrenova

Signature(s):

LAB ID	SAMPLE ID	DATE	TIME	MATRIX	PRES	TPH-g; -d; -mo by Method 8015	VOCs by USEPA Method 8260	PAHs by USEPA Method 8270	CAM 17 Metals by USEPA Method 6010/6020/7470	Organochlorine Pesticides by USEPA Method 8081	Polychlorinated biphenyls by USEPA Method 8082	Moisture Content by ASTM D2216	MIS dry	Number of Containers
1	DTSC-05a	5/20/19	1550	SOIL	None meth	X	X	X	X	X	X	X	X	1
2	DTSC-06a		1555			X	X	X	X	X	X	X	X	1
3	DTSC-07a		1545			X	X	X	X	X	X	X		
4	DTSC-08a		1600			X	X	X	X	X	X	X		
5	DTSC-05c		1140			X	X	X	X	X	X	X		
6	DTSC-06c		1145			X	X	X	X	X	X	X		
7	DTSC-07c		1150			X	X	X	X	X	X	X		
8	DTSC-08c		1155			X	X	X	X	X	X	X		

PROJECT INFORMATION

Project Name: Alameda Landing Waterfront

Project Number: 16-1498E

Contact Person: Jeff Martin; Kevin Halpin; Lizzie Hightower

E-mail: jeff.martin@rpsgroup.com; kevin.halpin@rpsgroup.com; elizabeth.hightower@rpsgroup.com

Contact Telephone: (510) 834-4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 2-hr 48-hr 24-hr Other:

RELINQUISHED BY:

Printed Name: Mayra Dudrenova

Signature:

Company: RPS

Time/Date: 5/20/19 / 17:27

RECEIVED BY:

Printed Name: Haley Campbell

Signature:

Company: EA

Time/Date: 5/20/19 17:27

Special Instructions/Comments:

Moisture, PAH, Hg, and TPH-d - no dry. All other analyses MIS-dry

RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

RECEIVED BY:

Printed Name

Signature

Company

Time/Date

SAMPLE RECEIPT CHECKLIST

Section 1: Login # 310051 Client: RPS
 Date Received: 5-20-19 Project: _____



Section 2: Samples received in a cooler? Yes, how many? _____ No (skip Section 3 below)
 If no cooler Sample Temp (°C): _____ using IR Gun # A, or B
 Samples received on ice directly from the field. Cooling process had begun
 If in cooler: Date Opened 5-20-19 By (print) af (sign) af
 Shipping info (if applicable) _____
 Are custody seals present? No, or Yes. If yes, where? on cooler, on samples, on package
 Date: _____ How many _____ Signature, Initials, None
 Were custody seals intact upon arrival? Yes No N/A

Section 3: Important : Notify PM if temperature exceeds 6°C or arrive frozen.

Packing in cooler: (if other, describe) _____
 Bubble Wrap, Foam blocks, Bags, None, Cloth material, Cardboard, Styrofoam, Paper towels
 Samples received on ice directly from the field. Cooling process had begun
 Type of ice used: Wet, Blue/Gel, None Temperature blank(s) included? Yes, No
 Temperature measured using Thermometer ID: _____, or IR Gun # A B
 Cooler Temp (°C): #1: 9.4, #2: _____, #3: _____, #4: _____, #5: _____, #6: _____, #7: _____

Section 4:	YES	NO	N/A
Were custody papers dry, filled out properly, and the project identifiable	<input checked="" type="checkbox"/>		
Were Method 5035 sampling containers present?	<input checked="" type="checkbox"/>		
If YES, what time were they transferred to freezer? <u>10:15 AM</u>			
Did all bottles arrive unbroken/unopened?	<input checked="" type="checkbox"/>		
Are there any missing / extra samples?		<input checked="" type="checkbox"/>	
Are samples in the appropriate containers for indicated tests?	<input checked="" type="checkbox"/>		
Are sample labels present, in good condition and complete?	<input checked="" type="checkbox"/>		
Does the container count match the COC?	<input checked="" type="checkbox"/>		
Do the sample labels agree with custody papers?	<input checked="" type="checkbox"/>		
Was sufficient amount of sample sent for tests requested?	<input checked="" type="checkbox"/>		
Did you change the hold time in LIMS for unpreserved VOAs?			<input checked="" type="checkbox"/>
Did you change the hold time in LIMS for preserved terracores?	<input checked="" type="checkbox"/>		
Are bubbles > 6mm absent in VOA samples?			<input checked="" type="checkbox"/>
Was the client contacted concerning this sample delivery?		<input checked="" type="checkbox"/>	
If YES, who was called? _____ By _____ Date: _____			

Section 5:

	YES	NO	N/A
Are the samples appropriately preserved? (if N/A, skip the rest of section 5)			<input checked="" type="checkbox"/>
Did you check preservatives for all bottles for each sample?			
Did you document your preservative check? pH strip lot# _____, pH strip lot# _____, pH strip lot# _____			
Preservative added:			
<input type="checkbox"/> H2SO4 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HCL lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> HNO3 lot# _____ added to samples _____ on/at _____			
<input type="checkbox"/> NaOH lot# _____ added to samples _____ on/at _____			

Section 6:
 Explanations/Comments: _____

Date Logged in 5/21/19 By (print) AC (sign) AC
 Date Labeled 5/21/19 By (print) AC (sign) AC

Gasoline by GC/FID (5035 Prep)			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/28/19
Batch#:	270817		

Field ID: DTSC-05A Moisture: 5%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-009

Analyte	Result	RL	MDL
Gasoline C7-C12	0.48 J	4.6	0.33

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	74	58-145

Field ID: DTSC-06A Moisture: 11%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-010

Analyte	Result	RL	MDL
Gasoline C7-C12	0.64 J	4.9	0.35

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

Field ID: DTSC-07A Moisture: 9%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-011

Analyte	Result	RL	MDL
Gasoline C7-C12	0.67 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Gasoline by GC/FID (5035 Prep)			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/28/19
Batch#:	270817		

Field ID: DTSC-08A Moisture: 8%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-012

Analyte	Result	RL	MDL
Gasoline C7-C12	0.95 J	5.2	0.37

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	70	58-145

Field ID: DTSC-05C Moisture: 8%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-013

Analyte	Result	RL	MDL
Gasoline C7-C12	0.58 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	63	58-145

Field ID: DTSC-06C Moisture: 11%
 Type: SAMPLE Diln Fac: 25.00
 Lab ID: 310051-014

Analyte	Result	RL	MDL
Gasoline C7-C12	0.75 J	4.7	0.34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	66	58-145

J= Estimated value
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	270817
Units:	mg/Kg	Analyzed:	05/28/19
Diln Fac:	1.000		

Type: BS Lab ID: QC977099

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9938	99	80-122

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	62	58-145

Type: BSD Lab ID: QC977100

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1.000	1.064	106	80-122	7	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	67	58-145

RPD= Relative Percent Difference

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5030B
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	310061-015	Batch#:	270817
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/21/19
Basis:	as received	Analyzed:	05/29/19

Type: MS Lab ID: QC977101

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.2387	10.31	8.344	79	51-120

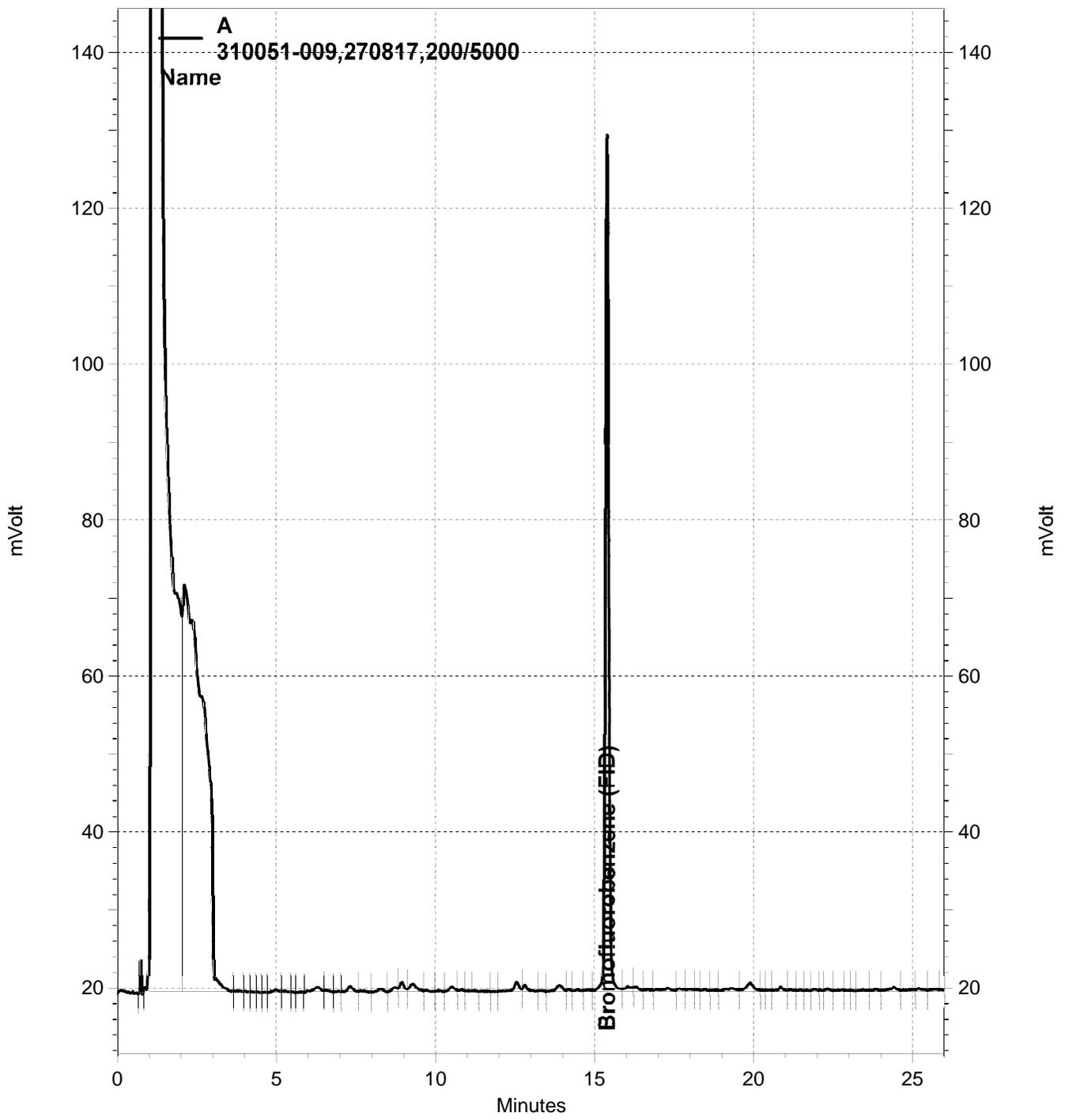
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	68	58-145

Type: MSD Lab ID: QC977102

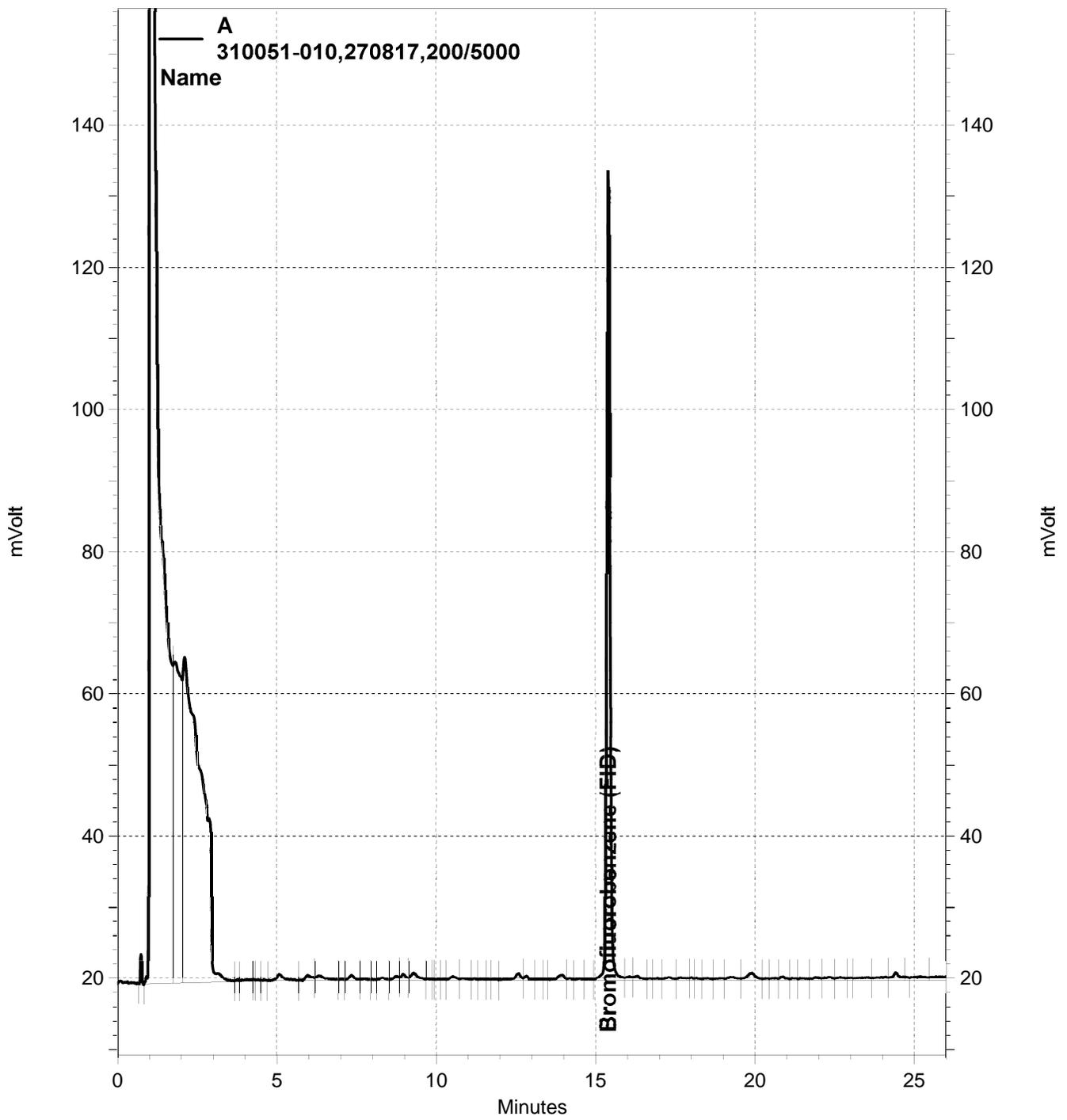
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.259	7.438	78	51-120	1	29

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	67	58-145

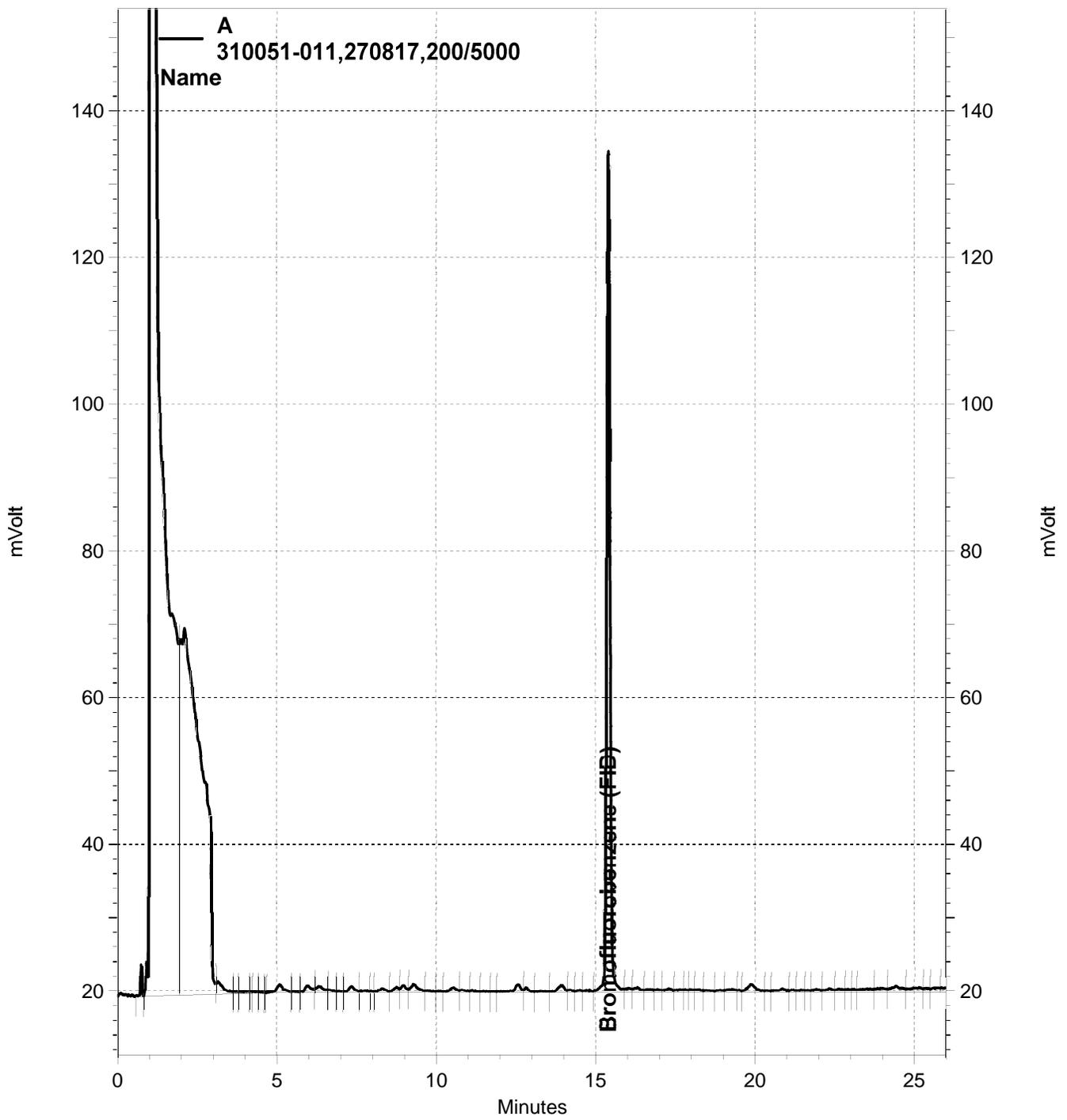
RPD= Relative Percent Difference



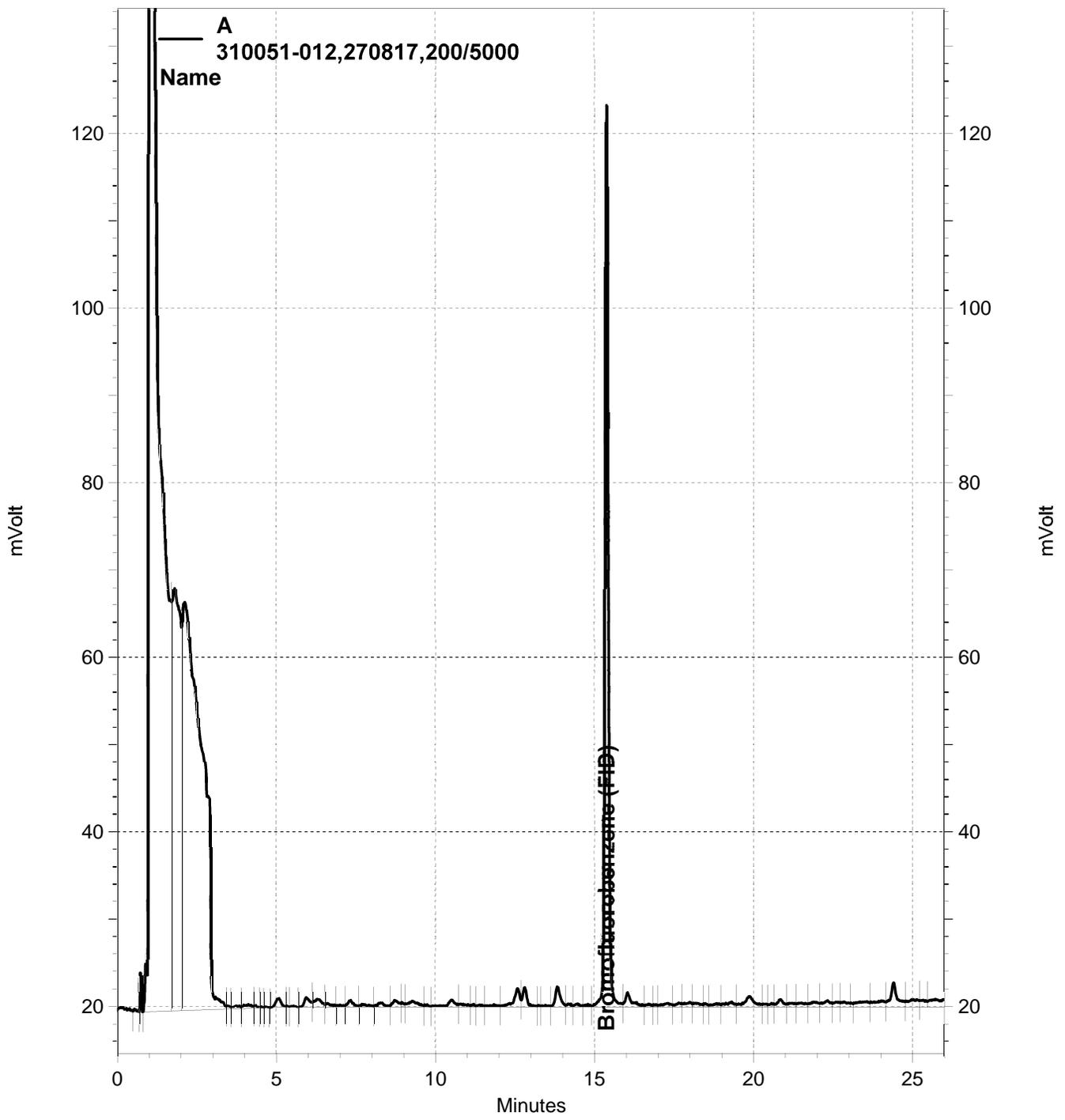
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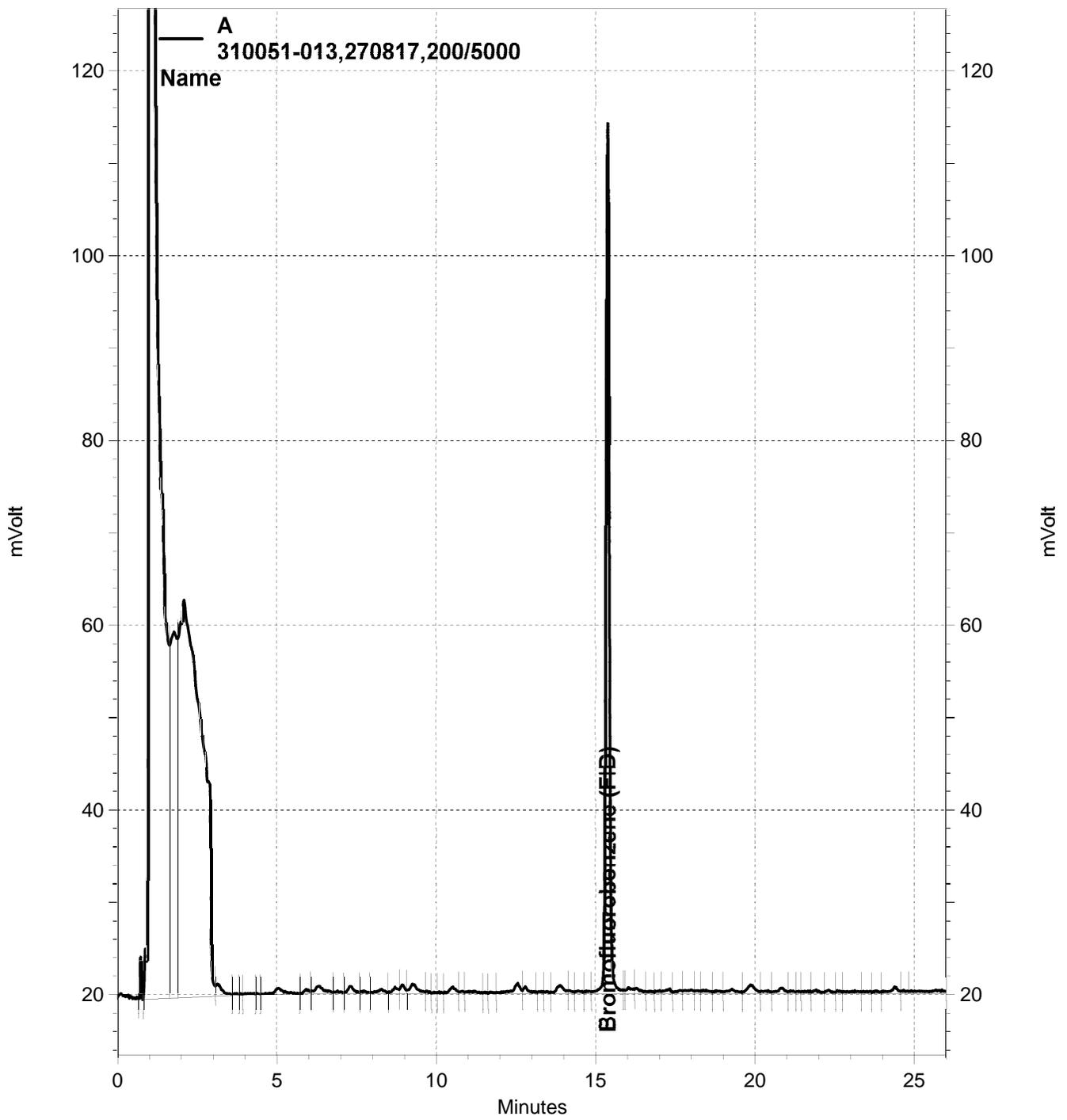
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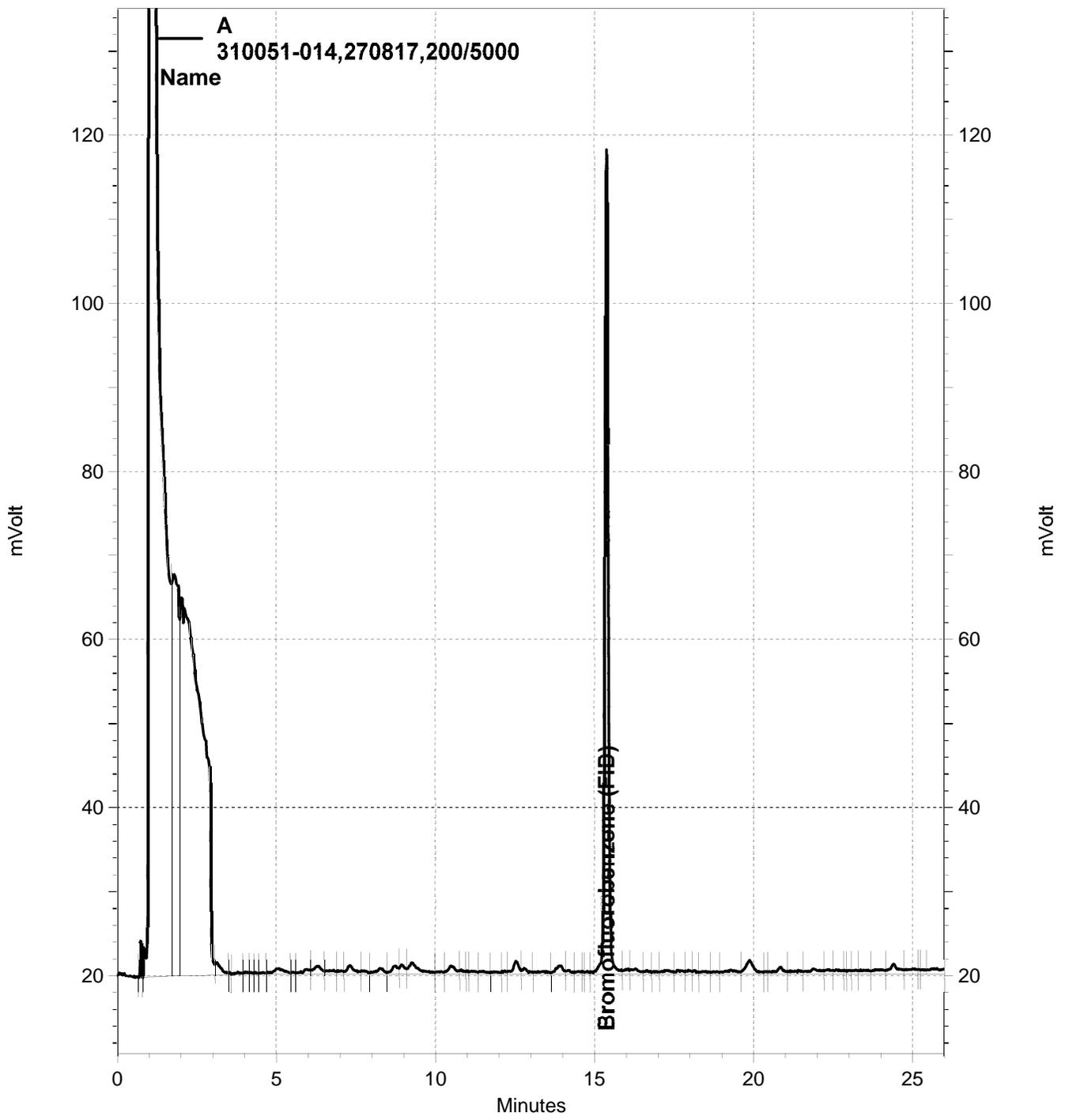
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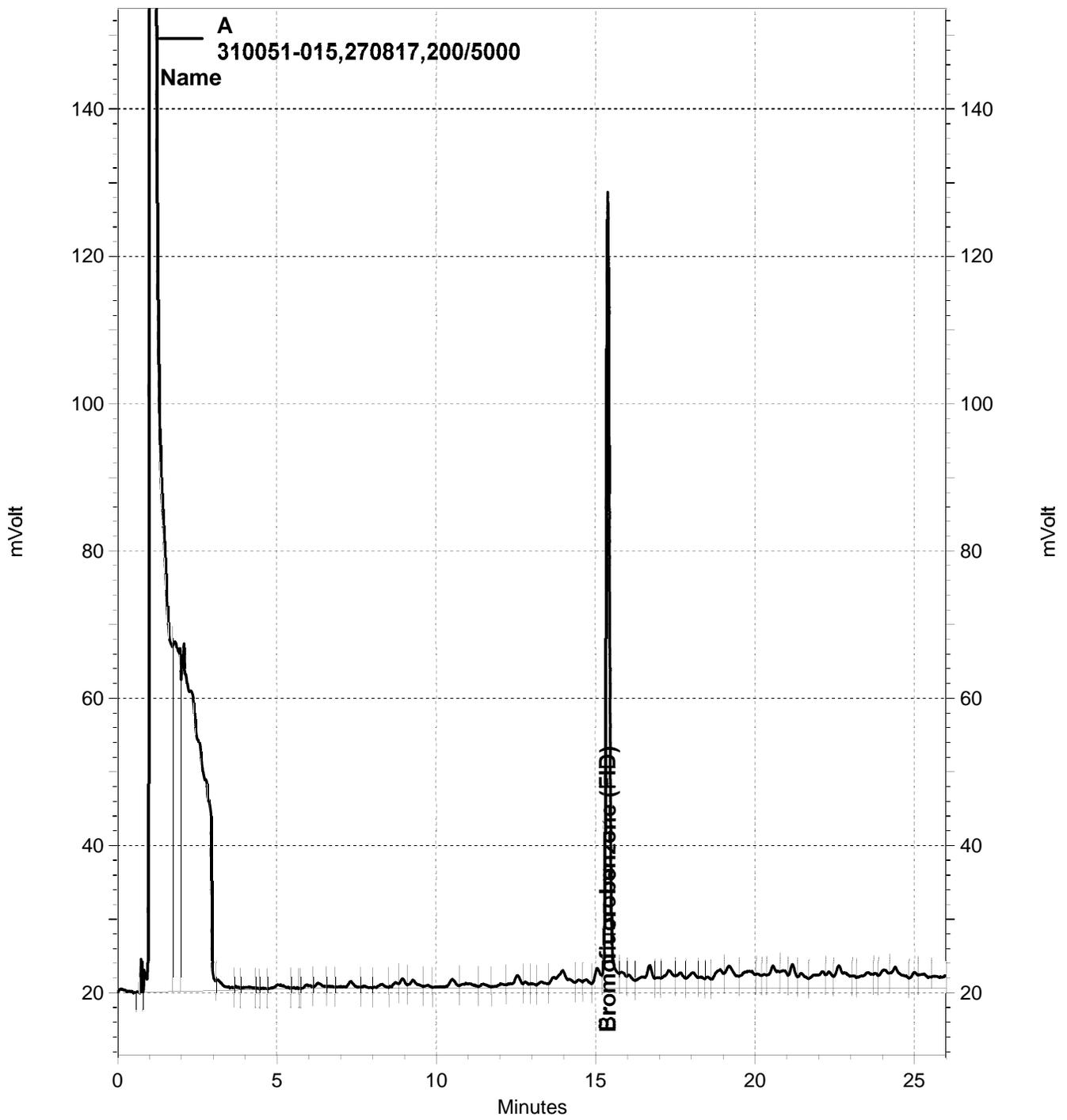
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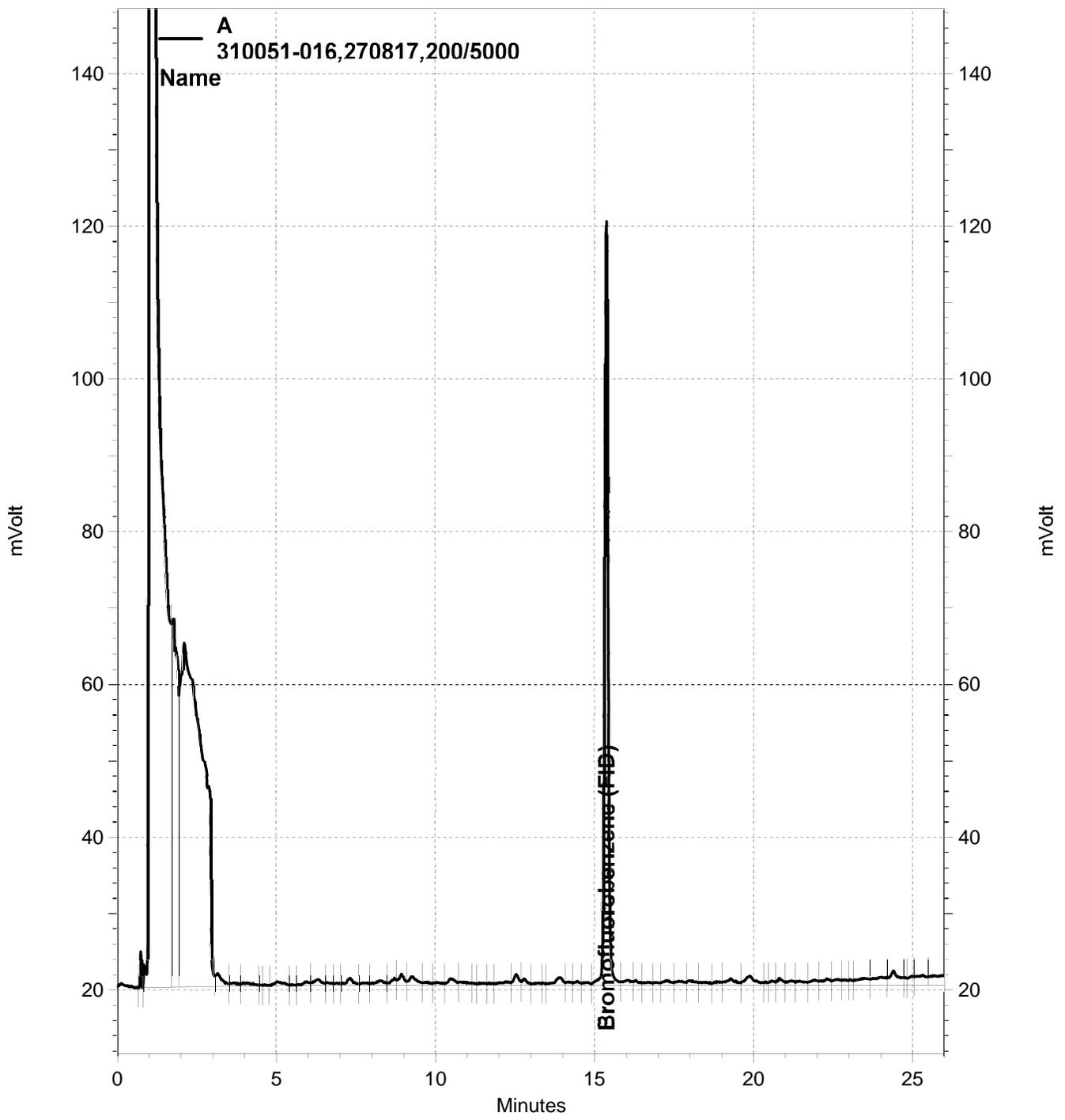
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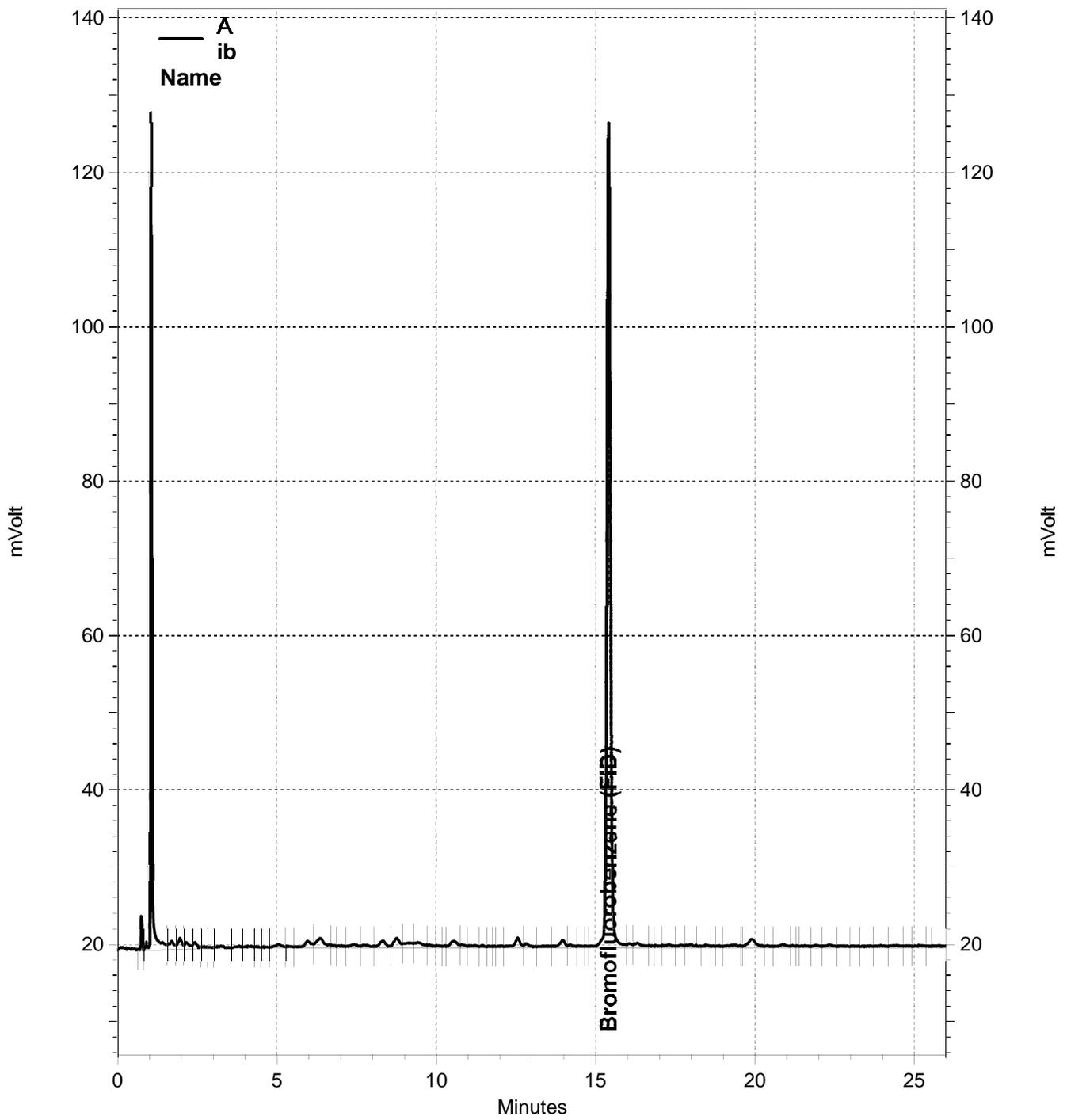
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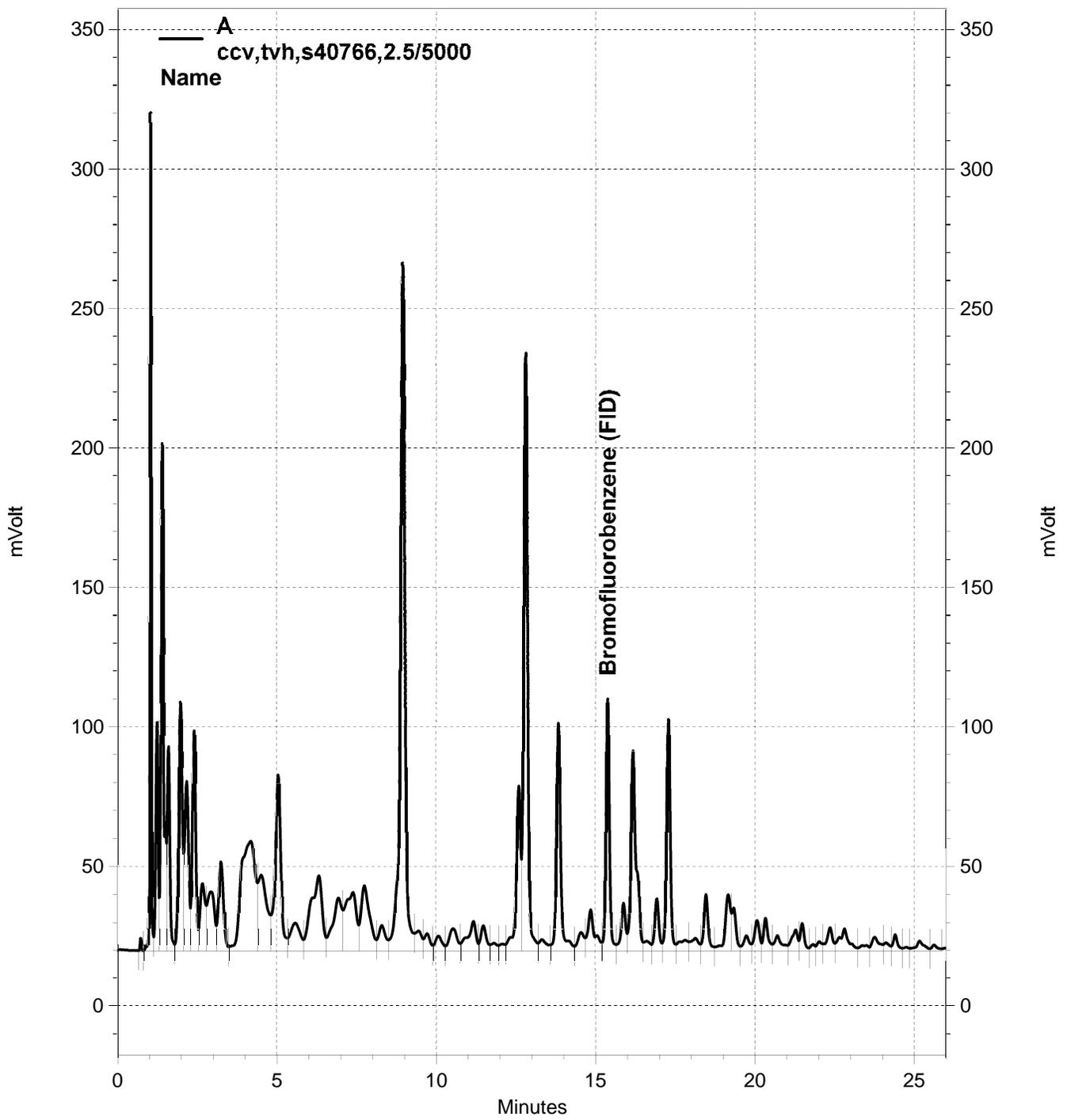
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Total Extractable Hydrocarbons			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	dry	Prepared:	05/22/19
Batch#:	270695		

Field ID: DTSC-05A Moisture: 5%
 Type: SAMPLE Diln Fac: 10.00
 Lab ID: 310051-009 Analyzed: 05/28/19

Analyte	Result	RL	MDL
Diesel C10-C24	58 Y	11	3.2
Motor Oil C24-C36	350	53	16

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-06A Moisture: 11%
 Type: SAMPLE Diln Fac: 5.000
 Lab ID: 310051-010 Analyzed: 05/28/19

Analyte	Result	RL	MDL
Diesel C10-C24	52 Y	5.6	1.7
Motor Oil C24-C36	200	28	8.5

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-07A Moisture: 9%
 Type: SAMPLE Diln Fac: 5.000
 Lab ID: 310051-011 Analyzed: 05/28/19

Analyte	Result	RL	MDL
Diesel C10-C24	35 Y	5.5	1.7
Motor Oil C24-C36	180	28	8.4

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Field ID: DTSC-08A Moisture: 8%
 Type: SAMPLE Diln Fac: 5.000
 Lab ID: 310051-012 Analyzed: 05/28/19

Analyte	Result	RL	MDL
Diesel C10-C24	68 Y	5.4	1.7
Motor Oil C24-C36	290	27	8.2

Surrogate	%REC	Limits
o-Terphenyl	DO	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Total Extractable Hydrocarbons			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	dry	Prepared:	05/22/19
Batch#:	270695		

Type: BLANK Diln Fac: 1.000
 Lab ID: QC976619 Analyzed: 05/24/19

Analyte	Result	RL	MDL
Diesel C10-C24	ND	1.0	0.31
Motor Oil C24-C36	ND	5.0	1.5

Surrogate	%REC	Limits
o-Terphenyl	121	61-130

Y= Sample exhibits chromatographic pattern which does not resemble standard
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976620	Batch#:	270695
Matrix:	Soil	Prepared:	05/22/19
Units:	mg/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.00	52.66	105	55-133

Surrogate	%REC	Limits
o-Terphenyl	102	61-130

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	270695
MSS Lab ID:	310026-002	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/22/19
Basis:	as received	Analyzed:	05/23/19
Diln Fac:	1.000		

Type: MS Lab ID: QC976621

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	2.016	50.13	63.76	123	56-125

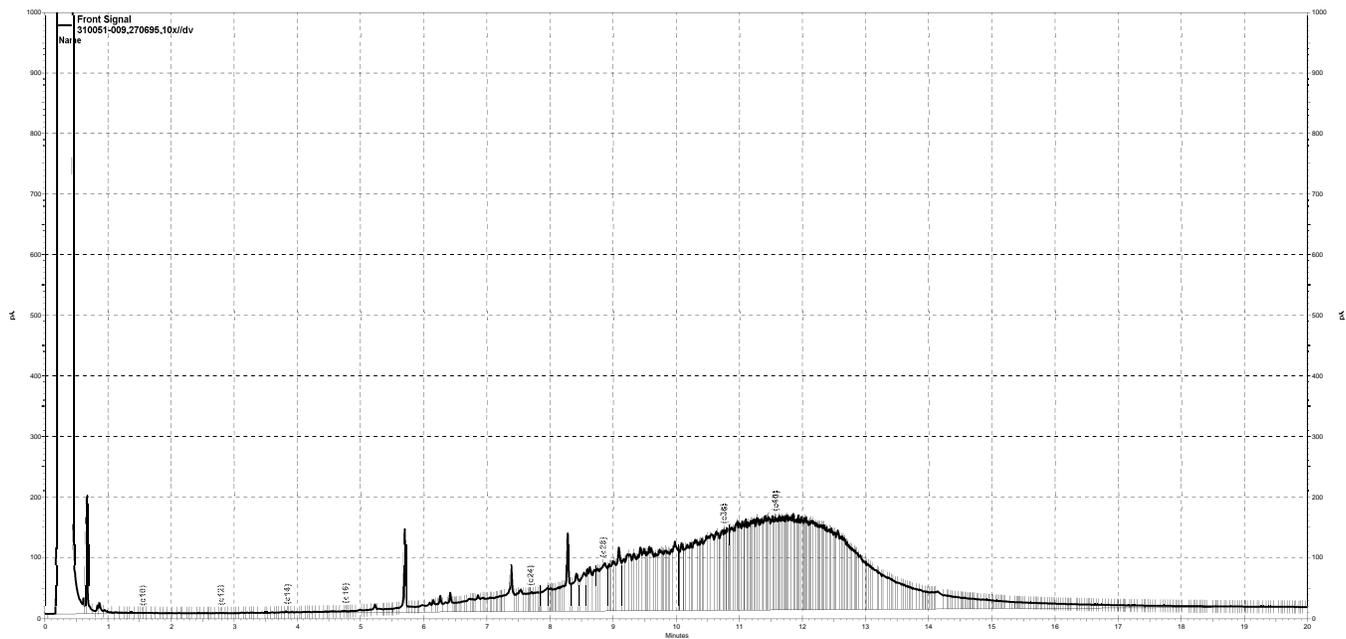
Surrogate	%REC	Limits
o-Terphenyl	88	61-130

Type: MSD Lab ID: QC976622

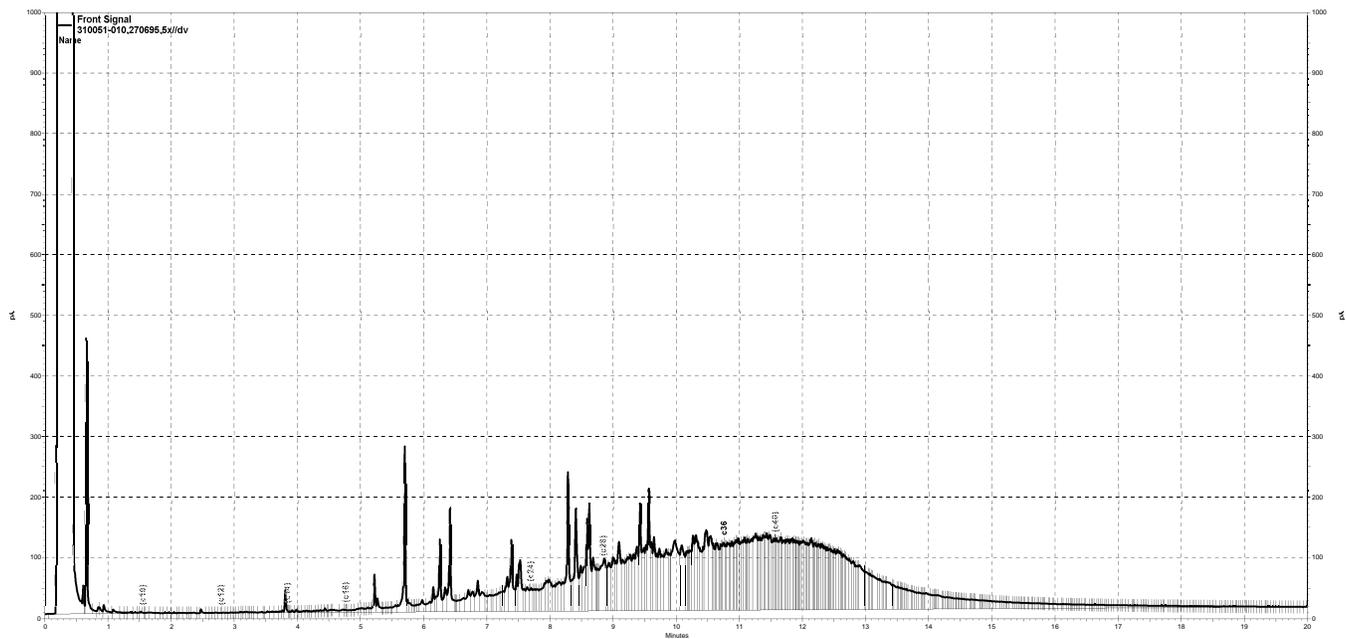
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.19	63.06	122	56-125	1	33

Surrogate	%REC	Limits
o-Terphenyl	90	61-130

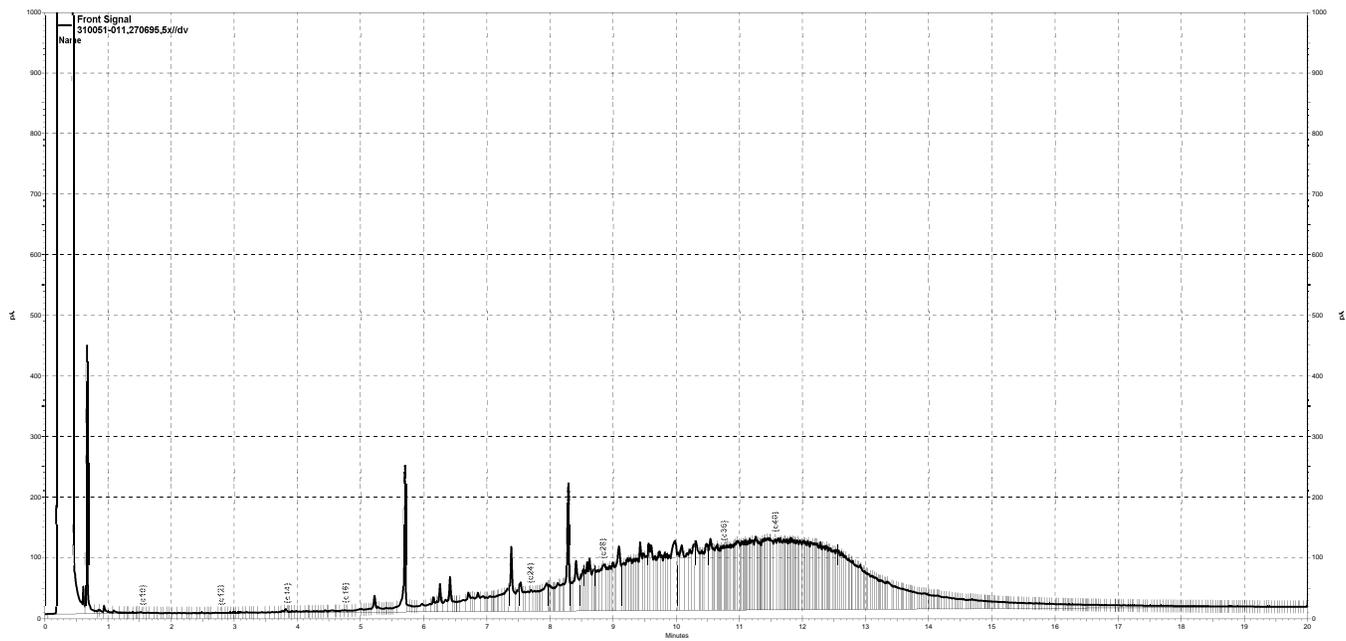
RPD= Relative Percent Difference



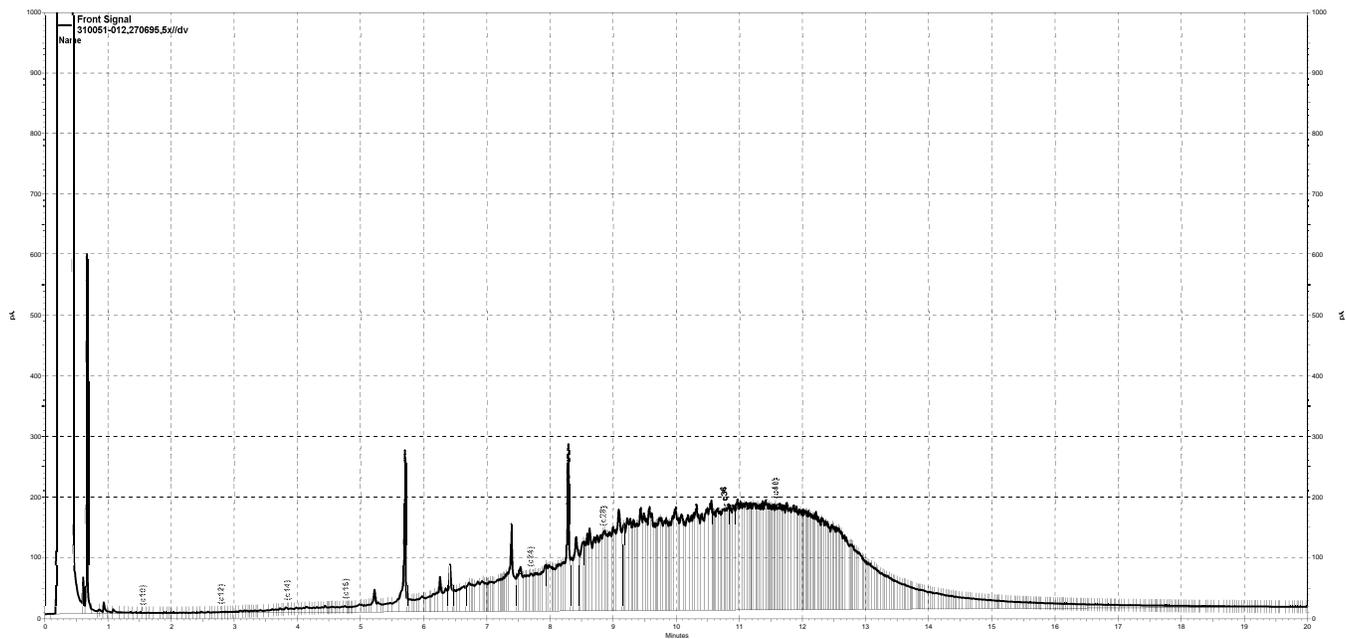
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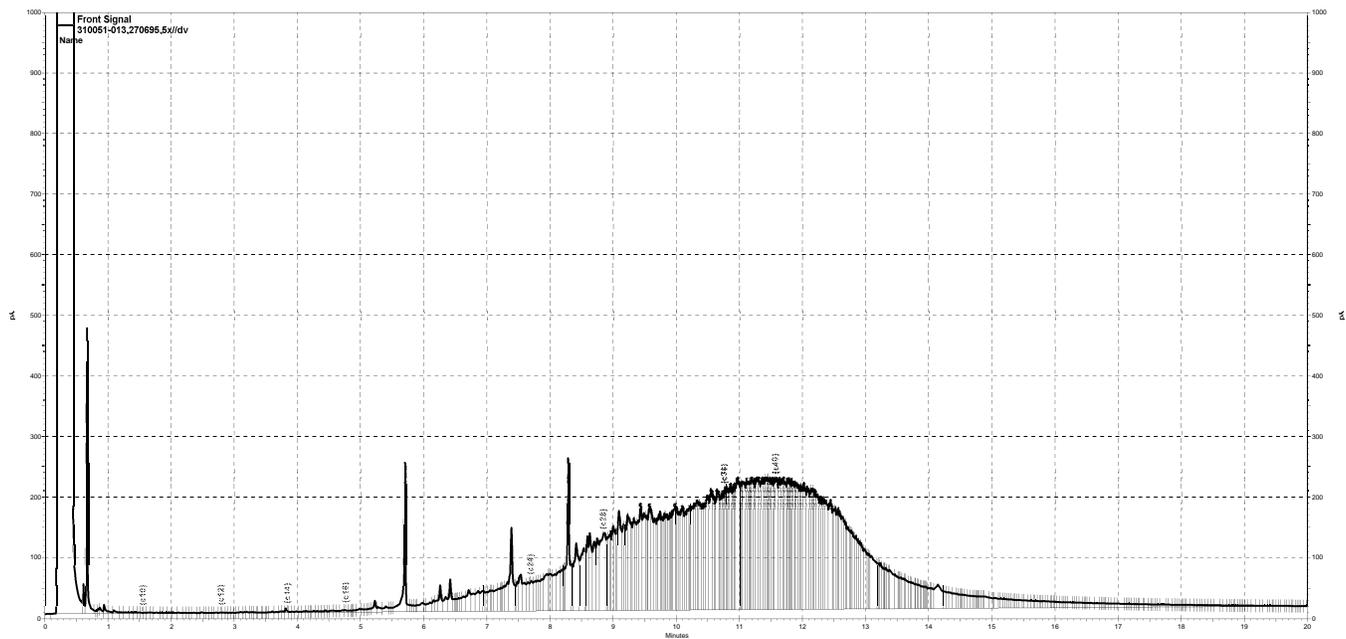
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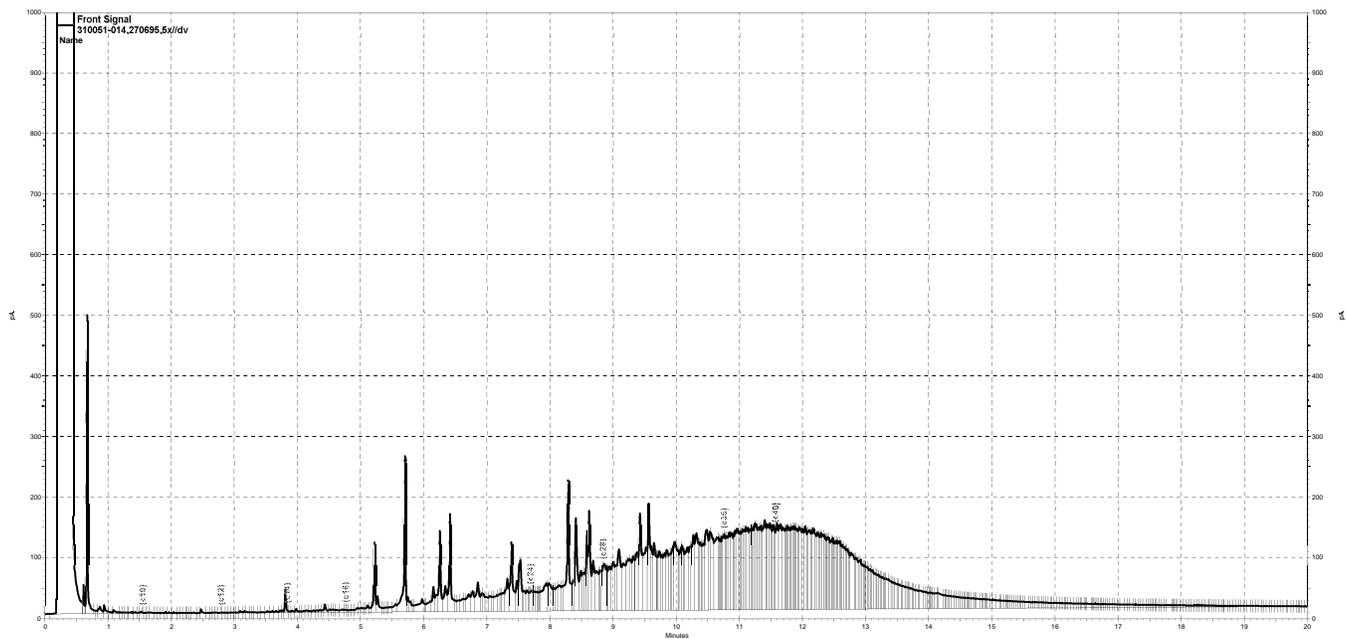
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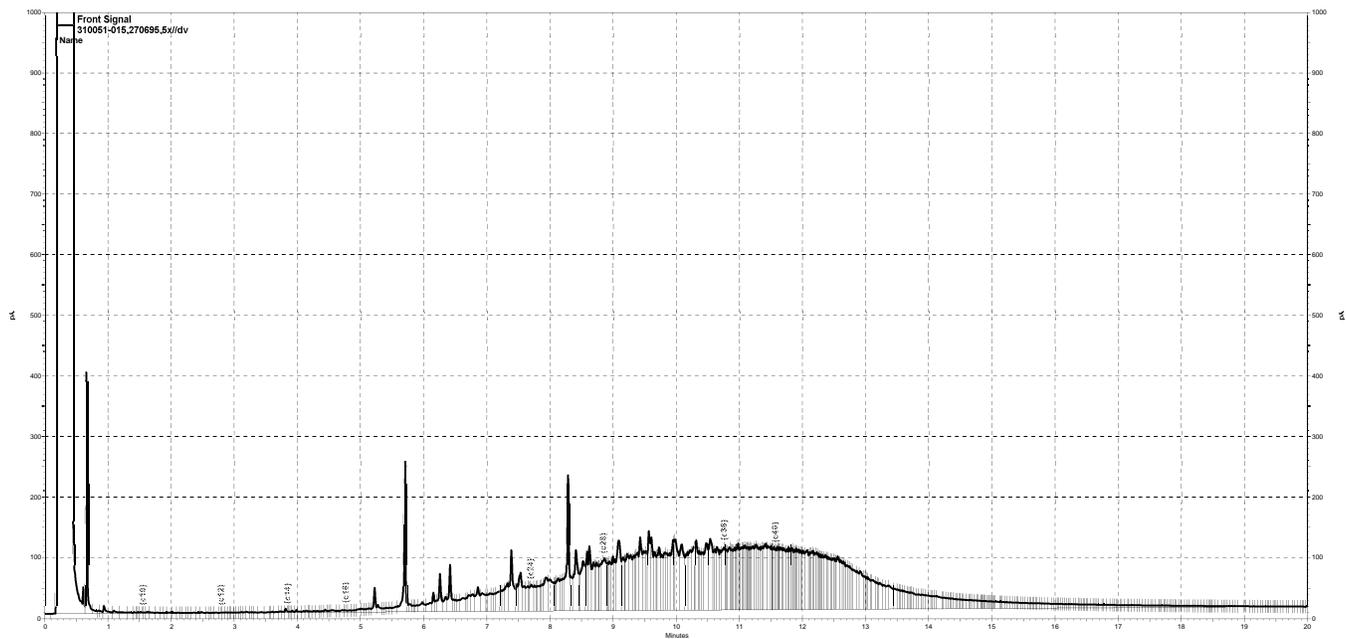
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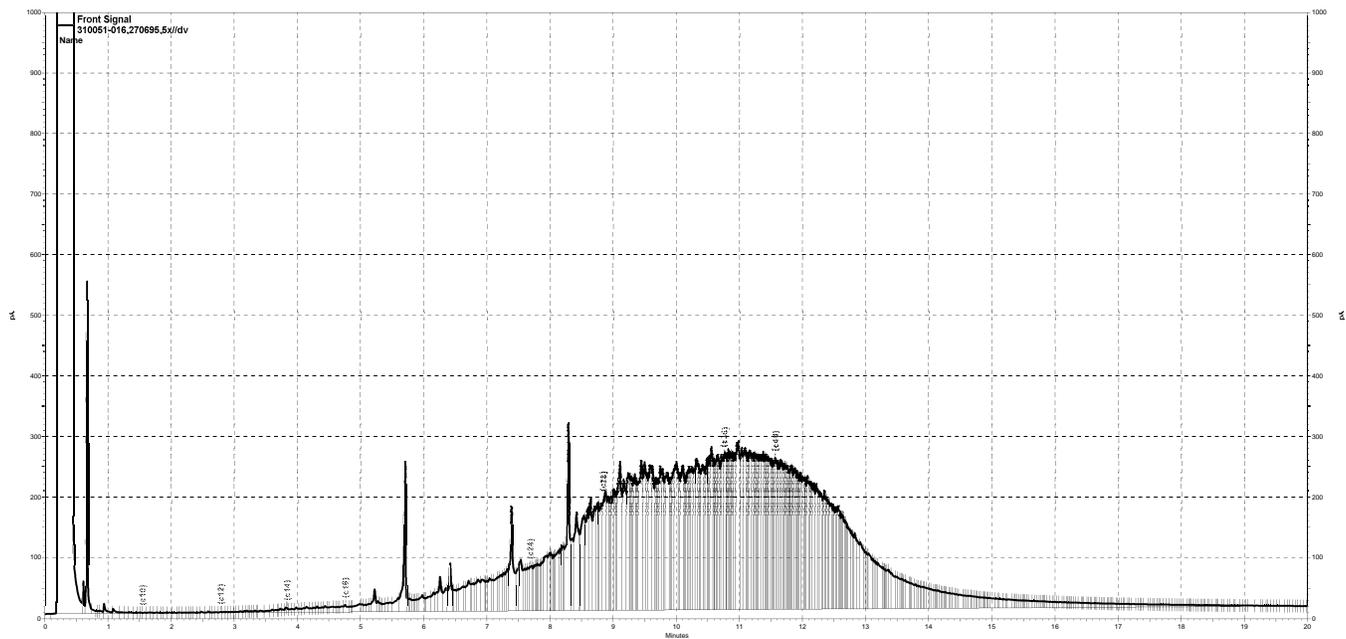
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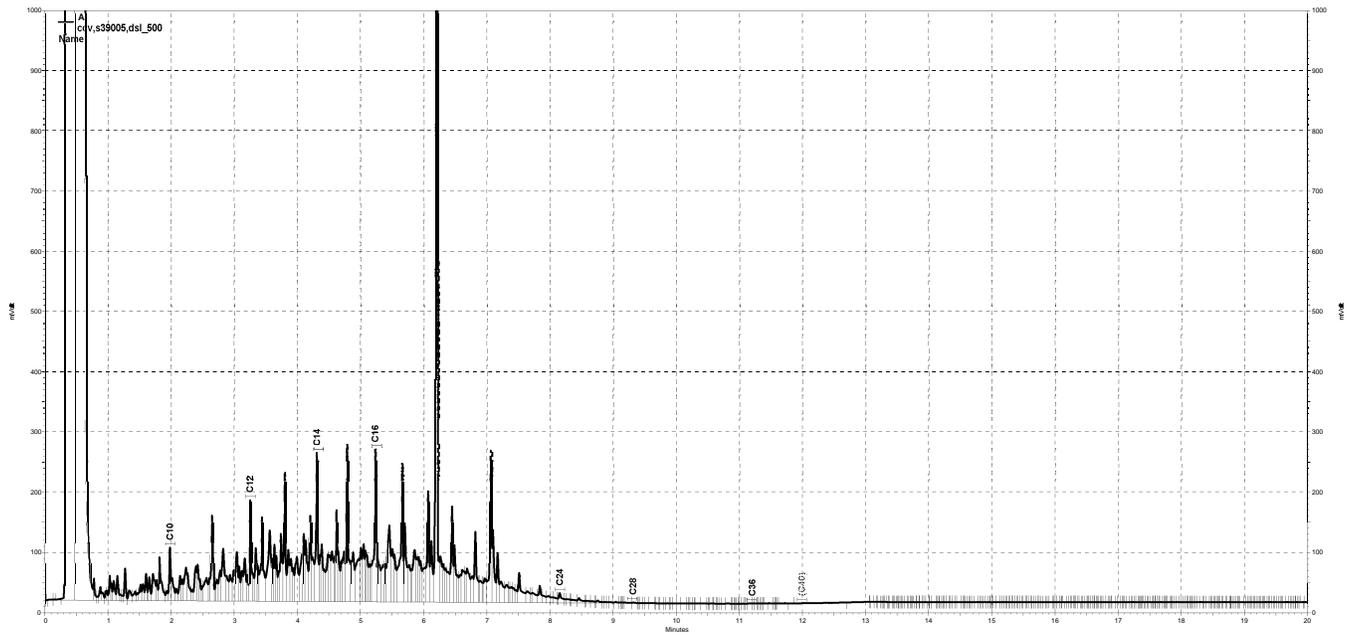
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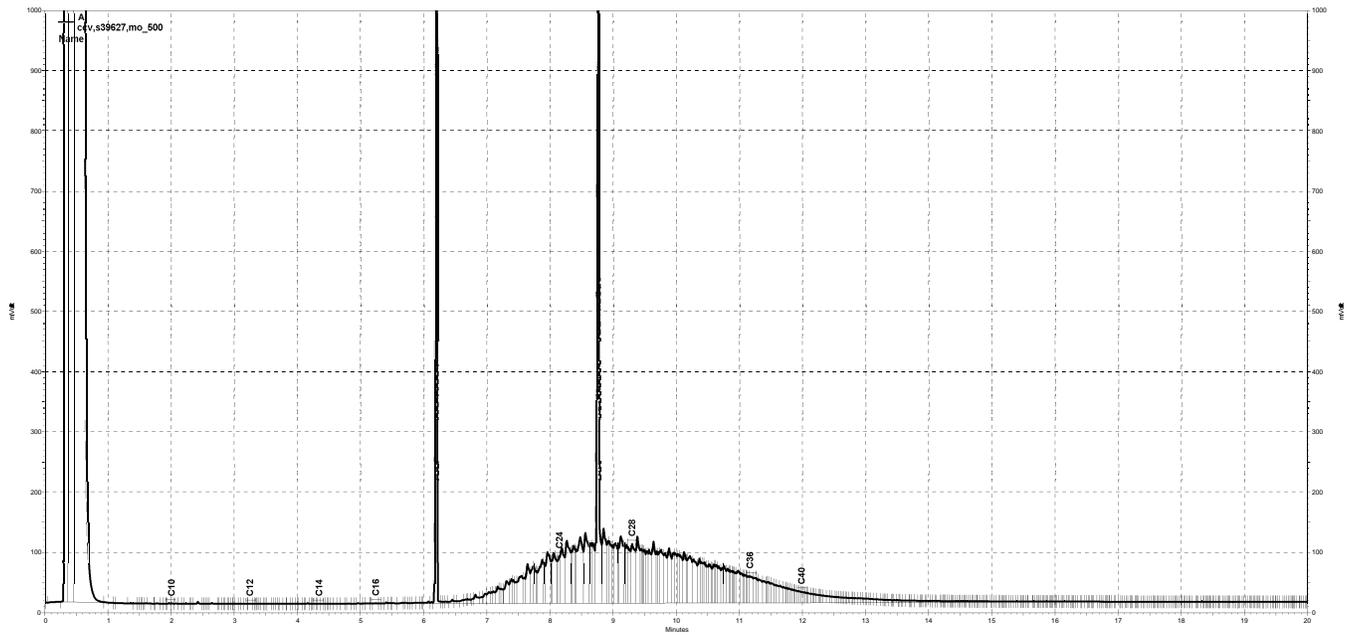
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Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05A	Diln Fac:	43.48
Lab ID:	310051-009	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 5%

Analyte	Result	RL	MDL
Freon 12	ND	460	47
Chloromethane	ND	460	38
Vinyl Chloride	ND	460	35
Bromomethane	ND	460	160
Chloroethane	ND	460	33
Trichlorofluoromethane	ND	230	36
Acetone	ND	920	120
Freon 113	ND	230	45
1,1-Dichloroethene	ND	230	39
Methylene Chloride	ND	1,100	200
Carbon Disulfide	ND	230	44
MTBE	ND	230	41
trans-1,2-Dichloroethene	ND	230	47
Vinyl Acetate	ND	2,300	53
1,1-Dichloroethane	ND	230	43
2-Butanone	ND	460	100
cis-1,2-Dichloroethene	ND	230	46
2,2-Dichloropropane	ND	230	45
Chloroform	ND	230	49
Bromochloromethane	ND	230	49
1,1,1-Trichloroethane	ND	230	49
1,1-Dichloropropene	ND	230	46
Carbon Tetrachloride	ND	230	42
1,2-Dichloroethane	ND	230	38
Benzene	ND	230	40
Trichloroethene	ND	230	46
1,2-Dichloropropane	ND	230	39
Bromodichloromethane	ND	230	41
Dibromomethane	ND	230	38
4-Methyl-2-Pentanone	ND	460	37
cis-1,3-Dichloropropene	ND	230	50
Toluene	ND	230	43
trans-1,3-Dichloropropene	ND	230	42
1,1,2-Trichloroethane	ND	230	44
2-Hexanone	ND	460	42
1,3-Dichloropropane	ND	230	43
Tetrachloroethene	ND	230	44
Dibromochloromethane	ND	230	39
1,2-Dibromoethane	ND	230	40
Chlorobenzene	ND	230	44
1,1,1,2-Tetrachloroethane	ND	230	49
Ethylbenzene	ND	230	47
m,p-Xylenes	ND	230	28
o-Xylene	ND	230	47
Styrene	ND	230	48
Bromoform	ND	230	45
Isopropylbenzene	ND	230	51
1,1,2,2-Tetrachloroethane	ND	230	38
1,2,3-Trichloropropane	ND	230	47
Propylbenzene	ND	230	47
Bromobenzene	ND	230	44

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05A	Diln Fac:	43.48
Lab ID:	310051-009	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	230	48
2-Chlorotoluene	ND	230	52
4-Chlorotoluene	ND	230	48
tert-Butylbenzene	ND	230	53
1,2,4-Trimethylbenzene	ND	230	48
sec-Butylbenzene	ND	230	53
para-Isopropyl Toluene	ND	230	50
1,3-Dichlorobenzene	ND	230	48
1,4-Dichlorobenzene	ND	230	45
n-Butylbenzene	ND	230	50
1,2-Dichlorobenzene	ND	230	52
1,2-Dibromo-3-Chloropropane	ND	230	46
1,2,4-Trichlorobenzene	ND	230	64
Hexachlorobutadiene	ND	230	56
Naphthalene	ND	230	50
1,2,3-Trichlorobenzene	ND	230	61

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	111	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06A	Diln Fac:	43.80
Lab ID:	310051-010	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	490	51
Chloromethane	ND	490	41
Vinyl Chloride	ND	490	37
Bromomethane	ND	490	170
Chloroethane	ND	490	35
Trichlorofluoromethane	ND	250	39
Acetone	ND	980	130
Freon 113	ND	250	49
1,1-Dichloroethene	ND	250	42
Methylene Chloride	ND	1,200	220
Carbon Disulfide	ND	250	48
MTBE	ND	250	44
trans-1,2-Dichloroethene	ND	250	50
Vinyl Acetate	ND	2,500	57
1,1-Dichloroethane	ND	250	46
2-Butanone	ND	490	110
cis-1,2-Dichloroethene	ND	250	49
2,2-Dichloropropane	ND	250	49
Chloroform	ND	250	53
Bromochloromethane	ND	250	52
1,1,1-Trichloroethane	ND	250	52
1,1-Dichloropropene	ND	250	50
Carbon Tetrachloride	ND	250	45
1,2-Dichloroethane	ND	250	41
Benzene	ND	250	43
Trichloroethene	ND	250	49
1,2-Dichloropropane	ND	250	42
Bromodichloromethane	ND	250	44
Dibromomethane	ND	250	41
4-Methyl-2-Pentanone	ND	490	40
cis-1,3-Dichloropropene	ND	250	54
Toluene	ND	250	46
trans-1,3-Dichloropropene	ND	250	45
1,1,2-Trichloroethane	ND	250	48
2-Hexanone	ND	490	45
1,3-Dichloropropane	ND	250	46
Tetrachloroethene	ND	250	48
Dibromochloromethane	ND	250	42
1,2-Dibromoethane	ND	250	43
Chlorobenzene	ND	250	47
1,1,1,2-Tetrachloroethane	ND	250	53
Ethylbenzene	ND	250	50
m,p-Xylenes	ND	250	30
o-Xylene	ND	250	50
Styrene	ND	250	52
Bromoform	ND	250	49
Isopropylbenzene	ND	250	54
1,1,2,2-Tetrachloroethane	ND	250	41
1,2,3-Trichloropropane	ND	250	51
Propylbenzene	ND	250	51
Bromobenzene	ND	250	48

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06A	Diln Fac:	43.80
Lab ID:	310051-010	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	250	51
2-Chlorotoluene	ND	250	56
4-Chlorotoluene	ND	250	52
tert-Butylbenzene	ND	250	57
1,2,4-Trimethylbenzene	ND	250	52
sec-Butylbenzene	ND	250	57
para-Isopropyl Toluene	ND	250	53
1,3-Dichlorobenzene	ND	250	52
1,4-Dichlorobenzene	ND	250	49
n-Butylbenzene	ND	250	54
1,2-Dichlorobenzene	ND	250	56
1,2-Dibromo-3-Chloropropane	ND	250	50
1,2,4-Trichlorobenzene	ND	250	68
Hexachlorobutadiene	ND	250	60
Naphthalene	ND	250	53
1,2,3-Trichlorobenzene	ND	250	66

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	91	80-136
Toluene-d8	102	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07A	Diln Fac:	43.47
Lab ID:	310051-011	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	480	49
Chloromethane	ND	480	40
Vinyl Chloride	ND	480	36
Bromomethane	ND	480	170
Chloroethane	ND	480	34
Trichlorofluoromethane	ND	240	38
Acetone	ND	960	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	480	110
cis-1,2-Dichloroethene	ND	240	48
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	44
1,2-Dichloroethane	ND	240	40
Benzene	ND	240	42
Trichloroethene	ND	240	48
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	43
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	480	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	45
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	480	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	41
1,2-Dibromoethane	ND	240	42
Chlorobenzene	ND	240	46
1,1,1,2-Tetrachloroethane	ND	240	52
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	49
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	53
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	50
Propylbenzene	ND	240	50
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07A	Diln Fac:	43.47
Lab ID:	310051-011	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	50
2-Chlorotoluene	ND	240	55
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	56
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	52
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	53
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	64

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	93	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08A	Diln Fac:	47.38
Lab ID:	310051-012	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	520	53
Chloromethane	ND	520	43
Vinyl Chloride	ND	520	39
Bromomethane	ND	520	180
Chloroethane	ND	520	37
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,000	130
Freon 113	ND	260	51
1,1-Dichloroethene	ND	260	44
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	50
MTBE	ND	260	46
trans-1,2-Dichloroethene	ND	260	53
Vinyl Acetate	ND	2,600	60
1,1-Dichloroethane	ND	260	49
2-Butanone	ND	520	110
cis-1,2-Dichloroethene	ND	260	51
2,2-Dichloropropane	ND	260	51
Chloroform	ND	260	55
Bromochloromethane	ND	260	55
1,1,1-Trichloroethane	ND	260	55
1,1-Dichloropropene	ND	260	52
Carbon Tetrachloride	ND	260	47
1,2-Dichloroethane	ND	260	43
Benzene	ND	260	45
Trichloroethene	ND	260	51
1,2-Dichloropropane	ND	260	44
Bromodichloromethane	ND	260	46
Dibromomethane	ND	260	43
4-Methyl-2-Pentanone	ND	520	42
cis-1,3-Dichloropropene	ND	260	57
Toluene	ND	260	48
trans-1,3-Dichloropropene	ND	260	47
1,1,2-Trichloroethane	ND	260	50
2-Hexanone	ND	520	47
1,3-Dichloropropane	ND	260	49
Tetrachloroethene	ND	260	50
Dibromochloromethane	ND	260	44
1,2-Dibromoethane	ND	260	45
Chlorobenzene	ND	260	49
1,1,1,2-Tetrachloroethane	ND	260	56
Ethylbenzene	ND	260	53
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	52
Styrene	ND	260	54
Bromoform	ND	260	51
Isopropylbenzene	ND	260	57
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	53
Propylbenzene	ND	260	53
Bromobenzene	ND	260	50

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08A	Diln Fac:	47.38
Lab ID:	310051-012	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	54
2-Chlorotoluene	ND	260	59
4-Chlorotoluene	ND	260	54
tert-Butylbenzene	ND	260	60
1,2,4-Trimethylbenzene	ND	260	54
sec-Butylbenzene	ND	260	59
para-Isopropyl Toluene	ND	260	56
1,3-Dichlorobenzene	ND	260	54
1,4-Dichlorobenzene	ND	260	51
n-Butylbenzene	ND	260	57
1,2-Dichlorobenzene	ND	260	58
1,2-Dibromo-3-Chloropropane	ND	260	52
1,2,4-Trichlorobenzene	ND	260	72
Hexachlorobutadiene	ND	260	63
Naphthalene	ND	260	56
1,2,3-Trichlorobenzene	ND	260	69

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	93	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05C	Diln Fac:	43.45
Lab ID:	310051-013	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 8%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	40
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	170
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	940	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	42
trans-1,2-Dichloroethene	ND	240	48
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	44
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	41
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	39
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	48
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-05C	Diln Fac:	43.45
Lab ID:	310051-013	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	49
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	49
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	93	78-131
1,2-Dichloroethane-d4	93	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06C	Diln Fac:	42.15
Lab ID:	310051-014	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 11%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	40
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	170
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	950	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	40
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	50
1,1,1-Trichloroethane	ND	240	50
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	42
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	43
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-06C	Diln Fac:	42.15
Lab ID:	310051-014	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	54
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	51
1,2,3-Trichlorobenzene	ND	240	63

Surrogate	%REC	Limits
Dibromofluoromethane	91	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	113	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07C	Diln Fac:	43.20
Lab ID:	310051-015	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 9%

Analyte	Result	RL	MDL
Freon 12	ND	470	49
Chloromethane	ND	470	40
Vinyl Chloride	ND	470	36
Bromomethane	ND	470	170
Chloroethane	ND	470	34
Trichlorofluoromethane	ND	240	37
Acetone	ND	950	120
Freon 113	ND	240	47
1,1-Dichloroethene	ND	240	41
Methylene Chloride	ND	1,200	210
Carbon Disulfide	ND	240	46
MTBE	ND	240	43
trans-1,2-Dichloroethene	ND	240	49
Vinyl Acetate	ND	2,400	55
1,1-Dichloroethane	ND	240	45
2-Butanone	ND	470	100
cis-1,2-Dichloroethene	ND	240	47
2,2-Dichloropropane	ND	240	47
Chloroform	ND	240	51
Bromochloromethane	ND	240	51
1,1,1-Trichloroethane	ND	240	51
1,1-Dichloropropene	ND	240	48
Carbon Tetrachloride	ND	240	43
1,2-Dichloroethane	ND	240	39
Benzene	ND	240	42
Trichloroethene	ND	240	47
1,2-Dichloropropane	ND	240	41
Bromodichloromethane	ND	240	42
Dibromomethane	ND	240	40
4-Methyl-2-Pentanone	ND	470	38
cis-1,3-Dichloropropene	ND	240	52
Toluene	ND	240	44
trans-1,3-Dichloropropene	ND	240	43
1,1,2-Trichloroethane	ND	240	46
2-Hexanone	ND	470	44
1,3-Dichloropropane	ND	240	45
Tetrachloroethene	ND	240	46
Dibromochloromethane	ND	240	40
1,2-Dibromoethane	ND	240	41
Chlorobenzene	ND	240	45
1,1,1,2-Tetrachloroethane	ND	240	51
Ethylbenzene	ND	240	49
m,p-Xylenes	ND	240	29
o-Xylene	ND	240	48
Styrene	ND	240	50
Bromoform	ND	240	47
Isopropylbenzene	ND	240	52
1,1,2,2-Tetrachloroethane	ND	240	39
1,2,3-Trichloropropane	ND	240	49
Propylbenzene	ND	240	49
Bromobenzene	ND	240	46

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-07C	Diln Fac:	43.20
Lab ID:	310051-015	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	240	49
2-Chlorotoluene	ND	240	54
4-Chlorotoluene	ND	240	50
tert-Butylbenzene	ND	240	55
1,2,4-Trimethylbenzene	ND	240	50
sec-Butylbenzene	ND	240	55
para-Isopropyl Toluene	ND	240	51
1,3-Dichlorobenzene	ND	240	50
1,4-Dichlorobenzene	ND	240	47
n-Butylbenzene	ND	240	52
1,2-Dichlorobenzene	ND	240	54
1,2-Dibromo-3-Chloropropane	ND	240	48
1,2,4-Trichlorobenzene	ND	240	66
Hexachlorobutadiene	ND	240	58
Naphthalene	ND	240	52
1,2,3-Trichlorobenzene	ND	240	64

Surrogate	%REC	Limits
Dibromofluoromethane	94	78-131
1,2-Dichloroethane-d4	93	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	112	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08C	Diln Fac:	48.75
Lab ID:	310051-016	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Moisture: 7%

Analyte	Result	RL	MDL
Freon 12	ND	520	54
Chloromethane	ND	520	44
Vinyl Chloride	ND	520	40
Bromomethane	ND	520	180
Chloroethane	ND	520	37
Trichlorofluoromethane	ND	260	41
Acetone	ND	1,000	140
Freon 113	ND	260	52
1,1-Dichloroethene	ND	260	45
Methylene Chloride	ND	1,300	230
Carbon Disulfide	ND	260	51
MTBE	ND	260	47
trans-1,2-Dichloroethene	ND	260	54
Vinyl Acetate	ND	2,600	61
1,1-Dichloroethane	ND	260	49
2-Butanone	ND	520	120
cis-1,2-Dichloroethene	ND	260	52
2,2-Dichloropropane	ND	260	52
Chloroform	ND	260	56
Bromochloromethane	ND	260	56
1,1,1-Trichloroethane	ND	260	56
1,1-Dichloropropene	ND	260	53
Carbon Tetrachloride	ND	260	48
1,2-Dichloroethane	ND	260	43
Benzene	ND	260	46
Trichloroethene	ND	260	52
1,2-Dichloropropane	ND	260	45
Bromodichloromethane	ND	260	47
Dibromomethane	ND	260	44
4-Methyl-2-Pentanone	ND	520	42
cis-1,3-Dichloropropene	ND	260	58
Toluene	ND	260	49
trans-1,3-Dichloropropene	ND	260	48
1,1,2-Trichloroethane	ND	260	51
2-Hexanone	ND	520	48
1,3-Dichloropropane	ND	260	49
Tetrachloroethene	ND	260	51
Dibromochloromethane	ND	260	45
1,2-Dibromoethane	ND	260	46
Chlorobenzene	ND	260	50
1,1,1,2-Tetrachloroethane	ND	260	57
Ethylbenzene	ND	260	54
m,p-Xylenes	ND	260	32
o-Xylene	ND	260	53
Styrene	ND	260	55
Bromoform	ND	260	52
Isopropylbenzene	ND	260	58
1,1,2,2-Tetrachloroethane	ND	260	43
1,2,3-Trichloropropane	ND	260	54
Propylbenzene	ND	260	54
Bromobenzene	ND	260	51

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Field ID:	DTSC-08C	Diln Fac:	48.75
Lab ID:	310051-016	Batch#:	270667
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	dry	Analyzed:	05/22/19

Analyte	Result	RL	MDL
1,3,5-Trimethylbenzene	ND	260	55
2-Chlorotoluene	ND	260	60
4-Chlorotoluene	ND	260	55
tert-Butylbenzene	ND	260	61
1,2,4-Trimethylbenzene	ND	260	55
sec-Butylbenzene	ND	260	60
para-Isopropyl Toluene	ND	260	57
1,3-Dichlorobenzene	ND	260	55
1,4-Dichlorobenzene	ND	260	52
n-Butylbenzene	ND	260	58
1,2-Dichlorobenzene	ND	260	59
1,2-Dibromo-3-Chloropropane	ND	260	53
1,2,4-Trichlorobenzene	ND	260	73
Hexachlorobutadiene	ND	260	64
Naphthalene	ND	260	57
1,2,3-Trichlorobenzene	ND	260	70

Surrogate	%REC	Limits
Dibromofluoromethane	92	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	110	80-129

ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	270667
Units:	ug/Kg	Analyzed:	05/22/19
Diln Fac:	1.000		

Type: BS Lab ID: QC976499

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	28.54	114	69-142
Benzene	25.00	28.00	112	79-123
Trichloroethene	25.00	27.71	111	79-126
Toluene	25.00	28.26	113	78-120
Chlorobenzene	25.00	26.49	106	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	78-131
1,2-Dichloroethane-d4	90	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

Type: BSD Lab ID: QC976500

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	27.19	109	69-142	5	23
Benzene	25.00	26.97	108	79-123	4	20
Trichloroethene	25.00	26.37	105	79-126	5	20
Toluene	25.00	27.29	109	78-120	3	20
Chlorobenzene	25.00	25.57	102	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	78-131
1,2-Dichloroethane-d4	87	80-136
Toluene-d8	104	80-120
Bromofluorobenzene	115	80-129

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976501	Batch#:	270667
Matrix:	Soil	Analyzed:	05/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
Freon 12	ND	10	0.23
Chloromethane	ND	10	0.22
Vinyl Chloride	ND	10	0.16
Bromomethane	ND	10	0.51
Chloroethane	ND	10	0.28
Trichlorofluoromethane	ND	5.0	0.22
Acetone	ND	20	2.1
Freon 113	ND	5.0	0.15
1,1-Dichloroethene	ND	5.0	0.22
Methylene Chloride	ND	25	6.9
Carbon Disulfide	ND	5.0	0.27
MTBE	ND	5.0	0.50
trans-1,2-Dichloroethene	ND	5.0	0.14
Vinyl Acetate	ND	50	1.3
1,1-Dichloroethane	ND	5.0	0.10
2-Butanone	ND	10	1.3
cis-1,2-Dichloroethene	ND	5.0	0.21
2,2-Dichloropropane	ND	5.0	0.50
Chloroform	ND	5.0	1.0
Bromochloromethane	ND	5.0	0.15
1,1,1-Trichloroethane	ND	5.0	0.16
1,1-Dichloropropene	ND	5.0	0.13
Carbon Tetrachloride	ND	5.0	0.19
1,2-Dichloroethane	ND	5.0	0.25
Benzene	ND	5.0	0.10
Trichloroethene	ND	5.0	0.18
1,2-Dichloropropane	ND	5.0	0.50
Bromodichloromethane	ND	5.0	0.10
Dibromomethane	ND	5.0	0.17
4-Methyl-2-Pentanone	ND	10	0.19
cis-1,3-Dichloropropene	ND	5.0	0.50
Toluene	ND	5.0	0.10
trans-1,3-Dichloropropene	ND	5.0	0.50
1,1,2-Trichloroethane	ND	5.0	0.50
2-Hexanone	ND	10	0.50
1,3-Dichloropropane	ND	5.0	0.50
Tetrachloroethene	ND	5.0	0.17
Dibromochloromethane	ND	5.0	0.50
1,2-Dibromoethane	ND	5.0	0.19
Chlorobenzene	ND	5.0	0.10
1,1,1,2-Tetrachloroethane	ND	5.0	0.14
Ethylbenzene	ND	5.0	0.13
m,p-Xylenes	ND	5.0	0.21
o-Xylene	ND	5.0	0.14
Styrene	ND	5.0	0.40
Bromoform	ND	5.0	0.50
Isopropylbenzene	ND	5.0	0.21
1,1,2,2-Tetrachloroethane	ND	5.0	0.12
1,2,3-Trichloropropane	ND	5.0	0.50
Propylbenzene	ND	5.0	0.17
Bromobenzene	ND	5.0	0.20
1,3,5-Trimethylbenzene	ND	5.0	0.15

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 5035
Project#:	16-1498E	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976501	Batch#:	270667
Matrix:	Soil	Analyzed:	05/22/19
Units:	ug/Kg		

Analyte	Result	RL	MDL
2-Chlorotoluene	ND	5.0	0.12
4-Chlorotoluene	ND	5.0	0.14
tert-Butylbenzene	ND	5.0	0.14
1,2,4-Trimethylbenzene	ND	5.0	0.20
sec-Butylbenzene	ND	5.0	0.19
para-Isopropyl Toluene	ND	5.0	0.18
1,3-Dichlorobenzene	ND	5.0	0.23
1,4-Dichlorobenzene	ND	5.0	0.16
n-Butylbenzene	ND	5.0	0.25
1,2-Dichlorobenzene	ND	5.0	0.10
1,2-Dibromo-3-Chloropropane	ND	5.0	0.50
1,2,4-Trichlorobenzene	ND	5.0	0.22
Hexachlorobutadiene	ND	5.0	0.27
Naphthalene		5.0	0.13
1,2,3-Trichlorobenzene	0.25 J	5.0	0.14

Surrogate	%REC	Limits
Dibromofluoromethane	87	78-131
1,2-Dichloroethane-d4	88	80-136
Toluene-d8	103	80-120
Bromofluorobenzene	114	80-129

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Semivolatile Organics by GC/MS SIM

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-06A	Batch#:	270633
Lab ID:	310051-010	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 11%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	60	57	11		
Acenaphthylene	210	57	11		
Acenaphthene	24 J	57	11		
Fluorene	34 J	57	11		
Phenanthrene	510	57	11		
Anthracene	130	57	11		
Fluoranthene	900	57	11		
Pyrene	1,700	57	11		
Benzo(a)anthracene	460	57	11	0.10	46
Chrysene	530	57	11	0.0010	0.53
Benzo(b)fluoranthene	930	57	11	0.10	93
Benzo(k)fluoranthene	260	57	11	0.010	2.6
Benzo(a)pyrene	850	57	11	1.0	850
Indeno(1,2,3-cd)pyrene	500	57	11	0.10	50
Dibenz(a,h)anthracene	88	57	11	1.0	88
Benzo(g,h,i)perylene	700	57	11		
Total Benzo(a)pyrene Equiv.					1,100

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-05C	Batch#:	270633
Lab ID:	310051-013	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	dry	Analyzed:	05/23/19
Diln Fac:	50.00		

TEQ ND Factor: 0.5

Moisture: 8%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	270	54		
Acenaphthylene	82 J	270	54		
Acenaphthene	ND	270	54		
Fluorene	ND	270	54		
Phenanthrene	250 J	270	54		
Anthracene	68 J	270	54		
Fluoranthene	600	270	54		
Pyrene	910	270	54		
Benzo(a)anthracene	300	270	54	0.10	30
Chrysene	350	270	54	0.0010	0.35
Benzo(b)fluoranthene	610	270	54	0.10	61
Benzo(k)fluoranthene	190 J	270	54	0.010	1.9
Benzo(a)pyrene	490	270	54	1.0	490
Indeno(1,2,3-cd)pyrene	270	270	54	0.10	27
Dibenz(a,h)anthracene	57 J	270	54	1.0	57
Benzo(g,h,i)perylene	460	270	54		
Total Benzo(a)pyrene Equiv.					670

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency
 TEQ ND Factor= Factor to use with RL when result is ND

Semivolatile Organics by GC/MS SIM

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Field ID:	DTSC-08C	Batch#:	270633
Lab ID:	310051-016	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/21/19
Basis:	dry	Analyzed:	05/24/19
Diln Fac:	10.00		

TEQ ND Factor: 0.5

Moisture: 7%

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	13 J	54	11		
Acenaphthylene	14 J	54	11		
Acenaphthene	27 J	54	11		
Fluorene	18 J	54	11		
Phenanthrene	200	54	11		
Anthracene	49 J	54	11		
Fluoranthene	390	54	11		
Pyrene	570	54	11		
Benzo(a)anthracene	190	54	11	0.10	19
Chrysene	250	54	11	0.0010	0.25
Benzo(b)fluoranthene	350	54	11	0.10	35
Benzo(k)fluoranthene	98	54	11	0.010	0.98
Benzo(a)pyrene	300	54	11	1.0	300
Indeno(1,2,3-cd)pyrene	130	54	11	0.10	13
Dibenz(a,h)anthracene	26 J	54	11	1.0	26
Benzo(g,h,i)perylene	140	54	11		
Total Benzo(a)pyrene Equiv.					390

Surrogate	%REC	Limits
Nitrobenzene-d5	DO	48-120
2-Fluorobiphenyl	DO	39-120
Terphenyl-d14	DO	61-120

J= Estimated value
 DO= Diluted Out
 RL= Reporting Limit
 MDL= Method Detection Limit
 TEF= Toxic Equivalency Factor
 TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976362	Batch#:	270633
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/23/19

TEQ ND Factor: 0.5

Analyte	Result	RL	MDL	TEF	TEQ
Naphthalene	ND	5.0	1.0		
Acenaphthylene	ND	5.0	1.0		
Acenaphthene	ND	5.0	1.0		
Fluorene	ND	5.0	1.0		
Phenanthrene	ND	5.0	1.0		
Anthracene	ND	5.0	1.0		
Fluoranthene	ND	5.0	1.0		
Pyrene	ND	5.0	1.0		
Benzo(a)anthracene	ND	5.0	1.0	0.10	0.25
Chrysene	ND	5.0	1.0	0.0010	0.0025
Benzo(b)fluoranthene	ND	5.0	1.0	0.10	0.25
Benzo(k)fluoranthene	ND	5.0	1.0	0.010	0.025
Benzo(a)pyrene	ND	5.0	1.0	1.0	2.5
Indeno(1,2,3-cd)pyrene	ND	5.0	1.0	0.10	0.25
Dibenz(a,h)anthracene	ND	5.0	1.0	1.0	2.5
Benzo(g,h,i)perylene	ND	5.0	1.0		
Total Benzo(a)pyrene Equiv.					5.8

Surrogate	%REC	Limits
Nitrobenzene-d5	151 *	48-120
2-Fluorobiphenyl	71	39-120
Terphenyl-d14	89	61-120

*= Value outside of QC limits; see narrative

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

TEF= Toxic Equivalency Factor

TEQ= Toxic Equivalency

TEQ ND Factor= Factor to use with RL when result is ND

Batch QC Report

Semivolatile Organics by GC/MS SIM

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3550C
Project#:	16-1498E	Analysis:	EPA 8270C-SIM
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976363	Batch#:	270633
Matrix:	Soil	Prepared:	05/21/19
Units:	ug/Kg	Analyzed:	05/23/19

Analyte	Spiked	Result	%REC	Limits
Naphthalene	33.33	25.93	78	57-120
Acenaphthylene	33.33	26.52	80	60-120
Acenaphthene	33.33	24.89	75	64-120
Fluorene	33.33	23.64	71	67-120
Phenanthrene	33.33	26.12	78	64-120
Anthracene	33.33	26.84	81	66-120
Fluoranthene	33.33	25.47	76	73-121
Pyrene	33.33	30.68	92	67-120
Benzo(a)anthracene	33.33	25.64	77	69-121
Chrysene	33.33	17.21	52	48-120
Benzo(b)fluoranthene	33.33	31.33	94	66-120
Benzo(k)fluoranthene	33.33	27.72	83	62-125
Benzo(a)pyrene	33.33	27.81	83	66-120
Indeno(1,2,3-cd)pyrene	33.33	19.75	59	57-120
Dibenz(a,h)anthracene	33.33	16.60	50	45-120
Benzo(g,h,i)perylene	33.33	19.24	58	56-120

Surrogate	%REC	Limits
Nitrobenzene-d5	140 *	48-120
2-Fluorobiphenyl	65	39-120
Terphenyl-d14	81	61-120

*= Value outside of QC limits; see narrative

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-05A	Batch#:	270733
Lab ID:	310051-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.7	0.51
beta-BHC	ND	5.7	0.33
gamma-BHC	ND	5.7	0.41
delta-BHC	ND	5.7	0.41
Heptachlor	ND	5.7	0.41
Aldrin	ND	5.7	0.31
Heptachlor epoxide	0.56 C J	5.7	0.39
Endosulfan I	ND	5.7	0.41
Dieldrin	1.2 C J	11	0.45
4,4'-DDE	1.1 J	11	0.41
Endrin	1.6 J	11	1.1
Endosulfan II	ND	11	0.41
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	1.4 J	11	0.77
Endrin aldehyde	ND	11	3.0
4,4'-DDT	3.6 C J	11	0.46
alpha-Chlordane	3.4 C J	5.7	0.73
gamma-Chlordane	4.9 J	5.7	0.57
Methoxychlor	ND	57	7.8
Toxaphene	ND	200	68

Surrogate	%REC	Limits
TCMX	89	43-125
Decachlorobiphenyl	63	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-06A	Batch#:	270733
Lab ID:	310051-002	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	0.47 J	5.6	0.43
Endosulfan I	ND	5.6	0.40
Dieldrin	1.5 J	11	0.44
4,4'-DDE	0.48 C J	11	0.40
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	1.6 C J	11	0.90
4,4'-DDD	0.60 C J	11	0.40
Endrin aldehyde	ND	11	3.0
4,4'-DDT	2.5 C J	11	0.45
alpha-Chlordane	3.6 C J	5.6	0.72
gamma-Chlordane	4.5 J	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	92	43-125
Decachlorobiphenyl	68	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-07A	Batch#:	270733
Lab ID:	310051-003	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.4	0.49
beta-BHC	ND	5.4	0.32
gamma-BHC	ND	5.4	0.40
delta-BHC	ND	5.4	0.39
Heptachlor	ND	5.4	0.39
Aldrin	ND	5.4	0.30
Heptachlor epoxide	ND	5.4	0.38
Endosulfan I	ND	5.4	0.39
Dieldrin	1.0 C J	11	0.43
4,4'-DDE	1.4 J	11	0.49
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	ND	11	0.36
4,4'-DDD	ND	11	0.74
Endrin aldehyde	ND	11	2.9
4,4'-DDT	ND	11	0.44
alpha-Chlordane	1.8 C J	5.4	0.70
gamma-Chlordane	2.2 J	5.4	0.54
Methoxychlor	ND	54	7.5
Toxaphene	ND	200	65

Surrogate	%REC	Limits
TCMX	86	43-125
Decachlorobiphenyl	63	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-08A	Batch#:	270733
Lab ID:	310051-004	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.33
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.40
Dieldrin	0.91 J	11	0.45
4,4'-DDE	1.6 J	11	0.50
Endrin	ND	11	0.34
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.38
4,4'-DDD	ND	11	0.40
Endrin aldehyde	ND	11	3.0
4,4'-DDT	ND	11	0.46
alpha-Chlordane	0.75 C J	5.6	0.72
gamma-Chlordane	ND	5.6	0.56
Methoxychlor	ND	56	7.7
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	74	43-125
Decachlorobiphenyl	49	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-05C	Batch#:	270733
Lab ID:	310051-005	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.6	0.51
beta-BHC	ND	5.6	0.32
gamma-BHC	ND	5.6	0.41
delta-BHC	ND	5.6	0.40
Heptachlor	ND	5.6	0.40
Aldrin	ND	5.6	0.31
Heptachlor epoxide	ND	5.6	0.39
Endosulfan I	ND	5.6	0.40
Dieldrin	1.2 J	11	0.40
4,4'-DDE	0.56 J	11	0.40
Endrin	ND	11	0.33
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.37
4,4'-DDD	ND	11	0.40
Endrin aldehyde	ND	11	3.0
4,4'-DDT	1.4 C J	11	0.45
alpha-Chlordane	2.5 C J	5.6	0.72
gamma-Chlordane	3.4 J	5.6	0.56
Methoxychlor	ND	56	7.6
Toxaphene	ND	200	67

Surrogate	%REC	Limits
TCMX	87	43-125
Decachlorobiphenyl	57	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-06C	Batch#:	270733
Lab ID:	310051-006	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	10.00		

Analyte	Result	RL	MDL
alpha-BHC	ND	11	0.99
beta-BHC	ND	11	0.64
gamma-BHC	ND	11	0.80
delta-BHC	ND	11	0.79
Heptachlor	ND	11	0.79
Aldrin	ND	11	0.60
Heptachlor epoxide	ND	11	0.76
Endosulfan I	ND	11	0.79
Dieldrin	ND	22	0.79
4,4'-DDE	ND	22	0.79
Endrin	ND	22	0.66
Endosulfan II	ND	22	0.79
Endosulfan sulfate	ND	22	0.73
4,4'-DDD	ND	22	0.79
Endrin aldehyde	ND	22	5.8
4,4'-DDT	ND	22	0.89
alpha-Chlordane	3.8 C J	11	1.4
gamma-Chlordane	5.3 J	11	1.1
Methoxychlor	ND	110	15
Toxaphene	ND	390	130

Surrogate	%REC	Limits
TCMX	DO	43-125
Decachlorobiphenyl	DO	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

DO= Diluted Out

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-07C	Batch#:	270733
Lab ID:	310051-007	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.32
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.39
Heptachlor	ND	5.5	0.39
Aldrin	ND	5.5	0.30
Heptachlor epoxide	ND	5.5	0.38
Endosulfan I	ND	5.5	0.39
Dieldrin	0.91 C J	11	0.43
4,4'-DDE	2.9 J	11	0.39
Endrin	0.52 C J	11	0.33
Endosulfan II	ND	11	0.39
Endosulfan sulfate	ND	11	0.37
4,4'-DDD	2.4 J	11	0.39
Endrin aldehyde	ND	11	2.9
4,4'-DDT	3.5 J	11	1.7
alpha-Chlordane	1.8 C J	5.5	0.70
gamma-Chlordane	2.7 J	5.5	0.55
Methoxychlor	ND	55	7.5
Toxaphene	ND	200	65

Surrogate	%REC	Limits
TCMX	82	43-125
Decachlorobiphenyl	61	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-08C	Batch#:	270733
Lab ID:	310051-008	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Analyte	Result	RL	MDL
alpha-BHC	ND	5.5	0.50
beta-BHC	ND	5.5	0.32
gamma-BHC	ND	5.5	0.40
delta-BHC	ND	5.5	0.40
Heptachlor	ND	5.5	0.40
Aldrin	ND	5.5	0.31
Heptachlor epoxide	ND	5.5	0.39
Endosulfan I	ND	5.5	0.40
Dieldrin	1.4 J	11	0.40
4,4'-DDE	2.1 J	11	0.50
Endrin	1.0 J	11	1.0
Endosulfan II	ND	11	0.40
Endosulfan sulfate	ND	11	0.37
4,4'-DDD	1.3 J	11	0.40
Endrin aldehyde	ND	11	2.9
4,4'-DDT	1.6 C J	11	0.45
alpha-Chlordane	0.72 C J	5.5	0.72
gamma-Chlordane	0.99 J	5.5	0.55
Methoxychlor	ND	55	7.6
Toxaphene	ND	200	66

Surrogate	%REC	Limits
TCMX	72	43-125
Decachlorobiphenyl	46	40-128

C= Presence confirmed, but RPD between columns exceeds 40%

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC976757	Batch#:	270733
Matrix:	Soil	Prepared:	05/23/19
Units:	ug/Kg	Analyzed:	05/29/19

Analyte	Result	RL	MDL
alpha-BHC	ND	1.1	0.10
beta-BHC	ND	1.1	0.065
gamma-BHC	ND	1.1	0.081
delta-BHC	ND	1.1	0.080
Heptachlor	ND	1.1	0.080
Aldrin	ND	1.1	0.061
Heptachlor epoxide	ND	1.1	0.077
Endosulfan I	ND	1.1	0.080
Dieldrin	ND	2.2	0.080
4,4'-DDE	ND	2.2	0.080
Endrin	ND	2.2	0.067
Endosulfan II	ND	2.2	0.080
Endosulfan sulfate	ND	2.2	0.074
4,4'-DDD	ND	2.2	0.080
Endrin aldehyde	ND	2.2	0.59
4,4'-DDT	ND	2.2	0.090
alpha-Chlordane	ND	1.1	0.18
gamma-Chlordane	ND	1.1	0.11
Methoxychlor	ND	11	1.5
Toxaphene	ND	40	13

Surrogate	%REC	Limits
TCMX	81	43-125
Decachlorobiphenyl	68	40-128

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976764	Batch#:	270733
Matrix:	Soil	Prepared:	05/23/19
Units:	ug/Kg	Analyzed:	05/29/19

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	13.33	15.60	117	58-131
Heptachlor	13.33	15.93	120	51-133
Aldrin	13.33	15.19	114	52-128
Dieldrin	13.33	15.86	119	59-133
Endrin	13.33	17.78	133	48-154
4,4'-DDT	13.33	17.56	132	54-140

Surrogate	%REC	Limits
TCMX	97	43-125
Decachlorobiphenyl	95	40-128

Batch QC Report

Organochlorine Pesticides			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8081A
Field ID:	DTSC-07A	Batch#:	270733
MSS Lab ID:	310051-003	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	5.000		

Type: MS Lab ID: QC976765

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.3959	13.12	8.777	67	58-126
Heptachlor	<0.3911	13.12	10.86 #	83	58-127
Aldrin	<0.2993	13.12	8.164	62	55-124
Dieldrin	1.028	13.12	8.610	58	48-137
Endrin	<0.3252	13.12	9.974	76	48-158
4,4'-DDT	<0.4411	13.12	10.42	79	38-155

Surrogate	%REC	Limits
TCMX	68	43-125
Decachlorobiphenyl	54	40-128

Type: MSD Lab ID: QC976766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.56	10.78	79	58-126	17	36
Heptachlor	13.56	13.82 #	102	58-127	21	34
Aldrin	13.56	10.46	77	55-124	21	31
Dieldrin	13.56	10.81	72	48-137	20	38
Endrin	13.56	12.48	92	48-158	19	38
4,4'-DDT	13.56	13.86	102	38-155	25	42

Surrogate	%REC	Limits
TCMX	75	43-125
Decachlorobiphenyl	61	40-128

#= CCV drift outside limits; average CCV drift within limits per method requirements
 RPD= Relative Percent Difference

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	air dried	Prepared:	05/23/19
Batch#:	270733	Analyzed:	05/24/19

Field ID: DTSC-05A
Type: SAMPLE

Lab ID: 310051-001
Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	14	7.4
Aroclor-1221	ND	27	8.9
Aroclor-1232	ND	14	7.5
Aroclor-1242	ND	14	9.9
Aroclor-1248	ND	14	10
Aroclor-1254	ND	14	5.6
Aroclor-1260	33	14	7.2

Surrogate	%REC	Limits
Decachlorobiphenyl	104	49-157

Field ID: DTSC-06A
Type: SAMPLE

Lab ID: 310051-002
Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.3
Aroclor-1221	ND	27	8.8
Aroclor-1232	ND	13	7.4
Aroclor-1242	ND	13	9.8
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.5
Aroclor-1260	15	13	9.2

Surrogate	%REC	Limits
Decachlorobiphenyl	91	49-157

Field ID: DTSC-07A
Type: SAMPLE

Lab ID: 310051-003
Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.1
Aroclor-1221	ND	26	8.5
Aroclor-1232	ND	13	7.2
Aroclor-1242	ND	13	9.5
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.3
Aroclor-1260	24	13	8.9

Surrogate	%REC	Limits
Decachlorobiphenyl	105	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Matrix:	Soil	Sampled:	05/20/19
Units:	ug/Kg	Received:	05/20/19
Basis:	air dried	Prepared:	05/23/19
Batch#:	270733	Analyzed:	05/24/19

Field ID: DTSC-07C Lab ID: 310051-007
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.2
Aroclor-1221	ND	26	8.6
Aroclor-1232	ND	13	7.2
Aroclor-1242	ND	13	9.5
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.4
Aroclor-1260	15	13	9.0

Surrogate	%REC	Limits
Decachlorobiphenyl	79	49-157

Field ID: DTSC-08C Lab ID: 310051-008
 Type: SAMPLE Diln Fac: 2.000

Analyte	Result	RL	MDL
Aroclor-1016	ND	13	7.3
Aroclor-1221	ND	27	8.7
Aroclor-1232	ND	13	7.3
Aroclor-1242	ND	13	9.7
Aroclor-1248	ND	13	10
Aroclor-1254	ND	13	5.4
Aroclor-1260	22	13	7.0

Surrogate	%REC	Limits
Decachlorobiphenyl	88	49-157

Type: BLANK Diln Fac: 1.000
 Lab ID: QC976757

Analyte	Result	RL	MDL
Aroclor-1016	ND	12	3.6
Aroclor-1221	ND	24	4.4
Aroclor-1232	ND	12	3.7
Aroclor-1242	ND	12	4.8
Aroclor-1248	ND	12	5.1
Aroclor-1254	ND	12	2.7
Aroclor-1260	ND	12	4.6

Surrogate	%REC	Limits
Decachlorobiphenyl	113	49-157

J= Estimated value
 ND= Not Detected at or above MDL
 RL= Reporting Limit
 MDL= Method Detection Limit

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC976758	Batch#:	270733
Matrix:	Soil	Prepared:	05/23/19
Units:	ug/Kg	Analyzed:	05/24/19

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	166.7	164.1	98	63-143
Aroclor-1260	166.7	149.6	90	59-157

Surrogate	%REC	Limits
Decachlorobiphenyl	114	49-157

Batch QC Report

Enthalpy Analytical - Berkeley Analytical Report

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3546
Project#:	16-1498E	Analysis:	EPA 8082
Field ID:	DTSC-07A	Batch#:	270733
MSS Lab ID:	310051-003	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	ug/Kg	Prepared:	05/23/19
Basis:	air dried	Analyzed:	05/24/19
Diln Fac:	2.000		

Type: MS Lab ID: QC976759

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<7.120	162.3	168.4	104	62-160
Aroclor-1260	23.56	162.3	166.7	88	53-172

Surrogate	%REC	Limits
Decachlorobiphenyl	82	49-157

Type: MSD Lab ID: QC976760

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	169.7	167.2	99	62-160	5	43
Aroclor-1260	169.7	155.4	78	53-172	11	44

Surrogate	%REC	Limits
Decachlorobiphenyl	78	49-157

RPD= Relative Percent Difference

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05A	Batch#:	270836
Lab ID:	310051-001	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.44 J	2.0	0.069
Arsenic	4.6	1.5	0.066
Barium	82	0.25	0.030
Beryllium	0.28	0.10	0.010
Cadmium	0.23 J	0.25	0.017
Chromium	42	0.25	0.049
Cobalt	8.8	0.25	0.015
Copper	27	0.25	0.057
Lead	26	1.0	0.057
Molybdenum	1.1	0.25	0.026
Nickel	43	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	36	0.25	0.052
Zinc	69	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-06A	Batch#:	270836
Lab ID:	310051-002	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.55 J	2.0	0.069
Arsenic	4.8	1.5	0.066
Barium	79	0.25	0.030
Beryllium	0.25	0.10	0.010
Cadmium	0.22 J	0.25	0.017
Chromium	37	0.25	0.049
Cobalt	8.7	0.25	0.015
Copper	28	0.25	0.057
Lead	25	1.0	0.057
Molybdenum	0.84	0.25	0.026
Nickel	41	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	31	0.25	0.053
Zinc	65	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-07A	Batch#:	270836
Lab ID:	310051-003	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.35 J	1.9	0.067
Arsenic	4.9	1.5	0.064
Barium	75	0.24	0.029
Beryllium	0.25	0.097	0.0098
Cadmium	0.18 J	0.24	0.016
Chromium	42	0.24	0.048
Cobalt	9.3	0.24	0.014
Copper	27	0.24	0.056
Lead	25	0.97	0.055
Molybdenum	0.85	0.24	0.025
Nickel	42	0.24	0.049
Selenium	ND	1.9	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.088
Vanadium	35	0.24	0.051
Zinc	62	0.97	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-08A	Batch#:	270836
Lab ID:	310051-004	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.32 J	2.0	0.068
Arsenic	3.6	1.5	0.066
Barium	59	0.25	0.030
Beryllium	0.22	0.10	0.010
Cadmium	0.095 J	0.25	0.016
Chromium	36	0.25	0.049
Cobalt	6.3	0.25	0.014
Copper	15	0.25	0.057
Lead	16	1.0	0.056
Molybdenum	0.47	0.25	0.026
Nickel	33	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	29	0.25	0.052
Zinc	41	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-05C	Batch#:	270836
Lab ID:	310051-005	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.30 J	2.0	0.067
Arsenic	5.0	1.5	0.065
Barium	78	0.24	0.029
Beryllium	0.27	0.098	0.0098
Cadmium	0.15 J	0.24	0.016
Chromium	44	0.24	0.048
Cobalt	8.8	0.24	0.014
Copper	22	0.24	0.056
Lead	23	0.98	0.055
Molybdenum	0.80	0.24	0.025
Nickel	47	0.24	0.049
Selenium	ND	2.0	0.18
Silver	ND	0.24	0.029
Thallium	ND	0.49	0.088
Vanadium	34	0.24	0.051
Zinc	54	0.98	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-06C	Batch#:	270836
Lab ID:	310051-006	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.55 J	2.0	0.068
Arsenic	4.6	1.5	0.066
Barium	65	0.25	0.030
Beryllium	0.26	0.10	0.010
Cadmium	0.16 J	0.25	0.016
Chromium	42	0.25	0.049
Cobalt	8.0	0.25	0.014
Copper	21	0.25	0.057
Lead	19	1.0	0.056
Molybdenum	0.68	0.25	0.026
Nickel	41	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	33	0.25	0.052
Zinc	78	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals

Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-07C	Batch#:	270836
Lab ID:	310051-007	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.21 J	2.0	0.069
Arsenic	5.1	1.5	0.066
Barium	84	0.25	0.030
Beryllium	0.30	0.10	0.010
Cadmium	0.20 J	0.25	0.017
Chromium	47	0.25	0.049
Cobalt	9.0	0.25	0.015
Copper	27	0.25	0.057
Lead	38	1.0	0.057
Molybdenum	0.77	0.25	0.026
Nickel	50	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	37	0.25	0.052
Zinc	68	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

California Title 22 Metals			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-08C	Batch#:	270836
Lab ID:	310051-008	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Antimony	0.86 J	2.0	0.068
Arsenic	5.6	1.5	0.066
Barium	71	0.25	0.030
Beryllium	0.22	0.10	0.010
Cadmium	0.16 J	0.25	0.016
Chromium	38	0.25	0.049
Cobalt	8.3	0.25	0.014
Copper	24	0.25	0.057
Lead	23	1.0	0.056
Molybdenum	0.65	0.25	0.026
Nickel	37	0.25	0.050
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.50	0.090
Vanadium	32	0.25	0.052
Zinc	62	1.0	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Mercury by Cold Vapor AA			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	270851
Matrix:	Soil	Sampled:	05/20/19
Units:	mg/Kg	Received:	05/20/19
Basis:	dry	Prepared:	05/29/19
Diln Fac:	1.000	Analyzed:	05/29/19

Field ID	Type	Lab ID	Result	RL	MDL	Moisture
DTSC-05A	SAMPLE	310051-009	0.17	0.017	0.0030	5%
DTSC-06A	SAMPLE	310051-010	0.59	0.017	0.0030	11%
DTSC-07A	SAMPLE	310051-011	0.23	0.019	0.0033	9%
DTSC-08A	SAMPLE	310051-012	0.087	0.018	0.0032	8%
DTSC-05C	SAMPLE	310051-013	0.13	0.018	0.0031	8%
DTSC-06C	SAMPLE	310051-014	0.14	0.019	0.0033	11%
DTSC-07C	SAMPLE	310051-015	0.28	0.020	0.0035	9%
DTSC-08C	SAMPLE	310051-016	0.12	0.018	0.0032	7%
	BLANK	QC977243	ND	0.018	0.0031	

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC977168	Batch#:	270836
Matrix:	Soil	Prepared:	05/29/19
Units:	mg/Kg	Analyzed:	05/29/19

Analyte	Result	RL	MDL
Antimony	ND	2.0	0.068
Arsenic	0.096 J	1.5	0.065
Barium	0.12 J	0.25	0.030
Beryllium	ND	0.099	0.0099
Cadmium	ND	0.25	0.016
Chromium	0.049 J	0.25	0.048
Cobalt	ND	0.25	0.014
Copper	ND	0.25	0.056
Lead	ND	0.99	0.056
Molybdenum	0.029 J	0.25	0.026
Nickel	0.095 J	0.25	0.049
Selenium	ND	2.0	0.19
Silver	ND	0.25	0.030
Thallium	ND	0.49	0.089
Vanadium	ND	0.25	0.052
Zinc	ND	0.99	0.21

J= Estimated value

ND= Not Detected at or above MDL

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

California Title 22 Metals			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	270836
Units:	mg/Kg	Prepared:	05/29/19
Diln Fac:	1.000	Analyzed:	05/29/19

Type: BS Lab ID: QC977169

Analyte	Spiked	Result	%REC	Limits
Antimony	49.95	46.32	93	80-120
Arsenic	49.95	48.05	96	80-120
Barium	49.95	48.08	96	80-120
Beryllium	24.98	23.22	93	80-120
Cadmium	49.95	46.53	93	80-120
Chromium	49.95	48.46	97	80-120
Cobalt	49.95	47.37	95	80-120
Copper	49.95	46.78	94	80-120
Lead	49.95	48.02	96	80-120
Molybdenum	49.95	48.30	97	80-120
Nickel	49.95	47.48	95	80-120
Selenium	49.95	46.46	93	80-120
Silver	4.995	4.553	91	80-120
Thallium	49.95	48.53	97	80-120
Vanadium	49.95	47.14	94	80-120
Zinc	49.95	47.85	96	80-120

Type: BSD Lab ID: QC977170

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.60	46.45	94	80-120	1	20
Arsenic	49.60	47.78	96	80-120	0	20
Barium	49.60	47.67	96	80-120	0	20
Beryllium	24.80	23.09	93	80-120	0	20
Cadmium	49.60	46.18	93	80-120	0	20
Chromium	49.60	47.99	97	80-120	0	20
Cobalt	49.60	46.95	95	80-120	0	20
Copper	49.60	46.16	93	80-120	1	20
Lead	49.60	47.71	96	80-120	0	20
Molybdenum	49.60	47.93	97	80-120	0	20
Nickel	49.60	47.04	95	80-120	0	20
Selenium	49.60	45.89	93	80-120	1	20
Silver	4.960	4.489	90	80-120	1	20
Thallium	49.60	48.10	97	80-120	0	20
Vanadium	49.60	46.68	94	80-120	0	20
Zinc	49.60	47.58	96	80-120	0	20

RPD= Relative Percent Difference

Batch QC Report

California Title 22 Metals			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	EPA 3050B
Project#:	16-1498E	Analysis:	EPA 6010B
Field ID:	DTSC-08C	Batch#:	270836
MSS Lab ID:	310051-008	Sampled:	05/20/19
Matrix:	Soil	Received:	05/20/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	air dried	Analyzed:	05/29/19
Diln Fac:	1.000		

Type: MS Lab ID: QC977171

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	0.8599	49.55	18.73	36 *	75-120
Arsenic	5.570	49.55	56.15	102	80-121
Barium	71.15	49.55	117.4	93	75-125
Beryllium	0.2204	24.78	23.35	93	80-120
Cadmium	0.1574	49.55	49.68	100	80-120
Chromium	37.56	49.55	90.34	107	75-125
Cobalt	8.256	49.55	53.66	92	75-120
Copper	23.54	49.55	75.62	105	80-125
Lead	23.30	49.55	69.92	94	75-125
Molybdenum	0.6478	49.55	46.45	92	75-120
Nickel	37.36	49.55	85.33	97	75-125
Selenium	<0.1879	49.55	48.16	97	80-120
Silver	<0.02994	4.955	4.611	93	75-120
Thallium	<0.08974	49.55	43.93	89	75-120
Vanadium	31.73	49.55	83.67	105	78-125
Zinc	61.76	49.55	110.5	98	75-125

Type: MSD Lab ID: QC977172

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	49.60	20.38	39 *	75-120	8	20
Arsenic	49.60	53.87	97	80-121	4	20
Barium	49.60	110.5	79	75-125	6	20
Beryllium	24.80	22.68	91	80-120	3	20
Cadmium	49.60	48.05	97	80-120	3	20
Chromium	49.60	85.37	96	75-125	6	20
Cobalt	49.60	52.06	88	75-120	3	20
Copper	49.60	70.57	95	80-125	7	20
Lead	49.60	75.28	105	75-125	7	20
Molybdenum	49.60	45.55	91	75-120	2	20
Nickel	49.60	82.15	90	75-125	4	20
Selenium	49.60	46.18	93	80-120	4	20
Silver	4.960	4.616	93	75-120	0	20
Thallium	49.60	42.86	86	75-120	3	20
Vanadium	49.60	77.75	93	78-125	7	20
Zinc	49.60	104.0	85	75-125	6	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	270851
MSS Lab ID:	310145-001	Sampled:	05/23/19
Matrix:	Soil	Received:	05/23/19
Units:	mg/Kg	Prepared:	05/29/19
Basis:	as received	Analyzed:	05/29/19

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC977244		0.1563	0.1354	87	80-120		
BSD	QC977245		0.1613	0.1359	84	80-120	3	20
MS	QC977246	0.07959	0.1613	0.2690	117	80-120		
MSD	QC977247		0.1754	0.2261	84	80-120	23 *	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Moisture			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Batch#:	270832
Matrix:	Soil	Sampled:	05/20/19
Units:	%	Received:	05/20/19
Diln Fac:	1.000	Analyzed:	05/29/19

Field ID	Lab ID	Result	RL
DTSC-05A	310051-009	5	1
DTSC-06A	310051-010	11	1
DTSC-07A	310051-011	9	1
DTSC-08A	310051-012	8	1
DTSC-05C	310051-013	8	1
DTSC-06C	310051-014	11	1
DTSC-07C	310051-015	9	1
DTSC-08C	310051-016	7	1

RL= Reporting Limit

Batch QC Report

Moisture			
Lab #:	310051	Location:	Alameda Landing
Client:	RPS	Prep:	METHOD
Project#:	16-1498E	Analysis:	EPA CLP
Analyte:	Moisture, Percent	Units:	%
Field ID:	DTSC-05A	Diln Fac:	1.000
Type:	SDUP	Batch#:	270832
MSS Lab ID:	310051-009	Sampled:	05/20/19
Lab ID:	QC977159	Received:	05/20/19
Matrix:	Soil	Analyzed:	05/29/19

MSS Result	Result	RL	RPD	Lim
4.643	4.552	1.000	2	26

RL= Reporting Limit

RPD= Relative Percent Difference

**Garfield Clubhouse Renovation, 26th and Harrison Street, San
Francisco, California**

**Environmental Site Characterization
GARFIELD PG AND CLUBHOUSE RENOVATION
26TH AND HARRISON STREETS
SAN FRANCISCO, CA 94110**



**PREPARED FOR:
CARMEN YNAMI
CITY AND COUNTY OF SAN FRANCISCO
PUBLIC WORKS
BUILDING DESIGN & CONSTRUCTION
30 VAN NESS, 3RD FLOOR
SAN FRANCISCO, CA 94102**

PREPARED BY:

SCA

ENVIRONMENTAL, INC.

**650 DELANCEY ST., SUITE 222
SAN FRANCISCO, CA 94107
TEL: (415) 882-1675**

December 27, 2017

Carmen Ynami
Project Manager
City and County of San Francisco Public Works
Building Design & Construction
30 Van Ness, 3rd Floor
San Francisco, California 94102

RE: Environmental Site Characterization Report
Garfield PG and Clubhouse Renovation
26th and Harrison Streets, San Francisco, California 94110
SCA Project No: B12486

Dear Ms. Ynami:

With this letter SCA Environmental, Inc. presents the Environmental Site Characterization Results for the proposed renovations at the Garfield PG and Clubhouse in San Francisco, California. SCA was retained to collect soil samples for waste characterization as part of renovations of the site. This work was completed in tandem with a hazardous materials building survey, submitted under a separate report.

Our findings, opinions, conclusions, and recommendations are based on applicable standards of our profession at the time this report was prepared. The results of this Site Investigation are, in our professional judgment, representative of the soil that will be encountered within the proposed excavation/disturbance sites.

The results of the sampling program are, in our professional judgment, representative of the soil and/or groundwater within the proposed excavation/disturbance site(s)", and that there is no reason to conclude that hazardous substances other than those listed in Section 22A.7 (a)(1) through (a)(10) – Subsurface Sampling and Analysis of the Article 22A of the San Francisco Health Code, are likely to be present on the property.

Should you have any questions, comments, or require additional information, please contact the undersigned at the numbers listed below.

Sincerely,
SCA ENVIRONMENTAL, INC.



Dan Leung, CIH, CSP, CAC
Vice President, Industrial Hygiene
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TABLES

Table 1	Summary of Analytical Results – Discrete Soil Samples
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FIGURES

Figure 1	Vicinity Map
Figure 2	Site Map Showing Sample Locations
Maps	APEZ, Maher & NOA Maps – Supplied by SFPW

APPENDICES

Appendix A	Boring Logs
Appendix B	Analytical Laboratory Reports

LIST OF ACRONYMS

ACM	Asbestos-Containing Material
ALSF	Analytical Laboratories San Francisco
APEZ	Air Pollution Exposure Zone
BAAQMD	Bay Area Air Quality Management District
bgs	Below ground surface
CARB	California Air Resources Board
CHHSLs	California Human Health Screening Levels
COD	Chemical Oxygen Demand
CY	Cubic Yards
DTSC	Department of Toxic Substances Control
DDD	Dichlorodiphenyldichloroethane
DDT	Dichlorodiphenyltrichloroethane
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
ESLs	Environmental Screening Levels
McCampbell	McCampbell Analytical, Inc.
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mR/hr	milliroentgens per hour
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
ppm	Parts per million
RWQCB	Regional Water Quality Control Board
SCA	SCA Environmental, Inc.
SFDPH	San Francisco Department of Public Health
SFPW	San Francisco Public Works
Site	Maxine Hall HC, 1301 Pierce Street, San Francisco, CA 94115
SMP	Site Mitigation Plan
STLC	Soluble Threshold Limit Concentration
SVOCs	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Process
TOG	Total Oil and Grease
TPHd	Total Petroleum Hydrocarbons as diesel
TPHg	Total Petroleum Hydrocarbons as gasoline
TPHmo	Total Petroleum Hydrocarbons as motor oil
TTLC	Total Threshold Limit Concentration
USA	Underground Services Alert
USCS	Unified Soil Classification System
VOCs	Volatile Organic Compounds
WET	Waste Extraction Test



1.0 EXECUTIVE SUMMARY

This summary is not to be read as a standalone document. The report shall be read in its entirety. The reader must review the detailed information provided in the accompanying text. The interpretation, use, and conclusion resulting from the data contained in this report are the responsibility of the reader.

This report presents the results of site investigation activities conducted by SCA Environmental, Inc. (SCA) for the Garfield PG and Clubhouse renovations in San Francisco, California (referred to herein as the Site, Figure 1). SCA's services were performed for the City and County of San Francisco Public Works (SFPW) in accordance with our proposal dated September 14, 2017.

The Site is outside of the jurisdiction of Article 22A ("Maher Zone") and does not meet requirements with the Article 22A "Maher" Ordinance. The purpose of this investigation is to evaluate the potential presence of chemical contamination in shallow fill for waste characterization. SCA was also retained to complete a hazardous materials building survey. SCA's *Hazardous Materials Survey* report is presented under separate cover. Investigation findings will be used to assist SFPW with disposal of soils to be removed during the project.

SCA's work only included hand auguring to maximum depth of 30 inches. Because of this shallow depth, no permit was required. In addition, all excess soils cuttings were used to backfill the borings. The boring locations and depths were specified by SFPW for the planned renovations of the clubhouse, basketball court and pool.

SCA encountered shallow soils comprised largely of sod, sands, silts and clay mixtures. Shallower depths were largely comprised of sod with underlying brown to yellow brown silty sand and brown to yellow brown clayey sand. SCA did not note any odors or staining or the visible presence of serpentine soils during the sampling activities. Groundwater was not encountered in any of the sampling depths.

Based on our field observations and results of analyses, SCA provides the following conclusions and recommendations.

Findings for Waste Characterization

1. Soils tested are classified as California Class II/III non-hazardous waste for transportation and disposal.
2. Arsenic was detected (exceeding the applicable ESL or CHHSL levels), but under the commonly encountered background levels of 11 mg/kg, as well as the US and California hazardous waste standards.

The Contractor should use the data provided herein to coordinate landfill acceptance of surplus prior to excavation and disposal of any surplus soil from the Site.



2.0 INTRODUCTION

This report presents the results of site investigation activities conducted by SCA Environmental, Inc. (SCA) for the Garfield PG and Clubhouse renovations in San Francisco, California (referred to herein as the Site, Figure 1). SCA's services were performed for the City and County of San Francisco Public Works (SFPW) in accordance with our proposal dated September 14, 2017.

As part of the renovation plans for Garfield PG and Clubhouse, some limited shallow soils are scheduled to be disturbed and removed as part of general grading and excavation. Soil samples were collected by SCA for waste disposal characterization. SCA collected these samples with the use of hand augers at locations pre-identified by SFPW. No boring permits were required due to the shallow depth of these borings.



3.0 FIELD INVESTIGATION ACTIVITIES

Field activities were conducted using standard industry practices regarding workers' health and safety, sample collection and handling, and chain-of-custody documentation.

As previously discussed, SCA collected all soil samples with the use of hand augers. Because of the shallow depth of these borings to only 15 to 30 inches below ground surface (bgs), no permit was required for this work. All remaining soil cuttings were used to backfill the borings.

3.1 Drilling Activities for Soil Sample Collection

Site activities were completed on November 11, 2017. A total of three borings were completed. SCA collected samples from throughout these borings between depths of the surface (0 inches bgs) and 30 inches bgs. As shown on Figure 2, samples were collected from:

- B-1 location at the surface and 15 inches bgs
- B-2 location at the surface and 30 inches bgs
- B-3 location at the surface and 24 inches bgs

SCA's field personnel logged each boring in accordance with the Unified Soil Classification System (USCS) and screened soil samples in the field using a Photo-ionization Detector (PID) which measures the presence of organic vapor such as gasoline and solvents.

Hand augers were used to complete all borings. Soil samples collected from the auger were placed into 8oz or 16oz glass jars. Each sample container was filled to avoid headspace. Samples were sealed, labeled, and placed in a chilled ice-chest pending delivery to the chemical testing laboratory.

Following soil sample collection, all exterior boring locations were backfilled with the remaining cuttings to grade.



4.0 SUBSURFACE CONDITIONS

SCA encountered shallow soils comprised largely of sod, sands, silts and clay mixtures. Shallower depths were largely comprised of sod with underlying brown to yellow brown silty sand and brown to yellow brown clayey sand. SCA did not note any odors or staining or the visible presence of serpentine soils during the sampling activities. Groundwater was not encountered in any of the sampling depths.



5.0 CHEMICAL TESTING PROGRAM

The chemical testing program for soil samples collected from the site is presented below.

5.1 Soil Samples

Discrete soil samples were submitted to McCampbell Analytical, Inc., (McCampbell) in Pittsburg, California under chain-of-custody documentation. Prior to analyses, McCampbell was instructed to generate composite samples as described below for each boring:

- Sample Location B-1: Surface and 15 inch samples were composited into one sample.
SAMPLE ID: GS-B1-0,GS-B1-15
- Sample Location B-2: Surface and 30 inch samples were composited into one sample.
SAMPLE ID: GS-B2-0,GS-B2-30
- Sample Location B-3: Surface and 24 inch samples were composited into one sample.
SAMPLE ID: GS-B3-0,GS-B3-24

Three (3) composite samples were tested for the following:

- Total petroleum hydrocarbons as gasoline (TPHg) using EPA Method 8015m;
- Total petroleum hydrocarbons as diesel (TPHd) and motor oil (TPHmo) using EPA Method 8015m;
- Volatile Organic Compounds (VOCs) using EPA Method 8260B;
- Semi-Volatile Organic Compounds (SVOCs) using EPA Method 8270C to meet ESLs;
- Organochlorine Pesticides using EPA Method 8081A;
- Polychlorinated Biphenyls (PCBs) using EPA Method 8082;
- Chromium VI using EPA Method 218.7;
- PH (acidity) using EPA Method 9040;
- 17 Title 22 Metals using EPA Method 6010.

Based on the total metals results, selected composite soil samples were further tested for soluble chromium, and/or lead using Waste Extraction Test (WET) and Toxicity Characteristic Leaching Process (TCLP) methodology to be compared to the Soluble Threshold Limit Concentration (STLC).

Soil samples for asbestos testing were not composited and were submitted to Analytical Laboratories San Francisco (ALSF) in San Francisco, California, using CARB 435 Method modified for 1200-point count.

6.0 RESULTS OF ANALYSES

Results of analyses from the composite soil samples collected from the site are summarized in Tables 1 and 2. Copies of all laboratory results are included in Appendix B.

6.1 Analytical Results – Soil

For the purposes of this report, soil results were compared to the San Francisco Bay RWQCB's Environmental Screening Level (ESL) for a commercial land use, as well as ESLs for a construction worker exposure scenario¹. Results for heavy metals were also compared to STLC, some of the criteria used to classify soil as a hazardous waste.

- Analyses detected no VOCs or TPHg in the composite samples tested.
- Organochlorine pesticides were detected in samples GS-B2-0, GS-B2-30 and GS-B3-0,GS-B3-24. p,p-DDT was detected in both samples at 0.013 and 0.020 mg/kg, well below the commercial and construction worker ESLs of 8.5 and 57 mg/kg. Endosulfan II, g-Chlordane, p,p-DDE, Endrin, and Endrin ketone were detected in sample GS-B3-0,GS-B3-24 in concentrations ranging between 0.0067 and 0.020 mg/kg, below the respective commercial and construction worker ESLs for all analytes. No Organochlorine pesticides were detected in sample GS-B1-0,GS-B1-15.
- Analyses detected Aroclor 1254 and total PCBs of 0.019 mg/kg in sample GS-B1-0,GS-B1-15, no PCBs in sample GS-B2-0,GS-B2-30, and Aroclor 1248 at 0.046 mg/kg, Aroclor 1260 at 0.026 mg/kg and total PCBs at 0.072 mg/kg in sample GS-B3-0,GS-B3-24. All PCB results were below commercial and construction worker ESLs.
- SVOCs were detected in each composite sample. Benzo(a)pyrene, Benzo(b)fluoranthene, and Dibenzo(a,h)anthracene were detected at levels of 0.041, 0.026, and 0.010 mg/kg in sample GS-B1-0,GS-B1-15. Benzo(a)pyrene, Benzo(b)fluoranthene, and Bis(2-ethylhexyl)Phthalate were detected at levels of 0.014, 0.010, and 0.28 mg/kg in sample GS-B2-0,GS-B2-30. Benzo(a)pyrene and Bis(2-ethylhexyl)Phthalate were detected at levels of 0.016 and 0.64 in sample GS-B3-0,GS-B3-24. All sample results were below the commercial and construction worker ESL levels.
- TPHmo was detected in all three composite samples ranging between 11 and 56 mg/kg. All results were below the applicable commercial and construction worker ESLs of 140,000 and 32,000 mg/kg.
- TPHd was detected only in samples GS-B1-0,GS-B1-15 and GS-B3-0,GS-B3-24 at levels of 1.7 and 1.5 mg/kg. All results were below the commercial and construction worker ESLs of 1,100 and 800 mg/kg.
- pH levels for the composite samples are as follows: 5.96 (GS-B1-0, GS-B1-15); 6.04 (GS-B2-0, GS-B2-30); and 6.36 (GS-B3-0, GS-B3-24).
- All soil samples were non-detected for asbestos (est. to be well below 0.1%).
- Miscellaneous building construction debris was reported in the soil by the laboratory, all of which were non-detected for asbestos (est. to be well below 0.1%).

¹ Summary Tables of SFRWQCB Environmental Screening Levels. Final February 2016.



Various metals were detected in all three composite samples analyzed at concentrations below respective ESLs for commercial and construction worker exposure. All metals were below respective TTLCs and/or ESLs for a commercial land use with the exception of the following:

- Total arsenic concentrations ranged from 32.9 to 3.3 mg/kg, exceeding the commercial ESL of 1.6 mg/kg in all samples, but well below California and US regulatory hazardous waste disposal standards for arsenic. Background arsenic concentrations in California soil typically exceed the ESL criteria, and background arsenic concentrations ranging up to 11 mg/kg are common¹.
- Analyses detected no Chromium VI in the 3 composite samples tested. Chromium VI was analyzed since initial analysis showed presence of Total Chromium at levels that warranted further investigations.

¹ Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated December 2011.



7.0 CONCLUSIONS AND RECOMMENDATIONS

SCA's investigation included the collection of soil samples from various depths in two borings that were completed by the geotechnical consultant. Based on our field observations and the results of chemical analyses:

3. Soils tested are classified as California Class II/III non-hazardous waste for transportation and disposal.
4. Arsenic was detected (exceeding the applicable ESL or CHHSL levels), but under the commonly encountered background levels of 11 mg/kg, and all California and US hazardous waste disposal standards.

The Contractor should use the data provided herein to coordinate landfill acceptance of surplus prior to excavation and disposal of any surplus soil from the Site.

TABLES

**Table 1
Summary of Analytical Results - Soil
Garfield PG and Clubhouse
26th and Harrison Streets
San Francisco, CA 94110**

Analyte	Units	Sample ID			Environmental Screening Levels		CHHSLs	Regulatory Limits	
		GS-B1-0,GS-B1-15	GS-B2-0,GS-B2-30	GS-B3-0,GS-B3-24	Commercial Land Use	Construction Worker		CA TTLC (mg/kg)	CA & US STLC (mg/L)
Sample Depth		0-15"	0-30"	0-24"					
Organochlorine Pesticides									
p,p-DDT	mg/kg	<0.00020	0.013	0.020	8.5	57	6.3	1.0	0.1
g-Chlordane	mg/kg	<0.00020	<0.00050	0.0029	2.2	14	NE	NE	NE
p,p-DDE	mg/kg	<0.00020	<0.00050	0.0049	8.5	57	6.3	1.0	0.1
Endosulfan II	mg/kg	<0.00020	<0.00050	0.0060	NE	NE	NE	NE	NE
Endrin	mg/kg	<0.00020	<0.00050	0.0067	290	74	230	0.2	0.02
Endrin ketone	mg/kg	<0.00020	<0.00050	0.0020	NE	NE	NE	NE	NE
All others	mg/kg	<0.00020 - <0.010	<0.00050 - <0.025	<0.00010 - <0.0050	varies	varies	varies	varies	varies
PCBs									
Aroclor 1254	mg/kg	0.019	<0.025	<0.0050	NE	NE	NE	NE	NE
Aroclor 1248	mg/kg	<0.010	<0.025	0.046	NE	NE	NE	NE	NE
Aroclor 1260	mg/kg	<0.010	<0.025	0.026	NE	NE	NE	NE	NE
PCBs, Total	mg/kg	0.019	<0.025	0.072	1.0	5.6	0.3	NE	NE
All others	mg/kg	<0.010	<0.025	<0.0050	varies	varies	varies	varies	varies
Chromium (VI)									
Hexavalent Chromium	mg/kg	<0.20	<0.20	<0.20	6.2	2.8	37	500	5
pH (acidity)									
pH (units at 25°C)	units	5.96	6.04	6.36	NA	NA	NA	NA	NA
Volatile Organic Compounds									
None Detected	mg/kg	<0.0050 - <0.10	<0.0050 - <0.10	<0.0050 - <0.10	varies	varies	varies	varies	varies
Semi-Volatile Organic Compounds									
Benzo(b) fluoranthene	mg/kg	0.041	0.014	<0.025	2.9	16	NE	NE	NE
Benzo(a)pyrene	mg/kg	0.026	0.010	0.016	0.29	1.6	0.13	NE	NE
Bis(2-ethylhexyl) Phthalate	mg/kg	<0.50	0.28	0.64	160	950	NE	NE	NE
Dibenzo(a,h)anthracene	mg/kg	0.010	<0.0025	<0.0050	0.29	1.6	NE	NE	NE
None Detected	mg/kg	<0.0025 - <2.6	<0.0012 - <1.3	<0.0025 - <2.6	varies	varies	varies	varies	varies
Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up									
TPH Motor Oil	mg/kg	17	11	56	140,000	32,000	NE	NE	NE
TPH Gasoline	mg/kg	<1.0	<1.0	<1.0	3,900	2,800	NE	NE	NE
TPH Diesel	mg/kg	1.7	<1.0	1.5	1,100	880	NE	NE	NE
Title 22 Metals									
Antimony	mg/kg	0.92	0.60	0.66	40	140	300	500	15
Arsenic	mg/kg	2.9	3.2	3.3	1.6/11**	0.98	0.007	500	5
Barium	mg/kg	130	87	110	1,500	3,000	5,200	10,000	100
Beryllium	mg/kg	<0.50	<0.50	<0.50	8.0	42	160	75	0.75
Cadmium	mg/kg	0.29	<0.25	<0.25	12	43	1.7	100	1
Chromium (Total)	mg/kg	58	46	44	750+	NE	NE	2500	560
Chromium VI	mg/kg	<0.2	<0.2	<0.2	NE	NE	NE	500	5
Cobalt	mg/kg	11	9.3	8	80	28	660	8000	80
Copper	mg/kg	39	32	20	230	14,000	3,000	2500	25
Lead	mg/kg	85	41	59	320	160	80	1000	5
Mercury	mg/kg	0.16	0.068	0.10	10	44	18	20	0.2
Molybdenum	mg/kg	0.55	<0.50	<0.50	40	1,800	380	3500	350
Nickel	mg/kg	42	31	30	150	86	1,600	2000	20
Selenium	mg/kg	<0.50	<0.50	<0.50	10	1,700	380	100	1
Silver	mg/kg	<0.50	<0.50	<0.50	40	1,800	380	500	5
Thallium	mg/kg	<0.50	<0.50	<0.50	10	3.5	5	700	7
Vanadium	mg/kg	49	40	39	200	470	530	2400	24
Zinc	mg/kg	99	130	77	600	110,000	23,000	5000	250

Notes

Detected concentrations shown in **Bold**
 mg/kg = Milligrams per kilogram
 < = Not detected at or above laboratory reporting limit
 ND = Not Detected; reporting limit varies by analyte
 NE = Not Established
 -- = Not Analyzed
 NA = Not Applicable

ESLs = Environmental Screening Levels, San Francisco Bay Regional Water Quality Control Board's User's Guide: Derivation and Application of Environmental Screening Levels, Interim Final February 2016
 Table S-1 (Direct Environmental Screening Levels)

Exceeds Commercial ESL
 ** Background Arsenic Concentration in San Francisco Bay Region soils. Master's Thesis "Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region", dated December 2011.

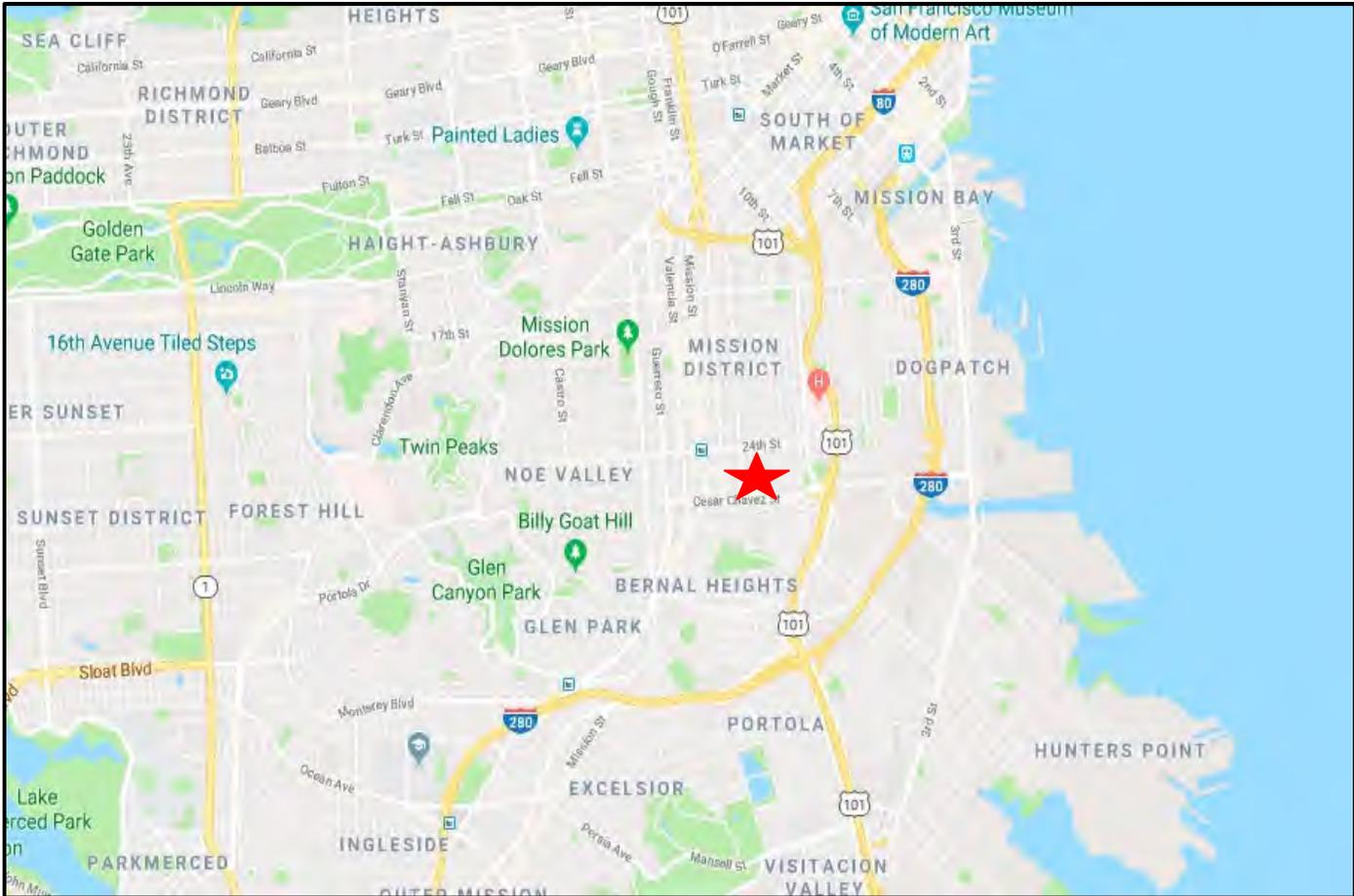
**Table 2: Soils Asbestos Results
Garfield PG and Clubhouse
26th and Harrison Streets
San Francisco, CA 94110**

	Sample ID					
	GS-B1-0	GS-B1-15	GS-B2-0	G2-B2-30	GS-B3-0	GS-B3-24
Asbestos (%) in soil	ND	ND	ND	ND	ND	ND
Asbestos (%) in construction debris	ND	ND	ND	ND	ND	ND

ND = not detected, est. to be equivalent to <<0.1%

PLM analysis via CARB 435 allows *Exception 1* when a sample does not have any asbestos fibers from 3 prepared PLM & 30 fields of views, such a sample can be reported as no asbestos was found without point-counting.

FIGURES



 Target Property

SCA
ENVIRONMENTAL, INC.

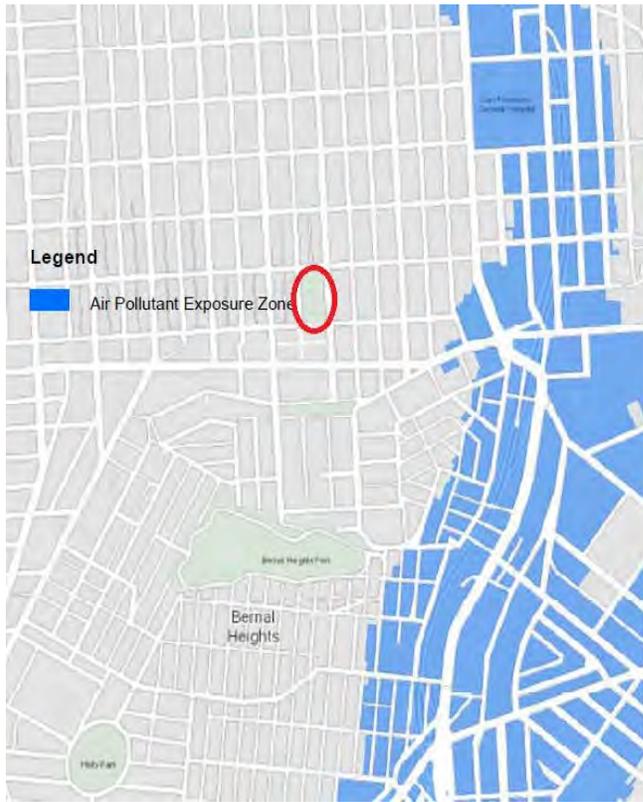
Figure 1: Vicinity Map
Garfield PG and Clubhouse
26th and Harrison, San Francisco, CA 94110
SCA Project No.: B12486

Projects	Mahe Map	APEZ	Sensitive Area	NOA	
1271 Treat Ave	NO	No	Schools (Within 1000 feet) <ul style="list-style-type: none"> • Saint Peters School • Saint Anthony – Immaculate Conception School • Hilltop High Special Services Center • Flynn, Leonard Flynn Elementary / Early Education 	<ul style="list-style-type: none"> • <i>Stormwater Management Ordinance</i> • <i>Archeologically Sensitive Area</i> 	NO

• Maher Map



- APEZ (Air Pollution Exposure Zone)



APPENDIX A
BORING LOGS



Project Name: SFPW Garfield Square Renovations	Project No.: B12486	Start Date / Time: 11/9/17 @ 11:15	End Date / Time: 11/9/17 @ 11:45
Site Location: 2965 Harrison Street, SF, CA			

DEPTH	SAMPLE ID NO.	SAMPLE TYPE (GRAB / TUBE)	DRILLING METHOD (HA / DP / HSA)	PID (PPM)	BLOWS / PRESSURE	USCS CLASSIFICATION	LITHOLOGICAL DESCRIPTION
0	GS-B1-0	G	HA			SM	Brown silty sand. No odor. No staining.
1							
	GS-B1-15	G	↓			SM	Brown silty sand. No odor. No staining.
2							End of Boring
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

Drilling Company / Driller Name:	Hammer Type:	Comments:
Drill Rig:	Concrete Coring: _____ to _____ Dia: _____ Hand Auger: <u> 0 </u> to <u> 15" </u> Dia: <u> 4" </u> Direct Push: _____ to _____ Dia: _____	
Backfill Date / Time / Type:	Hollow Stem Auger: _____ to _____ Dia: _____ Rotary Wash: _____ to _____ Dia: _____	



Project Name: SFPW Garfield Square Renovations	Project No.: B12486	Start Date / Time: 11/9/17 @ 10:55	End Date / Time: 11/9/17 @ 11:15
Site Location: 2965 Harrison Street, SF, CA			

DEPTH	SAMPLE ID NO.	SAMPLE TYPE (GRAB / TUBE)	DRILLING METHOD (HA / DP / HSA)	PID (PPM)	BLOWS / PRESSURE	USCS CLASSIFICATION	LITHOLOGICAL DESCRIPTION
0	GS-B2-0	G	HA			SM	Brown silty sand. No odor. No staining.
1							
2							
	GS-B2-30	G	↓			SC	Brown clayey sand. No odor. No staining.
3							End of Boring
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

Drilling Company / Driller Name:	Hammer Type:	Comments:
Drill Rig:	Concrete Coring: _____ to _____ Dia: _____ Hand Auger: <u> 0 </u> to <u> 30" </u> Dia: <u> 4" </u> Direct Push: _____ to _____ Dia: _____	
Backfill Date / Time / Type:	Hollow Stem Auger: _____ to _____ Dia: _____ Rotary Wash: _____ to _____ Dia: _____	



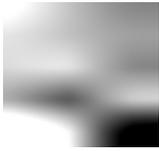
Project Name: SFPW Garfield Square Renovations	Project No.: B12486	Start Date / Time: 11/9/17 @ 10:35	End Date / Time: 11/9/17 @ 10:55
Site Location: 2965 Harrison Street, SF, CA			

DEPTH	SAMPLE ID NO.	SAMPLE TYPE (GRAB / TUBE)	DRILLING METHOD (HA / DP / HSA)	PID (PPM)	BLOWS / PRESSURE	USCS CLASSIFICATION	LITHOLOGICAL DESCRIPTION
0	GS-B3-0	G	HA			SC	Sod. Brown clayey sand. No odor. No staining.
1						SM	Yellow-brown silty sand. No odor. No staining.
2	GS-B3-24	G	↓			SM	Tan silty sand. No odor. No staining.
							End of Boring
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							

Drilling Company / Driller Name: Drill Rig: Backfill Date / Time / Type:	Hammer Type: Concrete Coring: _____ to _____ Dia: _____ Hand Auger: <u>0</u> to <u>24"</u> Dia: <u>4"</u> Direct Push: _____ to _____ Dia: _____ Hollow Stem Auger: _____ to _____ Dia: _____ Rotary Wash: _____ to _____ Dia: _____	Comments:
--	--	-----------

APPENDIX B

LABORATORY REPORTS



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1711381

Report Created for: SCA Environmental, Inc.

1 Lakeside Drive, Suite 215
Oakland, CA 94612

Project Contact: Dan Leung

Project P.O.:

Project Name: B12486; SFPW Garfield Square Renov

Project Received: 11/09/2017

Analytical Report reviewed & approved for release on 11/20/2017 by:



Christine Askari
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: B12486; SFPW Garfield Square Renov
WorkOrder: 1711381

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: B12486; SFPW Garfield Square Renov
WorkOrder: 1711381

Analytical Qualifiers

P Agreement between quantitative confirmation results exceed method recommended limits
e2 Diesel range compounds are significant; no recognizable pattern
e7 Oil range compounds are significant
j1 See attached narrative

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD is out of acceptance criteria.



Case Narrative

Client: SCA Environmental, Inc.
Project: B12486; SFPW Garfield Square Renov

Work Order: 1711381
November 15, 2017

1711381-002A

j1) In effort to meet Environmental Screening Levels (ESLs), for the four compounds listed below, MDL values (J-flag values) are reported for diluted samples. Elevated reporting limits are reported for all other analytes.

Dieldrin
Heptachlor epoxide
Endrin
Heptachlor



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC23 11141710.D	148397

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00020	2	11/14/2017 22:41
a-BHC	ND	0.00020	2	11/14/2017 22:41
b-BHC	ND	0.00020	2	11/14/2017 22:41
d-BHC	ND	0.00020	2	11/14/2017 22:41
g-BHC	ND	0.00020	2	11/14/2017 22:41
Chlordane (Technical)	ND	0.0050	2	11/14/2017 22:41
a-Chlordane	ND	0.00020	2	11/14/2017 22:41
g-Chlordane	ND	0.00020	2	11/14/2017 22:41
p,p-DDD	ND	0.00020	2	11/14/2017 22:41
p,p-DDE	ND	0.00020	2	11/14/2017 22:41
p,p-DDT	ND	0.00020	2	11/14/2017 22:41
Dieldrin	ND	0.00020	2	11/14/2017 22:41
Endosulfan I	ND	0.00020	2	11/14/2017 22:41
Endosulfan II	ND	0.00020	2	11/14/2017 22:41
Endosulfan sulfate	ND	0.00020	2	11/14/2017 22:41
Endrin	ND	0.00020	2	11/14/2017 22:41
Endrin aldehyde	ND	0.00020	2	11/14/2017 22:41
Endrin ketone	ND	0.00020	2	11/14/2017 22:41
Heptachlor	ND	0.00020	2	11/14/2017 22:41
Heptachlor epoxide	ND	0.00020	2	11/14/2017 22:41
Hexachlorobenzene	ND	0.0020	2	11/14/2017 22:41
Hexachlorocyclopentadiene	ND	0.0040	2	11/14/2017 22:41
Methoxychlor	ND	0.00020	2	11/14/2017 22:41
Toxaphene	ND	0.010	2	11/14/2017 22:41
Aroclor1016	ND	0.010	2	11/14/2017 22:41
Aroclor1221	ND	0.010	2	11/14/2017 22:41
Aroclor1232	ND	0.010	2	11/14/2017 22:41
Aroclor1242	ND	0.010	2	11/14/2017 22:41
Aroclor1248	ND	0.010	2	11/14/2017 22:41
Aroclor1254	0.019	0.010	2	11/14/2017 22:41
Aroclor1260	ND	0.010	2	11/14/2017 22:41
PCBs, total	0.019	0.010	2	11/14/2017 22:41

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	73	20-145	11/14/2017 22:41

Analyst(s): LT

(Cont.)



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC23 11141715.D	148397

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.00050	5	11/15/2017 00:01
a-BHC	ND	0.00050	5	11/15/2017 00:01
b-BHC	ND	0.00050	5	11/15/2017 00:01
d-BHC	ND	0.00050	5	11/15/2017 00:01
g-BHC	ND	0.00050	5	11/15/2017 00:01
Chlordane (Technical)	ND	0.012	5	11/15/2017 00:01
a-Chlordane	ND	0.00050	5	11/15/2017 00:01
g-Chlordane	ND	0.00050	5	11/15/2017 00:01
p,p-DDD	ND	0.00050	5	11/15/2017 00:01
p,p-DDE	ND	0.00050	5	11/15/2017 00:01
p,p-DDT	0.0013	0.00050	5	11/15/2017 00:01
Dieldrin	ND	0.00050	5	11/15/2017 00:01
Endosulfan I	ND	0.00050	5	11/15/2017 00:01
Endosulfan II	ND	0.00050	5	11/15/2017 00:01
Endosulfan sulfate	ND	0.00050	5	11/15/2017 00:01
Endrin	ND	0.00050	5	11/15/2017 00:01
Endrin aldehyde	ND	0.00050	5	11/15/2017 00:01
Endrin ketone	ND	0.00050	5	11/15/2017 00:01
Heptachlor	ND	0.00050	5	11/15/2017 00:01
Heptachlor epoxide	ND	0.00050	5	11/15/2017 00:01
Hexachlorobenzene	ND	0.0050	5	11/15/2017 00:01
Hexachlorocyclopentadiene	ND	0.010	5	11/15/2017 00:01
Methoxychlor	ND	0.00050	5	11/15/2017 00:01
Toxaphene	ND	0.025	5	11/15/2017 00:01
Aroclor1016	ND	0.025	5	11/15/2017 00:01
Aroclor1221	ND	0.025	5	11/15/2017 00:01
Aroclor1232	ND	0.025	5	11/15/2017 00:01
Aroclor1242	ND	0.025	5	11/15/2017 00:01
Aroclor1248	ND	0.025	5	11/15/2017 00:01
Aroclor1254	ND	0.025	5	11/15/2017 00:01
Aroclor1260	ND	0.025	5	11/15/2017 00:01
PCBs, total	ND	0.025	5	11/15/2017 00:01

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	74	20-145	11/15/2017 00:01

Analyst(s): LT **Analytical Comments:** j1

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640Am/3630Cm
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC23 11171728.D	148397

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Aldrin	0.00061	P	0.00010	1	11/17/2017 17:37
a-BHC	ND		0.00010	1	11/17/2017 17:37
b-BHC	ND		0.00010	1	11/17/2017 17:37
d-BHC	ND		0.00010	1	11/17/2017 17:37
g-BHC	ND		0.00010	1	11/17/2017 17:37
Chlordane (Technical)	ND		0.0025	1	11/17/2017 17:37
a-Chlordane	ND		0.00010	1	11/17/2017 17:37
g-Chlordane	0.0029		0.00010	1	11/17/2017 17:37
p,p-DDD	ND		0.00010	1	11/17/2017 17:37
p,p-DDE	0.0049	P	0.00010	1	11/17/2017 17:37
p,p-DDT	0.020		0.00010	1	11/17/2017 17:37
Dieldrin	0.0022	P	0.00010	1	11/17/2017 17:37
Endosulfan I	ND		0.00010	1	11/17/2017 17:37
Endosulfan II	0.0060		0.00010	1	11/17/2017 17:37
Endosulfan sulfate	ND		0.00010	1	11/17/2017 17:37
Endrin	0.0067		0.00010	1	11/17/2017 17:37
Endrin aldehyde	ND		0.00010	1	11/17/2017 17:37
Endrin ketone	0.0020		0.00010	1	11/17/2017 17:37
Heptachlor	ND		0.00010	1	11/17/2017 17:37
Heptachlor epoxide	ND		0.00010	1	11/17/2017 17:37
Hexachlorobenzene	ND		0.0010	1	11/17/2017 17:37
Hexachlorocyclopentadiene	ND		0.0020	1	11/17/2017 17:37
Methoxychlor	ND		0.00010	1	11/17/2017 17:37
Toxaphene	ND		0.0050	1	11/17/2017 17:37
Aroclor1016	ND		0.0050	1	11/17/2017 17:37
Aroclor1221	ND		0.0050	1	11/17/2017 17:37
Aroclor1232	ND		0.0050	1	11/17/2017 17:37
Aroclor1242	ND		0.0050	1	11/17/2017 17:37
Aroclor1248	0.046		0.0050	1	11/17/2017 17:37
Aroclor1254	ND		0.0050	1	11/17/2017 17:37
Aroclor1260	0.026	P	0.0050	1	11/17/2017 17:37
PCBs, total	0.072		0.0050	1	11/17/2017 17:37

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	75	20-145	11/17/2017 17:37

Analyst(s): KX



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC18 11141705.D	148385

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/14/2017 10:08
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/14/2017 10:08
Benzene	ND	0.0050	1	11/14/2017 10:08
Bromobenzene	ND	0.0050	1	11/14/2017 10:08
Bromochloromethane	ND	0.0050	1	11/14/2017 10:08
Bromodichloromethane	ND	0.0050	1	11/14/2017 10:08
Bromoform	ND	0.0050	1	11/14/2017 10:08
Bromomethane	ND	0.0050	1	11/14/2017 10:08
2-Butanone (MEK)	ND	0.020	1	11/14/2017 10:08
t-Butyl alcohol (TBA)	ND	0.050	1	11/14/2017 10:08
n-Butyl benzene	ND	0.0050	1	11/14/2017 10:08
sec-Butyl benzene	ND	0.0050	1	11/14/2017 10:08
tert-Butyl benzene	ND	0.0050	1	11/14/2017 10:08
Carbon Disulfide	ND	0.0050	1	11/14/2017 10:08
Carbon Tetrachloride	ND	0.0050	1	11/14/2017 10:08
Chlorobenzene	ND	0.0050	1	11/14/2017 10:08
Chloroethane	ND	0.0050	1	11/14/2017 10:08
Chloroform	ND	0.0050	1	11/14/2017 10:08
Chloromethane	ND	0.0050	1	11/14/2017 10:08
2-Chlorotoluene	ND	0.0050	1	11/14/2017 10:08
4-Chlorotoluene	ND	0.0050	1	11/14/2017 10:08
Dibromochloromethane	ND	0.0050	1	11/14/2017 10:08
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/14/2017 10:08
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/14/2017 10:08
Dibromomethane	ND	0.0050	1	11/14/2017 10:08
1,2-Dichlorobenzene	ND	0.0050	1	11/14/2017 10:08
1,3-Dichlorobenzene	ND	0.0050	1	11/14/2017 10:08
1,4-Dichlorobenzene	ND	0.0050	1	11/14/2017 10:08
Dichlorodifluoromethane	ND	0.0050	1	11/14/2017 10:08
1,1-Dichloroethane	ND	0.0050	1	11/14/2017 10:08
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/14/2017 10:08
1,1-Dichloroethene	ND	0.0050	1	11/14/2017 10:08
cis-1,2-Dichloroethene	ND	0.0050	1	11/14/2017 10:08
trans-1,2-Dichloroethene	ND	0.0050	1	11/14/2017 10:08
1,2-Dichloropropane	ND	0.0050	1	11/14/2017 10:08
1,3-Dichloropropane	ND	0.0050	1	11/14/2017 10:08
2,2-Dichloropropane	ND	0.0050	1	11/14/2017 10:08

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC18 11141705.D	148385

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/14/2017 10:08
cis-1,3-Dichloropropene	ND	0.0050	1	11/14/2017 10:08
trans-1,3-Dichloropropene	ND	0.0050	1	11/14/2017 10:08
Diisopropyl ether (DIPE)	ND	0.0050	1	11/14/2017 10:08
Ethylbenzene	ND	0.0050	1	11/14/2017 10:08
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/14/2017 10:08
Freon 113	ND	0.0050	1	11/14/2017 10:08
Hexachlorobutadiene	ND	0.0050	1	11/14/2017 10:08
Hexachloroethane	ND	0.0050	1	11/14/2017 10:08
2-Hexanone	ND	0.0050	1	11/14/2017 10:08
Isopropylbenzene	ND	0.0050	1	11/14/2017 10:08
4-Isopropyl toluene	ND	0.0050	1	11/14/2017 10:08
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/14/2017 10:08
Methylene chloride	ND	0.0050	1	11/14/2017 10:08
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/14/2017 10:08
Naphthalene	ND	0.0050	1	11/14/2017 10:08
n-Propyl benzene	ND	0.0050	1	11/14/2017 10:08
Styrene	ND	0.0050	1	11/14/2017 10:08
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/14/2017 10:08
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/14/2017 10:08
Tetrachloroethene	ND	0.0050	1	11/14/2017 10:08
Toluene	ND	0.0050	1	11/14/2017 10:08
1,2,3-Trichlorobenzene	ND	0.0050	1	11/14/2017 10:08
1,2,4-Trichlorobenzene	ND	0.0050	1	11/14/2017 10:08
1,1,1-Trichloroethane	ND	0.0050	1	11/14/2017 10:08
1,1,2-Trichloroethane	ND	0.0050	1	11/14/2017 10:08
Trichloroethene	ND	0.0050	1	11/14/2017 10:08
Trichlorofluoromethane	ND	0.0050	1	11/14/2017 10:08
1,2,3-Trichloropropane	ND	0.0050	1	11/14/2017 10:08
1,2,4-Trimethylbenzene	ND	0.0050	1	11/14/2017 10:08
1,3,5-Trimethylbenzene	ND	0.0050	1	11/14/2017 10:08
Vinyl Chloride	ND	0.0050	1	11/14/2017 10:08
Xylenes, Total	ND	0.0050	1	11/14/2017 10:08

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC18 11141705.D	148385

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	103	82-136		11/14/2017 10:08
Toluene-d8	110	92-139		11/14/2017 10:08
4-BFB	86	82-135		11/14/2017 10:08
Benzene-d6	102	55-122		11/14/2017 10:08
Ethylbenzene-d10	96	58-141		11/14/2017 10:08
1,2-DCB-d4	70	51-107		11/14/2017 10:08

Analyst(s): KF



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC10 11151716.D	148385

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/15/2017 17:14
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/15/2017 17:14
Benzene	ND	0.0050	1	11/15/2017 17:14
Bromobenzene	ND	0.0050	1	11/15/2017 17:14
Bromochloromethane	ND	0.0050	1	11/15/2017 17:14
Bromodichloromethane	ND	0.0050	1	11/15/2017 17:14
Bromoform	ND	0.0050	1	11/15/2017 17:14
Bromomethane	ND	0.0050	1	11/15/2017 17:14
2-Butanone (MEK)	ND	0.020	1	11/15/2017 17:14
t-Butyl alcohol (TBA)	ND	0.050	1	11/15/2017 17:14
n-Butyl benzene	ND	0.0050	1	11/15/2017 17:14
sec-Butyl benzene	ND	0.0050	1	11/15/2017 17:14
tert-Butyl benzene	ND	0.0050	1	11/15/2017 17:14
Carbon Disulfide	ND	0.0050	1	11/15/2017 17:14
Carbon Tetrachloride	ND	0.0050	1	11/15/2017 17:14
Chlorobenzene	ND	0.0050	1	11/15/2017 17:14
Chloroethane	ND	0.0050	1	11/15/2017 17:14
Chloroform	ND	0.0050	1	11/15/2017 17:14
Chloromethane	ND	0.0050	1	11/15/2017 17:14
2-Chlorotoluene	ND	0.0050	1	11/15/2017 17:14
4-Chlorotoluene	ND	0.0050	1	11/15/2017 17:14
Dibromochloromethane	ND	0.0050	1	11/15/2017 17:14
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/15/2017 17:14
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/15/2017 17:14
Dibromomethane	ND	0.0050	1	11/15/2017 17:14
1,2-Dichlorobenzene	ND	0.0050	1	11/15/2017 17:14
1,3-Dichlorobenzene	ND	0.0050	1	11/15/2017 17:14
1,4-Dichlorobenzene	ND	0.0050	1	11/15/2017 17:14
Dichlorodifluoromethane	ND	0.0050	1	11/15/2017 17:14
1,1-Dichloroethane	ND	0.0050	1	11/15/2017 17:14
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/15/2017 17:14
1,1-Dichloroethene	ND	0.0050	1	11/15/2017 17:14
cis-1,2-Dichloroethene	ND	0.0050	1	11/15/2017 17:14
trans-1,2-Dichloroethene	ND	0.0050	1	11/15/2017 17:14
1,2-Dichloropropane	ND	0.0050	1	11/15/2017 17:14
1,3-Dichloropropane	ND	0.0050	1	11/15/2017 17:14
2,2-Dichloropropane	ND	0.0050	1	11/15/2017 17:14

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC10 11151716.D	148385

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/15/2017 17:14
cis-1,3-Dichloropropene	ND	0.0050	1	11/15/2017 17:14
trans-1,3-Dichloropropene	ND	0.0050	1	11/15/2017 17:14
Diisopropyl ether (DIPE)	ND	0.0050	1	11/15/2017 17:14
Ethylbenzene	ND	0.0050	1	11/15/2017 17:14
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/15/2017 17:14
Freon 113	ND	0.0050	1	11/15/2017 17:14
Hexachlorobutadiene	ND	0.0050	1	11/15/2017 17:14
Hexachloroethane	ND	0.0050	1	11/15/2017 17:14
2-Hexanone	ND	0.0050	1	11/15/2017 17:14
Isopropylbenzene	ND	0.0050	1	11/15/2017 17:14
4-Isopropyl toluene	ND	0.0050	1	11/15/2017 17:14
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/15/2017 17:14
Methylene chloride	ND	0.0050	1	11/15/2017 17:14
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/15/2017 17:14
Naphthalene	ND	0.0050	1	11/15/2017 17:14
n-Propyl benzene	ND	0.0050	1	11/15/2017 17:14
Styrene	ND	0.0050	1	11/15/2017 17:14
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/15/2017 17:14
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/15/2017 17:14
Tetrachloroethene	ND	0.0050	1	11/15/2017 17:14
Toluene	ND	0.0050	1	11/15/2017 17:14
1,2,3-Trichlorobenzene	ND	0.0050	1	11/15/2017 17:14
1,2,4-Trichlorobenzene	ND	0.0050	1	11/15/2017 17:14
1,1,1-Trichloroethane	ND	0.0050	1	11/15/2017 17:14
1,1,2-Trichloroethane	ND	0.0050	1	11/15/2017 17:14
Trichloroethene	ND	0.0050	1	11/15/2017 17:14
Trichlorofluoromethane	ND	0.0050	1	11/15/2017 17:14
1,2,3-Trichloropropane	ND	0.0050	1	11/15/2017 17:14
1,2,4-Trimethylbenzene	ND	0.0050	1	11/15/2017 17:14
1,3,5-Trimethylbenzene	ND	0.0050	1	11/15/2017 17:14
Vinyl Chloride	ND	0.0050	1	11/15/2017 17:14
Xylenes, Total	ND	0.0050	1	11/15/2017 17:14

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC10 11151716.D	148385

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	111	82-136		11/15/2017 17:14
Toluene-d8	124	92-139		11/15/2017 17:14
4-BFB	110	82-135		11/15/2017 17:14
Benzene-d6	100	55-122		11/15/2017 17:14
Ethylbenzene-d10	102	58-141		11/15/2017 17:14
1,2-DCB-d4	84	51-107		11/15/2017 17:14

Analyst(s): KF



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC28 11131716.D	148385

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	11/13/2017 17:11
tert-Amyl methyl ether (TAME)	ND	0.0050	1	11/13/2017 17:11
Benzene	ND	0.0050	1	11/13/2017 17:11
Bromobenzene	ND	0.0050	1	11/13/2017 17:11
Bromochloromethane	ND	0.0050	1	11/13/2017 17:11
Bromodichloromethane	ND	0.0050	1	11/13/2017 17:11
Bromoform	ND	0.0050	1	11/13/2017 17:11
Bromomethane	ND	0.0050	1	11/13/2017 17:11
2-Butanone (MEK)	ND	0.020	1	11/13/2017 17:11
t-Butyl alcohol (TBA)	ND	0.050	1	11/13/2017 17:11
n-Butyl benzene	ND	0.0050	1	11/13/2017 17:11
sec-Butyl benzene	ND	0.0050	1	11/13/2017 17:11
tert-Butyl benzene	ND	0.0050	1	11/13/2017 17:11
Carbon Disulfide	ND	0.0050	1	11/13/2017 17:11
Carbon Tetrachloride	ND	0.0050	1	11/13/2017 17:11
Chlorobenzene	ND	0.0050	1	11/13/2017 17:11
Chloroethane	ND	0.0050	1	11/13/2017 17:11
Chloroform	ND	0.0050	1	11/13/2017 17:11
Chloromethane	ND	0.0050	1	11/13/2017 17:11
2-Chlorotoluene	ND	0.0050	1	11/13/2017 17:11
4-Chlorotoluene	ND	0.0050	1	11/13/2017 17:11
Dibromochloromethane	ND	0.0050	1	11/13/2017 17:11
1,2-Dibromo-3-chloropropane	ND	0.0040	1	11/13/2017 17:11
1,2-Dibromoethane (EDB)	ND	0.0040	1	11/13/2017 17:11
Dibromomethane	ND	0.0050	1	11/13/2017 17:11
1,2-Dichlorobenzene	ND	0.0050	1	11/13/2017 17:11
1,3-Dichlorobenzene	ND	0.0050	1	11/13/2017 17:11
1,4-Dichlorobenzene	ND	0.0050	1	11/13/2017 17:11
Dichlorodifluoromethane	ND	0.0050	1	11/13/2017 17:11
1,1-Dichloroethane	ND	0.0050	1	11/13/2017 17:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	11/13/2017 17:11
1,1-Dichloroethene	ND	0.0050	1	11/13/2017 17:11
cis-1,2-Dichloroethene	ND	0.0050	1	11/13/2017 17:11
trans-1,2-Dichloroethene	ND	0.0050	1	11/13/2017 17:11
1,2-Dichloropropane	ND	0.0050	1	11/13/2017 17:11
1,3-Dichloropropane	ND	0.0050	1	11/13/2017 17:11
2,2-Dichloropropane	ND	0.0050	1	11/13/2017 17:11

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC28 11131716.D	148385

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	11/13/2017 17:11
cis-1,3-Dichloropropene	ND	0.0050	1	11/13/2017 17:11
trans-1,3-Dichloropropene	ND	0.0050	1	11/13/2017 17:11
Diisopropyl ether (DIPE)	ND	0.0050	1	11/13/2017 17:11
Ethylbenzene	ND	0.0050	1	11/13/2017 17:11
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	11/13/2017 17:11
Freon 113	ND	0.0050	1	11/13/2017 17:11
Hexachlorobutadiene	ND	0.0050	1	11/13/2017 17:11
Hexachloroethane	ND	0.0050	1	11/13/2017 17:11
2-Hexanone	ND	0.0050	1	11/13/2017 17:11
Isopropylbenzene	ND	0.0050	1	11/13/2017 17:11
4-Isopropyl toluene	ND	0.0050	1	11/13/2017 17:11
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	11/13/2017 17:11
Methylene chloride	ND	0.0050	1	11/13/2017 17:11
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	11/13/2017 17:11
Naphthalene	ND	0.0050	1	11/13/2017 17:11
n-Propyl benzene	ND	0.0050	1	11/13/2017 17:11
Styrene	ND	0.0050	1	11/13/2017 17:11
1,1,1,2-Tetrachloroethane	ND	0.0050	1	11/13/2017 17:11
1,1,2,2-Tetrachloroethane	ND	0.0050	1	11/13/2017 17:11
Tetrachloroethene	ND	0.0050	1	11/13/2017 17:11
Toluene	ND	0.0050	1	11/13/2017 17:11
1,2,3-Trichlorobenzene	ND	0.0050	1	11/13/2017 17:11
1,2,4-Trichlorobenzene	ND	0.0050	1	11/13/2017 17:11
1,1,1-Trichloroethane	ND	0.0050	1	11/13/2017 17:11
1,1,2-Trichloroethane	ND	0.0050	1	11/13/2017 17:11
Trichloroethene	ND	0.0050	1	11/13/2017 17:11
Trichlorofluoromethane	ND	0.0050	1	11/13/2017 17:11
1,2,3-Trichloropropane	ND	0.0050	1	11/13/2017 17:11
1,2,4-Trimethylbenzene	ND	0.0050	1	11/13/2017 17:11
1,3,5-Trimethylbenzene	ND	0.0050	1	11/13/2017 17:11
Vinyl Chloride	ND	0.0050	1	11/13/2017 17:11
Xylenes, Total	ND	0.0050	1	11/13/2017 17:11

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC28 11131716.D	148385

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	111		82-136	11/13/2017 17:11
Toluene-d8	118		92-139	11/13/2017 17:11
4-BFB	103		82-135	11/13/2017 17:11
Benzene-d6	104		55-122	11/13/2017 17:11
Ethylbenzene-d10	97		58-141	11/13/2017 17:11
1,2-DCB-d4	91		51-107	11/13/2017 17:11

Analyst(s): JEM



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC21 11141706.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.28	0.50	2	11/14/2017 11:33
Acenaphthylene	ND	0.28	0.50	2	11/14/2017 11:33
Acetochlor	ND	0.50	0.50	2	11/14/2017 11:33
Anthracene	ND	0.28	0.50	2	11/14/2017 11:33
Benzidine	ND	0.46	2.6	2	11/14/2017 11:33
Benzo (a) anthracene	ND	0.10	0.10	2	11/14/2017 11:33
Benzo (a) pyrene	0.026	0.0050	0.0050	2	11/14/2017 11:33
Benzo (b) fluoranthene	0.041	0.025	0.025	2	11/14/2017 11:33
Benzo (g,h,i) perylene	ND	0.30	0.50	2	11/14/2017 11:33
Benzo (k) fluoranthene	ND	0.32	0.50	2	11/14/2017 11:33
Benzyl Alcohol	ND	1.0	2.6	2	11/14/2017 11:33
1,1-Biphenyl	ND	0.30	0.50	2	11/14/2017 11:33
Bis (2-chloroethoxy) Methane	ND	0.28	0.50	2	11/14/2017 11:33
Bis (2-chloroethyl) Ether	ND	0.0025	0.0025	2	11/14/2017 11:33
Bis (2-chloroisopropyl) Ether	ND	0.0025	0.0025	2	11/14/2017 11:33
Bis (2-ethylhexyl) Adipate	ND	0.50	0.50	2	11/14/2017 11:33
Bis (2-ethylhexyl) Phthalate	ND	0.26	0.50	2	11/14/2017 11:33
4-Bromophenyl Phenyl Ether	ND	0.32	0.50	2	11/14/2017 11:33
Butylbenzyl Phthalate	ND	0.26	0.50	2	11/14/2017 11:33
4-Chloroaniline	ND	0.0025	0.0025	2	11/14/2017 11:33
4-Chloro-3-methylphenol	ND	0.24	0.50	2	11/14/2017 11:33
2-Chloronaphthalene	ND	0.32	0.50	2	11/14/2017 11:33
2-Chlorophenol	ND	0.010	0.010	2	11/14/2017 11:33
4-Chlorophenyl Phenyl Ether	ND	0.30	0.50	2	11/14/2017 11:33
Chrysene	ND	0.28	0.50	2	11/14/2017 11:33
Dibenzo (a,h) anthracene	0.010	0.0050	0.0050	2	11/14/2017 11:33
Dibenzofuran	ND	0.26	0.50	2	11/14/2017 11:33
Di-n-butyl Phthalate	ND	0.26	0.50	2	11/14/2017 11:33
1,2-Dichlorobenzene	ND	0.24	0.50	2	11/14/2017 11:33
1,3-Dichlorobenzene	ND	0.28	0.50	2	11/14/2017 11:33
1,4-Dichlorobenzene	ND	0.050	0.050	2	11/14/2017 11:33
3,3-Dichlorobenzidine	ND	0.010	0.010	2	11/14/2017 11:33
2,4-Dichlorophenol	ND	0.0050	0.0050	2	11/14/2017 11:33
Diethyl Phthalate	ND	0.0050	0.0050	2	11/14/2017 11:33
2,4-Dimethylphenol	ND	0.050	0.050	2	11/14/2017 11:33
Dimethyl Phthalate	ND	0.0050	0.0050	2	11/14/2017 11:33
4,6-Dinitro-2-methylphenol	ND	0.26	2.6	2	11/14/2017 11:33

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC21 11141706.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.2	1.2	2	11/14/2017 11:33
2,4-Dinitrotoluene	ND	0.050	0.050	2	11/14/2017 11:33
2,6-Dinitrotoluene	ND	0.28	0.50	2	11/14/2017 11:33
Di-n-octyl Phthalate	ND	0.28	1.0	2	11/14/2017 11:33
1,2-Diphenylhydrazine	ND	0.32	0.50	2	11/14/2017 11:33
Fluoranthene	ND	0.26	0.50	2	11/14/2017 11:33
Fluorene	ND	0.28	0.50	2	11/14/2017 11:33
Hexachlorobenzene	ND	0.050	0.050	2	11/14/2017 11:33
Hexachlorobutadiene	ND	0.050	0.050	2	11/14/2017 11:33
Hexachlorocyclopentadiene	ND	1.5	2.6	2	11/14/2017 11:33
Hexachloroethane	ND	0.28	0.50	2	11/14/2017 11:33
Indeno (1,2,3-cd) pyrene	ND	0.025	0.025	2	11/14/2017 11:33
Isophorone	ND	0.24	0.50	2	11/14/2017 11:33
2-Methylnaphthalene	ND	0.050	0.050	2	11/14/2017 11:33
2-Methylphenol (o-Cresol)	ND	0.28	0.50	2	11/14/2017 11:33
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.50	2	11/14/2017 11:33
Naphthalene	ND	0.0050	0.0050	2	11/14/2017 11:33
2-Nitroaniline	ND	1.2	2.6	2	11/14/2017 11:33
3-Nitroaniline	ND	1.2	2.6	2	11/14/2017 11:33
4-Nitroaniline	ND	1.1	2.6	2	11/14/2017 11:33
Nitrobenzene	ND	0.28	0.50	2	11/14/2017 11:33
2-Nitrophenol	ND	1.3	2.6	2	11/14/2017 11:33
4-Nitrophenol	ND	0.82	2.6	2	11/14/2017 11:33
N-Nitrosodiphenylamine	ND	0.32	0.50	2	11/14/2017 11:33
N-Nitrosodi-n-propylamine	ND	0.025	0.025	2	11/14/2017 11:33
Pentachlorophenol	ND	0.65	2.6	2	11/14/2017 11:33
Phenanthrene	ND	0.28	0.50	2	11/14/2017 11:33
Phenol	ND	0.010	0.010	2	11/14/2017 11:33
Pyrene	ND	0.26	0.50	2	11/14/2017 11:33
Pyridine	ND	0.50	0.50	2	11/14/2017 11:33
1,2,4-Trichlorobenzene	ND	0.28	0.50	2	11/14/2017 11:33
2,4,5-Trichlorophenol	ND	0.025	0.025	2	11/14/2017 11:33
2,4,6-Trichlorophenol	ND	0.025	0.025	2	11/14/2017 11:33

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC21 11141706.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	74		30-130		11/14/2017 11:33
Phenol-d5	65		30-130		11/14/2017 11:33
Nitrobenzene-d5	60		30-130		11/14/2017 11:33
2-Fluorobiphenyl	59		30-130		11/14/2017 11:33
2,4,6-Tribromophenol	57		16-130		11/14/2017 11:33
4-Terphenyl-d14	57		30-130		11/14/2017 11:33

Analyst(s): REB



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC21 11151718.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.14	0.25	1	11/15/2017 17:10
Acenaphthylene	ND	0.14	0.25	1	11/15/2017 17:10
Acetochlor	ND	0.25	0.25	1	11/15/2017 17:10
Anthracene	ND	0.14	0.25	1	11/15/2017 17:10
Benzidine	ND	0.23	1.3	1	11/15/2017 17:10
Benzo (a) anthracene	ND	0.050	0.050	1	11/15/2017 17:10
Benzo (a) pyrene	0.010	0.0025	0.0025	1	11/15/2017 17:10
Benzo (b) fluoranthene	0.014	0.012	0.012	1	11/15/2017 17:10
Benzo (g,h,i) perylene	ND	0.15	0.25	1	11/15/2017 17:10
Benzo (k) fluoranthene	ND	0.16	0.25	1	11/15/2017 17:10
Benzyl Alcohol	ND	0.51	1.3	1	11/15/2017 17:10
1,1-Biphenyl	ND	0.15	0.25	1	11/15/2017 17:10
Bis (2-chloroethoxy) Methane	ND	0.14	0.25	1	11/15/2017 17:10
Bis (2-chloroethyl) Ether	ND	0.0012	0.0012	1	11/15/2017 17:10
Bis (2-chloroisopropyl) Ether	ND	0.0012	0.0012	1	11/15/2017 17:10
Bis (2-ethylhexyl) Adipate	ND	0.25	0.25	1	11/15/2017 17:10
Bis (2-ethylhexyl) Phthalate	0.28	0.13	0.25	1	11/15/2017 17:10
4-Bromophenyl Phenyl Ether	ND	0.16	0.25	1	11/15/2017 17:10
Butylbenzyl Phthalate	ND	0.13	0.25	1	11/15/2017 17:10
4-Chloroaniline	ND	0.0012	0.0012	1	11/15/2017 17:10
4-Chloro-3-methylphenol	ND	0.12	0.25	1	11/15/2017 17:10
2-Chloronaphthalene	ND	0.16	0.25	1	11/15/2017 17:10
2-Chlorophenol	ND	0.0050	0.0050	1	11/15/2017 17:10
4-Chlorophenyl Phenyl Ether	ND	0.15	0.25	1	11/15/2017 17:10
Chrysene	ND	0.14	0.25	1	11/15/2017 17:10
Dibenzo (a,h) anthracene	ND	0.0025	0.0025	1	11/15/2017 17:10
Dibenzofuran	ND	0.13	0.25	1	11/15/2017 17:10
Di-n-butyl Phthalate	ND	0.13	0.25	1	11/15/2017 17:10
1,2-Dichlorobenzene	ND	0.12	0.25	1	11/15/2017 17:10
1,3-Dichlorobenzene	ND	0.14	0.25	1	11/15/2017 17:10
1,4-Dichlorobenzene	ND	0.025	0.025	1	11/15/2017 17:10
3,3-Dichlorobenzidine	ND	0.0050	0.0050	1	11/15/2017 17:10
2,4-Dichlorophenol	ND	0.0025	0.0025	1	11/15/2017 17:10
Diethyl Phthalate	ND	0.0025	0.0025	1	11/15/2017 17:10
2,4-Dimethylphenol	ND	0.025	0.025	1	11/15/2017 17:10
Dimethyl Phthalate	ND	0.0025	0.0025	1	11/15/2017 17:10
4,6-Dinitro-2-methylphenol	ND	0.13	1.3	1	11/15/2017 17:10

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC21 11151718.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	0.62	0.62	1	11/15/2017 17:10
2,4-Dinitrotoluene	ND	0.025	0.025	1	11/15/2017 17:10
2,6-Dinitrotoluene	ND	0.14	0.25	1	11/15/2017 17:10
Di-n-octyl Phthalate	ND	0.14	0.50	1	11/15/2017 17:10
1,2-Diphenylhydrazine	ND	0.16	0.25	1	11/15/2017 17:10
Fluoranthene	ND	0.13	0.25	1	11/15/2017 17:10
Fluorene	ND	0.14	0.25	1	11/15/2017 17:10
Hexachlorobenzene	ND	0.025	0.025	1	11/15/2017 17:10
Hexachlorobutadiene	ND	0.025	0.025	1	11/15/2017 17:10
Hexachlorocyclopentadiene	ND	0.73	1.3	1	11/15/2017 17:10
Hexachloroethane	ND	0.14	0.25	1	11/15/2017 17:10
Indeno (1,2,3-cd) pyrene	ND	0.012	0.012	1	11/15/2017 17:10
Isophorone	ND	0.12	0.25	1	11/15/2017 17:10
2-Methylnaphthalene	ND	0.025	0.025	1	11/15/2017 17:10
2-Methylphenol (o-Cresol)	ND	0.14	0.25	1	11/15/2017 17:10
3 & 4-Methylphenol (m,p-Cresol)	ND	0.12	0.25	1	11/15/2017 17:10
Naphthalene	ND	0.0025	0.0025	1	11/15/2017 17:10
2-Nitroaniline	ND	0.62	1.3	1	11/15/2017 17:10
3-Nitroaniline	ND	0.59	1.3	1	11/15/2017 17:10
4-Nitroaniline	ND	0.55	1.3	1	11/15/2017 17:10
Nitrobenzene	ND	0.14	0.25	1	11/15/2017 17:10
2-Nitrophenol	ND	0.64	1.3	1	11/15/2017 17:10
4-Nitrophenol	ND	0.41	1.3	1	11/15/2017 17:10
N-Nitrosodiphenylamine	ND	0.16	0.25	1	11/15/2017 17:10
N-Nitrosodi-n-propylamine	ND	0.012	0.012	1	11/15/2017 17:10
Pentachlorophenol	ND	0.32	1.3	1	11/15/2017 17:10
Phenanthrene	ND	0.14	0.25	1	11/15/2017 17:10
Phenol	ND	0.0050	0.0050	1	11/15/2017 17:10
Pyrene	ND	0.13	0.25	1	11/15/2017 17:10
Pyridine	ND	0.25	0.25	1	11/15/2017 17:10
1,2,4-Trichlorobenzene	ND	0.14	0.25	1	11/15/2017 17:10
2,4,5-Trichlorophenol	ND	0.012	0.012	1	11/15/2017 17:10
2,4,6-Trichlorophenol	ND	0.012	0.012	1	11/15/2017 17:10

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Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC21 11151718.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	86		30-130		11/15/2017 17:10
Phenol-d5	78		30-130		11/15/2017 17:10
Nitrobenzene-d5	80		30-130		11/15/2017 17:10
2-Fluorobiphenyl	71		30-130		11/15/2017 17:10
2,4,6-Tribromophenol	74		16-130		11/15/2017 17:10
4-Terphenyl-d14	65		30-130		11/15/2017 17:10

Analyst(s): REB



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC21 11141708.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.28	0.50	2	11/14/2017 12:29
Acenaphthylene	ND	0.28	0.50	2	11/14/2017 12:29
Acetochlor	ND	0.50	0.50	2	11/14/2017 12:29
Anthracene	ND	0.28	0.50	2	11/14/2017 12:29
Benzidine	ND	0.46	2.6	2	11/14/2017 12:29
Benzo (a) anthracene	ND	0.10	0.10	2	11/14/2017 12:29
Benzo (a) pyrene	0.016	0.0050	0.0050	2	11/14/2017 12:29
Benzo (b) fluoranthene	ND	0.025	0.025	2	11/14/2017 12:29
Benzo (g,h,i) perylene	ND	0.30	0.50	2	11/14/2017 12:29
Benzo (k) fluoranthene	ND	0.32	0.50	2	11/14/2017 12:29
Benzyl Alcohol	ND	1.0	2.6	2	11/14/2017 12:29
1,1-Biphenyl	ND	0.30	0.50	2	11/14/2017 12:29
Bis (2-chloroethoxy) Methane	ND	0.28	0.50	2	11/14/2017 12:29
Bis (2-chloroethyl) Ether	ND	0.0025	0.0025	2	11/14/2017 12:29
Bis (2-chloroisopropyl) Ether	ND	0.0025	0.0025	2	11/14/2017 12:29
Bis (2-ethylhexyl) Adipate	ND	0.50	0.50	2	11/14/2017 12:29
Bis (2-ethylhexyl) Phthalate	0.64	0.26	0.50	2	11/14/2017 12:29
4-Bromophenyl Phenyl Ether	ND	0.32	0.50	2	11/14/2017 12:29
Butylbenzyl Phthalate	ND	0.26	0.50	2	11/14/2017 12:29
4-Chloroaniline	ND	0.0025	0.0025	2	11/14/2017 12:29
4-Chloro-3-methylphenol	ND	0.24	0.50	2	11/14/2017 12:29
2-Chloronaphthalene	ND	0.32	0.50	2	11/14/2017 12:29
2-Chlorophenol	ND	0.010	0.010	2	11/14/2017 12:29
4-Chlorophenyl Phenyl Ether	ND	0.30	0.50	2	11/14/2017 12:29
Chrysene	ND	0.28	0.50	2	11/14/2017 12:29
Dibenzo (a,h) anthracene	ND	0.0050	0.0050	2	11/14/2017 12:29
Dibenzofuran	ND	0.26	0.50	2	11/14/2017 12:29
Di-n-butyl Phthalate	ND	0.26	0.50	2	11/14/2017 12:29
1,2-Dichlorobenzene	ND	0.24	0.50	2	11/14/2017 12:29
1,3-Dichlorobenzene	ND	0.28	0.50	2	11/14/2017 12:29
1,4-Dichlorobenzene	ND	0.050	0.050	2	11/14/2017 12:29
3,3-Dichlorobenzidine	ND	0.010	0.010	2	11/14/2017 12:29
2,4-Dichlorophenol	ND	0.0050	0.0050	2	11/14/2017 12:29
Diethyl Phthalate	ND	0.0050	0.0050	2	11/14/2017 12:29
2,4-Dimethylphenol	ND	0.050	0.050	2	11/14/2017 12:29
Dimethyl Phthalate	ND	0.0050	0.0050	2	11/14/2017 12:29
4,6-Dinitro-2-methylphenol	ND	0.26	2.6	2	11/14/2017 12:29

(Cont.)



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC21 11141708.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.2	1.2	2	11/14/2017 12:29
2,4-Dinitrotoluene	ND	0.050	0.050	2	11/14/2017 12:29
2,6-Dinitrotoluene	ND	0.28	0.50	2	11/14/2017 12:29
Di-n-octyl Phthalate	ND	0.28	1.0	2	11/14/2017 12:29
1,2-Diphenylhydrazine	ND	0.32	0.50	2	11/14/2017 12:29
Fluoranthene	ND	0.26	0.50	2	11/14/2017 12:29
Fluorene	ND	0.28	0.50	2	11/14/2017 12:29
Hexachlorobenzene	ND	0.050	0.050	2	11/14/2017 12:29
Hexachlorobutadiene	ND	0.050	0.050	2	11/14/2017 12:29
Hexachlorocyclopentadiene	ND	1.5	2.6	2	11/14/2017 12:29
Hexachloroethane	ND	0.28	0.50	2	11/14/2017 12:29
Indeno (1,2,3-cd) pyrene	ND	0.025	0.025	2	11/14/2017 12:29
Isophorone	ND	0.24	0.50	2	11/14/2017 12:29
2-Methylnaphthalene	ND	0.050	0.050	2	11/14/2017 12:29
2-Methylphenol (o-Cresol)	ND	0.28	0.50	2	11/14/2017 12:29
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.50	2	11/14/2017 12:29
Naphthalene	ND	0.0050	0.0050	2	11/14/2017 12:29
2-Nitroaniline	ND	1.2	2.6	2	11/14/2017 12:29
3-Nitroaniline	ND	1.2	2.6	2	11/14/2017 12:29
4-Nitroaniline	ND	1.1	2.6	2	11/14/2017 12:29
Nitrobenzene	ND	0.28	0.50	2	11/14/2017 12:29
2-Nitrophenol	ND	1.3	2.6	2	11/14/2017 12:29
4-Nitrophenol	ND	0.82	2.6	2	11/14/2017 12:29
N-Nitrosodiphenylamine	ND	0.32	0.50	2	11/14/2017 12:29
N-Nitrosodi-n-propylamine	ND	0.025	0.025	2	11/14/2017 12:29
Pentachlorophenol	ND	0.65	2.6	2	11/14/2017 12:29
Phenanthrene	ND	0.28	0.50	2	11/14/2017 12:29
Phenol	ND	0.010	0.010	2	11/14/2017 12:29
Pyrene	ND	0.26	0.50	2	11/14/2017 12:29
Pyridine	ND	0.50	0.50	2	11/14/2017 12:29
1,2,4-Trichlorobenzene	ND	0.28	0.50	2	11/14/2017 12:29
2,4,5-Trichlorophenol	ND	0.025	0.025	2	11/14/2017 12:29
2,4,6-Trichlorophenol	ND	0.025	0.025	2	11/14/2017 12:29

(Cont.)



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/10/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics (Low Level) with GPC Cleanup

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC21 11141708.D	148509

Analytes	Result	MDL	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
2-Fluorophenol	76		30-130		11/14/2017 12:29
Phenol-d5	72		30-130		11/14/2017 12:29
Nitrobenzene-d5	71		30-130		11/14/2017 12:29
2-Fluorobiphenyl	67		30-130		11/14/2017 12:29
2,4,6-Tribromophenol	68		16-130		11/14/2017 12:29
4-Terphenyl-d14	74		30-130		11/14/2017 12:29

Analyst(s): REB



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	ICP-MS3 079SMPL.D	148441

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.92	0.50	1	11/10/2017 17:08
Arsenic	2.9	0.50	1	11/10/2017 17:08
Barium	130	5.0	1	11/10/2017 17:08
Beryllium	ND	0.50	1	11/10/2017 17:08
Cadmium	0.29	0.25	1	11/10/2017 17:08
Chromium	58	0.50	1	11/10/2017 17:08
Cobalt	11	0.50	1	11/10/2017 17:08
Copper	39	0.50	1	11/10/2017 17:08
Lead	85	0.50	1	11/10/2017 17:08
Mercury	0.16	0.050	1	11/10/2017 17:08
Molybdenum	0.55	0.50	1	11/10/2017 17:08
Nickel	42	0.50	1	11/10/2017 17:08
Selenium	ND	0.50	1	11/10/2017 17:08
Silver	ND	0.50	1	11/10/2017 17:08
Thallium	ND	0.50	1	11/10/2017 17:08
Vanadium	49	0.50	1	11/10/2017 17:08
Zinc	99	5.0	1	11/10/2017 17:08

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	100	70-130	11/10/2017 17:08

Analyst(s): MIG



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	ICP-MS1 019SMPL.D	148441

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.60	0.50	1	11/10/2017 10:23
Arsenic	3.2	0.50	1	11/10/2017 10:23
Barium	87	5.0	1	11/10/2017 10:23
Beryllium	ND	0.50	1	11/10/2017 10:23
Cadmium	ND	0.25	1	11/10/2017 10:23
Chromium	46	0.50	1	11/10/2017 10:23
Cobalt	9.3	0.50	1	11/10/2017 10:23
Copper	32	0.50	1	11/10/2017 10:23
Lead	41	0.50	1	11/10/2017 10:23
Mercury	0.068	0.050	1	11/10/2017 10:23
Molybdenum	ND	0.50	1	11/10/2017 10:23
Nickel	31	0.50	1	11/10/2017 10:23
Selenium	ND	0.50	1	11/10/2017 10:23
Silver	ND	0.50	1	11/10/2017 10:23
Thallium	ND	0.50	1	11/10/2017 10:23
Vanadium	40	0.50	1	11/10/2017 10:23
Zinc	130	5.0	1	11/10/2017 10:23

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	102	70-130	11/10/2017 10:23

Analyst(s): ND



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	ICP-MS3 076SMPL.D	148441

Analytes	Result	RL	DF	Date Analyzed
Antimony	0.66	0.50	1	11/10/2017 16:50
Arsenic	3.3	0.50	1	11/10/2017 16:50
Barium	110	5.0	1	11/10/2017 16:50
Beryllium	ND	0.50	1	11/10/2017 16:50
Cadmium	ND	0.25	1	11/10/2017 16:50
Chromium	44	0.50	1	11/10/2017 16:50
Cobalt	8.0	0.50	1	11/10/2017 16:50
Copper	20	0.50	1	11/10/2017 16:50
Lead	59	0.50	1	11/10/2017 16:50
Mercury	0.10	0.050	1	11/10/2017 16:50
Molybdenum	ND	0.50	1	11/10/2017 16:50
Nickel	30	0.50	1	11/10/2017 16:50
Selenium	ND	0.50	1	11/10/2017 16:50
Silver	ND	0.50	1	11/10/2017 16:50
Thallium	ND	0.50	1	11/10/2017 16:50
Vanadium	39	0.50	1	11/10/2017 16:50
Zinc	77	5.0	1	11/10/2017 16:50

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	101	70-130	11/10/2017 16:50

Analyst(s): MIG



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC7 11141727.D	148383

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/15/2017 00:30
MTBE	---	0.050	1	11/15/2017 00:30
Benzene	---	0.0050	1	11/15/2017 00:30
Toluene	---	0.0050	1	11/15/2017 00:30
Ethylbenzene	---	0.0050	1	11/15/2017 00:30
Xylenes	---	0.015	1	11/15/2017 00:30

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	93	62-126	11/15/2017 00:30

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC7 11141728.D	148383

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	11/15/2017 01:00
MTBE	---	0.050	1	11/15/2017 01:00
Benzene	---	0.0050	1	11/15/2017 01:00
Toluene	---	0.0050	1	11/15/2017 01:00
Ethylbenzene	---	0.0050	1	11/15/2017 01:00
Xylenes	---	0.015	1	11/15/2017 01:00

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	88	62-126	11/15/2017 01:00

Analyst(s): IA



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC19 11101712.D	148439

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	ND	1.0	1	11/10/2017 18:41
MTBE	---	0.050	1	11/10/2017 18:41
Benzene	---	0.0050	1	11/10/2017 18:41
Toluene	---	0.0050	1	11/10/2017 18:41
Ethylbenzene	---	0.0050	1	11/10/2017 18:41
Xylenes	---	0.015	1	11/10/2017 18:41

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
2-Fluorotoluene	87	62-126	11/10/2017 18:41

Analyst(s): IA



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 11/9/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	GC11A 11141724.D	148426

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.7	1.0	1	11/14/2017 19:31
TPH-Motor Oil (C18-C36)	17	5.0	1	11/14/2017 19:31

Surrogates	REC (%)	Limits	Date Analyzed
C9	107	78-126	11/14/2017 19:31

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	GC6B 11121709.D	148426

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/12/2017 11:06
TPH-Motor Oil (C18-C36)	11	5.0	1	11/12/2017 11:06

Surrogates	REC (%)	Limits	Date Analyzed
C9	100	78-126	11/12/2017 11:06

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	GC6B 11121711.D	148426

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1.5	1.0	1	11/12/2017 11:45
TPH-Motor Oil (C18-C36)	56	5.0	1	11/12/2017 11:45

Surrogates	REC (%)	Limits	Date Analyzed
C9	100	78-126	11/12/2017 11:45

Analyst(s): TK Analytical Comments: e7,e2



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/8/17	BatchID:	148397
Date Analyzed:	11/10/17 - 11/13/17	Extraction Method:	SW3550B/3640Am/3630Cm
Instrument:	GC23	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS/LCSD-148397

QC Summary Report for SW8081A/8082

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.00010	-	-	-
a-BHC	ND	0.00010	-	-	-
b-BHC	ND	0.00010	-	-	-
d-BHC	ND	0.00010	-	-	-
g-BHC	ND	0.00010	-	-	-
Chlordane (Technical)	ND	0.0025	-	-	-
a-Chlordane	ND	0.00010	-	-	-
g-Chlordane	ND	0.00010	-	-	-
p,p-DDD	ND	0.00010	-	-	-
p,p-DDE	ND	0.00010	-	-	-
p,p-DDT	ND	0.00010	-	-	-
Dieldrin	ND	0.00010	-	-	-
Endosulfan I	ND	0.00010	-	-	-
Endosulfan II	ND	0.00010	-	-	-
Endosulfan sulfate	ND	0.00010	-	-	-
Endrin	ND	0.00010	-	-	-
Endrin aldehyde	ND	0.00010	-	-	-
Endrin ketone	ND	0.00010	-	-	-
Heptachlor	ND	0.00010	-	-	-
Heptachlor epoxide	ND	0.00010	-	-	-
Hexachlorobenzene	ND	0.0010	-	-	-
Hexachlorocyclopentadiene	ND	0.0020	-	-	-
Methoxychlor	ND	0.00010	-	-	-
Toxaphene	ND	0.0050	-	-	-
Aroclor1016	ND	0.0050	-	-	-
Aroclor1221	ND	0.0050	-	-	-
Aroclor1232	ND	0.0050	-	-	-
Aroclor1242	ND	0.0050	-	-	-
Aroclor1248	ND	0.0050	-	-	-
Aroclor1254	ND	0.0050	-	-	-
Aroclor1260	ND	0.0050	-	-	-
PCBs, total	ND	0.0050	-	-	-
Surrogate Recovery					
Decachlorobiphenyl	0.005055		0.0050	101	32-138



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/8/17	BatchID:	148397
Date Analyzed:	11/10/17 - 11/13/17	Extraction Method:	SW3550B/3640Am/3630Cm
Instrument:	GC23	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS/LCSD-148397

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.00381	-	0.0050	76	-	70-130	-	-
a-BHC	0.00442	-	0.0050	88	-	70-130	-	-
b-BHC	0.00440	-	0.0050	88	-	70-130	-	-
d-BHC	0.00403	-	0.0050	81	-	70-130	-	-
g-BHC	0.00413	-	0.0050	83	-	70-130	-	-
a-Chlordane	0.00439	-	0.0050	88	-	70-130	-	-
g-Chlordane	0.00432	-	0.0050	86	-	70-130	-	-
p,p-DDD	0.00431	-	0.0050	86	-	70-130	-	-
p,p-DDE	0.00453	-	0.0050	91	-	70-130	-	-
p,p-DDT	0.00408	-	0.0050	82	-	70-130	-	-
Dieldrin	0.00448	-	0.0050	90	-	70-130	-	-
Endosulfan I	0.00420	-	0.0050	84	-	70-130	-	-
Endosulfan II	0.00369	-	0.0050	74	-	70-130	-	-
Endosulfan sulfate	0.00340	-	0.0050	68, F2	-	70-130	-	-
Endrin	0.00358	-	0.0050	72	-	70-130	-	-
Endrin aldehyde	0.00278	-	0.0050	56, F2	-	70-130	-	-
Endrin ketone	0.00328	-	0.0050	66, F2	-	70-130	-	-
Heptachlor	0.00374	-	0.0050	75	-	70-130	-	-
Heptachlor epoxide	0.00406	-	0.0050	81	-	70-130	-	-
Hexachlorobenzene	0.00364	-	0.0050	73	-	70-130	-	-
Methoxychlor	0.00282	-	0.0050	56, F2	-	70-130	-	-
Aroclor1016	0.0127	0.0142	0.015	85	95	70-130	11.0	30
Aroclor1260	0.0171	0.0184	0.015	114	123	70-130	7.43	30
Surrogate Recovery								
Decachlorobiphenyl	0.00321	0.00340	0.0050	64	68	32-138	5.56	30



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/8/17
Date Analyzed: 11/10/17 - 11/13/17
Instrument: GC10, GC18
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148385
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148385
 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	0.779	0.10	1	-	78	48-156
tert-Amyl methyl ether (TAME)	ND	0.0361	0.0050	0.050	-	72	56-115
Benzene	ND	0.0387	0.0050	0.050	-	77	63-131
Bromobenzene	ND	0.0438	0.0050	0.050	-	88	66-127
Bromochloromethane	ND	0.0400	0.0050	0.050	-	80	64-124
Bromodichloromethane	ND	0.0385	0.0050	0.050	-	77	64-120
Bromoform	ND	0.0293	0.0050	0.050	-	59	48-92
Bromomethane	ND	0.0182	0.0050	0.050	-	36	25-163
2-Butanone (MEK)	ND	0.134	0.020	0.20	-	67	51-133
t-Butyl alcohol (TBA)	ND	0.141	0.050	0.20	-	70	52-129
n-Butyl benzene	ND	0.0571	0.0050	0.050	-	114	83-200
sec-Butyl benzene	ND	0.0601	0.0050	0.050	-	120	81-199
tert-Butyl benzene	ND	0.0539	0.0050	0.050	-	108	79-178
Carbon Disulfide	ND	0.0437	0.0050	0.050	-	87	64-136
Carbon Tetrachloride	ND	0.0427	0.0050	0.050	-	85	66-140
Chlorobenzene	ND	0.0420	0.0050	0.050	-	84	73-116
Chloroethane	ND	0.0448	0.0050	0.050	-	90	35-147
Chloroform	ND	0.0388	0.0050	0.050	-	78	65-130
Chloromethane	ND	0.0226	0.0050	0.050	-	45	30-137
2-Chlorotoluene	ND	0.0528	0.0050	0.050	-	106	75-152
4-Chlorotoluene	ND	0.0501	0.0050	0.050	-	100	71-148
Dibromochloromethane	ND	0.0379	0.0050	0.050	-	76	61-106
1,2-Dibromo-3-chloropropane	ND	0.0136	0.0040	0.020	-	68	36-120
1,2-Dibromoethane (EDB)	ND	0.0427	0.0040	0.050	-	85	67-118
Dibromomethane	ND	0.0359	0.0050	0.050	-	72	61-116
1,2-Dichlorobenzene	ND	0.0380	0.0050	0.050	-	76	59-106
1,3-Dichlorobenzene	ND	0.0489	0.0050	0.050	-	98	75-129
1,4-Dichlorobenzene	ND	0.0437	0.0050	0.050	-	87	66-127
Dichlorodifluoromethane	ND	0.0203	0.0050	0.050	-	41	13-74
1,1-Dichloroethane	ND	0.0387	0.0050	0.050	-	77	65-134
1,2-Dichloroethane (1,2-DCA)	ND	0.0349	0.0040	0.050	-	70	57-131
1,1-Dichloroethene	ND	0.0425	0.0050	0.050	-	85	62-127
cis-1,2-Dichloroethene	ND	0.0410	0.0050	0.050	-	82	66-130
trans-1,2-Dichloroethene	ND	0.0420	0.0050	0.050	-	84	60-131
1,2-Dichloropropane	ND	0.0367	0.0050	0.050	-	73	63-127
1,3-Dichloropropane	ND	0.0404	0.0050	0.050	-	81	68-124
2,2-Dichloropropane	ND	0.0412	0.0050	0.050	-	82	63-150

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Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/8/17
Date Analyzed: 11/10/17 - 11/13/17
Instrument: GC10, GC18
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148385
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148385
 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	0.0396	0.0050	0.050	-	79	67-134
cis-1,3-Dichloropropene	ND	0.0436	0.0050	0.050	-	87	65-138
trans-1,3-Dichloropropene	ND	0.0381	0.0050	0.050	-	76	66-124
Diisopropyl ether (DIPE)	ND	0.0350	0.0050	0.050	-	70	58-129
Ethylbenzene	ND	0.0452	0.0050	0.050	-	90	73-145
Ethyl tert-butyl ether (ETBE)	ND	0.0354	0.0050	0.050	-	71	62-125
Freon 113	ND	0.0355	0.0050	0.050	-	71	55-116
Hexachlorobutadiene	ND	0.0613	0.0050	0.050	-	123	75-178
Hexachloroethane	ND	0.0434	0.0050	0.050	-	87	75-152
2-Hexanone	ND	0.0298	0.0050	0.050	-	60	41-113
Isopropylbenzene	ND	0.0494	0.0050	0.050	-	99	67-172
4-Isopropyl toluene	ND	0.0571	0.0050	0.050	-	114	88-171
Methyl-t-butyl ether (MTBE)	ND	0.0355	0.0050	0.050	-	71	58-122
Methylene chloride	ND	0.0387	0.0050	0.050	-	77	57-140
4-Methyl-2-pentanone (MIBK)	ND	0.0342	0.0050	0.050	-	69	42-117
Naphthalene	ND	0.0259	0.0050	0.050	-	52	29-65
n-Propyl benzene	ND	0.0591	0.0050	0.050	-	118	85-174
Styrene	ND	0.0403	0.0050	0.050	-	81	63-126
1,1,1,2-Tetrachloroethane	ND	0.0450	0.0050	0.050	-	90	68-131
1,1,2,2-Tetrachloroethane	ND	0.0353	0.0050	0.050	-	71	45-121
Tetrachloroethene	ND	0.0518	0.0050	0.050	-	104	65-150
Toluene	ND	0.0446	0.0050	0.050	-	89	72-135
1,2,3-Trichlorobenzene	ND	0.0295	0.0050	0.050	-	59	35-80
1,2,4-Trichlorobenzene	ND	0.0370	0.0050	0.050	-	74	45-103
1,1,1-Trichloroethane	ND	0.0412	0.0050	0.050	-	82	67-137
1,1,2-Trichloroethane	ND	0.0421	0.0050	0.050	-	84	67-117
Trichloroethene	ND	0.0455	0.0050	0.050	-	91	62-135
Trichlorofluoromethane	ND	0.0370	0.0050	0.050	-	74	56-124
1,2,3-Trichloropropane	ND	0.0410	0.0050	0.050	-	82	58-133
1,2,4-Trimethylbenzene	ND	0.0506	0.0050	0.050	-	101	78-161
1,3,5-Trimethylbenzene	ND	0.0532	0.0050	0.050	-	106	85-170
Vinyl Chloride	ND	0.0364	0.0050	0.050	-	73	32-142
Xylenes, Total	ND	0.134	0.0050	0.15	-	90	70-137

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Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/8/17	BatchID:	148385
Date Analyzed:	11/10/17 - 11/13/17	Extraction Method:	SW5030B
Instrument:	GC10, GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-148385 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.1379	0.141		0.12	110	113	87-127
Toluene-d8	0.16	0.159		0.12	128	127	93-141
4-BFB	0.01428	0.0146		0.012	114	117	84-137
Benzene-d6	0.1077	0.101		0.10	108	101	67-131
Ethylbenzene-d10	0.1173	0.110		0.10	117	110	78-153
1,2-DCB-d4	0.09151	0.0898		0.10	92	90	63-109



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/8/17
Date Analyzed: 11/10/17 - 11/13/17
Instrument: GC10, GC18
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148385
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148385
 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	0.837	0.759	1	ND	84	76	36-141	9.79	20
tert-Amyl methyl ether (TAME)	0.0374	0.0361	0.050	ND	75	72	46-105	3.55	20
Benzene	0.0468	0.0464	0.050	ND	94	93	46-124	0.843	20
Bromobenzene	0.0423	0.0440	0.050	ND	85	88	50-119	3.88	20
Bromochloromethane	0.0395	0.0388	0.050	ND	79	78	42-122	1.82	20
Bromodichloromethane	0.0398	0.0397	0.050	ND	80	79	48-112	0.118	20
Bromoform	0.0274	0.0269	0.050	ND	55	54	36-90	1.85	20
Bromomethane	0.0639	0.0587	0.050	ND	128	117	10-149	8.49	20
2-Butanone (MEK)	0.156	0.148	0.20	ND	78	74	43-114	5.42	20
t-Butyl alcohol (TBA)	0.132	0.123	0.20	ND	66	62	33-123	7.21	20
n-Butyl benzene	0.0535	0.0549	0.050	ND	107	110	40-185	2.71	20
sec-Butyl benzene	0.0574	0.0588	0.050	ND	115	118	40-183	2.38	20
tert-Butyl benzene	0.0512	0.0534	0.050	ND	102	107	44-168	4.15	20
Carbon Disulfide	0.0327	0.0322	0.050	ND	65	64	23-139	1.39	20
Carbon Tetrachloride	0.0410	0.0416	0.050	ND	82	83	43-133	1.54	20
Chlorobenzene	0.0407	0.0410	0.050	ND	81	82	51-115	0.780	20
Chloroethane	0.0576	0.0549	0.050	ND	115	110	16-138	4.88	20
Chloroform	0.0439	0.0438	0.050	ND	88	88	54-117	0	20
Chloromethane	0.0484	0.0452	0.050	ND	97	90	14-128	6.66	20
2-Chlorotoluene	0.0515	0.0525	0.050	ND	103	105	54-141	1.83	20
4-Chlorotoluene	0.0466	0.0474	0.050	ND	93	95	52-134	1.71	20
Dibromochloromethane	0.0343	0.0346	0.050	ND	69	69	46-102	0	20
1,2-Dibromo-3-chloropropane	0.0114	0.0108	0.020	ND	57	54	16-120	4.93	20
1,2-Dibromoethane (EDB)	0.0345	0.0343	0.050	ND	69	69	48-113	0	20
Dibromomethane	0.0382	0.0370	0.050	ND	76	74	44-110	3.28	20
1,2-Dichlorobenzene	0.0370	0.0371	0.050	ND	74	74	43-106	0	20
1,3-Dichlorobenzene	0.0470	0.0469	0.050	ND	94	94	49-128	0	20
1,4-Dichlorobenzene	0.0409	0.0412	0.050	ND	82	82	48-120	0	20
Dichlorodifluoromethane	0.0204	0.0198	0.050	ND	41	40	8-63	3.22	20
1,1-Dichloroethane	0.0454	0.0452	0.050	ND	91	90	50-122	0.481	20
1,2-Dichloroethane (1,2-DCA)	0.0390	0.0385	0.050	ND	78	77	46-116	1.32	20
1,1-Dichloroethene	0.0388	0.0385	0.050	ND	78	77	37-124	0.601	20
cis-1,2-Dichloroethene	0.0418	0.0425	0.050	ND	84	85	47-123	1.67	20
trans-1,2-Dichloroethene	0.0410	0.0411	0.050	ND	82	82	31-131	0	20
1,2-Dichloropropane	0.0459	0.0452	0.050	ND	92	90	50-116	1.65	20
1,3-Dichloropropane	0.0390	0.0391	0.050	ND	78	78	52-115	0	20
2,2-Dichloropropane	0.0429	0.0430	0.050	ND	86	86	43-137	0	20

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Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/8/17
Date Analyzed: 11/10/17 - 11/13/17
Instrument: GC10, GC18
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148385
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-148385
 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,1-Dichloropropene	0.0430	0.0433	0.050	ND	86	87	43-126	0.694	20
cis-1,3-Dichloropropene	0.0386	0.0390	0.050	ND	77	78	35-134	0.991	20
trans-1,3-Dichloropropene	0.0399	0.0399	0.050	ND	80	80	35-124	0	20
Diisopropyl ether (DIPE)	0.0469	0.0453	0.050	ND	94	91	49-116	3.35	20
Ethylbenzene	0.0433	0.0436	0.050	ND	87	87	49-137	0	20
Ethyl tert-butyl ether (ETBE)	0.0428	0.0415	0.050	ND	86	83	50-113	3.13	20
Freon 113	0.0329	0.0329	0.050	ND	66	66	28-114	0	20
Hexachlorobutadiene	0.0411	0.0417	0.050	ND	82	83	22-180	1.39	20
Hexachloroethane	0.0561	0.0594	0.050	ND	112	119	28-158	5.70	20
2-Hexanone	0.0304	0.0275	0.050	ND	61	55	31-102	9.99	20
Isopropylbenzene	0.0541	0.0562	0.050	ND	108	112	50-153	3.79	20
4-Isopropyl toluene	0.0513	0.0523	0.050	ND	103	105	41-171	2.07	20
Methyl-t-butyl ether (MTBE)	0.0404	0.0387	0.050	ND	81	77	48-110	4.24	20
Methylene chloride	0.0426	0.0418	0.050	ND	85	84	42-127	1.84	20
4-Methyl-2-pentanone (MIBK)	0.0305	0.0311	0.050	ND	61	62	24-114	1.96	20
Naphthalene	0.0174	0.0171	0.050	ND	35	34	19-69	2.07	20
n-Propyl benzene	0.0543	0.0563	0.050	ND	109	113	46-168	3.63	20
Styrene	0.0349	0.0345	0.050	ND	70	69	42-122	1.10	20
1,1,1,2-Tetrachloroethane	0.0380	0.0388	0.050	ND	76	78	52-121	2.03	20
1,1,2,2-Tetrachloroethane	0.0353	0.0359	0.050	ND	71	72	27-116	1.81	20
Tetrachloroethene	0.0395	0.0410	0.050	ND	79	82	37-149	3.63	20
Toluene	0.0440	0.0452	0.050	ND	88	90	52-124	2.88	20
1,2,3-Trichlorobenzene	0.0211	0.0212	0.050	ND	42	42	20-86	0	20
1,2,4-Trichlorobenzene	0.0270	0.0267	0.050	ND	54	53	24-107	0.849	20
1,1,1-Trichloroethane	0.0411	0.0418	0.050	ND	82	84	48-128	1.69	20
1,1,2-Trichloroethane	0.0369	0.0366	0.050	ND	74	73	51-110	0.727	20
Trichloroethene	0.0412	0.0420	0.050	ND	82	84	42-128	1.91	20
Trichlorofluoromethane	0.0331	0.0334	0.050	ND	66	67	31-121	0.746	20
1,2,3-Trichloropropane	0.0407	0.0411	0.050	ND	81	82	50-115	1.03	20
1,2,4-Trimethylbenzene	0.0458	0.0469	0.050	ND	92	94	48-151	2.19	20
1,3,5-Trimethylbenzene	0.0517	0.0536	0.050	ND	103	107	51-159	3.62	20
Vinyl Chloride	0.0500	0.0470	0.050	ND	100	94	11-136	5.97	20
Xylenes, Total	0.121	0.120	0.15	ND	80	80	38-141	0	20

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Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/8/17	BatchID:	148385
Date Analyzed:	11/10/17 - 11/13/17	Extraction Method:	SW5030B
Instrument:	GC10, GC18	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-148385 1711338-002AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
Dibromofluoromethane	0.128	0.128	0.12		103	103	82-136	0	20
Toluene-d8	0.140	0.142	0.12		112	113	92-139	1.43	20
4-BFB	0.0118	0.0124	0.012		95	99	82-135	4.62	20
Benzene-d6	0.114	0.111	0.10		114	111	55-122	2.58	20
Ethylbenzene-d10	0.114	0.112	0.10		114	112	58-141	1.38	20
1,2-DCB-d4	0.0829	0.0816	0.10		83	82	51-107	1.61	20



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/10/17
Date Analyzed: 11/10/17
Instrument: GC21
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148509
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-148509
 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	3.44	0.14	0.25	5	-	69	32-118
Acenaphthylene	ND	3.75	0.14	0.25	5	-	75	32-122
Acetochlor	ND	-	0.25	0.25	-	-	-	-
Anthracene	ND	3.73	0.14	0.25	5	-	75	36-125
Benzidine	ND	1.61	0.23	1.3	5	-	32	4-83
Benzo (a) anthracene	ND	4.06	0.050	0.050	5	-	81	35-117
Benzo (a) pyrene	ND	4.51	0.0025	0.0025	5	-	90	42-138
Benzo (b) fluoranthene	ND	4.32	0.012	0.012	5	-	86	37-125
Benzo (g,h,i) perylene	ND	4.36	0.15	0.25	5	-	87	45-146
Benzo (k) fluoranthene	ND	3.28	0.16	0.25	5	-	66	39-124
Benzyl Alcohol	ND	3.62	0.51	1.3	5	-	72	5-105
1,1-Biphenyl	ND	-	0.15	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	3.07	0.14	0.25	5	-	61	35-115
Bis (2-chloroethyl) Ether	ND	3.04	0.0012	0.0012	5	-	61	35-105
Bis (2-chloroisopropyl) Ether	ND	3.59	0.0012	0.0012	5	-	72	34-119
Bis (2-ethylhexyl) Adipate	ND	3.94	0.25	0.25	5	-	79	27-117
Bis (2-ethylhexyl) Phthalate	ND	4.17	0.13	0.25	5	-	83	34-124
4-Bromophenyl Phenyl Ether	ND	3.46	0.16	0.25	5	-	69	33-112
Butylbenzyl Phthalate	ND	3.95	0.13	0.25	5	-	79	35-127
4-Chloroaniline	ND	2.11	0.0012	0.0012	5	-	42	12-77
4-Chloro-3-methylphenol	ND	3.88	0.12	0.25	5	-	78	35-123
2-Chloronaphthalene	ND	3.02	0.16	0.25	5	-	60	28-109
2-Chlorophenol	ND	3.33	0.0050	0.0050	5	-	67	38-116
4-Chlorophenyl Phenyl Ether	ND	3.97	0.15	0.25	5	-	79	33-122
Chrysene	ND	3.84	0.14	0.25	5	-	77	37-116
Dibenzo (a,h) anthracene	ND	4.27	0.0025	0.0025	5	-	85	43-141
Dibenzofuran	ND	3.43	0.13	0.25	5	-	69	33-117
Di-n-butyl Phthalate	ND	3.64	0.13	0.25	5	-	73	38-126
1,2-Dichlorobenzene	ND	3.46	0.12	0.25	5	-	69	34-105
1,3-Dichlorobenzene	ND	3.34	0.14	0.25	5	-	67	33-104
1,4-Dichlorobenzene	ND	2.97	0.025	0.025	5	-	59	31-102
3,3-Dichlorobenzidine	ND	2.22	0.0050	0.0050	5	-	44	14-84
2,4-Dichlorophenol	ND	4.39	0.0025	0.0025	5	-	88	31-124
Diethyl Phthalate	0.00325	3.68	0.0025	0.0025	5	-	74	35-118
2,4-Dimethylphenol	ND	4.07	0.025	0.025	5	-	81	30-120
Dimethyl Phthalate	ND	3.68	0.0025	0.0025	5	-	74	33-118
4,6-Dinitro-2-methylphenol	ND	3.84	0.13	1.3	5	-	77	12-126

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Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/10/17
Date Analyzed: 11/10/17
Instrument: GC21
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148509
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-148509
 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrophenol	ND	4.75	0.62	0.62	5	-	95	8-130
2,4-Dinitrotoluene	ND	4.40	0.025	0.025	5	-	88	38-117
2,6-Dinitrotoluene	ND	4.09	0.14	0.25	5	-	82	35-121
Di-n-octyl Phthalate	ND	4.02	0.14	0.50	5	-	80	42-150
1,2-Diphenylhydrazine	ND	3.17	0.16	0.25	5	-	63	0-117
Fluoranthene	ND	3.83	0.13	0.25	5	-	77	38-126
Fluorene	ND	3.81	0.14	0.25	5	-	76	34-118
Hexachlorobenzene	ND	2.92	0.025	0.025	5	-	58	30-130
Hexachlorobutadiene	ND	3.40	0.025	0.025	5	-	68	33-121
Hexachlorocyclopentadiene	ND	3.02	0.73	1.3	5	-	60	8-89
Hexachloroethane	ND	3.24	0.14	0.25	5	-	65	32-106
Indeno (1,2,3-cd) pyrene	ND	4.20	0.012	0.012	5	-	84	43-138
Isophorone	ND	2.79	0.12	0.25	5	-	56	26-92
2-Methylnaphthalene	ND	4.04	0.025	0.025	5	-	81	30-121
2-Methylphenol (o-Cresol)	ND	3.44	0.14	0.25	5	-	69	34-114
3 & 4-Methylphenol (m,p-Cresol)	ND	3.42	0.12	0.25	5	-	68	26-130
Naphthalene	ND	3.58	0.0025	0.0025	5	-	72	33-113
2-Nitroaniline	ND	3.64	0.62	1.3	5	-	73	29-115
3-Nitroaniline	ND	2.89	0.59	1.3	5	-	58	25-93
4-Nitroaniline	ND	3.66	0.55	1.3	5	-	73	31-108
Nitrobenzene	ND	3.28	0.14	0.25	5	-	66	33-122
2-Nitrophenol	ND	4.18	0.64	1.3	5	-	84	32-121
4-Nitrophenol	ND	3.92	0.41	1.3	5	-	78	27-102
N-Nitrosodiphenylamine	ND	-	0.16	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	3.46	0.012	0.012	5	-	69	25-108
Pentachlorophenol	ND	3.70	0.32	1.3	5	-	74	28-134
Phenanthrene	ND	3.59	0.14	0.25	5	-	72	36-123
Phenol	ND	3.24	0.0050	0.0050	5	-	65	33-107
Pyrene	ND	3.80	0.13	0.25	5	-	76	38-124
Pyridine	ND	4.50	0.25	0.25	5	-	90	30-130
1,2,4-Trichlorobenzene	ND	3.88	0.14	0.25	5	-	78	34-121
2,4,5-Trichlorophenol	ND	3.90	0.012	0.012	5	-	78	31-126
2,4,6-Trichlorophenol	ND	3.76	0.012	0.012	5	-	75	32-128

(Cont.)



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/10/17	BatchID:	148509
Date Analyzed:	11/10/17	Extraction Method:	SW3550B/3640A
Instrument:	GC21	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-148509 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery								
2-Fluorophenol	3.604	3.82			5	72	76	31-108
Phenol-d5	3.323	3.83			5	66	77	32-106
Nitrobenzene-d5	3.332	3.67			5	67	73	27-109
2-Fluorobiphenyl	3.169	3.55			5	63	71	26-100
2,4,6-Tribromophenol	3.125	3.64			5	63	73	25-106
4-Terphenyl-d14	3.228	4.02			5	65	80	27-113

(Cont.)

NELAP 4033ORELAP



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/10/17
Date Analyzed: 11/10/17
Instrument: GC21
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148509
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-148509
 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<2.5	NR	NR	-	NR	-
Acenaphthylene	NR	NR		ND<2.5	NR	NR	-	NR	-
Anthracene	NR	NR		ND<2.5	NR	NR	-	NR	-
Benzidine	NR	NR		ND<13	NR	NR	-	NR	-
Benzo (a) anthracene	NR	NR		ND<0.5	NR	NR	-	NR	-
Benzo (a) pyrene	NR	NR		0.13	NR	NR	-	NR	-
Benzo (b) fluoranthene	NR	NR		0.2	NR	NR	-	NR	-
Benzo (g,h,i) perylene	NR	NR		ND<2.5	NR	NR	-	NR	-
Benzo (k) fluoranthene	NR	NR		ND<2.5	NR	NR	-	NR	-
Benzyl Alcohol	NR	NR		ND<13	NR	NR	-	NR	-
Bis (2-chloroethoxy) Methane	NR	NR		ND<2.5	NR	NR	-	NR	-
Bis (2-chloroethyl) Ether	NR	NR		ND<0.012	NR	NR	-	NR	-
Bis (2-chloroisopropyl) Ether	NR	NR		ND<0.012	NR	NR	-	NR	-
Bis (2-ethylhexyl) Adipate	NR	NR		ND<2.5	NR	NR	-	NR	-
Bis (2-ethylhexyl) Phthalate	NR	NR		ND<2.5	NR	NR	-	NR	-
4-Bromophenyl Phenyl Ether	NR	NR		ND<2.5	NR	NR	-	NR	-
Butylbenzyl Phthalate	NR	NR		ND<2.5	NR	NR	-	NR	-
4-Chloroaniline	NR	NR		ND<0.012	NR	NR	-	NR	-
4-Chloro-3-methylphenol	NR	NR		ND<2.5	NR	NR	-	NR	-
2-Chloronaphthalene	NR	NR		ND<2.5	NR	NR	-	NR	-
2-Chlorophenol	NR	NR		ND<0.05	NR	NR	-	NR	-
4-Chlorophenyl Phenyl Ether	NR	NR		ND<2.5	NR	NR	-	NR	-
Chrysene	NR	NR		ND<2.5	NR	NR	-	NR	-
Dibenzo (a,h) anthracene	NR	NR		ND<0.025	NR	NR	-	NR	-
Dibenzofuran	NR	NR		ND<2.5	NR	NR	-	NR	-
Di-n-butyl Phthalate	NR	NR		ND<2.5	NR	NR	-	NR	-
1,2-Dichlorobenzene	NR	NR		ND<2.5	NR	NR	-	NR	-
1,3-Dichlorobenzene	NR	NR		ND<2.5	NR	NR	-	NR	-
1,4-Dichlorobenzene	NR	NR		ND<0.25	NR	NR	-	NR	-
3,3-Dichlorobenzidine	NR	NR		ND<0.05	NR	NR	-	NR	-
2,4-Dichlorophenol	NR	NR		ND<0.025	NR	NR	-	NR	-
Diethyl Phthalate	NR	NR		ND<0.025	NR	NR	-	NR	-
2,4-Dimethylphenol	NR	NR		ND<0.25	NR	NR	-	NR	-
Dimethyl Phthalate	NR	NR		ND<0.025	NR	NR	-	NR	-
4,6-Dinitro-2-methylphenol	NR	NR		ND<13	NR	NR	-	NR	-
2,4-Dinitrophenol	NR	NR		ND<6.2	NR	NR	-	NR	-
2,4-Dinitrotoluene	NR	NR		ND<0.25	NR	NR	-	NR	-

(Cont.)

NELAP 4033ORELAP



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/10/17
Date Analyzed: 11/10/17
Instrument: GC21
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148509
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-148509
 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
2,6-Dinitrotoluene	NR	NR		ND<2.5	NR	NR	-	NR	-
Di-n-octyl Phthalate	NR	NR		ND<5	NR	NR	-	NR	-
1,2-Diphenylhydrazine	NR	NR		ND<2.5	NR	NR	-	NR	-
Fluoranthene	NR	NR		ND<2.5	NR	NR	-	NR	-
Fluorene	NR	NR		ND<2.5	NR	NR	-	NR	-
Hexachlorobenzene	NR	NR		ND<0.25	NR	NR	-	NR	-
Hexachlorobutadiene	NR	NR		ND<0.25	NR	NR	-	NR	-
Hexachlorocyclopentadiene	NR	NR		ND<13	NR	NR	-	NR	-
Hexachloroethane	NR	NR		ND<2.5	NR	NR	-	NR	-
Indeno (1,2,3-cd) pyrene	NR	NR		ND<0.12	NR	NR	-	NR	-
Isophorone	NR	NR		ND<2.5	NR	NR	-	NR	-
2-Methylnaphthalene	NR	NR		ND<0.25	NR	NR	-	NR	-
2-Methylphenol (o-Cresol)	NR	NR		ND<2.5	NR	NR	-	NR	-
3 & 4-Methylphenol (m,p-Cresol)	NR	NR		ND<2.5	NR	NR	-	NR	-
Naphthalene	NR	NR		ND<0.025	NR	NR	-	NR	-
2-Nitroaniline	NR	NR		ND<13	NR	NR	-	NR	-
3-Nitroaniline	NR	NR		ND<13	NR	NR	-	NR	-
4-Nitroaniline	NR	NR		ND<13	NR	NR	-	NR	-
Nitrobenzene	NR	NR		ND<2.5	NR	NR	-	NR	-
2-Nitrophenol	NR	NR		ND<13	NR	NR	-	NR	-
4-Nitrophenol	NR	NR		ND<13	NR	NR	-	NR	-
N-Nitrosodi-n-propylamine	NR	NR		ND<0.12	NR	NR	-	NR	-
Pentachlorophenol	NR	NR		ND<13	NR	NR	-	NR	-
Phenanthrene	NR	NR		ND<2.5	NR	NR	-	NR	-
Phenol	NR	NR		ND<0.05	NR	NR	-	NR	-
Pyrene	NR	NR		ND<2.5	NR	NR	-	NR	-
Pyridine	NR	NR		ND<2.5	NR	NR	-	NR	-
1,2,4-Trichlorobenzene	NR	NR		ND<2.5	NR	NR	-	NR	-
2,4,5-Trichlorophenol	NR	NR		ND<0.12	NR	NR	-	NR	-
2,4,6-Trichlorophenol	NR	NR		ND<0.12	NR	NR	-	NR	-

(Cont.)



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/10/17
Date Analyzed: 11/10/17
Instrument: GC21
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148509
Extraction Method: SW3550B/3640A
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-148509
 1711338-013AMS/MSD

QC Summary Report for SW8270C (Low Level) w/ GPC

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Surrogate Recovery									
2-Fluorophenol	NR	NR			NR	NR	-	NR	-
Phenol-d5	NR	NR			NR	NR	-	NR	-
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	-
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	-
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	-
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	-



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/9/17
Date Analyzed: 11/10/17
Instrument: ICP-MS1
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148441
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-148441
 1711381-002AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Antimony	ND	50.0	0.50	50	-	100	75-125
Arsenic	ND	49.7	0.50	50	-	99	75-125
Barium	ND	489	5.0	500	-	98	75-125
Beryllium	ND	49.9	0.50	50	-	100	75-125
Cadmium	ND	49.6	0.25	50	-	99	75-125
Chromium	ND	50.3	0.50	50	-	101	75-125
Cobalt	ND	46.7	0.50	50	-	93	75-125
Copper	ND	50.3	0.50	50	-	101	75-125
Lead	ND	47.5	0.50	50	-	95	75-125
Mercury	ND	1.21	0.050	1.25	-	97	75-125
Molybdenum	ND	48.4	0.50	50	-	97	75-125
Nickel	ND	50.7	0.50	50	-	101	75-125
Selenium	ND	48.8	0.50	50	-	98	75-125
Silver	ND	47.8	0.50	50	-	96	75-125
Thallium	ND	44.9	0.50	50	-	90	75-125
Vanadium	ND	49.4	0.50	50	-	99	75-125
Zinc	ND	494	5.0	500	-	99	75-125
Surrogate Recovery							
Terbium	533.4	519		500	107	104	70-130



Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/9/17
Date Analyzed: 11/10/17
Instrument: ICP-MS1
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148441
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/Kg
Sample ID: MB/LCS-148441
 1711381-002AMS/MSD

QC Summary Report for Metals

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	48.2	51.2	50	0.5982	95	101	75-125	6.04	20
Arsenic	51.8	53.8	50	3.245	97	101	75-125	3.69	20
Barium	606	634	500	87.04	104	109	75-125	4.56	20
Beryllium	47.6	50.6	50	ND	95	101	75-125	6.09	20
Cadmium	49.6	51.3	50	ND	99	102	75-125	3.43	20
Chromium	102	106	50	46.05	113	120	75-125	3.55	20
Cobalt	53.9	56.5	50	9.278	89	94	75-125	4.65	20
Copper	85.1	86.3	50	31.68	107	109	75-125	1.44	20
Lead	92.7	95.8	50	41.15	103	109	75-125	3.31	20
Mercury	1.31	1.31	1.25	0.06840	99	99	75-125	0	20
Molybdenum	46.8	49.5	50	ND	93	98	75-125	5.75	20
Nickel	90.6	89.3	50	31.27	119	116	75-125	1.39	20
Selenium	47.6	49.6	50	ND	95	99	75-125	3.97	20
Silver	46.7	49.1	50	ND	93	98	75-125	4.99	20
Thallium	44.4	46.6	50	ND	89	93	75-125	4.73	20
Vanadium	97.8	98.7	50	40.20	115	117	75-125	0.896	20
Zinc	607	647	500	126.9	96	104	75-125	6.36	20

Surrogate Recovery

Terbium	515	543	500		103	109	70-130	5.27	20
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Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	ND<2.5	0.5982	-	-
Arsenic	2.97	3.245	8.47	-
Barium	92.9	87.04	6.73	-
Beryllium	ND<2.5	ND	-	-
Cadmium	ND<1.2	ND	-	-
Chromium	50.8	46.05	10.3	20
Cobalt	10.3	9.278	11.0	-
Copper	32.4	31.68	2.27	20
Lead	43.1	41.15	4.74	20
Mercury	ND<0.25	0.06840	-	-
Molybdenum	ND<2.5	ND	-	-
Nickel	31.6	31.27	1.06	20
Selenium	ND<2.5	ND	-	-

(Cont.)



Quality Control Report

Client: SCA Environmental, Inc.	WorkOrder: 1711381
Date Prepared: 11/9/17	BatchID: 148441
Date Analyzed: 11/10/17	Extraction Method: SW3050B
Instrument: ICP-MS1	Analytical Method: SW6020
Matrix: Soil	Unit: mg/Kg
Project: B12486; SFPW Garfield Square Renov	Sample ID: MB/LCS-148441 1711381-002AMS/MSD

QC Summary Report for Metals

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	43.1	40.20	7.21	20
Zinc	127	126.9	0.0788	20

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/8/17	BatchID:	148383
Date Analyzed:	11/10/17 - 11/14/17	Extraction Method:	SW5030B
Instrument:	GC19, GC7	Analytical Method:	SW8021B/8015Bm
Matrix:	Soil	Unit:	mg/Kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-148383 1711338-009AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	1.0	-	-	-
MTBE	ND	0.050	-	-	-
Benzene	ND	0.0050	-	-	-
Toluene	ND	0.0050	-	-	-
Ethylbenzene	ND	0.0050	-	-	-
Xylenes	ND	0.015	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.09272		0.10	93	75-134
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.596	-	0.60	99	-	82-118	-	-
MTBE	0.0782	-	0.10	78	-	61-119	-	-
Benzene	0.105	-	0.10	105	-	77-128	-	-
Toluene	0.0974	-	0.10	97	-	74-132	-	-
Ethylbenzene	0.114	-	0.10	114	-	84-127	-	-
Xylenes	0.349	-	0.30	116	-	86-129	-	-

Surrogate Recovery

2-Fluorotoluene	0.0926	-	0.10	93	-	75-134	-	-
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.590	0.621	0.60	ND	98	103	58-129	5.05	20
MTBE	0.0997	0.0989	0.10	ND	100	99	47-118	0.814	20
Benzene	0.117	0.112	0.10	ND	117	112	55-129	4.20	20
Toluene	0.116	0.117	0.10	ND	113	114	56-130	1.06	20
Ethylbenzene	0.120	0.116	0.10	ND	120	116	63-129	3.53	20
Xylenes	0.336	0.323	0.30	ND	109	105	64-131	3.92	20

Surrogate Recovery

2-Fluorotoluene	0.0929	0.0908	0.10		93	91	62-126	2.31	20
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NELAP 4033ORELAP



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	11/9/17	BatchID:	148439
Date Analyzed:	11/10/17 - 11/14/17	Extraction Method:	SW5030B
Instrument:	GC19	Analytical Method:	SW8021B/8015Bm
Matrix:	Soil	Unit:	mg/Kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-148439 1711381-003AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	1.0	-	-	-
MTBE	ND	0.050	-	-	-
Benzene	ND	0.0050	-	-	-
Toluene	ND	0.0050	-	-	-
Ethylbenzene	ND	0.0050	-	-	-
Xylenes	ND	0.015	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.09064		0.10	91	75-134
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.584	-	0.60	97	-	82-118	-	-
MTBE	0.108	-	0.10	108	-	61-119	-	-
Benzene	0.112	-	0.10	112	-	77-128	-	-
Toluene	0.116	-	0.10	116	-	74-132	-	-
Ethylbenzene	0.115	-	0.10	115	-	84-127	-	-
Xylenes	0.329	-	0.30	110	-	86-129	-	-

Surrogate Recovery

2-Fluorotoluene	0.0926	-	0.10	93	-	75-134	-	-
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.546	0.552	0.60	ND	91	92	58-129	1.12	20
MTBE	0.102	0.106	0.10	ND	102	106	47-118	3.99	20
Benzene	0.110	0.109	0.10	ND	110	109	55-129	1.02	20
Toluene	0.114	0.113	0.10	ND	114	113	56-130	0.713	20
Ethylbenzene	0.112	0.112	0.10	ND	112	112	63-129	0	20
Xylenes	0.317	0.317	0.30	ND	106	106	64-131	0	20

Surrogate Recovery

2-Fluorotoluene	0.0910	0.0892	0.10		91	89	62-126	1.96	20
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Quality Control Report

Client: SCA Environmental, Inc.
Date Prepared: 11/9/17
Date Analyzed: 11/10/17
Instrument: GC39A, GC6A
Matrix: Soil
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
BatchID: 148426
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-148426
 1711255-006AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.9	1.0	40	-	110	75-128
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	21.88	21.9		25	88	88	72-122

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	37.5	37.1	40	ND	94	93	71-134	1.15	30
Surrogate Recovery									
C9	25.7	25.9	25		103	104	78-126	0.733	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1711381

ClientCode: SCAO

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

Dan Leung
SCA Environmental, Inc.
1 Lakeside Drive, Suite 215
Oakland, CA 94612
(510) 267-2726 FAX: (510) 839- 6200

Email: dleung@sca-enviro.com; labreports99@gm
cc/3rd Party:
PO:
ProjectNo: B12486; SFPW Garfield Square Renov

Bill to:

Accounts Payable
SCA Environmental, Inc.
1 Lakeside Drive, Suite 215
Oakland, CA 94612
emuisse@sca-ic.com; pgervasio@scaeh

Requested TAT: 5 days;

Date Received: 11/09/2017

Date Logged: 11/09/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1711381-001	GS-B1-0,GS-B1-15	Soil	11/9/2017 11:31	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A				
1711381-002	GS-B2-0,GS-B2-30	Soil	11/9/2017 11:09	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A				
1711381-003	GS-B3-0,GS-B3-24	Soil	11/9/2017 10:50	<input type="checkbox"/>	A	A	A	A	A	A	A	A	A				

Test Legend:

1	8081pcB_ESL_LL_S	2	8260B_S	3	8270_SCSM_S [J]	4	CAM17MS_TTLC_S
5	G-MBTEX_S	6	STLC_MSEXTRACTONLY	7	TCLP_MSEXTRACTONLY	8	TPH(DMO)WSG_S
9		10		11		12	

Prepared by: Alexandra Iniguez

The following SampIDs: 001A, 002A, 003A contain testgroup Multi RangeWSG_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: SCA ENVIRONMENTAL, INC.

Project: B12486; SFPW Garfield Square Renov

Work Order: 1711381

Client Contact: Dan Leung

QC Level: LEVEL 2

Contact's Email: dleung@sca-enviro.com; labreports99@gmail.com

Comments:

Date Logged: 11/9/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711381-001A	GS-B1-0,GS-B1-15	Soil	TCLP Extraction	2 / (2:1)	8OZ GJ	<input type="checkbox"/>	11/9/2017 11:31	5 days*		<input type="checkbox"/>	
			STLC (rotated) Extraction			<input type="checkbox"/>		5 days*		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1711381-002A	GS-B2-0,GS-B2-30	Soil	TCLP Extraction	2 / (2:1)	8OZ GJ	<input type="checkbox"/>	11/9/2017 11:09	5 days*		<input type="checkbox"/>	
			STLC (rotated) Extraction			<input type="checkbox"/>		5 days*		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: SCA ENVIRONMENTAL, INC.

Project: B12486; SFPW Garfield Square Renov

Work Order: 1711381

Client Contact: Dan Leung

QC Level: LEVEL 2

Contact's Email: dleung@sca-enviro.com; labreports99@gmail.com

Comments:

Date Logged: 11/9/2017

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711381-003A	GS-B3-0,GS-B3-24	Soil	TCLP Extraction	2 / (2:1)	8OZ GJ	<input type="checkbox"/>	11/9/2017 10:50	5 days*		<input type="checkbox"/>	
			STLC (rotated) Extraction			<input type="checkbox"/>		5 days*		<input type="checkbox"/>	
			Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (Low Level SVOCs) with GPC Cleanup			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8081A/8082 (OC Pesticides+PCBs) ESLs			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



Sample Receipt Checklist

Client Name: **SCA Environmental, Inc.**
 Project Name: **B12486; SFPW Garfield Square Renov**
 WorkOrder No: **1711381** Matrix: Soil
 Carrier: Client Drop-In

Date and Time Received: **11/9/2017 14:25**
 Date Logged: **11/9/2017**
 Received by: **Kena Ponce**
 Logged by: **Alexandra Iniguez**

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample/Temp Blank temperature	Temp: 0.3°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1711381 B

Report Created for: SCA Environmental, Inc.

1 Lakeside Drive, Suite 215
Oakland, CA 94612

Project Contact: Dan Leung

Project P.O.:

Project Name: B12486; SFPW Garfield Square Renov

Project Received: 11/09/2017

Analytical Report reviewed & approved for release on 12/14/2017 by:



Christine Askari
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: SCA Environmental, Inc.
Project: B12486; SFPW Garfield Square Renov
WorkOrder: 1711381 B

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

H Samples were analyzed out of holding time



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 12/13/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW3060A
Analytical Method: SW7199
Unit: mg/Kg

Hexavalent chromium by Alkaline Digestion and IC Analysis

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	IC2 17121321.CHW	150176

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	H	0.10	0.20	1	12/13/2017 23:11

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	IC2 17121322.CHW	150176

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	H	0.10	0.20	1	12/13/2017 23:26

Analyst(s): AO

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	IC2 17121323.CHW	150176

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Hexavalent chromium	ND	H	0.10	0.20	1	12/13/2017 23:42

Analyst(s): AO



Analytical Report

Client: SCA Environmental, Inc.
Date Received: 11/9/17 14:25
Date Prepared: 12/12/17
Project: B12486; SFPW Garfield Square Renov

WorkOrder: 1711381
Extraction Method: SW9045C
Analytical Method: SW9045C
Unit: pH units @ 25°C

pH

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B1-0,GS-B1-15	1711381-001A	Soil	11/09/2017 11:31	WetChem	150097

Analytes	Result	Accuracy	DF	Date Analyzed
pH	5.96	±0.1	1	12/12/2017 14:40

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B2-0,GS-B2-30	1711381-002A	Soil	11/09/2017 11:09	WetChem	150097

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.04	±0.1	1	12/12/2017 14:43

Analyst(s): PHU

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
GS-B3-0,GS-B3-24	1711381-003A	Soil	11/09/2017 10:50	WetChem	150097

Analytes	Result	Accuracy	DF	Date Analyzed
pH	6.36	±0.1	1	12/12/2017 14:49

Analyst(s): PHU



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	12/13/17	BatchID:	150176
Date Analyzed:	12/13/17	Extraction Method:	SW3060A
Instrument:	IC2	Analytical Method:	SW7199
Matrix:	Soil	Unit:	mg/Kg
Project:	B12486; SFPW Garfield Square Renov	Sample ID:	MB/LCS-150176 1712533-001AMS/MSD

QC Summary Report for SW7199 (Hexavalent chromium)

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Hexavalent chromium	ND	19.4	0.10	0.20	20	-	97	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Hexavalent chromium	19.1	19.0	20	ND	96	95	70-130	0.966	20



Quality Control Report

Client:	SCA Environmental, Inc.	WorkOrder:	1711381
Date Prepared:	12/12/17	BatchID:	150097
Date Analyzed:	12/12/17	Extraction Method:	SW9045C
Instrument:	WetChem	Analytical Method:	SW9045C
Matrix:	Soil	Unit:	pH units @ 25°C
Project:	B12486; SFPW Garfield Square Renov		

QC Summary Report for pH

SampleID	Sample Result	Sample DF	Dup / Serial Dilution Result	Dup / Serial Dilution DF	Precision	Acceptance Criteria
1711381-002A	6.04	1	6.05	1	0.01	0.1



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1711381 **B** ClientCode: SCAO

- WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:

Dan Leung
SCA Environmental, Inc.
1 Lakeside Drive, Suite 215
Oakland, CA 94612
(510) 267-2726 FAX: (510) 839- 6200

Email: dleung@sca-enviro.com; labreports99@g
cc/3rd Party:
PO:
ProjectNo: B12486; SFPW Garfield Square Renov

Bill to:

Accounts Payable
ALSF
467 Potrero Avenue
San Francisco, CA 94110

Requested TAT: 5 days;

Date Received: 11/09/2017

Date Logged: 11/09/2017

Date Add-On: 12/07/2017

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1711381-001	GS-B1-0,GS-B1-15	Soil	11/9/2017 11:31	<input type="checkbox"/>	A	A											
1711381-002	GS-B2-0,GS-B2-30	Soil	11/9/2017 11:09	<input type="checkbox"/>	A	A											
1711381-003	GS-B3-0,GS-B3-24	Soil	11/9/2017 10:50	<input type="checkbox"/>	A	A											

Test Legend:

1	7199_TTLC_LL_S [J]	2	PH_S	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Alexandra Iniguez

Add-On Prepared By: Agustina Venegas

Comments: STLC Pb Cr 11/20/17 STAT. 7199 LL & pH added 12/7/17 STAT

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: SCA ENVIRONMENTAL, INC.

Project: B12486; SFPW Garfield Square Renov

Work Order: 1711381

Client Contact: Dan Leung

QC Level: LEVEL 2

Contact's Email dleung@sca-enviro.com; labreports99@gmail.com

Comments: STLC Pb Cr 11/20/17 STAT. 7199 LL & pH added 12/7/17 STAT

Date Logged: 11/9/2017

Date Add-On: 12/7/2017

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1711381-001A	GS-B1-0,GS-B1-15	Soil	SW9045C (pH)	2 / (2:1)	8OZ GJ	11/9/2017 11:31	5 days		<input type="checkbox"/>	
			SW7199 (Hexavalent chromium, Low-Level)				5 days	<input type="checkbox"/>		
1711381-002A	GS-B2-0,GS-B2-30	Soil	SW9045C (pH)	2 / (2:1)	8OZ GJ	11/9/2017 11:09	5 days		<input type="checkbox"/>	
			SW7199 (Hexavalent chromium, Low-Level)				5 days	<input type="checkbox"/>		
1711381-003A	GS-B3-0,GS-B3-24	Soil	SW9045C (pH)	2 / (2:1)	8OZ GJ	11/9/2017 10:50	5 days		<input type="checkbox"/>	
			SW7199 (Hexavalent chromium, Low-Level)				5 days	<input type="checkbox"/>		

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

**POLARIZED LIGHT MICROSCOPY ANALYSIS FOR ASBESTOS CONTENT (CARB 435)**

Client: SCA ENVIRONMENTAL, INC.
1 LAKESIDE DR. #215
OAKLAND, CA 94612

Project No.: B12486

Project: SFDPW GARFIELD SQUARE

Location: 2965 HARRISON ST., SAN FRANCISCO

Report Number: DK20902

Date: NOVEMBER 16, 2017

Analyst: OLGA KIST

Date Analyzed: NOVEMBER 16, 2017

Sample Collector: DAN LEUNG

Collection Date: NOVEMBER 9, 2017

0 Sample(s) containing Asbestos

6 Sample(s) Analyzed 6 Sample(s) Received 11/9/17 13:30		ASBESTOS	NONASBESTOS
Sample #	Location / Description	Type and Range % or NONE DETECTED	Other Fibers (%) Balance
1. GS-B1-0	BROWN CLAY SOIL WITH GRAVEL, OCHRE-BROWN BRICK AND GLASS CHIPS	NONE DETECTED	CELL 5-10, GL<1, SYN <1, SILI, IRON OXIDES, ORGANICS, GLASS PARTICLES, MISC.
2. GS-B1-1	BROWN CLAY SOIL WITH PLANT DEBRIS AND METAL (NAILS)	NONE DETECTED	CELL 3-5, GL <1, SILI, OPAQUES, ORGANICS, IRON OXIDES, MISC.
3. GS-B2-0	A) BROWN CLAY SOIL WITH GRAVEL, RED BRICK, GLASS AND PLANT DEBRIS B) WHITE PLASTER, BLACK RUBBER AND YELLOW PAINT	NONE DETECTED NONE DETECTED	CELL 10-15, SYN <1, GL<1, SILI, OPAQUES, ORGANICS, IRON OXIDES, GYPSUM, SYN, MISC.
4. GS-B2-30	OCHRE-BROWN CLAY SOIL WITH GRAY CONCRETE	NONE DETECTED	CELL <1, SYN <1, SILI, IRON OXIDES, OPAQUES, CEMENT, MISC.
5. GS-B3-0	BROWN CLAY, GRAVEL, OCHRE BRICK AND WHITE PLASTIC SHEETS	NONE DETECTED	CELL 3-5, SYN <1, GL <1, SILI, OPAQUES, ORGANICS, IRON OXIDES, SYN, MISC.
6. GS-B3-24	RED-BROWN GRAINY CLAY	NONE DETECTED	CELL 1-3, SILI, OPAQUES, ORGANICS, IRON OXIDES, MISC.

PAGE 1 OF 2

112017 LABORATORY BLANK (1866 GLASS FIBERS) NONE DETECTED

ASBESTOS TYPES

CHRY: Chrysotile
AMOS: Amosite
CROC: Crocidolite
TREM: Tremolite/Actinolite
ANTH: Anthophyllite

NONASBESTOS

CELL: Cellulose
GL: Fiberglass/Mineral Wool
SYN: Synthetic
CARB: Carbonates
SILI: Mixed Silicates
POLY: Polyethylene
FTALC: Fibrous Talc
FGYP: Fibrous Gypsum
FELD: Feldspar
CASI: Calcium Silicates

Bulk samples analyzed in accordance with "Method for the Determination of Asbestos in Bulk Building Materials" EPA/600/R-93/116, July 1993 and EPA/M4-82-020 "Interim Method for the Determination of Asbestos in Bulk Insulation Samples". The detection limit is less than 1% asbestos by calibrated visual estimation. Asbestos fibers less than 0.2 microns cannot be resolved by light microscope. Analytical Labs San Francisco, Inc. (ALSF) is accredited for bulk asbestos fiber analysis by the California State Environmental Accreditation Program (ELAP #1050). This report must not be reproduced except in full, without the written approval of ALSF and pertains only to the samples analyzed.

AUTHORIZED SIGNATURE

DATE 11/24/17



ANALYTICAL LABS SAN FRANCISCO INC.
 467 Potrero Avenue, San Francisco, CA 94110 (415) 552-4595 FAX 552-0730

POLARIZED LIGHT MICROSCOPY ANALYSIS FOR ASBESTOS CONTENT (CARB 435)

Client: SCA ENVIRONMENTAL, INC.
 1 LAKESIDE DR. #215
 OAKLAND, CA 94612

Project No.: B12450
Project: CASTRO MISSION HC
Location: 3850 17TH ST., SAN FRANCISCO

Report Number: DK20902
Date: NOVEMBER 16, 2017
Analyst: OLGA KIST
Date Analyzed: NOVEMBER 16, 2017
Sample Collector: DAN LEUNG
Collection Date: NOVEMBER 9, 2017
0 Sample(s) containing Asbestos

Sample #	Location / Description	ASBESTOS Type and % or NONE DETECTED	NONASBESTOS Fibers (%) and Balance
6 Sample(s) Analyzed			
6 Sample(s) Received	11/9/17 13:30		

Special Preparations and Considerations for Serpentine Rock/Soil:

- Initially the gross sample is scanned for any building materials. Random rock surfaces are scanned for observable asbestos or asbestos veins. Random soil samples are scanned for observable loose fibers using a stereomicroscope.
- Further observations are noted from directly mounted random samples of the gross ground sample. Asbestos fibers with a minimum of 3:1 aspect ratio are identified using the polarized light microscope based on their optical properties.
- Chrysotile is the fibrous form of Serpentine. Chrysotile is distinguished from a variety of transitional forms including micaceous or plate like forms like Antigorite found in Serpentine when two or more of the following characteristics apply: (a) parallel fibers occurring in bundles; (b) fiber bundles displaying splayed ends; (c) matted masses of individual fibers; and/or (d) fibers showing curvature.
- A total of eight slides are prepared for point counting at 100X magnification. A minimum of 400 points is required to be counted which increases the precision of the PLM method from one percent to 0.25 area percent. Per the California Air Resource Board Method 435, 400-points count is required when asbestos is detected.
- If the precision of the PLM method is raised to 0.10 area percent over 1000 points is required to be counted.
- Exception 1 is possible when a sample is suspected to contain no asbestos. When no asbestos fibers are observed from from 3 prepared PLM slides and 30 fields of view it can be reported that no asbestos was found. Exception 2 is possible when a sample contains asbestos in excess of 10 percent. It can be reported that the asbestos content exceeds 10 percent using the visual technique of PLM analysis.

LAST PAGE

ASBESTOS TYPES

CHRY: Chrysotile
 AMOS: Amosite
 CROC: Crocidolite
 TREM: Tremolite/Actinolite
 ANTH: Anthophyllite

NONASBESTOS

CELL: Cellulose
 GL: Fiberglass/Mineral Wool
 SYN: Synthetic
 CARB: Carbonates
 SIL: Mixed Silicates
 POLY: Polyethylene
 FTALC: Fibrous Talc
 FGYP: Fibrous Gypsum
 FELD: Feldspar
 CASI: Calcium Silicates

Bulk samples analyzed in accordance with "Method for the Determination of Asbestos in Bulk Building Materials" EPA/600/R-93/116, July 1993 and EPA/M4-82-020 "Interim Method for the Determination of Asbestos in Bulk Insulation Samples". The detection limit is less than 1% asbestos by calibrated visual estimation. Asbestos fibers less than 0.2 microns cannot be resolved by light microscope. Analytical Labs San Francisco, Inc. (ALSF) is accredited for bulk asbestos fiber analysis by the California State Environmental Accreditation Program (ELAP #1050). This report must not be reproduced except in full, without the written approval of ALSF and pertains only to the samples analyzed.

AUTHORIZED SIGNATURE 

DATE 11/24/17

OK 20902

SCA Environmental, Inc. 650 Delaney St., Ste. 222, San Francisco, CA 94107 1 Lakeside Drive, Ste 215, Oakland, CA 94612		Tel 415-882-1675 510-645-6200	Fax 415-962-0736 415-962-0736																																																																																																										
CHAIN OF CUSTODY FORM		CALL/TXT with results: @messaging.sprintpcs.com Email rpt / COC & invoice: dleung@sca-enviro.com & pgenasio@scasf.com Email Pri Mgr Name: Chuck Siu Christina Codemo Dan Leung																																																																																																											
EMAIL HEADING: (Project #) - (Project Manager Initials) - (Site Name/Address) (Date MM/DD) BFPW GARFIELD SQUARE B12486 CS GARFIELD SQUARE, 11/9 2965 HARRISON		LAB ALGF G1., DF																																																																																																											
COURIER LAB REP NOTIFIED: _____ AIRBILL/FLIGHT NO.: _____ EST ARRIVAL DATE: _____		Notification DATE/TIME: _____ Shipper REFERENCE I.D.: _____ EST. ARRIVAL TIME: _____																																																																																																											
Method Reference: 7400 PCM AHERA TEM (GLUS s/cc Analyses) CARB-AHERA TEM 0.001 s/cc Ana Sensitivity Sample Media: 25 37 mm 0.45 0.8 micron MCEF Bulk Water Wipe (PLM (asbestos) Flame AA (Lead))																																																																																																													
RESULTS DUE: 6 DAYS AM / PM		Accounting Data:																																																																																																											
CHAIN OF CUSTODY DATA: Sending Info: 6 samples submitted by DL (SCA) on 11/9 at 12:30P Received by Lab: 6 samples received by CS on 11/9 at 1:30P Received by Analyst: 6 samples received by CS on 11/9 at 11		<table border="1"> <tr> <th>Units (each)</th> <th>ASBESTOS</th> </tr> <tr> <td>PCM NIOSH 7400</td> <td></td> </tr> <tr> <td>PLM Bulk</td> <td></td> </tr> <tr> <td>CARB 435 (400 Pt Ct) w/ prep</td> <td></td> </tr> <tr> <td>PLM Std Point Count 400</td> <td></td> </tr> <tr> <td>TEM AHERA</td> <td></td> </tr> <tr> <td>CARB AHERA 35-40 grid openings</td> <td></td> </tr> <tr> <td>CARB AHERA 10-15 grid openings</td> <td></td> </tr> </table>		Units (each)	ASBESTOS	PCM NIOSH 7400		PLM Bulk		CARB 435 (400 Pt Ct) w/ prep		PLM Std Point Count 400		TEM AHERA		CARB AHERA 35-40 grid openings		CARB AHERA 10-15 grid openings																																																																																											
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INSTRUCTIONS TO LAB (delete items not applicable AND circle items applicable): 1- Pickup requested: Contact: _____ Time of Call: _____ 2- Call SCA's contact to acknowledge receipt of samples. 3- Analyze samples by PCM only. 4- Analyze inside samples by PCM first, if any sample > 0.01 f/cc, contact SCA. 5- If all samples are < 0.01 f/cc, proceed with items 6, 7 or 8, as noted. 6- Analyze inside samples only; stop if Avg > 70 str/mm ² , contact SCA before analyzing outside or blanks. 7- Analyze all samples, including outside samples and blanks. 8- Do NOT analyze outside or blank samples. 9- Analyze by TEM only the inside air sample with the highest PCM result. 10- Serial analysis; stop at first positive (>1%), first trace (<0.1%), except sheetrock and plaster samples. 11- Analyze all bulk samples, unless otherwise indicated. 12- PCB-1 ppm detection limit required. Authorized to perform P10151 cleanup to meet the detection limit. 13- For AHERA TEM, only analyze for REGULATED ASBESTOS. 14. _____																																																																																																													
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LABREP021699@GMAIL.COM

19229 Masonic Homes, Union City, C



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1912570

Report Created for: A&B Construction

1350 4th Street
Berkeley, CA 94710

Project Contact: R Marten

Project P.O.: 19229

Project: 19229; Masonic Homes; Union City, CA

Project Received: 12/11/2019

Analytical Report reviewed & approved for release on 12/13/2019 by:

Angela Rydelius
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: A&B Construction
Project: 19229; Masonic Homes; Union City, CA
WorkOrder: 1912570

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: A&B Construction
Project: 19229; Masonic Homes; Union City, CA
WorkOrder: 1912570

Analytical Qualifiers

B Analyte detected in the associated Method Blank and in the sample
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
a3 Sample diluted due to high organic content.
a4 Reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
e2 Diesel range compounds are significant; no recognizable pattern
e7 Oil range compounds are significant

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.
F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.
F16 RawVal < LQL.



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/11/19

Analytical Method: SW8081A/8082

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC40 12111944.d	190441

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0020	2	12/11/2019 22:09
a-BHC	ND	0.0020	2	12/11/2019 22:09
b-BHC	ND	0.0020	2	12/11/2019 22:09
d-BHC	ND	0.0020	2	12/11/2019 22:09
g-BHC	ND	0.0020	2	12/11/2019 22:09
Chlordane (Technical)	ND	0.050	2	12/11/2019 22:09
a-Chlordane	ND	0.0020	2	12/11/2019 22:09
g-Chlordane	ND	0.0020	2	12/11/2019 22:09
p,p-DDD	ND	0.0020	2	12/11/2019 22:09
p,p-DDE	ND	0.0020	2	12/11/2019 22:09
p,p-DDT	ND	0.0020	2	12/11/2019 22:09
Dieldrin	ND	0.0020	2	12/11/2019 22:09
Endosulfan I	ND	0.0020	2	12/11/2019 22:09
Endosulfan II	ND	0.0020	2	12/11/2019 22:09
Endosulfan sulfate	ND	0.0020	2	12/11/2019 22:09
Endrin	ND	0.0020	2	12/11/2019 22:09
Endrin aldehyde	ND	0.0020	2	12/11/2019 22:09
Endrin ketone	ND	0.0020	2	12/11/2019 22:09
Heptachlor	ND	0.0020	2	12/11/2019 22:09
Heptachlor epoxide	ND	0.0020	2	12/11/2019 22:09
Hexachlorobenzene	ND	0.020	2	12/11/2019 22:09
Hexachlorocyclopentadiene	ND	0.040	2	12/11/2019 22:09
Methoxychlor	ND	0.0020	2	12/11/2019 22:09
Toxaphene	ND	0.10	2	12/11/2019 22:09
Aroclor1016	ND	0.10	2	12/11/2019 22:09
Aroclor1221	ND	0.10	2	12/11/2019 22:09
Aroclor1232	ND	0.10	2	12/11/2019 22:09
Aroclor1242	ND	0.10	2	12/11/2019 22:09
Aroclor1248	ND	0.10	2	12/11/2019 22:09
Aroclor1254	ND	0.10	2	12/11/2019 22:09
Aroclor1260	ND	0.10	2	12/11/2019 22:09
PCBs, total	ND	0.10	2	12/11/2019 22:09

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	110	69-143	12/11/2019 22:09

Analyst(s): LT

Analytical Comments: a3

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/11/19

Analytical Method: SW8081A/8082

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC40 12111940.d	190441

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.050	50	12/11/2019 21:13
a-BHC	ND	0.050	50	12/11/2019 21:13
b-BHC	ND	0.050	50	12/11/2019 21:13
d-BHC	ND	0.050	50	12/11/2019 21:13
g-BHC	ND	0.050	50	12/11/2019 21:13
Chlordane (Technical)	ND	1.2	50	12/11/2019 21:13
a-Chlordane	ND	0.050	50	12/11/2019 21:13
g-Chlordane	ND	0.050	50	12/11/2019 21:13
p,p-DDD	ND	0.050	50	12/11/2019 21:13
p,p-DDE	ND	0.050	50	12/11/2019 21:13
p,p-DDT	ND	0.050	50	12/11/2019 21:13
Dieldrin	ND	0.050	50	12/11/2019 21:13
Endosulfan I	ND	0.050	50	12/11/2019 21:13
Endosulfan II	ND	0.050	50	12/11/2019 21:13
Endosulfan sulfate	ND	0.050	50	12/11/2019 21:13
Endrin	ND	0.050	50	12/11/2019 21:13
Endrin aldehyde	ND	0.050	50	12/11/2019 21:13
Endrin ketone	ND	0.050	50	12/11/2019 21:13
Heptachlor	ND	0.050	50	12/11/2019 21:13
Heptachlor epoxide	ND	0.050	50	12/11/2019 21:13
Hexachlorobenzene	ND	0.50	50	12/11/2019 21:13
Hexachlorocyclopentadiene	ND	1.0	50	12/11/2019 21:13
Methoxychlor	ND	0.050	50	12/11/2019 21:13
Toxaphene	ND	2.5	50	12/11/2019 21:13
Aroclor1016	ND	2.5	50	12/11/2019 21:13
Aroclor1221	ND	2.5	50	12/11/2019 21:13
Aroclor1232	ND	2.5	50	12/11/2019 21:13
Aroclor1242	ND	2.5	50	12/11/2019 21:13
Aroclor1248	ND	2.5	50	12/11/2019 21:13
Aroclor1254	ND	2.5	50	12/11/2019 21:13
Aroclor1260	ND	2.5	50	12/11/2019 21:13
PCBs, total	ND	2.5	50	12/11/2019 21:13

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	118	69-143	12/11/2019 21:13

Analyst(s): LT

Analytical Comments: a3

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/11/19

Analytical Method: SW8081A/8082

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC40 12111941.d	190441

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.0050	5	12/11/2019 21:27
a-BHC	ND	0.0050	5	12/11/2019 21:27
b-BHC	ND	0.0050	5	12/11/2019 21:27
d-BHC	ND	0.0050	5	12/11/2019 21:27
g-BHC	ND	0.0050	5	12/11/2019 21:27
Chlordane (Technical)	ND	0.12	5	12/11/2019 21:27
a-Chlordane	ND	0.0050	5	12/11/2019 21:27
g-Chlordane	ND	0.0050	5	12/11/2019 21:27
p,p-DDD	ND	0.0050	5	12/11/2019 21:27
p,p-DDE	ND	0.0050	5	12/11/2019 21:27
p,p-DDT	ND	0.0050	5	12/11/2019 21:27
Dieldrin	ND	0.0050	5	12/11/2019 21:27
Endosulfan I	ND	0.0050	5	12/11/2019 21:27
Endosulfan II	ND	0.0050	5	12/11/2019 21:27
Endosulfan sulfate	ND	0.0050	5	12/11/2019 21:27
Endrin	ND	0.0050	5	12/11/2019 21:27
Endrin aldehyde	ND	0.0050	5	12/11/2019 21:27
Endrin ketone	ND	0.0050	5	12/11/2019 21:27
Heptachlor	ND	0.0050	5	12/11/2019 21:27
Heptachlor epoxide	ND	0.0050	5	12/11/2019 21:27
Hexachlorobenzene	ND	0.050	5	12/11/2019 21:27
Hexachlorocyclopentadiene	ND	0.10	5	12/11/2019 21:27
Methoxychlor	ND	0.0050	5	12/11/2019 21:27
Toxaphene	ND	0.25	5	12/11/2019 21:27
Aroclor1016	ND	0.25	5	12/11/2019 21:27
Aroclor1221	ND	0.25	5	12/11/2019 21:27
Aroclor1232	ND	0.25	5	12/11/2019 21:27
Aroclor1242	ND	0.25	5	12/11/2019 21:27
Aroclor1248	ND	0.25	5	12/11/2019 21:27
Aroclor1254	ND	0.25	5	12/11/2019 21:27
Aroclor1260	ND	0.25	5	12/11/2019 21:27
PCBs, total	ND	0.25	5	12/11/2019 21:27

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	108	69-143	12/11/2019 21:27

Analyst(s): LT

Analytical Comments: a3

(Cont.)



Analytical Report

Client: A&B Construction
Date Received: 12/11/19 13:47
Date Prepared: 12/11/19
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC40 12111942.d	190441

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.050	50	12/11/2019 21:41
a-BHC	ND	0.050	50	12/11/2019 21:41
b-BHC	ND	0.050	50	12/11/2019 21:41
d-BHC	ND	0.050	50	12/11/2019 21:41
g-BHC	ND	0.050	50	12/11/2019 21:41
Chlordane (Technical)	ND	1.2	50	12/11/2019 21:41
a-Chlordane	ND	0.050	50	12/11/2019 21:41
g-Chlordane	ND	0.050	50	12/11/2019 21:41
p,p-DDD	ND	0.050	50	12/11/2019 21:41
p,p-DDE	ND	0.050	50	12/11/2019 21:41
p,p-DDT	ND	0.050	50	12/11/2019 21:41
Dieldrin	ND	0.050	50	12/11/2019 21:41
Endosulfan I	ND	0.050	50	12/11/2019 21:41
Endosulfan II	ND	0.050	50	12/11/2019 21:41
Endosulfan sulfate	ND	0.050	50	12/11/2019 21:41
Endrin	ND	0.050	50	12/11/2019 21:41
Endrin aldehyde	ND	0.050	50	12/11/2019 21:41
Endrin ketone	ND	0.050	50	12/11/2019 21:41
Heptachlor	ND	0.050	50	12/11/2019 21:41
Heptachlor epoxide	ND	0.050	50	12/11/2019 21:41
Hexachlorobenzene	ND	0.50	50	12/11/2019 21:41
Hexachlorocyclopentadiene	ND	1.0	50	12/11/2019 21:41
Methoxychlor	ND	0.050	50	12/11/2019 21:41
Toxaphene	ND	2.5	50	12/11/2019 21:41
Aroclor1016	ND	2.5	50	12/11/2019 21:41
Aroclor1221	ND	2.5	50	12/11/2019 21:41
Aroclor1232	ND	2.5	50	12/11/2019 21:41
Aroclor1242	ND	2.5	50	12/11/2019 21:41
Aroclor1248	ND	2.5	50	12/11/2019 21:41
Aroclor1254	ND	2.5	50	12/11/2019 21:41
Aroclor1260	ND	2.5	50	12/11/2019 21:41
PCBs, total	ND	2.5	50	12/11/2019 21:41

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	119	69-143	12/11/2019 21:41

Analyst(s): LT **Analytical Comments:** a3

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/11/19

Analytical Method: SW8081A/8082

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Organochlorine Pesticides + PCBs

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC40 12111943.d	190441

Analytes	Result	RL	DF	Date Analyzed
Aldrin	ND	0.020	20	12/11/2019 21:55
a-BHC	ND	0.020	20	12/11/2019 21:55
b-BHC	ND	0.020	20	12/11/2019 21:55
d-BHC	ND	0.020	20	12/11/2019 21:55
g-BHC	ND	0.020	20	12/11/2019 21:55
Chlordane (Technical)	ND	0.50	20	12/11/2019 21:55
a-Chlordane	ND	0.020	20	12/11/2019 21:55
g-Chlordane	ND	0.020	20	12/11/2019 21:55
p,p-DDD	ND	0.020	20	12/11/2019 21:55
p,p-DDE	ND	0.020	20	12/11/2019 21:55
p,p-DDT	ND	0.020	20	12/11/2019 21:55
Dieldrin	ND	0.020	20	12/11/2019 21:55
Endosulfan I	ND	0.020	20	12/11/2019 21:55
Endosulfan II	ND	0.020	20	12/11/2019 21:55
Endosulfan sulfate	ND	0.020	20	12/11/2019 21:55
Endrin	ND	0.020	20	12/11/2019 21:55
Endrin aldehyde	ND	0.020	20	12/11/2019 21:55
Endrin ketone	ND	0.020	20	12/11/2019 21:55
Heptachlor	ND	0.020	20	12/11/2019 21:55
Heptachlor epoxide	ND	0.020	20	12/11/2019 21:55
Hexachlorobenzene	ND	0.20	20	12/11/2019 21:55
Hexachlorocyclopentadiene	ND	0.40	20	12/11/2019 21:55
Methoxychlor	ND	0.020	20	12/11/2019 21:55
Toxaphene	ND	1.0	20	12/11/2019 21:55
Aroclor1016	ND	1.0	20	12/11/2019 21:55
Aroclor1221	ND	1.0	20	12/11/2019 21:55
Aroclor1232	ND	1.0	20	12/11/2019 21:55
Aroclor1242	ND	1.0	20	12/11/2019 21:55
Aroclor1248	ND	1.0	20	12/11/2019 21:55
Aroclor1254	ND	1.0	20	12/11/2019 21:55
Aroclor1260	ND	1.0	20	12/11/2019 21:55
PCBs, total	ND	1.0	20	12/11/2019 21:55

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	118	69-143	12/11/2019 21:55

Analyst(s): LT

Analytical Comments: a3



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC28 12111925.D	190370

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	12/11/2019 22:19
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/11/2019 22:19
Benzene	ND	0.0050	1	12/11/2019 22:19
Bromobenzene	ND	0.0050	1	12/11/2019 22:19
Bromochloromethane	ND	0.0050	1	12/11/2019 22:19
Bromodichloromethane	ND	0.0050	1	12/11/2019 22:19
Bromoform	ND	0.0050	1	12/11/2019 22:19
Bromomethane	ND	0.0050	1	12/11/2019 22:19
2-Butanone (MEK)	ND	0.050	1	12/11/2019 22:19
t-Butyl alcohol (TBA)	ND	0.050	1	12/11/2019 22:19
n-Butyl benzene	ND	0.0050	1	12/11/2019 22:19
sec-Butyl benzene	ND	0.0050	1	12/11/2019 22:19
tert-Butyl benzene	ND	0.0050	1	12/11/2019 22:19
Carbon Disulfide	ND	0.0050	1	12/11/2019 22:19
Carbon Tetrachloride	ND	0.0050	1	12/11/2019 22:19
Chlorobenzene	ND	0.0050	1	12/11/2019 22:19
Chloroethane	ND	0.0050	1	12/11/2019 22:19
Chloroform	ND	0.0050	1	12/11/2019 22:19
Chloromethane	ND	0.0050	1	12/11/2019 22:19
2-Chlorotoluene	ND	0.0050	1	12/11/2019 22:19
4-Chlorotoluene	ND	0.0050	1	12/11/2019 22:19
Dibromochloromethane	ND	0.0050	1	12/11/2019 22:19
1,2-Dibromo-3-chloropropane	ND	0.0050	1	12/11/2019 22:19
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/11/2019 22:19
Dibromomethane	ND	0.0050	1	12/11/2019 22:19
1,2-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:19
1,3-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:19
1,4-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:19
Dichlorodifluoromethane	ND	0.0050	1	12/11/2019 22:19
1,1-Dichloroethane	ND	0.0050	1	12/11/2019 22:19
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/11/2019 22:19
1,1-Dichloroethene	ND	0.0050	1	12/11/2019 22:19
cis-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 22:19
trans-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 22:19
1,2-Dichloropropane	ND	0.0050	1	12/11/2019 22:19
1,3-Dichloropropane	ND	0.0050	1	12/11/2019 22:19
2,2-Dichloropropane	ND	0.0050	1	12/11/2019 22:19

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC28 12111925.D	190370

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	12/11/2019 22:19
cis-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 22:19
trans-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 22:19
Diisopropyl ether (DIPE)	ND	0.0050	1	12/11/2019 22:19
Ethylbenzene	ND	0.0050	1	12/11/2019 22:19
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/11/2019 22:19
Freon 113	ND	0.0050	1	12/11/2019 22:19
Hexachlorobutadiene	ND	0.0050	1	12/11/2019 22:19
Hexachloroethane	ND	0.0050	1	12/11/2019 22:19
2-Hexanone	ND	0.0050	1	12/11/2019 22:19
Isopropylbenzene	ND	0.0050	1	12/11/2019 22:19
4-Isopropyl toluene	ND	0.0050	1	12/11/2019 22:19
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/11/2019 22:19
Methylene chloride	ND	0.020	1	12/11/2019 22:19
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/11/2019 22:19
Naphthalene	ND	0.0050	1	12/11/2019 22:19
n-Propyl benzene	ND	0.0050	1	12/11/2019 22:19
Styrene	ND	0.0050	1	12/11/2019 22:19
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 22:19
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 22:19
Tetrachloroethene	ND	0.0050	1	12/11/2019 22:19
Toluene	ND	0.0050	1	12/11/2019 22:19
1,2,3-Trichlorobenzene	ND	0.0050	1	12/11/2019 22:19
1,2,4-Trichlorobenzene	ND	0.0050	1	12/11/2019 22:19
1,1,1-Trichloroethane	ND	0.0050	1	12/11/2019 22:19
1,1,2-Trichloroethane	ND	0.0050	1	12/11/2019 22:19
Trichloroethene	ND	0.0050	1	12/11/2019 22:19
Trichlorofluoromethane	ND	0.0050	1	12/11/2019 22:19
1,2,3-Trichloropropane	ND	0.0050	1	12/11/2019 22:19
1,2,4-Trimethylbenzene	ND	0.0050	1	12/11/2019 22:19
1,3,5-Trimethylbenzene	ND	0.0050	1	12/11/2019 22:19
Vinyl Chloride	ND	0.0050	1	12/11/2019 22:19
m,p-Xylene	ND	0.0050	1	12/11/2019 22:19
o-Xylene	ND	0.0050	1	12/11/2019 22:19
Xylenes, Total	ND	0.0050	1	12/11/2019 22:19

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC28 12111925.D	190370

Analytes	Result	RL	DF	Date Analyzed
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Surrogates	REC (%)	Limits	
Dibromofluoromethane	111	66-116	12/11/2019 22:19
Toluene-d8	98	86-110	12/11/2019 22:19
4-BFB	88	71-114	12/11/2019 22:19
Benzene-d6	90	62-122	12/11/2019 22:19
Ethylbenzene-d10	95	69-130	12/11/2019 22:19
1,2-DCB-d4	91	55-108	12/11/2019 22:19

Analyst(s): AK



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC28 12111926.D	190370

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	12/11/2019 22:57
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/11/2019 22:57
Benzene	ND	0.0050	1	12/11/2019 22:57
Bromobenzene	ND	0.0050	1	12/11/2019 22:57
Bromochloromethane	ND	0.0050	1	12/11/2019 22:57
Bromodichloromethane	ND	0.0050	1	12/11/2019 22:57
Bromoform	ND	0.0050	1	12/11/2019 22:57
Bromomethane	ND	0.0050	1	12/11/2019 22:57
2-Butanone (MEK)	ND	0.050	1	12/11/2019 22:57
t-Butyl alcohol (TBA)	ND	0.050	1	12/11/2019 22:57
n-Butyl benzene	ND	0.0050	1	12/11/2019 22:57
sec-Butyl benzene	ND	0.0050	1	12/11/2019 22:57
tert-Butyl benzene	ND	0.0050	1	12/11/2019 22:57
Carbon Disulfide	ND	0.0050	1	12/11/2019 22:57
Carbon Tetrachloride	ND	0.0050	1	12/11/2019 22:57
Chlorobenzene	ND	0.0050	1	12/11/2019 22:57
Chloroethane	ND	0.0050	1	12/11/2019 22:57
Chloroform	ND	0.0050	1	12/11/2019 22:57
Chloromethane	ND	0.0050	1	12/11/2019 22:57
2-Chlorotoluene	ND	0.0050	1	12/11/2019 22:57
4-Chlorotoluene	ND	0.0050	1	12/11/2019 22:57
Dibromochloromethane	ND	0.0050	1	12/11/2019 22:57
1,2-Dibromo-3-chloropropane	ND	0.0050	1	12/11/2019 22:57
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/11/2019 22:57
Dibromomethane	ND	0.0050	1	12/11/2019 22:57
1,2-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:57
1,3-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:57
1,4-Dichlorobenzene	ND	0.0050	1	12/11/2019 22:57
Dichlorodifluoromethane	ND	0.0050	1	12/11/2019 22:57
1,1-Dichloroethane	ND	0.0050	1	12/11/2019 22:57
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/11/2019 22:57
1,1-Dichloroethene	ND	0.0050	1	12/11/2019 22:57
cis-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 22:57
trans-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 22:57
1,2-Dichloropropane	ND	0.0050	1	12/11/2019 22:57
1,3-Dichloropropane	ND	0.0050	1	12/11/2019 22:57
2,2-Dichloropropane	ND	0.0050	1	12/11/2019 22:57

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC28 12111926.D	190370

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	12/11/2019 22:57
cis-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 22:57
trans-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 22:57
Diisopropyl ether (DIPE)	ND	0.0050	1	12/11/2019 22:57
Ethylbenzene	ND	0.0050	1	12/11/2019 22:57
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/11/2019 22:57
Freon 113	ND	0.0050	1	12/11/2019 22:57
Hexachlorobutadiene	ND	0.0050	1	12/11/2019 22:57
Hexachloroethane	ND	0.0050	1	12/11/2019 22:57
2-Hexanone	ND	0.0050	1	12/11/2019 22:57
Isopropylbenzene	ND	0.0050	1	12/11/2019 22:57
4-Isopropyl toluene	ND	0.0050	1	12/11/2019 22:57
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/11/2019 22:57
Methylene chloride	ND	0.020	1	12/11/2019 22:57
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/11/2019 22:57
Naphthalene	ND	0.0050	1	12/11/2019 22:57
n-Propyl benzene	ND	0.0050	1	12/11/2019 22:57
Styrene	ND	0.0050	1	12/11/2019 22:57
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 22:57
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 22:57
Tetrachloroethene	ND	0.0050	1	12/11/2019 22:57
Toluene	ND	0.0050	1	12/11/2019 22:57
1,2,3-Trichlorobenzene	ND	0.0050	1	12/11/2019 22:57
1,2,4-Trichlorobenzene	ND	0.0050	1	12/11/2019 22:57
1,1,1-Trichloroethane	ND	0.0050	1	12/11/2019 22:57
1,1,2-Trichloroethane	ND	0.0050	1	12/11/2019 22:57
Trichloroethene	ND	0.0050	1	12/11/2019 22:57
Trichlorofluoromethane	ND	0.0050	1	12/11/2019 22:57
1,2,3-Trichloropropane	ND	0.0050	1	12/11/2019 22:57
1,2,4-Trimethylbenzene	ND	0.0050	1	12/11/2019 22:57
1,3,5-Trimethylbenzene	ND	0.0050	1	12/11/2019 22:57
Vinyl Chloride	ND	0.0050	1	12/11/2019 22:57
m,p-Xylene	ND	0.0050	1	12/11/2019 22:57
o-Xylene	ND	0.0050	1	12/11/2019 22:57
Xylenes, Total	ND	0.0050	1	12/11/2019 22:57

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC28 12111926.D	190370

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	114		66-116	12/11/2019 22:57
Toluene-d8	98		86-110	12/11/2019 22:57
4-BFB	87		71-114	12/11/2019 22:57
Benzene-d6	87		62-122	12/11/2019 22:57
Ethylbenzene-d10	91		69-130	12/11/2019 22:57
1,2-DCB-d4	87		55-108	12/11/2019 22:57

Analyst(s): AK



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC28 12111927.D	190370

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	12/11/2019 23:35
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/11/2019 23:35
Benzene	ND	0.0050	1	12/11/2019 23:35
Bromobenzene	ND	0.0050	1	12/11/2019 23:35
Bromochloromethane	ND	0.0050	1	12/11/2019 23:35
Bromodichloromethane	ND	0.0050	1	12/11/2019 23:35
Bromoform	ND	0.0050	1	12/11/2019 23:35
Bromomethane	ND	0.0050	1	12/11/2019 23:35
2-Butanone (MEK)	ND	0.050	1	12/11/2019 23:35
t-Butyl alcohol (TBA)	ND	0.050	1	12/11/2019 23:35
n-Butyl benzene	ND	0.0050	1	12/11/2019 23:35
sec-Butyl benzene	ND	0.0050	1	12/11/2019 23:35
tert-Butyl benzene	ND	0.0050	1	12/11/2019 23:35
Carbon Disulfide	ND	0.0050	1	12/11/2019 23:35
Carbon Tetrachloride	ND	0.0050	1	12/11/2019 23:35
Chlorobenzene	ND	0.0050	1	12/11/2019 23:35
Chloroethane	ND	0.0050	1	12/11/2019 23:35
Chloroform	ND	0.0050	1	12/11/2019 23:35
Chloromethane	ND	0.0050	1	12/11/2019 23:35
2-Chlorotoluene	ND	0.0050	1	12/11/2019 23:35
4-Chlorotoluene	ND	0.0050	1	12/11/2019 23:35
Dibromochloromethane	ND	0.0050	1	12/11/2019 23:35
1,2-Dibromo-3-chloropropane	ND	0.0050	1	12/11/2019 23:35
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/11/2019 23:35
Dibromomethane	ND	0.0050	1	12/11/2019 23:35
1,2-Dichlorobenzene	ND	0.0050	1	12/11/2019 23:35
1,3-Dichlorobenzene	ND	0.0050	1	12/11/2019 23:35
1,4-Dichlorobenzene	ND	0.0050	1	12/11/2019 23:35
Dichlorodifluoromethane	ND	0.0050	1	12/11/2019 23:35
1,1-Dichloroethane	ND	0.0050	1	12/11/2019 23:35
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/11/2019 23:35
1,1-Dichloroethene	ND	0.0050	1	12/11/2019 23:35
cis-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 23:35
trans-1,2-Dichloroethene	ND	0.0050	1	12/11/2019 23:35
1,2-Dichloropropane	ND	0.0050	1	12/11/2019 23:35
1,3-Dichloropropane	ND	0.0050	1	12/11/2019 23:35
2,2-Dichloropropane	ND	0.0050	1	12/11/2019 23:35

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC28 12111927.D	190370

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	12/11/2019 23:35
cis-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 23:35
trans-1,3-Dichloropropene	ND	0.0050	1	12/11/2019 23:35
Diisopropyl ether (DIPE)	ND	0.0050	1	12/11/2019 23:35
Ethylbenzene	ND	0.0050	1	12/11/2019 23:35
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/11/2019 23:35
Freon 113	ND	0.0050	1	12/11/2019 23:35
Hexachlorobutadiene	ND	0.0050	1	12/11/2019 23:35
Hexachloroethane	ND	0.0050	1	12/11/2019 23:35
2-Hexanone	ND	0.0050	1	12/11/2019 23:35
Isopropylbenzene	ND	0.0050	1	12/11/2019 23:35
4-Isopropyl toluene	ND	0.0050	1	12/11/2019 23:35
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/11/2019 23:35
Methylene chloride	ND	0.020	1	12/11/2019 23:35
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/11/2019 23:35
Naphthalene	ND	0.0050	1	12/11/2019 23:35
n-Propyl benzene	ND	0.0050	1	12/11/2019 23:35
Styrene	ND	0.0050	1	12/11/2019 23:35
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 23:35
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/11/2019 23:35
Tetrachloroethene	ND	0.0050	1	12/11/2019 23:35
Toluene	ND	0.0050	1	12/11/2019 23:35
1,2,3-Trichlorobenzene	ND	0.0050	1	12/11/2019 23:35
1,2,4-Trichlorobenzene	ND	0.0050	1	12/11/2019 23:35
1,1,1-Trichloroethane	ND	0.0050	1	12/11/2019 23:35
1,1,2-Trichloroethane	ND	0.0050	1	12/11/2019 23:35
Trichloroethene	ND	0.0050	1	12/11/2019 23:35
Trichlorofluoromethane	ND	0.0050	1	12/11/2019 23:35
1,2,3-Trichloropropane	ND	0.0050	1	12/11/2019 23:35
1,2,4-Trimethylbenzene	ND	0.0050	1	12/11/2019 23:35
1,3,5-Trimethylbenzene	ND	0.0050	1	12/11/2019 23:35
Vinyl Chloride	ND	0.0050	1	12/11/2019 23:35
m,p-Xylene	ND	0.0050	1	12/11/2019 23:35
o-Xylene	ND	0.0050	1	12/11/2019 23:35
Xylenes, Total	ND	0.0050	1	12/11/2019 23:35

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC28 12111927.D	190370

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	103	66-116		12/11/2019 23:35
Toluene-d8	97	86-110		12/11/2019 23:35
4-BFB	87	71-114		12/11/2019 23:35
Benzene-d6	86	62-122		12/11/2019 23:35
Ethylbenzene-d10	91	69-130		12/11/2019 23:35
1,2-DCB-d4	88	55-108		12/11/2019 23:35

Analyst(s): AK



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC28 12111928.D	190370

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	12/12/2019 00:14
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/12/2019 00:14
Benzene	ND	0.0050	1	12/12/2019 00:14
Bromobenzene	ND	0.0050	1	12/12/2019 00:14
Bromochloromethane	ND	0.0050	1	12/12/2019 00:14
Bromodichloromethane	ND	0.0050	1	12/12/2019 00:14
Bromoform	ND	0.0050	1	12/12/2019 00:14
Bromomethane	ND	0.0050	1	12/12/2019 00:14
2-Butanone (MEK)	ND	0.050	1	12/12/2019 00:14
t-Butyl alcohol (TBA)	ND	0.050	1	12/12/2019 00:14
n-Butyl benzene	ND	0.0050	1	12/12/2019 00:14
sec-Butyl benzene	ND	0.0050	1	12/12/2019 00:14
tert-Butyl benzene	ND	0.0050	1	12/12/2019 00:14
Carbon Disulfide	ND	0.0050	1	12/12/2019 00:14
Carbon Tetrachloride	ND	0.0050	1	12/12/2019 00:14
Chlorobenzene	ND	0.0050	1	12/12/2019 00:14
Chloroethane	ND	0.0050	1	12/12/2019 00:14
Chloroform	ND	0.0050	1	12/12/2019 00:14
Chloromethane	ND	0.0050	1	12/12/2019 00:14
2-Chlorotoluene	ND	0.0050	1	12/12/2019 00:14
4-Chlorotoluene	ND	0.0050	1	12/12/2019 00:14
Dibromochloromethane	ND	0.0050	1	12/12/2019 00:14
1,2-Dibromo-3-chloropropane	ND	0.0050	1	12/12/2019 00:14
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/12/2019 00:14
Dibromomethane	ND	0.0050	1	12/12/2019 00:14
1,2-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:14
1,3-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:14
1,4-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:14
Dichlorodifluoromethane	ND	0.0050	1	12/12/2019 00:14
1,1-Dichloroethane	ND	0.0050	1	12/12/2019 00:14
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/12/2019 00:14
1,1-Dichloroethene	ND	0.0050	1	12/12/2019 00:14
cis-1,2-Dichloroethene	ND	0.0050	1	12/12/2019 00:14
trans-1,2-Dichloroethene	ND	0.0050	1	12/12/2019 00:14
1,2-Dichloropropane	ND	0.0050	1	12/12/2019 00:14
1,3-Dichloropropane	ND	0.0050	1	12/12/2019 00:14
2,2-Dichloropropane	ND	0.0050	1	12/12/2019 00:14

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC28 12111928.D	190370

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	12/12/2019 00:14
cis-1,3-Dichloropropene	ND	0.0050	1	12/12/2019 00:14
trans-1,3-Dichloropropene	ND	0.0050	1	12/12/2019 00:14
Diisopropyl ether (DIPE)	ND	0.0050	1	12/12/2019 00:14
Ethylbenzene	ND	0.0050	1	12/12/2019 00:14
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/12/2019 00:14
Freon 113	ND	0.0050	1	12/12/2019 00:14
Hexachlorobutadiene	ND	0.0050	1	12/12/2019 00:14
Hexachloroethane	ND	0.0050	1	12/12/2019 00:14
2-Hexanone	ND	0.0050	1	12/12/2019 00:14
Isopropylbenzene	ND	0.0050	1	12/12/2019 00:14
4-Isopropyl toluene	ND	0.0050	1	12/12/2019 00:14
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/12/2019 00:14
Methylene chloride	ND	0.020	1	12/12/2019 00:14
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/12/2019 00:14
Naphthalene	ND	0.0050	1	12/12/2019 00:14
n-Propyl benzene	ND	0.0050	1	12/12/2019 00:14
Styrene	ND	0.0050	1	12/12/2019 00:14
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/12/2019 00:14
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/12/2019 00:14
Tetrachloroethene	ND	0.0050	1	12/12/2019 00:14
Toluene	ND	0.0050	1	12/12/2019 00:14
1,2,3-Trichlorobenzene	ND	0.0050	1	12/12/2019 00:14
1,2,4-Trichlorobenzene	ND	0.0050	1	12/12/2019 00:14
1,1,1-Trichloroethane	ND	0.0050	1	12/12/2019 00:14
1,1,2-Trichloroethane	ND	0.0050	1	12/12/2019 00:14
Trichloroethene	ND	0.0050	1	12/12/2019 00:14
Trichlorofluoromethane	ND	0.0050	1	12/12/2019 00:14
1,2,3-Trichloropropane	ND	0.0050	1	12/12/2019 00:14
1,2,4-Trimethylbenzene	ND	0.0050	1	12/12/2019 00:14
1,3,5-Trimethylbenzene	ND	0.0050	1	12/12/2019 00:14
Vinyl Chloride	ND	0.0050	1	12/12/2019 00:14
m,p-Xylene	ND	0.0050	1	12/12/2019 00:14
o-Xylene	ND	0.0050	1	12/12/2019 00:14
Xylenes, Total	ND	0.0050	1	12/12/2019 00:14

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC28 12111928.D	190370

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	105		66-116	12/12/2019 00:14
Toluene-d8	98		86-110	12/12/2019 00:14
4-BFB	85		71-114	12/12/2019 00:14
Benzene-d6	83		62-122	12/12/2019 00:14
Ethylbenzene-d10	93		69-130	12/12/2019 00:14
1,2-DCB-d4	89		55-108	12/12/2019 00:14

Analyst(s): AK



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC28 12111929.D	190370

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	12/12/2019 00:52
tert-Amyl methyl ether (TAME)	ND	0.0050	1	12/12/2019 00:52
Benzene	ND	0.0050	1	12/12/2019 00:52
Bromobenzene	ND	0.0050	1	12/12/2019 00:52
Bromochloromethane	ND	0.0050	1	12/12/2019 00:52
Bromodichloromethane	ND	0.0050	1	12/12/2019 00:52
Bromoform	ND	0.0050	1	12/12/2019 00:52
Bromomethane	ND	0.0050	1	12/12/2019 00:52
2-Butanone (MEK)	ND	0.050	1	12/12/2019 00:52
t-Butyl alcohol (TBA)	ND	0.050	1	12/12/2019 00:52
n-Butyl benzene	ND	0.0050	1	12/12/2019 00:52
sec-Butyl benzene	ND	0.0050	1	12/12/2019 00:52
tert-Butyl benzene	ND	0.0050	1	12/12/2019 00:52
Carbon Disulfide	ND	0.0050	1	12/12/2019 00:52
Carbon Tetrachloride	ND	0.0050	1	12/12/2019 00:52
Chlorobenzene	ND	0.0050	1	12/12/2019 00:52
Chloroethane	ND	0.0050	1	12/12/2019 00:52
Chloroform	ND	0.0050	1	12/12/2019 00:52
Chloromethane	ND	0.0050	1	12/12/2019 00:52
2-Chlorotoluene	ND	0.0050	1	12/12/2019 00:52
4-Chlorotoluene	ND	0.0050	1	12/12/2019 00:52
Dibromochloromethane	ND	0.0050	1	12/12/2019 00:52
1,2-Dibromo-3-chloropropane	ND	0.0050	1	12/12/2019 00:52
1,2-Dibromoethane (EDB)	ND	0.0040	1	12/12/2019 00:52
Dibromomethane	ND	0.0050	1	12/12/2019 00:52
1,2-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:52
1,3-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:52
1,4-Dichlorobenzene	ND	0.0050	1	12/12/2019 00:52
Dichlorodifluoromethane	ND	0.0050	1	12/12/2019 00:52
1,1-Dichloroethane	ND	0.0050	1	12/12/2019 00:52
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	12/12/2019 00:52
1,1-Dichloroethene	ND	0.0050	1	12/12/2019 00:52
cis-1,2-Dichloroethene	ND	0.0050	1	12/12/2019 00:52
trans-1,2-Dichloroethene	ND	0.0050	1	12/12/2019 00:52
1,2-Dichloropropane	ND	0.0050	1	12/12/2019 00:52
1,3-Dichloropropane	ND	0.0050	1	12/12/2019 00:52
2,2-Dichloropropane	ND	0.0050	1	12/12/2019 00:52

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC28 12111929.D	190370

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	12/12/2019 00:52
cis-1,3-Dichloropropene	ND	0.0050	1	12/12/2019 00:52
trans-1,3-Dichloropropene	ND	0.0050	1	12/12/2019 00:52
Diisopropyl ether (DIPE)	ND	0.0050	1	12/12/2019 00:52
Ethylbenzene	ND	0.0050	1	12/12/2019 00:52
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	12/12/2019 00:52
Freon 113	ND	0.0050	1	12/12/2019 00:52
Hexachlorobutadiene	ND	0.0050	1	12/12/2019 00:52
Hexachloroethane	ND	0.0050	1	12/12/2019 00:52
2-Hexanone	ND	0.0050	1	12/12/2019 00:52
Isopropylbenzene	ND	0.0050	1	12/12/2019 00:52
4-Isopropyl toluene	ND	0.0050	1	12/12/2019 00:52
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	12/12/2019 00:52
Methylene chloride	ND	0.020	1	12/12/2019 00:52
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	12/12/2019 00:52
Naphthalene	ND	0.0050	1	12/12/2019 00:52
n-Propyl benzene	ND	0.0050	1	12/12/2019 00:52
Styrene	ND	0.0050	1	12/12/2019 00:52
1,1,1,2-Tetrachloroethane	ND	0.0050	1	12/12/2019 00:52
1,1,2,2-Tetrachloroethane	ND	0.0050	1	12/12/2019 00:52
Tetrachloroethene	ND	0.0050	1	12/12/2019 00:52
Toluene	ND	0.0050	1	12/12/2019 00:52
1,2,3-Trichlorobenzene	ND	0.0050	1	12/12/2019 00:52
1,2,4-Trichlorobenzene	ND	0.0050	1	12/12/2019 00:52
1,1,1-Trichloroethane	ND	0.0050	1	12/12/2019 00:52
1,1,2-Trichloroethane	ND	0.0050	1	12/12/2019 00:52
Trichloroethene	ND	0.0050	1	12/12/2019 00:52
Trichlorofluoromethane	ND	0.0050	1	12/12/2019 00:52
1,2,3-Trichloropropane	ND	0.0050	1	12/12/2019 00:52
1,2,4-Trimethylbenzene	ND	0.0050	1	12/12/2019 00:52
1,3,5-Trimethylbenzene	ND	0.0050	1	12/12/2019 00:52
Vinyl Chloride	ND	0.0050	1	12/12/2019 00:52
m,p-Xylene	ND	0.0050	1	12/12/2019 00:52
o-Xylene	ND	0.0050	1	12/12/2019 00:52
Xylenes, Total	ND	0.0050	1	12/12/2019 00:52

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5030B

Date Prepared: 12/11/19

Analytical Method: SW8260B

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/kg

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC28 12111929.D	190370

Analytes	Result	RL	DF	Date Analyzed
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Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	111	66-116	12/12/2019 00:52
Toluene-d8	99	86-110	12/12/2019 00:52
4-BFB	87	71-114	12/12/2019 00:52
Benzene-d6	87	62-122	12/12/2019 00:52
Ethylbenzene-d10	92	69-130	12/12/2019 00:52
1,2-DCB-d4	90	55-108	12/12/2019 00:52

Analyst(s): AK



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC17 12121918.D	190497

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	12/12/2019 15:45
Acenaphthylene	ND	0.010	1	12/12/2019 15:45
Acetochlor	ND	2.0	1	12/12/2019 15:45
Anthracene	ND	0.010	1	12/12/2019 15:45
Benzidine	ND	10	1	12/12/2019 15:45
Benzo (a) anthracene	ND	0.040	1	12/12/2019 15:45
Benzo (a) pyrene	ND	0.020	1	12/12/2019 15:45
Benzo (b) fluoranthene	ND	0.050	1	12/12/2019 15:45
Benzo (g,h,i) perylene	ND	0.020	1	12/12/2019 15:45
Benzo (k) fluoranthene	ND	0.010	1	12/12/2019 15:45
Benzyl Alcohol	ND	10	1	12/12/2019 15:45
1,1-Biphenyl	ND	0.10	1	12/12/2019 15:45
Bis (2-chloroethoxy) Methane	ND	2.0	1	12/12/2019 15:45
Bis (2-chloroethyl) Ether	ND	0.020	1	12/12/2019 15:45
Bis (2-chloroisopropyl) Ether	ND	0.020	1	12/12/2019 15:45
Bis (2-ethylhexyl) Adipate	ND	4.0	1	12/12/2019 15:45
Bis (2-ethylhexyl) Phthalate	ND	0.040	1	12/12/2019 15:45
4-Bromophenyl Phenyl Ether	ND	2.0	1	12/12/2019 15:45
Butylbenzyl Phthalate	ND	0.20	1	12/12/2019 15:45
4-Chloroaniline	ND	0.020	1	12/12/2019 15:45
4-Chloro-3-methylphenol	ND	2.0	1	12/12/2019 15:45
2-Chloronaphthalene	ND	2.0	1	12/12/2019 15:45
2-Chlorophenol	ND	0.040	1	12/12/2019 15:45
4-Chlorophenyl Phenyl Ether	ND	2.0	1	12/12/2019 15:45
Chrysene	ND	0.020	1	12/12/2019 15:45
Dibenzo (a,h) anthracene	ND	0.020	1	12/12/2019 15:45
Dibenzofuran	ND	2.0	1	12/12/2019 15:45
Di-n-butyl Phthalate	ND	0.020	1	12/12/2019 15:45
1,2-Dichlorobenzene	ND	2.0	1	12/12/2019 15:45
1,3-Dichlorobenzene	ND	2.0	1	12/12/2019 15:45
1,4-Dichlorobenzene	ND	2.0	1	12/12/2019 15:45
3,3-Dichlorobenzidine	ND	0.020	1	12/12/2019 15:45
2,4-Dichlorophenol	ND	0.10	1	12/12/2019 15:45
Diethyl Phthalate	ND	0.040	1	12/12/2019 15:45
2,4-Dimethylphenol	ND	2.0	1	12/12/2019 15:45
Dimethyl Phthalate	ND	0.020	1	12/12/2019 15:45
4,6-Dinitro-2-methylphenol	ND	10	1	12/12/2019 15:45

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC17 12121918.D	190497

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.0	1	12/12/2019 15:45
2,4-Dinitrotoluene	ND	0.050	1	12/12/2019 15:45
2,6-Dinitrotoluene	ND	0.020	1	12/12/2019 15:45
Di-n-octyl Phthalate	ND	0.040	1	12/12/2019 15:45
1,2-Diphenylhydrazine	ND	2.0	1	12/12/2019 15:45
Fluoranthene	ND	0.010	1	12/12/2019 15:45
Fluorene	ND	0.020	1	12/12/2019 15:45
Hexachlorobenzene	ND	0.010	1	12/12/2019 15:45
Hexachlorobutadiene	ND	0.020	1	12/12/2019 15:45
Hexachlorocyclopentadiene	ND	16	1	12/12/2019 15:45
Hexachloroethane	ND	0.020	1	12/12/2019 15:45
Indeno (1,2,3-cd) pyrene	ND	0.020	1	12/12/2019 15:45
Isophorone	ND	2.0	1	12/12/2019 15:45
1-Methylnaphthalene	ND	0.010	1	12/12/2019 15:45
2-Methylnaphthalene	ND	0.020	1	12/12/2019 15:45
2-Methylphenol (o-Cresol)	ND	4.0	1	12/12/2019 15:45
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	12/12/2019 15:45
Naphthalene	ND	0.010	1	12/12/2019 15:45
2-Nitroaniline	ND	10	1	12/12/2019 15:45
3-Nitroaniline	ND	10	1	12/12/2019 15:45
4-Nitroaniline	ND	10	1	12/12/2019 15:45
Nitrobenzene	ND	2.0	1	12/12/2019 15:45
2-Nitrophenol	ND	10	1	12/12/2019 15:45
4-Nitrophenol	ND	10	1	12/12/2019 15:45
N-Nitrosodiphenylamine	ND	2.0	1	12/12/2019 15:45
N-Nitrosodi-n-propylamine	ND	2.0	1	12/12/2019 15:45
Pentachlorophenol	ND	0.25	1	12/12/2019 15:45
Phenanthrene	ND	0.040	1	12/12/2019 15:45
Phenol	ND	0.040	1	12/12/2019 15:45
Pyrene	ND	0.020	1	12/12/2019 15:45
Pyridine	ND	2.0	1	12/12/2019 15:45
1,2,4-Trichlorobenzene	ND	2.0	1	12/12/2019 15:45
2,4,5-Trichlorophenol	ND	0.020	1	12/12/2019 15:45
2,4,6-Trichlorophenol	ND	0.10	1	12/12/2019 15:45

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC17 12121918.D	190497

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	120	56-152		12/12/2019 15:45
Phenol-d5	101	54-146		12/12/2019 15:45
Nitrobenzene-d5	80	47-147		12/12/2019 15:45
2-Fluorobiphenyl	69	46-141		12/12/2019 15:45
2,4,6-Tribromophenol	59	25-166		12/12/2019 15:45
4-Terphenyl-d14	60	39-153		12/12/2019 15:45

Analyst(s): REB

Analytical Comments: a4



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC17 12121919.D	190497

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.021	2	12/12/2019 16:13
Acenaphthylene	ND	0.021	2	12/12/2019 16:13
Acetochlor	ND	4.0	2	12/12/2019 16:13
Anthracene	ND	0.021	2	12/12/2019 16:13
Benzidine	ND	20	2	12/12/2019 16:13
Benzo (a) anthracene	ND	0.080	2	12/12/2019 16:13
Benzo (a) pyrene	ND	0.040	2	12/12/2019 16:13
Benzo (b) fluoranthene	ND	0.10	2	12/12/2019 16:13
Benzo (g,h,i) perylene	ND	0.040	2	12/12/2019 16:13
Benzo (k) fluoranthene	ND	0.021	2	12/12/2019 16:13
Benzyl Alcohol	ND	20	2	12/12/2019 16:13
1,1-Biphenyl	ND	0.21	2	12/12/2019 16:13
Bis (2-chloroethoxy) Methane	ND	4.0	2	12/12/2019 16:13
Bis (2-chloroethyl) Ether	ND	0.040	2	12/12/2019 16:13
Bis (2-chloroisopropyl) Ether	ND	0.040	2	12/12/2019 16:13
Bis (2-ethylhexyl) Adipate	ND	8.0	2	12/12/2019 16:13
Bis (2-ethylhexyl) Phthalate	ND	0.080	2	12/12/2019 16:13
4-Bromophenyl Phenyl Ether	ND	4.0	2	12/12/2019 16:13
Butylbenzyl Phthalate	ND	0.40	2	12/12/2019 16:13
4-Chloroaniline	ND	0.040	2	12/12/2019 16:13
4-Chloro-3-methylphenol	ND	4.0	2	12/12/2019 16:13
2-Chloronaphthalene	ND	4.0	2	12/12/2019 16:13
2-Chlorophenol	ND	0.080	2	12/12/2019 16:13
4-Chlorophenyl Phenyl Ether	ND	4.0	2	12/12/2019 16:13
Chrysene	ND	0.040	2	12/12/2019 16:13
Dibenzo (a,h) anthracene	ND	0.040	2	12/12/2019 16:13
Dibenzofuran	ND	4.0	2	12/12/2019 16:13
Di-n-butyl Phthalate	ND	0.040	2	12/12/2019 16:13
1,2-Dichlorobenzene	ND	4.0	2	12/12/2019 16:13
1,3-Dichlorobenzene	ND	4.0	2	12/12/2019 16:13
1,4-Dichlorobenzene	ND	4.0	2	12/12/2019 16:13
3,3-Dichlorobenzidine	ND	0.040	2	12/12/2019 16:13
2,4-Dichlorophenol	ND	0.21	2	12/12/2019 16:13
Diethyl Phthalate	ND	0.080	2	12/12/2019 16:13
2,4-Dimethylphenol	ND	4.0	2	12/12/2019 16:13
Dimethyl Phthalate	ND	0.040	2	12/12/2019 16:13
4,6-Dinitro-2-methylphenol	ND	20	2	12/12/2019 16:13

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC17 12121919.D	190497

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	2.1	2	12/12/2019 16:13
2,4-Dinitrotoluene	ND	0.10	2	12/12/2019 16:13
2,6-Dinitrotoluene	ND	0.040	2	12/12/2019 16:13
Di-n-octyl Phthalate	ND	0.080	2	12/12/2019 16:13
1,2-Diphenylhydrazine	ND	4.0	2	12/12/2019 16:13
Fluoranthene	0.024	0.021	2	12/12/2019 16:13
Fluorene	ND	0.040	2	12/12/2019 16:13
Hexachlorobenzene	ND	0.021	2	12/12/2019 16:13
Hexachlorobutadiene	ND	0.040	2	12/12/2019 16:13
Hexachlorocyclopentadiene	ND	32	2	12/12/2019 16:13
Hexachloroethane	ND	0.040	2	12/12/2019 16:13
Indeno (1,2,3-cd) pyrene	ND	0.040	2	12/12/2019 16:13
Isophorone	ND	4.0	2	12/12/2019 16:13
1-Methylnaphthalene	ND	0.021	2	12/12/2019 16:13
2-Methylnaphthalene	ND	0.040	2	12/12/2019 16:13
2-Methylphenol (o-Cresol)	ND	8.0	2	12/12/2019 16:13
3 & 4-Methylphenol (m,p-Cresol)	ND	4.0	2	12/12/2019 16:13
Naphthalene	ND	0.021	2	12/12/2019 16:13
2-Nitroaniline	ND	20	2	12/12/2019 16:13
3-Nitroaniline	ND	20	2	12/12/2019 16:13
4-Nitroaniline	ND	20	2	12/12/2019 16:13
Nitrobenzene	ND	4.0	2	12/12/2019 16:13
2-Nitrophenol	ND	20	2	12/12/2019 16:13
4-Nitrophenol	ND	20	2	12/12/2019 16:13
N-Nitrosodiphenylamine	ND	4.0	2	12/12/2019 16:13
N-Nitrosodi-n-propylamine	ND	4.0	2	12/12/2019 16:13
Pentachlorophenol	ND	0.50	2	12/12/2019 16:13
Phenanthrene	ND	0.080	2	12/12/2019 16:13
Phenol	ND	0.080	2	12/12/2019 16:13
Pyrene	ND	0.040	2	12/12/2019 16:13
Pyridine	ND	4.0	2	12/12/2019 16:13
1,2,4-Trichlorobenzene	ND	4.0	2	12/12/2019 16:13
2,4,5-Trichlorophenol	ND	0.040	2	12/12/2019 16:13
2,4,6-Trichlorophenol	ND	0.21	2	12/12/2019 16:13

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC17 12121919.D	190497

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	95	56-152		12/12/2019 16:13
Phenol-d5	57	54-146		12/12/2019 16:13
Nitrobenzene-d5	55	47-147		12/12/2019 16:13
2-Fluorobiphenyl	66	46-141		12/12/2019 16:13
2,4,6-Tribromophenol	38	25-166		12/12/2019 16:13
4-Terphenyl-d14	48	39-153		12/12/2019 16:13

Analyst(s): REB

Analytical Comments: a4



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC17 12121920.D	190497

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	12/12/2019 16:40
Acenaphthylene	ND	0.010	1	12/12/2019 16:40
Acetochlor	ND	2.0	1	12/12/2019 16:40
Anthracene	ND	0.010	1	12/12/2019 16:40
Benzidine	ND	10	1	12/12/2019 16:40
Benzo (a) anthracene	ND	0.040	1	12/12/2019 16:40
Benzo (a) pyrene	ND	0.020	1	12/12/2019 16:40
Benzo (b) fluoranthene	ND	0.050	1	12/12/2019 16:40
Benzo (g,h,i) perylene	ND	0.020	1	12/12/2019 16:40
Benzo (k) fluoranthene	ND	0.010	1	12/12/2019 16:40
Benzyl Alcohol	ND	10	1	12/12/2019 16:40
1,1-Biphenyl	ND	0.10	1	12/12/2019 16:40
Bis (2-chloroethoxy) Methane	ND	2.0	1	12/12/2019 16:40
Bis (2-chloroethyl) Ether	ND	0.020	1	12/12/2019 16:40
Bis (2-chloroisopropyl) Ether	ND	0.020	1	12/12/2019 16:40
Bis (2-ethylhexyl) Adipate	ND	4.0	1	12/12/2019 16:40
Bis (2-ethylhexyl) Phthalate	ND	0.040	1	12/12/2019 16:40
4-Bromophenyl Phenyl Ether	ND	2.0	1	12/12/2019 16:40
Butylbenzyl Phthalate	ND	0.20	1	12/12/2019 16:40
4-Chloroaniline	ND	0.020	1	12/12/2019 16:40
4-Chloro-3-methylphenol	ND	2.0	1	12/12/2019 16:40
2-Chloronaphthalene	ND	2.0	1	12/12/2019 16:40
2-Chlorophenol	ND	0.040	1	12/12/2019 16:40
4-Chlorophenyl Phenyl Ether	ND	2.0	1	12/12/2019 16:40
Chrysene	ND	0.020	1	12/12/2019 16:40
Dibenzo (a,h) anthracene	ND	0.020	1	12/12/2019 16:40
Dibenzofuran	ND	2.0	1	12/12/2019 16:40
Di-n-butyl Phthalate	ND	0.020	1	12/12/2019 16:40
1,2-Dichlorobenzene	ND	2.0	1	12/12/2019 16:40
1,3-Dichlorobenzene	ND	2.0	1	12/12/2019 16:40
1,4-Dichlorobenzene	ND	2.0	1	12/12/2019 16:40
3,3-Dichlorobenzidine	ND	0.020	1	12/12/2019 16:40
2,4-Dichlorophenol	ND	0.10	1	12/12/2019 16:40
Diethyl Phthalate	ND	0.040	1	12/12/2019 16:40
2,4-Dimethylphenol	ND	2.0	1	12/12/2019 16:40
Dimethyl Phthalate	ND	0.020	1	12/12/2019 16:40
4,6-Dinitro-2-methylphenol	ND	10	1	12/12/2019 16:40

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC17 12121920.D	190497

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.0	1	12/12/2019 16:40
2,4-Dinitrotoluene	ND	0.050	1	12/12/2019 16:40
2,6-Dinitrotoluene	ND	0.020	1	12/12/2019 16:40
Di-n-octyl Phthalate	ND	0.040	1	12/12/2019 16:40
1,2-Diphenylhydrazine	ND	2.0	1	12/12/2019 16:40
Fluoranthene	ND	0.010	1	12/12/2019 16:40
Fluorene	ND	0.020	1	12/12/2019 16:40
Hexachlorobenzene	ND	0.010	1	12/12/2019 16:40
Hexachlorobutadiene	ND	0.020	1	12/12/2019 16:40
Hexachlorocyclopentadiene	ND	16	1	12/12/2019 16:40
Hexachloroethane	ND	0.020	1	12/12/2019 16:40
Indeno (1,2,3-cd) pyrene	ND	0.020	1	12/12/2019 16:40
Isophorone	ND	2.0	1	12/12/2019 16:40
1-Methylnaphthalene	ND	0.010	1	12/12/2019 16:40
2-Methylnaphthalene	ND	0.020	1	12/12/2019 16:40
2-Methylphenol (o-Cresol)	ND	4.0	1	12/12/2019 16:40
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	12/12/2019 16:40
Naphthalene	ND	0.010	1	12/12/2019 16:40
2-Nitroaniline	ND	10	1	12/12/2019 16:40
3-Nitroaniline	ND	10	1	12/12/2019 16:40
4-Nitroaniline	ND	10	1	12/12/2019 16:40
Nitrobenzene	ND	2.0	1	12/12/2019 16:40
2-Nitrophenol	ND	10	1	12/12/2019 16:40
4-Nitrophenol	ND	10	1	12/12/2019 16:40
N-Nitrosodiphenylamine	ND	2.0	1	12/12/2019 16:40
N-Nitrosodi-n-propylamine	ND	2.0	1	12/12/2019 16:40
Pentachlorophenol	ND	0.25	1	12/12/2019 16:40
Phenanthrene	ND	0.040	1	12/12/2019 16:40
Phenol	ND	0.040	1	12/12/2019 16:40
Pyrene	ND	0.020	1	12/12/2019 16:40
Pyridine	ND	2.0	1	12/12/2019 16:40
1,2,4-Trichlorobenzene	ND	2.0	1	12/12/2019 16:40
2,4,5-Trichlorophenol	ND	0.020	1	12/12/2019 16:40
2,4,6-Trichlorophenol	ND	0.10	1	12/12/2019 16:40

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC17 12121920.D	190497

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	119	56-152		12/12/2019 16:40
Phenol-d5	95	54-146		12/12/2019 16:40
Nitrobenzene-d5	73	47-147		12/12/2019 16:40
2-Fluorobiphenyl	71	46-141		12/12/2019 16:40
2,4,6-Tribromophenol	53	25-166		12/12/2019 16:40
4-Terphenyl-d14	57	39-153		12/12/2019 16:40

Analyst(s): REB

Analytical Comments: a4



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC17 12121921.D	190497

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.021	2	12/12/2019 17:07
Acenaphthylene	ND	0.021	2	12/12/2019 17:07
Acetochlor	ND	4.0	2	12/12/2019 17:07
Anthracene	ND	0.021	2	12/12/2019 17:07
Benzidine	ND	20	2	12/12/2019 17:07
Benzo (a) anthracene	ND	0.080	2	12/12/2019 17:07
Benzo (a) pyrene	ND	0.040	2	12/12/2019 17:07
Benzo (b) fluoranthene	ND	0.10	2	12/12/2019 17:07
Benzo (g,h,i) perylene	ND	0.040	2	12/12/2019 17:07
Benzo (k) fluoranthene	ND	0.021	2	12/12/2019 17:07
Benzyl Alcohol	ND	20	2	12/12/2019 17:07
1,1-Biphenyl	ND	0.21	2	12/12/2019 17:07
Bis (2-chloroethoxy) Methane	ND	4.0	2	12/12/2019 17:07
Bis (2-chloroethyl) Ether	ND	0.040	2	12/12/2019 17:07
Bis (2-chloroisopropyl) Ether	ND	0.040	2	12/12/2019 17:07
Bis (2-ethylhexyl) Adipate	ND	8.0	2	12/12/2019 17:07
Bis (2-ethylhexyl) Phthalate	ND	0.080	2	12/12/2019 17:07
4-Bromophenyl Phenyl Ether	ND	4.0	2	12/12/2019 17:07
Butylbenzyl Phthalate	ND	0.40	2	12/12/2019 17:07
4-Chloroaniline	ND	0.040	2	12/12/2019 17:07
4-Chloro-3-methylphenol	ND	4.0	2	12/12/2019 17:07
2-Chloronaphthalene	ND	4.0	2	12/12/2019 17:07
2-Chlorophenol	ND	0.080	2	12/12/2019 17:07
4-Chlorophenyl Phenyl Ether	ND	4.0	2	12/12/2019 17:07
Chrysene	ND	0.040	2	12/12/2019 17:07
Dibenzo (a,h) anthracene	ND	0.040	2	12/12/2019 17:07
Dibenzofuran	ND	4.0	2	12/12/2019 17:07
Di-n-butyl Phthalate	ND	0.040	2	12/12/2019 17:07
1,2-Dichlorobenzene	ND	4.0	2	12/12/2019 17:07
1,3-Dichlorobenzene	ND	4.0	2	12/12/2019 17:07
1,4-Dichlorobenzene	ND	4.0	2	12/12/2019 17:07
3,3-Dichlorobenzidine	ND	0.040	2	12/12/2019 17:07
2,4-Dichlorophenol	ND	0.21	2	12/12/2019 17:07
Diethyl Phthalate	ND	0.080	2	12/12/2019 17:07
2,4-Dimethylphenol	ND	4.0	2	12/12/2019 17:07
Dimethyl Phthalate	ND	0.040	2	12/12/2019 17:07
4,6-Dinitro-2-methylphenol	ND	20	2	12/12/2019 17:07

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC17 12121921.D	190497

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	2.1	2	12/12/2019 17:07
2,4-Dinitrotoluene	ND	0.10	2	12/12/2019 17:07
2,6-Dinitrotoluene	ND	0.040	2	12/12/2019 17:07
Di-n-octyl Phthalate	ND	0.080	2	12/12/2019 17:07
1,2-Diphenylhydrazine	ND	4.0	2	12/12/2019 17:07
Fluoranthene	ND	0.021	2	12/12/2019 17:07
Fluorene	ND	0.040	2	12/12/2019 17:07
Hexachlorobenzene	ND	0.021	2	12/12/2019 17:07
Hexachlorobutadiene	ND	0.040	2	12/12/2019 17:07
Hexachlorocyclopentadiene	ND	32	2	12/12/2019 17:07
Hexachloroethane	ND	0.040	2	12/12/2019 17:07
Indeno (1,2,3-cd) pyrene	ND	0.040	2	12/12/2019 17:07
Isophorone	ND	4.0	2	12/12/2019 17:07
1-Methylnaphthalene	ND	0.021	2	12/12/2019 17:07
2-Methylnaphthalene	ND	0.040	2	12/12/2019 17:07
2-Methylphenol (o-Cresol)	ND	8.0	2	12/12/2019 17:07
3 & 4-Methylphenol (m,p-Cresol)	ND	4.0	2	12/12/2019 17:07
Naphthalene	ND	0.021	2	12/12/2019 17:07
2-Nitroaniline	ND	20	2	12/12/2019 17:07
3-Nitroaniline	ND	20	2	12/12/2019 17:07
4-Nitroaniline	ND	20	2	12/12/2019 17:07
Nitrobenzene	ND	4.0	2	12/12/2019 17:07
2-Nitrophenol	ND	20	2	12/12/2019 17:07
4-Nitrophenol	ND	20	2	12/12/2019 17:07
N-Nitrosodiphenylamine	ND	4.0	2	12/12/2019 17:07
N-Nitrosodi-n-propylamine	ND	4.0	2	12/12/2019 17:07
Pentachlorophenol	ND	0.50	2	12/12/2019 17:07
Phenanthrene	ND	0.080	2	12/12/2019 17:07
Phenol	ND	0.080	2	12/12/2019 17:07
Pyrene	ND	0.040	2	12/12/2019 17:07
Pyridine	ND	4.0	2	12/12/2019 17:07
1,2,4-Trichlorobenzene	ND	4.0	2	12/12/2019 17:07
2,4,5-Trichlorophenol	ND	0.040	2	12/12/2019 17:07
2,4,6-Trichlorophenol	ND	0.21	2	12/12/2019 17:07

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC17 12121921.D	190497

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	109	56-152		12/12/2019 17:07
Phenol-d5	84	54-146		12/12/2019 17:07
Nitrobenzene-d5	71	47-147		12/12/2019 17:07
2-Fluorobiphenyl	68	46-141		12/12/2019 17:07
2,4,6-Tribromophenol	51	25-166		12/12/2019 17:07
4-Terphenyl-d14	51	39-153		12/12/2019 17:07

Analyst(s): REB

Analytical Comments: a3,a4



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC17 12121917.D	190497

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	12/12/2019 15:18
Acenaphthylene	ND	0.010	1	12/12/2019 15:18
Acetochlor	ND	2.0	1	12/12/2019 15:18
Anthracene	ND	0.010	1	12/12/2019 15:18
Benzidine	ND	10	1	12/12/2019 15:18
Benzo (a) anthracene	ND	0.040	1	12/12/2019 15:18
Benzo (a) pyrene	ND	0.020	1	12/12/2019 15:18
Benzo (b) fluoranthene	ND	0.050	1	12/12/2019 15:18
Benzo (g,h,i) perylene	ND	0.020	1	12/12/2019 15:18
Benzo (k) fluoranthene	ND	0.010	1	12/12/2019 15:18
Benzyl Alcohol	ND	10	1	12/12/2019 15:18
1,1-Biphenyl	ND	0.10	1	12/12/2019 15:18
Bis (2-chloroethoxy) Methane	ND	2.0	1	12/12/2019 15:18
Bis (2-chloroethyl) Ether	ND	0.020	1	12/12/2019 15:18
Bis (2-chloroisopropyl) Ether	ND	0.020	1	12/12/2019 15:18
Bis (2-ethylhexyl) Adipate	ND	4.0	1	12/12/2019 15:18
Bis (2-ethylhexyl) Phthalate	ND	0.040	1	12/12/2019 15:18
4-Bromophenyl Phenyl Ether	ND	2.0	1	12/12/2019 15:18
Butylbenzyl Phthalate	ND	0.20	1	12/12/2019 15:18
4-Chloroaniline	ND	0.020	1	12/12/2019 15:18
4-Chloro-3-methylphenol	ND	2.0	1	12/12/2019 15:18
2-Chloronaphthalene	ND	2.0	1	12/12/2019 15:18
2-Chlorophenol	ND	0.040	1	12/12/2019 15:18
4-Chlorophenyl Phenyl Ether	ND	2.0	1	12/12/2019 15:18
Chrysene	ND	0.020	1	12/12/2019 15:18
Dibenzo (a,h) anthracene	ND	0.020	1	12/12/2019 15:18
Dibenzofuran	ND	2.0	1	12/12/2019 15:18
Di-n-butyl Phthalate	ND	0.020	1	12/12/2019 15:18
1,2-Dichlorobenzene	ND	2.0	1	12/12/2019 15:18
1,3-Dichlorobenzene	ND	2.0	1	12/12/2019 15:18
1,4-Dichlorobenzene	ND	2.0	1	12/12/2019 15:18
3,3-Dichlorobenzidine	ND	0.020	1	12/12/2019 15:18
2,4-Dichlorophenol	ND	0.10	1	12/12/2019 15:18
Diethyl Phthalate	ND	0.040	1	12/12/2019 15:18
2,4-Dimethylphenol	ND	2.0	1	12/12/2019 15:18
Dimethyl Phthalate	ND	0.020	1	12/12/2019 15:18
4,6-Dinitro-2-methylphenol	ND	10	1	12/12/2019 15:18

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC17 12121917.D	190497

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	1.0	1	12/12/2019 15:18
2,4-Dinitrotoluene	ND	0.050	1	12/12/2019 15:18
2,6-Dinitrotoluene	ND	0.020	1	12/12/2019 15:18
Di-n-octyl Phthalate	ND	0.040	1	12/12/2019 15:18
1,2-Diphenylhydrazine	ND	2.0	1	12/12/2019 15:18
Fluoranthene	0.022	0.010	1	12/12/2019 15:18
Fluorene	ND	0.020	1	12/12/2019 15:18
Hexachlorobenzene	ND	0.010	1	12/12/2019 15:18
Hexachlorobutadiene	ND	0.020	1	12/12/2019 15:18
Hexachlorocyclopentadiene	ND	16	1	12/12/2019 15:18
Hexachloroethane	ND	0.020	1	12/12/2019 15:18
Indeno (1,2,3-cd) pyrene	ND	0.020	1	12/12/2019 15:18
Isophorone	ND	2.0	1	12/12/2019 15:18
1-Methylnaphthalene	ND	0.010	1	12/12/2019 15:18
2-Methylnaphthalene	ND	0.020	1	12/12/2019 15:18
2-Methylphenol (o-Cresol)	ND	4.0	1	12/12/2019 15:18
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	12/12/2019 15:18
Naphthalene	ND	0.010	1	12/12/2019 15:18
2-Nitroaniline	ND	10	1	12/12/2019 15:18
3-Nitroaniline	ND	10	1	12/12/2019 15:18
4-Nitroaniline	ND	10	1	12/12/2019 15:18
Nitrobenzene	ND	2.0	1	12/12/2019 15:18
2-Nitrophenol	ND	10	1	12/12/2019 15:18
4-Nitrophenol	ND	10	1	12/12/2019 15:18
N-Nitrosodiphenylamine	ND	2.0	1	12/12/2019 15:18
N-Nitrosodi-n-propylamine	ND	2.0	1	12/12/2019 15:18
Pentachlorophenol	ND	0.25	1	12/12/2019 15:18
Phenanthrene	ND	0.040	1	12/12/2019 15:18
Phenol	ND	0.040	1	12/12/2019 15:18
Pyrene	0.024	0.020	1	12/12/2019 15:18
Pyridine	ND	2.0	1	12/12/2019 15:18
1,2,4-Trichlorobenzene	ND	2.0	1	12/12/2019 15:18
2,4,5-Trichlorophenol	ND	0.020	1	12/12/2019 15:18
2,4,6-Trichlorophenol	ND	0.10	1	12/12/2019 15:18

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Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3550B

Date Prepared: 12/12/19

Analytical Method: SW8270C

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC17 12121917.D	190497

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	114	56-152		12/12/2019 15:18
Phenol-d5	87	54-146		12/12/2019 15:18
Nitrobenzene-d5	83	47-147		12/12/2019 15:18
2-Fluorobiphenyl	73	46-141		12/12/2019 15:18
2,4,6-Tribromophenol	78	25-166		12/12/2019 15:18
4-Terphenyl-d14	59	39-153		12/12/2019 15:18

Analyst(s): REB

Analytical Comments: a4



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3050B

Date Prepared: 12/11/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	ICP-MS3 020SMPL.D	190442

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	12/12/2019 10:19
Arsenic	7.9		0.50	1	12/12/2019 10:19
Barium	260		5.0	1	12/12/2019 10:19
Beryllium	0.70		0.50	1	12/12/2019 10:19
Cadmium	ND		0.25	1	12/12/2019 10:19
Chromium	49		0.50	1	12/12/2019 10:19
Cobalt	12		0.50	1	12/12/2019 10:19
Copper	42		0.50	1	12/12/2019 10:19
Lead	13		0.50	1	12/12/2019 10:19
Mercury	0.19	B	0.050	1	12/12/2019 10:19
Molybdenum	0.66		0.50	1	12/12/2019 10:19
Nickel	39		0.50	1	12/12/2019 10:19
Selenium	ND		0.50	1	12/12/2019 10:19
Silver	ND		0.50	1	12/12/2019 10:19
Thallium	ND		0.50	1	12/12/2019 10:19
Vanadium	87		0.50	1	12/12/2019 10:19
Zinc	78		5.0	1	12/12/2019 10:19

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	111	70-130	12/12/2019 10:19

Analyst(s): JC



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3050B

Date Prepared: 12/11/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	ICP-MS3 046SMPL.D	190442

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	12/12/2019 12:57
Arsenic	9.6		0.50	1	12/12/2019 12:57
Barium	270		5.0	1	12/12/2019 12:57
Beryllium	0.61		0.50	1	12/12/2019 12:57
Cadmium	ND		0.25	1	12/12/2019 12:57
Chromium	49		0.50	1	12/12/2019 12:57
Cobalt	15		0.50	1	12/12/2019 12:57
Copper	53		0.50	1	12/12/2019 12:57
Lead	11		0.50	1	12/12/2019 12:57
Mercury	0.16	B	0.050	1	12/12/2019 12:57
Molybdenum	0.69		0.50	1	12/12/2019 12:57
Nickel	47		0.50	1	12/12/2019 12:57
Selenium	ND		0.50	1	12/12/2019 12:57
Silver	ND		0.50	1	12/12/2019 12:57
Thallium	ND		0.50	1	12/12/2019 12:57
Vanadium	84		0.50	1	12/12/2019 12:57
Zinc	98		5.0	1	12/12/2019 12:57

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	111	70-130	12/12/2019 12:57

Analyst(s): JC



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3050B

Date Prepared: 12/11/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	ICP-MS3 047SMPL.D	190442

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	12/12/2019 13:03
Arsenic	11		0.50	1	12/12/2019 13:03
Barium	220		5.0	1	12/12/2019 13:03
Beryllium	0.62		0.50	1	12/12/2019 13:03
Cadmium	ND		0.25	1	12/12/2019 13:03
Chromium	58		0.50	1	12/12/2019 13:03
Cobalt	15		0.50	1	12/12/2019 13:03
Copper	51		0.50	1	12/12/2019 13:03
Lead	16		0.50	1	12/12/2019 13:03
Mercury	0.11	B	0.050	1	12/12/2019 13:03
Molybdenum	0.61		0.50	1	12/12/2019 13:03
Nickel	47		0.50	1	12/12/2019 13:03
Selenium	ND		0.50	1	12/12/2019 13:03
Silver	ND		0.50	1	12/12/2019 13:03
Thallium	ND		0.50	1	12/12/2019 13:03
Vanadium	98		0.50	1	12/12/2019 13:03
Zinc	87		5.0	1	12/12/2019 13:03

Surrogates	REC (%)	Limits	
Terbium	108	70-130	12/12/2019 13:03

Analyst(s): JC



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3050B

Date Prepared: 12/11/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	ICP-MS3 051SMPL.D	190442

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	12/12/2019 13:29
Arsenic	6.7		0.50	1	12/12/2019 13:29
Barium	270		5.0	1	12/12/2019 13:29
Beryllium	ND		0.50	1	12/12/2019 13:29
Cadmium	ND		0.25	1	12/12/2019 13:29
Chromium	72		0.50	1	12/12/2019 13:29
Cobalt	20		0.50	1	12/12/2019 13:29
Copper	64		0.50	1	12/12/2019 13:29
Lead	11		0.50	1	12/12/2019 13:29
Mercury	0.058	B	0.050	1	12/12/2019 13:29
Molybdenum	ND		0.50	1	12/12/2019 13:29
Nickel	58		0.50	1	12/12/2019 13:29
Selenium	ND		0.50	1	12/12/2019 13:29
Silver	ND		0.50	1	12/12/2019 13:29
Thallium	ND		0.50	1	12/12/2019 13:29
Vanadium	89		0.50	1	12/12/2019 13:29
Zinc	81		5.0	1	12/12/2019 13:29

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	111	70-130	12/12/2019 13:29

Analyst(s): MIG



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW3050B

Date Prepared: 12/11/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

CAM / CCR 17 Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	ICP-MS3 052SMPL.D	190442

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
Antimony	ND		0.50	1	12/12/2019 13:35
Arsenic	6.9		0.50	1	12/12/2019 13:35
Barium	210		5.0	1	12/12/2019 13:35
Beryllium	0.50		0.50	1	12/12/2019 13:35
Cadmium	ND		0.25	1	12/12/2019 13:35
Chromium	57		0.50	1	12/12/2019 13:35
Cobalt	13		0.50	1	12/12/2019 13:35
Copper	38		0.50	1	12/12/2019 13:35
Lead	9.4		0.50	1	12/12/2019 13:35
Mercury	0.12	B	0.050	1	12/12/2019 13:35
Molybdenum	0.56		0.50	1	12/12/2019 13:35
Nickel	45		0.50	1	12/12/2019 13:35
Selenium	ND		0.50	1	12/12/2019 13:35
Silver	ND		0.50	1	12/12/2019 13:35
Thallium	ND		0.50	1	12/12/2019 13:35
Vanadium	77		0.50	1	12/12/2019 13:35
Zinc	74		5.0	1	12/12/2019 13:35

Surrogates	REC (%)	Limits	
Terbium	111	70-130	12/12/2019 13:35

Analyst(s): MIG



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: SW5035

Date Prepared: 12/11/19-12/13/19

Analytical Method: SW8021B/8015Bm

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC7 12131906.D	190566

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	12/13/2019 14:43
MTBE	---	0.050	1	12/13/2019 14:43
Benzene	---	0.0050	1	12/13/2019 14:43
Toluene	---	0.0050	1	12/13/2019 14:43
Ethylbenzene	---	0.0050	1	12/13/2019 14:43
m,p-Xylene	---	0.010	1	12/13/2019 14:43
o-Xylene	---	0.0050	1	12/13/2019 14:43
Xylenes	---	0.0050	1	12/13/2019 14:43

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	83	62-126	12/13/2019 14:43

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC7 12121924.D	190372

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	12/12/2019 21:21
MTBE	---	0.050	1	12/12/2019 21:21
Benzene	---	0.0050	1	12/12/2019 21:21
Toluene	---	0.0050	1	12/12/2019 21:21
Ethylbenzene	---	0.0050	1	12/12/2019 21:21
m,p-Xylene	---	0.010	1	12/12/2019 21:21
o-Xylene	---	0.0050	1	12/12/2019 21:21
Xylenes	---	0.0050	1	12/12/2019 21:21

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	85	62-126	12/12/2019 21:21

Analyst(s): IA

(Cont.)



Analytical Report

Client: A&B Construction
Date Received: 12/11/19 13:47
Date Prepared: 12/11/19-12/13/19
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
Extraction Method: SW5035
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC7 12121925.D	190372

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	12/12/2019 21:51
MTBE	---	0.050	1	12/12/2019 21:51
Benzene	---	0.0050	1	12/12/2019 21:51
Toluene	---	0.0050	1	12/12/2019 21:51
Ethylbenzene	---	0.0050	1	12/12/2019 21:51
m,p-Xylene	---	0.010	1	12/12/2019 21:51
o-Xylene	---	0.0050	1	12/12/2019 21:51
Xylenes	---	0.0050	1	12/12/2019 21:51

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	89	62-126	12/12/2019 21:51

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC7 12121914.D	190372

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	12/12/2019 16:19
MTBE	---	0.050	1	12/12/2019 16:19
Benzene	---	0.0050	1	12/12/2019 16:19
Toluene	---	0.0050	1	12/12/2019 16:19
Ethylbenzene	---	0.0050	1	12/12/2019 16:19
m,p-Xylene	---	0.010	1	12/12/2019 16:19
o-Xylene	---	0.0050	1	12/12/2019 16:19
Xylenes	---	0.0050	1	12/12/2019 16:19

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	90	62-126	12/12/2019 16:19

Analyst(s): IA

(Cont.)



Analytical Report

Client: A&B Construction	WorkOrder: 1912570
Date Received: 12/11/19 13:47	Extraction Method: SW5035
Date Prepared: 12/11/19-12/13/19	Analytical Method: SW8021B/8015Bm
Project: 19229; Masonic Homes; Union City, CA	Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC7 12121915.D	190372

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	1.0	1	12/12/2019 16:49
MTBE	---	0.050	1	12/12/2019 16:49
Benzene	---	0.0050	1	12/12/2019 16:49
Toluene	---	0.0050	1	12/12/2019 16:49
Ethylbenzene	---	0.0050	1	12/12/2019 16:49
m,p-Xylene	---	0.010	1	12/12/2019 16:49
o-Xylene	---	0.0050	1	12/12/2019 16:49
Xylenes	---	0.0050	1	12/12/2019 16:49

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorotoluene	84	62-126	12/12/2019 16:49

Analyst(s): IA



Analytical Report

Client: A&B Construction
Date Received: 12/11/19 13:47
Date Prepared: 12/11/19
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	GC6B 12121915.D	190371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	12/12/2019 21:53
TPH-Motor Oil (C18-C36)	7.4		5.0	1	12/12/2019 21:53
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	114		74-123		12/12/2019 21:53
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	GC11B 12121965.D	190371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	3.0		2.0	2	12/13/2019 13:09
TPH-Motor Oil (C18-C36)	67		10	2	12/13/2019 13:09
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	102		74-123		12/13/2019 13:09
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	GC6B 12121919.D	190371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		1.0	1	12/12/2019 23:11
TPH-Motor Oil (C18-C36)	6.3		5.0	1	12/12/2019 23:11
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	113		74-123		12/12/2019 23:11
<u>Analyst(s):</u> JIS			<u>Analytical Comments:</u> e7		

(Cont.)



Analytical Report

Client: A&B Construction
Date Received: 12/11/19 13:47
Date Prepared: 12/11/19
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	GC11B 12121959.D	190371

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.0	1.0	1	12/13/2019 11:14
TPH-Motor Oil (C18-C36)	35	5.0	1	12/13/2019 11:14

Surrogates	REC (%)	Limits	Date Analyzed
C9	104	74-123	12/13/2019 11:14

Analyst(s): JIS

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	GC11A 12121928.D	190371

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	2.2	1.0	1	12/13/2019 01:08
TPH-Motor Oil (C18-C36)	33	5.0	1	12/13/2019 01:08

Surrogates	REC (%)	Limits	Date Analyzed
C9	120	74-123	12/13/2019 01:08

Analyst(s): JIS

Analytical Comments: e7,e2



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/11/19	BatchID:	190441
Date Analyzed:	12/11/19 - 12/12/19	Extraction Method:	SW3550B
Instrument:	GC40	Analytical Method:	SW8081A/8082
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190441 1912570-001AMS/MSD

QC Summary Report for SW8081A/8082

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.00027	0.0010	-	-	-
a-BHC	ND	0.00010	0.0010	-	-	-
b-BHC	ND	0.00025	0.0010	-	-	-
d-BHC	ND	0.00037	0.0010	-	-	-
g-BHC	ND	0.000097	0.0010	-	-	-
Chlordane (Technical)	ND	0.016	0.025	-	-	-
a-Chlordane	ND	0.00047	0.0010	-	-	-
g-Chlordane	ND	0.00021	0.0010	-	-	-
p,p-DDD	ND	0.00014	0.0010	-	-	-
p,p-DDE	ND	0.00032	0.0010	-	-	-
p,p-DDT	ND	0.00043	0.0010	-	-	-
Dieldrin	ND	0.00033	0.0010	-	-	-
Endosulfan I	ND	0.00065	0.0010	-	-	-
Endosulfan II	ND	0.00020	0.0010	-	-	-
Endosulfan sulfate	ND	0.00063	0.0010	-	-	-
Endrin	ND	0.00042	0.0010	-	-	-
Endrin aldehyde	ND	0.00020	0.0010	-	-	-
Endrin ketone	ND	0.00013	0.0010	-	-	-
Heptachlor	ND	0.00021	0.0010	-	-	-
Heptachlor epoxide	ND	0.00020	0.0010	-	-	-
Hexachlorobenzene	ND	0.00027	0.010	-	-	-
Hexachlorocyclopentadiene	ND	0.00040	0.020	-	-	-
Methoxychlor	ND	0.00089	0.0010	-	-	-
Toxaphene	ND	0.035	0.050	-	-	-
Aroclor1016	ND	0.0051	0.050	-	-	-
Aroclor1221	ND	0.011	0.050	-	-	-
Aroclor1232	ND	0.0063	0.050	-	-	-
Aroclor1242	ND	0.0067	0.050	-	-	-
Aroclor1248	ND	0.0040	0.050	-	-	-
Aroclor1254	ND	0.0068	0.050	-	-	-
Aroclor1260	ND	0.0061	0.050	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.060			0.05	120	75-136

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Quality Control Report

Client: A&B Construction
Date Prepared: 12/11/19
Date Analyzed: 12/11/19 - 12/12/19
Instrument: GC40
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190441
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-190441
 1912570-001AMS/MSD

QC Summary Report for SW8081A/8082

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.055	0.056	0.050	110	112	92-134	1.84	20
a-BHC	0.058	0.059	0.050	116	119	96-147	1.98	20
b-BHC	0.053	0.054	0.050	106	109	77-131	2.68	20
d-BHC	0.064	0.066	0.050	127	131	89-148	3.14	20
g-BHC	0.057	0.058	0.050	114	116	92-139	1.82	20
a-Chlordane	0.051	0.052	0.050	102	104	72-132	2.24	20
g-Chlordane	0.057	0.058	0.050	114	117	86-132	2.19	20
p,p-DDD	0.059	0.060	0.050	119	120	35-140	1.14	20
p,p-DDE	0.057	0.058	0.050	115	117	86-138	1.93	20
p,p-DDT	0.049	0.052	0.050	98	103	70-137	5.10	20
Dieldrin	0.056	0.057	0.050	112	114	99-143	1.57	20
Endosulfan I	0.054	0.055	0.050	108	110	93-127	1.80	20
Endosulfan II	0.054	0.054	0.050	108	109	74-140	0.628	20
Endosulfan sulfate	0.061	0.060	0.050	121	121	66-135	0	20
Endrin	0.058	0.059	0.050	117	119	92-141	1.61	20
Endrin aldehyde	0.062	0.063	0.050	124	126	77-135	1.89	20
Endrin ketone	0.058	0.058	0.050	116	115	72-125	0.602	20
Heptachlor	0.063	0.064	0.050	127	129	89-131	1.73	20
Heptachlor epoxide	0.051	0.052	0.050	102	104	85-124	1.89	20
Hexachlorobenzene	0.048	0.048	0.050	96	97	87-123	0.964	20
Hexachlorocyclopentadiene		-	0	F2	-	-	-	-
Methoxychlor	0.053	0.054	0.050	106	108	82-147	2.10	20
Aroclor1016	0.16	0.16	0.15	106	106	90-125	0	20
Aroclor1260	0.18	0.18	0.15	117	120	77-122	2.38	20
Surrogate Recovery								
Decachlorobiphenyl	0.057	0.057	0.050	114	113	75-136	0.881	20
Decachlorobiphenyl		-	0	F2	-	-	-	-

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Aldrin	2	0.056	0.059	0.050	ND<0.0020	113	117	59-143	4.00	20
a-BHC	2	0.053	0.055	0.050	ND<0.0020	107	109	42-159	2.10	20
b-BHC	2	0.060	0.061	0.050	ND<0.0020	120	121	67-141	1.26	20
d-BHC	2	0.055	0.054	0.050	ND<0.0020	109	108	38-164	0.865	20
g-BHC	2	0.057	0.057	0.050	ND<0.0020	114	114	51-148	0	20
a-Chlordane	2	0.057	0.059	0.050	ND<0.0020	115	118	70-130	2.25	20

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Quality Control Report

Client: A&B Construction
Date Prepared: 12/11/19
Date Analyzed: 12/11/19 - 12/12/19
Instrument: GC40
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190441
Extraction Method: SW3550B
Analytical Method: SW8081A/8082
Unit: mg/kg
Sample ID: MB/LCS/LCSD-190441
 1912570-001AMS/MSD

QC Summary Report for SW8081A/8082

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
g-Chlordane	2	0.064	0.065	0.050	ND<0.0020	125	128	61-146	2.53	20
p,p-DDD	2	0.055	0.055	0.050	ND<0.0020	109	110	10-158	0.441	20
p,p-DDE	2	0.064	0.065	0.050	ND<0.0020	126	129	52-151	2.03	20
p,p-DDT	2	0.060	0.061	0.050	ND<0.0020	120	123	53-137	2.33	20
Dieldrin	2	0.063	0.063	0.050	ND<0.0020	125	125	58-163	0	20
Endosulfan I	2	0.061	0.061	0.050	ND<0.0020	121	122	64-136	0.696	20
Endosulfan II	2	0.059	0.059	0.050	ND<0.0020	119	117	46-141	0.885	20
Endosulfan sulfate	2	0.059	0.058	0.050	ND<0.0020	118	116	45-144	1.46	20
Endrin	2	0.061	0.061	0.050	ND<0.0020	122	123	56-153	0.457	20
Endrin aldehyde	2	0.060	0.058	0.050	ND<0.0020	120	115	63-134	3.95	20
Endrin ketone	2	0.059	0.058	0.050	ND<0.0020	118	117	53-130	0.954	20
Heptachlor	2	0.061	0.063	0.050	ND<0.0020	121	126	55-147	4.30	20
Heptachlor epoxide	2	0.058	0.058	0.050	ND<0.0020	115	116	63-128	0.840	20
Hexachlorobenzene	2	0.046	0.048	0.050	ND<0.020	93	97	71-132	4.26	20
Hexachlorocyclopentadiene	2	0.017	0.018	0.050	ND<0.040	33	35	12-144	5.17	20
Methoxychlor	2	0.056	0.057	0.050	ND<0.0020	113	114	70-150	1.23	20
Surrogate Recovery										
Decachlorobiphenyl	2	0.057	0.055	0.050		114	111	69-143	3.06	20
Decachlorobiphenyl	2	0.055	0.054	0.050		110	107	69-143	3.06	20



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190370
Date Analyzed:	12/11/19	Extraction Method:	SW5030B
Instrument:	GC10	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	0.039	0.10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0010	0.0050	-	-	-
Benzene	ND	0.0016	0.0050	-	-	-
Bromobenzene	ND	0.0030	0.0050	-	-	-
Bromochloromethane	ND	0.0015	0.0050	-	-	-
Bromodichloromethane	ND	0.0012	0.0050	-	-	-
Bromoform	ND	0.0012	0.0050	-	-	-
Bromomethane	ND	0.0020	0.0050	-	-	-
2-Butanone (MEK)	ND	0.021	0.050	-	-	-
t-Butyl alcohol (TBA)	ND	0.0053	0.050	-	-	-
n-Butyl benzene	ND	0.0035	0.0050	-	-	-
sec-Butyl benzene	ND	0.0034	0.0050	-	-	-
tert-Butyl benzene	ND	0.0029	0.0050	-	-	-
Carbon Disulfide	ND	0.0036	0.0050	-	-	-
Carbon Tetrachloride	ND	0.0017	0.0050	-	-	-
Chlorobenzene	ND	0.0018	0.0050	-	-	-
Chloroethane	ND	0.0016	0.0050	-	-	-
Chloroform	ND	0.0016	0.0050	-	-	-
Chloromethane	ND	0.0017	0.0050	-	-	-
2-Chlorotoluene	ND	0.0022	0.0050	-	-	-
4-Chlorotoluene	ND	0.0024	0.0050	-	-	-
Dibromochloromethane	ND	0.0011	0.0050	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.0037	0.0050	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0013	0.0040	-	-	-
Dibromomethane	ND	0.0014	0.0050	-	-	-
1,2-Dichlorobenzene	ND	0.0032	0.0050	-	-	-
1,3-Dichlorobenzene	ND	0.0018	0.0050	-	-	-
1,4-Dichlorobenzene	ND	0.0018	0.0050	-	-	-
Dichlorodifluoromethane	ND	0.0011	0.0050	-	-	-
1,1-Dichloroethane	ND	0.0017	0.0050	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0014	0.0040	-	-	-
1,1-Dichloroethene	ND	0.0017	0.0050	-	-	-
cis-1,2-Dichloroethene	ND	0.0015	0.0050	-	-	-
trans-1,2-Dichloroethene	ND	0.0016	0.0050	-	-	-
1,2-Dichloropropane	ND	0.0014	0.0050	-	-	-
1,3-Dichloropropane	ND	0.0016	0.0050	-	-	-
2,2-Dichloropropane	ND	0.0013	0.0050	-	-	-
1,1-Dichloropropene	ND	0.0018	0.0050	-	-	-

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Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190370
Date Analyzed:	12/11/19	Extraction Method:	SW5030B
Instrument:	GC10	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
cis-1,3-Dichloropropene	ND	0.0015	0.0050	-	-	-
trans-1,3-Dichloropropene	ND	0.0014	0.0050	-	-	-
Diisopropyl ether (DIPE)	ND	0.0014	0.0050	-	-	-
Ethylbenzene	ND	0.0025	0.0050	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0013	0.0050	-	-	-
Freon 113	ND	0.0016	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0050	0.0050	-	-	-
Hexachloroethane	ND	0.0025	0.0050	-	-	-
2-Hexanone	ND	0.0022	0.0050	-	-	-
Isopropylbenzene	ND	0.0032	0.0050	-	-	-
4-Isopropyl toluene	ND	0.0032	0.0050	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0013	0.0050	-	-	-
Methylene chloride	ND	0.010	0.020	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.00080	0.0050	-	-	-
Naphthalene	ND	0.0044	0.0050	-	-	-
n-Propyl benzene	ND	0.0029	0.0050	-	-	-
Styrene	ND	0.0030	0.0050	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.0016	0.0050	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.0013	0.0050	-	-	-
Tetrachloroethene	ND	0.0023	0.0050	-	-	-
Toluene	ND	0.0024	0.0050	-	-	-
1,2,3-Trichlorobenzene	ND	0.0030	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.0029	0.0050	-	-	-
1,1,1-Trichloroethane	ND	0.0018	0.0050	-	-	-
1,1,2-Trichloroethane	ND	0.0019	0.0050	-	-	-
Trichloroethene	ND	0.0017	0.0050	-	-	-
Trichlorofluoromethane	ND	0.0016	0.0050	-	-	-
1,2,3-Trichloropropane	ND	0.0019	0.0050	-	-	-
1,2,4-Trimethylbenzene	ND	0.0028	0.0050	-	-	-
1,3,5-Trimethylbenzene	ND	0.0026	0.0050	-	-	-
Vinyl Chloride	ND	0.0015	0.0050	-	-	-
m,p-Xylene	ND	0.0040	0.0050	-	-	-
o-Xylene	ND	0.0018	0.0050	-	-	-

(Cont.)



Quality Control Report

Client: A&B Construction	WorkOrder: 1912570
Date Prepared: 12/10/19	BatchID: 190370
Date Analyzed: 12/11/19	Extraction Method: SW5030B
Instrument: GC10	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: 19229; Masonic Homes; Union City, CA	Sample ID: MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	0.12			0.125	93	66-112
Toluene-d8	0.13			0.125	102	92-109
4-BFB	0.011			0.0125	89	72-112
Benzene-d6	0.083			0.1	83	81-126
Ethylbenzene-d10	0.10			0.1	100	92-138
1,2-DCB-d4	0.079			0.1	79	68-108



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190370
Date Analyzed:	12/11/19	Extraction Method:	SW5030B
Instrument:	GC10	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	0.21	0.21	0.20	106	104	59-127	1.81	20
tert-Amyl methyl ether (TAME)	0.015	0.014	0.020	73	72	54-98	1.42	20
Benzene	0.018	0.017	0.020	88	87	71-115	1.07	20
Bromobenzene	0.021	0.020	0.020	105	100	69-120	4.26	20
Bromochloromethane	0.020	0.019	0.020	99	96	63-117	2.90	20
Bromodichloromethane	0.017	0.017	0.020	85	83	61-109	1.93	20
Bromoform	0.014	0.014	0.020	71	70	46-87	1.91	20
Bromomethane	0.029	0.028	0.020	143	140	22-195	2.32	20
2-Butanone (MEK)	0.064	0.062	0.080	80	77	53-124	2.96	20
t-Butyl alcohol (TBA)	0.065	0.084	0.080	81	104	29-142	25.2,F2	20
n-Butyl benzene	0.026	0.025	0.020	128	124	102-169	3.07	20
sec-Butyl benzene	0.025	0.024	0.020	123	119	100-166	3.05	20
tert-Butyl benzene	0.024	0.023	0.020	122	116	91-153	4.54	20
Carbon Disulfide	0.018	0.018	0.020	91	90	60-125	2.04	20
Carbon Tetrachloride	0.020	0.019	0.020	101	97	69-124	3.33	20
Chlorobenzene	0.021	0.021	0.020	104	103	73-116	1.44	20
Chloroethane	0.018	0.018	0.020	92	89	47-140	2.65	20
Chloroform	0.019	0.019	0.020	97	95	69-118	1.97	20
Chloromethane	0.018	0.018	0.020	90	88	30-132	3.01	20
2-Chlorotoluene	0.022	0.022	0.020	112	110	75-147	1.91	20
4-Chlorotoluene	0.022	0.022	0.020	111	108	75-137	1.99	20
Dibromochloromethane	0.017	0.017	0.020	87	83	57-105	4.99	20
1,2-Dibromo-3-chloropropane	0.0066	0.0081	0.010	66	81	36-103	19.7	20
1,2-Dibromoethane (EDB)	0.0089	0.0086	0.010	89	86	66-101	3.14	20
Dibromomethane	0.017	0.016	0.020	83	82	61-103	1.17	20
1,2-Dichlorobenzene	0.017	0.016	0.020	85	82	59-104	3.85	20
1,3-Dichlorobenzene	0.020	0.020	0.020	101	99	70-133	1.99	20
1,4-Dichlorobenzene	0.020	0.019	0.020	100	97	68-123	3.38	20
Dichlorodifluoromethane	0.0070	0.0070	0.020	35	35	13-107	0	20
1,1-Dichloroethane	0.019	0.019	0.020	96	95	69-118	1.07	20
1,2-Dichloroethane (1,2-DCA)	0.019	0.019	0.020	96	94	59-112	1.78	20
1,1-Dichloroethene	0.019	0.019	0.020	96	94	69-126	2.46	20
cis-1,2-Dichloroethene	0.019	0.019	0.020	97	93	69-116	3.68	20
trans-1,2-Dichloroethene	0.020	0.019	0.020	98	95	73-116	2.98	20
1,2-Dichloropropane	0.018	0.018	0.020	91	89	65-111	1.59	20
1,3-Dichloropropane	0.018	0.018	0.020	89	88	67-110	1.31	20
2,2-Dichloropropane	0.020	0.019	0.020	99	95	65-125	3.35	20
1,1-Dichloropropene	0.019	0.018	0.020	93	91	70-123	1.74	20

(Cont.)



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190370
Date Analyzed:	12/11/19	Extraction Method:	SW5030B
Instrument:	GC10	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	0.019	0.018	0.020	94	92	68-126	2.55	20
trans-1,3-Dichloropropene	0.018	0.017	0.020	91	87	69-117	4.32	20
Diisopropyl ether (DIPE)	0.019	0.019	0.020	95	94	57-110	1.54	20
Ethylbenzene	0.021	0.021	0.020	107	105	80-128	1.60	20
Ethyl tert-butyl ether (ETBE)	0.018	0.017	0.020	89	87	54-106	2.44	20
Freon 113	0.018	0.018	0.020	89	88	60-108	1.70	20
Hexachlorobutadiene	0.028	0.027	0.020	138	136	67-182	1.63	20
Hexachloroethane	0.025	0.024	0.020	126	123	85-156	2.89	20
2-Hexanone	0.012	0.012	0.020	62	59	37-90	4.29	20
Isopropylbenzene	0.022	0.022	0.020	111	110	64-167	1.58	20
4-Isopropyl toluene	0.026	0.025	0.020	129	124	88-167	3.69	20
Methyl-t-butyl ether (MTBE)	0.016	0.016	0.020	80	79	60-102	2.15	20
Methylene chloride	0.018	0.018	0.020	92	91	71-117	1.36	20
4-Methyl-2-pentanone (MIBK)	0.012	0.012	0.020	61	60	48-90	0.708	20
Naphthalene	0.012	0.011	0.020	62	54	29-65	14.4	20
n-Propyl benzene	0.025	0.024	0.020	125	121	88-161	3.32	20
Styrene	0.018	0.018	0.020	89	88	70-108	1.43	20
1,1,1,2-Tetrachloroethane	0.020	0.020	0.020	102	101	69-117	0.791	20
1,1,2,2-Tetrachloroethane	0.016	0.015	0.020	78	75	53-96	3.97	20
Tetrachloroethene	0.024	0.023	0.020	118	116	78-128	1.34	20
Toluene	0.020	0.019	0.020	98	96	78-121	2.28	20
1,2,3-Trichlorobenzene	0.015	0.014	0.020	76	71	35-80	7.60	20
1,2,4-Trichlorobenzene	0.018	0.017	0.020	92	86	46-101	6.92	20
1,1,1-Trichloroethane	0.020	0.020	0.020	99	98	69-121	1.85	20
1,1,2-Trichloroethane	0.018	0.017	0.020	90	87	64-104	3.18	20
Trichloroethene	0.021	0.020	0.020	103	101	73-118	1.89	20
Trichlorofluoromethane	0.019	0.018	0.020	93	91	31-119	2.78	20
1,2,3-Trichloropropane	0.0090	0.0085	0.010	90	85	65-107	5.43	20
1,2,4-Trimethylbenzene	0.024	0.023	0.020	119	116	80-147	2.99	20
1,3,5-Trimethylbenzene	0.024	0.024	0.020	122	119	83-156	2.95	20
Vinyl Chloride	0.0091	0.0086	0.010	91	86	40-125	5.10	20
m,p-Xylene	0.042	0.041	0.040	104	102	80-122	1.38	20
o-Xylene	0.020	0.019	0.020	99	97	79-116	2.06	20

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Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190370
Date Analyzed:	12/11/19	Extraction Method:	SW5030B
Instrument:	GC10	Analytical Method:	SW8260B
Matrix:	Soil	Unit:	mg/kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190370

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
Dibromofluoromethane	0.12	0.12	0.12	93	93	66-112	0	20
Toluene-d8	0.13	0.13	0.12	101	101	92-109	0	20
4-BFB	0.012	0.012	0.012	93	92	72-112	0.637	20
Benzene-d6	0.084	0.083	0.10	84	83	81-126	1.31	20
Ethylbenzene-d10	0.099	0.097	0.10	99	97	92-138	1.69	20
1,2-DCB-d4	0.080	0.077	0.10	80	77	68-108	2.64	20



Quality Control Report

Client: A&B Construction
Date Prepared: 12/12/19
Date Analyzed: 12/12/19
Instrument: GC17
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190497
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-190497
 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.00077	0.0013	-	-	-
Acenaphthylene	ND	0.00041	0.0013	-	-	-
Acetochlor	ND	0.25	0.25	-	-	-
Anthracene	ND	0.00082	0.0013	-	-	-
Benzidine	ND	0.67	1.2	-	-	-
Benzo (a) anthracene	ND	0.0043	0.0050	-	-	-
Benzo (a) pyrene	ND	0.0012	0.0025	-	-	-
Benzo (b) fluoranthene	ND	0.0012	0.0063	-	-	-
Benzo (g,h,i) perylene	ND	0.0011	0.0025	-	-	-
Benzo (k) fluoranthene	ND	0.00079	0.0013	-	-	-
Benzyl Alcohol	ND	0.76	1.2	-	-	-
1,1-Biphenyl	ND	0.0023	0.013	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.15	0.25	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0016	0.0025	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0014	0.0025	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.15	0.50	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0034	0.0050	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.15	0.25	-	-	-
Butylbenzyl Phthalate	ND	0.021	0.025	-	-	-
4-Chloroaniline	ND	0.0016	0.0025	-	-	-
4-Chloro-3-methylphenol	ND	0.20	0.25	-	-	-
2-Chloronaphthalene	ND	0.14	0.25	-	-	-
2-Chlorophenol	ND	0.0020	0.0050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.16	0.25	-	-	-
Chrysene	ND	0.00080	0.0025	-	-	-
Dibenzo (a,h) anthracene	ND	0.0015	0.0025	-	-	-
Dibenzofuran	ND	0.16	0.25	-	-	-
Di-n-butyl Phthalate	ND	0.0020	0.0025	-	-	-
1,2-Dichlorobenzene	ND	0.15	0.25	-	-	-
1,3-Dichlorobenzene	ND	0.13	0.25	-	-	-
1,4-Dichlorobenzene	ND	0.18	0.25	-	-	-
3,3-Dichlorobenzidine	ND	0.0016	0.0025	-	-	-
2,4-Dichlorophenol	ND	0.0017	0.013	-	-	-
Diethyl Phthalate	ND	0.0036	0.0050	-	-	-
2,4-Dimethylphenol	ND	0.16	0.25	-	-	-
Dimethyl Phthalate	ND	0.0025	0.0025	-	-	-
4,6-Dinitro-2-methylphenol	ND	0.81	1.2	-	-	-
2,4-Dinitrophenol	ND	0.051	0.13	-	-	-

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Quality Control Report

Client: A&B Construction
Date Prepared: 12/12/19
Date Analyzed: 12/12/19
Instrument: GC17
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190497
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-190497
 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrotoluene	ND	0.0011	0.0063	-	-	-
2,6-Dinitrotoluene	ND	0.0013	0.0025	-	-	-
Di-n-octyl Phthalate	ND	0.0043	0.0050	-	-	-
1,2-Diphenylhydrazine	ND	0.15	0.25	-	-	-
Fluoranthene	ND	0.0011	0.0013	-	-	-
Fluorene	ND	0.00086	0.0025	-	-	-
Hexachlorobenzene	ND	0.00057	0.0013	-	-	-
Hexachlorobutadiene	ND	0.00042	0.0025	-	-	-
Hexachlorocyclopentadiene	ND	0.11	2.0	-	-	-
Hexachloroethane	ND	0.0011	0.0025	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0010	0.0025	-	-	-
Isophorone	ND	0.15	0.25	-	-	-
1-Methylnaphthalene	ND	0.0011	0.0013	-	-	-
2-Methylnaphthalene	ND	0.0017	0.0025	-	-	-
2-Methylphenol (o-Cresol)	ND	0.27	0.50	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.24	0.25	-	-	-
Naphthalene	ND	0.00069	0.0013	-	-	-
2-Nitroaniline	ND	0.69	1.2	-	-	-
3-Nitroaniline	ND	0.84	1.2	-	-	-
4-Nitroaniline	ND	1.1	1.2	-	-	-
Nitrobenzene	ND	0.16	0.25	-	-	-
2-Nitrophenol	ND	0.66	1.2	-	-	-
4-Nitrophenol	ND	0.77	1.2	-	-	-
N-Nitrosodiphenylamine	ND	0.15	0.25	-	-	-
N-Nitrosodi-n-propylamine	ND	0.14	0.25	-	-	-
Pentachlorophenol	ND	0.014	0.031	-	-	-
Phenanthrene	ND	0.00067	0.0050	-	-	-
Phenol	0.0010,J	0.00094	0.0050	-	-	-
Pyrene	ND	0.0014	0.0025	-	-	-
Pyridine	ND	0.18	0.25	-	-	-
1,2,4-Trichlorobenzene	ND	0.15	0.25	-	-	-
2,4,5-Trichlorophenol	ND	0.0013	0.0025	-	-	-
2,4,6-Trichlorophenol	ND	0.0012	0.013	-	-	-

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Quality Control Report

Client: A&B Construction	WorkOrder: 1912570
Date Prepared: 12/12/19	BatchID: 190497
Date Analyzed: 12/12/19	Extraction Method: SW3550B
Instrument: GC17	Analytical Method: SW8270C
Matrix: Soil	Unit: mg/Kg
Project: 19229; Masonic Homes; Union City, CA	Sample ID: MB/LCS/LCSD-190497 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	1.4			1.25	111	54-131
Phenol-d5	1.2			1.25	99	52-129
Nitrobenzene-d5	0.96			1.25	77	43-127
2-Fluorobiphenyl	0.98			1.25	79	42-116
2,4,6-Tribromophenol	1.2			1.25	98	39-119
4-Terphenyl-d14	0.81			1.25	65	36-118

(Cont.)



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/12/19	BatchID:	190497
Date Analyzed:	12/12/19	Extraction Method:	SW3550B
Instrument:	GC17	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190497 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.12	0.13	0.12	95	101	68-134	6.48	30
Acenaphthylene	0.13	0.14	0.12	105	114	65-141	7.45	30
Anthracene	0.12	0.14	0.12	100	109	65-147	8.95	30
Benzidine	5.8	6.1	12.5	46	49	7-97	5.47	30
Benzo (a) anthracene	0.12	0.13	0.12	98	108	61-136	9.26	30
Benzo (a) pyrene	0.15	0.17	0.12	120	133	59-150	10.5	30
Benzo (b) fluoranthene	0.65	0.73	0.62	104	117	43-160	12.3	30
Benzo (g,h,i) perylene	0.14	0.16	0.12	112	124	54-142	10.7	30
Benzo (k) fluoranthene	0.12	0.12	0.12	93	98	59-141	5.20	30
Benzyl Alcohol	12	13	12.5	98	102	48-145	3.51	30
Bis (2-chloroethoxy) Methane	2.3	2.6	2.5	92	104	71-138	12.1	30
Bis (2-chloroethyl) Ether	0.099	0.10	0.12	79	82	60-128	3.83	30
Bis (2-chloroisopropyl) Ether	0.11	0.11	0.12	87	90	67-129	2.88	30
Bis (2-ethylhexyl) Adipate	2.5	2.8	2.5	100	111	56-162	9.78	30
Bis (2-ethylhexyl) Phthalate	0.16	0.17	0.12	129	139	49-168	7.48	30
4-Bromophenyl Phenyl Ether	2.4	2.7	2.5	95	108	68-136	13.1	30
Butylbenzyl Phthalate	0.15	0.16	0.12	121	128	57-161	5.84	30
4-Chloroaniline	0.12	0.13	0.12	95	105	46-130	9.34	30
4-Chloro-3-methylphenol	2.9	3.1	2.5	116	125	78-149	7.29	30
2-Chloronaphthalene	2.5	2.6	2.5	98	102	71-133	3.88	30
2-Chlorophenol	0.13	0.14	0.12	104	109	73-133	4.67	30
4-Chlorophenyl Phenyl Ether	2.5	2.8	2.5	101	110	71-132	8.28	30
Chrysene	0.12	0.13	0.12	96	105	58-140	8.91	30
Dibenzo (a,h) anthracene	0.15	0.17	0.12	120	134	57-151	10.7	30
Dibenzofuran	2.3	2.5	2.5	93	101	70-134	7.92	30
Di-n-butyl Phthalate	0.16	0.17	0.12	125	134	65-147	7.20	30
1,2-Dichlorobenzene	2.0	2.1	2.5	82	86	68-114	5.03	30
1,3-Dichlorobenzene	2.1	2.2	2.5	82	87	69-116	5.72	30
1,4-Dichlorobenzene	2.0	2.2	2.5	81	86	64-117	6.92	30
3,3-Dichlorobenzidine	0.099	0.11	0.12	79	87	11-163	9.98	30
2,4-Dichlorophenol	3.7	4.1	2.5	148,F2	162,F2	78-144	9.05	30
Diethyl Phthalate	0.13	0.14	0.12	107	114	67-146	6.49	30
2,4-Dimethylphenol	2.9	3.2	2.5	115	129	71-152	11.8	30
Dimethyl Phthalate	0.14	0.14	0.12	108	116	70-135	6.56	30
4,6-Dinitro-2-methylphenol	9.1	10	12.5	72	84	14-155	14.5	30
2,4-Dinitrophenol	1.5	1.8	2.5	62	73	1-156	16.2	30
2,4-Dinitrotoluene	0.13	0.15	0.12	105	116	68-144	9.81	30
2,6-Dinitrotoluene	0.15	0.16	0.12	119	127	69-148	6.64	30

(Cont.)



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/12/19	BatchID:	190497
Date Analyzed:	12/12/19	Extraction Method:	SW3550B
Instrument:	GC17	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190497 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Di-n-octyl Phthalate	0.19	0.20	0.12	149	157	51-175	5.44	30
1,2-Diphenylhydrazine	2.2	2.4	2.5	88	97	62-142	10.1	30
Fluoranthene	0.14	0.15	0.12	110	119	66-146	7.77	30
Fluorene	0.14	0.14	0.12	109	115	72-142	4.97	30
Hexachlorobenzene	0.11	0.13	0.12	91	101	65-127	10.6	30
Hexachlorobutadiene	0.11	0.13	0.12	91	101	68-131	11.1	30
Hexachlorocyclopentadiene	12	13	12.5	94	102	38-134	8.43	30
Hexachloroethane	0.12	0.12	0.12	93	97	57-117	4.07	30
Indeno (1,2,3-cd) pyrene	0.14	0.16	0.12	115	127	57-145	10.2	30
Isophorone	2.2	2.5	2.5	89	99	69-139	10.3	30
1-Methylnaphthalene	0.13	0.14	0.12	102	113	30-130	9.49	30
2-Methylnaphthalene	0.13	0.14	0.12	104	114	72-139	9.30	30
2-Methylphenol (o-Cresol)	2.5	2.6	2.5	99	102	69-138	3.75	30
3 & 4-Methylphenol (m,p-Cresol)	3.1	3.2	2.5	123	127	69-128	2.71	30
Naphthalene	0.11	0.13	0.12	91	100	64-127	10.3	30
2-Nitroaniline	12	13	12.5	98	106	72-143	8.45	30
3-Nitroaniline	11	11	12.5	87	90	57-122	3.86	30
4-Nitroaniline	11	12	12.5	90	95	68-133	5.38	30
Nitrobenzene	2.2	2.5	2.5	87	99	66-136	12.7	30
2-Nitrophenol	13	15	12.5	108	120	80-141	11.1	30
4-Nitrophenol	13	13	12.5	104	107	67-144	2.93	30
N-Nitrosodiphenylamine	2.4	2.7	2.5	97	108	67-138	11.2	30
N-Nitrosodi-n-propylamine	2.0	2.1	2.5	78	83	74-118	6.06	30
Pentachlorophenol	0.63	0.72	0.62	101	115	50-153	13.1	30
Phenanthrene	0.11	0.13	0.12	92	100	66-129	9.27	30
Phenol	0.60	0.64	0.50	121	127	58-136	5.19	30
Pyrene	0.14	0.15	0.12	111	123	55-148	10.3	30
Pyridine	2.1	2.0	2.5	84	79	46-93	6.42	30
1,2,4-Trichlorobenzene	2.3	2.6	2.5	92	104	69-130	12.6	30
2,4,5-Trichlorophenol	0.16	0.18	0.12	132	145	68-150	9.34	30
2,4,6-Trichlorophenol	0.15	0.17	0.12	123	134	70-144	8.43	30

(Cont.)



Quality Control Report

Client: A&B Construction
Date Prepared: 12/12/19
Date Analyzed: 12/12/19
Instrument: GC17
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190497
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-190497
 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	1.3	1.2	1.25	104	100	68-128	3.64	30
Phenol-d5	1.2	1.2	1.25	98	94	73-121	3.38	30
Nitrobenzene-d5	1.1	1.2	1.25	89	96	59-138	7.90	30
2-Fluorobiphenyl	1.1	1.2	1.25	91	93	59-129	2.36	30
2,4,6-Tribromophenol	1.2	1.3	1.25	98	101	46-142	3.13	30
4-Terphenyl-d14	1.0	1.0	1.25	81	84	50-143	3.14	30

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	1	0.11	0.11	0.12	ND<0.010	91	85	31-140	6.39	30
Acenaphthylene	1	0.11	0.11	0.12	ND<0.010	91	87	23-142	3.44	30
Anthracene	1	0.11	0.11	0.12	ND<0.010	85	85	27-142	0	30
Benzidine	1	7.6	7.3	12.5	ND<10	61	59	2-88	3.08	30
Benzo (a) anthracene	1	0.12	0.12	0.12	ND<0.040	69	70	2-149	1.72	30
Benzo (a) pyrene	1	0.13	0.13	0.12	ND<0.020	103	101	15-158	2.07	30
Benzo (b) fluoranthene	1	0.54	0.54	0.62	ND<0.050	85	84	2-145	1.33	30
Benzo (g,h,i) perylene	1	0.12	0.12	0.12	ND<0.020	88	85	4-155	3.04	30
Benzo (k) fluoranthene	1	0.096	0.091	0.12	ND<0.010	76	73	19-148	4.30	30
Benzyl Alcohol	1	11	12	12.5	ND<10	91	94	2-163	3.74	30
Bis (2-chloroethoxy) Methane	1	2.0	2.1	2.5	ND<2.0	81	85	35-132	5.41	30
Bis (2-chloroethyl) Ether	1	0.11	0.11	0.12	ND<0.020	86	85	40-140	1.35	30
Bis (2-chloroisopropyl) Ether	1	0.10	0.11	0.12	ND<0.020	81	88	33-147	7.91	30
Bis (2-ethylhexyl) Adipate	1	1.8	1.9	2.5	ND<4.0	72	77	31-138	7.80	30
Bis (2-ethylhexyl) Phthalate	1	0.11	0.12	0.12	ND<0.040	90	97	6-195	8.27	30
4-Bromophenyl Phenyl Ether	1	2.0	2.1	2.5	ND<2.0	81	84	34-128	3.66	30
Butylbenzyl Phthalate	1	0.11	0.11	0.12	ND<0.20	92	91	32-143	0.661	30
4-Chloroaniline	1	0.12	0.12	0.12	ND<0.020	96	98	25-134	1.36	30
4-Chloro-3-methylphenol	1	2.7	2.7	2.5	ND<2.0	106	108	37-148	1.44	30
2-Chloronaphthalene	1	2.2	2.0	2.5	ND<2.0	88	81	35-124	7.95	30
2-Chlorophenol	1	0.14	0.15	0.12	ND<0.040	114	122	44-140	6.72	30
4-Chlorophenyl Phenyl Ether	1	2.2	2.2	2.5	ND<2.0	90	90	35-131	0	30
Chrysene	1	0.11	0.11	0.12	ND<0.020	76	76	18-137	0	30
Dibenzo (a,h) anthracene	1	0.12	0.11	0.12	ND<0.020	92	92	18-149	0	30
Dibenzofuran	1	2.2	2.1	2.5	ND<2.0	88	85	34-132	3.59	30
Di-n-butyl Phthalate	1	0.12	0.11	0.12	ND<0.020	92	90	42-145	2.58	30

(Cont.)



Quality Control Report

Client: A&B Construction
Date Prepared: 12/12/19
Date Analyzed: 12/12/19
Instrument: GC17
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190497
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS/LCSD-190497
 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
1,2-Dichlorobenzene	1	2.2	2.4	2.5	ND<2.0	89	95	31-136	6.16	30
1,3-Dichlorobenzene	1	2.2	2.2	2.5	ND<2.0	88	90	33-129	1.60	30
1,4-Dichlorobenzene	1	2.3	2.3	2.5	ND<2.0	91	91	30-129	0	30
3,3-Dichlorobenzidine	1	0.12	0.12	0.12	ND<0.020	97	95	16-152	1.88	30
2,4-Dichlorophenol	1	3.0	3.0	2.5	ND<0.10	121	120	45-134	0.940	30
Diethyl Phthalate	1	0.11	0.10	0.12	ND<0.040	89	83	38-146	7.32	30
2,4-Dimethylphenol	1	2.6	2.5	2.5	ND<2.0	102	100	27-149	2.24	30
Dimethyl Phthalate	1	0.11	0.098	0.12	ND<0.020	85	79	36-133	8.20	30
4,6-Dinitro-2-methylphenol	1	4.9	4.6	12.5	ND<10	39	37	2-145	7.09	30
2,4-Dinitrophenol	1	1.4	1.4	2.5	ND<1.0	56	54	2-153	3.05	30
2,4-Dinitrotoluene	1	0.11	0.099	0.12	ND<0.050	87	80	20-153	9.28	30
2,6-Dinitrotoluene	1	0.11	0.11	0.12	ND<0.020	87	87	24-153	0	30
Di-n-octyl Phthalate	1	0.18	0.17	0.12	ND<0.040	147	140	23-198	5.26	30
1,2-Diphenylhydrazine	1	1.8	1.8	2.5	ND<2.0	70	71	37-127	1.90	30
Fluoranthene	1	0.13	0.13	0.12	0.02218	85	83	9-169	1.29	30
Fluorene	1	0.12	0.11	0.12	ND<0.020	95	91	31-148	4.25	30
Hexachlorobenzene	1	0.094	0.097	0.12	ND<0.010	75	77	33-124	2.55	30
Hexachlorobutadiene	1	0.10	0.10	0.12	ND<0.020	80	81	32-131	1.47	30
Hexachlorocyclopentadiene	1	7.2	7.0	12.5	ND<16	58	56	2-108	2.27	30
Hexachloroethane	1	0.12	0.12	0.12	ND<0.020	95	95	25-134	0	30
Indeno (1,2,3-cd) pyrene	1	0.11	0.11	0.12	ND<0.020	91	90	11-152	1.40	30
Isophorone	1	1.9	2.1	2.5	ND<2.0	78	83	34-126	6.32	30
1-Methylnaphthalene	1	0.11	0.11	0.12	ND<0.010	89	90	30-130	1.95	30
2-Methylnaphthalene	1	0.11	0.11	0.12	ND<0.020	88	92	38-139	4.27	30
2-Methylphenol (o-Cresol)	1	3.1	2.7	2.5	ND<4.0	123	109	36-145	11.4	30
3 & 4-Methylphenol (m,p-Cresol)	1	3.2	3.1	2.5	ND<2.0	126	123	29-158	2.20	30
Naphthalene	1	0.096	0.096	0.12	ND<0.010	77	77	20-146	0	30
2-Nitroaniline	1	11	10	12.5	ND<10	90	82	35-133	8.71	30
3-Nitroaniline	1	11	10	12.5	ND<10	87	82	32-127	6.53	30
4-Nitroaniline	1	12	10	12.5	ND<10	93	81	34-132	13.5	30
Nitrobenzene	1	2.1	2.1	2.5	ND<2.0	84	83	29-139	1.34	30
2-Nitrophenol	1	12	12	12.5	ND<10	93	93	38-127	0	30
4-Nitrophenol	1	13	11	12.5	ND<10	101	85	28-137	17.0	30
N-Nitrosodiphenylamine	1	2.0	1.9	1.25	ND<2.0	163,F1	77	27-130	5.58	30
N-Nitrosodi-n-propylamine	1	2.3	2.4	2.5	ND<2.0	91	95	29-146	3.80	30
Pentachlorophenol	1	0.31	0.26	0.62	ND<0.25	49	41	3-129	16.6	30
Phenanthrene	1	0.11	0.11	0.12	ND<0.040	78	76	2-176	1.87	30
Phenol	1	0.56	0.56	0.50	ND<0.040	112	112	24-151	0	30

(Cont.)



Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/12/19	BatchID:	190497
Date Analyzed:	12/12/19	Extraction Method:	SW3550B
Instrument:	GC17	Analytical Method:	SW8270C
Matrix:	Soil	Unit:	mg/Kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190497 1912570-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Pyrene	1	0.11	0.12	0.12	0.02355	73	76	17-144	2.79	30
Pyridine	1	2.3	2.0	2.5	ND<2.0	NR,F16	80	2-110	NR	30
1,2,4-Trichlorobenzene	1	2.1	2.3	2.5	ND<2.0	84	93	36-129	10.8	30
2,4,5-Trichlorophenol	1	0.17	0.15	0.12	ND<0.020	135	117	36-143	14.0	30
2,4,6-Trichlorophenol	1	0.17	0.15	0.12	ND<0.10	133	117	30-139	12.2	30
Surrogate Recovery										
2-Fluorophenol	1	1.5	1.4	1.25		117	114	56-152	2.44	30
Phenol-d5	1	1.3	1.3	1.25		107	106	54-146	0.271	30
Nitrobenzene-d5	1	0.92	0.95	1.25		74	76	47-147	3.21	30
2-Fluorobiphenyl	1	1.1	1.0	1.25		85	81	46-141	4.62	30
2,4,6-Tribromophenol	1	1.2	1.1	1.25		98	91	25-166	8.20	30
4-Terphenyl-d14	1	0.72	0.78	1.25		58	62	39-153	7.11	30



Quality Control Report

Client: A&B Construction
Date Prepared: 12/11/19
Date Analyzed: 12/12/19
Instrument: ICP-MS3
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190442
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-190442
 1912570-001AMS/MSD
 1912570-001APDS

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Antimony	ND	0.094	0.50	-	-	-
Arsenic	ND	0.14	0.50	-	-	-
Barium	ND	0.97	5.0	-	-	-
Beryllium	ND	0.072	0.50	-	-	-
Cadmium	ND	0.058	0.25	-	-	-
Chromium	ND	0.092	0.50	-	-	-
Cobalt	ND	0.056	0.50	-	-	-
Copper	ND	0.069	0.50	-	-	-
Lead	ND	0.094	0.50	-	-	-
Mercury	0.010,J	0.0050	0.050	-	-	-
Molybdenum	ND	0.23	0.50	-	-	-
Nickel	ND	0.072	0.50	-	-	-
Selenium	ND	0.13	0.50	-	-	-
Silver	ND	0.055	0.50	-	-	-
Thallium	ND	0.10	0.50	-	-	-
Vanadium	ND	0.064	0.50	-	-	-
Zinc	ND	1.4	5.0	-	-	-
Surrogate Recovery						
Terbium	530			500	106	70-130



Quality Control Report

Client: A&B Construction
Date Prepared: 12/11/19
Date Analyzed: 12/12/19
Instrument: ICP-MS3
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190442
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-190442
 1912570-001AMS/MSD
 1912570-001APDS

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Antimony	57	55	50	113	111	75-125	2.07	20
Arsenic	52	50	50	104	101	75-125	3.06	20
Barium	520	500	500	105	100	75-125	4.38	20
Beryllium	53	50	50	106	101	75-125	5.00	20
Cadmium	52	50	50	103	99	75-125	3.79	20
Chromium	52	51	50	105	101	75-125	3.23	20
Cobalt	53	50	50	105	100	75-125	5.30	20
Copper	53	51	50	106	101	75-125	4.04	20
Lead	52	50	50	103	99	75-125	3.50	20
Mercury	1.3	1.3	1.25	105	103	75-125	1.46	20
Molybdenum	53	53	50	107	105	75-125	1.21	20
Nickel	53	51	50	106	102	75-125	3.96	20
Selenium	52	50	50	103	100	75-125	2.69	20
Silver	52	50	50	104	101	75-125	3.16	20
Thallium	50	49	50	101	98	75-125	2.61	20
Vanadium	52	50	50	105	101	75-125	3.92	20
Zinc	520	500	500	104	100	75-125	4.19	20

Surrogate Recovery

Terbium	560	550	500	112	109	70-130	2.35	20
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Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Antimony	1	56	53	50	ND	111	105	75-125	5.07	20
Arsenic	1	59	57	50	7.913	103	99	75-125	3.17	20
Barium	1	760	760	500	260.6	100	101	75-125	0.341	20
Beryllium	1	50	48	50	0.7035	98	95	75-125	3.06	20
Cadmium	1	52	50	50	ND	103	100	75-125	2.80	20
Chromium	1	100	100	50	49.25	104	101	75-125	1.58	20
Cobalt	1	60	58	50	11.83	96	92	75-125	3.36	20
Copper	1	450	98	50	41.66	808,F10	112	75-125	128,F10	20
Lead	1	63	61	50	13.17	100	95	75-125	4.13	20
Mercury	1	1.6	1.4	1.25	0.1886	110	98	75-125	9.97	20
Molybdenum	1	55	52	50	0.6568	108	102	75-125	5.49	20
Nickel	1	93	91	50	39.44	107	103	75-125	2.55	20
Selenium	1	48	47	50	ND	95	92	75-125	2.25	20
Silver	1	52	51	50	ND	104	101	75-125	2.35	20

(Cont.)



Quality Control Report

Client: A&B Construction
Date Prepared: 12/11/19
Date Analyzed: 12/12/19
Instrument: ICP-MS3
Matrix: Soil
Project: 19229; Masonic Homes; Union City, CA

WorkOrder: 1912570
BatchID: 190442
Extraction Method: SW3050B
Analytical Method: SW6020
Unit: mg/kg
Sample ID: MB/LCS/LCSD-190442
 1912570-001AMS/MSD
 1912570-001APDS

QC Summary Report for Metals

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Thallium	1	51	50	50	ND	101	99	75-125	1.75	20
Vanadium	1	150	150	50	87.48	129.F10	118	75-125	3.89	20
Zinc	1	590	580	500	78.21	103	101	75-125	1.53	20
Surrogate Recovery										
Terbium	1	560	550	500		113	110	70-130	2.46	20

Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Copper	96	50	41.66	108	75-125

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Antimony	0.67	ND	-	-
Arsenic	7.1	7.913	10.3	-
Barium	250	260.6	4.07	20
Beryllium	0.71	0.7035	0.924	-
Cadmium	ND<1.2	ND	-	-
Chromium	52	49.25	5.58	20
Cobalt	12	11.83	1.44	-
Copper	42	41.66	0.816	20
Lead	13	13.17	1.29	20
Mercury	0.34	0.1886	80.3	-
Molybdenum	ND<2.5	0.6568	-	-
Nickel	40	39.44	1.42	20
Selenium	ND<2.5	ND	-	-
Silver	ND<2.5	ND	-	-
Thallium	ND<2.5	ND	-	-
Vanadium	93	87.48	6.31	20
Zinc	79	78.21	1.01	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: A&B Construction	WorkOrder: 1912570
Date Prepared: 12/10/19	BatchID: 190372
Date Analyzed: 12/11/19	Extraction Method: SW5035
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 19229; Masonic Homes; Union City, CA	Sample ID: MB/LCS/LCSD-190372

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.70	1.0	-	-	-
MTBE	ND	0.0040	0.050	-	-	-
Benzene	ND	0.0030	0.0050	-	-	-
Toluene	ND	0.0020	0.0050	-	-	-
Ethylbenzene	ND	0.0022	0.0050	-	-	-
m,p-Xylene	ND	0.0030	0.010	-	-	-
o-Xylene	ND	0.0010	0.0050	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.12			0.1	119	75-134
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.55	0.56	0.60	92	94	82-118	1.98	20
MTBE	0.086	0.085	0.10	86	85	61-119	1.34	20
Benzene	0.10	0.10	0.10	102	103	77-128	1.26	20
Toluene	0.10	0.10	0.10	103	104	74-132	1.11	20
Ethylbenzene	0.10	0.11	0.10	104	106	84-127	1.26	20
m,p-Xylene	0.21	0.21	0.20	106	107	80-120	1.13	20
o-Xylene	0.10	0.10	0.10	103	104	80-120	0.791	20

Surrogate Recovery

2-Fluorotoluene	0.10	0.10	0.10	100	101	75-134	0.659	20
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Quality Control Report

Client: A&B Construction	WorkOrder: 1912570
Date Prepared: 12/12/19	BatchID: 190566
Date Analyzed: 12/13/19	Extraction Method: SW5035
Instrument: GC19	Analytical Method: SW8021B/8015Bm
Matrix: Soil	Unit: mg/Kg
Project: 19229; Masonic Homes; Union City, CA	Sample ID: MB/LCS/LCSD-190566

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	0.70	1.0	-	-	-
MTBE	ND	0.0040	0.050	-	-	-
Benzene	ND	0.0030	0.0050	-	-	-
Toluene	ND	0.0020	0.0050	-	-	-
Ethylbenzene	ND	0.0022	0.0050	-	-	-
m,p-Xylene	ND	0.0030	0.010	-	-	-
o-Xylene	ND	0.0010	0.0050	-	-	-

Surrogate Recovery

2-Fluorotoluene	0.10		0.1	100	75-134
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	0.51	0.56	0.60	86	93	82-118	8.31	20
MTBE	0.080	0.084	0.10	80	84	61-119	5.22	20
Benzene	0.11	0.10	0.10	113	104	77-128	7.43	20
Toluene	0.11	0.10	0.10	111	105	74-132	6.00	20
Ethylbenzene	0.11	0.11	0.10	111	106	84-127	4.01	20
m,p-Xylene	0.22	0.22	0.20	111	108	80-120	2.66	20
o-Xylene	0.11	0.11	0.10	106	106	80-120	0	20

Surrogate Recovery

2-Fluorotoluene	0.11	0.10	0.10	110	101	75-134	8.08	20
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Quality Control Report

Client:	A&B Construction	WorkOrder:	1912570
Date Prepared:	12/10/19	BatchID:	190371
Date Analyzed:	12/11/19	Extraction Method:	SW3550B
Instrument:	GC11A	Analytical Method:	SW8015B
Matrix:	Soil	Unit:	mg/Kg
Project:	19229; Masonic Homes; Union City, CA	Sample ID:	MB/LCS/LCSD-190371

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	0.83	1.0	-	-	-
TPH-Motor Oil (C18-C36)	ND	3.8	5.0	-	-	-
Surrogate Recovery						
C9	30			25	118	72-122

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43	41	40	107	102	75-128	4.71	30
Surrogate Recovery								
C9	30	30	25	119	118	72-122	0.697	30



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1912570

ClientCode: ABCB

- WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

R Marten
A&B Construction
1350 4th Street
Berkeley, CA 94710
(510) 999-6000 FAX: 415-362-2244

Email: rmarten@a-bconstruction.net
cc/3rd Party:
PO:
Project: 19229; Masonic Homes; Union City, CA

Bill to:

Mauricio Mayora
A&B Construction
1350 4th Street
Berkeley, CA 94710
SENHARDCOPY; melina@a-bconstru

Requested TAT: 2 days;

Date Received: 12/11/2019

Date Logged: 12/11/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1912570-001	Pad B-Stockpile	Soil	12/11/2019 11:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1912570-002	Pad B	Soil	12/11/2019 11:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1912570-003	Phase 2 18" over-ex	Soil	12/11/2019 11:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1912570-004	Phase 1 Road	Soil	12/11/2019 11:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A					
1912570-005	Drill Spoils @ Walls	Soil	12/11/2019 11:30	<input type="checkbox"/>	A	A	A	A	A	A	A	A					

Test Legend:

1	8081PCB_S	2	8260B_S	3	8270_SCSM_S	4	CAM17MS_TTLC_S
5	G-MBTEX_S	6	PRDisposal Fee	7	TPH(DMO)_S	8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Nancy Palacios

The following SamplIDs: 001A, 002A, 003A, 004A, 005A contain testgroup Multi Range_S.

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: A&B CONSTRUCTION
Client Contact: R Marten
Contact's Email: rmarten@a-bconstruction.net

Project: 19229; Masonic Homes; Union City, CA

Work Order: 1912570
QC Level: LEVEL 2
Date Logged: 12/11/2019

Comments

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1912570-001A	Pad B-Stockpile	Soil	Multi-Range TPH	2	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		2 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		2 days			
			SW8260B (VOCs)			<input type="checkbox"/>		2 days			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		2 days			
1912570-002A	Pad B	Soil	Multi-Range TPH	4	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		2 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		2 days			
			SW8260B (VOCs)			<input type="checkbox"/>		2 days			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		2 days			
1912570-003A	Phase 2 18" over-ex	Soil	Multi-Range TPH	3	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>	
			SW6020 (CAM 17)			<input type="checkbox"/>		2 days			
			SW8270C (SVOCs)			<input type="checkbox"/>		2 days			
			SW8260B (VOCs)			<input type="checkbox"/>		2 days			
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>		2 days			
1912570-004A	Phase 1 Road	Soil	Multi-Range TPH	1	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: A&B CONSTRUCTION
Client Contact: R Marten
Contact's Email: rmarten@a-bconstruction.net

Project: 19229; Masonic Homes; Union City, CA

Work Order: 1912570
QC Level: LEVEL 2
Date Logged: 12/11/2019

Comments

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1912570-004A	Phase 1 Road	Soil	SW6020 (CAM 17)	1	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>			
			SW8270C (SVOCs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
1912570-005A	Drill Spoils @ Walls	Soil	Multi-Range TPH	2	mason jar	<input type="checkbox"/>	12/11/2019 11:30	2 days		<input type="checkbox"/>			
			SW6020 (CAM 17)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
			SW8270C (SVOCs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
			SW8260B (VOCs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>
			SW8081A/8082 (OC Pesticides+PCBs)			<input type="checkbox"/>						2 days	<input type="checkbox"/>

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

	McCAMPBELL ANALYTICAL, INC.		CHAIN OF CUSTODY RECORD					
	1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701		Turn Around Time: 1 Day Rush	2 Day Rush	●	3 Day Rush	STD	Quote #
	Telephone: (877) 252-9262 / Fax: (925) 252-9269		J-Flag / MDL	ESL	Cleanup Approved		Dry Weight	Bottle Order #
	www.mccampbell.com main@mccampbell.com		Delivery Format: PDF	GeoTracker EDF	EDD	Write On (DW)	Detect Summary	

Report To: Bill To: A&B Construction

Company: A&B Construction

Address: 1350 Fourth St. Berkeley, CA

Email: rmarten@a-bconstruction.net Tele: 510-459-5996

Project Name: MASONIC HOMES Project #: 19229

Project Location: UNION CITY CA PO # 19229

Sampler Signature: _____

SAMPLE ID Location / Field Point	Sampling		#Containers	Matrix	Preservative	Multi Range as Gas, Diesel, and Motor Oil (8021/8015)	BTEX & TPH as Gas (8021/8015) MTBE	TPH as Diesel (8015) + Motor Oil Without Silica Gel	TPH as Diesel (8015) + Motor Oil With Silica Gel	Total Oil & Grease (1664 / 9071) Without Silica Gel	Total Petroleum Hydrocarbons - Oil & Grease (1664 / 9071) With Silica Gel	Total Petroleum Hydrocarbons (416.1) With Silica Gel	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ; Aroclors only	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.8 / 6020)*	Metals (200.8 / 6020)*	Baylands Requirements	Lab to filter sample for dissolved metals analysis	
	Date	Time																				
<u>Pad B - Stockpile</u>	<u>12-11</u>	<u>11:30a</u>	<u>2</u>	<u>S</u>		X	X	X					X	X	X	X		X				
<u>Pad B</u>	<u>12-11</u>	<u>11:30a</u>	<u>4</u>	<u>S</u>		X	X	X					X	X	X	X		X				
<u>Phase 2 18" over-ex</u>	<u>12-11</u>	<u>11:30a</u>	<u>3</u>	<u>S</u>		X	X	X					X	X	X	X		X				
<u>Phase 1 Road</u>	<u>12-11</u>	<u>11:30a</u>	<u>1</u>	<u>S</u>		X	X	X					X	X	X	X		X				
<u>Drill spoils @ walls</u>	<u>12-11</u>	<u>11:30a</u>	<u>2</u>	<u>S</u>		X	X	X					X	X	X	X		X				

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate \$250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time	Comments / Instructions
<u>B. Marten</u>	<u>12-11-19</u>	<u>1347</u>	<u>Nancy Palacios</u>	<u>12-11-19</u>	<u>1347</u>	

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other
 Preservative Code: 1=4°C 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____
14 WAT. Page ___ of ___



Sample Receipt Checklist

Client Name: **A&B Construction**
 Project: **19229; Masonic Homes; Union City, CA**
 WorkOrder No: **1912570** Matrix: Soil
 Carrier: Client Drop-In

Date and Time Received: **12/11/2019 13:47**
 Date Logged: **12/11/2019**
 Received by: Nancy Palacios
 Logged by: Nancy Palacios

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

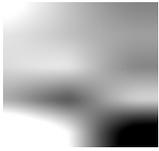
(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 1.4°C		NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

 Comments



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1912570 A

Report Created for: A&B Construction

1350 4th Street
Berkeley, CA 94710

Project Contact: R Marten

Project P.O.: 19229

Project: 19229; Masonic Homes; Union City, CA

Project Received: 12/11/2019

Analytical Report reviewed & approved for release on 12/19/2019 by:



Yen Cao

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: A&B Construction
Project: 19229; Masonic Homes; Union City, CA
WorkOrder: 1912570 A

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LQL	Lowest Quantitation Level
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: CA Title 22

Date Prepared: 12/16/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B-Stockpile	1912570-001A	Soil	12/11/2019 11:30	ICP-MS4 171SMPL.d	190751

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	12/18/2019 21:48

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Pad B	1912570-002A	Soil	12/11/2019 11:30	ICP-MS4 172SMPL.d	190751

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	12/18/2019 21:52

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 2 18" over-ex	1912570-003A	Soil	12/11/2019 11:30	ICP-MS4 176SMPL.d	190751

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	12/18/2019 22:07

Analyst(s): DB

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Phase 1 Road	1912570-004A	Soil	12/11/2019 11:30	ICP-MS4 177SMPL.d	190751

Analytes	Result	RL	DF	Date Analyzed
Chromium	ND	0.10	1	12/18/2019 22:11

Analyst(s): DB

(Cont.)



Analytical Report

Client: A&B Construction

WorkOrder: 1912570

Date Received: 12/11/19 13:47

Extraction Method: CA Title 22

Date Prepared: 12/16/19

Analytical Method: SW6020

Project: 19229; Masonic Homes; Union City, CA

Unit: mg/L

Metals (STLC)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
Drill Spoils @ Walls	1912570-005A	Soil	12/11/2019 11:30	ICP-MS4 178SMPL.d	190751

Analytes	Result	RL	DF	Date Analyzed
Chromium	0.12	0.10	1	12/18/2019 22:15

Analyst(s): DB



Quality Control Report

Client: A&B Construction	WorkOrder: 1912570
Date Prepared: 12/16/19	BatchID: 190751
Date Analyzed: 12/18/19	Extraction Method: CA Title 22
Instrument: ICP-MS4	Analytical Method: SW6020
Matrix: Soil	Unit: mg/L
Project: 19229; Masonic Homes; Union City, CA	Sample ID: MB/LCS/LCSD-190751

QC Summary Report for Metals (STLC)

Analyte	MB Result	MDL	RL	-	-	-
Chromium	ND	0.10	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Chromium	9.7	9.4	10	97	94	75-125	3.84	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1912570 **A** ClientCode: ABCB

- WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag
 Detection Summary Dry-Weight

Report to:
R Marten
A&B Construction
1350 4th Street
Berkeley, CA 94710
(510) 999-6000 FAX: 415-362-2244

Email: rmarten@a-bconstruction.net
cc/3rd Party:
PO: 19229
Project: 19229; Masonic Homes; Union City, CA

Bill to:
Mauricio Mayora
A&B Construction
1350 4th Street
Berkeley, CA 94710
SENDHARDCOPY; melina@a-bconstru

Requested TAT: **2 days;**

Date Received: **12/11/2019**
Date Logged: **12/11/2019**
Date Add-On: **12/16/2019**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1912570-001	Pad B-Stockpile	Soil	12/11/2019 11:30	<input type="checkbox"/>	A												
1912570-002	Pad B	Soil	12/11/2019 11:30	<input type="checkbox"/>	A												
1912570-003	Phase 2 18" over-ex	Soil	12/11/2019 11:30	<input type="checkbox"/>	A												
1912570-004	Phase 1 Road	Soil	12/11/2019 11:30	<input type="checkbox"/>	A												
1912570-005	Drill Spoils @ Walls	Soil	12/11/2019 11:30	<input type="checkbox"/>	A												

Test Legend:

1	CRMS_STLC_S	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Nancy Palacios
Add-On Prepared By: Kena Ponce

Comments: STLC Cr added 12/16/19 RTAT

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: A&B CONSTRUCTION

Project: 19229; Masonic Homes; Union City, CA

Work Order: 1912570

Client Contact: R Marten

QC Level: LEVEL 2

Contact's Email: rmarten@a-bconstruction.net

Comments: STLC Cr added 12/16/19 RTAT

Date Logged: 12/11/2019

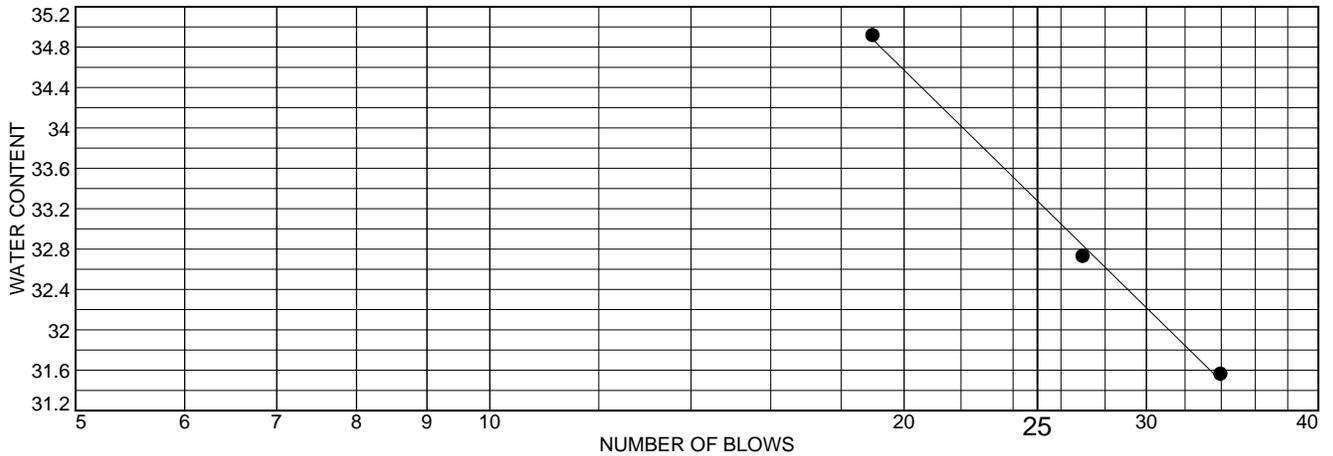
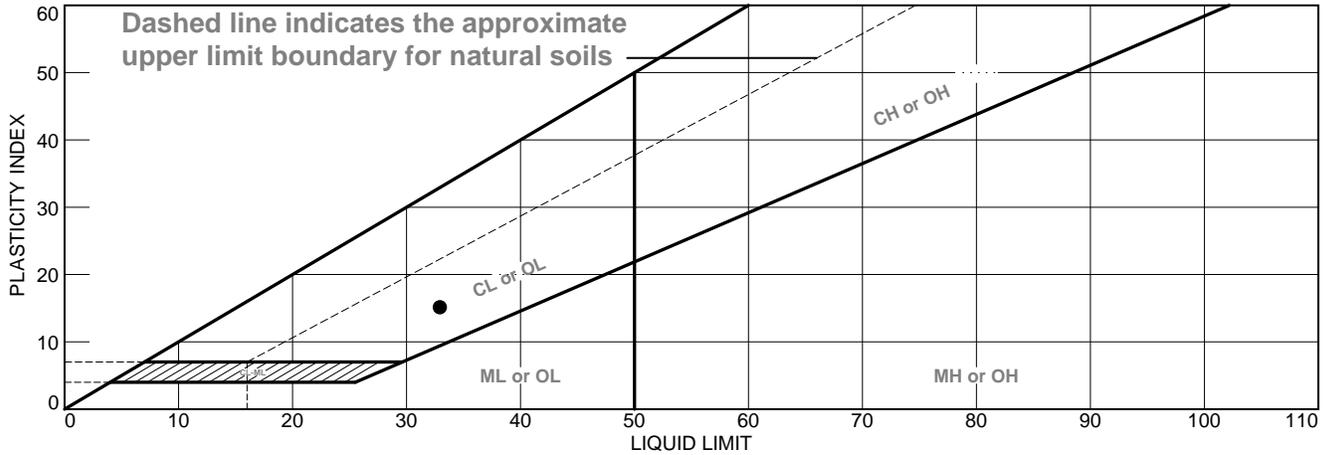
Date Add-On: 12/16/2019

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1912570-001A	Pad B-Stockpile	Soil	SW6020 (Chromium) (STLC)	2	mason jar	12/11/2019 11:30	2 days*		<input type="checkbox"/>	
1912570-002A	Pad B	Soil	SW6020 (Chromium) (STLC)	4	mason jar	12/11/2019 11:30	2 days*		<input type="checkbox"/>	
1912570-003A	Phase 2 18" over-ex	Soil	SW6020 (Chromium) (STLC)	3	mason jar	12/11/2019 11:30	2 days*		<input type="checkbox"/>	
1912570-004A	Phase 1 Road	Soil	SW6020 (Chromium) (STLC)	1	mason jar	12/11/2019 11:30	2 days*		<input type="checkbox"/>	
1912570-005A	Drill Spoils @ Walls	Soil	SW6020 (Chromium) (STLC)	2	mason jar	12/11/2019 11:30	2 days*		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	Brown clayey sand with gravel	33	18	15	33	20	SC

Project No. 2937-006.0 **Client:** A & B Construction

Project: Masonic Homes
19229

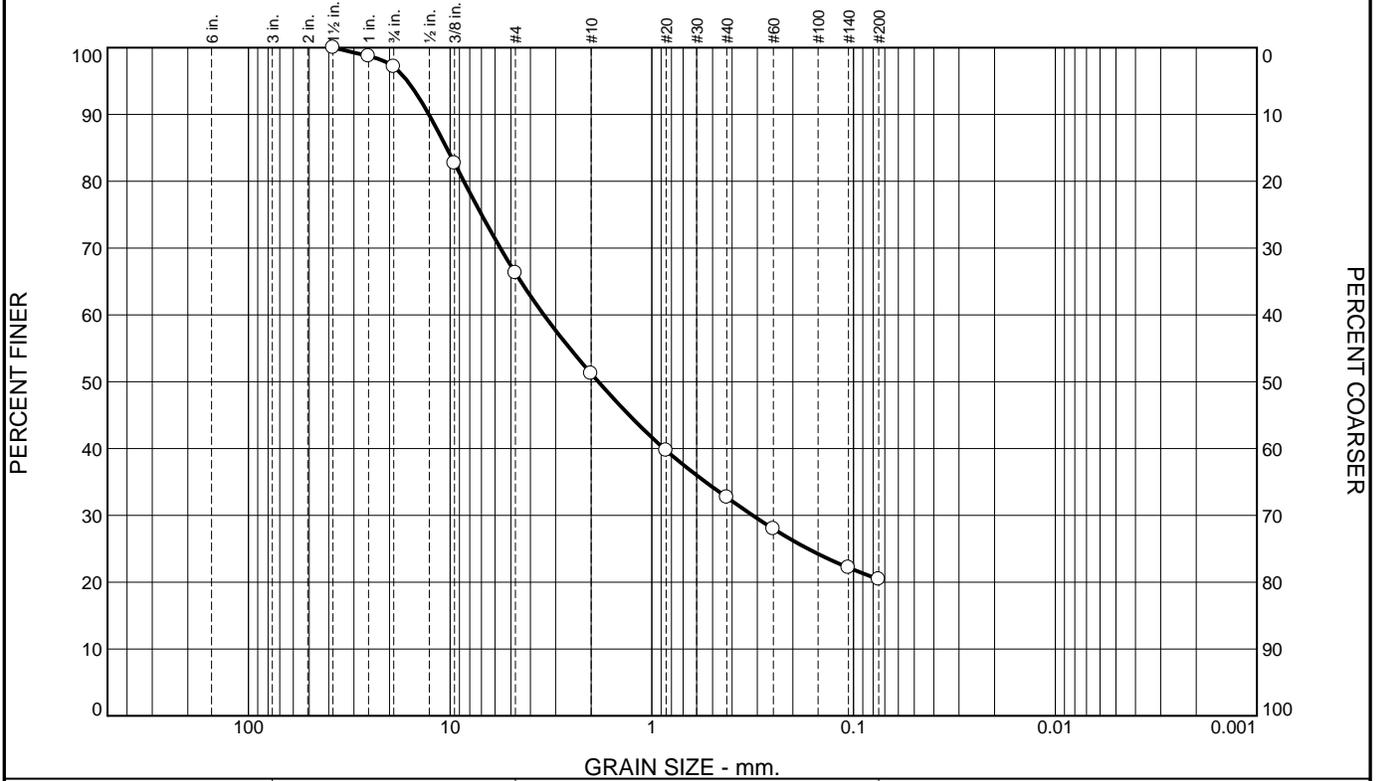
● **Source of Sample:** Onsite **Depth:** Bulk **Sample Number:** 1

Remarks:

Figure

Tested By: JH **Checked By:** JH

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	3	31	15	18	13	20	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100		
1	99		
3/4	97		
3/8	83		
#4	66		
#10	51		
#20	40		
#40	33		
#60	28		
#140	22		
#200	20		

Soil Description

Brown clayey sand with gravel

Atterberg Limits

PL= 18 LL= 33 PI= 15

Coefficients

D₉₀= 12.7543 D₈₅= 10.4184 D₆₀= 3.4293
D₅₀= 1.8425 D₃₀= 0.3161 D₁₅=
D₁₀= C_u= C_c=

Classification

USCS= SC AASHTO= A-2-6(0)

Remarks

* (no specification provided)

Source of Sample: Onsite Depth: Bulk Date: 12-18-19
Sample Number: 1

	Client: A & B Construction Project: Masonic Homes 19229 Project No: 2937-006.0	Figure
--	--	---------------

Tested By: SK Checked By: JH

APPENDIX G

**REGIONAL WATER BOARD IMPORT SOIL
AND WATER REUSE APPROVALS**

Archived: Friday, December 11, 2020 2:38:55 PM
From: West, Kimberlee@Waterboards
Sent: Tue, 20 Aug 2019 19:04:59
To: Dustyne Sutherland
Cc: Dorinda Shipman; Grace Stafford; Prowell, Cheryl@Waterboards
Subject: RE: Import Fill 920 Bayswater
Sensitivity: Normal

Dustyne,

Thank you for keeping me in the loop with import soil data. I have reviewed the analytical results of the soil samples from 920 Bayswater Avenue in Burlingame.

The Water Board concurs that the soil is suitable for use as imported backfill at the Docktown Marina site at 1548 Maple Street in Redwood City.

I will upload the import soil data and this approval email to GeoTracker. If there are any questions or concerns, please contact me.

Thank you,

Kimberlee West

Engineer
Regional Water Board
kimberlee.west@waterboards.ca.gov
510-622-2432



From: Dustyne Sutherland <dsutherland@Langan.com>
Sent: Tuesday, August 20, 2019 1:49 PM
To: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>
Cc: Dorinda Shipman <dshipman@Langan.com>; Grace Stafford <gstafford@langan.com>
Subject: RE: Import Fill 920 Bayswater

Hi Kimberlee

As a follow up to our discussion the 95% UCL for Chromium is 102.3 mg/kg. 33 out of 88 samples exceeded the 95% UCL.

Please let me know if you would like to discuss further,

Thanks,

We moved our office. Please note our new address.

Dustyne Sutherland
Senior Project Scientist
Direct: 415.955.5283
Mobile: 510.508.3436
[File Sharing Link](#)

Phone: 415.955.5200 Fax: 415.955.5201
135 Main Street, Suite 1500
San Francisco, CA 94105
www.langan.com

CALIFORNIA NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA WASHINGTON, DC
VIRGINIA WEST VIRGINIA OHIO FLORIDA TEXAS COLORADO ARIZONA
ABU DHABI ATHENS DOHA DUBAI LONDON PANAMA

A Carbon-Neutral Firm | Langan's goal is to be SAFE (Stay Accident Free Everyday)

From: Dustyne Sutherland
Sent: Monday, August 19, 2019 4:51 PM
To: West, Kimberlee@Waterboards (Kimberlee.West@Waterboards.ca.gov) <Kimberlee.West@Waterboards.ca.gov>
Cc: Dorinda Shipman <dshipman@Langan.com>; Grace Stafford <gstafford@langan.com>
Subject: Import Fill 920 Bayswater

Hi Kimberlee,

We have another import fill source site from 920 Bayswater Avenue in Burlingame and the proposed volume is 50,000 cubic yards of in-situ material. The sampling frequency fulfills the required number of samples, and the majority of the data meets our import fill criteria. However, similar to the Burlingame Point site, only a select few soluble chromium analyses were run, and cobalt is present over our import fill criteria. The 920 Bayswater site includes multiple addresses. The historical uses include residential structures, asphalt-paved parking areas and a former auto repair shop (see Figure 2 in the draft report).

Chromium results range from 47.9 to 190 mg/kg. Twelve soluble chrome tests were run, nine of those were concentrations over 100 mg/kg, including the maximum detected concentration of 190 mg/kg. Soluble chromium concentrations ranged from not detected to 0.13 mg/L. At the sample location where the maximum chromium concentration was 190 mg/kg, soluble chromium was detected at 0.13 mg/L.

Cobalt was detected at or above the residential ESL (23 mg/kg) in six of 88 samples, of which two concentrations were above the Bay Area background concentration for cobalt (25.5 mg/kg). A 95 percent upper confidence limit (95UCL) was calculated from all of the cobalt data. The 95UCL of the cobalt data of 17.74 mg/kg is below the residential ESL and within the Bay Area background concentration range.

This site is ready to export to meet their construction schedule. Could you please let me know when you would be able to review this?

Please note that that in the draft letter report attached Table 3 included the incorrect reporting limits for TPHg, the correct Table 3 is also attached in the link.

Thank you

We moved our office. Please note our new address.

Dustyne Sutherland
Senior Project Scientist
Direct: 415.955.5283
Mobile: 510.508.3436
[File Sharing Link](#)

Phone: 415.955.5200 Fax: 415.955.5201
135 Main Street, Suite 1500
San Francisco, CA 94105
www.langan.com

CALIFORNIA NEW JERSEY NEW YORK CONNECTICUT PENNSYLVANIA WASHINGTON, DC
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ABU DHABI ATHENS DOHA DUBAI LONDON PANAMA

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Archived: Friday, December 11, 2020 2:38:58 PM
From: West, Kimberlee@Waterboards
Sent: Wed, 10 Jul 2019 14:51:36
To: Dustyne Sutherland
Subject: RE: Import Fill Material - Maple Street, Docktown Marina
Sensitivity: Normal

Dustyne

Thanks for going over the data on potential backfill soil and the Response Plan's criteria for fill material with me. I appreciate the fact that this import soil will be transported directly from the source in Palo Alto to our Site in Redwood City without being stored at a quarry or secondary location. This reduces chances of cross-contamination or mishandling and reduces the overall carbon footprint.

I approve this soil to be used to backfill the excavation at the Docktown Marina Site. Please let me know as you find other potential import sources.

Thank you,
Kimberlee West

Engineer
Regional Water Board
kimberlee.west@waterboards.ca.gov
510-622-2432



From: Dustyne Sutherland <dsutherland@Langan.com>
Sent: Wednesday, July 10, 2019 9:08 AM
To: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>
Subject: Import Fill Material Maple Street

We moved our office. Please note our new address.

Dustyne Sutherland
Senior Project Scientist
Direct: 415.955.5283
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Archived: Friday, December 11, 2020 2:39:29 PM

From: West, Kimberlee@Waterboards

Sent: Tue, 9 Jul 2019 12:46:42

To: Dustyne Sutherland

Cc: Grace Stafford; Dorinda Shipman

Subject: RE: Area E Tide Water

Sensitivity: Normal

Thank you for clarifying that this is Area E tidal water, rather than the previous Area E water. I should read my emails more closely. ./

Area E Tide Water is approved for onsite reuse for dust control, pending phenolics data. If the phenolics levels are greater than the Silicon Valley ww limit of 2,600 µg/L, please give me a call to discuss. Otherwise, please proceed as proposed. After the water is pumped out of the borrow pit, please end me an email with the approximate volume (or add column to the ongoing Groundwater Results table for volume from each area).

Thank you,
Kimberlee West

Engineer
Regional Water Board
kimberlee.west@waterboards.ca.gov
510-622-2432



From: Dustyne Sutherland <dsutherland@Langan.com>

Sent: Monday, July 8, 2019 5:33 PM

To: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>

Cc: Grace Stafford <gstafford@langan.com>; Dorinda Shipman <dshipman@Langan.com>

Subject: Area E Tide Water

Hi Kimberlee,

The Area E excavation filled up with water following a few high tides. Can you please review the Area E tide water and let me know if it is approved for dust control? I should have the phenolic results by tomorrow am.

Thank you

We moved our office. Please note our new address.

Dustyne Sutherland
Senior Project Scientist

Direct: 415.955.5283

Mobile: 510.508.3436

[File Sharing Link](#)

Phone: 415.955.5200 Fax: 415.955.5201

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Archived: Friday, December 11, 2020 2:39:31 PM

From: West, Kimberlee@Waterboards

Sent: Wed, 1 May 2019 18:47:01

To: Dustyne Sutherland

Cc: Grace Stafford

Subject: RE: Analytical GW results Area A-D

Sensitivity: Normal

Dustyne,

Based on the sample data provided, I approve reuse of the water pumped from Excavation Area A for onsite dust control.

Thank you,

Kimberlee West

Engineer

Regional Water Board

kimberlee.west@waterboards.ca.gov

510-622-2432



From: Dustyne Sutherland <dsutherland@Langan.com>

Sent: Wednesday, May 1, 2019 3:38 PM

To: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>

Cc: Grace Stafford <gstafford@langan.com>

Subject: Analytical GW results Area A-D

Hi Kimberlee,

Concentrations of detected compounds look relatively low, please let me know if you would like to discuss.

Thank you

We moved our office. Please note our new address.

Dustyne Sutherland
Senior Project Scientist

Direct: 415.955.5283

Mobile: 510.508.3436

[File Sharing Link](#)

Phone: 415.955.5200 Fax: 415.955.5201

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Archived: Friday, December 11, 2020 2:39:34 PM

From: West, Kimberlee@Waterboards

Sent: Wed, 19 Jun 2019 15:58:58

To: Dustyne Sutherland

Cc: Dorinda Shipman; Grace Stafford

Subject: RE: 1548 Maple Update

Sensitivity: Normal

Dustyne,

Based on the data provided, I approve onsite reuse of the Yacht Club water.

I am free for a call this afternoon. Let me know what time, and I'll be sure to be at my desk.

Thank you,
-kimberlee

Kimberlee West

Engineer

Regional Water Board

kimberlee.west@waterboards.ca.gov

510-622-2432



From: Dustyne Sutherland <dsutherland@Langan.com>

Sent: Wednesday, June 19, 2019 11:23 AM

To: West, Kimberlee@Waterboards <Kimberlee.West@Waterboards.ca.gov>

Cc: Dorinda Shipman <dshipman@Langan.com>; Grace Stafford <gstafford@langan.com>

Subject: 1548 Maple Update

Hi Kimberlee,

I have attached the most recent updated confirmation sampling map and the groundwater results from water that was from the area of the former water tank/ Yacht Club area attached. Could you please let me know if you approve of the Yacht Club water for dust control?

We also found some soil impacted with free product in Area E which we have been over excavating. Would you have time to discuss with Dorinda and I between 2 and 4:30 today?

Thank you

We moved our office. Please note our new address.

Dustyne Sutherland

Senior Project Scientist

Direct: 415.955.5283

Mobile: 510.508.3436

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Phone: 415.955.5200 Fax: 415.955.5201

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APPENDIX H

**SILICON VALLEY CLEAN WATER DISTRICT DISCHARGE PERMIT
AND DOCUMENTATION**

SVCW NON-ROUTINE DISCHARGE APPLICATION

File # 70-60.01

Person Requesting: Nik Krukowski	Phone No. 415-263-9151	
Company: Strada Investment Group	Fax No.:	
Affected Business: N/A	Assessor's Parcel No.: 052-532-010	
Address: 1548 Maple Street	City: Redwood City	Zip: 94063

Waste Description: Rain and groundwater collecting in an open excavation

Constituents in Wastewater: (see tables 1 and 2)	Concentration:	Units:
Total petroleum hydrocarbons as diesel	91	µg/L
Phenolics	2.8	µg/L
Volatile organic compounds	< 0.5 – 6.2	µg/L
Metals	< 0.19 – 25	µg/L

Volume to Discharge (gal): 110,000 estimate

Date of Discharge: 1 April 2019 – 30 May 2019 Preferred Time of Discharge: 7 am to 3 pm

Preferred Discharge Method: Discharge to sanitary sewer via City of Redwood City manhole on maple street

Exact location, description and address of sanitary sewer discharge point: Sanitary sewer man hole on northwest side of maple street (see Attachment 1)

COORDINATES: 37.494654, -122.220876

Comments: Propose to discharge up to 10,000 gallons per day

Waste Certification: I certify that the information above is true and complete to the best of my knowledge. I certify that the proposed discharge is not a hazardous waste. I understand that it is illegal to discharge hazardous waste to the sanitary sewers.

Signed: *[Signature]* Title: *Vice President* Date: *3/15/19*

Submit Application to: Silicon Valley Clean Water
 Environmental Services Division Phone: (650) 591-7121
 1400 Radio Road E-Mail ndomingo@svcw.org
 Redwood City, CA 94065

Received at SVCW: Date: *3/18/19* Time: *PM 10AM* By: *[Signature]*

SVCW NON-ROUTINE DISCHARGE APPLICATION

File # 70-60.01

PAGE 2 OF 2 (Page 2 to be completed by SVCW)

Expected Impact of Discharge:

Collection System: NONE, discharge flow rate determined by RWC
 SVCW Pump Station: NONE
 SVCW Plant Processes: NONE
 SVCW Effluent Quality: NONE
 SVCW Sludge Quality: NONE
 Air Quality & Odors: NONE
 Work Health & Safety: NONE
 Additional Discussion: Discharge monitoring required

SVCW Authorization: Discharge Approved Not Approved

ESD Signature Momingo Date: 3/29/19

ECI Signature [Signature] Date: 3/29/19

Allowable Flow Rate: * gallons/day * gallons/minute

Total Discharge Allowed: * gallons

Time of Discharge: Time/Date Start: WHEN APPROVED by RWC Time/Date Stop: WHEN AUTHORIZATION COMPLETE, expires 5/31, 2019

Other Conditions: * Discharge flow rate AND total daily discharge volume to be determined by the City of REYWOOD City - SVCW Discharge Conditions ATTACHED.

This authorization applies only to the material described on Page 1. The discharge of hazardous waste is not allowed. The discharge must be in compliance with the SVCW Regulations and any applicable provisions of Federal, State, or local regulations.

Sanitary Sewer District/City Authorization:

Date Application Received:	DISTRICT USE:
Local Authorization Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	PERMIT #:
Discharge Approved: <input type="checkbox"/>	PERMIT FEE: \$
Discharge NOT Approved: <input type="checkbox"/>	SAMPLING & MONITORING: \$
By: _____ Date: _____	TOTAL FEES: \$
Title: _____	INVOICE #:
District/City: _____	DATE FEES PAID:

*** FEES MUST BE PAID PRIOR TO DISCHARGE ***

Additional Discussion/Conditions:

SILICON VALLEY CLEAN WATER

JOINT POWERS AUTHORITY - A PUBLIC ENTITY



1400 RADIO ROAD
REDWOOD CITY, CALIFORNIA 94065
650.591.7121 | FAX: 650.591.7122
WWW.SVCW.ORG

CITY OF SAN CARLOS | CITY OF REDWOOD CITY | CITY OF BELMONT | WEST BAY SANITARY DISTRICT

March 28, 2019

Nik Krukowski
Strada Investment Group
135 Main Street
San Francisco, CA 94105

Transmitted via email to NKrukowski@stradasf.com

Subj: Non-Routine Discharge Application

Source of Proposed Discharge: Storm water commingled with groundwater in an open excavation

Project Location: 1548 Maple Street, Redwood City, CA 94063

Proposed Discharge Location: Redwood City sanitary sewer manhole on Maple Street.

Silicon Valley Clean Water (SVCW) operates the wastewater treatment facility that will receive this wastewater. SVCW has reviewed this application. The City of Redwood City oversees and maintains the local sewer system and will establish applicable fees. Discharge flowrate into the local sanitary sewer to be determined by the City of Redwood City.

Attached find SVCW approval for the Non-Routine Discharge Application submitted 3/18/2019.

Approval by the City of Redwood City is required prior to discharge. Authorization to access Redwood City sanitary sewer manhole is required from the City of Redwood City. All Redwood City safety requirements to access a manhole in the street must be met.

SVCW DISCHARGE CONDITIONS:

- I. **Discharge approval by local sewer authority.** The Discharger shall contact the City of Redwood City to determine:
 - a. Discharge fees and payment schedule. Fees must be paid prior to discharge.
 - b. Contact Redwood City to determine flowrate acceptable for discharge to the local sanitary sewer system at the proposed point of discharge.
 - c. Discharge Location: Redwood City manhole on Maple Street
 - d. Authorization by the City of Redwood City is required to access Redwood City manhole on Maple Street. All Redwood City safety requirements to access a manhole in the street must be met.
 - e. Any additional conditions that may apply to this discharge.

2. Discharge approval by SVCW.

The Discharger has submitted analytical results of pollutants of concern that may affect the SVCW wastewater treatment processes or quality of the effluent, biosolids and recycled water. Discharge authorization is granted based on these results. Additional self-monitoring is required.

Prior to discharge.

- a. Submission of Analytical Results: Analytical results have been submitted. (note: Initial samples taken directly from the excavation pit. Chain of Custody indicates grab samples.)
Required Analysis:
 - pH
 - Salinity
 - Electrical Conductivity
 - Metals (EPA 6010B/7470A),
 - Volatile Organics (EPA 8260B),
 - Semi-volatile Organics (EPA 8270C)
 - Oil & Grease (EPA 1664A).
 - Total Petroleum Hydrocarbons gas, diesel, motor oil
- b. Storage/Treatment equipment: The Discharger shall install a settling tank. Adequate detention time shall be allowed to remove solids. Treatment may be required if sampling results indicate local limits are exceeded. The treatment equipment shall be sized to adequately treat at the maximum acceptable flowrate determined in 1b above. The treatment equipment shall be sized to achieve effective treatment for the total volume to be discharged (proposed maximum volume is approximately 110,000 gallons).
- c. Flowmeter: The Discharger shall install a flowmeter with a non-resettable totalizer and an indication of instantaneous flowrate (gallons per minute). The flowmeter shall be installed downstream of all treatment/storage equipment. The Discharger shall record the totalizer reading prior to discharge.
- d. Sample point: The Discharger shall install a sample point just downstream of the flowmeter. The sample point shall be accessible to SVCW staff at all times during the discharge. All samples shall be taken at this point.
- e. Discharge Location: The Discharger shall obtain authorization from City of Redwood City to access Redwood City street manholes. All Redwood City safety requirements must be met.
- f. Inspection: The Discharger shall contact the SVCW Environmental Services Division at (650) 832-6240 to arrange for an inspection when all the storage, treatment and discharge equipment is installed. SVCW will conduct an inspection **before** any discharge may occur. The inspection will include the storage/treatment/discharge equipment, the flowmeter and the monitoring point. SVCW will read the flowmeter totalizer during the inspection.

3. During discharge:

- a. Hours of Discharge: 7am to 7pm
- b. Additional Monitoring:
 - The discharger shall monitor every 20,000 gallons discharged for salinity and electrical conductivity. If the salinity or conductivity increases daily monitoring is required.
 - The discharger shall sample and analyze for parameters listed in Part 2a after the discharge of 30,000 gallons and 60,000 gallons.
 - Sampling analysis shall be done with a 48 hour turnaround time.
- c. Sample Results shall be submitted to SVCW at ndomingo@svcw.org upon receipt from the lab.
- d. Discharge shall not commence until results have been reviewed and approved.
- e. Maximum instantaneous flowrate: Instantaneous flowrate as determined by the City of Redwood City. To be recorded daily.
- f. Total daily discharge volume: Total daily discharge volume to be determined by the City of Redwood City. To be recorded daily. Daily discharge log shall be submitted to SVCW weekly at ndomingo@svcw.org.
- g. The Discharger shall comply with the SVCW Regulations with particular attention to the following section:
 - a. Section 2.4(e). No Person shall discharge, cause to be discharged, or permit to be discharged into the Sewerage Facilities any sand, grit, straw, metal, glass, rags, feathers, paper, tar, plastic, wood, leaves, garden clippings, manure, dead animals, offal, or any other solid or viscous substance capable of causing obstruction to the flow in the Sewerage Facilities, or which in any way interferes with the proper operation of the Sewerage Facilities.
- h. Maintenance by Discharger: The Discharger shall maintain the storage/treatment equipment as necessary to comply with discharge conditions at all times. This may include replacing particulate filters, etc.
- i. Inspection and sampling by SVCW: SVCW retains the right to conduct additional inspections and sampling during the discharge period.
- j. Storm Weather Discharge Restriction: During a wet weather storm event SVCW and the City of Redwood City reserve the right to restrict or prohibit discharge.
- k. Termination of Discharge: Discharge shall be terminated immediately upon notification.

4. After discharge is complete.

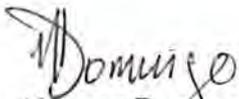
- a. Upon completion of discharge, the Discharger shall notify SVCW.

- b. The Discharger shall read the flowmeter totalizer after all wastewater has been discharged from the site.
- c. The Discharger shall submit the following to the City of Redwood City: initial and final totalizer reading along with total discharge volume; any additional information requested by the City of Redwood City.
- d. This non-routine discharge authorization only allows discharge from this single excavation pit. Any future dewatering from other excavation dewatering on this site must receive additional approval from SVCW and the City of Redwood City. Contact SVCW at ndomingo@SVCW.org.

5. Expiration Date.

This SVCW Non Routine Discharge Authorization expires May 31, 2019. Request for an extension of the expiration date must be submitted in writing.

If you have any questions regarding these requirements please contact us directly.



Norman Domingo
Environmental Services Director
Silicon Valley Clean Water
1400 Radio Road
Redwood City, CA 94065
(650) 832-6240
ndomingo@svcw.org



Ben Padua Jr.
Senior Environmental Compliance Inspector
Silicon Valley Clean Water
1400 Radio Road
Redwood City, CA 94065
(650) 832-6243
bapdua jr@svcw.org

cc by email:

Monte Hamamoto, SVCW, mhamamoto@svcw.org

Joel Evora, City of Redwood City, CD-Joel Evora <JEvora@redwoodcity.org>

Langston Project: 731695465
March 2019

Table 2
Groundwater Analytical Results for Metals
1548 Magala Street Development
Redwood City, California

Sample ID	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury I	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Area A-D Water	2/21/2019	3.3	6	24	< 0.50	< 0.25	3.3	1.1	10	< 0.50	0.08	25	5.7	0.62	< 0.19	< 0.50	11	< 15
Silicon Valley Wastewater Strength Limitations		-	100	-	-	40	200	-	200	200	2	-	60	-	100	-	-	1,000

Notes
 -- Waste water limitation not established
 < 50 - Analyte not detected at a concentration at or above the laboratory reporting limit (50 µg/L)
 µg/L - Micrograms per liter
 Silicon Valley Wastewater Strength Limitations - Wastewater strength limitations from the Regulations of Silicon Valley Clean Water, Section 2.3

SEWER DISCHARGE PERMIT APPLICATION



City of Redwood City
 Community Development Department
 1017 Middlefield Road, Redwood City, CA 94063
 Phone: (650) 780-7380 Fax: (650) 780-7309

Date: 3/13/19

Applicant/Company Name
Nik Krukowski/Strada Investment Group

Address: 101 Mission Street, Suite 420
San Francisco, CA 94105

Phone: 415-263-9151

Consultant or Contractor for Applicant:
Langan Engineering & Environmental Services, Inc

Location or other description of the premises served by thesewerage facilities and for which this permit is requested.
1548 Maple Street, Redwood City CA 94063

SEWER SYSTEM DISCHARGE TO:

- Storm Sewer
- Sanitary Sewer

WDR/NPDES Permit Associated with discharge:
 Yes: If so, specify Permit: _____
 No

TYPE OF DISCHARGE

- Stormwater Runoff
- Retained Surface and Rain Water
- Ground Water Draw Down
- Ground Water Clean Up
- Garbage Grinder Waste
- Holding Tank Waste
- Mandatory Wastewater Discharge
- Discretionary Wastewater Discharge
- Sewage from Private Disposal Facilities
- Unpolluted Water
- Other _____

Time(s) of Discharge: 7am - 3pm Duration of Discharge: 1 April - 30 May 2019
 Average Flow Rate of Discharge: 21 gpm Peak Flow Rate of Discharge: 32 gpm

Data, statistics, or other information which will assist the City Engineer during consideration of this permit request (Attach additional sheets, plans, sketches, if appropriate):

Estimated discharge of 10,000 gallons per day. Attachment 1 - Sewer Discharge Location. Attachment 2 - Holding Tank Location

Applicant's Signature: [Signature] Date: 3/13/19

Name of Signatory and Title: Nikolas Krukowski, Vice President

(For Official Use Only)

PERMIT APPROVAL AND SPECIFIC CONDITIONS: _____ Expires One year from Approval Date: _____

Fee Collected: \$ _____ Signature: _____ Date: _____

SABER SARWARY, P.E.
 City Engineer

FOR WASTEWATER DISCHARGE PERMITS ONLY:

Pursuant to Section 27.31.6 of the Redwood City Code, the City of Redwood City, California hereby consents to Silicon Valley Clean Water (SVCW) Wastewater Discharge Permit No. _____. This consent is subject to the terms and conditions of the Permit, including the City's rights of entry and the right of inspection. The City reserves the right to modify the terms and conditions and to revoke consent.

* Signature: _____

SABER SARWARY, P.E.
 City Engineer Date: _____

1548 Maple Wastewater Discharge Log

	Tank 1				Tank 2				Tank 1				Tank 2		
Date	4/30/19	5/1/19	5/2/19	5/3/19	5/15/19	5/16/19	5/17/19	5/20/19	5/21/19	5/22/19	5/23/19	5/24/19	5/28/19	5/30/19	5/31/19
Flow Start	58,530	62,341	66,608	70,907	73,417	77,842	81,915	85,959	90,373	94,380	98,620	102,838	107,009	111,214	115,640
Flow End	62,341	66,608	70,867	73,417	77,842	81,869	85,959	90,373	94,380	98,620	102,838	107,009	111,214	115,640	120,137
Day Total	3,811	4,267	4,259	2,510	4,425	4,027	4,044	4,414	4,007	4,240	4,218	4,171	4,205	4,426	4,497
Start Time (AM)	10:20	7:05	7:15	8:39	8:20	7:15	7:25	7:25	7:25	7:07	7:13	7:10	7:20	6:40	7:16
End Time	12:15	8:30	9:20	10:40	10:10	9:15	9:25	9:35	9:30	9:05	9:25	9:32	9:30	8:50	9:18
Temp (C*)	18.2	17.8	18.4	17.9	16.5	13.6	12.9	14.0	14.8	12.7	14.4	14.5	15.4	11.8	16.7
DO %	8.3	16.0	12.3	100.5	81.2	100.8	102.3	14.2	21.6	100.8	100.7	100.6	34.9	54.8	35.9
SPC	2550	0.75	257.4	0.001	0.003	0.008	0.011	2.739	2.836	0.046	0.049	0.059	2.851	2.953	2.925
TDS	1.67	0.49	1.67	0.0	0	0	0	2	2	0	0	0	2	2	2
pH	7.56	7.52	7.55	5.85	6.71	7.19	8.01	7.69	7.85	7.61	7.60	7.61	7.74	7.69	7.82
NTU	3.1	5.6	4.7	626	9.13	5.43	7.15	4.33	56.44	56.44	7.80	8.93	17.92	446.14	20.40
ORP	99.5	167.6	56.5	366.2	237.5	230.1	206.4	-112.2	0.4	204.6	205.1	211.6	172.6	181.1	173.7

APPENDIX I

A&B ACCIDENTAL WATER DISCHARGE LETTER



1350 4th Street
BERKELEY, CA 94710

TEL 510-999-6000
FAX 510-982-3636

CA LICENSE A #636514

August 1, 2019

Dustyne Sutherland
Langan
135 Main Street
San Francisco, CA 94105

Project Name: 1548 Maple Street
Subject: Oily Water Discharge

Dear Dustyne,

Please accept this letter as a summary of events regarding the accidental contaminated water discharge on the above referenced site.

A&B Construction (A&B) collected approximately 5,000 gallons of oily water from the Area E excavation. The water was stored in 1 of 3 water tanks on site. After the collection of water by A&B, Langan obtained a water sample.

Approximately one week after the sample was taken, A&B believed they were authorized to discharge the water on site as dust suppression. As we believed the water to be "oily", we sprayed 1,000 gallons on the asphalt paving which is to be removed at a later date. Also during this time, we collected ponded creek water from the excavation and erroneously added it to the remaining 4,000 gallons of contaminated water.

Langan notified us that we were mistaken about the authorization to re-use the water and advised us to not perform any more discharge until the "combined" water was tested. Per Langan, the new test results indicated the combined water met re-use criteria on site.

Please note that A&B had no financial advantage to re-using the oily water. The remediation work is being performed on a T&M basis and A&B would have been compensated regardless of the water being re-used onsite, discharged into the sanitary sewer, or exported to a disposal facility. This issue was a result of a miscommunication and a lack of written follow-up on my behalf.

Regards,

A handwritten signature in blue ink, appearing to read 'Pete Buss', is written over the typed name.

Pete Buss
Director of Projects

APPENDIX J

PETROLEUM AND CHLORINATED CASE CLOSURE SUMMARY

COMBINED PETROLEUM AND CHLORINATED

CASE CLOSURE SUMMARY

I. AGENCY INFORMATION

Date: 22 December 2020

Agency Name: San Francisco Bay Regional Water Quality Control Board	Address: 1515 Clay Street, Suite 1400
City/State/Zip: Oakland, CA 94612	Phone: 510.622.2431
Responsible Staff Person: Kimberlee West	Title: Engineer

II. SITE INFORMATION

Site Facility Name: Docktown Marina				
Site Facility Address: 1548 Maple Street, Redwood City, CA 94063				
Chlorinated Solvent Cleanup Case:				
Regional Water Board Case No.: 41S0194	Local Oversight Program Agency Case No.: 339222	Priority: NA		
Leaking Underground Storage Tank (LUST) Cleanup Case:				
Regional Water Board Case No. (LUST Cleanup Case): 41S0194	Local Oversight Program Agency Case No.: 339222	Unauthorized Release Form Filing Date: N/A		
Underground Storage Tank (UST) Cleanup Fund Expenditure to Date: N/A	UST Cleanup Fund Claim No.: N/A	Number of Years Case Open: 9		
Responsible Parties/Dischargers (include addresses, phone numbers, and emails)				
1548 Maple Street, LLC, 101 Mission Street, Suite 420, San Francisco, CA 94105, NKrukowski@stradasf.com				
Salaman Associates, LLC 1451 Magnolia Avenue, San Carlos, CA 94070				
Trustee for the J Franklin Trust, 524 Clinton Road, Lexington KY 40502				
Docktown CB-R LLC, 2889 Kelin Roas, San Jose, CA 95148				
Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	2,000	Not documented	Closed in-place	Not documented
2	2,000	Not documented	Closed in-place	Not documented

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type(s) of Release: Historical site activities – petroleum product			
Site characterization complete? Yes		Date Approved by Oversight Agency: May 11, 2018	
Monitoring wells installed? No		Number: N/A	Proper screened interval? N/A
Highest Groundwater (GW) Depth Below Ground Surface in feet (ft): 3.25 feet bgs		Lowest Depth: 9.64 feet bgs	Flow Direction: Assumed northeast
Most Sensitive Current GW Use: None			
Most Sensitive Potential GW Use: None			
Probability of Use: None			
Are drinking water wells affected? No		Aquifer Name: Santa Clara Valley: San Mateo Plain	
Is surface water affected? No		Nearest surface water name: Redwood Creek	
Offsite Beneficial Use Impacts (Addresses/GPS Coordinates): None			
Report(s) on file? Yes		Where is report(s) filed? Provide GeoTracker URL: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000003443	
Treatment and Disposal of Affected Material			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tanks	None		
Piping	None		
Free Product (Petroleum or other)	NA – mixed with soil excavation volume	Unexpected heavily degraded product present in soil removed.	June - November 2019
Soil	12,176 cubic yards	Offsite disposal – ECDC Environmental Landfill, Easton Carbon, Utah; Potrero Hills Landfill, Fairfield, California	January – November 2019
Groundwater	66,981 gallons	A. 61,521 gallons discharged to the City of Redwood City sanitary sewer B. 5,460 gallons trucked and disposed at EBMUD wastewater treatment plant	A. May 2019 B. 29 July 2019
Barrels	None		

Maximum Documented Pollutant Concentrations – Before and After Cleanup						
POLLUTANT	Soil (mg/kg)		Water (µg/L)		Soil Vapor (µg/m ³)	
	Before	After	Before	After	Before	After
Lead	249	220*				
TPHg	160	230*				
TPHd	4,100	680*				
<p>Comments (Depth of Remediation, etc.): *Lead was removed to 80 mg/kg and combined TPHg and TPHd to 100 mg/kg with the following exceptions. A lead concentration of 220 mg/kg was left in place in saturated soil at confirmation soil sample Sub Area A2-B-1-6.0. A TPHg concentration of 230 mg/kg and TPHd at 680 mg/kg was left in place at confirmation soil sample Area D-B-1-6.0, both at 6 feet bgs. At both locations a maximum over excavation depth of one foot into the groundwater table (6 feet below ground surface) was achieved, as agreed upon in the Response Plan.</p>						

IV. CASE CLOSURE

Chlorinated Solvent Cleanup Case:

This case meets the criteria in the Water Board's 2009 Assessment Tool for Closure of Low-Threat Chlorinated Solvent Sites:

- *1a) Pollutant sources are identified and evaluated*

As noted the site soil, soil vapor, and groundwater has been sampled extensively over the past decade leading to sufficient characterization (Figure 11). Soil, soil vapor, and groundwater sampling results confirm that no vinyl chloride source or plume is present. Vinyl chloride and other chlorinated VOCs were not detected at or above the laboratory reporting limits in soil samples collected by others in 2008 and 2011 and by Langan in 2017 and groundwater samples collected by others in 2011 and by Langan in 2017 (Table 2 and Table 9).

Forty-one soil vapor samples collected were analyzed for VOCs including vinyl chloride (Table 7). Vinyl chloride was detected above laboratory reporting limits in seven soil vapor samples, three of which exceeded the Response Plan criteria. The majority of the remaining 34 soil vapor samples had elevated vinyl chloride reporting limits that exceeded the Response Plan criteria because of dilution factors required for analysis of other VOCs. August 2020 soil vapor confirmation data eliminated one Response Plan criteria exceedance for vinyl chloride. The 15 CVOCs listed above in Section 6.0 were also detected in 20 soil vapor samples below Response Plan criteria.

- *1b) The site is adequately characterized*

The site has been sampled significantly over the past decade for soil, soil vapor, and groundwater and sufficiently characterized (Figure 11).

- *1c) Exposure pathways, receptors, and potential risks, threats, and other environmental concerns are identified and assessed*

Given the lack of detected vinyl chloride and other chlorinated VOC concentrations in soil and groundwater at the site, exposure pathways, receptors and potential risks were evaluated considering soil vapor data only. A potential exposure pathway to detected vinyl chloride and other VOCs in soil vapor to future receptors/residents is from vapor intrusion into future buildings.

- *2a) Pollutant sources are remediated to the extent feasible*

Site soil and groundwater data have confirmed that a vinyl chloride or other VOC source is not present at the site and therefore a pollutant source does not require remediation.

- *2b) Unacceptable risks to human health, ecological health, and sensitive receptors, considering current and future land and water uses, are mitigated*

The absence of vinyl chloride and other chlorinated VOCs in soil and groundwater mitigates unacceptable risk to water uses, groundwater and surface water resources.

- *2c) Unacceptable threats to groundwater and surface water resources, considering existing and potential beneficial uses, are mitigated*

Soil and groundwater data have confirmed that a vinyl chloride and other chlorinated VOCs have not been detected in soil or groundwater which indicates a CVOC source is not contributing to soil vapor concentrations that would require remediation.

- *3a) Groundwater plumes are decreasing*

Not applicable – groundwater samples confirm a vinyl chloride or other chlorinated VOC groundwater plume do not exist at the site.

- *3b) Cleanup standards can be met within a reasonable timeframe*

Vinyl chloride or chlorinated VOC plume were not detected in soil or groundwater indicating that a source is not contributing to VOCs in soil vapor. Vinyl chloride was detected above laboratory reporting limits in seven soil vapor samples, three of which exceeded the Response Plan criteria. Vinyl chloride reporting limits for majority of the remaining 34 soil vapor samples exceeded Response Plan criteria. In the August 2020 soil vapor sample B-41, vinyl chloride was not detected above the Response Plan criteria. The 15 CVOCs listed in Section 6.0 were also detected in 20 soil vapor samples below Response Plan criteria.

Remedial excavation removed soil at the locations of soil vapor samples SG-2, B-3, B-19, B-20, B-21, B-22, B-41, and B-54. B-3 and B-41 had the highest nondetect reporting limit and detected concentration of vinyl chloride, respectively, prior to excavation. Confirmation soil vapor samples at B-3 and B-41 following excavation and placement of import fill reported vinyl chloride at 1.99 $\mu\text{g}/\text{m}^3$ and not detected, respectively. SG-2, collected in 2011, had the second highest vinyl chloride detection at 21 $\mu\text{g}/\text{m}^3$ and the location was excavated as part of Excavation Area E. Excavated locations B-20, B-21 and B-22 had detections of CVOCs other than vinyl chloride that were below Response Plan criteria. Excavated locations B-19 and B-54 did not have detections of CVOCs, including vinyl chloride.

As discussed in Section 3.7, ILCR and HI were calculated from soil vapor concentrations and reporting limits that exceeded the Response Plan criteria. At location B-61, vinyl chloride was detected above the Response Plan criteria, however the ILCR and HI were within acceptable risk thresholds. Vinyl chloride and other CVOC detections and nondetect reporting limits greater than the Response Plan criteria do not create an ILCR or HI that exceed the allowable threshold of 1E-05 or 1. *3c) Risk management measures are appropriate, documented, and do not require future Water Board oversight*

Risk calculations using recent soil vapor concentrations, do not present an unacceptable ILCR of HI to future residential receptors. Furthermore, oxygen present in the subsurface and impacted soil excavation and backfill creates increased aerobic conditions that facilitate biodegradation of other lightly chlorinated compounds (e.g. chlorobenzene, dichlorobenzene, and vinyl chloride) (Tillman and Weaver, 2005).

LUST Cleanup Case:

This section should explain why the Source Property qualifies for closure or low-threat closure. The Transmittal Letter will indicate whether we've used the low-threat closure criteria from the 2012 SWRCB UST policy or the 1996 R2 supplemental instructions at a particular Source Property. Both sets of criteria are listed below; you should delete the set that doesn't apply at the Source Property including the box around it. You should either (i) list the criteria as is or (ii) use them as section headings and add explanatory text below each header.)

(low threat closure criteria from 2012 SWRCB UST policy)

This case meets the State Water Board's [Low-Threat Underground Storage Tank Case Closure Policy](#) (LTCP) as shown below.

General Criteria

- a. The unauthorized release is located within the service area of a public water system: NO. Groundwater at the site vicinity is not used as a potable water source.
- b. The unauthorized release consists only of petroleum: NOT APPLICABLE. This case closure summary captures both the petroleum and chlorinated solvent case closure criteria.
- c. The unauthorized ("primary") release from the UST system has been stopped: YES. Geotracker Case #330022 notes that the Leaking Underground Storage Tank case was closed as of September 27, 1990. Soil samples collected in 2011 and 2016 confirmed non detectable or low TPH and related VOC concentrations near the abandoned USTs.
- d. Free product has been removed to the maximum extent practicable: YES. Excavations undertaken at Excavation Area E removed unexpected heavily degraded product present in soil.
- e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed: YES. The site soil, soil vapor, and groundwater has been sampled substantially and documented in the Response Plan. Soil exceeding combined TPHg and TPHd at 100 mg/kg in the bioattenuation zone has been removed and VOCs in soil vapor are below acceptable risk levels per the Response Plan. Shallow Bayshore organic material and debris is likely contributing to the residual methane concentrations in soil vapor remaining at two locations near Redwood Creek.
- f. Secondary source has been removed to the extent practicable: YES. Unexpected heavily degraded product present at the site has been removed to the extent required by the Response Plan.
- g. Soil or groundwater has been tested for methyl tert-butyl ether (MtBE) and results reported in accordance with Health and Safety Code section 25296.15: YES. MTBE was not detected in soil and was detected in only one groundwater sample slightly above the laboratory detection limit. Results of soil and groundwater samples analyzed for MTBE are provided in the Response Plan Completion Report.
- h. Nuisance as defined by Water Code section 13050 does not exist at the Site: YES. Unexpected degraded free product encountered in soil has been excavated and removed and disposed of offsite.

Media-Specific Criteria

Groundwater. *Has a stable or decreasing contaminant plume and fits into at least one of the five classes of Source Properties for groundwater plume length.*

YES. Groundwater sampling has determined that a contaminant plume that exceeds water quality objectives is not present at the site. No water supply wells exist within 1,000 feet of the site. There is no identified free product at the site; unexpected heavily degraded free product has been removed to the extent required by the Response Plan. Dissolved benzene concentrations are less than 50 micrograms per liter ($\mu\text{g/L}$), and dissolved MTBE concentrations are less than 50 $\mu\text{g/L}$.

Petroleum Vapor Intrusion to Indoor Air. *The Source Property is considered low-threat for vapor intrusion to indoor air if Source Property-specific conditions satisfy all of the characteristics of one of the three classes of Source Properties (a through c) or if the exception for active commercial fueling facilities applies.*

YES. To evaluate Scenario 3 specific criteria, groundwater data collected from six boring locations in 2017 and seven groundwater samples collected in previous investigations were reviewed. Depth to groundwater was observed between 5 and 9 feet bgs. In all 13 groundwater samples, benzene concentrations were well below the 1,000 $\mu\text{g/L}$ criterion, with a maximum concentration of 18 $\mu\text{g/L}$ (Table 9).

In 2017, the shallowest groundwater was observed at 5 feet bgs. Development activities to date have included the addition of fill material across the entire site to mitigate sea level rise which has increased the ground surface elevation an average of approximately 5 feet; thus, the resulting vadose zone or unsaturated vertical interval between the groundwater and future building foundations is 10 feet or more.

Benzene concentrations in groundwater are well below 1,000 $\mu\text{g/L}$, observed depth to groundwater in conjunction the placement of approximately 5 feet of fill to raise the ground surface elevation, removal of soil with combined TPH greater than 100 mg/kg, and detections of widespread oxygen in the subsurface across the site greater than 4%v qualify the site to achieve regulatory closure under the LTCP Scenario 3.

In order to use the LTCP residential soil vapor screening levels, a bioattenuation zone of 5 feet is required between a soil vapor sample and the foundation of a future building, concentrations of combined TPH concentrations must be detected below the LTCC for combined TPH in soil of 100 mg/kg measured at a minimum of two depths within the five foot zone, and oxygen in soil vapor equal to or greater than 4%v must be present.

Prior to 2020, soil vapor samples were collected between 2.5 feet bgs and 4.75 feet bgs. With the exception of B-78, soil vapor samples were collected between 5.5 and 11 feet bgs, which equated to approximately five feet below future building pad elevation. Development plans have included the placement of approximately 5 feet of importfill across the entire site which increased the vertical interval between soil vapor samples and future building foundations to greater than 5 feet or a maximum of 10 feet or more.

In 2017, two soil samples were collected between 0 and 5 feet bgs from boring locations B-27, B-29, B-31, B-32, B-33 and B-34 and analyzed for TPH. In previous investigations, one sample was collected between 0 and 5 feet bgs from 16 boring locations and analyzed for TPH. Only three of the 28 soil samples collected within the five foot bioattenuation zone had detected TPH concentrations above the TPH LTCC of 100 mg/kg. Soil that exceeded the TPH LTCC has been excavated and disposed off site, (Section 3.2), and combined TPH was detected below the LTCC in confirmation soil samples within the bioattenuation zone (Section 3.3).

Because of the 5 foot bioattenuation zone, excavation of soil with TPH detections above the LTCC, and the presence of oxygen at 4%v or greater in soil vapor, soil vapor data was compared to the Scenario 4 LTCP residential screening levels for benzene, ethylbenzene, and naphthalene.

Benzene, ethylbenzene, and naphthalene soil vapor concentrations were detected well below the LTCP bioattenuation zone residential screening levels of 85,000 $\mu\text{g}/\text{m}^3$, 1,100,000 $\mu\text{g}/\text{m}^3$, and 93,000 $\mu\text{g}/\text{m}^3$, respectively. For this reason, benzene, ethylbenzene, and naphthalene concentrations have been excluded from risk calculations as discussed in Section 3.7. Furthermore, oxygen greater than 4%v present in the subsurface, impacted soil excavation and backfill creates an increase in aerobic conditions to facilitate the biodegradation of other lightly chlorinated compounds (e.g. chlorobenzene, dichlorobenzene and vinyl chloride) (Tillman and Weaver, 2005).

Direct Contact and Outdoor Air Exposure. *Meets at least one of the specific criteria (a through c).*

YES. Remaining concentrations of benzene, ethylbenzene, and naphthalene in soil are less than 0.5 mg/kg within the top five feet of native material at the site. Import fill has been brought in to raise the grade of the site approximately five feet overall to construct building pads and mitigate sea level rise. Import fill met the 2016 Regional Water Board Residential Shallow Soil Direct Exposure Environmental Screening Levels.

This case qualifies for closure pursuant to the State Water Board's [Low-Threat Underground Storage Tank Case Closure Policy](#) (Policy). While it does not meet all the low threat closure criteria of the Policy, the Regional Water Board has determined by other criteria that the case is a low-threat Source Property. Specifically, this case meets the Regional Water Board's [Supplemental Guidance Criteria](#) for low risk case closure, as shown below. *(use one of the two paragraphs below and delete the other, only difference is item #3)*

(soils-only case)

The leak has been stopped and ongoing sources, including free product, removed or remediated. YES. LUST Geotracker case closed on September 27, 1990.

1. The Source Property has been adequately characterized. YES. Site soil, soil vapor, and groundwater has been sampled extensively since 2011.
2. Little or no groundwater impact currently exists and no contaminants are found at levels above established maximum contaminant levels or applicable water quality objectives. YES. Groundwater samples confirm that low level VOCs were present 2017 samples prior to remedial excavation completion.
3. No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted. YES.
4. The Source Property presents no significant threat to human health. YES. Soils with combined TPH and lead greater than Response Plan criteria have been excavated.
5. The Source Property presents no significant threat to the environment. YES. Soils with combined TPH and lead greater than Response Plan criteria have been excavated.

V. SOURCE PROPERTY MANAGEMENT

<p>General: There may be residual petroleum-contaminated or chlorinated solvent-contaminated soil and groundwater at this Source Property that could pose an unacceptable risk as a result of future construction/redevelopment activities, such as onsite excavation activities, the installation of water wells at or near the Source Property or change to a more sensitive land use. Contractors performing subsurface activities at the Source Property should be prepared to encounter soil and groundwater contaminated with these potential contaminants, and any encountered pollution should be managed properly to avoid threats to human health or the environment. Proper management may include sampling, risk assessment, additional cleanup work, mitigation measures, or some combination of these tasks.</p>		
<p>Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? YES. Combined TPH and lead greater than Response Plan criteria excavated and disposed of within top six feet below original grade [original bioattenuation zone].</p>		
<p>Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? YES. Combined TPH and lead greater than Response Plan criteria excavated and disposed of within top six feet below original grade [original bioattenuation zone].</p>		
<p>Does corrective action protect public health for current land use? YES. Combined TPH and lead greater than Response Plan criteria excavated and disposed of within top six feet below original grade [original bioattenuation zone].</p>		
<p>Site Management Requirements:</p> <p>See Response Plan, April 2018 (Langan).</p>		
<p>Monitoring Wells Decommissioned:</p> <p>Zero</p>	<p>Number Decommissioned:</p> <p>Zero</p>	<p>Number Retained: Zero</p>
<p>List Enforcement Actions Taken: N/A</p>		
<p>List Enforcement Actions Rescinded: N/A</p>		

**VI. TECHNICAL REPORTS, CORRESPONDENCE, ETC., THAT THIS CLOSURE
RECOMMENDATION WAS BASED UPON**

Report	Issuance Date
Final Response Plan, 1548 Maple Street Development, Redwood City, California.	5 April 2018
Response Plan Completion Report, 1548 Maple Street Development, Redwood City, California.	22 December 2020

This document and the related CASE CLOSURE LETTER shall be retained by the lead agency as part of the official site file.

[Insert Figures showing site location, layout, and residual contamination, as appropriate]

Please find the figures and sections referenced above in the Response Plan Completion Report.