

March 21, 2018

Olsson Associates

Jason Davidson

4690 Table Mountain Drive

Golden

CO 80403

**Project Name - GWOC Stone Hawker Tank Battery Project Number - [none]
P&A**

Attached are your analytical results for GWOC Stone Hawker Tank Battery P&A received by Origins Laboratory, Inc. March 13, 2018. This project is associated with Origins project number Y803244-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods. These methods are identified as follows; "SW" are defined in SW-846, "EPA" are defined in 40CFR part 136 and "SM" are defined in the most current revision of Standard Methods For the Examination of Water and Wastewater.

The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody. As such, this report shall not be reproduced except in full, without the written approval of Origin's laboratory.

Unless otherwise noted, the analytical results for all soil samples are reported on a wet weight basis. All analytical analyses were performed under NELAP guidelines unless noted by a data qualifier.

Any holding time exceedances, deviations from the method specifications or deviations from Origins Laboratory's Standard Operating Procedures are outlined in the case narrative.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com



Olsson Associates

4690 Table Mountain Drive

Golden CO 80403

Jason Davidson

Project Number: [none]

Project: GWOC Stone Hawker Tank Battery P&A

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SWNorth-01	Y803244-01	Soil	March 13, 2018 11:05	03/13/2018 18:25
SWSouth-01	Y803244-02	Soil	March 13, 2018 11:10	03/13/2018 18:25
SWEast-01	Y803244-03	Soil	March 13, 2018 11:15	03/13/2018 18:25
SWWest-01	Y803244-04	Soil	March 13, 2018 11:20	03/13/2018 18:25
Base-01	Y803244-05	Soil	March 13, 2018 11:00	03/13/2018 18:25

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

[illegible]

Origins Laboratory, Inc.

Jeff Pellgrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y803244

Client: Olsson Associates

Client Project ID: Awac Stone Hawker Tank Battery i

Checklist Completed by: Don Lee

Shipped Via: Air
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 3-14-18

Airbill #: NA

Matrix(s) Received: (Check all that apply): ☒ Soil/Solid ☐ Water ☐ Other: _____

Cooler Number/Temperature: 15.4 °C 1 °C 1 °C 1 °C (Describe)

Thermometer ID: T1003

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is there ice present (document if blue ice is used)	<input checked="" type="checkbox"/>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<input checked="" type="checkbox"/>		
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		<input checked="" type="checkbox"/>		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>			
For volatiles in water — is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			<input checked="" type="checkbox"/>	
Are samples preserved that require preservation and was it checked ⁽¹⁾ ? (note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO ₃ , HCL, H ₂ SO ₄) / (pH >10 for samples preserved with NaAsO ₂ +NaOH, ZnAc+NaOH).			<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) JD

Date/Time Reviewed 3/15/18

Origins Laboratory, Inc.

Jefe Pellegrini

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

SWNorth-01

3/13/2018 11:05:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y803244-01 (Soil)

BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	B8C1502	03/15/2018	03/16/2018	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	123 %	70-130			"	"	"	
Surrogate: Toluene-d8	96.7 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	

GRO (TVPH)/DRO (TEPH)by EPA 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	B8C2005	03/20/2018	03/21/2018	U
Diesel (C10-C28)	ND	50.0	"	"	"	"	"	U

Surrogate: o-Terphenyl	86.1 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

SWSouth-01

3/13/2018 11:10:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y803244-02 (Soil)

BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	B8C1502	03/15/2018	03/16/2018	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	120 %	70-130			"	"	"	
Surrogate: Toluene-d8	96.6 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"	

GRO (TVPH)/DRO (TEPH)by EPA 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	B8C2005	03/20/2018	03/21/2018	U
Diesel (C10-C28)	ND	50.0	"	"	"	"	"	U

Surrogate: o-Terphenyl	85.0 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

SWEast-01**3/13/2018 11:15:00AM**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	--------------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc.
Y803244-03 (Soil)**BTEX by EPA 8260C**

Benzene	ND	0.002	mg/kg	1	B8C1502	03/15/2018	03/16/2018	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	119 %	70-130			"	"	"	
Surrogate: Toluene-d8	97.1 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	101 %	70-130			"	"	"	

GRO (TVPH)/DRO (TEPH)by EPA 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	B8C2005	03/20/2018	03/21/2018	U
Diesel (C10-C28)	ND	50.0	"	"	"	"	"	U

Surrogate: o-Terphenyl	86.9 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

SWWest-01

3/13/2018 11:20:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y803244-04 (Soil)

BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	B8C1502	03/15/2018	03/16/2018	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	117 %	70-130			"	"	"	
Surrogate: Toluene-d8	97.5 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"	

GRO (TVPH)/DRO (TEPH)by EPA 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	B8C2005	03/20/2018	03/21/2018	U
Diesel (C10-C28)	ND	50.0	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.6 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Base-01

3/13/2018 11:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	-------

Origins Laboratory, Inc. Y803244-05 (Soil)

BTEX by EPA 8260C

Benzene	ND	0.002	mg/kg	1	B8C1502	03/15/2018	03/16/2018	U
Toluene	ND	0.002	"	"	"	"	"	U
Ethylbenzene	ND	0.002	"	"	"	"	"	U
Xylenes, total	ND	0.002	"	"	"	"	"	U

Surrogate: 1,2-Dichloroethane-d4	117 %	70-130			"	"	"	
Surrogate: Toluene-d8	96.3 %	70-130			"	"	"	
Surrogate: 4-Bromofluorobenzene	102 %	70-130			"	"	"	

GRO (TVPH)/DRO (TEPH)by EPA 8015C

Gasoline (C6-C10)	ND	50.0	mg/kg	1	B8C2005	03/20/2018	03/21/2018	U
Diesel (C10-C28)	ND	50.0	"	"	"	"	"	U

Surrogate: o-Terphenyl	84.0 %	59-131			"	"	"	
------------------------	--------	--------	--	--	---	---	---	--

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8C1502 - EPA 5030 (soil)										
Blank (B8C1502-BLK1)					Prepared: 03/15/2018 Analyzed: 03/15/2018					
Benzene	ND	0.002	mg/kg							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	73		ug/kg	62.5		116	70-130			
Surrogate: Toluene-d8	62		"	62.5		99.6	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8C1502 - EPA 5030 (soil)										
Blank (B8C1502-BLK2)					Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	ND	0.002	mg/kg							U
Toluene	ND	0.002	"							U
Ethylbenzene	ND	0.002	"							U
Xylenes, total	ND	0.002	"							U
Surrogate: 1,2-Dichloroethane-d4	71		ug/kg	62.5		114	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.6	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8C1502 - EPA 5030 (soil)										
LCS (B8C1502-BS1)					Prepared: 03/15/2018 Analyzed: 03/15/2018					
Benzene	0.106	0.002	mg/kg	0.100		106	77.1-124			
Toluene	0.101	0.002	"	0.100		101	74.5-128			
Ethylbenzene	0.104	0.002	"	0.100		104	66.4-127			
m,p-Xylene	0.208	0.004	"	0.200		104	76.6-124			
o-Xylene	0.102	0.002	"	0.100		102	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	63		ug/kg	62.5		101	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.8	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8C1502 - EPA 5030 (soil)										
LCS (B8C1502-BS2)					Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	0.114	0.002	mg/kg	0.100		114	77.1-124			
Toluene	0.106	0.002	"	0.100		106	74.5-128			
Ethylbenzene	0.112	0.002	"	0.100		112	66.4-127			
m,p-Xylene	0.223	0.004	"	0.200		112	76.6-124			
o-Xylene	0.110	0.002	"	0.100		110	76.6-124			
Surrogate: 1,2-Dichloroethane-d4	67		ug/kg	62.5		107	70-130			
Surrogate: Toluene-d8	61		"	62.5		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8C1502 - EPA 5030 (soil)

Matrix Spike (B8C1502-MS1)		Source: Y803244-01			Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	0.097	0.002	mg/kg	0.100	ND	96.9	71.8-126			
Toluene	0.090	0.002	"	0.100	ND	89.9	65.1-130			
Ethylbenzene	0.088	0.002	"	0.100	ND	87.8	62.2-130			
m,p-Xylene	0.173	0.004	"	0.200	ND	86.4	46.5-137			
o-Xylene	0.089	0.002	"	0.100	ND	88.7	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	71		ug/kg	62.5		113	70-130			
Surrogate: Toluene-d8	60		"	62.5		96.3	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		100	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8C1502 - EPA 5030 (soil)

Matrix Spike (B8C1502-MS2)		Source: Y803244-02			Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	0.094	0.002	mg/kg	0.100	ND	94.1	71.8-126			
Toluene	0.085	0.002	"	0.100	ND	84.8	65.1-130			
Ethylbenzene	0.085	0.002	"	0.100	ND	85.3	62.2-130			
m,p-Xylene	0.172	0.004	"	0.200	ND	86.0	46.5-137			
o-Xylene	0.086	0.002	"	0.100	ND	85.9	54.2-134			
Surrogate: 1,2-Dichloroethane-d4	70		ug/kg	62.5		111	70-130			
Surrogate: Toluene-d8	60		"	62.5		95.5	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.6	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8C1502 - EPA 5030 (soil)

Matrix Spike Dup (B8C1502-MSD1)		Source: Y803244-01			Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	0.103	0.002	mg/kg	0.100	ND	103	71.8-126	6.27	11.3	
Toluene	0.092	0.002	"	0.100	ND	91.8	65.1-130	2.05	15.4	
Ethylbenzene	0.093	0.002	"	0.100	ND	93.4	62.2-130	6.14	19.6	
m,p-Xylene	0.187	0.004	"	0.200	ND	93.3	46.5-137	7.75	19.2	
o-Xylene	0.094	0.002	"	0.100	ND	94.2	54.2-134	5.95	17.9	
Surrogate: 1,2-Dichloroethane-d4	70		ug/kg	62.5		112	70-130			
Surrogate: Toluene-d8	59		"	62.5		94.1	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		99.0	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8C1502 - EPA 5030 (soil)

Matrix Spike Dup (B8C1502-MSD2)		Source: Y803244-02			Prepared: 03/15/2018 Analyzed: 03/16/2018					
Benzene	0.091	0.002	mg/kg	0.100	ND	91.1	71.8-126	3.20	11.3	
Toluene	0.082	0.002	"	0.100	ND	82.4	65.1-130	2.87	15.4	
Ethylbenzene	0.083	0.002	"	0.100	ND	83.4	62.2-130	2.25	19.6	
m,p-Xylene	0.167	0.004	"	0.200	ND	83.4	46.5-137	3.14	19.2	
o-Xylene	0.085	0.002	"	0.100	ND	84.8	54.2-134	1.34	17.9	
Surrogate: 1,2-Dichloroethane-d4	73		ug/kg	62.5		116	70-130			
Surrogate: Toluene-d8	60		"	62.5		95.7	70-130			
Surrogate: 4-Bromofluorobenzene	62		"	62.5		98.6	70-130			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Volatile Organic Compounds by GC/MS SW846 8260C - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Extractable Petroleum Hydrocarbons by 8015C - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch B8C2005 - EPA 3550B

Blank (B8C2005-BLK1)

Prepared: 03/20/2018 Analyzed: 03/20/2018

Gasoline (C6-C10)	ND	50.0	mg/kg							U
Diesel (C10-C28)	ND	50.0	"							U
Surrogate: o-Terphenyl	45		"	50.0		89.0	59-131			

Blank (B8C2005-BLK2)

Prepared: 03/20/2018 Analyzed: 03/20/2018

Gasoline (C6-C10)	ND	50.0	mg/kg							U
Diesel (C10-C28)	ND	50.0	"							U
Surrogate: o-Terphenyl	43		"	50.0		85.4	59-131			

LCS (B8C2005-BS1)

Prepared: 03/20/2018 Analyzed: 03/20/2018

Gasoline (C6-C10)	1020	50.0	mg/kg	1000		102	59-133			
Diesel (C10-C28)	951	50.0	"	1000		95.1	64-121			
Surrogate: o-Terphenyl	45		"	50.0		90.4	59-131			

LCS (B8C2005-BS2)

Prepared: 03/20/2018 Analyzed: 03/20/2018

Gasoline (C6-C10)	1070	50.0	mg/kg	1000		107	59-133			
Diesel (C10-C28)	1050	50.0	"	1000		105	64-121			
Surrogate: o-Terphenyl	48		"	50.0		96.3	59-131			

Matrix Spike (B8C2005-MS1)

Source: Y803242-01

Prepared: 03/20/2018 Analyzed: 03/20/2018

Gasoline (C6-C10)	1000	50.0	mg/kg	1000	ND	100	57-139			
Diesel (C10-C28)	1010	50.0	"	1000	ND	101	53-125			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates
4690 Table Mountain Drive
Golden CO 80403

Jason Davidson
Project Number: [none]
Project: GWOC Stone Hawker Tank Battery P&A

Extractable Petroleum Hydrocarbons by 8015C - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B8C2005 - EPA 3550B										
Matrix Spike (B8C2005-MS1)		Source: Y803242-01			Prepared: 03/20/2018 Analyzed: 03/20/2018					
Surrogate: o-Terphenyl	46		mg/kg	50.0		92.1	59-131			
Matrix Spike (B8C2005-MS2)		Source: Y803242-02			Prepared: 03/20/2018 Analyzed: 03/20/2018					
Gasoline (C6-C10)	1060	50.0	mg/kg	1000	ND	106	57-139			
Diesel (C10-C28)	1040	50.0	"	1000	ND	104	53-125			
Surrogate: o-Terphenyl	48		"	50.0		96.5	59-131			
Matrix Spike Dup (B8C2005-MSD1)		Source: Y803242-01			Prepared: 03/20/2018 Analyzed: 03/20/2018					
Gasoline (C6-C10)	1010	50.0	mg/kg	1000	ND	101	57-139	1.08	20	
Diesel (C10-C28)	1000	50.0	"	1000	ND	100	53-125	1.34	20	
Surrogate: o-Terphenyl	47		"	50.0		94.5	59-131			
Matrix Spike Dup (B8C2005-MSD2)		Source: Y803242-02			Prepared: 03/20/2018 Analyzed: 03/20/2018					
Gasoline (C6-C10)	1090	50.0	mg/kg	1000	ND	109	57-139	2.32	20	
Diesel (C10-C28)	1070	50.0	"	1000	ND	107	53-125	3.49	20	
Surrogate: o-Terphenyl	49		"	50.0		98.2	59-131			

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Olsson Associates

4690 Table Mountain Drive

Golden CO 80403

Jason Davidson

Project Number: [none]

Project: GWOC Stone Hawker Tank Battery P&A

Notes and Definitions

U Sample is Non-Detect.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

All soil results are reported at a wet weight basis.

Origins Laboratory, Inc.



The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jen Pellegrini For Noelle Doyle Mathis, President