

FREMONT ENVIRONMENTAL INC.

March 28, 2022

Mr. Jason Davidson
Great Western Operating Company, LLC
1001 17th Street, Suite 2000
Denver, CO 80202

Subject: **Remediation Report**
 UPRR Meyer #1
 API # 05-001-06793
 SWSE Sec 9, T2S, R63W
 Adams County, Colorado
 Fremont Project No. C020-031
 Facility #319791, Remediation #9264

Dear Mr. Davidson:

Enclosed please find a copy of the above referenced Remediation Report for the UPRR Meyer #1 site in Adams County, Colorado. The enclosed report describes the operation of the soil vapor extraction system that was installed at the site to remediate petroleum-impacted soil at the site.

Please contact me at (303) 956-8714 if you require any additional information.

Fremont appreciates the opportunity to provide this service.

Sincerely,
FREMONT ENVIRONMENTAL INC.

A handwritten signature in blue ink, appearing to read "Paul V. Henahan".

Paul V. Henahan, P.E.
Senior Consultant

Enclosure

REMEDIATION REPORT

GREAT WESTERN OPERATING COMPANY, LLC

UPRR MEYER #1

ADAMS COUNTY, COLORADO

FREMONT PROJECT NO. C020-031

FACILITY #319791, REMEDIATION #9464

Prepared by:

**Fremont Environmental Inc.
1759 Redwing Lane
Broomfield, CO 80020
(303) 956-8714**

March 28, 2022

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REMEDIATION REPORT
GREAT WESTERN OPERATING COMPANY, LLC
UPRR MEYER #1
ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C020-031
FACILITY #319791, REMEDIATION #9464

1.0 INTRODUCTION

The purpose of this document is to present information collected during the remediation of petroleum-impacted soil at Great Western Operating Company, LLC's (Great Western's) UPRR Meyer #1 site in Adams County, Colorado. A soil remediation system consisting of two soil vapor extraction (SVE) wells was installed and activated at the site on November 19, 2021. The SVE system has operated continuously since that date.

2.0 BACKGROUND INFORMATION

2.1 Site Location

The UPRR Meyer #1 site is located approximately 11 miles north of Bennett, Colorado in Adams County as shown on Figure 1. The site is located in an agricultural area approximately 0.3 miles northwest of the intersection of County Road 33 and East 104th Avenue. The location is further described as the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 9, Township 2S, Range 63W.

2.2 Site History

The UPRR Meyer #1 well was drilled in 1974 to a vertical depth of approximately 7,671 feet. The well and facility were permanently abandoned in 2019.

During abandonment activities, historical subsurface contamination was observed. These residual impacts triggered this remediation program.

3.0 REMEDIATION ACTIVITIES

3.1 Soil Remediation System

As a result of the residual subsurface impacts at the UPRR Meyer #1 location, Great Western installed an SVE system to remediate soil impacts. The system consists of two SVE wells that are individually piped to a remediation trailer. The Republic HRC 500 SVE vacuum blower operates at approximately 80 cfm and 25" H₂O. The remediation system is powered by a propane fueled generator. Figure 3 illustrates the layout of the remediation system.

SVE exhaust samples were collected on December 21 and 29, 2021 as well as on January 28, 2022 and March 7, 2022 and submitted to Origins Laboratory. These data indicate that the SVE system was most recently removing 4.81 pounds per day of petroleum hydrocarbons. The laboratory reports are provided in Appendix A.

4.0 DISCUSSION

Since soil impacts remained at the site after facility abandonment, an SVE remediation system was installed and activated in November 2021 to address those impacts. The remediation system operates on a 24/7 basis. The SVE system has removed 0.54 tons of petroleum hydrocarbons since startup.

When it appears that the SVE system has reached the limits of its operational effectiveness, confirmation soil borings will be advanced to determine whether the subsurface soil impacts have been adequately remediated. The Residential Soil Screening Levels will be applied to this site since the depth to groundwater is believed to be approximately 125 feet based on a 2020 Division of Water Resources document.

5.0 REMARKS

The discussion and conclusions contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by **FREMONT ENVIRONMENTAL INC.**



3/28/22

Date_____

Paul V. Henahan, P.E.

Senior Consultant

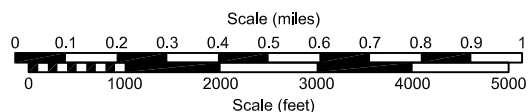
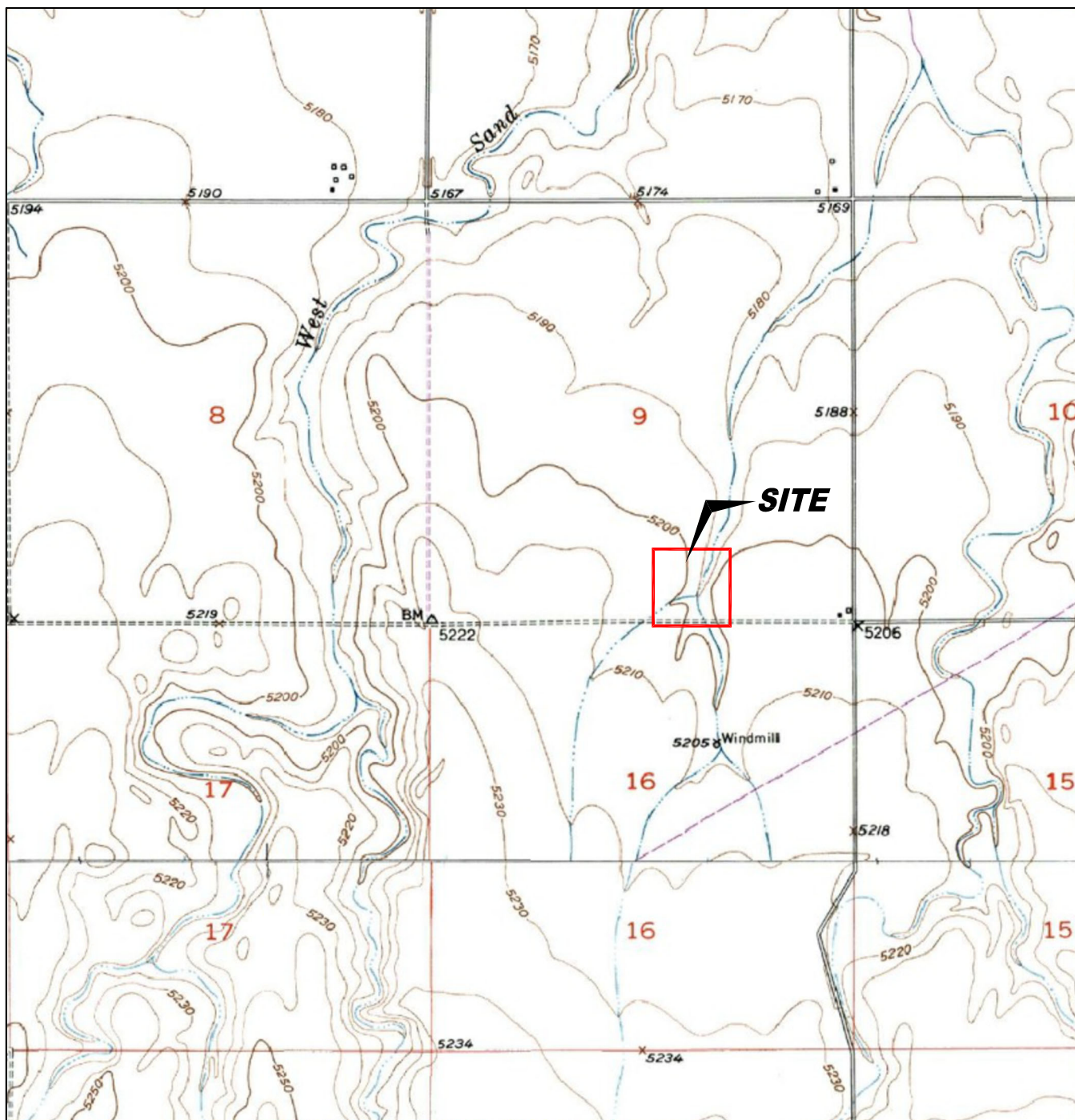
TABLE

TABLE 1
SUMMARY OF SVE DISCHARGE
GREAT WESTERN OPERATING COMPANY, LLC
UPRR MEYER #1, ADAMS COUNTY, COLORADO
FREMONT PROJECT NO. C021-031

Date	Air Discharge (CFM)	Instantaneous Hydrocarbon Removal Rate (Lbs/Hr) (Lbs/Day)		Operational Hours	Total Pounds Removed For Period	Cumulative Pounds Removed	Cumulative Tons Removed	Benzene Lbs/Hr	Total Benzene For Period Lbs	Cumulative Pounds Benzene Removed
12/03/21	80	0.46	11.13	336	155.75	155.75	0.08	0.0006	0.20	0.20
12/21/21	60	0.53	12.65	388	204.51	360.26	0.18	0.0004	0.16	0.36
12/29/21	60	1.39	33.43	173	240.97	601.23	0.30	0.0002	0.04	0.40
01/28/22	60	0.52	12.54	612	319.83	921.06	0.46	0.0000	0.01	0.41
03/07/22	60	0.20	4.81	821	164.44	1,085.50	0.54	0.0001	0.05	0.46

System started on 11/19/21

FIGURES



USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Great Western Operating Company
UPRR Meyer #1
 SWSE Sec. 9, T2S, R63W 6th PM
 Adams County, Colorado

Project # C021-031	API # 05-001-06793	Facility # 319791
Date 09/15/21	Remediation #	Filename 21031T





LEGEND

● GEO-PROBE SOIL BORING LOCATION	○ ABOVE GROUND STORAGE TANK	CONTAINMENT BERM
● SOIL BORING LOCATION	— CONTAINMENT WALL	— FENCE LINE
ⓧ SOIL VAPOR EXTRACTION WELL LOCATION	FORMER FACILITY	

Figure 2
SITE MAP

Great Western Operating Company
UPRR Meyer #1
 SWSE Sec. 9, T2S, R63W 6th PM
 Adams County, Colorado

Project No. C021-031	API # 05-001-06793	Facility # 319791	
Date 09/15/21	Remediation #	Filename 21031Q	

APPENDIX A

LABORATORY DOCUMENTATION



January 06, 2022

Fremont Environmental

Paul Henehan

8305 6th St, PO Box 1289

Wellington CO 80549

Project Name - GWOC - UPRR Meyer #2

Project Number - C021-031

Attached are your analytical results for GWOC - UPRR Meyer #2 received by Origins Laboratory, Inc. December 22, 2021. This project is associated with Origins project number Y112556-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #2

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UPRR Meyer SVE	Y112556-01	Air	December 21, 2021 0:00	12/22/2021 12:30

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.

Paul Henehan
Project Number: C021-031
Project: GWOC - UPRR Meyer #2

[illegible]

Origins Laboratory, Inc.

Intent

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #2

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: Y112556

Client: Fremont

Client Project ID: UPRR Meyer

Checklist Completed by: SG

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 12/23/21

Airbill #: N/A

Matrix(s) Received: (Check all that apply): Soil/Solid Water X Other: Air

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

Thermometer ID: N/A

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) Jm

12-27-21
Date/Time Reviewed

Origins Laboratory, Inc.

Jordan A. Merrill

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #2

UPRR Meyer SVE

12/21/2021 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

Y112556-01 (Air)

GBTEX by TO-15M GC/MS

T

Gasoline Range Hydrocarbons	2350000	50000	ug/m ³ Air	250	B1L2313	EPC	12/23/2021	12/29/2021
Benzene	1850	70.0	"	25	"	EPC	"	12/29/2021
Toluene	11500	1250	"	250	"	EPC	"	12/29/2021
Ethylbenzene	22200	1250	"	"	"	EPC	"	"
m,p-Xylene	106000	19600	"	1030.2	"	EPC	"	01/05/2022
o-Xylene	11300	4840	"	"	"	EPC	"	"

Surrogate: 1,2-Dichloroethane-d4	104 %	70-130			"	"		12/29/2021
Surrogate: Toluene-d8	100 %	70-130			"	"		01/05/2022
Surrogate: 4-Bromofluorobenzene	115 %	70-130			"	"		12/29/2021

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #2

Volatile Organic Compounds by TO-15 in Air - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B1L2313 - Default Prep - Air										
Blank (B1L2313-BLK1)					Prepared: 12/23/2021 Analyzed: 12/23/2021					T
Gasoline Range Hydrocarbons	ND	200	ug/m ³ Air							U
Benzene	ND	2.80	"							U
Toluene	ND	5.00	"							U
Ethylbenzene	ND	5.00	"							U
m,p-Xylene	ND	19.0	"							U
o-Xylene	ND	4.70	"							U
Surrogate: 1,2-Dichloroethane-d4	10.5		ppbv	10.0		105	70-130			
Surrogate: Toluene-d8	8.72		"	10.0		87.2	70-130			
Surrogate: 4-Bromofluorobenzene	9.73		"	10.0		97.3	70-130			
LCS (B1L2313-BS1)					Prepared: 12/23/2021 Analyzed: 12/23/2021					T
Benzene	35.2	2.80	ug/m ³ Air	31.9		110	70-130			
Toluene	37.8	5.00	"	37.7		100	70-130			
Ethylbenzene	38.7	5.00	"	43.4		89.1	70-130			
m,p-Xylene	123	19.0	"	174		70.8	70-130			
o-Xylene	39.4	4.70	"	43.4		90.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	10.3		ppbv	10.0		103	70-130			
Surrogate: Toluene-d8	10.7		"	10.0		107	70-130			
Surrogate: 4-Bromofluorobenzene	9.87		"	10.0		98.7	70-130			
LCS Dup (B1L2313-BSD1)					Prepared: 12/23/2021 Analyzed: 12/28/2021					T
Benzene	34.2	2.80	ug/m ³ Air	31.9		107	70-130	2.85	25	
Toluene	38.2	5.00	"	37.7		101	70-130	1.19	25	
Ethylbenzene	39.4	5.00	"	43.4		90.7	70-130	1.78	25	
m,p-Xylene	129	19.0	"	174		74.4	70-130	5.03	25	
o-Xylene	40.3	4.70	"	43.4		92.8	70-130	2.29	25	
Surrogate: 1,2-Dichloroethane-d4	10.2		ppbv	10.0		102	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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #2

Volatile Organic Compounds by TO-15 in Air - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B1L2313 - Default Prep - Air

LCS Dup (B1L2313-BSD1)

Prepared: 12/23/2021 Analyzed: 12/28/2021

T

Surrogate: Toluene-d8	10.6		ppbv	10.0		106	70-130			
Surrogate: 4-Bromofluorobenzene	9.99		"	10.0		99.9	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: C021-031
Project: GWOC - UPRR Meyer #2

Notes and Definitions

U Sample is Non-Detect.

T The TO-15 analysis is not part of the NELAC accreditation

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.



January 21, 2022

Fremont Environmental

Paul Henehan

8305 6th St, PO Box 1289

Wellington CO 80549

Project Name - UPRR Meyer #1

Project Number - CO21-031

Attached are your analytical results for UPRR Meyer #1 received by Origins Laboratory, Inc. December 30, 2021. This project is associated with Origins project number Y112691-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UPRR Meyer #1 SVE	Y112691-01	Air	December 29, 2021 0:00	12/30/2021 12:41

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.

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

[illegible]

Origins Laboratory, Inc.

Intent

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: CO21-031

Project: UPRR Meyer #1

Origins Laboratory

F-012207-01-R1

Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: 4112091

Client: Fremont

Client Project ID: UPRR Meyer #1

Checklist Completed by: SLH

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

Date/time completed: 12/30/21

Airbill #: NA

Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: NA

Cooler Number/Temperature: NA °C / NA °C / NA °C (Describe)

Thermometer ID: NA

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) JP

Date/Time Reviewed 1/3/22

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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

UPRR Meyer #1 SVE
12/29/2021 12:00:00AM

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

Origins Laboratory, Inc.
Y112691-01 (Air)

GBTEX by TO-15M GC/MS

T

Gasoline Range Hydrocarbons	6210000	258000	ug/m ³ Air	1288.6	B2A1026	EPC	01/10/2022	01/20/2022
Benzene	1020	70.0	"	25	"	EPC	"	01/19/2022
Toluene	8940	6440	"	1288.6	"	EPC	"	01/20/2022
Ethylbenzene	17100	6440	"	"	"	EPC	"	"
m,p-Xylene	296000	24500	"	"	"	EPC	"	"
o-Xylene	34100	6060	"	"	"	EPC	"	"
Surrogate: 1,2-Dichloroethane-d4	95.1 %	70-130			"	"		01/19/2022
Surrogate: Toluene-d8	110 %	70-130			"	"		01/20/2022
Surrogate: 4-Bromofluorobenzene	91.6 %	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2A1026 - Default Prep - Air										
Blank (B2A1026-BLK1)					Prepared: 01/10/2022 Analyzed: 01/13/2022					T
Gasoline Range Hydrocarbons	ND	200	ug/m ³ Air							U
Benzene	ND	2.80	"							U
Toluene	ND	5.00	"							U
Ethylbenzene	ND	5.00	"							U
m,p-Xylene	ND	19.0	"							U
o-Xylene	ND	4.70	"							U
Surrogate: 1,2-Dichloroethane-d4	11.1		ppbv	10.0		111	70-130			
Surrogate: Toluene-d8	9.74		"	10.0		97.4	70-130			
Surrogate: 4-Bromofluorobenzene	9.65		"	10.0		96.5	70-130			
LCS (B2A1026-BS1)					Prepared: 01/10/2022 Analyzed: 01/13/2022					T
Benzene	30.4	2.80	ug/m ³ Air	31.9		95.2	70-130			
Toluene	29.1	5.00	"	37.7		77.1	70-130			
Ethylbenzene	45.7	5.00	"	43.4		105	70-130			
m,p-Xylene	194	19.0	"	174		112	70-130			
o-Xylene	35.8	4.70	"	43.4		82.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	10.3		ppbv	10.0		103	70-130			
Surrogate: Toluene-d8	10.4		"	10.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	9.77		"	10.0		97.7	70-130			
LCS Dup (B2A1026-BSD1)					Prepared: 01/10/2022 Analyzed: 01/13/2022					T
Benzene	30.9	2.80	ug/m ³ Air	31.9		96.6	70-130	1.46	25	
Toluene	29.4	5.00	"	37.7		78.1	70-130	1.29	25	
Ethylbenzene	45.9	5.00	"	43.4		106	70-130	0.474	25	
m,p-Xylene	194	19.0	"	174		112	70-130	0.403	25	
o-Xylene	36.0	4.70	"	43.4		82.9	70-130	0.605	25	
Surrogate: 1,2-Dichloroethane-d4	10.4		ppbv	10.0		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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2A1026 - Default Prep - Air

LCS Dup (B2A1026-BSD1)

Prepared: 01/10/2022 Analyzed: 01/13/2022

T

Surrogate: Toluene-d8	10.9		ppbv	10.0		109	70-130			
Surrogate: 4-Bromofluorobenzene	9.81		"	10.0		98.1	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Notes and Definitions

U Sample is Non-Detect.

T The TO-15 analysis is not part of the NELAC accreditation

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.



February 16, 2022

Fremont Environmental

Paul Henehan

8305 6th St, PO Box 1289

Wellington CO 80549

Project Name - UPRR Meyer #1

Project Number - CO21-031

Attached are your analytical results for UPRR Meyer #1 received by Origins Laboratory, Inc. February 01, 2022. This project is associated with Origins project number Y202043-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: CO21-031

Project: UPRR Meyer #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UPRR Mater #1 SVE	Y202043-01	Air	January 28, 2022 13:00	02/01/2022 14:00

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.

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

[illegible]

Origins Laboratory, Inc.

Intent

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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

UPRR Mater #1 SVE
1/28/2022 1:00:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Y202043-01 (Air)
Origins Laboratory, Inc.

GBTEX by TO-15M GC/MS

									T
Gasoline Range Hydrocarbons	2330000	50000	ug/m ³ Air	250	B2B0213	EPC	02/02/2022	02/09/2022	
Benzene	ND	70.0	"	25	"	EPC	"	02/09/2022	U
Toluene	ND	125	"	"	"	EPC	"	"	U
Ethylbenzene	4660	1250	"	250	"	EPC	"	02/09/2022	
m,p-Xylene	113000	4750	"	"	"	EPC	"	"	
o-Xylene	14300	1180	"	"	"	EPC	"	"	
Surrogate: 1,2-Dichloroethane-d4	89.3 %	70-130			"	"		02/09/2022	
Surrogate: Toluene-d8	119 %	70-130			"	"		02/09/2022	
Surrogate: 4-Bromofluorobenzene	92.2 %	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2B0213 - Default Prep - Air										
Blank (B2B0213-BLK1)					Prepared: 02/02/2022 Analyzed: 02/02/2022					T
Gasoline Range Hydrocarbons	ND	200	ug/m ³ Air							U
Benzene	ND	2.80	"							U
Toluene	ND	5.00	"							U
Ethylbenzene	ND	5.00	"							U
m,p-Xylene	ND	19.0	"							U
o-Xylene	ND	4.70	"							U
Surrogate: 1,2-Dichloroethane-d4	9.92		ppbv	10.0		99.2	70-130			
Surrogate: Toluene-d8	9.87		"	10.0		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	8.91		"	10.0		89.1	70-130			
LCS (B2B0213-BS1)					Prepared: 02/02/2022 Analyzed: 02/02/2022					T
Benzene	34.1	2.80	ug/m ³ Air	31.9		107	70-130			
Toluene	43.5	5.00	"	37.7		115	70-130			
Ethylbenzene	45.8	5.00	"	43.4		105	70-130			
m,p-Xylene	185	19.0	"	174		106	70-130			
o-Xylene	47.0	4.70	"	43.4		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	9.47		ppbv	10.0		94.7	70-130			
Surrogate: Toluene-d8	9.18		"	10.0		91.8	70-130			
Surrogate: 4-Bromofluorobenzene	9.02		"	10.0		90.2	70-130			
LCS Dup (B2B0213-BSD1)					Prepared: 02/02/2022 Analyzed: 02/02/2022					T
Benzene	34.3	2.80	ug/m ³ Air	31.9		107	70-130	0.560	25	
Toluene	40.5	5.00	"	37.7		107	70-130	7.18	25	
Ethylbenzene	47.2	5.00	"	43.4		109	70-130	3.17	25	
m,p-Xylene	190	19.0	"	174		109	70-130	2.78	25	
o-Xylene	49.0	4.70	"	43.4		113	70-130	4.16	25	
Surrogate: 1,2-Dichloroethane-d4	9.09		ppbv	10.0		90.9	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control
Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2B0213 - Default Prep - Air

LCS Dup (B2B0213-BSD1)

Prepared: 02/02/2022 Analyzed: 02/02/2022

T

Surrogate: Toluene-d8	9.24		ppbv	10.0		92.4	70-130			
Surrogate: 4-Bromofluorobenzene	9.28		"	10.0		92.8	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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: CO21-031
Project: UPRR Meyer #1

Notes and Definitions

U Sample is Non-Detect.

T The TO-15 analysis is not part of the NELAC accreditation

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.



March 16, 2022

Fremont Environmental

Paul Henehan

8305 6th St, PO Box 1289

Wellington CO 80549

Project Name - GWOC - UPRR Meyer #1

Project Number - C021-031

Attached are your analytical results for GWOC - UPRR Meyer #1 received by Origins Laboratory, Inc. March 07, 2022. This project is associated with Origins project number Y203173-01.

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



1725 Elk Place, Denver, CO 80211 | Phone: 303.433.1322 | Fax: 303.265.9645

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #1

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
UPRR Meyer SVE	Y203173-01	Air	March 7, 2022 0:00	03/07/2022 12:35

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.

Paul Henehan
Project Number: C021-031
Project: GWOC - UPRR Meyer #1

[illegible]

Origins Laboratory, Inc.

Byron

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #1

Origins Laboratory

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

Sample Receipt Checklist

Origins Work Order: 1203173

Client: Fremont

Client Project ID: GWOC-UPRR Meyer #1

Checklist Completed by: KT

Shipped Via: HD

(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Date/time completed: 3/7/12

Airbill #: 12

Matrix(s) Received: (Check all that apply): Soil/Solid Water Other: Air

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

Thermometer ID: NA

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?			X	
Is there ice present (document if blue ice is used)			X	
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact ⁽¹⁾ ?	X			
Was adequate sample volume provided ⁽¹⁾ ?	X			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?		X		
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?		X		
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	X			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	X			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.			X	
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)			X	
Additional Comments (if any): <u>no sample time</u>				

⁽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) pm

3-8-12
Date/Time Reviewed

Origins Laboratory, Inc.

J. Bynon

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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #1

UPRR Meyer SVE

3/7/2022 12:00:00AM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc.

Y203173-01 (Air)

GBTEX by TO-15M GC/MS

T

Gasoline Range Hydrocarbons	893000	50000	ug/m ³ Air	250	B2C0923	EPC	03/09/2022	03/14/2022
Benzene	292	70.0	"	25	"	EPC	"	03/14/2022
Toluene	1890	1250	"	250	"	EPC	"	03/14/2022
Ethylbenzene	4690	1250	"	"	"	EPC	"	"
m,p-Xylene	95600	4750	"	"	"	EPC	"	"
o-Xylene	12900	1180	"	"	"	EPC	"	"

Surrogate: 1,2-Dichloroethane-d4

104 %

70-130

"

"

"

Surrogate: Toluene-d8

117 %

70-130

"

"

"

Surrogate: 4-Bromofluorobenzene

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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: C021-031
Project: GWOC - UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2C0923 - Default Prep - Air										
Blank (B2C0923-BLK1)					Prepared: 03/09/2022 Analyzed: 03/09/2022					T
Gasoline Range Hydrocarbons	ND	200	ug/m ³ Air							U
Benzene	ND	2.80	"							U
Toluene	ND	5.00	"							U
Ethylbenzene	ND	5.00	"							U
m,p-Xylene	ND	19.0	"							U
o-Xylene	ND	4.70	"							U
Surrogate: 1,2-Dichloroethane-d4	9.78		ppbv	10.0		97.8	70-130			
Surrogate: Toluene-d8	10.3		"	10.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	9.84		"	10.0		98.4	70-130			
LCS (B2C0923-BS1)					Prepared: 03/09/2022 Analyzed: 03/09/2022					T
Benzene	26.0	2.80	ug/m ³ Air	31.9		81.5	70-130			
Toluene	32.4	5.00	"	37.7		86.1	70-130			
Ethylbenzene	36.3	5.00	"	43.4		83.5	70-130			
m,p-Xylene	144	19.0	"	174		82.8	70-130			
o-Xylene	36.0	4.70	"	43.4		82.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	9.45		ppbv	10.0		94.5	70-130			
Surrogate: Toluene-d8	9.78		"	10.0		97.8	70-130			
Surrogate: 4-Bromofluorobenzene	10.5		"	10.0		105	70-130			
LCS Dup (B2C0923-BSD1)					Prepared: 03/09/2022 Analyzed: 03/09/2022					T
Benzene	26.0	2.80	ug/m ³ Air	31.9		81.5	70-130	0.00	25	
Toluene	30.9	5.00	"	37.7		82.1	70-130	4.76	25	
Ethylbenzene	33.7	5.00	"	43.4		77.7	70-130	7.20	25	
m,p-Xylene	141	19.0	"	174		81.3	70-130	1.89	25	
o-Xylene	35.7	4.70	"	43.4		82.3	70-130	0.726	25	
Surrogate: 1,2-Dichloroethane-d4	9.62		ppbv	10.0		96.2	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.

Fremont Environmental

8305 6th St, PO Box 1289

Wellington CO 80549

Paul Henehan

Project Number: C021-031

Project: GWOC - UPRR Meyer #1

Volatile Organic Compounds by TO-15 in Air - Quality Control

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B2C0923 - Default Prep - Air

LCS Dup (B2C0923-BSD1)

Prepared: 03/09/2022 Analyzed: 03/09/2022

T

Surrogate: Toluene-d8	8.80		ppbv	10.0		88.0	70-130			
Surrogate: 4-Bromofluorobenzene	10.3		"	10.0		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.

Fremont Environmental
8305 6th St, PO Box 1289
Wellington CO 80549

Paul Henehan
Project Number: C021-031
Project: GWOC - UPRR Meyer #1

Notes and Definitions

U Sample is Non-Detect.

T The TO-15 analysis is not part of the NELAC accreditation

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.