



FIGURE

Figure 1: Grab Groundwater Analytical Map

GW-01
07/06/22
B = **49.1**
T = 116
E = <1.00
X = 3090
N = <2.00
1,2,4-TMB = 7.70
1,3,5-TMB = 25.7

GW-01

LEGEND

--- INITIAL ASSESSMENT BOUNDARIES

● APPROXIMATE LOCATION OF GRAB GROUNDWATER
SAMPLE SUBMITTED FOR LABORATORY ANALYSIS

PARAMETERS

GROUNDWATER SAMPLE LOCATION

DATE

B = BENZENE (µg/L)

T = TOLUENE (µg/L)

E = ETHYLBENZENE (µg/L)

X = TOTAL XYLENES (µg/L)

N = NAPHTHALENE (µg/L)

1,2,4-TMB = 1,2,4-TRIMETHYLBENZENE (µg/L)

1,3,5-TMB = 1,3,5-TRIMETHYLBENZENE (µg/L)

µg/L = MICROGRAMS PER LITER

NOTES:

VALUES PRESENTED WITH A LESS THAN SYMBOL (<) DID
NOT CONTAIN CONCENTRATIONS AT OR ABOVE THE
LABORATORY REPORTING LIMIT

VALUES PRESENTED IN **BOLD** EXCEED THE COGCC TABLE
915-1 REGULATORY LIMITS FOR THAT COMPOUND

COGCC = COLORADO OIL AND GAS CONSERVATION
COMMISSION

GRAB GROUNDWATER ANALYTICAL MAP

LIBSACK 4-8-27

VENT LINE RELEASE

40.276553 / -104.644507

SW¼ SEC.27 T4N R65W 6PM

WELD COUNTY, COLORADO

LOCATION ID 310312

SPILL ID 482474

DATE:

07/07/22

DRAWN BY:

AMN

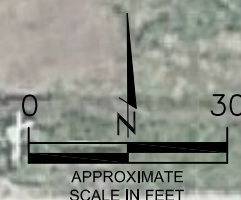
FIG.
NO.

1



EAGLE
ENVIRONMENTAL
CONSULTING, INC.

8000 W 44th Ave, Wheat Ridge, CO 80033
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TABLE

Table 1: Groundwater Analytical Results Summary

TABLE 1
GROUNDWATER ANALYTICAL RESULTS SUMMARY
LIBSACK 4-8-27
VENT LINE RELEASE
40.276553 / -104.644507
SW1/4 SE1/4 SEC.27 T4N R65W 6PM
WELD COUNTY, COLORADO
LOCATION ID 310312
SPILL ID 482474

Sample Location (Latitude/Longitude)	Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4- Trimethylbenzene (µg/L)	1,3,5 - Trimethylbenzene (µg/L)
COGCC Table 915-1 Regulatory Limits (µg/L)		5	560	700	1400	140	67	67
GW-01 (40.276553 / -104.644507)	07/06/22	49.1	116	<1.00	309	<2.00	7.70	25.7
COGCC = Colorado Oil and Gas Conservation Commission µg/L - micrograms per liter Note: Values presented with a less than symbol (<) indicate concentrations were not observed at or above the laboratory reporting limit. Values presented in bold typeface exceed their respective COGCC - Regulatory Limits (Table 915-1).								



ATTACHMENT A

Photolog

Libsack 4-8-27

SWSE Sec.27 T4N R65W 6PM

Location ID 310312

Spill ID 482474

Release Assessment

July 2022



EAGLE
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CIVITAS

Release Assessment – 07/06/22



Looking northeast at initial excavation

Groundwater observed at ~3 feet below ground surface

No petroleum hydrocarbon odor or sheen observed



Looking southeast at initial excavation

Groundwater observed at ~3 feet below ground surface

No petroleum hydrocarbon odor or sheen observed

Release Assessment – 07/06/22



Looking northeast at initial excavation adjacent to separator containment area



Looking southeast at initial excavation adjacent to separator containment area



ATTACHMENT B

Laboratory Analytical Report



July 07, 2022

Eagle Environmental Consulting, Inc.

Martin C Eckert III

8000 W 44th Ave

Wheat Ridge CO 80033

Project Name - Civitas - libsack 4-8-27

Project Number - [none]

Attached are your analytical results for Civitas - libsack 4-8-27 received by Origins Laboratory, Inc. July 06, 2022. This project is associated with Origins project number Y207083-01.

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

Eagle Environmental Consulting, Inc.

8000 W 44th Ave

Wheat Ridge CO 80033

Martin C Eckert III

Project Number: [none]

Project: Civitas - libsack 4-8-27

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW-01	Y207083-01	Water	July 6, 2022 12:35	07/06/2022 14:13

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.

Eagle Environmental Consulting, Inc.

8000 W 44th Ave

Wheat Ridge CO 80033

Martin C Eckert III

Project Number: [none]

Project: Civitas - libsack 4-8-27

Origins Laboratory

Origins Work Order: Y207083

Checklist Completed by: MS

Date/time completed: 7/6/22

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

Cooler Number/Temperature: 1 1 °C

Thermometer ID: TECH

Client: Eagle

Client Project ID: Libsack 4-8-27

Shipped Via: 4D

Airbill #: 4D

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

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

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C ⁽¹⁾ ?				
Is there ice present (document if blue ice is used)	<u>2</u>			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		<u>1</u>		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		<u>1</u>		
Were all samples received intact ⁽¹⁾ ?	<u>1</u>			
Was adequate sample volume provided ⁽¹⁾ ?	<u>1</u>			
Are short holding time analytes or samples with HTs due within 48 hours present ⁽¹⁾ ?	<u>1</u>			
Is a chain-of-custody (COC) present and filled out completely ⁽¹⁾ ?	<u>1</u>			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<u>1</u>			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<u>1</u>			
Is the COC properly relinquished by the client with date and time recorded ⁽¹⁾ ?	<u>1</u>			
For volatiles in water – is there headspace (> ¼ inch bubble) present? If yes, contact client and note in narrative.	<u>1</u>			
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)	<u>1</u>			
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): [Signature]

Date/Time Reviewed: 7/6/22

Origins Laboratory, Inc.

[Signature]

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Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Civitas - libsack 4-8-27

GW-01

7/6/2022 12:35:00PM

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Prepared	Analyzed	Notes
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Origins Laboratory, Inc. Y207083-01 (Water)

BTEX+N+TMBs by 8260D

1,2,4-Trimethylbenzene	7.70	2.00	ug/L	1	B2G0522	JMA	07/06/2022	07/06/2022	
1,3,5-Trimethylbenzene	25.7	2.00	"	"	"	JMA	"	"	
Benzene	49.1	1.00	"	"	"	JMA	"	"	
Ethylbenzene	ND	1.00	"	"	"	JMA	"	"	U
Naphthalene	ND	2.00	"	"	"	JMA	"	"	U
Toluene	116	1.00	"	"	"	JMA	"	"	
Xylenes, total	309	1.00	"	"	"	JMA	"	"	

Surrogate: 1,2-Dichloroethane-d4	111 %	70-130			"	"	"
Surrogate: Toluene-d8	108 %	70-130			"	"	"
Surrogate: 4-Bromofluorobenzene	103 %	70-130			"	"	"

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Civitas - libsack 4-8-27

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2G0522 - EPA 5030B (Water)										
Blank (B2G0522-BLK1)					Prepared: 07/05/2022 Analyzed: 07/06/2022					
1,2,4-Trimethylbenzene	ND	2.00	ug/L							U
1,3,5-Trimethylbenzene	ND	2.00	"							U
Benzene	ND	1.00	"							U
Ethylbenzene	ND	1.00	"							U
Naphthalene	ND	2.00	"							U
Toluene	ND	1.00	"							U
Xylenes, total	ND	1.00	"							U
Surrogate: 1,2-Dichloroethane-d4	68		"	62.5		110	70-130			
Surrogate: Toluene-d8	62		"	62.5		98.8	70-130			
Surrogate: 4-Bromofluorobenzene	64		"	62.5		103	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Civitas - libsack 4-8-27

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

Origins Laboratory, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2G0522 - EPA 5030B (Water)										
LCS (B2G0522-BS1)					Prepared: 07/05/2022 Analyzed: 07/06/2022					
1,2,4-Trimethylbenzene	51.8	2.00	ug/L	50.0		104	70-130			
1,3,5-Trimethylbenzene	50.5	2.00	"	50.0		101	70-130			
Benzene	48.3	1.00	"	50.0		96.6	70-130			
Ethylbenzene	54.3	1.00	"	50.0		109	70-130			
m,p-Xylene	108	2.00	"	100		108	70-130			
Naphthalene	47.7	2.00	"	50.0		95.4	70-130			
o-Xylene	48.2	1.00	"	50.0		96.3	70-130			
Toluene	56.0	1.00	"	50.0		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	67		"	62.5		107	70-130			
Surrogate: Toluene-d8	66		"	62.5		106	70-130			
Surrogate: 4-Bromofluorobenzene	63		"	62.5		101	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Civitas - libsack 4-8-27

Volatile Organic Compounds by GC/MS SW846 8260D - 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 B2G0522 - EPA 5030B (Water)

Matrix Spike (B2G0522-MS1)		Source: Y207036-01			Prepared: 07/05/2022 Analyzed: 07/07/2022					
1,2,4-Trimethylbenzene	554	2.00	ug/L	50.0	398	312	70-130			QM-02
1,3,5-Trimethylbenzene	151	2.00	"	50.0	33.9	234	70-130			QM-02
Benzene	107	1.00	"	50.0	ND	214	70-130			QM-02
Ethylbenzene	491	1.00	"	50.0	355	272	70-130			QM-02
m,p-Xylene	252	2.00	"	100	82.4	169	70-130			QM-02
Naphthalene	220	2.00	"	50.0	ND	441	70-130			QM-02
o-Xylene	71.3	1.00	"	50.0	5.60	131	70-130			QM-02
Toluene	102	1.00	"	50.0	ND	204	70-130			QM-02
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		106	70-130			
Surrogate: Toluene-d8	71		"	62.5		113	70-130			
Surrogate: 4-Bromofluorobenzene	65		"	62.5		104	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.
8000 W 44th Ave
Wheat Ridge CO 80033

Martin C Eckert III
Project Number: [none]
Project: Civitas - libsack 4-8-27

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B2G0522 - EPA 5030B (Water)										
Matrix Spike Dup (B2G0522-MSD1)			Source: Y207036-01		Prepared: 07/05/2022 Analyzed: 07/07/2022					
1,2,4-Trimethylbenzene	558	2.00	ug/L	50.0	398	319	70-130	0.631	20	QM-02
1,3,5-Trimethylbenzene	123	2.00	"	50.0	33.9	178	70-130	20.5	20	QM-02
Benzene	60.6	1.00	"	50.0	ND	121	70-130	55.2	20	QM-02
Ethylbenzene	493	1.00	"	50.0	355	276	70-130	0.465	20	QM-02
m,p-Xylene	218	2.00	"	100	82.4	135	70-130	14.5	20	QM-02
Naphthalene	152	2.00	"	50.0	ND	303	70-130	36.9	20	QM-02
o-Xylene	60.5	1.00	"	50.0	5.60	110	70-130	16.4	20	
Toluene	68.3	1.00	"	50.0	ND	137	70-130	39.5	20	QM-02
Surrogate: 1,2-Dichloroethane-d4	66		"	62.5		105	70-130			
Surrogate: Toluene-d8	70		"	62.5		112	70-130			
Surrogate: 4-Bromofluorobenzene	66		"	62.5		106	70-130			

Origins Laboratory, Inc.



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Eagle Environmental Consulting, Inc.

8000 W 44th Ave

Wheat Ridge CO 80033

Martin C Eckert III

Project Number: [none]

Project: Civitas - libsack 4-8-27

Notes and Definitions

U Sample is Non-Detect.

QM-02 The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

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.



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