



## Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

June 13, 2024

1600 Broadway Ste 1050  
Denver, CO 80202  
303-929-9513  
ryan@petersonenergyoperating.com

**Project Manager :** Ryan Dornbos

**Project Name :** Marick A-1

**Project Number :** N/A

Attached are the analytical results for Marick A-1 N/A received by Elevation Diagnostics, Division of Environmental Testing on May 31, 2024. This is associated with Elevation's number AA08675 .

The results were analyzed under the guidelines of various methods. These methods are identified in the report as follows: "SW" is referring to the EPA's SW-846 Compendium; "EPA" is referring to 40 CFR part 136; "HACH" is referring to a method which was validated by HACH®; "SM" is referring to a revision of the Standard Methods For the Examination of Water and Wastewater; and "ASTM" is referring to the standard test method set forth by ASTM International.

The analytical results in this report apply specifically to the samples listed in the attached Chain of Custody. This report may only be duplicated in full.

Any deviations to sample integrity, method specifications, or Elevation Diagnostics's standard operating procedures are documented in the report below.

Please contact us for any questions or comments concerning the content of this report.

Thank you,

Elevation Diagnostics, Division of Environmental Testing

Kristen Reichel  
Laboratory Director  
CSO,CCO




# Chain of Custody Form

Client: CENTRAL OPERATING  
 Address: \_\_\_\_\_  
 City/State/ZIP: \_\_\_\_\_  
 Phone: 303 929 9513  
 Project Contact: MSMITH@ARDOLENVIRONMENTAL.COM  
TFANNING@ARDOLENVIRONMENTAL.COM

# Elevation Diagnostics

2115 North Scranton Street Suite 3040A Aurora, CO 80045  
 800.440.5184

Project Name: MARYK A-1  
 Project Location: \_\_\_\_\_  
 Collector Name: RYAN DORNBOSS

Sample ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested										Notes
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Other	ECMC	TAB	EQS								
1	SOUTH PIT F-W	5/30	1330	3			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>										  
2	SOUTH PIT F-E	↓	↓	3			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>										
3	NORTH PIT FLOOR	↓	↓	3			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>										
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished By: RYAN DORNBOSS  
 Date/Time: 5/30/24 1515

Relinquished By: Dylan Samson  
 Date/Time: 5/30/24 15:21

Relinquished By: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_  
 2024-05-31-002

Lab Use Only  
 Observed Temperature Upon Receipt: 29.5°C  
 Corrected Temperature Upon Receipt: 30.8°C  
 Thermometer #: EDX EQ 238  
 Correction Factor: +1.3°C

Samples Intact: ☒ Yes ☒ No  
 pH Checked: ☒ Yes ☒ No  
 pH Adjusted: ☒ Yes ☒ No  
 Name/Lot Number of Adjustment: \_\_\_\_\_

Scan to Deliver Samples



EFOR-008.002

**Division of Environmental Testing**

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**Report Date :** 6/13/2024**Report Time :** 13:01**FINAL RESULTS REPORT****Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A

Sample ID	Customer ID	Collected		Dilution	Result	Units	RL	Method Ref.
Analyte Name		Analysis Start						Recovery
AA08675-1	South Pit F-W	Collected : 05/20/2024		13:30				
SAR - Calcium		06/11/2024	11:29	10.00	1.036	mEq/L	0.000	EPA 6020B
SAR - Magnesium		06/11/2024	11:29	10.00	0.256	mEq/L	0.000	EPA 6020B
SAR - Sodium		06/11/2024	11:29	10.00	47.555	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		06/11/2024	11:29	10.00	59.169		0.000	EPA 6020B
Soil Conductivity		06/03/2024	16:20		5.74	mmhos/cm		USDA 60
AA08675-2	South Pit F-W	Collected : 05/20/2024		13:30				
Chromium VI, Soil		06/05/2024	08:48		<0.0800	mg/kg	0.080	EPA 7199
Hot Water Soluble Boron		06/11/2024	10:07		2.416	mg/kg	0.050	Boron Hot Water Extraction
pH, Soils Temperature		06/03/2024	15:27		23.2	°C		
pH, Soils		06/03/2024	15:27		8.94	S.U.	0.01	EPA 9045D
Total Metals, Soils - Arsenic		06/10/2024	13:30	10.00	3.464	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Barium		06/10/2024	13:30	10.00	167.220 - MS	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Cadmium		06/10/2024	13:30	10.00	0.186	mg/kg	0.001	EPA 6020B
Total Metals, Soils - Copper		06/10/2024	13:30	10.00	10.735	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Lead		06/10/2024	13:30	10.00	10.400	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Nickel		06/10/2024	13:30	10.00	8.178	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Selenium		06/10/2024	13:30	10.00	3.035	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Silver		06/10/2024	13:30	10.00	<0.250 - RL1	mg/kg	0.250	EPA 6020B
Total Metals, Soils - Zinc		06/10/2024	13:30	10.00	38.832 - D1	mg/kg	0.025	EPA 6020B
AA08675-3	South Pit F-W	Collected : 05/20/2024		13:30				
DRO & ORO, Soil - DRO		06/10/2024	10:59		Not Detected	mg/kg	100.00	EPA 8015D
DRO & ORO, Soil - ORO		06/10/2024	10:59		Not Detected	mg/kg	100.00	EPA 8015D
Gasoline Range Organics, Soil		06/07/2024	15:53		Not Detected	mg/kg	0.26827	EPA 8260
SVOC, Soils - 1-methylnaphthalene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - 2-methylnaphthalene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Acenaphthene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Anthracene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benz(a)anthracene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(a)pyrene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(b)fluoranthene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(k)fluoranthene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Chrysene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Dibenzo(a,h)anthracene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluoranthene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluorene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Indeno(1,2,3-cd)pyrene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Naphthalene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Pyrene		06/13/2024	10:53		Not Detected	mg/kg	0.010	EPA 8270
VOC, Soils - 1,2,4-trimethylbenzene		06/06/2024	13:24		<0.00245	mg/kg	0.00245	EPA 8260d
VOC, Soils - 1,3,5-trimethylbenzene		06/06/2024	13:24		<0.005	mg/kg	0.005	EPA 8260d
VOC, Soils - Benzene		06/06/2024	13:24		Not Detected	mg/kg	0.00242	EPA 8260d
VOC, Soils - Ethylbenzene		06/06/2024	13:24		Not Detected	mg/kg	0.005	EPA 8260d
VOC, Soils - m&p- xylene		06/06/2024	13:24		<0.00427	mg/kg	0.00427	EPA 8260d

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**Report Date :** 6/13/2024**Report Time :** 13:01**FINAL RESULTS REPORT****Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A

Sample ID	Customer ID	Collected	Dilution	Result	Units	RL	Method Ref.
Analyte Name		Analysis Start					Recovery
VOC, Soils - o-xylene		06/06/2024	13:24	<0.00227	mg/kg	0.00227	EPA 8260d
VOC, Soils - Toluene		06/06/2024	13:24	Not Detected	mg/kg	0.00263	EPA 8260d
VOC, Soils - Xylenes, total		06/06/2024	13:24	<0.00654	mg/kg	0.00654	EPA 8260d
<b>AA08676-1</b>	South Pit F-E	<b>Collected :</b> 05/20/2024 13:30					
SAR - Calcium		06/11/2024	11:29 10.00	0.642	mEq/L	0.000	EPA 6020B
SAR - Magnesium		06/11/2024	11:29 10.00	0.151	mEq/L	0.000	EPA 6020B
SAR - Sodium		06/11/2024	11:29 10.00	98.055	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		06/11/2024	11:29 10.00	155.741		0.000	EPA 6020B
Soil Conductivity		06/03/2024	16:20	11.16	mmhos/cm		USDA 60
<b>AA08676-2</b>	South Pit F-E	<b>Collected :</b> 05/20/2024 13:30					
Chromium VI, Soil		06/05/2024	08:48	<0.0800	mg/kg	0.080	EPA 7199
Hot Water Soluble Boron		06/11/2024	10:07	4.184	mg/kg	0.050	Boron Hot Water Extraction
pH, Soils Temperature		06/03/2024	15:27	22.7	°C		
pH, Soils		06/03/2024	15:27	9.22	S.U.	0.01	EPA 9045D
Total Metals, Soils - Arsenic		06/10/2024	13:30 10.00	2.558	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Barium		06/10/2024	13:30 10.00	153.379	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Cadmium		06/10/2024	13:30 10.00	0.141	mg/kg	0.001	EPA 6020B
Total Metals, Soils - Copper		06/10/2024	13:30 10.00	10.011	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Lead		06/10/2024	13:30 10.00	7.921	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Nickel		06/10/2024	13:30 10.00	7.674	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Selenium		06/10/2024	13:30 10.00	2.464	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Silver		06/10/2024	13:30 10.00	<0.250 - RL1	mg/kg	0.250	EPA 6020B
Total Metals, Soils - Zinc		06/10/2024	13:30 10.00	30.655	mg/kg	0.025	EPA 6020B
<b>AA08676-3</b>	South Pit F-E	<b>Collected :</b> 05/20/2024 13:30					
DRO & ORO, Soil - DRO		06/10/2024	10:59	Not Detected	mg/kg	100.00	EPA 8015D
DRO & ORO, Soil - ORO		06/10/2024	10:59	Not Detected	mg/kg	100.00	EPA 8015D
Gasoline Range Organics, Soil		06/07/2024	15:53	<0.26827	mg/kg	0.26827	EPA 8260
SVOC, Soils - 1-methylnaphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - 2-methylnaphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Acenaphthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benz(a)anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(a)pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(b)fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(k)fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Chrysene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Dibenzo(a,h)anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluorene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Indeno(1,2,3-cd)pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Naphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
VOC, Soils - 1,2,4-trimethylbenzene		06/06/2024	13:24	<0.00245	mg/kg	0.00245	EPA 8260d
VOC, Soils - 1,3,5-trimethylbenzene		06/06/2024	13:24	<0.005	mg/kg	0.005	EPA 8260d

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**Report Date :** 6/13/2024**Report Time :** 13:01**FINAL RESULTS REPORT****Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A

Sample ID	Customer ID	Collected	Dilution	Result	Units	RL	Method Ref.
Analyte Name		Analysis Start					Recovery
VOC, Soils - Benzene		06/06/2024	13:24	Not Detected	mg/kg	0.00242	EPA 8260d
VOC, Soils - Ethylbenzene		06/06/2024	13:24	Not Detected	mg/kg	0.005	EPA 8260d
VOC, Soils - m&p- xylene		06/06/2024	13:24	<0.00427	mg/kg	0.00427	EPA 8260d
VOC, Soils - o-xylene		06/06/2024	13:24	Not Detected	mg/kg	0.00227	EPA 8260d
VOC, Soils - Toluene		06/06/2024	13:24	Not Detected	mg/kg	0.00263	EPA 8260d
VOC, Soils - Xylenes, total		06/06/2024	13:24	<0.00654	mg/kg	0.00654	EPA 8260d
<b>AA08677-1</b>	North Pit Floor	<b>Collected :</b> 05/20/2024 13:30					
SAR - Calcium		06/11/2024	11:29 10.00	0.531	mEq/L	0.000	EPA 6020B
SAR - Magnesium		06/11/2024	11:29 10.00	0.146	mEq/L	0.000	EPA 6020B
SAR - Sodium		06/11/2024	11:29 10.00	13.111	mEq/L	0.000	EPA 6020B
SAR - Sodium Adsorption Ratio		06/11/2024	11:29 10.00	22.542		0.000	EPA 6020B
Soil Conductivity		06/03/2024	16:20	1.378	mmhos/cm		USDA 60
<b>AA08677-2</b>	North Pit Floor	<b>Collected :</b> 05/20/2024 13:30					
Chromium VI, Soil		06/05/2024	08:48	<0.0800	mg/kg	0.080	EPA 7199
Hot Water Soluble Boron		06/11/2024	10:07	1.086	mg/kg	0.050	Boron Hot Water Extraction
pH, Soils Temperature		06/05/2024	07:45	22.2	°C		
pH, Soils		06/05/2024	07:45	8.86	S.U.	0.01	EPA 9045D
Total Metals, Soils - Arsenic		06/10/2024	13:30 10.00	2.077	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Barium		06/10/2024	13:30 10.00	220.520	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Cadmium		06/10/2024	13:30 10.00	0.151	mg/kg	0.001	EPA 6020B
Total Metals, Soils - Copper		06/10/2024	13:30 10.00	10.480	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Lead		06/10/2024	13:30 10.00	10.058	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Nickel		06/10/2024	13:30 10.00	7.949	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Selenium		06/10/2024	13:30 10.00	2.826	mg/kg	0.025	EPA 6020B
Total Metals, Soils - Silver		06/10/2024	13:30 10.00	<0.250 - RL 1	mg/kg	0.250	EPA 6020B
Total Metals, Soils - Zinc		06/10/2024	13:30 10.00	30.094	mg/kg	0.025	EPA 6020B
<b>AA08677-3</b>	North Pit Floor	<b>Collected :</b> 05/20/2024 13:30					
DRO & ORO, Soil - DRO		06/10/2024	10:59	Not Detected	mg/kg	100.00	EPA 8015D
DRO & ORO, Soil - ORO		06/10/2024	10:59	Not Detected	mg/kg	100.00	EPA 8015D
Gasoline Range Organics, Soil		06/07/2024	15:53	0.718	mg/kg	0.26827	EPA 8260
SVOC, Soils - 1-methylnaphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - 2-methylnaphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Acenaphthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benz(a)anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(a)pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(b)fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Benzo(k)fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Chrysene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Dibenzo(a,h)anthracene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluoranthene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Fluorene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Indeno(1,2,3-cd)pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
SVOC, Soils - Naphthalene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270

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Sample ID	Customer ID	Collected	Dilution	Result	Units	RL	Method Ref.
Analyte Name		Analysis Start					Recovery
SVOC, Soils - Pyrene		06/13/2024	10:53	Not Detected	mg/kg	0.010	EPA 8270
VOC, Soils - 1,2,4-trimethylbenzene		06/06/2024	13:24	Not Detected	mg/kg	0.00245	EPA 8260d
VOC, Soils - 1,3,5-trimethylbenzene		06/06/2024	13:24	Not Detected	mg/kg	0.005	EPA 8260d
VOC, Soils - Benzene		06/06/2024	13:24	Not Detected	mg/kg	0.00242	EPA 8260d
VOC, Soils - Ethylbenzene		06/06/2024	13:24	Not Detected	mg/kg	0.005	EPA 8260d
VOC, Soils - m&p- xylene		06/06/2024	13:24	<0.00427	mg/kg	0.00427	EPA 8260d
VOC, Soils - o-xylene		06/06/2024	13:24	Not Detected	mg/kg	0.00227	EPA 8260d
VOC, Soils - Toluene		06/06/2024	13:24	Not Detected	mg/kg	0.00263	EPA 8260d
VOC, Soils - Xylenes, total		06/06/2024	13:24	<0.00654	mg/kg	0.00654	EPA 8260d

**QC Report**

BORON-3261			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08678	1.430		0.050	mg/kg		1.481			3.5040	-15 - 15
MB AA08721	0.011			mg/kg						
LCS AA08722	0.864			mg/kg	1.000		86.4	80 - 120		
LCS AA08723	10.027			mg/kg	9.000		111	80 - 120		

CHROM_VI_SOIL-3242			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08642	<0.0800		0.080	mg/kg		<0.0800				
MB AA08659	<0.0800			mg/kg						
LCS AA08661	0.0407			mg/kg	0.0400		102			
LCS AA08662	0.0402			mg/kg	0.0400		100			

ECISOIL_MMHOS-3266			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08650	0.379			mmhos/cm		0.404			6.3857	
LCS AA08736	9.63			mmhos/cm	10.000		96.3			
LCS AA08737	9.69			mmhos/cm	10.000		96.9			

GRO_SOIL-3350			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08764	0.367		0.26827	mg/kg		<0.26827			7.0959	
Matrix Spike AA08764	0.394			mg/kg	2.150	<0.26827	18.3			
MB AA08909	Not Detected			mg/kg						
LCS AA08910	1.834			mg/kg	2.150		85.3			
LCS AA08911	1.741			mg/kg	2.150		81.0			

PH_S-3267			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08647	8.45		0.01	S.U.		8.45			<%MDL%	-5 - 5
LCS AA08739	6.89		0.01	S.U.	6.86		100	95 - 105		
LCS AA08740	6.94		0.01	S.U.	6.86		101	95 - 105		

PH_S-3271			Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Analyte	Result									
DUP AA08677	8.67		0.01	S.U.		8.86			2.1677124928	-5 - 5
LCS AA08753	6.82		0.01	S.U.	6.86		99.4	95 - 105		
LCS AA08754	6.93		0.01	S.U.	6.86		101	95 - 105		



**Division of Environmental Testing**

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Aurora, CO 80045

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**FINAL RESULTS REPORT****Report Date :** 6/13/2024**Report Time :** 13:01**Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A**QC Report**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
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**DRO\_ORO\_SOIL-3291****AA08764****DUP**

DRO	289.698				Not Detected			0.692	
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ORO	468.408				Not Detected			8.34	
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**Matrix Spike**

DRO	291.711		mg/kg	350	Not Detected	83.3			
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ORO	430.909		mg/kg	350	Not Detected	123			
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**AA08807****MB**

DRO	Not Detected		mg/kg						
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ORO	Not Detected		mg/kg						
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**AA08808****LCS**

DRO	343.43		mg/kg			98.1			
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ORO	194.69		mg/kg			55.6			
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**AA08809**

DRO	312.794		mg/kg			89.4			
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ORO	256.535		mg/kg			73.3			
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**METALS\_S-3263****AA08728****MB**

Arsenic	0.000		mg/kg						
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Barium	0.000		mg/kg						
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Cadmium	0.000		mg/kg						
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Copper	0.001		mg/kg						
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Lead	0.000		mg/kg						
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Nickel	0.000		mg/kg						
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Selenium	0.000		mg/kg						
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Silver	0.000		mg/kg						
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Zinc	0.015		mg/kg						
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**AA08730****LCS**

Arsenic	0.087		mg/kg			96.7	80 - 120		
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Barium	0.091		mg/kg			101	80 - 120		
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Cadmium	0.091		mg/kg			101	80 - 120		
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Copper	0.096		mg/kg			107	80 - 120		
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Lead	0.091		mg/kg			101	80 - 120		
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Nickel	0.089		mg/kg			98.9	80 - 120		
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Selenium	0.090		mg/kg			100	80 - 120		
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Silver	0.093		mg/kg			103	80 - 120		
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Zinc	0.090		mg/kg			100	80 - 120		
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**AA08731**

Arsenic	0.087		mg/kg			96.7	80 - 120		
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Aurora, CO 80045

800-440-5184

**FINAL RESULTS REPORT****Report Date :** 6/13/2024**Report Time :** 13:01**Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A**QC Report**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
Barium	0.092		mg/kg			102	80 - 120		
Cadmium	0.091		mg/kg			101	80 - 120		
Copper	0.096		mg/kg			107	80 - 120		
Lead	0.091		mg/kg			101	80 - 120		
Nickel	0.090		mg/kg			100	80 - 120		
Selenium	0.090		mg/kg			100	80 - 120		
Silver	0.095		mg/kg			106	80 - 120		
Zinc	0.090		mg/kg			100	80 - 120		

**SAR-3394****AA08963****MB**

Calcium	0.003	mEq/L
Magnesium	0.005	mEq/L
Sodium	0.030	mEq/L

**AA08964****LCS**

Calcium	11.866	ppm	119
Magnesium	9.772	ppm	97.7
Sodium	9.298	ppm	93.0

**AA08965**

Calcium	459.869	ppm	92.0
Magnesium	421.655	ppm	84.3
Sodium	427.014	ppm	85.4

**SVOC\_SOIL-3358****AA08922****MB**

1-methylnaphthalene	Not Detected	mg/kg
2-methylnaphthalene	Not Detected	mg/kg
Acenaphthene	Not Detected	mg/kg
Anthracene	Not Detected	mg/kg
Benz(a)anthracene	Not Detected	mg/kg
Benzo(a)pyrene	Not Detected	mg/kg
Benzo(b)fluoranthene	Not Detected	mg/kg
Benzo(k)fluoranthene	Not Detected	mg/kg
Chrysene	Not Detected	mg/kg
Dibenzo(a,h)anthracene	Not Detected	mg/kg
Fluoranthene	Not Detected	mg/kg
Fluorene	Not Detected	mg/kg
Indeno(1,2,3-cd)pyrene	Not Detected	mg/kg
Naphthalene	Not Detected	mg/kg
Pyrene	Not Detected	mg/kg

**AA08923****LCS**

1-methylnaphthalene	0.2109	mg/kg	70.3
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**Division of Environmental Testing**

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800-440-5184

**FINAL RESULTS REPORT****Report Date :** 6/13/2024**Report Time :** 13:01**Project Manager:** Ryan Dornbos**Project Name:** Marick A-1**Project Number:** N/A**QC Report**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
2-methylnaphthalene	0.2101		mg/kg			70.0			
Acenaphthene	0.2173		mg/kg			72.4			
Anthracene	0.2891		mg/kg			96.4			
Benz(a)anthracene	0.2469		mg/kg			82.3			
Benzo(a)pyrene	0.2237		mg/kg			74.6			
Benzo(b)fluoranthene	0.2109		mg/kg			70.3			
Benzo(k)fluoranthene	0.3860		mg/kg			129			
Chrysene	0.3216		mg/kg			107			
Dibenzo(a,h)anthracene	0.2153		mg/kg			71.8			
Fluoranthene	0.3814		mg/kg			127			
Fluorene	0.2190		mg/kg			73.0			
Indeno(1,2,3-cd)pyrene	0.2586		mg/kg			86.2			
Naphthalene	0.2101		mg/kg			70.0			
Pyrene	0.3583		mg/kg			119			

**AA08924**

1-methylnaphthalene	0.2355		mg/kg			78.5			
2-methylnaphthalene	0.2134		mg/kg			71.1			
Acenaphthene	0.2323		mg/kg			77.4			
Anthracene	0.3204		mg/kg			107			
Benz(a)anthracene	0.3097		mg/kg			103			
Benzo(a)pyrene	0.3692		mg/kg			123			
Benzo(b)fluoranthene	0.3310		mg/kg			110			
Benzo(k)fluoranthene	0.3752		mg/kg			125			
Chrysene	0.3849		mg/kg			128			
Dibenzo(a,h)anthracene	0.3880		mg/kg			129			
Fluoranthene	0.3447		mg/kg			115			
Fluorene	0.2594		mg/kg			86.5			
Indeno(1,2,3-cd)pyrene	0.3755		mg/kg			125			
Naphthalene	0.26081		mg/kg			86.9			
Pyrene	0.3755		mg/kg			125			

**VOC\_S-3321****AA08838****MB**

1,2,4-trimethylbenzene	<0.00245	mg/kg
1,3,5-trimethylbenzene	<0.005	mg/kg
Benzene	Not Detected	mg/kg
Ethylbenzene	<0.005	mg/kg
m&p- xylene	<0.00427	mg/kg
Naphthalene	Not Detected	mg/kg
o-xylene	<0.00227	mg/kg
Toluene	Not Detected	mg/kg
Xylenes, total	<0.00654	mg/kg

**AA08839****LCS**



## Division of Environmental Testing

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# FINAL RESULTS REPORT

Report Date : 6/13/2024

Report Time : 13:01

Project Manager: Ryan Dornbos

Project Name: Marick A-1

Project Number: N/A

## QC Report

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
1,2,4-trimethylbenzene	0.048		mg/kg			96.0			
1,3,5-trimethylbenzene	0.059		mg/kg			118			
Benzene	0.052		mg/kg			104			
Ethylbenzene	0.060		mg/kg			120			
m&p- xylene	0.104		mg/kg			104			
o-xylene	0.059		mg/kg			118			
Toluene	0.053		mg/kg			106			
Xylenes, total	0.163		mg/kg			109			

## AA08840

1,2,4-trimethylbenzene	0.042		mg/kg			84.0			
1,3,5-trimethylbenzene	0.057		mg/kg			114			
Benzene	0.056		mg/kg			112			
Ethylbenzene	0.060		mg/kg			120			
m&p- xylene	0.102		mg/kg			102			
o-xylene	0.056		mg/kg			112			
Toluene	0.053		mg/kg			106			
Xylenes, total	0.158		mg/kg			105			

## Qualifier

## Explanation

H1	Sample received outside of regulatory holding time.
H2	Sample analyzed outside of regulatory holding time due to a laboratory error.
P1	Sample received outside temperature requirements, 0-6°C.
P2	Sample received unpreserved.
P3	Broken or leaking sample container.
P4	Sample improperly collected
P5	Sample incorrectly preserved
B1	Blank failed high, indicating possible high bias in sample results.
B2	Blank failed low, indicating possible low bias in sample results.
MS	Matrix Spike / Matrix Spike Duplicate recovery and/or RPD limit exceeded, indicating potential matrix interference.
D1	Duplicate RPD limit exceeded due to low sample concentration.
D2	Duplicate RPD limit exceeded due to matrix interference.
S	Surrogate recovery failed, indicating potential matrix interference.
RL1	Reporting limits raised due to matrix interference.
RL2	Reporting limits raised due to limited sample.
U	Sample result less than method detection limit.
J	Sample result less than reporting limit but higher than method detection limit.
E	Electronic loss or corruption of data.
I	Subcontracted sample