

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

January 18, 2024

Costin McQueen

Civitas Resources

650 Southgate Drive

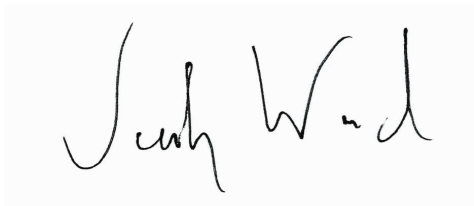
Windsor, CO 80550

RE: Prairie Center HZ Pad

Work Order #2401239

Enclosed are the results of analyses for samples received by Summit Scientific on 01/12/24 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

Jacob Wood For Paul Shrewsbury

President



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WC01	2401239-01	Soil	01/12/24 11:15	01/12/24 16:30
WC-BG01	2401239-02	Soil	01/12/24 11:45	01/12/24 16:30

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4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page 1 of 1
2401239	

Client: Civitas Resources				Send Data To:				Send Invoice To:										
Address: 650 Southgate Dr.				Project Manager: Costin McQueen				Company: Civitas Resources										
City/State/Zip: Windsor Co, 80550				E-Mail: cmcqueen@civiresources.com				Project Name/Location: <i>Prairie Center HZ Pad</i>										
Phone: 720-315-8934				Project Name: <i>Prairie Center HZ Pad</i>				AFE#: <i>CIC: P1427</i>										
Sampler Name: <i>Howard Arnold</i>				Project Number:				PO/Billing Codes: <i>IN/MA: 8520.162</i>										
<i>210-272-7847</i>				Contact: Costin McQueen														
ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other						
1	WC 02	1-12-24	11:15	2			X			X				X				
2	WC-R001	1-12-24	11:45	2			X			X				X	X	X	X	X
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		

Relinquished by: <i>Howard Arnold</i>	Date/Time: <i>1-12-24 2:00 PM</i>	Received by: <i>[Signature]</i>	Date/Time: <i>1/22/24 1030</i>	TAT Business Days	Field DO	Notes:
Relinquished by: <i>SL</i>	Date/Time: <i>1/22/24 1030</i>	Received by: <i>[Signature]</i>	Date/Time: <i>1/22/24 1030</i>	Same Day <input checked="" type="checkbox"/>	Field EC	
				1 Day	Field ORP	
				2 Days	Field pH	
				3 Days	Field Temp.	
				Standard	Field Turb.	
Temperature Upon Receipt: <i>7.1</i>		Corrected Temperature <i>6</i>		IR gun #: <i>1</i>	HNO3 lot #:	

S₂

Sample Receipt Checklist

S2 Work Order# 2401239Client: Cintas Client Project ID: Prairie Center H2 BdShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply) Air ☐ Soil/Solid ☒ Water ☐ Other ☐Temp (°C) Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	no time stamps
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.
AS
Custodian Printed Name

1/12/24
Date/Time



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

WC01
2401239-01 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	0.18	0.0020	mg/kg	1	BHA0510	01/12/24	01/13/24	EPA 8260B	
Toluene	0.13	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.017	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.081	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.031	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.0095	0.0050	"	"	"	"	"	"	
Naphthalene	0.011	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	1.8	0.50	"	"	"	"	"	"	

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0308	76.9 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0433	108 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0410	103 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHA0512	01/12/24	01/13/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	5.45	43.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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PAH by EPA Method 8270D SIM

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BHA0518	01/15/24	01/16/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.00650	0.00500	"	"	"	"	"	"	

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0146	43.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0217	65.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	3.33	2.00	mg/L	1	BHA0516	01/15/24	01/15/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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Total Metals by EPA 6020B

Arsenic	1.21	0.200	mg/kg dry	1	BHA0522	01/15/24	01/17/24	EPA 6020B
Barium	86.2	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.24	0.400	"	"	"	"	"	"
Lead	6.41	0.200	"	"	"	"	"	"
Nickel	2.84	0.400	"	"	"	"	"	"
Silver	0.0206	0.0200	"	"	"	"	"	"
Zinc	14.7	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHA0547	01/15/24	01/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	169	0.0500	mg/L dry	1	BHA0511	01/12/24	01/16/24	EPA 6020B	
Magnesium	20.7	0.0500	"	"	"	"	"	"	
Sodium	2870	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	55.5	0.00100	units	1	BHA0600	01/16/24	01/16/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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2401239-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.5		%	1	BHA0515	01/15/24	01/15/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0170	0.0100	mmhos/cm	1	BHA0540	01/15/24	01/16/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/12/24 11:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.16		pH Units	1	BHA0539	01/15/24	01/16/24	EPA 9045D	

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WC-BG01
2401239-02 (Soil)

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Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Boron	ND	2.00		mg/L	1	BHA0516	01/15/24	01/15/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	0.956	0.200		mg/kg dry	1	BHA0522	01/15/24	01/17/24	EPA 6020B	
Barium	83.5	0.400		"	"	"	"	"	"	
Cadmium	0.254	0.200		"	"	"	"	"	"	
Copper	2.94	0.400		"	"	"	"	"	"	
Lead	10.9	0.200		"	"	"	"	"	"	
Nickel	2.16	0.400		"	"	"	"	"	"	
Silver	0.167	0.0200		"	"	"	"	"	"	
Zinc	11.0	0.400		"	"	"	"	"	"	
Selenium	ND	0.260		"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chromium, Hexavalent	ND	0.30		mg/kg dry	1	BHA0547	01/15/24	01/15/24	EPA 7196A	

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Calcium	17.6	0.0500		mg/L dry	1	BHA0511	01/12/24	01/16/24	EPA 6020B	
Magnesium	3.55	0.0500		"	"	"	"	"	"	
Sodium	3.67	0.0500		"	"	"	"	"	"	

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Project Number: [none]
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Reported:
01/18/24 11:36

WC-BG01
2401239-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.209	0.00100	units	1	BHA0600	01/16/24	01/16/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.8		%	1	BHA0515	01/15/24	01/15/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.100	0.0100	mmhos/cm	1	BHA0540	01/15/24	01/16/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/12/24 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.50		pH Units	1	BHA0539	01/15/24	01/16/24	EPA 9045D	

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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHA0510 - EPA 5030 Soil MS

Blank (BHA0510-BLK1)

Prepared & Analyzed: 01/12/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0376		"	0.0400		94.0	50-150			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	50-150			

LCS (BHA0510-BS1)

Prepared & Analyzed: 01/12/24

Benzene	0.0962	0.0020	mg/kg	0.100		96.2	70-130			
Toluene	0.119	0.0050	"	0.100		119	70-130			
Ethylbenzene	0.110	0.0050	"	0.100		110	70-130			
m,p-Xylene	0.223	0.010	"	0.200		111	70-130			
o-Xylene	0.110	0.0050	"	0.100		110	70-130			
1,2,4-Trimethylbenzene	0.106	0.0050	"	0.100		106	70-130			
1,3,5-Trimethylbenzene	0.105	0.0050	"	0.100		105	70-130			
Naphthalene	0.0936	0.0038	"	0.100		93.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0393		"	0.0400		98.2	50-150			
Surrogate: Toluene-d8	0.0432		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	50-150			

Matrix Spike (BHA0510-MS1)

Source: 2401232-01

Prepared & Analyzed: 01/12/24

Benzene	0.0865	0.0020	mg/kg	0.100	ND	86.5	70-130			
Toluene	0.107	0.0050	"	0.100	ND	107	70-130			
Ethylbenzene	0.0962	0.0050	"	0.100	ND	96.2	70-130			
m,p-Xylene	0.198	0.010	"	0.200	ND	99.0	70-130			
o-Xylene	0.100	0.0050	"	0.100	ND	100	70-130			
1,2,4-Trimethylbenzene	0.0890	0.0050	"	0.100	ND	89.0	70-130			
1,3,5-Trimethylbenzene	0.0863	0.0050	"	0.100	ND	86.3	70-130			
Naphthalene	0.0851	0.0038	"	0.100	ND	85.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0348		"	0.0400		86.9	50-150			
Surrogate: Toluene-d8	0.0430		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	50-150			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch BHA0510 - EPA 5030 Soil MS

Matrix Spike Dup (BHA0510-MSD1)	Source: 2401232-01			Prepared & Analyzed: 01/12/24						
Benzene	0.107	0.0020	mg/kg	0.100	ND	107	70-130	21.1	30	
Toluene	0.130	0.0050	"	0.100	ND	130	70-130	19.7	30	
Ethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130	14.0	30	
m,p-Xylene	0.231	0.010	"	0.200	ND	115	70-130	15.3	30	
o-Xylene	0.111	0.0050	"	0.100	ND	111	70-130	10.3	30	
1,2,4-Trimethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130	12.7	30	
1,3,5-Trimethylbenzene	0.0988	0.0050	"	0.100	ND	98.8	70-130	13.5	30	
Naphthalene	0.0871	0.0038	"	0.100	ND	87.1	70-130	2.26	30	
Surrogate: 1,2-Dichloroethane-d4	0.0310		"	0.0400		77.6	50-150			
Surrogate: Toluene-d8	0.0459		"	0.0400		115	50-150			
Surrogate: 4-Bromofluorobenzene	0.0427		"	0.0400		107	50-150			

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650 Southgate Drive
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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BHA0512 - EPA 3550A

Blank (BHA0512-BLK1)

Prepared & Analyzed: 01/12/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	10.8		"	12.5		86.4	30-150			

LCS (BHA0512-BS1)

Prepared & Analyzed: 01/12/24

C10-C28 (DRO)	429	50	mg/kg	500		85.7	70-130			
Surrogate: o-Terphenyl	9.67		"	12.5		77.4	30-150			

Matrix Spike (BHA0512-MS1)

Source: 2401232-01

Prepared & Analyzed: 01/12/24

C10-C28 (DRO)	449	50	mg/kg	500	5.93	88.5	70-130			
Surrogate: o-Terphenyl	7.32		"	12.5		58.5	30-150			

Matrix Spike Dup (BHA0512-MSD1)

Source: 2401232-01

Prepared & Analyzed: 01/12/24

C10-C28 (DRO)	420	50	mg/kg	500	5.93	82.8	70-130	6.57	20	
Surrogate: o-Terphenyl	7.58		"	12.5		60.7	30-150			

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Project: Prairie Center HZ Pad
Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHA0518 - EPA 5030 Soil MS

Blank (BHA0518-BLK1)

Prepared & Analyzed: 01/15/24

Acenaphthene	ND	0.00500	mg/kg								
Anthracene	ND	0.00500	"								
Benzo (a) anthracene	ND	0.00500	"								
Benzo (a) pyrene	ND	0.00500	"								
Benzo (b) fluoranthene	ND	0.00500	"								
Benzo (k) fluoranthene	ND	0.00500	"								
Chrysene	ND	0.00500	"								
Dibenz (a,h) anthracene	ND	0.00500	"								
Fluoranthene	ND	0.00500	"								
Fluorene	ND	0.00500	"								
Indeno (1,2,3-cd) pyrene	ND	0.00500	"								
Pyrene	ND	0.00500	"								
1-Methylnaphthalene	ND	0.00500	"								
2-Methylnaphthalene	ND	0.00500	"								
Surrogate: 2-Methylnaphthalene-d10	0.0140		"	0.0333		42.1		40-150			
Surrogate: Fluoranthene-d10	0.0325		"	0.0333		97.4		40-150			

LCS (BHA0518-BS1)

Prepared & Analyzed: 01/15/24

Acenaphthene	0.0284	0.00500	mg/kg	0.0333		85.1		31-137			
Anthracene	0.0301	0.00500	"	0.0333		90.2		30-120			
Benzo (a) anthracene	0.0289	0.00500	"	0.0333		86.6		30-120			
Benzo (a) pyrene	0.0272	0.00500	"	0.0333		81.5		30-120			
Benzo (b) fluoranthene	0.0281	0.00500	"	0.0333		84.4		30-120			
Benzo (k) fluoranthene	0.0308	0.00500	"	0.0333		92.4		30-120			
Chrysene	0.0325	0.00500	"	0.0333		97.6		30-120			
Dibenz (a,h) anthracene	0.0249	0.00500	"	0.0333		74.8		30-120			
Fluoranthene	0.0303	0.00500	"	0.0333		90.9		30-120			
Fluorene	0.0314	0.00500	"	0.0333		94.1		30-120			
Indeno (1,2,3-cd) pyrene	0.0244	0.00500	"	0.0333		73.1		30-120			
Pyrene	0.0317	0.00500	"	0.0333		95.2		35-142			
1-Methylnaphthalene	0.0243	0.00500	"	0.0333		73.0		35-142			
2-Methylnaphthalene	0.0281	0.00500	"	0.0333		84.2		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0240		"	0.0333		71.9		40-150			
Surrogate: Fluoranthene-d10	0.0305		"	0.0333		91.4		40-150			

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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

PAH by EPA Method 8270D SIM - Quality Control

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

Batch BHA0518 - EPA 5030 Soil MS

Matrix Spike (BHA0518-MS1)

Source: 2401232-01

Prepared & Analyzed: 01/15/24

Acenaphthene	0.0148	0.00500	mg/kg	0.0333	ND	44.5	31-137		
Anthracene	0.0161	0.00500	"	0.0333	ND	48.3	30-120		
Benzo (a) anthracene	0.0136	0.00500	"	0.0333	ND	40.8	30-120		
Benzo (a) pyrene	0.0150	0.00500	"	0.0333	ND	44.9	30-120		
Benzo (b) fluoranthene	0.0139	0.00500	"	0.0333	ND	41.7	30-120		
Benzo (k) fluoranthene	0.0149	0.00500	"	0.0333	ND	44.8	30-120		
Chrysene	0.0144	0.00500	"	0.0333	ND	43.2	30-120		
Dibenz (a,h) anthracene	0.0142	0.00500	"	0.0333	ND	42.5	30-120		
Fluoranthene	0.0154	0.00500	"	0.0333	ND	46.3	30-120		
Fluorene	0.0173	0.00500	"	0.0333	ND	51.9	30-120		
Indeno (1,2,3-cd) pyrene	0.0143	0.00500	"	0.0333	ND	43.0	30-120		
Pyrene	0.0155	0.00500	"	0.0333	ND	46.6	35-142		
1-Methylnaphthalene	0.0146	0.00500	"	0.0333	ND	43.7	15-130		
2-Methylnaphthalene	0.0166	0.00500	"	0.0333	ND	49.9	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0142		"	0.0333		42.5	40-150		
Surrogate: Fluoranthene-d10	0.0162		"	0.0333		48.6	40-150		

Matrix Spike Dup (BHA0518-MSD1)

Source: 2401232-01

Prepared & Analyzed: 01/15/24

Acenaphthene	0.0139	0.00500	mg/kg	0.0333	ND	41.6	31-137	6.70	30
Anthracene	0.0149	0.00500	"	0.0333	ND	44.7	30-120	7.92	30
Benzo (a) anthracene	0.0144	0.00500	"	0.0333	ND	43.1	30-120	5.37	30
Benzo (a) pyrene	0.0153	0.00500	"	0.0333	ND	46.0	30-120	2.49	30
Benzo (b) fluoranthene	0.0158	0.00500	"	0.0333	ND	47.4	30-120	12.6	30
Benzo (k) fluoranthene	0.0168	0.00500	"	0.0333	ND	50.4	30-120	11.9	30
Chrysene	0.0136	0.00500	"	0.0333	ND	40.7	30-120	5.98	30
Dibenz (a,h) anthracene	0.0140	0.00500	"	0.0333	ND	41.9	30-120	1.36	30
Fluoranthene	0.0146	0.00500	"	0.0333	ND	43.7	30-120	5.77	30
Fluorene	0.0159	0.00500	"	0.0333	ND	47.7	30-120	8.46	30
Indeno (1,2,3-cd) pyrene	0.0161	0.00500	"	0.0333	ND	48.3	30-120	11.7	30
Pyrene	0.0151	0.00500	"	0.0333	ND	45.4	35-142	2.58	30
1-Methylnaphthalene	0.0156	0.00500	"	0.0333	ND	46.9	15-130	7.08	50
2-Methylnaphthalene	0.0155	0.00500	"	0.0333	ND	46.6	15-130	6.65	50
Surrogate: 2-Methylnaphthalene-d10	0.0143		"	0.0333		42.8	40-150		
Surrogate: Fluoranthene-d10	0.0152		"	0.0333		45.6	40-150		

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control
Summit Scientific

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

Batch BHA0516 - EPA 3050B

Blank (BHA0516-BLK1)

Prepared & Analyzed: 01/15/24

Boron ND 2.00 mg/L

LCS (BHA0516-BS1)

Prepared & Analyzed: 01/15/24

Boron 4.06 2.00 mg/L 5.00 81.2 80-120

Duplicate (BHA0516-DUP1)

Source: 2401232-01

Prepared & Analyzed: 01/15/24

Boron ND 2.00 mg/L ND 20

Matrix Spike (BHA0516-MS1)

Source: 2401232-01

Prepared & Analyzed: 01/15/24

Boron 4.24 2.00 mg/L 5.00 ND 84.8 75-125

Matrix Spike Dup (BHA0516-MSD1)

Source: 2401232-01

Prepared & Analyzed: 01/15/24

Boron 4.47 2.00 mg/L 5.00 ND 89.5 75-125 5.29 25

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Project: Prairie Center HZ Pad
Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Total Metals by EPA 6020B - Quality Control
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Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHA0522 - EPA 3050B

Blank (BHA0522-BLK1)

Prepared: 01/15/24 Analyzed: 01/17/24

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"
Selenium	ND	0.260	"

LCS (BHA0522-BS1)

Prepared: 01/15/24 Analyzed: 01/17/24

Arsenic	39.6	0.200	mg/kg wet	40.0	99.1	80-120
Barium	46.6	0.400	"	40.0	116	80-120
Cadmium	2.25	0.200	"	2.00	112	80-120
Copper	39.8	0.400	"	40.0	99.4	80-120
Lead	22.2	0.200	"	20.0	111	80-120
Nickel	39.0	0.400	"	40.0	97.5	80-120
Silver	2.24	0.0200	"	2.00	112	80-120
Zinc	39.3	0.400	"	40.0	98.3	80-120
Selenium	4.32	0.260	"	4.00	108	80-120

Duplicate (BHA0522-DUP1)

Source: 2401232-01

Prepared: 01/15/24 Analyzed: 01/17/24

Arsenic	0.701	0.200	mg/kg dry	0.887	23.5	20	QR-01
Barium	34.5	0.400	"	33.8	2.11	20	
Cadmium	0.0542	0.200	"	0.0636	16.0	20	
Copper	2.20	0.400	"	1.93	13.1	20	
Lead	2.15	0.200	"	2.50	15.2	20	
Nickel	1.39	0.400	"	1.22	13.3	20	
Silver	0.00985	0.0200	"	0.00780	23.3	20	QR-01
Zinc	4.42	0.400	"	4.13	6.73	20	
Selenium	ND	0.260	"	ND		20	

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Civitas Resources
650 Southgate Drive
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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHA0522 - EPA 3050B

Matrix Spike (BHA0522-MS1)		Source: 2401232-01			Prepared: 01/15/24 Analyzed: 01/17/24					
Arsenic	18.4	0.200	mg/kg dry	41.0	0.887	42.8	75-125			QM-07
Barium	77.0	0.400	"	41.0	33.8	105	75-125			
Cadmium	2.15	0.200	"	2.05	0.0636	102	75-125			
Copper	19.9	0.400	"	41.0	1.93	43.7	75-125			QM-07
Lead	22.3	0.200	"	20.5	2.50	96.7	75-125			
Nickel	18.8	0.400	"	41.0	1.22	42.9	75-125			QM-07
Silver	2.06	0.0200	"	2.05	0.00780	100	75-125			
Zinc	22.1	0.400	"	41.0	4.13	43.8	75-125			QM-07
Selenium	4.23	0.260	"	4.10	ND	103	75-125			

Matrix Spike Dup (BHA0522-MSD1)		Source: 2401232-01			Prepared: 01/15/24 Analyzed: 01/17/24					
Arsenic	18.3	0.200	mg/kg dry	41.0	0.887	42.4	75-125	0.840	25	QM-07
Barium	80.5	0.400	"	41.0	33.8	114	75-125	4.45	25	
Cadmium	2.27	0.200	"	2.05	0.0636	108	75-125	5.23	25	
Copper	19.8	0.400	"	41.0	1.93	43.7	75-125	0.130	25	QM-07
Lead	23.5	0.200	"	20.5	2.50	102	75-125	4.96	25	
Nickel	18.9	0.400	"	41.0	1.22	43.1	75-125	0.498	25	QM-07
Silver	2.16	0.0200	"	2.05	0.00780	105	75-125	4.42	25	
Zinc	21.8	0.400	"	41.0	4.13	43.1	75-125	1.37	25	QM-07
Selenium	4.27	0.260	"	4.10	ND	104	75-125	1.04	25	

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Project: Prairie Center HZ Pad
Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHA0547 - 3060A Mod

Blank (BHA0547-BLK1)

Prepared & Analyzed: 01/15/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHA0547-BS1)

Prepared & Analyzed: 01/15/24

Chromium, Hexavalent 23.6 0.30 mg/kg wet 25.0 94.2 80-120

Duplicate (BHA0547-DUP1)

Source: 2311306-06

Prepared & Analyzed: 01/15/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHA0547-MS1)

Source: 2311306-06

Prepared & Analyzed: 01/15/24

Chromium, Hexavalent 26.9 0.30 mg/kg dry 26.1 ND 103 75-125

Matrix Spike Dup (BHA0547-MSD1)

Source: 2311306-06

Prepared & Analyzed: 01/15/24

Chromium, Hexavalent 26.9 0.30 mg/kg dry 26.1 ND 103 75-125 0.194 20

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Civitas Resources
650 Southgate Drive
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Project: Prairie Center HZ Pad

Project Number: [none]

Project Manager: Costin McQueen

Reported:

01/18/24 11:36

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BHA0511 - General Preparation

Blank (BHA0511-BLK1)

Prepared: 01/12/24 Analyzed: 01/16/24

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BHA0511-BS1)

Prepared: 01/12/24 Analyzed: 01/16/24

Calcium	5.61	0.0500	mg/L wet	5.00	112	70-130
Magnesium	5.59	0.0500	"	5.00	112	70-130
Sodium	5.59	0.0500	"	5.00	112	70-130

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Project: Prairie Center HZ Pad

Project Number: [none]

Project Manager: Costin McQueen

Reported:

01/18/24 11:36

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

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

Batch BHA0515 - General Preparation

Duplicate (BHA0515-DUP1)		Source: 2311344-01			Prepared & Analyzed: 01/15/24						
% Solids	79.2		%		78.0			1.52		20	

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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control

Summit Scientific

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

Batch BHA0540 - General Preparation

Blank (BHA0540-BLK1)

Prepared: 01/15/24 Analyzed: 01/16/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHA0540-BS1)

Prepared: 01/15/24 Analyzed: 01/16/24

Specific Conductance (EC) 0.150 0.0100 mmhos/cm 0.150 100 95-105

Duplicate (BHA0540-DUP1)

Source: 2401232-01

Prepared: 01/15/24 Analyzed: 01/16/24

Specific Conductance (EC) 0.0700 0.0100 mmhos/cm 0.0692 1.26 20

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Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control
Summit Scientific

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

Batch BHA0539 - General Preparation

LCS (BHA0539-BS1)

Prepared: 01/15/24 Analyzed: 01/16/24

pH	9.16	pH Units	9.18	99.8	95-105
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Duplicate (BHA0539-DUP1)

Source: 2401232-01

Prepared: 01/15/24 Analyzed: 01/16/24

pH	8.52	pH Units	8.92	4.59	20
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Prairie Center HZ Pad

Project Number: [none]
Project Manager: Costin McQueen

Reported:
01/18/24 11:36

Notes and Definitions

QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference