

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 08, 2024

Karen Olson

Tasman Geosciences

6855 W. 119th Ave.

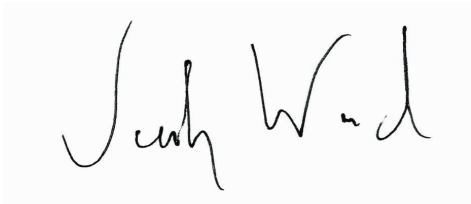
Broomfield, CO 80020

RE: PDC - Bunn M 1-34 Wellhead

Work Order #2410013

Enclosed are the results of analyses for samples received by Summit Scientific on 10/01/24 17:52. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style with a large initial "J" and a distinct "W".

Jacob Wood For Paul Shrewsbury

President



Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@6'	2410013-01	Soil	10/01/24 11:19	10/01/24 17:52
SS02@8'	2410013-02	Soil	10/01/24 11:27	10/01/24 17:52
SS03@9'	2410013-03	Soil	10/01/24 11:47	10/01/24 17:52
SS04@6'	2410013-04	Soil	10/01/24 14:26	10/01/24 17:52
SS05@8'	2410013-05	Soil	10/01/24 14:29	10/01/24 17:52
SS06@6'	2410013-06	Soil	10/01/24 14:33	10/01/24 17:52
SS07@8'	2410013-07	Soil	10/01/24 14:37	10/01/24 17:52
SS08@6'	2410013-08	Soil	10/01/24 16:00	10/01/24 17:52
SS09@8'	2410013-09	Soil	10/01/24 16:05	10/01/24 17:52
SS10@12'	2410013-10	Soil	10/01/24 16:10	10/01/24 17:52
GW01	2410013-11	Water	10/01/24 11:50	10/01/24 17:52

Summit Scientific

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Client: PDC / Tasman		Project Manager: Karen Olson		Company: PDC Energy	
Address: 6855 W 119th Ave		E-Mail: karen.olson@chevron.com		Project Name/Location: Bunn M. 1-34 Wellhead	
City/State/Zip: Broomfield / CO / 80020				AFE#:	
Phone: 303-487-1228		Project Name: Bunn M. 1-34 Wellhead		PO/Billing Codes:	
Sampler Name: Matthew Wentzel		Project Number:		Contact: Karen Olson	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Air-Canister #	Other	Analysis Requested						Special Instructions
					HCl	HNO3	None	Other	Water	Soil			BTEXN - 8260B	1,2,4 & 1,3,5-TMB	TDS, Cl, SO4	VOC, TPH, PAH-915	PH, EC, SAR	Boron	
1	SS01 @ 6'	10.1.24	1119	3			X			X				X	X	X	X		
2	SS02 @ 8'		1127	1															
3	SS03 @ 7'		1147	1															
4	SS04 @ 6'		1426	1															
5	SS05 @ 8'		1429	1															
6	SS06 @ 6'		1433	1															
7	SS07 @ 8'		1437	1															
8	SS08 @ 6'		1600	1															
9	SS09 @ 8'		1605	1															
10	SS10 @ 12'		1610	1															
11	GW01		1150	3				X				X	X	X					
12																			
13																			
14																			
15																			

Relinquished by:	Date/Time: 10.1.24 1800	Received by: Tasman Lockbox	Date/Time: 10.1.24 1800	TAT Business Days	Field DO	Notes: ★ GW inorganic on standard ★ Soil samples: BTEXN, TMBs, TPH on same day other constituents on standard.
Relinquished by: Tasman Lockbox	Date/Time: 10.24 1752	Received by:	Date/Time: 10.24 1752	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: 10.3	Corrected Temperature: 6	IR gun #: 1	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2410013

Client: Poc / Gasman Client Project ID: Bannm. 1-34 wellhead

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

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"/>	over 2CE
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
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

10/1/24
Date/Time

Custodian Printed Name



Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS01@6'
2410013-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0434	108 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0392	98.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0397	99.3 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHJ0054	10/01/24	10/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.4	91.1 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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2410013-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0180	53.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0187	56.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SS01@6'
2410013-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	0.739	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B
Barium	18.1	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	1.18	0.400	"	"	"	"	"	"
Lead	1.31	0.200	"	"	"	"	"	"
Nickel	1.61	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	5.96	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	15.0	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	7.12	0.0500	"	"	"	"	"	"	
Sodium	13.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.735	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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10/08/24 14:51

SS01@6'
2410013-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.9		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.211	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 11:19**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.72		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

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SS02@8'
2410013-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0439	110 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0397	99.2 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0400	99.9 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHJ0054	10/01/24	10/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	7.10	56.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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SS02@8'
2410013-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0202	60.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0224	67.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: [none]
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10/08/24 14:51

SS02@8'
2410013-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.948	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	21.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.63	0.400	"	"	"	"	"	"	
Lead	1.78	0.200	"	"	"	"	"	"	
Nickel	1.93	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.32	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	21.1	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	7.67	0.0500	"	"	"	"	"	"	
Sodium	14.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.664	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS02@8'
2410013-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.7		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.230	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 11:27**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.54		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS03@9'
2410013-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0398	99.5 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0389	97.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0409	102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHJ0054	10/01/24	10/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.77	70.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS03@9'
2410013-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0164	49.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0192	57.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS03@9'
2410013-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.24	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B
Barium	6.27	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	1.59	0.400	"	"	"	"	"	"
Lead	0.779	0.200	"	"	"	"	"	"
Nickel	1.18	0.400	"	"	"	"	"	"
Silver	0.147	0.0200	"	"	"	"	"	"
Zinc	3.77	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	28.4	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	12.1	0.0500	"	"	"	"	"	"	
Sodium	19.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.784	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS03@9'
2410013-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	91.7			%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 11:47**


Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.373	0.0100		mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 11:47**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.05			pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

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Tasman Geosciences
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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS04@6'
2410013-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0408	102 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0391	97.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0409	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHJ0054	10/01/24	10/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.24	65.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS04@6'
2410013-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0188	56.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0208	62.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS04@6'
2410013-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	1.85	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B
Barium	47.5	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.90	0.400	"	"	"	"	"	"
Lead	3.47	0.200	"	"	"	"	"	"
Nickel	4.12	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	13.5	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	27.3	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	21.9	0.0500	"	"	"	"	"	"	
Sodium	95.1	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.29	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS04@6'
2410013-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.1		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.783	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 14:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.74		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS05@8'
2410013-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0431	108 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0386	96.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0398	99.5 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHJ0054	10/01/24	10/01/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	7.80	62.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS05@8'
2410013-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0139	41.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0158	47.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS05@8'
2410013-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.59	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	44.2	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	3.82	0.400	"	"	"	"	"	"	
Lead	3.32	0.200	"	"	"	"	"	"	
Nickel	3.81	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	13.2	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	26.5	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	11.7	0.0500	"	"	"	"	"	"	
Sodium	15.2	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.619	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS05@8'
2410013-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.8		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 14:29**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.208	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 14:29**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.56		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific



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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS06@6'
2410013-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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		"	"	"	"	"	"	

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0440	110 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0392	98.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0396	98.9 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHJ0054	10/01/24	10/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.04	72.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS06@6'
2410013-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0168	50.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0193	58.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS06@6'
2410013-06 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.62	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	67.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.78	0.400	"	"	"	"	"	"	
Lead	1.33	0.200	"	"	"	"	"	"	
Nickel	1.70	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.67	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	15.2	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	6.42	0.0500	"	"	"	"	"	"	
Sodium	10.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.591	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS06@6'
2410013-06 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	95.0			%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.179	0.0100		mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 14:33**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.81			pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS07@8'
2410013-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHJ0051	10/01/24	10/01/24	EPA 8260B	
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	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0454	114 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0400	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0403	101 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHJ0054	10/01/24	10/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	6.37	50.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS07@8'
2410013-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0185	55.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0207	62.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS07@8'
2410013-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.594	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	8.89	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.43	0.400	"	"	"	"	"	"	
Lead	1.12	0.200	"	"	"	"	"	"	
Nickel	1.32	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	4.81	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: 10/01/24 14:37

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: 10/01/24 14:37

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	22.1	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	9.97	0.0500	"	"	"	"	"	"	
Sodium	17.7	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 10/01/24 14:37

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.785	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS07@8'
2410013-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.1		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.315	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 14:37**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.93		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS08@6'
2410013-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHJ0051	10/01/24	10/02/24	EPA 8260B	
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	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0387	96.7 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0386	96.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0387	96.7 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHJ0054	10/01/24	10/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.9	87.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS08@6'
2410013-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0185	55.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0200	59.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS08@6'
2410013-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.04	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	25.7	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.29	0.400	"	"	"	"	"	"	
Lead	1.11	0.200	"	"	"	"	"	"	
Nickel	1.63	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.27	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	6.94	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	2.78	0.0500	"	"	"	"	"	"	
Sodium	5.03	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.408	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS08@6'
2410013-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	96.0		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0761	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 16:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS09@8'
2410013-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHJ0051	10/01/24	10/02/24	EPA 8260B	
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		"	"	"	"	"	"	

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0400	100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0392	98.0 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0384	95.9 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHJ0054	10/01/24	10/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.1	89.0 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS09@8'
2410013-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0164	49.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0201	60.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS09@8'
2410013-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.29	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	14.8	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	1.27	0.400	"	"	"	"	"	"	
Lead	1.40	0.200	"	"	"	"	"	"	
Nickel	1.40	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	5.91	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	18.1	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	7.47	0.0500	"	"	"	"	"	"	
Sodium	14.1	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.704	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS09@8'
2410013-09 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.7		%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.250	0.0100	mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 16:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.47		pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific

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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS10@12'
2410013-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHJ0051	10/01/24	10/02/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	0.010	0.0050	"	"	"	"	"	"	
Xylenes (total)	0.028	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	0.081	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	0.038	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	8.9	0.50	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0464	116 %	50-150		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	0.0416	104 %	50-150		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0449	112 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHJ0054	10/01/24	10/02/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: o-Terphenyl</i>	9.67	77.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS10@12'
2410013-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHJ0132	10/03/24	10/04/24	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	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0175	52.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0213	64.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHJ0085	10/02/24	10/05/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS10@12'
2410013-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	1.02	0.200	mg/kg dry	1	BHJ0145	10/03/24	10/04/24	EPA 6020B	
Barium	16.1	0.400	"	"	"	"	"	"	
Cadmium	ND	0.200	"	"	"	"	"	"	
Copper	2.03	0.400	"	"	"	"	"	"	
Lead	2.17	0.200	"	"	"	"	"	"	
Nickel	2.16	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	7.43	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHJ0155	10/03/24	10/03/24	EPA 7196A	

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

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	30.0	0.0500	mg/L dry	1	BHJ0105	10/02/24	10/04/24	EPA 6020B	
Magnesium	11.3	0.0500	"	"	"	"	"	"	
Sodium	18.4	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.727	0.00100	units	1	BHJ0245	10/06/24	10/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Tasman Geosciences
6855 W. 119th Ave.
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

SS10@12'
2410013-10 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	91.4			%	1	BHJ0078	10/02/24	10/02/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.339	0.0100		mmhos/cm	1	BHJ0106	10/02/24	10/03/24	EPA 120.1	

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

Date Sampled: **10/01/24 16:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.19			pH Units	1	BHJ0107	10/02/24	10/03/24	EPA 9045D	

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

GW01
2410013-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/01/24 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	BHJ0052	10/01/24	10/01/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	6.3	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **10/01/24 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.2	98.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	9.39	70.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.7	95.0 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/01/24 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	47.6	0.0600	mg/L	50	BHJ0274	10/07/24	10/07/24	EPA 300.0	
Sulfate	327	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/01/24 11:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	878	10.0	mg/L	1	BHJ0125	10/03/24	10/04/24	SM2540C	

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHJ0051 - EPA 5030 Soil MS

Blank (BHJ0051-BLK1)

Prepared: 10/01/24 Analyzed: 10/02/24

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0388		"	0.0400		97.1	50-150			
<i>Surrogate: Toluene-d8</i>	0.0404		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0392		"	0.0400		98.1	50-150			

LCS (BHJ0051-BS1)

Prepared: 10/01/24 Analyzed: 10/02/24

Benzene	0.101	0.0020	mg/kg	0.100		101	70-130			
Toluene	0.0964	0.0050	"	0.100		96.4	70-130			
Ethylbenzene	0.104	0.0050	"	0.100		104	70-130			
m,p-Xylene	0.201	0.010	"	0.200		100	70-130			
o-Xylene	0.100	0.0050	"	0.100		100	70-130			
1,2,4-Trimethylbenzene	0.100	0.0050	"	0.100		100	70-130			
1,3,5-Trimethylbenzene	0.100	0.0050	"	0.100		100	70-130			
Naphthalene	0.0864	0.0038	"	0.100		86.4	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0383		"	0.0400		95.8	50-150			
<i>Surrogate: Toluene-d8</i>	0.0395		"	0.0400		98.8	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0374		"	0.0400		93.6	50-150			

Matrix Spike (BHJ0051-MS1)

Source: 2410011-01

Prepared: 10/01/24 Analyzed: 10/02/24

Benzene	0.0977	0.0020	mg/kg	0.100	ND	97.7	70-130			
Toluene	0.0952	0.0050	"	0.100	ND	95.2	70-130			
Ethylbenzene	0.103	0.0050	"	0.100	ND	103	70-130			
m,p-Xylene	0.201	0.010	"	0.200	ND	100	70-130			
o-Xylene	0.0974	0.0050	"	0.100	ND	97.4	70-130			
1,2,4-Trimethylbenzene	0.0983	0.0050	"	0.100	ND	98.3	70-130			
1,3,5-Trimethylbenzene	0.0988	0.0050	"	0.100	ND	98.8	70-130			
Naphthalene	0.0782	0.0038	"	0.100	ND	78.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0400		"	0.0400		99.9	50-150			
<i>Surrogate: Toluene-d8</i>	0.0396		"	0.0400		99.1	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0395		"	0.0400		98.8	50-150			

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Tasman Geosciences
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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

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

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

Batch BHJ0051 - EPA 5030 Soil MS

Matrix Spike Dup (BHJ0051-MSD1)	Source: 2410011-01			Prepared: 10/01/24		Analyzed: 10/02/24				
Benzene	0.0969	0.0020	mg/kg	0.100	ND	96.9	70-130	0.863	30	
Toluene	0.0942	0.0050	"	0.100	ND	94.2	70-130	1.05	30	
Ethylbenzene	0.101	0.0050	"	0.100	ND	101	70-130	1.82	30	
m,p-Xylene	0.195	0.010	"	0.200	ND	97.3	70-130	3.17	30	
o-Xylene	0.0959	0.0050	"	0.100	ND	95.9	70-130	1.58	30	
1,2,4-Trimethylbenzene	0.0956	0.0050	"	0.100	ND	95.6	70-130	2.72	30	
1,3,5-Trimethylbenzene	0.0974	0.0050	"	0.100	ND	97.4	70-130	1.50	30	
Naphthalene	0.0789	0.0038	"	0.100	ND	78.9	70-130	0.917	30	
Surrogate: 1,2-Dichloroethane-d4	0.0398		"	0.0400		99.4	50-150			
Surrogate: Toluene-d8	0.0390		"	0.0400		97.4	50-150			
Surrogate: 4-Bromofluorobenzene	0.0376		"	0.0400		94.0	50-150			

Batch BHJ0052 - EPA 5030 Water MS

Blank (BHJ0052-BLK1)	Prepared & Analyzed: 10/01/24									
Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.3		98.4	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.3	20-170			
Surrogate: 4-Bromofluorobenzene	16.5		"	13.3		124	21-167			

LCS (BHJ0052-BS1)	Prepared & Analyzed: 10/01/24									
Benzene	37.0	1.0	ug/l	33.3		111	51-132			
Toluene	37.9	1.0	"	33.3		114	51-138			
Ethylbenzene	36.2	1.0	"	33.3		109	58-146			
m,p-Xylene	74.7	2.0	"	66.7		112	57-144			
o-Xylene	33.9	1.0	"	33.3		102	53-146			
Naphthalene	24.4	1.0	"	33.3		73.2	70-130			
1,2,4-Trimethylbenzene	35.0	1.0	"	33.3		105	70-130			
1,3,5-Trimethylbenzene	36.8	1.0	"	33.3		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.3		92.7	23-173			
Surrogate: Toluene-d8	14.0		"	13.3		105	20-170			
Surrogate: 4-Bromofluorobenzene	12.2		"	13.3		91.4	21-167			

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHJ0052 - EPA 5030 Water MS

LCS Dup (BHJ0052-BSD1)

Prepared & Analyzed: 10/01/24

Benzene	38.5	1.0	ug/l	33.3	115	51-132	4.06	20	
Toluene	39.6	1.0	"	33.3	119	51-138	4.36	20	
Ethylbenzene	40.9	1.0	"	33.3	123	58-146	12.1	20	
m,p-Xylene	85.3	2.0	"	66.7	128	57-144	13.3	20	
o-Xylene	38.3	1.0	"	33.3	115	53-146	12.2	20	
Naphthalene	27.3	1.0	"	33.3	81.9	70-130	11.3	20	
1,2,4-Trimethylbenzene	40.1	1.0	"	33.3	120	70-130	13.7	20	
1,3,5-Trimethylbenzene	41.0	1.0	"	33.3	123	70-130	10.9	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>13.1</i>		<i>"</i>	<i>13.3</i>	<i>98.0</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>14.0</i>		<i>"</i>	<i>13.3</i>	<i>105</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.1</i>		<i>"</i>	<i>13.3</i>	<i>90.5</i>	<i>21-167</i>			

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BHJ0054 - EPA 3550A

Blank (BHJ0054-BLK1)

Prepared: 10/01/24 Analyzed: 10/02/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: <i>o</i> -Terphenyl	12.1		"	12.5		96.6		30-150		

LCS (BHJ0054-BS1)

Prepared: 10/01/24 Analyzed: 10/02/24

C10-C28 (DRO)	531	50	mg/kg	500		106		70-130		
Surrogate: <i>o</i> -Terphenyl	12.6		"	12.5		101		30-150		

Matrix Spike (BHJ0054-MS1)

Source: 2410011-01

Prepared: 10/01/24 Analyzed: 10/02/24

C10-C28 (DRO)	480	50	mg/kg	500	ND	96.0		70-130		
Surrogate: <i>o</i> -Terphenyl	9.65		"	12.5		77.2		30-150		

Matrix Spike Dup (BHJ0054-MSD1)

Source: 2410011-01

Prepared: 10/01/24 Analyzed: 10/02/24

C10-C28 (DRO)	439	50	mg/kg	500	ND	87.9		70-130	8.87	20
Surrogate: <i>o</i> -Terphenyl	9.83		"	12.5		78.7		30-150		

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHJ0132 - EPA 5030 Soil MS

Blank (BHJ0132-BLK1)

Prepared: 10/03/24 Analyzed: 10/04/24

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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0195</i>		"	<i>0.0333</i>		<i>58.6</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0205</i>		"	<i>0.0333</i>		<i>61.4</i>	<i>40-150</i>			

LCS (BHJ0132-BS1)

Prepared: 10/03/24 Analyzed: 10/04/24

Acenaphthene	0.0198	0.00500	mg/kg	0.0333		59.5	31-137			
Anthracene	0.0191	0.00500	"	0.0333		57.2	30-120			
Benzo (a) anthracene	0.0190	0.00500	"	0.0333		57.0	30-120			
Benzo (a) pyrene	0.0173	0.00500	"	0.0333		52.0	30-120			
Benzo (b) fluoranthene	0.0164	0.00500	"	0.0333		49.3	30-120			
Benzo (k) fluoranthene	0.0192	0.00500	"	0.0333		57.5	30-120			
Chrysene	0.0200	0.00500	"	0.0333		59.9	30-120			
Dibenz (a,h) anthracene	0.0168	0.00500	"	0.0333		50.5	30-120			
Fluoranthene	0.0194	0.00500	"	0.0333		58.1	30-120			
Fluorene	0.0184	0.00500	"	0.0333		55.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0150	0.00500	"	0.0333		45.0	30-120			
Pyrene	0.0211	0.00500	"	0.0333		63.3	35-142			
1-Methylnaphthalene	0.0193	0.00500	"	0.0333		57.8	35-142			
2-Methylnaphthalene	0.0189	0.00500	"	0.0333		56.8	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0197</i>		"	<i>0.0333</i>		<i>59.1</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0206</i>		"	<i>0.0333</i>		<i>61.7</i>	<i>40-150</i>			

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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BHJ0132 - EPA 5030 Soil MS

Matrix Spike (BHJ0132-MS1)	Source: 2410013-01			Prepared: 10/03/24 Analyzed: 10/04/24						
Acenaphthene	0.0197	0.00500	mg/kg	0.0333	ND	59.0	31-137			
Anthracene	0.0194	0.00500	"	0.0333	ND	58.3	30-120			
Benzo (a) anthracene	0.0215	0.00500	"	0.0333	ND	64.4	30-120			
Benzo (a) pyrene	0.0164	0.00500	"	0.0333	ND	49.1	30-120			
Benzo (b) fluoranthene	0.0219	0.00500	"	0.0333	ND	65.6	30-120			
Benzo (k) fluoranthene	0.0191	0.00500	"	0.0333	ND	57.4	30-120			
Chrysene	0.0192	0.00500	"	0.0333	ND	57.7	30-120			
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333	ND	40.6	30-120			
Fluoranthene	0.0197	0.00500	"	0.0333	ND	59.0	30-120			
Fluorene	0.0196	0.00500	"	0.0333	ND	58.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	ND	49.8	30-120			
Pyrene	0.0188	0.00500	"	0.0333	ND	56.3	35-142			
1-Methylnaphthalene	0.0192	0.00500	"	0.0333	ND	57.5	15-130			
2-Methylnaphthalene	0.0190	0.00500	"	0.0333	ND	57.1	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0196</i>		<i>"</i>	<i>0.0333</i>		<i>58.8</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0211</i>		<i>"</i>	<i>0.0333</i>		<i>63.3</i>	<i>40-150</i>			

Matrix Spike Dup (BHJ0132-MSD1)	Source: 2410013-01			Prepared: 10/03/24 Analyzed: 10/04/24						
Acenaphthene	0.0187	0.00500	mg/kg	0.0333	ND	56.1	31-137	5.09	30	
Anthracene	0.0190	0.00500	"	0.0333	ND	56.9	30-120	2.55	30	
Benzo (a) anthracene	0.0219	0.00500	"	0.0333	ND	65.8	30-120	2.23	30	
Benzo (a) pyrene	0.0157	0.00500	"	0.0333	ND	47.1	30-120	4.19	30	
Benzo (b) fluoranthene	0.0184	0.00500	"	0.0333	ND	55.3	30-120	17.0	30	
Benzo (k) fluoranthene	0.0179	0.00500	"	0.0333	ND	53.6	30-120	6.94	30	
Chrysene	0.0181	0.00500	"	0.0333	ND	54.3	30-120	6.14	30	
Dibenz (a,h) anthracene	0.0136	0.00500	"	0.0333	ND	40.9	30-120	0.734	30	
Fluoranthene	0.0189	0.00500	"	0.0333	ND	56.8	30-120	3.71	30	
Fluorene	0.0189	0.00500	"	0.0333	ND	56.8	30-120	3.14	30	
Indeno (1,2,3-cd) pyrene	0.0162	0.00500	"	0.0333	ND	48.7	30-120	2.36	30	
Pyrene	0.0171	0.00500	"	0.0333	ND	51.4	35-142	9.27	30	
1-Methylnaphthalene	0.0186	0.00500	"	0.0333	ND	55.7	15-130	3.22	50	
2-Methylnaphthalene	0.0185	0.00500	"	0.0333	ND	55.5	15-130	2.71	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0189</i>		<i>"</i>	<i>0.0333</i>		<i>56.6</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0212</i>		<i>"</i>	<i>0.0333</i>		<i>63.7</i>	<i>40-150</i>			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

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

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

Batch BHJ0085 - EPA 3050B

Blank (BHJ0085-BLK1)

Prepared: 10/02/24 Analyzed: 10/05/24

Boron ND 2.00 mg/L

LCS (BHJ0085-BS1)

Prepared: 10/02/24 Analyzed: 10/05/24

Boron 4.93 2.00 mg/L 5.00 98.5 80-120

Duplicate (BHJ0085-DUP1)

Source: 2410002-01

Prepared: 10/02/24 Analyzed: 10/05/24

Boron 0.316 2.00 mg/L 0.244 25.4 20 QR-01

Matrix Spike (BHJ0085-MS1)

Source: 2410002-01

Prepared: 10/02/24 Analyzed: 10/05/24

Boron 5.04 2.00 mg/L 5.05 0.244 95.1 75-125

Matrix Spike Dup (BHJ0085-MSD1)

Source: 2410002-01

Prepared: 10/02/24 Analyzed: 10/05/24

Boron 5.11 2.00 mg/L 5.05 0.244 96.3 75-125 1.24 25

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHJ0145 - EPA 3050B

Blank (BHJ0145-BLK1)

Prepared: 10/03/24 Analyzed: 10/04/24

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 (BHJ0145-BS1)

Prepared: 10/03/24 Analyzed: 10/04/24

Arsenic	34.1	0.181	mg/kg wet	36.2	94.2	80-120
Barium	34.9	0.362	"	36.2	96.3	80-120
Cadmium	1.73	0.181	"	1.81	95.3	80-120
Copper	36.9	0.362	"	36.2	102	80-120
Lead	17.2	0.181	"	18.1	95.1	80-120
Nickel	36.6	0.362	"	36.2	101	80-120
Silver	1.75	0.0181	"	1.81	96.5	80-120
Zinc	36.8	0.362	"	36.2	101	80-120
Selenium	3.47	0.236	"	3.62	95.7	80-120

Duplicate (BHJ0145-DUP1)

Source: 2410013-01

Prepared: 10/03/24 Analyzed: 10/04/24

Arsenic	0.701	0.200	mg/kg dry	0.739	5.30	20
Barium	16.4	0.400	"	18.1	10.1	20
Cadmium	0.0350	0.200	"	0.0358	2.27	20
Copper	1.32	0.400	"	1.18	11.1	20
Lead	1.30	0.200	"	1.31	0.402	20
Nickel	1.64	0.400	"	1.61	1.67	20
Silver	0.00569	0.0200	"	0.00933	48.4	20
Zinc	6.15	0.400	"	5.96	3.21	20
Selenium	ND	0.260	"	ND		20

QR-01

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHJ0145 - EPA 3050B

Matrix Spike (BHJ0145-MS1)

Source: 2410013-01

Prepared: 10/03/24 Analyzed: 10/04/24

Arsenic	41.1	0.200	mg/kg dry	39.5	0.739	102	75-125			
Barium	51.2	0.400	"	39.5	18.1	83.8	75-125			
Cadmium	1.95	0.200	"	1.97	0.0358	97.1	75-125			
Copper	35.0	0.400	"	39.5	1.18	85.7	75-125			
Lead	20.0	0.200	"	19.7	1.31	94.7	75-125			
Nickel	35.1	0.400	"	39.5	1.61	84.9	75-125			
Silver	1.86	0.0200	"	1.97	0.00933	93.7	75-125			
Zinc	40.1	0.400	"	39.5	5.96	86.5	75-125			
Selenium	3.70	0.260	"	3.95	ND	93.7	75-125			

Matrix Spike Dup (BHJ0145-MSD1)

Source: 2410013-01

Prepared: 10/03/24 Analyzed: 10/04/24

Arsenic	39.1	0.200	mg/kg dry	40.0	0.739	95.9	75-125	4.91	25
Barium	52.5	0.400	"	40.0	18.1	85.8	75-125	2.51	25
Cadmium	1.93	0.200	"	2.00	0.0358	94.7	75-125	0.985	25
Copper	35.5	0.400	"	40.0	1.18	85.7	75-125	1.44	25
Lead	20.1	0.200	"	20.0	1.31	93.9	75-125	0.670	25
Nickel	36.0	0.400	"	40.0	1.61	86.0	75-125	2.56	25
Silver	1.85	0.0200	"	2.00	0.00933	92.0	75-125	0.286	25
Zinc	40.7	0.400	"	40.0	5.96	86.7	75-125	1.47	25
Selenium	3.71	0.260	"	4.00	ND	92.7	75-125	0.420	25

Summit Scientific

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Tasman Geosciences
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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BHJ0155 - 3060A Mod

Blank (BHJ0155-BLK1)

Prepared & Analyzed: 10/03/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHJ0155-BS1)

Prepared & Analyzed: 10/03/24

Chromium, Hexavalent 26.6 0.30 mg/kg wet 25.0 106 80-120

Duplicate (BHJ0155-DUP1)

Source: 2410013-01

Prepared & Analyzed: 10/03/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHJ0155-MS1)

Source: 2410013-01

Prepared & Analyzed: 10/03/24

Chromium, Hexavalent 28.1 0.30 mg/kg dry 26.6 ND 106 75-125

Matrix Spike Dup (BHJ0155-MSD1)

Source: 2410013-01

Prepared & Analyzed: 10/03/24

Chromium, Hexavalent 29.4 0.30 mg/kg dry 26.6 ND 110 75-125 4.44 20

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

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

Summit Scientific

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

Batch BHJ0105 - General Preparation

Blank (BHJ0105-BLK1)

Prepared: 10/02/24 Analyzed: 10/04/24

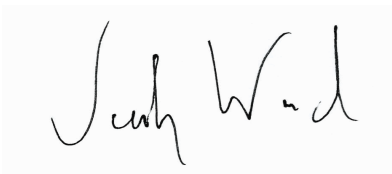
Calcium	ND	0.0500	mg/L wet							
Magnesium	ND	0.0500	"							
Sodium	ND	0.0500	"							

LCS (BHJ0105-BS1)

Prepared: 10/02/24 Analyzed: 10/04/24

Calcium	5.28	0.0500	mg/L wet	5.00		106	70-130			
Magnesium	5.07	0.0500	"	5.00		101	70-130			
Sodium	5.02	0.0500	"	5.00		100	70-130			

Summit Scientific



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Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

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

Batch BHJ0274 - General Preparation

Blank (BHJ0274-BLK1)

Prepared & Analyzed: 10/07/24

Chloride	ND	0.0600	mg/L						
Sulfate	ND	0.300	"						

LCS (BHJ0274-BS1)

Prepared & Analyzed: 10/07/24

Chloride	2.90	0.0600	mg/L	3.00	96.7	90-110
Sulfate	14.3	0.300	"	15.0	95.3	90-110

Duplicate (BHJ0274-DUP1)

Source: 2410013-11

Prepared & Analyzed: 10/07/24

Chloride	45.7	0.0600	mg/L	47.6		3.92	20
Sulfate	314	0.300	"	327		4.07	20

Matrix Spike (BHJ0274-MS1)

Source: 2410013-11

Prepared & Analyzed: 10/07/24

Chloride	194	0.0600	mg/L	150	47.6	97.7	80-120
Sulfate	1040	0.300	"	750	327	94.7	80-120

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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
 Project Manager: Karen Olson

Reported:
 10/08/24 14:51

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

Summit Scientific

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

Batch BHJ0078 - General Preparation


Duplicate (BHJ0078-DUP1)

Source: 2410004-01

Prepared & Analyzed: 10/02/24

% Solids	86.1		%		86.2			0.107		20	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Total Dissolved Solids by SM2540C - Quality Control

Summit Scientific

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

Batch BHJ0125 - General Preparation

Blank (BHJ0125-BLK1)

Prepared: 10/03/24 Analyzed: 10/04/24

Total Dissolved Solids ND 10.0 mg/L


Duplicate (BHJ0125-DUP1)

Source: 2409477-10

Prepared: 10/03/24 Analyzed: 10/04/24

Total Dissolved Solids 2480 10.0 mg/L 2530 2.00 20

Summit Scientific



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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

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

Summit Scientific

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

Batch BHJ0106 - General Preparation

Blank (BHJ0106-BLK1)

Prepared: 10/02/24 Analyzed: 10/03/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHJ0106-BS1)

Prepared: 10/02/24 Analyzed: 10/03/24

Specific Conductance (EC) 0.157 0.0100 mmhos/cm 0.150 104 95-105

Duplicate (BHJ0106-DUP1)

Source: 2409364-03

Prepared: 10/02/24 Analyzed: 10/03/24

Specific Conductance (EC) 0.175 0.0100 mmhos/cm 0.177 1.19 20

Summit Scientific

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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

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

Summit Scientific

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

Batch BHJ0107 - General Preparation

LCS (BHJ0107-BS1)

Prepared: 10/02/24 Analyzed: 10/03/24

pH	9.17	pH Units	9.18	99.9	95-105
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Duplicate (BHJ0107-DUP1)

Source: 2409364-03

Prepared: 10/02/24 Analyzed: 10/03/24

pH	8.55	pH Units	8.56	0.117	20
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Tasman Geosciences
6855 W. 119th Ave.
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Project: PDC - Bunn M 1-34 Wellhead

Project Number: [none]
Project Manager: Karen Olson

Reported:
10/08/24 14:51

Notes and Definitions

- QR-01 Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- 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