

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 25, 2025

Brian Humphrey

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Work Order #2501059

Enclosed are the results of analyses for samples received by Summit Scientific on 01/07/25 17:44. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Natalie Tessier". The signature is fluid and cursive, with the first name being more prominent.

Natalie Tessier For Paul Shrewsbury

President



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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]

Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW09@29'	2501059-01	Soil	01/06/25 14:33	01/07/25 17:44
MW09@54'	2501059-02	Soil	01/06/25 15:43	01/07/25 17:44
MW10@48'	2501059-03	Soil	01/06/25 10:57	01/07/25 17:44
MW10@54'	2501059-04	Soil	01/06/25 11:12	01/07/25 17:44

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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

Lab ID

Page 1 of 1

2501059

Send Data To:

Send Invoice To:

Client: Tasman DCE/P66
Address: 6855 W 119th Ave
City/State/Zip: Broomfield CO 80220
Phone: 303-487-1238
Sampler Name: B. Ulrich

Project Manager: Stephen Weather, Brian Humphrey
E-Mail: stephen.weather@p66.com
bhumphrey@tasman-geo.com
Project Name: 4 Farmlee - 84 Four Farmlee (H-6-9)
Project Number: 03/2024

Company: Tasman
Project Name/Location: Four Farmlee (H-6-9)
AFE#: 03/2024
PO/Billing Codes:
Contact: Brian Humphrey

					Preservative				Matrix				Analysis Requested							Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Full Table 915-1							
1	MW 09029'	1-6-25	1433	2			X		X	X			X							
2	MW 09054'	↓	1543	↓			↓		↓	↓			↓							
3	MW 10048'	↓	1057	↓			↓		↓	↓			↓							
4	MW 10054'	↓	1112	↓			↓		↓	↓			↓							
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Relinquished by: [Signature] Date/Time: 1-6-25 1758

Received by: Tasman Lockbox Date/Time: 1-6-25 1758

Relinquished by: [Signature] Date/Time: 1725
1744

Received by: [Signature] Date/Time: 1725
1744

Relinquished by: Date/Time:

Received by: Date/Time:

TAT Business Days	Field DO
Same Day	Field EC
1 Day	Field ORP
2 Days	Field pH
3 Days	Field Temp.
Standard	Field Turb.

Temperature Upon Receipt: 4.1

Corrected Temperature: 0

IR gun #: 1

HNO3 lot #:

Notes:

S₂

Sample Receipt Checklist

S2 Work Order# 2501059

Client: DCP/Place / Tashman Client Project ID: 4 Parmlee CH-1041 3/2024
 Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: ☐

Matrix (Check all that apply) Air ☐ Soil ☒ Solid ☐ Water ☐ Other ☐

Temp (°C) 4.7Thermometer # 1

	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"/>	<u>all 20F</u>
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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 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

1/7/25
Date/Time



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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@29'
2501059-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BIA0412	01/10/25	01/14/25	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: **01/06/25 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0402	100 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0408	102 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0400	99.9 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0418	01/10/25	01/15/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	11.6	93.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@29'
2501059-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BIA0489	01/13/25	01/21/25	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: **01/06/25 14:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0196	58.8 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0208	62.3 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0921	02/18/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@29'
2501059-01 (Soil)

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Total Metals by EPA 6020B

Arsenic	2.25	0.200	mg/kg dry	1	BIB1268	02/22/25	02/24/25	EPA 6020B
Barium	41.7	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	ND	0.400	"	"	"	"	"	"
Lead	3.63	0.200	"	"	"	"	"	"
Nickel	0.424	0.400	"	"	"	"	"	"
Silver	0.0221	0.0200	"	"	"	"	"	"
Zinc	2.42	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1099	01/23/25	01/24/25	EPA 7196A	

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

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	9.23	0.0500	mg/L dry	1	BIA0331	01/08/25	01/09/25	EPA 6020B	
Magnesium	2.74	0.0500	"	"	"	"	"	"	
Sodium	2.51	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.186	0.00100	units	1	BIA0467	01/12/25	01/12/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
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Reported:
02/25/25 09:14

MW09@29'
2501059-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.9		%	1	BIA0444	01/10/25	01/10/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0383	0.0100	mmhos/cm	1	BIA0332	01/08/25	01/10/25	EPA 120.1	

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

Date Sampled: **01/06/25 14:33**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BIA0333	01/08/25	01/10/25	EPA 9045D	

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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@54'
2501059-02 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0412	01/10/25	01/14/25	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: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0403	101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0396	99.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0394	98.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0418	01/10/25	01/15/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	8.03	64.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@54'
2501059-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BIA0489	01/13/25	01/21/25	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.00895	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.00632	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	0.00549	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0229	68.7 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0233	70.0 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BIB0921	02/18/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

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Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@54'
2501059-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.76	0.200	mg/kg dry	1	BIB1268	02/22/25	02/24/25	EPA 6020B
Barium	51.6	0.400	"	"	"	"	"	"
Cadmium	0.369	0.200	"	"	"	"	"	"
Copper	8.44	0.400	"	"	"	"	"	"
Lead	19.6	0.200	"	"	"	"	"	"
Nickel	6.33	0.400	"	"	"	"	"	"
Silver	0.181	0.0200	"	"	"	"	"	"
Zinc	28.7	0.400	"	"	"	"	"	"
Selenium	0.355	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1099	01/23/25	01/24/25	EPA 7196A	

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

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	17.4	0.0500	mg/L dry	1	BIA0331	01/08/25	01/09/25	EPA 6020B	
Magnesium	5.46	0.0500	"	"	"	"	"	"	
Sodium	16.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.900	0.00100	units	1	BIA0467	01/12/25	01/12/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.
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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW09@54'
2501059-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.6	%	1	BIA0444	01/10/25	01/10/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.163	0.0100	mmhos/cm	1	BIA0332	01/08/25	01/10/25	EPA 120.1	

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

Date Sampled: **01/06/25 15:43**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	9.01		pH Units	1	BIA0333	01/08/25	01/10/25	EPA 9045D	

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Broomfield CO, 80020

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@48'
2501059-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0412	01/10/25	01/14/25	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: **01/06/25 10:57**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0396	98.9 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0402	100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0393	98.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0418	01/10/25	01/15/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	14.2	114 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@48'
2501059-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0489	01/13/25	01/21/25	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: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0254	76.3 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0249	74.6 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB0921	02/18/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@48'
2501059-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.98	0.200	mg/kg dry	1	BIB1268	02/22/25	02/24/25	EPA 6020B
Barium	34.0	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	0.853	0.400	"	"	"	"	"	"
Lead	3.91	0.200	"	"	"	"	"	"
Nickel	1.50	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	8.98	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1099	01/23/25	01/24/25	EPA 7196A	

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

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	14.5	0.0500	mg/L dry	1	BIA0331	01/08/25	01/09/25	EPA 6020B	
Magnesium	2.52	0.0500	"	"	"	"	"	"	
Sodium	1.62	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.103	0.00100	units	1	BIA0467	01/12/25	01/12/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@48'
2501059-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.6		%	1	BIA0444	01/10/25	01/10/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0262	0.0100	mmhos/cm	1	BIA0332	01/08/25	01/10/25	EPA 120.1	

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

Date Sampled: **01/06/25 10:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.73		pH Units	1	BIA0333	01/08/25	01/10/25	EPA 9045D	

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@54'
2501059-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BIA0412	01/10/25	01/14/25	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: **01/06/25 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0413	103 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0405	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0386	96.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0418	01/10/25	01/15/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	9.22	73.7 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@54'
2501059-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0489	01/13/25	01/21/25	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: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0190	57.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0200	59.9 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB0921	02/18/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/06/25 11:12**

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: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@54'
2501059-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.56	0.200	mg/kg dry	1	BIB1268	02/22/25	02/24/25	EPA 6020B
Barium	38.3	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	0.698	0.400	"	"	"	"	"	"
Lead	4.45	0.200	"	"	"	"	"	"
Nickel	1.18	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	8.61	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1099	01/23/25	01/24/25	EPA 7196A	

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

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	13.4	0.0500	mg/L dry	1	BIA0331	01/08/25	01/09/25	EPA 6020B	
Magnesium	2.23	0.0500	"	"	"	"	"	"	
Sodium	4.21	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.281	0.00100	units	1	BIA0467	01/12/25	01/12/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

MW10@54'
2501059-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.2		%	1	BIA0444	01/10/25	01/10/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0618	0.0100	mmhos/cm	1	BIA0332	01/08/25	01/10/25	EPA 120.1	

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

Date Sampled: **01/06/25 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.96		pH Units	1	BIA0333	01/08/25	01/10/25	EPA 9045D	

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA0412 - EPA 5030 Soil MS

Blank (BIA0412-BLK1)

Prepared: 01/10/25 Analyzed: 01/13/25

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	0.0406		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0390		"	0.0400		97.4	50-150			

LCS (BIA0412-BS1)

Prepared: 01/10/25 Analyzed: 01/13/25

Benzene	0.106	0.0020	mg/kg	0.100		106	70-130			
Toluene	0.104	0.0050	"	0.100		104	70-130			
Ethylbenzene	0.115	0.0050	"	0.100		115	70-130			
m,p-Xylene	0.217	0.010	"	0.200		108	70-130			
o-Xylene	0.104	0.0050	"	0.100		104	70-130			
1,2,4-Trimethylbenzene	0.105	0.0050	"	0.100		105	70-130			
1,3,5-Trimethylbenzene	0.107	0.0050	"	0.100		107	70-130			
Naphthalene	0.0954	0.0038	"	0.100		95.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400		98.2	50-150			

Matrix Spike (BIA0412-MS1)

Source: 2501041-01

Prepared: 01/10/25 Analyzed: 01/13/25

Benzene	0.102	0.0020	mg/kg	0.100	ND	102	70-130			
Toluene	0.101	0.0050	"	0.100	ND	101	70-130			
Ethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130			
m,p-Xylene	0.204	0.010	"	0.200	ND	102	70-130			
o-Xylene	0.0968	0.0050	"	0.100	ND	96.8	70-130			
1,2,4-Trimethylbenzene	0.0945	0.0050	"	0.100	ND	94.5	70-130			
1,3,5-Trimethylbenzene	0.0973	0.0050	"	0.100	ND	97.3	70-130			
Naphthalene	0.0901	0.0038	"	0.100	ND	90.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0404		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0413		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0390		"	0.0400		97.5	50-150			

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA0412 - EPA 5030 Soil MS

Matrix Spike Dup (BIA0412-MSD1)	Source: 2501041-01			Prepared: 01/10/25 Analyzed: 01/13/25						
Benzene	0.105	0.0020	mg/kg	0.100	ND	105	70-130	2.47	30	
Toluene	0.101	0.0050	"	0.100	ND	101	70-130	0.0296	30	
Ethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130	0.869	30	
m,p-Xylene	0.199	0.010	"	0.200	ND	99.7	70-130	2.13	30	
o-Xylene	0.0964	0.0050	"	0.100	ND	96.4	70-130	0.404	30	
1,2,4-Trimethylbenzene	0.0914	0.0050	"	0.100	ND	91.4	70-130	3.29	30	
1,3,5-Trimethylbenzene	0.0934	0.0050	"	0.100	ND	93.4	70-130	4.09	30	
Naphthalene	0.0839	0.0038	"	0.100	ND	83.9	70-130	7.07	30	
Surrogate: 1,2-Dichloroethane-d4	0.0416		"	0.0400		104	50-150			
Surrogate: Toluene-d8	0.0406		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0400		"	0.0400		100	50-150			

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA0418 - EPA 3550A

Blank (BIA0418-BLK1)

Prepared: 01/10/25 Analyzed: 01/15/25

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	14.3		"	12.5		114	30-150			

LCS (BIA0418-BS1)

Prepared: 01/10/25 Analyzed: 01/15/25

C10-C28 (DRO)	605	50	mg/kg	500		121	70-130			
Surrogate: o-Terphenyl	18.2		"	12.5		146	30-150			

Matrix Spike (BIA0418-MS1)

Source: 2501041-01

Prepared: 01/10/25 Analyzed: 01/15/25

C10-C28 (DRO)	534	50	mg/kg	500	21.9	103	70-130			
Surrogate: o-Terphenyl	12.9		"	12.5		104	30-150			

Matrix Spike Dup (BIA0418-MSD1)

Source: 2501041-01

Prepared: 01/10/25 Analyzed: 01/15/25

C10-C28 (DRO)	520	50	mg/kg	500	21.9	99.5	70-130	2.83	20	
Surrogate: o-Terphenyl	14.2		"	12.5		113	30-150			

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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	Notes

Batch BIA0489 - EPA 5030 Soil MS

Blank (BIA0489-BLK1)

Prepared: 01/13/25 Analyzed: 01/21/25

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	0.0270		"	0.0333		81.0	40-140			
Surrogate: Fluoranthene-d10	0.0289		"	0.0333		86.7	40-140			

LCS (BIA0489-BS1)

Prepared: 01/13/25 Analyzed: 01/21/25

Acenaphthene	0.0226	0.00500	mg/kg	0.0333		67.7	40-140			
Anthracene	0.0240	0.00500	"	0.0333		72.1	40-140			
Benzo (a) anthracene	0.0255	0.00500	"	0.0333		76.6	40-140			
Benzo (a) pyrene	0.0226	0.00500	"	0.0333		67.7	40-140			
Benzo (b) fluoranthene	0.0227	0.00500	"	0.0333		68.2	40-140			
Benzo (k) fluoranthene	0.0237	0.00500	"	0.0333		71.2	40-140			
Chrysene	0.0250	0.00500	"	0.0333		75.0	40-140			
Dibenz (a,h) anthracene	0.0245	0.00500	"	0.0333		73.4	40-140			
Fluoranthene	0.0250	0.00500	"	0.0333		74.9	40-140			
Fluorene	0.0223	0.00500	"	0.0333		66.9	40-140			
Indeno (1,2,3-cd) pyrene	0.0155	0.00500	"	0.0333		46.6	40-140			
Pyrene	0.0261	0.00500	"	0.0333		78.3	40-140			
1-Methylnaphthalene	0.0247	0.00500	"	0.0333		74.2	40-140			
2-Methylnaphthalene	0.0272	0.00500	"	0.0333		81.6	40-140			
Surrogate: 2-Methylnaphthalene-d10	0.0239		"	0.0333		71.8	40-140			
Surrogate: Fluoranthene-d10	0.0267		"	0.0333		80.0	40-140			

Summit Scientific

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Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BIA0489 - EPA 5030 Soil MS

Matrix Spike (BIA0489-MS1)		Source: 2501057-01			Prepared: 01/13/25 Analyzed: 01/21/25						
Acenaphthene	0.0227	0.00500	mg/kg	0.0333	ND	68.1	40-140				
Anthracene	0.0237	0.00500	"	0.0333	ND	71.1	40-140				
Benzo (a) anthracene	0.0241	0.00500	"	0.0333	ND	72.4	40-140				
Benzo (a) pyrene	0.0207	0.00500	"	0.0333	ND	62.2	40-140				
Benzo (b) fluoranthene	0.0206	0.00500	"	0.0333	ND	61.8	40-140				
Benzo (k) fluoranthene	0.0210	0.00500	"	0.0333	ND	62.9	40-140				
Chrysene	0.0232	0.00500	"	0.0333	ND	69.7	40-140				
Dibenz (a,h) anthracene	0.0241	0.00500	"	0.0333	ND	72.2	40-140				
Fluoranthene	0.0232	0.00500	"	0.0333	ND	69.6	40-140				
Fluorene	0.0227	0.00500	"	0.0333	ND	68.1	40-140				
Indeno (1,2,3-cd) pyrene	0.0153	0.00500	"	0.0333	ND	45.8	40-140				
Pyrene	0.0232	0.00500	"	0.0333	ND	69.5	40-140				
1-Methylnaphthalene	0.0248	0.00500	"	0.0333	ND	74.5	40-140				
2-Methylnaphthalene	0.0271	0.00500	"	0.0333	ND	81.3	40-140				
Surrogate: 2-Methylnaphthalene-d10	0.0233		"	0.0333		69.9	40-140				
Surrogate: Fluoranthene-d10	0.0257		"	0.0333		77.1	40-140				

Matrix Spike Dup (BIA0489-MSD1)		Source: 2501057-01			Prepared: 01/13/25 Analyzed: 01/21/25						
Acenaphthene	0.0160	0.00500	mg/kg	0.0333	ND	47.9	40-140	34.8	30		QR-02
Anthracene	0.0160	0.00500	"	0.0333	ND	48.1	40-140	38.6	30		QR-02
Benzo (a) anthracene	0.0166	0.00500	"	0.0333	ND	49.9	40-140	36.8	30		QR-02
Benzo (a) pyrene	0.0143	0.00500	"	0.0333	ND	43.0	40-140	36.6	30		QR-02
Benzo (b) fluoranthene	0.0140	0.00500	"	0.0333	ND	41.9	40-140	38.3	30		QR-02
Benzo (k) fluoranthene	0.0143	0.00500	"	0.0333	ND	42.9	40-140	37.8	30		QR-02
Chrysene	0.0160	0.00500	"	0.0333	ND	48.1	40-140	36.7	30		QR-02
Dibenz (a,h) anthracene	0.0192	0.00500	"	0.0333	ND	57.6	40-140	22.6	30		
Fluoranthene	0.0166	0.00500	"	0.0333	ND	49.9	40-140	33.1	30		QR-02
Fluorene	0.0169	0.00500	"	0.0333	ND	50.7	40-140	29.4	30		
Indeno (1,2,3-cd) pyrene	0.0177	0.00500	"	0.0333	ND	53.1	40-140	14.7	30		
Pyrene	0.0162	0.00500	"	0.0333	ND	48.6	40-140	35.3	30		QR-02
1-Methylnaphthalene	0.0180	0.00500	"	0.0333	ND	53.9	40-140	32.2	30		QR-02
2-Methylnaphthalene	0.0202	0.00500	"	0.0333	ND	60.5	40-140	29.4	30		
Surrogate: 2-Methylnaphthalene-d10	0.0166		"	0.0333		49.9	40-140				
Surrogate: Fluoranthene-d10	0.0173		"	0.0333		51.9	40-140				

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIB0921 - EPA 3050B

Blank (BIB0921-BLK1)

Prepared: 02/18/25 Analyzed: 02/24/25

Boron ND 2.00 mg/L

LCS (BIB0921-BS1)

Prepared: 02/18/25 Analyzed: 02/24/25

Boron 4.61 2.00 mg/L 5.00 92.2 80-120

Duplicate (BIB0921-DUP1)

Source: 2501057-04

Prepared: 02/18/25 Analyzed: 02/24/25

Boron ND 2.00 mg/L ND 20

Matrix Spike (BIB0921-MS1)

Source: 2501057-04

Prepared: 02/18/25 Analyzed: 02/24/25

Boron 4.72 2.00 mg/L 5.02 ND 94.1 75-125

Matrix Spike Dup (BIB0921-MSD1)

Source: 2501057-04

Prepared: 02/18/25 Analyzed: 02/24/25

Boron 4.81 2.00 mg/L 5.02 ND 96.0 75-125 2.05 25

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIB1268 - EPA 3050B

Blank (BIB1268-BLK1)

Prepared: 02/22/25 Analyzed: 02/24/25

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 (BIB1268-BS1)

Prepared: 02/22/25 Analyzed: 02/24/25

Arsenic	45.9	0.200	mg/kg wet	40.7	113	80-120
Barium	47.0	0.400	"	40.7	116	80-120
Cadmium	2.19	0.200	"	2.03	108	80-120
Copper	46.5	0.400	"	40.7	114	80-120
Lead	22.2	0.200	"	20.3	109	80-120
Nickel	46.3	0.400	"	40.7	114	80-120
Silver	2.23	0.0200	"	2.03	110	80-120
Zinc	45.0	0.400	"	40.7	111	80-120
Selenium	4.17	0.260	"	4.07	102	80-120

Duplicate (BIB1268-DUP1)

Source: 2501059-01

Prepared: 02/22/25 Analyzed: 02/24/25

Arsenic	2.14	0.200	mg/kg dry	2.25	5.03	20	QR-01
Barium	39.9	0.400	"	41.7	4.45	20	
Cadmium	0.0129	0.200	"	0.0106	19.0	20	
Copper	0.159	0.400	"	0.165	3.78	20	
Lead	3.56	0.200	"	3.63	1.87	20	
Nickel	0.422	0.400	"	0.424	0.478	20	
Silver	0.00900	0.0200	"	0.0221	84.1	20	
Zinc	2.40	0.400	"	2.42	1.10	20	
Selenium	ND	0.260	"	ND		20	

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIB1268 - EPA 3050B

Matrix Spike (BIB1268-MS1)

Source: 2501059-01

Prepared: 02/22/25 Analyzed: 02/24/25

Arsenic	47.0	0.200	mg/kg dry	42.5	2.25	105	75-125
Barium	89.4	0.400	"	42.5	41.7	112	75-125
Cadmium	2.34	0.200	"	2.13	0.0106	110	75-125
Copper	41.8	0.400	"	42.5	0.165	97.8	75-125
Lead	26.5	0.200	"	21.3	3.63	108	75-125
Nickel	41.8	0.400	"	42.5	0.424	97.3	75-125
Silver	2.27	0.0200	"	2.13	0.0221	106	75-125
Zinc	43.0	0.400	"	42.5	2.42	95.5	75-125
Selenium	4.02	0.260	"	4.25	ND	94.4	75-125

Matrix Spike Dup (BIB1268-MSD1)

Source: 2501059-01

Prepared: 02/22/25 Analyzed: 02/24/25

Arsenic	45.0	0.200	mg/kg dry	41.5	2.25	103	75-125	4.52	25
Barium	82.3	0.400	"	41.5	41.7	97.9	75-125	8.20	25
Cadmium	2.15	0.200	"	2.08	0.0106	103	75-125	8.37	25
Copper	39.8	0.400	"	41.5	0.165	95.4	75-125	4.86	25
Lead	24.7	0.200	"	20.8	3.63	101	75-125	7.09	25
Nickel	39.7	0.400	"	41.5	0.424	94.6	75-125	5.14	25
Silver	2.10	0.0200	"	2.08	0.0221	100	75-125	7.89	25
Zinc	41.4	0.400	"	41.5	2.42	93.9	75-125	3.86	25
Selenium	3.82	0.260	"	4.15	ND	92.0	75-125	5.05	25

Summit Scientific

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA1099 - 3060A Mod

Blank (BIA1099-BLK1)

Prepared: 01/23/25 Analyzed: 01/24/25

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BIA1099-BS1)

Prepared: 01/23/25 Analyzed: 01/24/25

Chromium, Hexavalent 25.2 0.30 mg/kg wet 25.0 101 80-120

Duplicate (BIA1099-DUP1)

Source: 2501059-01

Prepared: 01/23/25 Analyzed: 01/24/25

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BIA1099-MS1)

Source: 2501059-01

Prepared: 01/23/25 Analyzed: 01/24/25

Chromium, Hexavalent 27.6 0.30 mg/kg dry 25.8 ND 107 75-125

Matrix Spike Dup (BIA1099-MSD1)

Source: 2501059-01

Prepared: 01/23/25 Analyzed: 01/24/25

Chromium, Hexavalent 28.0 0.30 mg/kg dry 25.8 ND 108 75-125 1.12 20

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA0331 - General Preparation

Blank (BIA0331-BLK1)

Prepared: 01/08/25 Analyzed: 01/09/25

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

LCS (BIA0331-BS1)

Prepared: 01/08/25 Analyzed: 01/09/25

Calcium	6.01	0.0500	mg/L wet	5.00	120	70-130
Magnesium	5.20	0.0500	"	5.00	104	70-130
Sodium	5.11	0.0500	"	5.00	102	70-130

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]

Project Manager: Brian Humphrey

Reported:

02/25/25 09:14

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 BIA0444 - General Preparation

Duplicate (BIA0444-DUP1)

Source: 2412318-01

Prepared & Analyzed: 01/10/25

% Solids	97.6	%	97.4	0.170	20
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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 BIA0332 - General Preparation

Blank (BIA0332-BLK1)

Prepared: 01/08/25 Analyzed: 01/10/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BIA0332-BS1)

Prepared: 01/08/25 Analyzed: 01/10/25

Specific Conductance (EC) 1.41 0.0100 mmhos/cm 1.41 99.8 95-105

Duplicate (BIA0332-DUP1)

Source: 2501059-01

Prepared: 01/08/25 Analyzed: 01/10/25

Specific Conductance (EC) 0.0391 0.0100 mmhos/cm 0.0383 2.12 20

Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

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

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

Batch BIA0333 - General Preparation

LCS (BIA0333-BS1)

Prepared: 01/08/25 Analyzed: 01/10/25

pH	9.05	pH Units	9.18	98.6	95-105
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Duplicate (BIA0333-DUP1)

Source: 2501059-01

Prepared: 01/08/25 Analyzed: 01/10/25

pH	7.66	pH Units	7.80	1.86	20
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Summit Scientific

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

Project: P66/DCP - 4 Parmlee (H-6-9) 03/2024

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
02/25/25 09:14

Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
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