

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 28, 2025

Bryce Goldade
Tasman Geosciences
6855 W. 119th Ave.
Broomfield, CO 80020
RE: Chevron - Lilli N-5
Work Order #2501086

Enclosed are the results of analyses for samples received by Summit Scientific on 01/09/25 17:38. 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 written in a cursive, flowing style.

Natalie Tessier For Paul Shrewsbury
President



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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
OB08	2501086-01	Soil	01/09/25 12:40	01/09/25 17:38
OB09	2501086-02	Soil	01/09/25 12:57	01/09/25 17:38
OB10	2501086-03	Soil	01/09/25 12:59	01/09/25 17:38
OB11	2501086-04	Soil	01/09/25 13:09	01/09/25 17:38
OB12	2501086-05	Soil	01/09/25 13:12	01/09/25 17:38
OB13	2501086-06	Soil	01/09/25 13:21	01/09/25 17:38



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

Lab ID	Page 1 of 1
250108b	

Send Data To:		Send Invoice To:	
Client: Noble/Tasman	Project Manager: Bryce Goldade	Company: Noble	
Address: 6855 W. 119th Ave.	E-Mail: tas-chevron-4@tasman-geo.com	Project Name/Location:	
City/State/Zip: Broomfield/CO/ 80020		AFE#:	
Phone: 937-554-5108	Project Name: Lilli N-S	PO/Billing Codes:	
Sampler Name: molly Parks	Project Number:	Contact: Keith Mclean	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested						Special Instructions			
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Metals - 915	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS		HOLD		
1	OB08	1-9-25	1240	2			X			X				X	X	X	X	X	X		SAR, EC, pH by saturated paste	
2	OB09		1257	2			X			X				X	X	X	X	X	X			
3	OB10		1259	2			X			X				X	X	X	X	X	X			
4	OB11		1309	2			X			X				X	X	X	X	X	X			
5	OB12		1312	2			X			X				X	X	X	X	X	X			
6	OB13	↓	1321	2			X			X				X	X	X	X	X	X			
7																						
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Relinquished by: mp	Date/Time: 1-9-25 11053	Received by: Tasman Lock Box	Date/Time: 1-9-25/ 1653	TAT Business Days	Field DO	Notes: * Base organics PAH on same day TAT, rest on standard	
				Same Day	X		Field EC
Relinquished by: Tasman Lock Box	Date/Time: 1-9-25 1738	Received by: [Signature]	Date/Time: 1-9-25 1738	1 Day			Field ORP
				2 Days			Field pH
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days			Field Temp.
				Standard	X	Field Turb.	
Temperature Upon Receipt: 4.1	Corrected Temperature: 0	IR gun #:		HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order: 2501086

Client: Nobel/Asman Client Project ID: Lilli N-3

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

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

Temp (°C) 4.1

Thermometer # 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>on ice</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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Same day</u>
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

1/9/25
Date/Time

02/20/25



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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB08
2501086-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 12:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0403	101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0401	100 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.2	89.6 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0179	53.7 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0200	60.0 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1015	02/19/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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OB08
2501086-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.36	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B	
Barium	277	0.400	"	"	"	"	"	"	
Cadmium	0.543	0.200	"	"	"	"	"	"	
Copper	5.30	0.400	"	"	"	"	"	"	
Lead	15.0	0.200	"	"	"	"	"	"	
Nickel	4.97	0.400	"	"	"	"	"	"	
Silver	0.0405	0.0200	"	"	"	"	"	"	
Zinc	20.6	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	101	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	3.11	0.0500	"	"	"	"	"	"	
Sodium	16.6	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.444	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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OB08
2501086-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	79.6	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.192	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 12:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.64		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

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02/28/25 09:10

OB09
2501086-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0395	98.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0404	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	12.0	96.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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OB09
2501086-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0178	53.5 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0188	56.5 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1015	02/19/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.09	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B
Barium	205	0.400	"	"	"	"	"	"
Cadmium	0.445	0.200	"	"	"	"	"	"
Copper	4.43	0.400	"	"	"	"	"	"
Lead	12.4	0.200	"	"	"	"	"	"
Nickel	4.37	0.400	"	"	"	"	"	"
Silver	0.0316	0.0200	"	"	"	"	"	"
Zinc	17.0	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 01/09/25 12:57

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: 01/09/25 12:57

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	62.2	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	5.91	0.0500	"	"	"	"	"	"	
Sodium	25.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 01/09/25 12:57

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.812	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 01/09/25 12:57

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB09
2501086-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	87.9	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.371	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 12:57**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.96		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB10
2501086-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0404	101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0397	99.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0406	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.0	87.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB10
2501086-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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	0.00501	0.00500	"	"	"	"	"	"	

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0200	60.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0206	61.9 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1015	02/19/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 12:59**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB10
2501086-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.31	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B
Barium	238	0.400	"	"	"	"	"	"
Cadmium	0.523	0.200	"	"	"	"	"	"
Copper	4.53	0.400	"	"	"	"	"	"
Lead	14.3	0.200	"	"	"	"	"	"
Nickel	4.31	0.400	"	"	"	"	"	"
Silver	0.0341	0.0200	"	"	"	"	"	"
Zinc	17.3	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	88.8	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	2.64	0.0500	"	"	"	"	"	"	
Sodium	24.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.708	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/09/25 12:59**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB10
2501086-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	89.2	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.292	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 12:59**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.37		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB11
2501086-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0402	100 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0406	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0415	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	11.8	94.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB11
2501086-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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	0.00542	0.00500	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0193	58.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0227	68.0 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1015	02/19/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 13:09**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB11
2501086-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.01	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B
Barium	213	0.400	"	"	"	"	"	"
Cadmium	0.438	0.200	"	"	"	"	"	"
Copper	4.61	0.400	"	"	"	"	"	"
Lead	11.7	0.200	"	"	"	"	"	"
Nickel	4.44	0.400	"	"	"	"	"	"
Silver	0.0387	0.0200	"	"	"	"	"	"
Zinc	18.1	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	98.0	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	2.23	0.0500	"	"	"	"	"	"	
Sodium	21.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.598	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/09/25 13:09**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB11
2501086-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	86.9	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.219	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 13:09**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.54		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB12
2501086-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0391	97.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0402	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	10.7	85.7 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB12
2501086-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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	0.00532	0.00500	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0211	63.3 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0226	67.8 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1015	02/19/25	02/24/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 13:12**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB12
2501086-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.44	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B
Barium	242	0.400	"	"	"	"	"	"
Cadmium	0.516	0.200	"	"	"	"	"	"
Copper	4.75	0.400	"	"	"	"	"	"
Lead	14.1	0.200	"	"	"	"	"	"
Nickel	4.62	0.400	"	"	"	"	"	"
Silver	0.0368	0.0200	"	"	"	"	"	"
Zinc	18.5	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	77.9	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	2.46	0.0500	"	"	"	"	"	"	
Sodium	14.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.441	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/09/25 13:12**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB12
2501086-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	88.3	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.244	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 13:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.21		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB13
2501086-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA0382	01/09/25	01/10/25	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: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0399	99.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0405	101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA0384	01/09/25	01/10/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	6.87	55.0 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Tasman Geosciences
6855 W. 119th Ave.
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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB13
2501086-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA0395	01/10/25	01/15/25	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	0.00614	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.00707	0.00500	"	"	"	"	"	"	

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0205	61.4 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0257	77.2 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1014	02/19/25	02/25/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/09/25 13:21**

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: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB13
2501086-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.73	0.200	mg/kg dry	1	BIB1407	02/25/25	02/25/25	EPA 6020B	
Barium	239	0.400	"	"	"	"	"	"	
Cadmium	0.504	0.200	"	"	"	"	"	"	
Copper	5.08	0.400	"	"	"	"	"	"	
Lead	13.4	0.200	"	"	"	"	"	"	
Nickel	4.81	0.400	"	"	"	"	"	"	
Silver	0.0412	0.0200	"	"	"	"	"	"	
Zinc	20.1	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIA1235	01/28/25	01/28/25	EPA 7196A	

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

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	61.3	0.0500	mg/L dry	1	BIA1360	01/29/25	02/01/25	EPA 6020B	
Magnesium	2.90	0.0500	"	"	"	"	"	"	
Sodium	7.49	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.254	0.00100	units	1	BIB0027	02/03/25	02/03/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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6855 W. 119th Ave.
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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

OB13
2501086-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	87.0	%	1	BIA1257	01/28/25	01/29/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.197	0.0100	mmhos/cm	1	BIA1350	01/29/25	01/30/25	EPA 120.1	

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

Date Sampled: **01/09/25 13:21**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.57		pH Units	1	BIA1336	01/29/25	01/30/25	EPA 9045D	

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6855 W. 119th Ave.
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Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA0382 - EPA 5030 Soil MS

Blank (BIA0382-BLK1)

Prepared: 01/09/25 Analyzed: 01/10/25

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	0.0388		"	0.0400		97.0	50-150			
Surrogate: Toluene-d8	0.0400		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0414		"	0.0400		104	50-150			

LCS (BIA0382-BS1)

Prepared: 01/09/25 Analyzed: 01/10/25

Benzene	0.111	0.0020	mg/kg	0.100		111	70-130			
Toluene	0.109	0.0050	"	0.100		109	70-130			
Ethylbenzene	0.0979	0.0050	"	0.100		97.9	70-130			
m,p-Xylene	0.194	0.010	"	0.200		97.0	70-130			
o-Xylene	0.0981	0.0050	"	0.100		98.1	70-130			
1,2,4-Trimethylbenzene	0.0984	0.0050	"	0.100		98.4	70-130			
1,3,5-Trimethylbenzene	0.0966	0.0050	"	0.100		96.6	70-130			
Naphthalene	0.0912	0.0038	"	0.100		91.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0395		"	0.0400		98.8	50-150			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0394		"	0.0400		98.6	50-150			

Matrix Spike (BIA0382-MS1)

Source: 2501085-01

Prepared: 01/09/25 Analyzed: 01/10/25

Benzene	0.100	0.0020	mg/kg	0.100	ND	100	70-130			
Toluene	0.0994	0.0050	"	0.100	ND	99.4	70-130			
Ethylbenzene	0.0858	0.0050	"	0.100	ND	85.8	70-130			
m,p-Xylene	0.170	0.010	"	0.200	ND	84.8	70-130			
o-Xylene	0.0861	0.0050	"	0.100	ND	86.1	70-130			
1,2,4-Trimethylbenzene	0.0821	0.0050	"	0.100	ND	82.1	70-130			
1,3,5-Trimethylbenzene	0.0819	0.0050	"	0.100	ND	81.9	70-130			
Naphthalene	0.0730	0.0038	"	0.100	ND	73.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0400		"	0.0400		99.9	50-150			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		101	50-150			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA0382 - EPA 5030 Soil MS

Matrix Spike Dup (BIA0382-MSD1)	Source: 2501085-01			Prepared: 01/09/25 Analyzed: 01/10/25						
Benzene	0.0998	0.0020	mg/kg	0.100	ND	99.8	70-130	0.659	30	
Toluene	0.0994	0.0050	"	0.100	ND	99.4	70-130	0.0905	30	
Ethylbenzene	0.0875	0.0050	"	0.100	ND	87.5	70-130	2.01	30	
m,p-Xylene	0.175	0.010	"	0.200	ND	87.5	70-130	3.10	30	
o-Xylene	0.0866	0.0050	"	0.100	ND	86.6	70-130	0.591	30	
1,2,4-Trimethylbenzene	0.0832	0.0050	"	0.100	ND	83.2	70-130	1.38	30	
1,3,5-Trimethylbenzene	0.0844	0.0050	"	0.100	ND	84.4	70-130	3.03	30	
Naphthalene	0.0768	0.0038	"	0.100	ND	76.8	70-130	5.09	30	
Surrogate: 1,2-Dichloroethane-d4	0.0398		"	0.0400		99.4	50-150			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0402		"	0.0400		100	50-150			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BIA0384 - EPA 3550A

Blank (BIA0384-BLK1)

Prepared: 01/09/25 Analyzed: 01/10/25

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	13.3		"	12.5		106		30-150			

LCS (BIA0384-BS1)

Prepared: 01/09/25 Analyzed: 01/10/25

C10-C28 (DRO)	547	50	mg/kg	500		109		70-130			
Surrogate: <i>o</i> -Terphenyl	13.9		"	12.5		111		30-150			

Matrix Spike (BIA0384-MS1)

Source: 2501085-01

Prepared: 01/09/25 Analyzed: 01/10/25

C10-C28 (DRO)	564	50	mg/kg	500	28.2	107		70-130			
Surrogate: <i>o</i> -Terphenyl	9.58		"	12.5		76.6		30-150			

Matrix Spike Dup (BIA0384-MSD1)

Source: 2501085-01

Prepared: 01/09/25 Analyzed: 01/10/25

C10-C28 (DRO)	646	50	mg/kg	500	28.2	124		70-130	13.6	20	
Surrogate: <i>o</i> -Terphenyl	8.83		"	12.5		70.6		30-150			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA0395 - EPA 5030 Soil MS

Blank (BIA0395-BLK1)

Prepared: 01/10/25 Analyzed: 01/14/25

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	0.0210		"	0.0333	63.1	40-140				
Surrogate: Fluoranthene-d10	0.0277		"	0.0333	83.2	40-140				

LCS (BIA0395-BS1)

Prepared: 01/10/25 Analyzed: 01/14/25

Acenaphthene	0.0272	0.00500	mg/kg	0.0333	81.7	40-140				
Anthracene	0.0281	0.00500	"	0.0333	84.3	40-140				
Benzo (a) anthracene	0.0281	0.00500	"	0.0333	84.3	40-140				
Benzo (a) pyrene	0.0253	0.00500	"	0.0333	75.9	40-140				
Benzo (b) fluoranthene	0.0252	0.00500	"	0.0333	75.5	40-140				
Benzo (k) fluoranthene	0.0239	0.00500	"	0.0333	71.7	40-140				
Chrysene	0.0279	0.00500	"	0.0333	83.6	40-140				
Dibenz (a,h) anthracene	0.0281	0.00500	"	0.0333	84.4	40-140				
Fluoranthene	0.0273	0.00500	"	0.0333	82.0	40-140				
Fluorene	0.0273	0.00500	"	0.0333	82.0	40-140				
Indeno (1,2,3-cd) pyrene	0.0136	0.00500	"	0.0333	40.9	40-140				
Pyrene	0.0281	0.00500	"	0.0333	84.3	40-140				
1-Methylnaphthalene	0.0232	0.00500	"	0.0333	69.7	40-140				
2-Methylnaphthalene	0.0261	0.00500	"	0.0333	78.2	40-140				
Surrogate: 2-Methylnaphthalene-d10	0.0226		"	0.0333	67.8	40-140				
Surrogate: Fluoranthene-d10	0.0280		"	0.0333	84.0	40-140				

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA0395 - EPA 5030 Soil MS

Matrix Spike (BIA0395-MS1)	Source: 2501083-01			Prepared: 01/10/25 Analyzed: 01/14/25					
Acenaphthene	0.0206	0.00500	mg/kg	0.0333	ND	61.7	40-140		
Anthracene	0.0208	0.00500	"	0.0333	ND	62.5	40-140		
Benzo (a) anthracene	0.0216	0.00500	"	0.0333	ND	64.8	40-140		
Benzo (a) pyrene	0.0192	0.00500	"	0.0333	ND	57.6	40-140		
Benzo (b) fluoranthene	0.0200	0.00500	"	0.0333	ND	60.0	40-140		
Benzo (k) fluoranthene	0.0190	0.00500	"	0.0333	ND	56.9	40-140		
Chrysene	0.0208	0.00500	"	0.0333	ND	62.5	40-140		
Dibenz (a,h) anthracene	0.0196	0.00500	"	0.0333	ND	58.7	40-140		
Fluoranthene	0.0208	0.00500	"	0.0333	ND	62.5	40-140		
Fluorene	0.0212	0.00500	"	0.0333	ND	63.5	40-140		
Indeno (1,2,3-cd) pyrene	0.0167	0.00500	"	0.0333	ND	50.1	40-140		
Pyrene	0.0216	0.00500	"	0.0333	ND	64.9	40-140		
1-Methylnaphthalene	0.0200	0.00500	"	0.0333	ND	60.0	40-140		
2-Methylnaphthalene	0.0223	0.00500	"	0.0333	0.00551	50.4	40-140		
Surrogate: 2-Methylnaphthalene-d10	0.0189		"	0.0333		56.8	40-140		
Surrogate: Fluoranthene-d10	0.0216		"	0.0333		64.7	40-140		

Matrix Spike Dup (BIA0395-MSD1)	Source: 2501083-01			Prepared: 01/10/25 Analyzed: 01/14/25					
Acenaphthene	0.0231	0.00500	mg/kg	0.0333	ND	69.2	40-140	11.4	30
Anthracene	0.0234	0.00500	"	0.0333	ND	70.1	40-140	11.5	30
Benzo (a) anthracene	0.0238	0.00500	"	0.0333	ND	71.5	40-140	9.83	30
Benzo (a) pyrene	0.0209	0.00500	"	0.0333	ND	62.6	40-140	8.31	30
Benzo (b) fluoranthene	0.0212	0.00500	"	0.0333	ND	63.7	40-140	6.03	30
Benzo (k) fluoranthene	0.0200	0.00500	"	0.0333	ND	60.1	40-140	5.50	30
Chrysene	0.0230	0.00500	"	0.0333	ND	69.1	40-140	10.1	30
Dibenz (a,h) anthracene	0.0236	0.00500	"	0.0333	ND	70.7	40-140	18.5	30
Fluoranthene	0.0231	0.00500	"	0.0333	ND	69.2	40-140	10.1	30
Fluorene	0.0234	0.00500	"	0.0333	ND	70.1	40-140	9.97	30
Indeno (1,2,3-cd) pyrene	0.0195	0.00500	"	0.0333	ND	58.6	40-140	15.6	30
Pyrene	0.0256	0.00500	"	0.0333	ND	76.7	40-140	16.7	30
1-Methylnaphthalene	0.0222	0.00500	"	0.0333	ND	66.5	40-140	10.3	30
2-Methylnaphthalene	0.0235	0.00500	"	0.0333	0.00551	54.1	40-140	5.34	30
Surrogate: 2-Methylnaphthalene-d10	0.0209		"	0.0333		62.8	40-140		
Surrogate: Fluoranthene-d10	0.0241		"	0.0333		72.2	40-140		

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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

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

Batch BIB1014 - EPA 3050B

Blank (BIB1014-BLK1)				Prepared: 02/19/25 Analyzed: 02/25/25						
Boron	ND	2.00	mg/L							
LCS (BIB1014-BS1)				Prepared: 02/19/25 Analyzed: 02/25/25						
Boron	4.85	2.00	mg/L	5.00		97.0	80-120			
Duplicate (BIB1014-DUP1)				Source: 2501076-06		Prepared: 02/19/25 Analyzed: 02/25/25				
Boron	ND	2.00	mg/L		ND				20	
Matrix Spike (BIB1014-MS1)				Source: 2501076-06		Prepared: 02/19/25 Analyzed: 02/25/25				
Boron	5.01	2.00	mg/L	5.03	ND	99.8	75-125			
Matrix Spike Dup (BIB1014-MSD1)				Source: 2501076-06		Prepared: 02/19/25 Analyzed: 02/25/25				
Boron	4.80	2.00	mg/L	5.03	ND	95.4	75-125	4.47	25	

Batch BIB1015 - EPA 3050B

Blank (BIB1015-BLK1)				Prepared: 02/19/25 Analyzed: 02/24/25						
Boron	ND	2.00	mg/L							
LCS (BIB1015-BS1)				Prepared: 02/19/25 Analyzed: 02/24/25						
Boron	4.85	2.00	mg/L	5.00		97.0	80-120			
Duplicate (BIB1015-DUP1)				Source: 2501082-01		Prepared: 02/19/25 Analyzed: 02/24/25				
Boron	ND	2.00	mg/L		ND				20	
Matrix Spike (BIB1015-MS1)				Source: 2501082-01		Prepared: 02/19/25 Analyzed: 02/24/25				
Boron	4.84	2.00	mg/L	5.01	ND	96.6	75-125			

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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

Summit Scientific

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

Batch BIB1015 - EPA 3050B

Matrix Spike Dup (BIB1015-MSD1)

Source: 2501082-01

Prepared: 02/19/25 Analyzed: 02/24/25

Boron	5.07	2.00	mg/L	5.01	ND	101	75-125	4.65	25	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BIB1407 - EPA 3050B

Blank (BIB1407-BLK1)

Prepared & Analyzed: 02/25/25

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 (BIB1407-BS1)

Prepared: 02/25/25 Analyzed: 02/26/25

Arsenic	39.7	0.200	mg/kg wet	41.3	96.1	80-120
Barium	41.1	0.400	"	41.3	99.4	80-120
Cadmium	2.18	0.200	"	2.07	105	80-120
Copper	45.3	0.400	"	41.3	110	80-120
Lead	21.2	0.200	"	20.7	103	80-120
Nickel	44.3	0.400	"	41.3	107	80-120
Silver	2.11	0.0200	"	2.07	102	80-120
Zinc	43.0	0.400	"	41.3	104	80-120
Selenium	4.61	0.260	"	4.13	111	80-120

Duplicate (BIB1407-DUP1)

Source: 2501086-01

Prepared & Analyzed: 02/25/25

Arsenic	5.08	0.200	mg/kg dry	5.36	5.24	20
Barium	262	0.400	"	277	5.86	20
Cadmium	0.575	0.200	"	0.543	5.75	20
Copper	5.49	0.400	"	5.30	3.51	20
Lead	14.5	0.200	"	15.0	3.26	20
Nickel	5.15	0.400	"	4.97	3.50	20
Silver	0.0447	0.0200	"	0.0405	9.67	20
Zinc	21.2	0.400	"	20.6	3.21	20
Selenium	ND	0.260	"	ND		20

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIB1407 - EPA 3050B

Matrix Spike (BIB1407-MS1)

Source: 2501086-01

Prepared: 02/25/25 Analyzed: 02/26/25

Arsenic	52.7	0.200	mg/kg dry	49.9	5.36	95.0	75-125			
Barium	299	0.400	"	49.9	277	44.2	75-125			QM-05
Cadmium	3.22	0.200	"	2.49	0.543	107	75-125			
Copper	33.3	0.400	"	49.9	5.30	56.2	75-125			QM-05
Lead	38.9	0.200	"	24.9	15.0	95.9	75-125			
Nickel	33.1	0.400	"	49.9	4.97	56.4	75-125			QM-05
Silver	2.60	0.0200	"	2.49	0.0405	103	75-125			
Zinc	48.9	0.400	"	49.9	20.6	56.8	75-125			QM-05
Selenium	5.54	0.260	"	4.99	ND	111	75-125			

Matrix Spike Dup (BIB1407-MSD1)

Source: 2501086-01

Prepared: 02/25/25 Analyzed: 02/27/25

Arsenic	52.3	0.200	mg/kg dry	48.7	5.36	96.4	75-125	0.764	25	
Barium	323	0.400	"	48.7	277	93.2	75-125	7.51	25	
Cadmium	3.18	0.200	"	2.44	0.543	108	75-125	1.17	25	
Copper	33.4	0.400	"	48.7	5.30	57.6	75-125	0.182	25	QM-05
Lead	39.6	0.200	"	24.4	15.0	101	75-125	1.87	25	
Nickel	33.1	0.400	"	48.7	4.97	57.7	75-125	0.0722	25	QM-05
Silver	2.59	0.0200	"	2.44	0.0405	105	75-125	0.132	25	
Zinc	49.8	0.400	"	48.7	20.6	60.0	75-125	1.81	25	QM-05
Selenium	4.78	0.260	"	4.87	ND	98.2	75-125	14.7	25	

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA1235 - 3060A Mod

Blank (BIA1235-BLK1)

Prepared & Analyzed: 01/28/25

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BIA1235-BS1)

Prepared & Analyzed: 01/28/25

Chromium, Hexavalent 26.5 0.30 mg/kg wet 25.5 104 80-120

Duplicate (BIA1235-DUP1)

Source: 2501086-01

Prepared & Analyzed: 01/28/25

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BIA1235-MS1)

Source: 2501086-01

Prepared & Analyzed: 01/28/25

Chromium, Hexavalent 33.5 0.30 mg/kg dry 32.1 ND 105 75-125

Matrix Spike Dup (BIA1235-MSD1)

Source: 2501086-01

Prepared & Analyzed: 01/28/25

Chromium, Hexavalent 31.8 0.30 mg/kg dry 30.2 ND 105 75-125 5.18 20

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA1360 - General Preparation

Blank (BIA1360-BLK1)

Prepared: 01/29/25 Analyzed: 02/01/25

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

LCS (BIA1360-BS1)

Prepared: 01/29/25 Analyzed: 02/01/25

Calcium	5.02	0.0500	mg/L wet	5.00	100	70-130				
Magnesium	4.87	0.0500	"	5.00	97.5	70-130				
Sodium	4.72	0.0500	"	5.00	94.4	70-130				

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
 Project Manager: Bryce Goldade

Reported:
 02/28/25 09:10

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 BIA1257 - General Preparation

Duplicate (BIA1257-DUP1)

Source: 2501076-01

Prepared: 01/28/25 Analyzed: 01/29/25

% Solids	87.5		%		87.3			0.299	20	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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

Summit Scientific

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

Batch BIA1350 - General Preparation

Blank (BIA1350-BLK1)

Prepared: 01/29/25 Analyzed: 01/30/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BIA1350-BS1)

Prepared: 01/29/25 Analyzed: 01/30/25

Specific Conductance (EC) 1.39 0.0100 mmhos/cm 1.41 98.8 95-105

Duplicate (BIA1350-DUP1)

Source: 2501086-01

Prepared: 01/29/25 Analyzed: 01/30/25

Specific Conductance (EC) 0.193 0.0100 mmhos/cm 0.192 0.496 20

Summit Scientific

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

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

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 BIA1336 - General Preparation

LCS (BIA1336-BS1)

Prepared: 01/29/25 Analyzed: 01/30/25

pH	9.11		pH Units	9.18		99.2	95-105			
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Duplicate (BIA1336-DUP1)

Source: 2501086-01

Prepared: 01/29/25 Analyzed: 01/30/25

pH	8.61		pH Units	8.64		0.341	20			
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Chevron - Lilli N-5

Project Number: [none]
Project Manager: Bryce Goldade

Reported:
02/28/25 09:10

Notes and Definitions

- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. 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