

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 29, 2024

Mike Medina

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Chesnut G22-3,4

Work Order #2410296

Enclosed are the results of analyses for samples received by Summit Scientific on 10/17/24 17:51. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Natalie Tessier For Paul Shrewsbury

President



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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R	2410296-01	Water	10/17/24 00:00	10/17/24 17:51
BH02R	2410296-02	Water	10/17/24 00:00	10/17/24 17:51
BH03R	2410296-03	Water	10/17/24 00:00	10/17/24 17:51
BH04R	2410296-04	Water	10/17/24 00:00	10/17/24 17:51
BH08R	2410296-05	Water	10/17/24 00:00	10/17/24 17:51
BH17	2410296-06	Water	10/17/24 00:00	10/17/24 17:51
BH20	2410296-07	Water	10/17/24 00:00	10/17/24 17:51
BH21	2410296-08	Water	10/17/24 00:00	10/17/24 17:51
BH22	2410296-09	Water	10/17/24 00:00	10/17/24 17:51
BH24	2410296-10	Water	10/17/24 00:00	10/17/24 17:51
BH33R4	2410296-11	Water	10/17/24 00:00	10/17/24 17:51
BH35	2410296-12	Water	10/17/24 00:00	10/17/24 17:51

Client: Noble Noble / Tasman		Send Data To: Project Manager: Mike Medina		Send Invoice To: Company: Noble Energy	
Address: 6855 W 119th Ave		E-Mail: tas-chevron-2@tasman-geo.com		Project Name/Location: <u>Chestnut G 22-3,4</u>	
City/State/Zip: Broomfield / CO / 80220		Project Name: <u>Chestnut G 22-3,4</u>		AFE#:	
Phone: 303-487-1228		Project Number:		PO/Billing Codes:	
Sampler Name: Jordan Hestmark		Project Number:		Contact: <u>Dan Peterson</u>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested								Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN - 8260B	TPH - (C6 - C36)	1,2,4 & 1,3,5 - TMB	Boron - HWS	pH, EC, SAR	PAHs - 915	Metals - 915		TDS, SO4, Cl
1	BH01R	10/17/24		4	3		1		X				X		X					X	
2	BH02R			1			1														
3	BH03R			1			1														
4	BH04R			3																	
5	BH08R			4			1														X
6	BH7			4			1														X
7	BH20			3																	
8	BH21			4			1														X
9	BH22			1																	
10	BH24			1																	
11	BH33R4			1																	
12	BH35			1																	
13																					
14																					
15																					

Relinquished by: <u>Jordan Hestmark</u>	Date/Time: <u>10/17/24 1530</u>	Received by: <u>Tasman Lockbox</u>	Date/Time: <u>10/17/24 1530</u>	TAT Business Days	Field DO	Notes:
Relinquished by: <u>Tasman Lockbox</u>	Date/Time: <u>10/17/24 1530</u>	Received by: <u>Tasman Lockbox</u>	Date/Time: <u>10/17/24 1530</u>	Same Day	Field EC	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	1 Day	Field ORP	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	2 Days	Field pH	
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____	3 Days	Field Temp.	
Temperature Upon Receipt: <u>9.1</u>	Corrected Temperature: <u>8</u>	IR gun #: <u>1</u>	HNO3 lot #:	Standard	<input checked="" type="checkbox"/> Field Turb.	

S₂

Sample Receipt Checklist

S2 Work Order# 2410296

Client: NDAE/Carman

Client Project ID: Chesnut G 22-3,4

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

Airbill #: _____

Matrix (Check all that apply)

Air

Soil/Solid

Water

Other

Temp (°C)

9.1

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 COE</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 checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>HCl</u>
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

10/17/24

Date/Time



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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH01R
2410296-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.3	92.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.9	97.1 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	15.8	118 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	475	0.0600		mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	1680	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	3280	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

Summit Scientific

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Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH02R
2410296-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.3	92.1 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.9	96.5 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.8	103 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	284	0.0600		mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	465	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	1270	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH03R
2410296-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.0	97.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	98.9 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.4	100 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	506	0.0600		mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	604	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	2400	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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Tasman Geosciences
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Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH04R
2410296-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	13.5	101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.6	102 %	21-167		"	"	"	"	

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Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH08R
2410296-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.9	96.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	12.9	96.5 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	99.4 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	326	0.0600		mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	472	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	1840	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH17
2410296-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.2	98.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.7	103 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.5	101 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	511	0.0600		mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	556	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	2400	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH20
2410296-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.8	95.8 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.3	99.7 %		21-167		"	"	"	"	

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH21
2410296-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	21	1.0	ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	3.0	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	12.7	95.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.8	104 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	364	0.0600	mg/L	50	BHJ1103	10/25/24	10/26/24	EPA 300.0	
Sulfate	615	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1820	10.0	mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH22
2410296-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.8	95.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.0	97.9 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.4	101 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	356	0.0600		mg/L	50	BHJ1105	10/25/24	10/26/24	EPA 300.0	
Sulfate	572	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	1920	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH24
2410296-10 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.2	98.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	101 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.5	101 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	348	0.0600		mg/L	50	BHJ1105	10/25/24	10/26/24	EPA 300.0	
Sulfate	624	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	1780	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH33R4
2410296-11 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	12.9	96.8 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	99.2 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	98.8 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Chloride	405	0.0600		mg/L	50	BHJ1105	10/25/24	10/26/24	EPA 300.0	
Sulfate	540	0.300		"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Total Dissolved Solids	2030	10.0		mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

BH35
2410296-12 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	93	1.0	ug/l	1	BHJ0796	10/18/24	10/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	1.3	1.0	"	"	"	"	"	"	
Xylenes (total)	5.4	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	4.0	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.4	100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	14.6	110 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	334	0.0600	mg/L	50	BHJ1105	10/25/24	10/26/24	EPA 300.0	
Sulfate	384	0.300	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **10/17/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1570	10.0	mg/L	1	BHJ0870	10/22/24	10/23/24	SM2540C	

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHJ0796 - EPA 5030 Water MS

Blank (BHJ0796-BLK1)

Prepared & Analyzed: 10/18/24

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Naphthalene	ND	1.0	"								
1,2,4-Trimethylbenzene	ND	1.0	"								
1,3,5-Trimethylbenzene	ND	1.0	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.7		"	13.3	103	23-173					
<i>Surrogate: Toluene-d8</i>	13.4		"	13.3	100	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	12.9		"	13.3	97.1	21-167					

LCS (BHJ0796-BS1)

Prepared & Analyzed: 10/18/24

Benzene	36.6	1.0	ug/l	33.3	110	51-132					
Toluene	36.4	1.0	"	33.3	109	51-138					
Ethylbenzene	36.6	1.0	"	33.3	110	58-146					
m,p-Xylene	73.3	2.0	"	66.7	110	57-144					
o-Xylene	33.3	1.0	"	33.3	99.8	53-146					
Naphthalene	30.0	1.0	"	33.3	90.1	70-130					
1,2,4-Trimethylbenzene	36.0	1.0	"	33.3	108	70-130					
1,3,5-Trimethylbenzene	36.8	1.0	"	33.3	110	70-130					
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.0		"	13.3	97.4	23-173					
<i>Surrogate: Toluene-d8</i>	13.3		"	13.3	100	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	12.7		"	13.3	95.1	21-167					

LCS Dup (BHJ0796-BSD1)

Prepared & Analyzed: 10/18/24

Benzene	38.2	1.0	ug/l	33.3	115	51-132	4.41	20			
Toluene	37.7	1.0	"	33.3	113	51-138	3.35	20			
Ethylbenzene	37.2	1.0	"	33.3	112	58-146	1.41	20			
m,p-Xylene	74.1	2.0	"	66.7	111	57-144	1.06	20			
o-Xylene	33.7	1.0	"	33.3	101	53-146	1.37	20			
Naphthalene	31.8	1.0	"	33.3	95.5	70-130	5.79	20			
1,2,4-Trimethylbenzene	36.4	1.0	"	33.3	109	70-130	0.967	20			
1,3,5-Trimethylbenzene	37.5	1.0	"	33.3	112	70-130	1.70	20			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.9		"	13.3	104	23-173					
<i>Surrogate: Toluene-d8</i>	13.8		"	13.3	104	20-170					
<i>Surrogate: 4-Bromofluorobenzene</i>	12.3		"	13.3	92.6	21-167					

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

Anions by EPA Method 300.0 - Quality Control
Summit Scientific

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

Batch BHJ1103 - General Preparation

Blank (BHJ1103-BLK1)

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							

LCS (BHJ1103-BS1)

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	2.98	0.0600	mg/L	3.00		99.3	90-110
Sulfate	14.9	0.300	"	15.0		99.0	90-110

Duplicate (BHJ1103-DUP1)

Source: 2410286-04

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	239	0.0600	mg/L		239		0.201	20
Sulfate	546	0.300	"		544		0.383	20

Matrix Spike (BHJ1103-MS1)

Source: 2410286-04

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	379	0.0600	mg/L	150	239	93.3	80-120
Sulfate	1240	0.300	"	750	544	92.9	80-120

Batch BHJ1105 - General Preparation

Blank (BHJ1105-BLK1)

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	ND	0.0600	mg/L				
Sulfate	ND	0.300	"				

LCS (BHJ1105-BS1)

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	2.98	0.0600	mg/L	3.00		99.2	90-110
Sulfate	14.8	0.300	"	15.0		98.7	90-110

Duplicate (BHJ1105-DUP1)

Source: 2410296-09

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	352	0.0600	mg/L		356		1.08	20
Sulfate	571	0.300	"		572		0.228	20

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

Anions by EPA Method 300.0 - Quality Control

Summit Scientific

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

Batch BHJ1105 - General Preparation

Matrix Spike (BHJ1105-MS1)

Source: 2410296-09

Prepared: 10/25/24 Analyzed: 10/26/24

Chloride	488	0.0600	mg/L	150	356	87.8	80-120
Sulfate	1260	0.300	"	750	572	92.3	80-120

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

Total Dissolved Solids by SM2540C - Quality Control

Summit Scientific

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

Batch BHJ0870 - General Preparation

Blank (BHJ0870-BLK1)

Prepared: 10/22/24 Analyzed: 10/23/24

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BHJ0870-DUP1)

Source: 2410291-12

Prepared: 10/22/24 Analyzed: 10/23/24

Total Dissolved Solids 1730 10.0 mg/L 1640 5.34 20

Summit Scientific

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

Project: Noble - Chesnut G22-3,4

Project Number: [none]
Project Manager: Mike Medina

Reported:
10/29/24 08:46

Notes and Definitions

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