

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 24, 2024

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Munds 13-29, Dickerson 14-29A

Work Order #2409250

Enclosed are the results of analyses for samples received by Summit Scientific on 09/17/24 17:54. 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: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH16	2409250-01	Water	09/17/24 14:13	09/17/24 17:54
BH17	2409250-02	Water	09/17/24 13:40	09/17/24 17:54
BH18	2409250-03	Water	09/17/24 13:27	09/17/24 17:54
BH19	2409250-04	Water	09/17/24 12:54	09/17/24 17:54
BH20	2409250-05	Water	09/17/24 13:10	09/17/24 17:54
BH21	2409250-06	Water	09/17/24 13:54	09/17/24 17:54
BH22	2409250-07	Water	09/17/24 13:41	09/17/24 17:54
BH24	2409250-08	Water	09/17/24 13:28	09/17/24 17:54
BH25	2409250-09	Water	09/17/24 14:32	09/17/24 17:54
BH26	2409250-10	Water	09/17/24 14:21	09/17/24 17:54
BH28	2409250-11	Water	09/17/24 12:56	09/17/24 17:54
BH30	2409250-12	Water	09/17/24 14:07	09/17/24 17:54
BH31	2409250-13	Water	09/17/24 14:02	09/17/24 17:54
BH33	2409250-14	Water	09/17/24 13:13	09/17/24 17:54
BH34	2409250-15	Water	09/17/24 12:49	09/17/24 17:54
BH35	2409250-16	Water	09/17/24 14:36	09/17/24 17:54
BH36	2409250-17	Water	09/17/24 14:34	09/17/24 17:54
BH37	2409250-18	Water	09/17/24 12:26	09/17/24 17:54
BH42	2409250-19	Water	09/17/24 13:52	09/17/24 17:54
BH43	2409250-20	Water	09/17/24 14:19	09/17/24 17:54
BH44	2409250-21	Water	09/17/24 13:19	09/17/24 17:54
BH46	2409250-22	Water	09/17/24 12:05	09/17/24 17:54
BH47	2409250-23	Water	09/17/24 11:51	09/17/24 17:54
BH49	2409250-24	Water	09/17/24 12:29	09/17/24 17:54
BH50	2409250-25	Water	09/17/24 12:28	09/17/24 17:54
BH51	2409250-26	Water	09/17/24 12:41	09/17/24 17:54
BH52	2409250-27	Water	09/17/24 11:49	09/17/24 17:54

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH54	2409250-28	Water	09/17/24 11:53	09/17/24 17:54

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# SUMMIT SCIENTIFIC

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

Lab ID

Page 1 of 2

2409250.1

<b>Send Data To:</b>		<b>Send Invoice To:</b>
Client: Noble/Tasman	Project Manager: Jake Whritenour	Company: Noble
Address: 6855 W. 119th Ave.	E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location:
City/State/Zip: Broomfield/CO/ 80020		AFE#:
Phone:	Project Name: <i>Mounds 13-29, Dickerson 14-29A</i>	PO/Billing Codes:
Sampler Name: <i>Conor Lovell</i>	Project Number:	Contact: Dan Peterson

				Preservative				Matrix				Analysis Requested				Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN	1,2,4 & 1,3,5-TMB	TDS, CL, SO4	SAR, EC, pH by saturated paste
1	BH16	9/17/24	1413	4	3		1		4				x	x	x	
2	BH17		1340													
3	BH18		1327													
4	BH19		1254													
5	BH20		1310													
6	BH21		1354													
7	BH22		1341													
8	BH24		1328													
9	BH25		1432	1	1				1				x	x		
10	BH26		1421	4	3		1		4				x	x	x	
11	BH28		1256													
12	BH30		1407													
13	BH31		1402													
14	BH33		1313													
15	BH34		1249													

Relinquished by: <i>[Signature]</i>	Date/Time: 9/17/24 1630	Received by: Tasman Lock Box	Date/Time: 9/17/24 1630	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: 9/17/24 1754	Received by: <i>[Signature]</i>	Date/Time: 9/17/24 1754	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	Field Turb.	
Temperature Upon Receipt: 10.1	Corrected Temperature: 9	IR gun #: 1	HNO3 lot #:			

		<b>Send Data To:</b>	<b>Send Invoice To:</b>
Client: Noble/Tasman		Project Manager: Jake Whritenour	Company: Noble
Address: 6855 W. 119th Ave.		E-Mail: Jwhritenour@tasman-geo.com	Project Name/Location:
City/State/Zip: Broomfield/CO/ 80020			AFE#:
Phone:		Project Name: Mounds 13-29, Dickerson 14-29A	PO/Billing Codes:
Sampler Name: <i>Conor Lovell</i>		Project Number:	Contact: Dan Peterson

				Preservative				Matrix				Analysis Requested				Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN	1,2,4 & 1,3,5-TMB	TDS, CL, SO4	SAR, EC, pH by saturated paste
1	BH35	9/17/24	1436	4	3		1		4				x	x	x	
2	BH36		1439													
3	BH37		1226													
4	BH42		1352													
5	BH43		1419													
6	BH44		1319													
7	BH46		1205													
8	BH47		1151													
9	BH49		1229													
10	BH50		1228													
11	BH51		1241													
12	BH52		1149													
13	BH54		1153													
14																
15																

Relinquished by: <i>Conor Lovell</i>	Date/Time: 9/17/24 1630	Received by: Tasman Lock Box	Date/Time: 9/17/24 1630	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <i>Tasman Lock Box</i>	Date/Time: 9/17/24 1721	Received by: <i>[Signature]</i>	Date/Time: 9/17/24 1701	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: 10-1	Corrected Temperature: 8	IR gun #: 1	HNO3 lot #:			

S<sub>2</sub>

2/2

## Sample Receipt Checklist

S2 Work Order# 2419250Client: Nadef TormanClient Project ID: Munds 1329, Dickerson 14-29AShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐

Airbill #:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Matrix (Check all that apply)

Air

☐

Soil/Solid

☐

Water

☒

Other

☐

Temp (°C)

10.1

Thermometer #

1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
If custody seals are present, are they intact? <sup>(1)</sup>	<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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , 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? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<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)? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HCl
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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):				
<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.				

AS  
Custodian Printed Name9/17/24  
Date/Time



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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH16**  
**2409250-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>2.1</b>	1.0		ug/l	1	BHI0607	09/18/24	09/18/24	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: **09/17/24 14:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.0	105 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	100 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.4 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>373</b>	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>155</b>	0.300		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:13**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>1470</b>	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH17**  
**2409250-02 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>11</b>	1.0	ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>460</b>	100	"	100	"	"	09/20/24	"	
<b>Xylenes (total)</b>	<b>5700</b>	200	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>14</b>	1.0	"	1	"	"	09/18/24	"	
<b>1,2,4-Trimethylbenzene</b>	<b>460</b>	100	"	100	"	"	09/20/24	"	
<b>1,3,5-Trimethylbenzene</b>	<b>350</b>	100	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>	15.1	114 %	23-173		"	"	09/18/24	"	
<i>Surrogate: Toluene-d8</i>	13.8	103 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	20.3	152 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Chloride</b>	<b>604</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>48.8</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>2000</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH18**  
**2409250-03 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:27**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>1.5</b>	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:27**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	14.0	105 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.5 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	14.6	109 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:27**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>411</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>337</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:27**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>1660</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH19**  
**2409250-04 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/18/24	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: **09/17/24 12:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.8	103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	99.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.1	98.3 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	193	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	176	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	848	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH20**  
**2409250-05 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/18/24	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: **09/17/24 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.6	102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	98.7 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>210</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	<b>179</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>876</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH21**  
**2409250-06 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>8.4</b>	1.0	ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>47</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>6.8</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>23</b>	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	14.1	106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	18.8	141 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>84.3</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>296</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>1310</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH22**  
**2409250-07 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>610</b>	100	ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	09/18/24	"	
<b>Ethylbenzene</b>	<b>730</b>	100	"	100	"	"	09/20/24	"	
<b>Xylenes (total)</b>	<b>11000</b>	200	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>19</b>	1.0	"	1	"	"	09/18/24	"	
<b>1,2,4-Trimethylbenzene</b>	<b>620</b>	100	"	100	"	"	09/20/24	"	
<b>1,3,5-Trimethylbenzene</b>	<b>470</b>	100	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.1	98.6 %	23-173		"	"	09/18/24	"	
<i>Surrogate: Toluene-d8</i>	13.4	101 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	16.7	125 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>219</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>8.76</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>923</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH24**  
**2409250-08 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>2.2</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.7	103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.2	99.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.4	100 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>227</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>964</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>1870</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH25**  
**2409250-09 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>7.6</b>	1.0		ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>10</b>	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0		"	"	"	"	"	"	

Date Sampled: **09/17/24 14:32**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	13.5	101 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.9	104 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.9	104 %		21-167		"	"	"	"	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH26**  
**2409250-10 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>750</b>	100	ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	09/18/24	"	
<b>Ethylbenzene</b>	<b>320</b>	100	"	100	"	"	09/20/24	"	
<b>Xylenes (total)</b>	<b>750</b>	200	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>16</b>	1.0	"	1	"	"	09/18/24	"	
<b>1,2,4-Trimethylbenzene</b>	<b>370</b>	100	"	100	"	"	09/20/24	"	
<b>1,3,5-Trimethylbenzene</b>	<b>13</b>	1.0	"	1	"	"	09/18/24	"	

Date Sampled: **09/17/24 14:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	15.3	115 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.4	101 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	15.8	118 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>212</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>9.63</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:21**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>870</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH28**  
**2409250-11 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	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: **09/17/24 12:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	14.1	106 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.5	101 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	337	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	556	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1620	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH30**  
**2409250-12 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>490</b>	100	ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	09/19/24	"	
<b>Ethylbenzene</b>	<b>530</b>	100	"	100	"	"	09/20/24	"	
<b>Xylenes (total)</b>	<b>6100</b>	200	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>11</b>	1.0	"	1	"	"	09/19/24	"	
<b>1,2,4-Trimethylbenzene</b>	<b>390</b>	100	"	100	"	"	09/20/24	"	
<b>1,3,5-Trimethylbenzene</b>	<b>160</b>	1.0	"	1	"	"	09/19/24	"	

Date Sampled: **09/17/24 14:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	11.6	86.6 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	12.7	95.6 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	14.0	105 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>182</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>8.86</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:07**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>749</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH31**  
**2409250-13 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>9.3</b>	1.0		ug/l	1	BHI0607	09/18/24	09/19/24	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: **09/17/24 14:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	14.5	109 %		23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	101 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.4	101 %		21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Chloride</b>	<b>158</b>	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>17.4</b>	0.300		"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Total Dissolved Solids</b>	<b>752</b>	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH33**  
**2409250-14 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	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: **09/17/24 13:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.2	99.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.1	98.0 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>210</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	<b>384</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:13**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>1070</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH34**  
**2409250-15 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>18</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>39</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>2.3</b>	1.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>23</b>	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 12:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.6	102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.8	104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	14.0	105 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>514</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>181</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>1810</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH35**  
**2409250-16 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>15000</b>	100	ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
<b>Toluene</b>	<b>130</b>	1.0	"	1	"	"	09/19/24	"	
<b>Ethylbenzene</b>	<b>10</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>150</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>4.3</b>	1.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>3.0</b>	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 14:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.2	99.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	99.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.2 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>660</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>7.46</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>1520</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH36**  
**2409250-17 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>2200</b>	100	ug/l	100	BHI0607	09/18/24	09/19/24	EPA 8260B	
Toluene	ND	100	"	"	"	"	"	"	R-05
<b>Ethylbenzene</b>	<b>260</b>	100	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>5000</b>	200	"	"	"	"	"	"	
Naphthalene	ND	100	"	"	"	"	"	"	R-05
<b>1,2,4-Trimethylbenzene</b>	<b>200</b>	100	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>150</b>	100	"	"	"	"	"	"	

Date Sampled: **09/17/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.0	97.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	96.2 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Chloride</b>	<b>514</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>263</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:34**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>1570</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH37**  
**2409250-18 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	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: **09/17/24 12:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	12.1	90.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.4	100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.1	98.2 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	517	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	804	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	2000	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH42**  
**2409250-19 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>73</b>	1.0	ug/l	1	BHI0607	09/18/24	09/19/24	EPA 8260B	
<b>Toluene</b>	<b>1.5</b>	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>7.0</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>61</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>1.9</b>	1.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>1.6</b>	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.0	97.3 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.8	103 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	12.5	93.9 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Chloride</b>	<b>148</b>	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>9.56</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Total Dissolved Solids</b>	<b>669</b>	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH43**  
**2409250-20 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 14:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	100	ug/l	100	BHI0607	09/18/24	09/19/24	EPA 8260B	R-05
Toluene	ND	100	"	"	"	"	"	"	R-05
Ethylbenzene	290	100	"	"	"	"	"	"	
Xylenes (total)	1800	200	"	"	"	"	"	"	
Naphthalene	ND	100	"	"	"	"	"	"	R-05
1,2,4-Trimethylbenzene	320	100	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	280	100	"	"	"	"	"	"	

Date Sampled: **09/17/24 14:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.0	97.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	96.4 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 14:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	184	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	ND	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 14:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	618	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH44**  
**2409250-21 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 13:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	67	1.0	"	"	"	"	"	"	
Xylenes (total)	17	2.0	"	"	"	"	"	"	
Naphthalene	1.7	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.2	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	19	1.0	"	"	"	"	"	"	

Date Sampled: **09/17/24 13:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	12.4	93.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	11.1	83.1 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.8	104 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 13:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	200	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	ND	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 13:19**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	684	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH46**  
**2409250-22 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>2300</b>	100	ug/l	100	BHI0656	09/19/24	09/20/24	EPA 8260B	
Toluene	ND	100	"	"	"	"	"	"	R-05
<b>Ethylbenzene</b>	<b>170</b>	100	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>2200</b>	200	"	"	"	"	"	"	
Naphthalene	ND	100	"	"	"	"	"	"	R-05
<b>1,2,4-Trimethylbenzene</b>	<b>120</b>	100	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>120</b>	100	"	"	"	"	"	"	

Date Sampled: **09/17/24 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	13.0	97.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.3	92.5 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Chloride</b>	<b>131</b>	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
<b>Sulfate</b>	<b>141</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>799</b>	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH47**  
**2409250-23 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 11:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 11:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	12.3	92.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.3	100 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.5	93.6 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 11:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>189</b>	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	<b>237</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 11:51**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>842</b>	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH49**  
**2409250-24 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.4	100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	96.4 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	228	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	494	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1180	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH50**  
**2409250-25 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 12:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.6	102 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.6	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.0	97.4 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>578</b>	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	<b>635</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>2110</b>	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH51**  
**2409250-26 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 12:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 12:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.0	97.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	101 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	13.2	99.2 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 12:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>208</b>	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	<b>205</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 12:41**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>894</b>	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

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Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH52**  
**2409250-27 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 11:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 11:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	12.1	90.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.5	102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.5	93.8 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 11:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	266	0.0600	mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	935	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 11:49**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	1690	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

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Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**BH54**  
**2409250-28 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/17/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BHI0656	09/19/24	09/20/24	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: **09/17/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	13.2	98.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8	13.1	98.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	12.8	95.7 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **09/17/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chloride	<b>317</b>	0.0600	mg/L	50	BHI0783	09/23/24	09/24/24	EPA 300.0	
Sulfate	<b>162</b>	0.300	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/17/24 11:53**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Total Dissolved Solids	<b>1090</b>	10.0	mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

## 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 BHI0607 - EPA 5030 Water MS

##### Blank (BHI0607-BLK1)

Prepared & Analyzed: 09/18/24

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	"							
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.3		99.7	23-173			
Surrogate: Toluene-d8	13.3		"	13.3		99.7	20-170			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.1	21-167			

##### LCS (BHI0607-BS1)

Prepared & Analyzed: 09/18/24

Benzene	31.2	1.0	ug/l	33.3		93.6	51-132			
Toluene	31.6	1.0	"	33.3		94.9	51-138			
Ethylbenzene	31.9	1.0	"	33.3		95.8	58-146			
m,p-Xylene	65.2	2.0	"	66.7		97.8	57-144			
o-Xylene	32.3	1.0	"	33.3		96.9	53-146			
Naphthalene	30.1	1.0	"	33.3		90.3	70-130			
1,2,4-Trimethylbenzene	32.1	1.0	"	33.3		96.3	70-130			
1,3,5-Trimethylbenzene	32.0	1.0	"	33.3		96.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.3		104	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		100	20-170			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	21-167			

##### LCS Dup (BHI0607-BSD1)

Prepared & Analyzed: 09/18/24

Benzene	32.4	1.0	ug/l	33.3		97.1	51-132	3.65	20	
Toluene	32.9	1.0	"	33.3		98.6	51-138	3.88	20	
Ethylbenzene	32.9	1.0	"	33.3		98.6	58-146	2.90	20	
m,p-Xylene	67.1	2.0	"	66.7		101	57-144	2.93	20	
o-Xylene	33.2	1.0	"	33.3		99.5	53-146	2.60	20	
Naphthalene	33.0	1.0	"	33.3		99.1	70-130	9.25	20	
1,2,4-Trimethylbenzene	33.1	1.0	"	33.3		99.2	70-130	2.95	20	
1,3,5-Trimethylbenzene	33.0	1.0	"	33.3		98.9	70-130	2.86	20	
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.3		106	23-173			
Surrogate: Toluene-d8	13.3		"	13.3		99.8	20-170			
Surrogate: 4-Bromofluorobenzene	13.2		"	13.3		99.2	21-167			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

## 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 BHI0656 - EPA 5030 Water MS

##### Blank (BHI0656-BLK1)

Prepared & Analyzed: 09/19/24

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Naphthalene	ND	1.0	"							
1,2,4-Trimethylbenzene	ND	1.0	"							
1,3,5-Trimethylbenzene	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	13.5		"	13.3		101	23-173			
Surrogate: Toluene-d8	13.5		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.2	21-167			

##### LCS (BHI0656-BS1)

Prepared: 09/19/24 Analyzed: 09/20/24

Benzene	37.6	1.0	ug/l	33.3		113	51-132			
Toluene	35.9	1.0	"	33.3		108	51-138			
Ethylbenzene	32.5	1.0	"	33.3		97.6	58-146			
m,p-Xylene	67.6	2.0	"	66.7		101	57-144			
o-Xylene	32.7	1.0	"	33.3		98.2	53-146			
Naphthalene	28.0	1.0	"	33.3		84.1	70-130			
1,2,4-Trimethylbenzene	31.4	1.0	"	33.3		94.1	70-130			
1,3,5-Trimethylbenzene	33.6	1.0	"	33.3		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	12.4		"	13.3		93.1	23-173			
Surrogate: Toluene-d8	13.9		"	13.3		104	20-170			
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		93.1	21-167			

##### LCS Dup (BHI0656-BSD1)

Prepared: 09/19/24 Analyzed: 09/20/24

Benzene	38.2	1.0	ug/l	33.3		115	51-132	1.48	20	
Toluene	36.5	1.0	"	33.3		109	51-138	1.46	20	
Ethylbenzene	34.1	1.0	"	33.3		102	58-146	4.66	20	
m,p-Xylene	71.1	2.0	"	66.7		107	57-144	4.96	20	
o-Xylene	33.8	1.0	"	33.3		102	53-146	3.30	20	
Naphthalene	31.5	1.0	"	33.3		94.4	70-130	11.6	20	
1,2,4-Trimethylbenzene	33.3	1.0	"	33.3		99.8	70-130	5.88	20	
1,3,5-Trimethylbenzene	35.8	1.0	"	33.3		108	70-130	6.39	20	
Surrogate: 1,2-Dichloroethane-d4	12.6		"	13.3		94.4	23-173			
Surrogate: Toluene-d8	13.7		"	13.3		103	20-170			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.6	21-167			

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

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

### Anions by EPA Method 300.0 - Quality Control

#### Summit Scientific

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

#### Batch BHI0745 - General Preparation

##### Blank (BHI0745-BLK1)

Prepared & Analyzed: 09/23/24

Chloride	ND	0.0600	mg/L
Sulfate	ND	0.300	"

##### LCS (BHI0745-BS1)

Prepared & Analyzed: 09/23/24

Chloride	2.97	0.0600	mg/L	3.00	98.9	90-110
Sulfate	14.8	0.300	"	15.0	98.3	90-110

##### Duplicate (BHI0745-DUP1)

Source: 2409250-01

Prepared & Analyzed: 09/23/24

Chloride	376	0.0600	mg/L	373	0.730	20
Sulfate	156	0.300	"	155	0.855	20

##### Matrix Spike (BHI0745-MS1)

Source: 2409250-01

Prepared & Analyzed: 09/23/24

Chloride	518	0.0600	mg/L	150	373	96.9	80-120
Sulfate	874	0.300	"	750	155	95.9	80-120

#### Batch BHI0783 - General Preparation

##### Blank (BHI0783-BLK1)

Prepared & Analyzed: 09/23/24

Chloride	ND	0.0600	mg/L
Sulfate	ND	0.300	"

##### LCS (BHI0783-BS1)

Prepared & Analyzed: 09/23/24

Chloride	2.97	0.0600	mg/L	3.00	99.1	90-110
Sulfate	14.8	0.300	"	15.0	98.5	90-110

##### Duplicate (BHI0783-DUP1)

Source: 2409250-22

Prepared & Analyzed: 09/23/24

Chloride	130	0.0600	mg/L	131	0.641	20
Sulfate	141	0.300	"	141	0.443	20

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6855 W. 119th Ave.  
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Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**Anions by EPA Method 300.0 - Quality Control**  
**Summit Scientific**

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

**Batch BHI0783 - General Preparation**

Matrix Spike (BHI0783-MS1)				Source: 2409250-22				Prepared & Analyzed: 09/23/24			
Chloride	281	0.0600	mg/L	150	131	100	80-120				
Sulfate	886	0.300	"	750	141	99.3	80-120				

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Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

**Total Dissolved Solids by SM2540C - Quality Control**  
**Summit Scientific**

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

**Batch BHI0727 - General Preparation**

**Blank (BHI0727-BLK1)**

Prepared & Analyzed: 09/23/24

Total Dissolved Solids ND 10.0 mg/L

**Duplicate (BHI0727-DUP1)**

Source: 2409250-01

Prepared & Analyzed: 09/23/24

Total Dissolved Solids 1440 10.0 mg/L 1470 1.51 20

**Batch BHI0728 - General Preparation**

**Blank (BHI0728-BLK1)**

Prepared & Analyzed: 09/23/24

Total Dissolved Solids ND 10.0 mg/L

**Duplicate (BHI0728-DUP1)**

Source: 2409250-21

Prepared & Analyzed: 09/23/24

Total Dissolved Solids 674 10.0 mg/L 684 1.47 20

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Munds 13-29, Dickerson 14-29A

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
09/24/24 09:29

### Notes and Definitions

R-05      The reporting limit for this sample has been raised due to the presence of high levels of non-target analytes.

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