

Summit Scientific

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,



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

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



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

Project: 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



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

Lab ID	Page 2 of 2
2409250.2	

		Send Data To:	Send Invoice To:
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

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	1,2,4 & 1,3,5-TMB	TDS, CL, SO4			
1	BH35	9/17/24	1436	4	3		1		4				x	x	x			SAR, EC, pH by saturated paste
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: 9/22/24 1721	Received by: <i>[Signature]</i>	Date/Time: 9/22/24 1701	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: 8	IR gun #: 1	HNO3 lot #:			



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								
Benzene	2.1	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								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	14.0	105 %		23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.3	100 %		20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	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								
Chloride	373	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	155	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								
Total Dissolved Solids	1470	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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
Benzene	11	1.0	ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	460	100	"	100	"	"	09/20/24	"	
Xylenes (total)	5700	200	"	"	"	"	"	"	
Naphthalene	14	1.0	"	1	"	"	09/18/24	"	
1,2,4-Trimethylbenzene	460	100	"	100	"	"	09/20/24	"	
1,3,5-Trimethylbenzene	350	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
Chloride	604	0.0600	mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	48.8	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
Total Dissolved Solids	2000	10.0	mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.5	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								
Chloride	411	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	337	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								
Total Dissolved Solids	1660	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	

Summit Scientific

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



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

Project: 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	210	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	179	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	876	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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								
Benzene	8.4	1.0		ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	47	1.0		"	"	"	"	"	"	
Xylenes (total)	6.8	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	23	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								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	14.1	106 %		23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.3	99.8 %		20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	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								
Chloride	84.3	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	296	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								
Total Dissolved Solids	1310	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

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

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

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

Total Dissolved Solids by SM2540C

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

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

Summit Scientific

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



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

Project: 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		"	"	"	"	"	"	
Xylenes (total)	2.2	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								
Chloride	227	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	964	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								
Total Dissolved Solids	1870	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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								
Benzene	7.6	1.0		ug/l	1	BHI0607	09/18/24	09/18/24	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	10	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		"	"	"	"	

Summit Scientific

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



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

Project: 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								
Benzene	750	100		ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
Toluene	ND	1.0		"	1	"	"	09/18/24	"	
Ethylbenzene	320	100		"	100	"	"	09/20/24	"	
Xylenes (total)	750	200		"	"	"	"	"	"	
Naphthalene	16	1.0		"	1	"	"	09/18/24	"	
1,2,4-Trimethylbenzene	370	100		"	100	"	"	09/20/24	"	
1,3,5-Trimethylbenzene	13	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								
Chloride	212	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	9.63	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								
Total Dissolved Solids	870	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	

Summit Scientific

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



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

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

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

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

Total Dissolved Solids by SM2540C

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

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

Summit Scientific

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



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

Project: 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								
Benzene	9.3	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								
Chloride	158	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	17.4	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								
Total Dissolved Solids	752	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	210	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	384	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	1070	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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		"	"	"	"	"	"	
Ethylbenzene	18	1.0		"	"	"	"	"	"	
Xylenes (total)	39	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	2.3	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	23	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								
Chloride	514	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	181	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								
Total Dissolved Solids	1810	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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								
Benzene	15000	100		ug/l	100	BHI0607	09/18/24	09/20/24	EPA 8260B	
Toluene	130	1.0		"	1	"	"	09/19/24	"	
Ethylbenzene	10	1.0		"	"	"	"	"	"	
Xylenes (total)	150	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	4.3	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	3.0	1.0		"	"	"	"	"	"	

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.2	99.2 %		23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>	13.3	99.8 %		20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	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								
Chloride	660	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	7.46	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								
Total Dissolved Solids	1520	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

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

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

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

Total Dissolved Solids by SM2540C

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

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

Summit Scientific

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



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

Project: 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

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



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

Project: 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								
Benzene	73	1.0		ug/l	1	BHI0607	09/18/24	09/19/24	EPA 8260B	
Toluene	1.5	1.0		"	"	"	"	"	"	
Ethylbenzene	7.0	1.0		"	"	"	"	"	"	
Xylenes (total)	61	2.0		"	"	"	"	"	"	
Naphthalene	ND	1.0		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.9	1.0		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	1.6	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								
Chloride	148	0.0600		mg/L	50	BHI0745	09/23/24	09/23/24	EPA 300.0	
Sulfate	9.56	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								
Total Dissolved Solids	669	10.0		mg/L	1	BHI0727	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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

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



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

Project: 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

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



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

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

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

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>	13.5	101 %		20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>	12.3	92.5 %		21-167		"	"	"	"	

Anions by EPA Method 300.0

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

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

Total Dissolved Solids by SM2540C

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

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

Summit Scientific

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



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

Project: 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	189	0.0600		mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	237	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	842	10.0		mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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

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



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

Project: 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	578	0.0600		mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	635	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	2110	10.0		mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	208	0.0600		mg/L	50	BHI0783	09/23/24	09/23/24	EPA 300.0	
Sulfate	205	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	894	10.0		mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	

Summit Scientific

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



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

Project: 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	317	0.0600		mg/L	50	BHI0783	09/23/24	09/24/24	EPA 300.0	
Sulfate	162	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	1090	10.0		mg/L	1	BHI0728	09/23/24	09/23/24	SM2540C	

Summit Scientific

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



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

Project: 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	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			Limit	RPD	Limit		

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	3.65	51-132	20	
Toluene	32.9	1.0	"	33.3		98.6	3.88	51-138	20	
Ethylbenzene	32.9	1.0	"	33.3		98.6	2.90	58-146	20	
m,p-Xylene	67.1	2.0	"	66.7		101	2.93	57-144	20	
o-Xylene	33.2	1.0	"	33.3		99.5	2.60	53-146	20	
Naphthalene	33.0	1.0	"	33.3		99.1	9.25	70-130	20	
1,2,4-Trimethylbenzene	33.1	1.0	"	33.3		99.2	2.95	70-130	20	
1,3,5-Trimethylbenzene	33.0	1.0	"	33.3		98.9	2.86	70-130	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		

Summit Scientific

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



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

Project: 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		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

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-BS1)

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			

Summit Scientific

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



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

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

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

Summit Scientific

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



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

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

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			

Summit Scientific

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



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

Project: 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	Result	Reporting		Spike Level	Source Result	%REC		RPD		Notes
		Limit	Units			Limit	RPD	Limit	RPD	

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

Summit Scientific

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



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

Project: 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