

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 01, 2025

Mike Medina

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - McMillen Trust 19-14G Flowline

Work Order #2501222

Enclosed are the results of analyses for samples received by Summit Scientific on 01/15/25 18:09. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Amanda Stilwell". The signature is written in a cursive, flowing style.

Amanda Stilwell For Paul Shrewsbury
President



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

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01R-W@4'	2501222-01	Soil	01/15/25 12:10	01/15/25 18:09
FL01-03@4'	2501222-02	Soil	01/15/25 13:05	01/15/25 18:09
FL01-04@4'	2501222-03	Soil	01/15/25 13:07	01/15/25 18:09

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.

Client: Noble / Tasman		Project Manager: Mike Medina		Send Invoice To:	
Address: 6855 W 119th Ave		E-Mail: jason.davidson@chevron.com; tas-chevron-2@tasman-geo.com; rbueu27@chevron.com		Company: Noble Energy	
City/State/Zip: Broomfield / CO / 80020		Project Name: <i>McMillen Trust 19-146 Flowline</i>		Project Name/Location: <i>McMillen Trust 19-146 Flowline</i>	
Phone: 303-487-1228		Project Number:		AFE#:	
Sampler Name: <i>Jared Llewellyn</i>				PO/Billing Codes:	
				Contact: Jason Davidson	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix		Air-Canister #	Other	Analysis Requested					Special Instructions	
					HCl	HNO3	None	Other	Water	Soil			BTEXN - 8260B	1,2,4 & 1,3,5-TMB	TDS, Cl, SO4	Full 915-1 Suite	pH, EC, SAR, boron		Table 915-1 Metals
1	<i>FLOIR-W @ 4'</i>	<i>01/15/25</i>	<i>1210</i>	<i>2</i>			<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>			
2	<i>FLOI-03 @ 4'</i>	<i>↓</i>	<i>1305</i>	<i>↓</i>												<i>↓</i>			
3	<i>FLOI-04 @ 4'</i>	<i>↓</i>	<i>1307</i>	<i>↓</i>												<i>↓</i>			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			

Relinquished by: <i>J. Llewellyn</i>	Date/Time: <i>01/15/25 1515</i>	Received by: <i>Tasman Latbox</i>	Date/Time: <i>01/15/25 1515</i>	TAT Business Days	Field DO	Notes:
				Same Day	Field EC	
Relinquished by: <i>Tasman Latbox</i>	Date/Time: <i>1/15/25 1809</i>	Received by: <i>[Signature]</i>	Date/Time: <i>1/15/25 1809</i>	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	<input checked="" type="checkbox"/> Field Turb.	
Temperature Upon Receipt: <i>4.1</i>	Corrected Temperature: <i>5</i>	IR gun #: <i>1</i>	HNO3 lot #:			

S₂

S2 Work Order# 2501222

Sample Receipt Checklist

Flawing

Client: Norbert Casmen Client Project ID: McMillen Trust 19-14G

Received Via: H.D./CD/FedEx/UPS/USPS/Other Airbill #: _____

Matrix (Circle all that apply) Air/Soil/Water/Other Temp (°C) 4.1 Thermometer # 1

Bottle ware (Circle all that apply) Glass Jar/Voa/Amber/Polyl/Other

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ICE
If custody seals are present, are they intact? ⁽¹⁾	-			
Are samples due within 48 hours?		-		
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/ Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD, Total Residual Chlorine (TRC)		-		
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	-			
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	-			
Were all samples received intact? ⁽¹⁾	✓			
Was adequate sample volume provided? ⁽¹⁾	✓			
Were samples provided in appropriate bottle ware?	✓			
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	✓			
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are any samples/bottles preserved (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Are there requested analysis that cannot be performed by S2? Note analysis in the comments column		✓		
<u>Additional Comments (if any):</u>				
(1) If NO, then contact the client before proceeding with analysis and note in case narrative.				

Control Form #: SRC-001

AS
Custodian Printed Name

1/15/25
Date/Time



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

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01R-W@4'
2501222-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BIA1081	01/23/25	01/27/25	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0463	116 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0410	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0413	103 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BIA1078	01/23/25	01/25/25	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	15.4	123 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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FL01R-W@4'
2501222-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA1119	01/24/25	01/30/25	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0158	47.4 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0152	45.5 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1280	02/23/25	03/27/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
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FL01R-W@4'
2501222-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.02	0.200	mg/kg dry	1	BIB1697	02/28/25	03/18/25	EPA 6020B
Barium	85.5	0.400	"	"	"	"	"	"
Cadmium	0.283	0.200	"	"	"	"	"	"
Copper	6.63	0.400	"	"	"	"	"	"
Lead	12.4	0.200	"	"	"	"	"	"
Nickel	5.20	0.400	"	"	"	"	"	"
Silver	0.0739	0.0200	"	"	"	"	"	"
Zinc	26.4	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0049	02/03/25	02/06/25	EPA 7196A	

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

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	23.2	0.0500	mg/L dry	1	BIB0369	02/07/25	02/18/25	EPA 6020B	
Magnesium	6.41	0.0500	"	"	"	"	"	"	
Sodium	33.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.59	0.00100	units	1	BIB1106	02/19/25	02/19/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: [none]
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Reported:
04/01/25 14:59

FL01R-W@4'
2501222-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	88.9	%	1	BIB0159	02/05/25	02/06/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.376	0.0100	mmhos/cm	1	BIB0370	02/07/25	02/13/25	EPA 120.1	

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

Date Sampled: **01/15/25 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28		pH Units	1	BIB0371	02/07/25	02/13/25	EPA 9045D	

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Project Number: [none]
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Reported:
04/01/25 14:59

FL01-03@4'
2501222-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BIA1081	01/23/25	01/27/25	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0443	111 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0410	103 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0398	99.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BIA1078	01/23/25	01/25/25	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	18.8	151 %	30-150		"	"	"	"	S-07

PAH by EPA Method 8270D SIM

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04/01/25 14:59

FL01-03@4'
2501222-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA1119	01/24/25	01/30/25	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0213	63.8 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0185	55.5 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1280	02/23/25	03/27/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: [none]
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FL01-03@4'
2501222-02 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	3.09	0.200	mg/kg dry	1	BIB1697	02/28/25	03/18/25	EPA 6020B
Barium	102	0.400	"	"	"	"	"	"
Cadmium	0.275	0.200	"	"	"	"	"	"
Copper	6.06	0.400	"	"	"	"	"	"
Lead	8.39	0.200	"	"	"	"	"	"
Nickel	5.31	0.400	"	"	"	"	"	"
Silver	0.0660	0.0200	"	"	"	"	"	"
Zinc	21.9	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0049	02/03/25	02/06/25	EPA 7196A	

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

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	28.8	0.0500	mg/L dry	1	BIB0369	02/07/25	02/18/25	EPA 6020B	
Magnesium	8.29	0.0500	"	"	"	"	"	"	
Sodium	44.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.86	0.00100	units	1	BIB1106	02/19/25	02/19/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01-03@4'
2501222-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.9	%	1	BIB0159	02/05/25	02/06/25	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.376	0.0100	mmhos/cm	1	BIB0370	02/07/25	02/13/25	EPA 120.1	

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

Date Sampled: **01/15/25 13:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.60		pH Units	1	BIB0371	02/07/25	02/13/25	EPA 9045D	

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01-04@4'
2501222-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BIA1081	01/23/25	01/27/25	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0452	113 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0410	102 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0409	102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BIA1078	01/23/25	01/25/25	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	17.4	139 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01-04@4'
2501222-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BIA1119	01/24/25	01/30/25	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0247	74.0 %	40-140		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0190	56.9 %	40-140		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BIB1280	02/23/25	03/27/25	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences
6855 W. 119th Ave.
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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01-04@4'
2501222-03 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	2.40	0.200	mg/kg dry	1	BIB1697	02/28/25	03/18/25	EPA 6020B
Barium	67.5	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	4.87	0.400	"	"	"	"	"	"
Lead	6.80	0.200	"	"	"	"	"	"
Nickel	4.33	0.400	"	"	"	"	"	"
Silver	0.0476	0.0200	"	"	"	"	"	"
Zinc	19.2	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BIB0049	02/03/25	02/06/25	EPA 7196A	

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

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	148	0.0500	mg/L dry	1	BIB0369	02/07/25	02/18/25	EPA 6020B	
Magnesium	48.5	0.0500	"	"	"	"	"	"	
Sodium	170	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.10	0.00100	units	1	BIB1106	02/19/25	02/19/25	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

FL01-04@4'
2501222-03 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.6		%	1	BIB0159	02/05/25	02/06/25	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.74	0.0100	mmhos/cm	1	BIB0370	02/07/25	02/13/25	EPA 120.1	

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

Date Sampled: **01/15/25 13:07**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.98		pH Units	1	BIB0371	02/07/25	02/13/25	EPA 9045D	

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

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 BIA1081 - EPA 5030 Soil MS

Blank (BIA1081-BLK1)

Prepared: 01/23/25 Analyzed: 01/27/25

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0471		"	0.0400		118	50-150			
<i>Surrogate: Toluene-d8</i>	0.0406		"	0.0400		102	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0408		"	0.0400		102	50-150			

LCS (BIA1081-BS1)

Prepared: 01/23/25 Analyzed: 01/27/25

Benzene	0.118	0.0020	mg/kg	0.100		118	70-130			
Toluene	0.112	0.0050	"	0.100		112	70-130			
Ethylbenzene	0.105	0.0050	"	0.100		105	70-130			
m,p-Xylene	0.215	0.010	"	0.200		107	70-130			
o-Xylene	0.106	0.0050	"	0.100		106	70-130			
1,2,4-Trimethylbenzene	0.108	0.0050	"	0.100		108	70-130			
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100		106	70-130			
Naphthalene	0.121	0.0038	"	0.100		121	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0503		"	0.0400		126	50-150			
<i>Surrogate: Toluene-d8</i>	0.0414		"	0.0400		103	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0427		"	0.0400		107	50-150			

Matrix Spike (BIA1081-MS1)

Source: 2501221-01

Prepared: 01/23/25 Analyzed: 01/27/25

Benzene	0.124	0.0020	mg/kg	0.100	ND	124	70-130			
Toluene	0.118	0.0050	"	0.100	ND	118	70-130			
Ethylbenzene	0.110	0.0050	"	0.100	ND	110	70-130			
m,p-Xylene	0.220	0.010	"	0.200	ND	110	70-130			
o-Xylene	0.111	0.0050	"	0.100	ND	111	70-130			
1,2,4-Trimethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130			
1,3,5-Trimethylbenzene	0.108	0.0050	"	0.100	ND	108	70-130			
Naphthalene	0.126	0.0038	"	0.100	ND	126	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0520		"	0.0400		130	50-150			
<i>Surrogate: Toluene-d8</i>	0.0410		"	0.0400		103	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0413		"	0.0400		103	50-150			

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

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

Batch BIA1081 - EPA 5030 Soil MS

Matrix Spike Dup (BIA1081-MSD1)	Source: 2501221-01			Prepared: 01/23/25 Analyzed: 01/27/25						
Benzene	0.120	0.0020	mg/kg	0.100	ND	120	70-130	3.11	30	
Toluene	0.114	0.0050	"	0.100	ND	114	70-130	3.27	30	
Ethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130	2.24	30	
m,p-Xylene	0.216	0.010	"	0.200	ND	108	70-130	2.10	30	
o-Xylene	0.108	0.0050	"	0.100	ND	108	70-130	2.39	30	
1,2,4-Trimethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130	0.669	30	
1,3,5-Trimethylbenzene	0.106	0.0050	"	0.100	ND	106	70-130	2.16	30	
Naphthalene	0.129	0.0038	"	0.100	ND	129	70-130	2.17	30	
Surrogate: 1,2-Dichloroethane-d4	0.0510		"	0.0400		128	50-150			
Surrogate: Toluene-d8	0.0411		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0426		"	0.0400		106	50-150			

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Broomfield CO, 80020

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BIA1078 - EPA 3550A

Blank (BIA1078-BLK1)

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

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	7.27		"	12.5		58.2	30-150				

LCS (BIA1078-BS1)

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

C10-C28 (DRO)	659	50	mg/kg	500		132	70-130				QLCS-01
Surrogate: <i>o</i> -Terphenyl	15.3		"	12.5		123	30-150				

Matrix Spike (BIA1078-MS1)

Source: 2501221-01

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

C10-C28 (DRO)	593	50	mg/kg	500	20.8	114	70-130				
Surrogate: <i>o</i> -Terphenyl	12.5		"	12.5		100	30-150				

Matrix Spike Dup (BIA1078-MSD1)

Source: 2501221-01

Prepared: 01/23/25 Analyzed: 01/27/25

C10-C28 (DRO)	497	50	mg/kg	500	20.8	95.2	70-130	17.7	20		
Surrogate: <i>o</i> -Terphenyl	17.1		"	12.5		137	30-150				

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BIA1119 - EPA 5030 Soil MS

Blank (BIA1119-BLK1)

Prepared: 01/24/25 Analyzed: 01/30/25

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0288		"	0.0333		86.3	40-140			
Surrogate: Fluoranthene-d10	0.0296		"	0.0333		88.9	40-140			

LCS (BIA1119-BS1)

Prepared: 01/24/25 Analyzed: 01/30/25

Acenaphthene	0.0242	0.00500	mg/kg	0.0333		72.6	40-140			
Anthracene	0.0241	0.00500	"	0.0333		72.2	40-140			
Benzo (a) anthracene	0.0286	0.00500	"	0.0333		85.7	40-140			
Benzo (a) pyrene	0.0246	0.00500	"	0.0333		73.9	40-140			
Benzo (b) fluoranthene	0.0257	0.00500	"	0.0333		77.1	40-140			
Benzo (k) fluoranthene	0.0245	0.00500	"	0.0333		73.6	40-140			
Chrysene	0.0276	0.00500	"	0.0333		82.8	40-140			
Dibenz (a,h) anthracene	0.0240	0.00500	"	0.0333		72.0	40-140			
Fluoranthene	0.0247	0.00500	"	0.0333		74.2	40-140			
Fluorene	0.0271	0.00500	"	0.0333		81.2	40-140			
Indeno (1,2,3-cd) pyrene	0.0158	0.00500	"	0.0333		47.5	40-140			
Pyrene	0.0265	0.00500	"	0.0333		79.6	40-140			
1-Methylnaphthalene	0.0278	0.00500	"	0.0333		83.4	40-140			
2-Methylnaphthalene	0.0250	0.00500	"	0.0333		74.9	40-140			
Surrogate: 2-Methylnaphthalene-d10	0.0250		"	0.0333		75.0	40-140			
Surrogate: Fluoranthene-d10	0.0278		"	0.0333		83.5	40-140			

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BIA1119 - EPA 5030 Soil MS

Matrix Spike (BIA1119-MS1)		Source: 2501221-01			Prepared: 01/24/25 Analyzed: 01/30/25	
Acenaphthene	0.0239	0.00500	mg/kg	0.0333	ND	71.8 40-140
Anthracene	0.0258	0.00500	"	0.0333	ND	77.4 40-140
Benzo (a) anthracene	0.0285	0.00500	"	0.0333	ND	85.6 40-140
Benzo (a) pyrene	0.0224	0.00500	"	0.0333	ND	67.2 40-140
Benzo (b) fluoranthene	0.0247	0.00500	"	0.0333	ND	74.2 40-140
Benzo (k) fluoranthene	0.0221	0.00500	"	0.0333	ND	66.4 40-140
Chrysene	0.0258	0.00500	"	0.0333	ND	77.3 40-140
Dibenz (a,h) anthracene	0.0242	0.00500	"	0.0333	ND	72.5 40-140
Fluoranthene	0.0248	0.00500	"	0.0333	ND	74.5 40-140
Fluorene	0.0253	0.00500	"	0.0333	ND	75.8 40-140
Indeno (1,2,3-cd) pyrene	0.0172	0.00500	"	0.0333	ND	51.5 40-140
Pyrene	0.0274	0.00500	"	0.0333	ND	82.1 40-140
1-Methylnaphthalene	0.0272	0.00500	"	0.0333	ND	81.7 40-140
2-Methylnaphthalene	0.0271	0.00500	"	0.0333	ND	81.2 40-140
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0275</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>82.5 40-140</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0258</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>77.4 40-140</i>

Matrix Spike Dup (BIA1119-MSD1)		Source: 2501221-01			Prepared: 01/24/25 Analyzed: 01/30/25	
Acenaphthene	0.0163	0.00500	mg/kg	0.0333	ND	49.0 40-140 37.7 30 QR-02
Anthracene	0.0166	0.00500	"	0.0333	ND	49.9 40-140 43.2 30 QR-02
Benzo (a) anthracene	0.0176	0.00500	"	0.0333	ND	52.9 40-140 47.3 30 QR-02
Benzo (a) pyrene	0.0149	0.00500	"	0.0333	ND	44.8 40-140 39.9 30 QR-02
Benzo (b) fluoranthene	0.0152	0.00500	"	0.0333	ND	45.7 40-140 47.5 30 QR-02
Benzo (k) fluoranthene	0.0151	0.00500	"	0.0333	ND	45.3 40-140 37.7 30 QR-02
Chrysene	0.0166	0.00500	"	0.0333	ND	49.8 40-140 43.4 30 QR-02
Dibenz (a,h) anthracene	0.0159	0.00500	"	0.0333	ND	47.6 40-140 41.5 30 QR-02
Fluoranthene	0.0164	0.00500	"	0.0333	ND	49.2 40-140 41.0 30 QR-02
Fluorene	0.0177	0.00500	"	0.0333	ND	53.2 40-140 35.0 30 QR-02
Indeno (1,2,3-cd) pyrene	0.0179	0.00500	"	0.0333	ND	53.7 40-140 4.32 30
Pyrene	0.0165	0.00500	"	0.0333	ND	49.6 40-140 49.2 30 QR-02
1-Methylnaphthalene	0.0174	0.00500	"	0.0333	ND	52.1 40-140 44.3 30 QR-02
2-Methylnaphthalene	0.0177	0.00500	"	0.0333	ND	53.0 40-140 41.9 30 QR-02
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0173</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>51.9 40-140</i>
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0170</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>51.1 40-140</i>

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

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

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

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

Batch BIB1280 - EPA 3050B

Blank (BIB1280-BLK1)

Prepared: 02/23/25 Analyzed: 03/27/25

Boron ND 2.00 mg/L

LCS (BIB1280-BS1)

Prepared: 02/23/25 Analyzed: 03/27/25

Boron 4.82 2.00 mg/L 5.00 96.4 80-120

Duplicate (BIB1280-DUP1)

Source: 2501222-01

Prepared: 02/23/25 Analyzed: 03/27/25

Boron 0.171 2.00 mg/L 0.120 35.3 20 QR-01

Matrix Spike (BIB1280-MS1)

Source: 2501222-01

Prepared: 02/23/25 Analyzed: 03/27/25

Boron 5.08 2.00 mg/L 4.99 0.120 99.3 75-125

Matrix Spike Dup (BIB1280-MSD1)

Source: 2501222-01

Prepared: 02/23/25 Analyzed: 03/27/25

Boron 5.08 2.00 mg/L 4.99 0.120 99.4 75-125 0.0550 25

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

Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BIB1697 - EPA 3050B

Blank (BIB1697-BLK1)

Prepared: 02/28/25 Analyzed: 03/17/25

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

LCS (BIB1697-BS1)

Prepared: 02/28/25 Analyzed: 03/17/25

Arsenic	39.7	0.200	mg/kg wet	41.0	96.8	80-120
Barium	43.0	0.400	"	41.0	105	80-120
Cadmium	1.99	0.200	"	2.05	97.2	80-120
Copper	43.3	0.400	"	41.0	106	80-120
Lead	20.0	0.200	"	20.5	97.5	80-120
Nickel	43.1	0.400	"	41.0	105	80-120
Silver	1.99	0.0200	"	2.05	97.1	80-120
Zinc	41.7	0.400	"	41.0	102	80-120
Selenium	3.67	0.260	"	4.10	89.6	80-120

Duplicate (BIB1697-DUP1)

Source: 2501204-01

Prepared: 02/28/25 Analyzed: 03/17/25

Arsenic	4.78	0.200	mg/kg dry	2.39	66.7	20	QR-04
Barium	60.0	0.400	"	53.2	12.0	20	
Cadmium	0.308	0.200	"	0.233	27.8	20	QR-04
Copper	6.54	0.400	"	6.33	3.20	20	
Lead	9.87	0.200	"	8.48	15.2	20	
Nickel	4.52	0.400	"	4.26	5.90	20	
Silver	0.0182	0.0200	"	0.0324	56.4	20	QR-01
Zinc	25.4	0.400	"	26.8	5.26	20	
Selenium	ND	0.260	"	0.183	200	20	QR-01

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6855 W. 119th Ave.
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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BIB1697 - EPA 3050B

Matrix Spike (BIB1697-MS1)	Source: 2501204-01			Prepared: 02/28/25		Analyzed: 03/17/25					
Arsenic	43.6	0.200	mg/kg dry	43.9	2.39	93.9	75-125				
Barium	92.7	0.400	"	43.9	53.2	89.8	75-125				
Cadmium	2.32	0.200	"	2.20	0.233	95.1	75-125				
Copper	38.8	0.400	"	43.9	6.33	74.0	75-125				QM-05
Lead	27.9	0.200	"	22.0	8.48	88.6	75-125				
Nickel	37.1	0.400	"	43.9	4.26	74.8	75-125				QM-05
Silver	2.04	0.0200	"	2.20	0.0324	91.4	75-125				
Zinc	57.1	0.400	"	43.9	26.8	69.1	75-125				QM-05
Selenium	3.61	0.260	"	4.39	0.183	78.1	75-125				

Matrix Spike Dup (BIB1697-MSD1)	Source: 2501204-01			Prepared: 02/28/25		Analyzed: 03/18/25					
Arsenic	47.4	0.200	mg/kg dry	45.8	2.39	98.3	75-125	8.22	25		
Barium	96.0	0.400	"	45.8	53.2	93.5	75-125	3.54	25		
Cadmium	2.51	0.200	"	2.29	0.233	99.4	75-125	7.72	25		
Copper	41.7	0.400	"	45.8	6.33	77.4	75-125	7.21	25		
Lead	30.2	0.200	"	22.9	8.48	95.1	75-125	7.89	25		
Nickel	40.0	0.400	"	45.8	4.26	78.1	75-125	7.50	25		
Silver	2.24	0.0200	"	2.29	0.0324	96.6	75-125	9.52	25		
Zinc	59.9	0.400	"	45.8	26.8	72.3	75-125	4.68	25		QM-05
Selenium	3.98	0.260	"	4.58	0.183	83.0	75-125	9.68	25		

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BIB0049 - 3060A Mod

Blank (BIB0049-BLK1)

Prepared: 02/03/25 Analyzed: 02/06/25

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BIB0049-BS1)

Prepared: 02/03/25 Analyzed: 02/06/25

Chromium, Hexavalent 24.5 0.30 mg/kg wet 25.0 98.0 80-120

Duplicate (BIB0049-DUP1)

Source: 2501201-01

Prepared: 02/03/25 Analyzed: 02/06/25

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BIB0049-MS1)

Source: 2501201-01

Prepared: 02/03/25 Analyzed: 02/06/25

Chromium, Hexavalent 21.3 0.30 mg/kg dry 26.7 ND 80.0 75-125

Matrix Spike Dup (BIB0049-MSD1)

Source: 2501201-01

Prepared: 02/03/25 Analyzed: 02/06/25

Chromium, Hexavalent 25.9 0.30 mg/kg dry 26.7 ND 97.0 75-125 19.2 20

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

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

Summit Scientific

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

Batch BIB0369 - General Preparation

Blank (BIB0369-BLK1)

Prepared: 02/07/25 Analyzed: 02/18/25

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

LCS (BIB0369-BS1)

Prepared: 02/07/25 Analyzed: 02/18/25

Calcium	4.59	0.0500	mg/L wet	5.00	91.8	70-130
Magnesium	4.86	0.0500	"	5.00	97.1	70-130
Sodium	5.08	0.0500	"	5.00	102	70-130

Summit Scientific

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

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

Batch BIB0159 - General Preparation

Duplicate (BIB0159-DUP1)

Source: 2501204-01

Prepared: 02/05/25 Analyzed: 02/06/25

% Solids	92.2	%		91.1		1.23	20
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Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

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

Summit Scientific

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

Batch BIB0370 - General Preparation

Blank (BIB0370-BLK1)

Prepared: 02/07/25 Analyzed: 02/13/25

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BIB0370-BS1)

Prepared: 02/07/25 Analyzed: 02/13/25

Specific Conductance (EC) 1.37 0.0100 mmhos/cm 1.41 97.0 95-105

Duplicate (BIB0370-DUP1)

Source: 2501162-26

Prepared: 02/07/25 Analyzed: 02/13/25

Specific Conductance (EC) 0.320 0.0100 mmhos/cm 0.321 0.308 20

Summit Scientific

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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

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

Summit Scientific

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

Batch BIB0371 - General Preparation

LCS (BIB0371-BS1)

Prepared: 02/07/25 Analyzed: 02/13/25

pH	9.20	pH Units	9.18	100	95-105
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Duplicate (BIB0371-DUP1)

Source: 2501162-26

Prepared: 02/07/25 Analyzed: 02/13/25

pH	8.06	pH Units	8.08	0.227	20
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Summit Scientific

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6855 W. 119th Ave.
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Project: Noble - McMillen Trust 19-14G Flowline

Project Number: [none]
Project Manager: Mike Medina

Reported:
04/01/25 14:59

Notes and Definitions

- S-07 The surrogate recovery was outside acceptance limits indicating a potential high bias. The sample did not exhibit concentrations above reporting level for analytes represented by this surrogate. Data quality is not affected.
- QR-04 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values. Only applies to source/DUP and MS/MSD pairs.
- QR-02 The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QR-01 Analyses are not controlled on RPD values from sample concentrations below the reporting limit. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. Sample results were accepted based on LCS and/or LCSD recoveries and/or RPD values.
- QLCS-01 The spike recovery was outside acceptance limits for this analyte indicating a potential high bias. The corresponding samples did not exhibit concentrations above reporting level for this analyte. Data quality is not affected.
- 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