

# Flowline Closure Checklist

## COGCC Rule 911.a.(4) Environmental Site Closure Assessment Field Form

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
Site Name & COGCC Facility Number: <b>Baker B02-05</b>		Date: <b>8/17/21; 3/22/22-3/28/22</b>						Remediation Project #: <b>22140</b>
Associated Wells:		Age of Site:						Number of Photos Attached: <b>25</b>
Starting point: (GPS coordinates and descriptions) <b>40.429895, -104.524085</b>								
End point: (GPS coordinates and descriptions) <b>40.434631 -104.522501</b>								
USCS Soil Type: <b>SW</b>					Estimated Depth to Groundwater:			
Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) <b>Yes, unknown size</b>								
Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth) <b>None observed</b>								
<b>Flowlines</b>								
Flowline type	Oil/gas/water							
Depth	3-ft							
Age	N/A							
Length	2,360-ft							
Construction Material	Steel							
Were flowlines pulled?	Yes - Partially							
Visual Integrity of lines	Good							
Visual impacts if trenched	N/A							
PID Readings if trenched	N/A							
Sample taken? Location/Sample ID#	See Below							
Photo Number(s)	25							
Other observations regarding on location flowlines: 25 bellhole openings were screened and named FL01-C through FL01-Z on 3/22/22-3/28/22. All samples taken at 3-ft depth, and one additional sample was collected at 6-ft depth at the FL01-G location. A total of 5 lab samples were submitted for laboratory analysis. The FL01 and FL01-B locations were sampled during the wellhead decommissioning on 8/17/22. A portion of the flowline was abandoned in place between FL01-H and FL01-B.								
<b>Summary</b>								
Was impacted soil identified? No                      Yes - less than 10 cubic yards <b>Yes</b> - more than 10 cubic yards								
Total number of samples field screened: <b>25</b>					Total number of samples collected: <b>5</b>			
Highest PID Reading: <b>536.4 ppm</b>					Total number of samples submitted to lab for analysis: <b>5</b>			
If more than 10 cubic yards of impacted soil were observed:								
Vertical extent: <b>Unknown</b>					Estimated spill volume: <b>Unknown</b>			
Lateral extent: <b>Unknown</b>					Volume of soil removed: <b>Unknown</b>			
Is additional investigation required? <b>Yes</b>								
Was groundwater encountered during the investigation? <b>No</b> Yes - not impacted or in contact with impacted soils                      Yes - groundwater impacted and/or in contact with impacted soils								
Measured depth to groundwater:					Was remedial groundwater removal conducted?    Yes                      No			
Date Groundwater was encountered:					Commencement date of removal:			
Sheen on groundwater?                      Yes                      No					Volume of groundwater removed prior to sampling:			
Free product observed?                      Yes                      No					Volume of groundwater removed post sampling:			
Total number of samples collected:					Total Volume of groundwater removed:			
Total number of samples submitted to lab for analysis:								



## Photographic Log



**Equipment ID:**FL01-C

**Equipment Type:**Flowline

**Material:**Steel

**Volume:**

**Contents:**Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-C@3' along flowline path. No hydrocarbon odor or staining .



**Equipment ID:**FL01-D

**Equipment Type:**Flowline

**Material:**Steel

**Volume:**

**Contents:**Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-D@3' along flowline path. No hydrocarbon odor or staining.



## Photographic Log


**Equipment ID:** FL01-E

**Equipment Type:** Flowline

**Material:** Steel

**Volume:**
**Contents:** Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-E @ 3' along flowline path. No hydrocarbon odor or staining.

**Equipment ID:** FL01-F

**Equipment Type:** Flowline



**Material:** Steel

**Volume:**
**Contents:** Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-F @ 3' along flowline path. No hydrocarbon odor or staining.



## Photographic Log

					
<b>Equipment ID:</b> FL01-G		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-G		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil sample location FL01-G@3'. Has HC odor and gray staining.			<b>Notes/Conditions:</b> Soil sample location FL01-G@6'. Strong HC odor and gray HC staining.		



## Photographic Log



**Equipment ID:**FL01-H

**Equipment Type:**Flowline

**Material:**Steel

**Volume:**

**Contents:**Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-H@3'. No hydrocarbon odor or staining.



**Equipment ID:**FL01-I

**Equipment Type:**Flowline

**Material:**Steel

**Volume:**

**Contents:**Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-I@3' along the flowline path. No hydrocarbon odor or staining.



## Photographic Log


**Equipment ID:** FL01-J

**Equipment Type:** Flowline

**Material:** Steel

**Volume:**
**Contents:** Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-J@3' along the flowline path. No hydrocarbon odor or staining.

**Equipment ID:** FL01-K

**Equipment Type:** Flowline

**Material:** Steel

**Volume:**
**Contents:** Oil/Gas/Water

**Notes/Conditions:** Soil screen location FL01-K@3' along the flowline path. No hydrocarbon odor or staining.





## Photographic Log

					
<b>Equipment ID:</b> FL01-L		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-M		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-L @3' along flowline path. No hydrocarbon odor or staining.					

					
<b>Equipment ID:</b> FL01-M		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-L		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-M @3' along flowline path. No hydrocarbon odor or staining.					







## Photographic Log

					
<b>Equipment ID:</b> FL01-N		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-O		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-N@3' along flowline path. No hydrocarbon odor or staining.					
<b>Notes/Conditions:</b> Soil screen location FL01-O@3' along flowline path. No hydrocarbon odor or staining.					



## Photographic Log


							
<b>Equipment ID:</b> FL01-P		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-Q		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel		<b>Volume:</b>		<b>Material:</b> Steel		<b>Volume:</b>	
		<b>Contents:</b> Oil/Gas/Water				<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> Soil screen location FL01-P@3' along flowline path. No hydrocarbon odor or staining.							

							
<b>Equipment ID:</b> FL01-Q		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-Q		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel		<b>Volume:</b>		<b>Material:</b> Steel		<b>Volume:</b>	
		<b>Contents:</b> Oil/Gas/Water				<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> Soil screen location FL01-Q@3' along flowline path. No hydrocarbon odor or staining.							





## Photographic Log



					
<b>Equipment ID:</b> FL01-R		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-S		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-R@3' along flowline path. No hydrocarbon odor or staining.					

					
<b>Equipment ID:</b> FL01-S		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-S		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-S@3' along flowline path. No hydrocarbon odor or staining.					



## Photographic Log

					
<b>Equipment ID:</b> FL01-T		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-U		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-T@3' along flowline path. No hydrocarbon odor or staining.					

					
<b>Equipment ID:</b> FL01-U		<b>Equipment Type:</b> Flowline	<b>Equipment ID:</b> FL01-U		<b>Equipment Type:</b> Flowline
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> Soil screen location FL01-U@3' along flowline path. No hydrocarbon odor or staining.					





## Photographic Log

							
<b>Equipment ID:</b> FL01-V		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-W		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel		<b>Volume:</b>		<b>Material:</b> Steel		<b>Volume:</b>	
<b>Contents:</b> Oil/Gas/Water				<b>Contents:</b> Oil/Gas/Water			
<b>Notes/Conditions:</b> Soil sample location FL01-V@3' where the line changes direction from NE to N. No hydrocarbon odor or staining.							

							
<b>Equipment ID:</b> FL01-W		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-W		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel		<b>Volume:</b>		<b>Material:</b> Steel		<b>Volume:</b>	
<b>Contents:</b> Oil/Gas/Water				<b>Contents:</b> Oil/Gas/Water			
<b>Notes/Conditions:</b> Soil sample location FL01-W@3' where the line changes from E to NE. No hydrocarbon odor or staining.							




## Photographic Log

																	
						<b>Equipment ID:</b> FL01-X		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-Y		<b>Equipment Type:</b> Flowline					
						<b>Material:</b> Steel		<b>Volume:</b>		<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel		<b>Volume:</b>		<b>Contents:</b> Oil/Gas/Water	
						<b>Notes/Conditions:</b> Soil screen location FL01-X@3'. No hydrocarbon odor or staining.						<b>Notes/Conditions:</b> Soil screen location FL01Y@3'. No hydrocarbon odor or staining.					



## Photographic Log

											
<b>Equipment ID:</b> FL01-Z		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b>		<b>Equipment Type:</b>					
<b>Material:</b> Steel		<b>Volume:</b>		<b>Contents:</b> Oil/Gas/Water		<b>Material:</b>		<b>Volume:</b>		<b>Contents:</b>	
<b>Notes/Conditions:</b> Soil sample location FL01-Z @ 3' where the line changes from NE to E. No hydrocarbon odor or staining.						<b>Notes/Conditions:</b>					



**TABLE 1**  
**SOIL SAMPLE LOCATIONS**  
**NOBLE ENERGY, INC. - BAKER B02-05**

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude <sup>1</sup>	Longitude	PDOP
FL01@4'	08/17/21	0.3	No Staining	No Odor	Lab	40.42986837	-104.52409880	1.0
FL01-B@2'	08/17/21	0.2	No Staining	No Odor	Lab	40.43471764	-104.52244672	1.3
FL01-C@3'	03/22/22	0.0	No Staining	No Odor	Grab	40.43299746	-104.52217966	1.0
FL01-D@3'	03/22/22	0.0	No Staining	No Odor	Grab	40.43314703	-104.52217273	1.2
FL01-E@3'	03/22/22	0.0	No Staining	No Odor	Grab	40.43336770	-104.52216781	1.1
FL01-F@3'	03/23/22	0.0	No Staining	No Odor	Grab	40.43355898	-104.52218318	1.2
FL01-G@3'	03/23/22	165.9	HC Staining	HC Odor	Lab	40.43371132	-104.52216924	1.0
FL01-G@6'	03/23/22	536.4	HC Staining	HC Odor	Lab	40.43371132	-104.52216924	1.0
FL01-H@3'	03/23/22	0.0	No Staining	No Odor	Grab	40.43389973	-104.52215240	1.0
FL01-I@3'	03/24/22	0.0	No Staining	No Odor	Grab	40.43205296	-104.52217295	1.1
FL01-J@3'	03/24/22	0.1	No Staining	No Odor	Grab	40.43219913	-104.52217207	1.0
FL01-K@3'	03/24/22	0.0	No Staining	No Odor	Grab	40.43237526	-104.52216908	1.1
FL01-L@3'	03/24/22	0.0	No Staining	No Odor	Grab	40.43260760	-104.52217561	0.9
FL01-M@3'	03/24/22	0.0	No Staining	No Odor	Grab	40.43280034	-104.52216980	1.0
FL01-N@3'	03/24/22	0.1	No Staining	No Odor	Grab	40.43295757	-104.52218327	1.0
FL01-O@3'	03/24/22	0.0	No Staining	No Odor	Grab	40.43194525	-104.52218217	1.1
FL01-P@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43168541	-104.52218397	1.2
FL01-Q@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43148360	-104.52217635	1.2
FL01-R@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43127113	-104.52217883	1.3
FL01-S@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43110494	-104.52218636	1.2
FL01-T@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43086470	-104.52219272	1.2
FL01-U@3'	03/25/22	0.0	No Staining	No Odor	Grab	40.43053425	-104.52219534	1.1
FL01-V@3'	03/25/22	0.0	No Staining	No Odor	Lab	40.43026703	-104.52224197	1.2
FL01-W@3'	03/28/22	0.0	No Staining	No Odor	Lab	40.43012524	-104.52255091	1.0
FL01-X@3'	03/28/22	0.0	No Staining	No Odor	Grab	40.43016081	-104.52302222	1.0
FL01-Y@3'	03/28/22	0.0	No Staining	No Odor	Grab	40.43015949	-104.52348744	1.0
FL01-Z@3'	03/28/22	0.0	No Staining	No Odor	Lab	40.43014980	-104.52391354	0.9

Notes:

PID = Photo-ionization detector

ppm = parts per million

PDOP = Position dilution of precision

HC = Hydrocarbon

1.) Latitude and longitude coordinates will be provided in decimal degrees with an accuracy and precision of 5 decimals of a degree using the North American Datum ("NAD") of 1983



TABLE 2  
SOIL ANALYTICAL DATA  
NOBLE ENERGY, INC. - BAKER B02-05 FLOWLINE

Soil Sample ID	Date	<sup>1</sup> Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	1,2,4 - TMB (mg/kg)	1,3,5 - TMB (mg/kg)	Naphthalene (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benz(a) (mg/kg)	Benzo(a) (mg/kg)	Benzo(b) (mg/kg)	Benzo(k) (mg/kg)	Chrysene (mg/kg)	A,H (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	Pyrene (mg/kg)	1-M (mg/kg)	2-M (mg/kg)
Residential SSL <sup>2</sup>		1.2	490	5.8	58	30	27	2	500			360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
Protection of Groundwater SSL <sup>2,3</sup>		0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500			0.55	6	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FL01@4'	08/17/21	<0.0020	<0.0050	<0.0050	0.081	0.0083	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-B@2'	08/17/21	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-G@3'	03/23/22	0.0069	<0.0050	<0.50	48	62	40	3.2	6,500	4,300	200	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.128	<0.00500	0.00821	<0.00500	<0.00500	<0.00500	3.04	5.10
FL01-G@6'	03/23/22	0.019	<0.0050	15	140	79	45	5.3	8,600	5,600	240	<0.00500	<0.00500	0.0965	<0.00500	<0.00500	<0.00500	0.0859	<0.00500	0.0214	<0.00500	<0.00500	0.0849	2.53	5.62
FL01-V@3'	03/25/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-W@3'	03/28/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-Z@3'	03/28/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Soil Sample ID	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
Residential SSL <sup>2</sup>		6 - 8.3	<6	<4mmhos/cm	2
FL01@4'	08/17/21	8.25	0.865	0.696	<0.0100
FL01-B@2'	08/17/21	8.36	0.356	0.303	0.0289
BG01@3'	08/17/21	NA	NA	NA	0.0315
FL01-G@3'	03/23/22	7.48	0.590	1.19	0.130
FL01-G@6'	03/23/22	7.69	0.480	1.08	0.0485
FL01-V@3'	03/25/22	8.02	1.99	2.22	0.245
FL01-W@3'	03/28/22	7.87	14.1	1.49	0.239
FL01-Z@3'	03/28/22	7.89	2.36	3.78	0.0886

Soil Sample ID	Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
Residential SSL <sup>2</sup>		0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
Protection of Groundwater SSL <sup>2,3</sup>		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FL01@4'	08/17/21	4.29	131	0.296	<0.30	7.47	13.0	5.82	0.769	0.0255	46.2
BG01@3'	08/17/21	6.33	148	0.284	<0.30	8.36	8.81	11.8	1.01	0.0365	35.4
FL01-G@6'	03/23/22	8.29	32.0	<0.238	<0.30	10.5	14.6	23.7	0.770	<0.238	60.7

- Notes:
- Compounds referenced from 2 CCR 404-1, Table 915-1, effective January 15, 2021.
  - Soil Screening Levels (SSL) referenced from EPA Regional Screening Levels (EPA RSLs)
  - SSLs are applicable if a pathway for communication with groundwater is present.

Definitions:

COGCC = Colorado Oil and Gas Conservation Commission

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

mmhos/cm = Millmhos per centimeter

1,2,4 - TMB = 1,2,4 Trimethylbenzene

1,3,5 - TMB = 1,3,5 Trimethylbenzene

Benz(a) = Benzanthracene

Benzo(b) = Benzo(a)fluoranthene

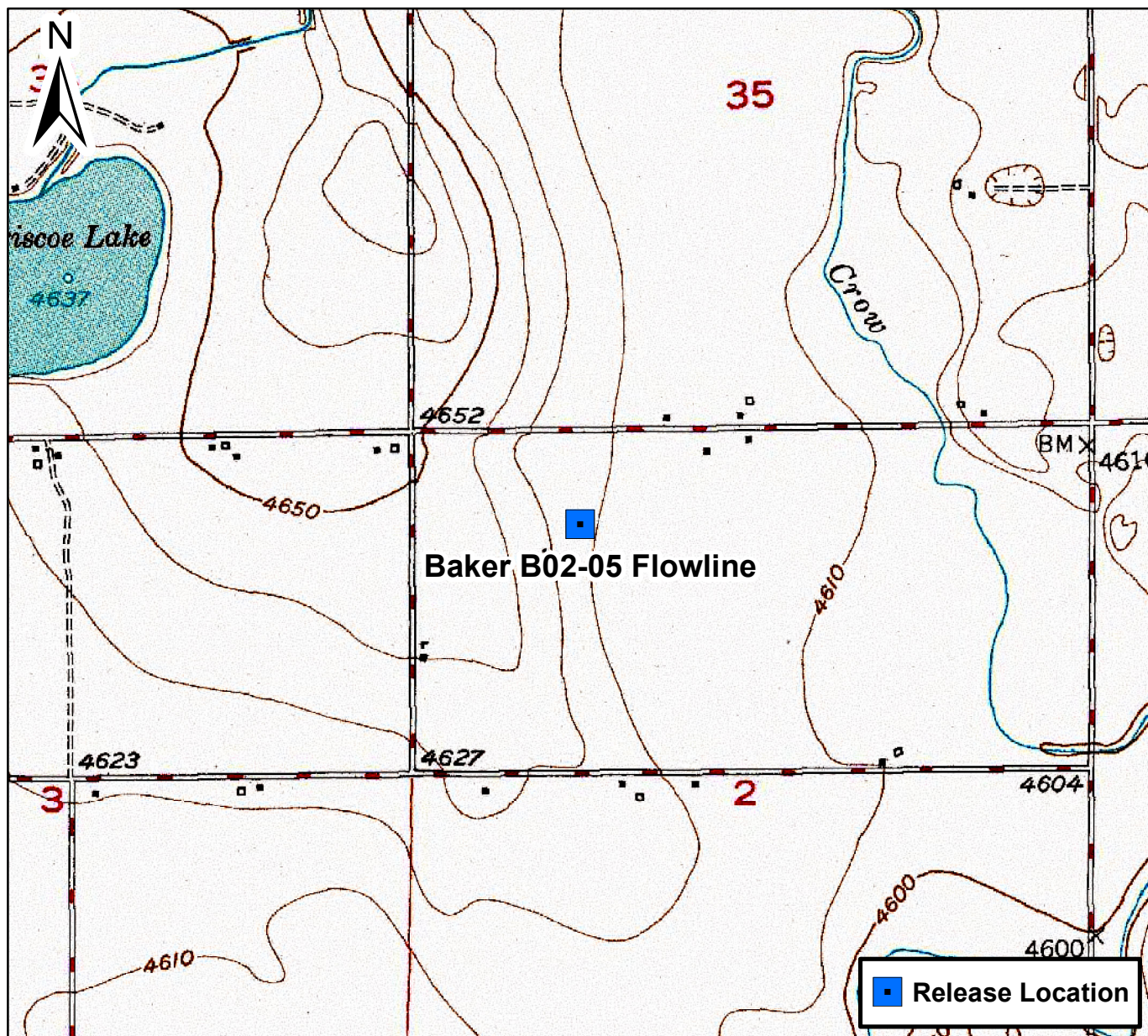
Benzo(k) = Benzo(a)fluoranthene

Benzo(a) = Benzopyrene

A,H = Dibenzo(a,h)anthracene

1,2,3-CD = Indeno(1,2,3-cd)pyrene





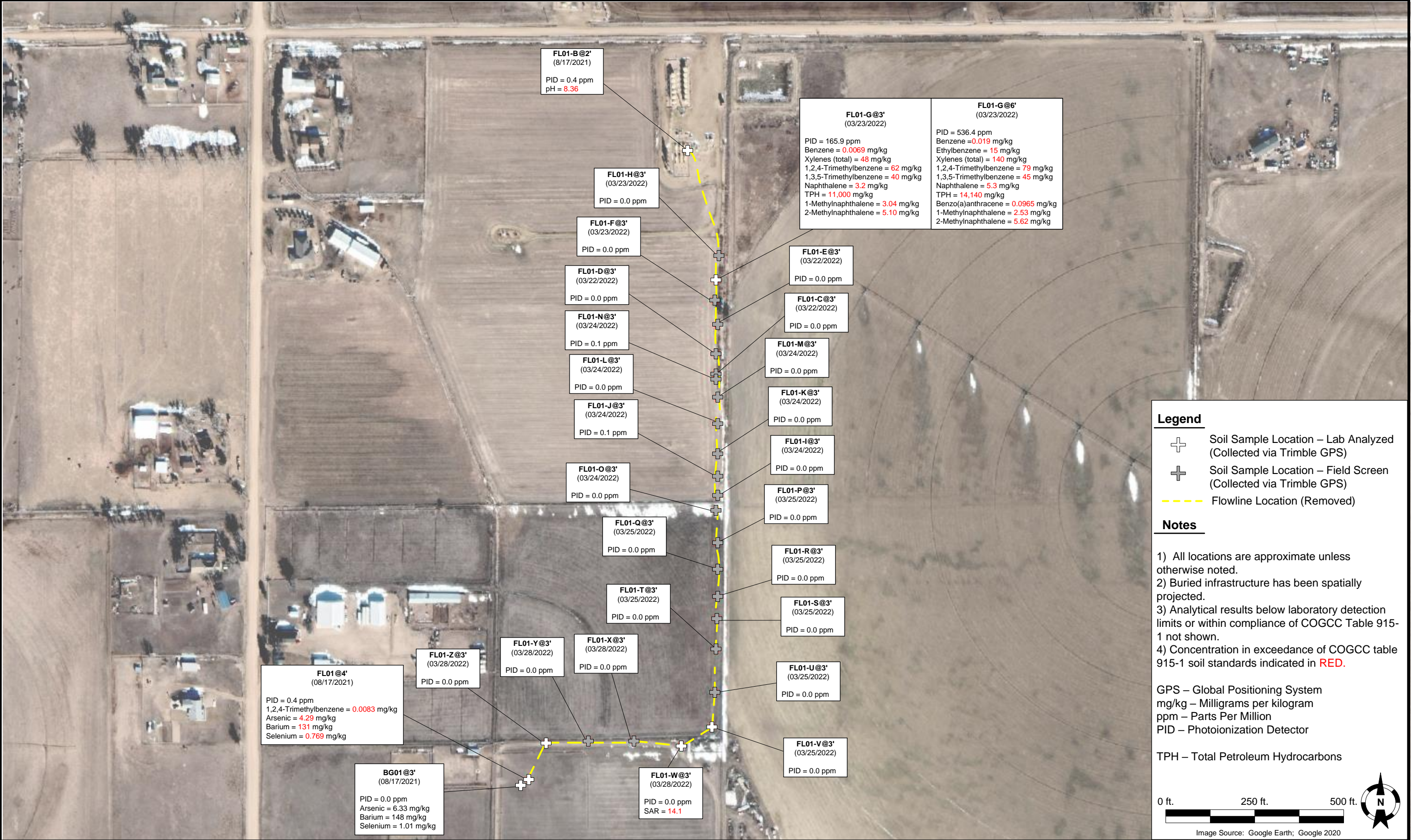
0 1,500 3,000 Feet

## Figure 1

Site Location Map  
Baker B02-05 Flowline  
NWNW S2 T5N R64W  
Weld County, Colorado









# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

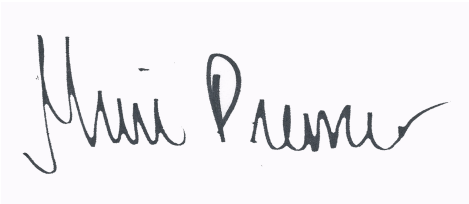
303.277.9310

October 01, 2021

Jacob Whritenour  
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RE: Noble - Baker B02-05  
Work Order #2108245

Enclosed are the results of analyses for samples received by Summit Scientific on 08/17/21 17:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President





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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-B@2'	2108245-01	Soil	08/17/21 10:25	08/17/21 17:50
FL01@4'	2108245-02	Soil	08/17/21 10:40	08/17/21 17:50
FS01@6'	2108245-03	Soil	08/17/21 11:05	08/17/21 17:50
BG01@3'	2108245-05	Soil	08/17/21 12:00	08/17/21 17:50

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.*



$S_2$ 

2108245

4653 Table Mountain Drive ♦ Golden, Colorado 80403

**303-277-9310**

Page 1 of 1

**Client:** Noble / Tasman Geosciences

Project Manager: Jake Whritenour, Invoice: Wade Firestein

Address: 6855 W. 119th Ave.

E-Mail: [Jwhritenour@tasman-geo.com](mailto:Jwhritenour@tasman-geo.com)

City/State/Zip: Broomfield / CO/ 80020


Phone: 303-487-1228

Project Name: Baker BO2-05

**Sampler Name:** Daniel Qua

Project Number: PC: 422130716 Task #: 247037

					Preservative				Matrix				Analysis Requested								Special Instructions	
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS	HOLD			
1	FL01-B22'	8/17/21	1025	2			X			X				X	X	X	X	X				SAR, EC, pH by saturated paste
2	FL0124'		1040																			
3	FS0126'		1105																			
4	SS0122.5'		1045																			
5	BG0123'		1200	1																		
6	BG0126'		1200	1																		
7																						
8																						
9																						
10																						

Relinquished by: 


Date/Time: 8/17/21 1700

Received by: Tasman's Lock Box

Date/Time: 8/17/21 1700

Relinquished by: Tasman's Lock Box

Date/Time: 8/17/21 1750

Received by: 

Date/Time: 8/17/21 1750

Relinquished by:

Date/Time:

Received by:

Date/Time:

Turn Around Time (Check)

Same Day

24 hours

48 hours

72 hours

Standard

Sample Integrity:

Temperature Upon Receipt: 80

Samples Intact: Yes No

Notes:

Hold all analytes



# Sample Receipt Checklist

S2 Work Order 2108245

Client: Noble TASMAN

Client Project ID: Baker B02-05

Shipped Via: ☐ H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: \_\_\_\_\_

Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: \_\_\_\_\_  
(Describe)

Temp (°C)	<u>20</u>
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ice</u>
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Additional Comments (if any):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.

W/G  
Custodian Printed Name or Initials

Will Sahin  
Signature of Custodian

8/17/21  
Date/Time





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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01-B@2'**  
**2108245-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0310	08/18/21	08/19/21	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: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		40.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		131 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0311	08/18/21	08/19/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		76.9 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01-B@2'**  
**2108245-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEH0289	08/18/21	08/19/21	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: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		87.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		71.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.0289</b>	0.0100	mg/L	1	BEH0299	08/18/21	08/19/21	EPA 6020B	

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

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01-B@2'**  
**2108245-01 (Soil)**

**Summit Scientific**

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

Calcium	49.3	0.0597	mg/L dry	1	BEH0307	08/18/21	08/23/21	EPA 6020B
Magnesium	10.2	0.0597	"	"	"	"	"	"
Sodium	10.5	0.0597	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.356	0.00100	units	1	BEH0387	08/23/21	08/23/21	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.8		%	1	BEH0384	08/23/21	08/23/21	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.303	0.0100	mmhos/cm	1	BEH0324	08/19/21	08/19/21	EPA 120.1	

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

Date Sampled: **08/17/21 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.36		pH Units	1	BEH0323	08/19/21	08/19/21	EPA 9045D	

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01@4'**  
**2108245-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEH0310	08/18/21	08/19/21	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>0.081</b>	0.010	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>0.0083</b>	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		26.0 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		122 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		105 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0311	08/18/21	08/19/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		77.9 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01@4'**  
**2108245-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEH0289	08/18/21	08/19/21	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: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		86.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		56.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BEH0299	08/18/21	08/19/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01@4'**  
**2108245-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	4.29	0.220	mg/kg dry	1	BEI0354	09/16/21	09/18/21	EPA 6020B
Barium	131	0.441	"	"	"	"	"	"
Cadmium	0.296	0.220	"	"	"	"	"	"
Copper	7.47	0.441	"	"	"	"	"	"
Lead	13.0	0.220	"	"	"	"	"	"
Nickel	5.82	0.441	"	"	"	"	"	"
Selenium	0.769	0.287	"	"	"	"	"	"
Silver	0.0255	0.0220	"	"	"	"	"	"
Zinc	46.2	0.441	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEI0362	09/16/21	09/16/21	EPA 7196A	I-04

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

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	72.7	0.0551	mg/L dry	1	BEH0307	08/18/21	08/23/21	EPA 6020B	
Magnesium	22.8	0.0551	"	"	"	"	"	"	
Sodium	33.0	0.0551	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.865	0.00100	units	1	BEH0387	08/23/21	08/23/21	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FL01@4'**  
**2108245-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

% Solids	90.7	%	1	BEH0384	08/23/21	08/23/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.696	0.0100	mmhos/cm	1	BEH0324	08/19/21	08/19/21	EPA 120.1	

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

Date Sampled: **08/17/21 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.25		pH Units	1	BEH0323	08/19/21	08/19/21	EPA 9045D	

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FS01@6'**  
**2108245-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BEH0310	08/18/21	08/19/21	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: **08/17/21 11:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		71.6 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		121 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BEH0311	08/18/21	08/19/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		78.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FS01@6'**  
**2108245-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEH0289	08/18/21	08/19/21	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: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		80.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		56.5 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	0.0100	mg/L	1	BEH0299	08/18/21	08/19/21	EPA 6020B	

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

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**FS01@6'**  
**2108245-03 (Soil)**

**Summit Scientific**

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

Calcium	82.8	0.0556	mg/L dry	1	BEH0307	08/18/21	08/23/21	EPA 6020B
Magnesium	23.6	0.0556	"	"	"	"	"	"
Sodium	50.0	0.0556	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.25	0.00100	units	1	BEH0387	08/23/21	08/23/21	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.9		%	1	BEH0384	08/23/21	08/23/21	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.867	0.0100	mmhos/cm	1	BEH0324	08/19/21	08/19/21	EPA 120.1	

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

Date Sampled: **08/17/21 11:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.21		pH Units	1	BEH0323	08/19/21	08/19/21	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**BG01@3'**  
**2108245-05 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **08/17/21 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.0315	0.0100	mg/L	1	BEI0617	09/29/21	10/01/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **08/17/21 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	6.33	0.217	mg/kg dry	1	BEI0354	09/16/21	09/18/21	EPA 6020B	
Barium	148	0.434	"	"	"	"	"	"	
Cadmium	0.284	0.217	"	"	"	"	"	"	
Copper	8.36	0.434	"	"	"	"	"	"	
Lead	8.81	0.217	"	"	"	"	"	"	
Nickel	11.8	0.434	"	"	"	"	"	"	
Selenium	1.01	0.282	"	"	"	"	"	"	
Silver	0.0365	0.0217	"	"	"	"	"	"	
Zinc	35.4	0.434	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **08/17/21 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEI0362	09/16/21	09/16/21	EPA 7196A	I-04

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **08/17/21 12:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
% Solids	92.3		%	1	BEI0348	09/16/21	09/17/21	Calculation	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BEH0310 - EPA 5030 Soil MS

##### Blank (BEH0310-BLK1)

Prepared: 08/18/21 Analyzed: 08/19/21

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0370		"	0.0400		92.5	23-173			
Surrogate: Toluene-d8	0.0499		"	0.0400		125	20-170			
Surrogate: 4-Bromofluorobenzene	0.0410		"	0.0400		102	21-167			

##### LCS (BEH0310-BS1)

Prepared: 08/18/21 Analyzed: 08/19/21

Benzene	0.0910	0.0020	mg/kg	0.100		91.0	70-130			
Toluene	0.111	0.0050	"	0.100		111	70-130			
Ethylbenzene	0.0952	0.0050	"	0.100		95.2	70-130			
m,p-Xylene	0.183	0.010	"	0.200		91.5	70-130			
o-Xylene	0.0991	0.0050	"	0.100		99.1	70-130			
1,2,4-Trimethylbenzene	0.0864	0.0050	"	0.100		86.4	70-130			
1,3,5-Trimethylbenzene	0.0908	0.0050	"	0.100		90.8	70-130			
Naphthalene	0.101	0.0038	"	0.100		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0207		"	0.0400		51.8	23-173			
Surrogate: Toluene-d8	0.0427		"	0.0400		107	20-170			
Surrogate: 4-Bromofluorobenzene	0.0394		"	0.0400		98.5	21-167			

##### Matrix Spike (BEH0310-MS1)

Source: 2108207-01

Prepared: 08/18/21 Analyzed: 08/19/21

Benzene	0.0939	0.0020	mg/kg	0.100	ND	93.9	70-130			
Toluene	0.130	0.0050	"	0.100	ND	130	70-130			
Ethylbenzene	0.0945	0.0050	"	0.100	ND	94.5	70-130			
m,p-Xylene	0.187	0.010	"	0.200	ND	93.3	70-130			
o-Xylene	0.102	0.0050	"	0.100	ND	102	70-130			
1,2,4-Trimethylbenzene	0.0930	0.0050	"	0.100	ND	93.0	70-130			
1,3,5-Trimethylbenzene	0.0888	0.0050	"	0.100	ND	88.8	70-130			
Naphthalene	0.125	0.0038	"	0.100	ND	125	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0372		"	0.0400		93.0	23-173			
Surrogate: Toluene-d8	0.0498		"	0.0400		124	20-170			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		102	21-167			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

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

**Batch BEH0310 - EPA 5030 Soil MS**

Matrix Spike Dup (BEH0310-MSD1)	Source: 2108207-01			Prepared: 08/18/21 Analyzed: 08/19/21						
Benzene	0.0928	0.0020	mg/kg	0.100	ND	92.8	70-130	1.16	30	
Toluene	0.117	0.0050	"	0.100	ND	117	70-130	10.6	30	
Ethylbenzene	0.0924	0.0050	"	0.100	ND	92.4	70-130	2.31	30	
m,p-Xylene	0.181	0.010	"	0.200	ND	90.6	70-130	2.99	30	
o-Xylene	0.0988	0.0050	"	0.100	ND	98.8	70-130	2.70	30	
1,2,4-Trimethylbenzene	0.0894	0.0050	"	0.100	ND	89.4	70-130	3.95	30	
1,3,5-Trimethylbenzene	0.0975	0.0050	"	0.100	ND	97.5	70-130	9.37	30	
Naphthalene	0.124	0.0038	"	0.100	ND	124	70-130	1.37	30	
Surrogate: 1,2-Dichloroethane-d4	0.0192		"	0.0400		48.0	23-173			
Surrogate: Toluene-d8	0.0462		"	0.0400		116	20-170			
Surrogate: 4-Bromofluorobenzene	0.0393		"	0.0400		98.3	21-167			

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BEH0311 - EPA 3550A**

**Blank (BEH0311-BLK1)**

Prepared: 08/18/21 Analyzed: 08/19/21

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

**LCS (BEH0311-BS1)**

Prepared: 08/18/21 Analyzed: 08/19/21

C10-C28 (DRO)	554	50	mg/kg	500	111	70-130
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**Matrix Spike (BEH0311-MS1)**

**Source: 2108207-01**

Prepared: 08/18/21 Analyzed: 08/19/21

C10-C28 (DRO)	488	50	mg/kg	500	15.9	94.4	70-130
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**Matrix Spike Dup (BEH0311-MSD1)**

**Source: 2108207-01**

Prepared: 08/18/21 Analyzed: 08/19/21

C10-C28 (DRO)	486	50	mg/kg	500	15.9	94.1	70-130	0.325	20
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BEH0289 - EPA 5030 Soil MS

##### Blank (BEH0289-BLK1)

Prepared: 08/18/21 Analyzed: 08/19/21

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	0.0316		"	0.0333		94.7	40-150			
Surrogate: Fluoranthene-d10	0.0254		"	0.0333		76.1	40-150			

##### LCS (BEH0289-BS1)

Prepared: 08/18/21 Analyzed: 08/19/21

Acenaphthene	0.0229	0.00500	mg/kg	0.0333		68.6	31-137			
Anthracene	0.0213	0.00500	"	0.0333		64.0	30-120			
Benzo (a) anthracene	0.0219	0.00500	"	0.0333		65.8	30-120			
Benzo (a) pyrene	0.0226	0.00500	"	0.0333		67.9	30-120			
Benzo (b) fluoranthene	0.0257	0.00500	"	0.0333		77.0	30-120			
Benzo (k) fluoranthene	0.0266	0.00500	"	0.0333		79.7	30-120			
Chrysene	0.0215	0.00500	"	0.0333		64.5	30-120			
Dibenz (a,h) anthracene	0.0244	0.00500	"	0.0333		73.3	30-120			
Fluoranthene	0.0214	0.00500	"	0.0333		64.3	30-120			
Fluorene	0.0241	0.00500	"	0.0333		72.3	30-120			
Indeno (1,2,3-cd) pyrene	0.0257	0.00500	"	0.0333		77.0	30-120			
Pyrene	0.0206	0.00500	"	0.0333		61.8	35-142			
1-Methylnaphthalene	0.0229	0.00500	"	0.0333		68.6	35-142			
2-Methylnaphthalene	0.0182	0.00500	"	0.0333		54.7	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0294		"	0.0333		88.2	40-150			
Surrogate: Fluoranthene-d10	0.0241		"	0.0333		72.2	40-150			

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Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BEH0289 - EPA 5030 Soil MS

##### Matrix Spike (BEH0289-MS1)

Source: 2108230-01

Prepared: 08/18/21 Analyzed: 08/19/21

Acenaphthene	0.0220	0.00500	mg/kg	0.0333	ND	65.9	31-137		
Anthracene	0.0199	0.00500	"	0.0333	ND	59.7	30-120		
Benzo (a) anthracene	0.0214	0.00500	"	0.0333	ND	64.1	30-120		
Benzo (a) pyrene	0.0213	0.00500	"	0.0333	ND	64.0	30-120		
Benzo (b) fluoranthene	0.0245	0.00500	"	0.0333	ND	73.6	30-120		
Benzo (k) fluoranthene	0.0247	0.00500	"	0.0333	ND	74.2	30-120		
Chrysene	0.0209	0.00500	"	0.0333	ND	62.6	30-120		
Dibenz (a,h) anthracene	0.0240	0.00500	"	0.0333	ND	71.9	30-120		
Fluoranthene	0.0200	0.00500	"	0.0333	ND	60.0	30-120		
Fluorene	0.0231	0.00500	"	0.0333	ND	69.2	30-120		
Indeno (1,2,3-cd) pyrene	0.0249	0.00500	"	0.0333	ND	74.6	30-120		
Pyrene	0.0194	0.00500	"	0.0333	ND	58.3	35-142		
1-Methylnaphthalene	0.0212	0.00500	"	0.0333	ND	63.7	15-130		
2-Methylnaphthalene	0.0186	0.00500	"	0.0333	ND	55.7	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0283		"	0.0333		84.8	40-150		
Surrogate: Fluoranthene-d10	0.0224		"	0.0333		67.3	40-150		

##### Matrix Spike Dup (BEH0289-MSD1)

Source: 2108230-01

Prepared: 08/18/21 Analyzed: 08/19/21

Acenaphthene	0.0233	0.00500	mg/kg	0.0333	ND	70.0	31-137	6.05	30
Anthracene	0.0216	0.00500	"	0.0333	ND	64.9	30-120	8.29	30
Benzo (a) anthracene	0.0226	0.00500	"	0.0333	ND	67.9	30-120	5.73	30
Benzo (a) pyrene	0.0235	0.00500	"	0.0333	ND	70.5	30-120	9.79	30
Benzo (b) fluoranthene	0.0264	0.00500	"	0.0333	ND	79.1	30-120	7.15	30
Benzo (k) fluoranthene	0.0268	0.00500	"	0.0333	ND	80.3	30-120	7.91	30
Chrysene	0.0222	0.00500	"	0.0333	ND	66.5	30-120	5.98	30
Dibenz (a,h) anthracene	0.0262	0.00500	"	0.0333	ND	78.5	30-120	8.83	30
Fluoranthene	0.0227	0.00500	"	0.0333	ND	68.0	30-120	12.6	30
Fluorene	0.0255	0.00500	"	0.0333	ND	76.6	30-120	10.2	30
Indeno (1,2,3-cd) pyrene	0.0270	0.00500	"	0.0333	ND	81.0	30-120	8.22	30
Pyrene	0.0210	0.00500	"	0.0333	ND	62.9	35-142	7.58	30
1-Methylnaphthalene	0.0219	0.00500	"	0.0333	ND	65.8	15-130	3.23	50
2-Methylnaphthalene	0.0204	0.00500	"	0.0333	ND	61.2	15-130	9.33	50
Surrogate: 2-Methylnaphthalene-d10	0.0309		"	0.0333		92.6	40-150		
Surrogate: Fluoranthene-d10	0.0252		"	0.0333		75.6	40-150		

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

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

**Batch BEH0299 - EPA 3050B**

**Blank (BEH0299-BLK1)**

Prepared: 08/18/21 Analyzed: 08/19/21

Boron ND 0.0100 mg/L

**LCS (BEH0299-BS1)**

Prepared: 08/18/21 Analyzed: 08/19/21

Boron 5.20 0.0100 mg/L 5.00 104 80-120

**Duplicate (BEH0299-DUP1)**

**Source: 2108207-01**

Prepared: 08/18/21 Analyzed: 08/19/21

Boron 0.120 0.0100 mg/L 0.165 31.1 20 QR-03

**Matrix Spike (BEH0299-MS1)**

**Source: 2108207-01**

Prepared: 08/18/21 Analyzed: 08/19/21

Boron 5.45 0.0100 mg/L 5.00 0.165 106 75-125

**Matrix Spike Dup (BEH0299-MSD1)**

**Source: 2108207-01**

Prepared: 08/18/21 Analyzed: 08/19/21

Boron 4.99 0.0100 mg/L 5.00 0.165 96.5 75-125 8.94 25

**Batch BEI0617 - EPA 3050B**

**Blank (BEI0617-BLK1)**

Prepared: 09/29/21 Analyzed: 10/01/21

Boron ND 0.0100 mg/L

**LCS (BEI0617-BS1)**

Prepared: 09/29/21 Analyzed: 10/01/21

Boron 4.77 0.0100 mg/L 5.00 95.5 80-120

**Duplicate (BEI0617-DUP1)**

**Source: 2108245-05**

Prepared: 09/29/21 Analyzed: 10/01/21

Boron 0.0350 0.0100 mg/L 0.0315 10.6 20

**Matrix Spike (BEI0617-MS1)**

**Source: 2108245-05**

Prepared: 09/29/21 Analyzed: 10/01/21

Boron 5.55 0.0100 mg/L 5.00 0.0315 110 75-125

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 - Baker B02-05

Project Number: RC 422130716 Task# 247037

Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

**Summit Scientific**

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

**Batch BEI0617 - EPA 3050B**

**Matrix Spike Dup (BEI0617-MSD1)**

**Source: 2108245-05**

Prepared: 09/29/21 Analyzed: 10/01/21

Boron	5.65	0.0100	mg/L	5.00	0.0315	112	75-125	1.90	25
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Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BEI0354 - EPA 3050B**

**Blank (BEI0354-BLK1)**

Prepared: 09/16/21 Analyzed: 09/18/21

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	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

**LCS (BEI0354-BS1)**

Prepared: 09/16/21 Analyzed: 09/18/21

Arsenic	44.3	0.200	mg/kg wet	40.0	111	80-120
Barium	39.2	0.400	"	40.0	98.1	80-120
Cadmium	2.25	0.200	"	2.00	112	80-120
Copper	39.5	0.400	"	40.0	98.9	80-120
Lead	19.5	0.200	"	20.0	97.5	80-120
Nickel	38.5	0.400	"	40.0	96.2	80-120
Selenium	3.96	0.260	"	4.00	99.0	80-120
Silver	1.90	0.0200	"	2.00	95.0	80-120
Zinc	45.9	0.400	"	40.0	115	80-120

**Duplicate (BEI0354-DUP1)**

Source: 2109029-02

Prepared: 09/16/21 Analyzed: 09/18/21

Arsenic	3.54	0.224	mg/kg dry	3.92	10.2	20
Barium	76.0	0.447	"	78.7	3.44	20
Cadmium	0.208	0.224	"	0.201	3.26	20
Copper	12.1	0.447	"	12.5	2.98	20
Lead	14.7	0.224	"	14.2	3.39	20
Nickel	7.28	0.447	"	6.95	4.67	20
Selenium	0.952	0.291	"	0.852	11.1	20
Silver	0.0481	0.0224	"	0.0424	12.8	20
Zinc	38.4	0.447	"	39.3	2.32	20

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BEI0354 - EPA 3050B**

Matrix Spike (BEI0354-MS1)		Source: 2109029-02			Prepared: 09/16/21		Analyzed: 09/18/21			
Arsenic	50.5	0.224	mg/kg dry	44.7	3.92	104	75-125			
Barium	117	0.447	"	44.7	78.7	86.1	75-125			
Cadmium	2.52	0.224	"	2.24	0.201	104	75-125			
Copper	48.5	0.447	"	44.7	12.5	80.6	75-125			
Lead	41.9	0.224	"	22.4	14.2	124	75-125			
Nickel	47.4	0.447	"	44.7	6.95	90.3	75-125			
Selenium	4.33	0.291	"	4.47	0.852	77.8	75-125			
Silver	1.98	0.0224	"	2.24	0.0424	86.4	75-125			
Zinc	92.2	0.447	"	44.7	39.3	118	75-125			

Matrix Spike Dup (BEI0354-MSD1)		Source: 2109029-02			Prepared: 09/16/21		Analyzed: 09/18/21			
Arsenic	52.8	0.224	mg/kg dry	44.7	3.92	109	75-125	4.43	25	
Barium	122	0.447	"	44.7	78.7	96.8	75-125	4.01	25	
Cadmium	2.64	0.224	"	2.24	0.201	109	75-125	4.62	25	
Copper	49.0	0.447	"	44.7	12.5	81.6	75-125	0.926	25	
Lead	38.5	0.224	"	22.4	14.2	109	75-125	8.32	25	
Nickel	50.5	0.447	"	44.7	6.95	97.3	75-125	6.38	25	
Selenium	4.68	0.291	"	4.47	0.852	85.5	75-125	7.60	25	
Silver	2.05	0.0224	"	2.24	0.0424	89.9	75-125	3.86	25	
Zinc	94.4	0.447	"	44.7	39.3	123	75-125	2.27	25	

Summit Scientific

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

Project: Noble - Baker B02-05  
Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BEI0362 - 3060A Mod**

**Blank (BEI0362-BLK1)**

Prepared & Analyzed: 09/16/21

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BEI0362-BS1)**

Prepared & Analyzed: 09/16/21

Chromium, Hexavalent 24.0 0.30 mg/kg wet 25.0 96.0 80-120

**Duplicate (BEI0362-DUP1)**

**Source: 2108245-02**

Prepared & Analyzed: 09/16/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BEI0362-MS1)**

**Source: 2108245-02**

Prepared & Analyzed: 09/16/21

Chromium, Hexavalent 30.9 0.30 mg/kg dry 27.6 ND 112 75-125

**Matrix Spike Dup (BEI0362-MSD1)**

**Source: 2108245-02**

Prepared & Analyzed: 09/16/21

Chromium, Hexavalent 30.3 0.30 mg/kg dry 27.6 ND 110 75-125 1.80 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037

Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

**Summit Scientific**

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

**Batch BEH0307 - General Preparation**

**Blank (BEH0307-BLK1)**

Prepared: 08/18/21 Analyzed: 08/23/21

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

**LCS (BEH0307-BS1)**

Prepared: 08/18/21 Analyzed: 08/23/21

Calcium	5.66	0.0500	mg/L wet	5.00	113	70-130
Magnesium	5.91	0.0500	"	5.00	118	70-130
Sodium	6.02	0.0500	"	5.00	120	70-130

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037

Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

**Summit Scientific**

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

**Batch BEH0384 - General Preparation**

<b>Duplicate (BEH0384-DUP1)</b>		<b>Source: 2108242-02</b>			Prepared & Analyzed: 08/23/21					
% Solids	89.8		%		87.5			2.55	20	

**Batch BEI0348 - General Preparation**

<b>Duplicate (BEI0348-DUP1)</b>		<b>Source: 2108245-05</b>			Prepared: 09/16/21 Analyzed: 09/17/21					
% Solids	93.3		%		92.3			1.12	20	

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037

Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

**Summit Scientific**

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

**Batch BEH0324 - General Preparation**

**Blank (BEH0324-BLK1)**

Prepared & Analyzed: 08/19/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEH0324-BS1)**

Prepared & Analyzed: 08/19/21

Specific Conductance (EC) 0.152 0.0100 mmhos/cm 0.150 102 90-110

**Duplicate (BEH0324-DUP1)**

**Source: 2108233-01**

Prepared & Analyzed: 08/19/21

Specific Conductance (EC) 8.61 0.0100 mmhos/cm 8.61 0.0697 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037

Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

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

**Summit Scientific**

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

**Batch BEH0323 - General Preparation**

**LCS (BEH0323-BS1)**

Prepared & Analyzed: 08/19/21

pH	9.22	pH Units	9.21	100	95-105
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**Duplicate (BEH0323-DUP1)**

**Source: 2108233-01**

Prepared & Analyzed: 08/19/21

pH	4.64	pH Units	4.66	0.430	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: RC 422130716 Task# 247037  
Project Manager: Jacob Whritenour

**Reported:**  
10/01/21 13:28

### Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
I-04	Sample was analyzed out of recommended holding time per clients request.
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

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

May 16, 2022

Jacob Whritenour  
Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield, CO 80020  
RE: Noble - Baker B02-05  
Work Order #2203380

Enclosed are the results of analyses for samples received by Summit Scientific on 03/23/22 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, flowing script.

Paul Shrewsbury  
President





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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-G@3'	2203380-01	Soil	03/23/22 11:25	03/23/22 15:40
FL01-G@6'	2203380-02	Soil	03/23/22 11:40	03/23/22 15:40

Summit Scientific

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$S_2$ 

**303-277-9310**

Page 1 of 1

Project Number:

[www.s2scientific.com](http://www.s2scientific.com)



2203380

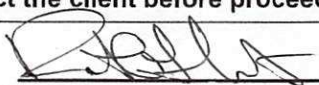
## Sample Receipt Checklist

S2 Work Order# \_\_\_\_\_

Client: Noble-Tasman Client Project ID: Baker B02-05Shipped Via: ☐ H.D./P.U./FedEx/UPS/USPS/Other ☐ Airbill #: \_\_\_\_\_Matrix (check all that apply): ☐ Air ☒ Soil/Solid ☐ Water ☐ Other: \_\_\_\_\_  
(Describe)Temp (°C) 6.9

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.  
Custodian Printed Name or Initials3.23.22  
Date/Time





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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@3'**  
**2203380-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Benzene</b>	<b>0.0069</b>	0.0020	mg/kg	1	BFC0563	03/24/22	03/26/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	100	"	"	"	"	
<b>Xylenes (total)</b>	<b>48</b>	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>62</b>	0.50	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>40</b>	0.50	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>3.2</b>	0.38	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>6500</b>	500	"	1000	"	"	"	"	

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4	0.0495	124 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0337	84.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0530	132 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>C10-C28 (DRO)</b>	<b>4300</b>	50	mg/kg	1	BFC0564	03/24/22	03/26/22	EPA 8015M	
<b>C28-C36 (ORO)</b>	<b>200</b>	50	"	"	"	"	"	"	

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl	12.9	103 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@3'**  
**2203380-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0541	03/24/22	03/25/22	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	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.128</b>	0.0500	"	10	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	1	"	"	"	"	
<b>Fluoranthene</b>	<b>0.00821</b>	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
<b>1-Methylnaphthalene</b>	<b>3.04</b>	0.500	"	100	"	"	"	"	
<b>2-Methylnaphthalene</b>	<b>5.10</b>	0.500	"	"	"	"	"	"	

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.00752	22.6 %	40-150		"	"	"	"	S-02
Surrogate: Fluoranthene-d10	0.0270	81.0 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.130</b>	0.0100	mg/L	1	BFC0662	03/29/22	04/07/22	EPA 6020B	

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

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@3'**  
**2203380-01 (Soil)**

**Summit Scientific**

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

Calcium	134	0.0597	mg/L dry	1	BFC0642	03/28/22	04/07/22	EPA 6020B
Magnesium	53.3	0.0597	"	"	"	"	"	"
Sodium	31.9	0.0597	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.590	0.00100	units	1	BFD0153	04/08/22	04/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.7		%	1	BFC0628	03/28/22	03/28/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.19	0.0100	mmhos/cm	1	BFC0677	03/29/22	03/29/22	EPA 120.1	

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

Date Sampled: **03/23/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.48		pH Units	1	BFC0678	03/29/22	03/29/22	EPA 9045D	

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@6'**  
**2203380-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>Benzene</b>	<b>0.019</b>	0.0020	mg/kg	1	BFC0563	03/24/22	03/26/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>15</b>	0.50	"	100	"	"	"	"	
<b>Xylenes (total)</b>	<b>140</b>	10	"	1000	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>79</b>	5.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>45</b>	0.50	"	100	"	"	"	"	
<b>Naphthalene</b>	<b>5.3</b>	0.38	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>8600</b>	500	"	1000	"	"	"	"	

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0543	136 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0341	85.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0553	138 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>C10-C28 (DRO)</b>	<b>5600</b>	50	mg/kg	1	BFC0564	03/24/22	03/26/22	EPA 8015M	
<b>C28-C36 (ORO)</b>	<b>240</b>	50	"	"	"	"	"	"	

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	16.1	129 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@6'**  
**2203380-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0541	03/24/22	03/25/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
<b>Benzo (a) anthracene</b>	<b>0.0965</b>	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.0859</b>	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
<b>Fluoranthene</b>	<b>0.0214</b>	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
<b>Pyrene</b>	<b>0.0849</b>	0.00500	"	"	"	"	"	"	
<b>1-Methylnaphthalene</b>	<b>2.53</b>	0.500	"	100	"	"	"	"	
<b>2-Methylnaphthalene</b>	<b>5.62</b>	0.500	"	"	"	"	"	"	

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0153	45.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0256	76.9 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.0485</b>	0.0100	mg/L	1	BFC0662	03/29/22	04/07/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@6'**  
**2203380-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Arsenic	8.29	0.238	mg/kg dry	1	BFE0040	05/03/22	05/14/22	EPA 6020B
Barium	32.0	0.476	"	"	"	"	"	"
Cadmium	ND	0.238	"	"	"	"	"	"
Copper	10.5	0.476	"	"	"	"	"	"
Lead	14.6	0.238	"	"	"	"	"	"
Nickel	23.7	0.476	"	"	"	"	"	"
Selenium	0.770	0.309	"	"	"	"	"	"
Silver	ND	0.0238	"	"	"	"	"	"
Zinc	60.7	0.476	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFE0013	05/02/22	05/02/22	EPA 7196A	I-02

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

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	119	0.0595	mg/L dry	1	BFC0642	03/28/22	04/07/22	EPA 6020B	
Magnesium	47.8	0.0595	"	"	"	"	"	"	
Sodium	24.5	0.0595	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.480	0.00100	units	1	BFD0153	04/08/22	04/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**FL01-G@6'**  
**2203380-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.0		%	1	BFC0628	03/28/22	03/28/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.08	0.0100	mmhos/cm	1	BFC0677	03/29/22	03/29/22	EPA 120.1	

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

Date Sampled: **03/23/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.69		pH Units	1	BFC0678	03/29/22	03/29/22	EPA 9045D	

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0563 - EPA 5030 Soil MS

##### Blank (BFC0563-BLK1)

Prepared & Analyzed: 03/24/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0459		"	0.0400		115	50-150			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		101	50-150			

##### LCS (BFC0563-BS1)

Prepared & Analyzed: 03/24/22

Benzene	0.145	0.0020	mg/kg	0.125		116	70-130			
Toluene	0.125	0.0050	"	0.125		99.7	70-130			
Ethylbenzene	0.121	0.0050	"	0.125		97.0	70-130			
m,p-Xylene	0.248	0.010	"	0.250		99.3	70-130			
o-Xylene	0.125	0.0050	"	0.125		100	70-130			
1,2,4-Trimethylbenzene	0.132	0.0050	"	0.125		106	70-130			
1,3,5-Trimethylbenzene	0.139	0.0050	"	0.125		111	70-130			
Naphthalene	0.107	0.0038	"	0.125		85.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0303		"	0.0400		75.7	50-150			
Surrogate: Toluene-d8	0.0414		"	0.0400		103	50-150			
Surrogate: 4-Bromofluorobenzene	0.0407		"	0.0400		102	50-150			

##### Matrix Spike (BFC0563-MS1)

Source: 2203354-01

Prepared & Analyzed: 03/24/22

Benzene	0.117	0.0020	mg/kg	0.125	ND	93.6	70-130			
Toluene	0.129	0.0050	"	0.125	ND	103	70-130			
Ethylbenzene	0.123	0.0050	"	0.125	ND	98.4	70-130			
m,p-Xylene	0.252	0.010	"	0.250	ND	101	70-130			
o-Xylene	0.126	0.0050	"	0.125	ND	101	70-130			
1,2,4-Trimethylbenzene	0.135	0.0050	"	0.125	ND	108	70-130			
1,3,5-Trimethylbenzene	0.142	0.0050	"	0.125	ND	113	70-130			
Naphthalene	0.115	0.0038	"	0.125	ND	92.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0469		"	0.0400		117	50-150			
Surrogate: Toluene-d8	0.0415		"	0.0400		104	50-150			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.4	50-150			

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0563 - EPA 5030 Soil MS

Matrix Spike Dup (BFC0563-MSD1)	Source: 2203354-01			Prepared & Analyzed: 03/24/22						
Benzene	0.134	0.0020	mg/kg	0.125	ND	107	70-130	13.3	30	
Toluene	0.131	0.0050	"	0.125	ND	105	70-130	1.69	30	
Ethylbenzene	0.129	0.0050	"	0.125	ND	103	70-130	4.65	30	
m,p-Xylene	0.258	0.010	"	0.250	ND	103	70-130	2.42	30	
o-Xylene	0.128	0.0050	"	0.125	ND	102	70-130	1.42	30	
1,2,4-Trimethylbenzene	0.140	0.0050	"	0.125	ND	112	70-130	3.66	30	
1,3,5-Trimethylbenzene	0.143	0.0050	"	0.125	ND	115	70-130	1.03	30	
Naphthalene	0.116	0.0038	"	0.125	ND	92.5	70-130	0.182	30	
Surrogate: 1,2-Dichloroethane-d4	0.0554		"	0.0400		139	50-150			
Surrogate: Toluene-d8	0.0430		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0406		"	0.0400		101	50-150			

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BFC0564 - EPA 3550A**

**Blank (BFC0564-BLK1)**

Prepared: 03/24/22 Analyzed: 03/25/22

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

**LCS (BFC0564-BS1)**

Prepared: 03/24/22 Analyzed: 03/25/22

C10-C28 (DRO)	481	50	mg/kg	500	96.2	70-130
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**Matrix Spike (BFC0564-MS1)**

Source: 2203354-01

Prepared: 03/24/22 Analyzed: 03/25/22

C10-C28 (DRO)	405	50	mg/kg	500	33.3	74.4	70-130
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**Matrix Spike Dup (BFC0564-MSD1)**

Source: 2203354-01

Prepared: 03/24/22 Analyzed: 03/25/22

C10-C28 (DRO)	440	50	mg/kg	500	33.3	81.2	70-130	8.15	20
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Tasman Geosciences  
6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0541 - EPA 5030 Soil MS

##### Blank (BFC0541-BLK1)

Prepared & Analyzed: 03/24/22

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	0.0180	"	0.0333	54.0	40-150
Surrogate: Fluoranthene-d10	0.0213	"	0.0333	63.8	40-150

##### LCS (BFC0541-BS1)

Prepared & Analyzed: 03/24/22

Acenaphthene	0.0222	0.00500	mg/kg	0.0333	66.5	31-137
Anthracene	0.0239	0.00500	"	0.0333	71.7	30-120
Benzo (a) anthracene	0.0249	0.00500	"	0.0333	74.7	30-120
Benzo (a) pyrene	0.0253	0.00500	"	0.0333	75.8	30-120
Benzo (b) fluoranthene	0.0266	0.00500	"	0.0333	79.8	30-120
Benzo (k) fluoranthene	0.0260	0.00500	"	0.0333	78.1	30-120
Chrysene	0.0238	0.00500	"	0.0333	71.5	30-120
Dibenz (a,h) anthracene	0.0239	0.00500	"	0.0333	71.8	30-120
Fluoranthene	0.0237	0.00500	"	0.0333	71.0	30-120
Fluorene	0.0220	0.00500	"	0.0333	66.1	30-120
Indeno (1,2,3-cd) pyrene	0.0238	0.00500	"	0.0333	71.5	30-120
Pyrene	0.0240	0.00500	"	0.0333	72.0	35-142
1-Methylnaphthalene	0.0201	0.00500	"	0.0333	60.2	35-142
2-Methylnaphthalene	0.0201	0.00500	"	0.0333	60.4	35-142

Surrogate: 2-Methylnaphthalene-d10	0.0207	"	0.0333	62.0	40-150
Surrogate: Fluoranthene-d10	0.0237	"	0.0333	71.0	40-150

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0541 - EPA 5030 Soil MS

##### Matrix Spike (BFC0541-MS1)

Source: 2203350-05

Prepared & Analyzed: 03/24/22

Acenaphthene	0.0247	0.00500	mg/kg	0.0333	ND	74.1	31-137				
Anthracene	0.0250	0.00500	"	0.0333	ND	75.0	30-120				
Benzo (a) anthracene	0.0265	0.00500	"	0.0333	ND	79.4	30-120				
Benzo (a) pyrene	0.0262	0.00500	"	0.0333	ND	78.5	30-120				
Benzo (b) fluoranthene	0.0284	0.00500	"	0.0333	ND	85.1	30-120				
Benzo (k) fluoranthene	0.0262	0.00500	"	0.0333	ND	78.7	30-120				
Chrysene	0.0261	0.00500	"	0.0333	0.00311	69.1	30-120				
Dibenz (a,h) anthracene	0.0216	0.00500	"	0.0333	ND	64.9	30-120				
Fluoranthene	0.0260	0.00500	"	0.0333	ND	78.1	30-120				
Fluorene	0.0309	0.00500	"	0.0333	0.0111	59.4	30-120				
Indeno (1,2,3-cd) pyrene	0.0238	0.00500	"	0.0333	ND	71.5	30-120				
Pyrene	0.0261	0.00500	"	0.0333	ND	78.2	35-142				
1-Methylnaphthalene	0.0565	0.00500	"	0.0333	0.0286	83.6	15-130				
2-Methylnaphthalene	0.0969	0.00500	"	0.0333	0.0600	110	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0231		"	0.0333		69.3	40-150				
Surrogate: Fluoranthene-d10	0.0263		"	0.0333		78.8	40-150				

##### Matrix Spike Dup (BFC0541-MSD1)

Source: 2203350-05

Prepared & Analyzed: 03/24/22

Acenaphthene	0.0254	0.00500	mg/kg	0.0333	ND	76.1	31-137	2.60	30		
Anthracene	0.0277	0.00500	"	0.0333	ND	83.1	30-120	10.3	30		
Benzo (a) anthracene	0.0273	0.00500	"	0.0333	ND	82.0	30-120	3.28	30		
Benzo (a) pyrene	0.0270	0.00500	"	0.0333	ND	80.9	30-120	2.94	30		
Benzo (b) fluoranthene	0.0291	0.00500	"	0.0333	ND	87.3	30-120	2.50	30		
Benzo (k) fluoranthene	0.0269	0.00500	"	0.0333	ND	80.6	30-120	2.39	30		
Chrysene	0.0275	0.00500	"	0.0333	0.00311	73.2	30-120	5.12	30		
Dibenz (a,h) anthracene	0.0207	0.00500	"	0.0333	ND	62.1	30-120	4.35	30		
Fluoranthene	0.0284	0.00500	"	0.0333	ND	85.2	30-120	8.67	30		
Fluorene	0.0341	0.00500	"	0.0333	0.0111	69.0	30-120	9.86	30		
Indeno (1,2,3-cd) pyrene	0.0230	0.00500	"	0.0333	ND	69.0	30-120	3.58	30		
Pyrene	0.0263	0.00500	"	0.0333	ND	79.0	35-142	1.04	30		
1-Methylnaphthalene	0.0580	0.00500	"	0.0333	0.0286	88.2	15-130	2.70	50		
2-Methylnaphthalene	0.0967	0.00500	"	0.0333	0.0600	110	15-130	0.150	50		
Surrogate: 2-Methylnaphthalene-d10	0.0202		"	0.0333		60.5	40-150				
Surrogate: Fluoranthene-d10	0.0287		"	0.0333		86.0	40-150				

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 - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

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

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

**Batch BFC0662 - EPA 3050B**

**Blank (BFC0662-BLK1)**

Prepared: 03/29/22 Analyzed: 04/07/22

Boron ND 0.0100 mg/L

**LCS (BFC0662-BS1)**

Prepared: 03/29/22 Analyzed: 04/07/22

Boron 5.15 0.0100 mg/L 5.00 103 80-120

**Duplicate (BFC0662-DUP1)**

**Source: 2203354-01**

Prepared: 03/29/22 Analyzed: 04/07/22

Boron 0.0448 0.0100 mg/L 0.0467 4.32 20

**Matrix Spike (BFC0662-MS1)**

**Source: 2203354-01**

Prepared: 03/29/22 Analyzed: 04/07/22

Boron 5.01 0.0100 mg/L 5.00 0.0467 99.3 75-125

**Matrix Spike Dup (BFC0662-MSD1)**

**Source: 2203354-01**

Prepared: 03/29/22 Analyzed: 04/07/22

Boron 4.89 0.0100 mg/L 5.00 0.0467 97.0 75-125 2.40 25

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BFE0040 - EPA 3050B**

**Blank (BFE0040-BLK1)**

Prepared: 05/03/22 Analyzed: 05/14/22

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	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

**LCS (BFE0040-BS1)**

Prepared: 05/03/22 Analyzed: 05/14/22

Arsenic	35.0	0.200	mg/kg wet	40.0	87.5	80-120
Barium	32.7	0.400	"	40.0	81.8	80-120
Cadmium	1.71	0.200	"	2.00	85.6	80-120
Copper	35.4	0.400	"	40.0	88.5	80-120
Lead	17.3	0.200	"	20.0	86.3	80-120
Nickel	35.0	0.400	"	40.0	87.4	80-120
Selenium	3.26	0.260	"	4.00	81.5	80-120
Silver	1.67	0.0200	"	2.00	83.5	80-120
Zinc	35.3	0.400	"	40.0	88.4	80-120

**Duplicate (BFE0040-DUP1)**

Source: 2203380-02

Prepared: 05/03/22 Analyzed: 05/14/22

Arsenic	8.64	0.238	mg/kg dry	8.29	4.18	20
Barium	31.1	0.476	"	32.0	2.97	20
Cadmium	0.0656	0.238	"	0.209	104	20
Copper	10.4	0.476	"	10.5	1.16	20
Lead	14.8	0.238	"	14.6	1.28	20
Nickel	20.3	0.476	"	23.7	15.6	20
Selenium	0.851	0.309	"	0.770	10.0	20
Silver	0.0193	0.0238	"	0.0160	18.7	20
Zinc	66.2	0.476	"	60.7	8.70	20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BFE0040 - EPA 3050B**

**Matrix Spike (BFE0040-MS1)**

**Source: 2203380-02**

Prepared: 05/03/22 Analyzed: 05/14/22

Arsenic	46.5	0.238	mg/kg dry	47.6	8.29	80.3	75-125			
Barium	68.3	0.476	"	47.6	32.0	76.3	75-125			
Cadmium	2.43	0.238	"	2.38	0.209	93.1	75-125			
Copper	49.8	0.476	"	47.6	10.5	82.4	75-125			
Lead	26.9	0.238	"	23.8	14.6	51.8	75-125			QM-05
Nickel	49.2	0.476	"	47.6	23.7	53.4	75-125			QM-05
Selenium	4.69	0.309	"	4.76	0.770	82.4	75-125			
Silver	1.82	0.0238	"	2.38	0.0160	75.8	75-125			
Zinc	101	0.476	"	47.6	60.7	84.3	75-125			

**Matrix Spike Dup (BFE0040-MSD1)**

**Source: 2203380-02**

Prepared: 05/03/22 Analyzed: 05/14/22

Arsenic	48.7	0.238	mg/kg dry	47.6	8.29	84.9	75-125	4.61	25	
Barium	71.8	0.476	"	47.6	32.0	83.6	75-125	5.00	25	
Cadmium	2.41	0.238	"	2.38	0.209	92.7	75-125	0.473	25	
Copper	47.8	0.476	"	47.6	10.5	78.2	75-125	4.08	25	
Lead	31.0	0.238	"	23.8	14.6	69.0	75-125	14.2	25	QM-05
Nickel	52.5	0.476	"	47.6	23.7	60.5	75-125	6.63	25	QM-05
Selenium	4.65	0.309	"	4.76	0.770	81.4	75-125	1.04	25	
Silver	2.26	0.0238	"	2.38	0.0160	94.1	75-125	21.4	25	
Zinc	108	0.476	"	47.6	60.7	100	75-125	7.19	25	

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BFE0013 - 3060A Mod**

**Blank (BFE0013-BLK1)**

Prepared & Analyzed: 05/02/22

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BFE0013-BS1)**

Prepared & Analyzed: 05/02/22

Chromium, Hexavalent 27.0 0.30 mg/kg wet 25.0 108 80-120

**Duplicate (BFE0013-DUP1)**

**Source: 2203380-02**

Prepared & Analyzed: 05/02/22

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BFE0013-MS1)**

**Source: 2203380-02**

Prepared & Analyzed: 05/02/22

Chromium, Hexavalent 32.8 0.30 mg/kg dry 29.8 ND 110 75-125

**Matrix Spike Dup (BFE0013-MSD1)**

**Source: 2203380-02**

Prepared & Analyzed: 05/02/22

Chromium, Hexavalent 34.8 0.30 mg/kg dry 29.8 ND 117 75-125 5.63 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**

05/16/22 12:22

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

**Summit Scientific**

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

**Batch BFC0642 - General Preparation**

**Blank (BFC0642-BLK1)**

Prepared: 03/28/22 Analyzed: 04/07/22

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

**LCS (BFC0642-BS1)**

Prepared: 03/28/22 Analyzed: 04/07/22

Calcium	5.71	0.0500	mg/L wet	5.00	114	70-130
Magnesium	5.19	0.0500	"	5.00	104	70-130
Sodium	5.12	0.0500	"	5.00	102	70-130

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**

05/16/22 12:22

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

**Summit Scientific**

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

**Batch BFC0628 - General Preparation**

**Duplicate (BFC0628-DUP1)**

**Source: 2203095-06**

**Prepared & Analyzed: 03/28/22**

% Solids	85.7	%	85.7	0.0328	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

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

**Summit Scientific**

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

**Batch BFC0677 - General Preparation**

**Blank (BFC0677-BLK1)**

Prepared & Analyzed: 03/29/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BFC0677-BS1)**

Prepared & Analyzed: 03/29/22

Specific Conductance (EC) 0.151 0.0100 mmhos/cm 0.150 100 95-105

**Duplicate (BFC0677-DUP1)**

**Source: 2203350-01**

Prepared & Analyzed: 03/29/22

Specific Conductance (EC) 3.43 0.0100 mmhos/cm 3.45 0.581 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

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

**Summit Scientific**

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

**Batch BFC0678 - General Preparation**

**LCS (BFC0678-BS1)**

Prepared & Analyzed: 03/29/22

pH	9.12	pH Units	9.18	99.3	95-105
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**Duplicate (BFC0678-DUP1)**

Source: 2203350-01

Prepared & Analyzed: 03/29/22

pH	7.85	pH Units	7.84	0.127	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
05/16/22 12:22

### Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
I-02	This sample was analyzed outside of the recommended holding time.
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

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 11, 2022

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

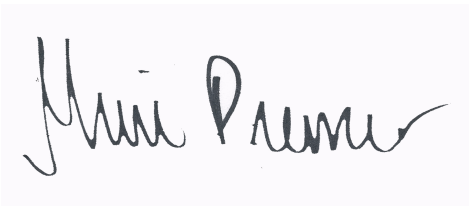
Broomfield, CO 80020

RE: Noble - Baker B02-05

Work Order #2203451

Enclosed are the results of analyses for samples received by Summit Scientific on 03/25/22 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President





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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-V@3'	2203451-01	Soil	03/25/22 12:30	03/25/22 15:40

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.*

# Summit Scientific

S<sub>2</sub>

2203451


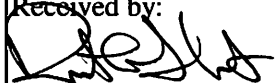
4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Page 1 of 1

Client:	Noble / Tasman Geosciences	Project Manager:	Jake Whritenour, Invoice: <u>Wade Firestone</u>
Address:	6855 W. 119th Ave.	E-Mail:	jwhritenour@tasman-geo.com/ Noble Group
City/State/Zip:	Broomfield / CO/ 80020		
Phone:	303-827-1511	Project Name:	<u>Baker B02-05</u>
Sampler Name: Hunter Merlo		Project Number:	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested							Special Instructions	
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	VOC - 915	TPH - 915	PAH - 915	pH, EC, SAR	Boron - HWS			
1	FL01-Ve3'	3/25/22	1230	2			X			X				X	X	X	X	X			pH, EC, SAR by saturated paste
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time	(Check)	Notes:
	3/25/22 1540	Tasman's Lock Box	3/25/22 1540	Same Day	72 hours	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours	X Standard	
Tasman's Lock Box			3/25/22 1540	48 hours		
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:		
				Temperature Upon Receipt: <u>55</u>		
				Samples Intact: (Yes) No		

3.25.22  
Date/Time



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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

**FL01-V@3'**  
**2203451-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0622	03/28/22	03/29/22	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: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		143 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		105 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0624	03/28/22	03/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		96.5 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

**FL01-V@3'**  
**2203451-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0625	03/28/22	03/30/22	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: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		48.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.0 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.245</b>	0.0100	mg/L	1	BFC0713	03/30/22	04/06/22	EPA 6020B	

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

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

**FL01-V@3'**  
**2203451-01 (Soil)**

**Summit Scientific**

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

Calcium	169	0.0550	mg/L dry	1	BFC0750	03/31/22	04/03/22	EPA 6020B
Magnesium	85.5	0.0550	"	"	"	"	"	"
Sodium	127	0.0550	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.99	0.00100	units	1	BFD0040	04/03/22	04/03/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.8		%	1	BFC0748	03/31/22	03/31/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.22	0.0100	mmhos/cm	1	BFD0028	04/01/22	04/01/22	EPA 120.1	

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

Date Sampled: **03/25/22 12:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.02		pH Units	1	BFD0029	04/01/22	04/01/22	EPA 9045D	

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 - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0622 - EPA 5030 Soil MS

##### Blank (BFC0622-BLK1)

Prepared: 03/28/22 Analyzed: 03/29/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0434		"	0.0400		109	50-150			
Surrogate: Toluene-d8	0.0404		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0405		"	0.0400		101	50-150			

##### LCS (BFC0622-BS1)

Prepared: 03/28/22 Analyzed: 03/29/22

Benzene	0.148	0.0020	mg/kg	0.150		98.8	70-130			
Toluene	0.146	0.0050	"	0.150		97.3	70-130			
Ethylbenzene	0.145	0.0050	"	0.150		96.7	70-130			
m,p-Xylene	0.287	0.010	"	0.300		95.8	70-130			
o-Xylene	0.146	0.0050	"	0.150		97.0	70-130			
1,2,4-Trimethylbenzene	0.144	0.0050	"	0.150		96.3	70-130			
1,3,5-Trimethylbenzene	0.144	0.0050	"	0.150		95.8	70-130			
Naphthalene	0.147	0.0038	"	0.150		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0389		"	0.0400		97.4	50-150			
Surrogate: Toluene-d8	0.0403		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0396		"	0.0400		98.9	50-150			

##### Matrix Spike (BFC0622-MS1)

Source: 2203403-01

Prepared: 03/28/22 Analyzed: 03/29/22

Benzene	0.134	0.0020	mg/kg	0.150	ND	89.3	70-130			
Toluene	0.134	0.0050	"	0.150	ND	89.0	70-130			
Ethylbenzene	0.128	0.0050	"	0.150	ND	85.7	70-130			
m,p-Xylene	0.248	0.010	"	0.300	ND	82.7	70-130			
o-Xylene	0.130	0.0050	"	0.150	ND	86.4	70-130			
1,2,4-Trimethylbenzene	0.108	0.0050	"	0.150	ND	72.2	70-130			
1,3,5-Trimethylbenzene	0.116	0.0050	"	0.150	ND	77.5	70-130			
Naphthalene	0.155	0.0038	"	0.150	ND	103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0406		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0396		"	0.0400		99.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0403		"	0.0400		101	50-150			

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0622 - EPA 5030 Soil MS

##### Matrix Spike Dup (BFC0622-MSD1)

Source: 2203403-01

Prepared: 03/28/22 Analyzed: 03/29/22

Benzene	0.124	0.0020	mg/kg	0.150	ND	83.0	70-130	7.38	30	
Toluene	0.123	0.0050	"	0.150	ND	82.0	70-130	8.24	30	
Ethylbenzene	0.118	0.0050	"	0.150	ND	78.7	70-130	8.42	30	
m,p-Xylene	0.227	0.010	"	0.300	ND	75.6	70-130	8.94	30	
o-Xylene	0.118	0.0050	"	0.150	ND	78.9	70-130	9.03	30	
1,2,4-Trimethylbenzene	0.132	0.0050	"	0.150	ND	87.7	70-130	19.3	30	
1,3,5-Trimethylbenzene	0.109	0.0050	"	0.150	ND	72.4	70-130	6.80	30	
Naphthalene	0.148	0.0038	"	0.150	ND	98.6	70-130	4.77	30	
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.8	50-150			
Surrogate: Toluene-d8	0.0400		"	0.0400		100	50-150			
Surrogate: 4-Bromofluorobenzene	0.0392		"	0.0400		98.1	50-150			

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BFC0624 - EPA 3550A**

**Blank (BFC0624-BLK1)**

Prepared: 03/28/22 Analyzed: 03/29/22

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

**LCS (BFC0624-BS1)**

Prepared: 03/28/22 Analyzed: 03/29/22

C10-C28 (DRO)	468	50	mg/kg	500	93.5	70-130
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**Matrix Spike (BFC0624-MS1)**

Source: 2203414-01

Prepared: 03/28/22 Analyzed: 03/29/22

C10-C28 (DRO)	464	50	mg/kg	500	32.9	86.2	70-130
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**Matrix Spike Dup (BFC0624-MSD1)**

Source: 2203414-01

Prepared: 03/28/22 Analyzed: 03/29/22

C10-C28 (DRO)	465	50	mg/kg	500	32.9	86.3	70-130	0.114	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0625 - EPA 5030 Soil MS

##### Blank (BFC0625-BLK1)

Prepared: 03/28/22 Analyzed: 03/30/22

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	0.0172		"	0.0333		51.5	40-150			
Surrogate: Fluoranthene-d10	0.0174		"	0.0333		52.1	40-150			

##### LCS (BFC0625-BS1)

Prepared: 03/28/22 Analyzed: 03/30/22

Acenaphthene	0.0201	0.00500	mg/kg	0.0333		60.2	31-137			
Anthracene	0.0262	0.00500	"	0.0333		78.7	30-120			
Benzo (a) anthracene	0.0232	0.00500	"	0.0333		69.5	30-120			
Benzo (a) pyrene	0.0251	0.00500	"	0.0333		75.4	30-120			
Benzo (b) fluoranthene	0.0253	0.00500	"	0.0333		75.8	30-120			
Benzo (k) fluoranthene	0.0146	0.00500	"	0.0333		43.8	30-120			
Chrysene	0.0254	0.00500	"	0.0333		76.2	30-120			
Dibenz (a,h) anthracene	0.0191	0.00500	"	0.0333		57.4	30-120			
Fluoranthene	0.0267	0.00500	"	0.0333		80.1	30-120			
Fluorene	0.0230	0.00500	"	0.0333		68.9	30-120			
Indeno (1,2,3-cd) pyrene	0.0243	0.00500	"	0.0333		72.9	30-120			
Pyrene	0.0266	0.00500	"	0.0333		79.8	35-142			
1-Methylnaphthalene	0.0237	0.00500	"	0.0333		71.0	35-142			
2-Methylnaphthalene	0.0248	0.00500	"	0.0333		74.4	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0258		"	0.0333		77.4	40-150			
Surrogate: Fluoranthene-d10	0.0255		"	0.0333		76.6	40-150			

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0625 - EPA 5030 Soil MS

##### Matrix Spike (BFC0625-MS1)

Source: 2203427-01

Prepared: 03/28/22 Analyzed: 03/30/22

Acenaphthene	0.0136	0.00500	mg/kg	0.0333	ND	40.7	31-137				
Anthracene	0.0205	0.00500	"	0.0333	ND	61.4	30-120				
Benzo (a) anthracene	0.0195	0.00500	"	0.0333	ND	58.6	30-120				
Benzo (a) pyrene	0.0209	0.00500	"	0.0333	ND	62.6	30-120				
Benzo (b) fluoranthene	0.0137	0.00500	"	0.0333	ND	41.0	30-120				
Benzo (k) fluoranthene	0.0191	0.00500	"	0.0333	ND	57.3	30-120				
Chrysene	0.0209	0.00500	"	0.0333	ND	62.7	30-120				
Dibenz (a,h) anthracene	0.0156	0.00500	"	0.0333	ND	46.8	30-120				
Fluoranthene	0.0220	0.00500	"	0.0333	ND	65.9	30-120				
Fluorene	0.0152	0.00500	"	0.0333	ND	45.6	30-120				
Indeno (1,2,3-cd) pyrene	0.0209	0.00500	"	0.0333	ND	62.8	30-120				
Pyrene	0.0213	0.00500	"	0.0333	ND	64.0	35-142				
1-Methylnaphthalene	0.0185	0.00500	"	0.0333	ND	55.4	15-130				
2-Methylnaphthalene	0.0214	0.00500	"	0.0333	ND	64.3	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0204		"	0.0333		61.3	40-150				
Surrogate: Fluoranthene-d10	0.0211		"	0.0333		63.3	40-150				

##### Matrix Spike Dup (BFC0625-MSD1)

Source: 2203427-01

Prepared: 03/28/22 Analyzed: 03/30/22

Acenaphthene	0.0151	0.00500	mg/kg	0.0333	ND	45.2	31-137	10.4	30		
Anthracene	0.0197	0.00500	"	0.0333	ND	59.2	30-120	3.63	30		
Benzo (a) anthracene	0.0193	0.00500	"	0.0333	ND	57.9	30-120	1.24	30		
Benzo (a) pyrene	0.0179	0.00500	"	0.0333	ND	53.6	30-120	15.5	30		
Benzo (b) fluoranthene	0.0152	0.00500	"	0.0333	ND	45.5	30-120	10.5	30		
Benzo (k) fluoranthene	0.0201	0.00500	"	0.0333	ND	60.3	30-120	5.12	30		
Chrysene	0.0196	0.00500	"	0.0333	ND	58.9	30-120	6.16	30		
Dibenz (a,h) anthracene	0.0186	0.00500	"	0.0333	ND	55.7	30-120	17.3	30		
Fluoranthene	0.0217	0.00500	"	0.0333	ND	65.2	30-120	1.07	30		
Fluorene	0.0153	0.00500	"	0.0333	ND	46.0	30-120	1.03	30		
Indeno (1,2,3-cd) pyrene	0.0197	0.00500	"	0.0333	ND	59.0	30-120	6.33	30		
Pyrene	0.0222	0.00500	"	0.0333	ND	66.7	35-142	4.19	30		
1-Methylnaphthalene	0.0159	0.00500	"	0.0333	ND	47.7	15-130	15.0	50		
2-Methylnaphthalene	0.0340	0.00500	"	0.0333	ND	102	15-130	45.3	50		
Surrogate: 2-Methylnaphthalene-d10	0.0347		"	0.0333		104	40-150				
Surrogate: Fluoranthene-d10	0.0356		"	0.0333		107	40-150				

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

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

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

**Batch BFC0713 - EPA 3050B**

**Blank (BFC0713-BLK1)**

Prepared: 03/30/22 Analyzed: 04/06/22

Boron ND 0.0100 mg/L

**LCS (BFC0713-BS1)**

Prepared: 03/30/22 Analyzed: 04/06/22

Boron 4.78 0.0100 mg/L 5.00 95.5 80-120

**Duplicate (BFC0713-DUP1)**

**Source: 2203095-06**

Prepared: 03/30/22 Analyzed: 04/06/22

Boron 0.0744 0.0100 mg/L 0.0750 0.826 20

**Matrix Spike (BFC0713-MS1)**

**Source: 2203095-06**

Prepared: 03/30/22 Analyzed: 04/06/22

Boron 4.94 0.0100 mg/L 5.00 0.0750 97.2 75-125

**Matrix Spike Dup (BFC0713-MSD1)**

**Source: 2203095-06**

Prepared: 03/30/22 Analyzed: 04/06/22

Boron 4.79 0.0100 mg/L 5.00 0.0750 94.2 75-125 3.09 25

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

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

**Summit Scientific**

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

**Batch BFC0750 - General Preparation**

**Blank (BFC0750-BLK1)**

Prepared: 03/31/22 Analyzed: 04/03/22

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

**LCS (BFC0750-BS1)**

Prepared: 03/31/22 Analyzed: 04/03/22

Calcium	5.20	0.0500	mg/L wet	5.00	104	70-130
Magnesium	5.57	0.0500	"	5.00	111	70-130
Sodium	5.09	0.0500	"	5.00	102	70-130

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

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

**Summit Scientific**

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

**Batch BFC0748 - General Preparation**

**Duplicate (BFC0748-DUP1)**

**Source: 2203186-01**

**Prepared & Analyzed: 03/31/22**

% Solids	96.8	%	96.8	0.0147	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

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

**Summit Scientific**

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

**Batch BFD0028 - General Preparation**

**Blank (BFD0028-BLK1)**

Prepared & Analyzed: 04/01/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BFD0028-BS1)**

Prepared & Analyzed: 04/01/22

Specific Conductance (EC) 0.152 0.0100 mmhos/cm 0.150 101 95-105

**Duplicate (BFD0028-DUP1)**

**Source: 2202202-01**

Prepared & Analyzed: 04/01/22

Specific Conductance (EC) 0.513 0.0100 mmhos/cm 0.518 1.09 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

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

**Summit Scientific**

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

**Batch BFD0029 - General Preparation**

**LCS (BFD0029-BS1)**

Prepared & Analyzed: 04/01/22

pH	9.01	pH Units	9.18	98.1	95-105
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**Duplicate (BFD0029-DUP1)**

Source: 2202202-01

Prepared & Analyzed: 04/01/22

pH	8.14	pH Units	8.11	0.369	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:45

### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 11, 2022

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Baker B02-05

Work Order #2203457

Enclosed are the results of analyses for samples received by Summit Scientific on 03/28/22 16:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury  
President



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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FL01-W@3'	2203457-01	Soil	03/28/22 13:35	03/28/22 16:05
FL01-Z@3'	2203457-02	Soil	03/28/22 13:50	03/28/22 16:05

Summit Scientific

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# Summit Scientific 2203457

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Page 1 of 1

Client: Noble / Tasman Geosciences	Project Manager: Jake Whritenour, Invoice: <u>Wade Firestien</u>
Address: 6855 W. 119th Ave.	E-Mail: jwhritenour@tasman-geo.com/ Noble Group
City/State/Zip: Broomfield / CO/ 80020	
Phone: 303-827-1511	Project Name: <u>Baker B02-05</u>
Sampler Name: Hunter Merlo	
Project Number:	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested							Special Instructions	
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	8260 BTEX	VOC - 915	TPH - 915	PAH - 915	pH, EC, SAR	Boron - HWS			
1	FL01-W@3'	3/28/22	1335	2			X			X				X	X	X	X	X			
2	FL01-Z@3'	3/28/22	1350	2			X			X				X	X	X	X	X			
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: <u>Hunter Merlo</u>	Date/Time: 3/28/22 1605	Received by: <u>Tasman's Lock Box</u> <u>Summit</u>	Date/Time: 3/28/22 1605	Turn Around Time (Check) <input type="checkbox"/> Same Day      72 hours <input checked="" type="checkbox"/> 24 hours      Standard <input type="checkbox"/> 48 hours	Notes:
Relinquished by: Tasman's Lock Box	Date/Time:	Received by: <u>[Signature]</u>	Date/Time: 3/28/22 1605	Sample Integrity:	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: <u>7.3</u> Samples Intact: <input checked="" type="checkbox"/> Yes      No	





2203457

## Sample Receipt Checklist

S2 Work Order#

Client: Noble TasmanClient Project ID: Baker B 02-05Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other

Airbill #:

Matrix (check all that apply):

☐

Air

☒

Soil/Solid

☐

Water

☐

Other:

(Describe)

Temp (°C)

7.3

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ICE
Were all samples received intact <sup>(1)</sup> ?	-			
Was adequate sample volume provided <sup>(1)</sup> ?	-			
If custody seals are present, are they intact <sup>(1)</sup> ?	-			
Are samples with holding times due within 48 hours sample due within 48 hours present?		-		
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	-			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	-			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	-			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	-			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			-	
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.			-	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			-	
If dissolved metals are requested, were samples field filtered?			-	

Additional Comments (if any):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.  
Custodian Printed Name or Initials3.28.22  
Date/Time



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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-W@3'**  
**2203457-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BFC0655	03/29/22	03/31/22	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: **03/28/22 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		146 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		106 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0656	03/29/22	03/30/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		95.1 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-W@3'**  
**2203457-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0704	03/30/22	04/06/22	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: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		108 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		94.2 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.239</b>	0.0100	mg/L	1	BFD0003	04/01/22	04/03/22	EPA 6020B	

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

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-W@3'**  
**2203457-01 (Soil)**

### Summit Scientific

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

Calcium	323	0.0552	mg/L dry	1	BFD0087	04/05/22	04/08/22	EPA 6020B
Magnesium	654	0.0552	"	"	"	"	"	"
Sodium	1910	0.0552	"	"	"	"	"	"

#### Calculated Analysis

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	14.1	0.00100	units	1	BFD0181	04/09/22	04/09/22	Calculation	

#### Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.6		%	1	BFC0715	03/30/22	03/31/22	Calculation	

#### Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.49	0.0100	mmhos/cm	1	BFD0107	04/06/22	04/07/22	EPA 120.1	

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

Date Sampled: **03/28/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.87		pH Units	1	BFD0108	04/06/22	04/06/22	EPA 9045D	

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-Z@3'**  
**2203457-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFC0655	03/29/22	03/31/22	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: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		146 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		104 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFC0656	03/29/22	03/30/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.4 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-Z@3'**  
**2203457-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFC0704	03/30/22	04/06/22	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: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		51.3 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.0886</b>	0.0100	mg/L	1	BFD0003	04/01/22	04/03/22	EPA 6020B	

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

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**FL01-Z@3'**  
**2203457-02 (Soil)**

**Summit Scientific**

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

Calcium	281	0.0560	mg/L dry	1	BFD0087	04/05/22	04/08/22	EPA 6020B
Magnesium	160	0.0560	"	"	"	"	"	"
Sodium	200	0.0560	"	"	"	"	"	"

**Calculated Analysis**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.36	0.00100	units	1	BFD0181	04/09/22	04/09/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.3		%	1	BFC0715	03/30/22	03/31/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.78	0.0100	mmhos/cm	1	BFD0107	04/06/22	04/07/22	EPA 120.1	

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

Date Sampled: **03/28/22 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.89		pH Units	1	BFD0108	04/06/22	04/06/22	EPA 9045D	

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0655 - EPA 5030 Soil MS

##### Blank (BFC0655-BLK1)

Prepared: 03/29/22 Analyzed: 03/31/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0586		"	0.0400		147	50-150			
Surrogate: Toluene-d8	0.0431		"	0.0400		108	50-150			
Surrogate: 4-Bromofluorobenzene	0.0439		"	0.0400		110	50-150			

##### LCS (BFC0655-BS1)

Prepared: 03/29/22 Analyzed: 03/31/22

Benzene	0.0955	0.0020	mg/kg	0.100		95.5	70-130			
Toluene	0.103	0.0050	"	0.100		103	70-130			
Ethylbenzene	0.0936	0.0050	"	0.100		93.6	70-130			
m,p-Xylene	0.192	0.010	"	0.200		95.9	70-130			
o-Xylene	0.0968	0.0050	"	0.100		96.8	70-130			
1,2,4-Trimethylbenzene	0.104	0.0050	"	0.100		104	70-130			
1,3,5-Trimethylbenzene	0.102	0.0050	"	0.100		102	70-130			
Naphthalene	0.122	0.0038	"	0.100		122	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0536		"	0.0400		134	50-150			
Surrogate: Toluene-d8	0.0420		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0445		"	0.0400		111	50-150			

##### Matrix Spike (BFC0655-MS1)

Source: 2202084-01

Prepared: 03/29/22 Analyzed: 03/31/22

Benzene	0.0977	0.0020	mg/kg	0.100	ND	97.7	70-130			
Toluene	0.106	0.0050	"	0.100	ND	106	70-130			
Ethylbenzene	0.0944	0.0050	"	0.100	ND	94.4	70-130			
m,p-Xylene	0.196	0.010	"	0.200	ND	98.2	70-130			
o-Xylene	0.0987	0.0050	"	0.100	ND	98.7	70-130			
1,2,4-Trimethylbenzene	0.110	0.0050	"	0.100	ND	110	70-130			
1,3,5-Trimethylbenzene	0.107	0.0050	"	0.100	ND	107	70-130			
Naphthalene	0.133	0.0038	"	0.100	0.0124	121	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0554		"	0.0400		139	50-150			
Surrogate: Toluene-d8	0.0418		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0452		"	0.0400		113	50-150			

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

### Summit Scientific

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

#### Batch BFC0655 - EPA 5030 Soil MS

##### Matrix Spike Dup (BFC0655-MSD1)

Source: 2202084-01

Prepared: 03/29/22 Analyzed: 03/31/22

Benzene	0.0965	0.0020	mg/kg	0.100	ND	96.5	70-130	1.27	30	
Toluene	0.102	0.0050	"	0.100	ND	102	70-130	3.81	30	
Ethylbenzene	0.0849	0.0050	"	0.100	ND	84.9	70-130	10.6	30	
m,p-Xylene	0.176	0.010	"	0.200	ND	88.0	70-130	10.9	30	
o-Xylene	0.0892	0.0050	"	0.100	ND	89.2	70-130	10.2	30	
1,2,4-Trimethylbenzene	0.0986	0.0050	"	0.100	ND	98.6	70-130	10.8	30	
1,3,5-Trimethylbenzene	0.0939	0.0050	"	0.100	ND	93.9	70-130	12.8	30	
Naphthalene	0.129	0.0038	"	0.100	0.0124	117	70-130	2.95	30	
Surrogate: 1,2-Dichloroethane-d4	0.0561		"	0.0400		140	50-150			
Surrogate: Toluene-d8	0.0422		"	0.0400		105	50-150			
Surrogate: 4-Bromofluorobenzene	0.0473		"	0.0400		118	50-150			

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BFC0656 - EPA 3550A**

**Blank (BFC0656-BLK1)**

Prepared & Analyzed: 03/29/22

C10-C28 (DRO)	ND	50	mg/kg
C28-C36 (ORO)	ND	50	"

**LCS (BFC0656-BS1)**

Prepared & Analyzed: 03/29/22

C10-C28 (DRO)	439	50	mg/kg	500	87.9	70-130
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**Matrix Spike (BFC0656-MS1)**

Source: 2202084-01

Prepared & Analyzed: 03/29/22

C10-C28 (DRO)	489	50	mg/kg	500	11.1	95.5	70-130
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**Matrix Spike Dup (BFC0656-MSD1)**

Source: 2202084-01

Prepared & Analyzed: 03/29/22

C10-C28 (DRO)	441	50	mg/kg	500	11.1	86.1	70-130	10.1	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0704 - EPA 5030 Soil MS

##### Blank (BFC0704-BLK1)

Prepared: 03/30/22 Analyzed: 04/05/22

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	0.0211		"	0.0333		63.2	40-150			
Surrogate: Fluoranthene-d10	0.0217		"	0.0333		65.0	40-150			

##### LCS (BFC0704-BS1)

Prepared: 03/30/22 Analyzed: 04/06/22

Acenaphthene	0.0274	0.00500	mg/kg	0.0333		82.3	31-137			
Anthracene	0.0282	0.00500	"	0.0333		84.6	30-120			
Benzo (a) anthracene	0.0306	0.00500	"	0.0333		91.7	30-120			
Benzo (a) pyrene	0.0294	0.00500	"	0.0333		88.1	30-120			
Benzo (b) fluoranthene	0.0329	0.00500	"	0.0333		98.7	30-120			
Benzo (k) fluoranthene	0.0365	0.00500	"	0.0333		110	30-120			
Chrysene	0.0320	0.00500	"	0.0333		96.0	30-120			
Dibenz (a,h) anthracene	0.0214	0.00500	"	0.0333		64.3	30-120			
Fluoranthene	0.0284	0.00500	"	0.0333		85.1	30-120			
Fluorene	0.0284	0.00500	"	0.0333		85.2	30-120			
Indeno (1,2,3-cd) pyrene	0.0251	0.00500	"	0.0333		75.4	30-120			
Pyrene	0.0342	0.00500	"	0.0333		103	35-142			
1-Methylnaphthalene	0.0277	0.00500	"	0.0333		83.1	35-142			
2-Methylnaphthalene	0.0284	0.00500	"	0.0333		85.2	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0274		"	0.0333		82.3	40-150			
Surrogate: Fluoranthene-d10	0.0294		"	0.0333		88.3	40-150			

Summit Scientific

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6855 W. 119th Ave.  
Broomfield CO, 80020

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

## PAH by EPA Method 8270D SIM - Quality Control

### Summit Scientific

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

#### Batch BFC0704 - EPA 5030 Soil MS

##### Matrix Spike (BFC0704-MS1)

Source: 2203457-01

Prepared: 03/30/22 Analyzed: 04/06/22

Acenaphthene	0.0226	0.00500	mg/kg	0.0333	ND	67.9	31-137				
Anthracene	0.0235	0.00500	"	0.0333	ND	70.4	30-120				
Benzo (a) anthracene	0.0262	0.00500	"	0.0333	ND	78.6	30-120				
Benzo (a) pyrene	0.0261	0.00500	"	0.0333	ND	78.3	30-120				
Benzo (b) fluoranthene	0.0286	0.00500	"	0.0333	ND	85.9	30-120				
Benzo (k) fluoranthene	0.0330	0.00500	"	0.0333	ND	99.1	30-120				
Chrysene	0.0276	0.00500	"	0.0333	ND	82.7	30-120				
Dibenz (a,h) anthracene	0.0191	0.00500	"	0.0333	ND	57.3	30-120				
Fluoranthene	0.0253	0.00500	"	0.0333	ND	75.8	30-120				
Fluorene	0.0220	0.00500	"	0.0333	ND	65.9	30-120				
Indeno (1,2,3-cd) pyrene	0.0220	0.00500	"	0.0333	ND	65.9	30-120				
Pyrene	0.0305	0.00500	"	0.0333	ND	91.6	35-142				
1-Methylnaphthalene	0.0254	0.00500	"	0.0333	ND	76.1	15-130				
2-Methylnaphthalene	0.0266	0.00500	"	0.0333	ND	79.9	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0247		"	0.0333		74.0	40-150				
Surrogate: Fluoranthene-d10	0.0248		"	0.0333		74.4	40-150				

##### Matrix Spike Dup (BFC0704-MSD1)

Source: 2203457-01

Prepared: 03/30/22 Analyzed: 04/06/22

Acenaphthene	0.0231	0.00500	mg/kg	0.0333	ND	69.3	31-137	2.14	30		
Anthracene	0.0222	0.00500	"	0.0333	ND	66.6	30-120	5.58	30		
Benzo (a) anthracene	0.0258	0.00500	"	0.0333	ND	77.4	30-120	1.58	30		
Benzo (a) pyrene	0.0248	0.00500	"	0.0333	ND	74.4	30-120	5.02	30		
Benzo (b) fluoranthene	0.0270	0.00500	"	0.0333	ND	81.0	30-120	5.91	30		
Benzo (k) fluoranthene	0.0331	0.00500	"	0.0333	ND	99.4	30-120	0.334	30		
Chrysene	0.0283	0.00500	"	0.0333	ND	84.8	30-120	2.48	30		
Dibenz (a,h) anthracene	0.0207	0.00500	"	0.0333	ND	62.1	30-120	8.15	30		
Fluoranthene	0.0226	0.00500	"	0.0333	ND	67.7	30-120	11.2	30		
Fluorene	0.0232	0.00500	"	0.0333	ND	69.7	30-120	5.61	30		
Indeno (1,2,3-cd) pyrene	0.0227	0.00500	"	0.0333	ND	68.0	30-120	3.22	30		
Pyrene	0.0300	0.00500	"	0.0333	ND	89.9	35-142	1.92	30		
1-Methylnaphthalene	0.0241	0.00500	"	0.0333	ND	72.3	15-130	5.08	50		
2-Methylnaphthalene	0.0220	0.00500	"	0.0333	ND	66.1	15-130	18.9	50		
Surrogate: 2-Methylnaphthalene-d10	0.0222		"	0.0333		66.5	40-150				
Surrogate: Fluoranthene-d10	0.0240		"	0.0333		71.9	40-150				

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

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

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

**Batch BFD0003 - EPA 3050B**

**Blank (BFD0003-BLK1)**

Prepared: 04/01/22 Analyzed: 04/03/22

Boron ND 0.0100 mg/L

**LCS (BFD0003-BS1)**

Prepared: 04/01/22 Analyzed: 04/03/22

Boron 4.74 0.0100 mg/L 5.00 94.9 80-120

**Duplicate (BFD0003-DUP1)**

**Source: 2202084-01**

Prepared: 04/01/22 Analyzed: 04/03/22

Boron ND 0.0100 mg/L ND 20

**Matrix Spike (BFD0003-MS1)**

**Source: 2202084-01**

Prepared: 04/01/22 Analyzed: 04/03/22

Boron 4.85 0.0100 mg/L 5.00 ND 96.9 75-125

**Matrix Spike Dup (BFD0003-MSD1)**

**Source: 2202084-01**

Prepared: 04/01/22 Analyzed: 04/03/22

Boron 4.87 0.0100 mg/L 5.00 ND 97.4 75-125 0.559 25

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

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

**Summit Scientific**

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

**Batch BFD0087 - General Preparation**

**Blank (BFD0087-BLK1)**

Prepared: 04/05/22 Analyzed: 04/08/22

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

**LCS (BFD0087-BS1)**

Prepared: 04/05/22 Analyzed: 04/08/22

Calcium	5.40	0.0500	mg/L wet	5.00	108	70-130
Magnesium	5.23	0.0500	"	5.00	105	70-130
Sodium	5.16	0.0500	"	5.00	103	70-130

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

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

**Summit Scientific**

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

**Batch BFC0715 - General Preparation**

**Duplicate (BFC0715-DUP1)**

**Source: 2203456-03**

Prepared: 03/30/22 Analyzed: 03/31/22

% Solids	94.6	%	94.5	0.111	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

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

**Summit Scientific**

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

**Batch BFD0107 - General Preparation**

**Blank (BFD0107-BLK1)**

Prepared: 04/06/22 Analyzed: 04/07/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BFD0107-BS1)**

Prepared: 04/06/22 Analyzed: 04/07/22

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 95-105

**Duplicate (BFD0107-DUP1)**

**Source: 2203186-01**

Prepared: 04/06/22 Analyzed: 04/07/22

Specific Conductance (EC) 0.256 0.0100 mmhos/cm 0.256 0.00 20

Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]

Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

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

**Summit Scientific**

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

**Batch BFD0108 - General Preparation**

**LCS (BFD0108-BS1)**

Prepared & Analyzed: 04/06/22

pH	9.08	pH Units	9.18	98.9	95-105
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**Duplicate (BFD0108-DUP1)**

Source: 2203186-01

Prepared: 04/06/22 Analyzed: 04/07/22

pH	7.84	pH Units	7.85	0.127	20
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Summit Scientific

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

Project: Noble - Baker B02-05

Project Number: [none]  
Project Manager: Jacob Whritenour

**Reported:**  
04/11/22 11:41

### Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference