

Third Party Removal Date									
Sample taken?									
PID Readings									
Photo Number(s)									
Other Facility Equipment									
Equipment type	Flare								
Equipment Condition Age	good								
Soil impacts	None observed								
PID Readings	0.0								
Sample taken?	Yes, see below								
Photo Number(s)	1-16								
Other observations regarding other facility or third party equipment: Sample taken below meter house and flare. (MH01@0.5' & Flare01@0.5')									
Summary									
Was impacted soil identified? No Yes - less than 10 cubic yards Yes - more than 10 cubic yards									
Total number of samples field screened: 13					Total number of samples collected: 13				
Highest PID Reading: 170.2					Total number of samples submitted to lab for analysis: 11				
If more than 10 cubic yards of impacted soil were observed:									
Vertical extent:					Estimated spill volume:				
Lateral extent:					Volume of soil removed:				
Is additional investigation required?									
Was groundwater encountered during the investigation? No 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: SS01		Equipment Type:		Equipment ID: SS02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions: ^P				Notes/Conditions:			

Photographic Log



Equipment ID: SS03		Equipment Type:		Equipment ID: SS04		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FS01		Equipment Type:		Equipment ID: AST01		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FLARE01		Equipment Type:			Equipment ID: FLARE02		Equipment Type:				
Material:		Volume:		Contents:		Material:		Volume:		Contents:	
Notes/Conditions:						Notes/Conditions:					

Photographic Log



Equipment ID: FS02		Equipment Type:		Equipment ID: FS02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: FS02		Equipment Type:		Equipment ID: FS02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: SEP01-DL01		Equipment Type:		Equipment ID: SEP01-DL02		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

Photographic Log



Equipment ID: SEP01-FL01		Equipment Type:		Equipment ID: BG01		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions:				Notes/Conditions:			

TABLE 1
SOIL SAMPLE LOCATIONS
NOBLE ENERGY, INC. - FRANK 1, 12-02, 7-4

Soil Sample ID	Date	PID (ppm)	Visual	Olfactory	Sample Type (Grab/Lab)	Latitude ¹	Longitude	PDOP
SS01@2.5'	01/26/22	0.0	No Staining	No Odor	Lab	40.33218898	-104.4898938	1.2
SS02@2.5'	01/26/22	0.1	No Staining	No Odor	Lab	40.33248341	-104.4899736	1.1
SS03@2.5'	01/26/22	2.7	No Staining	Slight HC Odor	Lab	40.33225264	-104.4898718	1.3
SS04@2.5'	01/26/22	0.6	No Staining	No Odor	Lab	40.33247177	-104.4898084	1
FS01@6'	01/26/22	8.3	HC Staining	Slight HC Odor	Lab	40.33247061	-104.4898094	1
AST01@0.5'	01/26/22	0.0	No Staining	No Odor	Lab	40.33247209	-104.4898545	1.1
FLARE01@0.5'	01/26/22	0.0	No Staining	No Odor	Grab	40.33242250	-104.4901558	1.3
FLARE02@0.5'	01/26/22	0.0	No Staining	No Odor	Grab	40.33221208	-104.4898689	1.2
FS02@8'	01/26/22	170.2	HC Staining	Strong HC Odor	Lab	40.33219198	-104.4898444	1.2
SEP01-DL01@3'	01/26/22	0.2	No Staining	No Odor	Lab	40.33248591	-104.4899208	1.1
SEP01-DL02@3'	01/26/22	0.3	No Staining	No Odor	Lab	40.33220410	-104.4898842	1.2
SEP01-FL01@3'	01/26/22	0.4	No Staining	No Odor	Lab	40.33217970	-104.4898835	1.2
BG01@6'	01/26/22	0.0	No Staining	No Odor	Lab	40.33220253	-104.4898896	1.1

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. - FRANK 1,12-2,7-4 FAC

Soil Sample ID	Date	¹ 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 ²		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 ^{2,3}		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	
SS01@2.5'	01/26/22	<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	
SS02@2.5'	01/26/22	<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	
SS03@2.5'	01/26/22	<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	
SS04@2.5'	01/26/22	<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	
FS01@6'	01/26/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	0.63	380	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.0381	<0.00500	<0.00500	0.0394	<0.00500	<0.00500	0.0324	0.0564
FS02@8'	01/26/22	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	0.46	690	990	<50	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.120	<0.00500	<0.00500	0.535	<0.00500	<0.00500	2.28	2.69
SEP01-DL01@3'	01/26/22	<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	
SEP01-DL02@3'	01/26/22	<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	
SEP01-FL01@3'	01/26/22	<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	
AST01@0.5'	01/26/22	<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 ²		6 - 8.3	<6	<4mmhos/cm	2
SS01@2.5'	01/26/22	7.64	0.18	0.0508	0.168
SS02@2.5'	01/26/22	7.90	0.0994	0.0414	0.194
SS03@2.5'	01/26/22	8.59	0.152	0.0572	0.128
SS04@2.5'	01/26/22	8.73	0.0433	0.0419	0.176
FS01@6'	01/26/22	8.57	0.226	0.0802	0.163
FS02@8'	01/26/22	8.87	0.688	0.0918	0.309
SEP01-DL01@3'	01/26/22	8.77	0.0746	0.0408	0.399
SEP01-DL02@3'	01/26/22	7.47	0.110	0.0392	0.414
SEP01-FL01@3'	01/26/22	7.62	0.0683	0.0382	1.25
AST01@0.5'	01/26/22	7.70	0.0631	0.042	0.133
BG01@6'	01/26/22	8.47	NA	NA	NA

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 ²		0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
Protection of Groundwater SSL ^{2,3}		0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FS02@8'	01/26/22	5.76	207	0.274	<0.30	19.7	13.4	17.1	3.15	<0.142	80.5
BG01@6'	01/26/21	1.89	177	NA	NA	NA	NA	NA	1.25	NA	NA

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) for Chemical Contaminants at Superfund Sites, effective November 2020.
- 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 = Millimhos per centimeter

mg/L = Milligrams per liter

NA = Not Analyzed

< = Analytical result is less than the indicated laboratory reporting limit

Highlighted results are equal to or exceed the COGCC Table 915-1 standard

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

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

Benz(a) = Benzantracene

Benzo(b) = Benzofluoranthene

Benzo(k) = Benzofluoranthene

Benzo(a) = Benzopyrene

A,H = Dibenzoanthracene

1,2,3-CD = Indenopyrene

1-M = 1-methylnaphthalene

2-M = 2-methylnaphthalene

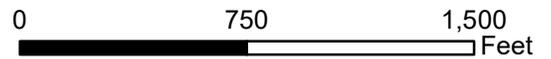
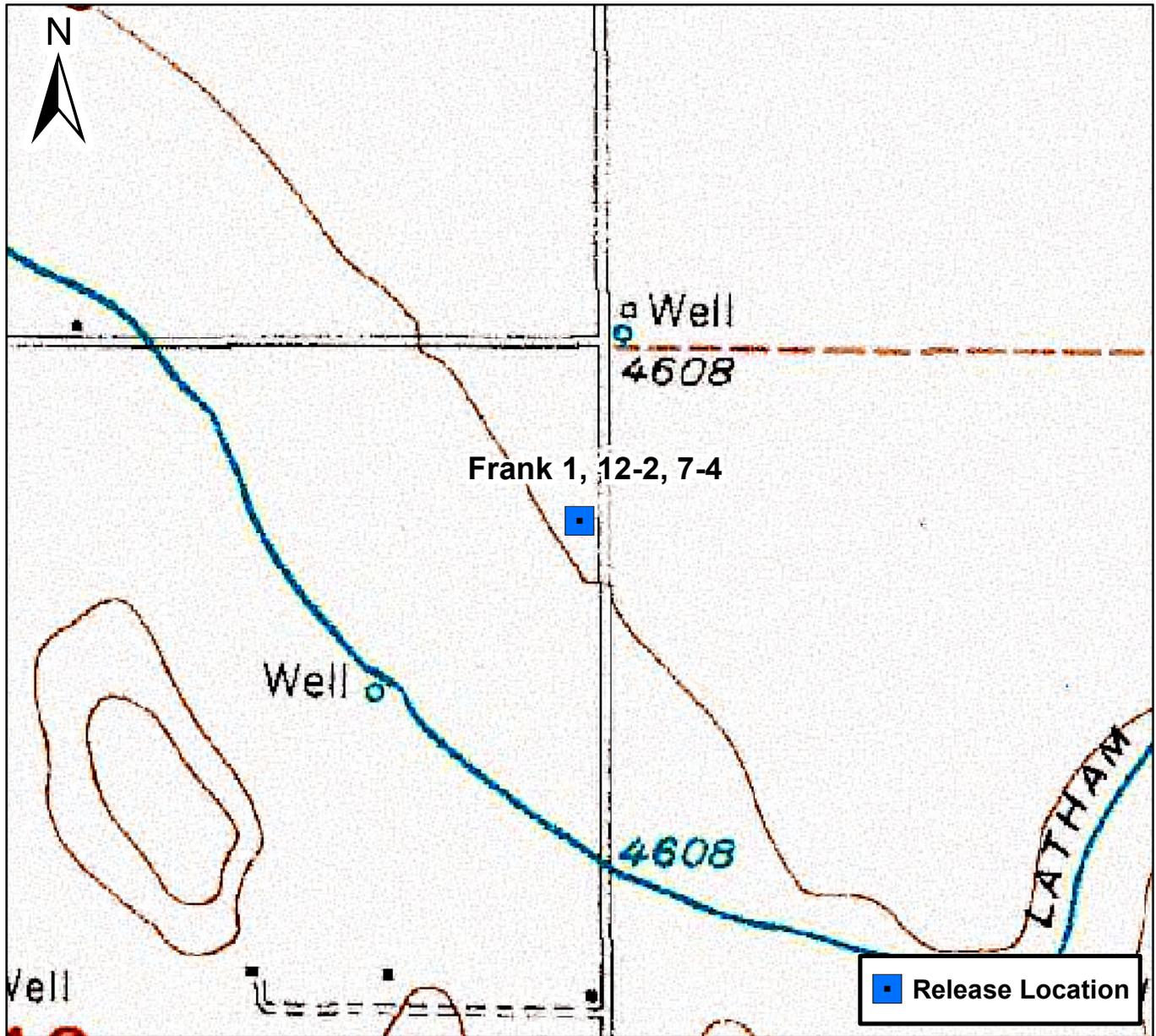
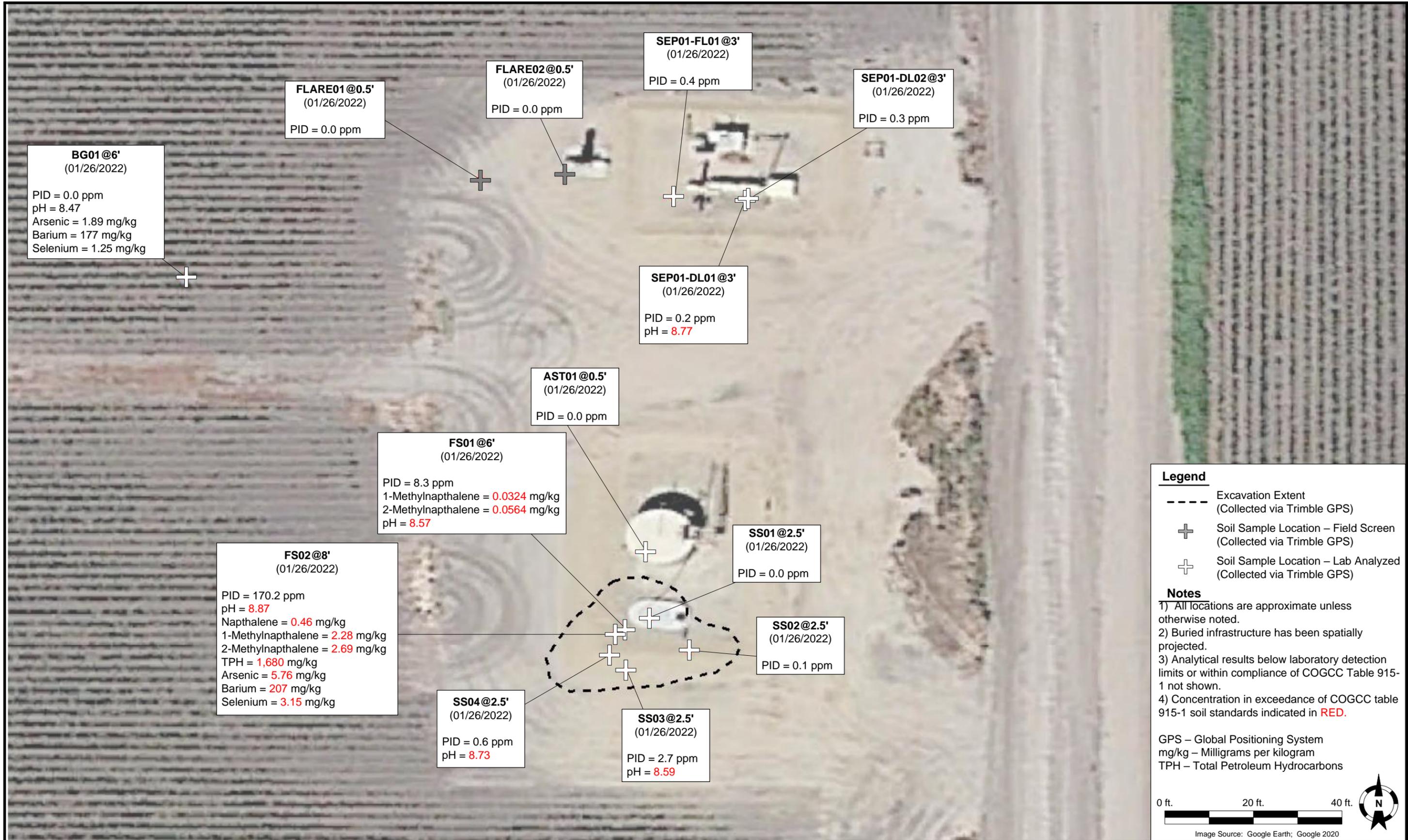


Figure 1

Site Location Map
 Frank 1, 12-2, 7-4
 NENE S12 T4N R64W
 Weld County, Colorado





DATE:	01/26/2022
DESIGNED BY:	JW
DRAWN BY:	SQ



Tasman Geosciences, Inc.
 6855 W 119th Avenue
 Broomfield, CO 80020

Noble Energy, Inc. – DJ Basin
Frank 1, 12-2, 7-4
 NENE, Section 12, Township 4 North, Range 64 West
 Weld County, Colorado

Wellhead Closure & Soil
 Analytical Results Map
 (01/26/2022)

FIGURE
2

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 04, 2022

Jacob Whritenour

Tasman Geosciences

6855 W. 119th Ave.

Broomfield, CO 80020

RE: Noble - Frank 1,12-2,7-4 FAC

Work Order #2201334

Enclosed are the results of analyses for samples received by Summit Scientific on 01/26/22 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury

President



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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS01@2.5'	2201334-01	Soil	01/26/22 12:02	01/26/22 16:20
SS02@2.5'	2201334-02	Soil	01/26/22 12:04	01/26/22 16:20
SS03@2.5'	2201334-03	Soil	01/26/22 12:06	01/26/22 16:20
SS04@2.5'	2201334-04	Soil	01/26/22 12:08	01/26/22 16:20
FS01@6'	2201334-05	Soil	01/26/22 12:10	01/26/22 16:20
FS02@8'	2201334-06	Soil	01/26/22 13:20	01/26/22 16:20
SEP01-DL01@3'	2201334-07	Soil	01/26/22 13:35	01/26/22 16:20
SEP01-DL02@3'	2201334-08	Soil	01/26/22 13:45	01/26/22 16:20
SEP01-FL01@3'	2201334-09	Soil	01/26/22 13:47	01/26/22 16:20
BG01@6'	2201334-10	Soil	01/26/22 14:15	01/26/22 16:20
AST01@0.5'	2201334-11	Soil	01/26/22 12:35	01/26/22 16:20

Summit Scientific

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

Summit Scientific

2201334.2

S₂

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

Page 2 of 2

Client: Noble / Tasman Geosciences Project Manager: Jake Whritenour, Invoice: Jeff White
 Address: 6855 W. 119th Ave. E-Mail: Jwhritenour@tasman-geo.com
 City/State/Zip: Broomfield / CO/ 80020
 Phone: 3038290530 Project Name: Frank 1, 12-2, 7-4 FAC
 Sampler Name: Halina North Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested						Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	VOC - 915	TPH - 915	PAH - 915	SAR, EC, pH	Boron - HWS		HOLD
1	ASTO @ O.S	1/26/22	12:35	2			X			X			X	X	X	X	X		SAR, EC, pH by saturated paste
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: <u>Halina North</u> Date/Time: <u>1/26/22 16:20</u>	Received by: <u>Tasman's Lock Box</u> Date/Time: <u>1/26/22 16:20</u>	Turn Around Time (Check) <input type="checkbox"/> Same Day 72 hours <input checked="" type="checkbox"/> 24 hours Standard <input type="checkbox"/> 48 hours Sample Integrity: Temperature Upon Receipt: <u>6.6</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by: <u>Tasman's Lock Box</u> Date/Time:	Received by: <u>[Signature]</u> Date/Time: <u>1/26/22 16:20</u>		
Relinquished by: Date/Time:	Received by: Date/Time:		

S₂

2/2

Sample Receipt Checklist

S2 Work Order# 2201334

Client: Noble/Tasman Client Project ID: Frank 1,12-2,7-4, FAC

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>6.6</u>
-----------	------------

Thermometer ID: G86A9201901378

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>ON ICE</u>
Were all samples received intact ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact ⁽¹⁾ ?	<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 ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? 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 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

[Signature]
Custodian Printed Name or Initials

1/20/22
Date/Time



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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS01@2.5'
2201334-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 12:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		144 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		108 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		34.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS01@2.5'
2201334-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		69.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		44.8 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.2		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS01@2.5'
2201334-01 (Soil)

Summit Scientific

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

pH	8.35	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS02@2.5'
2201334-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		141 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		41.4 %	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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS02@2.5'
2201334-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		58.7 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.7		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
 Project Manager: Jacob Whritenour

Reported:
 04/04/22 11:01

SS02@2.5'
2201334-02 (Soil)

Summit Scientific

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

pH	8.40	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS03@2.5'
2201334-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		150 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		109 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		96.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS03@2.5'
2201334-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		56.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		49.7 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.1		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS03@2.5'
2201334-03 (Soil)

Summit Scientific

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

pH	8.18	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS04@2.5'
2201334-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		145 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		108 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		49.2 %	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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SS04@2.5'
2201334-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		59.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		67.2 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	85.6		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
 Project Manager: Jacob Whritenour

Reported:
 04/04/22 11:01

SS04@2.5'
2201334-04 (Soil)

Summit Scientific

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

pH	8.48	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS01@6'
2201334-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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	0.63	0.50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		151 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		112 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	380	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		106 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS01@6'
2201334-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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	0.0381	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	0.0394	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.0324	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.0564	0.00500	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		51.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		74.3 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.6		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS01@6'
2201334-05 (Soil)

Summit Scientific

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

pH	8.49	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS02@8'
2201334-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

R-01

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.020	mg/kg	10	BFA0458	01/28/22	02/02/22	EPA 8260B	
Toluene	ND	0.050	"	"	"	"	"	"	
Ethylbenzene	ND	0.050	"	"	"	"	"	"	
Xylenes (total)	ND	0.10	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.050	"	"	"	"	"	"	
Naphthalene	0.46	0.038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	690	50	"	100	"	"	"	"	

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		90.2 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		91.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		394 %	21-167		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	990	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

R-01

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS02@8'
2201334-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BFA0484	01/28/22	01/29/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	0.120	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	0.535	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	2.28	0.500	"	100	"	"	"	"	
2-Methylnaphthalene	2.69	0.500	"	"	"	"	"	"	

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		63.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		42.0 %	40-150		"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFB0165	02/15/22	02/15/22	EPA 7196A	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 13:20**

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

FS02@8'
2201334-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	84.1	%	1	BFA0446	01/27/22	01/28/22	Calculation
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **01/26/22 13:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.84			pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D	

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL01@3'
2201334-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		152 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		108 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		93.8 %	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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL01@3'
2201334-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		58.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.4 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 13:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	81.8		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 13:35**

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL01@3'
2201334-07 (Soil)

Summit Scientific

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

pH	8.32	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL02@3'
2201334-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		137 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		89.3 %	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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL02@3'
2201334-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		64.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		58.7 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.8		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-DL02@3'
2201334-08 (Soil)

Summit Scientific

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

pH	8.35	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-FL01@3'
2201334-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		143 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		48.8 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

SEP01-FL01@3'
2201334-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		41.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		44.9 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.6		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 13:47**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
 Project Manager: Jacob Whritenour

Reported:
 04/04/22 11:01

SEP01-FL01@3'
2201334-09 (Soil)

Summit Scientific

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

pH	8.39	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

BG01@6'
2201334-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **01/26/22 14:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.89	0.200	mg/kg dry	1	BFC0718	03/30/22	04/02/22	EPA 6020B	
Barium	117	0.400	"	"	"	"	"	"	
Selenium	1.25	0.260	"	"	"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 14:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	79.4		%	1	BFC0749	03/31/22	04/01/22	Calculation	

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

Date Sampled: **01/26/22 14:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
pH	8.47		pH Units	1	BFC0644	03/28/22	03/29/22	EPA 9045D	

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

AST01@0.5'
2201334-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFA0458	01/28/22	01/30/22	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: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		137 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		106 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.9 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFA0459	01/28/22	01/29/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.9 %	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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

AST01@0.5'
2201334-11 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFA0484	01/28/22	01/29/22	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: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		53.3 %	40-150		"	"	"	"	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **01/26/22 12:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.0		%	1	BFA0446	01/27/22	01/28/22	Calculation	

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

Date Sampled: **01/26/22 12:35**

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 - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

AST01@0.5'
2201334-11 (Soil)

Summit Scientific

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

pH	7.66	pH Units	1	BFC0546	03/24/22	03/24/22	EPA 9045D
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Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFA0458 - EPA 5030 Soil MS

Blank (BFA0458-BLK1)

Prepared: 01/28/22 Analyzed: 01/29/22

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	0.0531		"	0.0400		133	23-173				
Surrogate: Toluene-d8	0.0427		"	0.0400		107	20-170				
Surrogate: 4-Bromofluorobenzene	0.0408		"	0.0400		102	21-167				

LCS (BFA0458-BS1)

Prepared: 01/28/22 Analyzed: 01/29/22

Benzene	0.0868	0.0020	mg/kg	0.0750		116	70-130				
Toluene	0.0839	0.0050	"	0.0750		112	70-130				
Ethylbenzene	0.0752	0.0050	"	0.0750		100	70-130				
m,p-Xylene	0.143	0.010	"	0.150		95.1	70-130				
o-Xylene	0.0734	0.0050	"	0.0750		97.8	70-130				
1,2,4-Trimethylbenzene	0.0794	0.0050	"	0.0750		106	70-130				
1,3,5-Trimethylbenzene	0.0774	0.0050	"	0.0750		103	70-130				
Naphthalene	0.0916	0.0038	"	0.0750		122	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0636		"	0.0400		159	23-173				
Surrogate: Toluene-d8	0.0406		"	0.0400		102	20-170				
Surrogate: 4-Bromofluorobenzene	0.0438		"	0.0400		110	21-167				

Matrix Spike (BFA0458-MS1)

Source: 2201334-01

Prepared: 01/28/22 Analyzed: 01/29/22

Benzene	0.0878	0.0020	mg/kg	0.0750	ND	117	70-130				
Toluene	0.0876	0.0050	"	0.0750	ND	117	70-130				
Ethylbenzene	0.0841	0.0050	"	0.0750	ND	112	70-130				
m,p-Xylene	0.160	0.010	"	0.150	ND	107	70-130				
o-Xylene	0.0816	0.0050	"	0.0750	ND	109	70-130				
1,2,4-Trimethylbenzene	0.0877	0.0050	"	0.0750	ND	117	70-130				
1,3,5-Trimethylbenzene	0.0879	0.0050	"	0.0750	ND	117	70-130				
Naphthalene	0.0929	0.0038	"	0.0750	ND	124	70-130				
Surrogate: 1,2-Dichloroethane-d4	0.0526		"	0.0400		131	23-173				
Surrogate: Toluene-d8	0.0411		"	0.0400		103	20-170				
Surrogate: 4-Bromofluorobenzene	0.0421		"	0.0400		105	21-167				

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFA0458 - EPA 5030 Soil MS

Matrix Spike Dup (BFA0458-MSD1)	Source: 2201334-01			Prepared: 01/28/22 Analyzed: 01/29/22						
Benzene	0.0843	0.0020	mg/kg	0.0750	ND	112	70-130	4.08	30	
Toluene	0.0880	0.0050	"	0.0750	ND	117	70-130	0.478	30	
Ethylbenzene	0.0827	0.0050	"	0.0750	ND	110	70-130	1.65	30	
m,p-Xylene	0.159	0.010	"	0.150	ND	106	70-130	0.902	30	
o-Xylene	0.0802	0.0050	"	0.0750	ND	107	70-130	1.63	30	
1,2,4-Trimethylbenzene	0.0854	0.0050	"	0.0750	ND	114	70-130	2.67	30	
1,3,5-Trimethylbenzene	0.0872	0.0050	"	0.0750	ND	116	70-130	0.720	30	
Naphthalene	0.0960	0.0038	"	0.0750	ND	128	70-130	3.24	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0524</i>		<i>"</i>	<i>0.0400</i>		<i>131</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0422</i>		<i>"</i>	<i>0.0400</i>		<i>106</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0410</i>		<i>"</i>	<i>0.0400</i>		<i>103</i>	<i>21-167</i>			

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BFA0459 - EPA 3550A

Blank (BFA0459-BLK1)

Prepared & Analyzed: 01/28/22

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

LCS (BFA0459-BS1)

Prepared & Analyzed: 01/28/22

C10-C28 (DRO)	481	50	mg/kg	500	96.2	70-130				
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Matrix Spike (BFA0459-MS1)

Source: 2201334-01

Prepared: 01/28/22 Analyzed: 01/29/22

C10-C28 (DRO)	467	50	mg/kg	500	31.9	87.0	70-130			
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Matrix Spike Dup (BFA0459-MSD1)

Source: 2201334-01

Prepared: 01/28/22 Analyzed: 01/29/22

C10-C28 (DRO)	421	50	mg/kg	500	31.9	77.7	70-130	10.4	20	
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Tasman Geosciences
6855 W. 119th Ave.
Broomfield CO, 80020

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFA0484 - EPA 5030 Soil MS

Blank (BFA0484-BLK1)

Prepared & Analyzed: 01/28/22

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	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0208		"	0.0333	62.3	40-150				
<i>Surrogate: Fluoranthene-d10</i>	0.0227		"	0.0333	68.0	40-150				

LCS (BFA0484-BS1)

Prepared & Analyzed: 01/28/22

Acenaphthene	0.0248	0.00500	mg/kg	0.0333	74.4	31-137				
Anthracene	0.0264	0.00500	"	0.0333	79.2	30-120				
Benzo (a) anthracene	0.0248	0.00500	"	0.0333	74.4	30-120				
Benzo (a) pyrene	0.0263	0.00500	"	0.0333	78.8	30-120				
Benzo (b) fluoranthene	0.0263	0.00500	"	0.0333	79.0	30-120				
Benzo (k) fluoranthene	0.0311	0.00500	"	0.0333	93.4	30-120				
Chrysene	0.0274	0.00500	"	0.0333	82.2	30-120				
Dibenz (a,h) anthracene	0.0257	0.00500	"	0.0333	77.1	30-120				
Fluoranthene	0.0265	0.00500	"	0.0333	79.6	30-120				
Fluorene	0.0257	0.00500	"	0.0333	77.1	30-120				
Indeno (1,2,3-cd) pyrene	0.0266	0.00500	"	0.0333	79.8	30-120				
Pyrene	0.0292	0.00500	"	0.0333	87.7	35-142				
1-Methylnaphthalene	0.0254	0.00500	"	0.0333	76.3	35-142				
2-Methylnaphthalene	0.0236	0.00500	"	0.0333	70.9	35-142				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0259		"	0.0333	77.6	40-150				
<i>Surrogate: Fluoranthene-d10</i>	0.0256		"	0.0333	76.8	40-150				

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFA0484 - EPA 5030 Soil MS

Matrix Spike (BFA0484-MS1)

Source: 2201326-01

Prepared: 01/28/22 Analyzed: 01/29/22

Acenaphthene	0.0228	0.00500	mg/kg	0.0333	ND	68.3	31-137			
Anthracene	0.0241	0.00500	"	0.0333	ND	72.4	30-120			
Benzo (a) anthracene	0.0230	0.00500	"	0.0333	ND	68.9	30-120			
Benzo (a) pyrene	0.0228	0.00500	"	0.0333	ND	68.4	30-120			
Benzo (b) fluoranthene	0.0247	0.00500	"	0.0333	ND	74.1	30-120			
Benzo (k) fluoranthene	0.0290	0.00500	"	0.0333	ND	87.0	30-120			
Chrysene	0.0251	0.00500	"	0.0333	ND	75.4	30-120			
Dibenz (a,h) anthracene	0.0235	0.00500	"	0.0333	ND	70.5	30-120			
Fluoranthene	0.0236	0.00500	"	0.0333	ND	70.7	30-120			
Fluorene	0.0229	0.00500	"	0.0333	ND	68.7	30-120			
Indeno (1,2,3-cd) pyrene	0.0259	0.00500	"	0.0333	ND	77.7	30-120			
Pyrene	0.0280	0.00500	"	0.0333	ND	84.1	35-142			
1-Methylnaphthalene	0.0228	0.00500	"	0.0333	ND	68.5	15-130			
2-Methylnaphthalene	0.0213	0.00500	"	0.0333	ND	63.8	15-130			
Surrogate: 2-Methylnaphthalene-d10	0.0241		"	0.0333		72.2	40-150			
Surrogate: Fluoranthene-d10	0.0236		"	0.0333		70.8	40-150			

Matrix Spike Dup (BFA0484-MSD1)

Source: 2201326-01

Prepared: 01/28/22 Analyzed: 01/29/22

Acenaphthene	0.0224	0.00500	mg/kg	0.0333	ND	67.1	31-137	1.73	30
Anthracene	0.0231	0.00500	"	0.0333	ND	69.4	30-120	4.26	30
Benzo (a) anthracene	0.0225	0.00500	"	0.0333	ND	67.4	30-120	2.29	30
Benzo (a) pyrene	0.0238	0.00500	"	0.0333	ND	71.5	30-120	4.37	30
Benzo (b) fluoranthene	0.0238	0.00500	"	0.0333	ND	71.4	30-120	3.64	30
Benzo (k) fluoranthene	0.0291	0.00500	"	0.0333	ND	87.2	30-120	0.225	30
Chrysene	0.0246	0.00500	"	0.0333	ND	73.8	30-120	2.18	30
Dibenz (a,h) anthracene	0.0217	0.00500	"	0.0333	ND	65.1	30-120	8.01	30
Fluoranthene	0.0232	0.00500	"	0.0333	ND	69.6	30-120	1.54	30
Fluorene	0.0234	0.00500	"	0.0333	ND	70.1	30-120	1.97	30
Indeno (1,2,3-cd) pyrene	0.0245	0.00500	"	0.0333	ND	73.4	30-120	5.80	30
Pyrene	0.0251	0.00500	"	0.0333	ND	75.4	35-142	10.9	30
1-Methylnaphthalene	0.0232	0.00500	"	0.0333	ND	69.6	15-130	1.47	50
2-Methylnaphthalene	0.0218	0.00500	"	0.0333	ND	65.4	15-130	2.52	50
Surrogate: 2-Methylnaphthalene-d10	0.0217		"	0.0333		65.0	40-150		
Surrogate: Fluoranthene-d10	0.0227		"	0.0333		68.0	40-150		

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BFC0718 - EPA 3050B

Blank (BFC0718-BLK1)

Prepared: 03/30/22 Analyzed: 04/02/22

Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Selenium	ND	0.260	"							

LCS (BFC0718-BS1)

Prepared: 03/30/22 Analyzed: 04/02/22

Arsenic	38.0	0.200	mg/kg wet	40.0	94.9	80-120				
Barium	35.9	0.400	"	40.0	89.8	80-120				
Selenium	3.60	0.260	"	4.00	90.1	80-120				

Duplicate (BFC0718-DUP1)

Source: 2201334-10

Prepared: 03/30/22 Analyzed: 04/02/22

Arsenic	1.78	0.200	mg/kg dry	1.89	5.88	20				
Barium	120	0.400	"	117	2.40	20				
Selenium	1.29	0.260	"	1.25	3.04	20				

Matrix Spike (BFC0718-MS1)

Source: 2201334-10

Prepared: 03/30/22 Analyzed: 04/02/22

Arsenic	42.8	0.200	mg/kg dry	50.4	1.89	81.2	75-125			
Barium	214	0.400	"	50.4	117	192	75-125			QM-05
Selenium	6.50	0.260	"	5.04	1.25	104	75-125			

Matrix Spike Dup (BFC0718-MSD1)

Source: 2201334-10

Prepared: 03/30/22 Analyzed: 04/02/22

Arsenic	44.6	0.200	mg/kg dry	50.4	1.89	84.9	75-125	4.26	25	
Barium	224	0.400	"	50.4	117	211	75-125	4.31	25	QM-05
Selenium	5.70	0.260	"	5.04	1.25	88.3	75-125	13.2	25	

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BFB0165 - 3060A Mod

Blank (BFB0165-BLK1)

Prepared & Analyzed: 02/15/22

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BFB0165-BS1)

Prepared & Analyzed: 02/15/22

Chromium, Hexavalent 26.7 0.30 mg/kg wet 25.0 107 80-120

Duplicate (BFB0165-DUP1)

Source: 2201305-01

Prepared & Analyzed: 02/15/22

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BFB0165-MS1)

Source: 2201305-01

Prepared & Analyzed: 02/15/22

Chromium, Hexavalent 32.3 0.30 mg/kg dry 31.0 ND 104 75-125

Matrix Spike Dup (BFB0165-MSD1)

Source: 2201305-01

Prepared & Analyzed: 02/15/22

Chromium, Hexavalent 34.8 0.30 mg/kg dry 31.0 ND 112 75-125 7.57 20

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

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

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

Batch BFA0446 - General Preparation

Duplicate (BFA0446-DUP1)	Source: 2201307-03			Prepared: 01/27/22 Analyzed: 01/28/22			
% Solids	84.5		%		84.3	0.253	20

Batch BFC0749 - General Preparation

Duplicate (BFC0749-DUP1)	Source: 2201334-10			Prepared: 03/31/22 Analyzed: 04/01/22			
% Solids	78.8		%		79.4	0.862	20

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

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

Summit Scientific

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

Batch BFC0546 - General Preparation

LCS (BFC0546-BS1)		Prepared & Analyzed: 03/24/22								
pH	9.13		pH Units	9.18		99.5	95-105			
Duplicate (BFC0546-DUP1)		Source: 2201245-03		Prepared & Analyzed: 03/24/22						
pH	8.31		pH Units		8.28			0.362	20	

Batch BFC0644 - General Preparation

LCS (BFC0644-BS1)		Prepared: 03/28/22 Analyzed: 03/29/22								
pH	9.17		pH Units	9.18		99.9	95-105			
Duplicate (BFC0644-DUP1)		Source: 2201334-10		Prepared: 03/28/22 Analyzed: 03/29/22						
pH	8.40		pH Units		8.47			0.830	20	

Summit Scientific

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

Project: Noble - Frank 1,12-2,7-4 FAC

Project Number: [none]
Project Manager: Jacob Whritenour

Reported:
04/04/22 11:01

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.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- 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.
- 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