

Mickey 5-F SEP

SWNE Sec. 5-T6N-R67W

Facility/Location ID: 430411

Spill/Release Point ID: 486166

Soil Boring Assessment

February 2024 through April 2024

Prepared by Tasman, Inc.



On behalf of Extraction Oil & Gas, Inc.



BORING LOGS



TASMAN

6855 W. 119th Ave
Broomfield, CO 80020

CLIENT:
Extraction Oil & Gas INC

LOGGED BY: Daniel Hensel

PROJECT MANAGER: Sam Vogt

DRILLING CONTRACTOR: Tasman, INC.

DRILLING EQUIPMENT:
HydroVac/Hand Auger

DRILL BIT SIZE (INCHES): 3.25"

DATE STARTED - COMPLETED: 04/04/24-04/04/24

SITE NAME:
Mickey 5-F SEP
Facility ID: 430411

SOIL BORING ID: DEL-E01

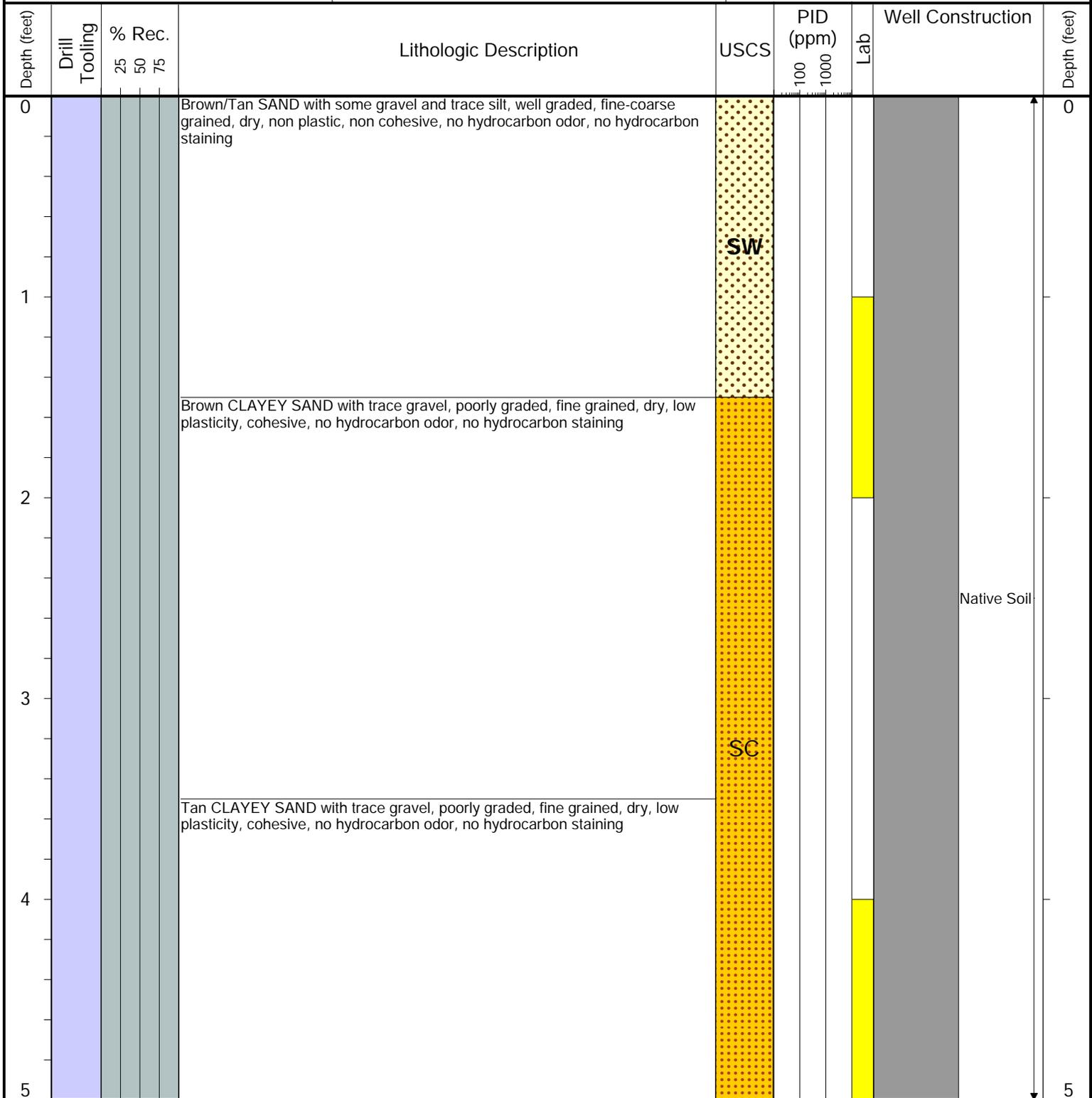
LOCATION: SWNE Sec. 5-T6N-R67W

LATITUDE (WGS 84): 40.513669

LONGITUDE (WGS 84): -104.923396

TOTAL WELL DEPTH (FT. BGS): 5

DEPTH TO WATER (FT. BGS): N/A ▼



Drilling / Sample Method:

- Direct Push Technology
- Hydrovac / Hand Auger
- Hydrovac
- Hand Auger

Laboratory Sample Types:

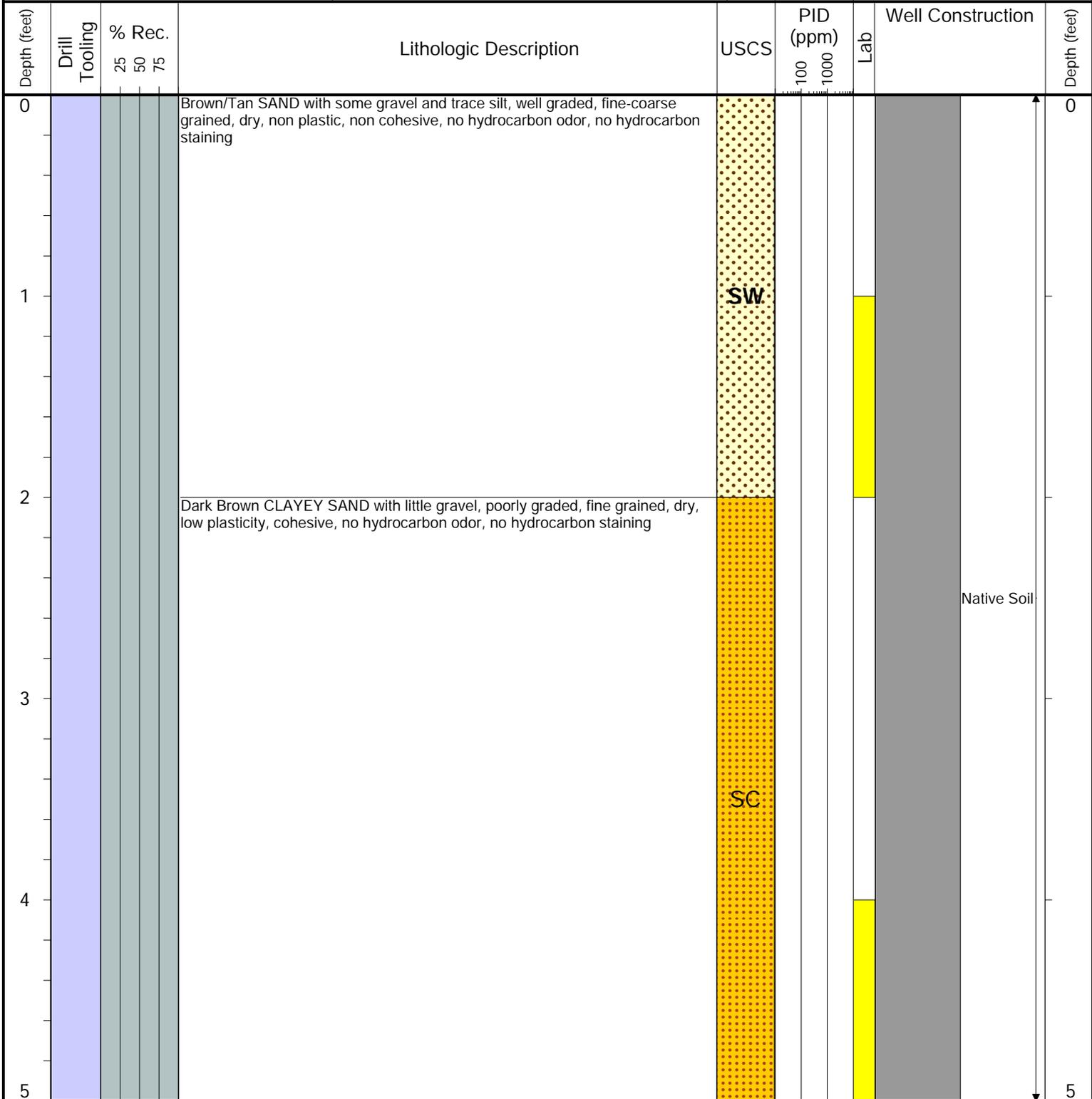
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



TASMAN

6855 W. 119th Ave
Broomfield, CO 80020

CLIENT: Extraction Oil & Gas INC	SITE NAME: Mickey 5-F SEP Facility ID: 430411
LOGGED BY: Daniel Hensel	SOIL BORING ID: DEL-N01
PROJECT MANAGER: Sam Vogt	
DRILLING CONTRACTOR: Tasman, INC.	LOCATION: SWNE Sec. 5-T6N-R67W
DRILLING EQUIPMENT: HydroVac/Hand Auger	LATITUDE (WGS 84): 40.513737
DRILL BIT SIZE (INCHES): 3.25"	LONGITUDE (WGS 84): -104.923459
DATE STARTED - COMPLETED: 04/04/24-04/04/24	TOTAL WELL DEPTH (FT. BGS): 5
	DEPTH TO WATER (FT. BGS): N/A ▼



Drilling / Sample Method:

- Direct Push Technology
- Hydrovac
- Hydrovac / Hand Auger
- Geotechnical Lab
- Geotechnical & Analytical Chemistry Lab
- Hollow Stem Auger
- Hand Auger
- Analytical Chemistry Lab



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CLIENT:
Extraction Oil & Gas INC

LOGGED BY: Daniel Hensel

PROJECT MANAGER: Sam Vogt

DRILLING CONTRACTOR: Tasman, INC.

DRILLING EQUIPMENT:
HydroVac/Hand Auger

DRILL BIT SIZE (INCHES): 3.25"

DATE STARTED - COMPLETED: 04/04/24-04/04/24

SITE NAME:
Mickey 5-F SEP
Facility ID: 430411

SOIL BORING ID: DEL-S01

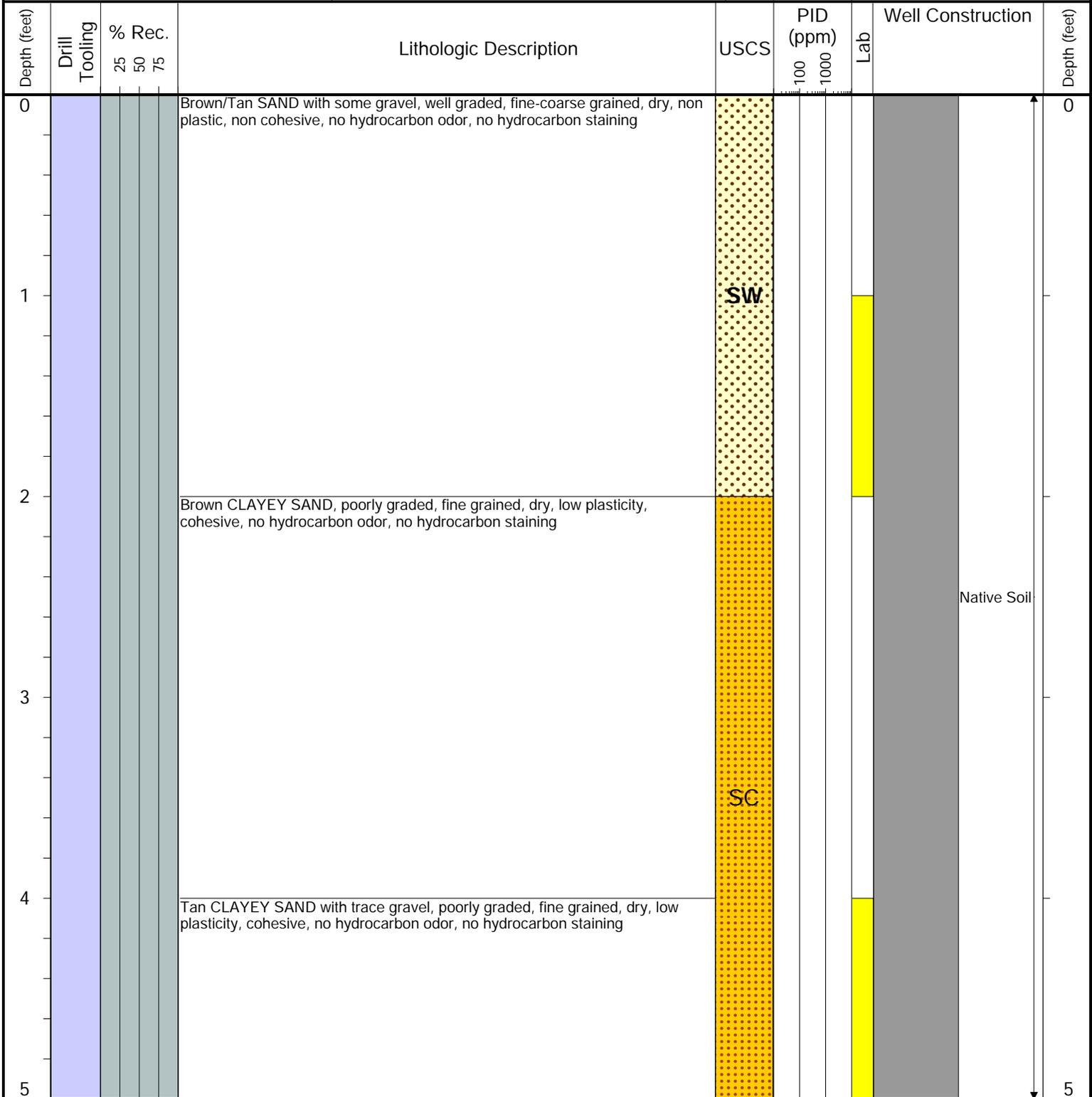
LOCATION: SWNE Sec. 5-T6N-R67W

LATITUDE (WGS 84): 40.513624

LONGITUDE (WGS 84): -104.92342

TOTAL WELL DEPTH (FT. BGS): 5

DEPTH TO WATER (FT. BGS): N/A ▼



Drilling / Sample Method:

- Direct Push Technology
- Hydrovac
- Hydrovac / Hand Auger
- Hand Auger

Laboratory Sample Types:

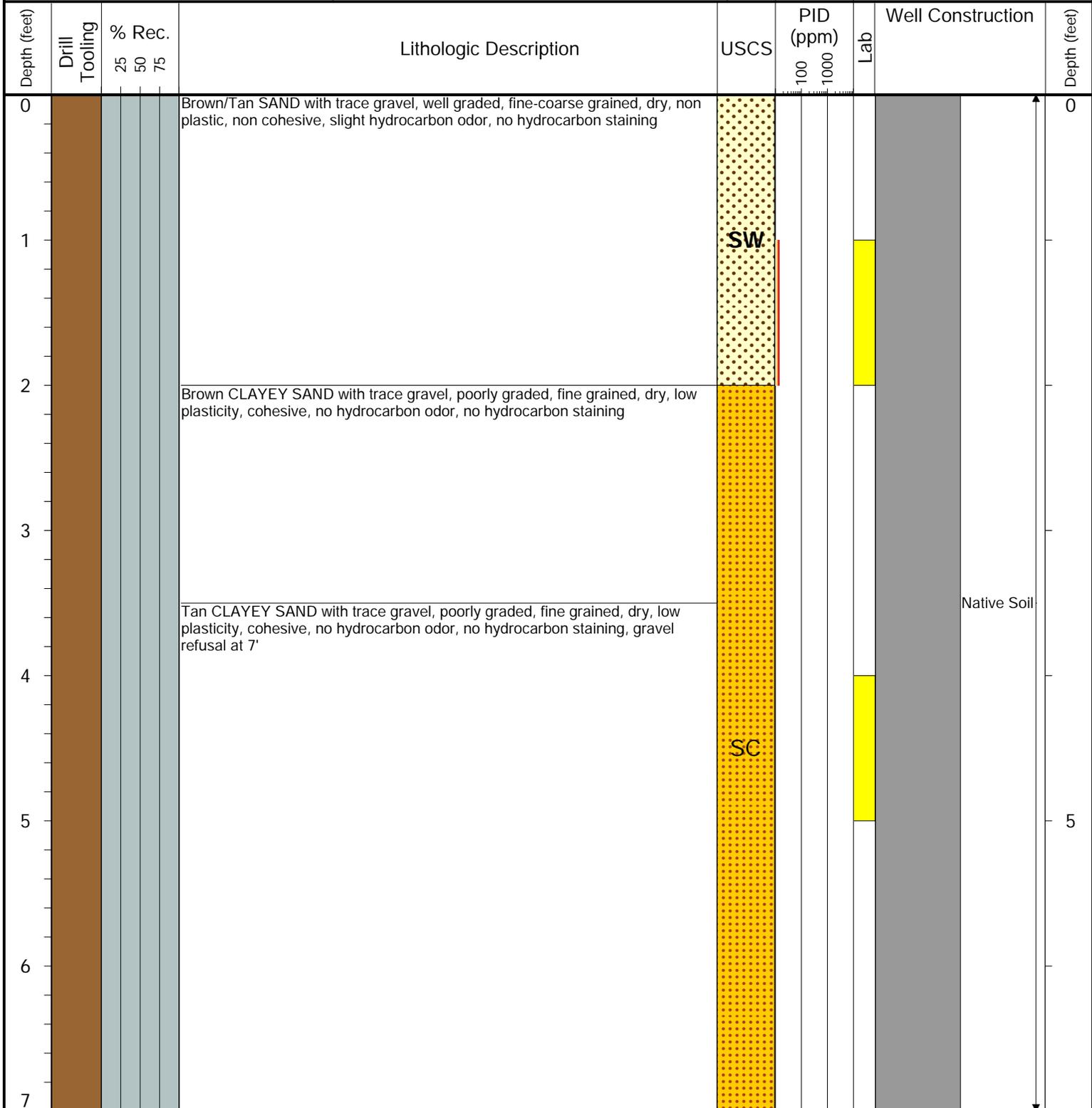
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



TASMAN

6855 W. 119th Ave
Broomfield, CO 80020

CLIENT: Extraction Oil & Gas INC	SITE NAME: Mickey 5-F SEP Facility ID: 430411
LOGGED BY: Daniel Hensel	SOIL BORING ID: DEL-V01
PROJECT MANAGER: Sam Vogt	
DRILLING CONTRACTOR: Tasman, INC.	LOCATION: SWNE Sec. 5-T6N-R67W
DRILLING EQUIPMENT: HydroVac/Hand Auger	LATITUDE (WGS 84): 40.513694
DRILL BIT SIZE (INCHES): 3.25"	LONGITUDE (WGS 84): -104.923504
DATE STARTED - COMPLETED: 04/04/24-04/04/24	TOTAL WELL DEPTH (FT. BGS): 7
	DEPTH TO WATER (FT. BGS): N/A ▼



Drilling / Sample Method:

- Direct Push Technology
- Hydrovac
- Hydrovac / Hand Auger
- Hand Auger

Laboratory Sample Types:

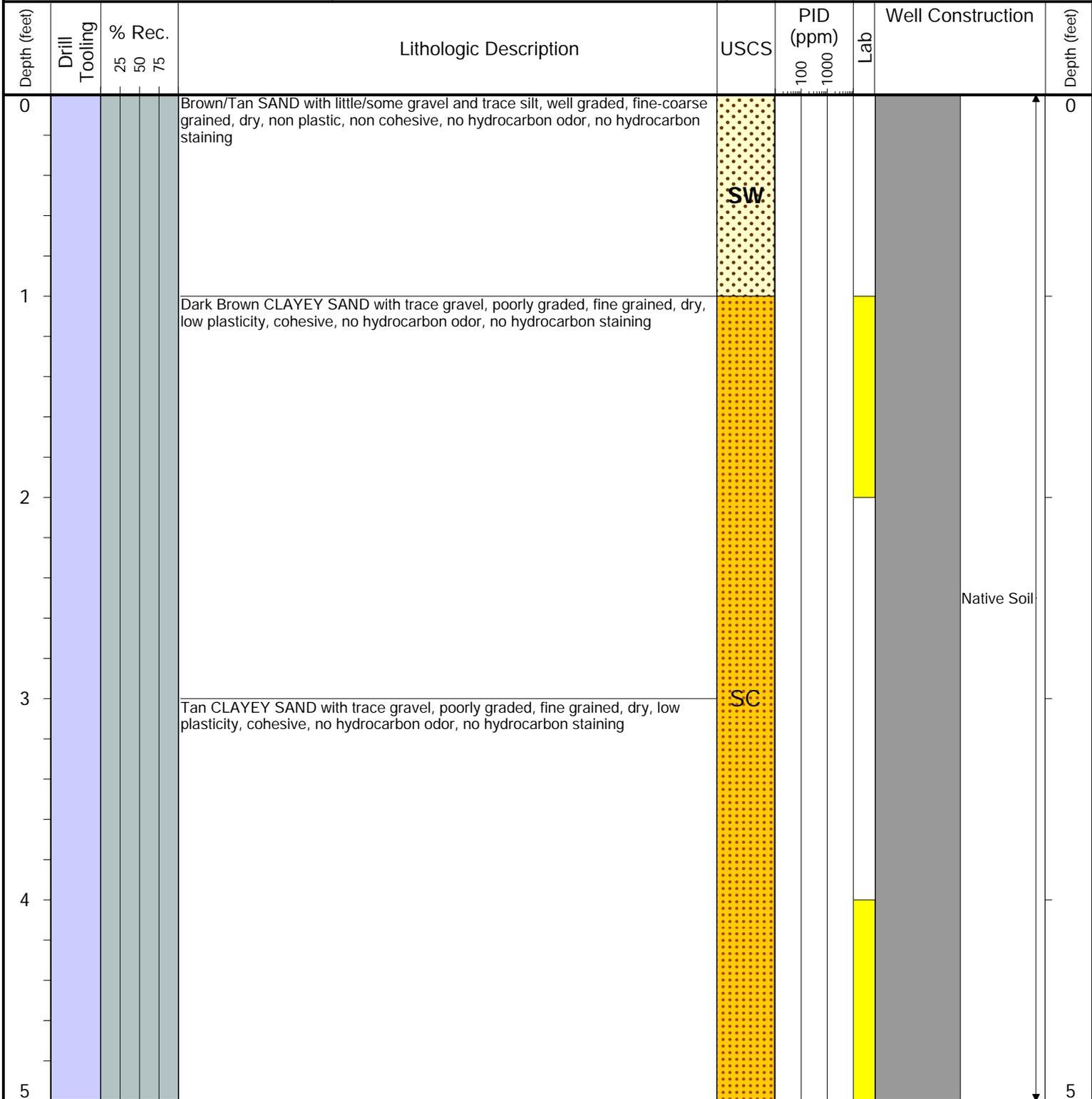
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



TASMAN

6855 W. 119th Ave
Broomfield, CO 80020

CLIENT: Extraction Oil & Gas INC	SITE NAME: Mickey 5-F SEP Facility ID: 430411
LOGGED BY: Daniel Hensel	SOIL BORING ID: DEL-W01
PROJECT MANAGER: Sam Vogt	
DRILLING CONTRACTOR: Tasman, INC.	LOCATION: SWNE Sec. 5-T6N-R67W
DRILLING EQUIPMENT: HydroVac/Hand Auger	LATITUDE (WGS 84): 40.51368
DRILL BIT SIZE (INCHES): 3.25"	LONGITUDE (WGS 84): -104.923595
DATE STARTED - COMPLETED: 04/04/24-04/04/24	TOTAL WELL DEPTH (FT. BGS): 5
	DEPTH TO WATER (FT. BGS): N/A ▼



Drilling / Sample Method:

- Direct Push Technology
- Hydrovac
- Hydrovac / Hand Auger
- Geotechnical Lab
- Geotechnical & Analytical Chemistry Lab
- Hollow Stem Auger
- Hand Auger
- Analytical Chemistry Lab

FIELD NOTES AND PHOTO LOG



Photographic Log

5°N (T) ● 40°30'49"N, 104°55'23"W ±13ft ▲ 4881ft			179°S (T) ● 40°30'49"N, 104°55'23"W ±16ft ▲ 4881ft		
04 Apr 2024, 11:32:07			04 Apr 2024, 11:32:14		
Equipment ID:		Equipment Type:	Equipment ID:		Equipment Type:
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: Surrounding land use, facing N			Notes/Conditions: Surrounding land use, facing S		

Photographic Log

					
<p>☀ 89°E (T) ● 40°30'49"N, 104°55'23"W ±16ft ▲ 4881ft</p>			<p>☀ 271°W (T) ● 40°30'49"N, 104°55'23"W ±13ft ▲ 4881ft</p>		
 <p style="text-align: right;">04 Apr 2024, 11:32:17</p>			 <p style="text-align: right;">04 Apr 2024, 11:32:10</p>		
Equipment ID:		Equipment Type:	Equipment ID:		Equipment Type:
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: Surrounding land use, facing E			Notes/Conditions: Surrounding land use, facing W		



Photographic Log

Equipment ID:		Equipment Type:	Equipment ID:		Equipment Type:
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: Soil sampling location			Notes/Conditions: Soil sampling location		



Photographic Log

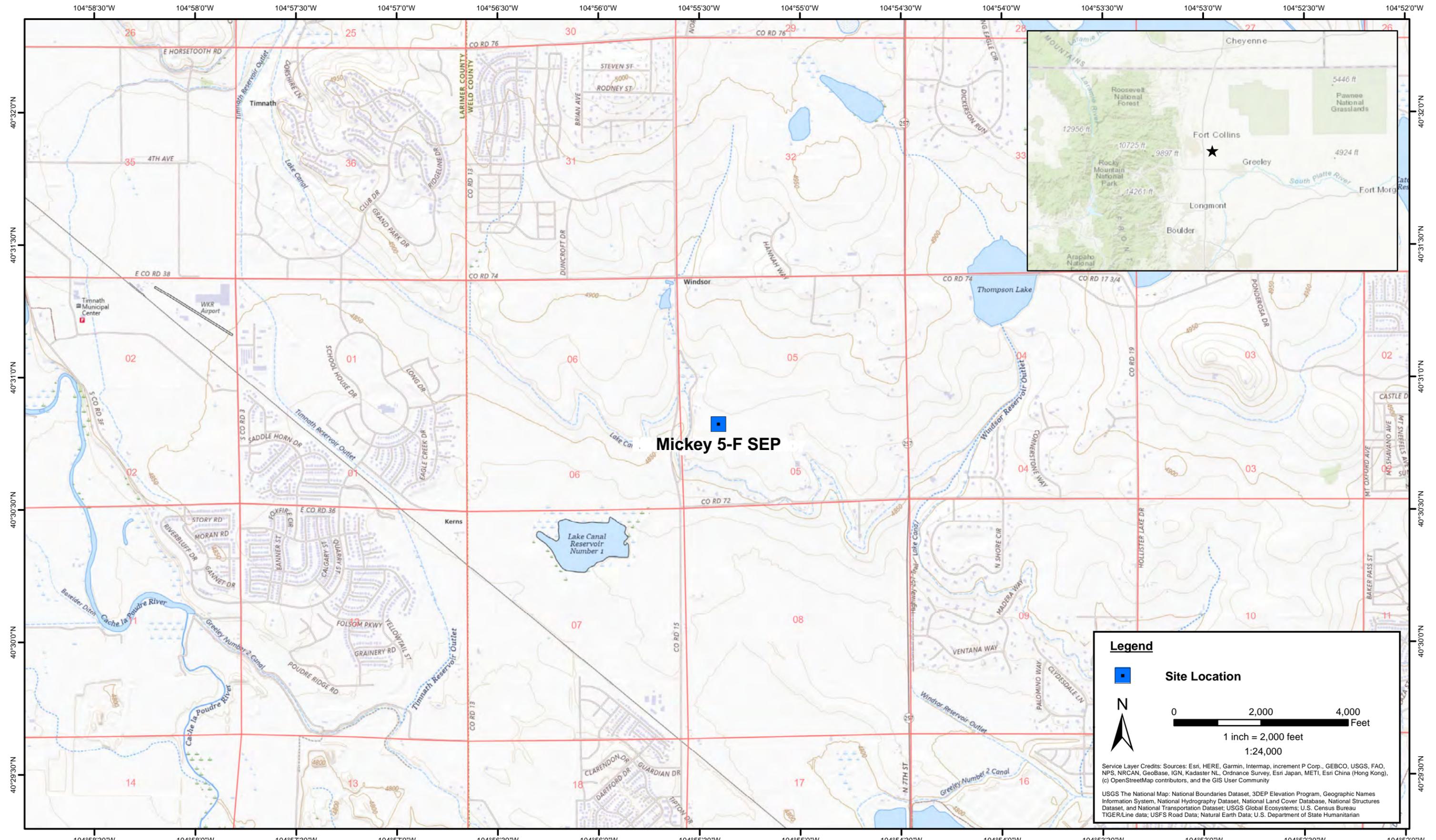
Equipment ID:		Equipment Type:		Equipment ID:		Equipment Type:	
Material:	Volume:	Contents:		Material:	Volume:	Contents:	
Notes/Conditions: Soil sampling location				Notes/Conditions: Soil sampling location			



Photographic Log

					
Equipment ID:		Equipment Type:		Equipment ID:	
Material:		Volume:	Contents:		Equipment Type:
Notes/Conditions: Soil sampling location			Notes/Conditions:		

FIGURES



DATE: May 2024
 DESIGNED BY: S. Vogt
 DRAWN BY: L. Reed



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

Extraction Oil & Gas, Inc.
Mickey 5-F SEP
 SWNE Sec. 5-T6N-R67W
 Weld County, Colorado

Site Location Map

Figure
1



WC-01	
Compound	02/25/2024
SAR	26.6

Legend

- Background soil sample location (Collected by Extraction Oil & Gas, Inc.)
- + Soil sample location – Exceeded ECMC Table 915-1 Soil Standards (Collected by Extraction Oil & Gas, Inc.)

ECMC Table 915-1 Soil Standards	
Compound	Date
SAR	< 6

Notes

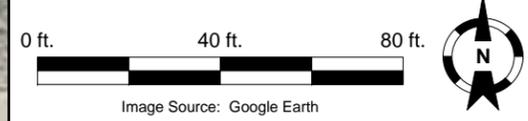
All locations are approximate unless otherwise noted.

BOLD = Analytical result is in exceedance of ECMC Table 915-1 Soil Suitability for Reclamation Standards

GPS = Global Positioning System

ECMC = Colorado Energy & Carbon Management Commission

SAR = Sodium Adsorption Ratio



DATE:	May 23, 2024
DESIGNED BY:	S. Vogt
DRAWN BY:	L. Bakel



Tasman, Inc.
6855 W119th Ave.
Broomfield, CO 80020

Extraction Oil & Gas, Inc.
Mickey 5-F SEP
SWNE Sec. 5-T6N-R67W
Weld County, Colorado

Soil Sample Location Map
(02/25/2024)

Figure
2A



DATE: May 23, 2024
DESIGNED BY: S. Vogt
DRAWN BY: L. Bakel

 **TASMAN**
Tasman, Inc.
6855 W119th Ave.
Broomfield, CO 80020

Extraction Oil & Gas, Inc.
Mickey 5-F SEP
SWNE Sec. 5-T6N-R67W
Weld County, Colorado

Delineation Soil Sample
Location Map
(04/04/2024)

Figure
2B

TABLES

TABLE 1
MICKEY 5-F SEP
SOIL SAMPLE LOCATIONS
EXTRACTION OIL & GAS, INC



Soil Sample Location	Depth	Date	PID Reading (ppm)	Latitude	Longitude	GPS PDOP Value	Lab (Y/N)
WC-01	0-6"	02/25/2024	-	40.513667	-104.923515	-	Y
WCBK-01	0-6"	02/25/2024	-	40.514166	-104.923323	-	Y
DEL-V01@1'	1'	04/04/2024	13.9	40.513695	-104.923504	1.1	Y
DEL-V01@5'	5'	04/04/2024	0.2	40.513695	-104.923504	1.1	Y
DEL-V01@7'	7'	04/04/2024	0.0	40.513695	-104.923504	1.1	Y
DEL-S01@1'	1'	04/04/2024	0.2	40.513624	-104.923430	1	Y
DEL-S01@5'	5'	04/04/2024	0.0	40.513624	-104.923430	1	Y
DEL-W01@1'	1'	04/04/2024	0.1	40.513681	-104.923596	1	Y
DEL-W01@5'	5'	04/04/2024	0.1	40.513681	-104.923596	1	Y
DEL-E01@1'	1'	04/04/2024	0.2	40.513670	-104.923396	1.1	Y
DEL-E01@5'	5'	04/04/2024	0.2	40.513670	-104.923396	1.1	Y
DEL-N01@1'	1'	04/04/2024	0.1	40.513737	-104.923459	1.1	Y
DEL-N01@5'	5'	04/04/2024	0.0	40.513737	-104.923459	1.1	Y

Notes:

PID = Photoionization Detector

ppm = parts per million

GPS = Global Positioning System

PDOP = Position Dilution of Precision

- = Not Applicable

10/29/2024 [date] = Data collected by Extraction Oil & Gas Inc

TABLE 2
MICKEY 5-F SEP
SOIL ANALYTICAL DATA - VOCs
EXTRACTION OIL & GAS, INC

Soil Sample Location	Depth	Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Naphthalene (mg/kg)	TVPH-GRO (mg/kg)	TEPH-DRO (mg/kg)	TEPH-ORO (mg/kg)	1,2,4-TMB (mg/kg)	1,3,5-TMB (mg/kg)
ECMC Organic Compounds in Soils - GSSL ⁽¹⁾			0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
ECMC Organic Compounds in Soils - RSL ⁽²⁾			1.2	490	5.8	58	2	500			30	27
WC-01	0-6"	02/25/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-V01@1'	1'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-V01@5'	5'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-V01@7'	7'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-S01@1'	1'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-S01@5'	5'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-W01@1'	1'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-W01@5'	5'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-E01@1'	1'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-E01@5'	5'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-N01@1'	1'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050
DEL-N01@5'	5'	04/04/2024	<0.0020	<0.0050	<0.0050	<0.010	<0.0038	<0.50	<50	<50	<0.0050	<0.0050

Notes:

VOCs = Volatile Organic Compounds

(1) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

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

mg/kg = milligrams per kilogram

TVPH - GRO = Total Volatile Petroleum Hydrocarbons - Gasoline Range Organics

TEPH - DRO = Total Extractable Petroleum Hydrocarbons - Diesel Range Organics

TEPH - ORO = Total Extractable Petroleum Hydrocarbons - Oil Range Organics

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

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

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations

10/29/2024 [date] = Data collected by Extraction Oil & Gas Inc

TABLE 3
MICKEY 5-F SEP
SOIL ANALYTICAL DATA - PAHs
EXTRACTION OIL & GAS, INC

Soil Sample Location	Depth	Date	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)A (mg/kg)	Benzo(b)F (mg/kg)	Benzo(k)F (mg/kg)	Benzo(a)P (mg/kg)	Chrysene (mg/kg)	D (a,h) A (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Pyrene (mg/kg)
ECMC Organic Compounds in Soils - GSSL ⁽¹⁾			0.55	5.8	0.011	0.3	2.9	0.24	9	0.96	8.9	0.54	0.98	0.006	0.019	1.3
ECMC Organic Compounds in Soils - RSL ⁽²⁾			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
WC-01	0-6"	02/25/2024	<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
DEL-V01@1'	1'	04/04/2024	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00573	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
DEL-V01@5'	5'	04/04/2024	<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
DEL-V01@7'	7'	04/04/2024	<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
DEL-S01@1'	1'	04/04/2024	<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
DEL-S01@5'	5'	04/04/2024	<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
DEL-W01@1'	1'	04/04/2024	<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
DEL-W01@5'	5'	04/04/2024	<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
DEL-E01@1'	1'	04/04/2024	<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
DEL-E01@5'	5'	04/04/2024	<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
DEL-N01@1'	1'	04/04/2024	<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
DEL-N01@5'	5'	04/04/2024	<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

Notes:

PAHs = Polycyclic Aromatic Hydrocarbons

(1) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

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

mg/kg = milligrams per kilogram

Benzo(a)A = Benzo(a)Anthracene

Benzo(b)F = Benzo(b)Fluoranthene

Benzo(k)F = Benzo(k)Fluoranthene

Benzo(a)P = Benzo(a)Pyrene

D (a,h) A = Dibenz(a,h)Anthracene

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

1-M = 1-Methylnaphthalene

2-M = 2-Methylnaphthalene

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Protection of Groundwater Soil Screening Level Concentrations

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Soils - Residential Soil Screening Level Concentrations

TABLE 3
MICKEY 5-F SEP
SOIL ANALYTICAL DATA - PAHs
EXTRACTION OIL & GAS, INC

Soil Sample Location	Depth	Date	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo(a)A (mg/kg)	Benzo(b)F (mg/kg)	Benzo(k)F (mg/kg)	Benzo(a)P (mg/kg)	Chrysene (mg/kg)	D (a,h) A (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	1,2,3-CD (mg/kg)	1-M (mg/kg)	2-M (mg/kg)	Pyrene (mg/kg)
ECMC Organic Compounds in Soils - GSSL ⁽¹⁾			0.55	5.8	0.011	0.3	2.9	0.24	9	0.96	8.9	0.54	0.98	0.006	0.019	1.3
ECMC Organic Compounds in Soils - RSL ⁽²⁾			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180

10/29/2024 [date] = Data collected by Extraction Oil & Gas Inc

TABLE 4
MICKEY 5-F SEP
SOIL ANALYTICAL DATA - METALS
EXTRACTION OIL & GAS, INC

Soil Sample Location	Depth	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)
ECMC Metals in Soils - GSSL ⁽¹⁾			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ECMC Metals in Soils - RSL ⁽²⁾			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
WC-01	0-6"	02/25/2024	3.56*	101*	0.218	<0.30	4.70	5.35	3.59	<0.260	<0.0200	41.5
BACKGROUND												
WCBK-01	0-6"	02/25/2024	3.52	111	0.214	<0.30	6.01	7.37	6.77	1.10	0.0400	24.7
Highest Background @ 0-6" x1.25			4.40	139	0.268	-	7.51	9.21	8.46	1.38	0.0500	30.88

Notes:

(1) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations (Effective January 15, 2021)

(2) Standards for soil are taken from ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

GSSL = Protection of Groundwater Screening Level

RSL = Residential Soil Screening Level

(<) = Analytical result is less than the indicated laboratory minimum detection limit

mg/kg = milligrams per kilogram

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Protection of Groundwater Soil Screening Level Concentrations

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Metals in Soils - Residential Soil Screening Level Concentrations

Highest background concentration x1.25

Italics = Laboratory minimum detection limit exceeds the ECMC Table 915-1 Standard

* Result exceeded the ECMC Table 915-1 standard, but was within site-specific 1.25x background multiplier level:

10/29/2024 [date] = Data collected by Extraction Oil & Gas Inc

TABLE 5
MICKEY 5-F SEP



SOIL ANALYTICAL DATA - SOIL RECLAMATION
EXTRACTION OIL & GAS, INC

Soil Sample Location	Depth	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
ECMC Soil Suitability for Reclamation⁽¹⁾			6 - 8.3	< 6	< 4	2
WC-01	0-6"	02/25/2024	7.11	26.6	0.0393	<2.00
DEL-V01@1'	1'	04/04/2024	-	10.2	-	-
DEL-V01@5'	5'	04/04/2024	-	2.38	-	-
DEL-V01@7'	7'	04/04/2024	-	3.26	-	-
DEL-S01@1'	1'	04/04/2024	-	0.606	-	-
DEL-S01@5'	5'	04/04/2024	-	0.815	-	-
DEL-W01@1'	1'	04/04/2024	-	1.92	-	-
DEL-W01@5'	5'	04/04/2024	-	1.31	-	-
DEL-E01@1'	1'	04/04/2024	-	0.227	-	-
DEL-E01@5'	5'	04/04/2024	-	0.381	-	-
DEL-N01@1'	1'	04/04/2024	-	0.0851	-	-
DEL-N01@5'	5'	04/04/2024	-	0.783	-	-
BACKGROUND						
WCBK-01	0-6"	02/25/2024	8.90	0.116	0.235	<2.00
Highest Background @ 0-6"			8.90	0.116	0.235	-

Notes:

(1) Standards for soil are taken from ECMC Table 915-1: Soil Suitability for Reclamation (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

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

mmhos/cm = millimhos per centimeter

mg/L = milligrams per liter

pH = Potential of Hydrogen

SAR = Sodium Adsorption Ratio

EC = Electrical Conductivity

BOLD = Analytical result is in exceedance of ECMC Table 915-1: Soil Suitability for Reclamation Concentrations

Highest background concentration

10/29/2024 [date] = Data collected by Extraction Oil & Gas Inc

LABORATORY ANALYTICAL DATA

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

March 14, 2024

Costin McQueen
Civitas Resources
650 Southgate Drive
Windsor, CO 80550

RE: Mickey #7

Work Order #2402469

Enclosed are the results of analyses for samples received by Summit Scientific on 02/27/24 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mikayla Axtell For Paul Shrewsbury
President



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WC-01	2402469-01	Soil	02/25/24 15:30	02/27/24 16:30
WCBK-01	2402469-02	Soil	02/25/24 15:40	02/27/24 16:30

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.



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

Lab ID	Page 1 of 1
2402409	

		Send Data To:	Send Invoice To:
Client: <i>Civitas Resources</i>	Project Manager: <i>Costin McQueen</i>	Company: <i>Civitas</i>	
Address: <i>650 Southgate Dr</i>	E-Mail: <i>C.McQueen@Civitasresources.com</i>	Project Name/Location: <i>Mickey #7</i>	
City/State/Zip: <i>Windsor, CO 80550</i>	<i>C.frost@Civitasresources.com</i>	AFE#: <i>C/C: COX0920</i>	
Phone: <i>720-438-9064</i>	Project Name: <i>Mickey #7</i>	PO/Billing Codes: <i>m/m: 8520.162</i>	
Sampler Name: <i>Com Frost</i>	Project Number:	Contact: <i>Costin McQueen</i>	

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other				
1	<i>WC-01</i>	<i>2-25-24</i>	<i>3:30 pm</i>	<i>2</i>						<input checked="" type="checkbox"/>						<i>Full 915</i>
2	<i>WCBK-01</i>	<i>2-25-24</i>	<i>3:40 pm</i>	<i>2</i>						<input checked="" type="checkbox"/>						<i>915 metals, EC, SAR, PH, Barom</i>
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

Relinquished by: <i>Com Frost</i>	Date/Time: <i>2-26-24/5:30 pm</i>	Received by:	Date/Time:	TAT Business Days	Field DO	Notes:
				Same Day <input checked="" type="checkbox"/>	Field EC	
Relinquished by: <i>SL</i>	Date/Time: <i>2/27/24 1030</i>	Received by: <i>[Signature]</i>	Date/Time: <i>2/27/24 1030</i>	1 Day	Field ORP	
				2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
				Standard	Field Turb.	
Temperature Upon Receipt: <i>6.6</i>	Corrected Temperature: <i>e</i>	IR gun #: <i>1</i>	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 2402469

Client: Cintas Client Project ID: Mickey #7

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

-

Matrix (Check all that apply) Air Soil/Solid Water Other

Temp (°C) 6.6 Thermometer # 1

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	-			on ICE
If custody seals are present, are they intact? ⁽¹⁾	-			
Are samples due within 48 hours present?	-			Sameday
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen		-		
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	-			
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	-			
Were all samples received intact? ⁽¹⁾	✓			
Was adequate sample volume provided? ⁽¹⁾	✓			
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	✓			
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	"
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.			✓	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	
Additional Comments (if any):				

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

AS

Custodian Printed Name

2/27/24
Date/Time



Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WC-01
2402469-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHB0859	02/27/24	02/27/24	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: **02/25/24 15:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0336	84.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0411	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0408	102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHB0862	02/27/24	02/27/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	13.6	109 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WC-01
2402469-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0879	02/28/24	02/28/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.00573	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: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0243	72.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0204	61.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHC0181	03/07/24	03/11/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/25/24 15:30**

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

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WC-01
2402469-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.56	0.200	mg/kg dry	1	BHC0007	03/01/24	03/04/24	EPA 6020B	
Barium	101	0.400	"	"	"	"	"	"	
Cadmium	0.218	0.200	"	"	"	"	"	"	
Copper	4.70	0.400	"	"	"	"	"	"	
Lead	5.35	0.200	"	"	"	"	"	"	
Nickel	3.59	0.400	"	"	"	"	"	"	
Silver	ND	0.0200	"	"	"	"	"	"	
Zinc	41.5	0.400	"	"	"	"	"	"	
Selenium	ND	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0305	03/12/24	03/13/24	EPA 7196A	

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

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	2640	0.0500	mg/L dry	1	BHB0864	02/27/24	03/01/24	EPA 6020B	
Magnesium	273	0.0500	"	"	"	"	"	"	
Sodium	5360	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	26.6	0.00100	units	1	BHC0151	03/06/24	03/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7
Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WC-01
2402469-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	93.0		%	1	BHC0072	03/05/24	03/05/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0393	0.0100	mmhos/cm	1	BHB0866	02/27/24	02/28/24	EPA 120.1	

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

Date Sampled: **02/25/24 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.11		pH Units	1	BHB0867	02/27/24	02/28/24	EPA 9045D	

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WCBK-01
2402469-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	ND	2.00	mg/L	1	BHC0181	03/07/24	03/11/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	3.52	0.200	mg/kg dry	1	BHC0007	03/01/24	03/04/24	EPA 6020B	
Barium	111	0.400	"	"	"	"	"	"	
Cadmium	0.214	0.200	"	"	"	"	"	"	
Copper	6.01	0.400	"	"	"	"	"	"	
Lead	7.37	0.200	"	"	"	"	"	"	
Nickel	6.77	0.400	"	"	"	"	"	"	
Silver	0.0400	0.0200	"	"	"	"	"	"	
Zinc	24.7	0.400	"	"	"	"	"	"	
Selenium	1.10	0.260	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BHC0305	03/12/24	03/13/24	EPA 7196A	

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

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	284	0.0500	mg/L dry	1	BHB0864	02/27/24	03/01/24	EPA 6020B	
Magnesium	36.3	0.0500	"	"	"	"	"	"	
Sodium	7.84	0.0500	"	"	"	"	"	"	

Calculated Analysis

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.





Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

WCBK-01
2402469-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.116	0.00100	units	1	BHC0151	03/06/24	03/06/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.1		%	1	BHC0072	03/05/24	03/05/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.235	0.0100	mmhos/cm	1	BHB0866	02/27/24	02/28/24	EPA 120.1	

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

Date Sampled: **02/25/24 15:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.90		pH Units	1	BHB0867	02/27/24	02/28/24	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.





Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHB0859 - EPA 5030 Soil MS

Blank (BHB0859-BLK1)

Prepared: 02/27/24 Analyzed: 02/28/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0345		"	0.0400		86.2	50-150			
<i>Surrogate: Toluene-d8</i>	0.0431		"	0.0400		108	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0416		"	0.0400		104	50-150			

LCS (BHB0859-BS1)

Prepared: 02/27/24 Analyzed: 02/28/24

Benzene	0.0910	0.0020	mg/kg	0.100		91.0	70-130			
Toluene	0.0913	0.0050	"	0.100		91.3	70-130			
Ethylbenzene	0.0901	0.0050	"	0.100		90.1	70-130			
m,p-Xylene	0.171	0.010	"	0.200		85.7	70-130			
o-Xylene	0.0860	0.0050	"	0.100		86.0	70-130			
1,2,4-Trimethylbenzene	0.0846	0.0050	"	0.100		84.6	70-130			
1,3,5-Trimethylbenzene	0.0806	0.0050	"	0.100		80.6	70-130			
Naphthalene	0.101	0.0038	"	0.100		101	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0326		"	0.0400		81.4	50-150			
<i>Surrogate: Toluene-d8</i>	0.0402		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0390		"	0.0400		97.6	50-150			

Matrix Spike (BHB0859-MS1)

Source: 2402467-01

Prepared: 02/27/24 Analyzed: 02/28/24

Benzene	0.0851	0.0020	mg/kg	0.100	ND	85.1	70-130			
Toluene	0.0852	0.0050	"	0.100	ND	85.2	70-130			
Ethylbenzene	0.0832	0.0050	"	0.100	ND	83.2	70-130			
m,p-Xylene	0.158	0.010	"	0.200	ND	79.1	70-130			
o-Xylene	0.0801	0.0050	"	0.100	ND	80.1	70-130			
1,2,4-Trimethylbenzene	0.0777	0.0050	"	0.100	ND	77.7	70-130			
1,3,5-Trimethylbenzene	0.0748	0.0050	"	0.100	ND	74.8	70-130			
Naphthalene	0.0946	0.0038	"	0.100	ND	94.6	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0334		"	0.0400		83.5	50-150			
<i>Surrogate: Toluene-d8</i>	0.0405		"	0.0400		101	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0398		"	0.0400		99.4	50-150			

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BHB0859 - EPA 5030 Soil MS

Matrix Spike Dup (BHB0859-MSD1)	Source: 2402467-01			Prepared: 02/27/24 Analyzed: 02/28/24						
Benzene	0.0833	0.0020	mg/kg	0.100	ND	83.3	70-130	2.21	30	
Toluene	0.0838	0.0050	"	0.100	ND	83.8	70-130	1.63	30	
Ethylbenzene	0.0819	0.0050	"	0.100	ND	81.9	70-130	1.60	30	
m,p-Xylene	0.156	0.010	"	0.200	ND	77.9	70-130	1.51	30	
o-Xylene	0.0797	0.0050	"	0.100	ND	79.7	70-130	0.526	30	
1,2,4-Trimethylbenzene	0.0779	0.0050	"	0.100	ND	77.9	70-130	0.347	30	
1,3,5-Trimethylbenzene	0.0743	0.0050	"	0.100	ND	74.3	70-130	0.724	30	
Naphthalene	0.0901	0.0038	"	0.100	ND	90.1	70-130	4.94	30	
Surrogate: 1,2-Dichloroethane-d4	0.0327		"	0.0400		81.7	50-150			
Surrogate: Toluene-d8	0.0406		"	0.0400		101	50-150			
Surrogate: 4-Bromofluorobenzene	0.0404		"	0.0400		101	50-150			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHB0862 - EPA 3550A

Blank (BHB0862-BLK1)

Prepared: 02/27/24 Analyzed: 02/28/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	10.6		"	12.5		85.1	30-150				

LCS (BHB0862-BS1)

Prepared: 02/27/24 Analyzed: 02/28/24

C10-C28 (DRO)	509	50	mg/kg	500		102	70-130				
Surrogate: <i>o</i> -Terphenyl	10.1		"	12.5		81.1	30-150				

Matrix Spike (BHB0862-MS1)

Source: 2402467-01

Prepared: 02/27/24 Analyzed: 02/28/24

C10-C28 (DRO)	506	50	mg/kg	500	17.1	97.9	70-130				
Surrogate: <i>o</i> -Terphenyl	15.8		"	12.5		126	30-150				

Matrix Spike Dup (BHB0862-MSD1)

Source: 2402467-01

Prepared: 02/27/24 Analyzed: 02/28/24

C10-C28 (DRO)	500	50	mg/kg	500	17.1	96.6	70-130	1.23	20		
Surrogate: <i>o</i> -Terphenyl	16.3		"	12.5		130	30-150				

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHB0879 - EPA 5030 Soil MS

Blank (BHB0879-BLK1)

Prepared & Analyzed: 02/28/24

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	0.0372		"	0.0333	112	40-150				
Surrogate: Fluoranthene-d10	0.0237		"	0.0333	71.1	40-150				

LCS (BHB0879-BS1)

Prepared & Analyzed: 02/28/24

Acenaphthene	0.0378	0.00500	mg/kg	0.0333	113	31-137				
Anthracene	0.0390	0.00500	"	0.0333	117	30-120				
Benzo (a) anthracene	0.0330	0.00500	"	0.0333	99.1	30-120				
Benzo (a) pyrene	0.0321	0.00500	"	0.0333	96.3	30-120				
Benzo (b) fluoranthene	0.0321	0.00500	"	0.0333	96.4	30-120				
Benzo (k) fluoranthene	0.0380	0.00500	"	0.0333	114	30-120				
Chrysene	0.0386	0.00500	"	0.0333	116	30-120				
Dibenz (a,h) anthracene	0.0259	0.00500	"	0.0333	77.8	30-120				
Fluoranthene	0.0363	0.00500	"	0.0333	109	30-120				
Fluorene	0.0378	0.00500	"	0.0333	114	30-120				
Indeno (1,2,3-cd) pyrene	0.0257	0.00500	"	0.0333	77.0	30-120				
Pyrene	0.0404	0.00500	"	0.0333	121	35-142				
1-Methylnaphthalene	0.0311	0.00500	"	0.0333	93.4	35-142				
2-Methylnaphthalene	0.0420	0.00500	"	0.0333	126	35-142				
Surrogate: 2-Methylnaphthalene-d10	0.0195		"	0.0333	58.4	40-150				
Surrogate: Fluoranthene-d10	0.0260		"	0.0333	78.1	40-150				

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHB0879 - EPA 5030 Soil MS

Matrix Spike (BHB0879-MS1)	Source: 2402467-01			Prepared & Analyzed: 02/28/24						
Acenaphthene	0.0160	0.00500	mg/kg	0.0333	ND	47.9	31-137			
Anthracene	0.0193	0.00500	"	0.0333	ND	58.0	30-120			
Benzo (a) anthracene	0.0182	0.00500	"	0.0333	ND	54.6	30-120			
Benzo (a) pyrene	0.0179	0.00500	"	0.0333	ND	53.7	30-120			
Benzo (b) fluoranthene	0.0149	0.00500	"	0.0333	ND	44.8	30-120			
Benzo (k) fluoranthene	0.0166	0.00500	"	0.0333	ND	49.9	30-120			
Chrysene	0.0188	0.00500	"	0.0333	ND	56.4	30-120			
Dibenz (a,h) anthracene	0.0149	0.00500	"	0.0333	ND	44.7	30-120			
Fluoranthene	0.0186	0.00500	"	0.0333	ND	55.9	30-120			
Fluorene	0.0173	0.00500	"	0.0333	ND	51.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0144	0.00500	"	0.0333	ND	43.3	30-120			
Pyrene	0.0203	0.00500	"	0.0333	ND	60.9	35-142			
1-Methylnaphthalene	0.0194	0.00500	"	0.0333	ND	58.2	15-130			
2-Methylnaphthalene	0.0191	0.00500	"	0.0333	ND	57.4	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0158</i>		<i>"</i>	<i>0.0333</i>		<i>47.3</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0134</i>		<i>"</i>	<i>0.0333</i>		<i>40.1</i>	<i>40-150</i>			

Matrix Spike Dup (BHB0879-MSD1)	Source: 2402467-01			Prepared & Analyzed: 02/28/24						
Acenaphthene	0.0177	0.00500	mg/kg	0.0333	ND	53.0	31-137	10.1	30	
Anthracene	0.0214	0.00500	"	0.0333	ND	64.1	30-120	10.1	30	
Benzo (a) anthracene	0.0201	0.00500	"	0.0333	ND	60.3	30-120	9.92	30	
Benzo (a) pyrene	0.0195	0.00500	"	0.0333	ND	58.4	30-120	8.36	30	
Benzo (b) fluoranthene	0.0163	0.00500	"	0.0333	ND	49.0	30-120	9.03	30	
Benzo (k) fluoranthene	0.0178	0.00500	"	0.0333	ND	53.4	30-120	6.77	30	
Chrysene	0.0201	0.00500	"	0.0333	ND	60.4	30-120	6.92	30	
Dibenz (a,h) anthracene	0.0164	0.00500	"	0.0333	ND	49.3	30-120	9.81	30	
Fluoranthene	0.0200	0.00500	"	0.0333	ND	60.0	30-120	7.02	30	
Fluorene	0.0186	0.00500	"	0.0333	ND	55.9	30-120	7.62	30	
Indeno (1,2,3-cd) pyrene	0.0157	0.00500	"	0.0333	ND	47.2	30-120	8.69	30	
Pyrene	0.0213	0.00500	"	0.0333	ND	63.8	35-142	4.63	30	
1-Methylnaphthalene	0.0144	0.00500	"	0.0333	ND	43.3	15-130	29.3	50	
2-Methylnaphthalene	0.0176	0.00500	"	0.0333	ND	52.8	15-130	8.41	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0142</i>		<i>"</i>	<i>0.0333</i>		<i>42.7</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0146</i>		<i>"</i>	<i>0.0333</i>		<i>43.8</i>	<i>40-150</i>			

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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

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

Batch BHC0181 - EPA 3050B

Blank (BHC0181-BLK1)

Prepared: 03/07/24 Analyzed: 03/11/24

Boron ND 2.00 mg/L

LCS (BHC0181-BS1)

Prepared: 03/07/24 Analyzed: 03/11/24

Boron 4.68 2.00 mg/L 5.00 93.6 80-120

Duplicate (BHC0181-DUP1)

Source: 2402448-01

Prepared: 03/07/24 Analyzed: 03/11/24

Boron ND 2.00 mg/L 0.0120 200 20 QR-01

Matrix Spike (BHC0181-MS1)

Source: 2402448-01

Prepared: 03/07/24 Analyzed: 03/11/24

Boron 4.52 2.00 mg/L 5.00 0.0120 90.2 75-125

Matrix Spike Dup (BHC0181-MSD1)

Source: 2402448-01

Prepared: 03/07/24 Analyzed: 03/11/24

Boron 4.40 2.00 mg/L 5.00 0.0120 87.8 75-125 2.69 25

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BHC0007 - EPA 3050B

Blank (BHC0007-BLK1)

Prepared: 03/01/24 Analyzed: 03/04/24

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

LCS (BHC0007-BS1)

Prepared: 03/01/24 Analyzed: 03/04/24

Arsenic	44.6	0.200	mg/kg wet	40.0	112	80-120
Barium	44.1	0.400	"	40.0	110	80-120
Cadmium	2.03	0.200	"	2.00	102	80-120
Copper	39.6	0.400	"	40.0	99.0	80-120
Lead	20.1	0.200	"	20.0	100	80-120
Nickel	39.3	0.400	"	40.0	98.2	80-120
Silver	2.00	0.0200	"	2.00	100	80-120
Zinc	39.1	0.400	"	40.0	97.8	80-120
Selenium	4.74	0.260	"	4.00	119	80-120

Duplicate (BHC0007-DUP1)

Source: 2402396-01

Prepared: 03/01/24 Analyzed: 03/04/24

Arsenic	2.91	0.200	mg/kg dry	2.78	4.66	20
Barium	75.1	0.400	"	89.2	17.2	20
Cadmium	0.113	0.200	"	0.102	10.1	20
Copper	2.45	0.400	"	2.49	1.68	20
Lead	6.40	0.200	"	5.93	7.70	20
Nickel	3.58	0.400	"	3.27	9.20	20
Silver	0.0312	0.0200	"	0.0308	1.46	20
Zinc	14.0	0.400	"	13.9	0.514	20
Selenium	ND	0.260	"	ND		20

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHC0007 - EPA 3050B

Matrix Spike (BHC0007-MS1)

Source: 2402396-01

Prepared: 03/01/24 Analyzed: 03/04/24

Arsenic	49.3	0.200	mg/kg dry	45.3	2.78	103	75-125			
Barium	119	0.400	"	45.3	89.2	65.2	75-125			QM-05
Cadmium	2.37	0.200	"	2.26	0.102	100	75-125			
Copper	31.2	0.400	"	45.3	2.49	63.4	75-125			QM-05
Lead	28.5	0.200	"	22.6	5.93	99.8	75-125			
Nickel	32.2	0.400	"	45.3	3.27	63.8	75-125			QM-05
Silver	2.21	0.0200	"	2.26	0.0308	96.4	75-125			
Zinc	43.5	0.400	"	45.3	13.9	65.5	75-125			QM-05
Selenium	7.26	0.260	"	4.53	ND	160	75-125			QM-05

Matrix Spike Dup (BHC0007-MSD1)

Source: 2402396-01

Prepared: 03/01/24 Analyzed: 03/04/24

Arsenic	49.8	0.200	mg/kg dry	45.3	2.78	104	75-125	1.06	25	
Barium	122	0.400	"	45.3	89.2	71.7	75-125	2.45	25	QM-05
Cadmium	2.44	0.200	"	2.26	0.102	103	75-125	3.05	25	
Copper	31.3	0.400	"	45.3	2.49	63.6	75-125	0.288	25	QM-05
Lead	29.4	0.200	"	22.6	5.93	104	75-125	2.98	25	
Nickel	32.3	0.400	"	45.3	3.27	64.2	75-125	0.491	25	QM-05
Silver	2.27	0.0200	"	2.26	0.0308	98.9	75-125	2.46	25	
Zinc	43.6	0.400	"	45.3	13.9	65.7	75-125	0.224	25	QM-05
Selenium	7.07	0.260	"	4.53	ND	156	75-125	2.55	25	QM-05

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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 BHC0305 - 3060A Mod

Blank (BHC0305-BLK1)

Prepared: 03/12/24 Analyzed: 03/13/24

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BHC0305-BS1)

Prepared: 03/12/24 Analyzed: 03/13/24

Chromium, Hexavalent 25.3 0.30 mg/kg wet 25.0 101 80-120

Duplicate (BHC0305-DUP1)

Source: 2402447-01

Prepared: 03/12/24 Analyzed: 03/13/24

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BHC0305-MS1)

Source: 2402447-01

Prepared: 03/12/24 Analyzed: 03/13/24

Chromium, Hexavalent 32.8 0.30 mg/kg dry 30.0 ND 109 75-125

Matrix Spike Dup (BHC0305-MSD1)

Source: 2402447-01

Prepared: 03/12/24 Analyzed: 03/13/24

Chromium, Hexavalent 32.9 0.30 mg/kg dry 30.0 ND 110 75-125 0.183 20

Summit Scientific

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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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

Summit Scientific

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

Batch BHB0864 - General Preparation

Blank (BHB0864-BLK1)

Prepared: 02/27/24 Analyzed: 03/01/24

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

LCS (BHB0864-BS1)

Prepared: 02/27/24 Analyzed: 03/01/24

Calcium	6.40	0.0500	mg/L wet	5.00	128	70-130				
Magnesium	5.67	0.0500	"	5.00	113	70-130				
Sodium	5.65	0.0500	"	5.00	113	70-130				

Summit Scientific

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Civitas Resources
 650 Southgate Drive
 Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
 Project Manager: Costin McQueen

Reported:
 03/14/24 07:27

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

Summit Scientific

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

Batch BHC0072 - General Preparation

Duplicate (BHC0072-DUP1)

Source: 2402366-01

Prepared & Analyzed: 03/05/24

% Solids	93.1		%		93.4			0.318	20	
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Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

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

Summit Scientific

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

Batch BHB0866 - General Preparation

Blank (BHB0866-BLK1)

Prepared: 02/27/24 Analyzed: 02/28/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHB0866-BS1)

Prepared: 02/27/24 Analyzed: 02/28/24

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.9 95-105

Duplicate (BHB0866-DUP1)

Source: 2402467-01

Prepared: 02/27/24 Analyzed: 02/28/24

Specific Conductance (EC) 0.122 0.0100 mmhos/cm 0.124 1.14 20

Summit Scientific

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Civitas Resources
 650 Southgate Drive
 Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
 Project Manager: Costin McQueen

Reported:
 03/14/24 07:27

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 BHB0867 - General Preparation

LCS (BHB0867-BS1)

Prepared: 02/27/24 Analyzed: 02/28/24

pH	9.13	pH Units	9.18	99.5	95-105
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Duplicate (BHB0867-DUP1)

Source: 2402467-01

Prepared: 02/27/24 Analyzed: 02/28/24

pH	8.75	pH Units	8.75	0.00	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.





Civitas Resources
650 Southgate Drive
Windsor CO, 80550

Project: Mickey #7

Project Number: [none]
Project Manager: Costin McQueen

Reported:
03/14/24 07:27

Notes and Definitions

- 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.
- 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

May 02, 2024

Sam Vogt

Tasman Geosciences

6855 W. 119th Ave.

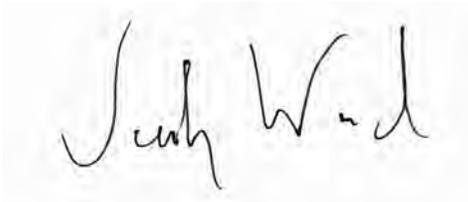
Broomfield, CO 80020

RE: Civitas - Mickey 5-F SEP

Work Order #2404076

Enclosed are the results of analyses for samples received by Summit Scientific on 04/04/24 17:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jacob Wood". The signature is written in a cursive style and is centered within a light gray rectangular box.

Jacob Wood For Paul Shrewsbury

President



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
 Project Manager: Sam Vogt

Reported:
 05/02/24 14:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
DEL-V01@1'	2404076-01	Soil	04/04/24 09:00	04/04/24 17:06
DEL-V01@5'	2404076-02	Soil	04/04/24 09:15	04/04/24 17:06
DEL-V01@7'	2404076-03	Soil	04/04/24 09:30	04/04/24 17:06
DEL-S01@1'	2404076-04	Soil	04/04/24 09:45	04/04/24 17:06
DEL-S01@5'	2404076-05	Soil	04/04/24 10:00	04/04/24 17:06
DEL-W01@1'	2404076-06	Soil	04/04/24 10:10	04/04/24 17:06
DEL-W01@5'	2404076-07	Soil	04/04/24 10:20	04/04/24 17:06
DEL-E01@1'	2404076-08	Soil	04/04/24 10:30	04/04/24 17:06
DEL-E01@5'	2404076-09	Soil	04/04/24 10:40	04/04/24 17:06
DEL-N01@1'	2404076-10	Soil	04/04/24 10:50	04/04/24 17:06
DEL-N01@5'	2404076-11	Soil	04/04/24 11:00	04/04/24 17:06

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

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

Lab ID	Page 1 of 1
2404076	

Client: Civitas/Tasman	Send Data To: Project Manager: Sam Vogt/Jacob Evans	Send Invoice To: Company: Civitas
Address: 6855 W. 119th Ave	E-Mail: svgot@tasman-geo.com; jevans@civiresources.com	Project Name/Location:
City/State/Zip: Broomfield, CO 80020	Project Name: Mickey 5-F SEP	AP# C/C: Cox 0920
Phone: PM (610) 405-9078	Project Number:	PO/Billing Codes: 8528-102
Sampler Name: Daniel Hensel		Contact:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested							Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEXN	1,2,4 + 1,3,5 TMBS	TPH (GRO, DRO, ORO)	PAHs	pH, EC, SAR	Boron		Metals
1	DEL-V01 e 1'	4/4/24	9:00	2			X			X			X	X	X				X	pH, EC, SAR by Saturated paste preparation method Boron by Hot Water Soluble preparation method Table 915 Metals - As, Ba, Cd, Cu, Pb, Ni, Se, Ag, Zn, Cr VI
2	DEL-V01 e 5'		9:15	1									X	X	X					
3	DEL-V01 e 7'		9:30	1									X	X	X					
4	DEL-S01 e 1'		9:45	1									X	X	X					
5	DEL-S01 e 5'		10:00	1									X	X	X					
6	DEL-W01 e 1'		10:10	1									X	X	X					
7	DEL-W01 e 5'		10:20	1									X	X	X					
8	DEL-E01 e 1'		10:30	1									X	X	X					
9	DEL-E01 e 5'		10:40	1									X	X	X					
10	DEL-N01 e 1'		10:50	1									X	X	X					
11	DEL-N01 e 5'		11:00	1									X	X	X					
12																				
13																				
14																				
15																				

Relinquished by: <i>[Signature]</i> 4/4/24	Date/Time: 16:45	Received by: Tasman Lockbox	Date/Time: 16:45	TAT Business Days	Field DO	Notes:
Relinquished by: <i>[Signature]</i> 4/24	Date/Time: 17:00	Received by: <i>[Signature]</i>	Date/Time: 17:00	Same Day <input checked="" type="checkbox"/>	Field EC	
Relinquished by: <i>[Signature]</i>	Date/Time:	Received by:	Date/Time:	1 Day	Field ORP	
Relinquished by:	Date/Time:	Received by:	Date/Time:	2 Days	Field pH	
Relinquished by:	Date/Time:	Received by:	Date/Time:	3 Days	Field Temp.	
Temperature Upon Receipt: 9.1	Corrected Temperature: 9	IR gun #: 1	HNO3 lot #:	Standard	Field Turb.	

S₂

Sample Receipt Checklist

S2 Work Order# 2404076

Client: CWAast (aman) Client Project ID: Mickey SF SEP

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other Airbill #: _____

Matrix (Check all that apply) Air Soil Solid Water Other

Temp (°C) Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ONCE
If custody seals are present, are they intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽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"/>	
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"/>	
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"/>	
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, H ₂ SO ₄ , NaOH, HNO ₃ , 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.

AS
Custodian Printed Name

4/4/24
Date/Time



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@1'
2404076-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0399	99.8 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0413	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.66	69.3 %		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: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@1'
2404076-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/05/24	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: **04/04/24 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0164	49.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0146	43.9 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	207	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	58.2	0.0500	"	"	"	"	"	"	
Sodium	646	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@1'
2404076-01 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 09:00**

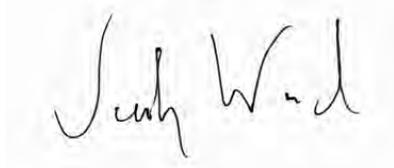
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.2	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 09:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.8		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@5'
2404076-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 09:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0409	102 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0422	106 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0417	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.05	72.4 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@5'
2404076-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/05/24	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: **04/04/24 09:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 2-Methylnaphthalene-d10	0.0168	50.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0178	53.5 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	23.3	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	10.1	0.0500	"	"	"	"	"	"	
Sodium	54.6	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@5'
2404076-02 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.38	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 09:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	80.0		%	1	BHD0260	04/09/24	04/09/24	Calculation	

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: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@7'
2404076-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0402	100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0412	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0414	103 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.04	72.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@7'
2404076-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/05/24	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: **04/04/24 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0190	57.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0207	62.0 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	23.3	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	9.94	0.0500	"	"	"	"	"	"	
Sodium	74.6	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-V01@7'
2404076-03 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 09:30**

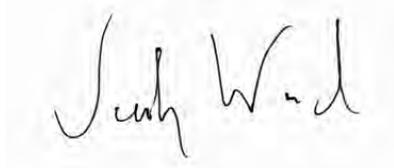
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.26	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 09:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	83.7		%	1	BHD0260	04/09/24	04/09/24	Calculation	

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@1'
2404076-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0401	100 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0420	105 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0417	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.83	70.7 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@1'
2404076-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/05/24	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: **04/04/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0180	54.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0175	52.5 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	41.1	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	5.11	0.0500	"	"	"	"	"	"	
Sodium	15.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@1'
2404076-04 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 09:45**

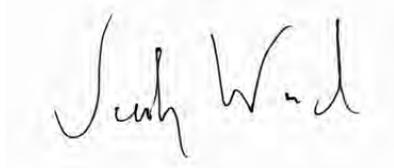
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.606	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 09:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.3		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@5'
2404076-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0394	98.5 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0412	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0415	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.94	79.5 %		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: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@5'
2404076-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0168	50.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0163	49.0 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	14.2	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	2.21	0.0500	"	"	"	"	"	"	
Sodium	12.5	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-S01@5'
2404076-05 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:00**

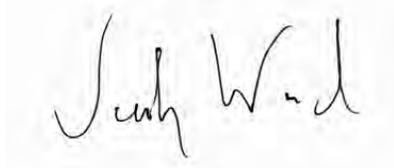
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.815	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	193		%	1	BHD0260	04/09/24	04/09/24	Calculation	

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@1'
2404076-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	0.0406	102 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0411	103 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0408	102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	8.06	64.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@1'
2404076-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 2-Methylnaphthalene-d10	0.0137	41.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0142	42.6 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	49.7	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	11.0	0.0500	"	"	"	"	"	"	
Sodium	57.3	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@1'
2404076-06 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:10**

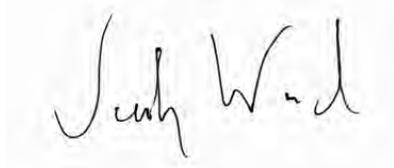
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.92	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.1		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@5'
2404076-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0389	97.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0399	99.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.27	74.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@5'
2404076-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0147	44.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0150	45.0 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	46.6	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	21.0	0.0500	"	"	"	"	"	"	
Sodium	42.8	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-W01@5'
2404076-07 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:20**

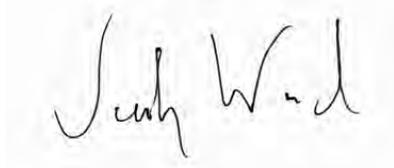
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.31	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.0		%	1	BHD0260	04/09/24	04/09/24	Calculation	

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@1'
2404076-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/04/24	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: **04/04/24 10:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0404	101 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0409	102 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0416	104 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/04/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.63	69.1 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@1'
2404076-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 2-Methylnaphthalene-d10	0.0204	61.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0199	59.8 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	49.2	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	7.95	0.0500	"	"	"	"	"	"	
Sodium	6.52	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@1'
2404076-08 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:30**

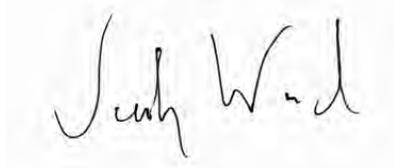
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.227	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@5'
2404076-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/05/24	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: **04/04/24 10:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0368	92.0 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0418	105 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0409	102 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/05/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	8.72	69.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@5'
2404076-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 2-Methylnaphthalene-d10	0.0184	55.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0175	52.4 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	34.4	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	8.81	0.0500	"	"	"	"	"	"	
Sodium	9.69	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-E01@5'
2404076-09 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:40**

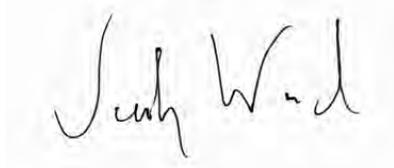
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.381	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	86.5		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@1'
2404076-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/05/24	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: **04/04/24 10:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0382	95.4 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0412	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0410	103 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/05/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	9.40	75.2 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@1'
2404076-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0189	56.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0203	60.8 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	48.5	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	5.05	0.0500	"	"	"	"	"	"	
Sodium	2.33	0.0500	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@1'
2404076-10 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 10:50**

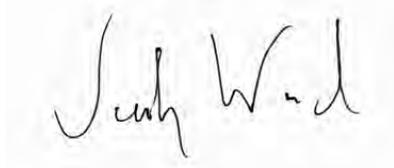
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0851	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.8		%	1	BHD0260	04/09/24	04/09/24	Calculation	

Summit Scientific



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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@5'
2404076-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHD0153	04/04/24	04/05/24	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: **04/04/24 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0409	102 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0412	103 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0411	103 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHD0156	04/04/24	04/05/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.2	89.3 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@5'
2404076-11 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHD0159	04/05/24	04/06/24	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: **04/04/24 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0149	44.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0143	42.9 %	40-150		"	"	"	"	

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

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	101	0.0500	mg/L dry	1	BHD0421	04/12/24	05/01/24	EPA 6020B	
Magnesium	32.7	0.0500	"	"	"	"	"	"	
Sodium	35.4	0.0500	"	"	"	"	"	"	

Calculated Analysis

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

DEL-N01@5'
2404076-11 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.783	0.00100	units	1	BHE0055	05/02/24	05/02/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **04/04/24 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	84.5		%	1	BHD0260	04/09/24	04/09/24	Calculation	

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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 BHD0153 - EPA 5030 Soil MS

Blank (BHD0153-BLK1)

Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0349		"	0.0400		87.3	50-150			
<i>Surrogate: Toluene-d8</i>	0.0435		"	0.0400		109	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0386		"	0.0400		96.4	50-150			

LCS (BHD0153-BS1)

Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	0.0955	0.0020	mg/kg	0.100		95.5	70-130			
Toluene	0.0957	0.0050	"	0.100		95.7	70-130			
Ethylbenzene	0.104	0.0050	"	0.100		104	70-130			
m,p-Xylene	0.208	0.010	"	0.200		104	70-130			
o-Xylene	0.100	0.0050	"	0.100		100	70-130			
1,2,4-Trimethylbenzene	0.100	0.0050	"	0.100		100	70-130			
1,3,5-Trimethylbenzene	0.0992	0.0050	"	0.100		99.2	70-130			
Naphthalene	0.0960	0.0038	"	0.100		96.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0362		"	0.0400		90.5	50-150			
<i>Surrogate: Toluene-d8</i>	0.0418		"	0.0400		104	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0384		"	0.0400		96.1	50-150			

Matrix Spike (BHD0153-MS1)

Source: 2404060-01

Prepared: 04/04/24 Analyzed: 04/05/24

Benzene	0.0831	0.0020	mg/kg	0.100	ND	83.1	70-130			
Toluene	0.0841	0.0050	"	0.100	ND	84.1	70-130			
Ethylbenzene	0.0916	0.0050	"	0.100	ND	91.6	70-130			
m,p-Xylene	0.180	0.010	"	0.200	ND	89.9	70-130			
o-Xylene	0.0901	0.0050	"	0.100	ND	90.1	70-130			
1,2,4-Trimethylbenzene	0.0882	0.0050	"	0.100	ND	88.2	70-130			
1,3,5-Trimethylbenzene	0.0900	0.0050	"	0.100	ND	90.0	70-130			
Naphthalene	0.0708	0.0038	"	0.100	ND	70.8	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0392		"	0.0400		98.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0417		"	0.0400		104	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0392		"	0.0400		98.0	50-150			

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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 BHD0153 - EPA 5030 Soil MS

Matrix Spike Dup (BHD0153-MSD1)	Source: 2404060-01			Prepared: 04/04/24 Analyzed: 04/05/24						
Benzene	0.0854	0.0020	mg/kg	0.100	ND	85.4	70-130	2.71	30	
Toluene	0.0877	0.0050	"	0.100	ND	87.7	70-130	4.12	30	
Ethylbenzene	0.0952	0.0050	"	0.100	ND	95.2	70-130	3.76	30	
m,p-Xylene	0.188	0.010	"	0.200	ND	94.2	70-130	4.68	30	
o-Xylene	0.0917	0.0050	"	0.100	ND	91.7	70-130	1.82	30	
1,2,4-Trimethylbenzene	0.0911	0.0050	"	0.100	ND	91.1	70-130	3.18	30	
1,3,5-Trimethylbenzene	0.0929	0.0050	"	0.100	ND	92.9	70-130	3.12	30	
Naphthalene	0.0729	0.0038	"	0.100	ND	72.9	70-130	2.84	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0392</i>		<i>"</i>	<i>0.0400</i>		<i>98.1</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0419</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0399</i>		<i>"</i>	<i>0.0400</i>		<i>99.8</i>	<i>50-150</i>			

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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 BHD0156 - EPA 3550A

Blank (BHD0156-BLK1)

Prepared: 04/04/24 Analyzed: 04/05/24

C10-C28 (DRO)	ND	50	mg/kg								
C28-C36 (ORO)	ND	50	"								
Surrogate: <i>o</i> -Terphenyl	16.2		"	12.5		130		30-150			

LCS (BHD0156-BS1)

Prepared: 04/04/24 Analyzed: 04/05/24

C10-C28 (DRO)	411	50	mg/kg	500		82.3		70-130			
Surrogate: <i>o</i> -Terphenyl	10.4		"	12.5		82.9		30-150			

Matrix Spike (BHD0156-MS1)

Source: 2404060-01

Prepared: 04/04/24 Analyzed: 04/05/24

C10-C28 (DRO)	395	50	mg/kg	500	12.8	76.4		70-130			
Surrogate: <i>o</i> -Terphenyl	6.97		"	12.5		55.8		30-150			

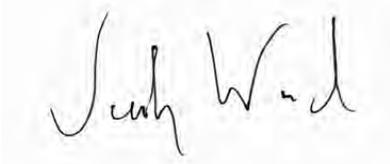
Matrix Spike Dup (BHD0156-MSD1)

Source: 2404060-01

Prepared: 04/04/24 Analyzed: 04/05/24

C10-C28 (DRO)	431	50	mg/kg	500	12.8	83.7		70-130	8.84	20	
Surrogate: <i>o</i> -Terphenyl	7.21		"	12.5		57.6		30-150			

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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 BHD0159 - EPA 5030 Soil MS

Blank (BHD0159-BLK1)

Prepared & Analyzed: 04/05/24

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>	<i>0.0208</i>		"	<i>0.0333</i>		<i>62.5</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0185</i>		"	<i>0.0333</i>		<i>55.4</i>	<i>40-150</i>			

LCS (BHD0159-BS1)

Prepared & Analyzed: 04/05/24

Acenaphthene	0.0212	0.00500	mg/kg	0.0333		63.6	31-137			
Anthracene	0.0216	0.00500	"	0.0333		64.9	30-120			
Benzo (a) anthracene	0.0167	0.00500	"	0.0333		50.2	30-120			
Benzo (a) pyrene	0.0155	0.00500	"	0.0333		46.4	30-120			
Benzo (b) fluoranthene	0.0161	0.00500	"	0.0333		48.3	30-120			
Benzo (k) fluoranthene	0.0168	0.00500	"	0.0333		50.5	30-120			
Chrysene	0.0204	0.00500	"	0.0333		61.3	30-120			
Dibenz (a,h) anthracene	0.0140	0.00500	"	0.0333		42.1	30-120			
Fluoranthene	0.0177	0.00500	"	0.0333		53.2	30-120			
Fluorene	0.0165	0.00500	"	0.0333		49.5	30-120			
Indeno (1,2,3-cd) pyrene	0.0176	0.00500	"	0.0333		52.9	30-120			
Pyrene	0.0256	0.00500	"	0.0333		76.9	35-142			
1-Methylnaphthalene	0.0239	0.00500	"	0.0333		71.8	35-142			
2-Methylnaphthalene	0.0218	0.00500	"	0.0333		65.4	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0228</i>		"	<i>0.0333</i>		<i>68.4</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0188</i>		"	<i>0.0333</i>		<i>56.4</i>	<i>40-150</i>			

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6855 W. 119th Ave.
Broomfield CO, 80020

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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 BHD0159 - EPA 5030 Soil MS

Matrix Spike (BHD0159-MS1)	Source: 2404060-01			Prepared & Analyzed: 04/05/24						
Acenaphthene	0.0158	0.00500	mg/kg	0.0333	ND	47.3	31-137			
Anthracene	0.0157	0.00500	"	0.0333	ND	47.2	30-120			
Benzo (a) anthracene	0.0147	0.00500	"	0.0333	ND	44.1	30-120			
Benzo (a) pyrene	0.0136	0.00500	"	0.0333	ND	40.7	30-120			
Benzo (b) fluoranthene	0.0150	0.00500	"	0.0333	ND	45.0	30-120			
Benzo (k) fluoranthene	0.0139	0.00500	"	0.0333	ND	41.7	30-120			
Chrysene	0.0161	0.00500	"	0.0333	ND	48.3	30-120			
Dibenz (a,h) anthracene	0.0164	0.00500	"	0.0333	ND	49.2	30-120			
Fluoranthene	0.0165	0.00500	"	0.0333	ND	49.6	30-120			
Fluorene	0.0146	0.00500	"	0.0333	ND	43.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	ND	49.7	30-120			
Pyrene	0.0149	0.00500	"	0.0333	ND	44.7	35-142			
1-Methylnaphthalene	0.0155	0.00500	"	0.0333	ND	46.6	15-130			
2-Methylnaphthalene	0.0146	0.00500	"	0.0333	ND	43.8	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0151</i>		<i>"</i>	<i>0.0333</i>		<i>45.3</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0163</i>		<i>"</i>	<i>0.0333</i>		<i>49.0</i>	<i>40-150</i>			

Matrix Spike Dup (BHD0159-MSD1)	Source: 2404060-01			Prepared & Analyzed: 04/05/24						
Acenaphthene	0.0149	0.00500	mg/kg	0.0333	ND	44.8	31-137	5.38	30	
Anthracene	0.0164	0.00500	"	0.0333	ND	49.3	30-120	4.43	30	
Benzo (a) anthracene	0.0163	0.00500	"	0.0333	ND	49.0	30-120	10.4	30	
Benzo (a) pyrene	0.0157	0.00500	"	0.0333	ND	47.1	30-120	14.6	30	
Benzo (b) fluoranthene	0.0161	0.00500	"	0.0333	ND	48.4	30-120	7.36	30	
Benzo (k) fluoranthene	0.0146	0.00500	"	0.0333	ND	43.7	30-120	4.81	30	
Chrysene	0.0153	0.00500	"	0.0333	ND	45.8	30-120	5.26	30	
Dibenz (a,h) anthracene	0.0164	0.00500	"	0.0333	ND	49.2	30-120	0.0488	30	
Fluoranthene	0.0170	0.00500	"	0.0333	ND	51.1	30-120	3.06	30	
Fluorene	0.0142	0.00500	"	0.0333	ND	42.5	30-120	3.08	30	
Indeno (1,2,3-cd) pyrene	0.0166	0.00500	"	0.0333	ND	49.8	30-120	0.127	30	
Pyrene	0.0155	0.00500	"	0.0333	ND	46.5	35-142	4.08	30	
1-Methylnaphthalene	0.0164	0.00500	"	0.0333	ND	49.1	15-130	5.29	50	
2-Methylnaphthalene	0.0153	0.00500	"	0.0333	ND	45.9	15-130	4.84	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0140</i>		<i>"</i>	<i>0.0333</i>		<i>42.0</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0137</i>		<i>"</i>	<i>0.0333</i>		<i>41.2</i>	<i>40-150</i>			

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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

Summit Scientific

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

Batch BHD0421 - General Preparation

Blank (BHD0421-BLK1)

Prepared: 04/12/24 Analyzed: 05/01/24

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

LCS (BHD0421-BS1)

Prepared: 04/12/24 Analyzed: 05/01/24

Calcium	5.85	0.0500	mg/L wet	5.00		117	70-130			
Magnesium	5.21	0.0500	"	5.00		104	70-130			
Sodium	5.24	0.0500	"	5.00		105	70-130			

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

Project: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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

Summit Scientific

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

Batch BHD0260 - General Preparation

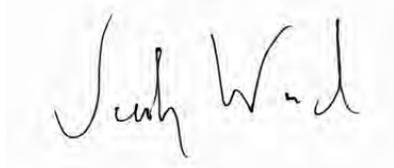
Duplicate (BHD0260-DUP1)

Source: 2404066-04

Prepared & Analyzed: 04/09/24

% Solids	94.2	%	94.3	0.138	20
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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: Civitas - Mickey 5-F SEP

Project Number: [none]
Project Manager: Sam Vogt

Reported:
05/02/24 14:58

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