

# **Doniphan-Shields-61N69W 11NENW**

NENW Sec. 11-T1N-R69W

API #'s: 013-06104 (2), 013-06541 (12-11)

Facility ID: 336380

Remediation Project #: 34305

Form 19 Data Package

June 2024




Prepared by Tasman, Inc.







On behalf of Crestone Peak Resources Operating, LLC








# PHOTO LOG

							
330°NW (T) ● 40°4'10"N, 105°5'11"W ±16ft ▲ 5002ft			327°NW (T) ● 40°4'10"N, 105°5'11"W ±16ft ▲ 5002ft				
							
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>		<b>Volume:</b>		<b>Material:</b>		<b>Volume:</b>	
<b>Contents:</b>				<b>Contents:</b>			
<b>Notes/Conditions:</b> Soil Sample LocationS				<b>Notes/Conditions:</b> Soil Sample LocationS			


									
						<b>Equipment ID:</b> <b>Equipment Type:</b>			<b>Equipment ID:</b> <b>Equipment Type:</b>
<b>Material:</b>		<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>		<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b> Soil sampling locations.					<b>Notes/Conditions:</b> Soil sampling location.				

							
☉ 61°NE (T) ● 40°4'9"N, 105°5'12"W ±16ft ▲ 5001ft			☉ 359°N (T) ● 40°4'9"N, 105°5'10"W ±16ft ▲ 5000ft				
 <p style="text-align: center;">ECD-B01@3 X</p> <p style="text-align: right;">19 Jun 2024 13:23:33</p>			 <p style="text-align: center;">PW-W01@3 X</p> <p style="text-align: center;">PW-N01@3 X</p> <p style="text-align: center;">GW-02 X</p> <p style="text-align: center;">PW-B01@4 X</p> <p style="text-align: right;">19 Jun 2024 13:29:38</p>				
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b> Soil sampling location.				<b>Notes/Conditions:</b> Soil and groundwater sampling locations.			

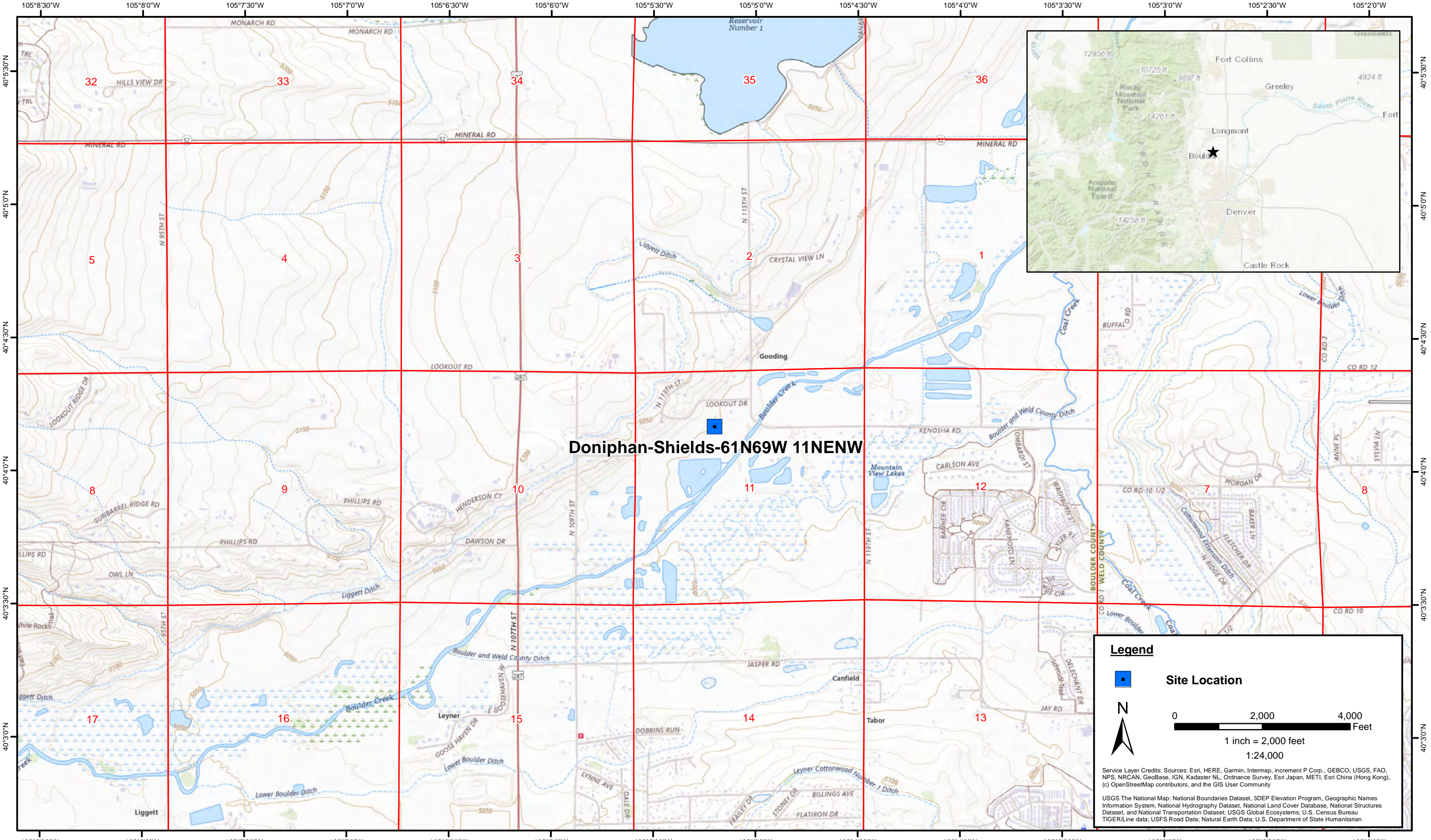
							
137°SE (T) ● 40°4'9"N, 105°5'10"W ±16ft ▲ 4999ft			125°SE (T) ● 40°4'9"N, 105°5'11"W ±16ft ▲ 5000ft				
 <p style="text-align: center;">GW-02 X</p> <p style="text-align: right;">19 Jun 2024 13:39:00</p>			 <p style="text-align: center;">PW-E01@3' X</p> <p style="text-align: center;">DL-B02@3' X</p> <p style="text-align: center;">PW-S01@3' X</p> <p style="text-align: right;">19 Jun 2024 13:29:51</p>				
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>		<b>Volume:</b>		<b>Material:</b>		<b>Volume:</b>	
<b>Contents:</b>				<b>Contents:</b>			
<b>Notes/Conditions:</b> Groundwater sampling location.				<b>Notes/Conditions:</b> Soil sampling locations.			

					
☀ 113°SE (T) ● 40°4'9"N, 105°5'10"W ±16ft ▲ 5000ft			☀ 36°NE (T) ● 40°4'9"N, 105°5'10"W ±16ft ▲ 4995ft		
					
<b>Equipment ID:</b>		<b>Equipment Type:</b>	<b>Equipment ID:</b>		<b>Equipment Type:</b>
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>
<b>Notes/Conditions:</b> Soil sampling location.			<b>Notes/Conditions:</b> Soil sampling location.		

 <p>W 270 NW 300 N 0 NE 60 E 300 NW 330 N 0 NE 60 E 90</p> <p>☉ 355°N (T) ● 40°4'9"N, 105°5'10"W ±16ft ▲ 4995ft</p>			 <p>W 270 NW 300 N 0 NE 60 E 300 NW 330 N 0 NE 60 E 90</p> <p>☉ 22°NE (T) ● 40°4'9"N, 105°5'11"W ±16ft ▲ 5005ft</p>		
 <p style="color: yellow; text-align: center;">DL-B04@3 X</p> <p style="text-align: right; font-size: small;">19 Jun 2024 13:31:47</p>			 <p style="text-align: right; font-size: small;">19 Jun 2024 13:37:33</p>		
<b>Equipment ID:</b>		<b>Equipment Type:</b>	<b>Equipment ID:</b>		<b>Equipment Type:</b>
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>
<b>Notes/Conditions:</b> Soil sampling location.			<b>Notes/Conditions:</b> PW excavation overview.		

							
<b>Equipment ID:</b>		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b> <small>AST overview.</small>				<b>Notes/Conditions:</b>			

# FIGURES



**Doniphan-Shields-61N69W 11NENW**

**Legend**

■ Site Location

N

0 2,000 4,000 Feet

1 inch = 2,000 feet  
1:24,000

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian

DATE: June 2024

DESIGNED BY: S. Vogt

DRAWN BY: L. Reed

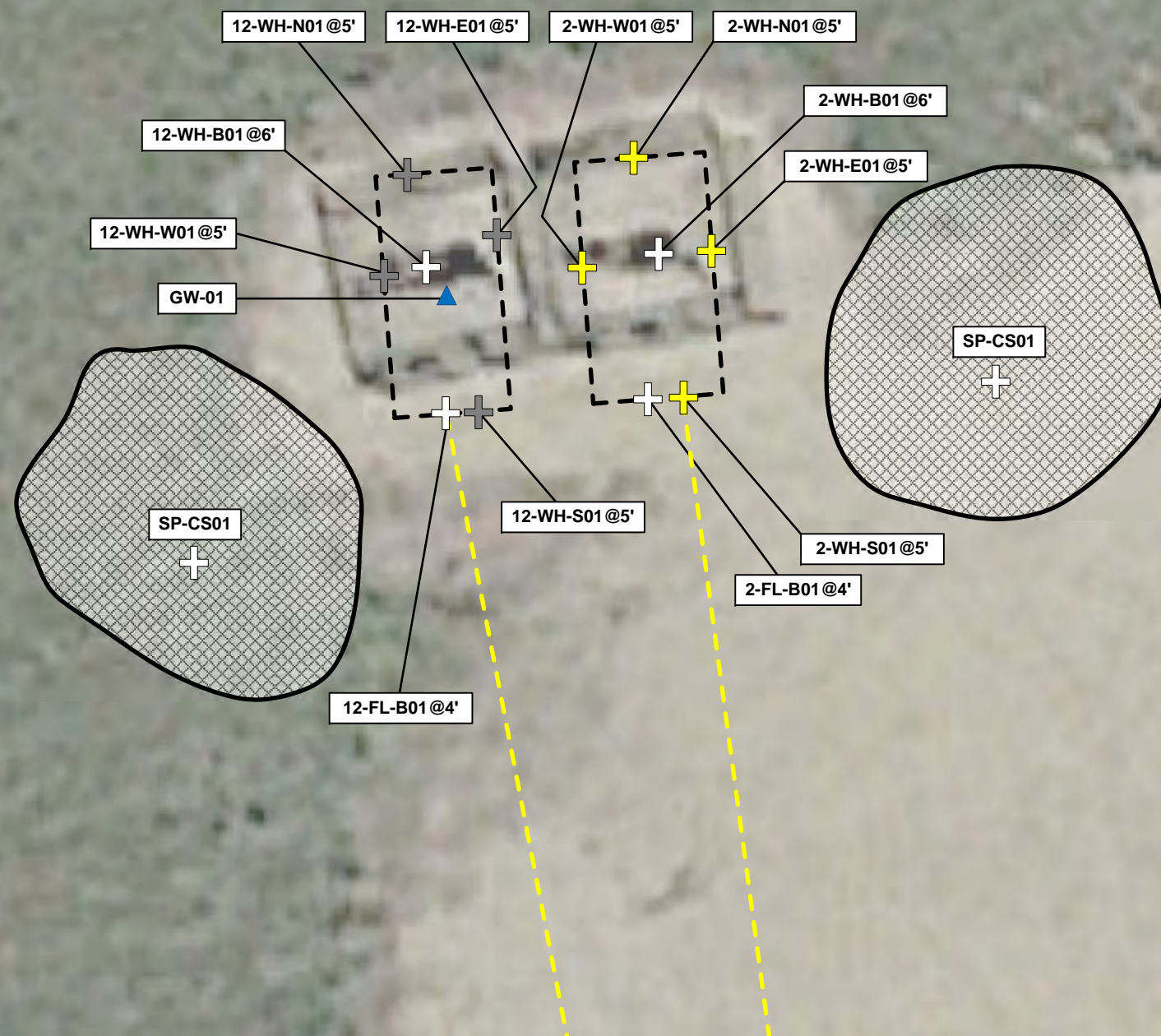


**Tasman, Inc.**  
6855 W. 119th Ave  
Broomfield, CO 80020

**Crestone Peak Resources Operating LLC**  
**Doniphan-Shields-61N69W 11NENW**  
NENW Sec. 11-T1N-R69W  
Boulder County, Colorado

Site Location Map

Figure  
1



**Legend**

- Soil sample location – Field Screened (Collected via Trimble GPS)
- Soil sample location – On-Hold for Laboratory Analysis (Collected via Trimble GPS)
- Soil sample location – Submitted for Laboratory Analysis (Collected via Trimble GPS)
- Groundwater sample location – Submitted for Laboratory Analysis (Collected via Trimble GPS)
- Excavation extent (Collected via Trimble GPS)
- Stockpile location (Collected via Trimble GPS)
- Flowline Location

**Notes**

Crestone Peak Resources Operating, LLC site infrastructure has been removed.

All locations are approximate unless otherwise noted.

GPS = Global Positioning System

0 ft. 10 ft. 20 ft.

Image Source: Google Earth

DATE:	June 19, 2024
DESIGNED BY:	S. Vogt
DRAWN BY:	L. Molson

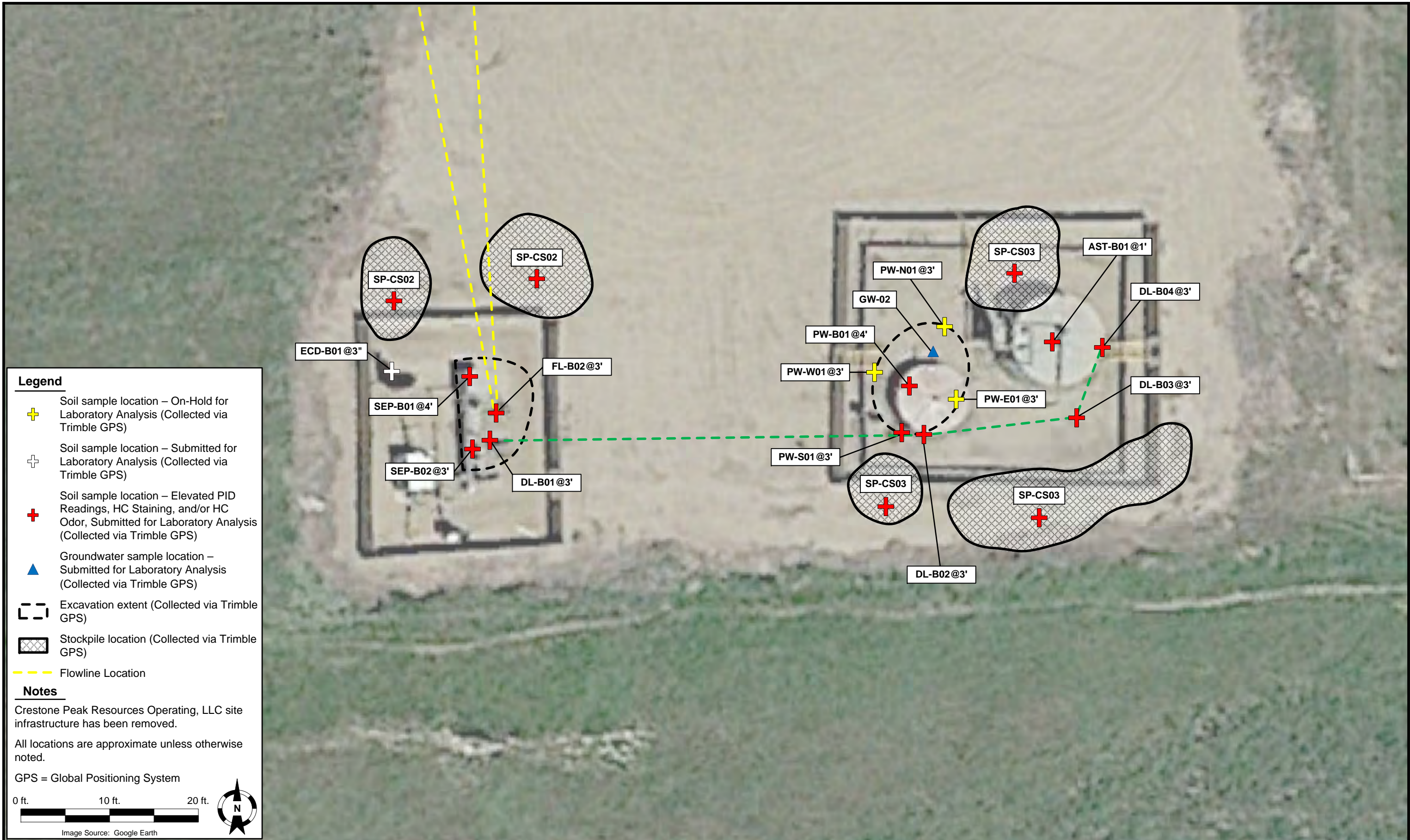


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 Boulder County, Colorado

Wellhead Soil Sample  
 Location Map  
 (06/13/2024)

Figure  
 2A



**Legend**

- + Soil sample location – On-Hold for Laboratory Analysis (Collected via Trimble GPS)
- + Soil sample location – Submitted for Laboratory Analysis (Collected via Trimble GPS)
- + Soil sample location – Elevated PID Readings, HC Staining, and/or HC Odor, Submitted for Laboratory Analysis (Collected via Trimble GPS)
- ▲ Groundwater sample location – Submitted for Laboratory Analysis (Collected via Trimble GPS)
- Excavation extent (Collected via Trimble GPS)
- Stockpile location (Collected via Trimble GPS)
- Flowline Location

**Notes**

Crestone Peak Resources Operating, LLC site infrastructure has been removed.  
 All locations are approximate unless otherwise noted.  
 GPS = Global Positioning System

0 ft.      10 ft.      20 ft.



Image Source: Google Earth

DATE: June 19, 2024  
 DESIGNED BY: S. Vogt  
 DRAWN BY: L. Molson



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 NENW Sec. 11-T1N-R69W  
 Boulder County, Colorado

Facility Soil Sample  
 Location Map  
 (06/19/2024)

Figure  
 2B

# TABLES

**TABLE 1**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SAMPLE LOCATIONS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



Sample Location	Depth	Date	PID Reading (ppm)	Latitude	Longitude	GPS PDOP Value	Lab (Y/N)
2-WH-B01@6'	6'	06/13/2024	302.5	40.069666	-105.086636	1	Y
2-WH-N01@5'	5'	06/13/2024	3.8	40.069682	-105.086642	1.1	On-Hold
2-WH-S01@5'	5'	06/13/2024	187.2	40.069647	-105.086632	1.3	On-Hold
2-WH-E01@5'	5'	06/13/2024	25.0	40.069666	-105.086624	1.1	On-Hold
2-WH-W01@5'	5'	06/13/2024	29.2	40.069663	-105.086654	1.1	On-Hold
2-FL-B01@4'	4'	06/13/2024	102.0	40.069639	-105.086638	1	Y
12-WH-B01@6'	6'	06/13/2024	87.7	40.069663	-105.086692	1	Y
12-WH-N01@5'	5'	06/13/2024	8.1	40.069678	-105.086696	1.5	N
12-WH-S01@5'	5'	06/13/2024	7.3	40.069645	-105.086680	1.2	N
12-WH-E01@5'	5'	06/13/2024	7.1	40.069669	-105.086678	1.4	N
12-WH-W01@5'	5'	06/13/2024	6.0	40.069661	-105.086700	1	N
12-FL-B01@4'	4'	06/13/2024	11.0	40.069638	-105.086684	1.5	Y
SP-CS01	-	06/13/2024	169.2	-	-	-	Y
GW-01	6'	06/13/2024	-	40.069666	-105.086689	1	Y
FL-B02@3'	3'	06/19/2024	117.3	40.069390	-104.086646	-	Y
SEP-B01@4'	4'	06/19/2024	11.5	40.069416	-105.086649	0.9	Y
SEP-B02@3'	3'	06/19/2024	525.7	40.069384	-105.086642	0.9	Y
PW-B01@4'	4'	06/19/2024	37.7	40.069399	-105.086380	0.9	Y
PW-N01@3'	3'	06/19/2024	8.8	40.069427	-105.086360	0.9	On-Hold
PW-S01@3'	3'	06/19/2024	26.3	40.069377	-105.086382	0.8	Y
PW-E01@3'	3'	06/19/2024	22.3	40.069396	-105.086359	0.9	On-Hold
PW-W01@3'	3'	06/19/2024	11.6	40.069406	-105.086403	0.9	On-Hold
AST-B01@1'	1'	06/19/2024	63.5	40.069406	-105.086314	0.8	Y
DL-B01@2'	2'	06/19/2024	35.1	40.069374	-105.086641	0.9	Y
DL-B02@3'	3'	06/19/2024	75.3	40.069378	-105.086373	0.9	Y
DL-B03@3'	3'	06/19/2024	1894.0	40.069385	-105.086280	0.9	Y
DL-B04@3'	3'	06/19/2024	1922.0	40.069418	-105.086268	0.8	Y
ECD-B01@3"	3'	06/19/2024	10.4	40.069420	-105.086695	0.8	Y
SP-CS02	-	06/19/2024	8.5	-	-	-	Y
SP-CS03	-	06/19/2024	10.2	-	-	-	Y
GW-02	4'	06/19/2024	-	40.069415	-105.086366	0.8	Y

**Notes:**

PID = Photoionization Detector

ppm = parts per million

GPS = Global Positioning System

**TABLE 1**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SAMPLE LOCATIONS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



Sample Location	Depth	Date	PID Reading (ppm)	Latitude	Longitude	GPS PDOP Value	Lab (Y/N)
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PDOP = Position Dilution of Precision

- = Not Applicable

On-Hold = On-Hold for Laboratory Analysis

**TABLE 2**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - VOCs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

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 <sup>(1)</sup>			0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
ECMC Organic Compounds in Soils - RSL <sup>(2)</sup>			1.2	490	5.8	58	2	500			30	27
2-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
2-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS01	-	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
FL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-S01@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST-B01@1'	1'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B01@2'	2'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B03@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B04@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
ECD-B01@3"	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS02	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**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

**TABLE 2**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - VOCs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

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 <sup>(1)</sup>			0.0026	0.69	0.78	9.9	0.0038	500			0.0081	0.0087
ECMC Organic Compounds in Soils - RSL <sup>(2)</sup>			1.2	490	5.8	58	2	500			30	27

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

Pending = Analytical results pending final laboratory reporting

**TABLE 3**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - PAHs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

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 <sup>(1)</sup>			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 <sup>(2)</sup>			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
2-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
2-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS01	-	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
FL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-S01@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST-B01@1'	1'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B01@2'	2'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B03@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B04@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
ECD-B01@3"	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS02	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**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

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

mg/kg = milligrams per kilogram

Benzo(a)A = Benzo(a)Anthracene

**TABLE 3**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - PAHs**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



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 <sup>(1)</sup>			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 <sup>(2)</sup>			360	1,800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180

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

Pending = Analytical results pending final laboratory reporting

**TABLE 4**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - METALS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

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 <sup>(1)</sup>			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ECMC Metals in Soils - RSL <sup>(2)</sup>			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
2-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
2-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
12-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS01	-	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
FL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SEP-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
PW-S01@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
AST-B01@1'	1'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B01@2'	2'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B03@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
DL-B04@3'	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
ECD-B01@3"	3'	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS02	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
SP-CS03	-	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**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

**TABLE 4**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - METALS**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

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 <sup>(1)</sup>			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
ECMC Metals in Soils - RSL <sup>(2)</sup>			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000

**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

Pending = Analytical results pending final laboratory reporting

**TABLE 5**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**SOIL ANALYTICAL DATA - SOIL RECLAMATION**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**



Soil Sample Location	Depth	Date	pH	SAR	EC (mmhos/cm)	Boron (mg/L)
<b>ECMC Soil Suitability for Reclamation<sup>(1)</sup></b>			<b>6 - 8.3</b>	<b>&lt; 6</b>	<b>&lt; 4</b>	<b>2</b>
2-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending
2-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending
12-WH-B01@6'	6'	06/13/2024	Pending	Pending	Pending	Pending
12-FL-B01@4'	4'	06/13/2024	Pending	Pending	Pending	Pending
SP-CS01	-	06/13/2024	Pending	Pending	Pending	Pending
FL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
SEP-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending
SEP-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
PW-B01@4'	4'	06/19/2024	Pending	Pending	Pending	Pending
PW-S01@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
AST-B01@1'	1'	06/19/2024	Pending	Pending	Pending	Pending
DL-B01@2'	2'	06/19/2024	Pending	Pending	Pending	Pending
DL-B02@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
DL-B03@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
DL-B04@3'	3'	06/19/2024	Pending	Pending	Pending	Pending
ECD-B01@3"	3'	06/19/2024	Pending	Pending	Pending	Pending
SP-CS02	-	06/19/2024	Pending	Pending	Pending	Pending
SP-CS03	-	06/19/2024	Pending	Pending	Pending	Pending

**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

Pending = Analytical results pending final laboratory reporting

**TABLE 6**  
**DONIPHAN-SHIELDS-61N69W 11NENW**  
**GROUNDWATER ANALYTICAL DATA**  
**CRESTONE PEAK RESOURCES OPERATING, LLC**

Groundwater Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ehtylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4-TMB (µg/L)	1,3,5-TMB (µg/L)	Chloride (mg/L)	Sulfate (mg/L)	TDS (mg/L)
<b>ECMC Organic Compounds in Groundwater and Groundwater Inorganic Parameters <sup>(1)</sup></b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	<b>140</b>	<b>67</b>	<b>67</b>	<b>250 or &lt;1.25 x Background</b>	<b>250 or &lt;1.25 x Background</b>	<b>&lt;1.25 x Background</b>
GW-01	06/13/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending
GW-02	06/19/2024	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending	Pending

**Notes:**

(1) Standards for groundwater are taken from ECMC Table 915-1: Organic Compounds in Groundwater and Groundwater Inorganic Parameters (Effective January 15, 2021)

ECMC = Colorado Energy & Carbon Management Commission

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

µg/L = micrograms per liter

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

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

TDS = Total Dissolved Solids

**BOLD** = Analytical result is in exceedance of ECMC Table 915-1: Organic Compounds in Groundwater and Groundwater Inorganic Parameters