

**INITIAL DECOMMISSIONING REPORT**  
**RITCHEY 1-27 1 FLOWLINE**

**ECMC REMEDIATION # 39449**

Prepared for:



1099 18th Street  
Suite 1500  
Denver, CO 80202

Prepared by:



4725 Independence Street  
Wheat Ridge, CO 80033



<b>BKG02@0-1'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm	<b>BKG02@2-3'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm
<b>BKG02@1-2'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm	<b>BKG02@3-4'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm

<b>BKG01@0-1'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm	<b>BKG01@2-3'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm
<b>BKG01@1-2'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm	<b>BKG01@3-4'</b> <sup>(2)</sup> (07/29/2025) PID = 0.0 ppm

**FL01R-W@3'**  
(07/31/2025)  
PID = 0.0 ppm

**Legend**

⊕ Soil Sample Location – Lab Analyzed  
(Collected via Trimble GPS)

— Flowline Location – Abandoned in Place

**Notes**

1) All locations are approximate unless otherwise noted.  
2) Sample collected during decommissioning of the associated RITCHEY H-63N65W 27NWNW tank battery (REM # 39935).

GPS – Global Positioning System  
PID – Photoionization Detector  
ppm – Parts per million

0 ft. 150 ft. 300 ft.

Image Source: Google Earth; Google 2021  
Projection: WGS 1984, UTM Zone 13 North

DATE:	August 18, 2025
DESIGNED BY:	J. Whritenour
DRAWN BY:	L. Reed



**Tasman, Inc.**  
4725 Independence Street  
Wheat Ridge, CO 80033

**Noble Energy, Inc – 100322 – DJ Basin**  
**RITCHEY 1-27 1 Flowline**  
SENW, Section 27, Township 3 North, Range 65 West  
Weld County, Colorado

**SOIL SAMPLE LOCATION MAP**  
(07/29/2025 & 07/31/2025)

**FIGURE 1**

**TABLE 1**  
**FIELD DATA SUMMARY TABLE**  
**NOBLE ENERGY, INC. - 100322**  
**RITCHEY 1-27 1 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 39449**



Sample ID	Sample Date	Depth (ft. bgs)	GPS Data <sup>1</sup>		PDOP Value	VOC Concentration <sup>2</sup> (ppm)
			Latitude	Longitude		
FL01R-W@3'	07/31/2025	3	40.199126	-104.653315	1.1	0.0
BKG01@0-1 <sup>[3]</sup>	07/29/2025	0-1	40.202191	-104.658059	1.0	0.0
BKG01@1-2' <sup>[3]</sup>	07/29/2025	1-2	40.202191	-104.658059	1.0	0.0
BKG01@2-3' <sup>[3]</sup>	07/29/2025	2-3	40.202191	-104.658059	1.0	0.0
BKG01@3-4' <sup>[3]</sup>	07/29/2025	3-4	40.202191	-104.658059	1.0	0.0
BKG02@0-1 <sup>[3]</sup>	07/29/2025	0-1	40.202638	-104.658378	1.0	0.0
BKG02@1-2' <sup>[3]</sup>	07/29/2025	1-2	40.202638	-104.658378	1.0	0.0
BKG02@2-3' <sup>[3]</sup>	07/29/2025	2-3	40.202638	-104.658378	1.0	0.0
BKG02@3-4' <sup>[3]</sup>	07/29/2025	3-4	40.202638	-104.658378	1.0	0.0

**Notes:**

1. Global Positioning System (GPS) data is provided in decimal degrees using North American Datum (NAD) 83 UTM Zone 13 North.
2. Volatile organic compound (VOC) concentrations are measured in the field using a photoionization detector (PID).
3. Sample collected during decommissioning of the associated RITCHEY H-63N65W 27NWNW tank battery (REM # 39935).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

bgs = Below ground surface

NC = Not collected

NA = Not analyzed

Source material characterization sample, excavated and transported off site for disposal.

Material excavated and transported off site for disposal.

TABLE 2  
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA  
NOBLE ENERGY, INC. - 100322  
RITCHEY 1-27 1 FLOWLINE, WELD COUNTY, COLORADO  
REM # 39449



Sample ID	Sample Date	Depth (ft. bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4-Trimethyl-Benzene (mg/kg)	1,3,5-Trimethyl-Benzene (mg/kg)	Naphthalene (mg/kg)	TPH (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500	500**		
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500	500**		
FL01R-W@3'	07/31/2025	3	<0.0011	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0022	166.3	<0.21	48.3	118

**Notes:**

1. **Bold** values exceed the ECMC Table 915-1 limit(s).
2. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
3. \*\* Summation of GRO+DRO+ORO must be less than 500 mg/kg.

ECMC = Energy and Carbon Management Commission

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

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

NA = Not analyzed

Source material characterization sample, excavated and transported off site for disposal.

Material excavated and transported off site for disposal.

TABLE 3  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE ENERGY, INC. - 100322  
RITCHEY 1-27 1 FLOWLINE, WELD COUNTY, COLORADO  
REM # 39449



Sample ID	Sample Date	Depth (ft. bgs)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl - Naphthalene (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			360	1800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FL01R-W@3'	07/31/2025	3	<0.0043	<0.0043	<0.0054	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043	<0.0043

**Notes:**

1. **Bold** values exceed the ECMC Table 915-1 limit(s).
2. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
3. \* Indicates laboratory minimum detection limit in excess of SSL.

ECMC = Energy and Carbon Management Commission

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

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

NA = Not analyzed

Source material characterization sample, excavated and transported off site for disposal.

Material excavated and transported off site for disposal.

**TABLE 4**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE ENERGY, INC. - 100322**  
**RITCHEY 1-27 1 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 39449**



Sample ID	Sample Date	Depth (ft. bgs)	pH (Standard Units)	EC (mmhos/cm)	SAR (Standard Units)	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
FL01R-W@3'	07/31/2025	3	7.52	1.4	5.51	<0.50
BKG01@0-1' <sup>[4]</sup>	07/29/2025	0-1	7.62	3.6	7.08	<0.50
BKG01@1-2' <sup>[4]</sup>	07/29/2025	1-2	7.18	2.5	6.73	<0.50
BKG01@2-3' <sup>[4]</sup>	07/29/2025	2-3	7.11	3.2	5.69	<0.50
BKG01@3-4' <sup>[4]</sup>	07/29/2025	3-4	7.87	2.3	7.00	<0.50
BKG02@0-1' <sup>[4]</sup>	07/29/2025	0-1	7.29	0.37	0.468	<0.50
BKG02@1-2' <sup>[4]</sup>	07/29/2025	1-2	7.48	2.5	6.32	0.593
BKG02@2-3' <sup>[4]</sup>	07/29/2025	2-3	7.25	2.0	7.27	0.660
BKG02@3-4' <sup>[4]</sup>	07/29/2025	3-4	7.74	5.1	6.91	0.568
Maximum Background Concentration			-	-	-	-

**Notes:**

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within background concentrations.
2. **Bold** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
3. Brown highlighted soil analytical values indicate a regulatory exceedance.
4. Sample collected during decommissioning of the associated RITCHEY H-63N65W 27NWNW tank battery (REM # 39935).

ECMC = Energy and Carbon Management Commission

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

mg/L = Milligrams per liter

ft. = Feet

bgs = Below ground surface

NA = Not analyzed

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = Millimhos per centimeter

Source material characterization sample, excavated and transported off site for disposal.

Material excavated and transported off site for disposal.

**TABLE 5**  
**SUMMARY OF METALS IN SOIL CHEMISTRY DATA**  
**NOBLE ENERGY, INC. - 100322**  
**RITCHEY 1-27 1 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 39449**



Sample ID	Sample Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) <sup>6</sup> (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15000	71	0.3	3100	400	1500	390	390	23000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FL01R-W@3'	07/31/2025	3	<b>1.5</b>	44.8	0.34	<0.44	7.7	<b>20.9</b>	3.7	<0.22	<0.055	22.9
BKG01@0-1' <sup>[7]</sup>	07/29/2025	0-1	1.7	42.9	<0.11	<0.43	3.6	3.7	3.5	<0.43	<0.11	13.0
BKG01@1-2' <sup>[7]</sup>	07/29/2025	1-2	1.3	41.8	<0.12	<0.45	3.7	3.6	3.9	<0.46	<0.12	13.6
BKG01@2-3' <sup>[7]</sup>	07/29/2025	2-3	1.5	47.9	<0.12	<0.47	4.2	4.0	4.4	<0.46	<0.12	16.8
BKG01@3-4' <sup>[7]</sup>	07/29/2025	3-4	1.4	46.0	<0.10	<0.45	4.2	4.1	4.5	<0.42	<0.10	16.0
BKG02@0-1' <sup>[7]</sup>	07/29/2025	0-1	1.5	43.1	<0.097	<0.40	4.1	4.5	5.0	<0.39	<0.097	15.0
BKG02@1-2' <sup>[7]</sup>	07/29/2025	1-2	2.3	66.8	<0.11	<0.45	5.5	6.1	6.6	<0.44	<0.11	24.6
BKG02@2-3' <sup>[7]</sup>	07/29/2025	2-3	2.0	62.7	<0.11	<0.43	5.2	5.7	6.8	<0.43	<0.11	23.0
BKG02@3-4' <sup>[7]</sup>	07/29/2025	3-4	1.8	56.6	<0.13	<0.54	3.5	3.5	4.6	<0.51	<0.13	13.7
1.25x Maximum Background Concentration			2.9	-	-	-	-	7.6	-	-	-	-

**Notes:**

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.
2. **Bold** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
3. Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
4. Reporting limit used for 1.25 multiplier when all background results for a specific metal are non-detect.
5. \* Indicates laboratory minimum detection limit in excess of SSL.
6. Compound falls within the ECMC Table 915-1 footnote 9.
7. Sample collected during decommissioning of the associated RITCHEY H-63N65W 27NWNW tank battery (REM # 39935).

ECMC = Energy & Carbon Management Commission

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

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

NA = Not analyzed

Source material characterization sample, excavated and transported off site for disposal.

Material excavated and transported off site for disposal.



<b>CLIENT:</b> Noble Energy		<b>SITE NAME:</b> RITCHEY 1-27 1					<b>DATE:</b> 7/30/2025	<b>REM. PROJECT #:</b> 39449	<b>WEATHER:</b> Clear, 80	
<b>SITE DIRECTIONS:</b> CR X CR 30, S 0.26mi, E 0.26 mi, SE 0.1 mi into							<b>JOB#:</b> 10650			
<b>LEGALS AND LAT/LONG:</b> 40.199128, -104.653319							<b>TASMAN PERSONNEL:</b> Connor Kenigsberg, Will Runge			
<b>SOIL TYPES:</b> Poorly Graded Sand - SP							<b>SURFACE GRADIENT:</b> South			
<b>SOIL SAMPLING</b>							<b>FACILITY INFRASTRUCTURE</b>			
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo?	Grab or Lab Sample?	EQUIPMENT		Quantity	
							Above Ground Storage Tank (AST)			
07-31-2025 11:10	FL01R-W@3'	0.0	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel			
							Separator			
							Emission Control Device (ECD)			
							Dump Line			
							Wellhead			
							Flowline		1 ✓	
							Other:			
							<b>Soil Loads Removed</b>			
							<b>IMPACTED SOIL IDENTIFIED?</b> No			
							<b>ESTIMATED VOLUME OF IMPACTS:</b> N/a			
							Date	Number	CY	
							<b>Total Removed</b>		0      0	
							<b>Disposal Facility:</b>			
							<b>Groundwater Recovery</b>			
							<b>DATE GW ENCOUNTERED:</b>		<b>DEPTH:</b> N/a	
							<b>GROUNDWATER IN CONTACT WITH IMPACTED SOIL?</b>			
							<b>LNAPL OR SHEEN OBSERVED ON GW?</b>			
<b>GROUNDWATER SAMPLING</b>							Date	BBLs		
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?				
							<b>Total Removed</b>		0	
							<b>Disposal Facility:</b>			

# Chevron Rockies Business Unit

## Field Qualitative Criteria for ECMC Reporting Associated with the Discovery of Potentially Impacted Material

If answered **Yes** to any of the questions listed below, this may suggest the presence of potentially impacted materials as outlined in ECMC Rule 912. Out of an abundance of caution, a “Yes” response will be reported to the ECMC within 24 hours after discovery, regardless of laboratory results. **Immediately notify the RBU Remediation Team.** Include a copy of this Field Qualitative Spill Criteria Checklist in the field Report.

Please answer the following questions when on-site:

1. Is there visible petroleum hydrocarbon staining in the soil? No\_\_\_\_\_
2. Does the soil sample from the stained area have a petroleum odor? No\_\_\_\_\_
3. Is there a petroleum hydrocarbon sheen on the nearby surface water? No\_\_\_\_\_
4. Does there appear to be a sheen of the surface of accumulated groundwater or seeps within the excavation indicative of petroleum? No\_\_\_\_\_
5. Is stained soil in contact with groundwater? No\_\_\_\_\_

Please Include relevant photos of the site conditions for items 1-5.

Location name: RITCHEY 1-27 1

Please Circle Facility Type: Flowline





# Photographic Log



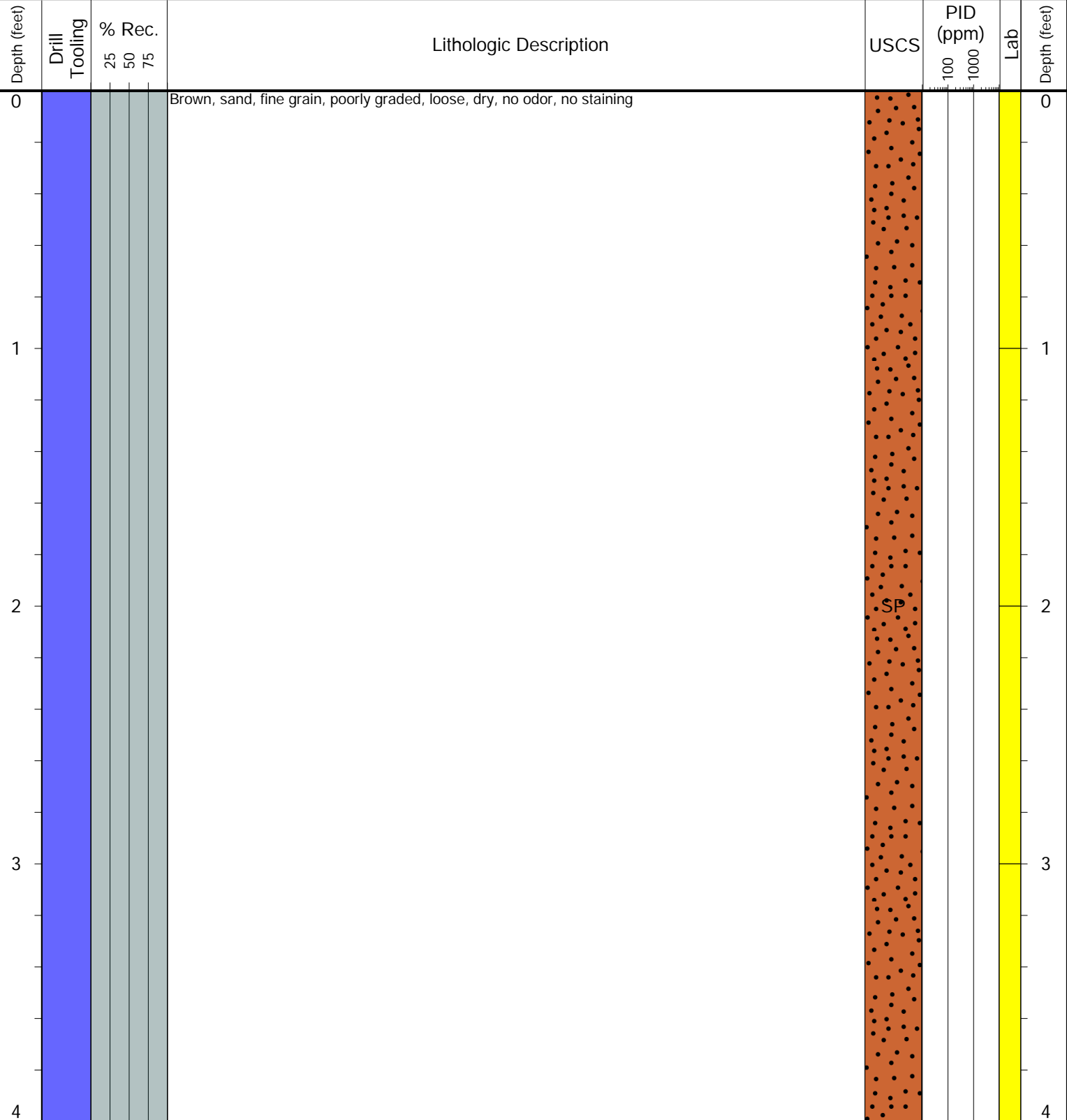
<b>Equipment ID:</b> FL01R-W@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b> Facing east				<b>Notes/Conditions:</b>			



**CLIENT:** Noble  
**LOGGED BY:** Connor Kenigsberg  
**PROJECT MANAGER:** Allan Engelhardt  
**DRILLING CONTRACTOR:** KSI  
**DRILLING EQUIPMENT:** Hand Auger  
**DRILL BIT SIZE (INCHES):** 3.25  
**DATE STARTED - COMPLETED:** 7/29/2025 - 7/29/2025  
**TOTAL WELL DEPTH (FT. BGS):** 4  
**DEPTH TO WATER (FT. BGS):** Not Encountered

**RITCHEY H-63N65W 27NWNW**  
**BORING ID:** BKG01  
**LOCATION:** NW of FL01R-W  
**LATITUDE (NAD 83):** 40.202191  
**LONGITUDE (NAD 83):** -104.658059  
**GROUND ELEVATION (FT. AMSL):** Not Measured  
**ABANDONMENT METHOD:** Native Material

**4725 Independence St.**  
**Wheat Ridge, CO 80033**



**Drilling / Sample Method:**

- Macro-Core
- Hand Auger
- HydroPunch Groundwater Sampler
- Expendable Well Tip

**Laboratory Sample Types:**

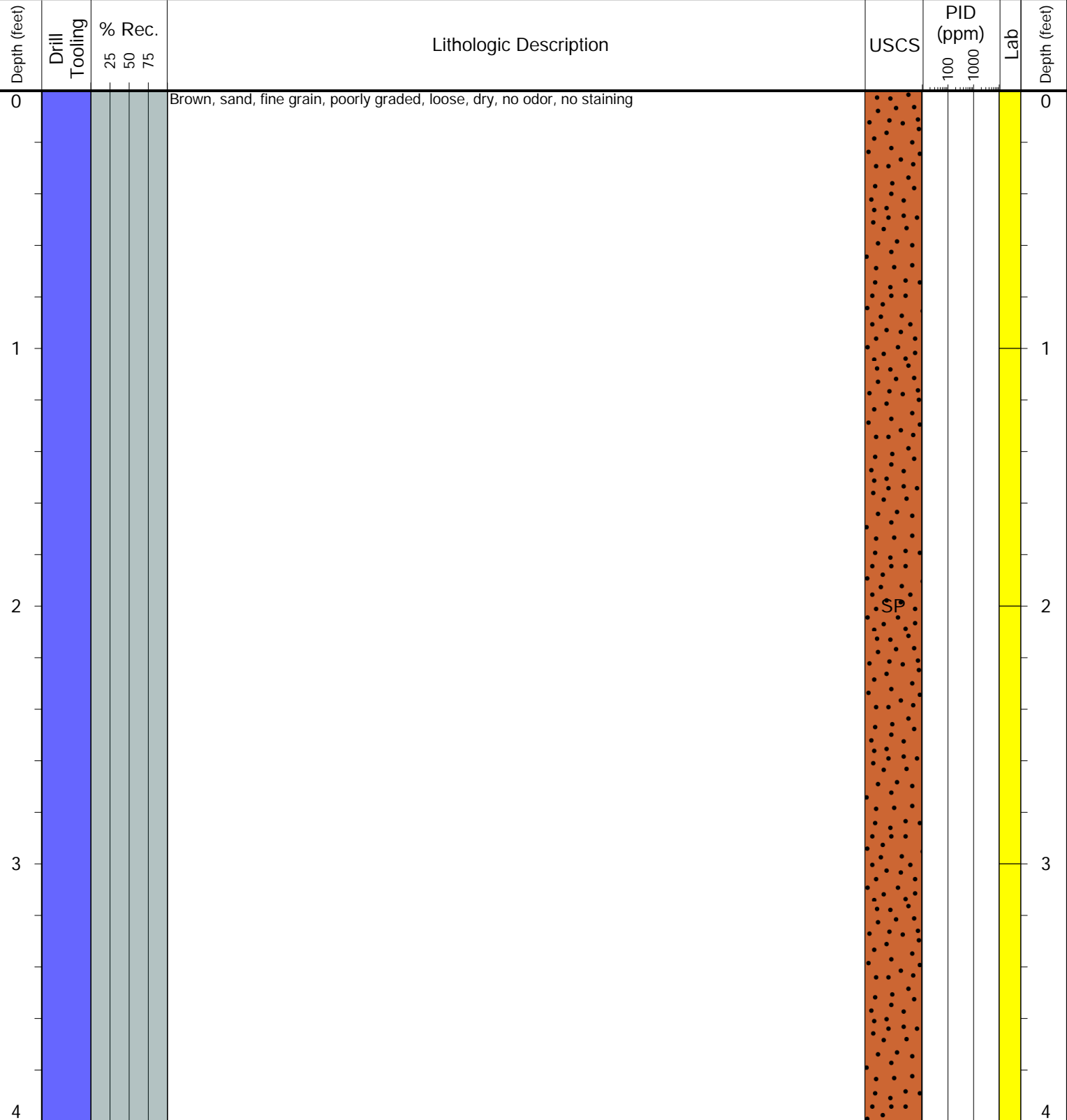
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



**CLIENT:** Noble  
**LOGGED BY:** Connor Kenigsberg  
**PROJECT MANAGER:** Allan Engelhardt  
**DRILLING CONTRACTOR:** KSI  
**DRILLING EQUIPMENT:** Hand Auger  
**DRILL BIT SIZE (INCHES):** 3.25  
**DATE STARTED - COMPLETED:** 7/29/2025 - 7/29/2025  
**TOTAL WELL DEPTH (FT. BGS):** 4  
**DEPTH TO WATER (FT. BGS):** Not Encountered

**RITCHEY H-63N65W 27NWNW**  
**BORING ID:** BKG02  
**LOCATION:** NW of BKG01  
**LATITUDE (NAD 83):** 40.202638  
**LONGITUDE (NAD 83):** -104.658378  
**GROUND ELEVATION (FT. AMSL):** Not Measured  
**ABANDONMENT METHOD:** Native Material

**4725 Independence St.**  
**Wheat Ridge, CO 80033**



**Drilling / Sample Method:**

- Macro-Core
- Hand Auger
- Expendable Well Tip
- HydroPunch Groundwater Sampler

**Laboratory Sample Types:**

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