

# Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
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Site Name & COGCC Facility Number: UNI UPR C25-06	Date: 7/5/2023	Remediation Project #: 22716
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Associated Wells:	Age of Site:	Number of Photos Attached: 3
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Starting point: (GPS coordinates and descriptions)  
40.285498 / -104.501596

End point: (GPS coordinates and descriptions)  
40.2854688 / -104.501593

USCS Soil Type: SW	Estimated Depth to Groundwater: > 4ft
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Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
none observed

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
none observed

### Flowlines

Flowline type	Oil / Gas / Water			
Depth	4 ft			
Age				
Length	1908 ft			
Construction Material	steel			
Were flowlines pulled?	No			
Visual Integrity of lines	good			
Visual impacts if trenched	none observed			
PID Readings if trenched	0.6 - 1.0			
Sample taken? Location/Sample ID#	yes, see below			
Photo Number(s)	1 - 3			

Other observations regarding on location flowlines:  
Samples were taken at the wellhead (FL01-A@4') and at the separator (FL01-B@3.5'). Both samples were submitted to the lab for analysis.  
Flowline was ABIP due to crops, and is scheduled to be pulled at a later date.

### Summary

Was impacted soil identified? No	
Total number of samples field screened: 2	Total number of samples collected: 2
Highest PID Reading: 1.0	Total number of samples submitted to lab for analysis: 2
If more than 10 cubic yards of impacted soil were observed:	
Vertical extent:	Estimated spill volume:
Lateral extent:	Volume of soil removed:
Is additional investigation required?	
Was groundwater encountered during the investigation? No	
Measured depth to groundwater:	Was remedial groundwater removal conducted?
Date Groundwater was encountered:	Commencement date of removal:
Sheen on groundwater?	Volume of groundwater removed prior to sampling:
Free product observed?	Volume of groundwater removed post sampling:
Total number of samples collected:	Total Volume of groundwater removed:
Total number of samples submitted to lab for analysis:	

# Flowline Closure Checklist

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

Additional Attachments:		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
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Site Name & ECMC Facility Number: UNI UPR C25-6	Date: 2/12/2024	Remediation Project #: 22716
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Associated Wells:	Age of Site:	Number of Photos Attached: 9
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Starting point: (GPS coordinates and descriptions)  
40.85498, -104.501596

End point: (GPS coordinates and descriptions)  
40.2854688, -104.501593

USCS Soil Type: SM	Estimated Depth to Groundwater:
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Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)  
None observed

### Flowlines

Flowline type	Oil / Gas / Water			
Depth	3'			
Age				
Length	1,908'			
Construction Material	Steel			
Were flowlines pulled?	Yes			
Visual Integrity of lines	Good			
Visual impacts if trenched	None			
PID Readings if trenched	0.0 - 0.2			
Sample taken? Location/Sample ID#	Yes, see below			
Photo Number(s)				

Other observations regarding on location flowlines:  
  
Samples were taken along the flowline path (FL01-C@3' - FL01-K@3').

### Summary

Was impacted soil identified? No

Total number of samples field screened: 9	Total number of samples collected: 9
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Highest PID Reading: 0.2	Total number of samples submitted to lab for analysis: 2
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If more than 10 cubic yards of impacted soil were observed:

Vertical extent: 4 ft	Estimated spill volume:
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Lateral extent:	Volume of soil removed:
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Is additional investigation required?

Was groundwater encountered during the investigation?  
No

Measured depth to groundwater:	Was remedial groundwater removal conducted?
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Date Groundwater was encountered:	Commencement date of removal:
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Sheen on groundwater?	Volume of groundwater removed prior to sampling:
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Free product observed?	Volume of groundwater removed post sampling:
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Total number of samples collected:	Total Volume of groundwater removed:
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Total number of samples submitted to lab for analysis:	
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## FLOWLINE ABANDONMENT FORM

<b>SITE NAME:</b> UNI UPR C25-06							<b>DATE:</b> 7/5/2023	<b>REM. PROJECT #:</b> 22716	<b>WEATHER:</b> 60s cloudy			
<b>SITE DIRECTIONS:</b> CR40 & 57 proceed to booth hay yard, NE around edge of center pivot, NE 0.5, N 200ft thru gate							<b>CLIENT:</b> Noble					
<b>LEGALS AND LAT/LONG:</b> 40.2854688 -104.501593							<b>TASMAN PERSONNEL:</b> Elyse Hossink					
<b>SOIL TYPES:</b> Well Graded Sand - SW							<b>SURFACE GRADIENT:</b> Southeast					
<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)					
7/5/2023 14:46	FL01-A@4'	0.6	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel					
7/5/2023 15:15	FL01B@3.5'	1.0	No Staining	No Odor	Yes	Lab	Separator					
							Emission Control Device (ECD)					
							Dump Line					
							Wellhead					
							Flowline		1			
							Other:					
							<b>Soil Loads Removed</b>					
							<b>IMPACTED SOIL IDENTIFIED?</b>					
							<b>ESTIMATED VOLUME OF IMPACTS:</b>					
							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>		
							<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>					

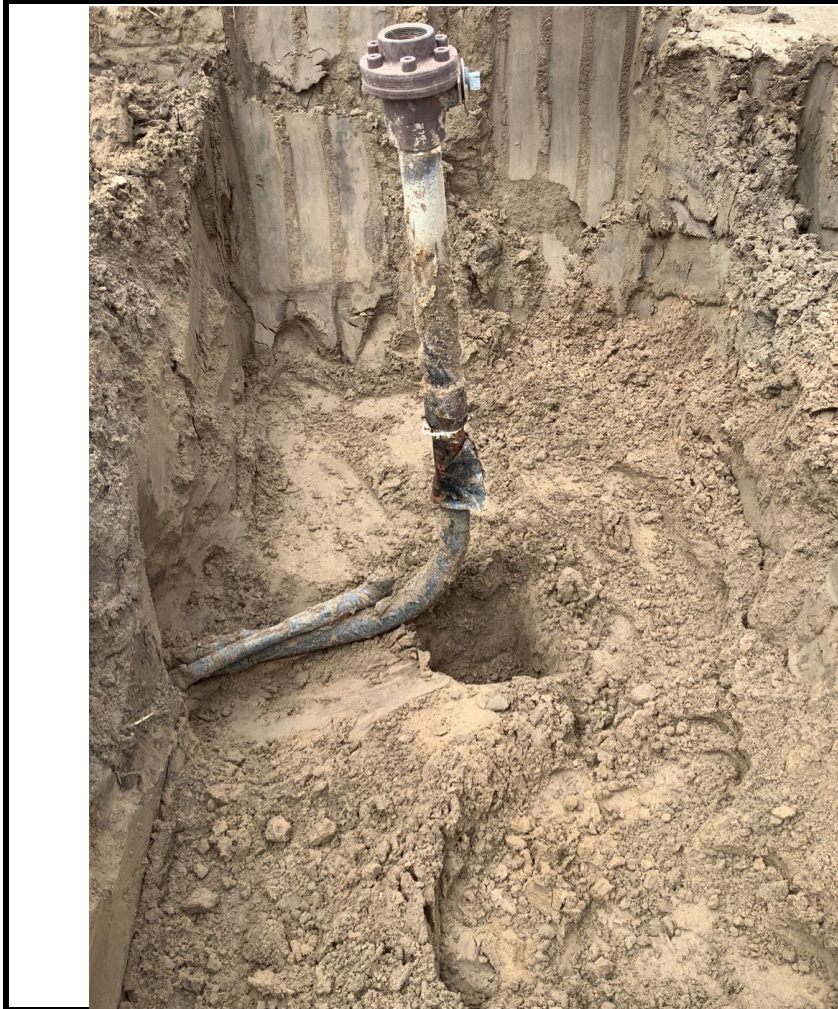


<b>SITE NAME:</b> UNI UPR C25-6 Flowline							<b>DATE:</b> 2/12/2024	<b>REM. PROJECT #:</b>	<b>WEATHER:</b> 50s sunny
<b>SITE DIRECTIONS:</b>							<b>CLIENT:</b> Noble		
<b>LEGALS AND LAT/LONG:</b>							<b>TASMAN PERSONNEL:</b> DV, KS		
<b>SOIL TYPES:</b> Silty Sand - SM							<b>SURFACE GRADIENT:</b> East		
SOIL SAMPLING							FACILITY INFRASTRUCTURE		
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo?	Grab or Lab Sample?	EQUIPMENT	Quantity	
							Above Ground Storage Tank (AST)		
2/12/2024 13:57	FL01-C @ 3'	0.2	No Staining	No Odor	Yes	Grab	Buried or Partially Buried Vessel		
2/12/2024 14:06	FL01-D @ 3'	0.0	No Staining	No Odor	Yes	Lab	Separator		
2/12/2024 14:18	FL01-E @ 4'	0.0	No Staining	No Odor	Yes	Lab	Emission Control Device (ECD)		
2/12/2024 14:21	FL01-F @ 4'	0.1	No Staining	No Odor	Yes	Grab	Dump Line		
2/13/2024 09:22	FL01-G @ 3'	0.0	No Staining	No Odor	Yes	Grab	Wellhead		
2/13/2024 09:31	FL01-H @ 3'	0.0	No Staining	No Odor	Yes	Grab	Flowline		
2/13/2024 09:35	FL01-I @ 3'	0.0	No Staining	No Odor	Yes	Grab	Other:		
2/13/2024 09:43	FL01-J@3'	0.0	No Staining	No Odor	Yes	Grab	Soil Loads Removed		
2/13/2024 09:48	FL01-K@3'	0.0	No Staining	No Odor	Yes	Grab	IMPACTED SOIL IDENTIFIED?		
							ESTIMATED VOLUME OF IMPACTS:		
							Date	Number	CY
							Total Removed	0	0
							Disposal Facility:		
							Groundwater Recovery		
							DATE GW ENCOUNTERED:	DEPTH:	
							GROUNDWATER IN CONTACT WITH IMPACTED SOIL?		
							LNAPL OR SHEEN OBSERVED ON GW?		
GROUNDWATER SAMPLING							Date	BBLs	
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?			
							Total Removed	0	
							Disposal Facility:		





### Photographic Log



<b>Equipment ID:</b> FL01-A@4'	<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b>		



<b>Equipment ID:</b>	<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>
<b>Notes/Conditions:</b> location of UNI UPR C25-03, UNI UPR C25-04, UNI UPR 25-05 and UNI UPR C25-06 flowlines at common separator labeled 3-6 respectively.		

## Photographic Log



<b>Equipment ID:</b> FL01-B@3.5'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>				<b>Notes/Conditions:</b>			

### Photographic Log



<b>Equipment ID:</b> FL01-C@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-D@3'		<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>				<b>Notes/Conditions:</b>			

## Photographic Log



<b>Equipment ID:</b> FL01-E@4'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-F@4'		<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>				<b>Notes/Conditions:</b>			

**Photographic Log**


<b>Equipment ID:</b> FL01-G@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>			

<b>Equipment ID:</b> FL01-H@3'		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b>			

**Photographic Log**


<b>Equipment ID:</b> FL01-I@3'		<b>Equipment Type:</b>		<b>Equipment ID:</b> FL01-J@3'		<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>				<b>Notes/Conditions:</b>			

Photographic Log



<b>Equipment ID:</b> FL01-K@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>				<b>Notes/Conditions:</b>			

**TABLE 1**  
**FIELD DATA SUMMARY TABLE**  
**NOBLE 100322**  
**UNI UPR C25-06, WELD COUNTY, COLORADO**  
**REM # 22716**

Sample ID	Sample Date	Depth (ft. bgs)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
FL01-A@4'	7/5/2023	4	40.285445	-104.501577	0.9	0.6
FL01-B@3.5'	7/5/2023	3.5	40.290059	-104.503845	0.8	1.0
FL01-C@3'	2/12/2024	3	40.285441	-104.501883	0.8	0.2
FL01-D@3'	2/12/2024	3	40.285535	-104.502199	0.9	0.0
FL01-E@4'	2/12/2024	4	40.285742	-104.502369	0.9	0.0
FL01-F@4'	2/12/2024	4	40.286033	-104.502422	0.9	0.1
FL01-G@3'	2/12/2024	3	40.286752	-104.502647	0.9	0.0
FL01-H@3'	2/12/2024	3	40.287653	-104.502982	0.8	0.0
FL01-I@4'	2/12/2024	4	40.288547	-104.503313	0.8	0.0
FL01-J@4'	2/12/2024	4	40.288875	-104.503454	0.9	0.0
FL01-K@3'	2/12/2024	3	40.289370	-104.503624	0.8	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).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

bgs = Below ground surface

TABLE 2  
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA  
NOBLE 100322  
UNI UPR C25-06, WELD COUNTY, COLORADO  
REM # 22716

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**		
FL01-A@4'	7/5/2023	4	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01-B@3.5'	7/5/2023	3.5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01-D@3'	2/12/2024	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01-E@4'	2/12/2024	4	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50

**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.
4. \*\* Summation of GRO+DRO+ORO must be less than 500 mg/kg.

ECMC = Energy & 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

TABLE 3  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
NOBLE 100322  
UNI UPR C25-06, WELD COUNTY, COLORADO  
REM # 22716

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	1,800	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
FL01-A@4'	7/5/2023	4	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-B@3.5'	7/5/2023	3.5	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-D@3'	2/12/2024	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-E@4'	2/12/2024	4	<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:**

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 = Colorado Energy & Carbon Management Commission

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

ft. = Feet

bgs = Below ground surface

mg/kg = Milligrams per kilogram

**TABLE 4**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**NOBLE 100322**  
**UNI UPR C25-06, WELD COUNTY, COLORADO**  
**REM # 22716**

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
FL01-A@4'	7/5/2023	4	7.21	<0.0100	1.19	0.345
FL01-B@3.5'	7/5/2023	3.5	<b>4.35</b>	0.134	0.0425	0.141
FL01-D@3'	2/12/2024	3	8.14	0.531	2.27	<2.00
FL01-E@4'	2/12/2024	4	<b>8.31</b>	0.441	2.11	<2.00

**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.

ECMC = Colorado Energy & Carbon Management Commission

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = millimhos per centimeter

mg/L = milligram per liter

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

ft. = Feet

bgs = Below ground surface

TABLE 5  
SUMMARY OF METALS IN SOIL CHEMISTRY DATA  
NOBLE 100322  
UNI UPR C25-06, WELD COUNTY, COLORADO  
REM # 22716

Sample ID	Sample Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) <sup>[4]</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	15,000	71	0.3	3,100	400	1,500	390	390	23,000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FL01-A@4'	7/5/2023	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FL01-B@3.5'	7/5/2023	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FL01-D@3'	2/12/2024	3	<b>1.02</b>	28.7	<0.200	<0.080	1.78	2.84	1.82	<0.260	0.0266	8.81
FL01-E@4'	2/12/2024	4	<b>1.08</b>	29.9	<0.200	<0.080	1.83	2.91	2.17	<0.260	<0.0200	8.83

**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. Compound falls within ECMC Table 915-1 Footnote 9.
5. Non-detect background results accounted for in the highest background concentration by using the reporting limit.

ECMC = Energy & Carbon Management Commission

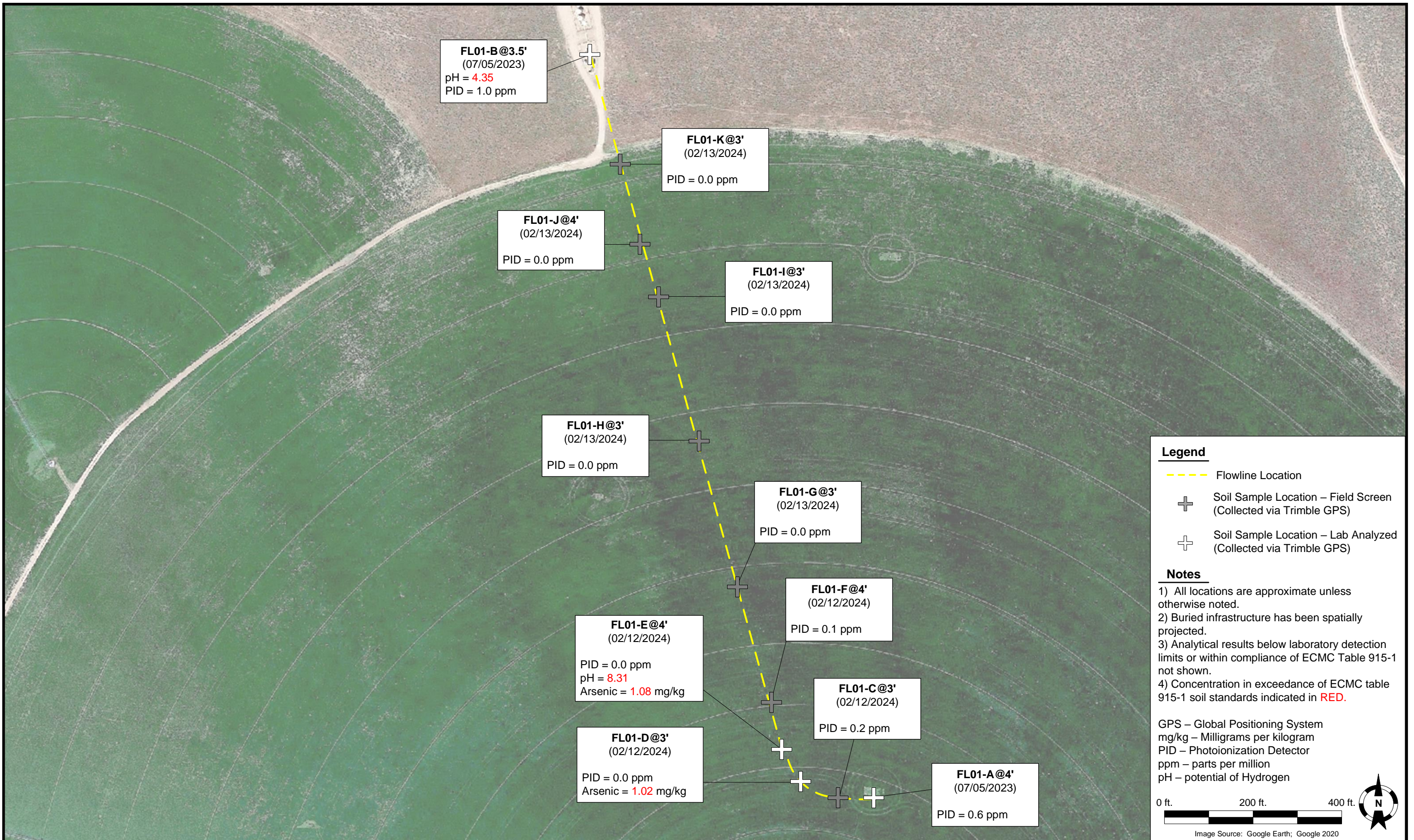
(<) = Analytical result is less than the indicated laboratory reporting limit.

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

NA = Constituent not analyzed



**Legend**

- - - Flowline Location
- + Soil Sample Location – Field Screen (Collected via Trimble GPS)
- + Soil Sample Location – Lab Analyzed (Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Buried infrastructure has been spatially projected.
- 3) Analytical results below laboratory detection limits or within compliance of ECMC Table 915-1 not shown.
- 4) Concentration in exceedance of ECMC table 915-1 soil standards indicated in **RED**.

GPS – Global Positioning System  
 mg/kg – Milligrams per kilogram  
 PID – Photoionization Detector  
 ppm – parts per million  
 pH – potential of Hydrogen

0 ft.      200 ft.      400 ft.

Image Source: Google Earth; Google 2020

DATE: 12/11/2024  
 DESIGNED BY: JW  
 DRAWN BY: S. Anderson



**Noble Energy, Inc. – DJ Basin**  
**UNI UPR C25-6**  
 SENW, Section 25, Township 4 North, Range 64 West  
 Weld County, Colorado

Flowline Analytical  
 Results Map

FIGURE  
 1