

FREMONT ENVIRONMENTAL INC.

November 22, 2024

Mr. Daniel Peterson
Noble Energy Inc.
2115 117th Avenue
Greeley, CO 80634

Subject: **Flowline Closure Data Submittal**
Rouse USX A05-19
API # 05-123-24697
NWNW Sec. 5, T6N, R64W
Weld County, Colorado
Fremont Project No. C024-074
Remediation # 32929

Dear Mr. Peterson:

As you requested, Fremont Environmental Inc. (Fremont) personnel conducted flowline closure activities for the Noble Energy Inc. (Noble) Rouse USX A05-19. Impacted soil was encountered during abandonment activities. Details of the Rouse USX A05-19 closure activities are documented in the attached Closure Report. Groundwater was not encountered during flowline abandonment activities.

Please contact me at (303) 261-6246 if you require any additional information. Fremont appreciates the opportunity to provide this service.

Sincerely,

FREMONT ENVIRONMENTAL INC.



Stanley Gilbert
Environmental Scientist

Attachments:

- Facility Closure Checklist
- Tables
- Figures
- Photos

1759 REDWING LANE, BROOMFIELD, CO 80020
(303) 956-8714 (DIRECT)

Flowline Closure Checklist

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

<i>Additional Attachments:</i>		Tank Battery Closure		Wellhead Closure		Pit Closure		Partially Buried Vault Closure
<i>Site Name & COGCC Facility Number:</i> Rouse USX A05-19		<i>Date:</i> 04/09/2024		<i>Remediation Project #:</i> 32929				
<i>Associated Wells:</i> API:05-123-24697		<i>Age of Site:</i> 2007		<i>Number of Photos Attached:</i> 7				
<i>Starting point: (GPS coordinates and descriptions)</i> 40.519580, -104.582290								
<i>End point: (GPS coordinates and descriptions)</i> 40.518680, -104.579099								
<i>USCS Soil Type:</i> SC				<i>Estimated Depth to Groundwater:</i> >5'				
<i>Hydrocarbon Impacted Soils / Spills: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> Impacts discovered at sample location FL05 3'. Refer to the polycyclic aromatic hydrocarbon soil chemistry table (Table 3) for reference. Impacts were left in place. Further remediation is required.								
<i>Salt Crusted Soils or Impacted Vegetation: (Note estimated size and if impact appears to be surficial or extends to an unknown depth)</i> None observed								
Flowlines								
<i>Flowline type</i>	OIL/Water/Gas							
<i>Depth</i>	3'- 5'							
<i>Age</i>	2012							
<i>Length</i>	1017'							
<i>Construction Material</i>	Steel							
<i>Were flowlines pulled?</i>	Yes, partially							
<i>Visual Integrity of lines</i>	Good							
<i>Visual impacts if trenched</i>	N/A							
<i>PID Readings if trenched</i>	N/A							
<i>Sample taken? Location/Sample ID#</i>	Yes, see attached							
<i>Photo Number(s)</i>	See attached							
<i>Other observations regarding on location flowlines:</i> Flowline was partially abandoned in place from FL05 5' to former separator location								
Summary								
<i>Was impacted soil identified?</i> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - less than 10 cubic yards <input type="checkbox"/> Yes - more than 10 cubic yards								
<i>Total number of samples field screened:</i> 7				<i>Total number of samples collected:</i> 7				
<i>Highest PID Reading:</i> 3.5ppm (FL04 3')				<i>Total number of samples submitted to lab for analysis:</i> 4				
<i>If more than 10 cubic yards of impacted soil were observed:</i>								
<i>Vertical extent:</i> Unknown				<i>Estimated spill volume:</i> Unknown				
<i>Lateral extent:</i> Unknown				<i>Volume of soil removed:</i> None				
<i>Is additional investigation required?</i> Yes, further remedial action is required								
<i>Was groundwater encountered during the investigation?</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - not impacted or in contact with impacted soils <input type="checkbox"/> Yes - groundwater impacted and/or in contact with impacted soils								
<i>Measured depth to groundwater:</i>				<i>Was remedial groundwater removal conducted?</i> Yes <input type="checkbox"/> No <input type="checkbox"/>				
<i>Date Groundwater was encountered:</i>				<i>Commencement date of removal:</i>				
<i>Sheen on groundwater?</i>		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<i>Volume of groundwater removed prior to sampling:</i>				
<i>Free product observed?</i>		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<i>Volume of groundwater removed post sampling:</i>				
<i>Total number of samples collected:</i>				<i>Total Volume of groundwater removed:</i>				
<i>Total number of samples submitted to lab for analysis:</i>								

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
FL01 3'	4/9/2024	3'	40.5186686	-104.5790932	0.9	0.5
FL04 3'	4/9/2024	3'	40.5190594	-104.5809716	-	3.5
SEP01 FL 3'	4/8/2024	3'	40.5195802	-104.5822848	-	1.4
SEP02 FL 3'	4/8/2024	3'	40.5196161	-104.5822843	-	2.0
FL02 4'	4/9/2024	4'	40.5188253	-104.5798898	-	1.7
FL03 4'	4/9/2024	4'	40.5189529	-104.5804465	0.9	0.4
FL05 5'	4/9/2024	5'	40.5192131	-104.5816780	1.0	2.5
BKG01	4/8/2024	0.5', 3', 5'	40.5197544	-104.5823424	0.8	0.0
BKG02	4/8/2024	0.5', 3', 5'	40.5193910	-104.5825008	0.8	0.0
BKG03	4/8/2024	0.5', 3', 5'	40.5190635	-104.5824674	0.8	0.0
BKG04	4/9/2024	0.5', 3', 5'	40.5190878	-104.5816621	0.8	0.0
BKG05	4/9/2024	0.5', 3', 5'	40.5162896	-104.5816589	0.9	0.0
BKG06	4/9/2024	0.5', 3', 5'	40.5165652	-104.5756896	0.8	0.0
BKG07	4/9/2024	0.5', 3', 5'	40.5185225	-104.5790567	0.8	0.0
BKG08	4/9/2024	0.5', 3', 5'	40.5198988	-104.5759613	1.0	0.0
BKG09	4/9/2024	0.5', 3', 5'	40.5199293	-104.5811431	1.0	0.0

1. Global Positioning System (GPS) data is provided in decimal degrees using North American Datum (NAD) 83 UTMZone 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

in. = Inches

ft. = Feet

bgs = Below ground surface

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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 3'	4/9/2024	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
SEP01 FL 3'	4/8/2024	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
SEP02 FL 3'	4/8/2024	3'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL05 5'	4/9/2024	5'	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50

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
- (<) = 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

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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
FL01 3'	4/9/2024	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
SEP01 FL 3'	4/8/2024	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
SEP02 FL 3'	4/8/2024	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
FL05 5'	4/9/2024	5'	0.011	0.0194	0.0246	0.011	0.0209	0.0105	0.024	<0.00500	0.0681	0.0102	0.0191	0.0707	<0.00500	<0.00500

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
- (<) = 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

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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 3'	4/9/2024	3'	9.26	0.159	0.411	<2.00
SEP01 FL 3'	4/8/2024	3'	8.98	0.0867	0.0164	<2.00
SEP02 FL 3'	4/8/2024	3'	8.98	0.0966	0.0202	<2.00
FL05 5'	4/9/2024	5'	8.90	0.560	2.34	<2.00
BKG01 0.5'	4/8/2024	0.5'	8.42	0.0445	0.0615	<2.00
BKG02 0.5'	4/8/2024	0.5'	8.46	0.145	0.184	<2.00
BKG03 0.5'	4/8/2024	0.5'	8.48	0.312	0.543	<2.00
BKG04 0.5'	4/9/2024	0.5'	8.74	0.266	0.613	<2.00
BKG05 0.5'	4/9/2024	0.5'	8.31	0.406	1.04	<2.00
BKG06 0.5'	4/9/2024	0.5'	8.23	0.526	1.29	<2.00
BKG07 0.5'	4/9/2024	0.5'	8.69	0.223	0.713	<2.00
BKG08 0.5'	4/9/2024	0.5'	8.90	0.275	0.643	<2.00
BKG09 0.5'	4/9/2024	0.5'	8.88	0.314	0.608	<2.00
BKG01 3'	4/8/2024	3'	8.54	0.0471	0.0684	<2.00
BKG02 3'	4/8/2024	3'	9.11	0.492	3.38	<2.00
BKG03 3'	4/8/2024	3'	8.64	0.820	2.51	<2.00
BKG04 3'	4/9/2024	3'	9.07	0.149	0.405	<2.00
BKG05 3'	4/9/2024	3'	8.90	0.236	0.598	<2.00
BKG06 3'	4/9/2024	3'	8.28	0.360	0.931	<2.00
BKG07 3'	4/9/2024	3'	8.93	0.218	0.708	<2.00
BKG08 3'	4/9/2024	3'	8.94	0.208	0.434	<2.00
BKG09 3'	4/9/2024	3'	8.78	0.237	0.56	<2.00

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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
BKG01 5'	4/8/2024	5'	8.81	1.46	5.28	<2.00
BKG02 5'	4/8/2024	5'	9.19	0.762	5.30	<2.00
BKG03 5'	4/8/2024	5'	9.35	0.457	3.28	<2.00
BKG04 5'	4/9/2024	5'	8.83	0.153	0.498	<2.00
BKG05 5'	4/9/2024	5'	9.09	0.154	0.331	<2.00
BKG06 5'	4/9/2024	5'	9.19	0.454	3.03	<2.00
BKG07 5'	4/9/2024	5'	8.14	0.250	0.910	<2.00
BKG08 5'	4/9/2024	5'	9.15	0.488	2.85	<2.00
BKG09 5'	4/9/2024	5'	8.99	0.674	3.69	<2.00
Maximum Background Concentration		0.5'	8.90	0.526	1.29	<2.00
Maximum Background Concentration		3'	9.11	0.820	3.38	<2.00
Maximum Background Concentration		5'	9.35	1.46	5.30	<2.00

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.

NA - Not analyzed/Not applicable

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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 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
FL01 3'	4/9/2024	3'	5.95	75.0	0.327	<0.30	15.3	13.7	10.3	<0.260	0.0418	24.8
SEP01 FL 3'	4/8/2024	3'	3.10	64.4	<0.200	<0.30	6.26	6.92	6.49	<0.260	0.0273	26.1
SEP02 FL 3'	4/8/2024	3'	4.63	112	0.301	<0.30	8.02	7.85	9.01	<0.260	0.0332	31.5
FL05 5'	4/9/2024	5'	4.18	85.6	0.378	<0.30	6.72	7.47	6.78	<0.260	0.0304	27.6
BKG01 0.5'	4/8/2024	0.5'	3.54	72.5	0.225	<0.30	7.04	7.10	7.99	<0.260	0.0527	27.6
BKG02 0.5'	4/8/2024	0.5'	4.05	66.0	0.254	<0.30	7.98	8.78	7.65	<0.260	0.0430	32.8
BKG03 0.5'	4/8/2024	0.5'	4.48	69.1	0.290	<0.30	9.95	9.31	7.35	<0.260	0.0417	40.7
BKG04 0.5'	4/9/2024	0.5'	3.83	75.7	0.333	<0.30	12.7	8.56	7.98	<0.260	0.0428	44.5
BKG05 0.5'	4/9/2024	0.5'	3.60	67.5	0.336	<0.30	11.5	8.97	7.24	<0.260	0.0412	41.7
BKG06 0.5'	4/9/2024	0.5'	3.99	86.9	0.383	<0.30	17.1	10.0	9.25	0.266	0.0484	54.1
BKG07 0.5'	4/9/2024	0.5'	3.37	69.0	0.317	<0.30	14.0	9.56	7.26	<0.260	0.0412	45.3
BKG08 0.5'	4/9/2024	0.5'	2.78	47.7	0.293	<0.30	9.35	6.02	4.82	<0.260	0.0242	30.6
BKG09 0.5'	4/9/2024	0.5'	3.77	49.9	0.241	<0.30	10.3	6.67	5.59	<0.260	0.0287	33.1
BKG01 3'	4/8/2024	3'	3.26	61.1	0.207	<0.30	6.00	6.35	7.24	<0.260	0.0408	24.0
BKG02 3'	4/8/2024	3'	2.30	34.8	<0.200	<0.30	3.08	3.78	3.95	<0.260	<0.0200	14.6
BKG03 3'	4/8/2024	3'	2.96	88.7	<0.200	<0.30	4.22	4.95	5.17	<0.260	0.0282	17.6
BKG04 3'	4/9/2024	3'	3.97	92.5	0.375	<0.30	10.1	9.46	9.20	<0.260	0.0500	39.3
BKG05 3'	4/9/2024	3'	3.47	110	0.328	<0.30	10.1	9.07	9.52	<0.260	0.0474	38.9
BKG06 3'	4/9/2024	3'	3.25	39.4	0.352	<0.30	14.7	10.7	15.3	<0.260	0.0436	54.3
BKG07 3'	4/9/2024	3'	4.91	114	0.349	<0.30	10.1	9.82	11.4	<0.260	0.0596	42.1
BKG08 3'	4/9/2024	3'	4.08	52.9	<0.200	<0.30	5.68	5.32	5.89	<0.260	0.0211	21.0
BKG09 3'	4/9/2024	3'	4.54	69.3	0.199	<0.30	6.38	6.11	7.45	<0.234	0.0190	22.7
BKG01 5'	4/8/2024	5'	3.48	59.2	<0.200	<0.30	4.42	4.44	5.62	<0.260	0.0304	18.0
BKG02 5'	4/8/2024	5'	2.36	37.8	<0.200	<0.30	3.74	4.35	4.73	<0.260	<0.0200	17.2
BKG03 5'	4/8/2024	5'	9.48	64.6	0.462	<0.30	9.43	4.40	12.1	<0.260	0.0228	26.8
BKG04 5'	4/9/2024	5'	4.85	85.7	0.371	<0.30	12.4	9.92	9.04	<0.260	0.0410	44.2
BKG05 5'	4/9/2024	5'	5.08	74.1	0.348	<0.30	6.95	5.04	7.51	<0.260	<0.0200	32.4
BKG06 5'	4/9/2024	5'	3.79	88	0.229	<0.30	7.17	7.25	8.12	<0.260	0.0510	28.0
BKG07 5'	4/9/2024	5'	6.98	73.9	0.462	<0.30	9.31	9.52	9.04	<0.260	0.0390	28.2

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE 100322
ROUSE USX A 5-19, WELD COUNTY, COLORADO
REM # 32929

Sample ID	Sample Date	Depth (ft)	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 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
BKG08 5'	4/9/2024	5'	3.04	106	0.258	<0.30	5.92	6.57	7.77	<0.260	0.0381	26.8
BKG09 5'	4/9/2024	5'	3.67	108	0.249	<0.30	6.64	6.17	8.08	<0.260	0.0336	28.3
1.25x Maximum Background Concentration		0.5'	5.60	109	0.479	<0.30	21.4	12.5	11.6	0.333	0.0659	67.6
1.25x Maximum Background Concentration		3'	6.14	143	0.469	<0.30	18.4	13.4	19.1	<0.260	0.0745	67.9
1.25x Maximum Background Concentration		5'	11.9	135	0.578	<0.30	15.5	12.4	15.1	<0.260	0.0638	55.3

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.

2. **Red** 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. 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.

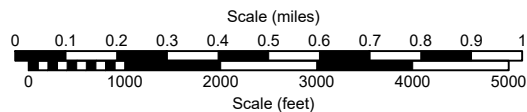
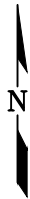
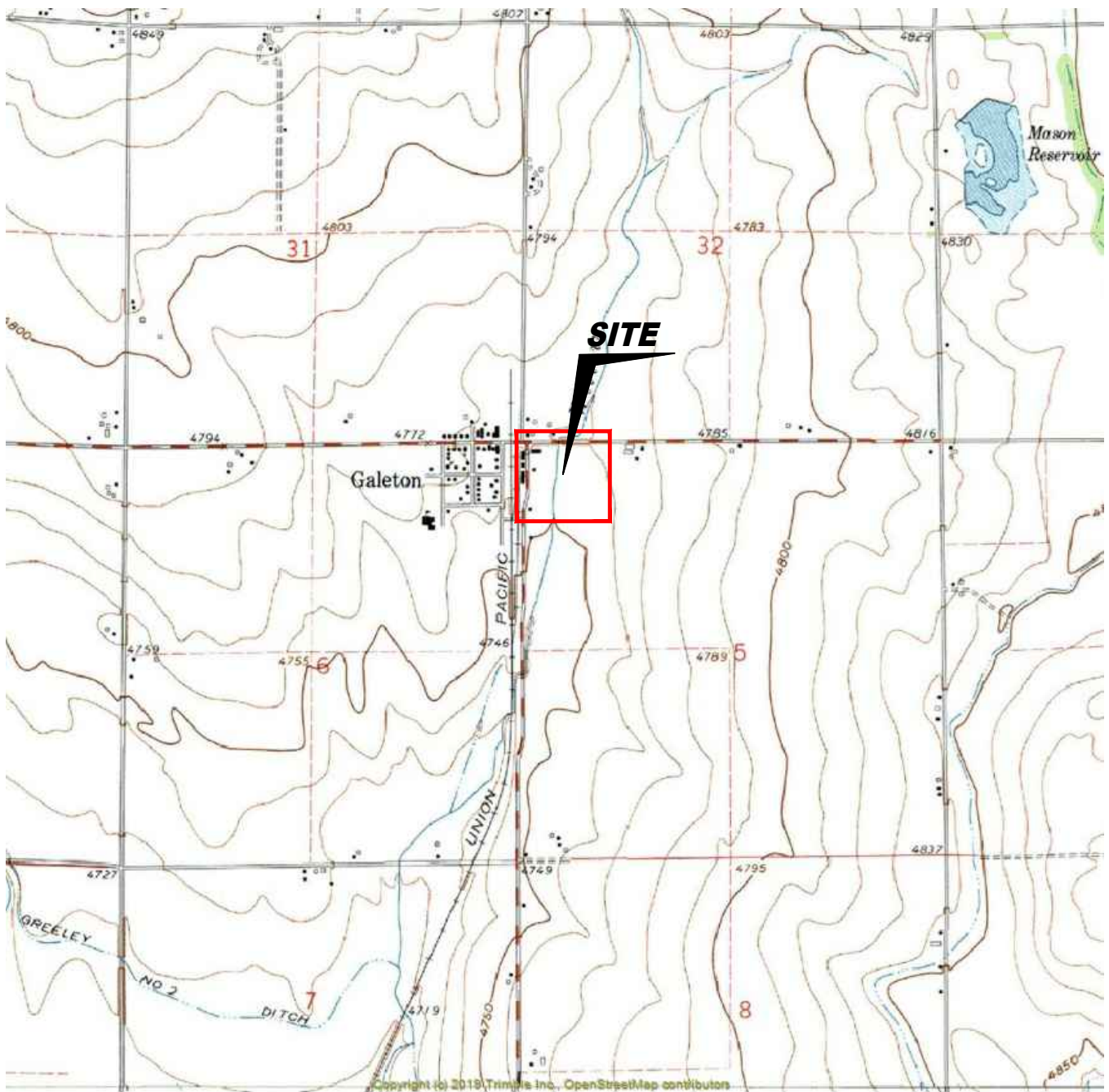
mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

* Indicates laboratory minimum detection limit in excess of SSL

NA - Not analyzed/Not applicable



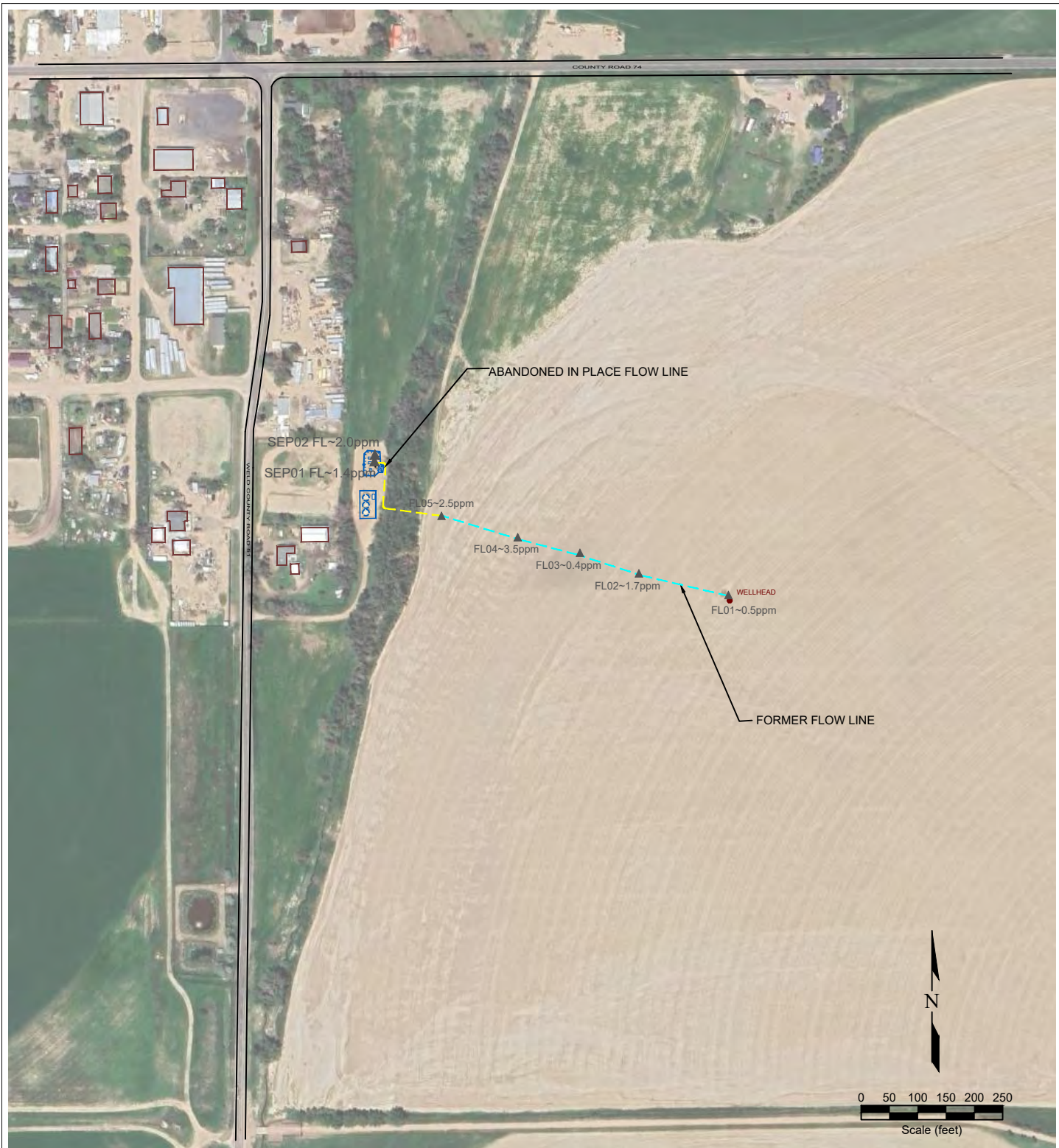
USGS 7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 1
SITE LOCATION MAP

Noble Energy, Inc.
ROUSE USX A 05-19
 NWNW Sec. 5, T6N, R64W, 6th PM
 Weld County, Colorado
 40.518700°, -104.579130°

Project No. CO24-074	API # 05-123-24697	Facility #
Date 1/23/25	Remediation # 32929	Filename 24074TFL





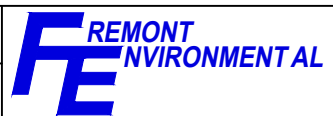
LEGEND

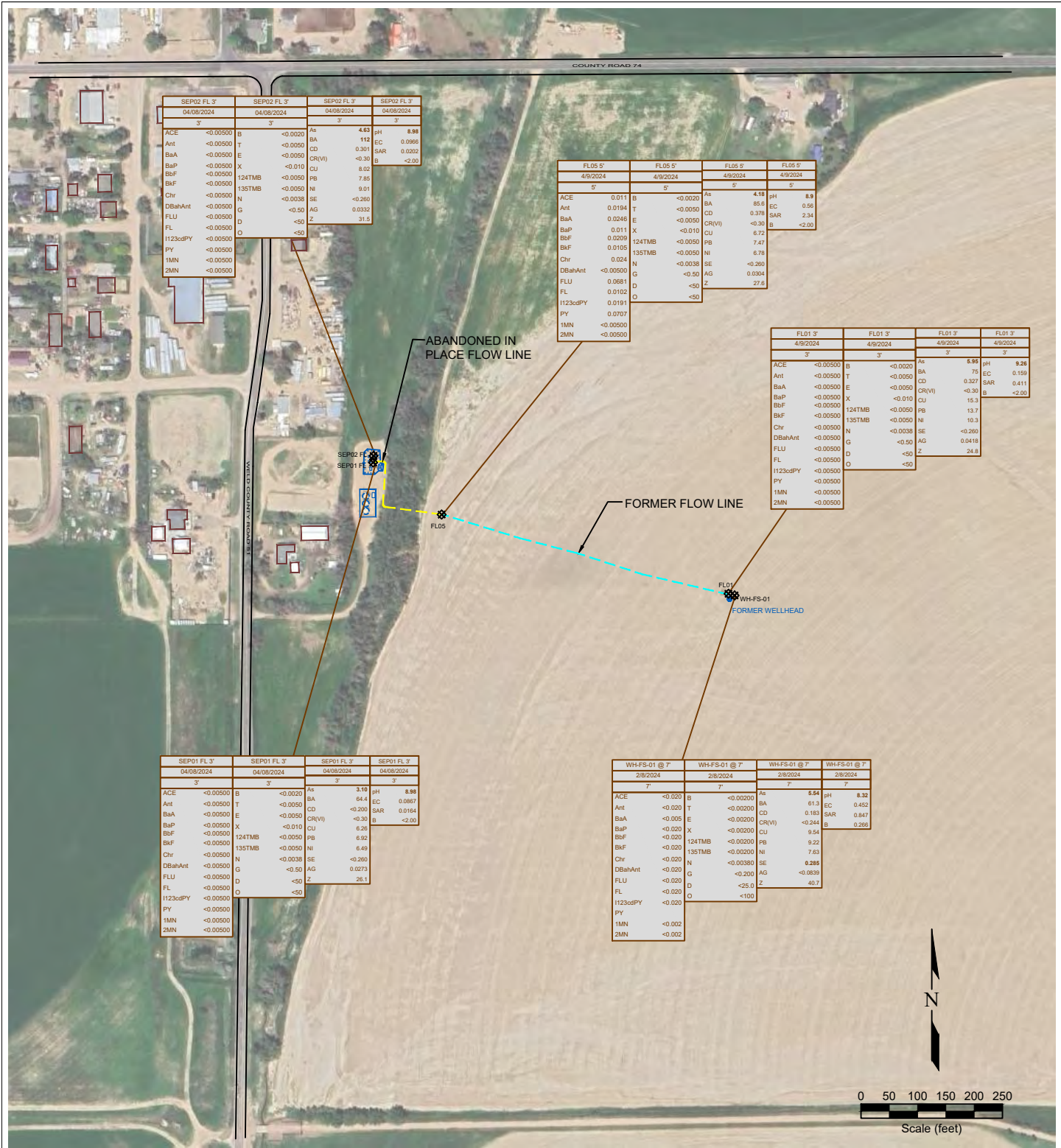
● WELL HEAD LOCATION	○ ABOVE GROUND STORAGE TANK	FORMER FACILITY	ABANDONED IN PLACE FLOW LINE
▲ PID READING LOCATION	BUILDING	BUILDING	FORMER FLOW LINE
	CONTAINMENT BERM	CONTAINMENT WALL	

Figure 2
SITE MAP

Noble Energy, Inc.
ROUSE USX A 05-19
 NWNW Sec. 5, T6N, R64W, 6th PM
 Weld County, Colorado
 40.518700°, -104.579130°

Project No. CO24-074	API # 05-123-24697	Facility #
Date 1/23/25	Remediation # 32929	Filename 24074QFLBKG





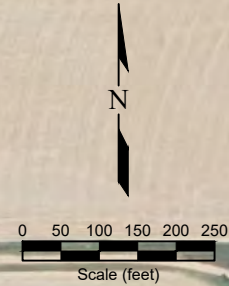
SEP02 FL 3'		SEP02 FL 3'		SEP02 FL 3'		SEP02 FL 3'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024	
3'		3'		3'		3'	
ACE	<-0.00500	B	<-0.00200	As	4.63	pH	8.88
Ant	<-0.00500	T	<-0.00500	BA	112	EC	0.0960
BaA	<-0.00500	E	<-0.00500	CD	0.301	SAR	0.0202
BaP	<-0.00500	X	<-0.010	CR(VI)	<-0.30	B	<-2.00
BbF	<-0.00500	124TMB	<-0.00500	PB	8.02		
BkF	<-0.00500	135TMB	<-0.00500	NI	7.85		
Chr	<-0.00500	N	<-0.0038	SE	<-0.260		
DBahAnt	<-0.00500	G	<-0.50	AG	0.0332		
FLU	<-0.00500	D	<-50	Z	31.5		
FL	<-0.00500	O	<-50				
1123cdPY	<-0.00500						
PY	<-0.00500						
1MN	<-0.00500						
2MN	<-0.00500						

FL05 5'		FL05 5'		FL05 5'		FL05 5'	
4/9/2024		4/9/2024		4/9/2024		4/9/2024	
5'		5'		5'		5'	
ACE	0.011	B	<-0.0020	As	4.18	pH	8.8
Ant	0.0194	T	<-0.0050	BA	85.6	EC	0.56
BaA	0.0246	E	<-0.0050	CD	0.378	SAR	2.34
BaP	0.011	X	<-0.010	CR(VI)	<-0.30	B	<-2.00
BbF	0.0209	124TMB	<-0.0050	CU	6.72		
BkF	0.0105	135TMB	<-0.0050	PB	7.47		
Chr	0.024	N	<-0.0038	NI	6.78		
DBahAnt	<-0.00500	G	<-0.50	SE	<-0.260		
FLU	0.0681	D	<-50	AG	0.0304		
FL	0.0102	O	<-50	Z	27.6		
1123cdPY	0.0191						
PY	0.0707						
1MN	<-0.00500						
2MN	<-0.00500						

FL01 3'		FL01 3'		FL01 3'		FL01 3'	
4/9/2024		4/9/2024		4/9/2024		4/9/2024	
3'		3'		3'		3'	
ACE	<-0.00500	S	<-0.0020	As	9.95	pH	9.26
Ant	<-0.00500	T	<-0.0050	BA	75	EC	0.159
BaA	<-0.00500	E	<-0.0050	CD	0.327	SAR	0.411
BaP	<-0.00500	X	<-0.010	CR(VI)	<-0.30	B	<-2.00
BbF	<-0.00500	124TMB	<-0.0050	CU	15.3		
BkF	<-0.00500	135TMB	<-0.0050	PB	13.7		
Chr	<-0.00500	N	<-0.0038	NI	10.3		
DBahAnt	<-0.00500	G	<-0.50	SE	<-0.260		
FLU	<-0.00500	D	<-50	AG	0.0418		
FL	<-0.00500	O	<-50	Z	24.8		
1123cdPY	<-0.00500						
PY	<-0.00500						
1MN	<-0.00500						
2MN	<-0.00500						

SEP01 FL 3'		SEP01 FL 3'		SEP01 FL 3'		SEP01 FL 3'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024	
3'		3'		3'		3'	
ACE	<-0.00500	B	<-0.00200	As	3.16	pH	8.88
Ant	<-0.00500	T	<-0.00500	BA	64.4	EC	0.0857
BaA	<-0.00500	E	<-0.00500	CD	<-0.200	SAR	0.0164
BaP	<-0.00500	X	<-0.010	CR(VI)	<-0.30	B	<-2.00
BbF	<-0.00500	124TMB	<-0.00500	CU	6.26		
BkF	<-0.00500	135TMB	<-0.00500	PB	6.92		
Chr	<-0.00500	N	<-0.0038	NI	6.49		
DBahAnt	<-0.00500	G	<-0.50	SE	<-0.260		
FLU	<-0.00500	D	<-50	AG	0.0273		
FL	<-0.00500	O	<-50	Z	26.1		
1123cdPY	<-0.00500						
PY	<-0.00500						
1MN	<-0.00500						
2MN	<-0.00500						

WH-FS-01 @ 7'		WH-FS-01 @ 7'		WH-FS-01 @ 7'		WH-FS-01 @ 7'	
2/8/2024		2/8/2024		2/8/2024		2/8/2024	
7'		7'		7'		7'	
ACE	<-0.020	B	<-0.00200	As	8.84	pH	8.32
Ant	<-0.020	T	<-0.00200	BA	613	EC	0.492
BaA	<-0.005	E	<-0.00200	CD	0.183	SAR	0.847
BaP	<-0.020	X	<-0.00200	CR(VI)	<-0.244	B	0.268
BbF	<-0.020	124TMB	<-0.00200	CU	9.54		
BkF	<-0.020	135TMB	<-0.00200	PB	9.22		
Chr	<-0.020	N	<-0.00380	NI	7.63		
DBahAnt	<-0.020	G	<-0.200	SE	9.288		
FLU	<-0.020	D	<-25.0	AG	<-0.0839		
FL	<-0.020	O	<-100	Z	40.7		
1123cdPY	<-0.020						
PY							
1MN	<-0.002						
2MN	<-0.002						

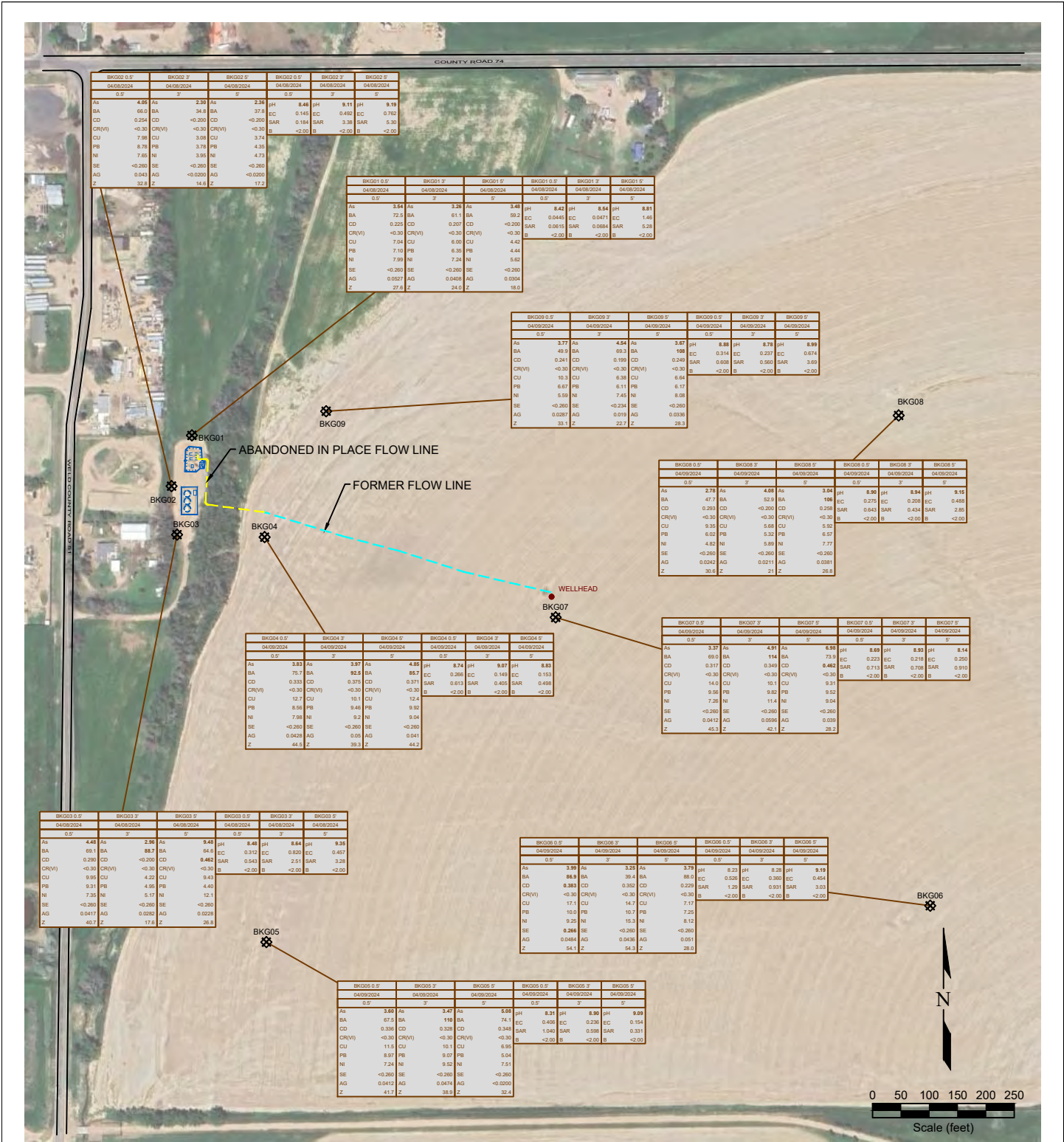


LEGEND

- WELL HEAD LOCATION
- ABOVE GROUND STORAGE TANK
- ABANDONED IN PLACE FLOW LINE
- FORMER FLOW LINE
- FENCE LINE
- ||||| CONTAINMENT BERM
- CONTAINMENT WALL
- FORMER FACILITY
- BUILDING

Figure 3
SOIL CHEMISTRY MAP
Noble Energy, Inc.
ROUSE USX A 05-19
 NWNW Sec. 5, T6N, R64W, 6th PM
 Weld County, Colorado
 40.518700°, -104.579130°

Project No. CO24-074	API # 05-123-24697	Facility #
Date 1/23/25	Remediation # 32929	Filename 24074QFLBKG



BKG01 0.5'		BKG01 3'		BKG01 5'		BKG01 0.5'		BKG01 3'		BKG01 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	4.65	As	2.35	As	2.35	pH	8.46	pH	8.11	pH	8.19
BA	66.0	BA	34.8	BA	37.8	EC	0.145	EC	0.492	EC	0.712
CD	0.294	CD	<0.260	CD	<0.260	SAR	0.184	SAR	3.38	SAR	5.30
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	7.98	CU	3.01	CU	3.74						
PB	8.78	PB	3.78	PB	4.35						
NI	7.65	NI	3.95	NI	4.75						
SE	<0.260	SE	<0.260	SE	<0.260						
AG	0.043	AG	<0.0200	AG	<0.0200						
Z	32.8	Z	14.0	Z	17.2						

BKG01 0.5'		BKG01 3'		BKG01 5'		BKG01 0.5'		BKG01 3'		BKG01 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	3.54	As	3.25	As	3.48	pH	8.42	pH	8.54	pH	8.81
BA	72.5	BA	61.1	BA	69.2	EC	0.046	EC	0.0471	EC	1.46
CD	0.225	CD	0.207	CD	<0.200	SAR	0.015	SAR	0.088	SAR	5.28
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	7.04	CU	6.00	CU	4.42						
PB	7.10	PB	6.35	PB	4.44						
NI	7.35	NI	7.24	NI	5.82						
SE	<0.260	SE	<0.260	SE	<0.260						
AG	0.0527	AG	0.0458	AG	0.0304						
Z	27.8	Z	24.0	Z	18.0						

BKG09 0.5'		BKG09 3'		BKG09 5'		BKG09 0.5'		BKG09 3'		BKG09 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	3.77	As	4.54	As	3.67	pH	8.88	pH	8.78	pH	8.98
BA	49.9	BA	69.3	BA	108	EC	0.314	EC	0.237	EC	0.674
CD	0.241	CD	0.199	CD	0.249	SAR	0.608	SAR	0.560	SAR	3.69
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	10.3	CU	6.38	CU	6.64						
PB	6.67	PB	6.11	PB	6.17						
NI	5.59	NI	7.45	NI	8.08						
SE	<0.260	SE	<0.234	SE	<0.260						
AG	0.0287	AG	0.019	AG	0.038						
Z	33.1	Z	22.7	Z	28.3						

BKG08 0.5'		BKG08 3'		BKG08 5'		BKG08 0.5'		BKG08 3'		BKG08 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	2.78	As	4.63	As	3.04	pH	8.98	pH	8.84	pH	9.15
BA	47.7	BA	52.9	BA	108	EC	0.278	EC	0.208	EC	0.488
CD	0.280	CD	<0.260	CD	0.289	SAR	0.643	SAR	0.434	SAR	2.88
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	9.35	CU	5.68	CU	5.92						
PB	6.02	PB	5.52	PB	6.57						
NI	4.82	NI	5.89	NI	7.77						
SE	<0.260	SE	<0.260	SE	<0.260						
AG	0.0242	AG	0.0211	AG	0.0381						
Z	38.8	Z	21	Z	25.8						

BKG04 0.5'		BKG04 3'		BKG04 5'		BKG04 0.5'		BKG04 3'		BKG04 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	3.83	As	3.97	As	4.88	pH	8.74	pH	8.97	pH	8.83
BA	75.7	BA	82.5	BA	86.7	EC	0.266	EC	0.169	EC	0.163
CD	0.333	CD	0.375	CD	0.371	SAR	0.613	SAR	0.405	SAR	0.498
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	12.7	CU	10.1	CU	12.4						
PB	8.56	PB	9.46	PB	9.30						
NI	7.88	NI	9.2	NI	9.04						
SE	<0.260	SE	<0.260	SE	<0.260						
AG	0.0423	AG	0.02	AG	0.041						
Z	44.3	Z	38.3	Z	44.7						

BKG07 0.5'		BKG07 3'		BKG07 5'		BKG07 0.5'		BKG07 3'		BKG07 5'	
04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024		04/08/2024	
0.5'		3'		5'		0.5'		3'		5'	
As	3.37	As	4.91	As	4.98	pH	8.88	pH	8.83	pH	8.14
BA	69.0	BA	114	BA	73.9	EC	0.223	EC	0.218	EC	0.250
CD	0.317	CD	0.349	CD	0.462	SAR	0.713	SAR	0.708	SAR	0.910
CR(V)	<0.30	CR(V)	<0.30	CR(V)	<0.30	B	<2.00	B	<2.00	B	<2.00
CU	14.0	CU	10.1	CU	9.91						
PB	9.56	PB	9.82	PB	9.52						
NI	7.25	NI	11.4	NI	9.04						
SE	<0.260	SE	<0.260	SE	<0.260						
AG	0.0412	AG	0.0295	AG	0.038						
Z	45.3	Z	42.1	Z	28.2						

LEGEND

- WELL HEAD LOCATION
- ABOVE GROUND STORAGE TANK
- ⊗ SOIL SAMPLE LOCATION
- ABANDONED IN PLACE FLOW LINE
- FORMER FLOW LINE
- FENCE LINE
- ||||| CONTAINMENT BERM
- CONTAINMENT WALL

SAMPLE DATE	SAMPLE ID	DEPTH (ft)	DATE SAMPLED	SAMPLE ID	DEPTH (ft)	DATE SAMPLED
As	As	0.5'	04/08/2024	As	0.5'	04/08/2024
BA	BA	0.5'	04/08/2024	BA	0.5'	04/08/2024
CD	CD	0.5'	04/08/2024	CD	0.5'	04/08/2024
CR(V)	CR(V)	0.5'	04/08/2024	CR(V)	0.5'	04/08/2024
CU	CU	0.5'	04/08/2024	CU	0.5'	04/08/2024
PB	PB	0.5'	04/08/2024	PB	0.5'	04/08/2024
NI	NI	0.5'	04/08/2024	NI	0.5'	04/08/2024
SE	SE	0.5'	04/08/2024	SE	0.5'	04/08/2024
AG	AG	0.5'	04/08/2024	AG	0.5'	04/08/2024
Z	Z	0.5'	04/08/2024	Z	0.5'	04/08/2024

Figure 4
BACKGROUND SAMPLE SOIL CHEMISTRY MAP

Noble Energy, Inc.
ROUSE USX A 05-19
NWNW Sec. 5, T6N, R64W, 6th PM
Weld County, Colorado
40.518700°, -104.579130°

Project No. CO24-074	API # 05-123-24697	Facility #	
Date 1/23/25	Remediation # 32929	Filename 24074QFLBKG	

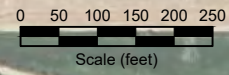


Photo Log



Description:

#1-FL01 3' - No visual staining or odor

Photo Log



Description:

#2-FL02 4' - No visual staining or odor

Photo Log



Description:

#3-FL03 4' - No visual staining or odor

Photo Log



Description:

#4-FL04 3' - No visual staining or odor

Photo Log



Description:

#5-FL05 5' - End of abandonment no visual staining or odor

Photo Log



Description:

#6- SEP02 FL 3' - Start of abandonment no visual staining or odor

Photo Log



Description:

#7- SEP01 FL 3' - Start of abandonment no visual staining or odor