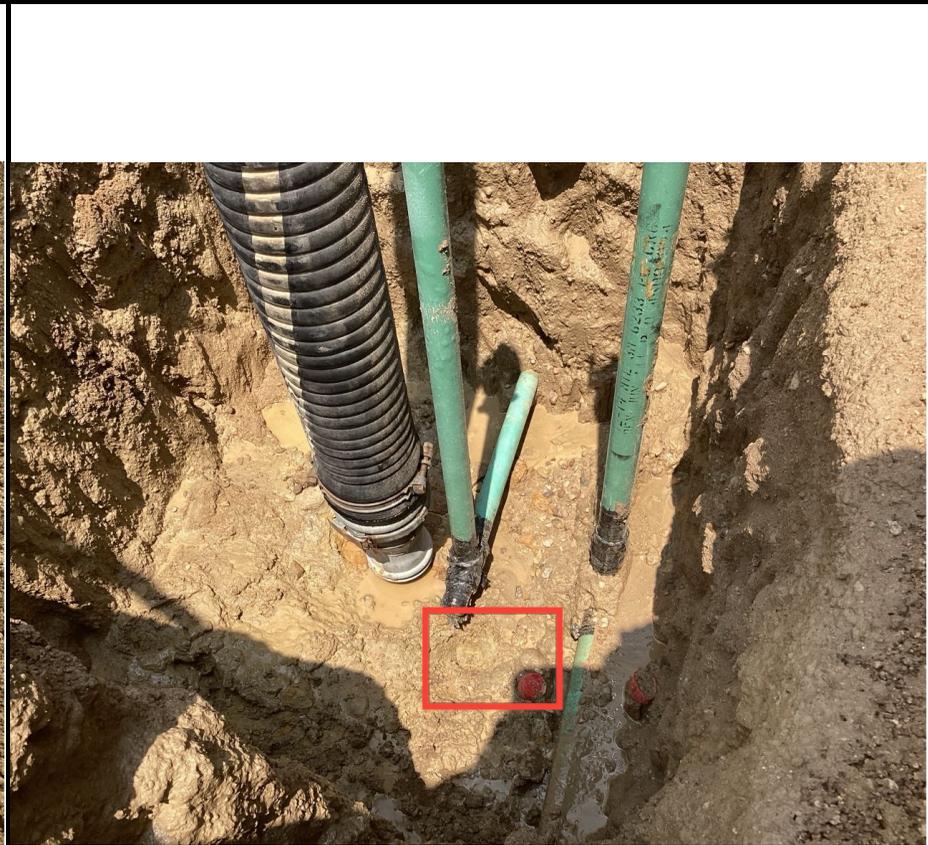
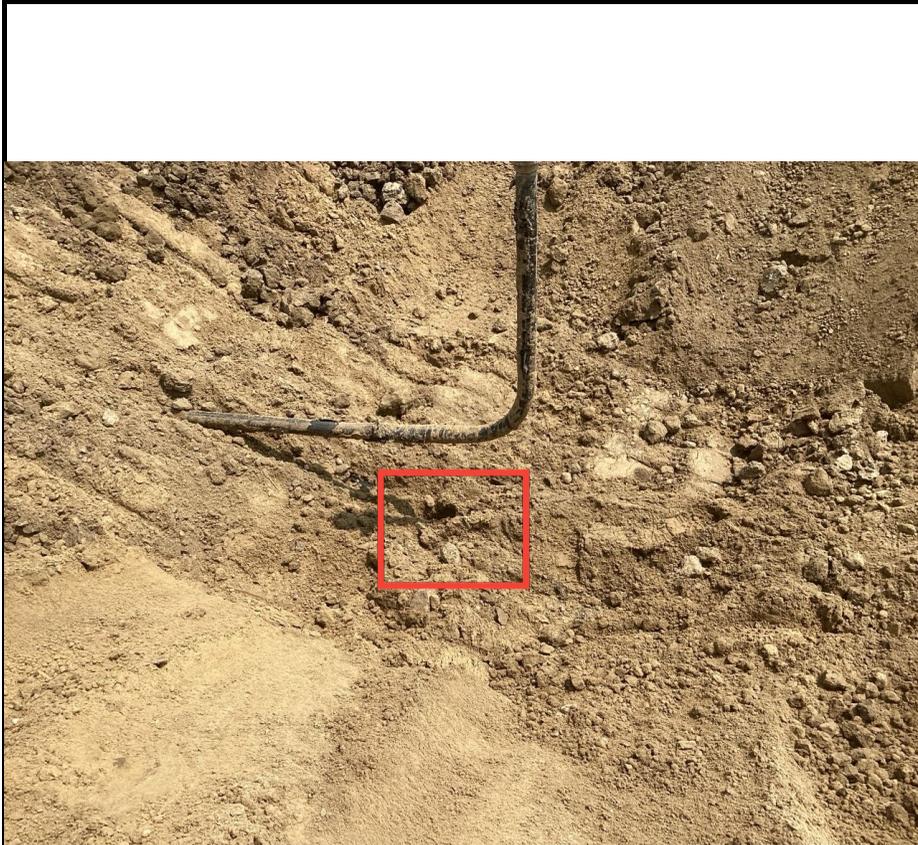




SITE NAME: Torres USX AB35-09 (FL)							DATE: 7/23/2024	REM. PROJECT #: 35770	WEATHER: 90s sunny	
SITE DIRECTIONS: Cr 74 and cr 59, N .5 miles, W into site							CLIENT: Noble			
LEGALS AND LAT/LONG: 40.528050,-104.510100							TASMAN PERSONNEL: TL			
SOIL TYPES: Well Graded Sand - SW							SURFACE GRADIENT: South			
SOIL SAMPLING							FACILITY INFRASTRUCTURE			
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo?	Grab or Lab Sample?	EQUIPMENT	Quantity	Photo?	
							Above Ground Storage Tank (AST)			
7/23/2024 13:00	FL01R-S@4'	92.2	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel			
7/23/2024 12:15	FL01R-W@3'	0.2	No Staining	No Odor	Yes	Lab	Separator			
							Emission Control Device (ECD)			
							Dump Line			
							Wellhead			
							Flowline	1	Yes	
							Other:			
							Soil Loads Removed			
							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:			



Equipment ID: FL01R-W@3'		Equipment Type:	
Material:	Volume:	Contents:	
Notes/Conditions: FACING EAST Flowline contained PCMC coating Sample collected via hand auger in order to not interact with the coating on line			

Equipment ID: FL01R-S@4'		Equipment Type:	
Material:	Volume:	Contents:	
Notes/Conditions: FACING NORTH NO GROUND WATER ENCOUNTERED WATER IN PHOTO IS FROM HYDROVAC			

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE ENERGY, INC. (100322)
TORRES USX AB35-09 FLOWLINE, WELD COUNTY, COLORADO
REM # 35770

Sample ID	Sample Date	Depth (ft. bgs)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
FL01R-S@4'	7/23/2024	4	40.529593	-104.508031	0.9	92.2
FL01R-W@3'	7/23/2024	3	40.528046	-104.510119	0.9	0.2

Notes:

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 ENERGY, INC. (100322)
TORRES USX AB35-09 FLOWLINE, WELD COUNTY, COLORADO
REM # 35770

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-S@4'	7/23/2024	4	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.50	<50	<50
FL01R-W@3'	7/23/2024	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<50	<0.50	<50	<50

Notes:

- Bold** values exceed the ECMC Table 915-1 limit(s).
- Pink & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
- ** 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 ENERGY, INC. (100322)
TORRES USX AB35-09 FLOWLINE, WELD COUNTY, COLORADO
REM # 35770

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
FL01R-S@4'	7/23/2024	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
FL01R-W@3'	7/23/2024	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00564	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

Notes:

- Bold** values exceed the ECMC Table 915-1 limit(s).
- Pink & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (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 ENERGY, INC. (100322)
TORRES USX AB35-09 FLOWLINE, WELD COUNTY, COLORADO
REM # 35770

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-S@4'	7/23/2024	4	8.77	0.156	0.0592	<2.00
FL01R-W@3'	7/23/2024	3	8.11	0.485	0.628	<2.00

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) above 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 ENERGY, INC. (100322)
TORRES USX AB35-09 FLOWLINE, WELD COUNTY, COLORADO
REM # 35770

Sample ID	Sample Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) ^[4] (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
FL01R-S@4'	7/23/2024	4	1.38	44.9	0.256	<0.30*	5.52	6.83	4.54	<0.260	0.0272	25.6
FL01R-W@3'	7/23/2024	3	1.88	44.7	<0.200	<0.30*	3.30	4.43	3.48	<0.260	<0.0200	15.1

Notes:

- 1. Bold** faced values exceed the ECMC Table 915-1 limit(s) above native background concentrations.
- Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
- Compound falls within ECMC Table 915-1 Footnote 9.

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



DATE:	7/31/2024
DESIGNED BY:	LB
DRAWN BY:	LB



TASMAN Tasman, Inc.
6855 W 119th Avenue
Broomfield, CO 80020

Noble Energy, Inc. (100322) – DJ Basin
Torres USX AB35-09 Flowline
NESE, Section 35, Township 7 North, Range 64 West
Weld County, Colorado

SOIL SAMPLE
LOCATION MAP

FIGURE
1



Legend

-  Proposed Soil Boring Location
-  Flowline Location
-  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.

GPS – Global Positioning System
 mg/kg – Milligrams per kilogram
 ppm – Parts per Million
 PID – Photoionization Detetector

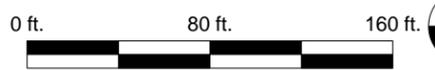


Image Source: Google Earth; Google 2023

DATE:	8/21/2024
DESIGNED BY:	JW
DRAWN BY:	LM



TASMAN Tasman, Inc.
 6855 W 119th Avenue
 Broomfield, CO 80020

Noble Energy, Inc. (100322) – DJ Basin
Torres USX AB35-09 Flowline
 NESE, Section 35, Township 7 North, Range 64 West
 Weld County, Colorado

Proposed Soil
 Boring Locations

FIGURE
 2