



CDH Consulting, LLC
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Wellhead Closure Investigation and Environmental Summary

LUCCI B 01-23 Wellhead
ECMC Remediation Project #36410
Weld County, Colorado

Attachments:

Field Form

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Photographic Log

Wellhead Closure Checklist

Boring Logs



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FIELD FORM

SITE NAME / REM: LUCCI B 01-23 WH / REM #36410							DATE: 3/21/2025 & 12/10/2025	WEATHER: Partly cloudy/sunny, 30-40s F		
TYPE OF WORK: Wellhead Decommissioning and Wellhead Background Sampling							CLIENT: Chevron			
LAT/LONG: 40.424889, -104.493611							PERSONNEL: EN			
ESTIMATED DEPTH TO GROUNDWATER: ~ 6 feet bgs							OTHER OBSERVATIONS: None			
SOIL SAMPLING							FACILITY INFRASTRUCTURE			
Date	Soil Sample ID	Soil Type	PID (ppm)	Staining (Y/N)	Odor (Y/N)	Time	Sent to lab on Ice? (Y/N)	EQUIPMENT	Quantity	
								Above Ground Storage Tank (AST)	-	
3/21/2025	WH01@6'	SW	0.1	N	N	-	Y	Buried or Partially Buried Vessel	-	
3/21/2025	WH01-N@5'	SC	0.3	N	N	-	Y	Separator	-	
3/21/2025	WH01-E@5'	SC	0.1	N	N	-	Y	Emission Control Device (ECD)	-	
3/21/2025	WH01-W@5'	SC	0.0	N	N	-	Y	Dump Line	-	
3/21/2025	WH01-S@5'	SC	0.0	N	N	-	Y	Wellhead	1	
3/21/2025	BKG01@5.5'	SC	0.0	N	N	-	Y	Flowline	-	
3/21/2025	BKG02@5.5'	SC	0.0	N	N	-	Y	Third Party Equipment:	-	
3/21/2025	BKG03@5.5'	SC	0.0	N	N	-	Y	Other:	-	
12/10/2025	BKG04@5.5'	SW	0.2	N	N	11:07:00 AM	Y	Soil Loads Removed		
12/10/2025	BKG05@5.5'	SW	0.7	N	N	11:15:00 AM	Y	IMPACTED SOIL IDENTIFIED?		
12/10/2025	BKG06@5.5'	CL	0.4	N	N	11:22:00 AM	Y	ESTIMATED VOLUME OF IMPACTS:		
								Date	Number	CY
								3/21/2025	4	40
								Total Removed	4	40
								Disposal Facility: North Weld Landfill		
								Groundwater Recovery		
								DATE GW ENCOUNTERED: 12/10/2025	DEPTH: 6'	
								GROUNDWATER IN CONTACT WITH IMPACTED SOIL? No		
								LNAPL OR SHEEN OBSERVED ON GW? No		
GROUNDWATER SAMPLING							Date	BBLS		
Date/Time	Groundwater Sample ID	Depth Collected (feet)	Turbid?	Sheen?	Odor?	Photo?	Sent to lab on Ice? (Y/N)			
12/10/2025	GW01	5.45	N	N	N	Y	Y			
12/10/2025	BKG04-GW	5.21	N	N	N	Y	Y			
12/10/2025	BKG05-GW	4.47	N	N	N	Y	Y	Total Removed		
12/10/2025	BKG06-GW	3.91	N	N	N	Y	Y	Disposal Facility:		





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FIGURES

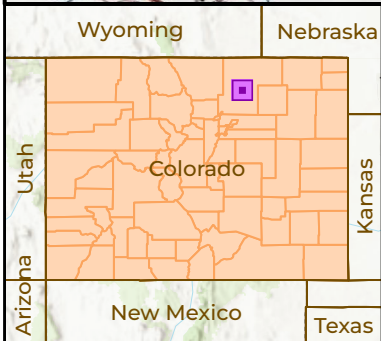
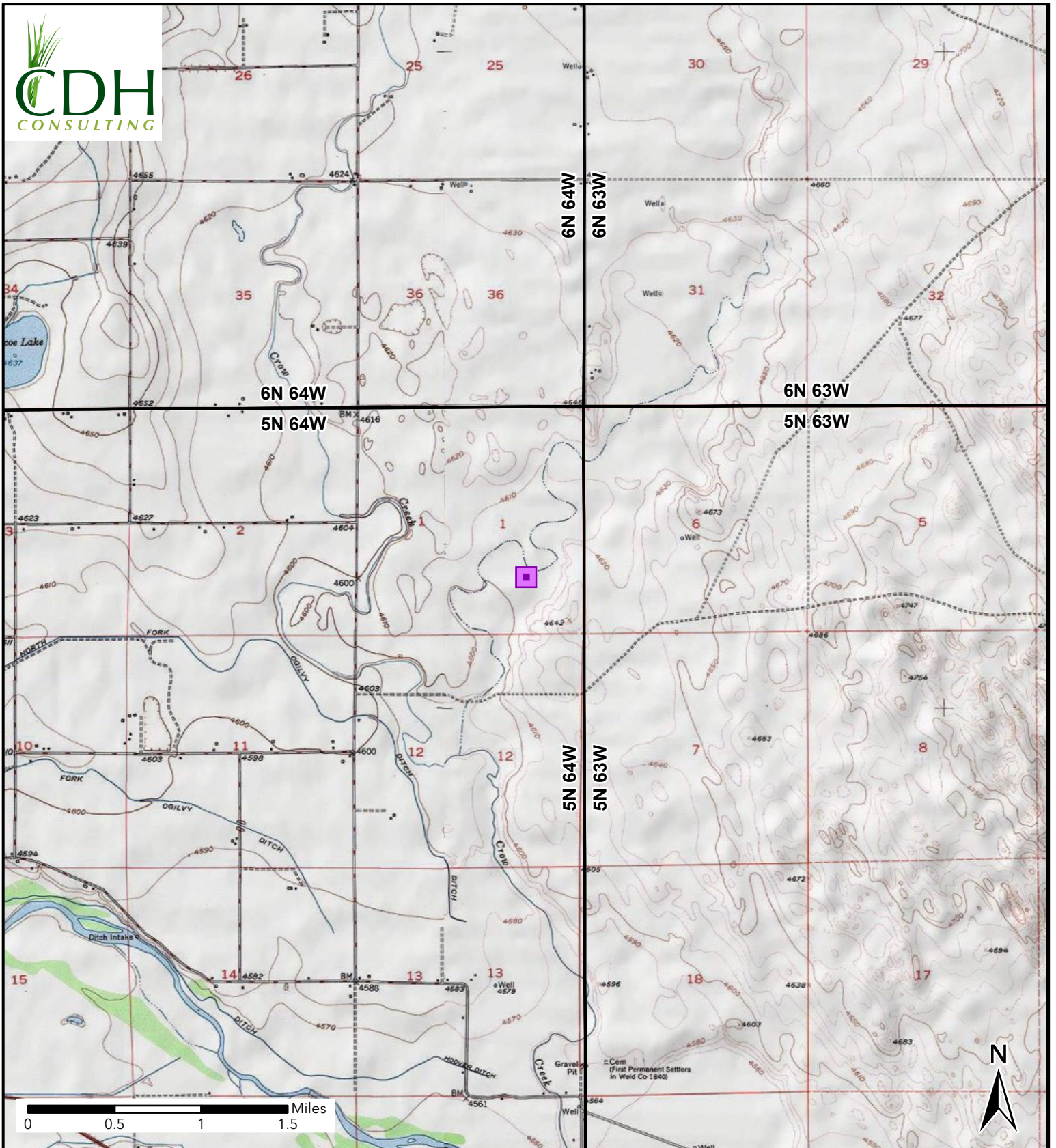

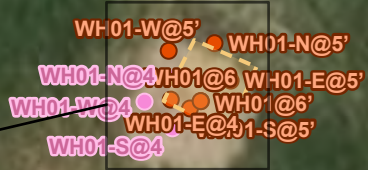


Figure 1
Site Location Map
LUCCI B 01-23 WH
NWSE-SEC 1-T5N-R64W
Weld County, Colorado
Noble Energy, Inc.

 Site Location

WH01-W@5'
Date: 3/21/2025
Lead: **18.0** mg/kg

GW01
Date: 12/10/2025
Chloride Ion: **389** mg/L



NOTE:
XXXX@X = Sample Name @ Depth in Feet
BOLD - Above ECMC Table 915-1 Standards
"mg/kg" = milligrams per kilogram
"mg/L" = milligrams per liter
** = Previous WH samples collected on 8/16/24

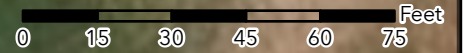


Figure 2
Soil Sample and Field Screening Locations Map
LUCCI B 01-23 WH
NWSE-SEC 1-T5N-R64W
Weld County, Colorado
Noble Energy Inc.

- Soil Sample
- Background Sample
- Grab Groundwater Sample
- Screening Point
- Existing Excavation

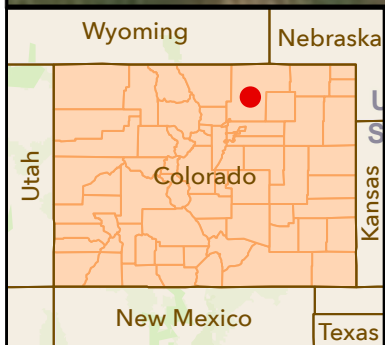
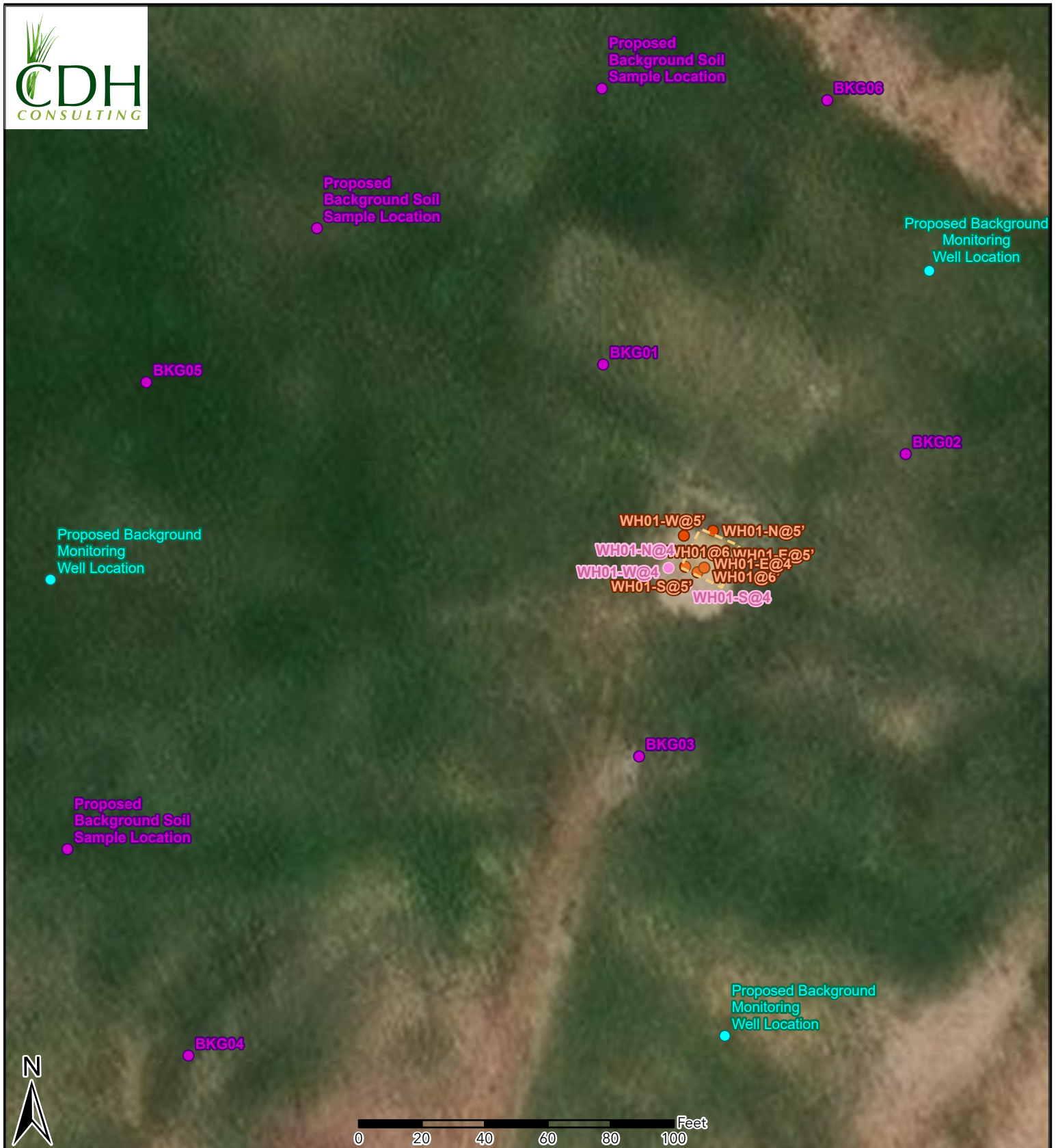


Figure 3 Supplemental Site Investigation Map

LUCCI B 01-23 WH
NWSE-SEC 1-T5N-R64W
Weld County, Colorado
Noble Energy Inc.

- Soil Sample
- Background Sample
- Proposed Monitoring Well
- Grab Groundwater Sample
- Screening Point
- Existing Excavation



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TABLES

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

Sample ID	Sample Date	Depth (ft)	GPS Data		PDOP Value	VOC Concentration (ppm)	Consultant Who Collected the Samples
			Latitude/Longitude				
WH01@6	8/16/2024	6	40.424894	-104.493609	NM	6.9	Entrada
WH01-E@4	8/16/2024	4	40.424893	-104.493587	NM	32.7	Entrada
WH01-S@4	8/16/2024	4	40.424878	-104.493608	NM	21.8	Entrada
WH01-W@4	8/16/2024	4	40.424893	-104.493628	NM	17.2	Entrada
WH01-N@4	8/16/2024	4	40.424906	-104.493610	NM	14.6	Entrada
WH01@6'	3/21/2025	6	40.424893	-104.493587	NM	0.1	CDH
WH01-N@5'	3/21/2025	5	40.424925	-104.493577	1.000000	0.3	CDH
WH01-E@5'	3/21/2025	5	40.424904	-104.493565	1.000000	0.0	CDH
WH01-W@5'	3/21/2025	5	40.424921	-104.493610	1.100000	0.0	CDH
WH01-S@5'	3/21/2025	5	40.424889	-104.493595	0.900000	0.0	CDH
BKG01@5.5'	3/21/2025	5.5	40.425071	-104.493700	0.900000	0.0	CDH
BKG02@5.5'	3/21/2025	5.5	40.424990	-104.493356	1.000000	0.0	CDH
BKG03@5.5'	3/21/2025	5.5	40.424729	-104.493664	0.900000	0.0	CDH
BKG04@5.5'	12/10/2025	5.5	40.424473	-104.494182	0.900000	0.2	CDH
BKG05@5.5'	12/10/2025	5.5	40.425060	-104.494221	1.100000	0.7	CDH
BKG06@5.5'	12/10/2025	5.5	40.425299	-104.493441	1.100000	0.4	CDH
GW01	12/10/2025	-	40.424906	-104.493579	1.000000	NM	CDH

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

NM = Not Measured

ft. = Feet

bgs = Below ground surface

TABLE 2
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM #36410

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**		
WH01@6	8/16/2024	6	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.002	<125.200	<0.200	<25.0	<100
WH01-E@4	8/16/2024	4	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.007	39.48	0.48	39	<100
WH01@6'	3/21/2025	6	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<0.50	<50	<50
WH01-N@5'	3/21/2025	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<0.50	<50	<50
WH01-E@5'	3/21/2025	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<0.50	<50	<50
WH01-W@5'	3/21/2025	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<0.50	<50	<50
WH01-S@5'	3/21/2025	5	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<100.50	<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
- Source material characterization sample, excavated and transported off site for disposal.

TABLE 3
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

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
WH01@6	8/16/2024	6	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.002	<0.002
WH01-E@4	8/16/2024	4	<0.020	<0.020	<0.005	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.021	0.029
WH01@6'	3/21/2025	6	<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
WH01-N@5'	3/21/2025	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
WH01-E@5'	3/21/2025	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
WH01-W@5'	3/21/2025	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
WH01-S@5'	3/21/2025	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

- Bold values exceed the ECMC Table 915-1 limit(s)
 - Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL)
 - * Indicates laboratory minimum detection limit in excess of SSL
- (<) = Analytical result is less than the indicated laboratory reporting limit.
mg/kg = Milligrams per kilogram
ft. = Feet
bgs = Below ground surface
Source material characterization sample, excavated and transported off site for disposal.

TABLE 4
SUMMARY OF SOIL SUITABILITY FOR RECLAMATION
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

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
WH01@6	8/16/2024	6	8.20	1.68	4.51	0.171
WH01-E@4	8/16/2024	4	8.91	2.79	8.36	0.903
WH01@6'	3/21/2025	6	8.62	1.70	4.70	<2.00
WH01-N@5'	3/21/2025	5	8.47	1.03	4.57	<2.00
WH01-E@5'	3/21/2025	5	8.33	2.19	8.36	<2.00
WH01-W@5'	3/21/2025	5	8.52	1.50	4.89	<2.00
WH01-S@5'	3/21/2025	5	8.45	0.309	8.61	<2.00
BKG01@5.5'	3/21/2025	5.5	8.25	0.568	12.4	<2.00
BKG02@5.5'	3/21/2025	5.5	8.92	0.186	38.2	<2.00
BKG03@5.5'	3/21/2025	5.5	8.85	0.408	14.1	<2.00
BKG04@5.5'	12/10/2025	5.5	8.23	3.93	0.994	<0.114
BKG05@5.5'	12/10/2025	5.5	8.03	4.97	1.26	<0.117
BKG06@5.5'	12/10/2025	5.5	8.59	6.25	1.71	0.720
Maximum Background Concentration			8.92	6.25	38.2	0.720

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.

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

TABLE 5
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

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
WH01@6	8/16/2024	6	2.18	43.9	<0.0931	<0.244*	<9.31	5.58	3.37	<0.242	<0.0931	<34.4
WH01-E@4	8/16/2024	4	1.99	58.4	0.0978	<0.249*	<8.89	290	4.38	0.244	<0.0889	<32.9
WH01@6'	3/21/2025	6	1.35	6.22	<0.200	<0.30 *	1.08	2.43	1.02	<0.260	<0.0200	5.21
WH01-N@5'	3/21/2025	5	1.79	14.4	<0.200	<0.30 *	1.99	3.49	2.16	<0.260	<0.0200	9.88
WH01-E@5'	3/21/2025	5	1.92	69.2	<0.200	<0.30 *	3.43	5.69	3.30	<0.260	0.0241	13.5
WH01-W@5'	3/21/2025	5	1.68	44.6	0.369	<0.30 *	3.03	18.0	2.62	<0.260	<0.0200	53.2
WH01-S@5'	3/21/2025	5	1.74	44.3	<0.200	<0.30 *	2.76	6.44	2.66	<0.260	<0.0200	12.1
BKG01@5.5'	3/21/2025	5.5	1.44	24.1	<0.200	<0.30 *	2.23	3.48	2.24	<0.260	<0.0200	9.55
BKG02@5.5'	3/21/2025	5.5	1.29	27.2	<0.200	<0.30 *	1.69	2.78	1.88	<0.260	<0.0200	8.41
BKG03@5.5'	3/21/2025	5.5	2.19	64.9	0.241	<0.30 *	4.18	6.54	3.63	0.277	0.0401	17.4
BKG04@5.5'	12/10/2025	5.5	16.4	94.8	<0.295	<0.539*	<35.8	<10.9	<20.2	<0.191	<0.622	<288
BKG05@5.5'	12/10/2025	5.5	6.10	<66.8	<0.310	<0.579*	<37.5	<11.4	<21.2	<0.200	<0.652	<301
BKG06@5.5'	12/10/2025	5.5	2.03	100	<0.314	<0.615*	<38.1	<11.6	<21.5	1.69	<0.662	<306
1.25x Maximum Background Concentration			20.5	125	0.301	NA	5.23	8.18	4.54	2.11	0.0501	21.8

- Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.
- Red** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
- Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
- 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

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

TABLE 6
SUMMARY OF GROUNDWATER ELEVATION DATA AND ORGANIC CHEMISTRY DATA
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Xylenes (µg/L)	Naphthalene (µg/L)	1,2,4- Trimethyl- Benzene (µg/L)	1,3,5- Trimethyl- Benzene (µg/L)	TOC Elevation (ft)	Depth to Groundwater Below TOC (ft)	Depth to Groundwater Below Ground Surface (ft)	Groundwater Elevation (ft)	LNAPL Thickness (ft)
ECMC Table 915-1 Limits		5.0	560	700	1400	140	67	67					
GW01	12/10/2025	<1.00	<1.00	<1.00	<1.00	<2.00	<2.00	<2.00	NM	NM	5.45	NM	NP
BKG04-GW	12/10/2025	NM	NM	NM	NM	NM	NM	NM	NM	NM	5.21	NM	NP
BKG05-GW	12/10/2025	NM	NM	NM	NM	NM	NM	NM	NM	NM	4.47	NM	NP
BKG06-GW	12/10/2025	NM	NM	NM	NM	NM	NM	NM	NM	NM	3.91	NM	NP

1. Bold values exceed the ECMC limit(s)
 2. Red highlighted groundwater analytical values indicate a regulatory exceedance
- NP - No measurable LNAPL, NA - Not Analyzed, NL - No Limit, INA - Inaccessible, IW - Insufficient Water, DES - Destroyed, NM - Not Measured

TABLE 7
SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE 100322
LUCCI B 01-23, WELD COUNTY, COLORADO
REM # 36410

Sample ID	Sample Date	Total Dissolved Solids (mg/L)	Chloride Ion (mg/L)	Sulfate Ion (mg/L)
ECMC Table 915-1 Limits*		<1.25 x local background	250 or <1.25 x local background	250 or <1.25 x local background
GW01	12/10/2025	5620	389	3200
BKG04-GW	12/10/2025	2400	106	1180
BKG05-GW	12/10/2025	2080	68.1	1000
BKG06-GW	12/10/2025	4540	262	2620
Background Concentration (Current)		5675	328	3275

1. Bold values exceed the ECMC limit(s)

2. Blue highlighted groundwater analytical values indicate a regulatory exceedance

NP - No measurable LNAPL, NA - Not Analyzed, INA - Inaccessible, IW - Insufficient Water, DES - Destroyed

*Dissolved metals refer to Colorado Regulation 41 Standards



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PHOTOGRAPHIC LOG

Photographic Log
LUCCI B 01-23 (REM #36410)
Noble Energy, Inc.
March 21, 2025 & December 10, 2025



Photo 1: View of wellhead excavation with groundwater infiltration, facing north

Photographic Log

LUCCI B 01-23 (REM #36410)

Noble Energy, Inc.

March 21, 2025 & December 10, 2025



Photo 2: View of wellhead excavation with groundwater, facing east

Photographic Log

LUCCI B 01-23 (REM #36410)

Noble Energy, Inc.

March 21, 2025 & December 10, 2025



Photo 3: View of wellhead excavation with groundwater, facing west

Photographic Log
LUCCI B 01-23 (REM #36410)
Noble Energy, Inc.
March 21, 2025 & December 10, 2025



Photo 4: View of wellhead excavation with groundwater, facing southwest

Photographic Log
LUCCI B 01-23 (REM #36410)
Noble Energy, Inc.
March 21, 2025 & December 10, 2025



Photo 5: View of BKG04, facing east

Photographic Log

LUCCI B 01-23 (REM #36410)

Noble Energy, Inc.

March 21, 2025 & December 10, 2025



Photo 6: View of BKG05, facing southeast

Photographic Log
LUCCI B 01-23 (REM #36410)
Noble Energy, Inc.
March 21, 2025 & December 10, 2025



Photo 7: View of BKG06, facing east

Photographic Log

LUCCI B 01-23 (REM #36410)

Noble Energy, Inc.

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Photo 8: View of GW01, facing south



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WELLHEAD CLOSURE CHECKLIST

Wellhead Closure Checklist

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

Additional attachments (optional):		Pit Closure		Tank Battery Closure		Flowline Closure		Partially Buried Vault Closure
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Site Name & COGCC Facility Number: LUCCI B 01-23 / #268003	Date: 3/21/2025	Remediation Project #: 36410
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Associated Wells: LUCCI B 01-23	Age of Site: 9/28/2003 (spud date)	Number of Photos Attached: 4
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Location: 40.424889, -104.493611	Estimated Facility Size (acres): 0.1
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General Condition of Site: Good, cropland

USCS Soil Type: Well graded sands (SW), Clayey sands (SC), and lean clay (CL)	Estimated Depth to Groundwater: ~ 6 feet bgs
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Hydrocarbon Impacted Soils / Spills: None observed

Salt Crusted Soils or Impacted Vegetation: None observed

Wellhead(s)

Well API	05-123-21508					
Age	9/28/2003					
Condition of surface around wellhead	Good					
PID Readings	0.0 - 0.3 ppm					
Condition of subsurface	No staining observed					
PID Readings	0.0 - 0.3 ppm					
Sample taken? Location/Sample ID#	Yes, see attached					
Photo Number(s)	See attached					

Other observations regarding wellheads: None

Summary

Was impacted soil identified?
No Yes - less than 10 cubic yards Yes - more than 10 cubic yards

Total number of samples field screened: 5	Total number of samples collected: 5
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Highest PID Reading: 0.3 ppm	Total number of samples submitted to lab for analysis: 5
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If more than 10 cubic yards of impacted soil were observed:

Vertical extent:	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 **Yes - not impacted or in contact with impacted soils** Yes - groundwater impacted and/or in contact with impacted soils

Measured depth to groundwater: 6 ft bgs	Was remedial groundwater removal conducted? Yes No
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Date Groundwater was encountered: 12/10/2025	Commencement date of removal: N/A
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Sheen on groundwater? Yes No	Volume of groundwater removed prior to sampling: None
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Free product observed? Yes No	Volume of groundwater removed post sampling: None
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Total number of samples collected: 1	Total Volume of groundwater removed: None
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Total number of samples submitted to lab for analysis: 1	
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BORING LOGS

Location Map: See Figure 2.



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BKG04	Project: LUCCI B 01-23
Date: 12/10/2025	Client: Noble Energy, Inc.
Logged By: Ryan Jedrzejak	Drilled By: CDH

Elevation: NM	Detector: NM	Drilling Method: Hand Auger	Sampling Method: Continuous
Gravel Pack: N/A	Seal: N/A	Grout: N/A	
Casing Type: N/A	Diameter: N/A	Length: N/A	Hole Diameter: 3.25"
Screen Type: N/A	Slot: N/A	Diameter: N/A	Length: N/A
		Total Depth: 7 ft-bgs	Depth to Liquid: 5.24 ft

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	Dry		No Staining		0		Clayey Sands (SC)	0-2 feet: Clayey Sands, brown, dry, no stain, no odor	NA
	Moist	0.2		BKG04 @5.5'	1		Well Graded Sands (SW)	2 - 6 feet: Well graded sands with some coarse gravel, brown, wet at 5 feet, no stain, no odor	
					2				
	3				4				
	5				6			6 feet: Bottom of boring.	
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				

Location Map: See Figure 2.



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BKG05	Project: LUCCI B 01-23
Date: 12/10/2025	Client: Noble Energy, Inc.
Logged By: Ryan Jedrzejak	Drilled By: CDH

Elevation: NM	Detector: NM	Drilling Method: Hand Auger	Sampling Method: Continuous
Gravel Pack: N/A	Seal: N/A	Grout: N/A	
Casing Type: N/A	Diameter: N/A	Length: N/A	Hole Diameter: 3.25" Depth to Liquid:
Screen Type: N/A	Slot: N/A	Diameter: N/A	Length: N/A Total Depth: 6 ft-bgs Depth to Water: 4.5 ft

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	Dry		No Staining		0		Clayey Sands (SC)	0-1 feet: Clayey Sands, brown, dry, no stain, no odor	NA
	Moist				1		Well Graded Sands (SW)	1 - 6 feet: Well Graded Sands with medium to coarse sands, brown, wet at 4.5 feet, no stain, no odor	
					2				
					3				
					4				
	Wet				5				
					6		6 feet: Bottom of boring.		
		0.7		BKG05 @5.5'					
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				

Location Map: See Figure 2.



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: BKG06	Project: LUCCI B 01-23
Date: 12/10/2025	Client: Noble Energy, Inc.
Logged By: Ryan Jedrzejak	Drilled By: CDH

Elevation: NM	Detector: MiniRAE	Drilling Method: Hand Auger	Sampling Method: Continuous
Gravel Pack: N/A	Seal: N/A	Grout: N/A	
Casing Type: N/A	Diameter: N/A	Length: N/A	Hole Diameter: 3.25" Depth to Liquid:
Screen Type: N/A	Slot: N/A	Diameter: N/A	Length: N/A Total Depth: 6 ft-bgs Depth to Water: 4 ft

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	Dry		No Staining		0		SC	0-1 feet: Clayey Sands, brown, dry, no stain, no odor	NA
	Moist				1		SW	1 - 2.5 feet: Well Graded Sands with some coarse sands, brown, slightly moist, no stain, no odor	
					2				
	Wet	0.4		BKG06 @5.5'	3		CL	2.5 - 6 feet: Lean clay, gray, high plasticity, wet at 4 feet, cohesive, no stain, no odor	
					4				
					5				
					6				6 feet: Bottom of boring.
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				

Location Map: See Figure 2.



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BORING LOG/MONITORING WELL COMPLETION DIAGRAM

Boring/Well Number: GW01	Project: LUCCI B 01-23
Date: 12/10/2025	Client: Noble Energy, Inc.
Logged By: Ryan Jedrzejak	Drilled By: CDH
Elevation: NM	Detector: NM
Drilling Method: Hand Auger	Sampling Method: Continuous
Gravel Pack: N/A	Seal: N/A
	Grout: N/A
Casing Type: N/A	Diameter: N/A Length: N/A
	Hole Diameter: 3.25" Depth to Liquid:
Screen Type: N/A Slot: N/A	Diameter: N/A Length: N/A
	Total Depth: 7 ft-bgs Depth to Water: 5.5 ft

Penetration Resistance	Moisture Content	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Run	Soil/Rock Type	Lithology/Remarks	Well Completion
	Dry	NM	No Staining		0		Clayey Sands (SC)	0-6 inches: Backfill material Clayey Sands, with small to medium gravels. No stain, no odor	NA
					1				
					2				
	Moist				3				
					4				
	Wet			GW01	5				
					6				
					7		6-7 feet: Clayey sands with some sands Gray, no stain, no odor		
					7		7 feet: Botom of boring		
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				