

FL01R-W@3'
(05/09/2024)
PID = 2.8 ppm

BKG01 @0-6"^[1]
(05/09/2024)
PID = 0.1 ppm

BKG01 @2.5"^[1]
(05/09/2024)
PID = 0.0 ppm

BKG01 @3"^[1]
(05/09/2024)
PID = 0.2 ppm

BKG01 @4"^[1]
(05/09/2024)
PID = 0.3 ppm

BKG02 @0-6"^[1]
(05/09/2024)
PID = 0.2 ppm

BKG02 @2.5"^[1]
(05/09/2024)
PID = 0.3 ppm

BKG02 @3"^[1]
(05/09/2024)
PID = 0.1 ppm

BKG02 @4"^[1]
(05/09/2024)
PID = 0.1 ppm

FL01R-S@3'
(05/09/2024)
PID = 0.2 ppm

Legend

- 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.

^[1] Background samples taken at tank battery. REM # 33475.

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

0 ft. 75 ft. 150 ft.

Image Source: Google Earth; Google 2016

DATE:	07/22/2024
DESIGNED BY:	JW
DRAWN BY:	LoB

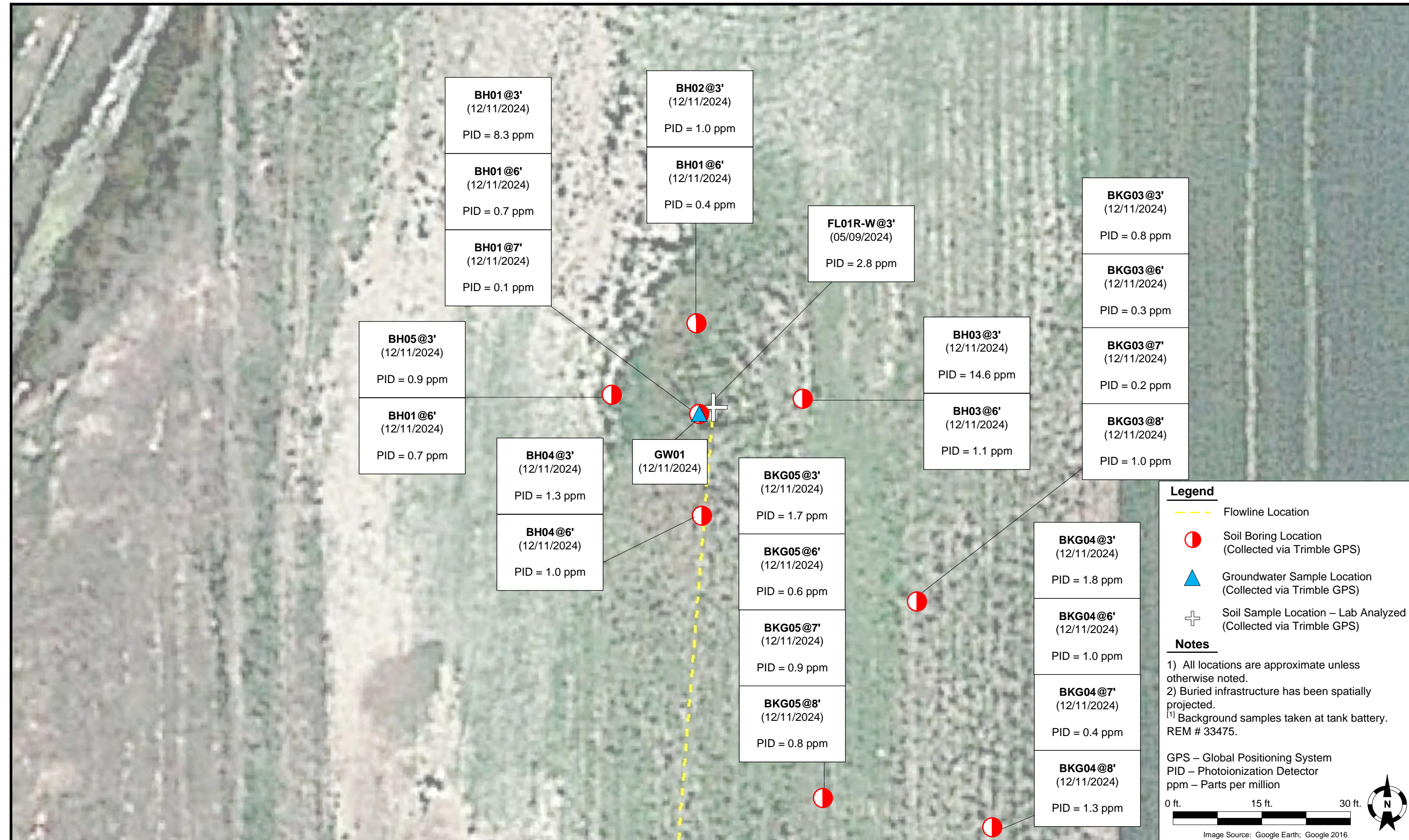


Tasman, Inc.
6855 W 119th Avenue
Broomfield, CO 80020

**Noble Energy, Inc. – 100322 – DJ Basin
Johnston 22-4**
NWNW, Section 22, Township 4 North, Range 64 West
Weld County, Colorado

Flowline Closure & Soil
Analytical Results Map
(05/09/2024)

FIGURE
1



DATE: February 12, 2025

DESIGNED BY: J. Whritenour

DRAWN BY: E. Brauer



Noble Energy, Inc. – 100322 – DJ Basin
Johnston 22-4
 NWNW, Section 22, Township 4 North, Range 64 West
 Weld County, Colorado

Site Assessment Soil Analytical
 Results Map

FIGURE
 2

Attachment A

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE ENERGY, INC. - 100322
JOHNSTON 22-4, WELD COUNTY, COLORADO
REM # 33793

Sample ID	Sample Date	Depth (ft. bgs)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
FL01R-W@3'	5/9/2024	3	40.302844	-104.543592	NC	2.8
FL01R-S@3'	5/9/2024	3	40.301513	-104.543923	NC	0.2
BH01@3'	12/11/2024	3	40.302840	-104.543600	1.3	8.3
BH01@6'	12/11/2024	6	40.302840	-104.543600	1.3	0.7
BH01@7'	12/11/2024	7	40.302840	-104.543600	1.3	0.1
BH02@3'	12/11/2024	3	40.302882	-104.543602	0.8	1
BH02@6'	12/11/2024	6	40.302882	-104.543602	0.8	0.4
BH03@3'	12/11/2024	3	40.302847	-104.543537	1.2	14.6
BH03@6'	12/11/2024	6	40.302847	-104.543537	1.2	1.1
BH04@3'	12/11/2024	3	40.302792	-104.543599	0.9	1.3
BH04@6'	12/11/2024	6	40.302792	-104.543599	0.9	1
BH05@3'	12/11/2024	3	40.302847	-104.543654	0.8	0.9
BH05@6'	12/11/2024	6	40.302847	-104.543654	0.8	0.7
GW01	12/11/2024	5	40.302840	-104.543600	1.3	NA
BKG01@0-6" ^[1]	5/9/2024	0-0.5	40.301376	-104.544209	NC	0.1
BKG01@2.5" ^[1]	5/9/2024	2.5	40.301376	-104.544209	NC	0.0
BKG01@3" ^[1]	5/9/2024	3	40.301376	-104.544209	NC	0.2
BKG01@4" ^[1]	5/9/2024	4	40.301376	-104.544209	NC	0.3
BKG02@0-6" ^[1]	5/9/2024	0-0.5	40.301366	-104.544454	0.9	0.2
BKG02@2.5" ^[1]	5/9/2024	2.5	40.301366	-104.544454	0.9	0.3
BKG02@3" ^[1]	5/9/2024	3	40.301366	-104.544454	0.9	0.1
BKG02@4" ^[1]	5/8/2024	4	40.301366	-104.544454	0.9	0.1
BKG03@3'	12/11/2024	3	40.302753	-104.543468	0.7	0.8

TABLE 1
FIELD DATA SUMMARY TABLE
NOBLE ENERGY, INC. - 100322
JOHNSTON 22-4, WELD COUNTY, COLORADO
REM # 33793

Sample ID	Sample Date	Depth (ft. bgs)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
BKG03@6'	12/11/2024	6	40.302753	-104.543468	0.7	0.3
BKG03@7'	12/11/2024	7	40.302753	-104.543468	0.7	0.2
BKG03@8'	12/11/2024	8	40.302753	-104.543468	0.7	1
BKG04@3'	12/11/2024	3	40.302648	-104.543425	0.7	1.8
BKG04@6'	12/11/2024	6	40.302648	-104.543425	0.7	1
BKG04@7'	12/11/2024	7	40.302648	-104.543425	0.7	0.4
BKG04@8'	12/11/2024	8	40.302648	-104.543425	0.7	1.3
BKG05@3'	12/11/2024	3	40.302661	-104.543527	0.7	1.7
BKG05@6'	12/11/2024	6	40.302661	-104.543527	0.7	0.6
BKG05@7'	12/11/2024	7	40.302661	-104.543527	0.7	0.9
BKG05@8'	12/11/2024	8	40.302661	-104.543527	0.7	0.8

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).

^[1] Background samples taken at facility of the same name. REM # 33475.

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

bgs = Below ground surface

NC = Data not collected

NA = Not Applicable

TABLE 2
SUMMARY OF GROUNDWATER ELEVATION DATA AND ORGANIC CHEMISTRY DATA
NOBLE ENERGY, INC. - 100322
JOHNSTON 22-4, WELD COUNTY, COLORADO
REM # 33793

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	12/11/24	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	NM	NM	5	NM	NM

1. Bold values exceed the ECMC limit(s)
 2. Red highlighted groundwater analytical values indicate a regulatory exceedance
- NM - Not measured

TABLE 3
SUMMARY OF INORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE ENERGY, INC. - 100322
JOHNSTON 22-4, WELD COUNTY, COLORADO
REM # 33793

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	12/11/24	4000	905	1510
Background Concentration (Current)		-	-	-

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

Attachment B



SITE NAME: Johnston 22-4 FL							DATE: 5/9/2024	REM. PROJECT #:	WEATHER: Cloudy, 40s
SITE DIRECTIONS: CR55 X CR44, S on CR55, E into							CLIENT: Noble		
LEGALS AND LAT/LONG: 40.301520, -104.543920							TASMAN PERSONNEL: MW, RY		
SOIL TYPES: Well Graded Sand - SW							SURFACE GRADIENT:		
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)		
5/9/2024 09:48	FL01R-W@3'	2.8	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel		
5/9/2024 11:21	FL01R-S@3'	0.2	No Staining	No Odor	Yes	Lab	Separator		
							Emission Control Device (ECD)		
							Dump Line		
							Wellhead		
							Flowline		1
							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:		



GENERAL OBSERVATION FORM

Client: Noble

Site Area/AOC: Johnston 22-4 FL

Date: 5/9/2024

Task/Location Description: Decommissioning soil sampling



Daily Forecast/Weather: Cloudy, 40s

Personnel: MW, RY

Description of Activities:

Time	Description
08:43	Arrived on site began JSA
08:55	Completed JSA reviewed with crew
09:04	Began sampling activities
11:41	Completed sampling activities
12:30	Departed site
	FL01R-S@3' SAMPLED WITH FACILITY UNDER POINT SEP01-FL
	FACILITY NAME: JOHNSTON 22-04 FAC REM#: 33475
	LINE LEFT ABANDONED IN PLACE DUE TO LANDOWNER FIELD CONFLICT. TO BE REMOVED ON FUTURE DATE.
	FLOWLINE PATH NOT COLLECTED DUE TO LACK OF MARKING FLAGS AND LACK OF REMOVAL.



Photographic Log

					
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: FACING NORTH			Notes/Conditions: FACING SOUTH SAMPLED UNDER FACILITY UNDER SAMPLE ID SEP01-FL		




SITE NAME: Johnston 22-4 FAC							DATE: 5/9/2024	REM. PROJECT #: 33475	WEATHER: Cloudy, 40s		
SITE DIRECTIONS: CR55 X CR44, S on CR55, E into							CLIENT: Noble				
LEGALS AND LAT/LONG: 40.301513, -104. 543919							TASMAN PERSONNEL: MW, RY				
SOIL TYPES: Well Graded Sand - SW							SURFACE GRADIENT: North				
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)		1		
5/9/2024 10:39	PWV01-B@4'	0.1	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel		1		
5/9/2024 10:40	PWV01-N@2.5'	0.2	No Staining	No Odor	Yes	On-Hold	Separator		1		
5/9/2024 10:41	PWV01-E@2.5'	0.5	No Staining	No Odor	Yes	On-Hold	Emission Control Device (ECD)		1		
5/9/2024 10:42	PWV01-S@2.5'	0.2	No Staining	No Odor	Yes	On-Hold	Dump Line		1		
5/9/2024 10:43	PWV01-W@2.5'	0.9	No Staining	No Odor	Yes	Lab	Wellhead				
5/9/2024 11:21	SEP01-FL@3'	0.2	No Staining	No Odor	Yes	Lab	Flowline				
5/9/2024 11:23	SEP01-DL@3'	0.1	No Staining	No Odor	Yes	Lab	Other:				
5/9/2024 11:25	MH01@0-6"	0.3	No Staining	No Odor	Yes	Grab	Soil Loads Removed				
5/9/2024 11:24	FLARE01@0-6"	0.3	No Staining	No Odor	Yes	Grab	IMPACTED SOIL IDENTIFIED?				
5/9/2024 10:38	AST01@0-6"	0.1	No Staining	No Odor	Yes	Lab	ESTIMATED VOLUME OF IMPACTS:				
5/9/2024 11:27	BKG01@0-6'	0.1	No Staining	No Odor	Yes	Lab	Date	Number	CY		
5/9/2024 11:28	BKG01@2.5'	0.0	No Staining	No Odor	Yes	Lab					
5/9/2024 11:29	BKG01@3'	0.2	No Staining	No Odor	Yes	Lab					
5/9/2024 11:30	BKG01@4'	0.3	No Staining	No Odor	Yes	Lab					
5/9/2024 11:31	BKG02@0-6"	0.2	No Staining	No Odor	Yes	Lab					
5/9/2024 11:32	BKG02@2.5'	0.3	No Staining	No Odor	Yes	Lab	Total Removed		0	0	
5/9/2024 11:33	BKG02@3'	0.1	No Staining	No Odor	Yes	Lab	Disposal Facility:				
5/9/2024 11:34	BKG02@4'	0.1	No Staining	No Odor	Yes	Lab	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

					
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: FACING SOUTH			Notes/Conditions: FACING WEST		

Photographic Log

					
Equipment ID: <small>BKG02</small>		Equipment Type:	Equipment ID:		Equipment Type:
Material:	Volume:	Contents:	Material:	Volume:	Contents:
Notes/Conditions: <small>FACING WEST</small>			Notes/Conditions:		

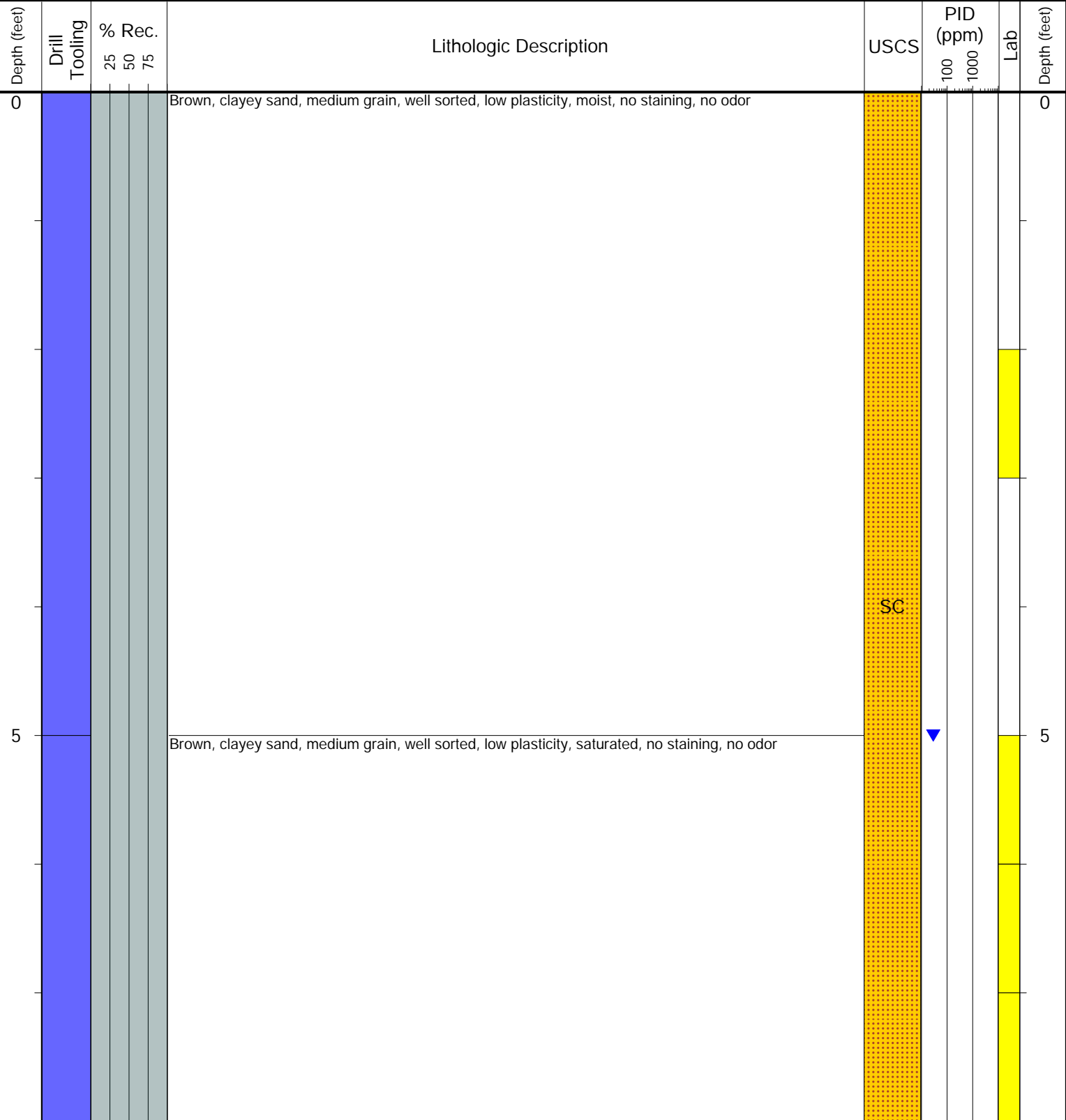
Attachment C



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BH01
LOCATION: Source
LATITUDE (NAD 83): 40.3028397
LONGITUDE (NAD 83): -104.5436003
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

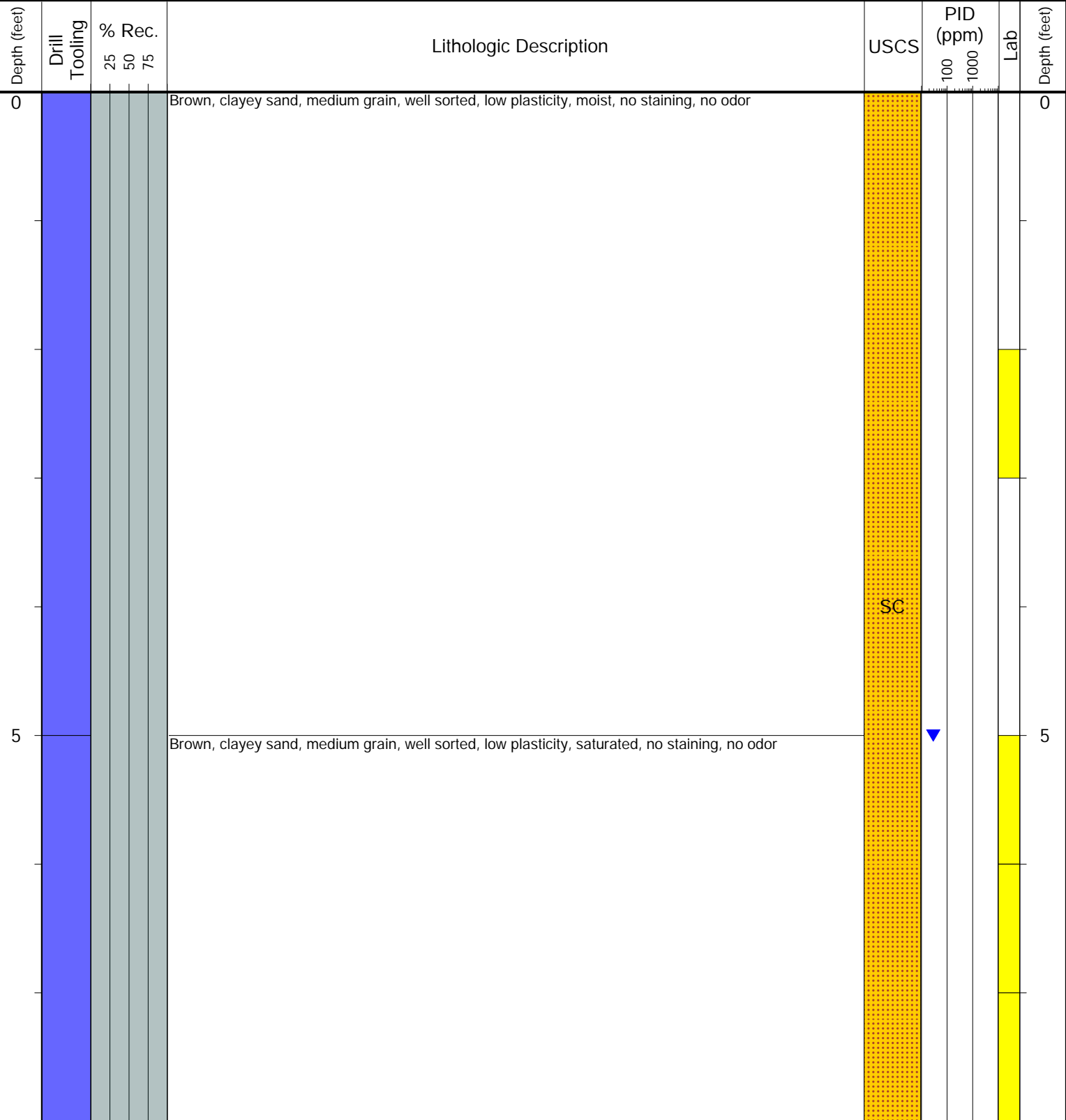
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BH02
LOCATION: North of Source
LATITUDE (NAD 83): 40.302882
LONGITUDE (NAD 83): -104.543602
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

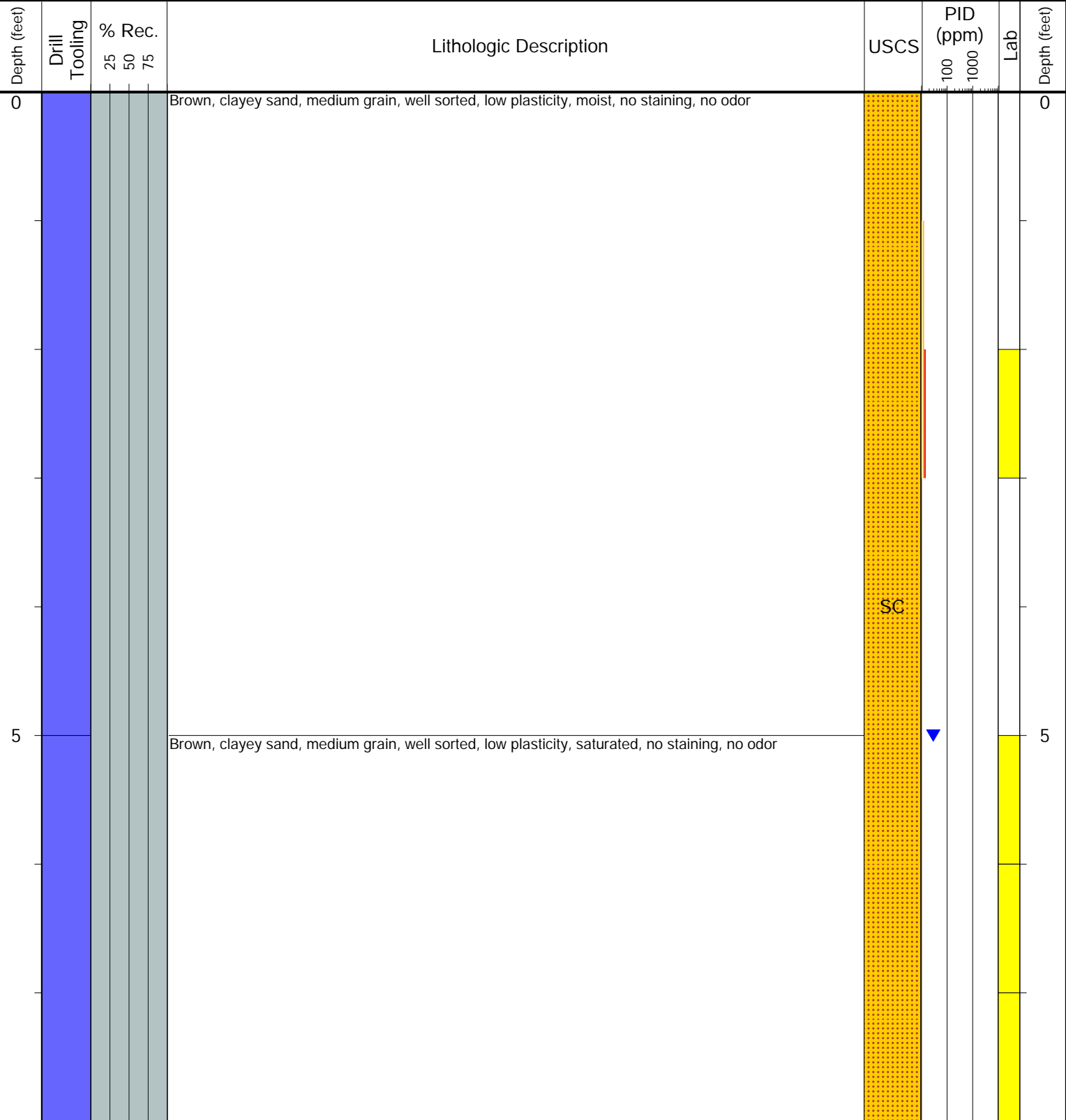
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BH03
LOCATION: East of Source
LATITUDE (NAD 83): 40.302847
LONGITUDE (NAD 83): -104.543537
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

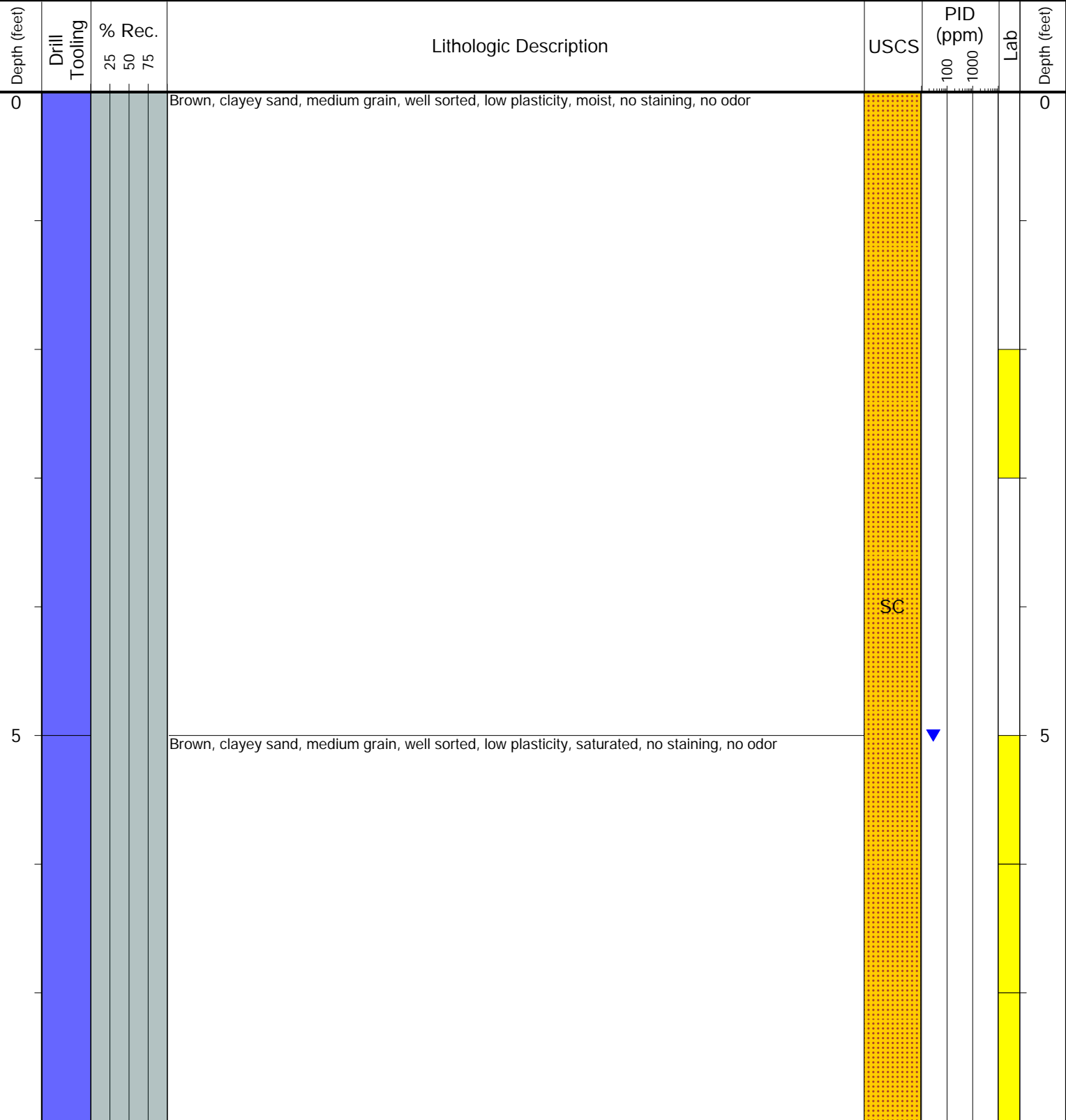
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BH04
LOCATION: South of Source
LATITUDE (NAD 83): 40.302792
LONGITUDE (NAD 83): -104.543599
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

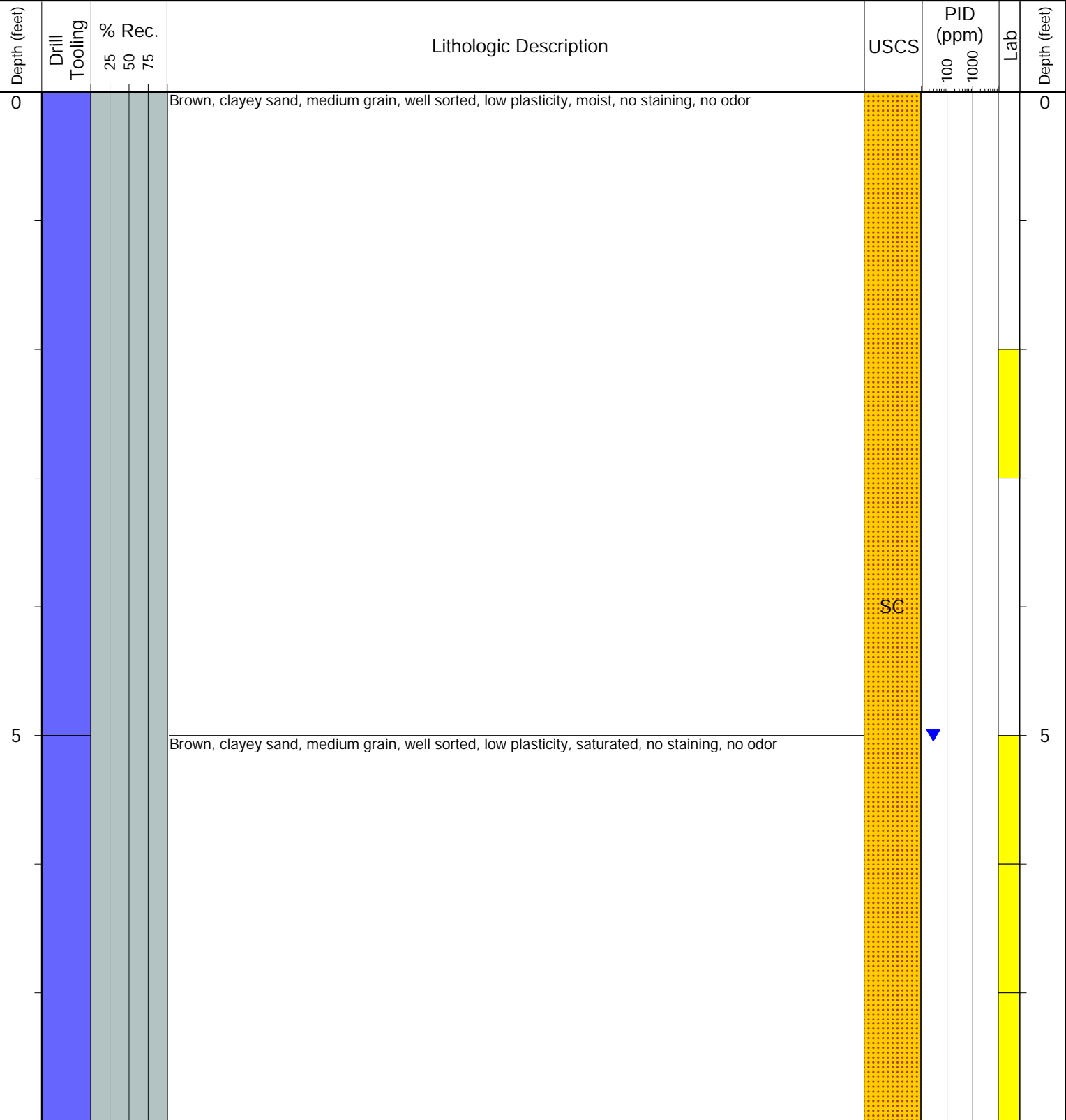
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BH05
LOCATION: West of Source
LATITUDE (NAD 83): 40.302847
LONGITUDE (NAD 83): -104.543654
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

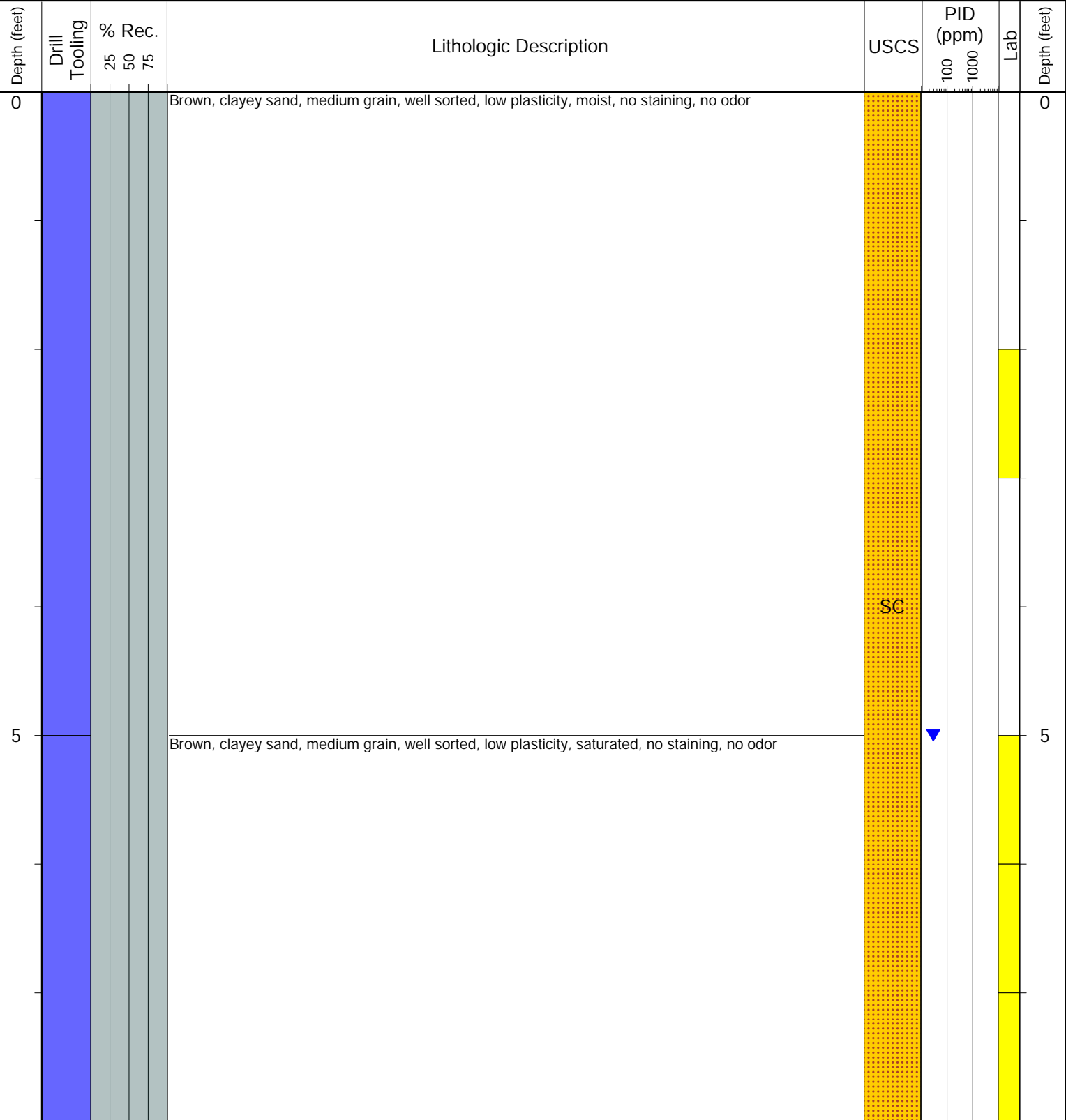
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BKG03
LOCATION: Southeast of Source
LATITUDE (NAD 83): 40.302753
LONGITUDE (NAD 83): -104.543468
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

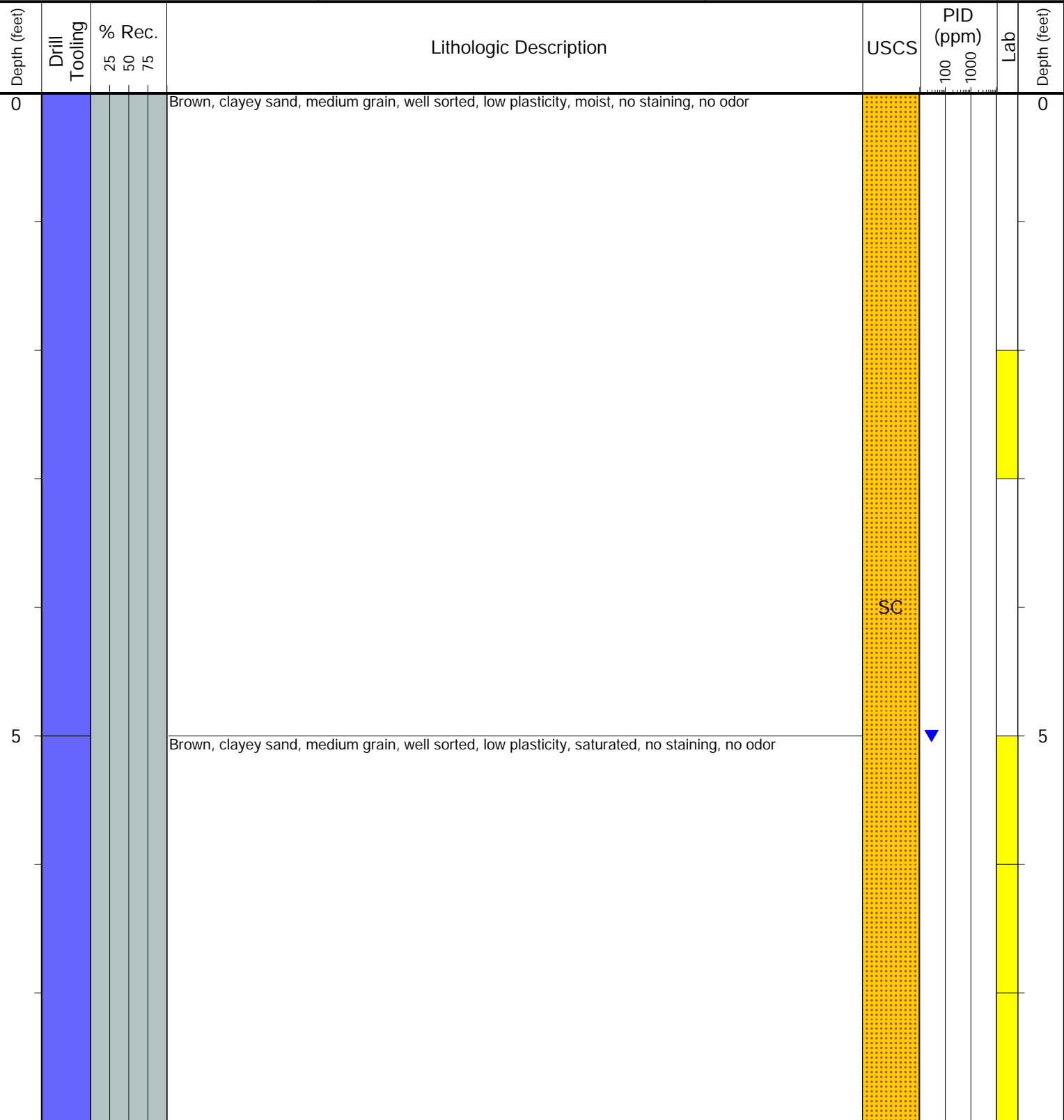
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BKG04
LOCATION: Southeast of Source
LATITUDE (NAD 83): 40.302648
LONGITUDE (NAD 83): -104.543425
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



Drilling / Sample Method:

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

Laboratory Sample Types:

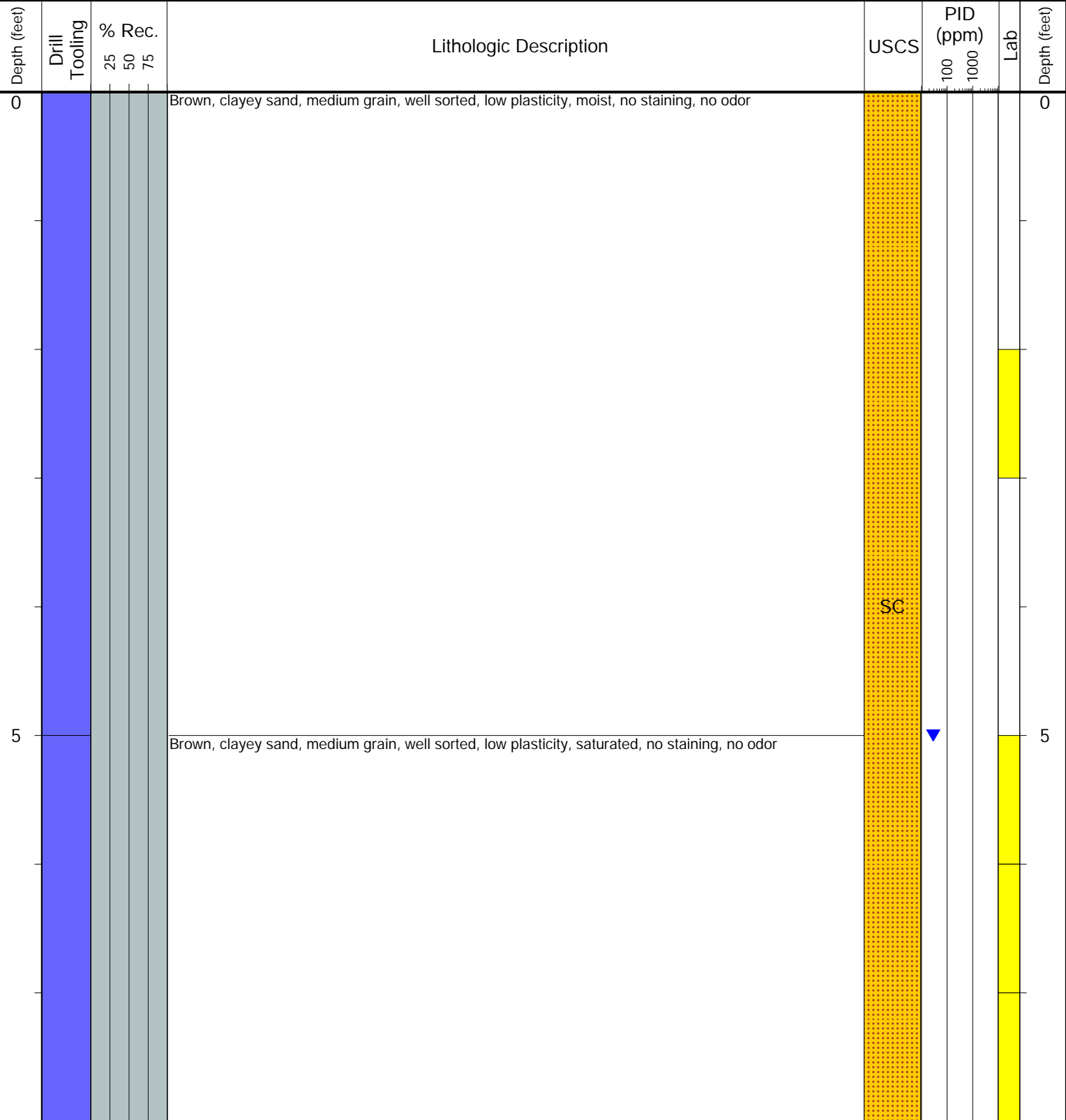
- Geotechnical Lab
- Analytical Chemistry Lab
- Geotechnical & Analytical Chemistry Lab



CLIENT: Noble
LOGGED BY: D. Bell, E. Lambert
PROJECT MANAGER: Bryce Goldade
DRILLING CONTRACTOR: Tasman
DRILLING EQUIPMENT: Hand Auger
DRILL BIT SIZE (INCHES): 3
DATE STARTED - COMPLETED: 12/11/24-12/11/24
TOTAL WELL DEPTH (FT. BGS): 8
DEPTH TO WATER (FT. BGS): 5

Johnston 22-4
BORING ID: BKG05
LOCATION: Southeast of Source
LATITUDE (NAD 83): 40.302661
LONGITUDE (NAD 83): -104.543527
GROUND ELEVATION (FT. AMSL): Not Measured
ABANDONMENT METHOD: Native Soil

6855 W. 119th Ave.
 Broomfield, CO 80020



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