FREMONT ENVIRONMENTAL INC.

October 29, 2021

Mr. Jacob Evans
Chevron Corporation
2115 117th Ave,
Greeley, CO 80634

Subject: **Excavation Report**
Harper Kona Pipeline
NESW Sec 21, T6N, R64W
Weld County, Colorado
Fremont Project No. C021-074
Spill #480529

Dear Mr. Evans:

Enclosed please find a copy of the above referenced Excavation Report for the Harper Kona Pipeline site in Weld County, Colorado. The enclosed report describes excavation and sampling efforts to remediate impacted soil at the site.

As shown in the attached report, soils achieved the COGCC Table 915-1 standards. However, groundwater encountered during excavation activities was impacted. Therefore, a quarterly groundwater monitoring program will be implemented to confirm residual groundwater impacts are adequately addressed.

Please contact me at (303) 956-8714 if you require any additional information.

Fremont appreciates the opportunity to provide this service.

Sincerely,
FREMONT ENVIRONMENTAL INC.

Paul V. Henehan, P.E.
Senior Consultant

Enclosure

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

EXCAVATION REPORT

NOBLE MIDSTREAM

HARPER KONA PIPELINE

WELD COUNTY, COLORADO

FREMONT PROJECT NO. C021-074

SPILL #480529

Prepared by:
Fremont Environmental Inc.
1759 Redwing Lane
Broomfield, CO 80020
(303) 956-8714

October 29, 2021

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EXCAVATION REPORT

NOBLE MIDSTREAM

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WELD COUNTY, COLORADO

FREMONT PROJECT NO. C021-074

SPILL #480529

1.0 INTRODUCTION

The purpose of this document is to present information collected during the 15-day excavation of petroleum-impacted soil at the Harper Kona Pipeline release location in Weld County, Colorado. This excavation project began on August 17, 2021 and was completed on September 9, 2021.

2.0 BACKGROUND INFORMATION

2.1 Site Location

The Harper Kona Pipeline release site is located approximately 1.5 miles northwest of Gill, Colorado in Weld County as shown on Figure 1. The site is in a rural area approximately 0.9 miles southwest of the intersection of State Hwy 392 and County Road 55. The location is further described as the NE ¼ of the SW ¼ of Section 21, Township 6N, Range 64W.

2.2 Site History

Fremont Environmental responded to an unintentional release at the Harper Kona Pipeline on August 17, 2021. Impacted soil was visually present aboveground, directly beneath and adjacent to the pipeline leak which prompted the immediate excavation of the spill area.

3.0 FIELD ACTIVITIES

3.1 Soil Excavation and Sampling

Remediation efforts consisted of containment and recovery of surfaced oil and produced water followed by excavation of petroleum-impacted soil at this site. The soil consisted of topsoil which was underlain by silt to a depth of at least three feet, transitioning to a weathered claystone layer, heavily mineralized at eight feet, underlain by silty sand to a depth of 14 feet. Groundwater was encountered in the excavation at approximately 14 feet. The excavation, as shown on Figure 2, measured 460 feet in length and tapered from 146 feet in width at the northern portion to its narrowest extent of 10 feet in width at the southern portion. The total depth of the excavation ranged between 3 and 14 feet below ground surface.

The 15-day excavation was completed at the Harper Kona Pipeline location on September 9, 2021. Soil impacts were removed from the surface and at varying depths in the area encompassing the pipeline release point and associated extent of surfaced liquids. Soil samples collected from the excavation sidewalls and floor were collected as grab samples. Depths of samples collected from the excavation ranged from 0.5 to 11 feet in the sidewalls and 3 to 14 feet in the floor.

The soil samples were analyzed by Summit Scientific Inc. of Golden, Colorado for benzene, toluene, ethylbenzene and total xylenes (BTEX), naphthalene, Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) by EPA method 8260B, TPH – Diesel Range Organics (TPH-DRO), Extended Range Organics (TPH-ORO) by EPA method 8015, Polycyclic Aromatic Hydrocarbons (PAH): Acenapthene, Anthracene, Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Chrysene, Dibenz (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-cd) pyrene, Pyrene, 1-Methylnaphthalene, 2-Methylnaphthalene by EPA method 8270D, Specific Conductance

(EC) by EPA Method 120.1 saturated paste extraction, saturated paste extraction of soluble nutrients by EPA method 6020/USDA60 6(2) for calculated analysis of Sodium Absorption Ratio (SAR), pH by saturated paste extraction APHA/ASTM/EPA methods, Total Metals by EPA method 6020B, and Hexavalent Chromium by EPA method 7196. The laboratory report and chain-of-custody documentation are included in Appendix A.

A summary of the laboratory data for the soil samples is included in Tables 1 through 6. The laboratory analyses indicated that soil samples collected from the sidewalls and floor of the excavation achieved COGCC Table 915-1 standards.

Arsenic, barium, selenium, nickel, and lead were sampled throughout the excavation and exceeded the COGCC Table 915-1 standard. Fourteen background samples were collected outside of the spill area in native soils and also exceeded COGCC standards.

Additional confirmation was sought to determine if elevated metal concentrations, primarily arsenic, were typical of native soil conditions or if the liquids released from the pipeline were attributable to elevated metal concentrations in soils across the site. A produced water sample was collected from the Harper Kona facility and analyzed by Summit Scientific Inc. of Golden, Colorado for Total Recoverable Metals by EPA Method 200.8. Concentrations of arsenic and barium exceeded Regulation 41 drinking water standards at levels of 11.98 ug/L and 7880 ug/L, respectively. Concentrations of lead, nickel and selenium did not exceed Regulation 41 drinking water standards. A calculation comparing the concentration of arsenic released in the reported spill volume to the mass of impacted soil excavated, which is provided in Table 7, demonstrated the concentration of arsenic in the liquid released had insufficient mass to account for consistently elevated levels of arsenic observed both in the excavation and background

samples collected. Therefore, the elevated concentrations of arsenic can be attributed to native or background concentrations.

During initial containment activities a total of approximately 421 bbls of oil and produced water were removed via hydrovac. The liquids were disposed of at NGL in Weld County, Colorado. A total of approximately 10,738 cubic yards of petroleum impacted soil was removed via hydrovac and track hoe by 1888 Industrial Services from the location over this 15-day project. Impacted soil was disposed of at both the North Weld Landfill in Ault, Colorado, and the Buffalo Ridge Landfill in Keenesburg, Colorado as non-hazardous waste.

3.2 Groundwater Sampling

Groundwater was encountered in the excavation at two discrete points. The first point, (W1) was located at the southernmost point of the excavation and the second point (E-TP) was approximately 220 feet south of the release point. Water flowed into the floor of the excavation in both points at a depth of 14 feet below ground surface. A sample was collected at each point and submitted to Summit Scientific, Inc. in Golden, Colorado for the analyses of petroleum constituents benzene, toluene, ethylbenzene, xylenes (BTEX), 1,2,4-trimethylbenzene; 1,3,5-trimethylbenzene and naphthalene by EPA Method 8260B. The E-TP groundwater sample exceeded COGCC Table 915-1 standard of 5 ug/L for benzene with a concentration of 8.9 ug/L. The W1 groundwater sample was below the laboratory detection limits for all petroleum constituents. The sample locations and groundwater chemistry are shown on Figure 3 and the analytical data are summarized in Table 5. A copy of the laboratory's report is presented in Appendix A.

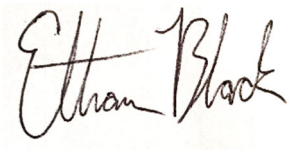
4.0 DISCUSSION

As demonstrated by the soil sampling, the petroleum impacted soil was removed from the Harper Kona Pipeline location by excavation. This was confirmed by the analyses of the soil samples collected from the exterior sidewalls and floor which were below the COGCC Table 915-1 standards upon completion of the excavation. Approximately 10,738 cubic yards of impacted soil was removed and transported to the landfill. A quarterly groundwater monitoring program will be implemented to confirm residual groundwater impacts are addressed. The soil and groundwater data are illustrated and summarized in the attached tables and figures.

5.0 REMARKS

The discussion and conclusions contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by **FREMONT ENVIRONMENTAL INC.**



10/29/21

_____ Date_____

Ethan D. Black

Geologist

Reviewed by:

10/29/21

_____ Date_____

Paul V. Henehan, P.E.

Senior Consultant

TABLES

TABLE 1
SUMMARY OF ORGANIC SOIL CHEMISTRY DATA
NOBLE MIDSTREAM INC.
HARPER PIPELINE
FREMONT PROJECT NO. C021-074

Sample	Date	Depth (ft)	Location	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)	Naphth-alene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
A - E Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
A- Floor 3 Ft	8/17/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
A- - W Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
B - E Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
B- Floor 3 Ft	8/17/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
B- - W Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
C - E Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
C- Floor 3 Ft	8/17/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
C - W Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	0.013	0.0061	**0.014**	**0.019**	1.0	78	<50
C - W Wall 0.5 Ft #2	8/18/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	**0.0088**	53.0	<50	<50
C - W Wall 0.5 Ft #3	8/19/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
D - E Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
D- Floor 3 Ft	8/17/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
D - W Wall 0.5 Ft	8/17/2021	0.5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E - E Wall 10 Ft	8/18/2021	10	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E - Floor 13 Ft	8/18/2021	13	Floor	**0.014**	0.08	**0.015**	0.17	**0.085**	**0.032**	**0.018**	8.4	<50	<50
E - W Wall 10 Ft	8/18/2021	10	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	1.1	<50	<50
F - E Wall 9 Ft	8/19/2021	9	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
F - Floor 10 Ft	8/19/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
F - W Wall 6 Ft	8/19/2021	6	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
G - Floor E 10 Ft	8/19/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
G - Floor W 7 Ft	8/19/2021	7	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
G - E Wall 9 Ft	8/19/2021	9	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
H Floor E 13 Ft	8/19/2021	13	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
H - Floor C 13 Ft	8/19/2021	13	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
H - Floor W 8 Ft	8/19/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
I - Floor 6 Ft	8/20/2021	6	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
I - W Wall 5 Ft	8/20/2021	5	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
J - W Wall 11 Ft	8/20/2021	11	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
J - Floor 12 Ft	8/20/2021	12	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
K - W Wall 11 Ft	8/20/2021	11	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
K - Floor 12 Ft	8/20/2021	12	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L - Floor 9 Ft	8/20/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E2 E Wall 2 Ft	8/23/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E2 Floor 4 Ft	8/23/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E2/F2 E Wall 2 Ft	8/23/2021	2	Wall	<0.0020	<0.0050	<0.0050	0.018	<0.0050	**0.018**	**0.0084**	0.63	<50	<50
E2/F2 E Wall 2 Ft #2	8/24/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E2/F2 Floor 4 Ft	8/23/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
F2 E Wall 3 Ft	8/23/2021	3	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
F2 Floor 4 Ft	8/23/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
G2 E Wall 3 Ft	8/23/2021	3	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
G2 Floor 6 Ft	8/23/2021	6	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
H2 E Wall 3 Ft	8/23/2021	3	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Sample	Date	Depth (ft)	Location	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)	Naphth-alene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
H2 Floor 8 Ft	8/23/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
I2 Floor 8 Ft	8/23/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
J2 Floor 8 Ft	8/23/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
K2 Floor 12 ft	8/23/2021	12	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
K3 Floor 8 Ft	8/23/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
H3 N Wall 2 Ft	8/24/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
I3 E Wall 2 Ft	8/24/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
I3 E Floor 4 Ft	8/24/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
J3 E Wall 2 Ft	8/24/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
J3 Floor 4 Ft	8/24/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
K3 E Floor 2 Ft	8/24/2021	2	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L2 Floor 14 Ft	8/24/2021	14	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L Wall 7 Ft	8/24/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M Floor 9 Ft	8/24/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M W Wall 7 Ft	8/24/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N W Wall 7 Ft	8/24/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N Floor 9 Ft	8/24/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O W Wall 7 Ft	8/24/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O Floor 4 Ft	8/24/2021	4	Floor	**0.0073**	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L3 - Floor 12 Ft	8/26/2021	12	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M2 - Floor 14 Ft	8/26/2021	14	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
E2 - Floor #2 6 Ft	8/26/2021	6	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L0 - Floor 4 Ft	8/26/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M0 - Wall 4 Ft	8/26/2021	4	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M/N0 - Floor 4 Ft	8/26/2021	4	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N/O Floor 10 Ft	8/27/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L0 Wall - 1 Ft	8/30/2021	1	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L0 Floor - 3 Ft	8/30/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L3 Wall - 2 Ft	8/30/2021	2	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
L3 Floor - 9 Ft	8/30/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M0 Wall - 1 Ft	8/30/2021	1	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M2 Floor - 11 Ft	8/30/2021	11	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N0 Wall - 1 Ft	8/30/2021	1	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N0 Floor - 3 Ft	8/30/2021	3	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N2 Floor - 11 Ft	8/30/2021	11	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O0 Wall - 1 Ft	8/30/2021	1	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O0 Floor - 3 Ft	8/30/2021	3	Floor	**0.049**	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O2 Floor - 9 Ft	8/30/2021	9	Floor	**0.0085**	0.0059	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M3 Wall - 7 Ft	8/31/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	**0.041**	**17**	**390**	**120**
M3 Wall - 7 Ft #2	9/1/2021	7	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
M3 Floor - 9 Ft	8/31/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N3 Wall - 8 Ft	8/31/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O3 Wall - 8 Ft	8/31/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O0 Floor - 4 Ft	8/31/2021	4	Floor	**0.0072**	0.0058	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O0 Floor - 7 Ft #2	9/1/2021	7	Floor	**0.0038**	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SP - E Surface	8/31/2021	0.2	Surface	<0.0020	0.034	0.015	0.2	**0.023**	0.0056	**0.05**	5.6	310	51
SP - W Surface	8/31/2021	0.2	Surface	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50

Sample	Date	Depth (ft)	Location	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)	Naphth-alene (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
O/P 4 Wall - 3 Ft	9/1/2021	3	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O/P 4 Floor - 9 Ft	9/1/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P0 Wall - 4 Ft	9/1/2021	4	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P0 Floor - 8 Ft	9/1/2021	8	Floor	**0.039**	0.04	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	0.54	<50	<50
P3 Floor - 9 Ft	9/1/2021	9	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P4 Wall - 4 Ft	9/1/2021	4	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P4 Floor - 8 Ft	9/1/2021	8	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
N3 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O0 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O2 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
O3 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P0 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P0 N Wall 8 Ft	9/8/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P N Wall 8 Ft	9/8/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P2 Floor 10 Ft	9/8/2021	10	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P2 N Wall 8 Ft	9/8/2021	8	Wall	**0.0028**	0.026	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P3 N Wall 8 Ft	9/8/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
P2 N Wall 8 Ft #2	9/9/2021	8	Wall	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SP-E 1 Ft	9/13/2021	1	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
SP-Exc. Mid. 6 Ft	9/13/2021	6	Floor	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Waste Char - 1	8/27/2021	9	Floor	**0.13**	**0.72**	0.1	0.54	**0.12**	**0.022**	**0.053**	32	65	<50
Backfill - 1	8/20/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 2	8/20/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 3	8/31/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 4	8/31/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 5	8/31/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 6	8/31/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 7	9/1/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 8	9/1/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 9	9/1/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
Backfill - 10	9/1/2021	0.5	Backfill	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<0.50	<50	<50
COGCC Table 915-1 Level - Resident Soil				1.2	490	5.8	58	30	27	2	None	None	None
COGCC Table 915-1 Level - Protection of Groundwater				0.0026	0.69	0.7800	9.90	0.0081	0.0087	0.0038	None	None	None

Bold faced values exceed the COGCC Table 915-1 RSL concentrations

Blue highlighted limits indicate the referenced soil screening level (SSL)

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

TABLE 2
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA
NOBLE MIDSTREAM INC.
HARPER PIPELINE RELEASE
FREMONT PROJECT NO. C021-074

Sample	Depth (ft)	Date Sampled	Location	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	1-Methyl - naphthalene (mg/kg)	2-Methyl- naphthalene (mg/kg)	Pyrene (mg/kg)
A - E Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
A- Floor 3 Ft	3	8/17/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
A- - W Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B - E Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B- Floor 3 Ft	3	8/17/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
B- - W Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C - E Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C- Floor 3 Ft	3	8/17/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C - W Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	**0.123**	**0.199**	<0.005
C - W Wall 0.5 Ft #2	0.5	8/18/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	**0.0726**	**0.101**	<0.005
C - W Wall 0.5 Ft #3	0.5	8/19/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
D - E Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
D- Floor 3 Ft	3	8/17/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
D - W Wall 0.5 Ft	0.5	8/17/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E - E Wall 10 Ft	10	8/18/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E- Floor 13 Ft	13	8/18/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E - W Wall 10 Ft	10	8/18/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
F - E Wall 9 Ft	9	8/19/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
F - Floor 10 Ft	10	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
F - W Wall 6 Ft	6	8/19/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G - Floor E 10 Ft	10	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G - Floor W 7 Ft	7	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G - E Wall 9 Ft	9	8/19/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H Floor E 13 Ft	13	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H - Floor C 13 Ft	13	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H - Floor W 8 Ft	8	8/19/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
I - Floor 6 Ft	6	8/20/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
I - W Wall 5 Ft	5	8/20/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
J - W Wall 11 Ft	11	8/20/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
J - Floor 12 Ft	12	8/20/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
K - W Wall 11 Ft	11	8/20/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
K - Floor 12 Ft	12	8/20/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L - Floor 9 Ft	9	8/20/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E2 E Wall 2 Ft	2	8/23/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00597	<0.005
E2 Floor 4 Ft	4	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00607	<0.005	**0.011**	0.0116	<0.005
E2 Floor 6 Ft #2	6	8/26/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E2/F2 E Wall 2 Ft	2	8/23/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0103	<0.005	**0.0239**	**0.0315**	<0.005
E2/F2 E Wall 2 Ft #2	2	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
E2/F2 Floor 4 Ft	4	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
F2 E Wall 3 Ft	3	8/23/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
F2 Floor 4 Ft	4	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G2 E Wall 3 Ft	3	8/23/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
G2 Floor 6 Ft	6	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H2 E Wall 3 Ft	3	8/23/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H2 Floor 8 Ft	8	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
I2 Floor 8 Ft	8	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
J2 Floor 8 Ft	8	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
K2 Floor 12 ft	12	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
K3 Floor 8 Ft	8	8/23/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
H3 N Wall 2 Ft	2	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
I3 E Wall 2 Ft	2	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Sample	Depth (ft)	Date Sampled	Location	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	1-Methyl - naphthalene (mg/kg)	2-Methyl- naphthalene (mg/kg)	Pyrene (mg/kg)
I3 E Floor 4 Ft	4	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
J3 E Wall 2 Ft	2	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
J3 Floor 4 Ft	4	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
K3 Floor 2 Ft	2	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L2 Floor 14 Ft	14	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L Wall 7 Ft	7	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M Floor 9 Ft	9	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M W Wall 7 Ft	7	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N W Wall 7 Ft	7	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N Floor 4 Ft	4	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O W Wall 7 Ft	7	8/24/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O Floor 4 Ft	4	8/24/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L3 - Floor 12 Ft	12	8/26/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M2 - Floor 14 Ft	14	8/26/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L0 - Floor 4 Ft	4	8/26/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M0 - Wall 4 Ft	4	8/26/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M/N0 - Floor 4 Ft	4	8/26/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N0 Floor 10 FT	10	8/27/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L0 Wall - 1 Ft	1	8/30/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L0 Floor - 3 Ft	3	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L3 Wall - 2 Ft	2	8/30/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
L3 Floor - 9 Ft	9	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M0 Wall - 1 Ft	1	8/30/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M2 Floor - 11 Ft	11	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N0 Wall - 1 Ft	1	8/30/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N0 Floor - 3 Ft	3	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N2 Floor - 11 Ft	11	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O0 Wall - 1 Ft	1	8/30/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O0 Floor - 3 Ft	3	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O2 Floor - 9 Ft	9	8/30/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M3 Wall - 7 Ft	7	8/31/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0142	<0.005	0.00522	0.0337	<0.005	**0.258**	**0.371**	0.0158
M3 Wall - 7 Ft #2	7	9/1/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
M3 Floor - 9 Ft	9	8/31/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N3 Wall - 8 Ft	8	8/31/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O3 Wall - 8 Ft	8	8/31/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O0 Floor - 4 Ft	4	8/31/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O0 Floor - 7 Ft #2	7	9/1/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SP - E Surface	0.2	8/31/2021	Surface	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0394	<0.005	**0.322**	**0.465**	<0.005
SP - W Surface	0.2	8/31/2021	Surface	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O/P 4 Wall - 3 Ft	3	9/1/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O/P 4 Floor - 9 Ft	9	9/1/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P0 Wall - 4 Ft	4	9/1/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P0 Floor - 8 Ft	8	9/1/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P3 Floor - 9 Ft	9	9/1/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P4 Wall - 4 Ft	4	9/1/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P4 Floor - 8 Ft	8	9/1/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
N3 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O0 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O2 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
O3 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P0 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P0 N Wall 8 Ft	8	9/8/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P N Wall 8 Ft	8	9/8/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Sample	Depth (ft)	Date Sampled	Location	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) anthracene (mg/kg)	Benzo (b) fluoranthene (mg/kg)	Benzo (k) fluoranthene (mg/kg)	Benzo (a) pyrene (mg/kg)	Chrysene (mg/kg)	Dibenz (a,h) anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) pyrene (mg/kg)	1-Methyl - naphthalene (mg/kg)	2-Methyl- naphthalene (mg/kg)	Pyrene (mg/kg)
P2 Floor 10 Ft	10	9/8/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P2 N Wall 8 Ft	8	9/8/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P3 N Wall 8 Ft	8	9/8/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P2 N Wall 8 Ft #2	8	9/9/2021	Wall	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SP-E 1 Ft	1	9/13/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SP-Exc. Mid. 6 Ft	6	9/13/2021	Floor	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Waste Char-1 9 Ft	9	8/27/2021	Floor	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	0.0867	0.145	<0.005
Backfill - 1	0.5	8/20/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 2	0.5	8/20/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 3	0.5	8/31/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 4	0.5	8/31/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 5	0.5	8/31/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 6	0.5	8/31/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 7	0.5	9/1/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.00934	0.005
Backfill - 8	0.5	9/1/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 9	0.5	9/1/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Backfill - 10	0.5	9/1/2021	Pile Comp	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
COGCC Table 915-1 - Resident Soil SSL				360	1800	1.1	1.1	11	0.11	110	0.11	240	240	1.1	18	24	180
COGCC Table 915-1 - Protection of Groundwater SSL				0.55	5.8	0.011	0.3	2.9	0.24	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3

Bold faced values exceed the EPA RSL concentrations

TABLE 3
SUMMARY OF METALS IN SOIL CHEMISTRY DATA
NOBLE MIDSTREAM
HARPER PIPELINE, WELD COUNTY, COLORADO
FREMONT PROJECT NO. C021-074

Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
A - E Wall 0.5 Ft	0.5	8/17/2021	**0.333**	7.96	<0.213	0.961	0.401	0.462	**0.344**	<0.0213	0.734	<0.30
A- Floor 3 Ft	3	8/17/2021	**0.449**	4.78	<0.214	0.848	0.722	0.606	**0.522**	<0.0214	0.998	<0.30
A- - W Wall 0.5 Ft	0.5	8/17/2021	**1.19**	42.6	<0.231	2.6	2.86	1.84	**0.567**	<0.0231	3.49	<0.30
B - E Wall 0.5 Ft	0.5	8/17/2021	**0.424**	7.69	<0.213	0.777	2.05	<0.427	**0.338**	<0.0213	0.827	<0.30
B- Floor 3 Ft	3	8/17/2021	<0.224	2.67	<0.224	<0.449	<0.224	<0.449	**1.36**	<0.0224	<0.449	<0.30
B- - W Wall 0.5 Ft	0.5	8/17/2021	**0.575**	21.4	<0.220	1.31	1.3	0.857	**0.351**	<0.022	1.73	<0.30
C - E Wall 0.5 Ft	0.5	8/17/2021	**0.979**	**92.9**	<0.232	4.19	5.41	2.4	**0.801**	<0.0232	5.42	<0.30
C- Floor 3 Ft	3	8/17/2021	<0.220	5.17	<0.220	<0.439	<0.220	<0.439	**<0.285**	<0.0220	<0.439	<0.30
C - W Wall 0.5 Ft	0.5	8/17/2021	**0.675**	26.8	<0.223	1.78	1.82	1.15	**0.389**	<0.0223	3.16	<0.30
C - W Wall 0.5 Ft #2	0.5	8/18/2021	**4.69**	59.8	<0.225	8.83	7.63	7.52	**0.611**	0.0323	36.3	<0.30
C - W Wall 0.5 Ft #3	0.5	8/19/2021	**6.49**	72.1	0.229	9.71	8.56	9.28	**0.863**	0.0359	43.2	<0.30
D - E Wall 0.5 Ft	0.5	8/17/2021	**0.338**	8.04	<0.215	0.819	0.502	<0.429	**<0.279**	<0.0215	0.758	<0.30
D- Floor 3 Ft	3	8/17/2021	<0.211	17.3	<0.211	0.437	0.456	<0.422	**0.374**	<0.0211	0.933	<0.30
D - W Wall 0.5 Ft	0.5	8/17/2021	0.271	8.73	<0.214	0.899	0.586	0.482	**<0.278**	<0.0214	0.932	<0.30
E - E Wall 10 Ft	10	8/18/2021	**1.07**	8.38	<0.237	6.89	4.55	0.941	**0.435**	<0.0237	9.65	<0.30
E - Floor 13 Ft	13	8/18/2021	**2.36**	23.9	<0.251	1.35	4.54	1.07	**<0.327**	<0.0251	8.8	<0.30
E - W Wall 10 Ft	10	8/18/2021	**22.3**	77.5	<0.238	11.4	9.5	2.19	**0.603**	0.0317	27.9	<0.30
F - E Wall 9 Ft	9	8/19/2021	**14.8**	52.3	<0.238	22	**24.7**	16.7	**1.36**	0.211	116	<0.30
F - Floor 10 Ft	10	8/19/2021	**17.9**	49.5	<0.239	18.7	12.2	8.85	**1.13**	0.0445	93.4	<0.30
F - W Wall 6 Ft	6	8/19/2021	**7.73**	35.3	<0.223	10.5	9.49	20.1	**1.24**	0.0353	83	<0.30
G - Floor E 10 Ft	10	8/19/2021	**12.4**	77.3	<0.240	18.7	**18.3**	11.3	**1.34**	0.048	111	<0.30
G - Floor W 7 Ft	7	8/19/2021	**6.38**	54.3	<0.246	22.4	**14.2**	**28.1**	**2.37**	0.0555	174	<0.30
G - E Wall 9 Ft	9	8/19/2021	**13.0**	55.9	<0.238	10.8	13.1	1.84	**0.695**	0.064	26.1	<0.30
H - Floor E 13 Ft	13	8/19/2021	**0.535**	13.3	<0.240	2.34	6.48	<0.481	**0.407**	<0.0240	2.13	<0.30
H - Floor C 13 Ft	13	8/19/2021	**3.89**	15.8	<0.239	4.09	8.93	1.79	**0.419**	<0.0239	16.4	<0.30
H - Floor W 8 Ft	8	8/19/2021	**8.86**	25.8	0.335	24	**22.2**	**61.9**	**2.34**	0.0563	183	<0.30
I - Floor 6 Ft	6	8/20/2021	**9.52**	32.4	<0.230	12.9	13.7	23.6	**0.831**	0.0453	84.6	<0.30
I - W Wall 5 Ft	5	8/20/2021	**7.04**	**88.1**	0.266	10.6	9.88	11.7	**0.782**	0.0389	49.6	<0.30
J - W Wall 11 Ft	11	8/20/2021	**11.8**	21	0.317	15.2	**18.7**	**31.6**	**1.56**	0.0478	150	<0.30
J - Floor 12 Ft	12	8/20/2021	**5.26**	9.38	<0.233	4.87	5.97	5.84	**0.436**	<0.0233	45.9	<0.30
K - W Wall 11 Ft	11	8/20/2021	**13.8**	21.8	<0.242	17.3	**14.6**	13.5	**1.21**	0.0429	131	<0.30
K - Floor 12 Ft	12	8/20/2021	**6.87**	39	<0.238	10.6	**17.1**	3.83	**0.741**	0.0245	31.5	<0.30

Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
L - Floor 9 Ft	9	8/20/2021	**8.18**	23.8	0.312	17.2	**26.1**	22.1	**1.7**	0.0516	105	<0.30
E2 E Wall 2 Ft	2	8/23/2021	**3.16**	62.9	<0.222	7.68	7.15	6	**0.635**	0.0391	35.5	<0.30
E2 Floor 4 Ft	4	8/23/2021	**6.95**	77.2	<0.243	11.8	9.61	10.7	**0.939**	0.0416	51.8	<0.30
E2 Floor 6 Ft #2	6	8/26/2021	**16.5**	43	0.245	18.9	**19.5**	13.6	**1.55**	0.0658	133	<0.30
E2/F2 E Wall 2 Ft	2	8/23/2021	**4.22**	39.9	<0.212	6.75	5.85	8.09	**0.663**	0.0262	34	<0.30
E2/F2 Floor 4 Ft	4	8/23/2021	**4.05**	64.1	<0.224	4.84	4.89	5.66	**0.491**	<0.0224	27.7	<0.30
F2 E Wall 3 Ft	3	8/23/2021	**9.3**	69.1	<0.230	14.4	13.2	16	**1.05**	0.0507	69.1	<0.30
F2 Floor 4 Ft	4	8/23/2021	**11.9**	18.3	<0.244	15.6	**17.4**	7.7	**1.62**	0.0611	54.3	<0.30
G2 E Wall 3 Ft	3	8/23/2021	**7.69**	87	0.304	18.2	**14.4**	15.1	**1.33**	0.0629	82.9	<0.30
G2 Floor 6 Ft	6	8/23/2021	**11.5**	28.4	<0.231	14	**15.4**	8.91	**1.05**	0.0603	68.9	<0.30
H2 E Wall 3 Ft	3	8/23/2021	**2.22**	28.6	<0.237	9.96	10.9	4.13	**0.65**	0.0511	26.3	<0.30
H2 Floor 8 Ft	8	8/23/2021	**2.86**	14.8	<0.242	16.4	10.6	10.6	**1.69**	0.0529	78.6	<0.30
I2 Floor 8 Ft	8	8/23/2021	**9.94**	20.8	<0.257	12.9	10.4	11.4	**1.08**	0.0376	110	<0.30
J2 Floor 8 Ft	8	8/23/2021	**0.939**	26.7	<0.258	7.95	5.96	2.41	**0.588**	<0.0258	22.5	<0.30
K2 Floor 12 ft	12	8/23/2021	**2.11**	6.37	<0.248	2.15	3.76	4.35	**0.398**	<0.0248	34.8	<0.30
K3 Floor 8 Ft	8	8/23/2021	**10.1**	23.9	<0.253	16.7	**15.5**	18.7	**1.97**	0.0472	143	<0.30
H3 N Wall 2 Ft	2	8/24/2021	**5.79**	74.8	<0.214	8.21	8.13	8.7	**0.589**	0.0364	39.8	<0.30
I3 E Wall 2 Ft	2	8/24/2021	**5.63**	70	0.224	8.69	8.99	8.14	**0.678**	0.0349	41.1	<0.30
I3 E Floor 4 Ft	4	8/24/2021	**8.78**	40.8	<0.231	11.7	13.6	9.71	**0.825**	0.0559	56.3	<0.30
J3 E Wall 2 Ft	2	8/24/2021	**6.3**	126	0.238	9.44	7.24	10.6	**0.716**	0.0406	40.2	<0.30
J3 Floor 4 Ft	4	8/24/2021	**10.5**	22.8	<0.237	10.2	10.4	20.2	**0.586**	0.0308	89.1	<0.30
K3 E Wall 2 Ft	2	8/24/2021	**2.78**	139	<0.208	4.27	4.65	5.08	**0.374**	0.0237	23.3	<0.30
L2 Floor 14 Ft	14	8/24/2021	**7.71**	52.2	<0.248	5.44	7.53	3.75	**0.45**	<0.0248	39	<0.30
L Wall 7 Ft	7	8/24/2021	**8.81**	18.6	0.281	16.9	**21.3**	20.7	**0.859**	0.0463	127	<0.30
M Floor 9 Ft	9	8/24/2021	**10.3**	17.5	0.266	14.4	**14.5**	22.2	**1.03**	0.049	92.8	<0.30
M W Wall 7 Ft	7	8/24/2021	**10.5**	26.6	<0.251	15.4	**16.7**	13.8	**1.25**	0.052	96.9	<0.30
N W Wall 7 Ft	7	8/24/2021	**11**	19.5	<0.255	15.2	**16.2**	13	**1.31**	0.0518	78.7	<0.30
E2/F2 E Wall 2Ft	2	8/24/2021	**5.03**	143	0.455	13.8	11	16.2	**0.795**	0.0446	56.4	<0.30
L3 - Floor 12 Ft	12	8/26/2021	**12.2**	14.3	<0.242	16.2	5.32	4.63	**0.879**	0.0329	41	<0.30
M2 - Floor 14 Ft	14	8/26/2021	**7.91**	17.1	<0.271	0.946	5.6	0.783	**<0.353**	<0.0271	7.75	<0.30
E2 - Floor #2 6 Ft	6	8/26/2021	**16.5**	43	0.245	18.9	**19.5**	13.6	**1.55**	0.0658	133	<0.30
L0 - Floor 4 Ft	4	8/26/2021	**5.1**	69.9	<0.233	7.86	7.52	8.2	**0.58**	0.0344	38	<0.30
M0 - Wall 4 Ft	4	8/26/2021	**7.35**	27.3	<0.226	9.75	10.3	17.6	**0.942**	0.0402	63.6	<0.30
M/N0 - Floor 4 Ft	4	8/26/2021	**9.21**	65.3	<0.256	13.1	13.5	14.1	**1.05**	0.0559	71.1	<0.30
N/O Floor 10 Ft	10	8/27/2021	**9.44**	45	<0.275	8.02	11.1	6.51	**1.17**	<0.0275	46.2	<0.30
L0 Wall - 1 Ft	1	8/30/2021	**5.03**	65.9	<0.206	7.79	7.9	8.06	**0.613**	0.0336	34.1	<0.30
L0 Floor - 3 Ft	3	8/30/2021	**9.85**	26.6	<0.240	14	13.9	25.5	**1.15**	0.0402	101	<0.30

Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
L3 Wall - 2 Ft	2	8/30/2021	**5.08**	82.8	<0.234	8.14	7.79	8.74	**0.728**	0.0389	34.6	<0.30
L3 Floor - 9 Ft	9	8/30/2021	**13.9**	15.2	<0.250	13.6	9.91	24.6	**1.46**	0.0301	115	<0.30
M0 Wall - 1 Ft	1	8/30/2021	**4.18**	61.2	<0.207	7.29	7.28	7.33	**0.573**	0.0325	32.8	<0.30
M2 Floor - 11 Ft	11	8/30/2021	**4.24**	32.6	<0.244	3.63	5.85	2.5	**0.467**	<0.0244	24.8	<0.30
N0 Wall - 1 Ft	1	8/30/2021	**4.87**	73.2	0.249	8.18	8.43	9.33	**0.67**	0.0361	36	<0.30
N0 Floor - 3 Ft	3	8/30/2021	**12.2**	46.9	0.74	17.3	**22.2**	72	**1.71**	0.0619	114	<0.30
N2 Floor - 11 Ft	11	8/30/2021	**9.85**	37.8	<0.239	5.16	5.24	4.03	**0.61**	<0.0239	33.1	<0.30
O0 Wall - 1 Ft	1	8/30/2021	**5.11**	70.1	<0.214	8.4	7.52	8.6	**0.618**	0.0346	37.8	<0.30
O0 Floor - 3 Ft	3	8/30/2021	**4.92**	181	0.297	11.7	10.1	15	**0.908**	0.0366	59.3	<0.30
O2 Floor - 9 Ft	9	8/30/2021	**8.26**	16.9	<0.253	19.8	13.4	12.6	**1.69**	0.0403	103	<0.30
Weathered Shale 7 Ft	7	8/30/2021	**14.0**	NA	NA	NA	NA	NA	NA	NA	NA	NA
M3 Wall - 7 Ft	7	8/31/2021	**13.8**	49.5	0.285	17	13.7	21.7	1.68	0.0448	102	<0.30
M3 Floor - 9 Ft	9	8/31/2021	**11.3**	16.6	0.291	17	12.3	24.1	1.18	0.047	118	<0.30
N3 Wall - 8 Ft	8	8/31/2021	**9.5**	10.5	<0.245	11.5	9.64	10.2	0.869	0.0374	75.3	<0.30
O3 Wall - 8 Ft	8	8/31/2021	**21.2**	20.3	<0.255	23.3	18.1	26.1	1.21	0.0613	122	<0.30
O0 Floor - 4 Ft	4	8/31/2021	**1.8**	19.9	<0.262	22.7	6.94	1.89	0.966	0.0569	13	<0.30
SP - E Surface	0.5	8/31/2021	**10.6**	88	0.27	14.2	12.7	17.2	**1.21**	0.0474	72.6	<0.30
SP - W Surface	0.5	8/31/2021	**6.7**	76	0.276	11.3	10	10.7	**0.977**	0.042	53	<0.30
M3 Wall - 7 Ft #2	7	9/1/2021	**9.8**	**268**	<0.231	18.6	**16,4**	15.2	**1.29**	**0.0805**	91.1	<0.30
O0 Floor - 7 Ft #2	7	9/1/2021	**10.2**	17.6	<0.254	16.4	11.2	10.7	**1.21**	0.0625	109	<0.30
O/P 4 Wall - 3 Ft	3	9/1/2021	**4.55**	82	<0.214	7.83	7.25	9.19	**0.641**	0.0346	35.8	<0.30
O/P 4 Floor - 9 Ft	9	9/1/2021	**1.89**	11.4	<0.243	11.6	8.09	1.94	**0.815**	<0.0243	15	<0.30
P0 Wall - 4 Ft	4	9/1/2021	**6.14**	57.4	<0.247	10.4	10.6	11	**0.718**	0.0303	53.4	<0.30
P0 Floor - 8 Ft	8	9/1/2021	**9.92**	14.7	<0.249	13.8	9.6	10.5	**1.74**	0.0284	120	<0.30
P3 Floor - 9 Ft	9	9/1/2021	**7.69**	12.1	<0.246	13.2	11.3	10.6	**1.04**	0.0337	91.1	<0.30
P4 Wall - 4 Ft	4	9/1/2021	**4.2**	89.2	<0.213	8.07	7.09	9.35	**0.584**	0.0306	37.9	<0.30
P4 Floor - 8 Ft	8	9/1/2021	**9.17**	12.2	<0.241	14.4	**14.2**	15.7	**1.17**	0.0431	95.1	<0.30
N3 Floor 10 Ft	10	9/8/2021	<0.241	6.59	<0.241	6.73	0.912	1.01	**0.633**	<0.0241	7.76	<0.30
O0 Floor 10 Ft	10	9/8/2021	**15.4**	21.9	<0.247	24.9	12	2.73	**1.82**	0.0646	43	<0.30
O Floor 10 Ft	10	9/8/2021	**5.45**	15.4	<0.245	15.5	8.64	5.26	**1.36**	0.0759	75.4	<0.30
O2 Floor 10 Ft	10	9/8/2021	**12.9**	16.4	<0.244	12.9	10.2	5.35	**1.61**	0.0619	61.8	<0.30
O3 Floor 10 Ft	10	9/8/2021	**1.58**	23.8	<0.242	12.1	8.4	3.14	**1.26**	0.0256	25.4	<0.30
P0 Floor 10 Ft	10	9/8/2021	**7.24**	20.1	<0.249	15	8.8	3.29	**1.02**	0.0572	40.3	<0.30
P0 N Wall 8 Ft	8	9/8/2021	**5.64**	59	0.328	11.4	11	13.7	**1.1**	0.0398	60.2	<0.30
P Floor 10 Ft	10	9/8/2021	**26.7**	24	<0.25	13.7	11.6	6.77	**2.17**	0.752	95.3	<0.30
P N Wall 8 Ft	8	9/8/2021	**16.7**	11.4	<0.253	12.7	11.2	13.1	**1.72**	0.0426	76.2	<0.30
P2 Floor 10 Ft	10	9/8/2021	**13.0**	19.7	<0.248	17.8	10.4	8.48	**1.61**	0.0476	90.9	<0.30

Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
P2 N Wall 8 Ft	8	9/8/2021	**1.46**	26.2	<0.25	12.2	7.91	3.27	**1.42**	0.0338	25.7	<0.30
P3 N Wall 8 Ft	8	9/8/2021	**6.45**	13.2	0.282	18.3	**14,5**	34	**1.61**	0.0407	140	<0.30
P2 Wall 8 Ft #2	8	9/9/2021	**9.27**	13.8	<0.235	13.2	**17**	9.18	**1.7**	0.0403	125	<0.30
SP-E 1 Ft	1	9/13/2021	**1.34**	49.3	<0.206	5.85	6.41	4.3	**0.406**	0.036	30.1	<0.30
SP-Exc. Mid. 6 Ft	6	9/13/2021	**1.61**	56	<0.209	9.19	9.36	4.61	**0.459**	0.0798	39.3	<0.30
Waste Char - 1	9	8/27/2021	**6.72**	13.5	<0.284	16.7	**16.1**	11.8	**1.26**	0.0398	116	<0.30
Background - NE 1 Ft	1	8/20/2021	**9.18**	104	0.247	15.4	12.3	13	**0.931**	0.0509	67.3	<0.30
Background - NE 3 Ft	3	8/20/2021	**9.5**	45.9	<0.224	14.2	11.6	12.8	**0.989**	0.0655	75	<0.30
Background - NE 5 Ft	5	8/20/2021	**12.9**	19	<0.232	17.8	15	11.3	**1.02**	0.0808	78.2	<0.30
Background - NE 7 Ft	7	8/20/2021	**12.3**	18.9	<0.238	15.3	13.2	10.9	**0.843**	0.0593	79	<0.30
Background - NE 8.5 Ft	8.5	8/20/2021	**9.89**	18.7	<0.238	20.3	17.6	11.7	**1.45**	0.091	78.1	<0.30
Background - SE 1 Ft	1	8/20/2021	**4.53**	56	<0.238	7.14	6.76	6.46	**0.606**	0.0309	33.2	<0.30
Background - SE 3 Ft	3	8/20/2021	**3.21**	106	<0.225	4.77	5.55	5.78	**0.552**	0.0257	25.3	<0.30
Background - SE 6 Ft	6	8/20/2021	**11**	29.3	<0.243	10.1	8.48	8.02	**0.774**	0.0302	77.5	<0.30
Background - SE 8 Ft	8	8/20/2021	**9.62**	35.4	<0.258	11.5	12.8	8.36	**0.827**	0.0591	71.7	<0.30
Background - SE 10 Ft	10	8/20/2021	**12.6**	73.5	<0.261	6.87	5.93	3.26	**0.474**	<0.0261	44.1	<0.30
Background - SE 11 Ft	11	8/20/2021	**6.37**	41	<0.276	5.1	5.22	4.02	**<0.358**	0.0317	33.7	<0.30
Background - NW 1 Ft	1	8/20/2021	**8.63**	111	0.252	11.6	10.7	12.9	**0.982**	0.0411	61.1	<0.30
Background - NW 3 Ft	3	8/20/2021	**9.5**	52.4	0.267	12.9	11.2	13	**0.963**	0.0512	65.1	<0.30
Background - SW 3 Ft	3	8/20/2021	**4.77**	77.6	<0.215	7.21	6.78	7.6	**0.691**	0.0299	33.9	<0.30
Backfill - 1	0.5	8/20/2021	**2.55**	62.7	<0.207	6.72	5.59	5.47	**0.478**	0.0286	31.9	<0.30
Backfill - 2	0.5	8/20/2021	**2.1**	50.6	<0.208	5.9	5.7	4.34	**0.403**	0.0295	27.1	<0.30
Backfill - 3	0.5	8/31/2021	**1.84**	62.6	<0.213	8.06	8.02	6.37	**0.759**	0.0373	33.9	<0.30
Backfill - 4	0.5	8/31/2021	**2.16**	86.5	<0.205	9.07	8.34	6.23	**0.683**	0.0572	37.8	<0.30
Backfill - 5	0.5	8/31/2021	**2.05**	69.5	<0.243	8.32	8.16	5.92	**0.657**	0.0469	35.7	<0.30
Backfill - 6	0.5	8/31/2021	**2.13**	69.8	0.243	12	11.5	6.95	**0.826**	0.0796	46.3	<0.30

Sample	Depth (ft)	Date Sampled	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)	Chromium (mg/kg)
Backfill - 7	0.5	9/1/2021	**2.19**	55.6	<0.205	6.73	6.52	5.02	**0.455**	0.0325	29.5	<0.30
Backfill - 8	0.5	9/1/2021	**2.31**	58.2	<0.208	6.46	6.13	5.48	**0.453**	0.0239	30.4	<0.30
Backfill - 9	0.5	9/1/2021	**1.94**	**85.3**	<0.225	6.50	7.05	5.75	**0.542**	0.0265	30.9	<0.30
Backfill - 10	0.5	9/1/2021	**2.33**	69.3	<0.208	7.13	7.15	6.40	**0.547**	0.0360	33.5	<0.30
COGCC Table 915-1 Limits (Residential SSL)			0.68	15000	71	3100	400	1500	390	390	23000	0.3
COGCC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	46	14	26	0.26	0.8	370	0.00067

Bold faced values exceed the COGCC Table 915-1 concentrations

Blue highlighted 915-1 Limits indicate the referenced soil screening level (SSL)

NA- Not analyzed

TABLE 4
SUMMARY OF INORGANIC SOIL CHEMISTRY DATA
NOBLE ENERGY INC.
HARPER PIPELINE
FREMONT PROJECT NO. C021-074

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
A - E Wall 0.5 Ft	8/19/2021	0.5	0.656	8.15	0.765	0.149
A- Floor 3 Ft	8/19/2021	3	0.718	8.24	2.53	0.0956
A- - W Wall 0.5 Ft	8/19/2021	0.5	0.382	8.15	0.451	0.181
B - E Wall 0.5 Ft	8/19/2021	0.5	0.481	8.18	0.392	0.16
B- Floor 3 Ft	8/19/2021	3	**4.88**	7.97	4.97	0.116
B - W Wall 0.5 Ft	8/19/2021	0.5	0.247	**8.33**	0.344	0.111
C - E Wall 0.5 Ft	8/17/2021	0.5	0.593	8	2.08	0.167
C- Floor 3 Ft	8/17/2021	3	3.27	7.92	1.85	0.225
C - W Wall 0.5 Ft	8/17/2021	0.5	0.591	8.04	1.88	0.259
C - W Wall 0.5 Ft #2	8/18/2021	0.5	NA	NA	NA	0.132
D - E Wall 0.5 Ft	8/17/2021	0.5	0.512	8.14	2.02	0.127
D- Floor 3 Ft	8/17/2021	3	0.604	8.14	1.79	0.068
D - W Wall 0.5 Ft	8/17/2021	0.5	0.309	8.12	1.29	0.141
E - E Wall 10 Ft	8/18/2021	10	NA	NA	NA	0.317
E - Floor 13 Ft	8/18/2021	13	NA	NA	NA	0.152
E - W Wall 10 Ft	8/18/2021	10	NA	NA	NA	0.273
E2 E Wall 2 Ft	8/23/2021	2	0.723	8.19	1.29	0.125
E2 Floor #2 - 6Ft	8/26/2021	6	3.13	8	0.426	0.65
G2 E Wall 3 Ft	8/23/2021	3	0.407	8.21	1.15	0.0782
G2 Floor 8 Ft	8/23/2021	8	2.68	7.9	1.18	0.263
I2 Floor 8 Ft	8/23/2021	8	1.88	7.94	1.11	0.525
O W Wall 7 Ft	8/24/2021	7	**5.12**	7.8	3.94	0.18
L - Floor 9 Ft	8/20/2021	9	2.49	7.67	2.71	1.55
L0 - Floor 4 Ft	8/26/2021	4	3.09	**8.57**	0.654	3.41
M0 - Wall 4 Ft	8/26/2021	4	2.53	7.82	0.0305	0.176

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
M/N0 - Floor 4 Ft	8/26/2021	4	**4.08**	7.74	0.272	0.357
Waste Char - 1 8 Ft	8/27/2021	8	3.52	7.67	0.463	1.68
N/O Floor 10 Ft	8/27/2021	10	3.76	7.47	0.214	0.48
L0 Wall - 1 Ft	8/30/2021	1	0.222	**8.38**	0.0549	0.101
L0 Floor - 3 Ft	8/30/2021	3	2.28	7.81	0.169	0.198
L3 Wall - 2 Ft	8/30/2021	2	0.623	8.21	0.055	0.127
L3 Floor - 9 Ft	8/30/2021	9	2.83	7.77	0.093	0.856
M0 Wall - 1 Ft	8/30/2021	1	0.219	**8.49**	0.053	0.187
M2 Floor - 11 Ft	8/30/2021	11	3.01	7.89	0.0958	0.389
N0 Wall - 1 Ft	8/30/2021	1	0.232	**8.45**	0.0482	0.113
N0 Floor - 3 Ft	8/30/2021	3	2.59	7.77	0.16	0.327
N2 Floor - 11 Ft	8/30/2021	11	1.2	8.05	0.474	0.719
O0 Wall - 1 Ft	8/30/2021	1	1.61	7.93	0.058	0.231
O0 Floor - 3 Ft	8/30/2021	3	3.3	7.74	0.288	0.214
O2 Floor - 9 Ft	8/30/2021	9	NA	NA	NA	NA
L 4 Ft	8/30/2021	4	**5.08**	7.76	0.183	0.315
M Wall 4 Ft	8/30/2021	4	**8.4**	7.72	0.169	0.287
N Wall 4 Ft	8/30/2021	4	**6.23**	7.58	0.662	0.475
Waste Char-1	8/27/2021	9	3.52	7.67	0.463	1.68
M3 Wall - 7 Ft	8/31/2021	7	1.8	8.2	0.351	0.162
M3 Floor - 9 Ft	8/31/2021	9	3.26	7.81	0.0776	0.242
N3 Wall - 8 Ft	8/31/2021	8	1.51	8.18	0.194	0.157
O3 Wall - 8 Ft	8/31/2021	8	3.94	7.85	0.239	0.354
O0 Floor - 4 Ft	8/31/2021	4	**4.65**	7.7	0.28	0.447
O0 Floor - 7 Ft #2	9/1/2021	7	2.51	7.63	0.351	0.777
SP - E Surface	8/31/2021	0.5	2.82	7.78	0.135	0.126
SP - W Surface	8/31/2021	0.5	3.89	7.84	0.379	0.311
M3 Wall - 7 Ft #2	9/1/2021	7	1.13	8.21	0.262	0.121
O/P 4 Wall - 3 Ft	9/1/2021	3	2.16	7.87	0.193	0.0937
O/P 4 Floor - 9 Ft	9/1/2021	9	3.73	7.64	0.380	0.388

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
P0 Wall - 4 Ft	9/1/2021	4	2.6	7.85	0.742	0.410
P0 Floor - 8 Ft	9/1/2021	8	**4.48**	7.73	0.371	0.775
P3 Floor - 9 Ft	9/1/2021	9	2.29	8.00	0.630	0.833
P4 Wall - 4 Ft	9/1/2021	4	1.79	8.12	0.313	0.154
P4 Floor - 8 Ft	9/1/2021	8	**4.64**	7.91	0.578	0.526
N3 Floor 10 Ft	9/8/2021	10	1.12	8.06	0.612	0.704
O0 Floor 10 Ft	9/8/2021	10	3.56	7.76	0.282	1
O Floor 10 Ft	9/8/2021	10	1.19	7.75	0.456	0.931
P0 Floor 10 Ft	9/8/2021	10	1.4	7.7	0.438	0.942
P N Wall 8 Ft	9/8/2021	8	2.84	7.81	0.916	1.62
P2 N Wall 8 Ft	9/8/2021	8	1.67	7.85	0.751	1.54
P3 N Wall 8 Ft	9/8/2021	8	3.55	7.84	0.773	1.23
P2 Wall 8 Ft #2	9/9/2021	8	1.43	7.79	0.725	0.102
SP-E 1 Ft	9/13/2021	1	0.696	8.29	0.109	0.0889
SP-Exc. Mid. 6 Ft	9/13/2021	6	0.69	8.24	0.136	0.124
Background - NE 1 Ft	8/20/2021	1	0.471	8.11	1.31	0.133
Background - NE 3 Ft	8/20/2021	3	3.53	7.87	1.51	0.276
Background - NE 5 Ft	8/27/2021	5	**4.18**	8.01	0.414	0.905
Background - NE 7 Ft	8/27/2021	7	3.83	7.91	0.326	0.805
Background - NE 8.5 Ft	8/27/2021	8.5	2.08	**8.33**	0.621	0.991
Background - SE 1 Ft	8/20/2021	1	1.05	8.23	1.83	0.217
Background - SE 3 Ft	8/20/2021	3	**11.4**	8.18	1.35	1.540
Background - SE 6 Ft	8/27/2021	6	2.3	8.1	0.579	0.419
Background - SE 8 Ft	8/27/2021	8	1.28	**8.32**	0.207	0.392
Background - SE 10 Ft	8/27/2021	10	1.38	8.09	0.262	0.384
Background - SE 11 Ft	8/27/2021	11	1.1	8.14	0.219	0.300
Background - NW 1 Ft	8/20/2021	1	0.34	8.3	1.26	0.098
Background - NW 3 Ft	8/20/2021	3	3.27	7.94	1.6	0.164
Background - SW 3 Ft	8/20/2021	3	3.03	8.04	1.58	0.103
Backfill - 1	8/20/2021	0.5	1.23	7.92	2.06	0.400

SAMPLE LOCATION	DATE SAMPLED	DEPTH ft	EC mmhos/cm	pH pH units	SAR units	BORON mg/L
Backfill - 2	8/20/2021	0.5	1.09	7.9	1.72	0.417
Backfill - 3	8/31/2021	0.5	0.616	**8.33**	0.0564	0.080
Backfill - 4	8/31/2021	0.5	0.585	**8.36**	0.0635	0.102
Backfill - 5	8/31/2021	0.5	0.714	**8.35**	0.0939	0.035
Backfill - 6	8/31/2021	0.5	0.951	**8.38**	0.0974	0.061
Backfill - 7	9/1/2021	0.5	0.809	8.20	0.1	0.166
Backfill - 8	9/1/2021	0.5	0.137	8.23	0.0386	0.195
Backfill - 9	9/1/2021	0.5	0.324	**8.34**	0.0374	0.098
Backfill - 10	9/1/2021	0.5	0.327	**8.37**	0.0444	0.114
Table 915-1 Limits			<4	6-8.3	<6	2

Bold face values exceed the COGCC Limits

TABLE 5
SUMMARY OF ORGANIC GROUNDWATER CHEMISTRY DATA
NOBLE MIDSTREAM
HARPER PIPELINE
FREMONT PROJECT NO. C021-074

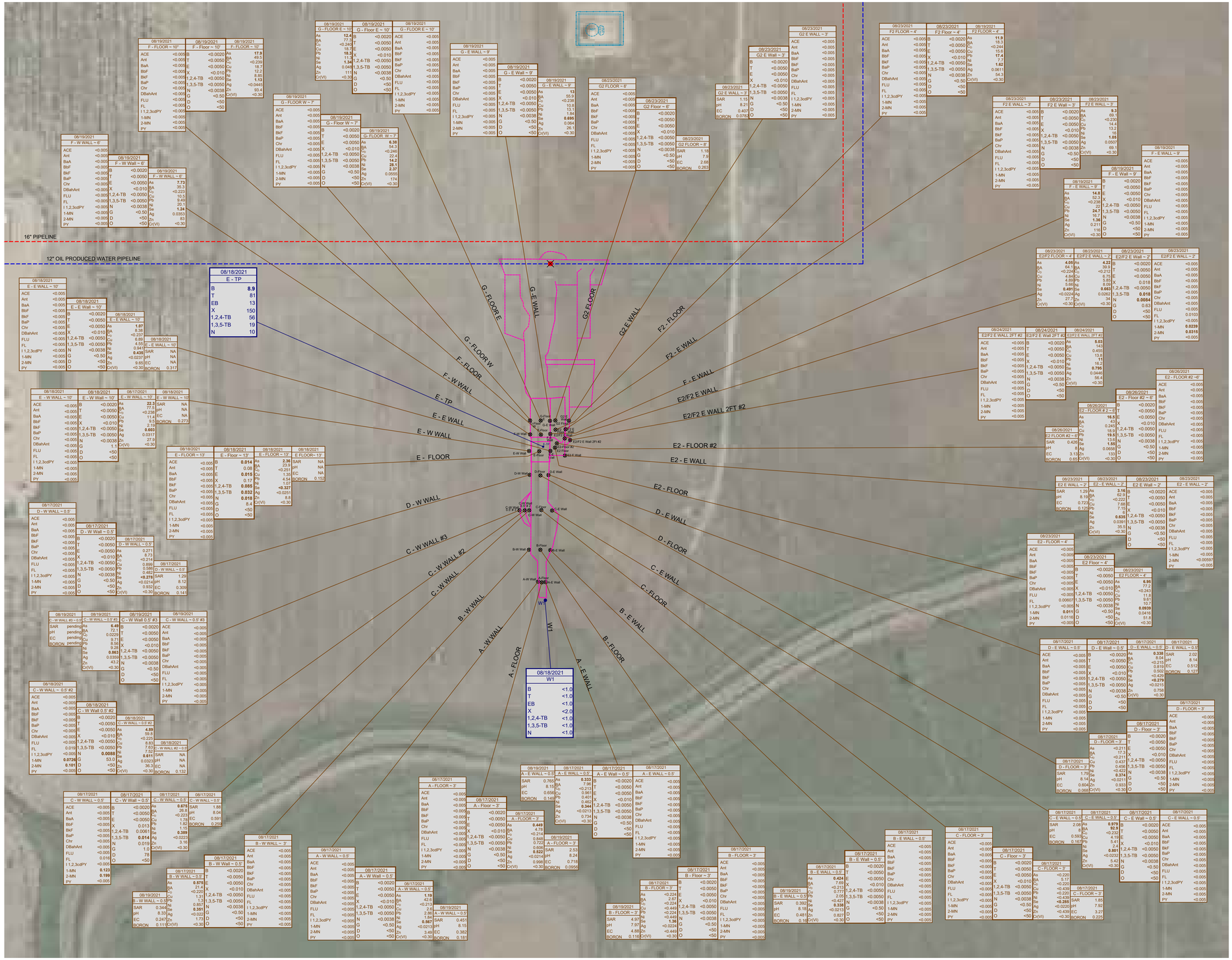
SAMPLE LOCATION	DATE	BENZENE (µg/L)	TOLUENE (µg/L)	ETHYL BENZENE (µg/L)	TOTAL XYLENES (µg/L)	NAPHTHALENE (µg/L)	1,2,4 TRIMETHYL-BENZENE (µg/L)	1,3,5 TRIMETHYL-BENZENE (µg/L)
W1	08/18/21	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
E- TP	08/18/21	**8.9**	81	13	150	10	56	19
Table 915-1 Standards		5	560	700	1,400	140	67	67

Bold face values exceed the regulatory standards

TABLE 6
SUMMARY OF PRODUCED WATER CHEMISTRY DATA
NOBLE MIDSTREAM
HARPER PIPELINE
FREMONT PROJECT NO. C021-074

SAMPLE LOCATION	DATE	ARSENIC (µ g/L)	BARIUM (µ g/L)	COPPER (µ g/L)	LEAD (µ g/L)	NICKEL (µ g/L)	SELENIUM (µ g/L)	SILVER (µ g/L)	ZINC (µ g/L)
Produced Water	08/27/21	**11.98**	**7880**	2.22	<0.500	3.1	<1.00	1.13	53.7
Regulation 41-Drinking Water Standard		10	2,000	5,000	50	100	50	50	5,000
Regulation 41-Agriculture Water Standard		100	None	200	100	200	20	None	2,000

Bold face values exceed the regulatory standards



LEGEND

- WATER SAMPLE LOCATION
- RELEASE POINT
- SOIL SAMPLE LOCATION
- AST — ABOVE GROUND STORAGE TANK
- FORMER — FORMER FACILITY
- CONTAINMENT BERM
- EXTENT OF EXCAVATION
- FENCE LINE
- 12" OIL PRODUCED WATER PIPELINE
- 16" PIPELINE
- [NA] — NOT ANALYZED

08/19/2021	
A - E Wall ~ 0.5'	DATE SAMPLED / SAMPLE ID & DEPTH (ft)
SAR	SAR (units)
pH	pH (pH units)
EC	EC (mmhos/cm)
BORON	BORON (mg/L)

08/18/2021	
W1	DATE SAMPLED / SAMPLE ID
B	BENZENE (ug/L)
T	TOLUENE (ug/L)
EB	ETHYLBENZENE (ug/L)
X	TOTAL XYLENES (ug/L)
1,2,4-TB	1,2,4-TRIMETHYLBENZENE (ug/L)
1,3,5-TB	1,3,5-TRIMETHYLBENZENE (ug/L)
N	NAPHTHALENE (ug/L)

08/17/2021	
A - E WALL ~ 0.5'	DATE SAMPLED / SAMPLE ID & DEPTH (ft)
As	ARSENIC (mg/L)
BA	BARIUM (mg/L)
Cc	CADMIUM (mg/L)
Cu	COPPER (mg/L)
Pb	LEAD (mg/L)
Ni	NICKEL (mg/L)
Se	SELENIUM (mg/L)
Ag	SILVER (mg/L)
Zn	ZINC (mg/L)
Cr(VI)	CHROMIUM (VI) (mg/L)

08/27/2021	
PRODUCED WATER	DATE SAMPLED / SAMPLE ID & DEPTH (ft)
As	ARSENIC (ug/L)
BA	BARIUM (ug/L)
Cu	COPPER (ug/L)
Pb	LEAD (ug/L)
Ni	NICKEL (ug/L)
Se	SELENIUM (ug/L)
Ag	SILVER (ug/L)
Zn	ZINC (ug/L)

08/17/2021	
A - E Wall ~ 0.5'	DATE SAMPLED / SAMPLE ID & DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
1,2,4-TB	1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

08/17/2021	
A - E Wall ~ 0.5'	DATE SAMPLED / SAMPLE ID & DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
I 1,2,3cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
1-MN	1-METHYLNAPHTHALENE (mg/kg)
2-MN	2-METHYLNAPHTHALENE (mg/kg)
PY	PYRENE (mg/kg)

N

0 20 40 60 80 100

Scale (feet)

Figure 3
SOUTHERN EXCAVATION EXTENT
SOIL AND GROUNDWATER CHEMISTRY MAP

CHEVRON CORPORATION / NOBLE MIDSTREAM, INC.
Harper Pipeline Release
NESW Sec. 21, T6N, R64W, 6th PM
Weld County, Colorado

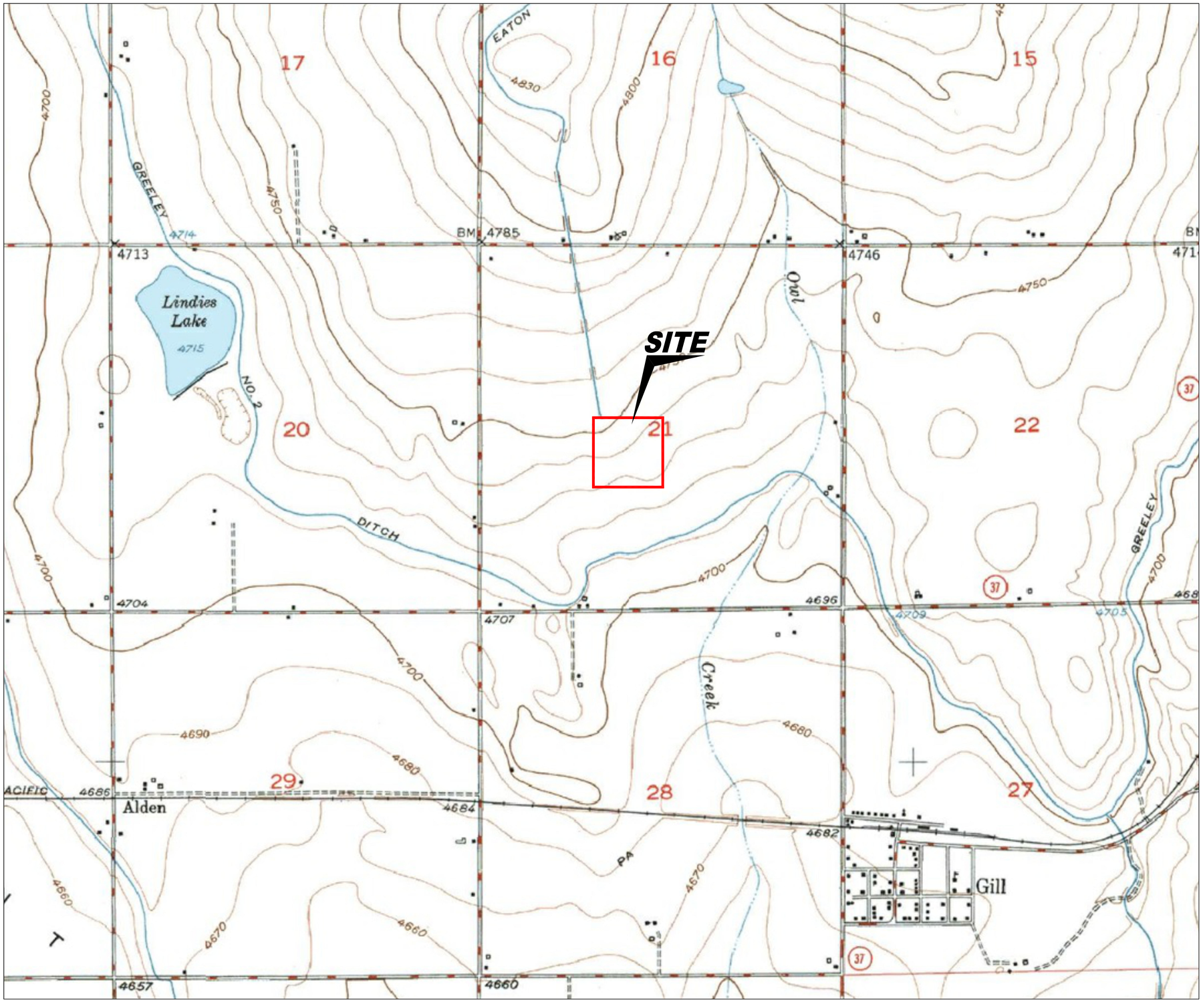
Project No.	Prepared by	Drawn by
CO21-074		TA
Date	Reviewed by	Filename
11/1/21	PH	21074QFFNS

FREMONT ENVIRONMENTAL

TABLE 7
SUMMARY OF ARSENIC (As) CONCENTRATION IN EXCAVATED SOILS CALCULATION (BASED ON REPORTED SPILL VOLUME)
NOBLE MIDSTREAM
HARPER PIPELINE
FREMONT PROJECT NO. C021-074

Produced H2O Release Volume (bbl)	Produced H2O Volume (L)	As Concentration (ug/L)	As Mass (mg)	Soil Excavated (T)	Soil Excavated (kg)	As Concentration (mg/kg)
151	151bbl x 159L/bbl	11.98	(11.98ug/L x 24,009L)/1000	13,946	13,946T x 907kg/T	288mg / 12,649,022kg
	24009		287.62782		12649022	2.3E-05

FIGURES



N

Scale (miles)

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

0 1000 2000 3000 4000 5000

Scale (feet)

Figure 1

SITE LOCATION MAP

CHEVRON CORPORATION / NOBLE MIDSTREAM, INC.
Harper Pipeline Release
NESW Sec. 21, T6N, R64W, 6th PM
Weld County, Colorado

Project No.	Prepared by	Drawn by
CO21-074		**TA**
Date	Reviewed by	Filename
10/20/21	**EB**	**21074T2**

FREMONT ENVIRONMENTAL

LEGEND

- RELEASE POINT
- SOIL SAMPLE LOCATION
- AST — ABOVE GROUND STORAGE TANK
- FORMER — FORMER FACILITY
- CONTAINMENT BERM
- EXTENT OF EXCAVATION
- FENCE LINE
- 12" OIL PRODUCED WATER PIPELINE
- 16" PIPELINE

EXCAVATION TOTAL:

*08/17/2021 ~ 250 tons
*08/18/2021 ~ 700 tons
*08/19/2021 ~ 856 tons
*08/20/2021 ~ 1481 tons
*08/21/2021 ~ 1240 tons
*08/23/2021 ~ 1050 tons
*08/24/2021 ~ 1136 tons
*08/25/2021 ~ 0 tons
*08/26/2021 ~ 1637 tons
*08/27/2021 ~ 1476 tons
*08/30/2021 ~ 1565 tons
*08/31/2021 ~ 1095 tons
*09/01/2021 ~ 638 tons
*09/08/2021 ~ 442 tons
*09/09/2021 ~ 380 tons

Total ~ 13,946 tons (10,738 cubic yards)

N

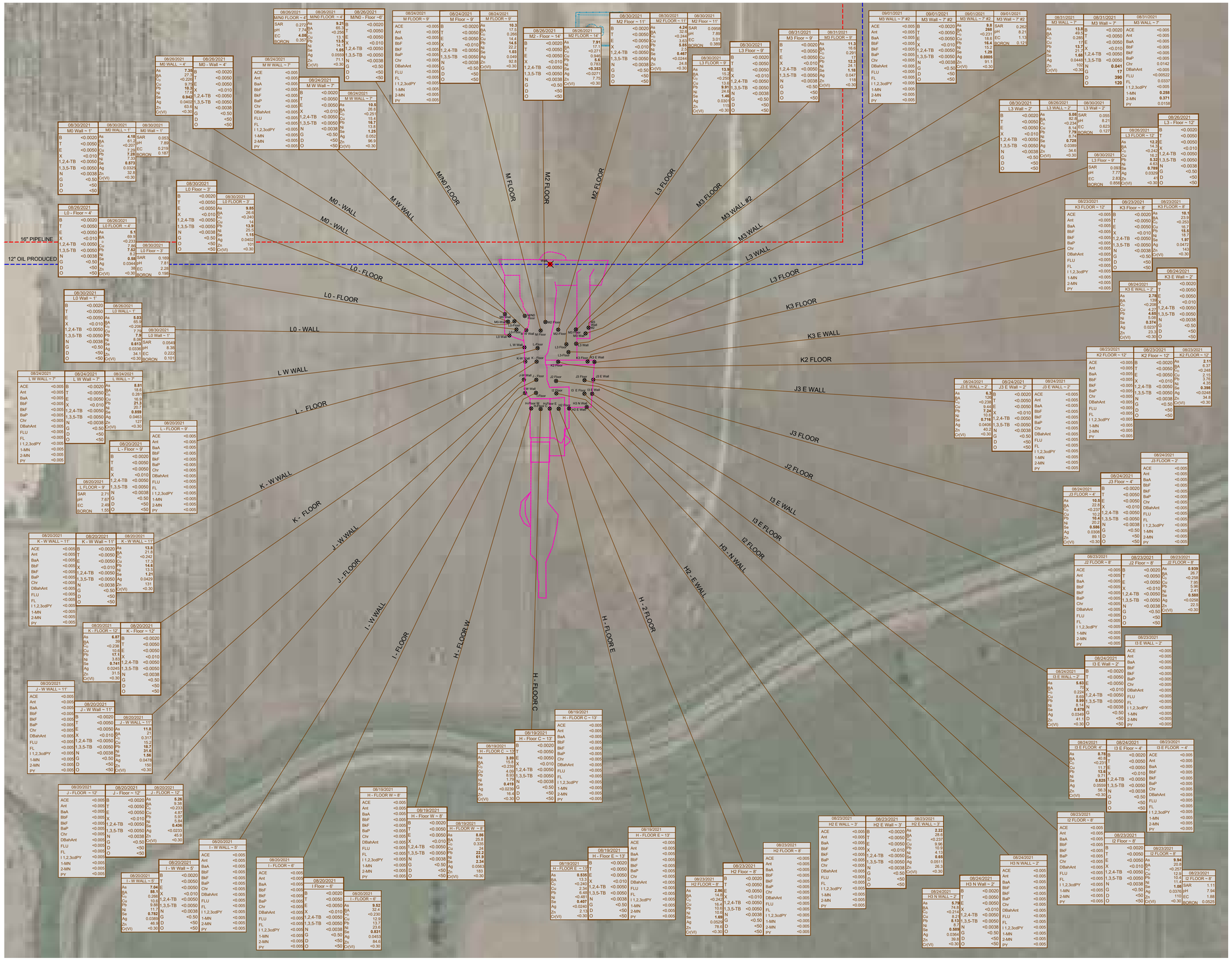
0 20 40 60 80 100
Scale (feet)

Figure 2
SITE MAP

CHEVRON CORPORATION / NOBLE MIDSTREAM, INC.
Harper Pipeline Release
NESW Sec. 21, T6N, R64W, 6th PM
Weld County, Colorado

Project No.	Prepared by	Drawn by
CO21-074		TA
Date	Reviewed by	Filename
11/2/21	EB	21074Q

FREMONT ENVIRONMENTAL



LEGEND

- RELEASE POINT
- SOIL SAMPLE LOCATION
- AST — ABOVE GROUND STORAGE TANK
- FORMER — FORMER FACILITY
- CONTAINMENT BERM
- EXTENT OF EXCAVATION
- FENCE LINE
- 12" OIL PRODUCED WATER PIPELINE
- 16" PIPELINE

[NA] NOT ANALYZED

08/19/2021	DATE SAMPLED
A - E Wall ~ 0.5'	SAMPLE ID & DEPTH (ft)
SAR 0.865	SAR (units)
pH 8.15	pH (pH units)
EC 2.656	EC (mmhos/cm)
BORON 0.149	BORON (mg/L)

08/17/2021	DATE SAMPLED
A - E WALL ~ 0.5'	SAMPLE ID & DEPTH (ft)
As 0.333	ARSENIC (mg/L)
BA 7.96	BARIUM (mg/L)
Cc <0.213	CADMIUM (mg/L)
Cu 0.961	COPPER (mg/L)
Pb 0.401	LEAD (mg/L)
Ni 0.462	NICKEL (mg/L)
Se 0.344	SELENIUM (mg/L)
Ag <0.0213	SILVER (mg/L)
Zn 0.734	ZINC (mg/L)
Cr(VI) <0.30	CHROMIUM (VI) (mg/L)

08/17/2021	DATE SAMPLED
A - E Wall ~ 0.5'	SAMPLE ID & DEPTH (ft)
B <0.0020	BENZENE (mg/kg)
T <0.0050	TOLUENE (mg/kg)
E <0.0050	ETHYLBENZENE (mg/kg)
X <0.010	TOTAL XYLENES (mg/kg)
1,2,4-TB <0.0050	1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TB <0.0050	1,3,5-TRIMETHYLBENZENE (mg/kg)
N <0.0038	NAPHTHALENE (mg/kg)
G <0.50	TPH-GRO (mg/kg)
D <50	TPH-DRO (mg/kg)
O <50	TPH-ORO (mg/kg)

08/17/2021	DATE SAMPLED
A - E WALL ~ 0.5'	SAMPLE ID and DEPTH (ft)
ACE <0.005	ACENAPHTHENE (mg/kg)
Ant <0.005	ANTHRACENE (mg/kg)
BaA <0.005	BENZO (A) ANTHRACENE (mg/kg)
BbF <0.005	BENZO (B) FLUORANTHENE (mg/kg)
BkF <0.005	BENZO (K) FLUORANTHENE(mg/kg)
BaP <0.005	BENZO (A) PYRENE (mg/kg)
Chr <0.005	CHRYSENE (mg/kg)
DBahAnt <0.005	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU <0.005	FLUORANTHENE (mg/kg)
FL <0.005	FLUORENE (mg/kg)
I 1,2,3cdPY <0.005	INDENO (1,2,3-CD) PYRENE(mg/kg)
1-MN <0.005	1-METHYLNAPHTHALENE (mg/kg)
2-MN <0.005	2-METHYLNAPHTHALENE (mg/kg)
PY <0.005	PYRENE (mg/kg)

N

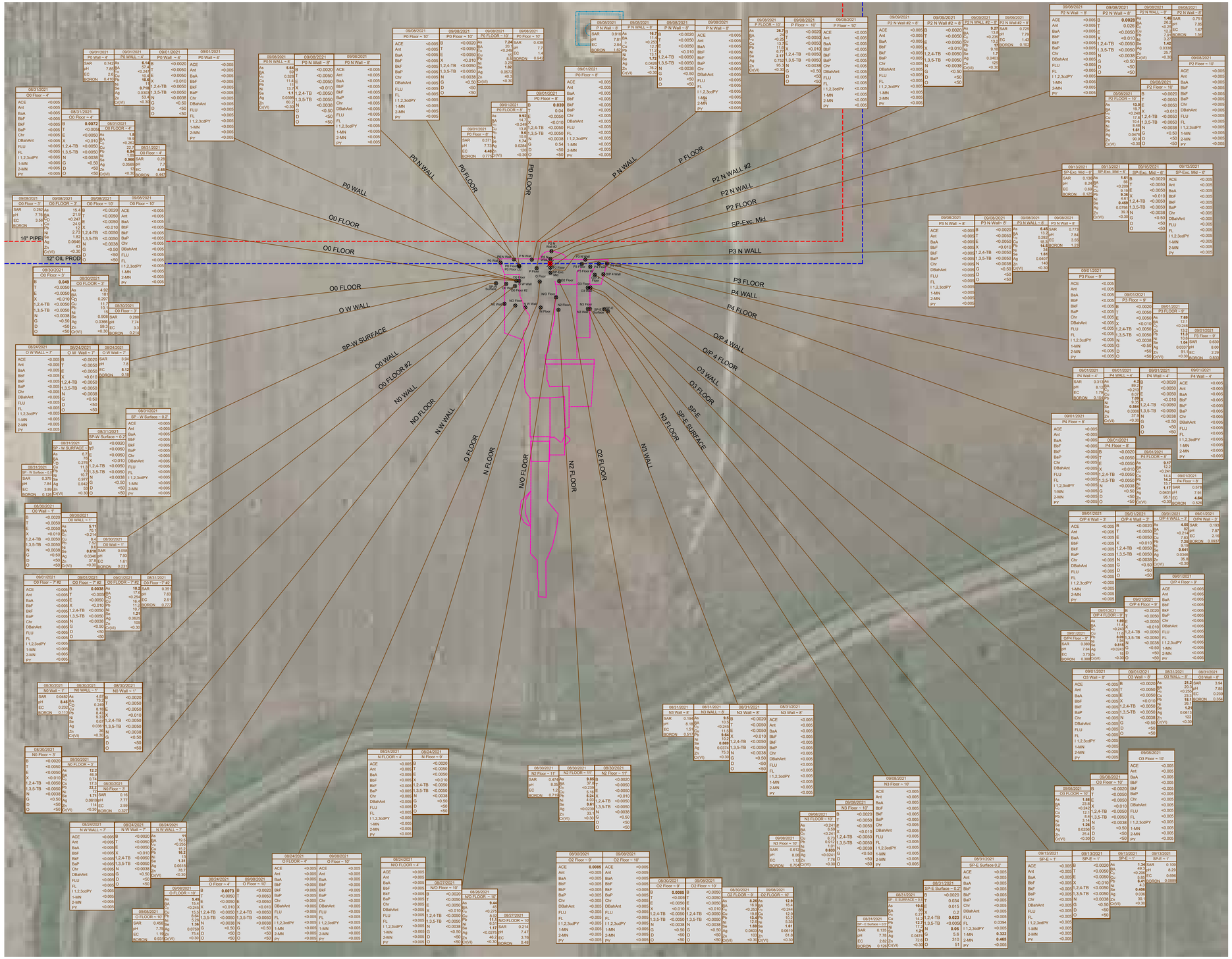
0 20 40 60 80 100

Scale (feet)

Figure 4
MIDDLE EXCAVATION EXTENT SOIL CHEMISTRY MAP

CHEVRON CORPORATION / NOBLE MIDSTREAM, INC.
Harper Pipeline Release
NESW Sec. 21, T6N, R64W, 6th PM
Weld County, Colorado

Project No.	Prepared by	Drawn by	FREMONT ENVIRONMENTAL
CO21-074		TA	
Date	Reviewed by	Filename	
11/1/21	PH	21074QFFC	



LEGEND

- RELEASE POINT
- SOIL SAMPLE LOCATION
- AST — ABOVE GROUND STORAGE TANK
- FORMER — FORMER FACILITY
- CONTAINMENT BERM
- EXTENT OF EXCAVATION
- FENCE LINE
- 12" OIL PRODUCED WATER PIPELINE
- 16" PIPELINE

[NA] NOT ANALYZED

08/19/2021	DATE SAMPLED
A - E Wall ~ 0.5'	SAMPLE ID & DEPTH (ft)
SAR	SAR (units)
pH	pH (pH units)
EC	EC (mmhos/cm)
BORON	BORON (mg/L)

08/17/2021	DATE SAMPLED
A - E WALL ~ 0.5'	SAMPLE ID & DEPTH (ft)
As	ARSENIC (mg/L)
BA	BARIUM (mg/L)
Cc	CADMIUM (mg/L)
Cu	COPPER (mg/L)
Pb	LEAD (mg/L)
Ni	NICKEL (mg/L)
Se	SELENIUM (mg/L)
Ag	SILVER (mg/L)
Zn	ZINC (mg/L)
Cr(VI)	CHROMIUM (VI) (mg/L)

08/17/2021	DATE SAMPLED
A - E Wall ~ 0.5'	SAMPLE ID & DEPTH (ft)
B	BENZENE (mg/kg)
T	TOLUENE (mg/kg)
E	ETHYLBENZENE (mg/kg)
X	TOTAL XYLENES (mg/kg)
1,2,4-TB	1,2,4-TRIMETHYLBENZENE (mg/kg)
1,3,5-TB	1,3,5-TRIMETHYLBENZENE (mg/kg)
N	NAPHTHALENE (mg/kg)
G	TPH-GRO (mg/kg)
D	TPH-DRO (mg/kg)
O	TPH-ORO (mg/kg)

08/17/2021	DATE SAMPLED
A - E WALL ~ 0.5'	SAMPLE ID & DEPTH (ft)
ACE	ACENAPHTHENE (mg/kg)
Ant	ANTHRACENE (mg/kg)
BaA	BENZO (A) ANTHRACENE (mg/kg)
BbF	BENZO (B) FLUORANTHENE (mg/kg)
BkF	BENZO (K) FLUORANTHENE(mg/kg)
BaP	BENZO (A) PYRENE (mg/kg)
Chr	CHRYSENE (mg/kg)
DBahAnt	DIBENZ (A,H) ANTHRACENE (mg/kg)
FLU	FLUORANTHENE (mg/kg)
FL	FLUORENE (mg/kg)
I 1,2,3cdPY	INDENO (1,2,3-CD) PYRENE(mg/kg)
1-MN	1-METHYLNAPHTHALENE (mg/kg)
2-MN	2-METHYLNAPHTHALENE (mg/kg)
PY	PYRENE (mg/kg)

N

0 20 40 60 80 100

Scale (feet)

Figure 5
NORTHERN EXCAVATION EXTENT SOIL CHEMISTRY MAP

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08/20/2021		08/20/2021	
Background NW ~ 1'		Background NW ~ 3'	
SAR	1.26	SAR	3.27
pH	8.3	pH	7.94
EC	0.34	EC	1.6
BORON	0.098	BORON	0.164

08/20/2021		08/20/2021	
Background NW ~ 3'		Background NW ~ 1'	
As	**9.5**	As	**8.63**
BA	52.4	BA	111
Co	0.267	Co	0.252
Cu	12.9	Cu	11.6
Pb	11.2	Pb	10.7
Ni	13	Ni	12.9
Se	**0.963**	Se	**0.982**
Ag	0.0512	Ag	0.0411
Zn	65.1	Zn	61.1
Cr(VI)	<0.30	Cr(VI)	<0.30

08/20/2021		08/20/2021		08/27/2021		08/27/2021		08/27/2021	
Background NE ~ 1'		Background NE ~ 3'		Background NE ~ 5'		Background NE ~ 7'		Background NE ~ 8.5'	
SAR	1.31	SAR	1.51	SAR	0.414	SAR	0.326	SAR	0.621
pH	8.11	pH	7.87	pH	8.01	pH	7.91	pH	**8.33**
EC	0.471	EC	3.53	EC	**4.18**	EC	3.83	EC	2.08
BORON	0.133	BORON	0.276	BORON	0.905	BORON	0.805	BORON	0.991

08/20/2021		08/20/2021		08/20/2021		08/20/2021		08/20/2021	
Background NE ~ 1'		Background NE ~ 3'		Background NE ~ 5'		Background NE ~ 7'		Background NE ~ 8.5'	
As	**9.18**	As	**9.5**	As	**12.9**	As	**12.3**	As	**9.89**
BA	104	BA	45.9	BA	19	BA	18.9	BA	18.7
Co	0.247	Co	<0.224	Co	<0.232	Co	<0.238	Co	<0.238
Cu	15.4	Cu	14.2	Cu	17.8	Cu	15.3	Cu	20.3
Pb	12.3	Pb	11.6	Pb	15	Pb	13.2	Pb	17.6
Ni	13	Ni	12.8	Ni	11.3	Ni	10.9	Ni	11.7
Se	**0.931**	Se	**0.989**	Se	1.02	Se	**0.843**	Se	**1.45**
Ag	0.0509	Ag	0.0655	Ag	0.0808	Ag	0.0593	Ag	0.091
Zn	67.3	Zn	75	Zn	78.2	Zn	79	Zn	78.1
Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30

08/20/2021	
Background SW ~ 3'	
As	**4.77**
BA	77.6
Co	<0.215
Cu	7.21
Pb	6.78
Ni	7.6
Se	**0.691**
Ag	0.0299
Zn	33.9
Cr(VI)	<0.30

08/20/2021	
Background SW ~ 3'	
SAR	3.03
pH	8.04
EC	1.58
BORON	0.103

08/20/2021		08/20/2021		08/27/2021		08/27/2021		08/27/2021	
Background SE ~ 1'		Background SE ~ 3'		Background SE ~ 6'		Background SE ~ 8'		Background SE ~ 10'	
SAR	1.83	SAR	1.35	SAR	0.579	SAR	0.207	SAR	0.262
pH	8.23	pH	8.18	pH	8.1	pH	**8.32**	pH	8.09
EC	1.05	EC	**11.4**	EC	2.3	EC	1.28	EC	1.38
BORON	0.217	BORON	1.540	BORON	0.419	BORON	0.392	BORON	0.384

08/20/2021		08/20/2021		08/20/2021		08/20/2021		08/20/2021		08/20/2021	
Background SE ~ 1'		Background SE ~ 3'		Background SE ~ 6'		Background SE ~ 8'		Background SE ~ 10'		Background SE ~ 11'	
As	**4.53**	As	**3.21**	As	**11**	As	**9.62**	As	**12.6**	As	**6.37**
BA	56	BA	106	BA	29.3	BA	35.4	BA	73.5	BA	41
Co	<0.238	Co	<0.225	Co	<0.243	Co	<0.258	Co	<0.261	Co	<0.276
Cu	7.14	Cu	4.77	Cu	10.1	Cu	11.5	Cu	6.87	Cu	5.1
Pb	6.76	Pb	5.55	Pb	8.48	Pb	12.8	Pb	5.93	Pb	5.22
Ni	6.46	Ni	5.78	Ni	8.02	Ni	8.36	Ni	3.26	Ni	4.02
Se	**0.606**	Se	**0.552**	Se	**0.774**	Se	**0.827**	Se	**0.474**	Se	**<0.358**
Ag	0.0309	Ag	0.0257	Ag	0.0302	Ag	0.0591	Ag	0.0261	Ag	0.0317
Zn	33.2	Zn	25.3	Zn	77.5	Zn	71.7	Zn	44.4	Zn	33.7
Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30	Cr(VI)	<0.30

LEGEND

- RELEASE POINT
- SOIL SAMPLE LOCATION
- AST — ABOVE GROUND STORAGE TANK
- FORMER — FORMER FACILITY
- CONTAINMENT BERM
- EXTENT OF EXCAVATION
- FENCE LINE
- 12" OIL PRODUCED WATER PIPELINE
- 16" PIPELINE

08/19/2021	
A - E Wall ~ 0.5'	
SAR	0.865
pH	8.15
EC	2.656
BORON	0.149

DATE SAMPLED
SAMPLE ID & DEPTH (ft)
SAR (units)
pH (pH units)
EC (mmhos/cm)
BORON (mg/L)

08/17/2021	
A - E WALL ~ 0.5'	
As	**0.333**
BA	7.96
Co	<0.213
Cu	0.961
Pb	0.401
Ni	0.462
Se	**0.344**
Ag	<0.0213
Zn	0.734
Cr(VI)	<0.30

DATE SAMPLED
SAMPLE ID & DEPTH (ft)
ARSENIC (mg/L)
BARIUM (mg/L)
CADMIUM (mg/L)
COPPER (mg/L)
LEAD (mg/L)
NICKEL (mg/L)
SELENIUM (mg/L)
SILVER (mg/L)
ZINC (mg/L)
CHROMIUM (VI) (mg/L)

N

0 20 40 60 80 100
Scale (feet)

Figure 6
BACKGROUND SAMPLE LOCATIONS SOIL CHEMISTRY MAP

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CO21-074		**TA**
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10/21/21	**EB**	**21074QFFBG**

FREMONT ENVIRONMENTAL