District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: **Enterprise Field Services, LLC**	OGRID: **151618**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	Incident # *(assigned by OCD)*: **NRM2003552129**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.592287** Longitude **-107.740493** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Lateral 6A-19 Pipeline**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **01/08/2020**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
F	**12**	**27N**	**9W**	**San Juan**

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name*: Navajo Nation)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) **Estimated 10 BBLS**	Volume Recovered (bbls) **None**
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls):	Volume Recovered (bbls):
☒ Natural Gas	Volume Released (Mcf): **255 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On January 8, 2020, Enterprise discovered a release of natural gas and natural gas liquids on the Lateral 6A-19 pipeline. An estimated ten (10) barrels of fluids were released to the ground surface. The pipeline was blown down, depressurized, locked out and tagged out. No washes were affected. The released fluids were recovered as much as practicable. Repairs and remediation were completed on February 4, 2020. The final excavation dimensions measured approximately 64 feet long by 18 feet wide by approximately 13 feet deep. Approximately 538 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A third party closure report is included with this "Final." C-141.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jon E. Fields Title: Director, Environmental

Signature: J.E. Fields Date: 8/20/2020

email: jefields@eprod.com Telephone: (713) 381-6684

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Nelson Velez Date: 04/04/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Lateral 6A-19 Pipeline Release
NW ¼, S12 T27N R9W
San Juan County, New Mexico

June 9, 2020
Ensolum Project No. 05A1226085

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, NM 87401
Attn: Mr. Thomas Long

Prepared by:

Ranee Deechilly
Environmental Scientist

Kyle Summers, CPG
Sr. Project Manager

Table of Contents

LIST OF APPENDICES

ENSOLUM

CLOSURE REPORT

Lateral 6A-19 Pipeline Release
NW ¼, S12 T27N R9W
San Juan County, New Mexico

Ensolum Project No. 05A1226085

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral 6A-19 Pipeline Release (Site)
Location:	36.592287° North, 107.740493° West Northwest (NW) ¼ of Section 12, Township 27 North, Range 9 West San Juan County, New Mexico
Property:	Navajo Nation
Regulatory:	Navajo Nation Environmental Protection Agency (NNEPA) and New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On January 7, 2020, a release of natural gas was identified at the Lateral 6A-19 pipeline. The resulting release was characterized by soil discoloration at the ground surface. Enterprise subsequently isolated and locked the pipeline out of service. On January 9, 2020, Enterprise initiated activities to facilitate the repair of the pipeline and remediate potential petroleum hydrocarbon impact.

A **Topographic Map** depicting the location of the Site is included as **Figure 1**, and a **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-site soils to below the applicable New Mexico EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NNEPA and the New Mexico EMNRD OCD. Ensolum, LLC (Ensolum) referenced New Mexico Administrative Code (NMAC) 19.15.29 *Releases,* which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action, during the evaluation and remediation of the Site. Ensolum utilized the general site characteristics and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site.

- The OSE tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable

and includes an interactive map). No water wells were identified within one mile of the Site in the OSE WRRS database. Supporting documentation is provided in **Appendix B**.

- Two (2) cathodic protection wells (CPWs) were identified within one mile of the Site. One (1) is associated with the Turner Hughes #16, #13, and #10 oil/gas production wells and is located approximately 0.75 miles west of the Site and at a higher elevation (6,020 feet) than the Site (5,940 feet), with a reported depth to water of 180 feet below grade surface (bgs). The second CPW located within one mile of the Site is associated with the Day "B" 2, 4, 6, and 7 oil/gas production wells and is located approximately 0.90 miles southeast of the Site and at a higher elevation (6,783 feet) than the Site, with no reported depth to water. Supporting documentation is provided in **Appendix B**.

  Based on a monitor well abandonment record for a temporary monitoring well installed at the El Paso Charley PAH #4 oil/gas production well pad (located approximately 0.40 miles southwest of the Site and at a slightly higher elevation (5,946 feet) than the Site) the depth to water is approximately 11 feet bgs (**Appendix B**). Groundwater data from a former monitoring well network located at the Charley PAH #2 oil/gas production well pad (located approximately 0.18 miles northeast of the Site and at a lower elevation (5,920 feet) than the Site) indicates the depth to water is approximately 19 feet bgs (according to New Mexico EMNRD OCD records (*1999 Pit Project Annual Groundwater Report*, PSC Services, March, 2000)). Groundwater data from a monitoring well network located at the Charles et al. No.1 pipeline release site (located approximately 0.42 miles southeast of the Site and at a lower elevation (5,935 feet) than the Site) indicates the depth to water is approximately seven (7) feet bgs (according to New Mexico EMNRD OCD records (*2018 Annual Groundwater Report*, GHD Services, Inc., January, 2018)).

- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The nearest ephemeral wash is located approximately 750 feet southwest of the Site.

- The Site is not located within 200 feet of a lakebed, sinkhole or playa lake.

- The Site is not located within 300 feet of a permanent residence, school, hospital, institution or church. The nearest permanent residence is located approximately 520 feet south of the Site.

- No springs, or private domestic fresh water wells used by less than five (5) households for domestic or stock watering purposes were identified within 500 feet of the Site.

- According to the OSE WRRS database there are no fresh water wells or springs within 1,000 feet of the Site. However, the USGS topographic map indicates a well or spring approximately 900 feet to the south, Additionally, the residence located approximately 520 feet to the south may have an unregistered water well.

- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.

- The Site is not located within 300 feet of a wetland.

- Based on information identified in the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.

- The Site is not located within an unstable area.

- The Site is not located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

Closure Criteria for Soils Impacted by a Release		
Constituent	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015	100 mg/kg
BTEX	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

3.0 SOIL REMEDIATION ACTIVITIES

On January 9, 2020, Enterprise initiated activities to facilitate the repair of the pipeline and to remediate petroleum hydrocarbon impact. During the remediation and corrective action activities, Halo Services, Inc. provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 64.5 feet long and 18 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 13 feet bgs.

The lithology that was encountered during the completion of the remediation activities consisted primarily of unconsolidated silty sand.

A total of approximately 538 cubic yards of petroleum hydrocarbon affected soils and 85 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils and then contoured to surrounding grade.

Figure 3 (**Appendix A**) is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline. Photographic documentation of the field activities is included in **Appendix D**.

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of 14 composite soil samples (S-1 through S-14), comprised of five (5) aliquots each, from the excavation for laboratory analysis. In addition, three (3) composite stockpiled soil samples (SP-1 through SP-3) were collected from the soils that were segregated for potential reuse, to confirm the material was suitable to remain on Site. A clean shovel was utilized to obtain fresh aliquots from each accessible area of the excavation and the stockpiled soil. An excavator was utilized to obtain fresh aliquots from areas of the excavation that were inaccessible due to slough hazards. A New Mexico EMNRD OCD representative was on Site during the January 30, 2020 sampling event. A New Mexico EMNRD OCD representative was not on Site during the February 4, 2020 sampling event, but approval to sample was provided.

First Sampling Event
On January 30, 2020, the first sampling event was performed at the Site. Composite soil samples S-1 (13'), and S-2 (13') were collected from the floor of the excavation. Composite soil samples S-4 (0'-13'), S-5 (0'-13'), S-6 (0'-13'), S-7 (0'-13'), S-8 (0'-13'), S-9 (0'-13'), S-11 (6'-13'), and S-14 (0'-13') were collected from the sidewalls of the excavation. Composite soil samples S-3 (0'-13') and S-10 (0'-13') were collected from the floor (ramp) and sidewalls of the excavation. Composite soil samples S-12 (0'-6') and S-13 (0'-6') were collected from a combination of the floor and sidewalls of the northern portion of the excavation. Analytical results from composite soil sample S-9 indicated New Mexico EMNRD OCD closure criteria TPH exceedances. In response to the data exceedances, the excavation was extended. Soils associated with composite soil samples S-9, SP-1, and SP-3 were removed and transported to the landfarm for disposal/remediation.

Second Sampling Event
On February 4, 2020, subsequent to the removal of soils associated with composite soil sample S-9, a second sampling event was performed. Composite soil sample S-14 (0'-13') was collected from the sidewall to replace composite soil sample S-9.

The soil samples were collected and placed in laboratory prepared glassware, labeled, and sealed using the laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0.

The laboratory analytical results are summarized in **Table 1** in **Appendix E**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix F**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results associated with the composite soil samples (S-1 through S-8, S-10 through S-14, and SP-2) to the applicable New Mexico EMNRD OCD closure criteria. In the event that the laboratory did not quantify a result for BTEX or chloride, Ensolum compared the laboratory supplied practical quantitation limits (PQLs) / reporting limits (RLs) to the New Mexico EMNRD OCD closure criteria. Due to the high PQLs/RLs associated with the TPH MRO range when using EPA SW-846 Method #8015, Ensolum only compared the quantified results to the New Mexico EMNRD OCD closure criteria. The soils associated with composite soil samples S-9, SP-1, and SP-3 were transported to Envirotech landfarm for disposal/remediation and are not included in the following discussion.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical results for composite soil samples S-7 and SP-2 indicate combined TPH GRO/DRO/MRO concentrations of 36 mg/kg and 57 mg/kg, respectively, which do not exceed the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, with no quantified combined values greater than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate chloride concentrations ranging from 96 mg/kg (S-7) to 460 mg/kg (S-3 and S-12), which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

The laboratory analytical results are summarized in **Table 1** (**Appendix E**).

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with a combination of imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, and was then contoured to the surrounding grade. Enterprise will re-seed the Site with an approved seeding mixture at the beginning of the next favorable growing season.

8.0 FINDINGS AND RECOMMENDATION

- A total of 14 composite soil samples were collected from the excavation. In addition, three (3) composite soil samples were collected from segregated stockpiled soils. Based on laboratory analytical results, the soils remaining in place do not exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria.

- A total of approximately 538 cubic yards of petroleum hydrocarbon affected soils and 85 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, and then contoured to surrounding grade.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

9.2 Additional Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be

noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendations are based solely upon data available to Ensolum at the time of these services.

9.3 Reliance

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

ENSOLUM

APPENDIX A

Figures

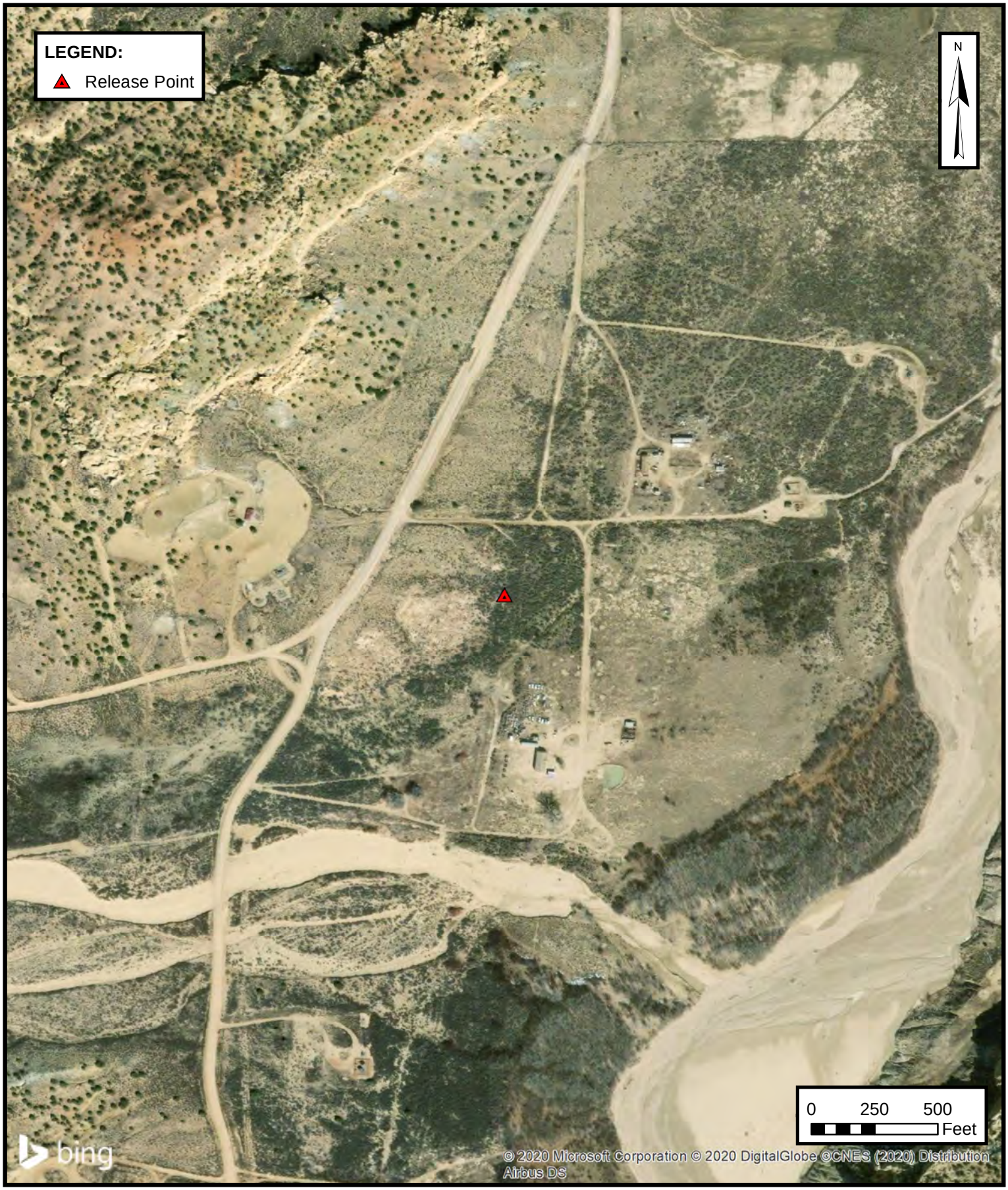
ENSOLUM

Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6A-19 PIPELINE RELEASE
NW ¼, S12 T27N R9W, San Juan County, New Mexico
36.592287° N, 107.740493° W
Ensolum Project No.: 05A1226085

FIGURE
1

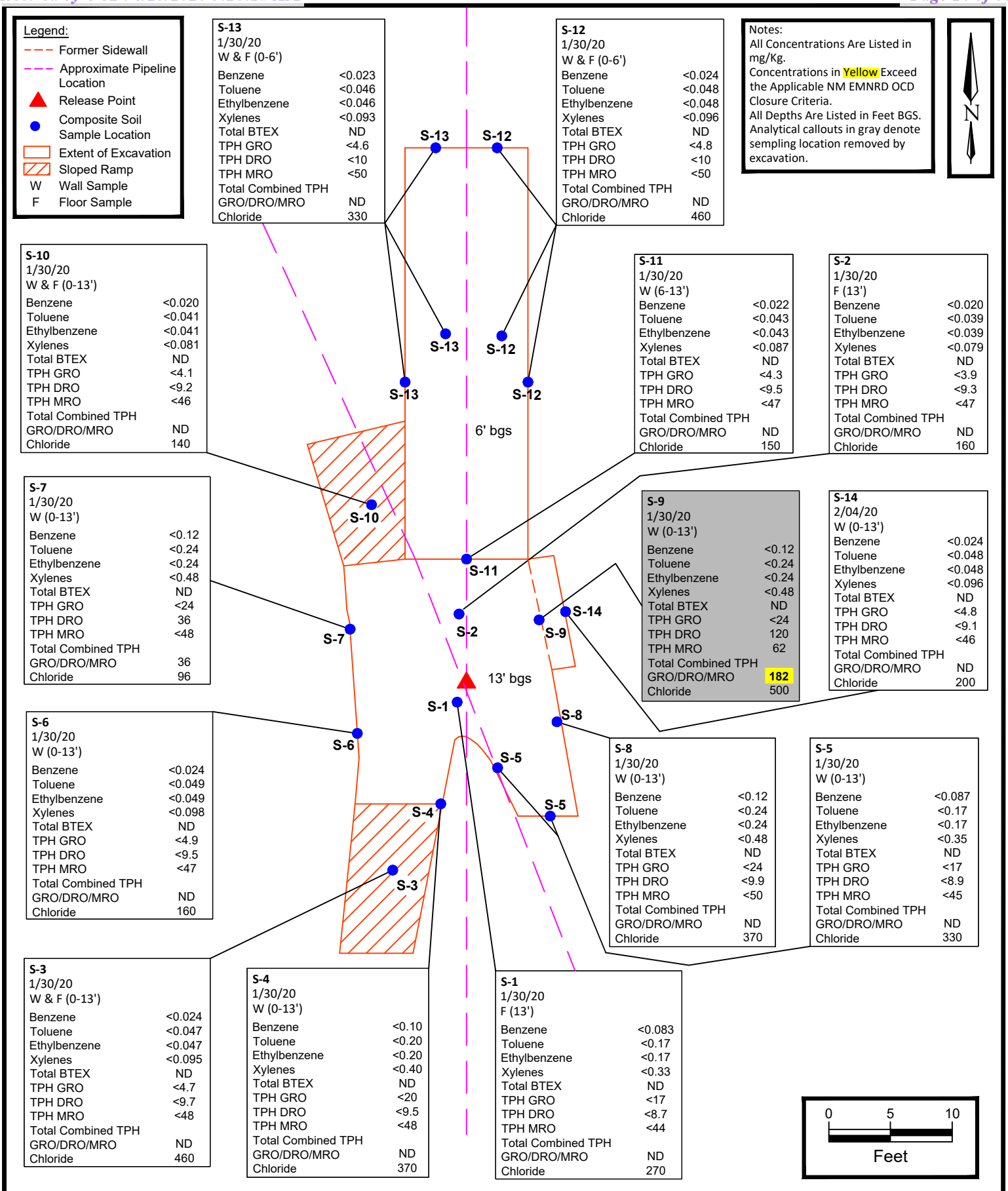


ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINTY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 6A-19 PIPELINE RELEASE
NW ¼, S12 T27N R9W, San Juan County, New Mexico
36.592287° N, 107.740493° W
Ensolum Project No.: 05A1226085

FIGURE 2



ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC.
LATERAL 6A-19 PIPELINE RELEASE
NW ¼, S12 T27N R9W, San Juan County, New Mexico
36.592287° N, 107.740493°W

Ensolum Project No.: 05A1226085

FIGURE
3

ENSOLUM

APPENDIX B

Siting Documentation

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 12, 1, 2, 11, 14, 13 **Township:** 27N **Range:** 09W

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 6, 7, 18 **Township:** 27N **Range:** 08W

13-30-045-06683
10-30-045-06710 16-30-045-11874

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO

Operator Meridian Oil Location: Unit 11 Sec. 11 Twp 27 Rng 6

Name of Well/Wells or Pipeline Serviced Turner Hughes #16
#13 & #10

Elevation ____ Completion Date ____ Total Depth ____ Land Type ____

Casing Strings, Sizes, Types & Depths 99' of 8" PVC surface
CASING

If Casing Strings are cemented, show amounts & types used Yes with
25 bags cement

If Cement or Bentonite Plugs have been placed, show depths & amounts used
No

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. Damp 145' water 180'

Depths gas encountered: No

Ground bed depth with type & amount of coke breeze used: 474' with
6500 lbs Loresco Type SW

Depths anodes placed: 455, 445, 410, 340, 330, 300, 290, 280, 255, 245, 235, 225, 215, 205, 195

Depths vent pipes placed: 474'

Vent pipe perforations: bottom 320'

Remarks:

RECEIVED
JAN 20 1995
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

2- 30-045-06598

4- 30-045-20338

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

6- 30-045-06678 7- 30-045-13037

Operator UNOCAL **Location: Unit** ___ **Sec.** 7 **Twp** 27 **Rng** 8

Name of Well/Wells or Pipeline Serviced Day "B" 2, 4, 6, & 7

Elevation 6789' **Completion Date** 2/27/91 **Total Depth** 300' **Land Type*** F

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. Moisture only

Depths gas encountered: N/A

Type & amount of coke breeze used: Carbo-40, 99.9% Carbon=2466 lbs.

Depths anodes placed: 150', 160', 170', 180', 190', 200'

Depths vent pipes placed: 0 to 300' deep

Vent pipe perforations: Laser cut slots from 100' to 300' deep

Remarks: First Ground Bed Installed at this Location

RECEIVED
MAR1 9 1991
OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included

*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.

A LUMENS COMPANY

CPS #: 151-00084 WELL NAME: Day 2B "PM" LOCATION: T-27-8 DATE: 2-27-91

TOTAL VOLTS: 12.3 TOTAL AMPS: 5.1 CIRC RESISTANCE: 2.41

DEEP	LOG ANOD	ANODE NO.	DEEP	LOG ANODE	ANODE NO.	DEEP	LOG ANODE	ANODE No.	DEEP	LOG ANODE	ANODE No.
5			105	4.1	2	365			545		
10			190	4.5		370			550		
15			195	4.6	1	375			555		
20			200	3.4		300			560		
25			205	3.4		305			565		
30			210	3.5		390			570		
35			215	2.8		395			575		
40			220	2.7		400			580		
45			225	2.6		405			585		
50			230	2.2		410			590		
55			235	2.2		415			595		
60			240	2.2		420			600		
65			245	3.0		425			605		
70			250	2.3		430			610		
75			255	2.0		435			615		
80			260	2.9		440			620		
85			265	2.2		445			625		
90			270	1.9		450			630		
95			275	2.8		455			635		
100			280	2.0		460			640		
105			285	1.9		465			645		
110			290	2.0		470			650		
115			295	2.1		475			655		
120			300	TAP		480			660		
125			305			485			665		
130			310			490			670		
135	4.6		315			495			675		
140	4.5		320			500			680		
145	4.8		325			505			685		
150	4.9	6	330			510			690		
155	5.0	5	335			515			695		
160	4.8	5i	340			520			700		
165	4.9	d	345			525			705		
170	4.8	4a	350			530			710		
175	4.5		355			535			715		
180	4.7	3	360			540			720		

ANODE READINGS

NO.	DEPTH	NO COKE	WITH COKE
1	195	4.6	5.1

REMARKS: 300' - Dia 6" (200 Allvent) — HB 2-27-91 have a bridge about 100'

MO-TE DRILLING, INC.

DAY Wednesday

DRILLER Jack | LEFT TOWN 7:00 ARRIVED FIELD 8:00

HELPER Jason | LEFT FIELD 8:00 ARRIVED TOWN 7:00

HELPER Donald | TOTAL FOOTAGE TODAY

RIG NO. 205 DATE 2-27-91 CLIENT CPS

BEGIN WORK ON HOLE NO. Day 2-B "PM" AT FEET

BEGIN WORK ON HOLE NO. AT FEET

TIME FROM	TIME TO	ACTIVITY
0	108	Sandstone, brown, gray, soft
108	186	Shale, gray, soft
186	300	Sandstone, tray, hard
300		T. D.

BIT RECORD SIZE & MAKE	SERIAL NO.	FOOTAGE
1-Set	6" Blades	

CIRCULATION MATERIAL QUAN.	UNIT	MATERIAL

NO. OF LOADS OF WATER SOURCE

san juan repr farm,nm Form 219-6

UNOCAL

DAY B 4 DK
NE/SW SEC 7 T27N R8W NMP
METER NO. 75942
SF-078571

N

ROAD

100BBL TANK

PIT

20'

MR

48'

DAY

67'

WELLHEAD

RECTIFIER

CABLE

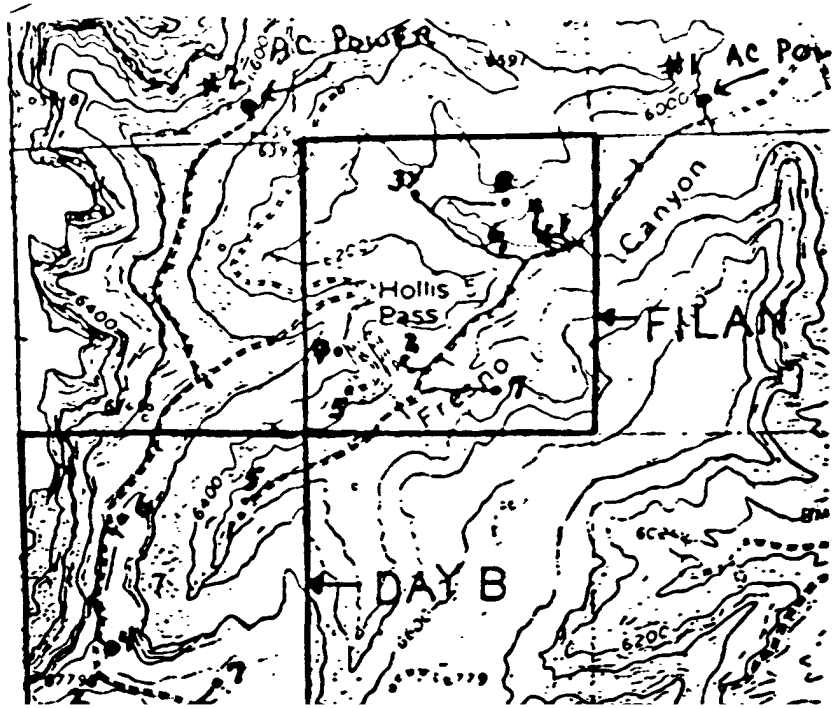
CABLE

GROUNDBED

RE TO DAY B 6
DLE TO DAY B 2
BLE TO DAY B 7

BURIED DC CABLE IN ROAD

● LOCATION OF GROUNDBED & RECTIFIER



312162

elpaso Field Services

Certified Mail: #7002 0510 0000 0307 2393

January 14, 2004

RECEIVED

JAN 20 2004

Oil Conservation Division
Environmental Bureau

Mr. William C. Olson
New Mexico Oil Conservation Division
1220 St. Francis Dr.
Santa Fe, NM 87504

RE: Well Abandonment at Closed Sites

Dear Mr. Olson:

El Paso Field Services (EPFS) hereby submits for your records abandonment forms for sites that have been approved for closure. As stipulated as a condition of final closure the monitoring wells at the sites listed below have been plugged and abandoned in accordance with EPFS' approved monitoring well abandonment plan. The forms documenting the plugging and abandoning of monitoring wells listed below are attached to this letter. In addition three monitoring wells were abandoned as approved at the Blanco Plant.

Charley Pah #4	TMW-1	Navajo
Rementa et al #1	MW-1, 2 and 3	Navajo
D-Loop Line Drip	MW-1, 2 and 3	Federal
Ohio C Government #3	MW-1	Federal
WD Heath B #5	MW-1	Federal
Lat 3B-39 Line Drip	MW-1, 2 and 3	Non-Federal
Blanco Plant	MW-10, 17 and 18	Non-Federal

If you have any questions concerning the attached well abandonment forms or require additional information please call me at (505) 599-2124.

Sincerely,

Scott T. Pope P.G.
Senior Environmental Scientist

Attachments: as stated

xc: Mr. Denny Foust, NMOCD, Aztec - w / enclosures; **1st Class Mail**
Mr. Bill Liesse, BLM – w / enclosures (federal sites only), **1st Class Mail**
Mr. Bill Freeman, Navajo EPA – w/ enclosures (Navajo Sites Only), **1st Class Mail**
Mr. James Walker, USEPA – w / enclosures (Navajo Sites Only), **1st Class Mail**

Terracon

12-2-03

Monitor Well Abandonment Record

1. Owner:

Name: EPFS City: Farmington State: NM

Address: 614 Reilly Ave Zip: 87401 Phone: (505)599-2124

2. Monitor Well Location:

Location Name: EL PASO CHARLEY PAH #4 Monitor Well I.D.: TMW-1

____ 1/4 of, K 1/4 of, Section 12 Township 21N Range 09W

County: Meter #71531

3. Description:

Well depth:	24.90 ft.	Casing material (circle one):	Steel	Plastic	Concrete
Depth to water:	10.84 ft.	Installation type (circle one):	Drilled	Driven	Augered
Casing diameter:	2 in.				
Depth of casing:	22.10 ft.	GROUND LEVEL			

4. Abandonment Method:

Well Casing: ____ Removed ____ Abandoned in place (Cut ≈2' below surface)

Plugging Method: ____ Pressure grouting ____ Bentonite pellets

No. of Bags of Cement: 2

No. of Bags of Bentonite Powder: 1/8

No. of Bags of Bentonite Pellets: ____

Signature: Leonardo Tena Date Plugged: 12-2-03

Printed Name: Leonardo Tena Title: Driller

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

97057-1058

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

AFE: Pending
PayKey: RB21200
PM: Maron O'Brien

2. Originating Site:
Lateral 6A-19

3. Location of Material (Street Address, City, State or ULSTR):
UL F Section 12 T27N R9W; 36.592287, -107.740493

Jan 2020

4. Source and Description of Waste:
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 538/85 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thom Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thom Long 1-9-2020, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Greg Crabtree, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Riley Industrial 4 L, Hald

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Enviro Manager DATE: 1/9/20
SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Lateral 6A-19 Pipeline Release
Ensolum Project No. 05A1226085

ENSOLUM

Photograph 1 Photograph Description: View of in-process excavation activities.	
Photograph 2 Photograph Description: View of in-process excavation activities.	
Photograph 3 Photograph Description: View of the final pipeline excavation.	

SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Lateral 6A-19 Pipeline Release
Ensolum Project No. 05A1226085

ENSOLUM

Photograph 4 Photograph Description: View of the final pipeline excavation.	
Photograph 5 Photograph Description: View of the final pipeline excavation.	
Photograph 6 Photograph Description: View of the final pipeline excavation.	

SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Lateral 6A-19 Pipeline Release
Ensolum Project No. 05A1226085

ENSOLUM

Photograph 7 Photograph Description: View of final excavation after initial restoration.	
Photograph 8 Photograph Description: View of final excavation after initial restoration.	

ENSOLUM

APPENDIX E

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Lateral 6A-19 Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (Feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria				10	NE	NE	NE	50				100	600
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Disposal/Remediation													
S-9	1.30.20	C	0 to 13	<0.12	<0.24	<0.24	<0.48	ND	<24	120	62	**182**	500
SP-1	1.30.20	C	Stockpile	<0.10	<0.21	<0.21	<0.41	ND	41	350	120	**511**	210
SP-3	1.30.20	C	Stockpile	<0.10	<0.21	<0.21	<0.41	ND	24	260	100	**384**	300
Stockpiled Soil Sample													
SP-2	1.30.20	C	Stockpile	<0.10	<0.20	<0.20	<0.41	ND	<20	57	<48	57	330
Excavation Composite Soil Samples													
S-1	1.30.20	C	13	<0.083	<0.17	<0.17	<0.33	ND	<17	<8.7	<44	ND	270
S-2	1.30.20	C	13	<0.020	<0.039	<0.039	<0.079	ND	<3.9	<9.3	<47	ND	160
S-3	1.30.20	C	0 to 13	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<9.7	<48	ND	460
S-4	1.30.20	C	0 to 13	<0.10	<0.20	<0.20	<0.40	ND	<20	<9.5	<48	ND	370
S-5	1.30.20	C	0 to 13	<0.087	<0.17	<0.17	<0.35	ND	<17	<8.9	<45	ND	330
S-6	1.30.20	C	0 to 13	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.5	<47	ND	160
S-7	1.30.20	C	0 to 13	<0.12	<0.24	<0.24	<0.48	ND	<24	36	<48	36	96
S-8	1.30.20	C	0 to 13	<0.12	<0.24	<0.24	<0.48	ND	<24	<9.9	<50	ND	370
S-10	1.30.20	C	0 to 13	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<9.2	<46	ND	140
S-11	1.30.20	C	6 to 13	<0.022	<0.043	<0.043	<0.087	ND	<4.3	<9.5	<47	ND	150
S-12	1.30.20	C	0 to 6	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<10	<50	ND	460
S-13	1.30.20	C	0 to 6	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<10	<50	ND	330
S-14	2.04.20	C	0 to 13	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.1	<46	ND	200

Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria

ND = Not Detected above the Practical Quantitation Limits or Reporting Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

ENSOLUM

APPENDIX F

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 03, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lateral 6A 19 OrderNo.: 2001C11

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 13 sample(s) on 1/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

CLIENT: ENSOLUM
Client Sample ID: S-1
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:15:00 AM
Lab ID: 2001C11-001 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	270	60		mg/Kg	20	1/31/2020 4:48:01 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	2/1/2020 4:11:05 AM	G66248
Surr: BFB	94.6	70-130		%Rec	5	2/1/2020 4:11:05 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	1/31/2020 9:00:06 PM	50182
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/31/2020 9:00:06 PM	50182
Surr: DNOP	89.1	55.1-146		%Rec	1	1/31/2020 9:00:06 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.083		mg/Kg	5	2/1/2020 4:11:05 AM	S66248
Toluene	ND	0.17		mg/Kg	5	2/1/2020 4:11:05 AM	S66248
Ethylbenzene	ND	0.17		mg/Kg	5	2/1/2020 4:11:05 AM	S66248
Xylenes, Total	ND	0.33		mg/Kg	5	2/1/2020 4:11:05 AM	S66248
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%Rec	5	2/1/2020 4:11:05 AM	S66248
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	5	2/1/2020 4:11:05 AM	S66248
Surr: Dibromofluoromethane	95.3	70-130		%Rec	5	2/1/2020 4:11:05 AM	S66248
Surr: Toluene-d8	96.0	70-130		%Rec	5	2/1/2020 4:11:05 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:20:00 AM
Lab ID: 2001C11-002 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	160	60		mg/Kg	20	1/31/2020 5:00:22 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	2/1/2020 5:35:47 AM	G66248
Surr: BFB	94.6	70-130		%Rec	1	2/1/2020 5:35:47 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/31/2020 9:26:47 PM	50182
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2020 9:26:47 PM	50182
Surr: DNOP	87.9	55.1-146		%Rec	1	1/31/2020 9:26:47 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.020		mg/Kg	1	2/1/2020 5:35:47 AM	S66248
Toluene	ND	0.039		mg/Kg	1	2/1/2020 5:35:47 AM	S66248
Ethylbenzene	ND	0.039		mg/Kg	1	2/1/2020 5:35:47 AM	S66248
Xylenes, Total	ND	0.079		mg/Kg	1	2/1/2020 5:35:47 AM	S66248
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	2/1/2020 5:35:47 AM	S66248
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	2/1/2020 5:35:47 AM	S66248
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	2/1/2020 5:35:47 AM	S66248
Surr: Toluene-d8	93.3	70-130		%Rec	1	2/1/2020 5:35:47 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-3
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:25:00 AM
Lab ID: 2001C11-003 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	460	60		mg/Kg	20	1/31/2020 6:02:07 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	2/1/2020 7:00:28 AM	G66248
Surr: BFB	90.4	70-130		%Rec	1	2/1/2020 7:00:28 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/31/2020 9:35:40 PM	50182
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2020 9:35:40 PM	50182
Surr: DNOP	88.9	55.1-146		%Rec	1	1/31/2020 9:35:40 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.024		mg/Kg	1	2/1/2020 7:00:28 AM	S66248
Toluene	ND	0.047		mg/Kg	1	2/1/2020 7:00:28 AM	S66248
Ethylbenzene	ND	0.047		mg/Kg	1	2/1/2020 7:00:28 AM	S66248
Xylenes, Total	ND	0.095		mg/Kg	1	2/1/2020 7:00:28 AM	S66248
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	1	2/1/2020 7:00:28 AM	S66248
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	2/1/2020 7:00:28 AM	S66248
Surr: Dibromofluoromethane	94.6	70-130		%Rec	1	2/1/2020 7:00:28 AM	S66248
Surr: Toluene-d8	94.6	70-130		%Rec	1	2/1/2020 7:00:28 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-4
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:30:00 AM
Lab ID: 2001C11-004 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	370	60		mg/Kg	20	1/31/2020 6:14:27 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	2/1/2020 7:28:38 AM	G66248
Surr: BFB	93.5	70-130		%Rec	5	2/1/2020 7:28:38 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2020 9:44:33 PM	50182
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2020 9:44:33 PM	50182
Surr: DNOP	86.5	55.1-146		%Rec	1	1/31/2020 9:44:33 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.10		mg/Kg	5	2/1/2020 7:28:38 AM	S66248
Toluene	ND	0.20		mg/Kg	5	2/1/2020 7:28:38 AM	S66248
Ethylbenzene	ND	0.20		mg/Kg	5	2/1/2020 7:28:38 AM	S66248
Xylenes, Total	ND	0.40		mg/Kg	5	2/1/2020 7:28:38 AM	S66248
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%Rec	5	2/1/2020 7:28:38 AM	S66248
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	5	2/1/2020 7:28:38 AM	S66248
Surr: Dibromofluoromethane	94.9	70-130		%Rec	5	2/1/2020 7:28:38 AM	S66248
Surr: Toluene-d8	95.5	70-130		%Rec	5	2/1/2020 7:28:38 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-5
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:35:00 AM
Lab ID: 2001C11-005 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	330	60		mg/Kg	20	1/31/2020 6:26:49 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	2/1/2020 7:56:49 AM	G66248
Surr: BFB	92.7	70-130		%Rec	5	2/1/2020 7:56:49 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/31/2020 9:53:27 PM	50182
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/31/2020 9:53:27 PM	50182
Surr: DNOP	89.1	55.1-146		%Rec	1	1/31/2020 9:53:27 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.087		mg/Kg	5	2/1/2020 7:56:49 AM	S66248
Toluene	ND	0.17		mg/Kg	5	2/1/2020 7:56:49 AM	S66248
Ethylbenzene	ND	0.17		mg/Kg	5	2/1/2020 7:56:49 AM	S66248
Xylenes, Total	ND	0.35		mg/Kg	5	2/1/2020 7:56:49 AM	S66248
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	5	2/1/2020 7:56:49 AM	S66248
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	5	2/1/2020 7:56:49 AM	S66248
Surr: Dibromofluoromethane	93.3	70-130		%Rec	5	2/1/2020 7:56:49 AM	S66248
Surr: Toluene-d8	93.3	70-130		%Rec	5	2/1/2020 7:56:49 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-6
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:40:00 AM
Lab ID: 2001C11-006 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	160	60		mg/Kg	20	1/31/2020 6:39:09 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	2/1/2020 8:25:01 AM	G66248
Surr: BFB	91.0	70-130		%Rec	1	2/1/2020 8:25:01 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2020 10:02:21 PM	50182
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2020 10:02:21 PM	50182
Surr: DNOP	89.2	55.1-146		%Rec	1	1/31/2020 10:02:21 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	2/1/2020 8:25:01 AM	S66248
Toluene	ND	0.049		mg/Kg	1	2/1/2020 8:25:01 AM	S66248
Ethylbenzene	ND	0.049		mg/Kg	1	2/1/2020 8:25:01 AM	S66248
Xylenes, Total	ND	0.098		mg/Kg	1	2/1/2020 8:25:01 AM	S66248
Surr: 1,2-Dichloroethane-d4	89.3	70-130		%Rec	1	2/1/2020 8:25:01 AM	S66248
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	2/1/2020 8:25:01 AM	S66248
Surr: Dibromofluoromethane	93.6	70-130		%Rec	1	2/1/2020 8:25:01 AM	S66248
Surr: Toluene-d8	91.1	70-130		%Rec	1	2/1/2020 8:25:01 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-7
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:45:00 AM
Lab ID: 2001C11-007 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	96	60		mg/Kg	20	1/31/2020 6:51:30 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/1/2020 8:53:13 AM	G66248
Surr: BFB	94.2	70-130		%Rec	5	2/1/2020 8:53:13 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	36	9.7		mg/Kg	1	1/31/2020 10:11:14 PM	50182
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2020 10:11:14 PM	50182
Surr: DNOP	95.6	55.1-146		%Rec	1	1/31/2020 10:11:14 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.12		mg/Kg	5	2/1/2020 8:53:13 AM	S66248
Toluene	ND	0.24		mg/Kg	5	2/1/2020 8:53:13 AM	S66248
Ethylbenzene	ND	0.24		mg/Kg	5	2/1/2020 8:53:13 AM	S66248
Xylenes, Total	ND	0.48		mg/Kg	5	2/1/2020 8:53:13 AM	S66248
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	5	2/1/2020 8:53:13 AM	S66248
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	5	2/1/2020 8:53:13 AM	S66248
Surr: Dibromofluoromethane	94.4	70-130		%Rec	5	2/1/2020 8:53:13 AM	S66248
Surr: Toluene-d8	95.0	70-130		%Rec	5	2/1/2020 8:53:13 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-8
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:50:00 AM
Lab ID: 2001C11-008
Matrix: SOIL
Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	370	60		mg/Kg	20	1/31/2020 7:03:51 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/1/2020 9:21:27 AM	G66248
Surr: BFB	93.5	70-130		%Rec	5	2/1/2020 9:21:27 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/31/2020 10:20:07 PM	50182
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2020 10:20:07 PM	50182
Surr: DNOP	92.5	55.1-146		%Rec	1	1/31/2020 10:20:07 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.12		mg/Kg	5	2/1/2020 9:21:27 AM	S66248
Toluene	ND	0.24		mg/Kg	5	2/1/2020 9:21:27 AM	S66248
Ethylbenzene	ND	0.24		mg/Kg	5	2/1/2020 9:21:27 AM	S66248
Xylenes, Total	ND	0.48		mg/Kg	5	2/1/2020 9:21:27 AM	S66248
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	5	2/1/2020 9:21:27 AM	S66248
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	5	2/1/2020 9:21:27 AM	S66248
Surr: Dibromofluoromethane	97.8	70-130		%Rec	5	2/1/2020 9:21:27 AM	S66248
Surr: Toluene-d8	94.7	70-130		%Rec	5	2/1/2020 9:21:27 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-9
Project: Lateral 6A 19
Collection Date: 1/30/2020 9:55:00 AM
Lab ID: 2001C11-009
Matrix: SOIL
Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	500	60		mg/Kg	20	1/31/2020 7:16:11 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	2/1/2020 9:49:43 AM	G66248
Surr: BFB	93.3	70-130		%Rec	5	2/1/2020 9:49:43 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	120	8.9		mg/Kg	1	1/31/2020 10:29:00 PM	50182
Motor Oil Range Organics (MRO)	62	44		mg/Kg	1	1/31/2020 10:29:00 PM	50182
Surr: DNOP	105	55.1-146		%Rec	1	1/31/2020 10:29:00 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.12		mg/Kg	5	2/1/2020 9:49:43 AM	S66248
Toluene	ND	0.24		mg/Kg	5	2/1/2020 9:49:43 AM	S66248
Ethylbenzene	ND	0.24		mg/Kg	5	2/1/2020 9:49:43 AM	S66248
Xylenes, Total	ND	0.48		mg/Kg	5	2/1/2020 9:49:43 AM	S66248
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	5	2/1/2020 9:49:43 AM	S66248
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	5	2/1/2020 9:49:43 AM	S66248
Surr: Dibromofluoromethane	96.9	70-130		%Rec	5	2/1/2020 9:49:43 AM	S66248
Surr: Toluene-d8	95.2	70-130		%Rec	5	2/1/2020 9:49:43 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-10
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:00:00 AM
Lab ID: 2001C11-010 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	140	60		mg/Kg	20	1/31/2020 7:28:33 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	2/1/2020 10:18:01 AM	G66248
Surr: BFB	94.7	70-130		%Rec	1	2/1/2020 10:18:01 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/31/2020 10:37:54 PM	50182
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/31/2020 10:37:54 PM	50182
Surr: DNOP	89.5	55.1-146		%Rec	1	1/31/2020 10:37:54 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.020		mg/Kg	1	2/1/2020 10:18:01 AM	S66248
Toluene	ND	0.041		mg/Kg	1	2/1/2020 10:18:01 AM	S66248
Ethylbenzene	ND	0.041		mg/Kg	1	2/1/2020 10:18:01 AM	S66248
Xylenes, Total	ND	0.081		mg/Kg	1	2/1/2020 10:18:01 AM	S66248
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	2/1/2020 10:18:01 AM	S66248
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	2/1/2020 10:18:01 AM	S66248
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	2/1/2020 10:18:01 AM	S66248
Surr: Toluene-d8	94.7	70-130		%Rec	1	2/1/2020 10:18:01 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-11
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:05:00 AM
Lab ID: 2001C11-011 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	150	60		mg/Kg	20	1/31/2020 7:40:54 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	2/1/2020 10:46:22 AM	G66248
Surr: BFB	93.1	70-130		%Rec	1	2/1/2020 10:46:22 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2020 10:46:48 PM	50182
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2020 10:46:48 PM	50182
Surr: DNOP	87.6	55.1-146		%Rec	1	1/31/2020 10:46:48 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.022		mg/Kg	1	2/1/2020 10:46:22 AM	S66248
Toluene	ND	0.043		mg/Kg	1	2/1/2020 10:46:22 AM	S66248
Ethylbenzene	ND	0.043		mg/Kg	1	2/1/2020 10:46:22 AM	S66248
Xylenes, Total	ND	0.087		mg/Kg	1	2/1/2020 10:46:22 AM	S66248
Surr: 1,2-Dichloroethane-d4	92.5	70-130		%Rec	1	2/1/2020 10:46:22 AM	S66248
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	2/1/2020 10:46:22 AM	S66248
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	2/1/2020 10:46:22 AM	S66248
Surr: Toluene-d8	93.4	70-130		%Rec	1	2/1/2020 10:46:22 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-12
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:10:00 AM
Lab ID: 2001C11-012
Matrix: SOIL
Received Date: 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	460	60		mg/Kg	20	1/31/2020 7:53:13 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/1/2020 11:14:45 AM	G66248
Surr: BFB	94.2	70-130		%Rec	1	2/1/2020 11:14:45 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2020 10:55:42 PM	50182
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2020 10:55:42 PM	50182
Surr: DNOP	89.2	55.1-146		%Rec	1	1/31/2020 10:55:42 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.024		mg/Kg	1	2/1/2020 11:14:45 AM	S66248
Toluene	ND	0.048		mg/Kg	1	2/1/2020 11:14:45 AM	S66248
Ethylbenzene	ND	0.048		mg/Kg	1	2/1/2020 11:14:45 AM	S66248
Xylenes, Total	ND	0.096		mg/Kg	1	2/1/2020 11:14:45 AM	S66248
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	2/1/2020 11:14:45 AM	S66248
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	2/1/2020 11:14:45 AM	S66248
Surr: Dibromofluoromethane	95.9	70-130		%Rec	1	2/1/2020 11:14:45 AM	S66248
Surr: Toluene-d8	94.4	70-130		%Rec	1	2/1/2020 11:14:45 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C11**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-13
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:15:00 AM
Lab ID: 2001C11-013 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	330	60		mg/Kg	20	1/31/2020 8:30:16 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	2/1/2020 11:43:10 AM	G66248
Surr: BFB	95.7	70-130		%Rec	1	2/1/2020 11:43:10 AM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2020 11:04:35 PM	50182
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2020 11:04:35 PM	50182
Surr: DNOP	90.2	55.1-146		%Rec	1	1/31/2020 11:04:35 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.023		mg/Kg	1	2/1/2020 11:43:10 AM	S66248
Toluene	ND	0.046		mg/Kg	1	2/1/2020 11:43:10 AM	S66248
Ethylbenzene	ND	0.046		mg/Kg	1	2/1/2020 11:43:10 AM	S66248
Xylenes, Total	ND	0.093		mg/Kg	1	2/1/2020 11:43:10 AM	S66248
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	2/1/2020 11:43:10 AM	S66248
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	2/1/2020 11:43:10 AM	S66248
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	2/1/2020 11:43:10 AM	S66248
Surr: Toluene-d8	93.9	70-130		%Rec	1	2/1/2020 11:43:10 AM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C11**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **MB-50184** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **50184** RunNo: **66229**
Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2276027** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-50184** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **50184** RunNo: **66229**
Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2276028** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C11**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **MB-50176**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **50176**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2274574**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	55.1	146			

Sample ID: **LCS-50176**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **50176**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2274575**	Units: **%Rec**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.1	55.1	146			

Sample ID: **MB-50182**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **PBS**	Batch ID: **50182**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2275224**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		84.6	55.1	146			

Sample ID: **LCS-50182**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **LCSS**	Batch ID: **50182**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2275225**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.8	63.9	124			
Surr: DNOP	4.1		5.000		81.2	55.1	146			

Sample ID: **2001C11-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **S-1**	Batch ID: **50182**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2275242**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.5	47.62	3.253	93.8	47.4	136			
Surr: DNOP	4.1		4.762		86.5	55.1	146			

Sample ID: **2001C11-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**							
Client ID: **S-1**	Batch ID: **50182**	RunNo: **66212**							
Prep Date: **1/31/2020**	Analysis Date: **1/31/2020**	SeqNo: **2275243**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.5	47.57	3.253	90.3	47.4	136	3.61	43.4	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C11**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **2001C11-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **50182** RunNo: **66212**
Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2275243** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		4.757		83.5	55.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C11**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **2001c11-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-1** Batch ID: **S66248** RunNo: **66248**
Prep Date: Analysis Date: **2/1/2020** SeqNo: **2275852** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.083	3.320	0	99.9	70	130			
Toluene	3.4	0.17	3.320	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	1.5		1.660		92.9	70	130			
Surr: 4-Bromofluorobenzene	1.6		1.660		94.7	70	130			
Surr: Dibromofluoromethane	1.5		1.660		93.1	70	130			
Surr: Toluene-d8	1.6		1.660		95.5	70	130			

Sample ID: **2001c11-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-1** Batch ID: **S66248** RunNo: **66248**
Prep Date: Analysis Date: **2/1/2020** SeqNo: **2275853** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.3	0.083	3.320	0	99.1	70	130	0.781	20	
Toluene	3.2	0.17	3.320	0	95.0	70	130	6.56	20	
Surr: 1,2-Dichloroethane-d4	1.6		1.660		93.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	1.6		1.660		94.9	70	130	0	0	
Surr: Dibromofluoromethane	1.6		1.660		94.3	70	130	0	0	
Surr: Toluene-d8	1.6		1.660		95.4	70	130	0	0	

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **S66248** RunNo: **66248**
Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275957** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.025								
1,2-Dichloroethane (EDC)	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
1,2-Dibromoethane (EDB)	ND	0.050								
1,2,4-Trimethylbenzene	ND	0.050								
1,3,5-Trimethylbenzene	ND	0.050								
Naphthalene	ND	0.10								
2-Methylnaphthalene	ND	0.20								
1-Methylnaphthalene	ND	0.20								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.0	70	130			
Surr: Toluene-d8	0.48		0.5000		95.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C11**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **LCSS** Batch ID: **G66248** RunNo: **66248**
Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275920** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.7	70	130			
Surr: BFB	460		500.0		91.0	70	130			

Sample ID: **2001c11-002a ms** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-2** Batch ID: **G66248** RunNo: **66248**
Prep Date: Analysis Date: **2/1/2020** SeqNo: **2275933** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.9	19.75	0	79.5	70	130			
Surr: BFB	370		395.0		94.1	70	130			

Sample ID: **2001c11-002a msd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **S-2** Batch ID: **G66248** RunNo: **66248**
Prep Date: Analysis Date: **2/1/2020** SeqNo: **2275934** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.9	19.75	0	77.6	70	130	2.44	20	
Surr: BFB	370		395.0		94.9	70	130	0	0	

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**
Client ID: **PBS** Batch ID: **G66248** RunNo: **66248**
Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275950** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	460		500.0		92.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM AZTEC Work Order Number: 2001C11 RcptNo: 1

Received By: Anne Thorne 1/31/2020 7:48:00 AM

Completed By: Anne Thorne 1/31/2020 8:47:41 AM

Reviewed By: ENM 1/31/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: AT 01/31/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: Custody Seals intact on Soil Jars | AT 01/31/20

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	1.2	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: kSummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 2/3/20
☐ Standard ☒ Rush Next D cly

Project Name: Lateral 6A-19

Project #: See notes

Project Manager: kSummers

Sampler: BDeerenity
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp(including CF): 1.2-0.1 = 1.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2001611	BTEX / ~~MTBE~~ / ~~TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides
1/30/20	915	S	S-1	1x4oz Jar	Cool	001	X	X									X
1/30/20	920	S	S-2	1x4oz Jar	Cool	002	X	X									X
1/30/20	925	S	S-3	1x4oz Jar	Cool	003	X	X									X
1/30/20	930	S	S-4	1x4oz Jar	Cool	004	X	X									X
1/30/20	935	S	S-5	1x4oz Jar	Cool	005	X	X									X
1/30/20	940	S	S-6	1x4oz Jar	Cool	006	X	X									X
1/30/20	945	S	S-7	1x4oz Jar	Cool	007	X	X									X
1/30/20	950	S	S-8	1x4oz Jar	Cool	008	X	X									X
1/30/20	955	S	S-9	1x4oz Jar	Cool	009	X	X									X
1/30/20	1000	S	S-10	1x4oz Jar	Cool	010	X	X									X
1/30/20	1005	S	S-11	1x4oz Jar	Cool	011	X	X									X
1/30/20	1010	S	S-12	1x4oz Jar	Cool	012	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/30/20	1242				1/30/20	1242
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/30/20	1811				01/31/20	0748

Remarks: PM - Tom Long (EPROD)
Pay Key - RB21200
Non AFE - N45550

Turn around monday 2/3/20

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 2/3/20
☐ Standard ☒ Rush Next Day

Project Name: Lateral 6A-19

Project #: See notes

Project Manager: ksummers

Sampler: R Decchilly
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 1.2 - 0.1 = 1.1 (°C)
1.3 - 0.1 = 1.2
01/31/20 mcotikt

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2001C11	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides					
1/30/20	1015	S	S-13	1x4oz Jar	cool	013	X	X									X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/30/20	1242	[signature]	[signature]		1/30/20	1242
1/30/20	1511	Christine Walker	[signature]		01/31/20	0748

Remarks:
PM – Tom Long (EPROD)
Pay Key – RB21200
Non AFE – N45550
Turnaround Monday 2/3/20

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 03, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lateral 6A 19 OrderNo.: 2001C13

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/31/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2001C13**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-1
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:20:00 AM
Lab ID: 2001C13-001 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	210	60		mg/Kg	20	1/31/2020 8:42:37 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	41	21		mg/Kg	5	2/1/2020 2:33:51 PM	G66248
Surr: BFB	93.4	70-130		%Rec	5	2/1/2020 2:33:51 PM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	350	9.8		mg/Kg	1	1/31/2020 11:13:29 PM	50182
Motor Oil Range Organics (MRO)	120	49		mg/Kg	1	1/31/2020 11:13:29 PM	50182
Surr: DNOP	112	55.1-146		%Rec	1	1/31/2020 11:13:29 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.10		mg/Kg	5	2/1/2020 2:33:51 PM	S66248
Toluene	ND	0.21		mg/Kg	5	2/1/2020 2:33:51 PM	S66248
Ethylbenzene	ND	0.21		mg/Kg	5	2/1/2020 2:33:51 PM	S66248
Xylenes, Total	ND	0.41		mg/Kg	5	2/1/2020 2:33:51 PM	S66248
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%Rec	5	2/1/2020 2:33:51 PM	S66248
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	5	2/1/2020 2:33:51 PM	S66248
Surr: Dibromofluoromethane	97.0	70-130		%Rec	5	2/1/2020 2:33:51 PM	S66248
Surr: Toluene-d8	96.3	70-130		%Rec	5	2/1/2020 2:33:51 PM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C13**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-2
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:25:00 AM
Lab ID: 2001C13-002 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	330	60		mg/Kg	20	1/31/2020 8:54:57 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	2/1/2020 3:02:12 PM	G66248
Surr: BFB	95.5	70-130		%Rec	5	2/1/2020 3:02:12 PM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	57	9.5		mg/Kg	1	1/31/2020 11:22:22 PM	50182
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2020 11:22:22 PM	50182
Surr: DNOP	104	55.1-146		%Rec	1	1/31/2020 11:22:22 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.10		mg/Kg	5	2/1/2020 3:02:12 PM	S66248
Toluene	ND	0.20		mg/Kg	5	2/1/2020 3:02:12 PM	S66248
Ethylbenzene	ND	0.20		mg/Kg	5	2/1/2020 3:02:12 PM	S66248
Xylenes, Total	ND	0.41		mg/Kg	5	2/1/2020 3:02:12 PM	S66248
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	5	2/1/2020 3:02:12 PM	S66248
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	5	2/1/2020 3:02:12 PM	S66248
Surr: Dibromofluoromethane	93.5	70-130		%Rec	5	2/1/2020 3:02:12 PM	S66248
Surr: Toluene-d8	95.2	70-130		%Rec	5	2/1/2020 3:02:12 PM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2001C13**
Date Reported: **2/3/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: SP-3
Project: Lateral 6A 19
Collection Date: 1/30/2020 10:30:00 AM
Lab ID: 2001C13-003 **Matrix:** SOIL **Received Date:** 1/31/2020 7:48:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Chloride	300	60		mg/Kg	20	1/31/2020 9:32:00 PM	50184
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst:	**JMR**
Gasoline Range Organics (GRO)	24	21		mg/Kg	5	2/1/2020 3:30:43 PM	G66248
Surr: BFB	92.2	70-130		%Rec	5	2/1/2020 3:30:43 PM	G66248
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**CLP**
Diesel Range Organics (DRO)	260	9.8		mg/Kg	1	1/31/2020 11:31:20 PM	50182
Motor Oil Range Organics (MRO)	100	49		mg/Kg	1	1/31/2020 11:31:20 PM	50182
Surr: DNOP	130	55.1-146		%Rec	1	1/31/2020 11:31:20 PM	50182
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst:	**JMR**
Benzene	ND	0.10		mg/Kg	5	2/1/2020 3:30:43 PM	S66248
Toluene	ND	0.21		mg/Kg	5	2/1/2020 3:30:43 PM	S66248
Ethylbenzene	ND	0.21		mg/Kg	5	2/1/2020 3:30:43 PM	S66248
Xylenes, Total	ND	0.41		mg/Kg	5	2/1/2020 3:30:43 PM	S66248
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	5	2/1/2020 3:30:43 PM	S66248
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	5	2/1/2020 3:30:43 PM	S66248
Surr: Dibromofluoromethane	95.7	70-130		%Rec	5	2/1/2020 3:30:43 PM	S66248
Surr: Toluene-d8	95.1	70-130		%Rec	5	2/1/2020 3:30:43 PM	S66248

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C13**

03-Feb-20

Client: ENSOLUM

Project: Lateral 6A 19

Sample ID: **MB-50184** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **50184** RunNo: **66229**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2276027** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-50184** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **50184** RunNo: **66229**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2276028** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C13**

03-Feb-20

Client: ENSOLUM

Project: Lateral 6A 19

Sample ID: **MB-50176** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **50176** RunNo: **66212**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2274574** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	55.1	146			

Sample ID: **LCS-50176** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **50176** RunNo: **66212**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2274575** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.1	55.1	146			

Sample ID: **MB-50182** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **50182** RunNo: **66212**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2275224** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		84.6	55.1	146			

Sample ID: **LCS-50182** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **50182** RunNo: **66212**

Prep Date: **1/31/2020** Analysis Date: **1/31/2020** SeqNo: **2275225** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.8	63.9	124			
Surr: DNOP	4.1		5.000		81.2	55.1	146			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C13**
03-Feb-20

Client: ENSOLUM
Project: Lateral 6A 19

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **S66248** RunNo: **66248**
Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275957** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.9	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.5000		94.0	70	130			
Surr: Dibromofluoromethane	0.48		0.5000		96.0	70	130			
Surr: Toluene-d8	0.48		0.5000		95.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2001C13**

03-Feb-20

Client: ENSOLUM

Project: Lateral 6A 19

Sample ID: **2.5ug gro lcs** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **G66248** RunNo: **66248**

Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275920** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	82.7	70	130			
Surr: BFB	460		500.0		91.0	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **G66248** RunNo: **66248**

Prep Date: Analysis Date: **1/31/2020** SeqNo: **2275950** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	460		500.0		92.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: ENSOLUM AZTEC Work Order Number: 2001C13 RcptNo: 1

Received By: Anne Thorne 1/31/2020 7:48:00 AM

Completed By: Anne Thorne 1/31/2020 9:16:30 AM

Reviewed By: ENM 1/31/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: AT 01/31/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: custody seals intact on soil jars AT 01/31/20

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	1.2	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A
Aztec, NM 87410

Phone #:

email or Fax#: ksummers@ensolum.co

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 2/3/20
☐ Standard ☒ Rush Next Day

Project Name: Lateral 6A-19

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 1.2 - 0.1 = 1.1 ; 1.3 - 0.1 = 1.2

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2001C13	BTEX / ~~MTBE / TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chlorides				
1/30/20	1020	S	SP-1	1x4oz Jar	cool	201	X	X									X				
1/30/20	1025	S	SP-2	1x4oz Jar	cool	202	X	X									X				
1/30/20	1030	S	SP-3	1x4oz Jar	cool	203	X	X									X				

Date	Time	Relinquished by	Received by	Via	Date	Time
1/30/20	1242	[signature]	[signature]		1/30/20	1242
1/30/20	1811	[signature]	[signature]		01/31/20	0748

Remarks:
PM – Tom Long (EPROD)
Pay Key – RB21200
Non AFE – N45550
Turnaround monday 2/3/20

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 06, 2020

Kyle Summers
ENSOLUM
606 S. Rio Grande Suite A
Aztec, NM 87410
TEL: (903) 821-5603
FAX

RE: Lateral 6A-19 OrderNo.: 2002121

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/5/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2002121**
Date Reported: **2/6/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-14
Project: Lateral 6A-19
Collection Date: 2/4/2020 10:00:00 AM
Lab ID: 2002121-001 **Matrix:** SOIL **Received Date:** 2/5/2020 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	200	60		mg/Kg	20	2/5/2020 11:33:41 AM	50267
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **CLP**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	2/5/2020 9:56:18 AM	50266
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/5/2020 9:56:18 AM	50266
Surr: DNOP	88.6	55.1-146		%Rec	1	2/5/2020 9:56:18 AM	50266
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	2/5/2020 11:48:22 AM	G66314
Surr: BFB	78.9	66.6-105		%Rec	1	2/5/2020 11:48:22 AM	G66314
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	2/5/2020 11:48:22 AM	B66314
Toluene	ND	0.048		mg/Kg	1	2/5/2020 11:48:22 AM	B66314
Ethylbenzene	ND	0.048		mg/Kg	1	2/5/2020 11:48:22 AM	B66314
Xylenes, Total	ND	0.096		mg/Kg	1	2/5/2020 11:48:22 AM	B66314
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	2/5/2020 11:48:22 AM	B66314

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002121**

06-Feb-20

Client: ENSOLUM

Project: Lateral 6A-19

Sample ID: **MB-50267** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **50267** RunNo: **66318**

Prep Date: **2/5/2020** Analysis Date: **2/5/2020** SeqNo: **2279270** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-50267** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **50267** RunNo: **66318**

Prep Date: **2/5/2020** Analysis Date: **2/5/2020** SeqNo: **2279271** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002121**

06-Feb-20

Client: ENSOLUM

Project: Lateral 6A-19

Sample ID: **MB-50266**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **50266**	RunNo: **66306**
Prep Date: **2/5/2020**	Analysis Date: **2/5/2020**	SeqNo: **2277774** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		85.7	55.1	146			

Sample ID: **LCS-50266**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **50266**	RunNo: **66306**
Prep Date: **2/5/2020**	Analysis Date: **2/5/2020**	SeqNo: **2277775** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.4	75.7	130			
Surr: DNOP	3.9		5.000		78.2	55.1	146			

Sample ID: **2002121-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-14**	Batch ID: **50266**	RunNo: **66306**
Prep Date: **2/5/2020**	Analysis Date: **2/5/2020**	SeqNo: **2277909** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.73	5.101	88.3	47.4	136			
Surr: DNOP	4.0		4.873		82.9	55.1	146			

Sample ID: **2002121-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-14**	Batch ID: **50266**	RunNo: **66306**
Prep Date: **2/5/2020**	Analysis Date: **2/5/2020**	SeqNo: **2277910** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.1	45.62	5.101	85.4	47.4	136	8.93	43.4	
Surr: DNOP	3.8		4.562		83.1	55.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002121**

06-Feb-20

Client: ENSOLUM

Project: Lateral 6A-19

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G66314**	RunNo: **66314**
Prep Date:	Analysis Date: **2/5/2020**	SeqNo: **2278108** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.1	80	120			
Surr: BFB	880		1000		87.7	66.6	105			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G66314**	RunNo: **66314**
Prep Date:	Analysis Date: **2/5/2020**	SeqNo: **2278111** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	830		1000		83.3	66.6	105			

Sample ID: **2002121-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-14**	Batch ID: **G66314**	RunNo: **66314**
Prep Date:	Analysis Date: **2/5/2020**	SeqNo: **2279566** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.08	0	93.8	69.1	142			
Surr: BFB	910		963.4		94.8	66.6	105			

Sample ID: **2002121-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **S-14**	Batch ID: **G66314**	RunNo: **66314**
Prep Date:	Analysis Date: **2/5/2020**	SeqNo: **2279568** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.08	0	93.2	69.1	142	0.642	20	
Surr: BFB	910		963.4		94.7	66.6	105	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2002121**

06-Feb-20

Client: ENSOLUM

Project: Lateral 6A-19

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B66314** RunNo: **66314**

Prep Date: Analysis Date: **2/5/2020** SeqNo: **2278126** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.5	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.2	80	120			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **B66314** RunNo: **66314**

Prep Date: Analysis Date: **2/5/2020** SeqNo: **2278129** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **ENSOLUM AZTEC** Work Order Number: **2002121** RcptNo: **1**

Received By: **Desiree Dominguez** **2/5/2020 8:15:00 AM** DD

Completed By: **Leah Baca** **2/5/2020 8:23:42 AM** Leah Baca

Reviewed By: ENM 2/5/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: ~~AT~~ 02/05/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks: Custody Seal intact on Soil Jar / ~~AT~~ 02/05/20

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Ste A Aztec, NM 87410

Phone #:

email or Fax#: KSummers@Ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Same Day

☐ Standard ☑ Rush 100%

Project Name: Lateral 6A-18

Project #:

Project Manager: K. Summers

Sampler: K. Summers

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.5-0.1 = 0.4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2002121	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
2/4/2020			T.B.	4oz/1oz/2oz MeOH/Cl												
2/4	1000	S	S-14	1x4oz	Cool	-001	X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2/4	1442		Christian Waelz		2/4/20	1442
2/4/20	1807	Christian Waelz		courier	2/5/20	8:15

Remarks: Tom Long RB21200 N45550

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

ENSOLUM

APPENDIX G

Regulatory Correspondence

From: Long, Thomas
To: "Smith, Cory, EMNRD"; Steve Austin
Cc: Stone, Brian
Subject: RE: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493
Date: Thursday, February 6, 2020 9:28:00 AM
Attachments: Rpt_2001C13_Lateral_6A_19_Final_v1.pdf
Lateral 6A 19.pdf

Cory,

The other sample results were included in the previous email. I have attached then again for reference.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Sent: Thursday, February 6, 2020 9:06 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Tom,

There is only 1 lab sample in the pdf..

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, February 6, 2020 7:19 AM
To: Steve Austin <nnepawq@frontiernet.net>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>

Subject: [EXT] RE: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Cory/Steve,

Please find the attached site sketch and lab report for the Lateral 6A-19 excavation. All sample results are below the NMOCD Tier I remediation standards. Enterprise will backfill the excavation will clean imported fill material and the one stock pile of soil that passed lab tests. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Steve Austin <nnepawq@frontiernet.net>
Sent: Tuesday, February 4, 2020 9:26 AM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

I do not have any issues with sampling today.

--Steve

Steve Austin
Senior Hydrologist
NNEPA WQ/NPDES Program
505-368-1037

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Tuesday, February 04, 2020 9:17 AM
To: Long, Thomas <tjlong@eprod.com>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Tom,

As discussed on the phone I do not have any issues with you sampling today so long as Navajo Nation has no issues.

Please include this approval in your final c-141.

Cory Smith
Environmental Specialist
Oil Conservation Division
Energy, Minerals, & Natural Resources
1000 Rio Brazos, Aztec, NM 87410
(505)334-6178 ext 115
cory.smith@state.nm.us

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, February 4, 2020 7:56 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] FW: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Cory/Steve,

Please find the attached site sketch and lab reports for the Lateral 6A-19 excavation. One sample (S-9) exceeds NMOCD Tier I standards. Enterprise will excavate additional soil and resample. If you have any question, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Wednesday, January 29, 2020 1:15 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; Steve Austin <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Cory/Steve,

This email is a follow up to my phone conversation with NMOCD earlier today. Enterprise will be collecting soil samples for laboratory analysis tomorrow, January 30, 2020 at 9:00 a.m. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Wednesday, January 8, 2020 3:22 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; 'Steve Austin' <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Lateral 6A-19 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Cory/Steve,

This release site name is officially the **Lateral 6A-19**. Please let me know if you have any questions.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

From: Long, Thomas
Sent: Wednesday, January 8, 2020 11:09 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; 'Steve Austin' <nnepawq@frontiernet.net>
Cc: Stone, Brian <bmstone@eprod.com>

Subject: Lateral C-7 - UL F Section 12 T27N R9W; 36.592287, -107.740493

Cory/Steve,

This email is a notification that Enterprise had a release of natural gas and natural gas liquids on the Lateral C-7 pipeline. No washes have been affected. The pipelines have been isolated, locked out and tagged out. There is an estimated ten (10) barrels of liquids on the ground. The release site is located at the Lateral C-7/Lateral 6A-19/Lateral C-7 Loop Intersection which is located at UL F Section 12 T27N R9W; 36.592287, -107.740493. So, the name of the release may change to one of the other names. Please hold out for more details. I have attached pictures for reference. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

Enterprise Products

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 9836

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 9836
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	4/4/2022