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)*: **NCS1935340298**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.400337** Longitude **-107.183137** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **CW Roberts #6**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **11/13/2019**	Serial Number *(if applicable)*: **NA**

Unit Letter	Section	Township	Range	County
G	**18**	**25N**	**3W**	**Rio Arriba**

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name*: **Tony Schmitz**)

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)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **10-15 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **< 1.0 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On November 13, 2019, an Enterprise technician discovered a release on the CW Roberts #6 pipeline. The pipeline was isolated, depressurized, locked out and tagged out. An area on the ground surface of approximately ten (10) feet long by five (5) feet wide was affected by released fluids. On November 18, 2019, Enterprise determined the release reportable per NMOCD regulation due to the volume of impacted subsurface soil. Remediation was completed on December 18, 2019. The final excavation dimensions measured approximately 37 feet long by 23 feet wide by approximately nine (9) feet deep. Approximately 260 cubic yards of hydrocarbon impacted soil was excavated and 40 barrels of hydro-excavated hydrocarbon impacted soil cuttings were removed 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: Jon E. Fields Date: 8/11/2020

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: 03/25/2022

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

ENSOLUM

CLOSURE REPORT

Property:

CW Roberts #6 Pipeline Release
NE ¼, S18 T25N R3W
Rio Arriba County, New Mexico

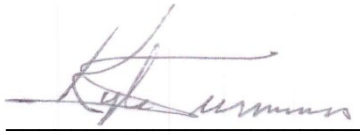
June 5, 2020
Ensolum Project No. 05A1226083

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

CW Roberts #6 Pipeline Release
NE ¼, S18 T25N R3W
Rio Arriba County, New Mexico

Ensolum Project No. 05A1226083

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	CW Roberts #6 Pipeline Release (Site)
Location:	36.400337° North, 107.183137° West Northeast (NE) ¼ of Section 18, Township 25 North, Range 3 West Rio Arriba County, New Mexico
Property:	Private Land
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On November 13, 2019, Enterprise personnel identified a release of natural gas and associated liquids from the pipeline and subsequently isolated and locked the pipeline out of service. On November 18, 2019, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release.

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 New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references 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. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, 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). Six (6) PODs (SJ 02224, SJ 02429, SJ 02428, SJ 01305, SP 04320, and SP 04320 1) were identified within one mile of the Site on the OSE WRRS database.

The well record for SJ 02224, located approximately 0.48 miles northwest of the Site and at a lower elevation (7,115 feet) than the Site (7,118 feet), indicates a depth to water of 56 feet below grade surface (bgs). The well record for SJ 02429, located approximately 0.48 miles south of the Site and at a higher elevation (7,147 feet) than the Site, indicates a depth to water of 230 feet bgs. The well record for SJ 02428, located approximately 0.85 miles southeast of the Site and at a higher elevation (7,194 feet) indicates a depth to water of 160 feet bgs. The well record for SJ 01305, located approximately 0.75 miles northeast of the Site and at a higher elevation (7,157) than the Site indicates a depth to water of 265 feet bgs. The records for SP 04320 and SP 04320 1, both located approximately 0.85 miles north/northeast of the Site, indicate that these PODs are for surface water diversion to a surface pond. Supporting documentation is provided in **Appendix B**.

- No cathodic-protection wells were identified within one mile of the Site.
- The Site is located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. An unnamed ephemeral wash is located approximately 230 feet north of the excavation.
- 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.
- 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.
- No fresh water wells or springs were identified within 1,000 feet of the Site.
- 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 on 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 November 18, 2019, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the pipeline release. During the remediation and corrective action activities OFT Construction, Inc. provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 37 feet long and 23 feet wide at the maximum extents. The maximum depth of the excavation was approximately nine (9) feet bgs.

The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand, shale, and weathered sandstone.

A total of approximately 260 cubic yards of petroleum hydrocarbon affected soils and 40 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 forms are provided in **Appendix C**. The excavation was ultimately backfilled with imported fill 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 the 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 15 composite soil samples (S-1 through S-15) comprised of five (5) aliquots each, from the excavation for laboratory analysis. A clean shovel was utilized to obtain fresh aliquots from each area of the excavation. The New Mexico EMNRD OCD provided verbal approval to proceed with the sampling events, although a New Mexico EMNRD OCD representative was not on Site during the sampling events.

First Sampling Event
On November 19, 2019, composite soil samples S-1 (9') and S-2 (8') were collected from the floor of the pipeline excavation. Composite soil samples S-3 (0'-9'), S-4 (0'-8'), S-5 (0'-9'), and S-6 (0'-9') were collected from the sidewalls of the pipeline excavation. Composite soil sample S-7 (0-4.5') was collected from a combination of the floor and sidewalls of the northern portion of the pipeline excavation. Subsequent analytical results indicated COC concentrations that exceeded the New Mexico EMNRD OCD closure criteria for composite soil sample S-7. In response to the data exceedance, the excavation to the north was extended and deepened. Soil associated with composite soil sample S-7 was removed from the Site and transported to the landfarm for disposal/remediation. While working on the north side of the excavation, historic, subsurface petroleum hydrocarbon impact was encountered. It was determined that the historic impact was not associated with the recent pipeline release. Enterprise collaborated with Enduring Resources, LLC (Enduring), the operator of the well site, prior to additional excavation to the north.

Second Sampling Event
On November 22, 2019, representatives from Enduring and Enterprise met on site to discuss remediation activities north of the pipeline. A second sampling event was performed in which composite soil samples S-8 (6.5') and S-9 (6.5') were collected from the floor of the remediation excavation north of the pipeline. Composite soil samples S-10 (0-6.5') and S-11 (0-6.5') were collected from the sidewalls of the excavation. Subsequent analytical results indicated that soils associated with composite soil samples S-10 and S-11

exhibited TPH concentrations above the applicable New Mexico EMNRD OCD closure criteria. Enterprise and Enduring decided to have the Enterprise contractors attempt to finish the remediation while their contractors were still on Site and the excavation was subsequently extended to the north.

Third Sampling Event
On December 18, 2019, composite soil sample S-12 (7') was collected from the floor of the excavation for laboratory analysis. Composite soil samples S-13 (0'-7'), S-14 (0'-7'), and S-15 (0'-7') were collected from sidewalls of the excavation.

The soil samples were collected and placed in laboratory prepared glassware, labeled/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-6, S-8, S-9, and S-12 through S-15) 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. Soil associated with composite soil samples S-7, S-10, and S-11 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 in concentrations greater than the laboratory PQLs/RLs, which are less than the 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 in concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO concentrations ranging from less than the laboratory PQLs/RLs to 55 mg/kg (S-5), 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 less than laboratory PQLs/RLs to 390 mg/kg

(S-14), which are less than the 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 imported fill and was then contoured to match the surrounding grade. Enterprise will re-seed the Site with an approved seeding mixture during the next favorable growing season.
.

8.0 FINDINGS AND RECOMMENDATION

- A total of 15 composite soil samples were collected from the excavation. Based on laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the applicable New Mexico EMNRD OCD closure criteria.

- A total of approximately 260 cubic yards of petroleum hydrocarbon affected soils and 40 bbls of hydro-excavation soil cuttings and water related to the excavation were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and was 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 recommendation are based solely upon data available to Ensolum at the time of these services.

9.3 Reliance

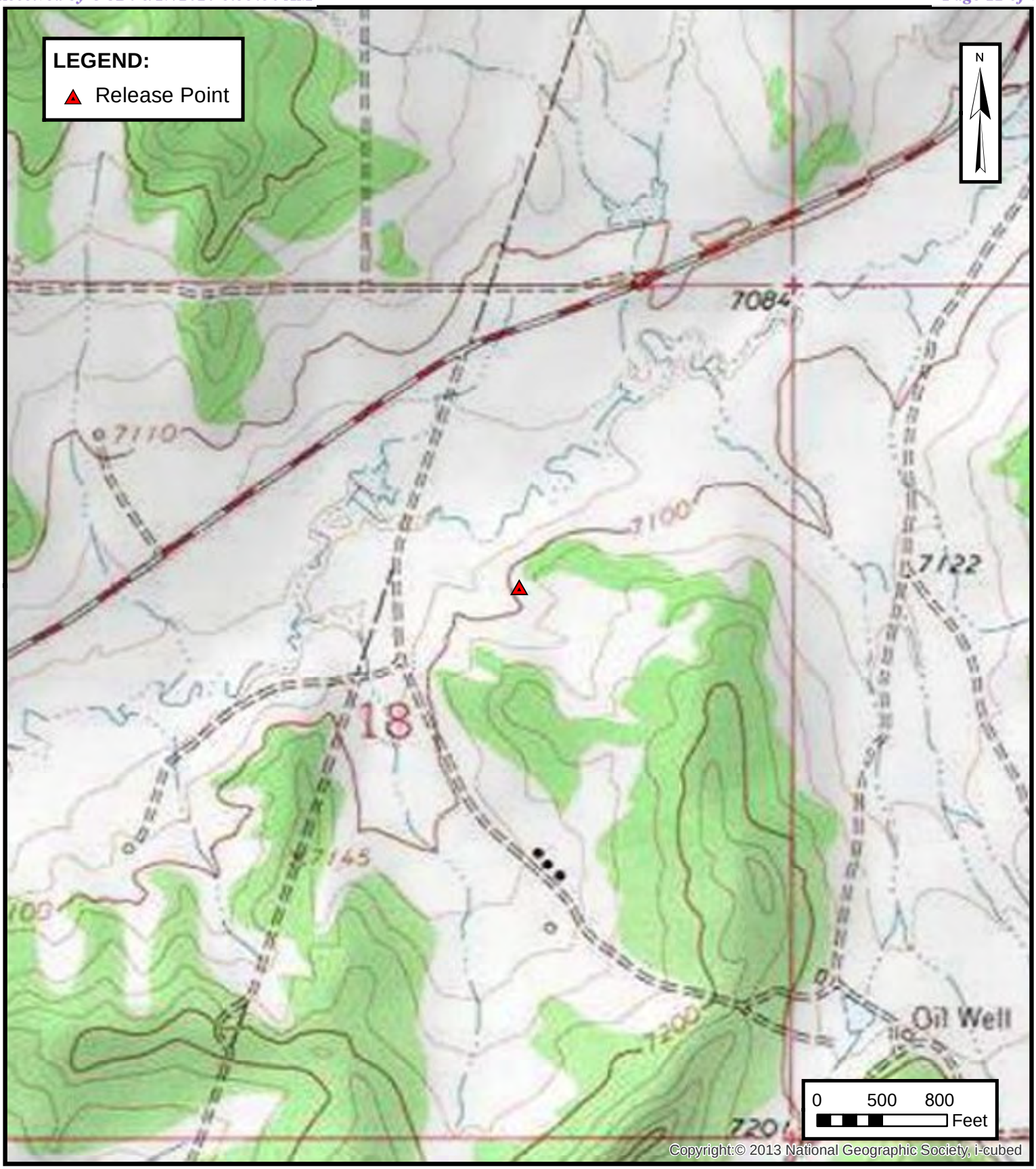
This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization of Enterprise and Ensolum. Any unauthorized distribution 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



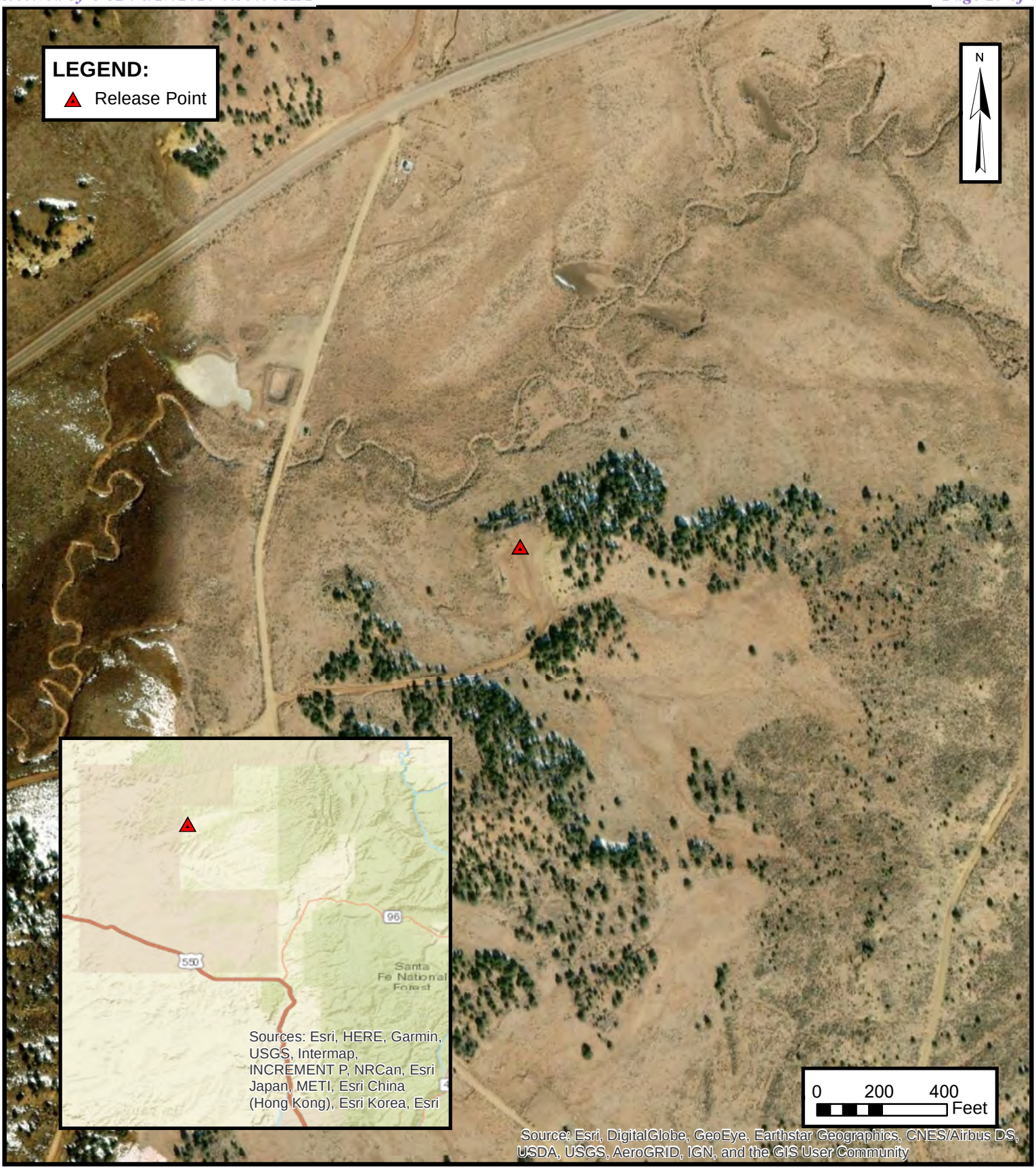
ENSOLUM
Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
CW ROBERTS #6 PIPELINE RELEASE
NE ¼, S18 T25N R3W, Rio Arriba County, New Mexico
36.400337° N, 107.183137° W

PROJECT NUMBER: 05A1226083

FIGURE
1



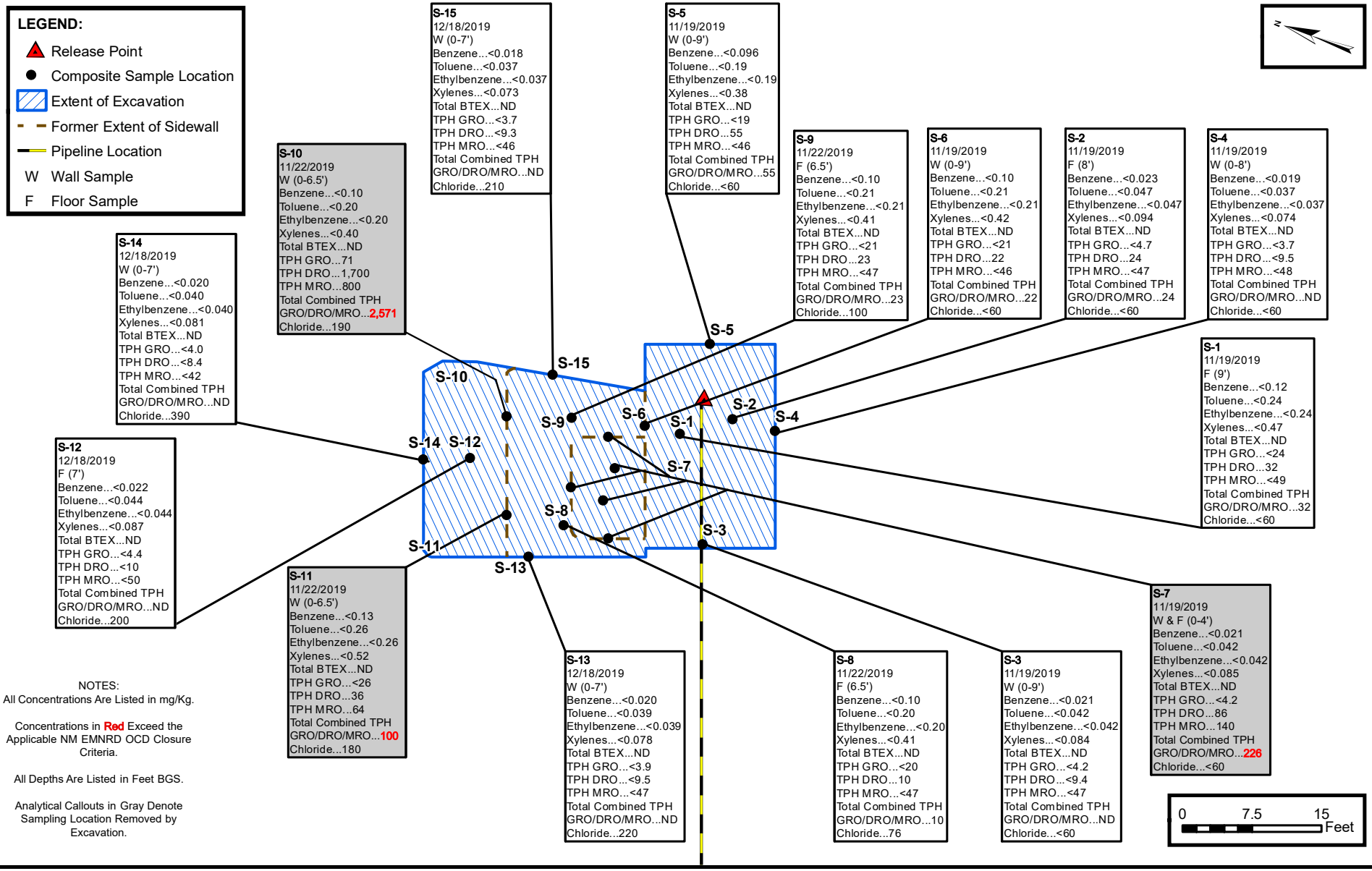
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
CW ROBERTS #6 PIPELINE RELEASE
NE ¼, S18 T25N R3W, Rio Arriba County, New Mexico
36.400337° N, 107.183137° W

PROJECT NUMBER: 05A1226083

FIGURE
2



NOTES:
All Concentrations Are Listed in mg/Kg.

Concentrations in **Red** Exceed the Applicable NM EMNRD OCD Closure Criteria.

All Depths Are Listed in Feet BGS.

Analytical Callouts in Gray Denote Sampling Location Removed by Excavation.

ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
CW ROBERTS #6 PIPELINE RELEASE
NE ¼, S18 T25N R3W, Rio Arriba County, New Mexico
36.400337° N, 107.183137° W

PROJECT NUMBER: 05A1226083

FIGURE
3

ENSOLUM

APPENDIX B

Siting Documentation

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

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 01305	SJ	RA	3	1	3	08	25N	03W	304876	4031601*	750	265	485
SJ 02224	SJ	RA	4	1	1	18	25N	03W	303470	4030829*	325	56	269

Average Depth to Water: **160 feet**

Minimum Depth: **56 feet**

Maximum Depth: **265 feet**

Record Count: 2

PLSS Search:

Section(s): 18, 7, 8, 17, 20, 19 **Township:** 25N **Range:** 03W

***UTM location was derived from PLSS - see Help**

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

No records found.

PLSS Search:

Section(s): 12, 13, 24 **Township:** 25N **Range:** 04W

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q q q 6416	4	Sec	Tws	Rng	X	Y	Distance
SJ 02429	SJ	STK	3.6	SCHMITZ LAND CO. LLC.	RA	SJ 02429					2 3	4	18	25N	03W	304226	4029806*	765
SJ 02224	SJ	SAN	3	AMOCO PRODUCTION CO.	RA	SJ 02224				Shallow	4 1	1	18	25N	03W	303470	4030829*	826
SJ 01305	SJ	STK	3	ARAPAHOE DRILLING CO.	RA	SJ 01305				Artesian	3 1	3	08	25N	03W	304876	4031601*	1203
SP 04320	SJM2	OIL	0	T.N.T. CONSTRUCTION, INC.	SJ	SP 04320 1					1	3	08	25N	03W	304977	4031702*	1342
					RA	SP 04320							07	25N	03W	303985	4031935*	1390
SJ 02428	SJ	STK	3	TONY SCHMITZ	RA	SJ 02428					3 4	3	17	25N	03W	305234	4029579*	1393

Record Count: 6

UTMNAD83 Radius Search (in meters):

Easting (X): 304254.68 **Northing (Y):** 4030570.804 **Radius:** 1609.3

Sorted by: Distance

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: SP 04320 **Subbasin:** SJM2 **Cross Reference:** -

Primary Purpose: OIL OIL PRODUCTION

Primary Status: PMT PERMIT

Total Acres: 0 **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: T.N.T. CONSTRUCTION, INC.

Contact: TONY L. SCHMITZ

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	327945	FCDAM	1991-12-11	PMT	APR	SP 04320-1	T	0	0	
get images	327897	FCDAM	1988-10-31	PMT	APR	SP 04320	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Other Location Desc
SP 04320						07	25N	03W	303985	4031935*	
SP 04320 1				1	3	08	25N	03W	304977	4031702*	

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	Source
10/24/1988	PMT	0	0	SP 04320	
10/08/1991	PMT	0	0	SP 04320 1	

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	0		OIL		SW	

ENSOLUM

APPENDIX C

Executed C-138 Solid Waste Acceptance Forms

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

97057-1057

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

2. Originating Site:
CW Roberts #6

AFE: Pending
PM: Dwayne Dixon
Pay Key: RB21200

2. Location of Material (Street Address, City, State or ULSTR):
UL G Section 18 T25N R3W; 36.400337, -107.183137

Nov. 2019

4. Source and Description of Waste:
Source: Hydrocarbon contaminated soil/sludge associated with remediation activities from a natural gas pipeline release.
Description: Hydrocarbon contaminated soil/sludge associated with remediation activities from a natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 170/40 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long (Thomas 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 (Thomas Long) 11-15-19, representative for Enterprise Products Operating authorize 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, DFT, Rosenbaum, Stan Horn, Sweazey

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM01-0011**
Address of Facility: **Hill Top, 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: 11/15/19

SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

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 97057-1051
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

2. Originating Site:
CW Roberts #6

AFE: N44360
PM: Dwayne Dixon
Pay Key: RB21200

2. Location of Material (Street Address, City, State or ULSTR):
UL G Section 18 T25N R3W; 36.400337, -107.183137

Dec. 2019 / Jan. 2020

4. Source and Description of Waste:
Source: Hydrocarbon contaminated soil/sludge associated with remediation activities from a natural gas pipeline release.
Description: Hydrocarbon contaminated soil/sludge associated with remediation activities from a natural gas pipeline release.
Estimated Volume 50 (yd³) bbls Known Volume (to be entered by the operator at the end of the haul) 90 (yd³) bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long (Thomas 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 (Thomas Long) 1-14-2020, representative for Enterprise Products Operating authorize 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: OFT, Stan Horn, Sweazea

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech, Inc. Soil Remediation Facility * Permit #: NM01-0011**
Address of Facility: **Hill Top, 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: 12/18/19

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
CW Roberts #6 Pipeline Release
Ensolum Project No. 05A1226083

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
CW Roberts #6 Pipeline Release
Ensolum Project No. 05A1226083

ENSOLUM

Photograph 4 Photograph Description: View of the initial remediation excavation north of the pipeline.	
Photograph 5 Photograph Description: View of the final excavation north of the pipeline.	
Photograph 6 Photograph Description: View of final excavation after initial restoration.	

ENSOLUM

APPENDIX E

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
CW Roberts #6 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													
S-7	11.19.19	C	0 to 4	<0.021	<0.042	<0.042	<0.085	ND	<4.2	86	140	**226**	<60
S-10	11.22.19	C	0 to 6.5	<0.10	<0.20	<0.20	<0.40	ND	71	1,700	800	**2,571**	190
S-11	11.22.19	C	0 to 6.5	<0.13	<0.26	<0.26	<0.52	ND	<26	36	64	**100**	180
Excavation Composite Soil Samples													
S-1	11.19.19	C	9	<0.12	<0.24	<0.24	<0.47	ND	<24	32	<49	32	<60
S-2	11.19.19	C	8	<0.023	<0.047	<0.047	<0.094	ND	<4.7	24	<47	24	<60
S-3	11.19.19	C	0 to 9	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.4	<47	ND	<60
S-4	11.19.19	C	0 to 8	<0.019	<0.037	<0.037	<0.074	ND	<3.7	<9.5	<48	ND	<60
S-5	11.19.19	C	0 to 9	<0.096	<0.19	<0.19	<0.38	ND	<19	55	<46	55	<60
S-6*	11.19.19	C	0 to 9	<0.10	<0.21	<0.21	<0.42	ND	<21	22	<46	22	<60
S-8	11.22.19	C	6.5	<0.10	<0.20	<0.20	<0.41	ND	<20	10	<47	10	76
S-9	11.22.19	C	6.5	<0.10	<0.21	<0.21	<0.41	ND	<21	23	<47	23	100
S-12	12.18.19	C	7	<0.022	<0.044	<0.044	<0.087	ND	<4.4	<10	<50	ND	200
S-13	12.18.19	C	0 to 7	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<9.5	<47	ND	220
S-14	12.18.19	C	0 to 7	<0.020	<0.040	<0.040	<0.081	ND	<4.0	<8.4	<42	ND	390
S-15	12.18.19	C	0 to 7	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<9.3	<46	ND	210

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

* = Partially removed by excavation

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

November 21, 2019

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

RE: C W Roberts 6 OrderNo.: 1911906

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/20/2019 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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: C W Roberts 6 **Collection Date:** 11/19/2019 1:15:00 PM
Lab ID: 1911906-001 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 10:58:57 AM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	11/20/2019 12:18:36 PM	G64643
Surr: BFB	95.2	70-130		%Rec	5	11/20/2019 12:18:36 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	32	9.8		mg/Kg	1	11/20/2019 11:34:57 AM	48905
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/20/2019 11:34:57 AM	48905
Surr: DNOP	92.9	70-130		%Rec	1	11/20/2019 11:34:57 AM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.12		mg/Kg	5	11/20/2019 12:18:36 PM	R64643
Toluene	ND	0.24		mg/Kg	5	11/20/2019 12:18:36 PM	R64643
Ethylbenzene	ND	0.24		mg/Kg	5	11/20/2019 12:18:36 PM	R64643
Xylenes, Total	ND	0.47		mg/Kg	5	11/20/2019 12:18:36 PM	R64643
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	5	11/20/2019 12:18:36 PM	R64643
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	5	11/20/2019 12:18:36 PM	R64643
Surr: Dibromofluoromethane	115	70-130		%Rec	5	11/20/2019 12:18:36 PM	R64643
Surr: Toluene-d8	105	70-130		%Rec	5	11/20/2019 12:18:36 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: C W Roberts 6
Collection Date: 11/19/2019 1:20:00 PM
Lab ID: 1911906-002 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 11:11:21 AM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/20/2019 12:47:20 PM	G64643
Surr: BFB	94.8	70-130		%Rec	1	11/20/2019 12:47:20 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	24	9.4		mg/Kg	1	11/20/2019 11:44:09 AM	48905
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/20/2019 11:44:09 AM	48905
Surr: DNOP	99.7	70-130		%Rec	1	11/20/2019 11:44:09 AM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.023		mg/Kg	1	11/20/2019 12:47:20 PM	R64643
Toluene	ND	0.047		mg/Kg	1	11/20/2019 12:47:20 PM	R64643
Ethylbenzene	ND	0.047		mg/Kg	1	11/20/2019 12:47:20 PM	R64643
Xylenes, Total	ND	0.094		mg/Kg	1	11/20/2019 12:47:20 PM	R64643
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	11/20/2019 12:47:20 PM	R64643
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	11/20/2019 12:47:20 PM	R64643
Surr: Dibromofluoromethane	119	70-130		%Rec	1	11/20/2019 12:47:20 PM	R64643
Surr: Toluene-d8	104	70-130		%Rec	1	11/20/2019 12:47:20 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-3
Project: C W Roberts 6
Collection Date: 11/19/2019 1:30:00 PM
Lab ID: 1911906-003 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 11:23:46 AM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	11/20/2019 1:15:58 PM	G64643
Surr: BFB	93.9	70-130		%Rec	1	11/20/2019 1:15:58 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/20/2019 11:53:23 AM	48905
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/20/2019 11:53:23 AM	48905
Surr: DNOP	93.8	70-130		%Rec	1	11/20/2019 11:53:23 AM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.021		mg/Kg	1	11/20/2019 1:15:58 PM	R64643
Toluene	ND	0.042		mg/Kg	1	11/20/2019 1:15:58 PM	R64643
Ethylbenzene	ND	0.042		mg/Kg	1	11/20/2019 1:15:58 PM	R64643
Xylenes, Total	ND	0.084		mg/Kg	1	11/20/2019 1:15:58 PM	R64643
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	11/20/2019 1:15:58 PM	R64643
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	11/20/2019 1:15:58 PM	R64643
Surr: Dibromofluoromethane	119	70-130		%Rec	1	11/20/2019 1:15:58 PM	R64643
Surr: Toluene-d8	104	70-130		%Rec	1	11/20/2019 1:15:58 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-4
Project: C W Roberts 6
Collection Date: 11/19/2019 1:35:00 PM
Lab ID: 1911906-004 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 11:36:11 AM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	11/20/2019 1:44:41 PM	G64643
Surr: BFB	89.9	70-130		%Rec	1	11/20/2019 1:44:41 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/20/2019 12:02:35 PM	48905
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/20/2019 12:02:35 PM	48905
Surr: DNOP	98.4	70-130		%Rec	1	11/20/2019 12:02:35 PM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.019		mg/Kg	1	11/20/2019 1:44:41 PM	R64643
Toluene	ND	0.037		mg/Kg	1	11/20/2019 1:44:41 PM	R64643
Ethylbenzene	ND	0.037		mg/Kg	1	11/20/2019 1:44:41 PM	R64643
Xylenes, Total	ND	0.074		mg/Kg	1	11/20/2019 1:44:41 PM	R64643
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	11/20/2019 1:44:41 PM	R64643
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	11/20/2019 1:44:41 PM	R64643
Surr: Dibromofluoromethane	119	70-130		%Rec	1	11/20/2019 1:44:41 PM	R64643
Surr: Toluene-d8	103	70-130		%Rec	1	11/20/2019 1:44:41 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-5
Project: C W Roberts 6
Collection Date: 11/19/2019 1:40:00 PM
Lab ID: 1911906-005 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 11:48:35 AM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	11/20/2019 2:13:18 PM	G64643
Surr: BFB	93.1	70-130		%Rec	5	11/20/2019 2:13:18 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	55	9.1		mg/Kg	1	11/20/2019 12:11:47 PM	48905
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/20/2019 12:11:47 PM	48905
Surr: DNOP	108	70-130		%Rec	1	11/20/2019 12:11:47 PM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.096		mg/Kg	5	11/20/2019 2:13:18 PM	R64643
Toluene	ND	0.19		mg/Kg	5	11/20/2019 2:13:18 PM	R64643
Ethylbenzene	ND	0.19		mg/Kg	5	11/20/2019 2:13:18 PM	R64643
Xylenes, Total	ND	0.38		mg/Kg	5	11/20/2019 2:13:18 PM	R64643
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	5	11/20/2019 2:13:18 PM	R64643
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	5	11/20/2019 2:13:18 PM	R64643
Surr: Dibromofluoromethane	117	70-130		%Rec	5	11/20/2019 2:13:18 PM	R64643
Surr: Toluene-d8	105	70-130		%Rec	5	11/20/2019 2:13:18 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-6
Project: C W Roberts 6
Collection Date: 11/19/2019 1:45:00 PM
Lab ID: 1911906-006 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 12:01:00 PM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	11/20/2019 2:42:03 PM	G64643
Surr: BFB	94.9	70-130		%Rec	5	11/20/2019 2:42:03 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	22	9.2		mg/Kg	1	11/20/2019 12:21:00 PM	48905
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/20/2019 12:21:00 PM	48905
Surr: DNOP	96.1	70-130		%Rec	1	11/20/2019 12:21:00 PM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.10		mg/Kg	5	11/20/2019 2:42:03 PM	R64643
Toluene	ND	0.21		mg/Kg	5	11/20/2019 2:42:03 PM	R64643
Ethylbenzene	ND	0.21		mg/Kg	5	11/20/2019 2:42:03 PM	R64643
Xylenes, Total	ND	0.42		mg/Kg	5	11/20/2019 2:42:03 PM	R64643
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	5	11/20/2019 2:42:03 PM	R64643
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	5	11/20/2019 2:42:03 PM	R64643
Surr: Dibromofluoromethane	117	70-130		%Rec	5	11/20/2019 2:42:03 PM	R64643
Surr: Toluene-d8	108	70-130		%Rec	5	11/20/2019 2:42:03 PM	R64643

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 **1911906**
Date Reported: **11/21/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-7
Project: C W Roberts 6 **Collection Date:** 11/19/2019 1:50:00 PM
Lab ID: 1911906-007 **Matrix:** SOIL **Received Date:** 11/20/2019 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	11/20/2019 12:13:24 PM	48908
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **JMR**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	11/20/2019 3:10:41 PM	G64643
Surr: BFB	90.4	70-130		%Rec	1	11/20/2019 3:10:41 PM	G64643
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	86	9.0		mg/Kg	1	11/20/2019 12:41:59 PM	48905
Motor Oil Range Organics (MRO)	140	45		mg/Kg	1	11/20/2019 12:41:59 PM	48905
Surr: DNOP	94.8	70-130		%Rec	1	11/20/2019 12:41:59 PM	48905
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	0.021		mg/Kg	1	11/20/2019 3:10:41 PM	R64643
Toluene	ND	0.042		mg/Kg	1	11/20/2019 3:10:41 PM	R64643
Ethylbenzene	ND	0.042		mg/Kg	1	11/20/2019 3:10:41 PM	R64643
Xylenes, Total	ND	0.085		mg/Kg	1	11/20/2019 3:10:41 PM	R64643
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	11/20/2019 3:10:41 PM	R64643
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	11/20/2019 3:10:41 PM	R64643
Surr: Dibromofluoromethane	121	70-130		%Rec	1	11/20/2019 3:10:41 PM	R64643
Surr: Toluene-d8	101	70-130		%Rec	1	11/20/2019 3:10:41 PM	R64643

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#: **1911906**

21-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **MB-48908** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **48908** RunNo: **64637**

Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2214771** Units: **mg/Kg**

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

Sample ID: **LCS-48908** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **48908** RunNo: **64637**

Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2214772** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	96.9	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#: **1911906**

21-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **LCS-48905** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48905** RunNo: **64627**
Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2213763** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.6	63.9	124			
Surr: DNOP	4.1		5.000		82.4	70	130			

Sample ID: **MB-48905** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **48905** RunNo: **64627**
Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2213764** 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	9.4		10.00		93.7	70	130			

Sample ID: **1911906-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **48905** RunNo: **64627**
Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2214658** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	68	8.8	44.13	31.85	81.5	57	142			
Surr: DNOP	4.4		4.413		101	70	130			

Sample ID: **1911906-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1** Batch ID: **48905** RunNo: **64627**
Prep Date: **11/20/2019** Analysis Date: **11/20/2019** SeqNo: **2214659** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	75	9.9	49.36	31.85	86.9	57	142	9.72	20	
Surr: DNOP	4.7		4.936		95.7	70	130	0	0	

Sample ID: **LCS-48889** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48889** RunNo: **64627**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2214660** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.2	70	130			

Sample ID: **LCS-48896** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48896** RunNo: **64627**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2214661** Units: **%Rec**

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

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#: **1911906**

21-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **LCS-48896**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **48896**	RunNo: **64627**
Prep Date: **11/19/2019**	Analysis Date: **11/20/2019**	SeqNo: **2214661** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.2		5.000		123	70	130			

Sample ID: **MB-48889**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48889**	RunNo: **64627**
Prep Date: **11/19/2019**	Analysis Date: **11/20/2019**	SeqNo: **2214662** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.9	70	130			

Sample ID: **MB-48896**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **48896**	RunNo: **64627**
Prep Date: **11/19/2019**	Analysis Date: **11/20/2019**	SeqNo: **2214663** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	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#: **1911906**

21-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **LCSS** Batch ID: **R64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2214297** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	68	135			
Toluene	1.0	0.050	1.000	0	99.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		101	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.3	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		114	70	130			
Surr: Toluene-d8	0.52		0.5000		104	70	130			

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **PBS** Batch ID: **R64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2214305** 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	0.50		0.5000		99.9	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		91.0	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		114	70	130			
Surr: Toluene-d8	0.54		0.5000		108	70	130			

Sample ID: **1911906-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-1** Batch ID: **R64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2215410** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.1	0.12	4.735	0	108	57.1	141			
Toluene	4.6	0.24	4.735	0	98.1	70	130			
Surr: 1,2-Dichloroethane-d4	2.6		2.368		110	70	130			
Surr: 4-Bromofluorobenzene	2.1		2.368		89.1	70	130			
Surr: Dibromofluoromethane	2.8		2.368		118	70	130			
Surr: Toluene-d8	2.4		2.368		103	70	130			

Sample ID: **1911906-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**

Client ID: **S-1** Batch ID: **R64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2215412** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	5.2	0.12	4.735	0	110	57.1	141	1.98	20	
Toluene	4.6	0.24	4.735	0	96.5	70	130	1.59	20	

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#: **1911906**
21-Nov-19

Client: ENSOLUM
Project: C W Roberts 6

Sample ID: **1911906-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **S-1** Batch ID: **R64643** RunNo: **64643**
Prep Date: Analysis Date: **11/20/2019** SeqNo: **2215412** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	2.7		2.368		112	70	130	0	0	
Surr: 4-Bromofluorobenzene	2.2		2.368		92.0	70	130	0	0	
Surr: Dibromofluoromethane	2.9		2.368		123	70	130	0	0	
Surr: Toluene-d8	2.4		2.368		103	70	130	0	0	

Sample ID: **lcs-48885** SampType: **LCS** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS** Batch ID: **48885** RunNo: **64643**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2215567** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		108	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.6	70	130			
Surr: Dibromofluoromethane	0.62		0.5000		123	70	130			
Surr: Toluene-d8	0.51		0.5000		103	70	130			

Sample ID: **mb-48885** SampType: **MBLK** TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS** Batch ID: **48885** RunNo: **64643**
Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2215568** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		90.7	70	130			
Surr: Dibromofluoromethane	0.60		0.5000		119	70	130			
Surr: Toluene-d8	0.52		0.5000		103	70	130			

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#: **1911906**

21-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

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

Client ID: **LCSS** Batch ID: **G64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2214314** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	70	130			
Surr: BFB	450		500.0		91.0	70	130			

Sample ID: **rb1** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **G64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2214315** 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		91.8	70	130			

Sample ID: **1911906-002a ms** SampType: **MS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **S-2** Batch ID: **G64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2215540** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.7	23.50	1.128	95.7	70	130			
Surr: BFB	450		469.9		95.7	70	130			

Sample ID: **1911906-002a msd** SampType: **MSD** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **S-2** Batch ID: **G64643** RunNo: **64643**

Prep Date: Analysis Date: **11/20/2019** SeqNo: **2215541** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.7	23.50	1.128	89.9	70	130	5.98	20	
Surr: BFB	440		469.9		94.2	70	130	0	0	

Sample ID: **lcs-48885** SampType: **LCS** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **LCSS** Batch ID: **48885** RunNo: **64643**

Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2215542** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	470		500.0		94.6	70	130			

Sample ID: **mb-48885** SampType: **MBLK** TestCode: **EPA Method 8015D Mod: Gasoline Range**

Client ID: **PBS** Batch ID: **48885** RunNo: **64643**

Prep Date: **11/19/2019** Analysis Date: **11/20/2019** SeqNo: **2215543** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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: 1911906 RcptNo: 1

Received By: JR 11/20/2019 8:05:00 AM

Completed By: Anne Thorne 11/20/2019 8:12:58 AM Anne Thorne

Reviewed By: JO 11/20/19

Chain of Custody

1. Is Chain of Custody 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
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: A 11/20/19

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 11/20/19

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	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: Same Day

☐ Standard ☒ Rush 100%

Project Name: C.W. Roberts #6

Project #: See notes

Project Manager: RSummers

Sampler: RDeechilly

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 1.6-0.4 = 1.2

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. 191906	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
11/19/19	1315	S	S-1	1x4oz Jar	Cool	201	X	X									X
11/19/19	1320	S	S-2	1x4oz Jar	Cool	202	X	X									X
11/19/19	1330	S	S-3	1x4oz Jar	Cool	203	X	X									X
11/19/19	1335	S	S-4	1x4oz Jar	Cool	204	X	X									X
11/19/19	1340	S	S-5	1x4oz Jar	Cool	205	X	X									X
11/19/19	1345	S	S-6	1x4oz Jar	Cool	206	X	X									X
11/19/19	1350	S	S-7	1x4oz Jar	Cool	207	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/19/19	1611				11/19/19	1611
11/19/19	1753			carrier	11/20/19	8:05

Remarks: SAME DAY

PM - Tom Long (EPROD)
Pay key - RB21200
Non AFE - N44360

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

November 26, 2019

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

RE: C W Roberts 6 OrderNo.: 1911B23

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/23/2019 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 **1911B23**
Date Reported: **11/26/2019**

CLIENT: ENSOLUM
Client Sample ID: S-8
Project: C W Roberts 6
Collection Date: 11/22/2019 10:00:00 AM
Lab ID: 1911B23-001 **Matrix:** SOIL **Received Date:** 11/23/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	76	60		mg/Kg	20	11/25/2019 12:12:52 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	10	9.4		mg/Kg	1	11/25/2019 10:31:10 AM	48997
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/25/2019 10:31:10 AM	48997
Surr: DNOP	88.6	70-130		%Rec	1	11/25/2019 10:31:10 AM	48997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	11/25/2019 9:25:18 AM	G64749
Surr: BFB	106	77.4-118		%Rec	5	11/25/2019 9:25:18 AM	G64749
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	11/25/2019 9:25:18 AM	B64749
Toluene	ND	0.20		mg/Kg	5	11/25/2019 9:25:18 AM	B64749
Ethylbenzene	ND	0.20		mg/Kg	5	11/25/2019 9:25:18 AM	B64749
Xylenes, Total	ND	0.41		mg/Kg	5	11/25/2019 9:25:18 AM	B64749
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	5	11/25/2019 9:25:18 AM	B64749

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1911B23**
Date Reported: **11/26/2019**

CLIENT: ENSOLUM
Client Sample ID: S-9
Project: C W Roberts 6
Collection Date: 11/22/2019 10:05:00 AM
Lab ID: 1911B23-002 **Matrix:** SOIL **Received Date:** 11/23/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	100	60		mg/Kg	20	11/25/2019 12:37:40 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	23	9.3		mg/Kg	1	11/25/2019 10:40:22 AM	48997
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/25/2019 10:40:22 AM	48997
Surr: DNOP	88.1	70-130		%Rec	1	11/25/2019 10:40:22 AM	48997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	11/25/2019 9:48:07 AM	G64749
Surr: BFB	107	77.4-118		%Rec	5	11/25/2019 9:48:07 AM	G64749
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	11/25/2019 9:48:07 AM	B64749
Toluene	ND	0.21		mg/Kg	5	11/25/2019 9:48:07 AM	B64749
Ethylbenzene	ND	0.21		mg/Kg	5	11/25/2019 9:48:07 AM	B64749
Xylenes, Total	ND	0.41		mg/Kg	5	11/25/2019 9:48:07 AM	B64749
Surr: 4-Bromofluorobenzene	94.0	80-120		%Rec	5	11/25/2019 9:48:07 AM	B64749

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **1911B23**
Date Reported: **11/26/2019**

CLIENT: ENSOLUM
Client Sample ID: S-10
Project: C W Roberts 6
Collection Date: 11/22/2019 10:10:00 AM
Lab ID: 1911B23-003 **Matrix:** SOIL **Received Date:** 11/23/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	190	60		mg/Kg	20	11/25/2019 12:50:05 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	1700	94		mg/Kg	10	11/25/2019 10:49:32 AM	48997
Motor Oil Range Organics (MRO)	800	470		mg/Kg	10	11/25/2019 10:49:32 AM	48997
Surr: DNOP	0	70-130	S	%Rec	10	11/25/2019 10:49:32 AM	48997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	71	20		mg/Kg	5	11/25/2019 10:11:00 AM	G64749
Surr: BFB	267	77.4-118	S	%Rec	5	11/25/2019 10:11:00 AM	G64749
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.10		mg/Kg	5	11/25/2019 10:11:00 AM	B64749
Toluene	ND	0.20		mg/Kg	5	11/25/2019 10:11:00 AM	B64749
Ethylbenzene	ND	0.20		mg/Kg	5	11/25/2019 10:11:00 AM	B64749
Xylenes, Total	ND	0.40		mg/Kg	5	11/25/2019 10:11:00 AM	B64749
Surr: 4-Bromofluorobenzene	97.8	80-120		%Rec	5	11/25/2019 10:11:00 AM	B64749

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 **1911B23**
Date Reported: **11/26/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-11
Project: C W Roberts 6
Collection Date: 11/22/2019 10:15:00 AM
Lab ID: 1911B23-004 **Matrix:** SOIL **Received Date:** 11/23/2019 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	180	60		mg/Kg	20	11/25/2019 1:02:30 PM	49000
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	36	9.2		mg/Kg	1	11/25/2019 11:19:28 AM	48997
Motor Oil Range Organics (MRO)	64	46		mg/Kg	1	11/25/2019 11:19:28 AM	48997
Surr: DNOP	93.4	70-130		%Rec	1	11/25/2019 11:19:28 AM	48997
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	26		mg/Kg	5	11/25/2019 10:33:58 AM	G64749
Surr: BFB	109	77.4-118		%Rec	5	11/25/2019 10:33:58 AM	G64749
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.13		mg/Kg	5	11/25/2019 10:33:58 AM	B64749
Toluene	ND	0.26		mg/Kg	5	11/25/2019 10:33:58 AM	B64749
Ethylbenzene	ND	0.26		mg/Kg	5	11/25/2019 10:33:58 AM	B64749
Xylenes, Total	ND	0.52		mg/Kg	5	11/25/2019 10:33:58 AM	B64749
Surr: 4-Bromofluorobenzene	93.9	80-120		%Rec	5	11/25/2019 10:33:58 AM	B64749

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#: **1911B23**

26-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **MB-49000** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **49000** RunNo: **64777**

Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2220067** Units: **mg/Kg**

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

Sample ID: **LCS-49000** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **49000** RunNo: **64777**

Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2220069** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.5	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#: **1911B23**

26-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **LCS-48972** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48972** RunNo: **64745**
Prep Date: **11/22/2019** Analysis Date: **11/25/2019** SeqNo: **2218776** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.3	70	130			

Sample ID: **LCS-48997** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **48997** RunNo: **64745**
Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2218777** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.0	63.9	124			
Surr: DNOP	4.1		5.000		82.3	70	130			

Sample ID: **MB-48972** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **48972** RunNo: **64745**
Prep Date: **11/22/2019** Analysis Date: **11/25/2019** SeqNo: **2218778** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.0	70	130			

Sample ID: **MB-48997** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **48997** RunNo: **64745**
Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2218779** 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	8.7		10.00		86.6	70	130			

Sample ID: **1911B23-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-8** Batch ID: **48997** RunNo: **64745**
Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2219137** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.7	48.36	10.34	85.7	57	142			
Surr: DNOP	4.1		4.836		85.2	70	130			

Sample ID: **1911B23-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-8** Batch ID: **48997** RunNo: **64745**
Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2219138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.1	45.50	10.34	86.7	57	142	3.87	20	

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#: **1911B23**
26-Nov-19

Client: ENSOLUM
Project: C W Roberts 6

Sample ID: **1911B23-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-8** Batch ID: **48997** RunNo: **64745**
Prep Date: **11/25/2019** Analysis Date: **11/25/2019** SeqNo: **2219138** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		4.550		92.5	70	130	0	0	

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#: **1911B23**

26-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **G64749**	RunNo: **64749**							
Prep Date:	Analysis Date: **11/25/2019**	SeqNo: **2219128**	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	1100		1000		109	77.4	118			

Sample ID: **2.5UG GRO LCS**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **G64749**	RunNo: **64749**							
Prep Date:	Analysis Date: **11/25/2019**	SeqNo: **2219129**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	80	120			
Surr: BFB	1200		1000		123	77.4	118			S

Sample ID: **1911B23-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **S-8**	Batch ID: **G64749**	RunNo: **64749**							
Prep Date:	Analysis Date: **11/25/2019**	SeqNo: **2219130**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	120	20	101.6	0	119	69.1	142			
Surr: BFB	4900		4065		122	77.4	118			S

Sample ID: **1911B23-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **S-8**	Batch ID: **G64749**	RunNo: **64749**							
Prep Date:	Analysis Date: **11/25/2019**	SeqNo: **2219131**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	160	20	101.6	0	162	69.1	142	30.5	20	RS
Surr: BFB	5200		4065		127	77.4	118	0	0	S

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#: **1911B23**

26-Nov-19

Client: ENSOLUM

Project: C W Roberts 6

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

Client ID: **PBS** Batch ID: **B64749** RunNo: **64749**

Prep Date: Analysis Date: **11/25/2019** SeqNo: **2219142** 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	0.98		1.000		97.8	80	120			

Sample ID: **100NG BTEX LCS** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **B64749** RunNo: **64749**

Prep Date: Analysis Date: **11/25/2019** SeqNo: **2219143** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.1	80	120			
Toluene	0.89	0.050	1.000	0	88.9	80	120			
Ethylbenzene	0.86	0.050	1.000	0	85.8	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.4	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.4	80	120			

Sample ID: **1911B23-002AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-9** Batch ID: **B64749** RunNo: **64749**

Prep Date: Analysis Date: **11/25/2019** SeqNo: **2219144** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	4.0	0.10	4.105	0	98.0	76	123			
Toluene	3.8	0.21	4.105	0	92.3	80.3	127			
Ethylbenzene	3.6	0.21	4.105	0	88.8	80.2	131			
Xylenes, Total	11	0.41	12.32	0	88.8	78	133			
Surr: 4-Bromofluorobenzene	3.8		4.105		92.8	80	120			

Sample ID: **1911B23-002AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-9** Batch ID: **B64749** RunNo: **64749**

Prep Date: Analysis Date: **11/25/2019** SeqNo: **2219145** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	6.7	0.10	4.105	0	163	76	123	49.9	20	RS
Toluene	6.4	0.21	4.105	0	155	80.3	127	50.8	20	RS
Ethylbenzene	6.3	0.21	4.105	0	154	80.2	131	53.6	20	RS
Xylenes, Total	19	0.41	12.32	0	155	78	133	54.4	20	RS
Surr: 4-Bromofluorobenzene	4.0		4.105		98.3	80	120	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

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: **1911B23** RcptNo: **1**

Received By: **Yazmine Garduno** **11/23/2019 9:30:00 AM**

Completed By: **Yazmine Garduno** **11/23/2019 11:04:09 AM**

Reviewed By: 11/25/19

Chain of Custody

1. Is Chain of Custody 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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
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: 11/25/19

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 sal jars/ 11/25/19

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good				

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 6006 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:
☐ Standard ☒ ~~Rush~~ 100%

Project Name: C.W. Roberts #6

Project #: See notes

Project Manager: KSummers

Sampler: R Deechilly

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 2.5+0.2=2.7

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. 1911B23	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
11/22/19	1000	S	S-8	1x4oz Jar	cool	-001	X	X									X
11/22/19	1005	S	S-9	1x4oz Jar	cool	-002	X	X									X
11/22/19	1010	S	S-10	1x4oz Jar	cool	-003	X	X									X
11/22/19	1015	S	S-11	1x4oz Jar	cool	-004	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/22/19	1255				11/22/19	1255
11/22/19	1920			courier	11/23/19	0730

Remarks: SAME DAY
PM - Tom Long (EPROD)
Pay Key - RB21200
NonAFE - N44360

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

December 20, 2019

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

RE: CW Roberts 6 OrderNo.: 1912975

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/19/2019 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 **1912975**
Date Reported: **12/20/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-12
Project: CW Roberts 6
Collection Date: 12/18/2019 2:20:00 PM
Lab ID: 1912975-001 **Matrix:** SOIL **Received Date:** 12/19/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	200	60		mg/Kg	20	12/19/2019 11:54:43 AM	49434
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/19/2019 11:26:38 AM	49430
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/19/2019 11:26:38 AM	49430
Surr: DNOP	98.1	70-130		%Rec	1	12/19/2019 11:26:38 AM	49430
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	12/19/2019 9:39:30 AM	49408
Surr: BFB	85.7	66.6-105		%Rec	1	12/19/2019 9:39:30 AM	49408
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	12/19/2019 9:39:30 AM	49408
Toluene	ND	0.044		mg/Kg	1	12/19/2019 9:39:30 AM	49408
Ethylbenzene	ND	0.044		mg/Kg	1	12/19/2019 9:39:30 AM	49408
Xylenes, Total	ND	0.087		mg/Kg	1	12/19/2019 9:39:30 AM	49408
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	12/19/2019 9:39:30 AM	49408

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 **1912975**
Date Reported: **12/20/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-13
Project: CW Roberts 6
Collection Date: 12/18/2019 2:25:00 PM
Lab ID: 1912975-002 **Matrix:** SOIL **Received Date:** 12/19/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	220	60		mg/Kg	20	12/19/2019 12:07:08 PM	49434
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/19/2019 11:50:45 AM	49430
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/19/2019 11:50:45 AM	49430
Surr: DNOP	91.1	70-130		%Rec	1	12/19/2019 11:50:45 AM	49430
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	12/19/2019 10:02:27 AM	49408
Surr: BFB	87.9	66.6-105		%Rec	1	12/19/2019 10:02:27 AM	49408
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	12/19/2019 10:02:27 AM	49408
Toluene	ND	0.039		mg/Kg	1	12/19/2019 10:02:27 AM	49408
Ethylbenzene	ND	0.039		mg/Kg	1	12/19/2019 10:02:27 AM	49408
Xylenes, Total	ND	0.078		mg/Kg	1	12/19/2019 10:02:27 AM	49408
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	12/19/2019 10:02:27 AM	49408

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 **1912975**
Date Reported: **12/20/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-14
Project: CW Roberts 6 **Collection Date:** 12/18/2019 2:30:00 PM
Lab ID: 1912975-003 **Matrix:** SOIL **Received Date:** 12/19/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	390	60		mg/Kg	20	12/19/2019 12:19:32 PM	49434
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	8.4		mg/Kg	1	12/19/2019 12:14:49 PM	49430
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	12/19/2019 12:14:49 PM	49430
Surr: DNOP	90.1	70-130		%Rec	1	12/19/2019 12:14:49 PM	49430
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	12/19/2019 10:25:25 AM	49408
Surr: BFB	86.2	66.6-105		%Rec	1	12/19/2019 10:25:25 AM	49408
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	12/19/2019 10:25:25 AM	49408
Toluene	ND	0.040		mg/Kg	1	12/19/2019 10:25:25 AM	49408
Ethylbenzene	ND	0.040		mg/Kg	1	12/19/2019 10:25:25 AM	49408
Xylenes, Total	ND	0.081		mg/Kg	1	12/19/2019 10:25:25 AM	49408
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	12/19/2019 10:25:25 AM	49408

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 **1912975**
Date Reported: **12/20/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-15
Project: CW Roberts 6
Collection Date: 12/18/2019 2:35:00 PM
Lab ID: 1912975-004 **Matrix:** SOIL **Received Date:** 12/19/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	210	60		mg/Kg	20	12/19/2019 12:31:56 PM	49434
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/19/2019 12:39:06 PM	49430
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/19/2019 12:39:06 PM	49430
Surr: DNOP	96.9	70-130		%Rec	1	12/19/2019 12:39:06 PM	49430
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	12/19/2019 10:48:29 AM	49408
Surr: BFB	86.0	66.6-105		%Rec	1	12/19/2019 10:48:29 AM	49408
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	12/19/2019 10:48:29 AM	49408
Toluene	ND	0.037		mg/Kg	1	12/19/2019 10:48:29 AM	49408
Ethylbenzene	ND	0.037		mg/Kg	1	12/19/2019 10:48:29 AM	49408
Xylenes, Total	ND	0.073		mg/Kg	1	12/19/2019 10:48:29 AM	49408
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	12/19/2019 10:48:29 AM	49408

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#: **1912975**

20-Dec-19

Client: ENSOLUM

Project: CW Roberts 6

Sample ID: **MB-49434**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **49434**	RunNo: **65288**
Prep Date: **12/19/2019**	Analysis Date: **12/19/2019**	SeqNo: **2242908** Units: **mg/Kg**

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

Sample ID: **LCS-49434**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **49434**	RunNo: **65288**
Prep Date: **12/19/2019**	Analysis Date: **12/19/2019**	SeqNo: **2242909** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.8	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#: **1912975**

20-Dec-19

Client: ENSOLUM

Project: CW Roberts 6

Sample ID: **LCS-49430** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **49430** RunNo: **65281**

Prep Date: **12/19/2019** Analysis Date: **12/19/2019** SeqNo: **2242124** 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	96.5	63.9	124			
Surr: DNOP	4.0		5.000		79.4	70	130			

Sample ID: **MB-49430** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **49430** RunNo: **65281**

Prep Date: **12/19/2019** Analysis Date: **12/19/2019** SeqNo: **2242125** 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	9.5		10.00		95.2	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#: **1912975**

20-Dec-19

Client: ENSOLUM

Project: CW Roberts 6

Sample ID: **mb-49408** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **49408** RunNo: **65284**

Prep Date: **12/18/2019** Analysis Date: **12/19/2019** SeqNo: **2242589** 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	860		1000		86.2	66.6	105			

Sample ID: **lcs-49408** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **49408** RunNo: **65284**

Prep Date: **12/18/2019** Analysis Date: **12/19/2019** SeqNo: **2242590** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.7	80	120			
Surr: BFB	970		1000		96.8	66.6	105			

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#: **1912975**

20-Dec-19

Client: ENSOLUM

Project: CW Roberts 6

Sample ID: **mb-49408** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **PBS** Batch ID: **49408** RunNo: **65284**

Prep Date: **12/18/2019** Analysis Date: **12/19/2019** SeqNo: **2242603** 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	1.0		1.000		104	80	120			

Sample ID: **LCS-49408** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **LCSS** Batch ID: **49408** RunNo: **65284**

Prep Date: **12/18/2019** Analysis Date: **12/19/2019** SeqNo: **2242604** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.7	80	120			
Toluene	0.91	0.050	1.000	0	91.3	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.3	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

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: **1912975** RcptNo: **1**

Received By: **Daniel Marquez** **12/19/2019 8:00:00 AM**

Completed By: **Leah Baca** **12/19/2019 8:35:17 AM** Leah SBaca

Reviewed By: LB 12/19/19

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: DM 12/19/19

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:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S. Rio Grande Suite A

Aztec, NM 87410

Phone #:

email or Fax#: RSummers@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 100%

Project Name: C.W. Roberts #6

Project #: See notes

Project Manager: KSummers

Sampler: RDeechilly

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 4.9-0.1 = 4.8°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. 1912975	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
12/18/19	1420	S	S-12	1x4oz Jar	cool	-001	X	X									X
12/18/19	1425	S	S-13	1x4oz Jar	cool	-002	X	X									X
12/18/19	1430	S	S-14	1x4oz Jar	cool	-003	X	X									X
12/18/19	1435	S	S-15	1x4oz Jar	cool	-004	X	X									X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/18/19	1724				12/18/19	1724
12/19/19	1817			Courier	12/19/19	800

Remarks: SAME DAY

PM - Tom Long (EPROD)
Pay Key - RB21200
Non AFE - N44360

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 (Cory.Smith@state.nm.us)"
Cc: Stone, Brian
Subject: CW- Roberts #6 - UL G Section 18 T25N R3W; 36.400337, -107.183137
Date: Monday, November 18, 2019 9:53:00 AM

Cory,

This email is a courtesy notification that Enterprise had a release of condensate on the CW Roberts #6 meter tube on November 13, 2019. Enterprise has not yet determined this release reportable per NMOCD regulation. No washes were affected. An area of approximately 10 feet by five feet wide was impacted by the released fluids. The meter tube was isolated, depressurized, locked out and tagged out, and tagged out. The release site is located at UL G Section 18 T25N R3W; 36.400337, -107.183137. We are starting the remediation today and I will keep you informed as to the reporting status. If you have any questions, please call or email.

Sincerely,

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: James McDaniel
To: Long, Thomas; "Smith, Cory, EMNRD (Cory.Smith@state.nm.us)"
Cc: Stone, Brian; Abbott, Patrick; Kyle Walter; Tim Friesenhahn
Subject: RE: CW Roberts #6 - UL G Section 18 T25N R3W; 36.400337, -107.183137
Date: Friday, December 20, 2019 10:40:41 AM
Attachments: image001.png

Thank you sir. Let us know where you are off of location, and we will make the road repairs. Thank you!

James McDaniel
HSE Supervisor
Enduring Resources
CSP #30009
CHMM #15676
CIT #13805
Office: 505-636-9731
Cell: 505-444-3004
jmcdaniel@enduringresources.com

From: Long, Thomas <tjlong@eprod.com>
Sent: Friday, December 20, 2019 8:07 AM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Abbott, Patrick <pwabbott@eprod.com>; James McDaniel <JMcDaniel@enduringresources.com>
Subject: CW Roberts #6 - UL G Section 18 T25N R3W; 36.400337, -107.183137

Cory, Roberts

Please find the attached site sketch and lab reports for the CW Roberts excavation. All sample results are below the NMOCD Tier I standards. Enterprise will backfill the excavation with clean imported fill material. 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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
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 9770

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 9770
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/25/2022