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	3RP-1011
Facility ID	
Application ID	

Release Notification

RCVD 8/13/19

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):* **NCS190433625**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	ncs1907433625

Location of Release Source

Latitude **36.670267** Longitude **-108.158470** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Lateral 3C-2 Pipeline**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **2/21/2019**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
M	**7**	**28N**	**12W**	**San Juan**

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

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): **8-10 BBLs**	Volume Recovered (bbls): **None**
☒	ıe Released (Mcf): **3.63 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On February 21, 2019, an Enterprise technician discovered a release of natural gas and natural gas liquids on the Lateral 3C-2 pipeline. An area of approximately three feet in diameter was impacted by the released fluids. The pipeline was blown down, depressurized, locked out and tagged out. Enterprise recovered the released fluids as much as practicable and barricaded the affected area. On February 28, 2019, Enterprise began the initial repairs and remediation and determined this release reportable per NMOCD regulation due the volume of impacted subsurface soil. The final excavation dimensions measured approximately 48 feet long by 31 feet wide by approximately 15 feet deep. Approximately 564 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A third party closure report is included with this "Final." C-141.

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: 8/13/19

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

OCD Only

Received by: OCD Date: 8/13/19

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: Cory Date: 8/19/19

Printed Name: Cory Title: Environmental Specalist

CLOSURE REPORT

Property:

Lateral 3C-2 Pipeline Release
SW ¼, S7 T28N R12W
San Juan County, New Mexico

August 9, 2019
Ensolum Project No. 05A1226047

Prepared for:

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

Prepared by:

Ranee Deechilly
Environmental Scientist

Chad D'Aponti
Field Environmental Scientist

Kyle Summers, CPG
Sr. Project Manager

Table of Contents

LIST OF APPENDICES

CLOSURE REPORT

Lateral 3C-2 Pipeline Release
SW ¼, S7 T28N R12W
San Juan County, New Mexico

Ensolum Project No. 05A1226047

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Lateral 3C-2 Pipeline Release (Site)
Location:	36.670267° North, 108.157470° West Southwest (SW) ¼ of Section 7, Township 28 North, Range 12 West San Juan County, New Mexico
Property:	Private Land (B Square Ranch LLC)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On February 21, 2019, a release of natural gas and associated pipeline liquids was identified on the Lateral 3C-2 pipeline. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On February 28, 2019, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and temporarily repairing the pipeline. Further remediation activities were postponed due to site access, adverse weather, and poor ground conditions. On April 29, 2019, Enterprise resumed activities to facilitate the repair of the pipeline and remediate 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 sites 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.

- No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database.
- No cathodic-protection wells were identified near the Site.
- The Site is located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or significant watercourse.
- 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 8015M	100 mg/kg
BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

3.0 SOIL REMEDIATION ACTIVITIES

On February 28, 2019, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and temporarily repairing the pipeline. Due to site access, adverse weather, and poor ground conditions remediation activities were postponed, resuming on April 29, 2019. During the

remediation and corrective action activities West States Energy Contractors, Inc. (West States), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 48 feet long and 31 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 15 feet bgs.

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

A total of approximately 564 cubic yards (yd^3) of petroleum hydrocarbon affected soils were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix B**. The excavation was backfilled with imported fill and then contoured to surrounding grade.

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

4.0 SOIL SAMPLING PROGRAM

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

Ensolum's soil sampling program included the collection of 21 composite soil samples (S-1 through S-21), comprised of five (5) aliquots each, from the remediation area for laboratory analysis. Due to the depth of the excavation, an excavator operated by a West States licensed heavy equipment operator was utilized to obtain fresh aliquots from each area of the excavation. The New Mexico EMNRD OCD provided verbal approval to proceed with the two (2) sampling events, although a New Mexico EMNRD OCD representative was not on-Site during the sampling events.

First Sampling Event
Composite soil samples S-1 (15'), S-2 (15'), S-3 (15'), and S-4 (15') were collected from the floor of the excavation. Composite soil samples S-5 (0'-15'), S-6 (0'-15'), and S-7 (0'-15') were collected from the west sidewall of the excavation and composite soil samples S-8 (0'-15'), S-9 (0'-15'), and S-10 (0'-15') were collected from the east sidewall of the excavation.

Second Sampling Event
Composite soil samples S-12 (0'-15') and S-13 (0'-15') were collected from the south sidewall of the initial excavation. As a result of elevated COC concentrations identified by field analyses, the excavation was extended to the north prior to further sampling. Subsequent to the extension, composite soil samples S-14 (15'), S-15 (15'), and S-16 (15') were collected from the floor of the extended excavation. Composite soil samples S-11 (0'-15'), S-17 (0'-15'), S-18 (0'-15'), S-19 (0'-15'), S-20 (0'-15'), and S-21 (0'-15') were collected from the sidewalls of the extended excavation.

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, 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.

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

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) associated with the composite soil samples (S-1 through S-21) to the applicable New Mexico EMNRD OCD closure criteria.

- 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, which are less than the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).

- The laboratory analytical result for composite soil sample S-7, collected from soils remaining at the Site indicates a total BTEX concentration of 0.061 mg/kg, which does not exceed the New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate total BTEX is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.

- The laboratory analytical result for composite soil sample S-2, collected from soils remaining at the Site, indicates a combined TPH GRO/DRO/MRO concentration of 16 mg/kg, which does not exceed the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical result for composite soil sample S-4, collected from soils remaining at the Site indicates a chloride concentration of 81 mg/kg, which does not exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate chloride is not present in concentrations greater than laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

Laboratory analytical results are summarized in **Table 1** (**Appendix D**).

7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. The release excavation was adjacent to and into the adjacent dirt ranch road. Enterprise will re-seed the Site with an approved seeding mixture if requested by the landowner.

8.0 FINDINGS AND RECOMMENDATION

On February 21, 2019, a release of natural gas and associated pipeline liquids was identified on the Lateral 3C-2 pipeline. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On February 28, 2019, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and temporarily repairing the pipeline. Further remediation activities were postponed due to site access, adverse weather, and poor ground conditions. On April 29, 2019, Enterprise resumed activities to facilitate the repair of the pipeline and remediate petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.

- A total of 21 composite soil samples were collected from the walls and floor of the final excavation for laboratory analysis. Based on soil laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.

- A total of approximately 564 yd^3 of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and then contoured to surrounding grade.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Additional Limitations

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

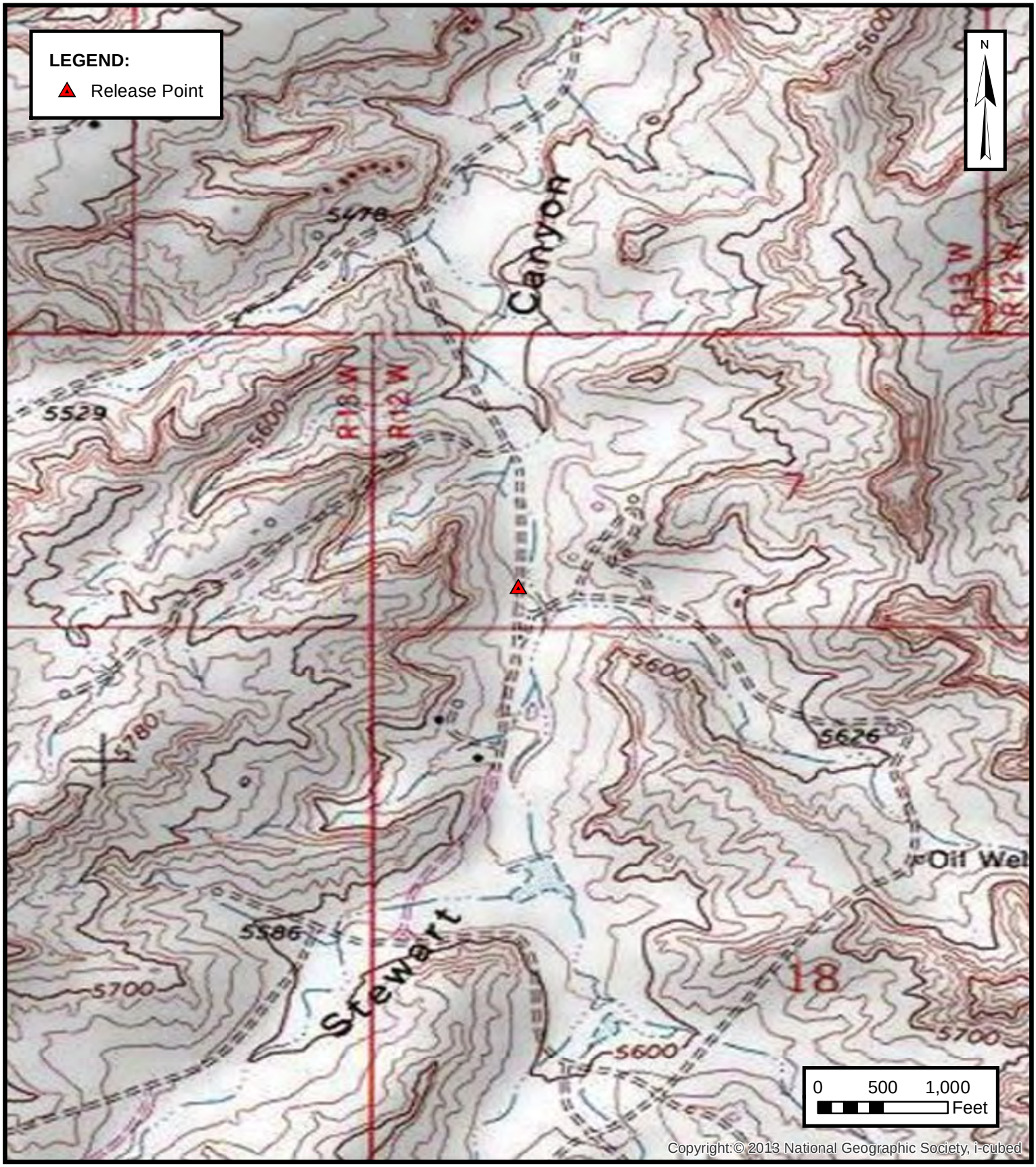
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Products Operating LLC, 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 Enterprise Products Operating LLC 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.

APPENDIX A

Figures



ENSOLUM
Environmental & Hydrogeologic Consultants

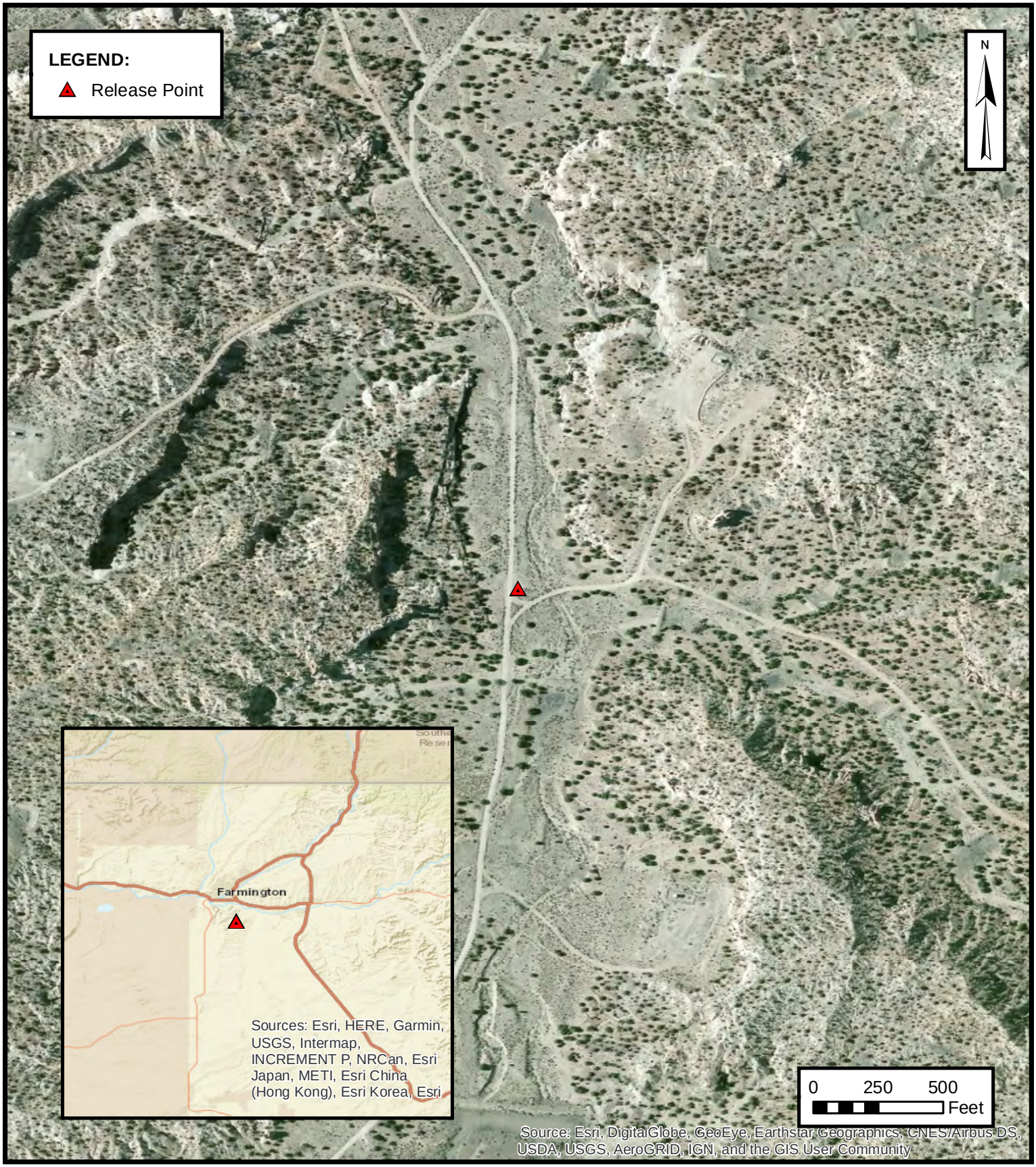
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 3C-2 PIPELINE RELEASE
SW ¼, S7 T28N R12W, San Juan County, New Mexico
36.670267° N, 108.158470° W

PROJECT NUMBER: 05A1226047

FIGURE

1



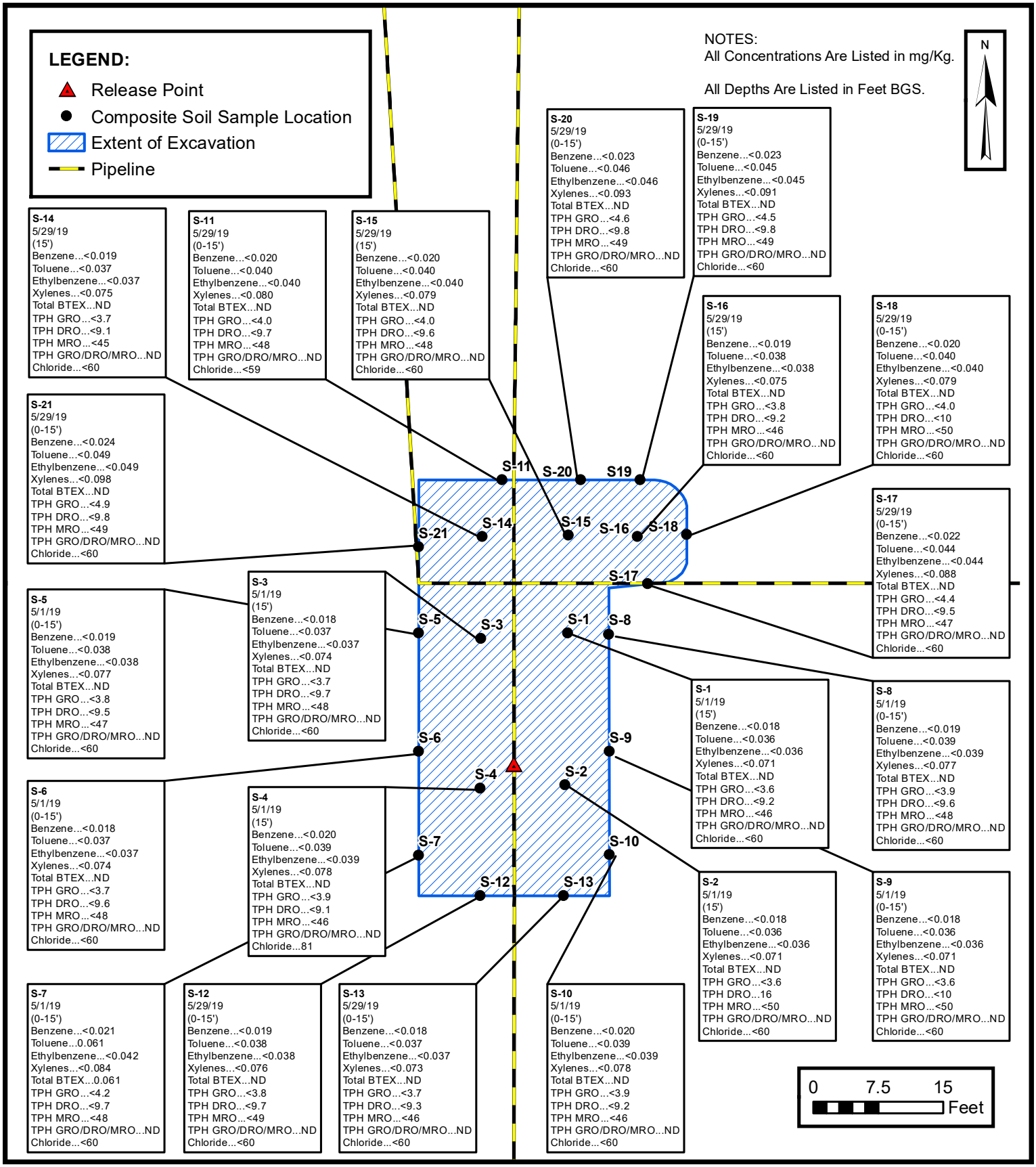
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
LATERAL 3C-2 PIPELINE RELEASE
SW ¼, S7 T28N R12W, San Juan County, New Mexico
36.670267° N, 108.158470° W

PROJECT NUMBER: 05A1226047

FIGURE
2



ENSOLUM
Environmental & Hydrogeologic Consultants

SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
LATERAL 3C-2 PIPELINE RELEASE
SW ¼, S7 T28N R12W, San Juan County, New Mexico
36.670267° N, 108.158470° W

PROJECT NUMBER: 05A1226047

FIGURE
3

APPENDIX B

Executed C-138 Solid Waste Acceptance Form

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

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

97057-1006

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

AFE: N41424
PayKey: RB21200
PM: Aaron Lucero

2. Originating Site:
Lateral 3C-2

3. Location of Material (Street Address, City, State or ULSTR):
UL M Section 7 T28N R12W; 36.670267 -108.158470

April / May 2019

4. Source and Description of Waste: Hydrocarbon impacted soil/sludge.
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.
Estimated Volume 50 (yd³) / bbls Known Volume (to be entered by the operator at the end of the haul) 564 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) 4-29-19, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: ~~PBD~~ ACE, West States, Doug Foutz, HBL

OCD Permitted Surface Waste Management Facility

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

Waste Acceptance Status:

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

PRINT NAME: Greg Crabtree TITLE: Envirn Manager DATE: 4/29/19
SIGNATURE: _____ TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

APPENDIX C

Photographic Documentation

Photograph 1 Photograph Description: View of the release area.	
Photograph 2 Photograph Description: View of the in process excavation activities.	
Photograph 3 Photograph Description: View of the in process excavation activities.	

Photograph 4 Photograph Description: View of the in process excavation activities.	
Photograph 5 Photograph Description: View of the final excavation.	
Photograph 6 Photograph Description: View of the north end of the final excavation.	

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

APPENDIX D

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Lateral 3C-2 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**
Final Confirmation Composite Soil Samples													
S-1	05.01.19	C	15	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<9.2	<46	ND	<60
S-2	05.01.19	C	15	<0.018	<0.036	<0.036	<0.071	ND	<3.6	16	<50	16	<60
S-3	05.01.19	C	15	<0.018	<0.037	<0.037	<0.074	ND	<3.7	<9.7	<48	ND	<60
S-4	05.01.19	C	15	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<9.1	<46	ND	81
S-5	05.01.19	C	0 to 15	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.5	<47	ND	<60
S-6	05.01.19	C	0 to 15	<0.018	<0.037	<0.037	<0.074	ND	<3.7	<9.6	<48	ND	<60
S-7	05.01.19	C	0 to 15	<0.021	0.061	<0.042	<0.084	0.061	<4.2	<9.7	<48	ND	<60
S-8	05.01.19	C	0 to 15	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.6	<48	ND	<60
S-9	05.01.19	C	0 to 15	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<10	<50	ND	<60
S-10	05.01.19	C	0 to 15	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<9.2	<46	ND	<60
S-11	05.29.19	C	0 to 15	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.7	<48	ND	<59
S-12	05.29.19	C	0 to 15	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.7	<49	ND	<60
S-13	05.29.19	C	0 to 15	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<9.3	<46	ND	<60
S-14	05.29.19	C	15	<0.019	<0.037	<0.037	<0.075	ND	<3.7	<9.1	<45	ND	<60
S-15	05.29.19	C	15	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<9.6	<48	ND	<60
S-16	05.29.19	C	15	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.2	<46	ND	<60
S-17	05.29.19	C	0 to 15	<0.022	<0.044	<0.044	<0.088	ND	<4.4	<9.5	<47	ND	<60
S-18	05.29.19	C	0 to 15	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<10	<50	ND	<60
S-19	05.29.19	C	0 to 15	<0.023	<0.045	<0.045	<0.091	ND	<4.5	<9.8	<49	ND	<60
S-20	05.29.19	C	0 to 15	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<9.8	<49	ND	<60
S-21	05.29.19	C	0 to 15	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.8	<49	ND	<60

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

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon

APPENDIX E

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

May 06, 2019

Kyle Summers

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

RE: Lateral 3C-2 OrderNo.: 1905053

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/2/2019 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.

CLIENT: ENSOLUM
Client Sample ID: S-1
Project: Lateral 3C-2
Collection Date: 5/1/2019 1:45:00 PM
Lab ID: 1905053-001
Matrix: SOIL
Received Date: 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 10:51:00 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/2/2019 9:35:19 AM	44673
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/2/2019 9:35:19 AM	44673
Surr: DNOP	97.2	70-130		%Rec	1	5/2/2019 9:35:19 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/2/2019 9:56:41 AM	R59586
Surr: BFB	95.4	73.8-119		%Rec	1	5/2/2019 9:56:41 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	5/2/2019 9:56:41 AM	B59586
Toluene	ND	0.036		mg/Kg	1	5/2/2019 9:56:41 AM	B59586
Ethylbenzene	ND	0.036		mg/Kg	1	5/2/2019 9:56:41 AM	B59586
Xylenes, Total	ND	0.071		mg/Kg	1	5/2/2019 9:56:41 AM	B59586
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	5/2/2019 9:56:41 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-2
Project: Lateral 3C-2
Collection Date: 5/1/2019 1:50:00 PM
Lab ID: 1905053-002 **Matrix:** SOIL **Received Date:** 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 11:03:24 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	16	9.9		mg/Kg	1	5/2/2019 9:57:33 AM	44673
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/2/2019 9:57:33 AM	44673
Surr: DNOP	99.7	70-130		%Rec	1	5/2/2019 9:57:33 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/2/2019 10:20:19 AM	R59586
Surr: BFB	112	73.8-119		%Rec	1	5/2/2019 10:20:19 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	5/2/2019 10:20:19 AM	B59586
Toluene	ND	0.036		mg/Kg	1	5/2/2019 10:20:19 AM	B59586
Ethylbenzene	ND	0.036		mg/Kg	1	5/2/2019 10:20:19 AM	B59586
Xylenes, Total	ND	0.071		mg/Kg	1	5/2/2019 10:20:19 AM	B59586
Surr: 4-Bromofluorobenzene	93.9	80-120		%Rec	1	5/2/2019 10:20:19 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-3
Project: Lateral 3C-2
Collection Date: 5/1/2019 1:55:00 PM
Lab ID: 1905053-003
Matrix: SOIL
Received Date: 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 11:15:49 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/2/2019 10:19:42 AM	44673
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/2/2019 10:19:42 AM	44673
Surr: DNOP	100	70-130		%Rec	1	5/2/2019 10:19:42 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/2/2019 10:44:00 AM	R59586
Surr: BFB	93.6	73.8-119		%Rec	1	5/2/2019 10:44:00 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	5/2/2019 10:44:00 AM	B59586
Toluene	ND	0.037		mg/Kg	1	5/2/2019 10:44:00 AM	B59586
Ethylbenzene	ND	0.037		mg/Kg	1	5/2/2019 10:44:00 AM	B59586
Xylenes, Total	ND	0.074		mg/Kg	1	5/2/2019 10:44:00 AM	B59586
Surr: 4-Bromofluorobenzene	92.5	80-120		%Rec	1	5/2/2019 10:44:00 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-4
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:00:00 PM
Lab ID: 1905053-004 **Matrix:** SOIL **Received Date:** 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	81	60		mg/Kg	20	5/2/2019 11:28:13 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/2/2019 10:41:55 AM	44673
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/2/2019 10:41:55 AM	44673
Surr: DNOP	98.1	70-130		%Rec	1	5/2/2019 10:41:55 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/2/2019 11:07:39 AM	R59586
Surr: BFB	93.0	73.8-119		%Rec	1	5/2/2019 11:07:39 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.020		mg/Kg	1	5/2/2019 11:07:39 AM	B59586
Toluene	ND	0.039		mg/Kg	1	5/2/2019 11:07:39 AM	B59586
Ethylbenzene	ND	0.039		mg/Kg	1	5/2/2019 11:07:39 AM	B59586
Xylenes, Total	ND	0.078		mg/Kg	1	5/2/2019 11:07:39 AM	B59586
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	5/2/2019 11:07:39 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-5
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:08:00 PM
Lab ID: 1905053-005 **Matrix:** SOIL **Received Date:** 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 11:40:37 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/2/2019 11:03:59 AM	44673
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/2/2019 11:03:59 AM	44673
Surr: DNOP	95.7	70-130		%Rec	1	5/2/2019 11:03:59 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/2/2019 11:31:17 AM	R59586
Surr: BFB	91.6	73.8-119		%Rec	1	5/2/2019 11:31:17 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.019		mg/Kg	1	5/2/2019 11:31:17 AM	B59586
Toluene	ND	0.038		mg/Kg	1	5/2/2019 11:31:17 AM	B59586
Ethylbenzene	ND	0.038		mg/Kg	1	5/2/2019 11:31:17 AM	B59586
Xylenes, Total	ND	0.077		mg/Kg	1	5/2/2019 11:31:17 AM	B59586
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	5/2/2019 11:31:17 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-6
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:10:00 PM
Lab ID: 1905053-006 **Matrix:** SOIL **Received Date:** 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 11:53:01 AM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/2/2019 11:16:49 AM	44673
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/2/2019 11:16:49 AM	44673
Surr: DNOP	75.4	70-130		%Rec	1	5/2/2019 11:16:49 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/2/2019 11:54:37 AM	R59586
Surr: BFB	96.1	73.8-119		%Rec	1	5/2/2019 11:54:37 AM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	5/2/2019 11:54:37 AM	B59586
Toluene	ND	0.037		mg/Kg	1	5/2/2019 11:54:37 AM	B59586
Ethylbenzene	ND	0.037		mg/Kg	1	5/2/2019 11:54:37 AM	B59586
Xylenes, Total	ND	0.074		mg/Kg	1	5/2/2019 11:54:37 AM	B59586
Surr: 4-Bromofluorobenzene	93.1	80-120		%Rec	1	5/2/2019 11:54:37 AM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-7
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:15:00 PM
Lab ID: 1905053-007
Matrix: SOIL
Received Date: 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 12:05:25 PM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/2/2019 10:52:24 AM	44673
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/2/2019 10:52:24 AM	44673
Surr: DNOP	75.0	70-130		%Rec	1	5/2/2019 10:52:24 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	5/2/2019 12:18:00 PM	R59586
Surr: BFB	93.8	73.8-119		%Rec	1	5/2/2019 12:18:00 PM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.021		mg/Kg	1	5/2/2019 12:18:00 PM	B59586
Toluene	0.061	0.042		mg/Kg	1	5/2/2019 12:18:00 PM	B59586
Ethylbenzene	ND	0.042		mg/Kg	1	5/2/2019 12:18:00 PM	B59586
Xylenes, Total	ND	0.084		mg/Kg	1	5/2/2019 12:18:00 PM	B59586
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	5/2/2019 12:18:00 PM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-8
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:20:00 PM
Lab ID: 1905053-008
Matrix: SOIL
Received Date: 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 12:17:50 PM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/2/2019 10:28:11 AM	44673
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/2/2019 10:28:11 AM	44673
Surr: DNOP	75.5	70-130		%Rec	1	5/2/2019 10:28:11 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/2/2019 12:41:27 PM	R59586
Surr: BFB	101	73.8-119		%Rec	1	5/2/2019 12:41:27 PM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.019		mg/Kg	1	5/2/2019 12:41:27 PM	B59586
Toluene	ND	0.039		mg/Kg	1	5/2/2019 12:41:27 PM	B59586
Ethylbenzene	ND	0.039		mg/Kg	1	5/2/2019 12:41:27 PM	B59586
Xylenes, Total	ND	0.077		mg/Kg	1	5/2/2019 12:41:27 PM	B59586
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/2/2019 12:41:27 PM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-9
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:25:00 PM
Lab ID: 1905053-009 **Matrix:** SOIL **Received Date:** 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 12:55:03 PM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/2/2019 10:03:45 AM	44673
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/2/2019 10:03:45 AM	44673
Surr: DNOP	75.5	70-130		%Rec	1	5/2/2019 10:03:45 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	5/2/2019 1:05:02 PM	R59586
Surr: BFB	93.7	73.8-119		%Rec	1	5/2/2019 1:05:02 PM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.018		mg/Kg	1	5/2/2019 1:05:02 PM	B59586
Toluene	ND	0.036		mg/Kg	1	5/2/2019 1:05:02 PM	B59586
Ethylbenzene	ND	0.036		mg/Kg	1	5/2/2019 1:05:02 PM	B59586
Xylenes, Total	ND	0.071		mg/Kg	1	5/2/2019 1:05:02 PM	B59586
Surr: 4-Bromofluorobenzene	93.7	80-120		%Rec	1	5/2/2019 1:05:02 PM	B59586

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.

CLIENT: ENSOLUM
Client Sample ID: S-10
Project: Lateral 3C-2
Collection Date: 5/1/2019 2:30:00 PM
Lab ID: 1905053-010
Matrix: SOIL
Received Date: 5/2/2019 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/2/2019 1:07:28 PM	44678
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/2/2019 9:39:24 AM	44673
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/2/2019 9:39:24 AM	44673
Surr: DNOP	75.5	70-130		%Rec	1	5/2/2019 9:39:24 AM	44673
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	5/2/2019 1:28:25 PM	R59586
Surr: BFB	93.6	73.8-119		%Rec	1	5/2/2019 1:28:25 PM	R59586
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**	
Benzene	ND	0.020		mg/Kg	1	5/2/2019 1:28:25 PM	B59586
Toluene	ND	0.039		mg/Kg	1	5/2/2019 1:28:25 PM	B59586
Ethylbenzene	ND	0.039		mg/Kg	1	5/2/2019 1:28:25 PM	B59586
Xylenes, Total	ND	0.078		mg/Kg	1	5/2/2019 1:28:25 PM	B59586
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	5/2/2019 1:28:25 PM	B59586

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#: **1905053**

06-May-19

Client: ENSOLUM

Project: Lateral 3C-2

Sample ID: **MB-44678**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **44678**	RunNo: **59589**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2009347** Units: **mg/Kg**

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

Sample ID: **LCS-44678**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **44678**	RunNo: **59589**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2009348** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.6	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#: **1905053**

06-May-19

Client: ENSOLUM

Project: Lateral 3C-2

Sample ID: **LCS-44673**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **44673**	RunNo: **59575**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2007470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	101	63.9	124			
Surr: DNOP	4.6		5.000		91.2	70	130			

Sample ID: **MB-44673**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **44673**	RunNo: **59575**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2007472** 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	9.7		10.00		97.0	70	130			

Sample ID: **1905053-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1**	Batch ID: **44673**	RunNo: **59575**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2008042** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.5	47.66	0	100	53.5	126			
Surr: DNOP	4.3		4.766		89.2	70	130			

Sample ID: **1905053-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-1**	Batch ID: **44673**	RunNo: **59575**
Prep Date: **5/2/2019**	Analysis Date: **5/2/2019**	SeqNo: **2008043** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.9	49.50	0	104	53.5	126	7.50	21.7	
Surr: DNOP	4.6		4.950		93.1	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905053**

06-May-19

Client: ENSOLUM

Project: Lateral 3C-2

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **R59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2008261** 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	99.0	80.1	123			
Surr: BFB	1100		1000		110	73.8	119			

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

Client ID: **PBS** Batch ID: **R59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2008262** 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	980		1000		98.4	73.8	119			

Sample ID: **1905053-001A MS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-1** Batch ID: **R59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2009441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.6	17.78	0	91.6	69.1	142			
Surr: BFB	740		711.2		104	73.8	119			

Sample ID: **1905053-001A MSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **S-1** Batch ID: **R59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2009442** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.6	17.78	0	89.4	69.1	142	2.34	20	
Surr: BFB	710		711.2		99.8	73.8	119	0	0	

Sample ID: **LCS-44653** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **LCSS** Batch ID: **44653** RunNo: **59586**

Prep Date: **5/1/2019** Analysis Date: **5/2/2019** SeqNo: **2009443** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	73.8	119			

Sample ID: **MB-44653** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**

Client ID: **PBS** Batch ID: **44653** RunNo: **59586**

Prep Date: **5/1/2019** Analysis Date: **5/2/2019** SeqNo: **2009444** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	890		1000		89.4	73.8	119			

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#: **1905053**

06-May-19

Client: ENSOLUM

Project: Lateral 3C-2

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

Client ID: **LCSS** Batch ID: **B59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2008295** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.8	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.7	80	120			

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

Client ID: **PBS** Batch ID: **B59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2008306** 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	0.97		1.000		97.4	80	120			

Sample ID: **1905053-002A MS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-2** Batch ID: **B59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2009468** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.66	0.018	0.7133	0.007561	91.2	63.9	127			
Toluene	0.69	0.036	0.7133	0.01733	94.2	69.9	131			
Ethylbenzene	0.69	0.036	0.7133	0.01270	94.9	71	132			
Xylenes, Total	2.1	0.071	2.140	0.05913	96.5	71.8	131			
Surr: 4-Bromofluorobenzene	0.69		0.7133		96.5	80	120			

Sample ID: **1905053-002A MSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **S-2** Batch ID: **B59586** RunNo: **59586**

Prep Date: Analysis Date: **5/2/2019** SeqNo: **2009469** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.018	0.7133	0.007561	88.6	63.9	127	2.91	20	
Toluene	0.66	0.036	0.7133	0.01733	90.7	69.9	131	3.68	20	
Ethylbenzene	0.67	0.036	0.7133	0.01270	91.9	71	132	3.23	20	
Xylenes, Total	2.1	0.071	2.140	0.05913	93.3	71.8	131	3.21	20	
Surr: 4-Bromofluorobenzene	0.65		0.7133		91.7	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905053**

06-May-19

Client: ENSOLUM

Project: Lateral 3C-2

Sample ID: **LCS-44653**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **44653**	RunNo: **59586**
Prep Date: **5/1/2019**	Analysis Date: **5/2/2019**	SeqNo: **2009470** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		91.8	80	120			

Sample ID: **MB-44653**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **44653**	RunNo: **59586**
Prep Date: **5/1/2019**	Analysis Date: **5/2/2019**	SeqNo: **2009471** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	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: 1905053 RcptNo: 1

10 5C 5-2-19

Received By: Yazmine Garduno 5/2/2019 8:15:00 AM

Completed By: Anne Thorne 5/2/2019 8:36:16 AM

Reviewed By: YG 5/2/19

Labeled by: AT 05/02/19

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: _____

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 5/2/19

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			
2	0.9	Good	Yes			
3	0.6	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 6016 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: 5/2/19
☐ Standard ☒ Rush 100%

Project Name: Lateral 3C-2

Project #: 05A1226047

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 3
Cooler Temp(including CF): 4.1°, 0.9°, 0.6°

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. 1905053	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
5/1/19	1345	S	S-1	~~Mason Jar~~ 1 4oz Jar	cool	201	X	X									X
5/1/19	1350	S	S-2	1 4oz Jar	cool	202	X	X									X
5/1/19	1355	S	S-3	1 4oz Jar	cool	203	X	X									X
5/1/19	1400	S	S-4	1 4oz Jar	cool	204	X	X									X
5/1/19	1405	S	S-5	1 4oz Jar	cool	205	X	X									X
5/1/19	1410	S	S-6	1 4oz Jar	cool	206	X	X									X
5/1/19	1415	S	S-7	1 4oz Jar	cool	207	X	X									X
5/1/19	1420	S	S-8	1 4oz Jar	cool	208	X	X									X
5/1/19	1425	S	S-9	1 4oz Jar	cool	209	X	X									X
5/1/19	1430	S	S-10	1 4oz Jar	cool	210	X	X									X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
5/1/19	1652				5/1/19	1652
5/1/19	1847			Courier	5/2/19	8:10

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

SAME DAY

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

June 03, 2019

Kyle Summers

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

RE: Lateral 3C 2 OrderNo.: 1905D87

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 11 sample(s) on 5/30/2019 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.

CLIENT: ENSOLUM
Client Sample ID: S-11
Project: Lateral 3C 2
Collection Date: 5/29/2019 8:30:00 AM
Lab ID: 1905D87-001
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	59		mg/Kg	20	5/30/2019 10:29:52 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/30/2019 9:50:13 AM	45265
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/30/2019 9:50:13 AM	45265
Surr: DNOP	98.7	70-130		%Rec	1	5/30/2019 9:50:13 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	5/30/2019 9:36:34 AM	45242
Surr: BFB	102	73.8-119		%Rec	1	5/30/2019 9:36:34 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	5/30/2019 9:36:34 AM	45242
Toluene	ND	0.040		mg/Kg	1	5/30/2019 9:36:34 AM	45242
Ethylbenzene	ND	0.040		mg/Kg	1	5/30/2019 9:36:34 AM	45242
Xylenes, Total	ND	0.080		mg/Kg	1	5/30/2019 9:36:34 AM	45242
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	1	5/30/2019 9:36:34 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-12
Project: Lateral 3C 2
Collection Date: 5/29/2019 9:30:00 AM
Lab ID: 1905D87-002
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 10:42:17 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/30/2019 10:12:10 AM	45265
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/30/2019 10:12:10 AM	45265
Surr: DNOP	99.4	70-130		%Rec	1	5/30/2019 10:12:10 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/30/2019 9:59:17 AM	45242
Surr: BFB	89.7	73.8-119		%Rec	1	5/30/2019 9:59:17 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/30/2019 9:59:17 AM	45242
Toluene	ND	0.038		mg/Kg	1	5/30/2019 9:59:17 AM	45242
Ethylbenzene	ND	0.038		mg/Kg	1	5/30/2019 9:59:17 AM	45242
Xylenes, Total	ND	0.076		mg/Kg	1	5/30/2019 9:59:17 AM	45242
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	5/30/2019 9:59:17 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-13
Project: Lateral 3C 2
Collection Date: 5/29/2019 9:35:00 AM
Lab ID: 1905D87-003
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 10:54:42 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/30/2019 10:34:13 AM	45265
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/30/2019 10:34:13 AM	45265
Surr: DNOP	100	70-130		%Rec	1	5/30/2019 10:34:13 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/30/2019 10:22:04 AM	45242
Surr: BFB	89.6	73.8-119		%Rec	1	5/30/2019 10:22:04 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.018		mg/Kg	1	5/30/2019 10:22:04 AM	45242
Toluene	ND	0.037		mg/Kg	1	5/30/2019 10:22:04 AM	45242
Ethylbenzene	ND	0.037		mg/Kg	1	5/30/2019 10:22:04 AM	45242
Xylenes, Total	ND	0.073		mg/Kg	1	5/30/2019 10:22:04 AM	45242
Surr: 4-Bromofluorobenzene	95.3	80-120		%Rec	1	5/30/2019 10:22:04 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-14
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:05:00 AM
Lab ID: 1905D87-004
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 11:07:06 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	5/30/2019 10:56:22 AM	45265
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	5/30/2019 10:56:22 AM	45265
Surr: DNOP	100	70-130		%Rec	1	5/30/2019 10:56:22 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	5/30/2019 10:44:51 AM	45242
Surr: BFB	91.3	73.8-119		%Rec	1	5/30/2019 10:44:51 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/30/2019 10:44:51 AM	45242
Toluene	ND	0.037		mg/Kg	1	5/30/2019 10:44:51 AM	45242
Ethylbenzene	ND	0.037		mg/Kg	1	5/30/2019 10:44:51 AM	45242
Xylenes, Total	ND	0.075		mg/Kg	1	5/30/2019 10:44:51 AM	45242
Surr: 4-Bromofluorobenzene	95.7	80-120		%Rec	1	5/30/2019 10:44:51 AM	45242

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.

CLIENT: ENSOLUM
Client Sample ID: S-15
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:10:00 AM
Lab ID: 1905D87-005
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 11:19:31 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	5/30/2019 11:18:28 AM	45265
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/30/2019 11:18:28 AM	45265
Surr: DNOP	102	70-130		%Rec	1	5/30/2019 11:18:28 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	5/30/2019 11:07:29 AM	45242
Surr: BFB	92.7	73.8-119		%Rec	1	5/30/2019 11:07:29 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	5/30/2019 11:07:29 AM	45242
Toluene	ND	0.040		mg/Kg	1	5/30/2019 11:07:29 AM	45242
Ethylbenzene	ND	0.040		mg/Kg	1	5/30/2019 11:07:29 AM	45242
Xylenes, Total	ND	0.079		mg/Kg	1	5/30/2019 11:07:29 AM	45242
Surr: 4-Bromofluorobenzene	98.2	80-120		%Rec	1	5/30/2019 11:07:29 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-16
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:15:00 AM
Lab ID: 1905D87-006
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 11:31:55 AM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	5/30/2019 11:40:20 AM	45265
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/30/2019 11:40:20 AM	45265
Surr: DNOP	102	70-130		%Rec	1	5/30/2019 11:40:20 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/30/2019 11:30:08 AM	45242
Surr: BFB	91.0	73.8-119		%Rec	1	5/30/2019 11:30:08 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.019		mg/Kg	1	5/30/2019 11:30:08 AM	45242
Toluene	ND	0.038		mg/Kg	1	5/30/2019 11:30:08 AM	45242
Ethylbenzene	ND	0.038		mg/Kg	1	5/30/2019 11:30:08 AM	45242
Xylenes, Total	ND	0.075		mg/Kg	1	5/30/2019 11:30:08 AM	45242
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	1	5/30/2019 11:30:08 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-17
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:20:00 AM
Lab ID: 1905D87-007
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 12:09:08 PM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	5/30/2019 12:39:01 PM	45265
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/30/2019 12:39:01 PM	45265
Surr: DNOP	107	70-130		%Rec	1	5/30/2019 12:39:01 PM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	5/30/2019 11:52:48 AM	45242
Surr: BFB	89.6	73.8-119		%Rec	1	5/30/2019 11:52:48 AM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	5/30/2019 11:52:48 AM	45242
Toluene	ND	0.044		mg/Kg	1	5/30/2019 11:52:48 AM	45242
Ethylbenzene	ND	0.044		mg/Kg	1	5/30/2019 11:52:48 AM	45242
Xylenes, Total	ND	0.088		mg/Kg	1	5/30/2019 11:52:48 AM	45242
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	5/30/2019 11:52:48 AM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-18
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:25:00 AM
Lab ID: 1905D87-008
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 12:21:33 PM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/30/2019 12:14:38 PM	45265
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/30/2019 12:14:38 PM	45265
Surr: DNOP	108	70-130		%Rec	1	5/30/2019 12:14:38 PM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	5/30/2019 12:15:28 PM	45242
Surr: BFB	93.3	73.8-119		%Rec	1	5/30/2019 12:15:28 PM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.020		mg/Kg	1	5/30/2019 12:15:28 PM	45242
Toluene	ND	0.040		mg/Kg	1	5/30/2019 12:15:28 PM	45242
Ethylbenzene	ND	0.040		mg/Kg	1	5/30/2019 12:15:28 PM	45242
Xylenes, Total	ND	0.079		mg/Kg	1	5/30/2019 12:15:28 PM	45242
Surr: 4-Bromofluorobenzene	97.4	80-120		%Rec	1	5/30/2019 12:15:28 PM	45242

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.

CLIENT: ENSOLUM
Client Sample ID: S-19
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:30:00 AM
Lab ID: 1905D87-009
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 12:33:57 PM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/30/2019 11:50:10 AM	45265
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/30/2019 11:50:10 AM	45265
Surr: DNOP	105	70-130		%Rec	1	5/30/2019 11:50:10 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	5/30/2019 12:38:08 PM	45242
Surr: BFB	91.3	73.8-119		%Rec	1	5/30/2019 12:38:08 PM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/30/2019 12:38:08 PM	45242
Toluene	ND	0.045		mg/Kg	1	5/30/2019 12:38:08 PM	45242
Ethylbenzene	ND	0.045		mg/Kg	1	5/30/2019 12:38:08 PM	45242
Xylenes, Total	ND	0.091		mg/Kg	1	5/30/2019 12:38:08 PM	45242
Surr: 4-Bromofluorobenzene	96.0	80-120		%Rec	1	5/30/2019 12:38:08 PM	45242

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.

CLIENT: ENSOLUM
Client Sample ID: S-20
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:35:00 AM
Lab ID: 1905D87-010
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 12:46:21 PM	45269
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/30/2019 11:25:45 AM	45265
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/30/2019 11:25:45 AM	45265
Surr: DNOP	108	70-130		%Rec	1	5/30/2019 11:25:45 AM	45265
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/30/2019 1:00:47 PM	45242
Surr: BFB	92.2	73.8-119		%Rec	1	5/30/2019 1:00:47 PM	45242
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	5/30/2019 1:00:47 PM	45242
Toluene	ND	0.046		mg/Kg	1	5/30/2019 1:00:47 PM	45242
Ethylbenzene	ND	0.046		mg/Kg	1	5/30/2019 1:00:47 PM	45242
Xylenes, Total	ND	0.093		mg/Kg	1	5/30/2019 1:00:47 PM	45242
Surr: 4-Bromofluorobenzene	96.2	80-120		%Rec	1	5/30/2019 1:00:47 PM	45242

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

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: S-21
Project: Lateral 3C 2
Collection Date: 5/29/2019 10:40:00 AM
Lab ID: 1905D87-011
Matrix: SOIL
Received Date: 5/30/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	ND	60		mg/Kg	20	5/30/2019 12:58:45 PM	45269
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: **RAA**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/30/2019 12:26:41 PM	G60275
Surr: BFB	97.0	70-130		%Rec	1	5/30/2019 12:26:41 PM	G60275
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/30/2019 10:12:17 AM	45265
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/30/2019 10:12:17 AM	45265
Surr: DNOP	112	70-130		%Rec	1	5/30/2019 10:12:17 AM	45265
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: **RAA**	
Benzene	ND	0.024		mg/Kg	1	5/30/2019 12:26:41 PM	SL60275
Toluene	ND	0.049		mg/Kg	1	5/30/2019 12:26:41 PM	SL60275
Ethylbenzene	ND	0.049		mg/Kg	1	5/30/2019 12:26:41 PM	SL60275
Xylenes, Total	ND	0.098		mg/Kg	1	5/30/2019 12:26:41 PM	SL60275
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%Rec	1	5/30/2019 12:26:41 PM	SL60275
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	5/30/2019 12:26:41 PM	SL60275
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/30/2019 12:26:41 PM	SL60275
Surr: Toluene-d8	83.4	70-130		%Rec	1	5/30/2019 12:26:41 PM	SL60275

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#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID	**MB-45269**	SampType:	**MBLK**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**45269**	RunNo:	**60279**					
Prep Date:	**5/30/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2038208**	Units:	**mg/Kg**			

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

Sample ID	**LCS-45269**	SampType:	**LCS**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**45269**	RunNo:	**60279**					
Prep Date:	**5/30/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2038209**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	99.1	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#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID **LCS-45265**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45265**	RunNo: **60253**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2036201** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	63.9	124			
Surr: DNOP	4.5		5.000		90.7	70	130			

Sample ID **MB-45265**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45265**	RunNo: **60253**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2036212** 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	9.8		10.00		97.5	70	130			

Sample ID **LCS-45237**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **45237**	RunNo: **60254**
Prep Date: **5/29/2019**	Analysis Date: **5/30/2019**	SeqNo: **2036242** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		93.1	70	130			

Sample ID **MB-45237**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **45237**	RunNo: **60254**
Prep Date: **5/29/2019**	Analysis Date: **5/30/2019**	SeqNo: **2036243** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.7	70	130			

Sample ID **1905D87-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-11**	Batch ID: **45265**	RunNo: **60253**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2036835** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.5	47.35	2.380	90.1	53.5	126			
Surr: DNOP	4.3		4.735		90.6	70	130			

Sample ID **1905D87-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **S-11**	Batch ID: **45265**	RunNo: **60253**
Prep Date: **5/30/2019**	Analysis Date: **5/30/2019**	SeqNo: **2037650** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.6	47.94	2.380	96.9	53.5	126	8.13	21.7	

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#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID	**1905D87-001AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**
Client ID:	**S-11**	Batch ID:	**45265**	RunNo:	**60253**
Prep Date:	**5/30/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037650** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		4.794		97.0	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID	**MB-45242**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**45242**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037655**	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	900		1000		90.2	73.8	119			

Sample ID	**LCS-45242**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**45242**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037656**	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	90.7	80.1	123			
Surr: BFB	1000		1000		101	73.8	119			

Sample ID	**MB-45234**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**45234**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037664**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		91.7	73.8	119			

Sample ID	**LCS-45234**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**45234**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037665**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	73.8	119			

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#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID	**MB-45242**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**45242**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037690**	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	0.97		1.000		96.8	80	120			

Sample ID	**LCS-45242**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**45242**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037691**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	105	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID	**MB-45234**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**45234**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037697**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		97.3	80	120			

Sample ID	**LCS-45234**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**45234**	RunNo:	**60276**					
Prep Date:	**5/29/2019**	Analysis Date:	**5/30/2019**	SeqNo:	**2037698**	Units:	**%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		103	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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1905D87**
03-Jun-19

Client: ENSOLUM
Project: Lateral 3C 2

Sample ID **100ng lcs**	SampType: **LCS**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **LCSS**	Batch ID: **SL60275**	RunNo: **60275**
Prep Date:	Analysis Date: **5/30/2019**	SeqNo: **2036859** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.7	70	130			
Toluene	0.96	0.050	1.000	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	0.40		0.5000		81.0	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.4	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		93.2	70	130			
Surr: Toluene-d8	0.43		0.5000		85.8	70	130			

Sample ID **rb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: Volatiles Short List**
Client ID: **PBS**	Batch ID: **SL60275**	RunNo: **60275**
Prep Date:	Analysis Date: **5/30/2019**	SeqNo: **2036863** 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	0.41		0.5000		81.5	70	130			
Surr: 4-Bromofluorobenzene	0.44		0.5000		88.5	70	130			
Surr: Dibromofluoromethane	0.47		0.5000		94.9	70	130			
Surr: Toluene-d8	0.42		0.5000		84.6	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#: **1905D87**

03-Jun-19

Client: ENSOLUM

Project: Lateral 3C 2

Sample ID	**2.5ug gro lcs**	SampType:	**LCS**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**G60275**		RunNo:	**60275**				
Prep Date:		Analysis Date:	**5/30/2019**		SeqNo:	**2036868**	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	101	70	130			
Surr: BFB	490		500.0		99.0	70	130			

Sample ID	**rb**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D Mod: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**G60275**		RunNo:	**60275**				
Prep Date:		Analysis Date:	**5/30/2019**		SeqNo:	**2036869**	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	480		500.0		96.9	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		

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: **1905D87** RcptNo: **1**

Received By: **Anne Thorne** 5/30/2019 8:00:00 AM Anne Thorne

Completed By: **Anne Thorne** 5/30/2019 8:20:17 AM Anne Thorne

Reviewed By: ENM 5/30/19

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: AT 05/30/19 (<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

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 5/30/19

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good	Yes			
2	2.6	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:
☐ Standard ☒ Rush 5/30/19 100%

Project Name: Lateral 3C-2

Project #: 05A1226047

Project Manager: KSummers

Sampler: RDeechilly
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 3.4+0.2CF = 3.6°C
~~AT 05/30/19~~ 2.4+0.2CF = 2.6°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. 1905D87	BTEX / ~~MTBE / TMBs~~ (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
5/29/19	0830	S	S-11	MeOH Vial 1 4oz Jar	cool	001	X	X									X
5/29/19	930	S	S-12	1 4oz Jar	cool	002	X	X									X
5/29/19	935	S	S-13	1 4oz Jar	cool	003	X	X									X
5/29/19	1005	S	S-14	1 4oz Jar	cool	004	X	X									X
5/29/19	1010	S	S-15	1 4oz Jar	cool	005	X	X									X
5/29/19	1015	S	S-16	1 4oz Jar	cool	006	X	X									X
5/29/19	1020	S	S-17	1 4oz Jar	cool	007	X	X									X
5/29/19	1025	S	S-18	1 4oz Jar	cool	008	X	X									X
5/29/19	1030	S	S-19	1 4oz Jar	cool	009	X	X									X
5/29/19	1035	S	S-20	1 4oz Jar	cool	010	X	X									X
5/29/19	1040	S	S-21	1 4oz Jar	cool	011	X	X									X

Date	Time	Relinquished by	Received by	Via	Date	Time
5/29/19	1411		Christy Walters		5/29/19	1411
5/29/19	1819	Christy Walters			05/30/19	0800

Remarks: PM - Tom Long (EPROD)
PAY KEY - RB21200
SAMEDAY

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.