

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	NCS1916854049
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 151618
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email: tjlong@eprod.com	Incident # (assigned by OCD): NCS1916854049
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.91645** Longitude **-107.69799** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Oxnard #334S Pipeline	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 5/3/2019	Serial Number (if applicable): NM 108646

Unit Letter	Section	Township	Range	County
B	8	31N	8W	San Juan

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

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): 5-7 BBLS	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 7.73 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On May 3, 2019, an Enterprise technician discovered a release of natural gas on the Oxnard #334S pipeline. The pipeline was isolated, depressurized, locked out and tagged out. There were no fluids observed on the ground surface. Enterprise determined this release was required to be remediated to the most stringent NMOCD remediation standard (10 ppm Benzene, 50 ppm BTEX, 100 ppm TPH and 600 ppm Chloride). Repairs and remediation were completed on June 12, 2019. The final excavation dimensions measured approximately 53 feet long by 25 feet wide by approximately 11 feet deep. Approximately 190 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.

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: 

Date: 10/28/19

email: jefields@eprod.com

Telephone: (713) 381-6684

OCD Only

Received by: OCD

Date: 10/31/19

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: 

Date: 1/2/20

Printed Name: Cory

Title: Environmental Specialist



CLOSURE REPORT

Property:

**Oxnard #334S Pipeline Release
NW ¼, S8 T31N R8W
San Juan County, New Mexico**

September 30, 2019
Ensolum Project No. 05A1226057

Prepared for:

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

Prepared by:

Ranee DeeChilly
Environmental Scientist

Kyle Summers, CPG
Sr. Project Manager

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CLOSURE REPORT

**Oxnard #334S Pipeline Release
NW ¼, S8 T31N R8W
San Juan County, New Mexico**

Ensolum Project No. 05A1226057

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Oxnard #334S Pipeline Release (Site)
Location:	36.91649° North, 107.69862° West Northwest (NW) ¼ of Section 8, Township 31 North, Range 8 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On May 3, 2019, a release of natural gas was identified on the Oxnard #334S pipeline. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On May 4, 2019, Enterprise initiated 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 oil and gas release 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.
- Four (4) cathodic-protection wells were identified within one-half mile of the Site. The shallowest water recorded for a cathodic well was 60 feet below grade surface (bgs) at the Blanco #8 MV (Unit

N, Sec 5 T31N R8W), which is approximately 0.4 miles from the Site. The closest cathodic well (Oxnard #1A (Unit C, Sec 8 T31N R8W)) records indicate a depth to water of 300 feet bgs, at approximately 0.1 miles from the Site. Records for the remaining cathodic wells (Blanco #330 (Unit N, Sec 5 T31N R8W) and Oxnard #333 and Oxnard #3 (Unit H, Sec 8 T31N R8W)) within 0.5 miles of the Site indicate water depths of 80 feet bgs or greater.

- 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 May 4, 2019, Enterprise initiated activities to facilitate the repair of the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities OFT Construction, Inc. (OFT), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 53 feet long and 25 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 11 feet bgs.

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

A total of approximately 190 cubic yards of petroleum hydrocarbon affected soils and weathered sandstone 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 a combination of imported fill and the segregated, laboratory-confirmed, unaffected stockpiled soils associated with stockpiled soil sample SP-2 and was 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 18 composite soil samples (S-1 through S-18), comprised of five (5) aliquots each, from the excavation for laboratory analysis. In addition, two (2) stockpiled soil samples (SP-1 and SP-2), consisting of five (5) aliquots each, were collected from the soils that were segregated for potential reuse to confirm the material was suitable to remain on-Site. A clean shovel was utilized to obtain fresh aliquots from each accessible area of the excavation. An excavator, operated by OFT, was utilized to obtain fresh aliquots from areas of the excavation that exceeded depths greater than six (6) feet bgs. The New Mexico EMNRD OCD provided verbal approval to proceed with the sampling event, although a New Mexico EMNRD OCD representative was not on-Site during the sampling activities.

First Sampling Event

The initial pipeline repair excavation was sampled during the first sampling event to evaluate petroleum hydrocarbon impact. Composite soil samples S-1 (0'-7.5'), S-2 (0'-7.5'), S-3 (0'-7.5'), S-4 (0'-6'), S-5 (0'-6'), and S-6 (0'-6') were collected from the sidewalls of the initial repair excavation. Composite soil samples S-7 (6.5'), S-8 (6.5'), and S-9 (6.5') were collected from the floor of the excavation. Analytical results from composite soil samples S-5 (sidewall) and S-8 (floor) from the initial repair excavation indicated New Mexico EMNRD OCD closure standard exceedances. In response to the data exceedances, the excavation was extended to remove petroleum hydrocarbon impact. Soils associated with composite soil samples S-5 and S-8 were removed by excavation and transported to the landfarm for disposal/remediation. Additionally, stockpiled soils associated with sample SP-2 were also transported to the landfarm for disposal/remediation.

Second Sampling Event

After the excavation was deepened and extended, a second sampling event was performed. Composite soil samples S-10 (0'-6'), S-11 (0'-9'), S-13 (6'-9') and S-14 (7.5' to 10.5') were collected from the sidewall and floor of the extended excavation to replace composite soil samples S-5 and S-8 which had exhibited closure standard exceedances and were removed by excavation. Composite soil samples S-12 (0'-9'), S-15 (0'-10.5'), and S-16 (0'-10.5') were collected from unaffected sidewalls in areas that had been extended to accommodate access to the deeper excavation. Subsequent analytical results from composite soil

sample S-13 indicated a combined TPH GRO/DRO/MRO New Mexico EMNRD OCD closure standard exceedance.

Third Sampling Event

The floor and short sidewalls beneath the pipeline were excavated and composite soil samples S-17 (9'-11') and S-18 (9'-11') were collected from the floor and sidewall of the extended excavation to replace previous floor and sidewall composite soil sample S-13 which had exhibited a closure standard exceedance and was removed by excavation and transported to landfarm for disposal/remediation.

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-4, S-6, S-7, S-9 through S-12, S-14 through S-18 and SP-2) to the applicable New Mexico EMNRD OCD closure criteria. Soils associated with composite soil samples S-5, S-8, S-13 and SP-1 were transported to Envirotech landfarm for disposal/remediation and are not included in the following discussion.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate benzene is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate total BTEX is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO 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 results for the 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 a combination of imported fill and the segregated, laboratory-confirmed, unaffected stockpiled soils associated with stockpiled soil sample SP-2 and was then contoured to the surrounding grade. Enterprise will re-seed the Site with a BLM Farmington Field Office approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

On May 3, 2019, a release of natural gas was identified on the Oxnard #334S pipeline. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On May 4, 2019, Enterprise initiated 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 20 composite soil samples were collected from the walls and floor of the final excavation and stockpiled soils 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 190 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with a combination of imported fill and the segregated, laboratory-confirmed, unaffected stockpiled soils, and was then contoured to surrounding grade.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Additional Limitations

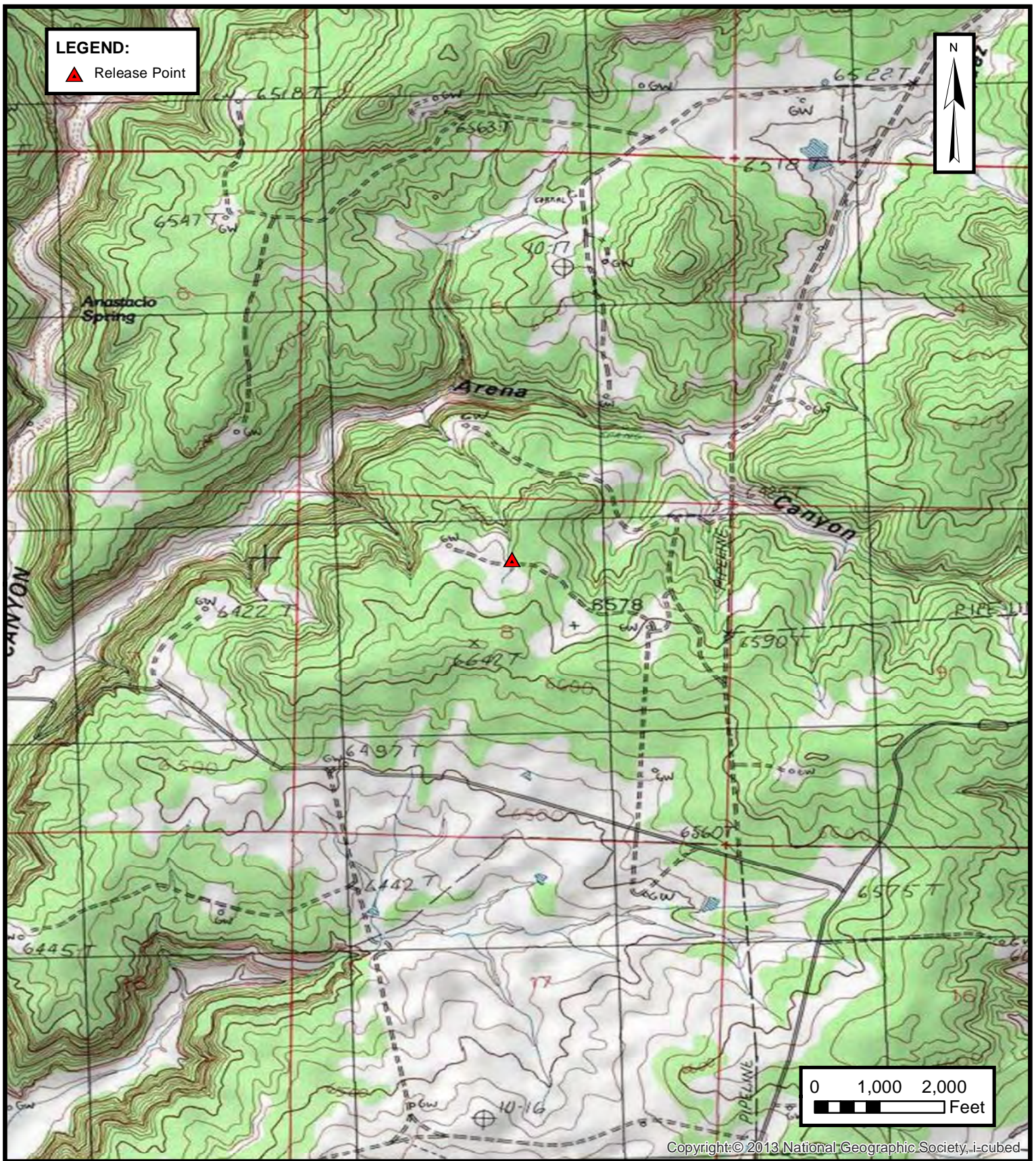
Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence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

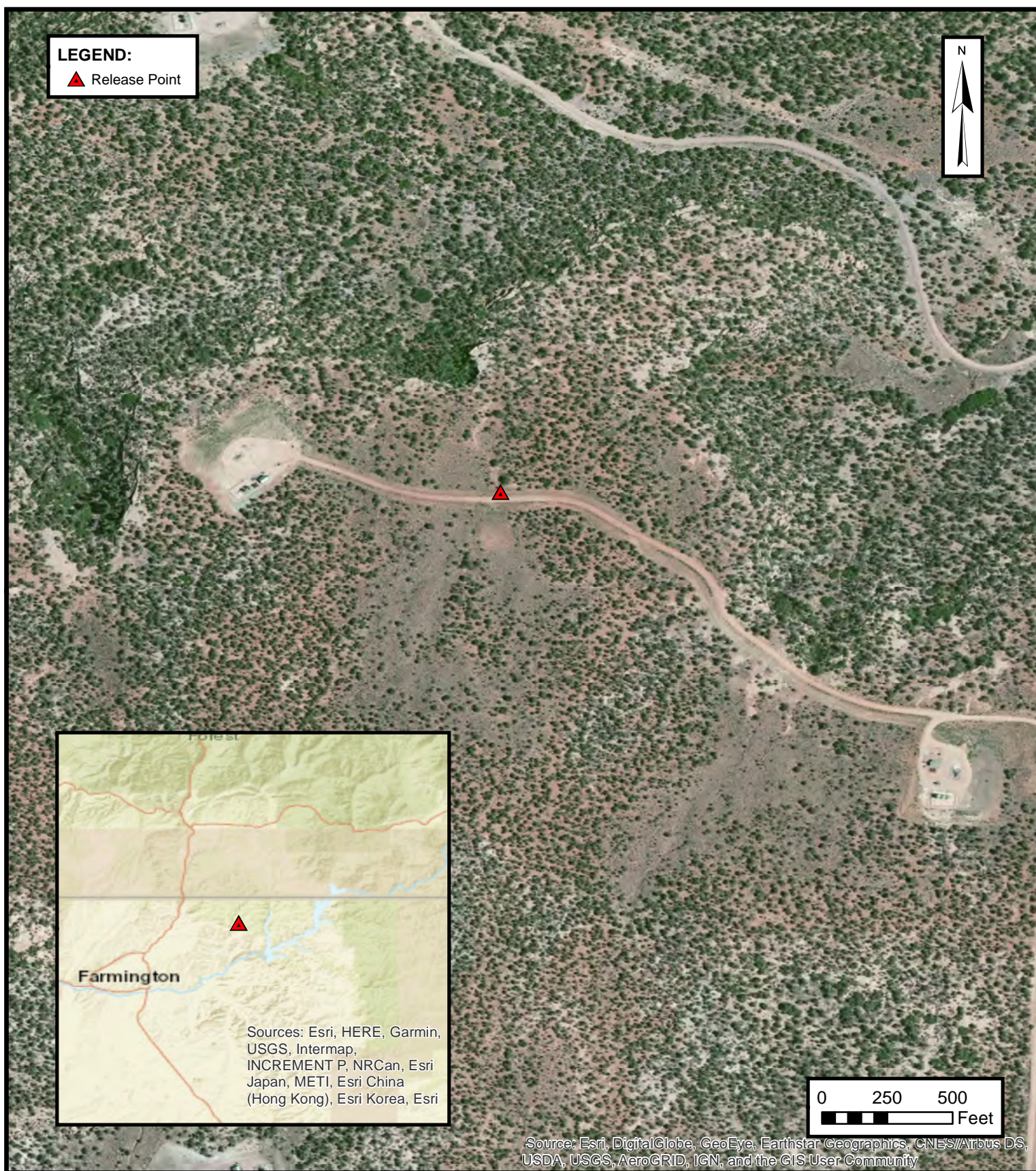
9.3 Reliance

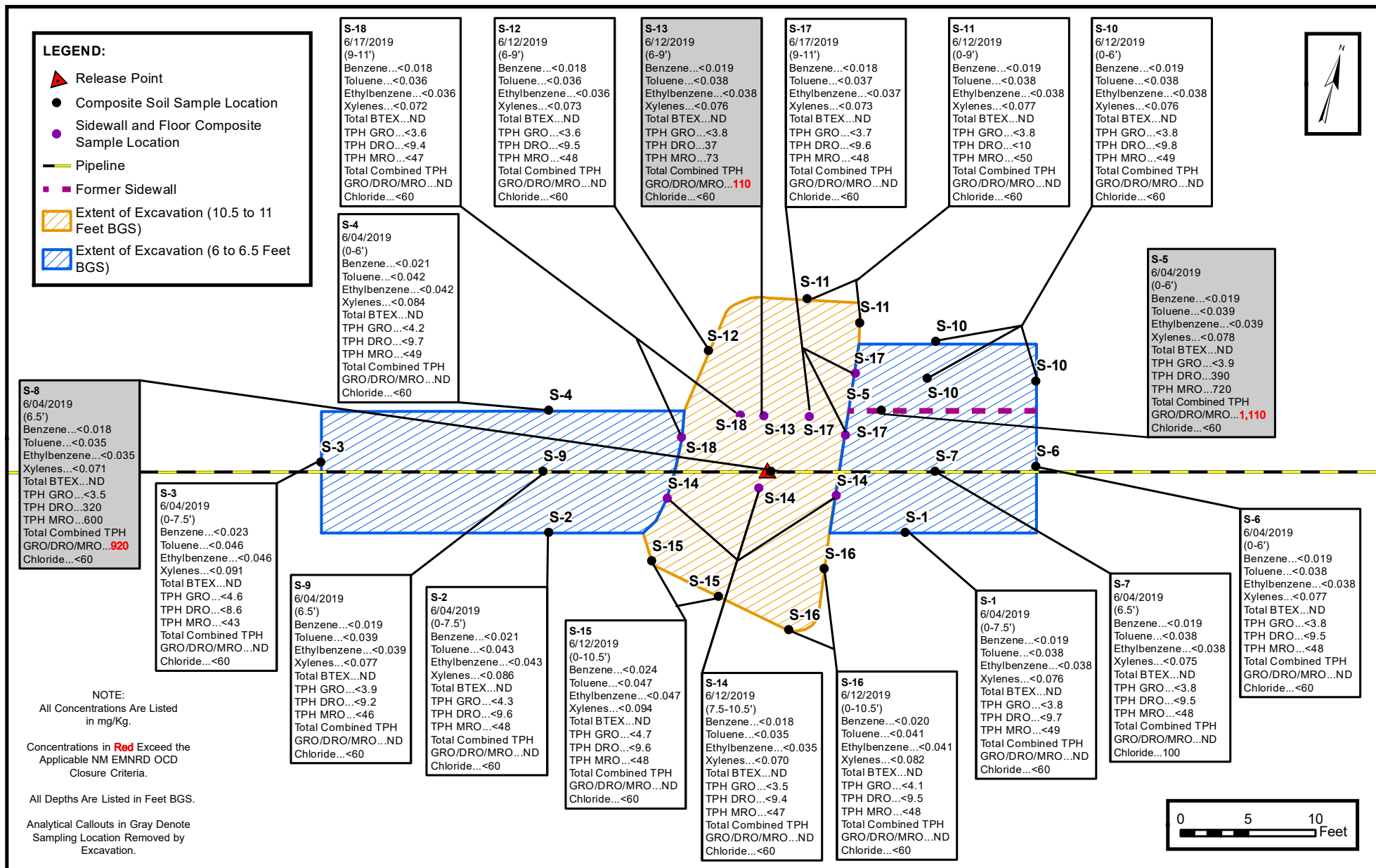
This report has been prepared for the exclusive use of Enterprise Products Operating LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Products Operating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







SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
OXNARD #334S PIPELINE RELEASE
NW ¼, S8 T31N R8W, San Juan County, New Mexico
36.91649° N, 107.69862° W

PROJECT NUMBER: 05A1226057

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

97057-1013

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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

2. Originating Site:
Oxnard #334S

3. Location of Material (Street Address, City, State or ULSTR):
UL B Section 8 T31N R8W; 36.91645, -107.69799

June 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/sludge associated natural gas pipeline release.

Estimated Volume (50) yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) 190 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*, 6-10-19, 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: TBD, *OFT, Stan Horn, Baileys*
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*

SIGNATURE: *Greg Crabtree*

Surface Waste Management Facility Authorized Agent

TITLE: *Enviro Manager*

TELEPHONE NO.:

505-632-0615

DATE: *6/10/19*

APPENDIX C

Photographic Documentation

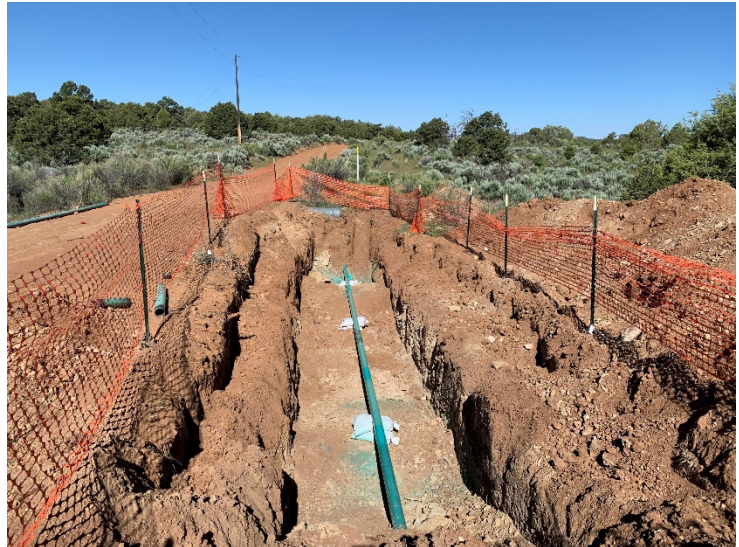
SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Oxnard #334S Pipeline Release
Ensolum Project No. 05A1226057



Photograph 1

Photograph Description: View of initial excavation.



Photograph 2

Photograph Description: View of in-process excavation activities.



Photograph 3

Photograph Description: View of in-process excavation activities.



SITE PHOTOGRAPHS

Enterprise Field Services, LLC
Closure Report
Oxnard #334S Pipeline Release
Ensolum Project No. 05A1226057



Photograph 4

Photograph Description: View of in-process excavation activities.



Photograph 5

Photograph Description: View of the final excavation (middle section of the excavation).



Photograph 6

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



APPENDIX D

Table 1 – Soil Analytical Summary

TABLE 1
Oxnard #334S 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
Preliminary Composite Soil Samples Removed by Excavation													
SP-1	06.04.19	C	Stockpile	<0.10	<0.20	<0.20	0.54	0.54	<20	110	180	290	<60
S-5	06.04.19	C	0 to 6	<0.019	<0.039	<0.039	<0.078	ND	<3.9	390	720	1,110	<60
S-8	06.04.19	C	6.5	<0.018	<0.035	<0.035	<0.071	ND	<3.5	320	600	920	<60
S-13	06.12.19	C	6 to 9	<0.019	<0.038	<0.038	<0.076	ND	<3.8	37	73	110	<60
Stockpile Composite Soil Samples													
SP-2	06.04.19	C	Stockpile	<0.022	<0.044	<0.044	<0.088	ND	<4.4	<9.2	<46	ND	<60
Final Confirmation Composite Soil Samples													
S-1	06.04.19	C	0 to 7.5	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.7	<49	ND	<60
S-2	06.04.19	C	0 to 7.5	<0.021	<0.043	<0.043	<0.086	ND	<4.3	<9.6	<48	ND	<60
S-3	06.04.19	C	0 to 7.5	<0.023	<0.046	<0.046	<0.091	ND	<4.6	<8.6	<43	ND	<60
S-4	06.04.19	C	0 to 6	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.7	<49	ND	<60
S-6	06.04.19	C	0 to 6	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.5	<48	ND	<60
S-7	06.04.19	C	6.5	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.5	<48	ND	100
S-9	06.04.19	C	6.5	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.2	<46	ND	<60
S-10	06.12.19	C	0 to 6	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.8	<49	ND	<60
S-11	06.12.19	C	0 to 9	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<10	<50	ND	<60
S-12	06.12.19	C	0 to 9	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.5	<48	ND	<60
S-14	06.12.19	C	7.5 to 10.5	<0.018	<0.035	<0.035	<0.070	ND	<3.5	<9.4	<47	ND	<60
S-15	06.12.19	C	0 to 10.5	<0.024	<0.047	<0.047	<0.094	ND	<4.7	<9.6	<48	ND	<60
S-16	06.12.19	C	0 to 10.5	<0.020	<0.041	<0.041	<0.082	ND	<4.1	<9.5	<48	ND	<60
S-17	06.17.19	C	9 to 11	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<9.6	<48	ND	<60
S-18	06.17.19	C	9 to 11	<0.018	<0.036	<0.036	<0.072	ND	<3.6	<9.4	<47	ND	<60

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

TPH = Total Petroleum Hydrocarbon

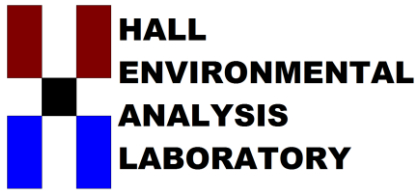
GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

APPENDIX E

Laboratory Data Sheets & Chain of Custody Documentation



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

June 07, 2019

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Oxnard 334S

OrderNo.: 1906148

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/5/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906148**Date Reported: **6/7/2019****CLIENT:** ENSOLUM**Client Sample ID:** SP-1**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:40:00 PM**Lab ID:** 1906148-001**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 11:20:48 AM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	110	9.8		mg/Kg	1	6/5/2019 10:37:48 AM	45382
Motor Oil Range Organics (MRO)	180	49		mg/Kg	1	6/5/2019 10:37:48 AM	45382
Surr: DNOP	120	70-130		%Rec	1	6/5/2019 10:37:48 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	6/5/2019 10:01:15 AM	GS60413
Surr: BFB	98.2	73.8-119		%Rec	5	6/5/2019 10:01:15 AM	GS60413
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.10		mg/Kg	5	6/5/2019 10:01:15 AM	BS60413
Toluene	ND	0.20		mg/Kg	5	6/5/2019 10:01:15 AM	BS60413
Ethylbenzene	ND	0.20		mg/Kg	5	6/5/2019 10:01:15 AM	BS60413
Xylenes, Total	0.54	0.40		mg/Kg	5	6/5/2019 10:01:15 AM	BS60413
Surr: 4-Bromofluorobenzene	105	80-120		%Rec	5	6/5/2019 10:01:15 AM	BS60413

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906148**

Date Reported: **6/7/2019**

CLIENT: ENSOLUM

Client Sample ID: SP-2

Project: Oxnard 334S

Collection Date: 6/4/2019 1:45:00 PM

Lab ID: 1906148-002

Matrix: MEOH (SOIL)

Received Date: 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 11:33:12 AM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/5/2019 10:59:48 AM	45382
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/5/2019 10:59:48 AM	45382
Surr: DNOP	114	70-130		%Rec	1	6/5/2019 10:59:48 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	6/5/2019 10:24:40 AM	GS60413
Surr: BFB	89.2	73.8-119		%Rec	1	6/5/2019 10:24:40 AM	GS60413
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.022		mg/Kg	1	6/5/2019 10:24:40 AM	BS60413
Toluene	ND	0.044		mg/Kg	1	6/5/2019 10:24:40 AM	BS60413
Ethylbenzene	ND	0.044		mg/Kg	1	6/5/2019 10:24:40 AM	BS60413
Xylenes, Total	ND	0.088		mg/Kg	1	6/5/2019 10:24:40 AM	BS60413
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/5/2019 10:24:40 AM	BS60413

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1906148

07-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45384	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 45384	RunNo: 60433
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043901 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-45384	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 45384	RunNo: 60433
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043902 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.0 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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#: 1906148

07-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS60413		RunNo: 60413							
Prep Date:	Analysis Date: 6/5/2019		SeqNo: 2043525		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	910		1000		91.2	73.8	119			

Sample ID: 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS60413		RunNo: 60413							
Prep Date:	Analysis Date: 6/5/2019		SeqNo: 2043526		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	102	80.1	123			
Surr: BFB	1200		1000		115	73.8	119			

Sample ID: MB-45359	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 45359		RunNo: 60413							
Prep Date: 6/4/2019	Analysis Date: 6/5/2019		SeqNo: 2043546		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.8	73.8	119			

Sample ID: LCS-45359	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 45359		RunNo: 60413							
Prep Date: 6/4/2019	Analysis Date: 6/5/2019		SeqNo: 2043547		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	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 Quantitative 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#: 1906148

07-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: BS60413	RunNo: 60413								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043568			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: BS60413	RunNo: 60413								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043569			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.7	80	120			
Toluene	0.96	0.050	1.000	0	96.4	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.4	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

Sample ID: 1906148-001AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SP-1	Batch ID: BS60413	RunNo: 60413								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043570			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.5	0.10	4.036	0	87.3	63.9	127			
Toluene	3.8	0.20	4.036	0.08515	91.2	69.9	131			
Ethylbenzene	3.9	0.20	4.036	0.07385	94.2	71	132			
Xylenes, Total	12	0.40	12.11	0.5400	96.5	71.8	131			
Surr: 4-Bromofluorobenzene	4.3		4.036		107	80	120			

Sample ID: 1906148-001AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SP-1	Batch ID: BS60413	RunNo: 60413								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043571			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.6	0.10	4.036	0	88.7	63.9	127	1.51	20	
Toluene	3.8	0.20	4.036	0.08515	93.2	69.9	131	2.08	20	
Ethylbenzene	3.9	0.20	4.036	0.07385	95.8	71	132	1.65	20	
Xylenes, Total	12	0.40	12.11	0.5400	98.1	71.8	131	1.61	20	
Surr: 4-Bromofluorobenzene	4.5		4.036		111	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 Quantitative 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#: 1906148

07-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45359	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 45359		RunNo: 60413							
Prep Date: 6/4/2019	Analysis Date: 6/5/2019		SeqNo: 2043588		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID: LCS-45359	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 45359		RunNo: 60413							
Prep Date: 6/4/2019	Analysis Date: 6/5/2019		SeqNo: 2043589		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.2		1.000		121	80	120			S

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 Quantitative 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

Sample Log-In Check List

Client Name: **ENSOLUM AZTEC**

Work Order Number: **1906148**

RcptNo: 1

Received By: **Jevon Campisi**

6/5/2019 8:00:00 AM

Jevon Campisi

Completed By: **Leah Baca**

6/5/2019 8:56:49 AM

Leah Baca

Reviewed By: *LB*

6/5/19

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered?

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *DAD 6/5/19*

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			
2	2.4	Good	Yes			



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

June 10, 2019

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Oxnard 334S

OrderNo.: 1906146

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 9 sample(s) on 6/5/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-1**Project:** Oxnard 334S**Collection Date:** 6/4/2019 12:50:00 PM**Lab ID:** 1906146-001**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 11:45:36 AM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/5/2019 11:21:47 AM	45382
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/5/2019 11:21:47 AM	45382
Surr: DNOP	108	70-130		%Rec	1	6/5/2019 11:21:47 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/5/2019 9:33:16 AM	G60414
Surr: BFB	94.0	73.8-119		%Rec	1	6/5/2019 9:33:16 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/5/2019 9:33:16 AM	B60414
Toluene	ND	0.038		mg/Kg	1	6/5/2019 9:33:16 AM	B60414
Ethylbenzene	ND	0.038		mg/Kg	1	6/5/2019 9:33:16 AM	B60414
Xylenes, Total	ND	0.076		mg/Kg	1	6/5/2019 9:33:16 AM	B60414
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	6/5/2019 9:33:16 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-2**Project:** Oxnard 334S**Collection Date:** 6/4/2019 12:55:00 PM**Lab ID:** 1906146-002**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 11:58:01 AM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/5/2019 11:43:53 AM	45382
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/5/2019 11:43:53 AM	45382
Surr: DNOP	119	70-130		%Rec	1	6/5/2019 11:43:53 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	6/5/2019 9:55:58 AM	G60414
Surr: BFB	92.0	73.8-119		%Rec	1	6/5/2019 9:55:58 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	6/5/2019 9:55:58 AM	B60414
Toluene	ND	0.043		mg/Kg	1	6/5/2019 9:55:58 AM	B60414
Ethylbenzene	ND	0.043		mg/Kg	1	6/5/2019 9:55:58 AM	B60414
Xylenes, Total	ND	0.086		mg/Kg	1	6/5/2019 9:55:58 AM	B60414
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	6/5/2019 9:55:58 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**

Date Reported: **6/10/2019**

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Oxnard 334S

Collection Date: 6/4/2019 1:00:00 PM

Lab ID: 1906146-003

Matrix: MEOH (SOIL)

Received Date: 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 12:10:26 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.6		mg/Kg	1	6/5/2019 12:06:05 PM	45382
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	6/5/2019 12:06:05 PM	45382
Surr: DNOP	110	70-130		%Rec	1	6/5/2019 12:06:05 PM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/5/2019 10:18:35 AM	G60414
Surr: BFB	92.6	73.8-119		%Rec	1	6/5/2019 10:18:35 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	6/5/2019 10:18:35 AM	B60414
Toluene	ND	0.046		mg/Kg	1	6/5/2019 10:18:35 AM	B60414
Ethylbenzene	ND	0.046		mg/Kg	1	6/5/2019 10:18:35 AM	B60414
Xylenes, Total	ND	0.091		mg/Kg	1	6/5/2019 10:18:35 AM	B60414
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	6/5/2019 10:18:35 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-4**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:05:00 PM**Lab ID:** 1906146-004**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 12:22:50 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	6/5/2019 12:42:50 PM	45382
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/5/2019 12:42:50 PM	45382
Surr: DNOP	112	70-130		%Rec	1	6/5/2019 12:42:50 PM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	6/5/2019 10:41:15 AM	G60414
Surr: BFB	94.3	73.8-119		%Rec	1	6/5/2019 10:41:15 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	6/5/2019 10:41:15 AM	B60414
Toluene	ND	0.042		mg/Kg	1	6/5/2019 10:41:15 AM	B60414
Ethylbenzene	ND	0.042		mg/Kg	1	6/5/2019 10:41:15 AM	B60414
Xylenes, Total	ND	0.084		mg/Kg	1	6/5/2019 10:41:15 AM	B60414
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/5/2019 10:41:15 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-5**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:10:00 PM**Lab ID:** 1906146-005**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 12:35:15 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	390	9.2		mg/Kg	1	6/5/2019 1:04:45 PM	45382
Motor Oil Range Organics (MRO)	720	46		mg/Kg	1	6/5/2019 1:04:45 PM	45382
Surr: DNOP	138	70-130	S	%Rec	1	6/5/2019 1:04:45 PM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	6/5/2019 11:04:02 AM	G60414
Surr: BFB	93.9	73.8-119		%Rec	1	6/5/2019 11:04:02 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/5/2019 11:04:02 AM	B60414
Toluene	ND	0.039		mg/Kg	1	6/5/2019 11:04:02 AM	B60414
Ethylbenzene	ND	0.039		mg/Kg	1	6/5/2019 11:04:02 AM	B60414
Xylenes, Total	ND	0.078		mg/Kg	1	6/5/2019 11:04:02 AM	B60414
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	6/5/2019 11:04:02 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-6**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:15:00 PM**Lab ID:** 1906146-006**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 1:12:28 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/5/2019 12:47:46 PM	45382
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/5/2019 12:47:46 PM	45382
Surr: DNOP	119	70-130		%Rec	1	6/5/2019 12:47:46 PM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/5/2019 11:26:42 AM	G60414
Surr: BFB	92.9	73.8-119		%Rec	1	6/5/2019 11:26:42 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/5/2019 11:26:42 AM	B60414
Toluene	ND	0.038		mg/Kg	1	6/5/2019 11:26:42 AM	B60414
Ethylbenzene	ND	0.038		mg/Kg	1	6/5/2019 11:26:42 AM	B60414
Xylenes, Total	ND	0.077		mg/Kg	1	6/5/2019 11:26:42 AM	B60414
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	6/5/2019 11:26:42 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-7**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:20:00 PM**Lab ID:** 1906146-007**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	100	60		mg/Kg	20	6/5/2019 1:24:52 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/5/2019 12:23:33 PM	45382
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/5/2019 12:23:33 PM	45382
Surr: DNOP	108	70-130		%Rec	1	6/5/2019 12:23:33 PM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/5/2019 11:49:19 AM	G60414
Surr: BFB	93.0	73.8-119		%Rec	1	6/5/2019 11:49:19 AM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/5/2019 11:49:19 AM	B60414
Toluene	ND	0.038		mg/Kg	1	6/5/2019 11:49:19 AM	B60414
Ethylbenzene	ND	0.038		mg/Kg	1	6/5/2019 11:49:19 AM	B60414
Xylenes, Total	ND	0.075		mg/Kg	1	6/5/2019 11:49:19 AM	B60414
Surr: 4-Bromofluorobenzene	98.9	80-120		%Rec	1	6/5/2019 11:49:19 AM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-8**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:25:00 PM**Lab ID:** 1906146-008**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 1:37:17 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	320	10		mg/Kg	1	6/5/2019 11:59:15 AM	45382
Motor Oil Range Organics (MRO)	600	50		mg/Kg	1	6/5/2019 11:59:15 AM	45382
Surr: DNOP	137	70-130	S	%Rec	1	6/5/2019 11:59:15 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/5/2019 12:12:06 PM	G60414
Surr: BFB	96.1	73.8-119		%Rec	1	6/5/2019 12:12:06 PM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/5/2019 12:12:06 PM	B60414
Toluene	ND	0.035		mg/Kg	1	6/5/2019 12:12:06 PM	B60414
Ethylbenzene	ND	0.035		mg/Kg	1	6/5/2019 12:12:06 PM	B60414
Xylenes, Total	ND	0.071		mg/Kg	1	6/5/2019 12:12:06 PM	B60414
Surr: 4-Bromofluorobenzene	99.4	80-120		%Rec	1	6/5/2019 12:12:06 PM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906146**Date Reported: **6/10/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-9**Project:** Oxnard 334S**Collection Date:** 6/4/2019 1:30:00 PM**Lab ID:** 1906146-009**Matrix:** MEOH (SOIL)**Received Date:** 6/5/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	ND	60		mg/Kg	20	6/5/2019 1:49:41 PM	45384
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	6/5/2019 11:35:02 AM	45382
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/5/2019 11:35:02 AM	45382
Surr: DNOP	122	70-130		%Rec	1	6/5/2019 11:35:02 AM	45382
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	6/5/2019 12:34:45 PM	G60414
Surr: BFB	90.7	73.8-119		%Rec	1	6/5/2019 12:34:45 PM	G60414
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/5/2019 12:34:45 PM	B60414
Toluene	ND	0.039		mg/Kg	1	6/5/2019 12:34:45 PM	B60414
Ethylbenzene	ND	0.039		mg/Kg	1	6/5/2019 12:34:45 PM	B60414
Xylenes, Total	ND	0.077		mg/Kg	1	6/5/2019 12:34:45 PM	B60414
Surr: 4-Bromofluorobenzene	95.8	80-120		%Rec	1	6/5/2019 12:34:45 PM	B60414

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1906146

10-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45384	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 45384	RunNo: 60433
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043901 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-45384	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 45384	RunNo: 60433
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043902 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.0 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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#: 1906146

10-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: LCS-45382	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 45382	RunNo: 60400								
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2042688 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	63.9	124			
Surr: DNOP	5.1		5.000		103	70	130			

Sample ID: MB-45382	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 45382	RunNo: 60400								
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2042693 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	11		10.00		114	70	130			

Sample ID: 1906146-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 45382	RunNo: 60403								
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043267 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.5	47.30	0	98.8	57	142			
Surr: DNOP	4.6		4.730		97.4	70	130			

Sample ID: 1906146-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 45382	RunNo: 60403								
Prep Date: 6/5/2019	Analysis Date: 6/5/2019	SeqNo: 2043268 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	49.90	0	99.9	57	142	6.37	20	
Surr: DNOP	4.9		4.990		97.6	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 Quantitative 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#: 1906146

10-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: G60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043607 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	950		1000		95.1	73.8	119			

Sample ID: 2.5UG GRO LCS	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: G60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043608 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	90.4	80.1	123			
Surr: BFB	980		1000		97.6	73.8	119			

Sample ID: 1906146-001AMS	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: S-1	Batch ID: G60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043610 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.8	19.10	0	92.8	69.1	142			
Surr: BFB	800		763.9		104	73.8	119			

Sample ID: 1906146-001AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: S-1	Batch ID: G60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043612 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.8	19.10	0	91.0	69.1	142	2.05	20	
Surr: BFB	790		763.9		104	73.8	119	0	0	

Sample ID: MB-45365	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 45365	RunNo: 60414								
Prep Date: 6/4/2019	Analysis Date: 6/5/2019	SeqNo: 2043621 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.7	73.8	119			

Sample ID: LCS-45365	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 45365	RunNo: 60414								
Prep Date: 6/4/2019	Analysis Date: 6/5/2019	SeqNo: 2043623 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		105	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 Quantitative 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#: 1906146

10-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043656			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043657			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.7	80	120			
Toluene	0.91	0.050	1.000	0	91.4	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.4	80	120			
Xylenes, Total	2.5	0.10	3.000	0	81.8	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	80	120			

Sample ID: 1906146-002AMS	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: S-2	Batch ID: B60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043658			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.021	0.8584	0	104	63.9	127			
Toluene	0.89	0.043	0.8584	0	103	69.9	131			
Ethylbenzene	0.87	0.043	0.8584	0	102	71	132			
Xylenes, Total	2.6	0.086	2.575	0	99.6	71.8	131			
Surr: 4-Bromofluorobenzene	0.92		0.8584		107	80	120			

Sample ID: 1906146-002AMSD	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: S-2	Batch ID: B60414	RunNo: 60414								
Prep Date:	Analysis Date: 6/5/2019	SeqNo: 2043659			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.021	0.8584	0	102	63.9	127	2.47	20	
Toluene	0.88	0.043	0.8584	0	102	69.9	131	1.05	20	
Ethylbenzene	0.87	0.043	0.8584	0	101	71	132	0.873	20	
Xylenes, Total	2.5	0.086	2.575	0	98.1	71.8	131	1.48	20	
Surr: 4-Bromofluorobenzene	0.91		0.8584		106	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 Quantitative 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#: 1906146

10-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45365		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS		Batch ID: 45365		RunNo: 60414						
Prep Date: 6/4/2019		Analysis Date: 6/5/2019		SeqNo: 2043665			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	80	120			

Sample ID: LCS-45365		SampType: LCS		TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS		Batch ID: 45365		RunNo: 60414						
Prep Date: 6/4/2019		Analysis Date: 6/5/2019		SeqNo: 2043666			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		105	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 Quantitative 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

Sample Log-In Check List

Client Name: **ENSOLUM AZTEC**

Work Order Number: **1906146**

RcptNo: 1

Received By: **Jevon Campisi**

6/5/2019 8:00:00 AM

Jevon Campisi

Completed By: **Leah Baca**

6/5/2019 8:49:49 AM

Leah Baca

Reviewed By: *LB*

6/5/19

Chain of Custody

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

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: *DAD 6/5/19*

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			
2	2.4	Good	Yes			



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

June 17, 2019

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Oxnard 334S

OrderNo.: 1906658

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/13/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-10**Project:** Oxnard 334S**Collection Date:** 6/12/2019 11:40:00 AM**Lab ID:** 1906658-001**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 11:49:38 AM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	6/13/2019 10:02:23 AM	45560
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/13/2019 10:02:23 AM	45560
Surr: DNOP	99.6	70-130		%Rec	1	6/13/2019 10:02:23 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/14/2019 9:38:49 AM	45546
Surr: BFB	96.6	73.8-119		%Rec	1	6/14/2019 9:38:49 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/14/2019 9:38:49 AM	45546
Toluene	ND	0.038		mg/Kg	1	6/14/2019 9:38:49 AM	45546
Ethylbenzene	ND	0.038		mg/Kg	1	6/14/2019 9:38:49 AM	45546
Xylenes, Total	ND	0.076		mg/Kg	1	6/14/2019 9:38:49 AM	45546
Surr: 4-Bromofluorobenzene	99.2	80-120		%Rec	1	6/14/2019 9:38:49 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-11**Project:** Oxnard 334S**Collection Date:** 6/12/2019 11:45:00 AM**Lab ID:** 1906658-002**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 12:02:03 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/13/2019 10:24:18 AM	45560
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/13/2019 10:24:18 AM	45560
Surr: DNOP	100	70-130		%Rec	1	6/13/2019 10:24:18 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/14/2019 10:02:24 AM	45546
Surr: BFB	95.9	73.8-119		%Rec	1	6/14/2019 10:02:24 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/14/2019 10:02:24 AM	45546
Toluene	ND	0.038		mg/Kg	1	6/14/2019 10:02:24 AM	45546
Ethylbenzene	ND	0.038		mg/Kg	1	6/14/2019 10:02:24 AM	45546
Xylenes, Total	ND	0.077		mg/Kg	1	6/14/2019 10:02:24 AM	45546
Surr: 4-Bromofluorobenzene	98.4	80-120		%Rec	1	6/14/2019 10:02:24 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-12**Project:** Oxnard 334S**Collection Date:** 6/12/2019 11:50:00 AM**Lab ID:** 1906658-003**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 12:14:28 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/13/2019 10:46:24 AM	45560
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/13/2019 10:46:24 AM	45560
Surr: DNOP	103	70-130		%Rec	1	6/13/2019 10:46:24 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/14/2019 10:26:00 AM	45546
Surr: BFB	93.2	73.8-119		%Rec	1	6/14/2019 10:26:00 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/14/2019 10:26:00 AM	45546
Toluene	ND	0.036		mg/Kg	1	6/14/2019 10:26:00 AM	45546
Ethylbenzene	ND	0.036		mg/Kg	1	6/14/2019 10:26:00 AM	45546
Xylenes, Total	ND	0.073		mg/Kg	1	6/14/2019 10:26:00 AM	45546
Surr: 4-Bromofluorobenzene	95.6	80-120		%Rec	1	6/14/2019 10:26:00 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-13**Project:** Oxnard 334S**Collection Date:** 6/12/2019 11:55:00 AM**Lab ID:** 1906658-004**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 12:26:53 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	37	10		mg/Kg	1	6/13/2019 11:08:25 AM	45560
Motor Oil Range Organics (MRO)	73	50		mg/Kg	1	6/13/2019 11:08:25 AM	45560
Surr: DNOP	107	70-130		%Rec	1	6/13/2019 11:08:25 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	6/14/2019 10:49:35 AM	45546
Surr: BFB	94.7	73.8-119		%Rec	1	6/14/2019 10:49:35 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.019		mg/Kg	1	6/14/2019 10:49:35 AM	45546
Toluene	ND	0.038		mg/Kg	1	6/14/2019 10:49:35 AM	45546
Ethylbenzene	ND	0.038		mg/Kg	1	6/14/2019 10:49:35 AM	45546
Xylenes, Total	ND	0.076		mg/Kg	1	6/14/2019 10:49:35 AM	45546
Surr: 4-Bromofluorobenzene	97.1	80-120		%Rec	1	6/14/2019 10:49:35 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**

Date Reported: **6/17/2019**

CLIENT: ENSOLUM

Client Sample ID: S-14

Project: Oxnard 334S

Collection Date: 6/12/2019 12:00:00 PM

Lab ID: 1906658-005

Matrix: SOIL

Received Date: 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 12:39:18 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/13/2019 11:30:59 AM	45560
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/13/2019 11:30:59 AM	45560
Surr: DNOP	101	70-130		%Rec	1	6/13/2019 11:30:59 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	6/14/2019 11:13:18 AM	45546
Surr: BFB	96.3	73.8-119		%Rec	1	6/14/2019 11:13:18 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/14/2019 11:13:18 AM	45546
Toluene	ND	0.035		mg/Kg	1	6/14/2019 11:13:18 AM	45546
Ethylbenzene	ND	0.035		mg/Kg	1	6/14/2019 11:13:18 AM	45546
Xylenes, Total	ND	0.070		mg/Kg	1	6/14/2019 11:13:18 AM	45546
Surr: 4-Bromofluorobenzene	98.1	80-120		%Rec	1	6/14/2019 11:13:18 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-15**Project:** Oxnard 334S**Collection Date:** 6/12/2019 12:05:00 PM**Lab ID:** 1906658-006**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 12:51:42 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/13/2019 11:53:04 AM	45560
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/13/2019 11:53:04 AM	45560
Surr: DNOP	99.6	70-130		%Rec	1	6/13/2019 11:53:04 AM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/14/2019 11:37:01 AM	45546
Surr: BFB	98.0	73.8-119		%Rec	1	6/14/2019 11:37:01 AM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/14/2019 11:37:01 AM	45546
Toluene	ND	0.047		mg/Kg	1	6/14/2019 11:37:01 AM	45546
Ethylbenzene	ND	0.047		mg/Kg	1	6/14/2019 11:37:01 AM	45546
Xylenes, Total	ND	0.094		mg/Kg	1	6/14/2019 11:37:01 AM	45546
Surr: 4-Bromofluorobenzene	100	80-120		%Rec	1	6/14/2019 11:37:01 AM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906658**Date Reported: **6/17/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-16**Project:** Oxnard 334S**Collection Date:** 6/12/2019 12:10:00 PM**Lab ID:** 1906658-007**Matrix:** SOIL**Received Date:** 6/13/2019 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/13/2019 1:04:07 PM	45561
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	6/13/2019 12:15:16 PM	45560
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/13/2019 12:15:16 PM	45560
Surr: DNOP	107	70-130		%Rec	1	6/13/2019 12:15:16 PM	45560
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	6/14/2019 12:00:46 PM	45546
Surr: BFB	102	73.8-119		%Rec	1	6/14/2019 12:00:46 PM	45546
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	6/14/2019 12:00:46 PM	45546
Toluene	ND	0.041		mg/Kg	1	6/14/2019 12:00:46 PM	45546
Ethylbenzene	ND	0.041		mg/Kg	1	6/14/2019 12:00:46 PM	45546
Xylenes, Total	ND	0.082		mg/Kg	1	6/14/2019 12:00:46 PM	45546
Surr: 4-Bromofluorobenzene	104	80-120		%Rec	1	6/14/2019 12:00:46 PM	45546

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1906658

17-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45561	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 45561	RunNo: 60629
Prep Date: 6/13/2019	Analysis Date: 6/13/2019	SeqNo: 2052139 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-45561	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 45561	RunNo: 60629
Prep Date: 6/13/2019	Analysis Date: 6/13/2019	SeqNo: 2052140 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 94.7 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 Quantitative 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#: 1906658

17-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: LCS-45560	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 45560		RunNo: 60622							
Prep Date: 6/13/2019	Analysis Date: 6/13/2019		SeqNo: 2051172		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	99.1	63.9	124			
Surr: DNOP	4.7		5.000		93.8	70	130			

Sample ID: MB-45560	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 45560		RunNo: 60622							
Prep Date: 6/13/2019	Analysis Date: 6/13/2019		SeqNo: 2051173		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	10		10.00		101	70	130			

Sample ID: 1906658-001AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S-10	Batch ID: 45560		RunNo: 60622							
Prep Date: 6/13/2019	Analysis Date: 6/13/2019		SeqNo: 2052479		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.6	48.08	0	98.5	57	142			
Surr: DNOP	4.4		4.808		91.3	70	130			

Sample ID: 1906658-001AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: S-10	Batch ID: 45560		RunNo: 60622							
Prep Date: 6/13/2019	Analysis Date: 6/13/2019		SeqNo: 2052480		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.7	48.50	0	103	57	142	5.46	20	
Surr: DNOP	4.8		4.850		98.0	70	130	0	0	

Sample ID: LCS-45543	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 45543		RunNo: 60622							
Prep Date: 6/12/2019	Analysis Date: 6/13/2019		SeqNo: 2052482		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		95.4	70	130			

Sample ID: MB-45543	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 45543		RunNo: 60622							
Prep Date: 6/12/2019	Analysis Date: 6/13/2019		SeqNo: 2052483		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative 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#: 1906658

17-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45543	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 45543	RunNo: 60622								
Prep Date: 6/12/2019	Analysis Date: 6/13/2019	SeqNo: 2052483	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	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 Quantitative 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#: 1906658

17-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45546	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 45546	RunNo: 60653								
Prep Date: 6/12/2019	Analysis Date: 6/14/2019	SeqNo: 2052830	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	950		1000		95.4	73.8	119			

Sample ID: LCS-45546	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 45546	RunNo: 60653								
Prep Date: 6/12/2019	Analysis Date: 6/14/2019	SeqNo: 2052831	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	98.6	80.1	123			
Surr: BFB	1100		1000		109	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 Quantitative 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#: 1906658

17-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45546		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS		Batch ID: 45546		RunNo: 60653						
Prep Date: 6/12/2019		Analysis Date: 6/14/2019		SeqNo: 2052877		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			

Sample ID: LCS-45546		SampType: LCS		TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS		Batch ID: 45546		RunNo: 60653						
Prep Date: 6/12/2019		Analysis Date: 6/14/2019		SeqNo: 2052878			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	109	80	120			
Toluene	1.1	0.050	1.000	0	114	80	120			
Ethylbenzene	1.2	0.050	1.000	0	115	80	120			
Xylenes, Total	3.5	0.10	3.000	0	117	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	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 Quantitative 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
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: 1906658

RcptNo: 1

Received By: Anne Thorne

6/13/2019 7:25:00 AM

Anne Thorne

Completed By: Anne Thorne

6/13/2019 7:35:48 AM

Anne Thorne

Reviewed By: ENM

6/13/19

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 $>0^{\circ}\text{C}$ 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? Yes ☒ No ☐

(Note discrepancies on chain of custody)

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? Yes ☒ No ☐

(If no, notify customer for authorization.)

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 / A-06/13/19

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			



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

June 19, 2019

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Oxnard 334S

OrderNo.: 1906915

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/18/2019 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,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906915**Date Reported: **6/19/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-17**Project:** Oxnard 334S**Collection Date:** 6/17/2019 2:50:00 PM**Lab ID:** 1906915-001**Matrix:** SOIL**Received Date:** 6/18/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/18/2019 11:59:41 AM	45650
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	6/18/2019 11:05:33 AM	45649
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/18/2019 11:05:33 AM	45649
Surr: DNOP	152	70-130	S	%Rec	1	6/18/2019 11:05:33 AM	45649
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	6/18/2019 11:58:08 AM	G60728
Surr: BFB	93.2	73.8-119		%Rec	1	6/18/2019 11:58:08 AM	G60728
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/18/2019 11:58:08 AM	B60728
Toluene	ND	0.037		mg/Kg	1	6/18/2019 11:58:08 AM	B60728
Ethylbenzene	ND	0.037		mg/Kg	1	6/18/2019 11:58:08 AM	B60728
Xylenes, Total	ND	0.073		mg/Kg	1	6/18/2019 11:58:08 AM	B60728
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/18/2019 11:58:08 AM	B60728

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1906915**Date Reported: **6/19/2019****CLIENT:** ENSOLUM**Client Sample ID:** S-18**Project:** Oxnard 334S**Collection Date:** 6/17/2019 2:55:00 PM**Lab ID:** 1906915-002**Matrix:** SOIL**Received Date:** 6/18/2019 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	6/18/2019 12:12:06 PM	45650
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	6/18/2019 11:29:59 AM	45649
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/18/2019 11:29:59 AM	45649
Surr: DNOP	160	70-130	S	%Rec	1	6/18/2019 11:29:59 AM	45649
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	6/18/2019 12:21:27 PM	G60728
Surr: BFB	93.1	73.8-119		%Rec	1	6/18/2019 12:21:27 PM	G60728
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	6/18/2019 12:21:27 PM	B60728
Toluene	ND	0.036		mg/Kg	1	6/18/2019 12:21:27 PM	B60728
Ethylbenzene	ND	0.036		mg/Kg	1	6/18/2019 12:21:27 PM	B60728
Xylenes, Total	ND	0.072		mg/Kg	1	6/18/2019 12:21:27 PM	B60728
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	6/18/2019 12:21:27 PM	B60728

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1906915

19-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: MB-45650	SampType: mbk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 45650	RunNo: 60725								
Prep Date: 6/18/2019	Analysis Date: 6/18/2019	SeqNo: 2056354	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-45650	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 45650	RunNo: 60725								
Prep Date: 6/18/2019	Analysis Date: 6/18/2019	SeqNo: 2056355	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	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 Quantitative 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#: 1906915

19-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: LCS-45649	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 45649		RunNo: 60712							
Prep Date: 6/18/2019	Analysis Date: 6/18/2019		SeqNo: 2054899		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.7	63.9	124			
Surr: DNOP	4.5		5.000		89.7	70	130			

Sample ID: MB-45649	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 45649		RunNo: 60712							
Prep Date: 6/18/2019	Analysis Date: 6/18/2019		SeqNo: 2054900		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	17		10.00		171	70	130			S

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 Quantitative 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#: 1906915

19-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G60728		RunNo: 60728							
Prep Date:	Analysis Date: 6/18/2019		SeqNo: 2055379		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	940		1000		93.7	73.8	119			

Sample ID: 2.5UG GRO LCS	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G60728		RunNo: 60728							
Prep Date:	Analysis Date: 6/18/2019		SeqNo: 2055380		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	80.1	123			
Surr: BFB	1100		1000		108	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 Quantitative 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#: 1906915

19-Jun-19

Client: ENSOLUM
Project: Oxnard 334S

Sample ID: RB	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B60728	RunNo: 60728								
Prep Date:	Analysis Date: 6/18/2019	SeqNo: 2055390	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B60728	RunNo: 60728								
Prep Date:	Analysis Date: 6/18/2019	SeqNo: 2055391	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	102	80	120			
Ethylbenzene	1.0	0.050	1.000	0	103	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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 Quantitative 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

Sample Log-In Check List

Client Name: ENSOLUM AZTEC

Work Order Number: 1906915

RcptNo: 1

Received By: Jevon Campisi

6/18/2019 8:40:00 AM

Jevon Campisi

Completed By: Anne Thorne

6/18/2019 9:33:46 AM

Anne Thorne

Reviewed By: DAD 6/18/19

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? Yes ☒ No ☐
(Note discrepancies on chain of custody)
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? Yes ☒ No ☐
(If no, notify customer for authorization.)

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 6/18/19

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes			

Chain-of-Custody Record

Client:	Eosylvia LLC
Turn-Around Time:	Standard <input type="checkbox"/> Rush <input checked="" type="checkbox"/>
Date:	6/18/19
Time:	10:00 AM

Mailing Address: 6065 Pio 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) _____

Date	Time	Matrix	Sample Name
6/7/19	1450	S	S-17
6/7/19	1455	S	S-18

[illegible]

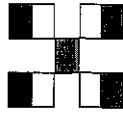
Turn-Around Time:	<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	6/18/19 100%
Project Name:	Oxnard #3343	
Project #:	OSA1296057	

Project Manager: Ksummers

Sampler:	Reedilly
On Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
# of Containers:	1

Cooler Temp	Including or Excl	HEAL No.
<i>MCC-8000</i>	<i>PRESERVATIVE</i>	<i>19062915</i>
Type and #	Type	
1 M02 Jar	cool	701
1 M02 Jar	cool	702

Received by:	Via:	Date	Time
Christ Waets		6/17/19	1718
Received by:	Via:	Date	Time
LC	curia	6-18-19	8:40



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTEX / MIBE / TMB's (8021)	X	X
TPH:8015D(GRO / DRO / MRO)	X	X
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)	X	X
Chlorides		

Remarks:

pm-Tom Long (EP200)
Pay Key- PB21200

Date 6-18-19 Time 8:40 SAME DAY

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. 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.