State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	NCS1913740101
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): NCS1913740101
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude 36.549313

_Longitude -107.549324

(NAD 83 in decimal degrees to 5 decimal places)

)

Site Name Lateral C-7 Loop Pipeline	Site Type Natural Gas Gathering Pipeline	
Date Release Discovered: 4/25/2019	Serial Number (if applicable):	

Unit Letter	Section	Township	Range	County
G	25	27N	9W	San Juan

Surface Owner: State Federal Tribal Private (Name: Navajo Nation

Nature and Volume of Release

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

			L /	
	Crude Oil	Volume Released (bbls)Volume Recovered (bbls)		
	Produced Water	Volume Released (bbls)	Volume Recovered (bbls)	
		Is the concentration of dissolved chloride in the produced water $>10.000 \text{ mg/l}$?	Yes No	
Receive	Condensate	Volume Released (bbls): 5-7 BBLS	Volume Recovered (bbls): None	
D	🖄 Natural Gas	Volume Released (Mcf): 5.74 MCF	Volume Recovered (Mcf): None	
	Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)	

Cause of Release: On April 25, 2019, a third party notified Enterprise of a possible gas release on the Lateral C-7 Loop pipeline. A technician was dispatched and confirmed the release. An area of approximately three feet in diameter was impacted by the released fluids. The pipeline was blown down, depressurized, locked out and tagged out. Enterprise recovered the released fluids as much as practicable and barricaded off the affected area. On May 2, 2019, Enterprise began the repairs and remediation and determined this release reportable per NMOCD regulation due the volume of impacted subsurface soil. Remediation was completed on May 15, 2019. The final excavation dimensions measured approximately 33 feet long by 14 feet wide by approximately 17 feet deep. Approximately 194 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. A third party closure report is included with this "Final." C-141.

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

<u>Closure Report Attachment Checklist</u> : Each of the follow	ring 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 ph must be notified 2 days prior to liner inspection)	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 co and regulations all operators are required to report and/or file c may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate an human health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or re- restore, reclaim, and re-vegetate the impacted surface area to the accordance with 19.15.29.13 NMAC including notification to the Printed Name: Jon E_Fields Signature:	mplete to the best of my knowledge and understand that pursuant to OCD rules ertain release notifications and perform corrective actions for releases which ce of a C-141 report by the OCD does not relieve the operator of liability d remediate contamination that pose a threat to groundwater, surface water, ee of a C-141 report does not relieve the operator of responsibility for egulations. The responsible party acknowledges they must substantially the conditions that existed prior to the release or their final land use in the OCD when reclamation and re-vegetation are complete. Title: Director, Environmental Date: $12/14/19$ Telephone: (713) 381-6684		
OCD Only			
Received by: OCD	Date: 10/21/19		
Closure approval by the OCD does not relieve the responsible p remediate contamination that poses a threat to groundwater, surf party of compliance with any other federal, state, or local laws	party of liability should their operations have failed to adequately investigate and face water, human health, or the environment nor does not relieve the responsible and/or regulations.		
Closure Approved by:	Date: 12/11/19		
Printed Name: Cory	Title: Environmental Specalist		



CLOSURE REPORT

Property:

Lateral C-7 Loop Pipeline Release NE ¼, S25 T27N R9W San Juan County, New Mexico

August 12, 2019 Ensolum Project No. 05A1226055

Prepared for:

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

Prepared by:

Ranee Deechilly Environmental Scientist

at umm

Kyle Summers, CPG Sr. Project Manager

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CLOSURE REPORT

Lateral C-7 Loop Pipeline Release NE ¼, S25 T27N R9W San Juan County, New Mexico

Ensolum Project No. 05A1226055

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)	
Site Name:	Lateral C-7 Loop Pipeline Release (Site)	
Location:	36.549313° North, 107.736210° West Northeast (NE) ¼ of Section 25, Township 27 North, Range 9 West San Juan County, New Mexico	
Property:	Navajo Nation Allotment Land	
Regulatory:	Navajo Nation Environmental Protection Agency Office (NNEPA) and New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)	

On April 25, 2019, a release of natural gas was identified on the Lateral C-7 Loop pipeline by a third party. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On May 1, 2019, Enterprise initiated activities to facilitate the repair of the pipeline and to remediate potential petroleum hydrocarbon impact resulting from the release.

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

1.2 **Project Objective**

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

2.0 CLOSURE CRITERIA

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

• No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database.



- One (1) cathodic protection well was identified within a mile of the Site. Cathodic-protection well Huerfanito Unit #10, #178, #151 (Unit A, Sec 36 T27N R9W) located approximately 0.9 miles from the Site indicates a depth to water of approximately 25 feet below grade surface (bgs).
- 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 CI 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 1, 2019, Enterprise initiated activities to facilitate the repair of the pipeline, and to remediate potential 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 33 feet long and 14 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 17 feet bgs.



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

A total of approximately 194 cubic yards of petroleum hydrocarbon affected soils were transported to the Envirotech, Inc. (Envirotech) landfarm near Hilltop, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix B**. The excavation was backfilled with a combination of imported fill and segregated, laboratory-confirmed, unaffected stockpiled soils, 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 13 composite soil samples (CS-1 through CS-13), comprised of five (5) aliquots each, from the excavation for laboratory analysis. In addition, three (3) composite stockpiled soil samples (SP-1 through SP-3) were collected from the soils that were segregated for potential reuse, to confirm the material was suitable to remain on-Site. Due to the depth of the excavation, an excavator (operated by OFT) was utilized to obtain fresh aliquots from each area of the excavation. The New Mexico EMNRD OCD provided verbal approval to proceed with the four (4) sampling events, although a New Mexico EMNRD OCD representative was not on-Site during the sampling events.

First Sampling Event

Composite soil sample CS-1 (13') was collected from the floor of the excavation. Composite soil samples CS-2 (0'-13'), CS-3 (0'-13') were collected from the west sidewall of the excavation. Composite soil sample CS-4 (0'-13') was collected from the south sidewall of the excavation and composite soil samples CS-5 (0'-13') and CS-6 (0'-13') were collected from the east sidewall of the excavation. Subsequent to receiving confirmation that the composite soil samples exhibited acceptable analytical results, the excavation was partially backfilled to provide pipeline support, allowing further excavation to the north.

Second Sampling Event

Subsequent to the excavation extension, a second sampling event was performed. Composite soil sample CS-7 (13') was collected from the floor of the extended excavation. Composite soil samples CS-8 (0'-13'), CS-9 (0'-13'), and CS-10 (0'-13) were collected from the sidewalls of the extended excavation. Analytical results from composite soil samples CS-7 (floor) and CS-10 (west sidewall) from the excavation indicated New Mexico EMNRD OCD closure standard exceedances. In response to the data exceedances, the excavation was deepened and extended west to remove petroleum hydrocarbon and chloride impact. Soils associated with composite soil samples CS-7, and CS-10 were removed by excavation and transported to the landfarm for disposal/remediation.

Third Sampling Event

After the excavation was deepened and extended to the west, composite soil samples CS-11 (15') and CS-12 (0'-15) were collected from the floor and west sidewall of the excavation, respectively. Analytical results from composite soil sample CS-11 indicated a New Mexico EMNRD OCD exceedance. The floor of the excavation was excavated an additional two (2) feet. Soil associated with composite soil sample CS-11 was removed by excavation and transported to the landfarm for disposal/remediation.



Fourth Sampling Event

Subsequent to excavation activities, composite soil sample CS-13 (17') was collected from the floor of the deepened excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

Composite soil samples SP-1 through SP-3, CS-1 through CS-10, and CS-13 were analyzed for benzene, toluene, ethylbenzene and total xylenes (BTEX) using Environmental Protection Agency (EPA) SW-846 Method #8021/8260, total petroleum hydrocarbon (TPH) gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) using EPA SW-846 Method #8015, and chlorides using EPA Method #300.0. Composite soil samples CS-11 and CS-12 were analyzed for chlorides only, 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 (CS-1 through CS-6, CS-8, CS-9, CS-12, CS-13, and SP-1 through SP-3) to the applicable New Mexico EMNRD OCD closure criteria. Soil associated with composite soil samples CS-7, CS-10, and CS-11 were removed from the Site by excavation and transported to the 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 composite soil samples SP-2 and SP-3 collected from soils remaining at the Site, indicate combined TPH GRO/DRO/MRO concentrations of 20 mg/kg (SP-2) and 45 mg/kg (SP-3),respectively, which do not exceed the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for composite soil samples collected from soils remaining at the Site indicate chloride concentrations ranging from less than the laboratory PQL to 500 mg/kg (CS-8), which do not exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg.

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 segregated, laboratory-confirmed, unaffected stockpiled soils, and was then contoured to the surrounding grade. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

On April 25, 2019, a release of natural gas was identified on the Lateral C-7 Loop pipeline by a third party. Enterprise verified the release and subsequently isolated and locked the pipeline out of service. On May 1, 2019, Enterprise initiated activities to facilitate the repair of the pipeline and to remediate potential 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 13 composite soil samples were collected from the walls and floor of the final excavation for laboratory analysis. In addition, three (3) composite stockpiled soil samples were collected from stockpiled soils. 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 194 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 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). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Additional Limitations

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



9.3 Reliance

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



APPENDIX A

Figures









APPENDIX B

Executed C-138 Solid Waste Acceptance Form

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



*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, 014 Keiny Ave, Farmington Nivi 07401		
2. Originating Site: Lateral C-7 Loop		
3. Location of Material (Street Address, City, State or ULSTR): UL G Section 25 T27N R9W; 36.549313, -107.736210 and 36.549324 -107.736168 Apr. 1 May 2019		
4. Source and Description of Waste: Hydrocarbon Impacted Soil. Source: Remediation activities associated with a natural gas pipeline leak. Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release. Estimated Volume _10_yd ² bbls Known Volume (to be entered by the operator at the end of the haul) _194yd ³ bbls		
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS		
I, Thomas Long Jun Ly, 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. <u>Operator Use Only: Waste Acceptance Frequency</u> 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 4-25-19, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.		
I, <u>Grag</u> <u>Cra</u> <u>Lister</u> , representative for <u>Envirotech. Inc.</u> 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.		
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 Index Landfarm Landfill Other		
Waste Acceptance Status: Device Must Be Maintained As Permanent Record) PRINT NAME: Grad Crabbrac TITLE: Fnuire Management Record) SIGNATURE: Suffice Waste Management Padility Authorized Agent TITLE: Fnuire Management Padility Authorized Agent		



APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Lateral C-7 Loop Pipeline Release Ensolum Project No. 05A1226055



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

SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Lateral C-7 Loop Pipeline Release Ensolum Project No. 05A1226055



Photograph 4

Photograph Description: View of the excavation (facing north) prior to partial backfill of the of the southern end (to provide pipeline support and allow deeper excavation of the northern portion).



Photograph 5

Photograph Description: View of the final excavation (northern section of the excavation) after partial backfill of the southern portion.



Photograph 6

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





APPENDIX D

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
_ateral C-7 Loop Pipeline Release
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX	TPH	TPH	TPH	Total Combined	Chloride
		C- Composite G - Grab	(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	TPH (GRO/DRO/MRO) (mg/kg)	(mg/kg)
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Closure Criteria			10	NE	NE	NE	50				100	600	
					Preliminary Co	omposite Soil Samp	les Removed by E	xcavation					
CS-7	05.08.19	С	13	<0.014	<0.029	<0.029	<0.058	ND	<2.9	<9.5	<47	ND	1,100
CS-10	05.08.19	С	0 to 13	<0.016	<0.032	<0.032	<0.063	ND	<3.2	<9.7	<49	ND	630
CS-11	05.13.19	С	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	690
					ŝ	Stockpile Composite	e Soil Samples						
SP-1	05.03.19	С	Stockpile	<0.017	<0.033	<0.033	<0.067	ND	<3.3	<9.7	<49	ND	160
SP-2	05.03.19	С	Stockpile	<0.017	<0.034	<0.034	<0.068	ND	6.4	14	<50	20	240
SP-3	05.03.19	С	Stockpile	<0.021	<0.042	<0.042	<0.084	ND	6.3	39	<48	45	360
					Final	Confirmation Comp	osite Soil Sample	8					
CS-1	05.03.19	С	13	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<9.8	<49	ND	100
CS-2	05.03.19	С	0 to 13	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<9.5	<47	ND	200
CS-3	05.03.19	С	0 to 13	<0.016	<0.031	<0.031	<0.062	ND	<3.1	<9.2	<46	ND	74
CS-4	05.03.19	С	0 to 13	<0.018	<0.035	<0.035	<0.070	ND	<3.5	<9.9	<49	ND	<60
CS-5	05.03.19	С	0 to 13	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<9.7	<49	ND	260
CS-6	05.03.19	С	0 to 13	<0.016	<0.032	<0.032	<0.065	ND	<3.2	<9.9	<49	ND	310
CS-8	05.08.19	С	0 to 13	<0.015	<0.030	<0.030	<0.061	ND	<3.0	<9.7	<49	ND	500
CS-9	05.08.19	С	0 to 13	<0.016	<0.032	<0.032	<0.064	ND	<3.2	<9.6	<48	ND	95
CS-12	05.13.19	С	0 to 15	NA	NA	NA	NA	NA	NA	NA	NA	NA	<60
CS-13	05.15.19	С	17	<0.019	<0.038	<0.038	<0.076	ND	<3.8	<9.8	<49	ND	220

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

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon



APPENDIX E

Laboratory Data Sheets & Chain of Custody Documentation



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

May 08, 2019

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

RE: Lateral C-7 Loop

OrderNo.: 1905232

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/4/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	Client Sample ID: SP-1	
Project:	Lateral C-7 Loop	Collection Date: 5/3/2019 9:45:00 AM	
Lab ID:	1905232-001	Matrix: MEOH (SOIL) Received Date: 5/4/2019 8:50:00 AM	

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: MRA
Chloride	160	60	mg/Kg	20	5/5/2019 2:25:22 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: TOM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/6/2019 10:27:25 AM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 10:27:25 AM	44727
Surr: DNOP	104	70-130	%Rec	1	5/6/2019 10:27:25 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	5/6/2019 12:23:33 PM	G59659
Surr: BFB	91.7	73.8-119	%Rec	1	5/6/2019 12:23:33 PM	G59659
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.017	mg/Kg	1	5/6/2019 12:23:33 PM	R59659
Toluene	ND	0.033	mg/Kg	1	5/6/2019 12:23:33 PM	R59659
Ethylbenzene	ND	0.033	mg/Kg	1	5/6/2019 12:23:33 PM	R59659
Xylenes, Total	ND	0.067	mg/Kg	1	5/6/2019 12:23:33 PM	R59659
Surr: 4-Bromofluorobenzene	90.2	80-120	%Rec	1	5/6/2019 12:23:33 PM	R59659

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

Qualifiers:

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

- 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

Page 1 of 7

S % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	Client Sample ID: SP-2	
Project:	Lateral C-7 Loop	Collection Date: 5/3/2019 9:50:00 AM	
Lab ID:	1905232-002	Matrix: MEOH (SOIL) Received Date: 5/4/2019 8:50:00 AM	

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	MRA
Chloride	240	60		mg/Kg	20	5/5/2019 2:37:46 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	том
Diesel Range Organics (DRO)	14	9.9		mg/Kg	1	5/6/2019 10:51:40 AM	44727
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/6/2019 10:51:40 AM	44727
Surr: DNOP	102	70-130		%Rec	1	5/6/2019 10:51:40 AM	44727
EPA METHOD 8015D: GASOLINE RANGE						Analyst	RAA
Gasoline Range Organics (GRO)	6.4	3.4		mg/Kg	1	5/6/2019 12:47:01 PM	G59659
Surr: BFB	136	73.8-119	S	%Rec	1	5/6/2019 12:47:01 PM	G59659
EPA METHOD 8021B: VOLATILES						Analyst	RAA
Benzene	ND	0.017		mg/Kg	1	5/6/2019 12:47:01 PM	R59659
Toluene	ND	0.034		mg/Kg	1	5/6/2019 12:47:01 PM	R59659
Ethylbenzene	ND	0.034		mg/Kg	1	5/6/2019 12:47:01 PM	R59659
Xylenes, Total	ND	0.068		mg/Kg	1	5/6/2019 12:47:01 PM	R59659
Surr: 4-Bromofluorobenzene	90.0	80-120		%Rec	1	5/6/2019 12:47:01 PM	R59659

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 7

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	Client Sample ID: SP-3
Project:	Lateral C-7 Loop	Collection Date: 5/3/2019 9:55:00 AM
Lab ID:	1905232-003	Matrix: MEOH (SOIL) Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	MRA
Chloride	360	60		mg/Kg	20	5/5/2019 2:50:10 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst:	том
Diesel Range Organics (DRO)	39	9.7		mg/Kg	1	5/6/2019 11:16:11 AM	44727
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/6/2019 11:16:11 AM	44727
Surr: DNOP	105	70-130		%Rec	1	5/6/2019 11:16:11 AM	44727
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	RAA
Gasoline Range Organics (GRO)	6.3	4.2		mg/Kg	1	5/6/2019 12:10:45 PM	G59658
Surr: BFB	124	73.8-119	S	%Rec	1	5/6/2019 12:10:45 PM	G59658
EPA METHOD 8021B: VOLATILES						Analyst:	RAA
Benzene	ND	0.021		mg/Kg	1	5/6/2019 12:10:45 PM	R59658
Toluene	ND	0.042		mg/Kg	1	5/6/2019 12:10:45 PM	R59658
Ethylbenzene	ND	0.042		mg/Kg	1	5/6/2019 12:10:45 PM	R59658
Xylenes, Total	ND	0.084		mg/Kg	1	5/6/2019 12:10:45 PM	R59658
Surr: 4-Bromofluorobenzene	96.4	80-120		%Rec	1	5/6/2019 12:10:45 PM	R59658

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

Qualifiers:

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

- 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

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S % Recovery outside of range due to dilution or matrix

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: **1905232** *08-May-19*

Client:	ENS	SOLUM									
Project:	Late	eral C-7 Loop									
Sample ID:	: MB-44722 SampType: mblk			Tes	tCode: EF						
Client ID:	PBS Batch ID: 44722			F	RunNo: 5 9	9653					
Prep Date:	5/5/2019	Analysis D	ate: 5/	5/2019	S	SeqNo: 20	010922	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-44722	SampT	ype: Ics	5	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	n ID: 44	722	F	RunNo: 5 9	9653				
Prep Date:	5/5/2019	Analysis D	ate: 5/	5/2019	S	SeqNo: 20	010923	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.5	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: **1905232** *08-May-19*

Client: Project:	ENSOLU Lateral C	JM 2-7 Loop										
Sample ID:	LCS-44647	SampType:	LCS	Tes	tCode: EF	PA Method	8015M/D: Die:	sel Range	e Organics			
Client ID:	LCSS	Batch ID:	44647	F	RunNo: 59643							
Prep Date:	5/3/2019	Analysis Date:	5/6/2019	S	SeqNo: 20	010611	Units: %Rec					
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: DNOP		4.4	5.000		88.3	70	130					
Sample ID:	LCS-44727	SampType:	LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID:	LCSS	Batch ID:	F	RunNo: 5 9	9643							
Prep Date:	5/6/2019	Analysis Date:	5/6/2019	S	SeqNo: 20	010612	Units: mg/Kg)				
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range C	Organics (DRO)	46	10 50.00	0	92.9	63.9	124					
Surr: DNOP		4.3	5.000		86.8	70	130					
Sample ID:	MB-44647	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID:	PBS	Batch ID:	44647	F	RunNo: 5 9	9643						
Prep Date:	5/3/2019	Analysis Date:	5/6/2019	S	SeqNo: 20	010613	Units: %Rec					
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: DNOP		10	10.00		103	70	130					
Sample ID:	MB-44727	SampType:	MBLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics			
Client ID:	PBS	Batch ID:	44727	RunNo: 59643								
Prep Date:	5/6/2019	Analysis Date:	5/6/2019	S	SeqNo: 20	010614	Units: mg/Kg					
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range C	Drganics (DRO)	ND	10									
Motor Oil Range	e Organics (MRO)	ND 9.5	10.00		95 3	70	130					
		0.0	10.00		00.0	10	100					
Sample ID:	LCS-44646	SampType:	LCS	Tes	tCode: EF	PA Method	8015M/D: Die:	sel Range	e Organics			
Client ID:	LCSS	Batch ID:	44646	F	RunNo: 5 9	9644						
Prep Date:	5/3/2019	Analysis Date:	5/6/2019	5	SeqNo: 20	010648	Units: %Rec					
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: DNOP		4.3	5.000		85.9	70	130					
Sample ID:	MB-44646	SampType:	MBLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics			
Client ID:	PBS	Batch ID:	44646	RunNo: 59644								
Prep Date:	5/3/2019	Analysis Date:	5/6/2019	S	SeqNo: 20	010649	Units: %Rec					
Analyte		Result PO	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: DNOP		9.2	10.00		92.3	70	130					

Qualifiers:

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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: **1905232**

Client:ENSOLUMProject:Lateral C-7 Loop

Sample ID: 2.5UG GRO LCS	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batcl	h ID: G5	9658	F	RunNo: 59658							
Prep Date:	Analysis D	Date: 5/	6/2019	5	SeqNo: 2011127			Units: mg/Kg				
Analyte	Result	PQI	SPK value	SPK Ref Val	%RFC	l owl imit	Highl imit	%RPD	RPDI imit	Qual		
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.5	80.1	123	, or a - D				
Surr: BFB	1000		1000		104	73.8	119					
Sample ID: RB	SampT	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range										
Client ID: PBS	Batcl	h ID: 65	9658	F	RunNo: 5	9658		-				
Prep Date:	Analysis Date: 5/6/2019			5	SeqNo: 2	011128	Units: mg/k	۲g				
Assiste	Decell	DOI				1				0		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLIMIt	Quai		
		5.0	1000		80.0	70.0	110					
JUII. DED	900		1000		09.9	/	119					
					00.0		110					
Sample ID: 2.5UG GRO LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e			
Sample ID: 2.5UG GRO LCS Client ID: LCSS	SampT Batcl	「ype: LC h ID: G5	S 9659	Tes	tCode: El	PA Method 9659	8015D: Gasc	oline Rang	e			
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date:	SampT Batcl Analysis D	Type: LC h ID: G5 Date: 5/	9659 6/2019	Tes F S	tCode: El RunNo: 59 SeqNo: 20	PA Method 9659 011208	8015D: Gasc	bline Rang	e			
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte	SampT Batcl Analysis E Result	Type: LC h ID: G5 Date: 5/ PQL	S 9659 6/2019 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 59 SeqNo: 20 %REC	PA Method 9659 011208 LowLimit	8015D: Gaso Units: mg/F HighLimit	oline Rang (g %RPD	e RPDLimit	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO)	SampT Batcl Analysis D Result 24	「ype: LC h ID: G5 Date: 5/ PQL 5.0	S 9659 6/2019 SPK value 25.00	Tes F S SPK Ref Val 0	tCode: El RunNo: 5 SeqNo: 2 %REC 94.7	PA Method 9659 011208 LowLimit 80.1	8015D: Gasc Units: mg/k HighLimit 123	oline Rang (g %RPD	e RPDLimit	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB	SampT Batcl Analysis E Result 24 1100	「ype: LC h ID: G5 Date: 5/ PQL 5.0	S 9659 6/2019 SPK value 25.00 1000	Tes F SPK Ref Val 0	tCode: EI RunNo: 59 SeqNo: 20 %REC 94.7 108	PA Method 9659 011208 LowLimit 80.1 73.8	8015D: Gaso Units: mg/k HighLimit 123 119	oline Rang (g %RPD	e RPDLimit	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: RB	SampT Batcl Analysis E Result 24 1100 SampT	⊽ype: LC h ID: G5 Date: 5/ PQL 5.0	S 9659 6/2019 SPK value 25.00 1000 BLK	Tes F SPK Ref Val 0 Tes	tCode: E RunNo: 5 SeqNo: 2 %REC 94.7 108	PA Method 9659 011208 LowLimit 80.1 73.8 PA Method	8015D: Gaso Units: mg/k HighLimit 123 119 8015D: Gaso	oline Rang (g %RPD Dline Rang	e RPDLimit	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: RB Client ID: PBS	SampT Batcl Analysis E Result 24 1100 SampT Batcl	Type: LC h ID: G5 Date: 5/ PQL 5.0 Type: ME	S 9659 6/2019 SPK value 25.00 1000 BLK 9659	Tes F SPK Ref Val 0 Tes F	tCode: EI RunNo: 5 9 SeqNo: 2 0 %REC 94.7 108 tCode: EI RunNo: 5 9	PA Method 9659 011208 LowLimit 80.1 73.8 PA Method 9659	8015D: Gaso Units: mg/k HighLimit 123 119 8015D: Gaso	oline Rang (g %RPD Dine Rang	e RPDLimit e	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: RB Client ID: PBS Prep Date:	SampT Batcl Analysis E Result 24 1100 SampT Batcl Analysis E	Type: LC h ID: G5 Date: 5/ PQL 5.0 Type: ME h ID: G5 Date: 5/	S 9659 6/2019 SPK value 25.00 1000 BLK 9659 6/2019	Tes F SPK Ref Val 0 Tes F S	tCode: EF RunNo: 59 SeqNo: 20 %REC 94.7 108 tCode: EF RunNo: 59 SeqNo: 20	PA Method 9659 011208 LowLimit 80.1 73.8 PA Method 9659 011209	8015D: Gaso Units: mg/k HighLimit 123 119 8015D: Gaso Units: mg/k	oline Rang (g %RPD Dline Rang (g	e RPDLimit e	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: RB Client ID: PBS Prep Date: Analyte	SampT Batcl Analysis E Result 24 1100 SampT Batcl Analysis E Result	Type: LC h ID: G5 Date: 5/ PQL 5.0 Type: ME h ID: G5 Date: 5/ PQL	S 9659 6/2019 SPK value 25.00 1000 3LK 9659 6/2019 SPK value	Tes F SPK Ref Val 0 Tes F SPK Ref Val	tCode: EI RunNo: 59 SeqNo: 20 %REC 94.7 108 tCode: EI RunNo: 59 SeqNo: 20 %REC	PA Method 9659 011208 LowLimit 80.1 73.8 PA Method 9659 011209 LowLimit	8015D: Gaso Units: mg/k HighLimit 123 119 8015D: Gaso Units: mg/k HighLimit	oline Rang (g %RPD oline Rang (g %RPD	e RPDLimit e RPDLimit	Qual		
Sample ID: 2.5UG GRO LCS Client ID: LCSS Prep Date: Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: RB Client ID: PBS Prep Date: Analyte Gasoline Range Organics (GRO)	SampT Batcl Analysis E Result 24 1100 SampT Batcl Analysis E Result ND	Type: LC h ID: G5 Date: 5/ PQL 5.0 Type: ME h ID: G5 Date: 5/ PQL 5.0	S 9659 6/2019 SPK value 25.00 1000 3LK 9659 6/2019 SPK value	Tes F SPK Ref Val 0 Tes F SPK Ref Val	tCode: EI RunNo: 59 SeqNo: 20 94.7 108 tCode: EI RunNo: 59 SeqNo: 20 %REC	PA Method 9659 011208 LowLimit 80.1 73.8 PA Method 9659 011209 LowLimit	8015D: Gaso Units: mg/k HighLimit 123 119 8015D: Gaso Units: mg/k HighLimit	oline Rang (g %RPD oline Rang (g %RPD	e RPDLimit e RPDLimit	Qual		

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

WO#: 1905232 08-May-19

Client: Project:	ENSOL	UM 7-7 Loop									
Somple ID:		S Somo		20	Too	tCodo: El	PA Mothod	9021B: Volo	tiloo		
	LOOD	s Samp			Tes				liles		
Client ID:	LCSS	Batc	n ID: R	9658	F	(unNo: 5	9658				
Prep Date:		Analysis [Date: 5	/6/2019	5	SeqNo: 2	011130	Units: mg/k	٢g		
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		0.93	0.050	1.000	0	93.1	80	120			
Ethylbenzene		0.91	0.050	1.000	0	91.2	80	120			
Xylenes, Total		2.7	0.10	3.000	0	89.7	80	120			
Surr: 4-Bron	nofluorobenzene	0.94		1.000		93.6	80	120			
Sample ID:	RB	Samp	Туре: М	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: R	59658	F	RunNo: 5 9	9658				
Prep Date:		Analysis [Date: 5	/6/2019	S	SeqNo: 2	011140	Units: mg/k	٢g		
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-Bron	nofluorobenzene	0.89		1.000		88.5	80	120			
Sample ID:	100NG BTEX LC	s Samp	Type: L(cs	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batc	h ID: R	59659	F	RunNo: 5	9659				
Prep Date:		Analysis [Date: 5	/6/2019	5	SeqNo: 2	011244	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	89.7	80	120			
Toluene		0.92	0.050	1.000	0	91.7	80	120			
Ethylbenzene		0.91	0.050	1.000	0	91.4	80	120			
Xylenes, Total		2.8	0.10	3.000	0	91.7	80	120			
Surr: 4-Bron	nofluorobenzene	0.94		1.000		94.3	80	120			
Sample ID:	RB	Samp	Туре: М	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: R	59659	F	RunNo: 5 9	9659				
Prep Date:		Analysis [Date: 5	/6/2019	5	SeqNo: 2	011255	Units: mg/k	٢g		
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-Bron	nofluorobenzene	0.92		1.000		92.0	80	120			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Value above quantitation range Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

	RONMENTAL Ysis Ratory	Hall Environment A TEL: 505-345-39 Website: www.	tal Analy 49 Ibuquer 75 FAX: hallenvi	vsis Laborato 01 Hawkins N que, NM 8710 505-345-410 ronmental.co	ry 1E 09 Sar 07 m	nple Log-In C	Check List
Client Name:	ENSOLUM AZTEC	Work Order Numb	er: 190	5232		RcptNo	: 1
Received By:	Isaiah Ortiz	5/4/2019 8:50:00 AM	1		Inc	2×	
Completed By:	Isaiah Ortiz	5/4/2019 10:18:10 A	м		INC	2	
Reviewed By:	of MA 5/5/19						
Chain of Cus	<u>tody</u>				_	_	
1. Is Chain of Cu	ustody complete?		Yes	\checkmark	No 🗌	Not Present	
2. How was the	sample delivered?		Cou	rier			
<u>Log In</u>							
3. Was an attem	npt made to cool the sample	es?	Yes	\checkmark	No 🗌	NA 🗌	
4. Were all samp	ples received at a temperati	ure of >0° C to 6.0°C	Yes	\checkmark	No 🗌		
5. Sample(s) in p	proper container(s)?		Yes	\checkmark	No 🗌		
6. Sufficient sam	ple volume for indicated tes	st(s)?	Yes	\checkmark	No 🗌		
7. Are samples (e	except VOA and ONG) prop	perly preserved?	Yes	\checkmark	No 🗌		
8. Was preservat	tive added to bottles?		Yes		No 🔽	NA 🗌	
9. VOA vials have	e zero headspace?		Yes		No 🗌	No VOA Vials 🗹	
10. Were any sam	nple containers received bro	oken?	Yes		No 🔽	# of preserved bottles checked	
11. Does paperwo	rk match bottle labels?		Yes	\checkmark	No 🗌	for pH:	
2 Are matrices o	correctly identified on Chain	of Custody?	Vec	v	No 🗌	Adjusted?	>12 unless hoted)
3 Is it clear what	analyses were requested?	of Custody?	Yes				
4. Were all holdin	ng times able to be met?		Yes			Checked by:	
(If no, notify cu	stomer for authorization.)				l		
pecial Handli	ing (if applicable)						
15. Was client not	tified of all discrepancies wi	th this order?	Yes		No 🗌	NA 🗹	
Person I	Notified:	Date [.]					
By Who	m: [Via:	eM	ail 🗌 Phor	ne 🗌 Fax	In Person	
Regardin	ng:						
Client In	structions:						
16. Additional ren	narks:						1), (1)
17. <u>Cooler Inforr</u> Cooler No 1	Temp °C Condition 2.4 Good	Seal Intact Seal No Yes	Seal D	ate Sig	gned By		

Chair	1-of-Cl	ustody Record	Turn-Around	Time:	and the state of the second se		< H			001	T IN E IN IN	
lient: Ens	Slumic	TC	□ Standard	K Rush	140%						SORATO	AL
			Project Name		-			n hallen	vironm.			
lailing Addres	s:[0[2]02	S. Rio Grande Sut A	Lat	t-J INDIA	1000	4901 Ha	wkins N	A - JV	buquer	due. NI	M 87109	
Artecin	HES M	010	Project #: O	SAIDAGO	X	Tel. 50	5-345-3	975	Fax 5(05-345-	-4107	
hone #:		1						Ana	lysis R	equest		
mail or Fax#:	KSW	Syamu	Project Mana	ger: ≮Swm	mers	(O) (1)	20 11	^v O		(ìn		
A/QC Packag∈] Standard		Level 4 (Full Validation)				ьсв. ^а 0 \	SMIS	PO4, S		əsdA\ti		
ccreditation:	□ Az Cc	ompliance	Sampler:	Perece	hillo	ам / DК	۲) 2728	103'		uəse		
NELAC	□ Othe	r	On Ice:	<pre> Yes </pre>	No/	18/si	01 8 01 8	V "		(AC	5	
I EDD (Type)			# of Coolers:)		BE (GF	018 910	lete	(ա. -^C	90	
			Cooler Temp(including CF): Z	٦.٣.	TM 15D oite	y 83 etho	s Me	(AO	imə Iofilo	Ų	
ate Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO. 1905 732	+X∃T8 7PH:80 8081 Pe	M) 803 d sHA9	8 АЯЭЯ СІ, F, B	∧) 0928	S) 0728 Total Co	NAS	
3/19 gus	\sim	SP-1	402Jar	(00)	100-	XX						
3/9 950	S	SP-3	1 yez Jar	(00)	200-	\swarrow					×	
319 955	5	SP-3	1 yestar	CObi	-003	XX					X	
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		THA	/									
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ate: Time:	Relinquish	led by:	Received by:	Via:	Date Time	Remarks:		é,		Tom	La) huon	(lozo
te: Time:	Relinquish	ed by:	Received by:	Via:	7/5/17 15/8 Date Time	CAMEDAL		Par	Ley	121	Salad	
13/10 1810	M	In the A D. P. LOKS	to	COUNIC	stylig orso		1					
lf necessar	y, samples sut	bmitted to Hall Environmental may be subc	ontracted to other ac	credited laboratories	. This serves as notice of this	possibility. Any sub	-contracted	i data will t	be clearly n	notated on	the analytical report.	

 \sum



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

May 08, 2019

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

RE: Lateral C-7 Loop

OrderNo.: 1905230

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/4/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	C	lient Sample ID: CS-1
Project:	Lateral C-7 Loop		Collection Date: 5/3/2019 9:15:00 AM
Lab ID:	1905230-001	Matrix: MEOH (SOIL)	Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	100	60	mg/Kg	20	5/5/2019 1:10:54 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/6/2019 10:19:29 AM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 10:19:29 AM	44727
Surr: DNOP	89.7	70-130	%Rec	1	5/6/2019 10:19:29 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/6/2019 9:08:54 AM	G59658
Surr: BFB	90.4	73.8-119	%Rec	1	5/6/2019 9:08:54 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.023	mg/Kg	1	5/6/2019 9:08:54 AM	R59658
Toluene	ND	0.046	mg/Kg	1	5/6/2019 9:08:54 AM	R59658
Ethylbenzene	ND	0.046	mg/Kg	1	5/6/2019 9:08:54 AM	R59658
Xylenes, Total	ND	0.093	mg/Kg	1	5/6/2019 9:08:54 AM	R59658
Surr: 4-Bromofluorobenzene	88.9	80-120	%Rec	1	5/6/2019 9:08:54 AM	R59658

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

Qualifiers:

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

- 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

Page 1 of 11

S % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	Client Sample ID: CS-2
Project:	Lateral C-7 Loop	Collection Date: 5/3/2019 9:20:00 AM
Lab ID:	1905230-002	Matrix: MEOH (SOIL) Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	200	60	mg/Kg	20	5/5/2019 1:23:18 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/6/2019 10:43:32 AM	44727
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/6/2019 10:43:32 AM	44727
Surr: DNOP	97.0	70-130	%Rec	1	5/6/2019 10:43:32 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	5/6/2019 9:31:38 AM	G59658
Surr: BFB	89.2	73.8-119	%Rec	1	5/6/2019 9:31:38 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.017	mg/Kg	1	5/6/2019 9:31:38 AM	R59658
Toluene	ND	0.034	mg/Kg	1	5/6/2019 9:31:38 AM	R59658
Ethylbenzene	ND	0.034	mg/Kg	1	5/6/2019 9:31:38 AM	R59658
Xylenes, Total	ND	0.068	mg/Kg	1	5/6/2019 9:31:38 AM	R59658
Surr: 4-Bromofluorobenzene	85.9	80-120	%Rec	1	5/6/2019 9:31:38 AM	R59658

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	(Client Sample ID: CS-3
Project:	Lateral C-7 Loop		Collection Date: 5/3/2019 9:25:00 AM
Lab ID:	1905230-003	Matrix: MEOH (SOIL)	Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	74	60	mg/Kg	20	5/5/2019 1:35:43 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: JME
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	5/6/2019 11:07:46 AM	44727
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	5/6/2019 11:07:46 AM	44727
Surr: DNOP	97.8	70-130	%Rec	1	5/6/2019 11:07:46 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	5/6/2019 9:54:17 AM	G59658
Surr: BFB	90.6	73.8-119	%Rec	1	5/6/2019 9:54:17 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.016	mg/Kg	1	5/6/2019 9:54:17 AM	R59658
Toluene	ND	0.031	mg/Kg	1	5/6/2019 9:54:17 AM	R59658
Ethylbenzene	ND	0.031	mg/Kg	1	5/6/2019 9:54:17 AM	R59658
Xylenes, Total	ND	0.062	mg/Kg	1	5/6/2019 9:54:17 AM	R59658
Surr: 4-Bromofluorobenzene	87.7	80-120	%Rec	1	5/6/2019 9:54:17 AM	R59658

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

Qualifiers:

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

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	Client Sample ID: CS-4
Project:	Lateral C-7 Loop	Collection Date: 5/3/2019 9:30:00 AM
Lab ID:	1905230-004	Matrix: MEOH (SOIL) Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	5/5/2019 1:48:07 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/6/2019 11:32:03 AM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 11:32:03 AM	44727
Surr: DNOP	97.2	70-130	%Rec	1	5/6/2019 11:32:03 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	5/6/2019 10:16:56 AM	G59658
Surr: BFB	90.5	73.8-119	%Rec	1	5/6/2019 10:16:56 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.018	mg/Kg	1	5/6/2019 10:16:56 AM	R59658
Toluene	ND	0.035	mg/Kg	1	5/6/2019 10:16:56 AM	R59658
Ethylbenzene	ND	0.035	mg/Kg	1	5/6/2019 10:16:56 AM	R59658
Xylenes, Total	ND	0.070	mg/Kg	1	5/6/2019 10:16:56 AM	R59658
Surr: 4-Bromofluorobenzene	89.2	80-120	%Rec	1	5/6/2019 10:16:56 AM	R59658

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

Qualifiers:

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

- 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

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S % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM	C	lient Sample ID: CS-5
Project:	Lateral C-7 Loop		Collection Date: 5/3/2019 9:35:00 AM
Lab ID:	1905230-005	Matrix: MEOH (SOIL)	Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	260	60	mg/Kg	20	5/5/2019 2:00:32 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/6/2019 11:56:19 AM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 11:56:19 AM	44727
Surr: DNOP	97.5	70-130	%Rec	1	5/6/2019 11:56:19 AM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	5/6/2019 10:39:42 AM	G59658
Surr: BFB	90.4	73.8-119	%Rec	1	5/6/2019 10:39:42 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	: RAA
Benzene	ND	0.017	mg/Kg	1	5/6/2019 10:39:42 AM	R59658
Toluene	ND	0.035	mg/Kg	1	5/6/2019 10:39:42 AM	R59658
Ethylbenzene	ND	0.035	mg/Kg	1	5/6/2019 10:39:42 AM	R59658
Xylenes, Total	ND	0.069	mg/Kg	1	5/6/2019 10:39:42 AM	R59658
Surr: 4-Bromofluorobenzene	90.0	80-120	%Rec	1	5/6/2019 10:39:42 AM	R59658

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

Qualifiers:

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

- 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

Page 5 of 11

S % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/8/2019

CLIENT:	ENSOLUM		Client Sample ID: CS-6
Project:	Lateral C-7 Loop		Collection Date: 5/3/2019 9:40:00 AM
Lab ID:	1905230-006	Matrix: MEOH (SOIL)	Received Date: 5/4/2019 8:50:00 AM

Analyses	Result	RL Q	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	310	60	mg/Kg	20	5/5/2019 2:12:57 PM	44722
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	JME
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	5/6/2019 12:20:30 PM	44727
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/6/2019 12:20:30 PM	44727
Surr: DNOP	97.8	70-130	%Rec	1	5/6/2019 12:20:30 PM	44727
EPA METHOD 8015D: GASOLINE RANGE					Analyst	RAA
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	5/6/2019 11:02:24 AM	G59658
Surr: BFB	88.2	73.8-119	%Rec	1	5/6/2019 11:02:24 AM	G59658
EPA METHOD 8021B: VOLATILES					Analyst	RAA
Benzene	ND	0.016	mg/Kg	1	5/6/2019 11:02:24 AM	R59658
Toluene	ND	0.032	mg/Kg	1	5/6/2019 11:02:24 AM	R59658
Ethylbenzene	ND	0.032	mg/Kg	1	5/6/2019 11:02:24 AM	R59658
Xylenes, Total	ND	0.065	mg/Kg	1	5/6/2019 11:02:24 AM	R59658
Surr: 4-Bromofluorobenzene	87.1	80-120	%Rec	1	5/6/2019 11:02:24 AM	R59658

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

Qualifiers:

*

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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WO#: 1905230 08-May-19

Client: Project:	ENS Late	OLUM ral C-7 Loop									
Sample ID:	MB-44722	SampTy	/pe: ml	olk 722	Tes	tCode: El	PA Method	300.0: Anion	s		
Prep Date:	5/5/2019	Analysis Da	ate: 5/	5/2019	S	SeqNo: 2	010922	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-44722	SampTy	vpe: Ics	5	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 44	722	F	RunNo: 5 9	9653				
Prep Date:	5/5/2019	Analysis Da	ate: 5/	5/2019	S	SeqNo: 2	010923	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.5	90	110			

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits Р
- Sample pH Not In Range
- RL Reporting Limit

WO#: **1905230**

08-May-19

Client: Project:	ENSOLU Lateral C	M -7 Loop									
Oranda ID								0045M/D D:-		0	
Sample ID:	: LCS-44647	Samply		5 6 4 7	I esi	Code: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch	D: 44	647	R	unNo: 5	9643				
Prep Date:	5/3/2019	Analysis Da	ie: 5/	6/2019	5	eqNo: 2	010611	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	4.4		5.000		88.3	70	130			
Sample ID:	: LCS-44727	SampTy	be: LC	S	Test	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch I	D: 44	727	R	unNo: 5	9643				
Prep Date:	5/6/2019	Analysis Da	e: 5/	6/2019	S	eqNo: 2	010612	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	46	10	50.00	0	92.9	63.9	124			
Surr: DNOP)	4.3		5.000		86.8	70	130			
Sample ID:	: MB-44647	SampTy	De: ME	BLK	Test	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch I	D: 44	647	R	lunNo: 5	9643				
Prep Date:	5/3/2019	Analysis Da	ie: 5/	6/2019	S	eqNo: 2	010613	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	10		10.00		103	70	130			
Sample ID:	: MB-44727	SampTy	be: ME	BLK	Test	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	PBS	Batch I	D: 44	727	R	lunNo: 5	9643				
Prep Date:	5/6/2019	Analysis Da	ie: 5/	6/2019	S	eqNo: 2	010614	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Motor Oil Rang	ge Organics (MRO)	ND	50								
Surr: DNOP	5	9.5		10.00		95.3	70	130			
Sample ID:	: LCS-44646	SampTy	e: LC	S	Test	tCode: El	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch I	D: 44	646	R	unNo: 5	9644				
Prep Date:	5/3/2019	Analysis Da	e: 5/	6/2019	S	eqNo: 2	010648	Units: %Rec	:		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	4.3		5.000		85.9	70	130			
					Tool		PA Method	8015M/D: Die	sel Range	Organics	
Sample ID:	: MB-44646	SampTy	De: MF		165					s organics	
Sample ID: Client ID:	: MB-44646 PBS	SampTy Batch I	D: 44	646	R	tunNo: 5	9644		j-	organics	
Sample ID: Client ID: Prep Date:	: MB-44646 PBS 5/3/2019	SampTy Batch I Analysis Da	DE: ME D: 44 D: 5/	646 6/2019	R	tunNo: 5 9 SeqNo: 2 0	9644 010649	Units: %Rec	:	organics	
Sample ID: Client ID: Prep Date: Analyte	: MB-44646 PBS 5/3/2019	SampTyj Batch I Analysis Da Result	DE: ME D: 44 DE: 5 / PQL	646 6/2019 SPK value	SPK Ref Val	2unNo: 59 SeqNo: 20 %REC	9644 010649 LowLimit	Units: %Rec	%RPD	RPDLimit	Qual

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

4.3

Client: Project:	ENSOLUM Lateral C-7 Loop									
Sample ID: MB-	44648 Samp Bate	Type: MI ch ID: 44	BLK 648	Tes F	tCode: El RunNo: 5	PA Method 9657	8015M/D: Die	esel Rang	e Organics	
Prep Date: 5/3	/2019 Analysis	Date: 5/	6/2019	5	SeqNo: 2	011095	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		89.7	70	130			
Sample ID: LCS	-44648 Samp	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: LCS	S Bate	ch ID: 44	648	F	RunNo: 5	9657				
Prep Date: 5/3	/2019 Analysis	Date: 5/	6/2019	5	SeqNo: 2	011096	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

86.1

70

130

5.000

Surr: DNOP

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 11

WO#: **1905230**

08-May-19

Client: ENSOLUM Project: Lateral C-7 Loop Sample ID: 1905230-001A MS SampType: MS TestCode: EPA Method 8015D: Gasoline Range RunNo: 59658 Client ID: CS-1 Batch ID: G59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011117 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analvte Result LowLimit Qual Gasoline Range Organics (GRO) 20 4.6 23.13 Λ 86.2 69.1 142 Surr: BFB 970 925.1 105 73.8 119 Sample ID: 1905230-001A MSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: CS-1 Batch ID: G59658 RunNo: 59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011118 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 19 4.6 23.13 0 82.8 69.1 142 4.07 20 Surr: BFB 940 925.1 101 73.8 119 0 0 Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: G59658 RunNo: 59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011127 Units: mg/Kg %REC Result PQL SPK value SPK Ref Val HighLimit %RPD RPDLimit Analyte LowLimit Qual Gasoline Range Organics (GRO) 22 5.0 25.00 0 87.5 80.1 123 Surr: BFB 1000 1000 104 73.8 119 Sample ID: RB TestCode: EPA Method 8015D: Gasoline Range SampType: MBLK Client ID: PBS Batch ID: G59658 RunNo: 59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011128 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD RPDLimit Analyte Result PQL LowLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 900 1000 89.9 73.8 119

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, In	c.

WO#: **1905230**

08-May-19

Client: ENSOLUM Project: Lateral C-7 Loop Sample ID: 100NG BTEX LCS SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS RunNo: 59658 Batch ID: R59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011130 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analvte Result LowLimit Qual Benzene 1.1 0.025 1.000 0 109 80 120 Toluene 0.93 0.050 1.000 0 93.1 80 120 0.050 0 91.2 80 Ethylbenzene 0.91 1.000 120 Xylenes, Total 2.7 0.10 3.000 0 89.7 80 120 Surr: 4-Bromofluorobenzene 0.94 1.000 93.6 80 120 Sample ID: RB SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: R59658 RunNo: 59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2011140 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual ND 0.025 Benzene Toluene ND 0.050 ND 0.050 Ethylbenzene ND 0.10 Xylenes, Total Surr: 4-Bromofluorobenzene 0.89 1.000 88.5 80 120 Sample ID: 1905230-002A MS SampType: MS TestCode: EPA Method 8021B: Volatiles Client ID: CS-2 Batch ID: R59658 RunNo: 59658 Prep Date: Analysis Date: 5/6/2019 SeqNo: 2013259 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual 0.74 109 63.9 0.017 0.6798 127 Benzene O Toluene 0.65 0.034 0.6798 0 96.0 69.9 131 Ethylbenzene 0.034 0.6798 0 94.4 71 132 0.64 Xylenes, Total 1.9 0.068 2.039 0 92.3 71.8 131 Surr: 4-Bromofluorobenzene 0.66 0.6798 974 120 80 Sample ID: 1905230-002A MSD TestCode: EPA Method 8021B: Volatiles SampType: MSD CS-2 Batch ID: R59658 RunNo: 59658 Client ID: Prep Date: Analysis Date: 5/6/2019 SeqNo: 2013260 Units: mg/Kg HighLimit PQL SPK value SPK Ref Val %REC %RPD RPDLimit Analyte Result LowLimit Qual Benzene 0.71 0.017 0.6798 0 104 63.9 127 4.66 20 Toluene 0.61 0.034 0.6798 0 89.7 69.9 131 6.84 20 Ethylbenzene 0.58 0.034 0.6798 0 85.5 71 132 9.89 20 Xylenes, Total 1.7 0.068 2.039 0 82.5 71.8 131 11.3 20 0 Surr: 4-Bromofluorobenzene 0.63 0.6798 92.4 80 120 0

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

	RONMENTAL YSIS RATORY	Hall Environmental Albu TEL: 505-345-3975 Website: www.ha	Analy 490 querq FAX: llenvii	sis Laboratory 11 Hawkins NE 10e, NM 87109 505-345-4107 ronmental.com	Sa	mple Log-In C	heck List
Client Name:	ENSOLUM AZTEC	Work Order Number:	190	5230		RcptNo:	1
Received By:	Isaiah Ortiz	5/4/2019 8:50:00 AM			I_(24	
Completed By:	Yazmine Garduno	5/4/2019 9:57:03 AM			rfazmine (Glardes	ite	
Reviewed By:	of mix 5/5/19						
Chain of Cus	stody						
1. Is Chain of C	sustody complete?		Yes	\checkmark	No 🗌	Not Present	
2. How was the	sample delivered?		<u>Cou</u>	rier			
Log In						_	
3. Was an atten	npt made to cool the samples?		Yes	\checkmark	No 🗌	NA 📖	
4. Were all sam	ples received at a temperature of	of >0° C to 6.0°C	Yes		No 🗌		
5. Sample(s) in	proper container(s)?		Yes		No 🗌		
6. Sufficient sam	nple volume for indicated test(s)	?	Yes	\checkmark	No 🗌		
7. Are samples ((except VOA and ONG) properly	preserved?	Yes	\checkmark	No 🗌		
8. Was preserva	tive added to bottles?		Yes		No 🗹	NA 🗌	
9. VOA vials hav	ve zero headspace?		Yes		No 🗌	No VOA Vials 🗹	
10. Were any sar	mple containers received broker	1?	Yes		No 🗸	# of preserved	
11. Does paperwo (Note discreps	ork match bottle labels? ancies on chain of custody)		Yes		No 🗌	bottles checked for pH: (<2 or	>12 unless noted)
12. Are matrices of	correctly identified on Chain of C	Custody?	Yes	\checkmark	No 🗌	Adjusted?	
13. Is it clear what	t analyses were requested?		Yes	\checkmark	No 🗌		
14. Were all holdi (If no, notify ci	ng times able to be met? ustomer for authorization.)		Yes	\checkmark	No 🗌	Checked by:	
Special Handl	ling (if applicable)						
15. Was client no	otified of all discrepancies with the	nis order?	Yes		No 🗌	NA 🗹	
Person	Notified:	Date					
By Who	om:	Via:] eM	ail 🗌 Phon	e 🗌 Fax	in Person	
Regard	ing:						
16. Additional re	marks:						
17. <u>Cooler Infor</u>	mation		60.7 <u>2</u> 50.50	e pierre de la compaña		. NE	
1	Temp *C Condition Se 2.4 Good Yes	ai intact Seal No S	eal D	ate Sig	ned By	50 1	

Chain-of-(Custody Record	Turn-Around	Time:	And a second sec			l		(
Client: Ensolum /	10	□ Standard	K Rush	100%				TAN	A B	NMENIAL	
		Project Name				MMM	hallenv	ronmer	ntal.col		-
Mailing Address:	o S. Bin locanto Suitr A				4901 H	awkins N	≡ - Alb	nduera	ue. NN	A 87109	
Aztec, NM 87	014	Project #: 03	SAIAZLO	SS	Tel. 50	5-345-39	75 F	ax 505	5-345-4	4107	
Phone #:							Analy	sis Re	quest		
email or Fax#: KSuym	mers perisolum, com	Project Mana	ger: KSum	mers	(0) (1		[⊅] O	-	(ìn		
QA/QC Package:					208 ЯМ г'В:	SM	S Ԡ(əsd		
□ Standard	Level 4 (Full Validation)				ЪС / О\) s ,{	IIS0	ЪС		A\fn		
Accreditation:	Compliance	Sampler:	RDeech	(1)(r) (1)	1MT 7 DF 280	(r. 728	10 ⁵		IƏSƏ		
DINELAC DI	ner	On Ice:	@ Yes	O No	8/s 02	or 504	[؛] ا	(AC	, Pr		
EDD (Type)		# of Coolers:	1		∃8 (GF	910 910	10 ³	-AC (u.	50	
		Cooler Temp	ncluding CF): 2	14.1	TM ISD oife	odta 58 \	r, Ne	(AO ime	otilo	نط	
		Container	Preservative	, HEAL No.	31 Pe 1801 1801	M) 8 (d sH	8 АЯ: В , Я	N) 02	DO IB:	ON	
Date Time Matrix	Sample Name	Type and #	Type	1405230	ТЯ IЧТ 808	БA	сі' вс	928 928	tоТ	2	
5/2/19 9115 S	CS-I	1402 Jar	Coul	-00)	XX					X	
5/3/19 920 S	CS-2	1 402 Jur	Coul	200-	$\langle \times \rangle$						
5/3/19 gas S	C5-3	142Jar	روما	-003	XX		4			×	
5/3/19 930 S	CS-4	1 yez Jar	Coul	-00H	XX						
5/3/19 935 5	CS-5	1 yuz Jan	1001	- 005	\neq \neq					~	
5/3/19/940 S	C5-6	1 402 Jar	1001	400-	XX				(7	
1							÷.				
				e							
	SA										
									3		
Date: Time: Relingu	ished by:	Received by:	Via:	5/3/19 13/8	Remarks:		Pay	F	Dem (Lung (Epter)	
Pate: Time: Relinqu	ished by:	Received by:	Via:	Jate Time	SAMED	Í.					
If necessary, samples	www.www.www.www.www.www.www.www.www.ww	ontracted to other ac	courter aboratories	s. This serves as notice of this	possibility. Any sut	-contracted c	lata will be	clearly not	ated on th	he analytical report.	7



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

May 15, 2019

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

RE: Lateral C-7 Loop

OrderNo.: 1905461

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 sample(s) on 5/9/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab Order 1905461

Date Reported: 5/15/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	ENSOLUM	Client Sample ID: CS-7					
Project:	Lateral C-7 Loop		Collection Date: 5/8/2019 9:05:00 AM				
Lab ID:	1905461-001	Matrix: MEOH (SOIL)	Received Date: 5/9/2019 8:15:00 AM				

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	1100	60	mg/Kg	20	5/9/2019 2:17:47 PM	44826
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	2.9	mg/Kg	1	5/9/2019 1:25:03 PM	R59765
Surr: BFB	105	70-130	%Rec	1	5/9/2019 1:25:03 PM	R59765
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst:	том
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	5/9/2019 12:54:12 PM	44816
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/9/2019 12:54:12 PM	44816
Surr: DNOP	105	70-130	%Rec	1	5/9/2019 12:54:12 PM	44816
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.014	mg/Kg	1	5/9/2019 1:25:03 PM	S59765
Toluene	ND	0.029	mg/Kg	1	5/9/2019 1:25:03 PM	S59765
Ethylbenzene	ND	0.029	mg/Kg	1	5/9/2019 1:25:03 PM	S59765
Xylenes, Total	ND	0.058	mg/Kg	1	5/9/2019 1:25:03 PM	S59765
Surr: 1,2-Dichloroethane-d4	89.8	70-130	%Rec	1	5/9/2019 1:25:03 PM	S59765
Surr: 4-Bromofluorobenzene	91.2	70-130	%Rec	1	5/9/2019 1:25:03 PM	S59765
Surr: Dibromofluoromethane	104	70-130	%Rec	1	5/9/2019 1:25:03 PM	S59765
Surr: Toluene-d8	88.7	70-130	%Rec	1	5/9/2019 1:25:03 PM	S59765

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 9

Lab Order 1905461

Date Reported: 5/15/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	ENSOLUM		С	lient Sample ID: CS-8
Project:	Lateral C-7 Loop			Collection Date: 5/8/2019 9:10:00 AM
Lab ID:	1905461-002	Matrix: ME	EOH (SOIL)	Received Date: 5/9/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	500	60	mg/Kg	20	5/9/2019 2:30:11 PM	44826
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.0	mg/Kg	1	5/9/2019 1:53:40 PM	R59765
Surr: BFB	108	70-130	%Rec	1	5/9/2019 1:53:40 PM	R59765
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst:	том
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/9/2019 1:16:26 PM	44816
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/9/2019 1:16:26 PM	44816
Surr: DNOP	106	70-130	%Rec	1	5/9/2019 1:16:26 PM	44816
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.015	mg/Kg	1	5/9/2019 1:53:40 PM	S59765
Toluene	ND	0.030	mg/Kg	1	5/9/2019 1:53:40 PM	S59765
Ethylbenzene	ND	0.030	mg/Kg	1	5/9/2019 1:53:40 PM	S59765
Xylenes, Total	ND	0.061	mg/Kg	1	5/9/2019 1:53:40 PM	S59765
Surr: 1,2-Dichloroethane-d4	94.1	70-130	%Rec	1	5/9/2019 1:53:40 PM	S59765
Surr: 4-Bromofluorobenzene	95.6	70-130	%Rec	1	5/9/2019 1:53:40 PM	S59765
Surr: Dibromofluoromethane	109	70-130	%Rec	1	5/9/2019 1:53:40 PM	S59765
Surr: Toluene-d8	88.8	70-130	%Rec	1	5/9/2019 1:53:40 PM	S59765

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

Qualifiers:

*

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 2 of 9

Lab Order 1905461

Date Reported: 5/15/2019

Hall Environmental Analysis Laboratory, Inc.

CLIENT:	ENSOLUM		C	lient Sample ID: CS-9
Project:	Lateral C-7 Loop			Collection Date: 5/8/2019 9:15:00 AM
Lab ID:	1905461-003	Matrix: N	MEOH (SOIL)	Received Date: 5/9/2019 8:15:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	95	60	mg/Kg	20	5/9/2019 2:42:36 PM	44826
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	5/9/2019 2:22:17 PM	R59765
Surr: BFB	109	70-130	%Rec	1	5/9/2019 2:22:17 PM	R59765
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst:	том
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/9/2019 1:38:44 PM	44816
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/9/2019 1:38:44 PM	44816
Surr: DNOP	106	70-130	%Rec	1	5/9/2019 1:38:44 PM	44816
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.016	mg/Kg	1	5/9/2019 2:22:17 PM	S59765
Toluene	ND	0.032	mg/Kg	1	5/9/2019 2:22:17 PM	S59765
Ethylbenzene	ND	0.032	mg/Kg	1	5/9/2019 2:22:17 PM	S59765
Xylenes, Total	ND	0.064	mg/Kg	1	5/9/2019 2:22:17 PM	S59765
Surr: 1,2-Dichloroethane-d4	92.6	70-130	%Rec	1	5/9/2019 2:22:17 PM	S59765
Surr: 4-Bromofluorobenzene	95.7	70-130	%Rec	1	5/9/2019 2:22:17 PM	S59765
Surr: Dibromofluoromethane	107	70-130	%Rec	1	5/9/2019 2:22:17 PM	S59765
Surr: Toluene-d8	88.5	70-130	%Rec	1	5/9/2019 2:22:17 PM	S59765

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

Qualifiers:

*

- Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 3 of 9

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 5/15/2019

CLIENT:	ENSOLUM	Client Sample ID: CS-10						
Project:	Lateral C-7 Loop		Collection Date: 5/8/2019 9:20:00 AM					
Lab ID:	1905461-004	Matrix: MEOH (SOIL)	Received Date: 5/9/2019 8:15:00 AM					

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	MRA
Chloride	630	60	mg/Kg	20	5/9/2019 2:55:00 PM	44826
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst:	RAA
Gasoline Range Organics (GRO)	ND	3.2	mg/Kg	1	5/9/2019 2:50:53 PM	R59765
Surr: BFB	108	70-130	%Rec	1	5/9/2019 2:50:53 PM	R59765
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst:	том
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/9/2019 2:00:49 PM	44816
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/9/2019 2:00:49 PM	44816
Surr: DNOP	106	70-130	%Rec	1	5/9/2019 2:00:49 PM	44816
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst:	RAA
Benzene	ND	0.016	mg/Kg	1	5/9/2019 2:50:53 PM	S59765
Toluene	ND	0.032	mg/Kg	1	5/9/2019 2:50:53 PM	S59765
Ethylbenzene	ND	0.032	mg/Kg	1	5/9/2019 2:50:53 PM	S59765
Xylenes, Total	ND	0.063	mg/Kg	1	5/9/2019 2:50:53 PM	S59765
Surr: 1,2-Dichloroethane-d4	89.2	70-130	%Rec	1	5/9/2019 2:50:53 PM	S59765
Surr: 4-Bromofluorobenzene	97.0	70-130	%Rec	1	5/9/2019 2:50:53 PM	S59765
Surr: Dibromofluoromethane	107	70-130	%Rec	1	5/9/2019 2:50:53 PM	S59765
Surr: Toluene-d8	91.0	70-130	%Rec	1	5/9/2019 2:50:53 PM	S59765

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

Qualifiers:

- * Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 9

WO#: **1905461** *15-May-19*

Client: Project:	ENSC Latera	LUM									
	Zuttin	a e + 200p									
Sample ID:	MB-44826	SampTy	/pe: mk	olk	Tes	tCode: EP	A Method	300.0: Anion	5		
Client ID:	PBS	Batch	ID: 44	826	R	lunNo: 59	766				
Prep Date:	5/9/2019	Analysis Da	ate: 5/	9/2019	S	eqNo: 20	16237	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-44826	SampTy	/pe: Ics	5	Test	tCode: EP	A Method	300.0: Anion	6		
Client ID:	LCSS	Batch	ID: 44	826	R	unNo: 59	766				
Prep Date:	5/9/2019	Analysis Da	ate: 5/	9/2019	S	eqNo: 20	16238	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.0	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 9

Client:ENSOProject:Lateral	LUM C-7 Loop										
Sample ID: LCS-44816	Sample ID: LCS-44816 SampType: LCS Client ID: LCSS Batch ID: 4481			TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS Batch ID			816	RunNo: 59732							
Prep Date: 5/9/2019	Analysis D	ate: 5/	9/2019	S	SeqNo: 2	014933	Units: mg/ł	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	45	10	50.00	0	90.0	63.9	124				
Surr: DNOP	4.0		5.000		79.4	70	130				
Sample ID: MB-44816	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics		_
Client ID: PBS	Batch	D: 44	816	F	RunNo: 5	9732					
Prep Date: 5/9/2019	Analysis D	ate: 5/	9/2019	S	SeqNo: 2	014934	Units: mg/ł	٢g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	9.5		10.00		94.8	70	130				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 9

WO#: 1905461

15-May-19

Client: ENSOLUM Project: Lateral C-7 Loop Sample ID: 100ng Ics SampType: LCS TestCode: EPA Method 8260B: Volatiles Short List Client ID: LCSS Batch ID: \$59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2015522 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analvte Result PQL LowLimit HighLimit Qual Benzene 1.0 0.025 1.000 0 99.8 70 130 Toluene 0.96 0.050 1.000 0 96.3 70 130 87.1 Surr: 1,2-Dichloroethane-d4 0.44 0.5000 70 130 Surr: 4-Bromofluorobenzene 0.49 0.5000 98.1 70 130 Surr: Dibromofluoromethane 0.51 0.5000 103 70 130 Surr: Toluene-d8 0.45 0.5000 89.7 70 130 Sample ID: rb SampType: MBLK TestCode: EPA Method 8260B: Volatiles Short List Client ID: PBS Batch ID: \$59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2015523 Units: mg/Kg PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result LowLimit HighLimit Qual Benzene ND 0.025 ND 0.050 Toluene ND 0.050 Ethylbenzene Xylenes, Total ND 0.10 Surr: 1,2-Dichloroethane-d4 0.43 0.5000 85.8 70 130 Surr: 4-Bromofluorobenzene 0.49 0.5000 97.7 70 130 Surr: Dibromofluoromethane 0.51 0.5000 103 70 130 Surr: Toluene-d8 0.5000 91.9 70 130 0.46 Sample ID: 1905461-002a ms SampType: MS TestCode: EPA Method 8260B: Volatiles Short List Client ID: CS-8 Batch ID: \$59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2016571 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 0.62 0.015 0.6098 0 101 68.9 Benzene 131 Toluene 0.57 0.030 0.6098 0 94.1 64.3 137 Surr: 1,2-Dichloroethane-d4 0.27 0.3049 87.8 70 130 Surr: 4-Bromofluorobenzene 0.30 0.3049 97.0 70 130 Surr: Dibromofluoromethane 0.33 0.3049 107 70 130 Surr: Toluene-d8 0.27 0.3049 88.3 70 130 Sample ID: 1905461-002A MSD TestCode: EPA Method 8260B: Volatiles Short List SampType: MSD Client ID: CS-8 Batch ID: \$59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2016572 Units: mg/Kg %RPD SPK value SPK Ref Val HighLimit %REC **RPDLimit** Qual Analyte Result PQL LowLimit 0.58 0.015 0.6098 94.9 68.9 6.24 20 Benzene 0 131 Toluene 0.54 0.030 0.6098 0 89.0 64.3 137 5.54 20

Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Н
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- R Analyte detected in the associated Method Blank
- Value above quantitation range Е
- Analyte detected below quantitation limits J

Р Sample pH Not In Range

RL Reporting Limit

WO#: **1905461** *15-May-19*

Client: ENSOLUM

Project: Lateral C-7 Loop

Sample ID: 1905461-002A MS	SD SampT	ype: MS	SD	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: CS-8	Batch	n ID: S5	9765	F	RunNo: 5 9	9765				
Prep Date:	Analysis D	ate: 5/	9/2019	5	SeqNo: 2	016572	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	0.27		0.3049		89.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.29		0.3049		96.1	70	130	0	0	
Surr: Dibromofluoromethane	0.32		0.3049		106	70	130	0	0	
Surr: Toluene-d8	0.27		0.3049		88.7	70	130	0	0	

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: **1905461**

15-May-19

Client: ENSOLUM **Project:** Lateral C-7 Loop Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range RunNo: 59765 Client ID: LCSS Batch ID: R59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2015548 Units: mg/Kg SPK value SPK Ref Val %REC HiahLimit %RPD **RPDLimit** Analvte Result PQL LowLimit Qual Gasoline Range Organics (GRO) 23 5.0 25.00 Λ 93.3 70 130 Surr: BFB 540 500.0 108 70 130 Sample ID: rb TestCode: EPA Method 8015D Mod: Gasoline Range SampType: MBLK Client ID: PBS Batch ID: R59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2015549 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 70 550 500.0 109 130 Sample ID: 1905461-001a ms SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: CS-7 Batch ID: R59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2016560 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Analyte Qual Gasoline Range Organics (GRO) 13 2.9 14.44 0 88.8 68.2 135 Surr: BFB 108 70 310 288.7 130 Sample ID: 1905461-001a msd TestCode: EPA Method 8015D Mod: Gasoline Range SampType: MSD Client ID: CS-7 Batch ID: R59765 RunNo: 59765 Prep Date: Analysis Date: 5/9/2019 SeqNo: 2016561 Units: mg/Kg Result SPK value SPK Ref Val %REC HighLimit %RPD RPDLimit Analyte PQL LowLimit Qual Gasoline Range Organics (GRO) 12 14.44 84.8 68.2 135 4.61 2.9 0 20 Surr: BFB 310 288.7 108 70 130 0 0

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

HALL ENVIR ANAL LABOI	RONMENTAL YSIS RATORY	Hall Environment Aı TEL: 505-345-39 Website: www.	al Analysis Labor 4901 Hawkin Ibuquerque, NM 8 75 FAX: 505-345- hallenvironmenta	ratory ns NE 87109 San 4107 1.com	ample Log-In Check List			
Client Name:	ENSOLUM AZTEC	Work Order Numbe	er: 1905461		RcptNo:	1		
Received By:	Erin Melendrez	5/9/2019 8:19:00 AN	5.9.19	ina				
Completed By:	Leah Baca	5/9/2019 8:44:21 AN	1	Lab Bace	1			
Reviewed By:	AT 05/09/19							
Labelee <u>Chain of Cus</u>	tody ENME	5/9/19						
1. Is Chain of C	ustody complete?		Yes 🗹	No 🗌	Not Present			
2. How was the	sample delivered?		Courier					
Log In 3. Was an atterr	npt made to cool the sample	s?	Yes 🗹	No 🗌	NA 🗌			
4. Were all samp	oles received at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗌				
5. Sample(s) in I	proper container(s)?		Yes 🗹	No 🗌				
6. Sufficient sam	ple volume for indicated tes	t(s)?	Yes 🗹	No 🗌				
7. Are samples (except VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗌	_			
8. Was preserva	tive added to bottles?		Yes 🗌	No 🔽	NA 🗌			
9. VOA vials hav	e zero headspace?		Yes 🗌	No 🗌	No VOA Vials 🗹			
10. Were any san	nple containers received bro	ken?	Yes	No 🗹	# . f	C >		
11. Does paperwo (Note discrepa	ork match bottle labels? ancies on chain of custody)		Yes 🗹	No 🗌	bottles checked for pH:	12 unless noted)		
12. Are matrices of	correctly identified on Chain	of Custody?	Yes 🗹	No 🗌	Adjusted?			
13. Is it clear what	t analyses were requested?		Yes 🗹	No 🗌	(PF			
14. Were all holdin	ng times able to be met?		Yes 🗹	No 🗌	Checked by:			
				/				
Special Handl	ing (if applicable)		_					
15. Was client no	tified of all discrepancies wit	h this order?	Yes 🗌	No	NA 🗹			
Person	Notified:	Date						
By Who	om:	Via:	eMail F	Phone 🗌 Fax	In Person			
Regardi	ing:							
10. Additional rer	marks:							
17. Cooler Infor	mation							

Chain-of-Custody Record	Turn-Around Time:	
Client:	Candard XRush NON	AALL ENVIKONMENTAL
	Project Name:	
Mailing Address: (ODG S. Rio Grande Suited	- Lateral C-7 Loup	4901 Hawkins NE - Albuquerque, NM 87109
Aztec, NM 87410	Project #: OSA/226 CSS	Tel. 505-345-3975 Fax 505-345-4107
Phone #:	The contract of the contract o	Analysis Request
email or Fax#: KSummers eensolum .com	Project Manager: KSum mers	(O) 604
QA/QC Package:		(802 74, 5 28's 1MS
Standard Level 4 (Full Validation)		05 20 20 20 20 20 20 20 20 20 20 20 20 20
Accreditation:	Sampler: RDeechilly	MTME 0 / DF 104.1) 218082 21827 21827 21827 21928 2
EDD (Type)	# of Coolers: 3	ССК 103 103 103 100 100 100 100 100 100 100
	Cooler Temp(including cF): 1.5 C3.2 C4.1 C	П 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	Container Preservative HFAI No	 X / X= X / Y= X / Y
Date Time Matrix Sample Name	Type and # Type 1905461	BTF BTF B26 B26 B26 B26 B26 C1, C1, C2, C1, C2, C2, C2, C2, C2, C2, C2, C2, C2, C2
5/8/4 905 5 CS-7	1402-Jar 6001 -0001	× ×
5/8/19 910 5 CS-8	1402 Sar 2001 - 00%	××
SISIM QUS S CS-9	1402 Jar COOF -003	××
5/s/19/920 5 CS-10	142 Jar 6001 -004	X X X X X
	 A set of the set of	
Date: Time: Relinquished by: 5/8/19/1432 Ann La	Received by: Via: Date Time Onvolue Worlds 5/8/19 1432	Remarks: PM TOM LONG (EPROD) PON Vey- RE21200
5/8/19 1900 Multimushed by:	Received by: Via:COURIER Date 1 10815	SIMEDH
If necessary, samples submitted to Hall Environmental may be subco	contracted to other accredited laboratories. This serves as notice of the	nis possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

May 15, 2019

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

RE: Lateral C-7 Loop

OrderNo.: 1905662

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 5/14/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Anal	ysis Laboratory, In	ic.		Lab Order 1905662 Date Reported: 5/15/2019					
CLIENT: ENSOLUM		Clien	t Sample II	D: CS	-11				
Project: Lateral C-7 Loop		Coll	ection Dat	e: 5/1	3/2019 1:00:00 PM				
Lab ID: 1905662-001	Matrix: SOIL	Re	ceived Dat	e: 5/1	4/2019 8:00:00 AM				
Analyses	Result	RL Qu	ıal Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analy	/st: MRA			
Chloride	690	60	mg/Kg	20	5/14/2019 10:01:09 4	AM 44902			

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 3

Hall Environmental Anal	ysis Laboratory, Ir	ıc.			Lab Order 1905662 Date Reported: 5/15 /	2019
CLIENT: ENSOLUM		Client	t Sample II	D: CS	-12	
Project: Lateral C-7 Loop		Coll	ection Dat	e: 5/1	3/2019 1:05:00 PM	
Lab ID: 1905662-002	Matrix: SOIL	Re	ceived Dat	e: 5/1	4/2019 8:00:00 AM	
Analyses	Result	RL Qu	ial Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analy	/st: MRA
Chloride	ND	60	mg/Kg	20	5/14/2019 10:13:34 /	AM 44902

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 3

WO#: **1905662** *15-May-19*

Client: Project:	ENSO Latera	LUM l C-7 Loop									
Sample ID:	MB-44902	SampTy	pe: m t	olk	Tes	tCode: EP	A Method	300.0: Anion	s		
Client ID:	PBS	Batch	D: 44	902	R	unNo: 59	859				
Prep Date:	5/14/2019	Analysis Da	te: 5/	14/2019	S	eqNo: 20	19990	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-44902	SampTy	pe: Ics	5	Test	tCode: EP	A Method	300.0: Anion	s		
Client ID:	LCSS	Batch	D: 44	902	R	unNo: 59	859				
Prep Date:	5/14/2019	Analysis Da	te: 5/	14/2019	S	eqNo: 20	19991	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.2	90	110			

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental Analy 490 Albuquerg TEL: 505-345-3975 FAX: Website: www.hallenvir	sis Laboratory 11 Hawkins NE 1ue, NM 87109 505-345-4107 ronmental.com	Sampl	e Log-In Che	eck List
Client Name: ENSOLUM AZTEC V	Vork Order Number: 190	5662		RcptNo: 1	······································
Received By: Desiree Dominguez 5/14	4/2019 8:00:00 AM	E	2	· · ·	
Completed By: Anne Thorne 5/14	1/2019 8:09:19 AM		A.		
Reviewed By: DAD, 5/14/19 Labeled by 1 A NE/14					
Chain of Custody					-
1. Is Chain of Custody complete?	Yes	V N	lo 🗋 🗌	Not Present	
2. How was the sample delivered?	Cou	rier	-		
Log In 3. Was an attempt made to cool the samples?	Yes	V N	lo 🗌	NA	
	C to 6.0°C Yes			NA 📖	
5. Sample(s) in proper container(s)?	Yes	✓ N	lo 🗌		
6. Sufficient sample volume for indicated test(s)?	Yes	N N	o 🗌		
7 Are samples (except VOA and ONG) properly pres	erved? Yes	N N	•		
8. Was preservative added to bottles?	Yes		•	NA	· ·
9. VOA vials have zero headspace?	Yes		⊳ 🗌 No	VOA Vials 🗹	· · ·
10. Were any sample containers received broken?	Yes	□ N	o 🗹 🛛 🗯	f preserved '	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	V N	bot	tles checked pH: (<2 or >12	unless noted)
12. Are matrices correctly identified on Chain of Custor	ly? Yes	✓ No		Adjusted?	
3 is it clear what analyses were requested?	Yes	V No	• □		
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	V No	• 🗆 🗋	Checked by:	· ,
Special Handling (if applicable)		-			
15. Was client notified of all discrepancies with this or	ler? Yes		•		
Person Notified:	Date				
By Whom:	Via: □ eMa	uil 🗔 Phone 🛛	□Fax [□]	n Person	
Regarding:			jien (ji		
Client Instructions:				NEW CONTRACTOR CONTRACTOR	
16. Additional remarks: CUSTODA 5	eals intact	on S	jort Jo	2-5/1-15	-114/19
17. <u>Cooler Information</u> <u>Cooler No.</u> Temp ^o C Condition Seal Inte 1 1.9 Good Yes	ct Seal No Seal Da	ite Signed	By	1 1.00	e - · · ·

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		www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	() () () () () () () () () ()	8) 2' 109 109 109 109 109 100 100 100 100 100	TMB 20 / DR 34.1) 7 DR 7 2 7 2 7 2 7	BE /	TEX / MT PH:8015D(081 Pestic 081 Pestic AHs by 83 270 (Semi- otal Colifor otal Colifor otal Colifor		02					Remarks: PM-TOM LONG (EPROD) Payleg- ZB21200	DAME DAY	of this possibility. Any sub-contracted data will be clearly notated on the analytical report.
· ·	Turn-Around Time: 5)4)9 5/18/19 □ Standard 12/Rush 100/0	Lateral C-7 Loop	roject #: 0541326055		roject Manager: צאיזאיזאיז Project Manager:		sampler: T2Ceectri الع Di tres: م Tac	sof Coolers: A	Cooler Tempinetonics 1, 9 °C	ype and # 1ype 110 - 100	Yor Tar root					Amethy Via: Date Time	The CONTRESS LIM/19 8	tracted to other accredited laboratories. This serves as noti
	Chain-of-Custody Record Client: Ensolvem, LLC	Mailing Address: (206 3 Rio 6 Camp Sitt A	AZtecnim 87410	Phone #:	email or Fax#: KSummers @ Lrsolum.(Gm H QA/QC Package:	Standard Level 4 (Full Validation)	Accreditation:	□ EDD (Type) #		5/18/19/1300 S CS-11	Sishilads S CS-12					Date: Time: Relinquished by: 519/19/14/5/w-AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	3/3/19/1700/ Marter Mallo	If necessary samples submitted to Hall Environmental may be subcon



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

May 17, 2019

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

RE: Lateral C 7 Loop

OrderNo.: 1905803

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/16/2019 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 5/17/2019

CLIENT:	ENSOLUM		Cl	ient Sample II	D: CS	5-13	
Project:	Lateral C 7 Loop			Collection Dat	e: 5/1	15/2019 10:15:00 AM	
Lab ID:	1905803-001	Matrix: SOIL		Received Dat	e: 5/1	16/2019 6:15:00 AM	
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA MET	HOD 300.0: ANIONS					Analyst:	MRA
Chloride		220	60	mg/Kg	20	5/16/2019 11:18:46 AM	44963
EPA MET	HOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst:	том
Diesel Ra	ange Organics (DRO)	ND	9.8	mg/Kg	1	5/16/2019 1:36:10 PM	44961
Motor Oil	Range Organics (MRO)	ND	49	mg/Kg	1	5/16/2019 1:36:10 PM	44961
Surr: D	DNOP	98.7	70-130	%Rec	1	5/16/2019 1:36:10 PM	44961
EPA MET	HOD 8015D: GASOLINE RANGE	E				Analyst:	NSB
Gasoline	Range Organics (GRO)	ND	3.8	mg/Kg	1	5/16/2019 10:48:52 AM	G59933
Surr: E	3FB	84.4	73.8-119	%Rec	1	5/16/2019 10:48:52 AM	G59933
EPA MET	HOD 8021B: VOLATILES					Analyst:	NSB
Benzene		ND	0.019	mg/Kg	1	5/16/2019 10:48:52 AM	B59933
Toluene		ND	0.038	mg/Kg	1	5/16/2019 10:48:52 AM	B59933
Ethylben	zene	ND	0.038	mg/Kg	1	5/16/2019 10:48:52 AM	B59933
Xylenes,	Total	ND	0.076	mg/Kg	1	5/16/2019 10:48:52 AM	B59933
Surr: 4	I-Bromofluorobenzene	83.3	80-120	%Rec	1	5/16/2019 10:48:52 AM	B59933

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

Qualifiers: * Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to MatrixH Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

Hall Environmental Analysis Laboratory, Inc.

- 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

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WO#: **1905803**

Client:	ENS	OLUM									
Project:	Later	al C 7 Loop									
Sample ID:	MB-44963	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	ID: 44	963	F	RunNo: 59	9923				
Prep Date:	5/16/2019	Analysis D	ate: 5/	16/2019	S	SeqNo: 20)23454	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-44963	SampT	ype: LC	S	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	ID: 44	963	F	RunNo: 59	9923				
Prep Date:	5/16/2019	Analysis D	ate: 5/	16/2019	S	SeqNo: 20)23455	Units: mg/K	g		
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.
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- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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ation mints

Client: ENSOLUM Project: Lateral C 7 Loop Sample ID: LCS-44961 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 44961 RunNo: 59920 Prep Date: 5/16/2019 Analysis Date: 5/16/2019 SeqNo: 2022125 Units: mg/Kg Analvte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Diesel Range Organics (DRO) 10 0 52 50.00 104 63.9 124 Surr: DNOP 4.7 5.000 93.0 70 130 Sample ID: MB-44961 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 44961 RunNo: 59920

Prep Date: 5/16/2019	Analysis D	ate: 5/	16/2019	S	SeqNo: 20	022126	Units: mg/K	g		
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		109	70	130			

- * Value exceeds Maximum Contaminant Level.
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- 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

Client: E	NSOLUM									
Project:	ateral C / Loop									
Sample ID: RB	Samp	Туре: МЕ	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: PBS	Bato	h ID: G5	9933	F	RunNo: 5	9933				
Prep Date:	Analysis I	Date: 5/	16/2019	5	SeqNo: 2	022695	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) ND	5.0								
Surr: BFB	880		1000		87.6	73.8	119			
Sample ID: 2.5UG GF	OLCS Samp	Type: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: LCSS	Bato	h ID: G5	9933	F	RunNo: 5	9933				
Prep Date:	Analysis I	Date: 5/	16/2019	S	SeqNo: 2	022696	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) 23	5.0	25.00	0	90.2	80.1	123			
Surr: BFB	1100		1000		108	73.8	119			

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix S

- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Ind	c.

WO#: **1905803**

17-May-19

Client:	ENSOLU	Μ									
Project:	Lateral C	7 Loop									
Sample ID: F	RB	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: F	PBS	Batc	h ID: B5	9933	F	RunNo: 5	9933				
Prep Date:		Analysis [Date: 5/	16/2019	S	SeqNo: 2	022707	Units: mg/k	٢g		
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-Bromof	fluorobenzene	0.88		1.000		87.5	80	120			
Sample ID: 1	00NG BTEX LCS	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: L	CSS	Batc	h ID: B5	9933	F	RunNo: 5	9933				
Prep Date:		Analysis [Date: 5/	16/2019	S	SeqNo: 2	022708	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	1.000	0	110	80	120			
Toluene		0.94	0.050	1.000	0	93.9	80	120			
Ethylbenzene		0.92	0.050	1.000	0	92.3	80	120			
Xylenes, Total		2.7	0.10	3.000	0	91.2	80	120			
Surr: 4-Bromof	fluorobenzene	0.95		1.000		94.6	80	120			

Qualifiers:

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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- J Analyte detected below quantitation limits
- P Sample pH Not In Range
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Client Name: ENSOLUM AZTEC Work Order Number: 1905803 RcptNo: 1 Received By: Anne Thorne $5/16/2019 6:15:00 \text{ AM}$ $am_{em_{em_{em_{em_{em_{em_{em_{em_{em_{e$	
Received By:Anne Thorne $5/16/2019 6:15:00 \text{ AM}$ $and formCompleted By:Anne Thorne5/16/2019 7:04:05 \text{ AM}and formReviewed By:M_{G}S_1 M_1 M_1Cababel Call by:AT OS / 16 I (9)and formChain of CustodyYes \checkmarkNoNot Present1. Is Chain of Custody complete?Yes \checkmarkNoNot Present2. How was the sample delivered?Courier$	
Received By: Anne Thorne $5/16/2019 6:15:00 \text{ AM}$ $Uone Machine Completed By: Anne Thorne 5/16/2019 7:04:05 \text{ AM} Qone Machine Reviewed By: Y6 S W W Qone Machine Cabated by: Y6 S W W Qone Machine Chain of Custody A = 05/16/16 Yes No Not Present 1. Is Chain of Custody complete? Yes No Not Present Qourier 2. How was the sample delivered? Courier Courier Courier Courier $	
Completed By: Anne Thorne 5/16/2019 7:04:05 AM Anne Mark Reviewed By: Y6 SIMIK Anne Mark Labeled by: Y6 SIMIK Labeled by: AT 05/16/19 Yes No No Not Present 2. How was the sample delivered? Log In	
Reviewed By: YG SIMIK Labulad by: AT 05/16/19 Chain of Custody 1. Is Chain of Custody complete? Yes Yes No Not Present 2. How was the sample delivered? Log In	
Labited by: AT 05/16/19 Chain of Custody 1. Is Chain of Custody complete? Yes No No Not Present 2. How was the sample delivered? Courier	
Chain of Custody 1. Is Chain of Custody complete? Yes Yes Yes No <	
1. Is Chain of Custody complete? Yes No Not Present 2. How was the sample delivered? Courier Log In	
2. How was the sample delivered? Courier	
Log In	
3. Was an attempt made to cool the samples? Yes 🗸 No No	
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 🗹	
bottles checked	
11. Does paperwork match bottle labels? Yes ☑ No ☐ for pH:	
(Note discrepancies on chain of custody) (<2 or >12 unless not an of custody)	ted)
12 Is it clear what analyses were requested?	-
14. Were all holding times able to be met? Yes V No Checked by:	
(If no, notify customer for authorization.)	
Special Handling (if applicable)	
15. Was client notified of all discrepancies with this order? Yes No No No NA	
Person Notified:	
By Whom: Via: eMail Phone Fax In Person	
Regarding:	
Client Instructions:	•
16. Additional remarks:	
CUSTODY SEAL INTACT ON SOIL JAR/at 5/16/19	
17. <u>Cooler Information</u>	
Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 1 1.1 Good Yes Seal No Seal Date Signed By	

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| ALL ENVIRONMENTAL<br>NALYSIS LABORATORY<br>ww.hallenvironmental.com<br>s NE - Albuquerque, NM 87109<br>-3975 Fax 505-345-4107<br>Analysis Request | PAHs by 8310 of 82/05IMS<br>RCRA 8 Metals<br>CI, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub><br>8260 (VOA)<br>8270 (Semi-VOA)<br>Total Coliform (Present/Absent)<br>CMI0 Cd05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PM- Tom Long (EPeod)<br>PAY Key- Real 00<br>Pay Key- Real 00                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4901 Hawkin                                                                                                                                       | BTEX / <u>-MTBE / TMB'</u> s (8021)<br>8081 Pesticides/8082 PCB's<br>BDB (Method 504.1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | X X<br>X X<br>Remarks:                                                                                                                                                                                                                   |
| Turn-Around Time: 5/16/19<br>Standard Skush 1060<br>Project Name:<br>Lateral C-7 Loop                                                             | Project Manager: XSummerS<br>Sampler: 2: Deechilly<br>Dintce: X Yes 1 No<br>4 of Goolers: //<br>Cooler Templineluting Chil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Wez Jar Carol Zau<br>Wez Jar Carol Zau<br>MMT Mark Silver Date Time<br>MMT Mark Silver Date Time<br>teceived by Via: Date Time<br>eccived by Via: Date Time<br>tracted to other accredited laboratories. This serves as notice of this I |
| Client: Encolution (LLC)<br>Client: Encolution (LLC)<br>Mailing Address: Loce S. Rice Grande Suited                                               | email or Fax#: KSIMM&rS   F<br>CA/CC Package:<br>Carditation: Cardination   Cardination   Cardination   Cardination: Cardination   C | Instant     S     SS-13       Instant     Instant     Instant                    |

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