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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 151618
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email:tjlong@eprod.com	Incident # (assigned by OCD): NVF1836031460
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude 36.893767

Longitude -107.898126

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Trunk MD 16 Inch	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 11/29/2018	Serial Number (<i>if applicable</i>): NA

Unit Letter	Section	Township	Range	County
Р	17	31N	10W	San Juan

Surface Owner: State Federal Tribal Private (Name: Marcotte, Donna R Trust

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below) Crude Oil Volume Released (bbls) Volume Recovered (bbls) Produced Water Volume Recovered (bbls) Volume Released (bbls) Is the concentration of dissolved chloride in the 🗌 Yes 🗌 No produced water >10,000 mg/l? Condensate Volume Released (bbls): 3-5 BBLs Volume Recovered (bbls): None Natural Gas Volume Released (Mcf): 447.89 MCF Volume Recovered (Mcf): None Other (describe) Volume/Weight Released (provide units): Volume/Weight Recovered (provide units) Cause of Release: On November 29, 2018, Enterprise dispatched a technician to investigate a possible leak on the Trunk MD 16 Inch

Cause of Release: On November 29, 2018, Enterprise dispatched a technician to investigate a possible leak on the Trunk MD To Inch pipeline. The leak was confirmed and the pipeline was isolated, depressurized, locked out and tagged out. An area of approximately four feet in diameter was impacted with condensate. Enterprise determined this release reportable per NMOCD regulation on December 6, 2018 after receipt of laboratory analysis. This release was required to be remediated to the most stringent NMOCD remediation standard (10 ppm Benzene, 50 ppm BTEX and 100 ppm TPH). With a time extension approval from NMOCD, repairs are remediation were completed on July 12, 2019. The final excavation dimensions measured approximately 11 feet long by 5 feet wide by 5 feet deep. Approximately 380 barrels of hydrocarbon impacted soil were hydro-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. Received by OCD: 11/8/2019 6:55:12 AM

Form C-141

Page 2

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application II	1

Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

Description of remediation activities

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

Printed Name: Jon E. Fields	Title: Director, Environmental
Signature: Kull	Date: $\frac{10/31/19}{31}$
email: jefields@eprod.com	Telephone: (713) 381-6684
OCD Only	
Received by: OCD	Date: 11/8/2019
Closure approval by the OCD does not relieve the responsible par remediate contamination that poses a threat to groundwater, surface party of compliance with any other federal, state, or local laws ar	ety of liability should their operations have failed to adequately investigate and ce water, human health, or the environment nor does not relieve the responsible ad/or regulations.
Closure Approved by:	Date: 2/14/2020
Printed Name: Cory	Title: Environmental Specialist



CLOSURE REPORT

Property:

Trunk MD (2018) Pipeline Release SE ¼, S17 T31N R10W San Juan County, New Mexico

September 30, 2019 Ensolum Project No. 05A1226017

Prepared for:

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

Prepared by:

1

Chad D'Aponti Field Environmental Scientist

Ranee Deechilly Environmental Scientist

umm

Kyle Summers, CPG Sr. Project Manager

Ensolum, LLC | Environmental & Hydrogeologic Consultants 606 South Rio Grande, Suite A | Aztec, NM 87410 | ensolum.com

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CLOSURE REPORT

Trunk MD (2018) Pipeline Release SE ¼, S17 T31N R10W San Juan County, New Mexico

Ensolum Project No. 05A1226017

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Trunk MD (2018) Pipeline Release (Site)
Location:	36.893767° North, 107.898126° West Southeast (SE) ¼ of Section 17, Township 31 North, Range 10 West San Juan County, New Mexico
Property:	Private Land (Marcotte Donna R Trust)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On November 29, 2018, a release of natural gas occurred from the Trunk MD pipeline. On November 30, 2018, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and performing temporary pipeline repairs. Further remediation activities were postponed due to adverse weather and ground conditions with approval from the New Mexico EMNRD OCD. On July 2, 2019, while the Val Verde Plant was shut down for maintenance, Enterprise resumed activities to remediate petroleum hydrocarbon impact resulting from the release.

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

1.2 **Project Objective**

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

2.0 CLOSURE CRITERIA

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

• One (1) water well (SJ 0198) was identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database with a depth to water of 97 feet below grade surface (bgs).

Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release September 30, 2019



- Two (2) cathodic-protection wells were identified within one-half mile of the Site. Data from the Scott #4A cathodic protection well (Unit SE, Sec 17 T31N R10W), located approximately 0.2 miles from the Site, indicates water from 160 feet bgs to 180 feet bgs. Data from the Scott #8 cathodic protection well (Unit I, Sec 17 T31N R1W), located approximately 0.2 miles from the Site, indicates water at 130 feet 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 8015	100 mg/kg					
BTEX	EPA SW-846 Method 8021 or 8260	50 mg/kg					
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg					

3.0 SOIL REMEDIATION ACTIVITIES

On November 29, 2018, a release of natural gas occurred from the Trunk MD pipeline. On November 30, 2018, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and performing temporary pipeline repairs. Further remediation activities were postponed due to adverse weather and ground conditions with approval from the New Mexico EMNRD OCD. During July 2019, while the Val Verde Plant was shut down for maintenance, Enterprise resumed activities to remediate

Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release September 30, 2019



petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Riley Industrial Services, Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 11 feet long and five (5) feet wide. The maximum depth of the excavation measured approximately five (5) feet bgs.

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

A total of approximately 380 barrels (bbls) of hydro-excavation soil cuttings and water were transported to Industrial Ecosystems, Inc. (IEI) on Crouch Mesa, near Aztec, New Mexico for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix B**. The excavation is still partially open, awaiting permanent pipeline repairs. A cellar box was placed in the excavation to access the Petrosleeve, until final pipeline repairs can be conducted. The excavation will be backfilled with clean, imported fill and contoured to the surrounding grade once permanent pipeline repairs are completed. If requested, Enterprise will re-seed the Site with a seeding mixture approved by the landowner at the beginning of the next favorable growing season.

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 six (6) composite soil samples (S-1 through S-6), comprised of five (5) aliquots each, from the primary hydro-excavation. A clean hand auger was utilized to obtain fresh aliquots from each area of the hydro-excavation. The New Mexico EMNRD OCD provided verbal approval to proceed with the sampling events, although a New Mexico EMNRD OCD representative was not on-Site during the sampling events. Soils associated with composite soil sample S-2 were removed from the Site and transported to the IEI landfarm for disposal/remediation.

First Sampling Event

The pipeline repair excavation was initially sampled to evaluate potential petroleum hydrocarbon impact. Composite soil samples S-1 (0' to 5'), S-2 (0' to 5'), S-3 (0' to 5'), S-4 (0' to 5') were collected from the sidewalls of the hydro-excavation. Composite soil sample S-5 (5') was collected from the floor of the excavation. Analytical results from composite soil sample S-2 (sidewall) from the hydro-excavation indicated a New Mexico EMNRD OCD closure standard exceedance. In response to the data exceedance, the hydro-excavation was extended to remove petroleum hydrocarbon impact. Soils associated with composite soil sample S-2 were removed by excavation and transported to the IEI landfarm for disposal/remediation.

Second Sampling Event

Subsequent to the extension of the hydro-excavation, composite soil sample S-6 (0' to 5'), was collected from the sidewalls of the southern extended hydro-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

Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release September 30, 2019



to the courier for Hall Environmental Analysis Laboratory of Albuquerque, New Mexico, under proper chainof-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) associated with the composite soil samples (S-1, and S-3 through S-6) to the applicable New Mexico EMNRD OCD closure criteria. Soils associated with composite soil sample S-2 were removed from the Site and transported to IEI for disposal/remediation and are not included in the following discussion.

- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate benzene is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate total BTEX is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for composite soil sample S-4, collected from soils remaining at the Site, indicates a chloride concentration of 78 mg/kg, which is less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides. The laboratory analytical results for the remaining composite soil samples collected from soils remaining at the Site indicate chloride is not present in concentrations greater than laboratory PQLs, which are less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

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

7.0 RECLAMATION AND RE-VEGETATION

The excavation was partially backfilled with imported fill and then contoured to the surrounding grade. Enterprise will fully backfill the excavation once permanent pipeline repairs are completed. Enterprise will re-seed the Site with an approved seeding mixture if requested by the landowner.



8.0 FINDINGS AND RECOMMENDATION

On November 29, 2018, a release of natural gas occurred from the Trunk MD pipeline. On November 30, 2018, Enterprise performed initial response activities by removing visibly impacted material from the ground surface and performing temporary pipeline repairs. Further remediation activities were postponed due to adverse weather and ground conditions with approval from the New Mexico EMNRD OCD. On July 2, 2019, while the Val Verde Plant was shut down for maintenance, Enterprise resumed activities to remediate petroleum hydrocarbon impact resulting from the release.

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.
- A total of six (6) composite soil samples were collected from the hydro-excavation for laboratory analyses. 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 380 bbls of hydro-excavation soil cuttings and water were transported to the IEI landfarm on Crouch Mesa, near Aztec, New Mexico for disposal/remediation.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Additional Limitations

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

9.3 Reliance

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

Page 9 of 43

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Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release September 30, 2019



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 Forms

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

Form C-138 Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 2. **Originating Site: Trunk MD Pipeline** Location of Material (Street Address, City, State or ULSTR): 3. Unit P Section 17 T 31 N R9W; 36.893767, -107.898126 Source and Description of Waste: 4. Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water) Estimated Volume 80 yd³ (bb) Known Volume (to be entered by the operator at the end of the haul) GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS 5. I. Thomas Long , representative or authorized agent for Enterprise Products Operating do hereby **Generator Signature** certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency 88 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 Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load exempt waste. RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste ha characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, p subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardo the appropriate items) 🗆 MSDS Information 🛛 RCRA Hazardous Waste Analysis 🖾 Process Knowledge 🗌 Other (Provide description in Bo **GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS** 7-1-19, representative for Enterprise Products Operating authorizes <u>IEI</u>, Inc. to complete I, Thomas Long Generator Signature the required testing/sign the Generator Waste Testing Certification. , representative for IEI, Inc do hereby certify that I, 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. **Transporter: Riley Industrial** 5. **OCD Permitted Surface Waste Management Facility** Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B Address of Facility: #49 CR 2150 Aztec, New Mexico Method of Treatment and/or Disposal: 🗌 Evaporation 🔲 Injection 🔲 Treating Plant 🖾 Landfarm 🗌 Landfill ☐ Other Waste Acceptance Status: APPROVED DENIED (Must Be Maintained As Permanent Record) TITLE: DATE: PRINT NAME 505-632-1782 **TELEPHONE NO.:** IGNATURE: Surface Waste Management Facility Authorized Agent

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District I District II District II
1301 W. Grand Avenue, Artesia, NM 88210 District III
1000 Rio Brazos Road, Aztec, NM 87410 2012 South St. Francis Dr. 2012 South St. Francis Dr.
20 S. St. Francis Dr., Santa Fe, NM 87505 Santa Fe, NM 87505
REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401
2. Originating Site: Trunk MD Pipeline
3. Location of Material (Street Address, City, State or ULSTR): Unit P Section 17 T 31 N R9W; 36.893767, -107.898126
4. Source and Description of Waste:
Source: Hydro excavation Spoils from a Leak from a Natural Gas Gathering Line Description: Soil impacted with Natural Gas Liquids (Condensate and Water)
Estimated Volume $\underline{80}$ yd ³ (bbl) Known Volume (to be entered by the operator at the end of the haul) $\underline{130}$ yd ³ (bbls)
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
There day
I, Thomas Long , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. Operator Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
□ MSDS Information □ RCRA Hazardous Waste Analysis ⊠ Process Knowledge □ Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I Thomas Long 11 20 10 nonreconstruction for Endersning Declarity Operations of the in 151 1
Generator Signature
the required testing/sign the Generator Waste Testing Certification.
I,, representative for IEI, Inc do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: TBD CNJ
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: JFJ Landfarm/Industrial Ecosystems, Inc. * Permit #: NM 01-0010B Address of Facility: #49 CR 2150 Aztec, New Mexico
Method of Treatment and/or Disposal: \Box Evaporation \Box Injection \Box Treating Plant \Box Landform \Box Landfill \Box Other
Waste Accentance Status:
APPROVED DENIED (Must Be Maintained As Permanent Record)
PRINT NAME: Elia Scherz TITLE: Clerk DATE: 11/30/18
IGNATURE: <u>Courte</u> January TELEPHONE NO.: 505-632-1782
$(1/_{75})$
1-0/18



APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release Ensolum Project No. 05A1226017





SITE PHOTOGRAPHS

Enterprise Field Services, LLC Closure Report Trunk MD (2018) Pipeline Release Ensolum Project No. 05A1226017



Photograph 4

Photograph Description: View of the final excavation after initial restoration. A cellar box was placed in the excavation to access the Petro-sleeve until final pipeline repairs can be conducted.



Photograph 5

Photograph Description: View of the final excavation after initial restoration. A cellar box was placed in the excavation to access the Petro-sleeve until final pipeline repairs can be conducted.





APPENDIX D

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1													
Trunk MD (2018) 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 G - Grab G - Grab (feet) (mg/kg) (mg									Chloride (mg/kg)				
New Mexico Energy, Mineral & Natural Resources Department, Oil Conservation Division, Closure Criteria			es Department, iteria	10	NE	NE	NE	50				100	600
					Excavation Co	omposite Soil Sam	ples Removed by	y Hydro-Excavatio	on				
S-2	7.08.19	С	0 to 5	<0.023	<0.047	<0.047	<0.093	ND	<4.7	120	<49	120	<60
						Excavation Com	posite Soil Samp	oles					
S-1	7.08.19	С	0 to 5	<0.023	<0.045	<0.045	<0.091	ND	<4.5	<10	<50	ND	<60
S-3	7.08.19	С	0 to 5	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<9.7	<48	ND	<60
S-4	7.08.19	С	0 to 5	<0.024	<0.049	<0.049	<0.098	ND	<4.9	<9.9	<50	ND	78
S-5	7.08.19	С	5	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.6	<48	ND	<60
S-6	7.15.19	С	0 to 5	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<9.8	<49	ND	<60

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

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

NE = Not established

.

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX E

Laboratory Data Sheets & Chain of Custody Documentation



July 11, 2019

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

RE: Trunk MD 2018

OrderNo.: 1907347

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/9/2019 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 <u>www.hallenvironmental.com</u> 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.

Lab Order 1907347

Date Reported: 7/11/2019

CLIENT: ENSOLUM		Cl	ient Sample II	D:S-	1					
Project: Trunk MD 2018	Collection Date: 7/8/2019 8:00:00 AM									
Lab ID: 1907347-001	Matrix: SOIL		Received Dat	e: 7/9	9/2019 8:10:00 AM					
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analyst	MRA				
Chloride	ND	60	mg/Kg	20	7/9/2019 11:20:05 AM	46066				
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/9/2019 10:14:48 AM	46063				
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/9/2019 10:14:48 AM	46063				
Surr: DNOP	103	70-130	%Rec	1	7/9/2019 10:14:48 AM	46063				
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	: NSB				
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	7/9/2019 11:32:05 AM	46057				
Surr: BFB	101	73.8-119	%Rec	1	7/9/2019 11:32:05 AM	46057				
EPA METHOD 8021B: VOLATILES					Analyst	: NSB				
Benzene	ND	0.023	mg/Kg	1	7/9/2019 11:32:05 AM	46057				
Toluene	ND	0.045	mg/Kg	1	7/9/2019 11:32:05 AM	46057				
Ethylbenzene	ND	0.045	mg/Kg	1	7/9/2019 11:32:05 AM	46057				
Xylenes, Total	ND	0.091	mg/Kg	1	7/9/2019 11:32:05 AM	46057				
Surr: 4-Bromofluorobenzene	89.8	80-120	%Rec	1	7/9/2019 11:32:05 AM	46057				

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

Not Detected at the Reporting Limit ND

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 Page 1 of 9

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1907347

Date Reported: 7/11/2019

CLIENT: ENSOLUM		Cli	ient Sample II	D: S-2	2	
Project: Trunk MD 2018		(Collection Dat	e: 7/8	8/2019 8:05:00 AM	
Lab ID: 1907347-002	Matrix: SOIL		Received Dat	e: 7/9	9/2019 8:10:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/9/2019 11:32:30 AM	46066
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	120	9.7	mg/Kg	1	7/9/2019 10:39:13 AM	46063
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/9/2019 10:39:13 AM	46063
Surr: DNOP	107	70-130	%Rec	1	7/9/2019 10:39:13 AM	46063
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/9/2019 11:54:42 AM	46057
Surr: BFB	103	73.8-119	%Rec	1	7/9/2019 11:54:42 AM	46057
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/9/2019 11:54:42 AM	46057
Toluene	ND	0.047	mg/Kg	1	7/9/2019 11:54:42 AM	46057
Ethylbenzene	ND	0.047	mg/Kg	1	7/9/2019 11:54:42 AM	46057
Xylenes, Total	ND	0.093	mg/Kg	1	7/9/2019 11:54:42 AM	46057
Surr: 4-Bromofluorobenzene	92.2	80-120	%Rec	1	7/9/2019 11:54:42 AM	46057

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
- Not Detected at the Reporting Limit ND
- 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

Page 2 of 9

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1907347

Date Reported: 7/11/2019

CLIENT: ENSOLUM		Cl	ient Sample II	D: S-3	3	
Project: Trunk MD 2018		(Collection Dat	e: 7/8	3/2019 8:10:00 AM	
Lab ID: 1907347-003	Matrix: SOIL		Received Dat	e: 7/9	0/2019 8:10:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/9/2019 11:44:55 AM	46066
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/9/2019 11:03:52 AM	46063
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/9/2019 11:03:52 AM	46063
Surr: DNOP	96.2	70-130	%Rec	1	7/9/2019 11:03:52 AM	46063
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	7/9/2019 12:17:30 PM	46057
Surr: BFB	99.0	73.8-119	%Rec	1	7/9/2019 12:17:30 PM	46057
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.020	mg/Kg	1	7/9/2019 12:17:30 PM	46057
Toluene	ND	0.040	mg/Kg	1	7/9/2019 12:17:30 PM	46057
Ethylbenzene	ND	0.040	mg/Kg	1	7/9/2019 12:17:30 PM	46057
Xylenes, Total	ND	0.079	mg/Kg	1	7/9/2019 12:17:30 PM	46057
Surr: 4-Bromofluorobenzene	88.1	80-120	%Rec	1	7/9/2019 12:17:30 PM	46057

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
- Not Detected at the Reporting Limit ND
- 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

Page 3 of 9

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1907347

Date Reported: 7/11/2019

CLIENT: ENSOLUM		Cl	ient Sample II	D: S-	4				
Project: Trunk MD 2018		(Collection Dat	e: 7/8	8/2019 8:15:00 AM				
Lab ID: 1907347-004	Matrix: SOIL		Received Dat	e: 7/9	:7/9/2019 8:10:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	MRA			
Chloride	78	60	mg/Kg	20	7/9/2019 11:57:20 AM	46066			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM			
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/9/2019 11:28:26 AM	46063			
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/9/2019 11:28:26 AM	46063			
Surr: DNOP	98.2	70-130	%Rec	1	7/9/2019 11:28:26 AM	46063			
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/9/2019 12:40:10 PM	46057			
Surr: BFB	99.5	73.8-119	%Rec	1	7/9/2019 12:40:10 PM	46057			
EPA METHOD 8021B: VOLATILES					Analyst	NSB			
Benzene	ND	0.024	mg/Kg	1	7/9/2019 12:40:10 PM	46057			
Toluene	ND	0.049	mg/Kg	1	7/9/2019 12:40:10 PM	46057			
Ethylbenzene	ND	0.049	mg/Kg	1	7/9/2019 12:40:10 PM	46057			
Xylenes, Total	ND	0.098	mg/Kg	1	7/9/2019 12:40:10 PM	46057			
Surr: 4-Bromofluorobenzene	88.5	80-120	%Rec	1	7/9/2019 12:40:10 PM	46057			

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
- Not Detected at the Reporting Limit ND
- 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

Page 4 of 9

Hall Environmental Analysis Laboratory, Inc.

Lab Order 1907347

Date Reported: 7/11/2019

CLIENT: ENSOLUM		Cl	ient Sample II	D: S-:	5				
Project: Trunk MD 2018	Collection Date: 7/8/2019 8:20:00 AM								
Lab ID: 1907347-005	Matrix: SOIL		Received Dat	e: 7/9	9/2019 8:10:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analyst	MRA			
Chloride	ND	60	mg/Kg	20	7/9/2019 12:09:44 PM	46066			
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst	BRM			
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/9/2019 11:53:10 AM	46063			
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/9/2019 11:53:10 AM	46063			
Surr: DNOP	94.8	70-130	%Rec	1	7/9/2019 11:53:10 AM	46063			
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: NSB			
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	7/9/2019 1:02:47 PM	46057			
Surr: BFB	101	73.8-119	%Rec	1	7/9/2019 1:02:47 PM	46057			
EPA METHOD 8021B: VOLATILES					Analyst	: NSB			
Benzene	ND	0.020	mg/Kg	1	7/9/2019 1:02:47 PM	46057			
Toluene	ND	0.040	mg/Kg	1	7/9/2019 1:02:47 PM	46057			
Ethylbenzene	ND	0.040	mg/Kg	1	7/9/2019 1:02:47 PM	46057			
Xylenes, Total	ND	0.080	mg/Kg	1	7/9/2019 1:02:47 PM	46057			
Surr: 4-Bromofluorobenzene	88.9	80-120	%Rec	1	7/9/2019 1:02:47 PM	46057			

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

Not Detected at the Reporting Limit ND

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 Page 5 of 9

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

1907347 11-Jul-19

WO#:

Client:	ENSOLUM
Project:	Trunk MD 2018

Sample ID: MB-46066 Client ID: PBS	SampType: MBLK Batch ID: 46066	TestCode: EPA Method RunNo: 61239	300.0: Anions				
Prep Date: 7/9/2019	Analysis Date: 7/9/2019	SeqNo: 2076918	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Chloride	ND 1.5						
Sample ID: LCS-46066	SampType: LCS	TestCode: EPA Method	300.0: Anions				
Client ID: LCSS	Batch ID: 46066	RunNo: 61239					
Prep Date: 7/9/2019	Analysis Date: 7/9/2019	SeqNo: 2076919	Units: mg/Kg				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Chladda	14 15 1500	0 027 00	440				

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

IMMARY REPORT	WO#:	1907347
vironmental Analysis Laboratory, Inc.		11-Jul-19

Client:	ENSOLUM									
Project:	Trunk MD 2018									
Sample ID: LCS-46	063 Samp	Type: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Bato	h ID: 46	063	F	RunNo: 6	1236				
Prep Date: 7/9/20	19 Analysis I	Date: 7/	9/2019	5	SeqNo: 2	075888	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) 55	10	50.00	0	110	63.9	124			
Surr: DNOP	4.7		5.000		94.0	70	130			
Sample ID: MB-460	63 Samp	Туре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Bato	h ID: 46	063	F	RunNo: 6	1236				
Prep Date: 7/9/20	19 Analysis I	Date: 7/	9/2019	S	SeqNo: 2	075889	Units: mg/ł	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I	DRO) ND	10								
Motor Oil Range Organic	s (MRO) ND	50								
Surr: DNOP	9.4		10.00		94.0	70	130			
Sample ID: 190734	7-001AMS Samp	Туре: М	3	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-1	Bato	h ID: 46	063	F	RunNo: 6	1236				
Prep Date: 7/9/20	19 Analysis I	Date: 7/	9/2019	S	SeqNo: 2	076760	Units: mg/ł	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (I	DRO) 64	9.7	48.64	7.731	116	57	142			
Surr: DNOP	5.3		4.864		110	70	130			
Sample ID: 190734	7-001AMSD Samp	Туре: М	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-1	Bato	h ID: 46	063	F	RunNo: 6	1236				
Prep Date: 7/9/20	19 Analysis I	Date: 7/	9/2019	S	SeqNo: 2	076761	Units: mg/k	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO) 50	9.1	45.58	7.731	91.9	57	142	25.2	20	R
Surr: DNOP	4.7		4.558		103	70	130	0	0	

Н

ND

Value exceeds Maximum Contaminant Level. * D

Not Detected at the Reporting Limit

Sample Diluted Due to Matrix Holding times for preparation or analysis exceeded Е Value above quantitation range

Analyte detected below quantitation limits J

Р Sample pH Not In Range

Analyte detected in the associated Method Blank

RL Reporting Limit

В

PQL Practical Quanitative Limit % Recovery outside of range due to dilution or matrix

S

Client:ENSOProject:Trunk	LUM MD 2018									
Sample ID: MB-46057	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	n ID: 46	057	F	RunNo: 6	1243				
Prep Date: 7/8/2019	Analysis D	ate: 7/	9/2019	S	SeqNo: 2	076306	Units: mg/H	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		105	73.8	119			
Sample ID: LCS-46057	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	n ID: 46	057	F	RunNo: 6	1243				
Prep Date: 7/8/2019	Analysis D	ate: 7/	9/2019	5	SeqNo: 2	076307	Units: mg/H	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.3	80.1	123			
Surr: BFB	1100		1000		112	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

Page 8 of 9

Page 33 of 43

WO#:

Client:	ENSOLUM
Project:	Trunk MD 2018

Sample ID: MB-46057	Samp	SampType: MBLK TestCode: EPA Method						tiles		
Client ID: PBS	Batc	h ID: 46	057	F	RunNo: 61243					
Prep Date: 7/8/2019	Analysis [Date: 7/	9/2019	5	SeqNo: 2	076314	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025					0			
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.5	80	120			
Sample ID: LCS-46057	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: 46	057	F	RunNo: 6	1243				
Prep Date: 7/8/2019	Analysis I	Date: 7/	9/2019	S	SeqNo: 2	076315	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.0	80	120			
Toluene	0.91	0.050	1.000	0	91.1	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.3	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Qualifiers:

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

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

Page 9 of 9

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environme TEL: 505-345- Website: ww	ental Analysis Lab 4901 Haw, Albuquerque, NN 3975 FAX: 505-34 w.hallenvironmen	oratory kins NE 187109 Sar 15-4107 tal.com	nple Log-In (Check List
Client Name: ENSOLUM AZTEC	Work Order Nun	nber: 1907347		RcptNo	: 1
Received By: Anne Thorne	7/9/2019 8:10:00 /	AM ¹	anne H.	~	
Completed By: Anne Thorne	7/9/2019 8:39:44 /	AM	ann A.	~	
	7/9/19		<i></i>		
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	γ.
2. How was the sample delivered?		Courier			
Log In 3. Was an attempt made to cool the sample	s?	Yes 🔽	No 🗌	NA 🗌	
4. Were all samples received at a temperatu	re 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 tes	t(s)?	Yes 🗸	No 🗌		
7. Are samples (except VOA and ONG) prop	erly 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 bro	ken?	Yes	No 🗹		
11. Does paperwork match bottle labels?		Yes 🔽	No 🗌	# of preserved bottles checked for pH:	1109111
(Note discrepancies on chain of custody)	of Curstadu D	¥	Na 🗔	Adiuse (52 b	✓12 unless noted)
13 Is it clear what analyses were requested?	or Custody?	Yes 🔽			
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹		Checked by:	
Special Handling (if applicable)				-	
15. Was client notified of all discrepancies wit	h this order?	Yes	No 🗌	NA 🗹	
Person Notified: By Whom: Regarding:	Date Via:	eMail	Phone 🗌 Fax	In Person	
Client Instructions:		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······	
16. Additional remarks:					
CUSTODY SEALS INTACT ON SO	L JARS/at 7/9/19				
17. <u>Cooler Information</u> Cooler No Temp °C Condition 1 2.2 Good Y	Seal Intact Seal No	Seal Date	Signed By		

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-of-Custody Record	Turn-Around Time:	
	160 20	
	Clandard 対 Rush ア・デーノラ	ANALYSIS LABORATORY
	Project Name:	www hallenvironmental com
Ship Grande	(SOC) QMXVNI	4901 Hawkins NE - Alburnieronie NM 87109
Olhe	Project #:	Tel. 505-345-3975 Fax 505-345-4107
	0541336017	Analysis Request
	Project Manager:	() () () ()
	, , , , ,	ргец 9 ^{4'} 2 МК 805-
Level 4 (Full Validation)	commers	Altr Altr Altr
mpliance	Sampler: $\langle c \downarrow A \beta c A L$	-TMB 8082 4.1) . 8277
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	Medil Et	X / X (Me (Me (Me (Me (Ne (Ne (Ne (Ne (Ne (Ne) (Ne (Ne) (Ne (Ne) (Ne)
Sample Name	Type and # Type 707340	ВТЕ 8081 8260 8260 8260 8270 8270 8270 8270 8270 8270 8270 827
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5-2	202	
5-5		
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2-2	1 1 200	
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	teceived by Viai Date Date	C W N WY
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July 19, 2019

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

RE: Trunk MD 2018

OrderNo.: 1907813

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/17/2019 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

Analytical Report Lab Order 1907813

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 7/19/2019

CLIENT: ENSOLUM		Cl	ient Sample II	D: S-	6	
Project: Trunk MD 2018		(Collection Dat	e: 7/2	15/2019 11:00:00 AM	
Lab ID: 1907813-001	Matrix: SOIL		Received Dat	e: 7/2	17/2019 8:00:00 AM	
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	MRA
Chloride	ND	60	mg/Kg	20	7/17/2019 11:34:01 AM	46223
EPA METHOD 8015M/D: DIES	EL RANGE ORGANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/17/2019 9:48:30 AM	46222
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/17/2019 9:48:30 AM	46222
Surr: DNOP	102	70-130	%Rec	1	7/17/2019 9:48:30 AM	46222
EPA METHOD 8015D: GASOL	INE RANGE				Analyst	NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	7/17/2019 9:55:10 AM	R61440
Surr: BFB	87.6	73.8-119	%Rec	1	7/17/2019 9:55:10 AM	R61440
EPA METHOD 8021B: VOLAT	LES				Analyst	NSB
Benzene	ND	0.020	mg/Kg	1	7/17/2019 9:55:10 AM	B61440
Toluene	ND	0.041	mg/Kg	1	7/17/2019 9:55:10 AM	B61440
Ethylbenzene	ND	0.041	mg/Kg	1	7/17/2019 9:55:10 AM	B61440
Xylenes, Total	ND	0.081	mg/Kg	1	7/17/2019 9:55:10 AM	B61440
Surr: 4-Bromofluorobenzene	89.2	80-120	%Rec	1	7/17/2019 9:55:10 AM	B61440

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
- % 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

Page 1 of 5

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#: **1907813** *19-Jul-19*

Client:ENSOLUMProject:Trunk MD 2018

Sample ID: MB-46223	SampType: mblk	TestCode: EPA Method	300.0: Anions	
Client ID: PBS	Batch ID: 46223	RunNo: 61446		
Prep Date: 7/17/2019	Analysis Date: 7/17/2019	SeqNo: 2083563	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID: LCS-46223	SampType: Ics	TestCode: EPA Method	300.0: Anions	
Client ID: LCSS	Batch ID: 46223	RunNo: 61446		
Prep Date: 7/17/2019	Analysis Date: 7/17/2019	SeqNo: 2083564	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	14 15 15.00	0 94.1 90	110	

Qualifiers:

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

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JUNIMARY REPORT	WO#:	1907813
ivironmental Analysis Laboratory, Inc.		19-Jul-19

Client:ENSOLUProject:Trunk M	JM D 2018									
Sample ID: LCS-46222	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	iD: 46	222	F	RunNo: 6	1424		Ū	•	
Prep Date: 7/17/2019	Analysis D	ate: 7/	/17/2019	S	SeqNo: 2	082509	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.2	63.9	124			
Surr: DNOP	4.5		5.000		90.0	70	130			
Sample ID: MB-46222	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	ID: 46	222	F	RunNo: 6	1424				
Prep Date: 7/17/2019	Analysis D	ate: 7/	/17/2019	S	SeqNo: 2	082510	Units: mg/k	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	10		10.00		103	70	130			
Sample ID: 1907813-001AMS	SampT	уре: М	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-6	Batch	ID: 46	222	F	RunNo: 6	1424				
Prep Date: 7/17/2019	Analysis D	ate: 7/	/17/2019	S	SeqNo: 2	084130	Units: mg/k	۲g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.4	46.77	2.431	105	57	142			
Surr: DNOP	4.1		4.677		86.7	70	130			
Sample ID: 1907813-001AMS	D SampT	уре: М	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: S-6	Batch	ID: 46	222	F	RunNo: 6	1424				
Prep Date: 7/17/2019	Analysis D	ate: 7/	/17/2019	S	SeqNo: 2	084131	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	9.6	48.17	2.431	111	57	142	7.80	20	
Surr: DNOP	4.4		4.817		90.5	70	130	0	0	

* 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

MMARY REPORT	WO#:	1907813
ironmental Analysis Laboratory, Inc.		19-Jul-19

Client: Proiect:	ENSOLUM Trunk MD 2018									
Sample ID: RB	Samp	Туре: М	BLK	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID: PBS	Bate	ch ID: R6	61440	R	RunNo: 6	1440				
Prep Date:	Analysis	Date: 7/	17/2019	S	SeqNo: 20	083073	Units: mg/M	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO) ND	5.0								
Surr: BFB	930		1000		92.5	73.8	119			
Sample ID: 2.5UG GRO LCS SampType: LCS TestCode: EPA Method 8015D: Gasoline Range										
Client ID: LCSS	Bat	ch ID: R6	51440	F	RunNo: 6	1440				
Prep Date:	Analysis	Date: 7/	17/2019	S	SeqNo: 20	083074	Units: mg/M	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO) 21	5.0	25.00	0	85.9	80.1	123			
Surr: BEB	1000		1000		103	73.8	119			
00						10.0				
Sample ID: 19078	313-001AMS Samp	Туре: М	6	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Sample ID: 19078 Client ID: S-6	313-001AMS Samp Bate	Type: M:	S 51440	Tes	tCode: EF	PA Method	8015D: Gasc	oline Rango	e	
Sample ID: 19078 Client ID: S-6 Prep Date:	13-001AMS Samp Bate Analysis	Type: MS ch ID: R6 Date: 7/	5 51440 /17/2019	Tes R S	tCode: EF RunNo: 6 ⁴ SeqNo: 20	PA Method 1440 083076	8015D: Gasc Units: mg/k	oline Rango	e	
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte	313-001AMS Samp Bate Analysis Result	Type: MS ch ID: R6 Date: 7/ PQL	5 51440 117/2019 SPK value	Tes F S SPK Ref Val	tCode: EF RunNo: 6 ⁴ SeqNo: 20 %REC	PA Method 1440 083076 LowLimit	8015D: Gasc Units: mg/k HighLimit	oline Rango Kg %RPD	e RPDLimit	Qual
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ	313-001AMS Samp Bate Analysis Result ics (GRO) 19	Type: M ch ID: R6 Date: 7 / PQL 4.1	5 51440 117/2019 SPK value 20.36	Tes F S SPK Ref Val 0	tCode: EF RunNo: 6' SeqNo: 2(%REC 93.8	PA Method 1440 083076 LowLimit 69.1	8015D: Gasc Units: mg/k HighLimit 142	oline Rango Kg %RPD	e RPDLimit	Qual
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB	R13-001AMS Samp Bate Analysis Result ics (GRO) 19 980	Type: M ch ID: R6 Date: 7 / PQL 4.1	5 51440 717/2019 SPK value 20.36 814.3	Tes F S SPK Ref Val 0	tCode: EF RunNo: 6' SeqNo: 20 %REC 93.8 120	PA Method 1440 083076 LowLimit 69.1 73.8	8015D: Gasc Units: mg/k HighLimit 142 119	vline Rang (g %RPD	e RPDLimit	Qual S
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 19078	313-001AMS Samp Bate Analysis Result ics (GRO) 19 980 313-001AMSD Samp	Type: Ms ch ID: R6 Date: 7/ PQL 4.1	5 51440 (17/2019 SPK value 20.36 814.3 SD	Tes R S SPK Ref Val 0 Tes	tCode: EF RunNo: 6' SeqNo: 2(%REC 93.8 120 tCode: EF	PA Method 1440 083076 LowLimit 69.1 73.8 PA Method	8015D: Gasc Units: mg/k HighLimit 142 119 8015D: Gasc	Vine Rang Kg %RPD Vine Rang	e RPDLimit e	Qual S
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 19078 Client ID: S-6	13-001AMS Samp Bate Analysis Result ics (GRO) 19 980 13-001AMSD Samp Bate	Type: MS ch ID: R6 Date: 7/ PQL 4.1 Type: MS ch ID: R6	5 51440 717/2019 20.36 814.3 5D 51440	Tes F SPK Ref Val 0 Tes F	tCode: EF RunNo: 6 SeqNo: 20 %REC 93.8 120 tCode: EF RunNo: 6	PA Method 1440 083076 LowLimit 69.1 73.8 PA Method 1440	8015D: Gasc Units: mg/k HighLimit 142 119 8015D: Gasc	Viine Rang (g %RPD Viine Rang	e RPDLimit e	Qual S
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 19078 Client ID: S-6 Prep Date:	13-001AMS Samp Bate Analysis Result ics (GRO) 19 980 13-001AMSD Samp Bate Analysis	Type: MS ch ID: R6 Date: 7/ PQL 4.1 Type: MS ch ID: R6 Date: 7/	5 51440 (17/2019 20.36 814.3 5D 51440 (17/2019	Tes F SPK Ref Val 0 Tes F S	tCode: EF RunNo: 6' SeqNo: 20 93.8 120 tCode: EF RunNo: 6' SeqNo: 20	PA Method 1440 083076 LowLimit 69.1 73.8 PA Method 1440 083077	8015D: Gasc Units: mg/k HighLimit 142 119 8015D: Gasc Units: mg/k	Vine Rang (g %RPD Vine Rang	e RPDLimit e	Qual S
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 19078 Client ID: S-6 Prep Date: Analyte	13-001AMS Samp Bate Analysis Result ics (GRO) 19 980 13-001AMSD Samp Bate Analysis Result	Type: MS ch ID: R6 Date: 7/ PQL 4.1 Type: MS ch ID: R6 Date: 7/ PQL	5 51440 717/2019 20.36 814.3 5D 51440 717/2019 SPK value	Tes F SPK Ref Val 0 Tes F SPK Ref Val	tCode: EF RunNo: 6 SeqNo: 20 93.8 120 tCode: EF RunNo: 6 SeqNo: 20 %REC	PA Method 1440 083076 LowLimit 69.1 73.8 PA Method 1440 083077 LowLimit	8015D: Gasc Units: mg/k HighLimit 142 119 8015D: Gasc Units: mg/k HighLimit	vline Rang Sg %RPD vline Rang Sg %RPD	e RPDLimit e RPDLimit	Qual S
Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ Surr: BFB Sample ID: 19078 Client ID: S-6 Prep Date: Analyte Gasoline Range Organ	13-001AMS Samp Bate Analysis Result ics (GRO) 19 980 313-001AMSD Samp Bate Analysis Result ics (GRO) 18	Type: Ms ch ID: R6 Date: 7/ PQL 4.1 Type: Ms ch ID: R6 Date: 7/ PQL 4.1	5 51440 20.36 814.3 5D 51440 20.36 5PK value 20.36	Tes SPK Ref Val 0 Tes SPK Ref Val 0	tCode: EF RunNo: 6' SeqNo: 2(%REC 93.8 120 tCode: EF RunNo: 6' SeqNo: 2(%REC 90.1	PA Method 1440 083076 LowLimit 69.1 73.8 PA Method 1440 083077 LowLimit 69.1	8015D: Gasc Units: mg/k HighLimit 142 119 8015D: Gasc Units: mg/k HighLimit 142	oline Rang %RPD oline Rang %RPD 4.00	e RPDLimit e RPDLimit 20	Qual S Qual

* Value exceeds Maximum Contaminant Level.

- D Sample Diluted Due to Matrix
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ND Not Detected at the Reporting Limit

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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#:	1907813
	19-Jul-19

Client: ENSO Project: Trunk	LUM MD 2018									
Sample ID: RB	Samp	Type: MF	N K	Tes	tCode: FI	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID' B6	1440	F		1440	002121 7010			
Dren Deter			1740	י נ		000000	linite:	(
Prep Date:	Analysis L		1772019	Ċ		083092	Units: mg/r	\g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		93.5	80	120			
Sample ID: 100NG BTEX L	CS Samp	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: R6	1440	F	RunNo: 6	1440				
Prep Date:	Analysis [Date: 7/	17/2019	S	SeqNo: 2	083093	Units: %Re	с		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	80	120			
Sample ID: 1907813-001AN	IS Samp	Гуре: МS	5	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: S-6	Batc	h ID: B6	1440	F	RunNo: 6	1440				
Prep Date:	Analysis I	Date: 7/	17/2019	S	SeqNo: 2	083095	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.020	0.8143	0	97.6	63.9	127			
Toluene	0.83	0.041	0.8143	0	102	69.9	131			
Ethylbenzene	0.83	0.041	0.8143	0	102	71	132			
Xylenes, Total	2.5	0.081	2.443	0	101	71.8	131			
Surr: 4-Bromofluorobenzene	0.78		0.8143		95.4	80	120			
Sample ID: 1907813-001AN	ISD Samp	Гуре: МS	D	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID: S-6	Batc	h ID: B6	1440	F	RunNo: 6	1440				
Prep Date:	Analysis I	Date: 7/	17/2019	S	SeqNo: 2	083096	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.00	0 0 2 0	0.8143	0	100	63.9	127	2.59	20	
	0.82	0.020	0.0145	v	100	00.0				
Toluene	0.82	0.020	0.8143	0	104	69.9	131	1.91	20	
Toluene Ethylbenzene	0.82 0.84 0.84	0.020 0.041 0.041	0.8143 0.8143	0	104 104	69.9 71	131 132	1.91 1.83	20 20	
Toluene Ethylbenzene Xylenes, Total	0.82 0.84 0.84 2.5	0.020 0.041 0.041 0.081	0.8143 0.8143 2.443	0 0 0	104 104 103	69.9 71 71.8	131 132 131	1.91 1.83 2.17	20 20 20	

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to MatrixH Holding times for preparation or an

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 5

Received by OCD: 11/8/2019 6:55:12 AM

ANALYSIS LABORATORY Website: www	4901 Hawı Albuquerque, NM 975 FAX: 505-34 v.hallenvironmen	tins NE 187109 Sar 5-4107 tal.com	nple Log-In Check L	.ist
Client Name: ENSOLUM AZTEC Work Order Numi	ber: 1907813		RcptNo: 1	
Received By: Leah Baca 7/17/2019 8:00:00 /	АМ	Loop Bas	a.	
Completed By: Anne Thorne 7/17/2019 8:18:44 /	AM	am H.	~	
Reviewed By: 10 - 17/19		//		
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🗹	No 📋	Not Present	
2. How was the sample delivered?	Courier			
Log In 3. Was an attempt made to cool the samples?	Yes ⊻	No 🗌	NA 🗌	
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?	Yes 🔽	No 🗌		
6. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗌		
7. Are samples (except VOA and ONG) properly preserved?	Yes 🖌	No 🗌		
3. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗀	
9. VOA vials have zero headspace?	Yes	No 🗌	No VOA Vials 🗹	G _
10. Were any sample containers received broken?	Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗹	No 🗌	for pH: (52 or >12 unless	noted)
2. Are matrices correctly identified on Chain of Custody?	Yes 🗹	No 🗌	Adjusted?	
3. Is it clear what analyses were requested?	Yes 🗹	No 🗌		
4. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ⊻	No 🗌	Checked by:	
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🔽	
Person Notified: Date	T			
By Whom: Via:	🗌 eMail 🗌	Phone 📋 Fax	In Person	
Regarding:	· · · · · · · · · · · ·			
Client Instructions:	·····			
16. Additional remarks:				
CUSTODY SEAL INTACT ON SOIL JAR/at 7/17/19				
7. <u>Cooler Information</u>				

 Cooler No
 Temp ^oC
 Condition
 Seal Intact
 Seal No
 Seal Date
 Signed By

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 Good
 Yes
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Received by OCD: 11/8/2019 6:5	5:12 AM		Page 43 of 43
NTAL			Sec. ne Dereg Ireport.
NME 30RJ M 87109 4107	· · · · · · · · · · · · · · · · · · ·		the analytica
LAE LAE 5-345- quest	Total Coliform (Present/Absent)		
LS Pomme querc s Re	(AOV) 0828		
EN Albuir Fa	CI L' BL' NO^{3'} NO^{3'} LO^{*'} 20*		The ck
AL AL	RCRA 8 Metals		1 20 8 left
TAL www ins N	PAHs by 8310 or 8270SIMS		Tacted 2 ×
-1awk ► ■	EDB (Method 504.1)		p-cont
- [el. 5	8081 Pesticides/8082 PCB's		S: P/
			 stbility.
1028 7-17-19 (3018)	5 1-1- 1-1- 1-1-1- 1-1-1-1- 1-1-1-1-1-1-	1012	Date Time $\frac{7/i \omega}{16}$ 133 ω , Date $\frac{7/i \omega}{16}$ 133 ω , Date Time ω , This serves as notice of ω
id Time: Id Kush ne: A D A 1236 01	lager: Scmmer Zommer ZYes Plineuding cp: 2 Preservative Type	Josef	Via Via: Court
Turn-Aroun ☐ Standai Project Nar Project #:	Project Mar Sampler: Con Ice: # of Cooler # of Cooler Cooler Ten Cooler Ten Container	1 462	Received by: Received by:
stody Record S Lie F A S7410		5-6	I by:
soluter See	Az Con	<u>η</u>	Relinquished Relinquished A safeples submi
Addres	Prax#: Prackage Indard Intation: AC O (Type) Time	0011	 Time: 7 1337 Time: 1816
Mailing	email- QA/QC Accrec Accrec Date	1/5/	Date: Zule: Date: Ilufig

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