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**

# DENIED

# **Responsible Party**

Responsible Party: Enterprise Field Services, LLC	OGRID: <b>151618</b>
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email:tjlong@eprod.com	Incident # (assigned by OCD): NCS1919034097
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

# **Location of Release Source**

Latitude 36.628523

Longitude -108.010080

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Lateral 2B-23 Drip Tank	Site Type Natural Gas Condensate Tank	
Date Release Discovered: 6/21/2019	Serial Number (if applicable): NM 0 021702	

Unit Letter	Section	Township	Range	County	*Incomplete Report,
N	28	28N	11W	San Juan	No Notification for Samples

Surface Owner: State Federal Tribal Private (Name: BLM

# Nature and Volume of Release

Please Review and resubmit no later Than 4/17/2020

- Incomplete Ground Water Data

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

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls): 40 bbls	Volume Recovered (bbls): ~ 40 bbls
🗌 Natural Gas	Volume Released (Mcf):	Volume Recovered (Mcf):
Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

**Cause of Release:** On June 21, 2019, an Enterprise technician discovered a release of condensate on the Lateral 2B-23 Drip Tank. The release was a result of someone shooting holes in the tank. The condensate tank was pumped down by utilizing a vacuum truck. An estimated 40 barrels of condensate was released into the lined secondary containment structure. The condensate from the secondary containment was also removed by vacuum truck. On July 3, 2019, Enterprise removed the liner and completed remediation activities. The final excavation dimensions measured approximately 23 feet long by 21 feet wide by approximately 0.5 feet deep. Approximately seven (7) 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.

Received by OCD: 12/18/2019 12:12:26 PM

Form C-141

Page 2

State of New Mexico Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

# Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

Description of remediation activities

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

Printed Name: Jon E_Fields	Title: Director, Environmental
Signature: JNE. Full	Date: 12/17/19
email: jefields@eprod.com	Telephone: (713) 381-6684
OCD Only	
Received by:	Date:
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	rty of liability should their operations have failed to adequately investigate and ce water, human health, or the environment nor does not relieve the responsible nd/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



### **CLOSURE REPORT**

Property:

2B-23 Drip Tank Release SW ¼, S28 T28N R11W San Juan County, New Mexico

October 15, 2019 Ensolum Project No. 05A1226066

Prepared for:

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

Prepared by:

Ranee Deechilly Environmental Scientist

Ummo

Kyle Summers, CPG Sr. Project Manager

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4.0	SOIL SAMPLING PROGRAM	3
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8.0	FINDINGS AND RECOMMENDATION	4
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Appendix B:	Executed C-138 Solid Waste Acceptance Form		
Appendix C:	Photographic Documentation		
Appendix D:	Table 1 - Soil Analytical Summary		
Appendix E:	Laboratory Data Sheets & Chain of Custody Documentation		



# **CLOSURE REPORT**

### 2B-23 Drip Tank Release SW ¼, S28 T28N R11W San Juan County, New Mexico

# Ensolum Project No. 05A1226066

### 1.0 INTRODUCTION

# 1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)	
Site Name:	2B-23 Drip Tank Release (Site)	
Location:	36.628523° North, 108.010080° West Southwest (SW) ¼ of Section 28, Township 28 North, Range 11 West San Juan County, New Mexico	
Property:	United States (US) Bureau of Land Management (BLM)	
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)	

On June 21, 2019, Enterprise personnel identified approximately 40 barrels (bbls) of water/condensate within the 2B-23 drip tank secondary lined containment. The release of water/condensate resulted from the drip tank being vandalized. Enterprise subsequently removed the liquids from the secondary containment and initiated activities to facilitate the removal and replacement of the drip tank 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 New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for oil and gas release sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

• No water wells were identified within a one-half mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database. It appears that a POD (SP 04019) was filed for a construction project within one-half mile, but it appears to be related to the Navajo Irrigation Project Canal, as opposed to groundwater.

Enterprise Field Services, LLC Closure Report 2B-23 Drip Tank Release October 15, 2019



- 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

During the remediation and corrective action activities OFT Construction, Inc, provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The excavation measured approximately 23 feet long and 21 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 0.5 feet bgs.

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



Page 7 of 30

A total of approximately seven (7) cubic yards (cy3) 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. Liquids removed from the containment were recycled and transported to the Blanco Storage facility. The excavation was backfilled with imported fill and then contoured to surrounding grade.

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

#### 4.0 SOIL SAMPLING PROGRAM

Ensolum field screened soil samples from the scraped area utilizing a photoionization detector (PID) fitted with a 10.6 eV lamp and a calibrated Dexsil PetroFLAG<sup>®</sup> hydrocarbon analyzer system.

Ensolum's soil sampling program included the collection of three (3) composite soil samples (S-1 through S-3), comprised of five (5) aliquots each from the scraped area for laboratory analysis. A clean shovel was utilized to obtain fresh aliquots from each area of the scraped excavation. The New Mexico EMNRD OCD provided verbal approval to proceed with the sampling event. A New Mexico EMNRD OCD representative was not on-Site during the sampling event.

### First Sampling Event

Subsequent to the removal of the drip tank and the secondary containment lining, the footprint of the former secondary containment was scraped one (1) to six (6) inches in depth utilizing a back hoe. Composite soil samples S-1 (6"), S-2 (3"), and S-3 (1") were collected from the scraped areas.

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 relinguished 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) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-3) to the applicable New Mexico EMNRD OCD closure criteria.

The laboratory analytical results for the composite soil samples collected from soils remaining at the Site, indicate benzene is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).



- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate total BTEX is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present in concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples collected from soils remaining at the Site indicate chloride is not present in concentrations greater than laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

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

# 7.0 RECLAMATION AND RE-VEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. The leaking tank was replaced and put back into service.

# 8.0 FINDINGS AND RECOMMENDATION

On June 21, 2019, Enterprise personnel identified approximately 40 bbls of water/condensate within the 2B-23 drip tank secondary lined containment. The release of water/condensate resulted from the drip tank being vandalized. Enterprise subsequently removed the liquids from the secondary containment and initiated activities to facilitate the removal and replacement of the drip tank 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 three (3) composite soil samples were collected from the floor of the excavation for laboratory analysis. Based on soil laboratory analytical results, soils remaining in place do not exhibit COC concentrations above the New Mexico EMNRD OCD closure criteria.
- A total of approximately seven (7) cy<sup>3</sup> of petroleum hydrocarbon affected soils were transported to the Envirotech landfarm near Hilltop, New Mexico for disposal/remediation. The excavation was backfilled with imported fill and then contoured to surrounding grade.

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

# 9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

#### 9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the

Enterprise Field Services, LLC Closure Report 2B-23 Drip Tank Release October 15, 2019



work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties).

# 9.2 Additional Limitations

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

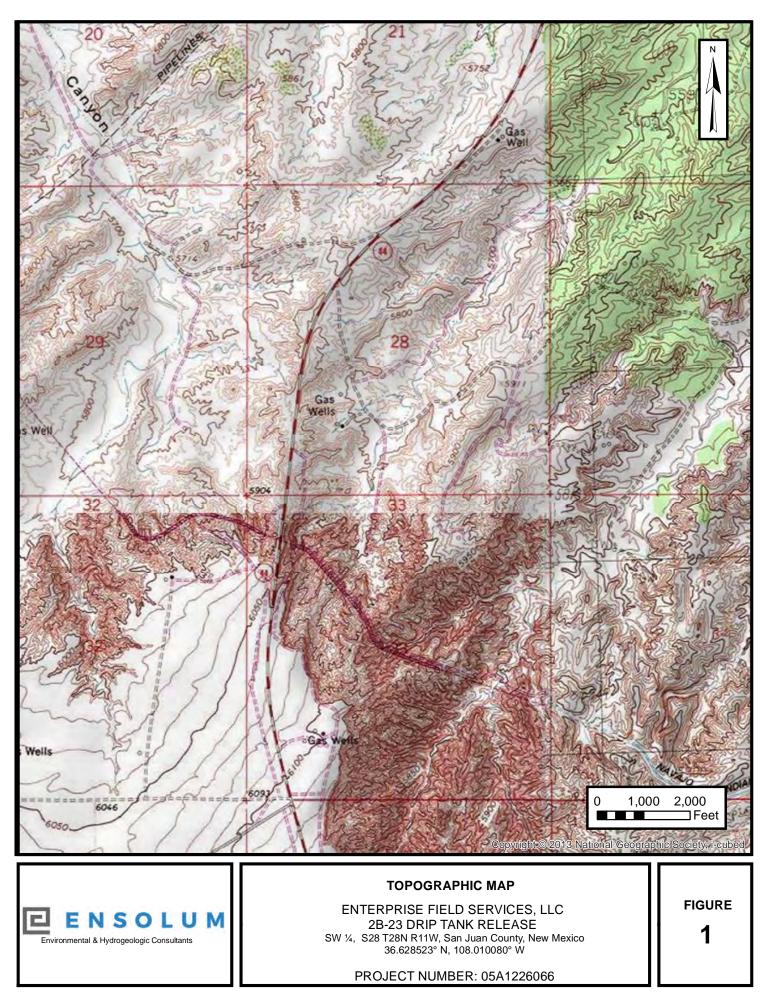
# 9.3 Reliance

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

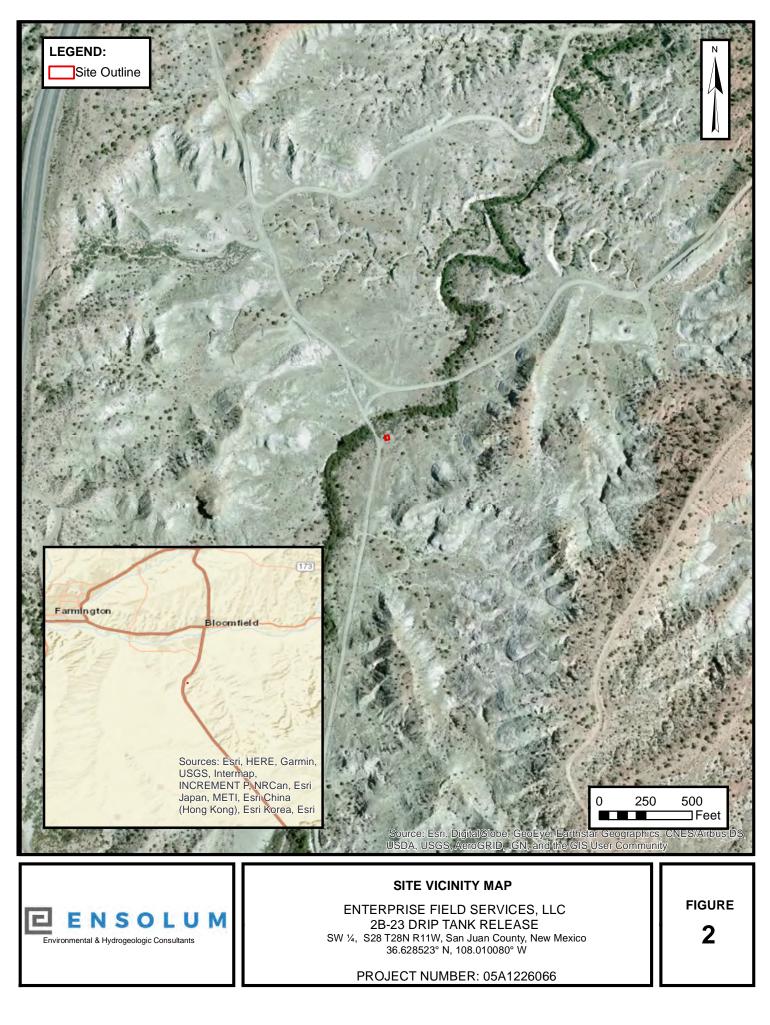


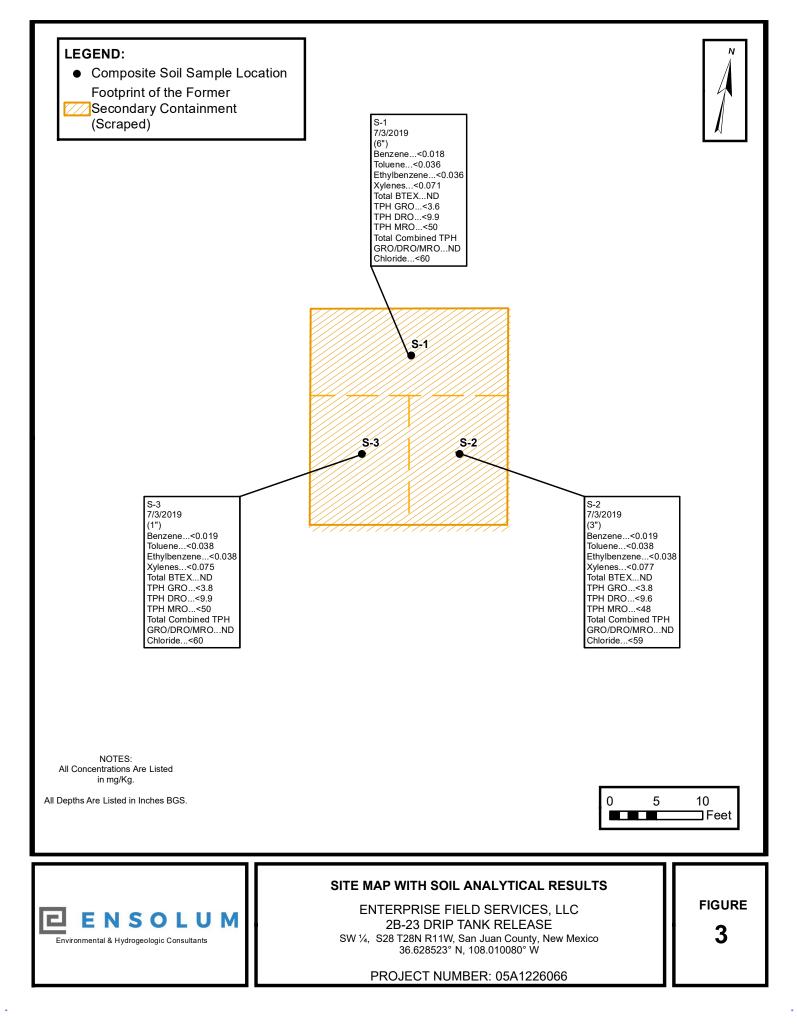
APPENDIX A

Figures



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APPENDIX B

Executed C-138 Solid Waste Acceptance Form

corvcDistrict 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 9 7057-1019 Revised August 1, 2011

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

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE** 

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

<ol> <li>Generator Name and Address:</li> <li>Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401</li> </ol>	Invoice Information:
	PM: Aron Lucero Pay Key: RB21200-15404
3. Originating Site: Lateral 2B-23 Drip Tank (6-21-19 release)	
4. Location of Material (Street Address, City, State or ULSTR): UL N Section 28 T28N R11W; 36.628523, -108.010080	July 2019
<ol> <li>Source and Description of Waste: Hydrocarbon impacted soil/sludge from rem pipeline release.</li> <li>Estimated Volume <u>5</u> d<sup>3</sup> obls Known Volume (to be entered by the op</li> </ol>	7 0
5. GENERATOR CERTIFICATION STATEMENT	OF WASTE STATUS
I, <u>Brian Stone</u> PRINT & SIGN NAME certify that according to the Resource Conservation and Recovery Act (RCRA) and the regulatory determination, the above described waste is: (Check the appropriate classic	IV NAME he US Environmental Protection Agency's July 1988
RCRA Exempt: Oil field wastes generated from oil and gas exploration and exempt waste.	production operations and are not mixed with non- nthly D Weekly D Per Load
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not e characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or lister subpart D, as amended. The following documentation is attached to demonstrate the appropriate items)	d hazardous waste as defined in 40 CFR, part 261,
□ MSDS Information □ RCRA Hazardous Waste Analysis □ Process Knowl	ledge
<b>GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION S</b>	TATEMENT FOR LANDFARMS
I,7-3-19, representative for <u>Enterprise Field Services, LLC</u> authorize I Generator Signature complete the required testing/sign the Generator Waste Testing Certification.	Envirotech, Inc. to
complete me required testing sign me Generator waste resting Certification.	
I, <u>Crea</u> <u>Crubrac</u> , representative for <u>Envirote</u> representative samples of the oil field waste have been subjected to the paint filter tes have been found to conform to the specific requirements applicable to landfarms pure of the representative samples are attached to demonstrate the above-described waste 19.15.36 NMAC.	st and tested for chloride content and that the samples suant to Section 15 of 19.15.36 NMAC. The results
Transporter: TBD	
OCD Permitted Surface Waste Management Facility Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit # Address of Facility: Hilltop, NM	*: NM 01-0011
Method of Treatment and/or Disposal:	Landfill Other
Waste Acceptance Status:	ENIED (Must Be Maintained As Permanent Record)
	$\underline{Manager}$ DATE: $\underline{7/3/19}$
FRINT INAME: CHAY CHANNEL IIILE: DUIDNO	1. 505-632-065
DIVIDATURE / JAA / / VIIII I LELEPHONE N	

Surface Waste Management Facility Authorized Agent



# APPENDIX C

Photographic Documentation

# SITE PHOTOGRAPHS

Enterprise Field Services, LLC 2B-23 Drip Tank Release Ensolum Project No. 05A1226066



Photograph 1 Photograph Description: View of the scraped area.	<image/>
Photograph 2 Photograph Description: View of the scraped area.	
Photograph 3 Photograph Description: View of the scraped area.	

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APPENDIX D

Table 1 – Soil Analytical Summary

# **ENSOLUM**

TABLE 1         2B-23 Drip Tank Release         SOIL ANALYTICAL SUMMARY													
Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
		Natural Resources ision, Closure Crite		10	NE	NE	NE	50				100	600
	Final Confirmation Composite Soil Samples												
S-1	7.03.19	С	6	<0.018	<0.036	<0.036	<0.071	ND	<3.6	<9.9	<50	ND	<60
S-2	7.03.19	С	3	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.6	<48	ND	<59
S-3	7.03.19	С	1	<0.019	<0.038	<0.038	<0.075	ND	<3.8	<9.9	<50	ND	<60

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

ND = Not Detected above the Practical Quantitation Limits

NA = Not Analyzed

.

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

TPH = Total Petroleum Hydrocarbon



APPENDIX E

Laboratory Data Sheets & Chain of Custody Documentation



July 10, 2019

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

RE: 2B 23 Drip Tank

OrderNo.: 1907226

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 3 sample(s) on 7/4/2019 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

**Analytical Report** Lab Order 1907226

### Date Reported: 7/10/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Project: 2B 23 Drip Tank	Client Sample ID: S-1 Collection Date: 7/3/2019 8:05:00 AM								
Lab ID: 1907226-001	Matrix: SOIL		<b>Received Dat</b>	<b>e:</b> 7/4	4/2019 8:05:00 AM				
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA METHOD 300.0: ANIONS					Analys	t: smb			
Chloride	ND	60	mg/Kg	20	7/5/2019 1:34:21 PM	46021			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analys	t: BRM			
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/5/2019 9:58:16 AM	46018			
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/5/2019 9:58:16 AM	46018			
Surr: DNOP	98.0	70-130	%Rec	1	7/5/2019 9:58:16 AM	46018			
EPA METHOD 8015D: GASOLINE RANGE	E				Analys	t: NSB			
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	7/5/2019 11:34:24 AM	G61171			
Surr: BFB	101	73.8-119	%Rec	1	7/5/2019 11:34:24 AM	G61171			
EPA METHOD 8021B: VOLATILES					Analys	t: NSB			
Benzene	ND	0.018	mg/Kg	1	7/5/2019 11:34:24 AM	B61171			
Toluene	ND	0.036	mg/Kg	1	7/5/2019 11:34:24 AM	B61171			
Ethylbenzene	ND	0.036	mg/Kg	1	7/5/2019 11:34:24 AM	B61171			
Xylenes, Total	ND	0.071	mg/Kg	1	7/5/2019 11:34:24 AM	B61171			
Surr: 4-Bromofluorobenzene	94.2	80-120	%Rec	1	7/5/2019 11:34:24 AM	B61171			

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
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range

RL Reporting Limit

Page 1 of 7

**Analytical Report** Lab Order 1907226

#### Date Reported: 7/10/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM		Cl	ient Sample II	<b>D:</b> S-2	2		
<b>Project:</b> 2B 23 Drip Tank	Collection Date: 7/3/2019 8:10:00 AM						
Lab ID: 1907226-002	Matrix: SOIL Received Date: 7/4/2019 8:05:00 AM						
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analyst	∷ smb	
Chloride	ND	59	mg/Kg	20	7/5/2019 1:46:46 PM	46021	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM	
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/5/2019 10:20:23 AM	46018	
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/5/2019 10:20:23 AM	46018	
Surr: DNOP	93.9	70-130	%Rec	1	7/5/2019 10:20:23 AM	46018	
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/5/2019 11:57:05 AM	G61171	
Surr: BFB	103	73.8-119	%Rec	1	7/5/2019 11:57:05 AM	G61171	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Benzene	ND	0.019	mg/Kg	1	7/5/2019 11:57:05 AM	B61171	
Toluene	ND	0.038	mg/Kg	1	7/5/2019 11:57:05 AM	B61171	
Ethylbenzene	ND	0.038	mg/Kg	1	7/5/2019 11:57:05 AM	B61171	
Xylenes, Total	ND	0.077	mg/Kg	1	7/5/2019 11:57:05 AM	B61171	
Surr: 4-Bromofluorobenzene	95.6	80-120	%Rec	1	7/5/2019 11:57:05 AM	B61171	

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
- Analyte detected below quantitation limits J
- Р Sample pH Not In Range

RL Reporting Limit

Page 2 of 7

**Analytical Report** Lab Order 1907226

#### Date Reported: 7/10/2019

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM Project: 2B 23 Drip Tank	Client Sample ID: S-3 Collection Date: 7/3/2019 8:15:00 AM									
Lab ID: 1907226-003	Matrix: SOIL         Received Date: 7/4/2019 8:05:00 AM									
Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch				
EPA METHOD 300.0: ANIONS					Analyst	smb				
Chloride	ND	60	mg/Kg	20	7/5/2019 1:59:11 PM	46021				
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst	BRM				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/5/2019 10:42:31 AM	46018				
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/5/2019 10:42:31 AM	46018				
Surr: DNOP	93.6	70-130	%Rec	1	7/5/2019 10:42:31 AM	46018				
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	NSB				
Gasoline Range Organics (GRO)	ND	3.8	mg/Kg	1	7/5/2019 12:19:45 PM	G61171				
Surr: BFB	101	73.8-119	%Rec	1	7/5/2019 12:19:45 PM	G61171				
EPA METHOD 8021B: VOLATILES					Analyst	NSB				
Benzene	ND	0.019	mg/Kg	1	7/5/2019 12:19:45 PM	B61171				
Toluene	ND	0.038	mg/Kg	1	7/5/2019 12:19:45 PM	B61171				
Ethylbenzene	ND	0.038	mg/Kg	1	7/5/2019 12:19:45 PM	B61171				
Xylenes, Total	ND	0.075	mg/Kg	1	7/5/2019 12:19:45 PM	B61171				
Surr: 4-Bromofluorobenzene	92.8	80-120	%Rec	1	7/5/2019 12:19:45 PM	B61171				

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

- Analyte detected below quantitation limits J
- Р Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT	
Hall Environmental Analysis Laboratory, Inc.	

1907226 10-Jul-19

WO#:

#### **Client:** ENSOLUM **Project:** 2B 23 Drip Tank

Sample ID: MB-46021	SampType: MBLK	TestCode: EPA Method 300.0: Anions					
Client ID: PBS	Batch ID: 46021	RunNo: 61175					
Prep Date: 7/5/2019	Analysis Date: 7/5/2019	SeqNo: 2074356	Units: <b>mg/Kg</b>				
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Chloride	ND 1.5						
Sample ID: LCS-46021	SampType: LCS	TestCode: EPA Method	300.0: Anions				
Client ID: LCSS	Batch ID: 46021	RunNo: 61175					
Prep Date: 7/5/2019	Analysis Date: 7/5/2019	SeqNo: 2074357	Units: mg/Kg				
	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual			
Analyte	Result FQL SFR value		Tigheinit /010	Ri Deliniti Quai			

# Qualifiers:

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix D
- H 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

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

1907226	
10-Jul-19	

WO#:

Client:ENSOLProject:2B 23 D	UM Drip Tank									
Sample ID: LCS-46018	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batch	n ID: 46	018	R	aunNo: 6	1157				
Prep Date: 7/5/2019	Analysis D	ate: 7/	5/2019	S	SeqNo: 2	073055	Units: mg/M	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	63.9	124			
Surr: DNOP	4.8		5.000		95.8	70	130			
Sample ID: MB-46018	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	n ID: 46	018	R	aunNo: 6	1157				
Prep Date: 7/5/2019	Analysis D	ate: 7/	5/2019	S	073056	Units: <b>mg/#</b>	٤g			
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	9.0		10.00		89.8	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

WO#:	1907226
	10-Jul-19

Client:ENSOLProject:2B 23 D	UM Drip Tank									
Sample ID: RB	SampT	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch	n ID: <b>G6</b>	1171	F	RunNo: 6	1171				
Prep Date:	Analysis D	ate: 7/	5/2019	S	SeqNo: 2	073623	Units: <b>mg/K</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	73.8	119			
Sample ID: 2.5UG GRO LCS	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	e	
Client ID: LCSS	Batch	n ID: <b>G6</b>	1171	F	RunNo: 6	1171				
Prep Date:	Analysis D	ate: 7/	5/2019	5	SeqNo: 2	073811	Units: <b>mg/K</b>	ſg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	80.1	123			
Surr: BFB	1200		1000		116	73.8	119			

Qualifiers:

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

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

Page 6 of 7

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	1907226
	10-Jul-19

Client:ENSOLUProject:2B 23 Dr										
Sample ID: RB	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	h ID: <b>B6</b>	1171	F	RunNo: 6	1171				
Prep Date:	Analysis D	Date: 7/	5/2019	S	SeqNo: 20	073637	Units: mg/K	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								
Kylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	80	120			
Sample ID: 100NG BTEX LCS	Samp1	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: <b>B6</b>	1171	F	RunNo: 6	1171				
Prep Date:	Analysis E	Date: 7/	5/2019	S	SeqNo: 20	073638	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Foluene	0.94	0.050	1.000	0	93.6	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
(ylenes, Total	2.8	0.10	3.000	0	92.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	80	120			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range RL Reporting Limit

Page 7 of 7

HALL ENVIRONMENTAL ANALYSIS LABORATORY	TEL: 505-345-3975	4901 Hawkins I uquerque, NM 871	ve 09 <b>Sarr</b> 07	nple Log-In C	heck List
Client Name: ENSOLUM AZTEC	Work Order Number	: 1907226		RcptNo:	1
Received By: Andy Freeman	7/4/2019 8:05:00 AM		andre How	-	
Completed By: Anne Thorne	7/5/2019 7:42:47 AM		anne An	~	
Reviewed By: DAD 7/5/19			-		
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🔽	No 🗌	Not Present	
2. How was the sample delivered?		<u>Courier</u>			
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) properl	y preserved?	Yes 🔽	No 🗌		
8. Was preservative added to bottles?		Yes	No 🗹	NA 🗔	
9. VOA vials have zero headspace?		Yes	No 🗌	No VOA Vials 🗹	
<ol> <li>Were any sample containers received broke</li> </ol>	n?	Yes	No 🗹 🛛	# of preserved	165/19
11. Does paperwork match bottle labels?		Yes 🔽	No 🗆	bottles checked for pH:	0110
(Note discrepancies on chain of custody)					>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 t	his order?	Yes	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	] eMail 🗌 Pho	ne 🗌 Fax	📋 In Person	
Regarding:		······································	· · · · · · · · · · · · · · · · · · ·		
Client Instructions:	· · · · ·			· · · · · · · · · · · · · · · · · · ·	
16. Additional remarks: CUStudy 17. <u>Cooler Information</u>	seels inte	of on sa	()as /	h 07/05/19	
Cooler No         Temp °C         Condition         Set           1         3.3         Good         Yes	o dan in dia dalah dari dan sekara dari dari dari dari dari dari dari d	eal Date Si	gned By		

Chain-of-Custody Record	Turn-Around Time:	
Client: Ensolut, LL	□ Standard \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ANALYSTS / ARODATODY
	Project Name:	
Mailing Address: 600 5, BIOGRANDE SuiteA	28-23 Drip lank	37109
AZTECINIM SAMIO	Project #: See noves	5 Fax 505-345-4107
		Analysis Request
email or Fax#: KSUMMER @ Ensolum.com Project Manager: KSUMMELS	Project Manager: KSWMMerCS	(O)
QA/QC Package:		s '†Оd SWIS SWIS св. <sup>2</sup> СВ. <sup>2</sup>
ר ⊐ Az Con ר Other	Sampler: Rechilly	/8082 01 8270 A) A) Cresen
ype)_	lers: /	m (I 10 <sup>3</sup> ; 10 <sup>2</sup> ; 10 <sup>2</sup> 10 <sup>2</sup>
	Cooler Temp(mauaing cs): 2,2*C	etho etho Me Me Me Me Me Me
Date Time Matrix Sample Name	の1011で Container Preservative HEAL No. Twne and # Twne	3TEX / 108:1 Pe 2081 Pe 208
9805 S	Market Coal Coal -ril	
Ś	(00)	
7/3/19815 S S-3		
/		
/		
	/	
Date: Time: Relinquished by: 7/5/19/10/71 20,20 WS	Received by: Via: 7/3/19 1017	Remarks: pM-Tom Long (EPEOD) Pay Ver- EB21200
73/19/1740 Annutur 20101	Received by Via: Date Time	SAMEDAY
samples submitted to Hall Environmental	accredited laboratories.	This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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