State of New Mexico
Oil Conservation Division

Incident ID	nAPP2228036562
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: Stephen L. Smith Title: HSE Supervisor

Signature: Date: 8/16/23

email: SSmith@enduringresources.com Telephone: 505-497-8574

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Date:

Printed Name: Title:

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. N0G13121799

6. If Indian, Allottee or Tribe Name: EASTERN NAVAJO

7. If Unit of CA/Agreement, Name and/or No.: S CHACO UT- MANCOS/NMNM133321A

1. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.: S LYBROOK UNIT/344H

2. Name of Operator: ENDURING RESOURCES LLC

9. API Well No.: 3004321280

3a. Address: 200 ENERGY COURT, FARMINGTON, NM 8740

3b. Phone No. *(include area code)*: (505) 497-8574

10. Field and Pool or Exploratory Area: LYBROOK GALLUP/LYBROOK GALLUP

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*: SEC 2/T22N/R7W/NMP

11. Country or Parish, State: SANDOVAL/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☑ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

ENDURING RESOURCES WOULD LIKE TO REQUEST SPILL CLOSURE BASED ON THE ACTIVITES IN THE ATTACHED REPORT.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*: HEATHER HUNTINGTON / Ph: (505) 636-9751

Title: Permitting Technician

Signature

Date: 08/04/2023

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by: DAVE J MANKIEWICZ / Ph: (505) 564-7761 / Approved

Title: AFM-Minerals

Date: 08/07/2023

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office: FARMINGTON

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

ENSOLUM

July 28, 2023

Mr. Steve Smith
Enduring Resources
200 Energy Court
Farmington, New Mexico 87401

Re: Closure Report
South Lybrook 344H Surface Lay Flat Line Route
Sandoval County, New Mexico
Incident Number: NAPP2228036562

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Enduring Resources, LLC (Enduring), has prepared the following *Closure Report* to document the work performed to address the release of produced water within the South Lybrook 344H Surface Lay Flat Line Route (Site). Based on the activities described in this report, Ensolum recommends Enduring request closure and no further action for Incident Number NAPP2228036562.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 10, Township 22 North, Range 07 West, in Sandoval County, New Mexico (36.15281° N, 107.56416° W) (Figure 1) and is associated with oil and gas exploration and production operations on tribal surface land.

On October 6, 2022, a partial failure of a clamp in the lay flat line resulted in the release of an estimated 20 barrels (bbls) of produced water. The fluids spread out within the pipeline right-of-way (ROW), but due to heavy rainfall at the time of the release, fluid also migrated outside the ROW to the southeast. The fluid flowed southwest within a roadside ditch, following the general direction of the ROW, for approximately 750 feet before turning northwest and flowing along a two-track road for approximately 415 feet. Enduring personnel immediately shut-in the pipeline, built an earthen berm at the ROW to contain the fluids, and began planning for delineation and repairs. No surface waters appear to have been impacted by the release.

Enduring submitted a *Release Notification* Form C-141 (Form C-141) to the New Mexico Oil Conservation Division (NMOCD) on October 19, 2022, and the release was assigned Incident Number NAPP2228036562. Because the release occurred on tribal allotment lands, Enduring additionally notified the Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA).

BACKGROUND

Ensolum conducted an initial Site assessment on November 4, 2022, and additional delineation sampling on December 7, 2022. The results of these events are outlined in a *Remediation Work Plan* (dated December 29, 2022) and a *Revised Remediation Work Plan* (dated March 27, 2023) which were submitted to the NMOCD, BLM, and BIA. The work plans described findings for the

sampling events, which suggested a sheet flow of produced water near the release point traveled across surface soils to the roadside ditch without infiltrating significantly into the subsurface. Once the release channelized with the ditch, flow slowed and concentrated, allowing for soil saturation and infiltration of fluids to approximately 1 foot to 2 feet below ground surface (bgs) before reaching the upper surface of a sandstone. Rainwater likely advanced the release water downgradient, but the terminus was documented by a clean delineation sample. No petroleum hydrocarbons were identified in the soil, but chloride exceeding 600 milligrams per kilogram (mg/kg) was identified in limited areas. Based on multiple sampling events documenting a decrease in chloride concentrations, precipitation appeared to have promoted natural attenuation.

The original *Remediation Work Plan* proposed continued monitoring of natural attenuation through soil sampling and vegetation assessments in spring and summer of 2023. Based on comments from BLM, the *Revised Remediation Work Plan* included addition of gypsum to the soil if spring sampling results did not document a sufficient reduction in chloride concentrations at the limited remaining areas containing elevated chloride.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). The results are presented in the *Revised Remediation Work Plan,* and based on the presence of a significant watercourse, the following NMOCD Table I Closure Criteria (Closure Criteria) applies for chloride: 600 mg/kg. That standard aligns with a reclamation requirement and is used as guidance for this *Closure Report*.

ADDITIONAL MONITORING AND REMEDIATION ACTIVITIES

Based on the delineation efforts referenced above, Ensolum proposed a multi-tiered remediation approach to monitor and accelerate natural attenuation of chloride concentrations at sample locations that previously exceeded 600 mg/kg chloride. The following section describes those activities. A photographic log of sampling is included as Appendix A.

On April 21, 2023, Ensolum personnel collected soil samples following spring snowmelt. As proposed in the *Revised Remediation Work Plan*, five-point composite samples were collected within each 200 square foot section that previously exceeded Closure Criteria during the December 7, 2022 sampling event (sampling areas CS09, CS10, CS11, CS12, CS13, CS15, CS16, CS17, CS24, and CS25). Of note, composite sampling area CS24 was not assessed in April 2023 but was resampled on July 26, 2023. Additionally, four hand auger borings were advanced at locations previously exceeding the Closure Criteria (HA11, HA15, HA16, and HA18) and three discrete soil samples were collected from each boring at 0.5, 1, and 2 feet bgs. Soil sample locations are presented on Figure 2.

The five-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Discrete soil samples were taken by collecting soil from a specific location and depth. Soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, and immediately placed on ice. The soil samples were transported on ice under strict chain-of-custody procedures to Hall Environmental Analysis Laboratory (Hall) for analysis of chloride by United States Environmental Protection Agency (EPA) Method 300.0.

Laboratory analytical results from the April 21, 2023 sampling event indicated that all composite soil samples exhibited a decrease in chloride concentration compared to the December 7, 2022

sampling event and did not exceed 600 mg/kg chloride. Additionally, chloride concentrations from three of the hand auger borings (HA15, HA16, and HA18) did not exceed 600 mg/kg, with results ranging from non-detect to 350 mg/kg. Sample HA11A, collected at 1-foot bgs, contained a chloride concentration of 900 mg/kg. Laboratory analytical results are summarized in Table 1 and the complete laboratory report is included as Appendix B.

Ensolum personnel returned to the Site on May 23, 2023 to field screen chloride concentrations in the soil near HA11. Results indicated that chloride concentrations remained elevated in soil at depths of 1 to 2 feet bgs. To address the residual chloride concentrations at this location, Ensolum personnel removed impacted soil up to a depth of 2 feet bgs near HA11 using a hand shovel on June 2, 2023. In total, approximately one cubic yard of soil was removed for disposal at the landfarm operated by Envirotech, Inc. and located in San Juan County, New Mexico. This area was backfilled with a mixture of clean soil and finely powdered gypsum. On June 27, 2023, Ensolum personnel returned to the Site and advanced one hand auger boring to 2.5 feet bgs to reassess chloride concentrations at location HA11. Laboratory analytical results from sample "HA11@2.5'" indicated that no chloride was detected above laboratory reporting limits.

Vegetation within the ROW was monitored in July 2023 to assess the percentage of cover and relative health of impacted areas as compared to adjacent unimpacted vegetation. Photograph 5 was taken within the affected area of the ROW and Photograph 6 was taken in an adjacent, unaffected area. As seen in the photographs, vegetation quality and coverage is similar both within and outside of the release area, indicating that vegetation was not significantly impacted by the release. Photographs 7 and 8 show areas where the release migrated outside of the ROW towards the ditch and roadway southeast of the release point. Similar to the affected area of the ROW, the more mature vegetation in the area closer to the ditch did not appear to be impacted by the release. Photographs of the current vegetation are included in Appendix A.

CONCLUSIONS AND CLOSURE REQUEST

The release of produced water resulted in presence of elevated chloride concentrations in surface soil in the pipeline ROW and in the shallow subsurface of the upper reaches of the roadside ditch, where release water channelized and slowed. Natural attenuation by rainwater and snowmelt decreased the chloride concentrations as documented by soil sampling results collected 1 month (December 2022) and 5 months (April 2023) after the release. In the location where the release channelized and concentrated into the roadside ditch (represented by sample location HA11), chloride concentrations in soil from 1- to 2 feet bgs required active remediation. Because the volume of residually impacted soil was so small, Ensolum manually removed the impacted soil at HA11 to expose the underlying sandstone at 2.5 feet bgs, then backfilled with a mixture of clean soil and finely powdered gypsum.

Laboratory analytical results from all final confirmation soil samples collected at the Site indicate chloride concentrations have been reduced to less than 600 mg/kg and no further remediation is required. As such, Enduring respectfully requests closure for Incident Number NAPP2228036562.

Ensolum appreciates the opportunity to provide this *Closure Report* to the NMOCD. If you have any questions or comments, please contact the undersigned.

Sincerely,

Ensolum, LLC

Reece Hanson
Staff Geologist
970-210-9803
rhanson@ensolum.com

Ashley Ager, MS, PG
Principal, Geologist
970-946-1093
aager@ensolum.com

Attachments:

Figure 1	Site Location Map
Figure 2	2023 Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Photographic Log
Appendix B	Laboratory Analytical Reports

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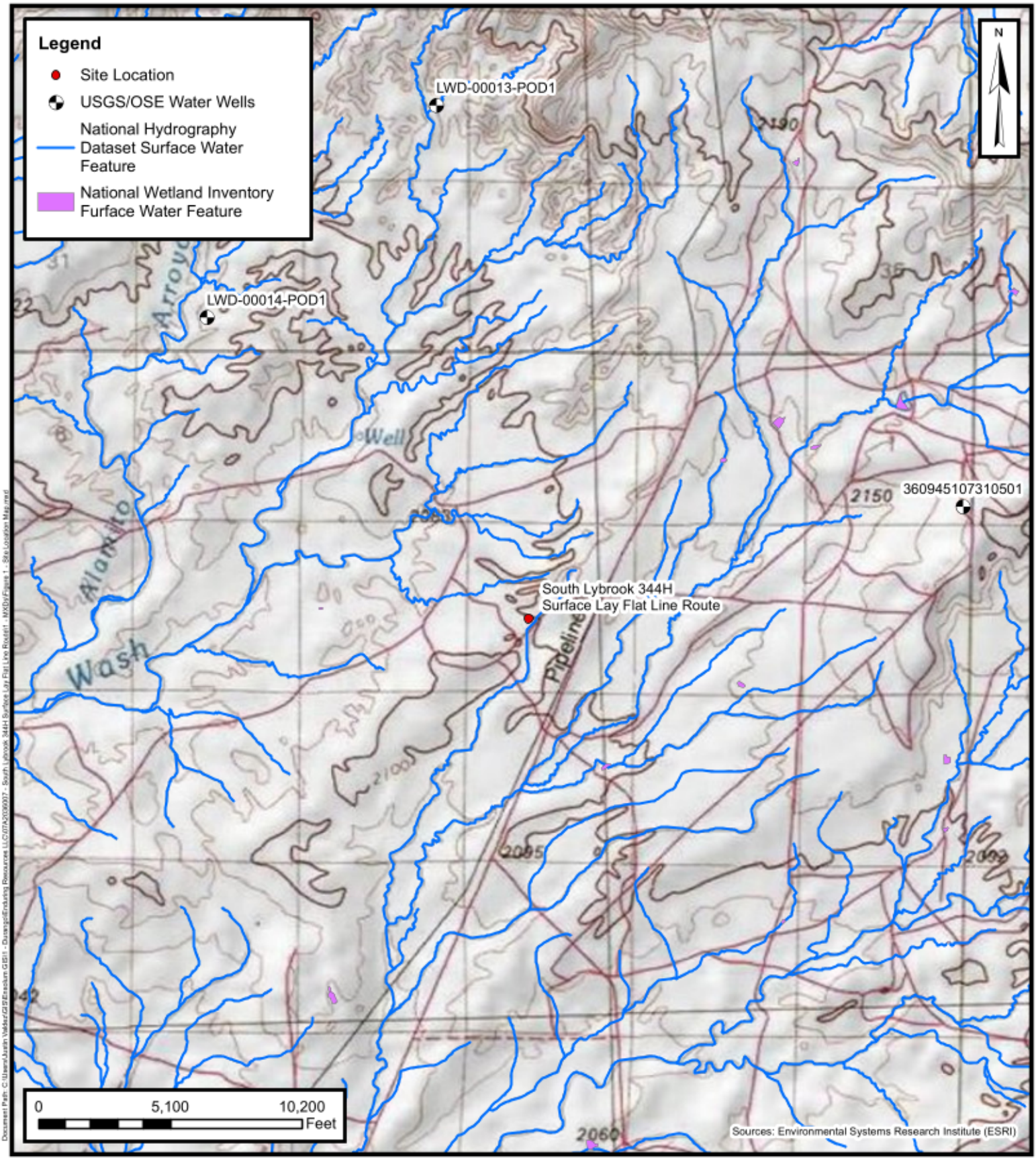
FIGURES

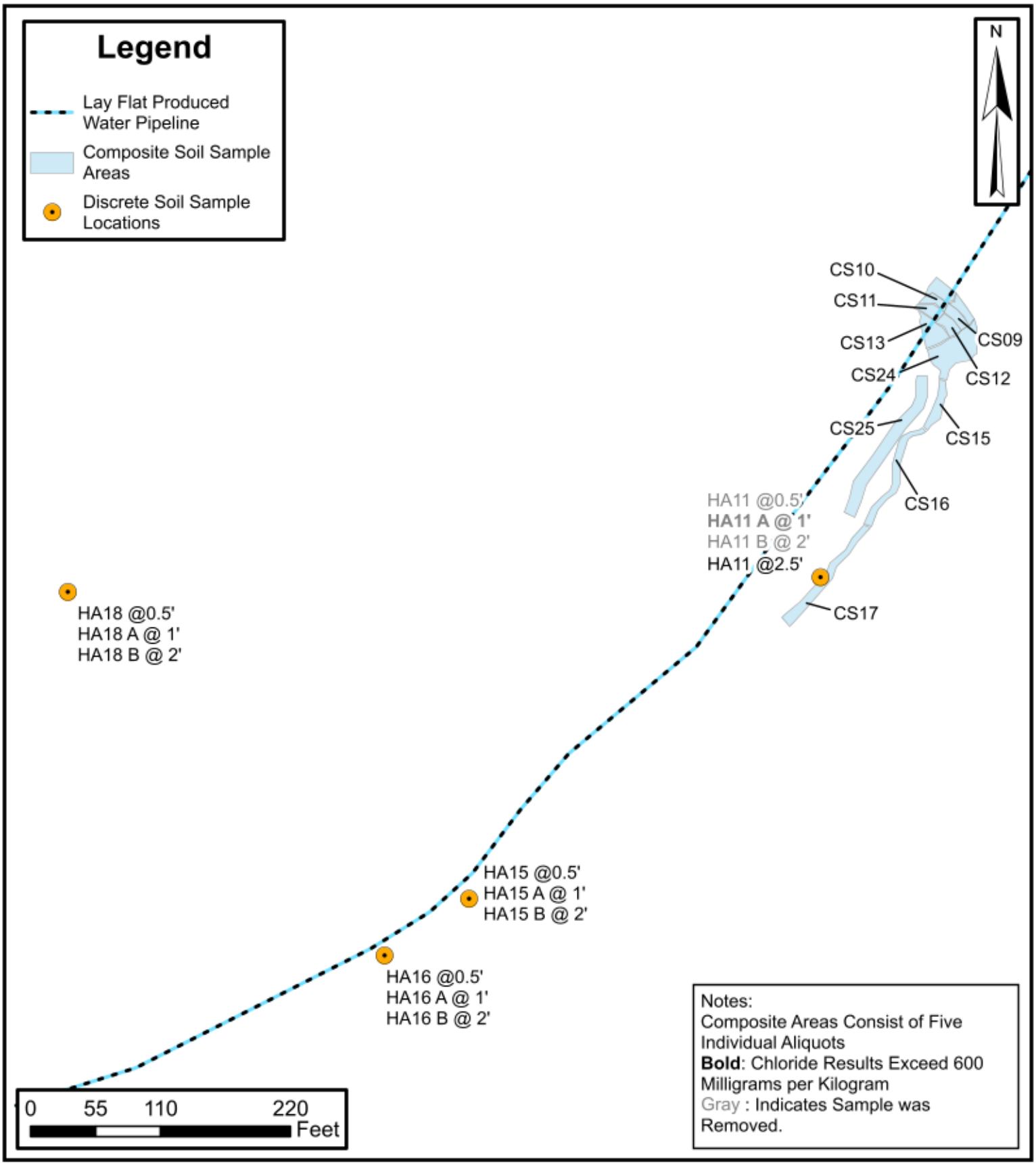


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Location Map

South Lybrook 344H Surface Lay Flat Line Route
Enduring Resources, LLC
36.152806°, -107.564385°
Sandoval County, New Mexico

FIGURE
1



2023 Soil Sample Locations

South Lybrook 344H Surface Lay Flat Line Route
Enduring Resources, LLC

36.152806, -107.564385
Sandoval County, New Mexico

FIGURE
2

Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
SOUTH LYBROOK 344H SURFACE LAY FLAT LINE ROUTE
ENDURING RESOURCES, LLC
SANDOVAL COUNTY, NEW MEXICO

Sample Identification	Sample Date	Sample Depth (feet bgs)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**600**
5-Point Composite Soil Samples			
CS09	04/21/2023	0 - 0.5	500
CS10	04/21/2023	0 - 0.5	<60
CS11	04/21/2023	0 - 0.5	110
CS12	04/21/2023	0 - 0.5	<60
CS13	04/21/2023	0 - 0.5	<60
CS15	04/21/2023	0 - 0.5	<60
CS16	04/21/2023	0 - 0.5	160
CS17	04/21/2023	0 - 0.5	63
CS24	07/26/2023	0 - 0.5	223
CS25	04/21/2023	0 - 0.5	<60
Discrete Soil Samples			
~~HA11~~	~~04/21/2023~~	~~0 - 0.5~~	~~<60~~
~~HA11 A~~	~~04/21/2023~~	~~1~~	~~900~~
~~HA11 B~~	~~04/21/2023~~	~~2~~	~~<59~~
HA11 @2.5'	06/27/2023	2.5	<61
HA15	04/21/2023	0 - 0.5	<59
HA15 A	04/21/2023	1	120
HA15 B	04/21/2023	2	350
HA16	04/21/2023	0 - 0.5	<60
HA16 A	04/21/2023	1	98
HA16 B	04/21/2023	2	200
HA18	04/21/2023	0 - 0.5	<60
HA18 A	04/21/2023	1	190
HA18 B	04/21/2023	2	61

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

Grey text indicates soil sample removed during remedial activities

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APPENDIX A

Photographic Log

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Photographic Log
Enduring Resources, LLC
South Lybrook 344H Surface Lay Flat Line Route
Sandoval County, New Mexico

Photograph: 1 Date: 6/2/2023
Description: Hand dug area around HA11
View: Northeast

Photograph: 2 Date: 6/2/2023
Description: Backfilled area around HA11
View: Southeast

Photograph: 3 Date: 6/2/2023
Description: Backfilled area around HA11
View: Northeast

Photograph: 4 Date: 6/27/2023
Description: Auger location - Sample HA11 @2.5'
View: Southeast

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Photographic Log
Enduring Resources, LLC
South Lybrook 344H Surface Lay Flat Line Route
Sandoval County, New Mexico

Photograph: 5 Date: 6/26/2023
Description: Pipeline ROW vegetation in release area
View: Looking south from release point

Photograph: 6 Date: 6/26/2023
Description: Pipeline ROW vegetation outside release
View: South

Photograph: 7 Date: 6/26/2023
Description: Release migrated out of ROW into ditch
View: Northeast

Photograph: 8 Date: 6/26/2023
Description: Vegetation outside ROW to the east
View: Northwest

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APPENDIX B

Laboratory Analytical Reports

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

May 03, 2023

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

RE: 344 H OrderNo.: 2304A27

Dear Brooke Herb:

Hall Environmental Analysis Laboratory received 24 sample(s) on 4/25/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order: **2304A27**
Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2304A27
Project: 344 H

Lab ID: 2304A27-001 **Collection Date:** 4/21/2023 11:10:00 AM
Client Sample ID: CS07 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	330	60		mg/Kg	20	4/26/2023 12:31:47 AM	74553

Lab ID: 2304A27-002 **Collection Date:** 4/21/2023 11:12:00 AM
Client Sample ID: CS08 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 12:44:11 AM	74553

Lab ID: 2304A27-003 **Collection Date:** 4/21/2023 11:14:00 AM
Client Sample ID: CS09 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	500	60		mg/Kg	20	4/26/2023 1:21:24 AM	74553

Lab ID: 2304A27-004 **Collection Date:** 4/21/2023 11:16:00 AM
Client Sample ID: CS10 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 1:33:49 AM	74553

Lab ID: 2304A27-005 **Collection Date:** 4/21/2023 11:18:00 AM
Client Sample ID: CS11 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	110	60		mg/Kg	20	4/26/2023 1:46:14 AM	74553

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order: **2304A27**
Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2304A27
Project: 344 H

Lab ID: 2304A27-006 **Collection Date:** 4/21/2023 11:20:00 AM
Client Sample ID: CS12 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 1:58:39 AM	74553

Lab ID: 2304A27-007 **Collection Date:** 4/21/2023 11:22:00 AM
Client Sample ID: CS13 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 2:11:03 AM	74553

Lab ID: 2304A27-008 **Collection Date:** 4/21/2023 11:24:00 AM
Client Sample ID: CS15 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 2:23:28 AM	74553

Lab ID: 2304A27-009 **Collection Date:** 4/21/2023 11:26:00 AM
Client Sample ID: CS16 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	160	60		mg/Kg	20	4/26/2023 2:35:52 AM	74553

Lab ID: 2304A27-010 **Collection Date:** 4/21/2023 11:28:00 AM
Client Sample ID: CS17 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	63	60		mg/Kg	20	4/26/2023 2:48:17 AM	74553

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order: **2304A27**
Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2304A27
Project: 344 H

Lab ID: 2304A27-011 **Collection Date:** 4/21/2023 11:30:00 AM
Client Sample ID: CS25 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 3:00:42 AM	74553

Lab ID: 2304A27-012 **Collection Date:** 4/21/2023 10:55:00 AM
Client Sample ID: HA11 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 3:13:06 AM	74553

Lab ID: 2304A27-013 **Collection Date:** 4/21/2023 10:57:00 AM
Client Sample ID: HA11 A **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	900	60		mg/Kg	20	4/26/2023 8:23:24 PM	74584

Lab ID: 2304A27-014 **Collection Date:** 4/21/2023 10:59:00 AM
Client Sample ID: HA11 B **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	59		mg/Kg	20	4/26/2023 8:35:45 PM	74584

Lab ID: 2304A27-015 **Collection Date:** 4/21/2023 11:05:00 AM
Client Sample ID: HA15 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	59		mg/Kg	20	4/26/2023 8:48:06 PM	74584

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order: **2304A27**
Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2304A27
Project: 344 H

Lab ID: 2304A27-016 **Collection Date:** 4/21/2023 11:07:00 AM
Client Sample ID: HA15 A **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	120	60		mg/Kg	20	4/26/2023 9:00:27 PM	74584

Lab ID: 2304A27-017 **Collection Date:** 4/21/2023 11:10:00 AM
Client Sample ID: HA15 B **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	350	60		mg/Kg	20	4/26/2023 9:12:47 PM	74584

Lab ID: 2304A27-018 **Collection Date:** 4/21/2023 11:18:00 AM
Client Sample ID: HA16 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 9:25:08 PM	74584

Lab ID: 2304A27-019 **Collection Date:** 4/21/2023 11:21:00 AM
Client Sample ID: HA16 A **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	98	60		mg/Kg	20	4/26/2023 9:37:28 PM	74584

Lab ID: 2304A27-020 **Collection Date:** 4/21/2023 11:25:00 AM
Client Sample ID: HA16 B **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	200	60		mg/Kg	20	4/26/2023 10:14:30 PM	74584

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

Analytical Report
Lab Order: **2304A27**
Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Lab Order:** 2304A27
Project: 344 H

Lab ID: 2304A27-021 **Collection Date:** 4/21/2023 11:30:00 AM
Client Sample ID: HA18 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	ND	60		mg/Kg	20	4/26/2023 10:26:50 PM	74584

Lab ID: 2304A27-022 **Collection Date:** 4/21/2023 11:33:00 AM
Client Sample ID: HA18 A **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	190	60		mg/Kg	20	4/27/2023 4:19:07 PM	74601

Lab ID: 2304A27-023 **Collection Date:** 4/21/2023 11:35:00 AM
Client Sample ID: HA18 B **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	61	60		mg/Kg	20	5/1/2023 7:19:10 PM	74674

Lab ID: 2304A27-024 **Collection Date:** 4/21/2023 11:16:00 AM
Client Sample ID: CS10- Dup **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	67	60		mg/Kg	20	5/1/2023 7:56:12 PM	74674

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2304A27**

03-May-23

Client: ENSOLUM

Project: 344 H

Sample ID: **MB-74553** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **74553** RunNo: **96292**
Prep Date: **4/25/2023** Analysis Date: **4/25/2023** SeqNo: **3487901** Units: **mg/Kg**

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

Sample ID: **LCS-74553** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **74553** RunNo: **96292**
Prep Date: **4/25/2023** Analysis Date: **4/25/2023** SeqNo: **3487902** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Sample ID: **MB-74584** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **74584** RunNo: **96342**
Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489317** Units: **mg/Kg**

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

Sample ID: **LCS-74584** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **74584** RunNo: **96342**
Prep Date: **4/26/2023** Analysis Date: **4/26/2023** SeqNo: **3489318** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: **MB-74601** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **74601** RunNo: **96357**
Prep Date: **4/27/2023** Analysis Date: **4/27/2023** SeqNo: **3490739** Units: **mg/Kg**

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

Sample ID: **LCS-74601** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **74601** RunNo: **96357**
Prep Date: **4/27/2023** Analysis Date: **4/27/2023** SeqNo: **3490740** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2304A27**

03-May-23

Client: ENSOLUM

Project: 344 H

Sample ID: **MB-74674**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **74674**	RunNo: **96419**
Prep Date: **5/1/2023**	Analysis Date: **5/1/2023**	SeqNo: **3494434** Units: **mg/Kg**

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

Sample ID: **LCS-74674**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **74674**	RunNo: **96419**
Prep Date: **5/1/2023**	Analysis Date: **5/1/2023**	SeqNo: **3494435** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	0	109	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2304A27 RcptNo: 1

Received By: Tracy Casarrubias 4/25/2023 6:20:00 AM

Completed By: Tracy Casarrubias 4/25/2023 9:13:58 AM

Reviewed By: JH 4-25-23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: TMC 4/25/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: Mailing address and phone number missing on COC- TMC 4/25/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Yes	Morty		
2	2.5	Good	Yes	Morty		

Chain-of-Custody Record

Client: Ensolum

Brooke Herb

Mailing Address:

Phone #:

email or Fax#: bherb@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: 344H

Project #:

Project Manager: Brook. Herb

Sampler: Eric Carroll

On Ice: ☑ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): See Checklist (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2306A27	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	X Chloride
4-21	1110	Soil	CS07	1402	cool	001											X
↓	1112	↓	CS08	↓	↓	002											↓
	1114		CS09			003											
	1116		CS10			004											
	1118		CS11			005											
	1120		CS12			006											
	1122		CS13			007											
	1124		CS15			008											
	1126		CS16			009											
	11:28		CS17			010											
	11:30		CS25			011											
↓	10:55	↓	HA11	↓	↓	012											

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4-24	16:15				4/24/23	1615
4/24/23	1813			Courier	4/25/23	6:20

Remarks: cc: ecarroll@ensolum.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Ensolum
Brooke Herb
Mailing Address:
Phone #:
email or Fax#: bherb@ensolum.com
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: 344H
Project #:
Project Manager: Brooke Herb
Sampler: EC
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp(Including CF): See Checklist (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2304A27	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
4-21	1057	Soil	HA11 A	14oz	Cool	013											X
	1059		HA11 B			014											
	1105		~~HA12 A~~ HA15			015											
	1107		~~HA12 B~~ HA15A			016											
	11:16		~~HA12~~ HA15 B			017											
	11:18		~~HA13~~ HA16			018											
	11:21		~~HA13 A~~ HA16A			019											
	11:25		HA16B			020											
	11:30		HA16			021											
	11:33		HA18A			022											
	11:35		HA18B			023											X
4-21	11:16		CS10-Dup			024											X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4-24	16:15				4/24/23	1618
4/24/23	1813			Courier	4/25/23	6:20

Remarks:
cc: ecarroll@ensolum.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

July 06, 2023

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

RE: South Lybrook 344H OrderNo.: 2306E07

Dear Stuart Hyde:

Hall Environmental Analysis Laboratory received 1 sample(s) on 6/28/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2306E07**
Date Reported: **7/6/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM
Client Sample ID: HA11@2.5'
Project: South Lybrook 344H
Collection Date: 6/27/2023 1:26:00 PM
Lab ID: 2306E07-001 **Matrix:** SOIL **Received Date:** 6/28/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	61		mg/Kg	20	7/3/2023 8:00:38 PM	75965

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2306E07**

06-Jul-23

Client: ENSOLUM

Project: South Lybrook 344H

Sample ID: **MB-75965**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **75965**	RunNo: **97896**
Prep Date: **7/3/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561641** Units: **mg/Kg**

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

Sample ID: **LCS-75965**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **75965**	RunNo: **97896**
Prep Date: **7/3/2023**	Analysis Date: **7/3/2023**	SeqNo: **3561642** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	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 standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: ENSOLUM Work Order Number: 2306E07 RcptNo: 1

Received By: Tracy Casarrubias 6/28/2023 6:45:00 AM

Completed By: Tracy Casarrubias 6/28/2023 7:16:31 AM

Reviewed By: CMC 6/28/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes ☑ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐ Adjusted?
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes ☑ No ☐ Checked by: JN 6/28/23

Special Handling (if applicable)

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

Person Notified: Date:

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions: Mailing address and phone number are missing on COC - TMC 6/28/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.2	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Ensolum, LLC
Attn: Stuart Hyde
Mailing Address:
Phone #:
email or Fax#: shyde@ensolum.com
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: 5-day
☒ Standard ☐ Rush
Project Name: South Lybrook 344H
Project #:
Project Manager: Stuart Hyde
Sampler: Reece Hanson
On Ice: ☒ Yes ☐ No yoqi
# of Coolers: 1
Cooler Temp(Including CF): 5.2 -0 = 5.2 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2306E07	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	(Cl, F, Br, NO_3, NO_2, PO_4, SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
6/22/23	1326	soil	HA11 @2.5'	1,4oz	Cool	001							X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
6/22/23	1454				6/27/23	1454
6/22/23	1812			Courier	6/28/23	6:45

Remarks:
CC: shyde rhanson@ensolum.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Report to:

Stuart Hyde

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Ensolum, LLC

Project Name:	NEU 344
Work Order:	E307146
Job Number:	23003-C-0001
Received:	7/26/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/27/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 7/27/23

Stuart Hyde
3122 National Parks Hwy
Carlsbad, NM 88220

Project Name: NEU 344
Workorder: E307146
Date Received: 7/26/2023 2:18:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/26/2023 2:18:00PM, under the Project Name: NEU 344.

The analytical test results summarized in this report with the Project Name: NEU 344 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Cell: 775-287-1762
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Table of Contents

Sample Summary

Ensolum, LLC	Project Name:	NEU 344	**Reported:**
3122 National Parks Hwy	Project Number:	23003-C-0001	
Carlsbad NM, 88220	Project Manager:	Stuart Hyde	07/27/23 13:16

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS24	E307146-01A	Soil	07/26/23	07/26/23	Glass Jar, 4 oz.

Sample Data

Ensolum, LLC	Project Name:	NEU 344	
3122 National Parks Hwy	Project Number:	23003-C-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Stuart Hyde	7/27/2023 1:16:07PM

CS24

E307146-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KF			Batch: 2330062
Chloride	**223**	20.0	1	07/26/23	07/26/23	

QC Summary Data

Ensolum, LLC	Project Name:	NEU 344	**Reported:**
3122 National Parks Hwy	Project Number:	23003-C-0001	
Carlsbad NM, 88220	Project Manager:	Stuart Hyde	7/27/2023 1:16:07PM

Anions by EPA 300.0/9056A

Analyst: KF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2330062-BLK1)									Prepared: 07/26/23 Analyzed: 07/26/23
Chloride	ND	20.0							
LCS (2330062-BS1)									Prepared: 07/26/23 Analyzed: 07/26/23
Chloride	248	20.0	250		99.2	90-110			
LCS Dup (2330062-BSD1)									Prepared: 07/26/23 Analyzed: 07/26/23
Chloride	246	20.0	250		98.6	90-110	0.608	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

Ensolum, LLC	Project Name:	NEU 344	
3122 National Parks Hwy	Project Number:	23003-C-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Stuart Hyde	07/27/23 13:16

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 1

Same day Rush

Client: Ensolum, LLC	Bill To Ensolum
Project: NEN 34/4	Attention: Stuart Hyde
Project Manager: Stuart Hyde	Address: 776 E 2nd Ave
Address: 776 E 2nd Ave	City, State, Zip Durango, Co 81301
City, State, Zip Durango, CO 81301	Phone: 970-903-1607
Phone: 970-903-1607	Email: shyde@ensolum.com
Email: shyde@ensolum.com	cc: rhanson@ensolum.com
Report due by: Thursday 7/27	

Lab Use Only: Lab WO# E307146 | Job Number 23103-C-1001

TAT: 1D X | 2D | 3D | Standard

EPA Program: CWA | SDWA | RCRA

State: NM | CO | UT | AZ | TX

Analysis and Method

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC - NM	TCEQ 1005- TX	Remarks
1256	7/26/23	Soil	1, 4oz	CS24	1						X			

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	7/26/23	1417		7/26/23	14:18
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: Y (N)

T1 14.1 T2 17.2 T3 16.4

AVG Temp °C 16

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other S

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA g

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech

Envirotech Analytical Laboratory

Printed: 7/26/2023 2:25:10PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Ensolum, LLC	Date Received:	07/26/23 14:18	Work Order ID:	E307146
Phone:	(575) 988-0055	Date Logged In:	07/26/23 14:22	Logged In By:	Alexa Michaels
Email:	shyde@ensolum.com	Due Date:	07/26/23 17:00 (0 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes	

Sample Cooler

7. Was a sample cooler received?	Yes	
8. If yes, was cooler received in good condition?	Yes	
9. Was the sample(s) received intact, i.e., not broken?	Yes	
10. Were custody/security seals present?	No	
11. If yes, were custody/security seals intact?	NA	
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes	
13. If no visible ice, record the temperature. Actual sample temperature: 16°C		

Sample Container

14. Are aqueous VOC samples present?	No	
15. Are VOC samples collected in VOA Vials?	NA	
16. Is the head space less than 6-8 mm (pea sized or less)?	NA	
17. Was a trip blank (TB) included for VOC analyses?	NA	
18. Are non-VOC samples collected in the correct containers?	Yes	
19. Is the appropriate volume/weight or number of sample containers collected?	Yes	

Field Label

20. Were field sample labels filled out with the minimum information:		
Sample ID?	Yes	
Date/Time Collected?	Yes	
Collectors name?	Yes	

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	Yes	
22. Are sample(s) correctly preserved?	No	
24. Is lab filteration required and/or requested for dissolved metals?	No	

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No	
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA	

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 253090

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 253090
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	Accepted for the record. Incident on tribal land.	2/1/2024