

**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	NAPP2228036562
District RP	
Facility ID	
Application ID	

**Release Notification****Accepted - 05/19/2023****Responsible Party**

NV

Responsible Party Enduring Resources	OGRID 372286
Contact Name Stephen Smith	Contact Telephone 505-497-8574
Contact email ssmith@enduringresources.com	Incident # (assigned by OCD) nAPP2228036562
Contact mailing address 200 Energy Ct Farmington NM 87401	

**Location of Release Source**

Latitude 36.15281N \_\_\_\_\_ Longitude -107.56416W \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name S LYBROOK 344H SURFACE LAYFLAT LINE ROUTE	Site Type Layflat ROW
Date Release Discovered 10/6/22	API# (if applicable) NA

Unit Letter	Section	Township	Range	County
K	10	22N	07W	Sandoval

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

**Nature and Volume of Release**

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 20	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

**Cause of Release**

During water transfer operations we experienced a partial failure of a clamp in a lay flat line. The line did not separate, rather, the clamp loosened and allowed water to exit between the loosened area of the couplings.

**VOLUME RECOVERED REVISED FROM ORIGINAL SUBMISSION**

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Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  The spill area is still in the process of being delineated by soil sampling. When the event occurred it was raining heavily.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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.	
Printed Name: <u>Stephen Smith</u> Signature: <u>[Signature]</u> email: <u>ssmith@EnduringResources.com</u>	Title: <u>HSE Supervisor</u> Date: <u>10/19/22</u> Telephone: <u>505-497-8574</u>
<b>OCD Only</b> Received by: <u>Jocelyn Harimon</u> Date: <u>10/20/2022</u>	

Incident ID	NAPP2228036562
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## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### **Characterization Report Checklist:** *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

## Oil Conservation Division

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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.

Printed Name:

Stephen L Smith

Title:

HSE Supervisor

Signature:



Date:

1/5/23

email:

ssmith@vendmresources.com

Telephone:

505-497-8574

**OCD Only**

Received by:

Jocelyn Harimon

Date:

01/06/2023

State of New Mexico  
Oil Conservation Division

Incident ID	NAPP2228036562
District RP	
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Application ID	

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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.

Printed Name: Stephen L SmithTitle: HSE SupervisorSignature: [Signature]Date: 1/5/23email: s.smith@enduringresources.comTelephone: 505-497-8574**OCD Only**Received by: Jocelyn HarimonDate: 01/06/2023☐ Approved☐ Approved with Attached Conditions of Approval☐ Denied☐ Deferral Approved

Signature: \_\_\_\_\_

Date: \_\_\_\_\_





December 29, 2022

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

**Re: Remediation Work Plan**  
South Lybrook 344H Surface Lay Flat Line Route  
Incident Number: NAPP2228036562  
Sandoval County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of Enduring Resources, LLC (Enduring), has prepared the following *Remediation Work Plan (Work Plan)* to document site assessment and delineation activities completed to date and propose actions to address impacted soil identified following a release of produced water within the South Lybrook 344H Surface Lay Flat Line Route (Site). This *Work Plan* proposes natural attenuation of chloride concentrations in soil in a pipeline right-of-way and roadside ditch, confirmed through routine soil sampling and monitoring of vegetation.

## **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 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 clean-up 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.

## **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). Results from the characterization desktop review are presented on page 3 of the Form C-141. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest water well is United States Geological Survey well 360945107310501, located 2.6 miles northeast of the Site, as shown on Figure 1. The well log recorded depth to water at 904 feet below the top of casing in June of 1998. The Well Record and Log is included in Appendix A. Since there are no water wells in the immediate vicinity of the Site, evaluation of topography and surface water can be useful for determining depth to groundwater. Shallow groundwater may occur near Escavada Wash, greater than 1 mile to the northwest. The elevation difference between Escavada Wash and the Site is approximately 118 feet, providing additional evidence that groundwater is likely deep at the Site.

The closest continuously flowing or significant watercourse to the Site is an unnamed seasonal drainage located approximately 50 feet southeast of and across the road from the Site. This drainage parallels, and is sometimes intersected by, the road. Comparison of the mapped location to the actual location suggests the drainage was likely modified or rerouted during road construction. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not likely underlain by unstable geology.

Based on the results of the Site Characterization, in particular the nearby significant watercourse, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

In addition, the reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH is applied to the top four feet since the release occurred off pad.

## INITIAL SITE ASSESSMENT

On November 4, 2022, Ensolum personnel completed a site visit to evaluate the release extent. Five-point composite soil samples were collected from three locations (CS01, CS02, and CS06) within the ROW near the release point. Another three five-point composite soil samples (CS03 through CS05) were collected from within the release pathway southeast of the ROW, and 13 discrete soil samples were collected from eight locations (SS01 through SS08) along the downgradient release pathway. Discrete samples were collected from the surface and from a depth of 1 foot bgs. Soil samples were field screened for chloride using Hach® chloride QuanTab® test strips. The release point, release extent and flow path, and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. A photographic log is included as Appendix B.

Soil samples were placed directly into pre-cleaved glass jars, labeled with the location, date, time, sampler name, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celcius under strict chain-of-custody procedures to Hall Environmental Analysis Laboratory for analysis of chloride by United States Environmental Protection Agency (EPA) Method 300.0, total petroleum hydrocarbons (TPH)-diesel range organics (DRO), TPH-oil range organics (ORO), and TPH-gasoline range organics (GRO) by EPA Method 8015M/D, and benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8021B.

Laboratory analytical results indicated no BTEX concentrations were detected in any samples. No TPH concentrations were detected, except in CS02 which only contained 13 mg/kg. Chloride concentrations exceeded the NMOCD Table I Closure Criteria (600 mg/kg) in 11 soil samples.

Results from composite samples collected in the ROW and the upper reaches of the flow pathway ranged from non-detect to 2,700 mg/kg. Chloride concentrations in discrete samples collected along the release pathway ranged from non-detect to 1,600 mg/kg, including some samples from 1-foot bgs (02A, 03A, 04A, and 05A). The most downgradient sample, SS08, did not contain any detectable concentration of chloride. Soil analytical results are presented on Table 1 and the complete laboratory analytical report is included as Appendix C.

## DELINEATION ACTIVITIES

On December 7, 2022, Ensolum personnel returned to the Site to better delineate the vertical extent of impacted soil. The area around the release point in the ROW was segregated into eight representative sections measuring approximately 200 square feet each, and the linear flowpath was segregated into representative 100-foot sections. Within each section, one five-point composite soil sample was collected from 0 to 6 inches bgs. Additionally, one soil boring was advanced with a hand auger in the center of each section to collect discrete samples for vertical delineation. Soil samples were field screened for chloride and handled as described above. Total depth of discrete samples reached 1.5 feet bgs in most borings. Exceptions included HA11 advanced to 2.5 feet bgs, HA18 advanced to 2 feet bgs, and HA17 stopped at 0.75 feet bgs due to auger refusal. A total of 19 composite soil samples (CS07 through CS25) and 19 discrete hand auger soil samples (HA01 through HA19) were analyzed for chloride only since initial sampling results ruled out hydrocarbons as constituents of concern (COCs). Soil sample locations are depicted on Figures 3a and 3b.

## RESULTS

Laboratory analytical results for composite soil samples collected from the ROW near the release point exhibited chloride concentrations ranging from 910 mg/kg to 2,000 mg/kg. No discrete samples collected from depth in that area contained elevated chloride concentrations.

Composite soil samples CS15 through CS17 and CS25, collected from the northernmost sections of the linear release flow path exhibited chloride concentrations ranging from 630 mg/kg to 1,200 mg/kg. One discrete sample collected at depth (HA11 from 2.5 feet bgs) contained 750 mg/kg chloride. Auger refusal was encountered and a deeper sample could not be collected.

No composite samples representing the surface of the downgradient flow pathway contained chloride concentrations exceeding Table I Closure Criteria. Discrete soil sample HA15, collected from 1.5 feet bgs contained 660 mg/kg chloride and was the only downgradient sample from depth that contained elevated chloride. Soil analytical results are summarized on Table 1 and the complete laboratory analytical report is included as Appendix C.

## CONCLUSIONS

To best understand results from the assessment and delineation, the Site is divided into three sections: the ROW near the release point where sheet flow occurred, the upper reaches of the roadside ditch where flow initially channelized, and the downgradient flow pathway following the roadside ditch and turning northward along a two-track road.

Surface soils within the ROW near the release extent has been impacted by the produced water release, with the highest concentrations of chloride detected most recently at 2,000 mg/kg. Those concentrations at the ground surface decrease with lateral distance from the release point and into the subsurface. No subsurface samples collected from the ROW contained elevated chloride.

Chloride concentrations near 1,000 mg/kg are evident in surface soils sampled from the upper reaches of the roadside ditch. Similar concentrations were detected within the upper foot of the subsurface during initial sampling, but vertical delineation was achieved in samples collected at



1.5 feet bgs. One exception was HA11, where chloride was detected at 750 mg/kg near 2.5 feet bgs. A sandstone was encountered at this depth through which the auger could not penetrate.

Downgradient in the roadside ditch and along the two-track road, no composite samples from the ground surface contained elevated chloride. Initial discrete samples SS06 and SS07 contained chloride concentrations of 1,600 mg/kg and 1,000 mg/kg, respectively. The reduced concentrations identified in subsequent composite samples may indicate natural attenuation at the surface is occurring. Initial discrete sample SS05A collected from 1-foot bgs contained elevated chloride, but vertical delineation sample (HA16) collected from 1.5 feet bgs in the same area did not. Vertical delineation sample HA15 contained 660 mg/kg chloride, just exceeding the Table I Closure Criteria.

Based on these observations, it appears 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, flow concentrated and slowed, allowing for soil saturation and infiltration of fluids to approximately 1-foot bgs in the roadside ditch. In some areas, such as near HA11, it may have migrated deeper, but likely remained on top of a sandstone occurring near 2.5 feet. Continued downgradient flow through the ditch was likely advanced by rainwater. The downgradient extent was delineated by SS08 containing no detectable concentration of chloride. Succeeding precipitation events appear to have promoted natural attenuation, with no chloride concentrations detected in downgradient surface soils during the latest delineation event. The highest concentration detected during the initial assessment was 2,700 mg/kg chloride. Maximum concentrations in the most recent samples collected were 2,000 mg/kg near the release point, 1,300 in the upper reaches of the roadside ditch, and 660 mg/kg at 1.5 feet bgs in the downgradient direction.

## PROPOSED REMEDIATION WORK PLAN

Based on the limited extent of impacted soil, geometry of the release, relatively low concentrations of residual chloride, absence of fresh- and groundwater receptors, and little to no vegetation within the ROW and roadside ditch, Enduring proposes monitored natural attenuation as a reasonable solution for this release. A decrease in chloride concentrations has already been documented between two sampling events, suggesting natural attenuation is underway. Active remediation, such as excavation or flushing, is impractical and may inflict more damage to the landscape and vegetation through significant surface disturbances. The revegetation taking hold in the ROW may survive and significant dirt-work along the reclaimed ROW, along with unstable banks of the roadside ditch, will promote erosion and sediment runoff.

Instead, Enduring proposes to allow time for continued natural attenuation of the remaining chloride concentrations and routine soil sampling in the areas presented on Figure 4 to ensure concentrations decrease to below Table I Closure Criteria (600 mg/kg). Five-point composite soil samples will be collected from surface areas in the ROW and upper reaches of the roadside ditch containing impacted soil. Discrete samples will be collected from four locations downgradient. At each discrete sampling location, Enduring will collect samples from the ground surface, 1-foot bgs, and 2-feet bgs. All samples will be analyzed for chloride. The first monitoring event will be conducted in the spring of 2023 (April), then bi-annually (October) as necessary. If chloride concentrations do not decrease below 600 mg/kg after 24 months, additional remediation options will be assessed and presented to the NMOCD. The ROW is currently being reclaimed. During monitoring events, vegetation growth and health will be documented, and reseeding will be considered if vegetation along the ROW does not return to similar levels as the unaffected reseeded areas by the fall of 2023. An updated report will be submitted to the NMOCD after each sampling period.

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

Sincerely,

**Ensolum, LLC**



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

cc: Steve Smith, Enduring  
Bureau of Land Management  
Bureau of Indian Affairs

Appendices:

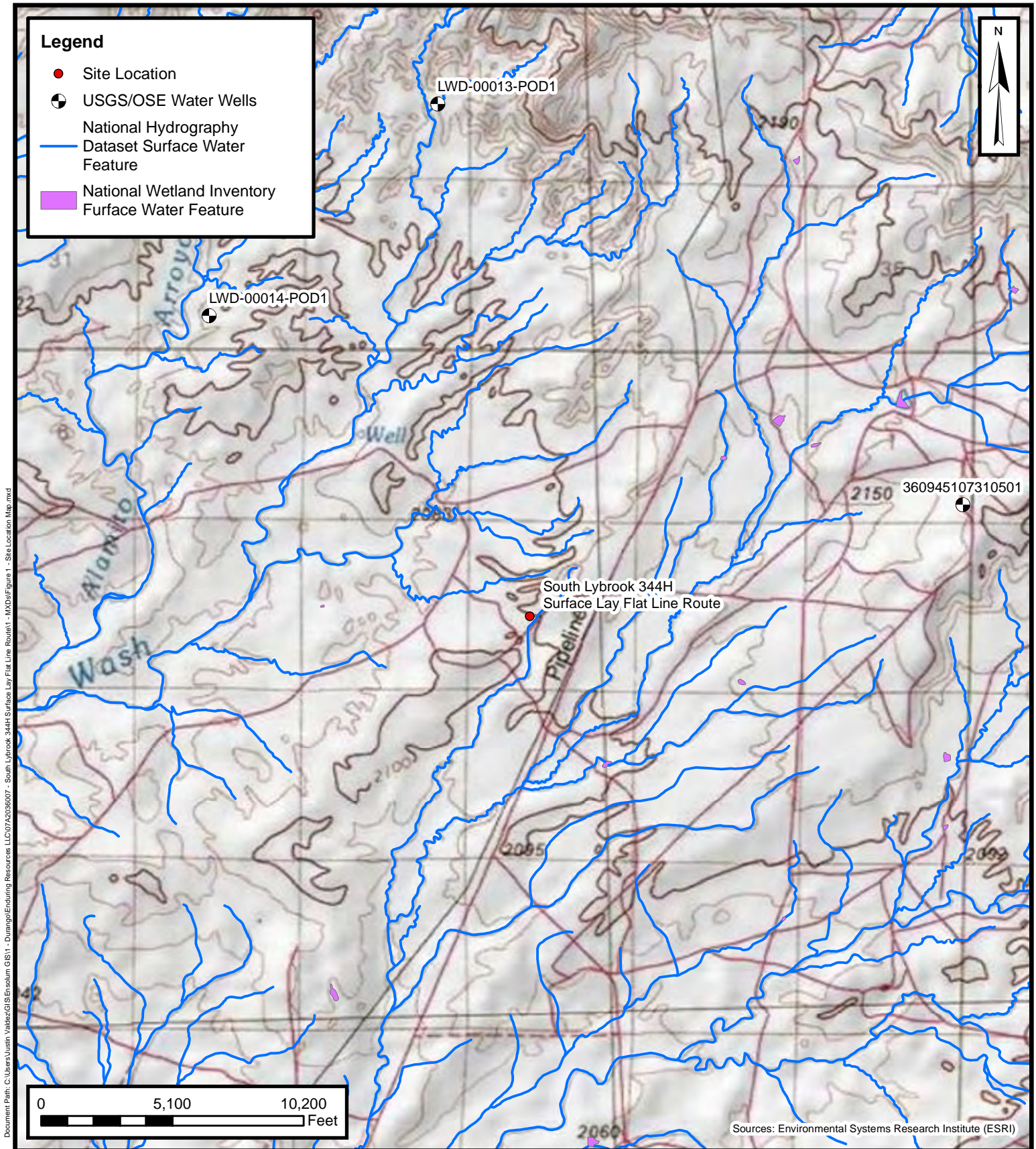
Figure 1	Site Location Map
Figure 2	Site Assessment Map
Figure 3	Delineation Site Map
Figure 4	Proposed Monitoring Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports



FIGURES







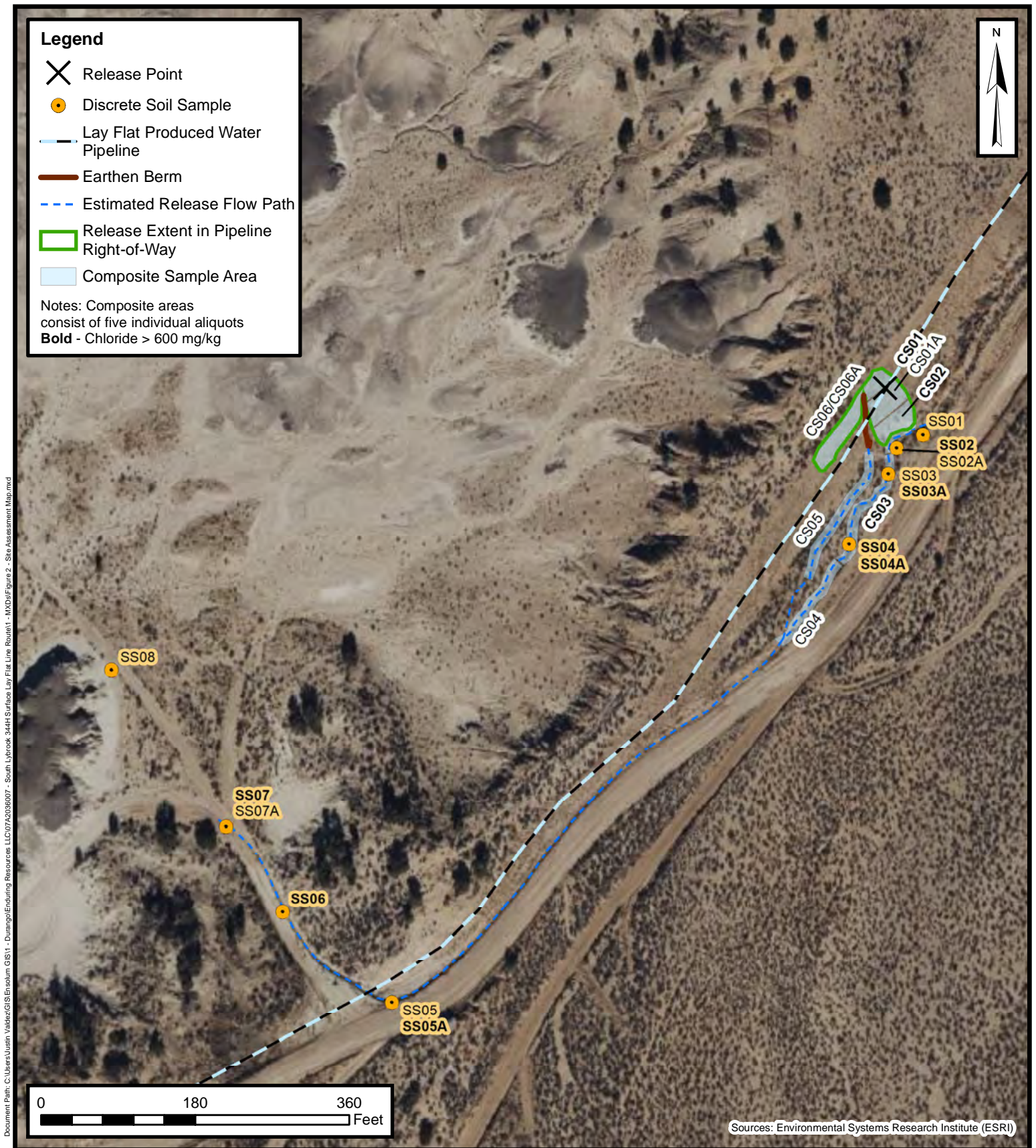
## Site Location Map

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

FIGURE

1



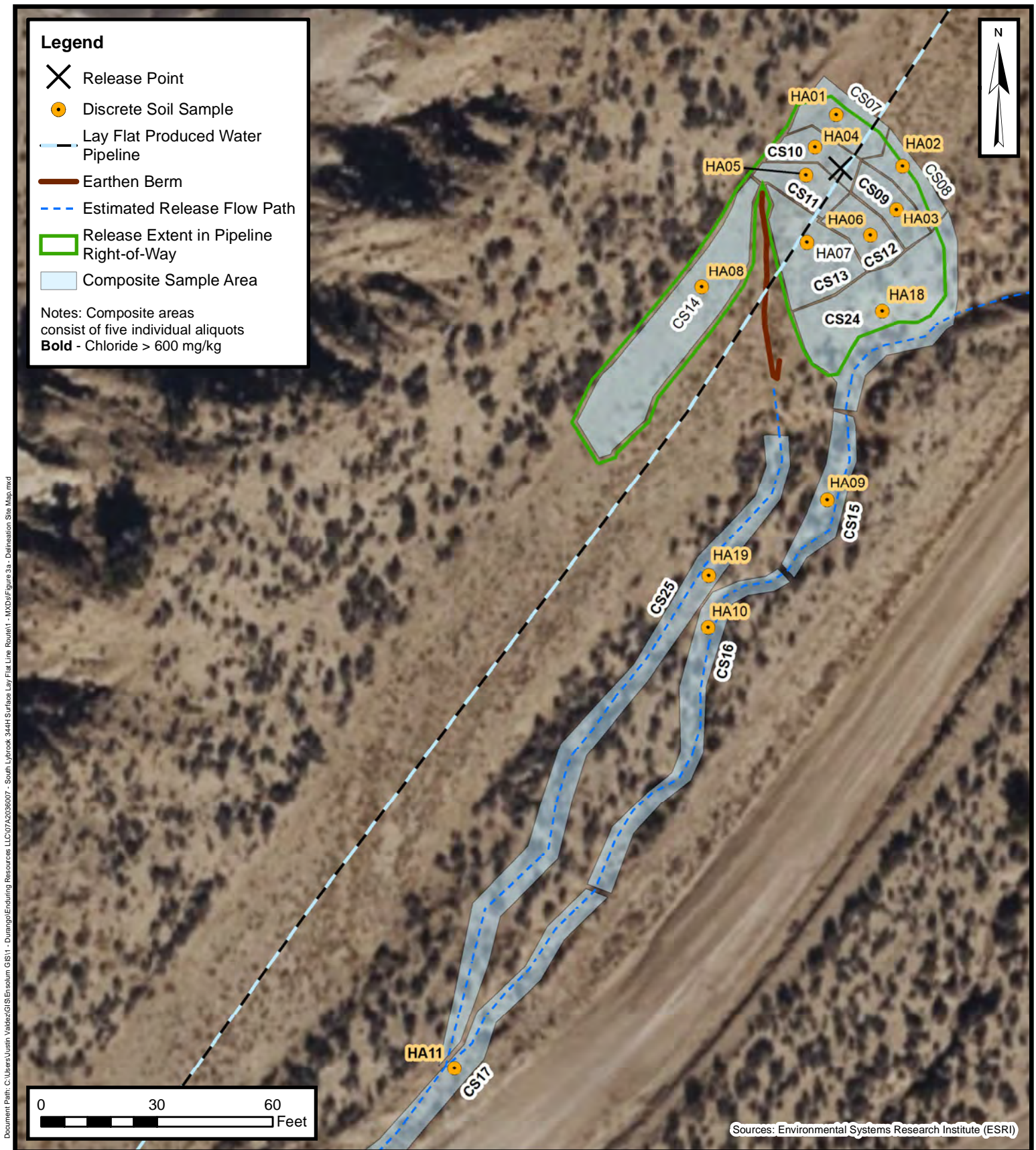


## Site Assessment Map

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

FIGURE  
**2**





## Delineation Site Map

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

FIGURE  
**3a**



Document Path: C:\Users\Justin\OneDrive\GIS\1 - Durango\Enduring Resources\LC0742036007 - South Lybrook 344H Surface Lay Flat Line Route\1 - MWD\Figure 3b- Delineation Site Map Copy.mxd



## Delineation Site Map

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

FIGURE  
**3b**





## Soil Monitoring Locations

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

FIGURE  
4



TABLES

**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 Field Screening (mg/L)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCB Table I Closure Criteria (NMAC 19.15.29)				10	50	NE	NE	NE	100	600
5-Point Composite Soil Samples										
CS01	11/04/2022	Surface	468	<0.025	<0.098	<4.9	<13	<44	<44	1,400
CS01A	11/04/2022	1.0	152	<0.023	<0.094	<4.7	<15	<50	<50	390
CS02	11/04/2022	Surface	568	<0.024	<0.096	<4.8	13	<43	13	2,700
CS03	11/04/2022	Surface	672	<0.024	<0.097	<4.8	<15	<49	<49	640
CS04	11/04/2022	Surface	ND	<0.024	<0.095	<4.7	<14	<47	<47	<60
CS05	11/04/2022	Surface	ND	<0.025	<0.10	<5.0	<13	<43	<43	74
CS06	11/04/2022	Surface	268	<0.023	<0.093	<4.6	<15	<49	<49	540
CS06A	11/04/2022	1.0	172	<0.024	<0.095	<4.7	<15	<49	<49	160
CS07	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	130
CS08	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	79
CS09	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,100
CS10	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	2,000
CS11	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,000
CS12	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,700
CS13	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,100
CS14	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	300
CS15	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,000
CS16	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	1,200
CS17	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	630
CS18	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	190
CS19	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	140
CS20	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	470
CS21	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	510
CS22	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	310



**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 Field Screening (mg/L)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>				<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
CS23	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	410
CS24	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	<b>910</b>
CS25	12/07/2022	0 - 0.5	NA	NA	NA	NA	NA	NA	NA	<b>1,300</b>
<b>Discrete Soil Samples</b>										
SS01	11/04/2022	Surface	ND	<0.023	<0.094	<4.7	<15	<50	<50	<59
SS02	11/04/2022	Surface	172	<0.023	<0.092	<4.6	<14	<47	<47	<b>950</b>
SS02A	11/04/2022	1.0	384	<0.024	<0.096	<4.8	<14	<47	<47	<b>1,100</b>
SS03	11/04/2022	Surface	<120	<0.025	<0.094	<4.7	<14	<46	<46	260
SS03A	11/04/2022	1.0	1,152	<0.024	<0.095	<4.7	<14	<47	<47	<b>1,100</b>
SS04	11/04/2022	Surface	732	<0.024	<0.095	<4.7	<14	<46	<46	<b>1,600</b>
SS04A	11/04/2022	1.0	568	<0.024	<0.096	<4.8	<14	<47	<47	<b>800</b>
SS05	11/04/2022	Surface	<120	<0.024	<0.097	<4.8	<13	<45	<45	270
SS05A	11/04/2022	1.0	236	<0.025	<0.099	<4.9	<14	<48	<48	<b>980</b>
SS06	11/04/2022	Surface	172	<0.025	<0.098	<4.9	<14	<47	<47	<b>1,600</b>
SS07	11/04/2022	Surface	640	<0.025	<0.099	<4.9	<13	<43	<43	<b>1,000</b>
SS07A	11/04/2022	1.0	<120	<0.025	<0.099	<4.9	<14	<48	<48	100
SS08	11/04/2022	Surface	ND	<0.025	<0.099	<4.9	<13	<43	<43	<60
HA01	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<59
HA02	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60
HA03	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60
HA04	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	71
HA05	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60
HA06	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	86
HA07	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60
HA08	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60

**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 Field Screening (mg/L)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>				<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
HA09	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	230
HA10	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	350
HA11	12/07/2022	2.5	180	NA	NA	NA	NA	NA	NA	<b>750</b>
HA12	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	74
HA13	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	93
HA14	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60
HA15	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<b>660</b>
HA16	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<59
HA17	12/07/2022	0.75	<124	NA	NA	NA	NA	NA	NA	83
HA18	12/07/2022	2.0	124	NA	NA	NA	NA	NA	NA	310
HA19	12/07/2022	1.5	<124	NA	NA	NA	NA	NA	NA	<60

**Notes:**

bgs: below ground surface

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

mg/L: milligrams per Liter - estimated result based on chloride test strip field screening

mg/kg: milligrams per kilogram

NA: not analyzed

NE: not established

ND: not detected

NMAC: New Mexico Administrative Code

NMOCD: New Mexico Oil Conservation Division

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.



## APPENDIX A

### Referenced Well Records

---

USC 60945107310501 22N.07W.01.4442

San Juan County, New Mexico  
Latitude: 36°09'45", Longitude 107°31'05" NAD27  
Land surface elevation 7,190 feet above NGVD29  
The depth of the well is 1,250 feet below land surface.  
The depth of the hole is 1,250 feet below land surface.  
This well is completed in the Colorado Plateaus aquifers (N300COPLTS) national aquifer.  
This well is completed in the Ojo Alamo Sandstone (211OJAM) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1988-06-09			D	62610		6308.64	NGVD29	1	T		A
1988-06-09			D	62611		6312.27	NAVD88	1	T		A
1988-06-09			D	72019	881.36			1	T		A
1988-06-18			D	62610		6286.00	NGVD29	1	O		A
1988-06-18			D	62611		6289.63	NAVD88	1	O		A
1988-06-18			D	72019	904.00			1	O		A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	O	Observed
Method of measurement	T	Electric-tape measurement
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.



## APPENDIX B

### 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: 11/4/2022  
 Description: Release point on lay flat line  
 View: Northwest



Photograph: 2 Date: 11/4/2022  
 Description: Release pathway along ROW  
 View: Southwest



Photograph: 3 Date: 11/4/2022  
 Description: Release pathway on banks of roadside ditch  
 View: Southwest



Photograph: 4 Date: 11/4/2022  
 Description: Release pathway near soil sample SS06  
 View: Southeast



## APPENDIX C

# Laboratory Analytical Results Reports



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

November 22, 2022

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

RE: NEU 344 Release

OrderNo.: 2211696

Dear Ashley Ager:

Hall Environmental Analysis Laboratory received 21 sample(s) on 11/11/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS01

Project: NEU 344 Release

Collection Date: 11/4/2022 1:40:00 PM

Lab ID: 2211696-001

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1400	60		mg/Kg	20	11/15/2022 10:40:54 PM	71526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	11/15/2022 9:40:06 PM	71475
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	11/15/2022 9:40:06 PM	71475
Surr: DNOP	108	21-129		%Rec	1	11/15/2022 9:40:06 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/14/2022 5:41:00 PM	71451
Surr: BFB	91.2	37.7-212		%Rec	1	11/14/2022 5:41:00 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	11/14/2022 5:41:00 PM	71451
Toluene	ND	0.049		mg/Kg	1	11/14/2022 5:41:00 PM	71451
Ethylbenzene	ND	0.049		mg/Kg	1	11/14/2022 5:41:00 PM	71451
Xylenes, Total	ND	0.098		mg/Kg	1	11/14/2022 5:41:00 PM	71451
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	11/14/2022 5:41:00 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS01A

Project: NEU 344 Release

Collection Date: 11/4/2022 1:41:00 PM

Lab ID: 2211696-002

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	390	60		mg/Kg	20	11/15/2022 11:18:07 PM	71526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/15/2022 9:50:41 PM	71475
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/15/2022 9:50:41 PM	71475
Surr: DNOP	121	21-129		%Rec	1	11/15/2022 9:50:41 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/14/2022 6:04:40 PM	71451
Surr: BFB	90.7	37.7-212		%Rec	1	11/14/2022 6:04:40 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	11/14/2022 6:04:40 PM	71451
Toluene	ND	0.047		mg/Kg	1	11/14/2022 6:04:40 PM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/14/2022 6:04:40 PM	71451
Xylenes, Total	ND	0.094		mg/Kg	1	11/14/2022 6:04:40 PM	71451
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	11/14/2022 6:04:40 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS02

Project: NEU 344 Release

Collection Date: 11/4/2022 1:44:00 PM

Lab ID: 2211696-003

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	2700	150		mg/Kg	50	11/16/2022 4:18:16 PM	71526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	13	13		mg/Kg	1	11/15/2022 10:01:14 PM	71475
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	11/15/2022 10:01:14 PM	71475
Surr: DNOP	109	21-129		%Rec	1	11/15/2022 10:01:14 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/14/2022 6:28:22 PM	71451
Surr: BFB	90.1	37.7-212		%Rec	1	11/14/2022 6:28:22 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/14/2022 6:28:22 PM	71451
Toluene	ND	0.048		mg/Kg	1	11/14/2022 6:28:22 PM	71451
Ethylbenzene	ND	0.048		mg/Kg	1	11/14/2022 6:28:22 PM	71451
Xylenes, Total	ND	0.096		mg/Kg	1	11/14/2022 6:28:22 PM	71451
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/14/2022 6:28:22 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS03

Project: NEU 344 Release

Collection Date: 11/4/2022 1:46:00 PM

Lab ID: 2211696-004

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	640	60		mg/Kg	20	11/15/2022 11:42:56 PM	71526
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/15/2022 10:11:48 PM	71475
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/15/2022 10:11:48 PM	71475
Surr: DNOP	114	21-129		%Rec	1	11/15/2022 10:11:48 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/14/2022 6:51:57 PM	71451
Surr: BFB	90.8	37.7-212		%Rec	1	11/14/2022 6:51:57 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/14/2022 6:51:57 PM	71451
Toluene	ND	0.048		mg/Kg	1	11/14/2022 6:51:57 PM	71451
Ethylbenzene	ND	0.048		mg/Kg	1	11/14/2022 6:51:57 PM	71451
Xylenes, Total	ND	0.097		mg/Kg	1	11/14/2022 6:51:57 PM	71451
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	11/14/2022 6:51:57 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS04

Project: NEU 344 Release

Collection Date: 11/4/2022 1:48:00 PM

Lab ID: 2211696-005

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	11/16/2022 9:49:28 AM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/15/2022 10:22:19 PM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/15/2022 10:22:19 PM	71475
Surr: DNOP	116	21-129		%Rec	1	11/15/2022 10:22:19 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/14/2022 7:15:37 PM	71451
Surr: BFB	89.6	37.7-212		%Rec	1	11/14/2022 7:15:37 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/14/2022 7:15:37 PM	71451
Toluene	ND	0.047		mg/Kg	1	11/14/2022 7:15:37 PM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/14/2022 7:15:37 PM	71451
Xylenes, Total	ND	0.095		mg/Kg	1	11/14/2022 7:15:37 PM	71451
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	11/14/2022 7:15:37 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS05

Project: NEU 344 Release

Collection Date: 11/4/2022 1:50:00 PM

Lab ID: 2211696-006

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	74	60		mg/Kg	20	11/16/2022 10:26:41 AM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	11/15/2022 10:32:51 PM	71475
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	11/15/2022 10:32:51 PM	71475
Surr: DNOP	110	21-129		%Rec	1	11/15/2022 10:32:51 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/14/2022 11:34:46 PM	71451
Surr: BFB	87.7	37.7-212		%Rec	1	11/14/2022 11:34:46 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	11/14/2022 11:34:46 PM	71451
Toluene	ND	0.050		mg/Kg	1	11/14/2022 11:34:46 PM	71451
Ethylbenzene	ND	0.050		mg/Kg	1	11/14/2022 11:34:46 PM	71451
Xylenes, Total	ND	0.10		mg/Kg	1	11/14/2022 11:34:46 PM	71451
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/14/2022 11:34:46 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS06

Project: NEU 344 Release

Collection Date: 11/4/2022 1:52:00 PM

Lab ID: 2211696-007

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	540	60		mg/Kg	20	11/16/2022 11:03:55 AM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/15/2022 10:53:43 PM	71475
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/15/2022 10:53:43 PM	71475
Surr: DNOP	136	21-129	S	%Rec	1	11/15/2022 10:53:43 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/14/2022 11:58:12 PM	71451
Surr: BFB	86.9	37.7-212		%Rec	1	11/14/2022 11:58:12 PM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	11/14/2022 11:58:12 PM	71451
Toluene	ND	0.046		mg/Kg	1	11/14/2022 11:58:12 PM	71451
Ethylbenzene	ND	0.046		mg/Kg	1	11/14/2022 11:58:12 PM	71451
Xylenes, Total	ND	0.093		mg/Kg	1	11/14/2022 11:58:12 PM	71451
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	11/14/2022 11:58:12 PM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS06A

Project: NEU 344 Release

Collection Date: 11/4/2022 1:53:00 PM

Lab ID: 2211696-008

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	160	60		mg/Kg	20	11/16/2022 11:41:08 AM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/15/2022 11:04:13 PM	71475
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/15/2022 11:04:13 PM	71475
Surr: DNOP	140	21-129	S	%Rec	1	11/15/2022 11:04:13 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/15/2022 12:21:37 AM	71451
Surr: BFB	86.6	37.7-212		%Rec	1	11/15/2022 12:21:37 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 12:21:37 AM	71451
Toluene	ND	0.047		mg/Kg	1	11/15/2022 12:21:37 AM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/15/2022 12:21:37 AM	71451
Xylenes, Total	ND	0.095		mg/Kg	1	11/15/2022 12:21:37 AM	71451
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	11/15/2022 12:21:37 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS01

Project: NEU 344 Release

Collection Date: 11/4/2022 1:56:00 PM

Lab ID: 2211696-009

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	59		mg/Kg	20	11/16/2022 11:53:33 AM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/15/2022 11:14:41 PM	71475
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/15/2022 11:14:41 PM	71475
Surr: DNOP	107	21-129		%Rec	1	11/15/2022 11:14:41 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/15/2022 12:44:59 AM	71451
Surr: BFB	86.4	37.7-212		%Rec	1	11/15/2022 12:44:59 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	11/15/2022 12:44:59 AM	71451
Toluene	ND	0.047		mg/Kg	1	11/15/2022 12:44:59 AM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/15/2022 12:44:59 AM	71451
Xylenes, Total	ND	0.094		mg/Kg	1	11/15/2022 12:44:59 AM	71451
Surr: 4-Bromofluorobenzene	90.8	70-130		%Rec	1	11/15/2022 12:44:59 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS02

Project: NEU 344 Release

Collection Date: 11/4/2022 1:58:00 PM

Lab ID: 2211696-010

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	950	60		mg/Kg	20	11/16/2022 12:05:57 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/15/2022 11:25:08 PM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/15/2022 11:25:08 PM	71475
Surr: DNOP	114	21-129		%Rec	1	11/15/2022 11:25:08 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/15/2022 1:08:23 AM	71451
Surr: BFB	86.9	37.7-212		%Rec	1	11/15/2022 1:08:23 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	11/15/2022 1:08:23 AM	71451
Toluene	ND	0.046		mg/Kg	1	11/15/2022 1:08:23 AM	71451
Ethylbenzene	ND	0.046		mg/Kg	1	11/15/2022 1:08:23 AM	71451
Xylenes, Total	ND	0.092		mg/Kg	1	11/15/2022 1:08:23 AM	71451
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	11/15/2022 1:08:23 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS02A

Project: NEU 344 Release

Collection Date: 11/4/2022 1:59:00 PM

Lab ID: 2211696-011

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1100	59		mg/Kg	20	11/16/2022 12:18:21 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/15/2022 11:35:34 PM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/15/2022 11:35:34 PM	71475
Surr: DNOP	109	21-129		%Rec	1	11/15/2022 11:35:34 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/15/2022 1:31:45 AM	71451
Surr: BFB	85.2	37.7-212		%Rec	1	11/15/2022 1:31:45 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 1:31:45 AM	71451
Toluene	ND	0.048		mg/Kg	1	11/15/2022 1:31:45 AM	71451
Ethylbenzene	ND	0.048		mg/Kg	1	11/15/2022 1:31:45 AM	71451
Xylenes, Total	ND	0.096		mg/Kg	1	11/15/2022 1:31:45 AM	71451
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	11/15/2022 1:31:45 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS03

Project: NEU 344 Release

Collection Date: 11/4/2022 2:01:00 PM

Lab ID: 2211696-012

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	260	60		mg/Kg	20	11/16/2022 12:30:46 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/15/2022 11:46:00 PM	71475
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/15/2022 11:46:00 PM	71475
Surr: DNOP	112	21-129		%Rec	1	11/15/2022 11:46:00 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/15/2022 1:55:06 AM	71451
Surr: BFB	85.9	37.7-212		%Rec	1	11/15/2022 1:55:06 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 1:55:06 AM	71451
Toluene	ND	0.047		mg/Kg	1	11/15/2022 1:55:06 AM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/15/2022 1:55:06 AM	71451
Xylenes, Total	ND	0.094		mg/Kg	1	11/15/2022 1:55:06 AM	71451
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	11/15/2022 1:55:06 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS03A

Project: NEU 344 Release

Collection Date: 11/4/2022 2:02:00 PM

Lab ID: 2211696-013

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1100	60		mg/Kg	20	11/16/2022 12:43:10 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/15/2022 11:56:25 PM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/15/2022 11:56:25 PM	71475
Surr: DNOP	110	21-129		%Rec	1	11/15/2022 11:56:25 PM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/15/2022 2:18:31 AM	71451
Surr: BFB	86.5	37.7-212		%Rec	1	11/15/2022 2:18:31 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 2:18:31 AM	71451
Toluene	ND	0.047		mg/Kg	1	11/15/2022 2:18:31 AM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/15/2022 2:18:31 AM	71451
Xylenes, Total	ND	0.095		mg/Kg	1	11/15/2022 2:18:31 AM	71451
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	11/15/2022 2:18:31 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS04

Project: NEU 344 Release

Collection Date: 11/4/2022 2:15:00 PM

Lab ID: 2211696-014

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1600	60		mg/Kg	20	11/16/2022 12:55:34 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/16/2022 12:06:49 AM	71475
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/16/2022 12:06:49 AM	71475
Surr: DNOP	114	21-129		%Rec	1	11/16/2022 12:06:49 AM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/15/2022 2:41:48 AM	71451
Surr: BFB	85.1	37.7-212		%Rec	1	11/15/2022 2:41:48 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 2:41:48 AM	71451
Toluene	ND	0.047		mg/Kg	1	11/15/2022 2:41:48 AM	71451
Ethylbenzene	ND	0.047		mg/Kg	1	11/15/2022 2:41:48 AM	71451
Xylenes, Total	ND	0.095		mg/Kg	1	11/15/2022 2:41:48 AM	71451
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	11/15/2022 2:41:48 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS04A

Project: NEU 344 Release

Collection Date: 11/4/2022 2:16:00 PM

Lab ID: 2211696-015

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	800	61		mg/Kg	20	11/16/2022 1:07:59 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/16/2022 12:17:17 AM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/16/2022 12:17:17 AM	71475
Surr: DNOP	110	21-129		%Rec	1	11/16/2022 12:17:17 AM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/15/2022 3:05:06 AM	71451
Surr: BFB	84.3	37.7-212		%Rec	1	11/15/2022 3:05:06 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 3:05:06 AM	71451
Toluene	ND	0.048		mg/Kg	1	11/15/2022 3:05:06 AM	71451
Ethylbenzene	ND	0.048		mg/Kg	1	11/15/2022 3:05:06 AM	71451
Xylenes, Total	ND	0.096		mg/Kg	1	11/15/2022 3:05:06 AM	71451
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	11/15/2022 3:05:06 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS05

Project: NEU 344 Release

Collection Date: 11/4/2022 2:20:00 PM

Lab ID: 2211696-016

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	270	61		mg/Kg	20	11/16/2022 1:20:24 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	11/16/2022 12:27:43 AM	71475
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	11/16/2022 12:27:43 AM	71475
Surr: DNOP	113	21-129		%Rec	1	11/16/2022 12:27:43 AM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/15/2022 3:51:43 AM	71451
Surr: BFB	84.4	37.7-212		%Rec	1	11/15/2022 3:51:43 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	11/15/2022 3:51:43 AM	71451
Toluene	ND	0.048		mg/Kg	1	11/15/2022 3:51:43 AM	71451
Ethylbenzene	ND	0.048		mg/Kg	1	11/15/2022 3:51:43 AM	71451
Xylenes, Total	ND	0.097		mg/Kg	1	11/15/2022 3:51:43 AM	71451
Surr: 4-Bromofluorobenzene	89.2	70-130		%Rec	1	11/15/2022 3:51:43 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS05A

Project: NEU 344 Release

Collection Date: 11/4/2022 2:22:00 PM

Lab ID: 2211696-017

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	980	59		mg/Kg	20	11/16/2022 1:32:49 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/16/2022 12:38:09 AM	71475
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/16/2022 12:38:09 AM	71475
Surr: DNOP	109	21-129		%Rec	1	11/16/2022 12:38:09 AM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2022 4:14:56 AM	71451
Surr: BFB	85.6	37.7-212		%Rec	1	11/15/2022 4:14:56 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	11/15/2022 4:14:56 AM	71451
Toluene	ND	0.049		mg/Kg	1	11/15/2022 4:14:56 AM	71451
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2022 4:14:56 AM	71451
Xylenes, Total	ND	0.099		mg/Kg	1	11/15/2022 4:14:56 AM	71451
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	11/15/2022 4:14:56 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS06

Project: NEU 344 Release

Collection Date: 11/4/2022 2:24:00 PM

Lab ID: 2211696-018

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1600	61		mg/Kg	20	11/16/2022 3:03:49 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>DGH</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/16/2022 12:48:33 AM	71475
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/16/2022 12:48:33 AM	71475
Surr: DNOP	116	21-129		%Rec	1	11/16/2022 12:48:33 AM	71475
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2022 4:38:10 AM	71451
Surr: BFB	84.8	37.7-212		%Rec	1	11/15/2022 4:38:10 AM	71451
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	11/15/2022 4:38:10 AM	71451
Toluene	ND	0.049		mg/Kg	1	11/15/2022 4:38:10 AM	71451
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2022 4:38:10 AM	71451
Xylenes, Total	ND	0.098		mg/Kg	1	11/15/2022 4:38:10 AM	71451
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	11/15/2022 4:38:10 AM	71451

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS07

Project: NEU 344 Release

Collection Date: 11/4/2022 2:26:00 PM

Lab ID: 2211696-019

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	1000	61		mg/Kg	20	11/16/2022 3:16:13 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	11/16/2022 12:13:48 AM	71465
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	11/16/2022 12:13:48 AM	71465
Surr: DNOP	96.9	21-129		%Rec	1	11/16/2022 12:13:48 AM	71465
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2022 11:40:00 AM	71459
Surr: BFB	106	37.7-212		%Rec	1	11/15/2022 11:40:00 AM	71459
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	11/15/2022 11:40:00 AM	71459
Toluene	ND	0.049		mg/Kg	1	11/15/2022 11:40:00 AM	71459
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2022 11:40:00 AM	71459
Xylenes, Total	ND	0.099		mg/Kg	1	11/15/2022 11:40:00 AM	71459
Surr: 4-Bromofluorobenzene	118	70-130		%Rec	1	11/15/2022 11:40:00 AM	71459

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS07A

Project: NEU 344 Release

Collection Date: 11/4/2022 2:28:00 PM

Lab ID: 2211696-020

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	100	60		mg/Kg	20	11/16/2022 3:28:38 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/16/2022 12:53:53 AM	71465
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/16/2022 12:53:53 AM	71465
Surr: DNOP	97.3	21-129		%Rec	1	11/16/2022 12:53:53 AM	71465
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2022 12:40:00 PM	71459
Surr: BFB	125	37.7-212		%Rec	1	11/15/2022 12:40:00 PM	71459
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	11/15/2022 12:40:00 PM	71459
Toluene	ND	0.049		mg/Kg	1	11/15/2022 12:40:00 PM	71459
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2022 12:40:00 PM	71459
Xylenes, Total	ND	0.099		mg/Kg	1	11/15/2022 12:40:00 PM	71459
Surr: 4-Bromofluorobenzene	125	70-130		%Rec	1	11/15/2022 12:40:00 PM	71459

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2211696

Date Reported: 11/22/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: SS08

Project: NEU 344 Release

Collection Date: 11/4/2022 2:32:00 PM

Lab ID: 2211696-021

Matrix: SOIL

Received Date: 11/11/2022 6:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	11/16/2022 3:41:03 PM	71532
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>SB</b>
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	11/16/2022 1:06:47 AM	71465
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	11/16/2022 1:06:47 AM	71465
Surr: DNOP	95.0	21-129		%Rec	1	11/16/2022 1:06:47 AM	71465
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>CCM</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/15/2022 1:39:00 PM	71459
Surr: BFB	107	37.7-212		%Rec	1	11/15/2022 1:39:00 PM	71459
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>CCM</b>
Benzene	ND	0.025		mg/Kg	1	11/15/2022 1:39:00 PM	71459
Toluene	ND	0.049		mg/Kg	1	11/15/2022 1:39:00 PM	71459
Ethylbenzene	ND	0.049		mg/Kg	1	11/15/2022 1:39:00 PM	71459
Xylenes, Total	ND	0.099		mg/Kg	1	11/15/2022 1:39:00 PM	71459
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	11/15/2022 1:39:00 PM	71459

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>MB-71526</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>71526</b>		RunNo: <b>92584</b>							
Prep Date: <b>11/15/2022</b>	Analysis Date: <b>11/15/2022</b>		SeqNo: <b>3331242</b>		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: <b>LCS-71526</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>71526</b>		RunNo: <b>92584</b>							
Prep Date: <b>11/15/2022</b>	Analysis Date: <b>11/15/2022</b>		SeqNo: <b>3331243</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.5	90	110			

Sample ID: <b>MB-71532</b>	SampType: <b>mblk</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>PBS</b>	Batch ID: <b>71532</b>		RunNo: <b>92613</b>							
Prep Date: <b>11/16/2022</b>	Analysis Date: <b>11/16/2022</b>		SeqNo: <b>3332644</b>		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: <b>LCS-71532</b>	SampType: <b>lcs</b>		TestCode: <b>EPA Method 300.0: Anions</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>71532</b>		RunNo: <b>92613</b>							
Prep Date: <b>11/16/2022</b>	Analysis Date: <b>11/16/2022</b>		SeqNo: <b>3332649</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	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 Quantitative 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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>LCS-71475</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>71475</b>			RunNo: <b>92583</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3331023</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	50.00	0	87.3	64.4	127			
Surr: DNOP	5.4		5.000		108	21	129			

Sample ID: <b>MB-71475</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>71475</b>			RunNo: <b>92583</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3331025</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		120	21	129			

Sample ID: <b>MB-71492</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>71492</b>			RunNo: <b>92578</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3331679</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		116	21	129			

Sample ID: <b>LCS-71492</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>71492</b>			RunNo: <b>92578</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3331680</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.0		5.000		119	21	129			

Sample ID: <b>MB-71465</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>71465</b>			RunNo: <b>92578</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3331704</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.9	21	129			

Sample ID: <b>LCS-71465</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>71465</b>			RunNo: <b>92578</b>						
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/16/2022</b>			SeqNo: <b>3331705</b>	Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**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 Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>LCS-71465</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>71465</b>		RunNo: <b>92578</b>							
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/16/2022</b>		SeqNo: <b>3331705</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	50.00	0	93.6	64.4	127			
Surr: DNOP	4.8		5.000		96.3	21	129			

Sample ID: <b>2211696-019AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>SS07</b>	Batch ID: <b>71465</b>		RunNo: <b>92578</b>							
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/16/2022</b>		SeqNo: <b>3331707</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	14	46.34	0	95.5	36.1	154			
Surr: DNOP	4.5		4.634		97.2	21	129			

Sample ID: <b>2211696-019AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>SS07</b>	Batch ID: <b>71465</b>		RunNo: <b>92578</b>							
Prep Date: <b>11/14/2022</b>	Analysis Date: <b>11/16/2022</b>		SeqNo: <b>3331708</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	48.54	0	99.2	36.1	154	8.50	33.9	
Surr: DNOP	4.8		4.854		98.7	21	129	0	0	

**Qualifiers:**

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

Page 24 of 28

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>mb-71451</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>71451</b>			RunNo: <b>92559</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/14/2022</b>			SeqNo: <b>3328235</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.7	37.7	212			

Sample ID: <b>lcs-71451</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>71451</b>			RunNo: <b>92559</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/14/2022</b>			SeqNo: <b>3328236</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	1900		1000		193	37.7	212			

Sample ID: <b>lcs-71459</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>71459</b>			RunNo: <b>92605</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3330772</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	107	72.3	137			
Surr: BFB	2300		1000		228	37.7	212			S

Sample ID: <b>mb-71459</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>PBS</b>	Batch ID: <b>71459</b>			RunNo: <b>92605</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3330773</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		107	37.7	212			

Sample ID: <b>2211696-019ams</b>	SampType: <b>MS</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>SS07</b>	Batch ID: <b>71459</b>			RunNo: <b>92605</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3330775</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.75	0	94.1	70	130			
Surr: BFB	2300		990.1		236	37.7	212			S

Sample ID: <b>2211696-019amsd</b>	SampType: <b>MSD</b>			TestCode: <b>EPA Method 8015D: Gasoline Range</b>						
Client ID: <b>SS07</b>	Batch ID: <b>71459</b>			RunNo: <b>92605</b>						
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>			SeqNo: <b>3330776</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of 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#: 2211696  
22-Nov-22

Client: ENSOLUM  
Project: NEU 344 Release

Sample ID: 2211696-019amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: SS07		Batch ID: 71459			RunNo: 92605					
Prep Date: 11/11/2022		Analysis Date: 11/15/2022			SeqNo: 3330776		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	24.78	0	98.4	70	130	4.59	20	
Surr: BFB	2200		991.1		227	37.7	212	0	0	S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit
S	% Recovery outside of 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#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>mb-71451</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>71451</b>		RunNo: <b>92559</b>							
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/14/2022</b>		SeqNo: <b>3328269</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		92.8	70	130			

Sample ID: <b>LCS-71451</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>71451</b>		RunNo: <b>92559</b>							
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/14/2022</b>		SeqNo: <b>3328270</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.6	80	120			
Toluene	0.94	0.050	1.000	0	93.8	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.4	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	70	130			

Sample ID: <b>lcs-71459</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>71459</b>		RunNo: <b>92605</b>							
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>		SeqNo: <b>3330825</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.1	0.050	1.000	0	115	80	120			
Ethylbenzene	1.1	0.050	1.000	0	115	80	120			
Xylenes, Total	3.4	0.10	3.000	0	114	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	70	130			

Sample ID: <b>mb-71459</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>71459</b>		RunNo: <b>92605</b>							
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>		SeqNo: <b>3330826</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		119	70	130			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of 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#: 2211696

22-Nov-22

**Client:** ENSOLUM  
**Project:** NEU 344 Release

Sample ID: <b>2211696-020AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SS07A</b>	Batch ID: <b>71459</b>	RunNo: <b>92605</b>								
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>	SeqNo: <b>3330829</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.024	0.9625	0	109	68.8	120			
Toluene	1.0	0.048	0.9625	0	109	73.6	124			
Ethylbenzene	1.1	0.048	0.9625	0	110	72.7	129			
Xylenes, Total	3.2	0.096	2.887	0	110	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		0.9625		117	70	130			

Sample ID: <b>2211696-020AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>SS07A</b>	Batch ID: <b>71459</b>	RunNo: <b>92605</b>								
Prep Date: <b>11/11/2022</b>	Analysis Date: <b>11/15/2022</b>	SeqNo: <b>3330830</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	0.9833	0	111	68.8	120	4.19	20	
Toluene	1.1	0.049	0.9833	0	112	73.6	124	5.03	20	
Ethylbenzene	1.1	0.049	0.9833	0	113	72.7	129	4.10	20	
Xylenes, Total	3.3	0.098	2.950	0	112	75.7	126	3.93	20	
Surr: 4-Bromofluorobenzene	1.2		0.9833		122	70	130	0	0	

**Qualifiers:**

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

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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: **2211696**

RcptNo: 1

Received By: **Juan Rojas**

11/11/2022 6:35:00 AM

*Juan Rojas*

Completed By: **Cheyenne Cason**

11/11/2022 7:35:32 AM

*Cheyenne Cason*

Reviewed By: **TML**

11/11/22

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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: *Juan Rojas*

### Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

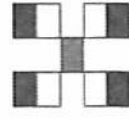
Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Yes			

## Chain-of-Custody Record

Client: Ensolum	
Attn: Danny Burns	
Mailing Address: 776 East Second Ave	
Durango, CO 81301	
Phone #: 363-601-1420	
email or Fax#: dburns@ensolum.com	
QA/QC Package:	
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)
Accreditation: <input type="checkbox"/> Az Compliance	
<input type="checkbox"/> NELAC	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> EDD (Type) DEF	

Date	Time	Matrix	Sample Name
11-4-22	13:40	SOIL	CS01
	13:41		CS01A
	13:44		CS02
	13:46		CS03
	13:48		CS04
	13:50		CS05
	13:52		CS06
	13:53		CS06A
	13:56		SS01
	13:58		SS02
	13:59		SS02A
	14:01		SS03

Date:	Time:	Relinquished by:
11-10	1300	Eddie Green
Date:	Time:	Relinquished by:
11/10/22	1802	Mattie Wheeler



# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

<input checked="" type="checkbox"/> BTEX	<input checked="" type="checkbox"/> MTEB / TMBs (8021)	<input checked="" type="checkbox"/> (PH: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 <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
										Chloride

## Remarks:

cc: aager  
dburns@ensolum.com



# Chain-of-Custody Record

Client: EnSolum

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

☐ EDD (Type)

☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC

☐ Other

Turn-Around Time:

☒ 5 Day ☐ Rush

Project Name:

NEU 344 Release

Project #:

07A2036007

Project Manager:

Ashley Ager

Sampler: D. Burns

On Ice: ☐ Yes ☐ No

# of Coolers:

Cooler Temp (including CF): 0.1°C = 0.1 (°C)

Container Type and #

1-402

Preservative Type

cool

HEAL No.

2211696

TPH: 8015D (GRO / DRO / MRO)

MBE / TMBs (8021)

BTEX

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Chloride

Remarks:

Received by: EnSolum Date: 11/10/22 Time: 1306

Relinquished by: EnSolum Date: 11/10/22 Time: 1802

Relinquished by: EnSolum Date: 11/10/22 Time: 1802



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

December 20, 2022

Danny Burns

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: NEU 344

OrderNo.: 2212577

Dear Danny Burns:

Hall Environmental Analysis Laboratory received 38 sample(s) on 12/9/2022 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](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 2212577  
Date Reported: 12/20/2022

CLIENT: ENSOLUM	Client Sample ID: HA02
Project: NEU 344	Collection Date: 12/7/2022 11:15:00 AM
Lab ID: 2212577-003	Matrix: SOIL
	Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	12/15/2022 2:15:51 PM	72106

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		



## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS08

Project: NEU 344

Collection Date: 12/7/2022 11:20:00 AM

Lab ID: 2212577-004

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	79	60		mg/Kg	20	12/15/2022 2:28:16 PM	72106

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order **2212577**

Date Reported: 12/20/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT: ENSOLUM**

**Client Sample ID:** HA03

**Project:** NEU 344

**Collection Date:** 12/7/2022 11:30:00 AM

**Lab ID:** 2212577-005

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: <b>NAI</b>
Chloride	ND	60		mg/Kg	20	12/15/2022 3:53:28 PM	72114

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS09

Project: NEU 344

Collection Date: 12/7/2022 11:40:00 AM

Lab ID: 2212577-006

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	1100	60		mg/Kg	20	12/15/2022 4:30:41 PM	72114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order **2212577**

Date Reported: 12/20/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT: ENSOLUM**

**Client Sample ID:** HA04

**Project:** NEU 344

**Collection Date:** 12/7/2022 11:50:00 AM

**Lab ID:** 2212577-007

**Matrix:** SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: <b>NAI</b>
Chloride	71	60		mg/Kg	20	12/15/2022 5:07:54 PM	72114

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		





## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA05

Project: NEU 344

Collection Date: 12/7/2022 12:15:00 PM

Lab ID: 2212577-009

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	12/15/2022 5:32:43 PM	72114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS11

Project: NEU 344

Collection Date: 12/7/2022 12:25:00 PM

Lab ID: 2212577-010

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: NAI
Chloride	1000	60		mg/Kg	20	12/15/2022 5:45:07 PM	72114

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 2212577  
Date Reported: 12/20/2022

CLIENT: ENSOLUM	Client Sample ID: HA06
Project: NEU 344	Collection Date: 12/7/2022 12:40:00 PM
Lab ID: 2212577-011	Matrix: SOIL
	Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	86	60		mg/Kg	20	12/15/2022 6:22:20 PM	72114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report  
Lab Order 2212577  
Date Reported: 12/20/2022

CLIENT: ENSOLUM	Client Sample ID: CS12
Project: NEU 344	Collection Date: 12/7/2022 12:50:00 PM
Lab ID: 2212577-012	Matrix: SOIL
	Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	1700	60		mg/Kg	20	12/15/2022 6:34:44 PM	72114

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	Page 12 of 39
	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 Quantitative Limit	RL	Reporting Limit	
	S	% Recovery outside of standard limits. If undiluted results may be estimated.			

## Date Reported: 12/20/2022







## Analytical Report

Lab Order **2212577**

Date Reported: 12/20/2022

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT: ENSOLUM**

**Client Sample ID: CS14**

**Project:** NEU 344

**Collection Date:** 12/7/2022 1:40:00 PM

**Lab ID:** 2212577-016

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: <b>NAI</b>
Chloride	300	60		mg/Kg	20	12/15/2022 7:24:22 PM	72114

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**



## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA10

Project: NEU 344

Collection Date: 12/7/2022 2:15:00 PM

Lab ID: 2212577-019

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	350	60		mg/Kg	20	12/15/2022 8:01:35 PM	72114

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**





## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS19

Project: NEU 344

Collection Date: 12/7/2022 3:00:00 PM

Lab ID: 2212577-026

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	140	59		mg/Kg	20	12/15/2022 4:32:25 PM	72117

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA15

Project: NEU 344

Collection Date: 12/7/2022 3:15:00 PM

Lab ID: 2212577-029

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: NAI
Chloride	660	60		mg/Kg	20	12/15/2022 5:34:28 PM	72117

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**





Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: HA17

Project: NEU 344

Collection Date: 12/7/2022 3:35:00 PM

Lab ID: 2212577-033

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	83	60		mg/Kg	20	12/15/2022 6:48:56 PM	72117

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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

## Date Reported: 12/20/2022

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**

Date Reported: **12/20/2022**

Received Date: 12/9/2022 7:35:00 AM

Analyst: **NAI**





## Analytical Report

Lab Order 2212577

Date Reported: 12/20/2022

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: CS25

Project: NEU 344

Collection Date: 12/7/2022 4:00:00 PM

Lab ID: 2212577-038

Matrix: SOIL

Received Date: 12/9/2022 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: NAI
Chloride	1300	60		mg/Kg	20	12/15/2022 7:51:00 PM	72117

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

<b>Qualifiers:</b>	*	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 Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2212577

20-Dec-22

**Client:** ENSOLUM**Project:** NEU 344

Sample ID: <b>MB-72106</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72106</b>	RunNo: <b>93343</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365210</b> 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: <b>LCS-72106</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72106</b>	RunNo: <b>93343</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365211</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.0	90	110			

Sample ID: <b>MB-72117</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72117</b>	RunNo: <b>93343</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365240</b> 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: <b>LCS-72117</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72117</b>	RunNo: <b>93343</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365241</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Sample ID: <b>MB-72114</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>72114</b>	RunNo: <b>93351</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365784</b> 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: <b>LCS-72114</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>72114</b>	RunNo: <b>93351</b>								
Prep Date: <b>12/15/2022</b>	Analysis Date: <b>12/15/2022</b>	SeqNo: <b>3365785</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

**Qualifiers:**

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

## Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2212577

RcptNo: 1

Received By: **Tracy Casarrubias** 12/9/2022 7:35:00 AM

Completed By: **Tracy Casarrubias** 12/9/2022 8:39:25 AM

Reviewed By: JN 12/9/22

### 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 <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | NA <input type="checkbox"/>            |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to $6.0^{\circ}\text{C}$ | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | NA <input type="checkbox"/>            |
| 5. Sample(s) in proper container(s)?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 6. Sufficient sample volume for indicated test(s)?   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 7. Are samples (except VOA and ONG) properly preserved?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 8. Was preservative added to bottles?  | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/>            |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA?                                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken?  | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> |  |
| 11. Does paperwork match bottle labels?<br>(Note discrepancies on chain of custody)            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 12. Are matrices correctly identified on Chain of Custody?                                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 13. Is it clear what analyses were requested?  | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
| 14. Were all holding times able to be met?<br>(If no, notify customer for authorization.)      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |  |
- # of preserved bottles checked for pH: (<2)

Adjusted? Adjusted?

Checked by: \_\_\_\_\_

## Special Handling (if applicable)

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

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Yes			

## Chain-of-Custody Record

Client: EnsolumMailing Address: 776 E 2nd AvePhone #: Danango Co. 81301email or Fax#: dburns@ensolum.comQA/QC Package:  
☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance  
☐ NELAC ☐ Other☐ EDD (Type) \_\_\_\_\_

Date	Time	Matrix	Sample Name
12/27/22	11:00	Soil	H401
12/27/22	11:10	Soil	C507
12/27/22	11:15	Soil	H402
12/27/22	11:20	Soil	C508
12/27/22	11:30	Soil	H403
12/27/22	11:40	Soil	C509
12/27/22	11:50	Soil	H404
12/27/22	12:00	Soil	C510
12/27/22	12:15	Soil	H405
12/27/22	12:25	Soil	C511
12/27/22	12:40	Soil	H406
12/27/22	12:50	Soil	C512

Relinquished by: Colt Wade Date: 12-28-22 Time: 1434

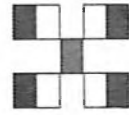
Relinquished by: Colt Wade Date: 12/8/22 Time: 1819

Turn-Around Time: 5 - Day  
☒ Standard ☐ RushProject Name: NEU 344Project #: 07A2036007Project Manager: Danny Burns - EnsolumSampler: E. Carroll  
On Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (Including CF): 0.6 + 0.1 ± 0.7 (°C)Container Type and #  
Preservative Type  
HEAL No.  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
1-402 Cool  
2212577

Date	Time	Matrix	Sample Name
12/27/22	11:00	Soil	H401
12/27/22	11:10	Soil	C507
12/27/22	11:15	Soil	H402
12/27/22	11:20	Soil	C508
12/27/22	11:30	Soil	H403
12/27/22	11:40	Soil	C509
12/27/22	11:50	Soil	H404
12/27/22	12:00	Soil	C510
12/27/22	12:15	Soil	H405
12/27/22	12:25	Soil	C511
12/27/22	12:40	Soil	H406
12/27/22	12:50	Soil	C512

Received by: Colt Wade Date: 12/8/22 Time: 1434

Received by: Colt Wade Date: 12/9/22 Time: 7:35

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Chloride
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Remarks:

cc: dburns@ensolum.com



## Chain-of-Custody Record

Client: EnSolum

Mailing Address:

Phone #:

email or Fax#: dburns@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)# of Coolers: 1Cooler Temp (including CF): 0.6 to 0.1 = 0.7 (°C)

HEAL No.

Container Type and #

Preservative Type

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Project #:

Project Manager:

Sampler:

On Ice: ☒ Yes ☐ No

# of Coolers:

Cooler Temp (including CF):

HEAL No.

Container Type and #

Preservative Type

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

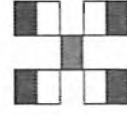
Time

Matrix

Sample Name

Date

Time

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX / MTBE / TMBs (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCBs

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

X Chloride

Remarks:

CC: dburns@ensolum.com

Received by: Cur-hk Date: 12/8/22 Time: 1434Relinquished by: Carle Adams Date: 12/8/22 Time: 1819Received by: Cur-hk Date: 12/8/22 Time: 1434Relinquished by: Cur-hk Date: 12/8/22 Time: 1819Received by: Cur-hk Date: 12/8/22 Time: 1434Relinquished by: Cur-hk Date: 12/8/22 Time: 1819Received by: Cur-hk Date: 12/8/22 Time: 1434Relinquished by: Cur-hk Date: 12/8/22 Time: 1819







**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 173533

CONDITIONS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 173533
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. Incident on tribal land.	5/19/2023