

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

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Enterprise Field Services, LLC	OGRID: 241602
Contact Name: Thomas Long	Contact Telephone: 505-599-2286
Contact email: tjlong@eprod.com	Incident # (assigned by OCD) nAPP2226953758
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.479150** Longitude **-107.710620** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Newsome #20	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 09/26/2022	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
D	20	26N	8W	San Juan

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: **BLM**)

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 type="checkbox"/> Produced Water	Volume Released (bbls)	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 checked="" type="checkbox"/> Condensate	Volume Released (bbls): Estimated 15-20 BBLs	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 2.38 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On September 8, 2022, Enterprise had a release of natural gas from the Newsome #20. The pipeline was isolated, depressurized, locked and tagged out. No liquids were released to the ground surface. No emergency services responded. No fire nor injuries occurred. Remediation and repairs began on September 26, 2022, at which time Enterprise determined reportable per New Mexico Oil Conservation Division regulation, due to the volume of impacted subsurface soil. Remediation and repairs were completed on December 22, 2022. The final excavation dimensions measured approximately 45 feet long by 35 feet wide by eight 22 feet deep. A total of 2,728 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division (NMOCD) approved land farm. A third party closure report is included with this "Final" C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Thomas Long Title: Senior Environmental Scientist

Signature:  Date: 05-09-2023

email: tjlong@eprod.com Telephone: (505) 599-2286

OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: 05/15/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv



CLOSURE REPORT

Property:

Newsome #20 (09/26/22)
Unit Letter D, S20 T26N R8W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2226953758

May 8, 2023

Ensolum Project No. 05A1226211

Prepared for:

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

Prepared by:

Ranee Deechilly
Project Manager

Kyle Summers
Senior Managing Geologist

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	Site Description & Background.....	1
1.2	Project Objective.....	1
2.0	CLOSURE CRITERIA.....	1
3.0	SOIL REMEDIATION ACTIVITIES.....	3
4.0	SOIL SAMPLING PROGRAM.....	3
5.0	SOIL LABORATORY ANALYTICAL METHODS.....	4
6.0	SOIL DATA EVALUATION.....	4
7.0	RECLAMATION AND REVEGETATION	5
8.0	FINDINGS AND RECOMMENDATION	5
9.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE.....	5
9.1	Standard of Care.....	5
9.2	Limitations.....	5
9.3	Reliance.....	6

LIST OF APPENDICES

Appendix A – Figures

Figure 1: Topographic Map
Figure 2: Site Vicinity Map
Figure 3: Site Map with Soil Analytical Results

Appendix B – Siting Figures and Documentation

Figure A: 1.0 Mile Radius Water Well/POD Location Map
Figure B: Cathodic Protection Well Recorded Depth to Water
Figure C: 300 Foot Radius Watercourse and Drainage Identification
Figure D: 300 Foot Radius Occupied Structure Identification
Figure E: Water Well and Natural Spring Location
Figure F: Wetlands
Figure G: Mines, Mills, and Quarries
Figure H: 100-Year Flood Plain Map

Appendix C – Executed C-138 Solid Waste Acceptance Form

Appendix D – Photographic Documentation

Appendix E – Regulatory Correspondence

Appendix F – Table 1 - Soil Analytical Summary

Appendix G – Laboratory Data Sheets & Chain of Custody Documentation

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Newsome #20 (09/26/22) (Site)
NM EMNRD OCD Incident ID No.	NAPP2226953758
Location:	36.47915° North, 107.71092° West Unit Letter D, Section 20, Township 26 North, Range 08 West San Juan County, New Mexico
Property:	United States Bureau of Land Management (BLM)
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On September 8, 2022, Enterprise discovered a release on the Newsome #20 well tie pipeline. Enterprise personnel subsequently isolated and locked the pipeline out of service. On September 15, 2022, Enterprise initiated activities to repair the pipeline and remediate potential petroleum hydrocarbon impact. On September 26, 2022, Enterprise determined the release was “reportable” due to the estimated volume of impacted soil. The NM EMNRD OCD was subsequently notified.

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

1.2 Project Objective

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

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. Ensolum, LLC (Ensolum) referenced 19.15.29 New Mexico Administrative Code (NMAC), which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action, during the evaluation and remediation of the Site. The appropriate closure criteria for sites are determined using the siting requirements outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. Ensolum utilized the general site characteristics and information available from NM state agency databases and federal agency geospatial databases to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following Siting bullets are provided in **Appendix B**.

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). No PODs were identified in the same Public Land Survey System (PLSS) section as the Site, and no PODs were identified in the adjacent sections (**Figure A**, **Appendix B**).
- Two cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the adjacent PLSS sections. These Two CPWs are depicted on **Figure B** (**Appendix B**). Documentation for the cathodic protection well located near the Kah-Des-Pah

#2 well location indicates a depth to water of approximately 100 feet below grade surface (bgs). This cathodic protection well is located approximately 0.87 miles northwest of the Site and is approximately 188 feet lower in elevation than the Site. Documentation for the cathodic protection well located near the Naw-Di-Des-Wood #1 well location indicates a depth to water of approximately 140 feet bgs. This cathodic protection well is located approximately 1.4 miles southwest of the Site and is approximately 25 feet lower in elevation than the Site.

- The Site is located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C, Appendix B**).
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D, Appendix B**).
- No springs, or private domestic freshwater wells used by less than five households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E, Appendix B**).
- No freshwater wells or springs were identified within 1,000 feet of the Site (**Figure E, Appendix B**).
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not within 300 feet of a wetland (**Figure F, Appendix B**).
- Based on information identified in the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G, Appendix B**).
- The Site is not located within an unstable area per Paragraph (6) of Subsection U of 19.15.2.7 NMAC.
- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not within a 100-year floodplain (**Figure H, Appendix B**).

Based on available information, the applicable closure criteria for soils remaining in place at the Site include:

Tier I Closure Criteria for Soils Impacted by a Release		
Constituent ¹	Method	Limit
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO) ²	EPA SW-846 Method 8015	100 mg/kg
BTEX ³	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

¹ – Constituent concentrations are in milligrams per kilogram (mg/kg).

² – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).

³ – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

3.0 SOIL REMEDIATION ACTIVITIES

On September 15, 2022, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Industrial Mechanical Inc (IMI), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 45 feet long and 35 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 22 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of silty sand, sand, and gravel.

Approximately 2,728 cubic yards (yd³) of petroleum hydrocarbon-affected soils were transported to the Envirotech, Inc., (Envirotech) landfarm near Hilltop, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG[®] hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of 30 composite soil samples (S-1 through S-28, S-11a, and S-12a) from the excavation for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 200 square foot (ft²) sample area or less per guidelines outlined in Section D of 19.15.29.12 NMAC. The excavator bucket was utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event

On November 9, 2022, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 (20') and S-2 (20') were collected from the floor of the excavation. Composite soil samples S-3 (0' to 20'), S-4 (0' to 20'), S-5 (0' to 20'), S-6 (0' to 20'), S-7 (0' to 20'), and S-8 (0' to 20') were collected from the walls of the excavation.

Second Sampling Event

On November 10, 2022, a second sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-9 (20') and S-10 (20') were collected from the floor of the excavation. Composite soil samples S-11 (0' to 20') and S-12 (0' to 20') were collected from the walls of the excavation.

Subsequent soil analytical results identified TPH concentrations that exceeded the NM EMNRD OCD closure criteria for composite soil samples S-11 and S-12. In response to the exceedances the excavation was enlarged. The impacted soils were removed by excavation and transported to the landfarm for disposal/remediation.

Third Sampling Event

On December 22, 2022, a third sampling event was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-13 (22'), S-14 (22'), S-15 (22'), S-16 (22'), S-17 (22'), and S-18 (22') were collected from the floor of the excavation. Composite soil samples S-11a (0'-20'), S-12a (0'-20') were collected from the walls of the excavation to replace samples S-11 and S-12. Composite soil samples S-19 (0'-22'), S-20 (0'-22'), S-21 (0'-22'), S-22 (0'-22'), S-23 (0'-22'), S-24 (0'-22'), S-25 (0'-22'), S-26 (0'-22'), S-27 (0'-22'), and S-28 (0'-13') were collected from the walls of the excavation.

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

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method #8021; TPH GRO/DRO/MRO using EPA SW-846 Method #8015; and chlorides using EPA Method #300.0.

The laboratory analytical results are summarized in **Table 1 (Appendix F)**. The laboratory data sheets and executed chain-of-custody forms are provided in **Appendix G**.

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 through S-10, S-11a, S-12a, and S-13 through S-28) to the applicable NM EMNRD OCD closure criteria. The soils associated with composite soil samples S-11, and S-12 were removed from the Site, and therefore, are not included in the following discussion. The laboratory analytical results are summarized in **Table 1 (Appendix F)**.

- The laboratory analytical results for composite soil sample S-2 indicates a benzene concentration of 0.041 mg/kg, which is less than the New Mexico EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for all other composite soil samples collected from soils remaining at the Site indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for composite soil samples S-2 and S-4 indicate combined BTEX concentrations of 0.11 mg/kg and 0.13 mg/kg, respectively, which are less than the New Mexico EMNRD OCD closure criteria of 50 mg/kg. The laboratory analytical results for all other composite soil samples collected from soils remaining at the Site indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for all composite soil samples collected from soils remaining at the Site indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical results for composite soil samples S-7 and S-8 indicate combined chloride concentrations of 77 mg/kg and 61 mg/kg, respectively, which are less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg. The laboratory analytical results for all other composite soil samples collected from soils remaining at the Site indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the New Mexico EMNRD OCD closure criteria of 600 mg/kg.

7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with imported fill and then contoured to the surrounding topography. Enterprise will re-seed the Site with an approved seeding mixture.

8.0 FINDINGS AND RECOMMENDATION

- Thirty composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.
- Approximately 2,728 yd³ of petroleum hydrocarbon-affected soils were transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with imported fill and then contoured to the surrounding topography.

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

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

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

9.2 Limitations

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

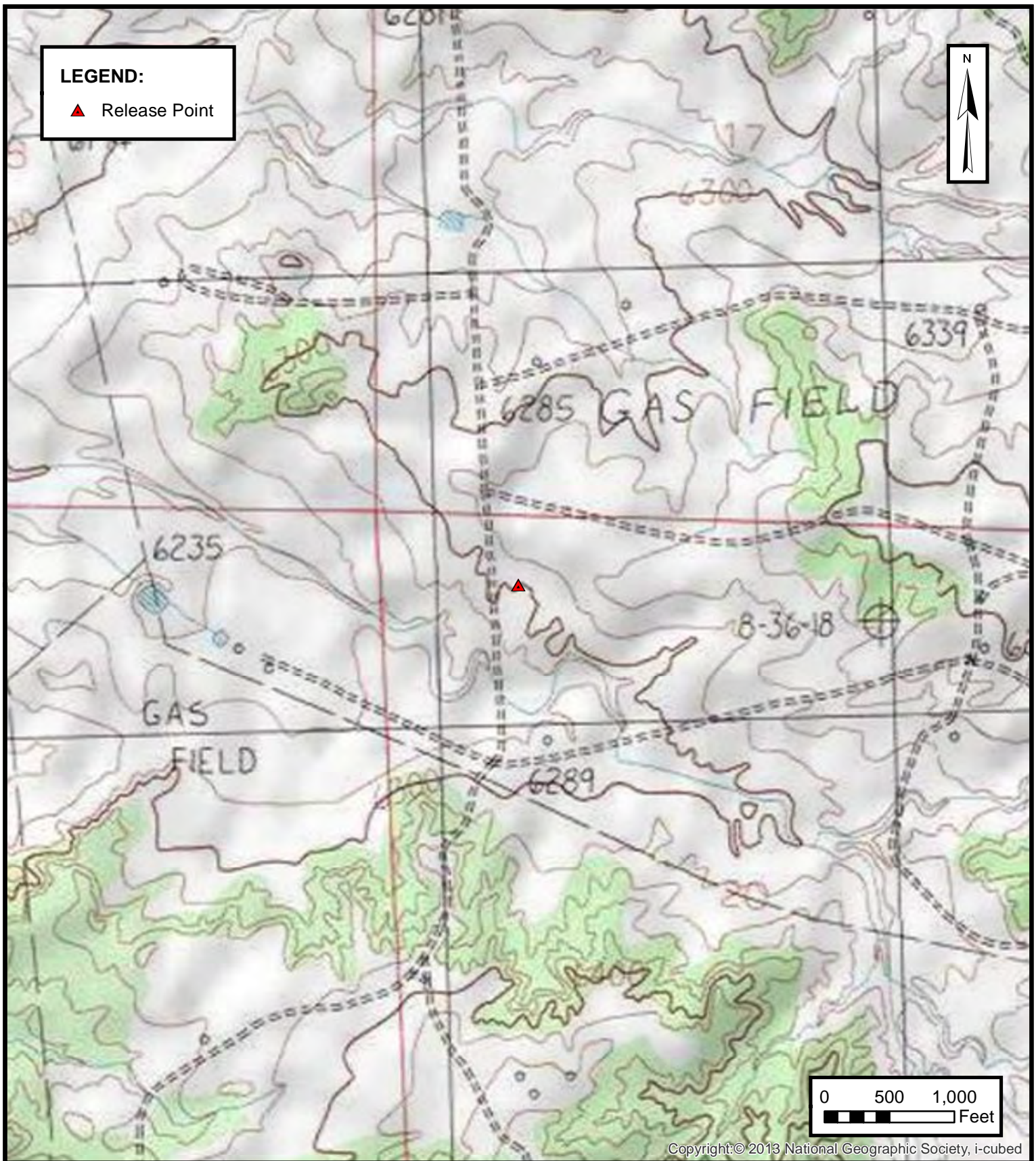
9.3 Reliance

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



APPENDIX A

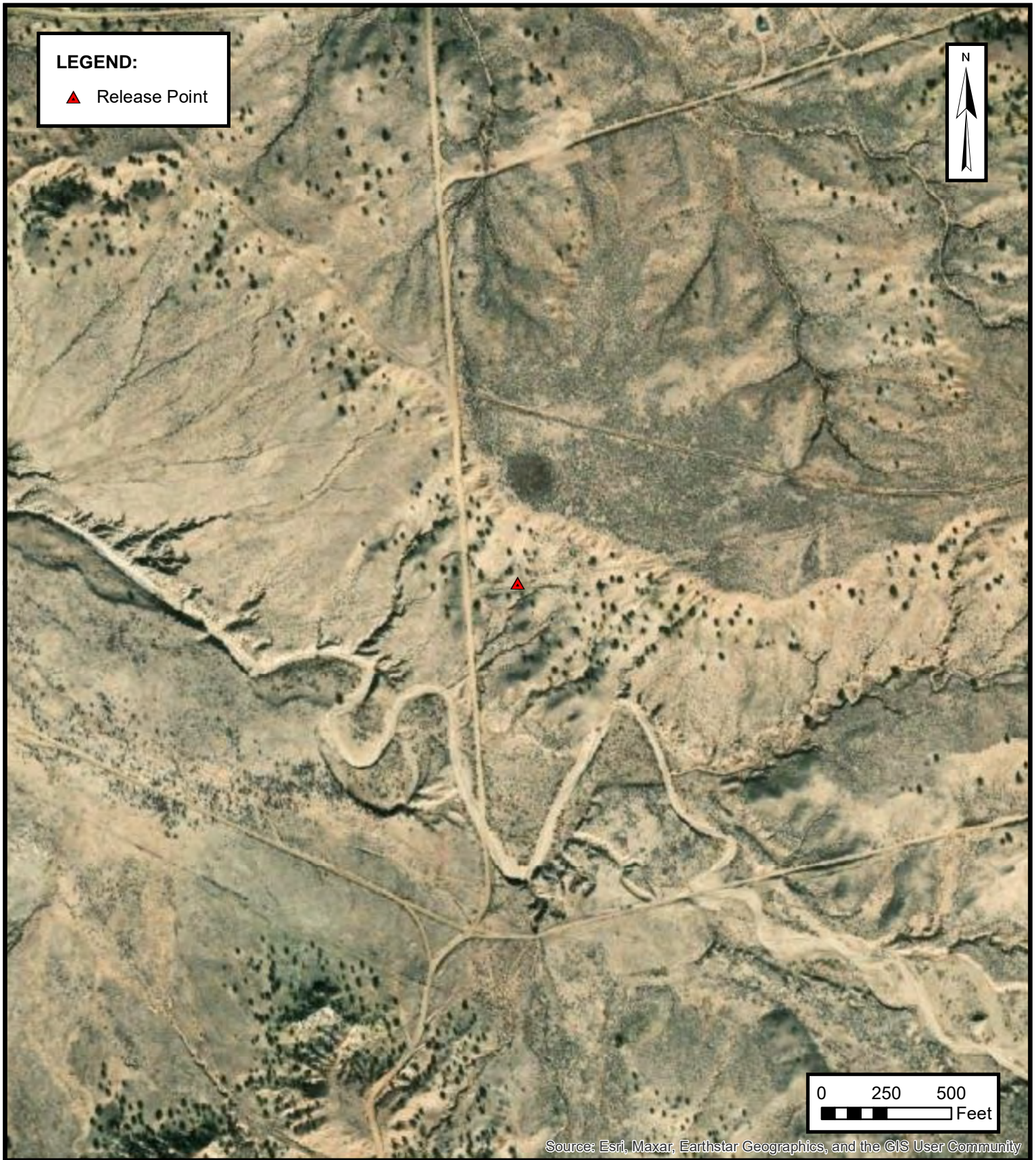
Figures

**TOPOGRAPHIC MAP**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

FIGURE**1**



SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)

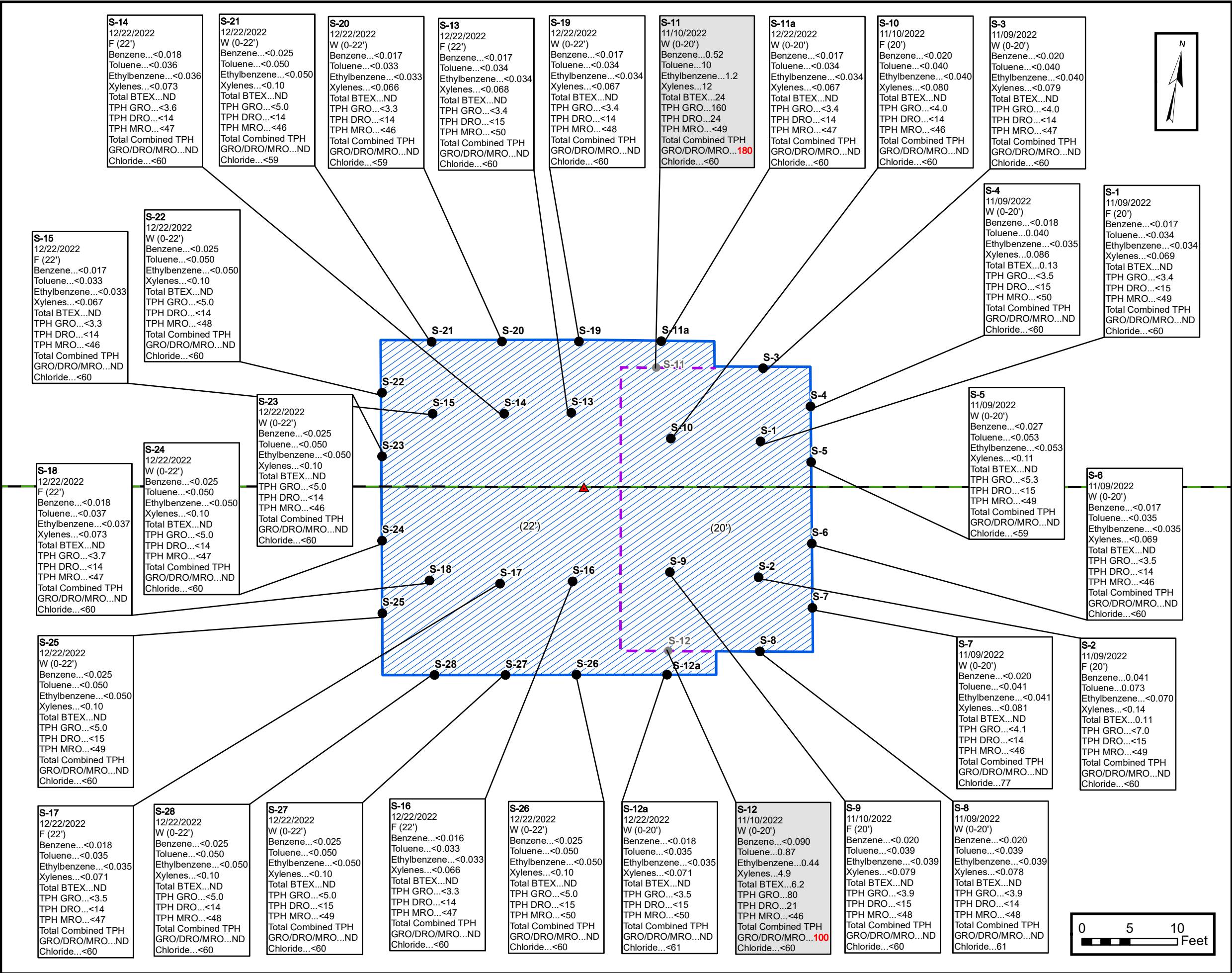
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

FIGURE

2

ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants



LEGEND:

- ▲ Release Point
- Composite Soil Sample Location
- Composite Soil Sample Removed by Excavation
- Extent of Excavation
- Former Wall
- Approximate Pipeline Location

NOTES:
F - Floor Sample
W - Wall Sample

All Concentrations Are in mg/Kg.

Concentrations in **Red** Exceed the Applicable NM EMNRD OCD Closure Criteria.

All Depths Are Listed in Feet BGS.

Analytical Callouts in Gray Denote Sampling Location Removed by Excavation.



SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)

Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N, 107.71092° W

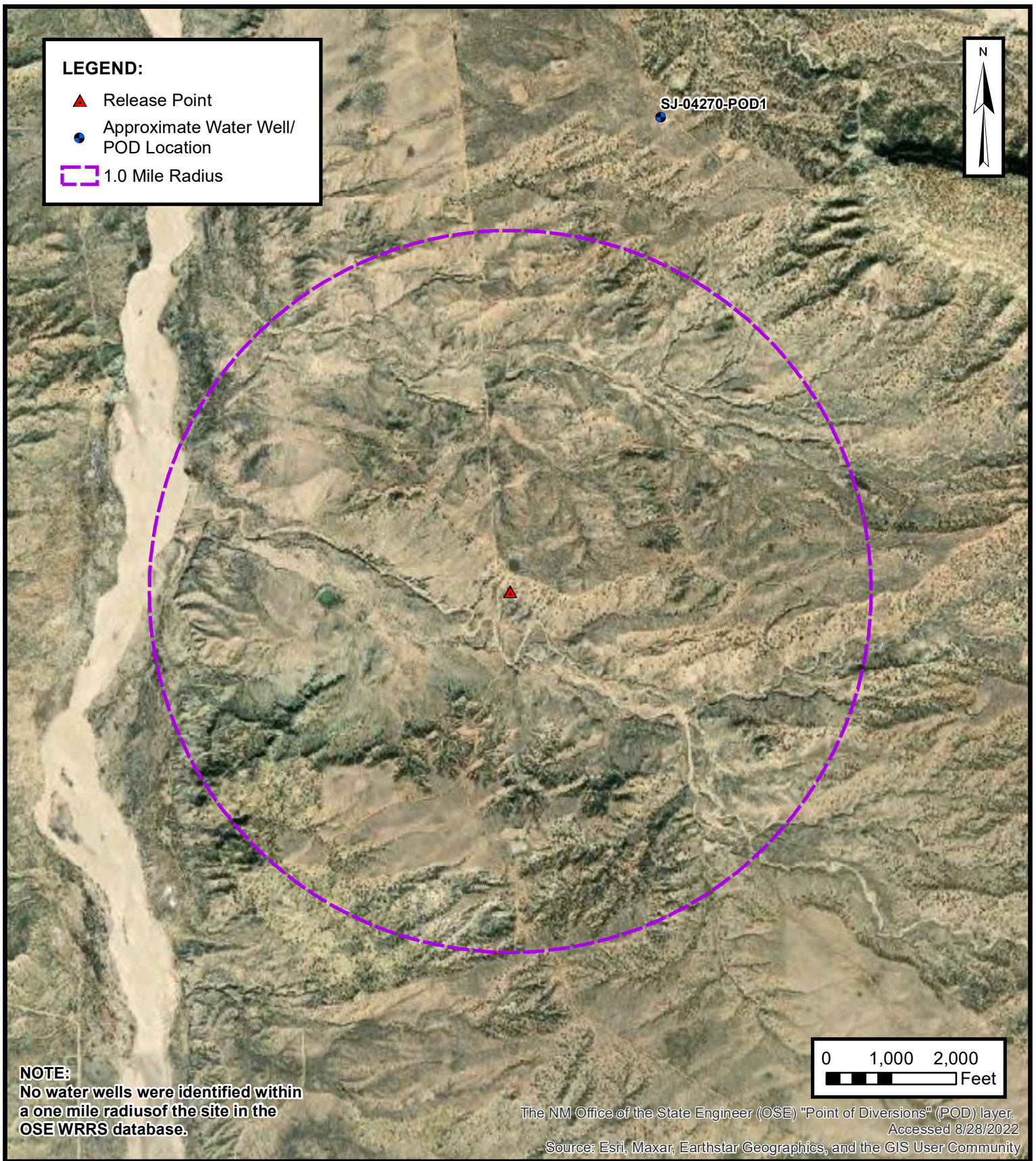
**FIGURE
3**

PROJECT NUMBER: 05A1226211



APPENDIX B

Siting Figures and Documentation

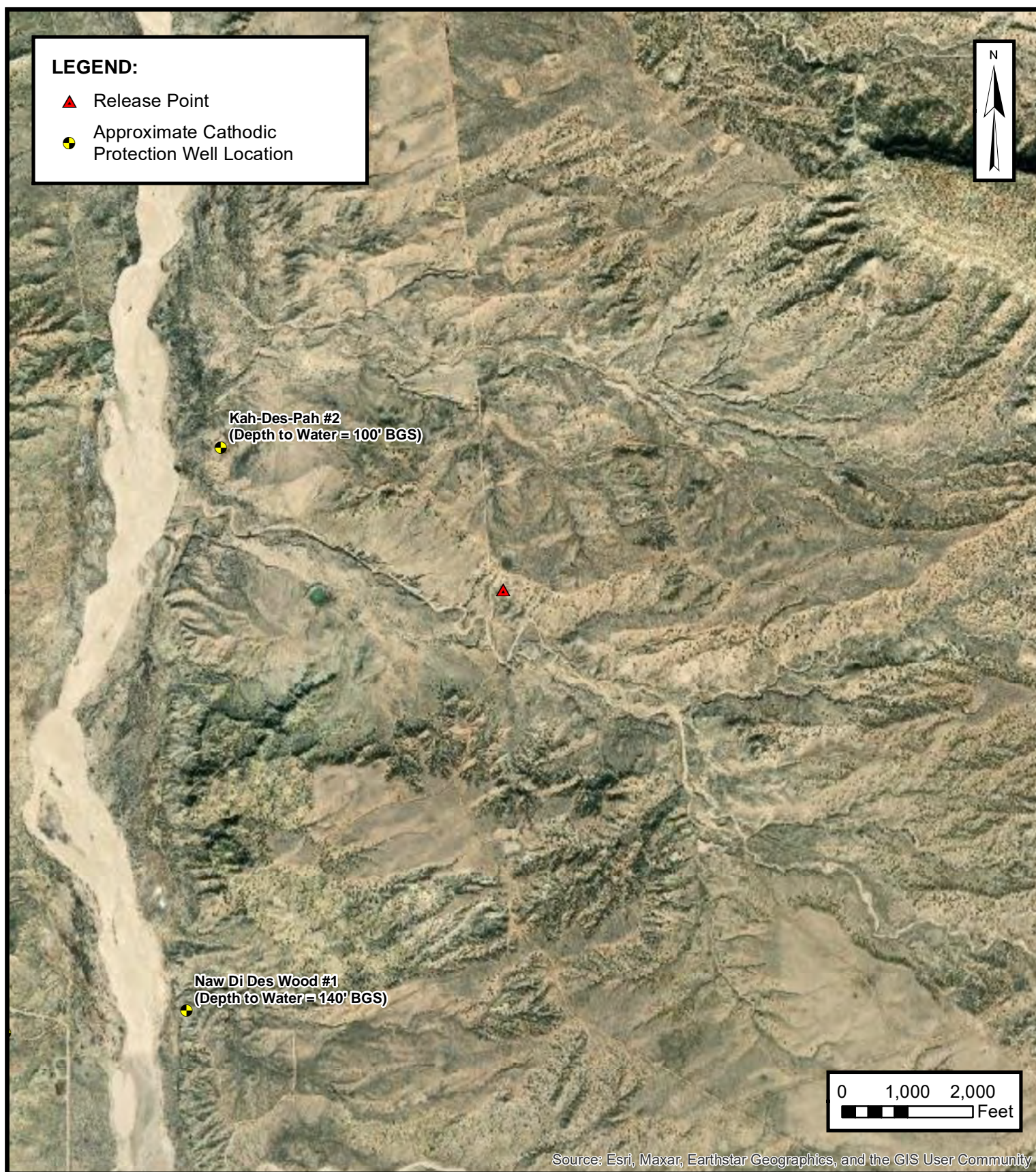


1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP

ENTERPRISE FIELD SERVICES, LLC
 NEWSOME #20 (09/26/22)
 Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
 36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

FIGURE
A



Environmental, Engineering and
Hydrogeologic Consultants

**CATHODIC PROTECTION WELL RECORDED
DEPTH TO WATER**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)

Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

**FIGURE
B**

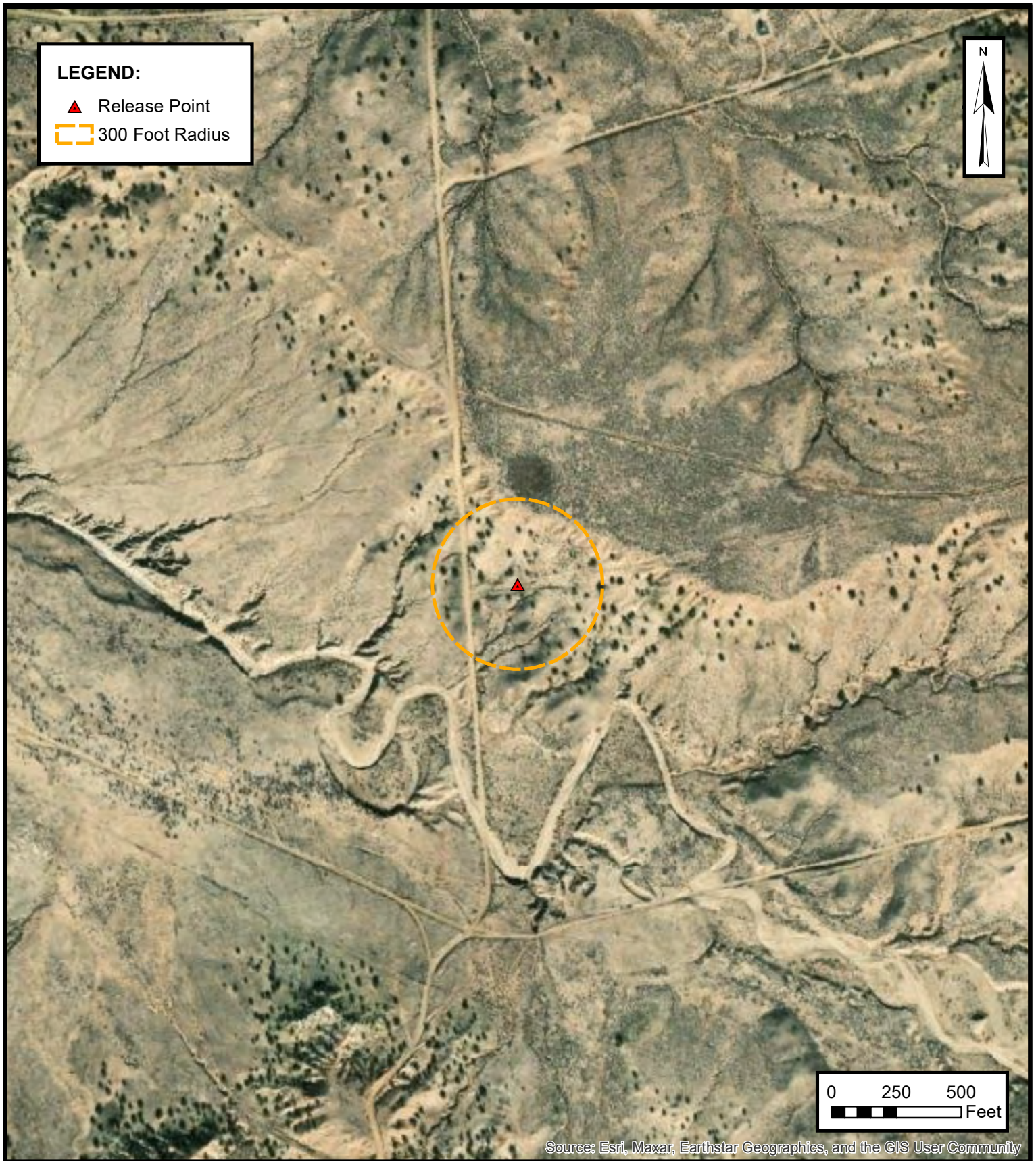


**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

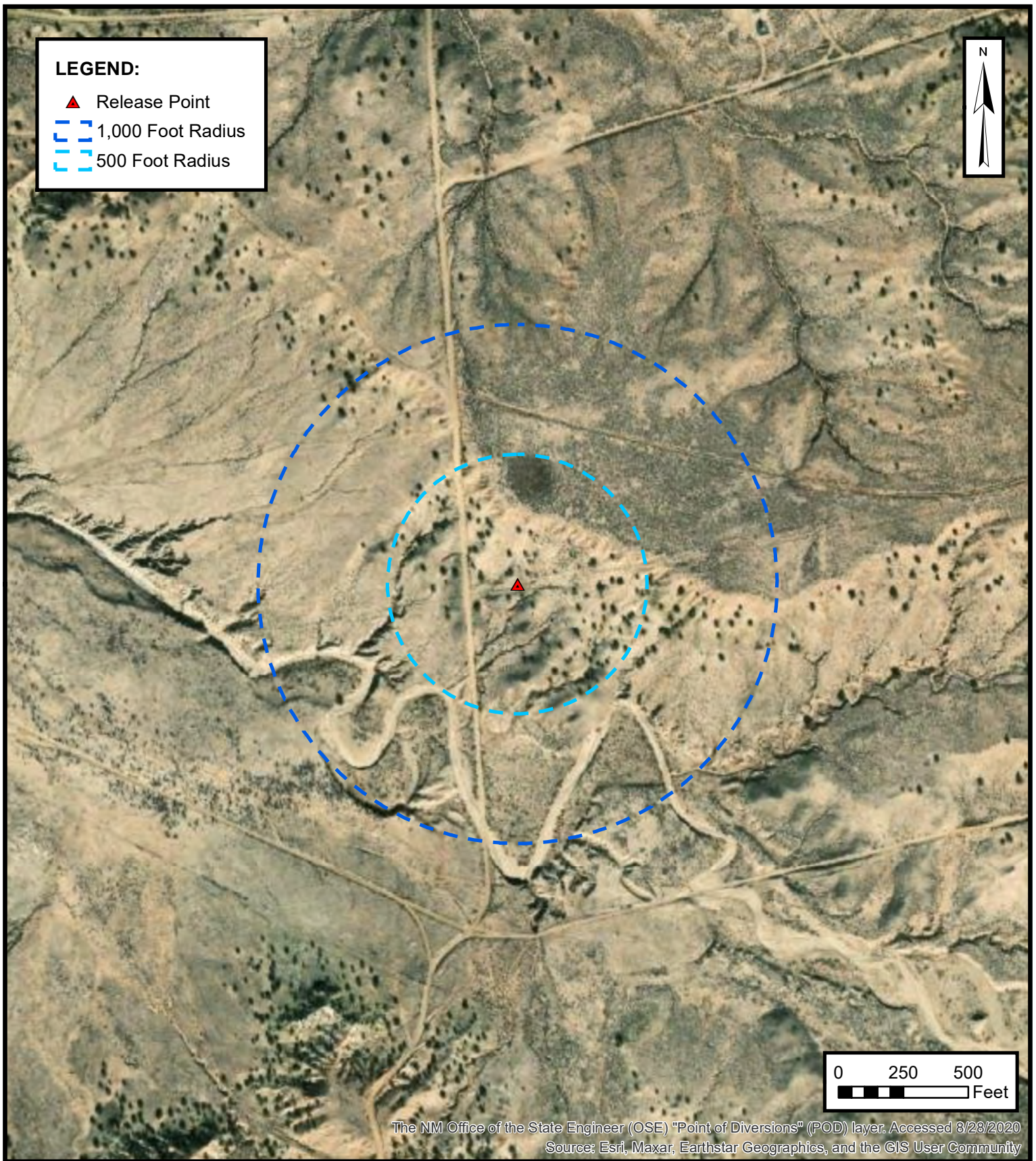
**FIGURE
C**



**300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

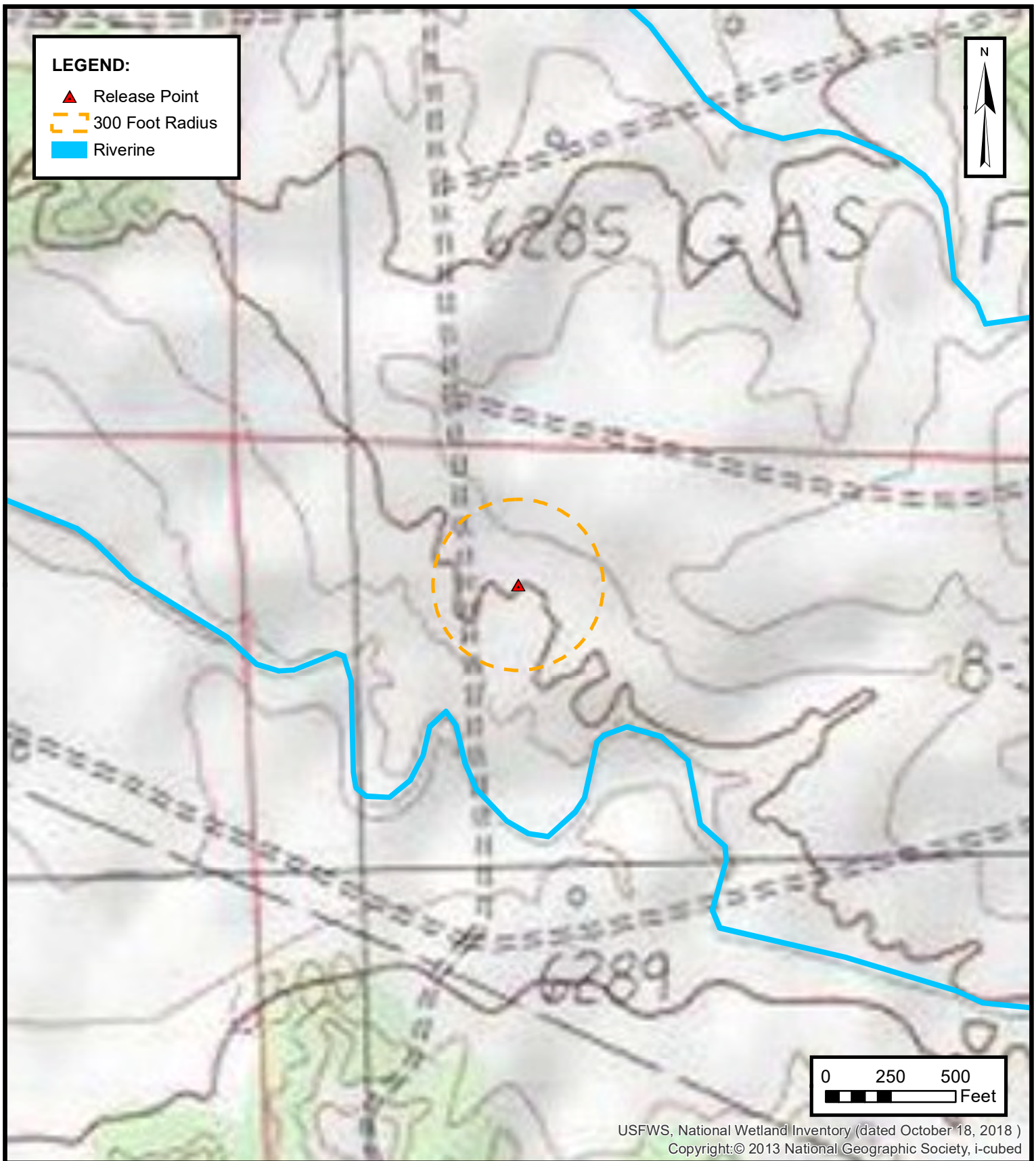
**FIGURE
D**

**WATER WELL AND NATURAL SPRING LOCATION**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

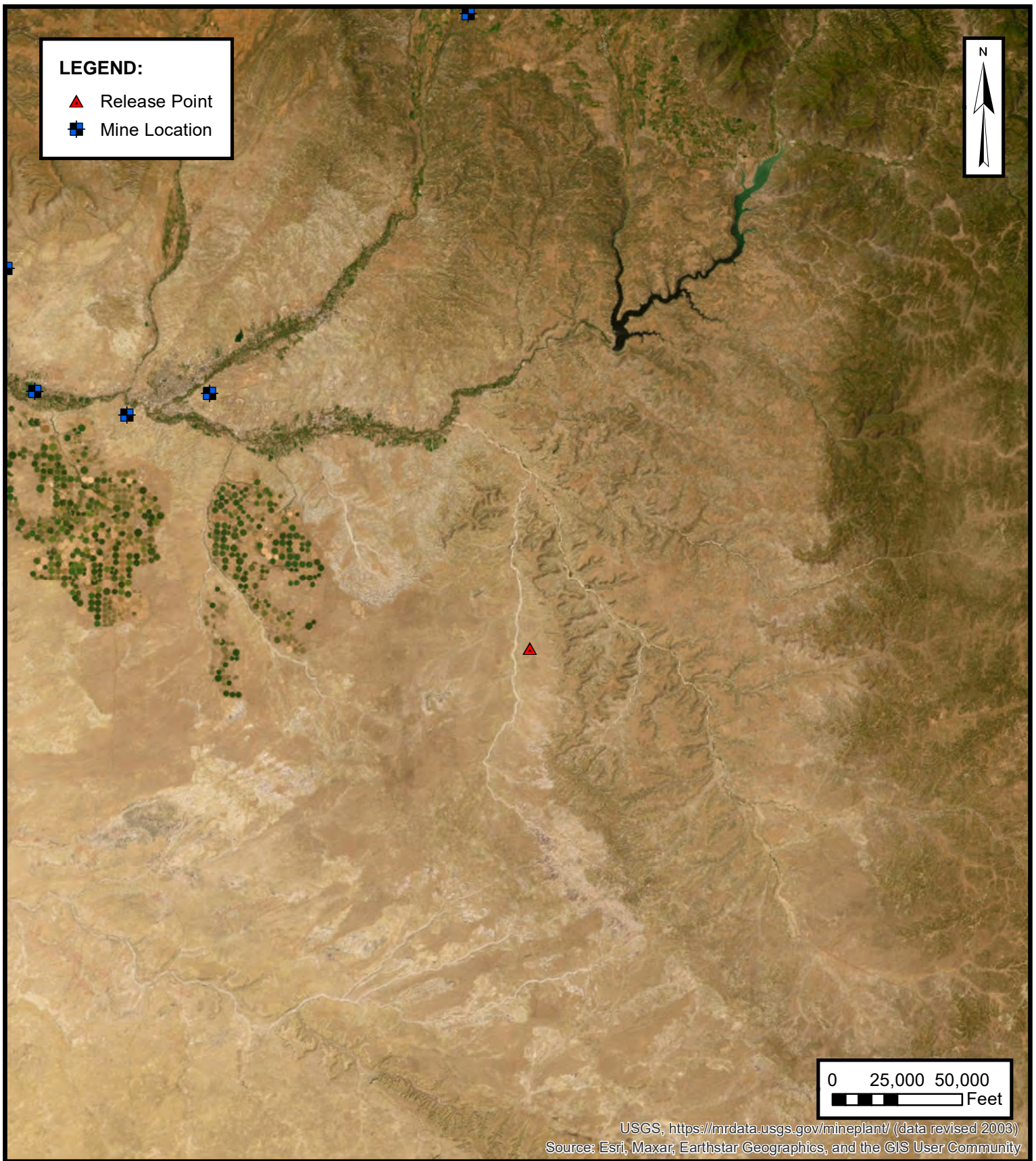
FIGURE
E

**WETLANDS**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

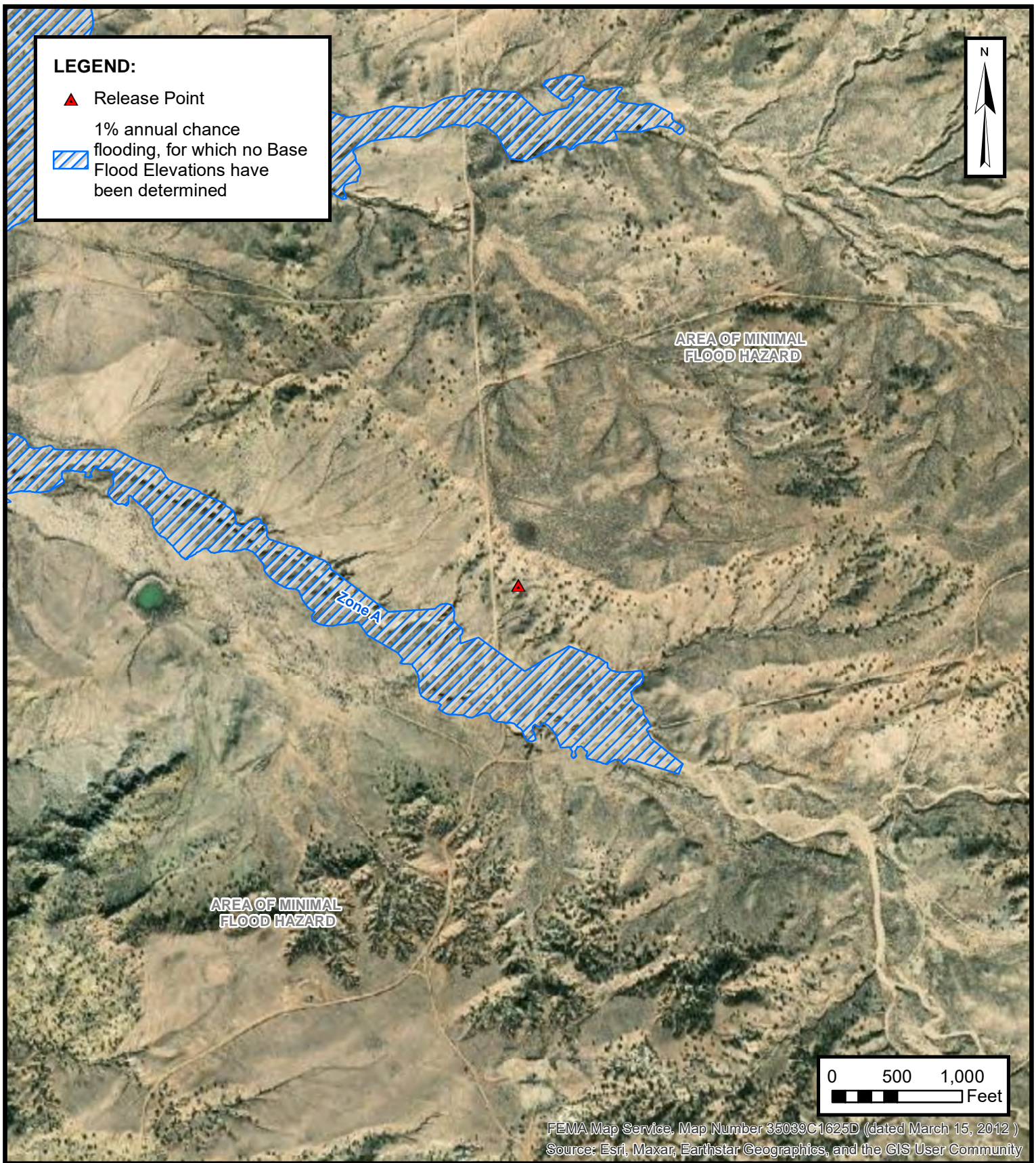
FIGURE**F**

**MINES, MILLS AND QUARRIES**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)
Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

FIGURE**G**

**100-YEAR FLOOD PLAIN MAP**

ENTERPRISE FIELD SERVICES, LLC
NEWSOME #20 (09/26/22)

Unit Letter D, S20 T26N R8W, San Juan County, New Mexico
36.47915° N 107.71092° W

PROJECT NUMBER: 05A1226211

FIGURE

H

ENSOLUM
Environmental, Engineering and
Hydrogeologic Consultants



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 20, 16, 17, 18,
19, 21, 28, 29,
30 **Township:** 26N **Range:** 08W

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/16/22 10:53 AM

Page 1 of 1

WATER COLUMN/ AVERAGE
DEPTH TO WATER

605

30-045-27456

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit L Sec. 18 Twp 26 Rng 5Name of Well/Wells or Pipeline Serviced KAH-DES-PAN #2

22244

Elevation 6119 Completion Date 11-25-91 Total Depth 321 Land Type FCasing Strings, Sizes, Types & Depths Set 98' of 9" P.U.C.If Casing Strings are cemented, show amounts & types used Used 24
sacks of neat cementIf Cement or Bentonite Plugs have been placed, show depths & amounts used
no plugsDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. water was at 100' and clear.Depths gas encountered: No gasGround bed depth with type & amount of coke breeze used: 321' with
44 sacks of Asbury 4518Depths anodes placed: #1 is at 300' & #15 is at 130'Depths vent pipes placed: 321' to surfaceVent pipe perforations: vent pipe is perforated up to 130'

Remarks: _____

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State;
If Federal or Indian, add Lease Number.

RECEIVED

FEB 24 1992

OIL CON. DIV.
DIST. 3

CPS GROUND BED CONSTRUCTION WORKSHEET

CPS# 7224-W	P/L NAME(s), NUMBER(s) KAH-DES-PAH #2					
WD # 1284	TOTAL	VOLTS 11.89	AMPS 26.4	- OHMS	DATE 11-25-91	NAME R. Smith
REMARKS (notes for construction log) H ₂ O is at 100', vent pipe is perforated up to 150'						

DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	DEPTH	LOG	ANODE	
	ANODE	*		ANODE	*		ANODE	*		ANODE	*	
100	3.1		295	3.2		490			685			
105	2.1		300	2.4	①	495			690			
110	1.5		305	1.9		500			695			
115	.9		310	1.3		505			700			
120	1.6		315	.7		510			ANODE	DEPTH	NO	FULLY
125	3.0		320	7032		515			*		COKE	COKE D
130	3.0	⑫	325			520			1	300	2.6	5.7
135	3.1		330			525			2	290	3.0	6.2
140	3.2	⑩	335			530			3	245	3.0	6.2
145	3.0		340			535			4	235	2.6	6.0
150	2.7	⑩	345			540			5	225	3.2	7.0
155	2.3		350			545			6	215	2.6	6.4
160	1.7		355			550			7	205	3.2	7.0
165	1.2		360			555			8	195	2.8	6.9
170	1.0		365			560			9	185	3.8	7.3
175	1.0		370			565			10	150	2.9	6.7
180	1.7		375			570			11	140	2.3	7.1
185	3.7	⑨	380			575			12	130	3.2	7.0
190	2.4		385			580			13			
195	2.8	⑧	390			585			14			
200	2.9		395			590			15			
205	3.0	⑩	400			595			16			
210	2.6		405			600			17			
215	2.3	⑩	410			605			18			
220	2.7		415			610			19			
225	3.1	⑮	420			615			20			
230	2.9		425			620			21			
235	2.3	④	430			625			22			
240	2.5		435			630			23			
245	2.8	③	440			635			24			
250	2.6		445			640			25			
255	1.5		450			645			26			
260	.5		455			650			27			
265	.7		460			655			28			
270	.8		465			660			29			
275	1.8		470			665			30			
280	2.5		475			670						
285	2.6		480			675						
290	3.1	⑥	485			680						

DISTRIBUTION - original - permanent CPS FILE

copy

- Division Corrosion Supervisor

copy

- Region Corrosion Specialist

2635W

30-045-08693

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit F Sec. 30 Twp 26 Rng 08

Name of Well/Wells. or Pipeline Serviced _____

NRW-DP-Des-Wood #1Elevation 6282 Completion Date 4/22/94 Total Depth 423' Land Type ICasing Strings, Sizes, Types & Depths 4 1/2" Set 99' of 8" PVC Casing.NO GAS, WATER, or Boulders were encountered during casing.If Casing Strings are cemented, show amounts & types used Cemented
WITH 21 SACKS.If Cement or Bentonite Plugs have been placed, show depths & amounts used
NONEDepths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. HIT SOME FRESH WATER AT 140', AND A
MAJOR FRESH WATER VEIN AT 265'. A WATER SAMPLE WAS TAKEN.Depths gas encountered: NONEGround bed depth with type & amount of coke breeze used: 423' Depth.
Used 56 SACKS of Loresco SW (5600#)Depths anodes placed: 400', 389', 365', 352', 318', 310', 302', 264', 254', 245', 185', 177', 165', 155', & 145'.Depths vent pipes placed: SURFACE TO 423'.Vent pipe perforations: BOTTOM 305'.

Remarks: _____

RECEIVED
JAN 20 1995OIL CON. DIV.
DIST. 3

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.
If Federal or Indian, add Lease Number.



APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

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

97057-1125

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:

Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

PayKey: EM20767
PM: ME Eddleman
AFE: N60802

2. Originating Site:

Newsome #20

3. Location of Material (Street Address, City, State or ULSTR):

UL D Section 20 T26N R8W; 36.479150, -107.710920

Sept - Dec 2022

4. Source and Description of Waste:

Source: Remediation activities associated with a natural gas pipeline leak.

Description: Hydrocarbon/Condensate impacted soil associated natural gas pipeline release.

Estimated Volume 50 yd³/bbls Known Volume (to be entered by the operator at the end of the haul) 2728 yd³/bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long*, representative or authorized agent for Enterprise Products Operating do hereby

Generator Signature

certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long* 9-14-2022, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete

Generator Signature

the required testing/sign the Generator Waste Testing Certification.

I, Greg Crabtree, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: IMI or Subcontractors

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree
SIGNATURE: [Signature]
Surface Waste Management Facility Authorized Agent

TITLE: Enviro Manager DATE: 9/26/22
TELEPHONE NO.: 505-632-0615



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Newsome #20 (09/26/22)
Ensolum Project No. 05A1226211

**Photograph 1**

Photograph Description: View of the excavation (first sampling event).

**Photograph 2**

Photograph Description: View of the excavation (second sampling event).

**Photograph 3**

Photograph Description: View of the excavation (second sampling event).



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Newsome #20 (09/26/22)
Ensolum Project No. 05A1226211

**Photograph 4**

Photograph Description: View of the excavation (third sampling event).

**Photograph 5**

Photograph Description: View of the excavation (third sampling event).

**Photograph 6**

Photograph Description: View of the site after initial restoration.





APPENDIX E

Regulatory Correspondence

From: Kyle Summers
To: Rance Deschilly; Landon Daniel
Subject: Fwd: [EXTERNAL] Fwd: Newsom #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758
Date: Tuesday, December 20, 2022 4:08:56 PM

Kyle Summers
Principal
903-821-5603
Ensolum, LLC

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Tuesday, December 20, 2022 4:07:51 PM
To: Long, Thomas <tjlong@eprod.com>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Fwd: Newsom #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

Regards

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov NOTE NEW EMAIL ADDRESS
<http://www.emnrd.state.nm.us/OCD/>

-----Original Message-----

From: Long, Thomas <tjlong@eprod.com>
Sent: Tuesday, December 20, 2022 1:14 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Fwd: Newsom #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

Nelson/Ryan,

This email is a sample notification and variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples on December 22, 2022 at 11:00 a.m. at the Newsome #20 excavation. This will probably complete the remediation if all samples pass. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

-----Original Message-----

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Friday, December 16, 2022 9:37 AM
To: Long, Thomas <tjlong@eprod.com>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Fwd: Newsom #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

[Use caution with links/attachments]

Tom,

Limitations, such as inclement weather and personnel availability are good cause justification for a time extension (TE). However, many of the site characterization/assessment data (Form C-141 page 3), such as determining depth to water, especially when OCD is only given the minimum details within the initial C-141 submittal, can be achieved administratively. Therefore, OCD will grant the TE request to February 28, 2023 under the conditions that the following information is provided with supporting documentation (19.15.29.11A);

1. Provide as best as possible, the shallowest depth to groundwater beneath the area affected by the release
2. Provide information as to whether the release impacted groundwater or surface water groundwater impact may be determined based on research findings and possibly interpreted as having a higher- than-average probability of occurring (e.g. – high volume release, high soil porosity, shallow groundwater).
3. Provide the lateral extents of the release if within 300 feet of a continuously flowing watercourse or any other significant watercourse
4. Provide the lateral extents of the release if within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)
5. Provide the lateral extents of the release if within 300 feet of an occupied permanent residence, school, hospital, institution, or church
6. Provide the lateral extents of the release if 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
7. Provide the lateral extents of the release if within 1000 feet of any other fresh water well or spring
8. Provide the lateral extents of the release if within incorporated municipal boundaries or within a defined municipal fresh water well field
9. Provide the lateral extents of the release if within 300 feet of a wetland
10. Provide the lateral extents of the release if overlying a subsurface mine
11. Provide the lateral extents of the release if overlying an unstable area such as karst geology
12. Provide the lateral extents of the release if within a 100-year floodplain
13. Provide information whether the release impact areas are not on an exploration, development, production, or storage site
14. Provide a scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells if applicable
15. Any field data collected
16. Data table of soil contaminant concentration data, if any
17. Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
18. Photographs associated with the release that includes date/time and/or GIS information for the photographs collected
19. Topographic/Aerial maps

20. Laboratory data including chain of custody if any sampling completed up to this transmittal
21. 19.15.29 NMAC Table I closure standard determination

Enterprise has approximately 14 days (deadline date: December 30, 2022) to provide the aforementioned information to fulfill the conditions for the TE request. This is the initial time extension requested.

Upon receipt of the site characterization/assessment information, OCD reserved the right to request additional information if needed (19.15.29.11C).

Please keep a copy of this communication for inclusion within the final closure report submittal. The OCD requires a copy of all correspondence relative to remedial activities be included in all proposal and/or final closure reports.

If you have any questions, please contact me at your earliest convenience. Thank you for your cooperation, communication, and diligence regarding this incident.

Regards,

Nelson Velez • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnr.dnm.gov NOTE NEW EMAIL ADDRESS https://urldefense.com/v3/_http://www.emnr.dnm.us/OCD/_!!JsDx9Q!aLbCg-wNY2GSNIqgZi4HFksKLi-bKNOeERLMlw7Qc4uFwWqA-uyaNqKQgXqTjb2Or0Ww2tx3FaPF3kPLawONJhjKZS

-----Original Message-----

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, December 15, 2022 10:31 AM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnr.dnm.gov>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Fwd: Newsome #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

Nelson,

The email is a time extension request for the Newsome #20; UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758 for continued soil remediation activities. Enterprise requests an additional 60 days from December 26, 2022 to a completion date of February 26, 2023. Enterprise requires the time extension to complete the soil remediation activities because Enterprise has not been able to access the site due to inclement weather or has not had the personnel to oversee the remediation activities. Please acknowledge acceptance of the time extension request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

-----Original Message-----

From: Velez, Nelson, EMNRD <Nelson.Velez@emnr.dnm.gov>
Sent: Thursday, November 10, 2022 7:12 AM
To: Long, Thomas <tjlong@eprod.com>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: RE: [EXTERNAL] Fwd: Newsome #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

[Use caution with links/attachments]

Tom,

Thank you for the notice. Your variance request specifically addressing 19.15.29.12D (1a) NMAC is approved.

If an OCD representative is not on-site on the date &/or time given, please sample per 19.15.29 NMAC. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the closure sample(s) not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards

Nelson Velez • Environmental Specialist - Adv Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnr.dnm.gov NOTE NEW EMAIL ADDRESS
https://urldefense.com/v3/_http://www.emnr.dnm.us/OCD/_!!JsDx9Q!bbZi1wR2gWISUJ7GWlcnQmbJ4kEk0VAjywyXqla2hShh39hvtYyTNHwZ24zJp0iMDN6YSE6wEfgKml84SplfGyS

-----Original Message-----

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, November 9, 2022 4:08 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnr.dnm.gov>; Ryan Joyner <rjoyner@blm.gov>
Cc: Stone, Brian <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: [EXTERNAL] Fwd: Newsome #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Nelson/Ryan,

This email is a sample notification and variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples tomorrow November 10, 2022 at the Newsome #20 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Tom Long

Begin forwarded message:

From: "Long, Thomas" <tjlong@eprod.com>
Date: November 8, 2022 at 9:07:00 AM MST
To: "Velez, Nelson, EMNRD" <Nelson.Velez@state.nm.us>; Ryan Joyner <rjoyner@blm.gov>
Cc: "Stone, Brian" <bstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>
Subject: Newsome #20 - UL D Section 20 T26N R8W; 36.479150, -107.710620; Incident # nAPP2226953758

Nelson/Ryan,

This email is a sample notification and variance request. Enterprise is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Enterprise would like to collect closure samples tomorrow November 8, 2022 at the Newsome #20 excavation. Please acknowledge acceptance of this variance request. If you have any questions, please call or email.

Thomas J. Long
Senior Environmental Scientist
Enterprise Products Company
614 Reilly Ave.
Farmington, New Mexico 87401
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com<<mailto:tjlong@eprod.com>>

[image001.jpg]

This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



APPENDIX F

Table 1 – Soil Analytical Summary



TABLE 1
Newsome #20 (09/26/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type	Sample Depth	Benzene	Toluene	Ethylbenzene	Xylenes	Total BTEX ¹	TPH GRO	TPH DRO	TPH MRO	Total Combined TPH (GRO/DRO/MRO) ¹	Chloride
		C- Composite G - Grab	(feet)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
Composite Soil Samples Removed by Excavation and Transported to the Landfarm for Diposal/Remediation													
S-11	11.10.22	C	0 to 20	0.52	10	1.2	12	24	160	24	<49	180	<60
S-12	11.10.22	C	0 to 20	<0.090	0.87	0.44	4.9	6.2	80	21	<46	100	<60
Excavation Composite Soil Samples													
S-1	11.09.22	C	20	<0.017	<0.034	<0.034	<0.069	ND	<3.4	<15	<49	ND	<60
S-2	11.09.22	C	20	0.041	0.073	<0.070	<0.14	0.11	<7.0	<15	<49	ND	<60
S-3	11.09.22	C	0 to 20	<0.020	<0.040	<0.040	<0.079	ND	<4.0	<14	<47	ND	<60
S-4	11.09.22	C	0 to 20	<0.018	0.040	<0.035	0.086	0.13	<3.5	<15	<50	ND	<60
S-5	11.09.22	C	0 to 20	<0.027	<0.053	<0.053	<0.11	ND	<5.3	<15	<49	ND	<59
S-6	11.09.22	C	0 to 20	<0.017	<0.035	<0.035	<0.069	ND	<3.5	<14	<46	ND	<60
S-7	11.09.22	C	0 to 20	<0.020	<0.041	<0.041	<0.081	ND	<4.1	<14	<46	ND	77
S-8	11.09.22	C	0 to 20	<0.020	<0.039	<0.039	<0.078	ND	<3.9	<14	<48	ND	61
S-9	11.10.22	C	20	<0.020	<0.039	<0.039	<0.079	ND	<3.9	<15	<48	ND	<60
S-10	11.10.22	C	20	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<14	<46	ND	<60
S-11a	12.22.22	C	0 to 20	<0.017	<0.034	<0.034	<0.067	ND	<3.4	<14	<47	ND	<60
S-12a	12.22.22	C	0 to 20	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<15	<50	ND	<61
S-13	12.22.22	C	22	<0.017	<0.034	<0.034	<0.068	ND	<3.4	<15	<50	ND	<60
S-14	12.22.22	C	22	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<14	<47	ND	<60
S-15	12.22.22	C	22	<0.017	<0.033	<0.033	<0.067	ND	<3.3	<14	<46	ND	<60
S-16	12.22.22	C	22	<0.016	<0.033	<0.033	<0.066	ND	<3.3	<14	<47	ND	<60
S-17	12.22.22	C	22	<0.018	<0.035	<0.035	<0.071	ND	<3.5	<14	<47	ND	<60
S-18	12.22.22	C	22	<0.018	<0.037	<0.037	<0.073	ND	<3.7	<14	<47	ND	<60
S-19	12.22.22	C	0 to 22	<0.017	<0.034	<0.034	<0.067	ND	<3.4	<14	<48	ND	<60
S-20	12.22.22	C	0 to 22	<0.017	<0.033	<0.033	<0.066	ND	<3.3	<14	<46	ND	<59
S-21	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<14	<46	ND	<59
S-22	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<14	<48	ND	<60



TABLE 1
Newsome #20 (09/26/22)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX ¹ (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) ¹ (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				10	NE	NE	NE	50	NE	NE	NE	100	600
S-23	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<14	<46	ND	<60
S-24	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<14	<47	ND	<60
S-25	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<15	<49	ND	<60
S-26	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<15	<50	ND	<60
S-27	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<15	<49	ND	<60
S-28	12.22.22	C	0 to 22	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<14	<48	ND	<60

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

¹ = Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.

ND = Not Detected above the Practical Quantitation Limits (PQLs) or Reporting Limits (RLs)

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics



APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation



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

November 15, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Newsome 20

OrderNo.: 2211595

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/10/2022 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 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

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Newsome 20

Collection Date: 11/9/2022 11:00:00 AM

Lab ID: 2211595-001

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/10/2022 10:49:34 AM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/10/2022 10:09:28 AM	71405
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/10/2022 10:09:28 AM	71405
Surr: DNOP	95.3	21-129		%Rec	1	11/10/2022 10:09:28 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	11/10/2022 9:12:00 AM	G92479
Surr: BFB	87.9	37.7-212		%Rec	1	11/10/2022 9:12:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	11/10/2022 9:12:00 AM	B92479
Toluene	ND	0.034		mg/Kg	1	11/10/2022 9:12:00 AM	B92479
Ethylbenzene	ND	0.034		mg/Kg	1	11/10/2022 9:12:00 AM	B92479
Xylenes, Total	ND	0.069		mg/Kg	1	11/10/2022 9:12:00 AM	B92479
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	11/10/2022 9:12:00 AM	B92479

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.		

Page 1 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Newsome 20

Collection Date: 11/9/2022 11:05:00 AM

Lab ID: 2211595-002

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/10/2022 11:26:47 AM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/10/2022 10:20:03 AM	71405
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/10/2022 10:20:03 AM	71405
Surr: DNOP	94.2	21-129		%Rec	1	11/10/2022 10:20:03 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	7.0		mg/Kg	1	11/10/2022 9:35:00 AM	G92479
Surr: BFB	87.8	37.7-212		%Rec	1	11/10/2022 9:35:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.041	0.035		mg/Kg	1	11/10/2022 9:35:00 AM	B92479
Toluene	0.073	0.070		mg/Kg	1	11/10/2022 9:35:00 AM	B92479
Ethylbenzene	ND	0.070		mg/Kg	1	11/10/2022 9:35:00 AM	B92479
Xylenes, Total	ND	0.14		mg/Kg	1	11/10/2022 9:35:00 AM	B92479
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	11/10/2022 9:35:00 AM	B92479

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.		

Page 2 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Newsome 20

Collection Date: 11/9/2022 11:10:00 AM

Lab ID: 2211595-003

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/10/2022 11:39:12 AM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/10/2022 10:30:35 AM	71405
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/10/2022 10:30:35 AM	71405
Surr: DNOP	95.1	21-129		%Rec	1	11/10/2022 10:30:35 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/10/2022 9:59:00 AM	G92479
Surr: BFB	98.6	37.7-212		%Rec	1	11/10/2022 9:59:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	11/10/2022 9:59:00 AM	B92479
Toluene	ND	0.040		mg/Kg	1	11/10/2022 9:59:00 AM	B92479
Ethylbenzene	ND	0.040		mg/Kg	1	11/10/2022 9:59:00 AM	B92479
Xylenes, Total	ND	0.079		mg/Kg	1	11/10/2022 9:59:00 AM	B92479
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	11/10/2022 9:59:00 AM	B92479

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.		

Page 3 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Newsome 20

Collection Date: 11/9/2022 11:15:00 AM

Lab ID: 2211595-004

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/10/2022 11:51:37 AM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/10/2022 10:41:08 AM	71405
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/10/2022 10:41:08 AM	71405
Surr: DNOP	122	21-129		%Rec	1	11/10/2022 10:41:08 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	11/10/2022 10:22:00 AM	G92479
Surr: BFB	91.0	37.7-212		%Rec	1	11/10/2022 10:22:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	11/10/2022 10:22:00 AM	B92479
Toluene	0.040	0.035		mg/Kg	1	11/10/2022 10:22:00 AM	B92479
Ethylbenzene	ND	0.035		mg/Kg	1	11/10/2022 10:22:00 AM	B92479
Xylenes, Total	0.086	0.070		mg/Kg	1	11/10/2022 10:22:00 AM	B92479
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	11/10/2022 10:22:00 AM	B92479

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.		

Page 4 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Newsome 20

Collection Date: 11/9/2022 11:20:00 AM

Lab ID: 2211595-005

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	59		mg/Kg	20	11/10/2022 12:04:02 PM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/10/2022 10:51:42 AM	71405
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/10/2022 10:51:42 AM	71405
Surr: DNOP	97.4	21-129		%Rec	1	11/10/2022 10:51:42 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.3		mg/Kg	1	11/10/2022 10:46:00 AM	G92479
Surr: BFB	91.6	37.7-212		%Rec	1	11/10/2022 10:46:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.027		mg/Kg	1	11/10/2022 10:46:00 AM	B92479
Toluene	ND	0.053		mg/Kg	1	11/10/2022 10:46:00 AM	B92479
Ethylbenzene	ND	0.053		mg/Kg	1	11/10/2022 10:46:00 AM	B92479
Xylenes, Total	ND	0.11		mg/Kg	1	11/10/2022 10:46:00 AM	B92479
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	11/10/2022 10:46:00 AM	B92479

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.		

Page 5 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-6

Project: Newsome 20

Collection Date: 11/9/2022 11:25:00 AM

Lab ID: 2211595-006

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/10/2022 12:16:27 PM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/10/2022 11:02:16 AM	71405
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/10/2022 11:02:16 AM	71405
Surr: DNOP	98.8	21-129		%Rec	1	11/10/2022 11:02:16 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	11/10/2022 11:09:00 AM	G92479
Surr: BFB	90.1	37.7-212		%Rec	1	11/10/2022 11:09:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	11/10/2022 11:09:00 AM	B92479
Toluene	ND	0.035		mg/Kg	1	11/10/2022 11:09:00 AM	B92479
Ethylbenzene	ND	0.035		mg/Kg	1	11/10/2022 11:09:00 AM	B92479
Xylenes, Total	ND	0.069		mg/Kg	1	11/10/2022 11:09:00 AM	B92479
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/10/2022 11:09:00 AM	B92479

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.		

Page 6 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-7

Project: Newsome 20

Collection Date: 11/9/2022 11:30:00 AM

Lab ID: 2211595-007

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	77	60		mg/Kg	20	11/10/2022 12:28:51 PM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/10/2022 11:12:51 AM	71405
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/10/2022 11:12:51 AM	71405
Surr: DNOP	98.6	21-129		%Rec	1	11/10/2022 11:12:51 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	11/10/2022 11:32:00 AM	G92479
Surr: BFB	91.4	37.7-212		%Rec	1	11/10/2022 11:32:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	11/10/2022 11:32:00 AM	B92479
Toluene	ND	0.041		mg/Kg	1	11/10/2022 11:32:00 AM	B92479
Ethylbenzene	ND	0.041		mg/Kg	1	11/10/2022 11:32:00 AM	B92479
Xylenes, Total	ND	0.081		mg/Kg	1	11/10/2022 11:32:00 AM	B92479
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	11/10/2022 11:32:00 AM	B92479

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.		

Page 7 of 12

Analytical Report

Lab Order 2211595

Date Reported: 11/15/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-8

Project: Newsome 20

Collection Date: 11/9/2022 11:35:00 AM

Lab ID: 2211595-008

Matrix: SOIL

Received Date: 11/10/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	61	60		mg/Kg	20	11/10/2022 12:41:16 PM	71406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/10/2022 11:23:27 AM	71405
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/10/2022 11:23:27 AM	71405
Surr: DNOP	98.0	21-129		%Rec	1	11/10/2022 11:23:27 AM	71405
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/10/2022 11:56:00 AM	G92479
Surr: BFB	89.4	37.7-212		%Rec	1	11/10/2022 11:56:00 AM	G92479
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	11/10/2022 11:56:00 AM	B92479
Toluene	ND	0.039		mg/Kg	1	11/10/2022 11:56:00 AM	B92479
Ethylbenzene	ND	0.039		mg/Kg	1	11/10/2022 11:56:00 AM	B92479
Xylenes, Total	ND	0.078		mg/Kg	1	11/10/2022 11:56:00 AM	B92479
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	11/10/2022 11:56:00 AM	B92479

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.		

Page 8 of 12

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211595

15-Nov-22

Client: ENSOLUM
Project: Newsome 20

Sample ID: MB-71406		SampType: mblk			TestCode: EPA Method 300.0: Anions					
Client ID: PBS		Batch ID: 71406			RunNo: 92489					
Prep Date: 11/10/2022		Analysis Date: 11/10/2022			SeqNo: 3325646		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-71406		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 71406		RunNo: 92489						
Prep Date: 11/10/2022		Analysis Date: 11/10/2022		SeqNo: 3325647			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	90	110			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical 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#: 2211595

15-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: LCS-71405	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 71405			RunNo: 92477						
Prep Date: 11/10/2022	Analysis Date: 11/10/2022			SeqNo: 3324052			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	15	50.00	0	104	64.4	127			
Surr: DNOP	5.3		5.000		106	21	129			

Sample ID: MB-71405	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 71405			RunNo: 92477						
Prep Date: 11/10/2022	Analysis Date: 11/10/2022			SeqNo: 3324054			Units: mg/Kg			
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	9.4		10.00		94.1	21	129			

Sample ID: 2211595-001AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-1	Batch ID: 71405			RunNo: 92477						
Prep Date: 11/10/2022	Analysis Date: 11/10/2022			SeqNo: 3325727			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	14	45.75	0	105	36.1	154			
Surr: DNOP	5.1		4.575		111	21	129			

Sample ID: 2211595-001AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-1	Batch ID: 71405			RunNo: 92477						
Prep Date: 11/10/2022	Analysis Date: 11/10/2022			SeqNo: 3325728			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	45.70	0	100	36.1	154	4.95	33.9	
Surr: DNOP	4.8		4.570		104	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 10 of 12

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

WO#: 2211595

15-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: mb	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: G92479				RunNo: 92479					
Prep Date:	Analysis Date: 11/10/2022				SeqNo: 3327234		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.7	37.7	212			

Sample ID: 2.5ug gro lcs	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: G92479				RunNo: 92479					
Prep Date:	Analysis Date: 11/10/2022				SeqNo: 3327235		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.9	72.3	137			
Surr: BFB	1900		1000		190	37.7	212			

Sample ID: 2211595-001ams	SampType: MS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: S-1	Batch ID: G92479				RunNo: 92479					
Prep Date:	Analysis Date: 11/10/2022				SeqNo: 3327236		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.4	17.20	0	90.1	70	130			
Surr: BFB	1200		687.8		178	37.7	212			

Sample ID: 2211595-001amsd	SampType: MSD				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: S-1	Batch ID: G92479				RunNo: 92479					
Prep Date:	Analysis Date: 11/10/2022				SeqNo: 3327237		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.4	17.20	0	90.9	70	130	0.884	20	
Surr: BFB	1200		687.8		180	37.7	212	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 11 of 12

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

WO#: 2211595

15-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: B92479			RunNo: 92479						
Prep Date:	Analysis Date: 11/10/2022			SeqNo: 3327266			Units: mg/Kg			
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	0.96		1.000		95.6	70	130			

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: B92479			RunNo: 92479						
Prep Date:	Analysis Date: 11/10/2022			SeqNo: 3327267			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Toluene	0.96	0.050	1.000	0	96.1	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.4	80	120			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	70	130			

Sample ID: 2211595-002ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B92479			RunNo: 92479						
Prep Date:	Analysis Date: 11/10/2022			SeqNo: 3327268			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.035	1.397	0.04078	96.4	68.8	120			
Toluene	1.4	0.070	1.397	0.07304	98.4	73.6	124			
Ethylbenzene	1.4	0.070	1.397	0	97.5	72.7	129			
Xylenes, Total	4.1	0.14	4.190	0.06564	97.0	75.7	126			
Surr: 4-Bromofluorobenzene	1.4		1.397		97.3	70	130			

Sample ID: 2211595-002amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: S-2	Batch ID: B92479			RunNo: 92479						
Prep Date:	Analysis Date: 11/10/2022			SeqNo: 3327269			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.4	0.035	1.397	0.04078	94.1	68.8	120	2.31	20	
Toluene	1.4	0.070	1.397	0.07304	97.1	73.6	124	1.25	20	
Ethylbenzene	1.3	0.070	1.397	0	96.2	72.7	129	1.35	20	
Xylenes, Total	4.1	0.14	4.190	0.06564	95.8	75.7	126	1.19	20	
Surr: 4-Bromofluorobenzene	1.3		1.397		96.7	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

Page 12 of 12



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: 2211595

RcptNo: 1

Received By: Juan Rojas

11/10/2022 7:00:00 AM

Juan Rojas

Completed By: Juan Rojas

11/10/2022 7:11:20 AM

Juan Rojas

Reviewed By: *JR 11-10-22*

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°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: *JR 11/10/22*

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	Good				



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

November 16, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Newsome 20

OrderNo.: 2211694

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 4 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 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 2211694

Date Reported: 11/16/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-9

Project: Newsome 20

Collection Date: 11/10/2022 1:00:00 PM

Lab ID: 2211694-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/11/2022 9:49:01 AM	71440
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	11/11/2022 10:02:43 AM	71436
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/11/2022 10:02:43 AM	71436
Surr: DNOP	111	21-129		%Rec	1	11/11/2022 10:02:43 AM	71436
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	11/11/2022 10:35:54 AM	G92511
Surr: BFB	91.7	37.7-212		%Rec	1	11/11/2022 10:35:54 AM	G92511
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	11/11/2022 10:35:00 AM	B92511
Toluene	ND	0.039		mg/Kg	1	11/11/2022 10:35:00 AM	B92511
Ethylbenzene	ND	0.039		mg/Kg	1	11/11/2022 10:35:00 AM	B92511
Xylenes, Total	ND	0.079		mg/Kg	1	11/11/2022 10:35:00 AM	B92511
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	11/11/2022 10:35:00 AM	B92511

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.		

Page 1 of 9

Analytical Report

Lab Order 2211694

Date Reported: 11/16/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-10

Project: Newsome 20

Collection Date: 11/10/2022 1:05:00 PM

Lab ID: 2211694-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/11/2022 10:01:25 AM	71440
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	11/11/2022 10:13:10 AM	71436
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/11/2022 10:13:10 AM	71436
Surr: DNOP	111	21-129		%Rec	1	11/11/2022 10:13:10 AM	71436
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	11/11/2022 10:59:38 AM	G92511
Surr: BFB	92.7	37.7-212		%Rec	1	11/11/2022 10:59:38 AM	G92511
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.020		mg/Kg	1	11/11/2022 10:59:00 AM	B92511
Toluene	ND	0.040		mg/Kg	1	11/11/2022 10:59:00 AM	B92511
Ethylbenzene	ND	0.040		mg/Kg	1	11/11/2022 10:59:00 AM	B92511
Xylenes, Total	ND	0.080		mg/Kg	1	11/11/2022 10:59:00 AM	B92511
Surr: 4-Bromofluorobenzene	95.5	70-130		%Rec	1	11/11/2022 10:59:00 AM	B92511

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.		

Page 2 of 9

Analytical Report

Lab Order 2211694

Date Reported: 11/16/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-11

Project: Newsome 20

Collection Date: 11/10/2022 1:10:00 PM

Lab ID: 2211694-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/11/2022 10:13:50 AM	71440
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	24	15		mg/Kg	1	11/11/2022 10:23:36 AM	71436
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/11/2022 10:23:36 AM	71436
Surr: DNOP	109	21-129		%Rec	1	11/11/2022 10:23:36 AM	71436
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	160	18		mg/Kg	5	11/11/2022 11:23:21 AM	G92511
Surr: BFB	222	37.7-212	S	%Rec	5	11/11/2022 11:23:21 AM	G92511
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.52	0.088		mg/Kg	5	11/11/2022 11:23:00 AM	B92511
Toluene	10	0.18		mg/Kg	5	11/11/2022 11:23:00 AM	B92511
Ethylbenzene	1.2	0.18		mg/Kg	5	11/11/2022 11:23:00 AM	B92511
Xylenes, Total	12	0.35		mg/Kg	5	11/11/2022 11:23:00 AM	B92511
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	5	11/11/2022 11:23:00 AM	B92511

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.		

Page 3 of 9

Analytical Report

Lab Order 2211694

Date Reported: 11/16/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-12

Project: Newsome 20

Collection Date: 11/10/2022 1:15:00 PM

Lab ID: 2211694-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	11/11/2022 10:26:15 AM	71440
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	21	14		mg/Kg	1	11/11/2022 10:34:03 AM	71436
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/11/2022 10:34:03 AM	71436
Surr: DNOP	108	21-129		%Rec	1	11/11/2022 10:34:03 AM	71436
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	80	18		mg/Kg	5	11/11/2022 12:10:42 PM	G92511
Surr: BFB	191	37.7-212		%Rec	5	11/11/2022 12:10:42 PM	G92511
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.090		mg/Kg	5	11/11/2022 12:10:00 PM	B92511
Toluene	0.87	0.18		mg/Kg	5	11/11/2022 12:10:00 PM	B92511
Ethylbenzene	0.44	0.18		mg/Kg	5	11/11/2022 12:10:00 PM	B92511
Xylenes, Total	4.9	0.36		mg/Kg	5	11/11/2022 12:10:00 PM	B92511
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	5	11/11/2022 12:10:00 PM	B92511

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.		

Page 4 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2211694
16-Nov-22

Client: ENSOLUM
Project: Newsome 20

Sample ID: MB-71440	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 71440	RunNo: 92527
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3328156 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-71440	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 71440	RunNo: 92527
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3328157 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 96.1 90 110

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical 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#: 2211694

16-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: 2211694-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-9	Batch ID: 71436	RunNo: 92519								
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3325794 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	49.65	0	94.0	36.1	154			
Surr: DNOP	5.9		4.965		118	21	129			

Sample ID: 2211694-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-9	Batch ID: 71436	RunNo: 92519								
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3325795 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	49.90	0	93.1	36.1	154	0.462	33.9	
Surr: DNOP	6.0		4.990		119	21	129	0	0	

Sample ID: LCS-71436	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 71436	RunNo: 92519								
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3325800 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	50.00	0	89.9	64.4	127			
Surr: DNOP	5.6		5.000		112	21	129			

Sample ID: MB-71436	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 71436	RunNo: 92519								
Prep Date: 11/11/2022	Analysis Date: 11/11/2022	SeqNo: 3325802 Units: mg/Kg								
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	11		10.00		106	21	129			

Sample ID: LCS-71413	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 71413	RunNo: 92519								
Prep Date: 11/10/2022	Analysis Date: 11/11/2022	SeqNo: 3327399 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.1		5.000		121	21	129			

Sample ID: MB-71413	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 71413	RunNo: 92519								
Prep Date: 11/10/2022	Analysis Date: 11/11/2022	SeqNo: 3327400 Units: %Rec								
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#: 2211694

16-Nov-22

Client: ENSOLUM

Project: Newsome 20

Sample ID: MB-71413	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 71413	RunNo: 92519								
Prep Date: 11/10/2022	Analysis Date: 11/11/2022	SeqNo: 3327400		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		117	21	129			

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#: 2211694

16-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: mb	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: G92511				RunNo: 92511					
Prep Date:	Analysis Date: 11/11/2022				SeqNo: 3326853		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		91.1	37.7	212			

Sample ID: 2.5ug gro lcs	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: G92511				RunNo: 92511					
Prep Date:	Analysis Date: 11/11/2022				SeqNo: 3326854		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.4	72.3	137			
Surr: BFB	1900		1000		190	37.7	212			

Sample ID: 2211694-001ams	SampType: MS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: S-9	Batch ID: G92511				RunNo: 92511					
Prep Date:	Analysis Date: 11/11/2022				SeqNo: 3327201		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	3.9	19.75	0	98.8	70	130			
Surr: BFB	1500		789.9		189	37.7	212			

Sample ID: 2211694-001amsd	SampType: MSD				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: S-9	Batch ID: G92511				RunNo: 92511					
Prep Date:	Analysis Date: 11/11/2022				SeqNo: 3327205		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	3.9	19.75	0	99.0	70	130	0.243	20	
Surr: BFB	1500		789.9		192	37.7	212	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

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

WO#: 2211694

16-Nov-22

Client: ENSOLUM**Project:** Newsome 20

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: B92511		RunNo: 92511							
Prep Date:	Analysis Date: 11/11/2022		SeqNo: 3326825		Units: mg/Kg					
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	0.95		1.000		94.6	70	130			

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: B92511		RunNo: 92511							
Prep Date:	Analysis Date: 11/11/2022		SeqNo: 3326826		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.6	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		97.1	70	130			

Sample ID: 2211694-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-10	Batch ID: B92511		RunNo: 92511							
Prep Date:	Analysis Date: 11/11/2022		SeqNo: 3327212		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.75	0.020	0.7962	0.01194	92.3	68.8	120			
Toluene	0.77	0.040	0.7962	0.01704	94.6	73.6	124			
Ethylbenzene	0.76	0.040	0.7962	0.01115	94.7	72.7	129			
Xylenes, Total	2.4	0.080	2.389	0.06704	96.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.78		0.7962		97.9	70	130			

Sample ID: 2211694-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: S-10	Batch ID: B92511		RunNo: 92511							
Prep Date:	Analysis Date: 11/11/2022		SeqNo: 3327216		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.020	0.7962	0.01194	90.5	68.8	120	1.94	20	
Toluene	0.75	0.040	0.7962	0.01704	92.6	73.6	124	2.06	20	
Ethylbenzene	0.75	0.040	0.7962	0.01115	92.6	72.7	129	2.15	20	
Xylenes, Total	2.3	0.080	2.389	0.06704	93.4	75.7	126	2.82	20	
Surr: 4-Bromofluorobenzene	0.76		0.7962		95.5	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

Page 9 of 9

Sample Log-In Check List

Client Name: ENSOLUM

Work Order Number: 2211694

RcptNo: 1

Received By: **Juan Rojas**

11/11/2022 6:35:00 AM

Completed By: **Juan Rojas**

11/11/2022 6:54:51 AM

Reviewed By: *[Signature]* 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 <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°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?
(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?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: (<2)

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	0.1	Good				



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

December 28, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX

RE: Newsom 20

OrderNo.: 2212D41

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 18 sample(s) on 12/23/2022 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 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

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-11a

Project: Newsom 20

Collection Date: 12/22/2022 11:00:00 AM

Lab ID: 2212D41-001

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 11:05:21 AM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:13:27 AM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 11:13:27 AM	72301
Surr: DNOP	118	21-129		%Rec	1	12/23/2022 11:13:27 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/23/2022 11:43:40 AM	R93539
Surr: BFB	86.4	37.7-212		%Rec	1	12/23/2022 11:43:40 AM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/23/2022 11:43:40 AM	R93539
Toluene	ND	0.034		mg/Kg	1	12/23/2022 11:43:40 AM	R93539
Ethylbenzene	ND	0.034		mg/Kg	1	12/23/2022 11:43:40 AM	R93539
Xylenes, Total	ND	0.067		mg/Kg	1	12/23/2022 11:43:40 AM	R93539
Surr: 4-Bromofluorobenzene	88.3	70-130		%Rec	1	12/23/2022 11:43:40 AM	R93539

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.		

Page 1 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-12a

Project: Newsom 20

Collection Date: 12/22/2022 11:05:00 AM

Lab ID: 2212D41-002

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	61		mg/Kg	20	12/23/2022 11:17:42 AM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/23/2022 11:24:04 AM	72301
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/23/2022 11:24:04 AM	72301
Surr: DNOP	131	21-129	S	%Rec	1	12/23/2022 11:24:04 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	12/23/2022 12:07:02 PM	R93539
Surr: BFB	87.9	37.7-212		%Rec	1	12/23/2022 12:07:02 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	12/23/2022 12:07:02 PM	R93539
Toluene	ND	0.035		mg/Kg	1	12/23/2022 12:07:02 PM	R93539
Ethylbenzene	ND	0.035		mg/Kg	1	12/23/2022 12:07:02 PM	R93539
Xylenes, Total	ND	0.071		mg/Kg	1	12/23/2022 12:07:02 PM	R93539
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	12/23/2022 12:07:02 PM	R93539

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.		

Page 2 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-13

Project: Newsom 20

Collection Date: 12/22/2022 11:10:00 AM

Lab ID: 2212D41-003

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 11:30:03 AM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/23/2022 11:34:37 AM	72301
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/23/2022 11:34:37 AM	72301
Surr: DNOP	114	21-129		%Rec	1	12/23/2022 11:34:37 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/23/2022 12:30:37 PM	R93539
Surr: BFB	86.8	37.7-212		%Rec	1	12/23/2022 12:30:37 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/23/2022 12:30:37 PM	R93539
Toluene	ND	0.034		mg/Kg	1	12/23/2022 12:30:37 PM	R93539
Ethylbenzene	ND	0.034		mg/Kg	1	12/23/2022 12:30:37 PM	R93539
Xylenes, Total	ND	0.068		mg/Kg	1	12/23/2022 12:30:37 PM	R93539
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	12/23/2022 12:30:37 PM	R93539

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.		

Page 3 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-14

Project: Newsom 20

Collection Date: 12/22/2022 11:15:00 AM

Lab ID: 2212D41-004

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 11:42:24 AM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:45:13 AM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 11:45:13 AM	72301
Surr: DNOP	118	21-129		%Rec	1	12/23/2022 11:45:13 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/23/2022 12:54:05 PM	R93539
Surr: BFB	86.3	37.7-212		%Rec	1	12/23/2022 12:54:05 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	12/23/2022 12:54:05 PM	R93539
Toluene	ND	0.036		mg/Kg	1	12/23/2022 12:54:05 PM	R93539
Ethylbenzene	ND	0.036		mg/Kg	1	12/23/2022 12:54:05 PM	R93539
Xylenes, Total	ND	0.073		mg/Kg	1	12/23/2022 12:54:05 PM	R93539
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/23/2022 12:54:05 PM	R93539

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.		

Page 4 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-15

Project: Newsom 20

Collection Date: 12/22/2022 11:20:00 AM

Lab ID: 2212D41-005

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 11:54:45 AM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:55:48 AM	72301
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/23/2022 11:55:48 AM	72301
Surr: DNOP	115	21-129		%Rec	1	12/23/2022 11:55:48 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/23/2022 1:17:40 PM	R93539
Surr: BFB	88.0	37.7-212		%Rec	1	12/23/2022 1:17:40 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/23/2022 1:17:40 PM	R93539
Toluene	ND	0.033		mg/Kg	1	12/23/2022 1:17:40 PM	R93539
Ethylbenzene	ND	0.033		mg/Kg	1	12/23/2022 1:17:40 PM	R93539
Xylenes, Total	ND	0.067		mg/Kg	1	12/23/2022 1:17:40 PM	R93539
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	12/23/2022 1:17:40 PM	R93539

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.		

Page 5 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-16

Project: Newsom 20

Collection Date: 12/22/2022 11:25:00 AM

Lab ID: 2212D41-006

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:07:05 PM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 12:06:25 PM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 12:06:25 PM	72301
Surr: DNOP	114	21-129		%Rec	1	12/23/2022 12:06:25 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/23/2022 1:41:08 PM	R93539
Surr: BFB	86.9	37.7-212		%Rec	1	12/23/2022 1:41:08 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.016		mg/Kg	1	12/23/2022 1:41:08 PM	R93539
Toluene	ND	0.033		mg/Kg	1	12/23/2022 1:41:08 PM	R93539
Ethylbenzene	ND	0.033		mg/Kg	1	12/23/2022 1:41:08 PM	R93539
Xylenes, Total	ND	0.066		mg/Kg	1	12/23/2022 1:41:08 PM	R93539
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	12/23/2022 1:41:08 PM	R93539

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.		

Page 6 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-17

Project: Newsom 20

Collection Date: 12/22/2022 11:30:00 AM

Lab ID: 2212D41-007

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:19:26 PM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 12:17:04 PM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 12:17:04 PM	72301
Surr: DNOP	114	21-129		%Rec	1	12/23/2022 12:17:04 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	12/23/2022 2:04:43 PM	R93539
Surr: BFB	85.9	37.7-212		%Rec	1	12/23/2022 2:04:43 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	12/23/2022 2:04:43 PM	R93539
Toluene	ND	0.035		mg/Kg	1	12/23/2022 2:04:43 PM	R93539
Ethylbenzene	ND	0.035		mg/Kg	1	12/23/2022 2:04:43 PM	R93539
Xylenes, Total	ND	0.071		mg/Kg	1	12/23/2022 2:04:43 PM	R93539
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	12/23/2022 2:04:43 PM	R93539

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.		

Page 7 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-18

Project: Newsom 20

Collection Date: 12/22/2022 11:35:00 AM

Lab ID: 2212D41-008

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:31:47 PM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: mb
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 12:27:43 PM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 12:27:43 PM	72301
Surr: DNOP	114	21-129		%Rec	1	12/23/2022 12:27:43 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	12/23/2022 2:28:16 PM	R93539
Surr: BFB	86.4	37.7-212		%Rec	1	12/23/2022 2:28:16 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	12/23/2022 2:28:16 PM	R93539
Toluene	ND	0.037		mg/Kg	1	12/23/2022 2:28:16 PM	R93539
Ethylbenzene	ND	0.037		mg/Kg	1	12/23/2022 2:28:16 PM	R93539
Xylenes, Total	ND	0.073		mg/Kg	1	12/23/2022 2:28:16 PM	R93539
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	12/23/2022 2:28:16 PM	R93539

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.		

Page 8 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-19

Project: Newsom 20

Collection Date: 12/22/2022 11:40:00 AM

Lab ID: 2212D41-009

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 1:08:50 PM	72303
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 10:57:56 AM	72301
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2022 10:57:56 AM	72301
Surr: DNOP	105	21-129		%Rec	1	12/23/2022 10:57:56 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	12/23/2022 2:51:48 PM	R93539
Surr: BFB	88.1	37.7-212		%Rec	1	12/23/2022 2:51:48 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/23/2022 2:51:48 PM	R93539
Toluene	ND	0.034		mg/Kg	1	12/23/2022 2:51:48 PM	R93539
Ethylbenzene	ND	0.034		mg/Kg	1	12/23/2022 2:51:48 PM	R93539
Xylenes, Total	ND	0.067		mg/Kg	1	12/23/2022 2:51:48 PM	R93539
Surr: 4-Bromofluorobenzene	87.1	70-130		%Rec	1	12/23/2022 2:51:48 PM	R93539

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.		

Page 9 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-20

Project: Newsom 20

Collection Date: 12/22/2022 11:45:00 AM

Lab ID: 2212D41-010

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	59		mg/Kg	20	12/23/2022 11:30:32 AM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:12:11 AM	72301
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/23/2022 11:12:11 AM	72301
Surr: DNOP	103	21-129		%Rec	1	12/23/2022 11:12:11 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	12/23/2022 3:15:23 PM	R93539
Surr: BFB	88.6	37.7-212		%Rec	1	12/23/2022 3:15:23 PM	R93539
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.017		mg/Kg	1	12/23/2022 3:15:23 PM	R93539
Toluene	ND	0.033		mg/Kg	1	12/23/2022 3:15:23 PM	R93539
Ethylbenzene	ND	0.033		mg/Kg	1	12/23/2022 3:15:23 PM	R93539
Xylenes, Total	ND	0.066		mg/Kg	1	12/23/2022 3:15:23 PM	R93539
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	12/23/2022 3:15:23 PM	R93539

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.		

Page 10 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-21

Project: Newsom 20

Collection Date: 12/22/2022 11:50:00 AM

Lab ID: 2212D41-011

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	59		mg/Kg	20	12/23/2022 11:42:57 AM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:26:06 AM	72301
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/23/2022 11:26:06 AM	72301
Surr: DNOP	104	21-129		%Rec	1	12/23/2022 11:26:06 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 3:12:00 PM	R93529
Surr: BFB	105	37.7-212		%Rec	1	12/23/2022 3:12:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 3:12:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 3:12:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 3:12:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 3:12:00 PM	R93529
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	12/23/2022 3:12:00 PM	R93529

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.		

Page 11 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-22

Project: Newsom 20

Collection Date: 12/22/2022 11:55:00 AM

Lab ID: 2212D41-012

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 11:55:22 AM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:39:56 AM	72301
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2022 11:39:56 AM	72301
Surr: DNOP	104	21-129		%Rec	1	12/23/2022 11:39:56 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 2:52:00 PM	R93529
Surr: BFB	99.4	37.7-212		%Rec	1	12/23/2022 2:52:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 2:52:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 2:52:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 2:52:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 2:52:00 PM	R93529
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	12/23/2022 2:52:00 PM	R93529

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.		

Page 12 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-23

Project: Newsom 20

Collection Date: 12/22/2022 12:00:00 PM

Lab ID: 2212D41-013

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:07:47 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 11:54:19 AM	72301
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/23/2022 11:54:19 AM	72301
Surr: DNOP	107	21-129		%Rec	1	12/23/2022 11:54:19 AM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 2:33:00 PM	R93529
Surr: BFB	99.8	37.7-212		%Rec	1	12/23/2022 2:33:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 2:33:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 2:33:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 2:33:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 2:33:00 PM	R93529
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	12/23/2022 2:33:00 PM	R93529

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.		

Page 13 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-24

Project: Newsom 20

Collection Date: 12/22/2022 12:05:00 PM

Lab ID: 2212D41-014

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:20:11 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 12:08:36 PM	72301
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/23/2022 12:08:36 PM	72301
Surr: DNOP	105	21-129		%Rec	1	12/23/2022 12:08:36 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 2:13:00 PM	R93529
Surr: BFB	99.6	37.7-212		%Rec	1	12/23/2022 2:13:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 2:13:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 2:13:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 2:13:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 2:13:00 PM	R93529
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	12/23/2022 2:13:00 PM	R93529

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.		

Page 14 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-25

Project: Newsom 20

Collection Date: 12/22/2022 12:10:00 PM

Lab ID: 2212D41-015

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:32:35 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/23/2022 12:22:27 PM	72301
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/23/2022 12:22:27 PM	72301
Surr: DNOP	108	21-129		%Rec	1	12/23/2022 12:22:27 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 1:53:00 PM	R93529
Surr: BFB	106	37.7-212		%Rec	1	12/23/2022 1:53:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 1:53:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 1:53:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 1:53:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 1:53:00 PM	R93529
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	12/23/2022 1:53:00 PM	R93529

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.		

Page 15 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-26

Project: Newsom 20

Collection Date: 12/22/2022 12:15:00 PM

Lab ID: 2212D41-016

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:44:59 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/23/2022 12:36:39 PM	72301
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/23/2022 12:36:39 PM	72301
Surr: DNOP	107	21-129		%Rec	1	12/23/2022 12:36:39 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 1:34:00 PM	R93529
Surr: BFB	100	37.7-212		%Rec	1	12/23/2022 1:34:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 1:34:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 1:34:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 1:34:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 1:34:00 PM	R93529
Surr: 4-Bromofluorobenzene	115	70-130		%Rec	1	12/23/2022 1:34:00 PM	R93529

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.		

Page 16 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-27

Project: Newsom 20

Collection Date: 12/22/2022 12:20:00 PM

Lab ID: 2212D41-017

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 12:57:23 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/23/2022 12:50:20 PM	72301
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/23/2022 12:50:20 PM	72301
Surr: DNOP	106	21-129		%Rec	1	12/23/2022 12:50:20 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 1:14:00 PM	R93529
Surr: BFB	107	37.7-212		%Rec	1	12/23/2022 1:14:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 1:14:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 1:14:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 1:14:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 1:14:00 PM	R93529
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	12/23/2022 1:14:00 PM	R93529

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.		

Page 17 of 24

Analytical Report

Lab Order 2212D41

Date Reported: 12/28/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-28

Project: Newsom 20

Collection Date: 12/22/2022 12:25:00 PM

Lab ID: 2212D41-018

Matrix: MEOH (SOIL)

Received Date: 12/23/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	12/23/2022 1:34:36 PM	72304
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/23/2022 1:04:04 PM	72301
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/23/2022 1:04:04 PM	72301
Surr: DNOP	106	21-129		%Rec	1	12/23/2022 1:04:04 PM	72301
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/23/2022 12:54:00 PM	R93529
Surr: BFB	110	37.7-212		%Rec	1	12/23/2022 12:54:00 PM	R93529
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	12/23/2022 12:54:00 PM	R93529
Toluene	ND	0.050		mg/Kg	1	12/23/2022 12:54:00 PM	R93529
Ethylbenzene	ND	0.050		mg/Kg	1	12/23/2022 12:54:00 PM	R93529
Xylenes, Total	ND	0.10		mg/Kg	1	12/23/2022 12:54:00 PM	R93529
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	12/23/2022 12:54:00 PM	R93529

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.		

Page 18 of 24

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

WO#: 2212D41

28-Dec-22

Client: ENSOLUM**Project:** Newsom 20

Sample ID: MB-72303	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 72303	RunNo: 93531								
Prep Date: 12/23/2022	Analysis Date: 12/23/2022	SeqNo: 3374702 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-72303	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 72303	RunNo: 93531								
Prep Date: 12/23/2022	Analysis Date: 12/23/2022	SeqNo: 3374703 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

Sample ID: MB-72304	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 72304	RunNo: 93532								
Prep Date: 12/23/2022	Analysis Date: 12/23/2022	SeqNo: 3374832 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-72304	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 72304	RunNo: 93532								
Prep Date: 12/23/2022	Analysis Date: 12/23/2022	SeqNo: 3374833 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical 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 19 of 24

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

WO#: 2212D41

28-Dec-22

Client: ENSOLUM**Project:** Newsom 20

Sample ID: LCS-72301	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 72301			RunNo: 93526						
Prep Date: 12/23/2022	Analysis Date: 12/23/2022			SeqNo: 3373985		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	15	50.00	0	80.6	64.4	127			
Surr: DNOP	5.9		5.000		117	21	129			

Sample ID: MB-72301	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 72301			RunNo: 93526						
Prep Date: 12/23/2022	Analysis Date: 12/23/2022			SeqNo: 3373987		Units: mg/Kg				
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	11		10.00		114	21	129			

Sample ID: 2212D41-001AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-11a	Batch ID: 72301			RunNo: 93526						
Prep Date: 12/23/2022	Analysis Date: 12/23/2022			SeqNo: 3374812		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	16	53.30	0	78.0	36.1	154			
Surr: DNOP	6.4		5.330		119	21	129			

Sample ID: 2212D41-001AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: S-11a	Batch ID: 72301			RunNo: 93526						
Prep Date: 12/23/2022	Analysis Date: 12/23/2022			SeqNo: 3374813		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	15	49.55	0	81.6	36.1	154	2.70	33.9	
Surr: DNOP	5.9		4.955		120	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 20 of 24

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

WO#: 2212D41

28-Dec-22

Client: ENSOLUM**Project:** Newsom 20

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: R93529			RunNo: 93529						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374070		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.3	137			
Surr: BFB	2200		1000		221	37.7	212			S

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: R93529			RunNo: 93529						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374071		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	37.7	212			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: R93539			RunNo: 93539						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374535		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	860		1000		86.2	37.7	212			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: R93539			RunNo: 93539						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374536		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	72.3	137			
Surr: BFB	1800		1000		181	37.7	212			

Sample ID: 2212d41-001ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-11a	Batch ID: R93539			RunNo: 93539						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374682		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.4	16.80	0	102	70	130			
Surr: BFB	1300		672.0		187	37.7	212			

Sample ID: 2212d41-001amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-11a	Batch ID: R93539			RunNo: 93539						
Prep Date:	Analysis Date: 12/23/2022			SeqNo: 3374683		Units: mg/Kg				
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

Page 21 of 24

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2212D41

28-Dec-22

Client: ENSOLUM

Project: Newsom 20

Sample ID: 2212d41-001amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: S-11a		Batch ID: R93539		RunNo: 93539						
Prep Date:		Analysis Date: 12/23/2022		SeqNo: 3374683		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.4	16.80	0	101	70	130	0.868	20	
Surr: BFB	1200		672.0		184	37.7	212	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 22 of 24

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

WO#: 2212D41

28-Dec-22

Client: ENSOLUM**Project:** Newsom 20

Sample ID: 100ng btex lcs		SampType: LCS				TestCode: EPA Method 8021B: Volatiles				
Client ID: LCSS		Batch ID: R93529				RunNo: 93529				
Prep Date:		Analysis Date: 12/23/2022				SeqNo: 3374073		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	80	120			
Toluene	1.1	0.050	1.000	0	113	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	70	130			

Sample ID: mb		SampType: MBLK				TestCode: EPA Method 8021B: Volatiles				
Client ID: PBS		Batch ID: R93529				RunNo: 93529				
Prep Date:		Analysis Date: 12/23/2022				SeqNo: 3374074		Units: mg/Kg		
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		116	70	130			

Sample ID: mb		SampType: MBLK				TestCode: EPA Method 8021B: Volatiles				
Client ID: PBS		Batch ID: R93539				RunNo: 93539				
Prep Date:		Analysis Date: 12/23/2022				SeqNo: 3374633		Units: mg/Kg		
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	0.88		1.000		87.5	70	130			

Sample ID: 100ng btex lcs		SampType: LCS				TestCode: EPA Method 8021B: Volatiles				
Client ID: LCSS		Batch ID: R93539				RunNo: 93539				
Prep Date:		Analysis Date: 12/23/2022				SeqNo: 3374634		Units: mg/Kg		
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	93.5	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.5	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.3	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#: 2212D41

28-Dec-22

Client: ENSOLUM**Project:** Newsom 20

Sample ID: 2212d41-002ams	SampType: MS				TestCode: EPA Method 8021B: Volatiles					
Client ID: S-12a	Batch ID: R93539				RunNo: 93539					
Prep Date:	Analysis Date: 12/23/2022				SeqNo: 3374656		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.63	0.071	0.7082	0	89.5	61.5	113			
Benzene	0.62	0.018	0.7082	0	88.2	68.8	120			
Toluene	0.65	0.035	0.7082	0	91.3	73.6	124			
Ethylbenzene	0.65	0.035	0.7082	0	91.5	72.7	129			
Xylenes, Total	1.9	0.071	2.125	0	91.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.63		0.7082		88.6	70	130			

Sample ID: 2212d41-002amsd	SampType: MSD				TestCode: EPA Method 8021B: Volatiles					
Client ID: S-12a	Batch ID: R93539				RunNo: 93539					
Prep Date:	Analysis Date: 12/23/2022				SeqNo: 3374657		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.018	0.7082	0	84.5	68.8	120	4.30	20	
Toluene	0.62	0.035	0.7082	0	87.8	73.6	124	3.87	20	
Ethylbenzene	0.63	0.035	0.7082	0	88.4	72.7	129	3.45	20	
Xylenes, Total	1.9	0.071	2.125	0	88.7	75.7	126	3.25	20	
Surr: 4-Bromofluorobenzene	0.64		0.7082		90.2	70	130	0	0	

Sample ID: 2212D41-018ams	SampType: MS				TestCode: EPA Method 8021B: Volatiles					
Client ID: S-28	Batch ID: R93529				RunNo: 93529					
Prep Date:	Analysis Date: 12/23/2022				SeqNo: 3374694		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	113	68.8	120			
Toluene	1.1	0.050	1.000	0	115	73.6	124			
Ethylbenzene	1.1	0.050	1.000	0	115	72.7	129			
Xylenes, Total	3.5	0.10	3.000	0	116	75.7	126			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	70	130			

Sample ID: 2212D41-018amsd	SampType: MSD				TestCode: EPA Method 8021B: Volatiles					
Client ID: S-28	Batch ID: R93529				RunNo: 93529					
Prep Date:	Analysis Date: 12/23/2022				SeqNo: 3374695		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	107	68.8	120	5.60	20	
Toluene	1.1	0.050	1.000	0	109	73.6	124	5.31	20	
Ethylbenzene	1.1	0.050	1.000	0	109	72.7	129	5.32	20	
Xylenes, Total	3.3	0.10	3.000	0	109	75.7	126	5.64	20	
Surr: 4-Bromofluorobenzene	1.1		1.000		110	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



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: **2212D41**

RcptNo: **1**

Received By: **Cheyenne Cason** 12/23/2022 8:00:00 AM

Completed By: **Cheyenne Cason** 12/23/2022 8:18:04 AM

Reviewed By: **TMC** 12/23/22

Chad

Chad

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *KAC 12-23-22*

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	0.6	Good	Yes			

Chain-of-Custody Record

Client: Engelwood

Mailing Address:

Phone #:
email or Fax#:QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other☐ EDD (Type)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
12/22	1200	S	S-23	100% Jar	Cool	2212041
12/22	1205	S	S-24		Cool	013
12/22	1210	S	S-25		Cool	014
12/22	1215	S	S-26		Cool	015
12/22	1220	S	S-27		Cool	016
12/22	1225	S	S-28		Cool	017
						018

Date:	Time:	Relinquished by:
12/22/22	1514	<i>[Signature]</i>
Date:	Time:	Relinquished by:
12/22/22	1810	<i>[Signature]</i>

Turn-Around Time: 100%

☐ Standard ☒ Rush 12-23-22

Project Name: Newsome #20

Project #: _____

Project Manager: K Summers

Sampler: C. D. Hentz

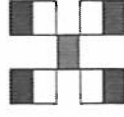
On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (Including CF): 0.6 - 0.6 - 0.6 (°C)

Received by: [Signature] Date: 12/22/22 Time: 1510

Received by: [Signature] Date: 12/23/22 Time: 0800



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 ₂ , NO ₃ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks:

2 of 2

Same Day

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 215173

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 215173
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/15/2023