

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) nAPP2213148781
Contact mailing address: 614 Reilly Ave, Farmington, NM 87401	

Location of Release Source

Latitude **36.805079** Longitude **-107.994599** (NAD 83 in decimal degrees to 5 decimal places)

Site Name Aztec Gas Com 4#2	Site Type Natural Gas Gathering Pipeline
Date Release Discovered: 05/11/2022	Serial Number (if applicable): N/A

Unit Letter	Section	Township	Range	County
O	21	30N	11W	San Juan

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Duane Meador)

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): 5-10 BBLS	Volume Recovered (bbls): None
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): 9.3 MCF	Volume Recovered (Mcf): None
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: : On May 6, 2022, ~~2024~~, Enterprise had a release of natural gas and natural gas liquids from the Aztec Gas Com #2 pipeline. The pipeline was isolated, depressurized, locked and tagged out. No washes were affected. No residences were affected. No emergency service responded. On November 11, 2021, Enterprise determined the release reportable due the volume of impacted subsurface soil. The final excavation dimensions measured approximately 15 feet long by 13 feet wide by 8 feet deep. A total of 61 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

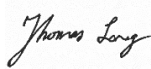
The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled 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

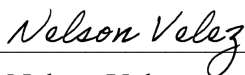
Signature:  Date: 07-13-2022

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: 07/27/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv



CLOSURE REPORT

Property:

**Aztec Gas Com 4#2 (05/11/22)
Unit Letter O, S16 T30N R11W
San Juan County, New Mexico**

NM EMNRD OCD Incident ID No. NAPP2213148781

July 5, 2022
Ensolum Project No. 05A1226192

Prepared for:

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

Prepared by:

A handwritten signature in blue ink, reading "Ranee Deechilly".

Ranee Deechilly
Project Manager

A handwritten signature in blue ink, reading "Kyle Summers".

Kyle Summers
Senior Managing Geologist

Closure Report
Enterprise Field Services, LLC
Aztec Com 4#2 (05/11/22)
July 5, 2022



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Closure Report
Enterprise Field Services, LLC
Aztec Com 4#2 (05/11/22)
July 5, 2022



1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Aztec Com 4#2 (05/11/22) (Site)
NM EMNRD OCD Incident ID No.	NAPP2213148781
Location:	36.8051079° North, 107.994599° West Unit Letter O, Section 16, Township 30 North, Range 11 West San Juan County, New Mexico
Property:	Private
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On May 6, 2022, Enterprise personnel discovered of a release of natural gas from the Aztec Com 4#2 pipeline. Enterprise verified a leak and subsequently isolated and locked the pipeline out of service. Additionally, Enterprise initiated activities to repair the pipeline and remediate petroleum hydrocarbon impact. On May 11, 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 NM EMNRD OCD. To address activities related to oil and gas releases, the NM EMNRD OCD references NM Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. 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). Numerous PODs were identified in the same Public Land Survey System (PLSS) section as the Site and in adjacent sections. The average depth to water for the PODs located in this PLSS section and in adjacent PLSS sections is approximately 27 feet below grade surface (bgs). The closest PODs (SJ-02923, SJ-03257, SJ-03265,

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and SJ-03310) are located within the Animas River valley and approximately 0.77 miles from the Site. The average depth to water for these four PODS is 42.5 feet bgs (**Figure A, Appendix B**).

- Numerous cathodic protection wells (CPWs) were identified in the same PLSS section and in the adjacent PLSS sections in the NM EMNRD OCD imaging database. Six CPWs are located within one mile of the Site and are depicted on **Figure B (Appendix B)**. The records for the cathodic protection well located near the Fifield #4 well location indicate a depth to water of approximately 100 feet bgs. This cathodic protection well is located approximately 0.5 miles southwest of the Site and is approximately 13 feet higher in elevation than the Site. The records for the cathodic protection well located near the Fuller #1 and #3 well locations indicate a depth to water of approximately 80 feet bgs. This cathodic protection well is located approximately 0.67 miles southeast of the Site and is approximately 48 feet higher in elevation than the Site. The records for the cathodic protection well located near the Gonzales State Com #1 well location indicate a depth to water of approximately 120 feet bgs. This cathodic protection well is located approximately 0.72 miles north of the Site and is approximately 41 feet lower in elevation than the Site. The records for the cathodic protection well located near the Morris A#6 well location indicate a depth to water of approximately 140 feet bgs. This cathodic protection well is located approximately 0.79 miles southwest of the Site and is approximately 50 feet higher in elevation than the Site. The records for the cathodic protection well located near the Taylor #1R, Com #2 well locations indicate a depth to water of approximately 65 feet bgs. This cathodic protection well is located approximately 0.79 miles west of the Site and is approximately 61 feet lower in elevation than the Site. The records for the cathodic protection well located near the Elliott Fed #1-22 and Morris A#10 well locations indicate a depth to water of approximately 125 feet bgs. This cathodic protection well is located approximately 0.96 miles southeast of the Site and is approximately 81 feet higher in elevation than the Site.
- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 635 feet southeast of Williams Arroyo (**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 fresh water 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 fresh water wells or springs were identified within 1,000 feet of the Site. The residences located within the 1,000 feet may have unregistered water wells (**Figure E, Appendix B**).
- The Site is 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.

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Enterprise Field Services, LLC
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July 5, 2022



- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is 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 kilograms (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 May 6, 2022, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Kelley Oilfield Services, Inc., (Kelley), provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The final excavation measured approximately 15 feet long and 13 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 8 feet bgs. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand, weathered sandstone, and shale.

Approximately 61 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, was compacted, 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 photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of five composite soil samples (S-1 through S-5) 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. Hand tools and a backhoe, operated by Kelley, were utilized to obtain fresh aliquots from each area of the excavation. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event

On May 12, 2022, the first 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

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sample S-1 (7.5'-8') was collected from the floor of the excavation. Composite soil samples S-2 (0'-8'), S-3 (0'-7.5'), S-4 (0'-8'), and S-5 (0'-8') 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 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-5) to the Tier I NM EMNRD OCD closure criteria. The laboratory analytical results are summarized in **Table 1 (Appendix F)**.

- The laboratory analytical results for composite soil samples S-3 and S-4 indicate benzene concentrations of 0.024 mg/kg and 0.021 mg/kg, respectively, which are less than the NM EMNRD OCD closure criteria of 10 mg/kg. The laboratory analytical results for composite soil samples S-1, S-2, and S-5 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-3, S-4, and S-5 indicate total BTEX concentrations of 0.82 mg/kg, 0.50 mg/kg, and 0.57 mg/kg, respectively, which are less than the NM EMNRD OCD closure criteria of ~~50~~ 50 mg/kg. The laboratory analytical results for composite soil samples S-1 and S-2 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 composite soil samples S-2 through S-5 indicate combined TPH GRO/DRO/MRO concentrations ranging from 10 mg/kg (S-2) to 15 mg/kg (S-3), which are less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg. The laboratory analytical results for composite soil sample S-1 indicate combined TPH GRO/DRO/MRO is not present at a concentration greater than the laboratory PQLs/RLs, which is less than the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for all composite soil samples 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.

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July 5, 2022



7.0 RECLAMATION AND REVEGETATION

The excavation was backfilled with clean 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

- Five composite soil samples were collected from the Site. Based on laboratory analytical results, benzene, total BTEX, combined TPH GRO/DRO/MRO, and chloride concentrations are below the New Mexico EMNRD OCD closure criteria.
- Approximately 61 yd³ of petroleum hydrocarbon affected soils was transported to the Envirotech landfarm for disposal/remediation. The excavation was backfilled with clean 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.

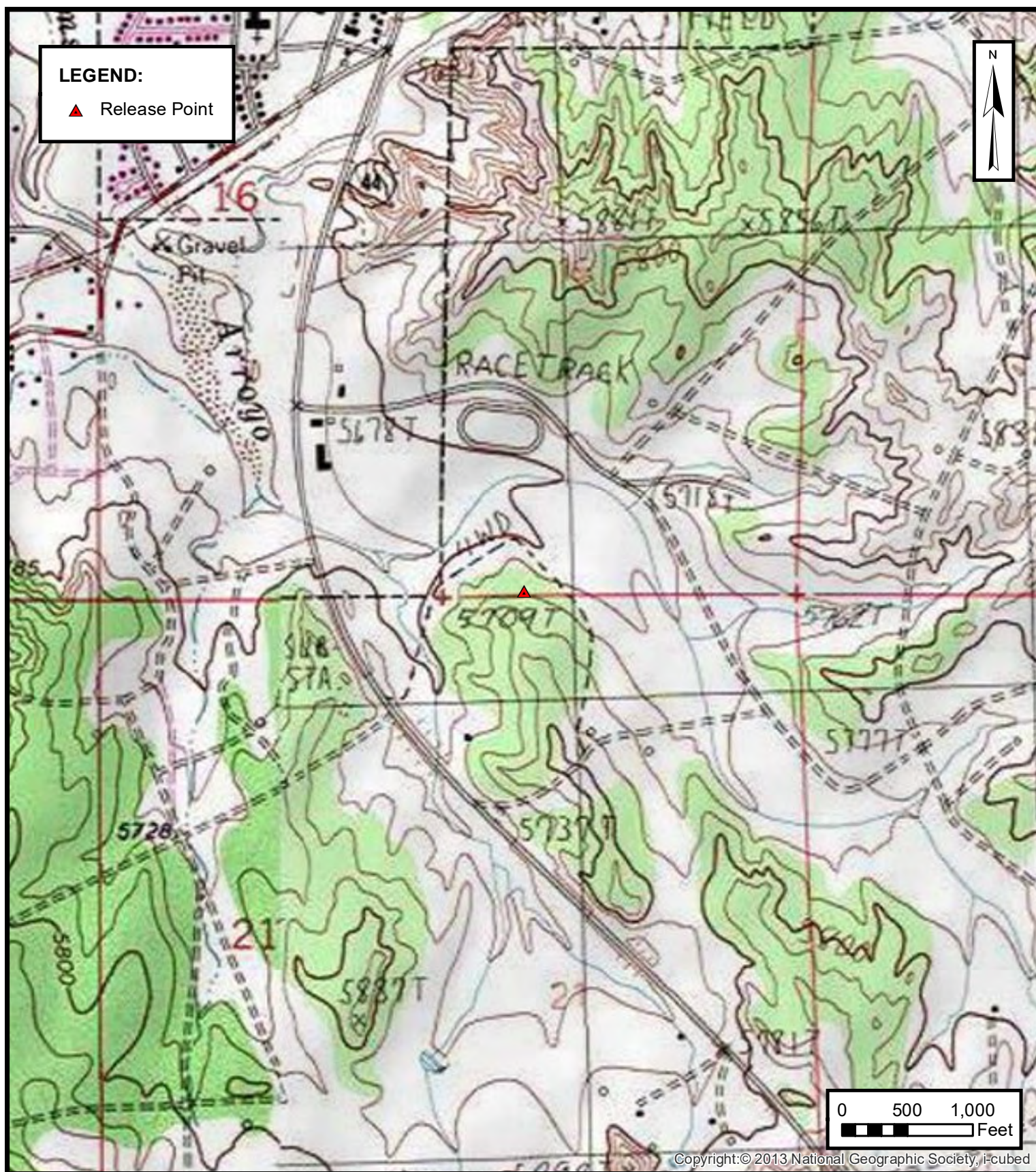
9.3 Reliance

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



 **ENSOLUM**
Environmental & Hydrogeologic Consultants

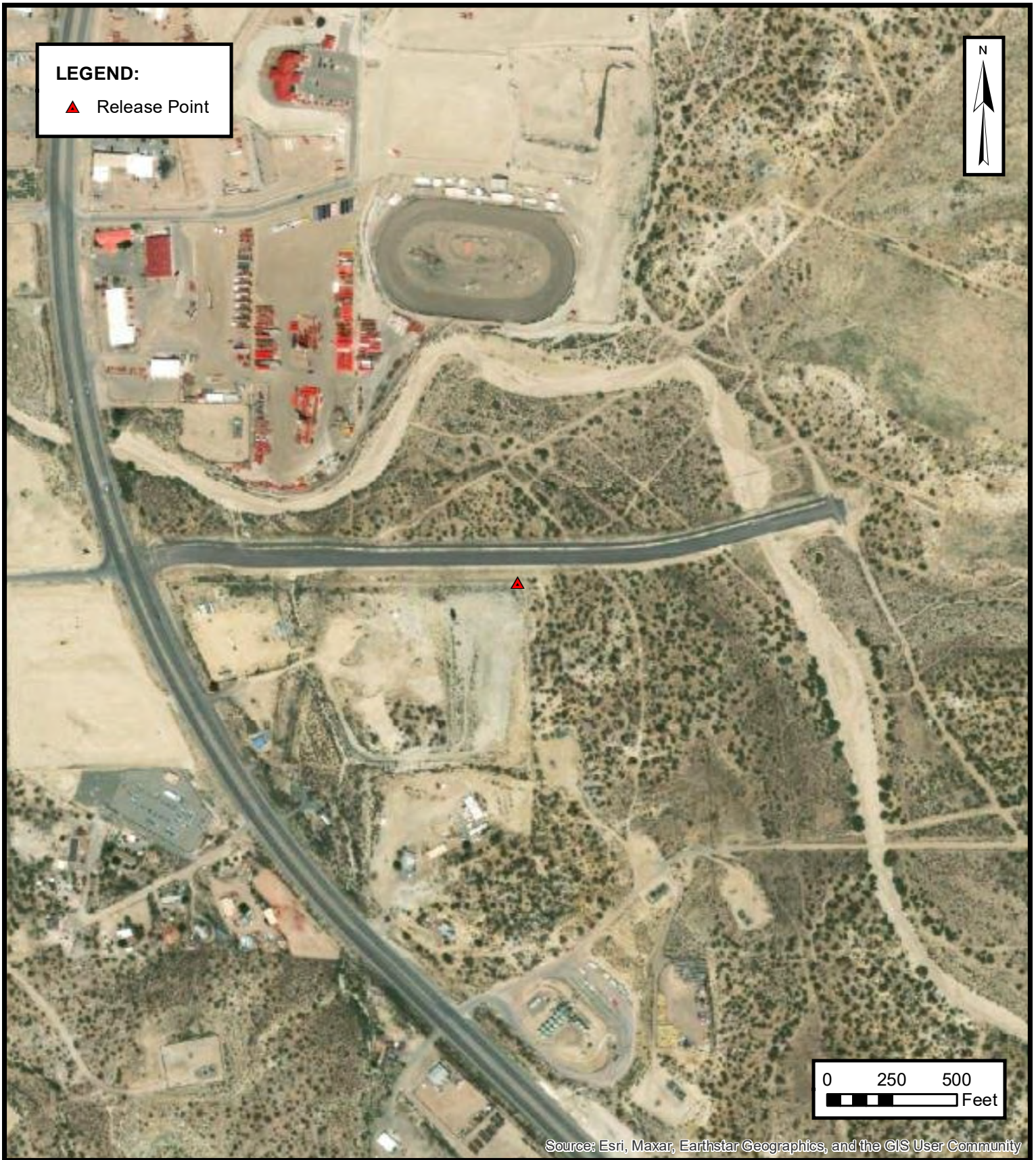
TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

FIGURE

1



 **ENSOLUM**
Environmental & Hydrogeologic Consultants

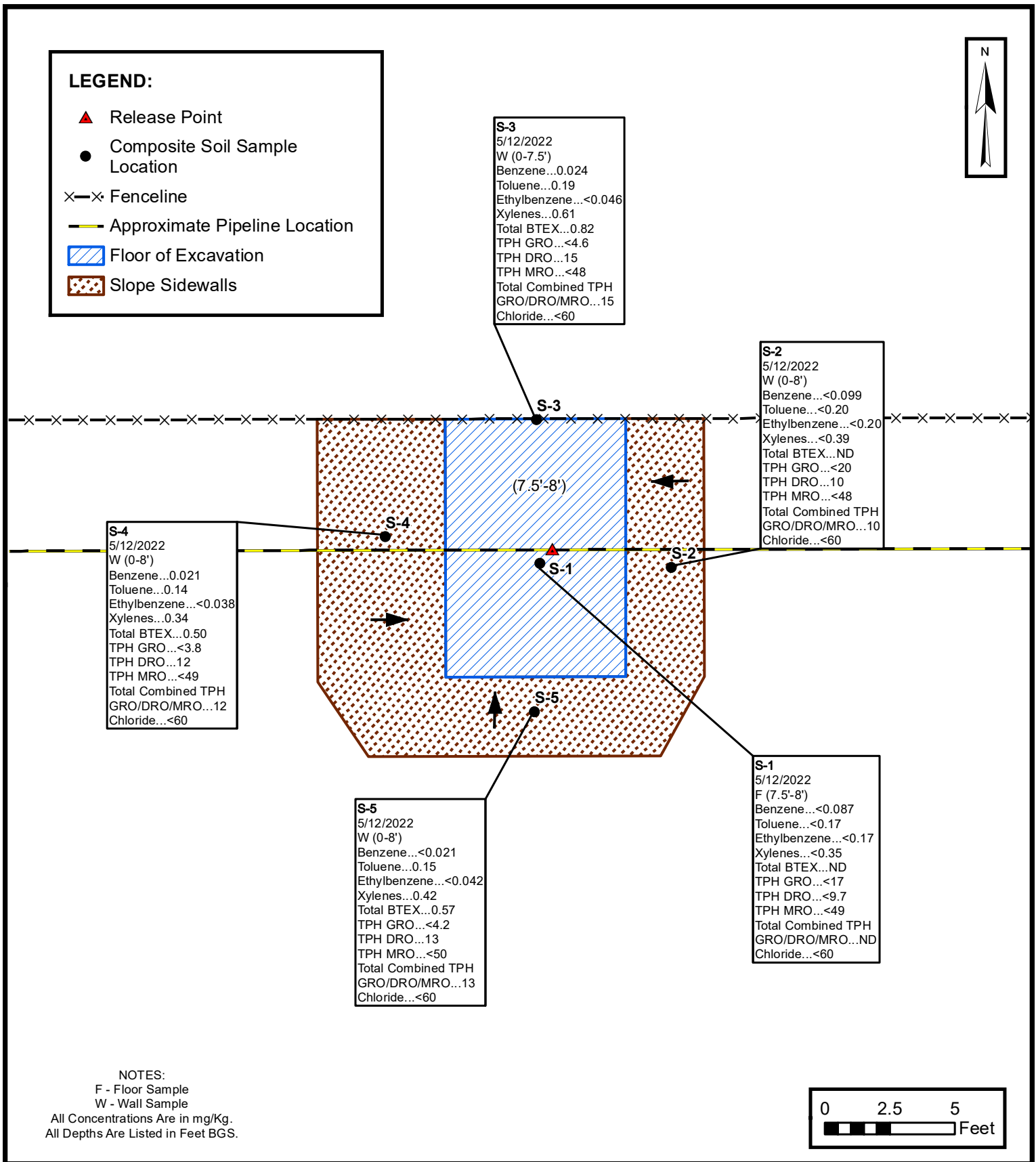
SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

FIGURE

2



SITE MAP WITH SOIL ANALYTICAL RESULTS

ENTERPRISE FIELD SERVICES, LLC

AZTEC COM 4#2 (05/11/22)

Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

FIGURE

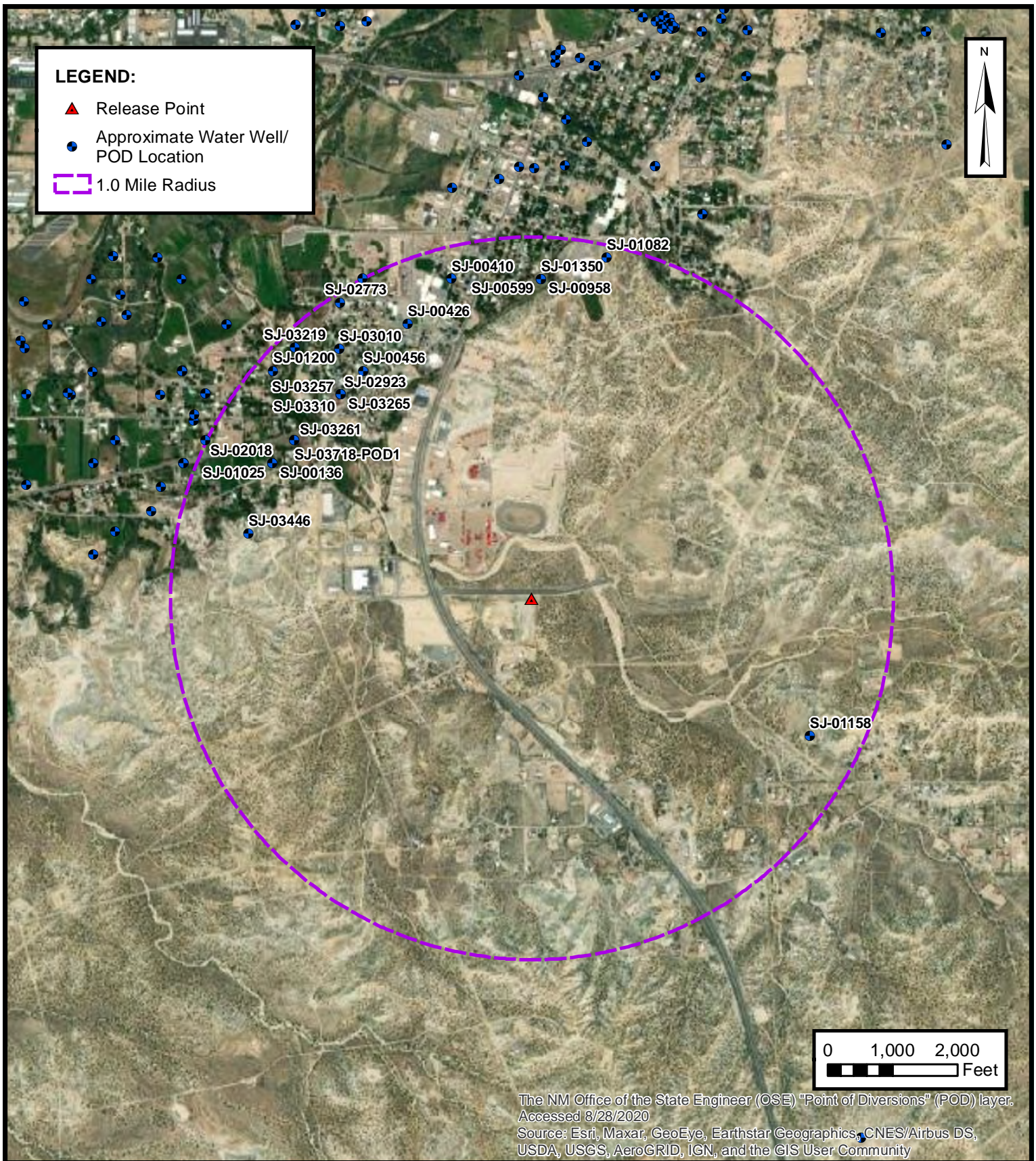
3


ENSOLUM
Environmental & Hydrogeologic Consultants



APPENDIX B

Siting Figures and Documentation



1.0 MILE RADIUS WATER WELL/ POD LOCATION MAP

ENTERPRISE FIELD SERVICES, LLC
 AZTEC COM 4#2 (05/11/22)
 Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
 36.8051079° N, 107.994599° W

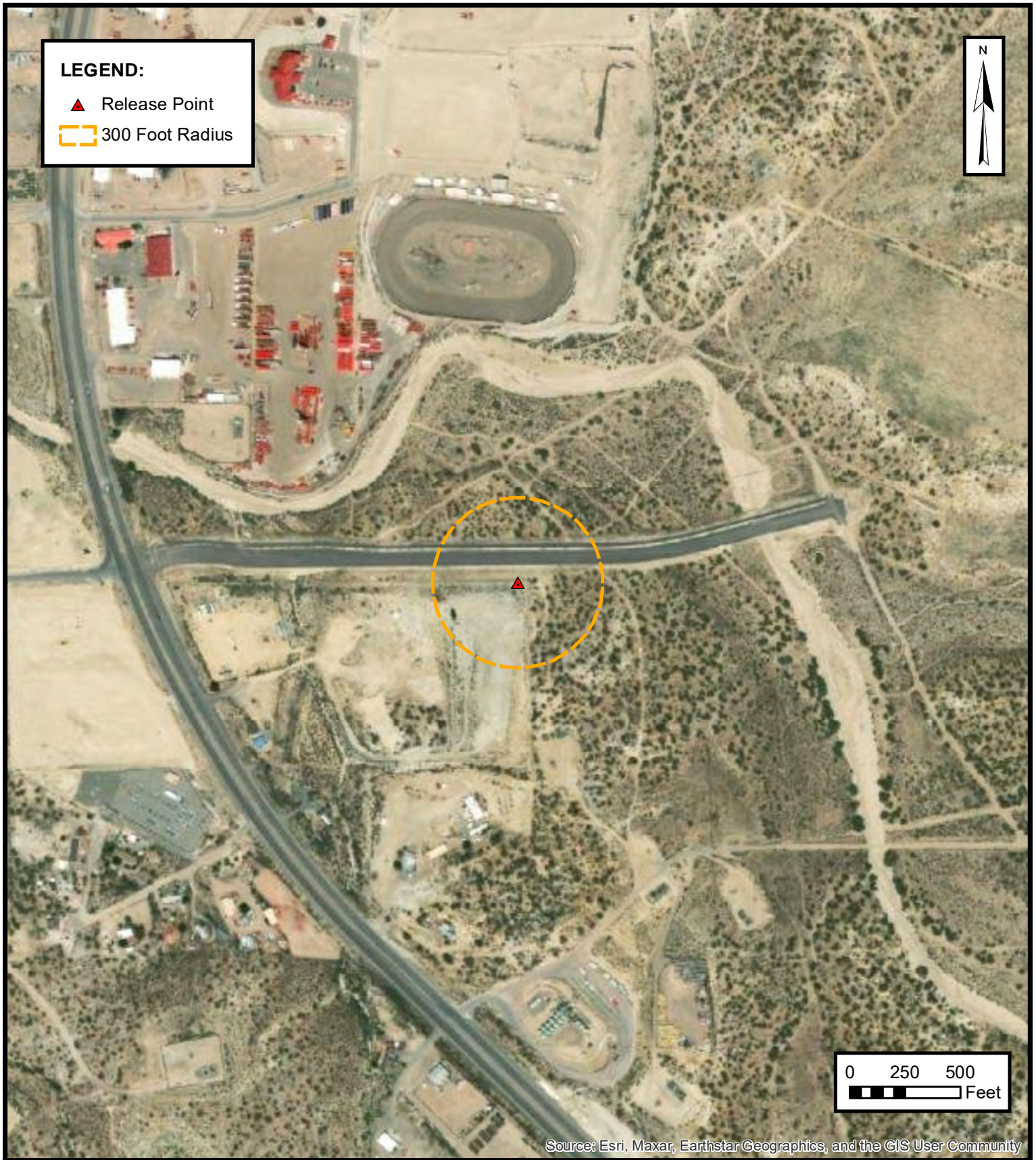
PROJECT NUMBER: 05A1226192

FIGURE

A

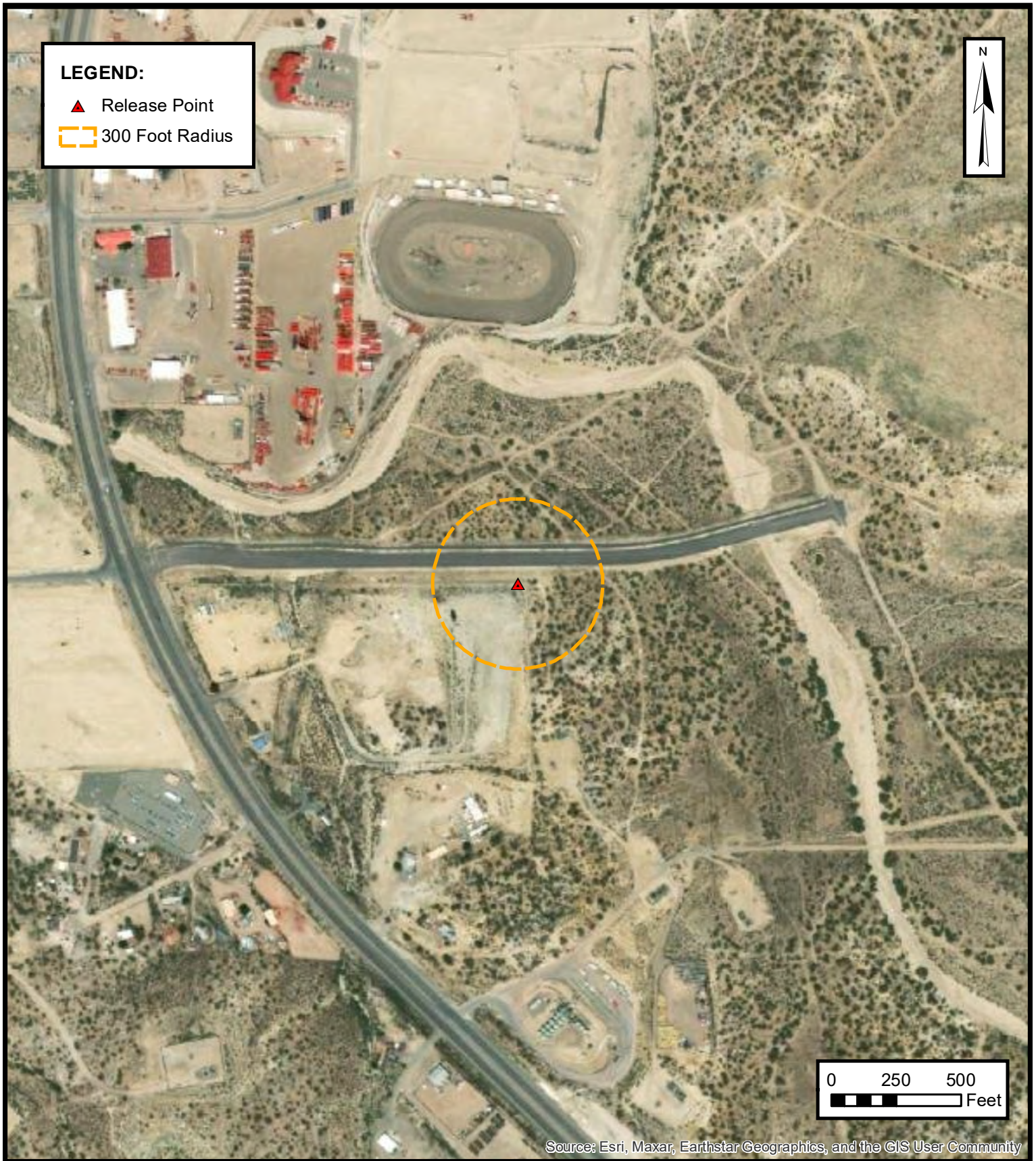
ENSOLUM
 Environmental & Hydrogeologic Consultants





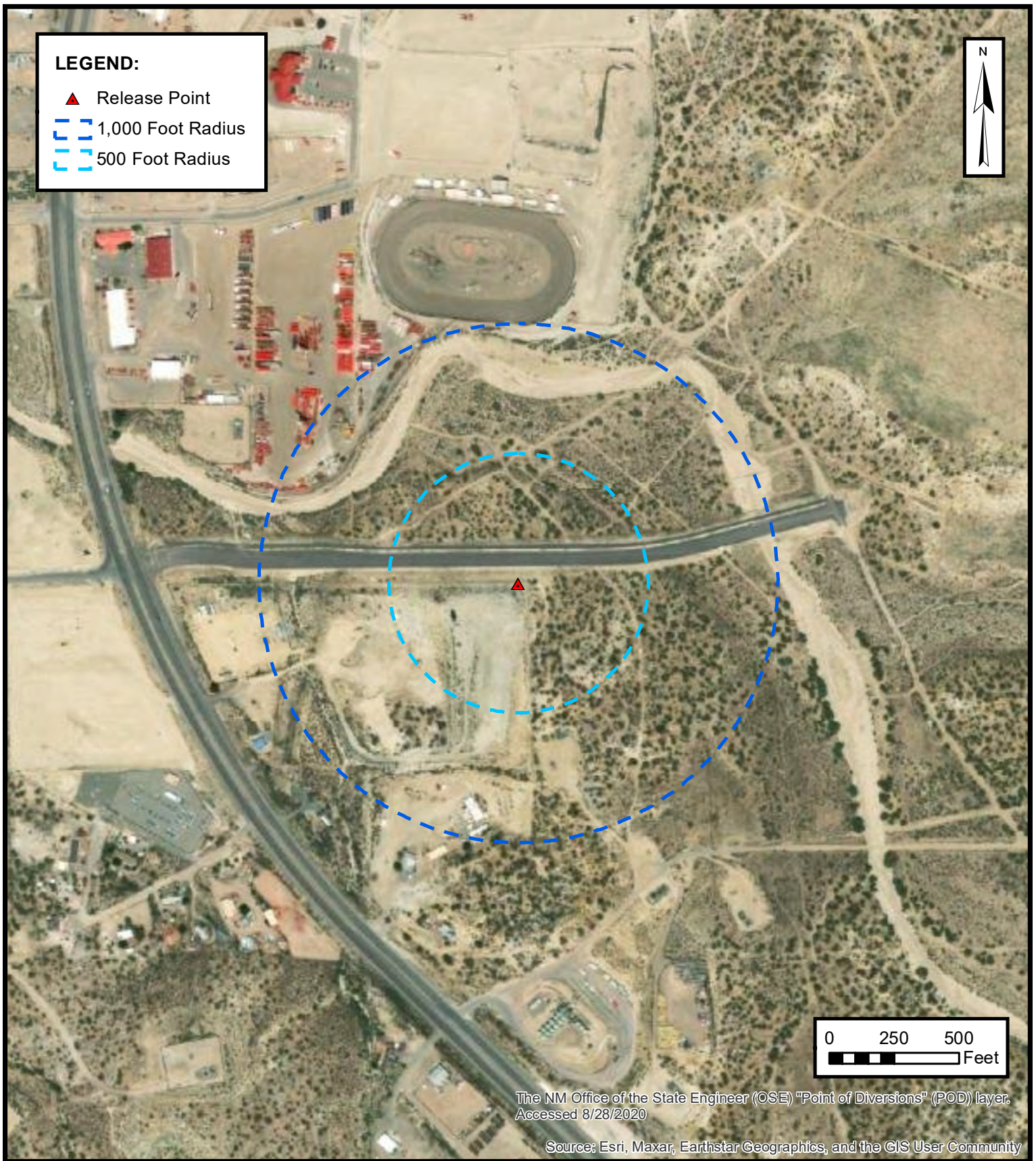
**300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W
PROJECT NUMBER: 05A1226192

**FIGURE
C**



**300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION**
ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W
PROJECT NUMBER: 05A1226192

**FIGURE
D**

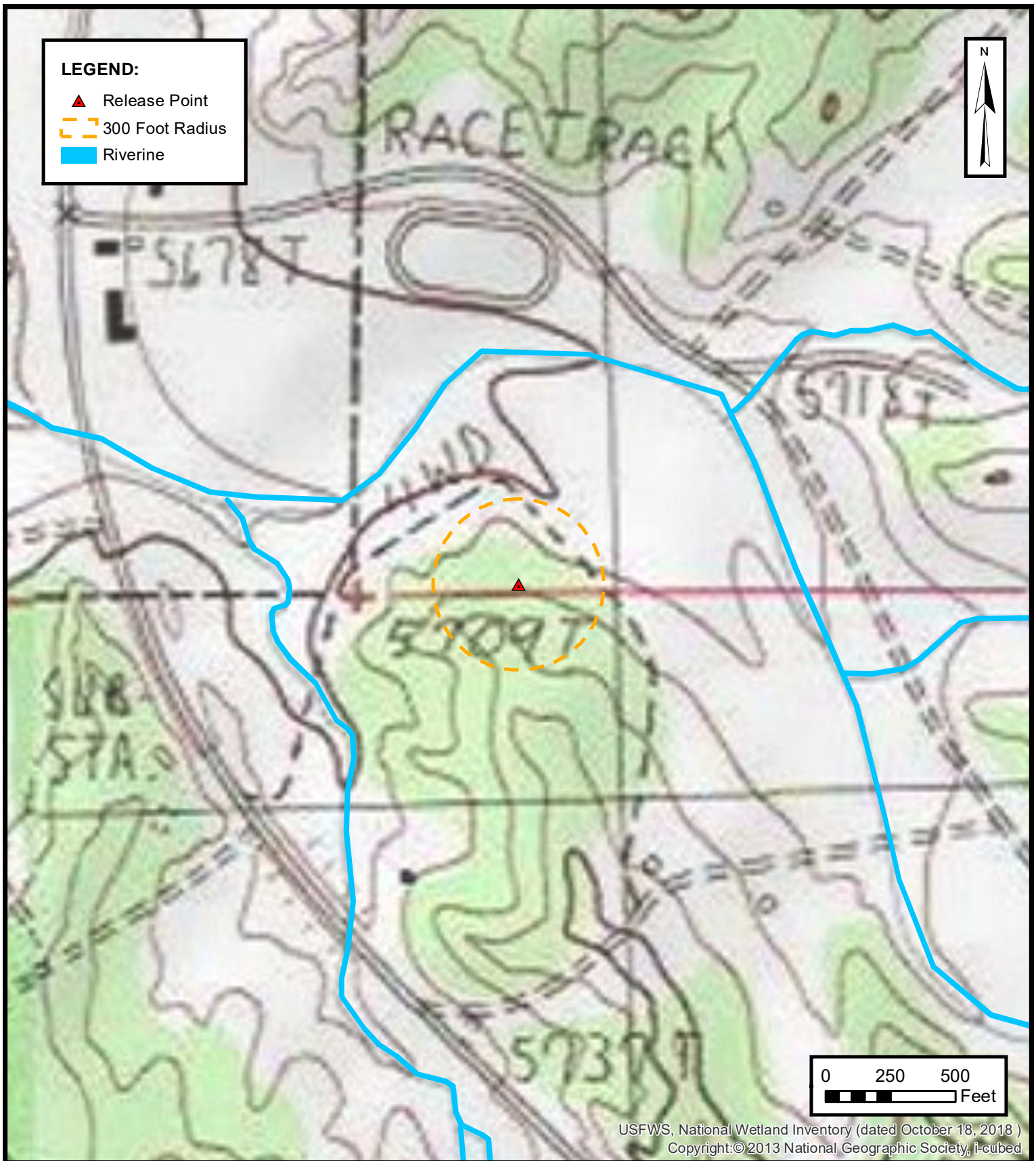


WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

FIGURE
E

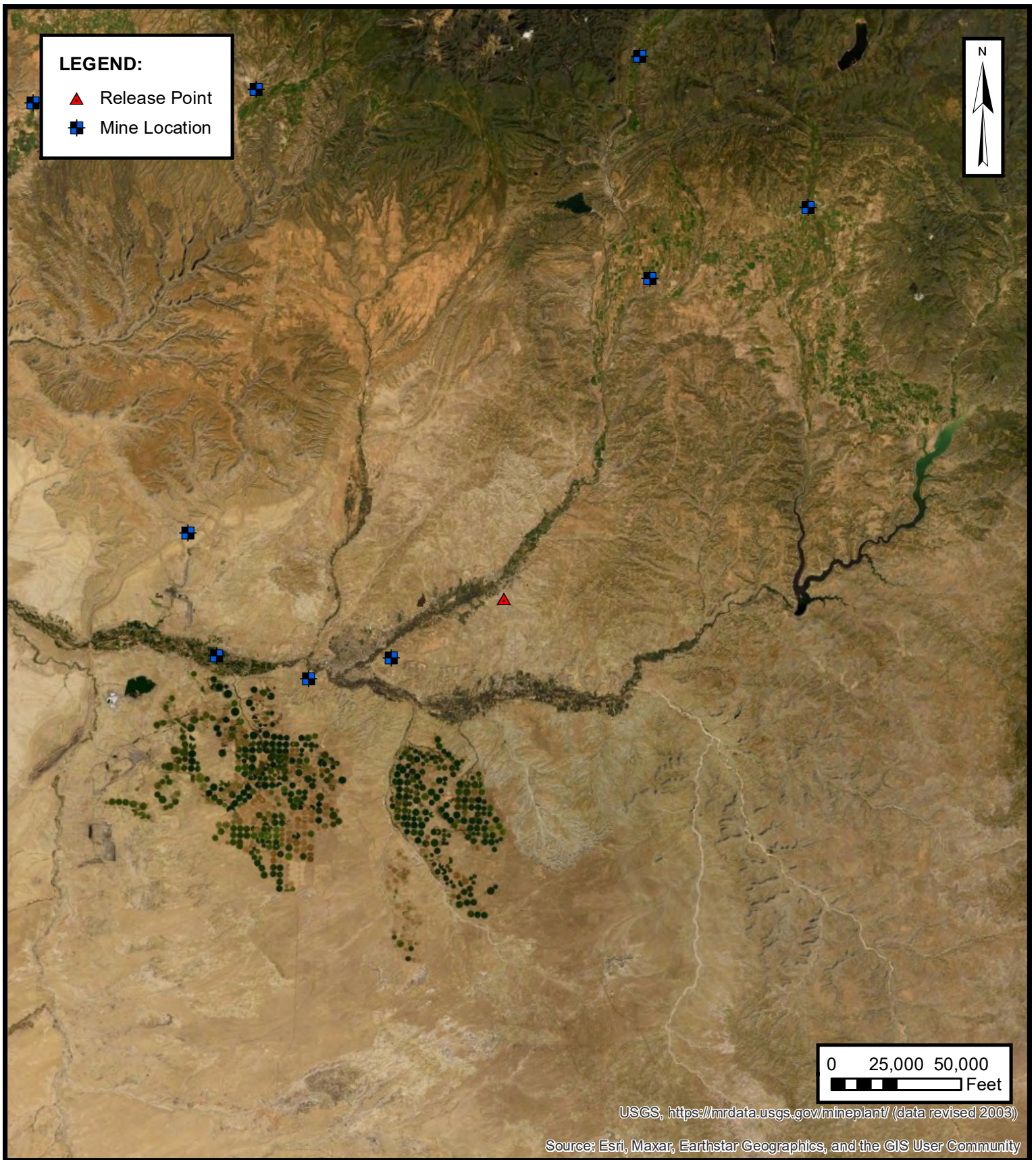


WETLANDS

ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

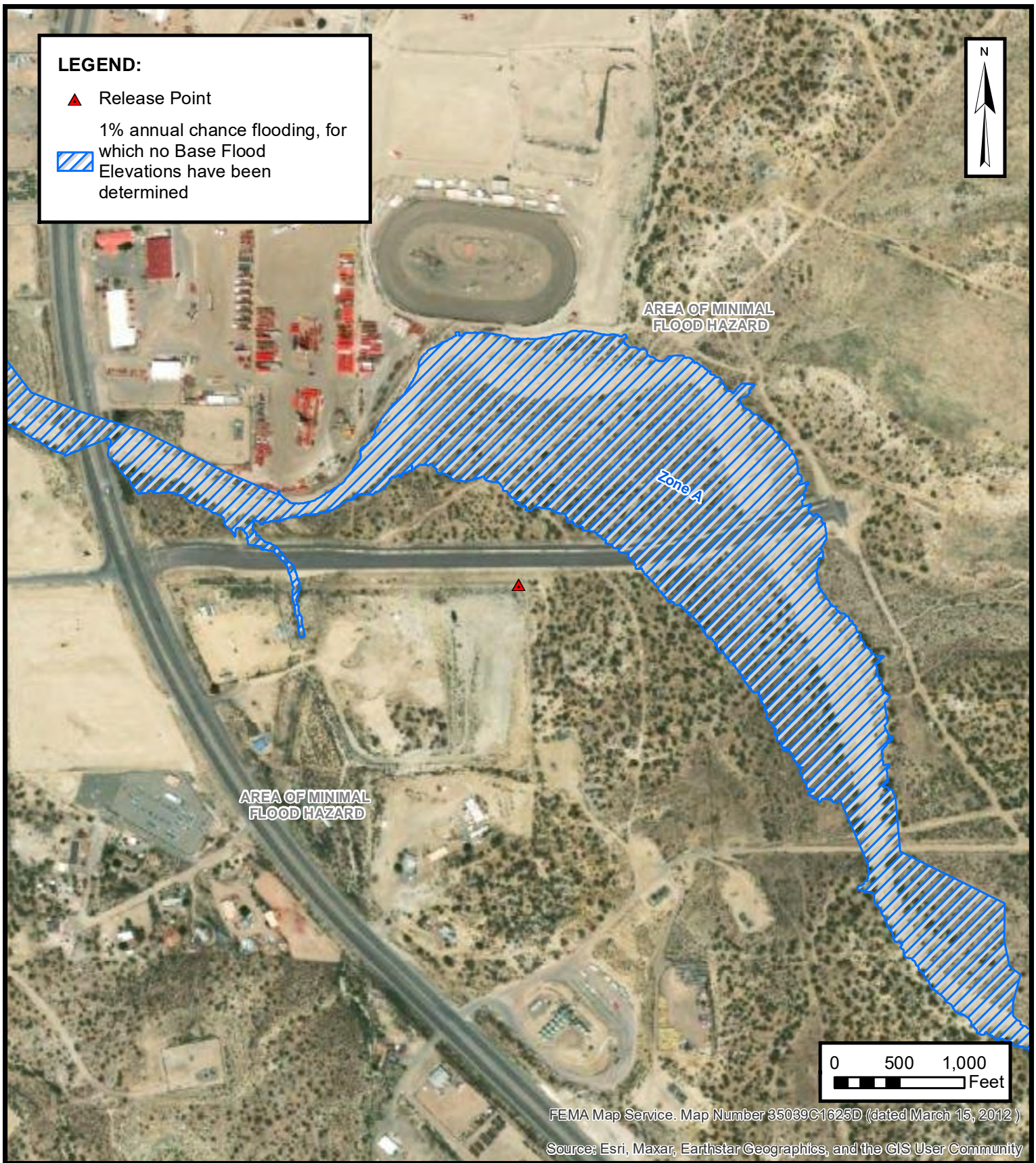
FIGURE
F



ENSOLUM
Environmental & Hydrogeologic Consultants

MINES, MILLS AND QUARRIES
ENTERPRISE FIELD SERVICES, LLC
AZTEC COM 4#2 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New Mexico
36.8051079° N, 107.994599° W
PROJECT NUMBER: 05A1226192

FIGURE
G



100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
AZTEC COM #42 (05/11/22)
Unit Letter O, Sec 16 T30N R11W, San Juan County, New
Mexico 36.8051079° N, 107.994599° W

PROJECT NUMBER: 05A1226192

FIGURE
H



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00136		SJAR	SJ	2	4	17	30N	11W		231716	4078065*	69	35	34
SJ 00159		SJAR	SJ	1	3	17	30N	11W		230530	4078103*	35	8	27
SJ 00166		SJAR	SJ	3	2	17	30N	11W		231332	4078482*	48	11	37
SJ 00183		SJAR	SJ	1	1	08	30N	11W		230601	4080532*	360	300	60
SJ 00220		SJAR	SJ	3	2	2	08	30N	11W	231695	4080392*	60	36	24
SJ 00228		SJAR	SJ	4	2	2	08	30N	11W	231895	4080392*	67	38	29
SJ 00234		SJAR	SJ	1	4	17	30N	11W		231324	4078076*	54	23	31
SJ 00249		SJAR	SJ	2	4	2	08	30N	11W	231879	4080189*	46	30	16
SJ 00332		SJAR	SJ	2	2	08	30N	11W		231796	4080493*	52	34	18
SJ 00347		SJAR	SJ		4	09	30N	11W		233146	4079436*	36	19	17
SJ 00348		SJAR	SJ	4	3	1	10	30N	11W	233866	4079903*	72	24	48
SJ 00364		SJAR	SJ	2	3	2	09	30N	11W	233071	4080140*	50	20	30
SJ 00364 CLW263561	O		SJ	2	3	2	09	30N	11W	233071	4080140*	33	11	22
SJ 00410		SJAR	SJ	2	1	16	30N	11W		232531	4078851*	61	45	16
SJ 00411		SJAR	SJ	1	4	17	30N	11W		231324	4078076*	60	25	35
SJ 00438		SJAR	SJ	3	2	1	09	30N	11W	232486	4080362*	29	19	10
SJ 00457		SJAR	SJ	2	1	4	17	30N	11W	231423	4078175*	52	18	34
SJ 00650		SJAR	SJ	3	1	4	17	30N	11W	231223	4077975*	49	18	31
SJ 00665		SJAR	SJ	1	2	17	30N	11W		231341	4078888*	28	14	14
SJ 00745		SJAR	SJ		2	17	30N	11W		231533	4078683*	54	30	24
SJ 00750		SJAR	SJ	4	1	09	30N	11W		232573	4080059*	26	6	20
SJ 00924		SJAR	SJ	2	2	1	09	30N	11W	232686	4080562*	46	16	30
SJ 00925		SJAR	SJ	2	1	4	08	30N	11W	231467	4079798*	32	20	12
SJ 01057		SJAR	SJ	3	2	17	30N	11W		231332	4078482*	63	28	35
SJ 01060		SJAR	SJ	3	2	17	30N	11W		231332	4078482*	58	23	35
SJ 01082		SJAR	SJ	1	2	2	16	30N	11W	233215	4078924*	80	34	46

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(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 01115	SJAR	SJ		4	2	2	08	30N	11W	231895	4080392*	35	26	9
SJ 01169	SJAR	SJ		3	1	09	30N	11W		232174	4080078*	56	33	23
SJ 01200	SJAR	SJ		4	2	17	30N	11W		231731	4078471*	50	20	30
SJ 01296	SJAR	SJ		2	3	17	30N	11W		230927	4078089*	50	10	40
SJ 01342	SJAR	SJ		1	1	2	17	30N	11W	231240	4078987*	26	5	21
SJ 01368	SJAR	SJ		2	3	08	30N	11W		230968	4079711*	59	39	20
SJ 01436	SJAR	SJ		1	4	09	30N	11W		232958	4079638*	210	50	160
SJ 01451	SJAR	SJ		2	2	08	30N	11W		231796	4080493*	64	34	30
SJ 01465	SJAR	SJ		2	3	1	09	30N	11W	232273	4080177*	47		
SJ 01520	SJAR	SJ		2	1	4	08	30N	11W	231467	4079798*	58	18	40
SJ 01528	SJAR	SJ		1	1	17	30N	11W		230548	4078912*	26	10	16
SJ 01560	SJAR	SJ		1	1	09	30N	11W		232188	4080482*	36	26	10
SJ 01570	SJAR	SJ		1	4	08	30N	11W		231368	4079699*	59	37	22
SJ 01574	SJAR	SJ		3	1	09	30N	11W		232174	4080078*	46	27	19
SJ 01585	SJAR	SJ		1	1	09	30N	11W		232188	4080482*	40	28	12
SJ 01722	SJAR	SJ			1	17	30N	11W		230745	4078706*	20	8	12
SJ 01722 POD2	SJAR	SJ		4	2	1	17	30N	11W	230985	4078712	17	3	14
SJ 01810	SJAR	SJ		4	3	17	30N	11W		230916	4077685*	29	9	20
SJ 01814	SJAR	SJ		2	2	08	30N	11W		231796	4080493*	52	10	42
SJ 01847	SJAR	SJ		1	4	17	30N	11W		231324	4078076*	30	6	24
SJ 01899	SJAR	SJ		2	3	1	17	30N	11W	230643	4078604*	27	7	20
SJ 01948	SJAR	SJ		2	1	17	30N	11W		230944	4078900*	21	3	18
SJ 01955	SJAR	SJ		4	2	09	30N	11W		233370	4080022*	40	11	29
SJ 01968	SJAR	SJ		2	2	08	30N	11W		231796	4080493*	40	25	15
SJ 01999	SJAR	SJ		2	2	08	30N	11W		231796	4080493*	61	45	16
SJ 02018	SJAR	SJ		2	4	17	30N	11W		231716	4078065*	100	40	60
SJ 02176	SJAR	SJ		3	1	10	30N	11W		233767	4080004*	57	37	20
SJ 02236	SJAR	SJ		1	1	1	09	30N	11W	232087	4080581*	35	17	18
SJ 02237	SJAR	SJ		1	3	1	09	30N	11W	232073	4080177*	48	28	20

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(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02241	SJAR	SJ		1	09	30N	11W			232375	4080279*	39	27	12
SJ 02261	SJAR	SJ		2	3	4	08	30N	11W	231449	4079393*			
SJ 02290	SJAR	SJ		2	4	2	09	30N	11W	233469	4080121*	45	15	30
SJ 02293	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	50	35	15
SJ 02331	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	53	35	18
SJ 02336	SJAR	SJ		2	3	1	09	30N	11W	232273	4080177*	46	11	35
SJ 02413	SJAR	SJ		1	4	3	08	30N	11W	230850	4079406*	40	31	9
SJ 02485	SJAR	SJ		4	1	4	08	30N	11W	231467	4079598*	49	30	19
SJ 02493	SJAR	SJ		1	3	1	09	30N	11W	232073	4080177*	49	26	23
SJ 02528	SJAR	SJ		4	2	09	30N	11W		233370	4080022*	60	28	32
SJ 02773	SJAR	SJ		3	1	1	16	30N	11W	232037	4078763*	46	25	21
SJ 02796	SJAR	SJ		2	3	4	09	30N	11W	233044	4079334*	100		
SJ 02817	SJAR	SJ		2	2	1	17	30N	11W	231043	4078999*	15		
SJ 02819	SJAR	SJ		3	3	2	10	30N	11W	234453	4079873*	140	40	100
SJ 02915	SJAR	SJ		1	4	3	08	30N	11W	230850	4079406*	45		
SJ 02923	SJAR	SJ		3	3	1	16	30N	11W	232028	4078358*	75	40	35
SJ 02975	SJAR	SJ		4	1	2	09	30N	11W	233084	4080342*	37	12	25
SJ 03010	SJAR	SJ		1	3	1	16	30N	11W	232028	4078558*	80	40	40
SJ 03019	SJAR	SJ		1	3	1	09	30N	11W	232073	4080177*	50	30	20
SJ 03030	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	56	40	16
SJ 03031	SJAR	SJ		1	3	1	09	30N	11W	232073	4080177*	55	35	20
SJ 03032	SJAR	SJ		1	4	1	10	30N	11W	234060	4080088*	80	30	50
SJ 03089	SJAR	SJ		4	2	3	08	30N	11W	231067	4079610*	48	36	12
SJ 03098	SJAR	SJ		2	2	2	08	30N	11W	231895	4080592*	63	23	40
SJ 03128	SJAR	SJ		2	3	2	09	30N	11W	233071	4080140*	50		
SJ 03154	SJAR	SJ		4	1	1	08	30N	11W	230700	4080431*	40		
SJ 03199	SJAR	SJ		1	4	3	08	30N	11W	230850	4079406*	40	20	20
SJ 03202 POD1	SJAR	SJ		2	4	2	08	30N	11W	231955	4080282	57		
SJ 03209	SJAR	SJ		3	1	1	09	30N	11W	232087	4080381*	49	32	17

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POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 03210	SJAR	SJ		2	2	2	08	30N	11W	231895	4080592*	60	30	30
SJ 03213	SJAR	SJ		2	4	4	09	30N	11W	233443	4079317*	100		
SJ 03214	SJAR	SJ		2	4	4	09	30N	11W	233443	4079317*	93	63	30
SJ 03218	SJAR	SJ		3	3	3	10	30N	11W	233642	4079100*	50	30	20
SJ 03219	SJAR	SJ		2	4	2	17	30N	11W	231830	4078570*	68	38	30
SJ 03223	SJAR	SJ		2	2	4	09	30N	11W	233456	4079719*	59	25	34
SJ 03225	SJAR	SJ		4	1	1	09	30N	11W	232287	4080381*	50		
SJ 03229	SJAR	SJ		4	1	1	09	30N	11W	232287	4080381*	50		
SJ 03240	SJAR	SJ		2	2	2	08	30N	11W	231895	4080592*	50		
SJ 03241	SJAR	SJ		3	3	2	17	30N	11W	231231	4078381	75	20	55
SJ 03248	SJAR	SJ		3	3	1	10	30N	11W	233666	4079903*	90	30	60
SJ 03249	SJAR	SJ		2	2	3	17	30N	11W	231026	4078188*	55	12	43
SJ 03257	SJAR	SJ		3	3	1	16	30N	11W	232028	4078358*	80	40	40
SJ 03258	SJAR	SJ		3	3	1	10	30N	11W	233666	4079903*	55	10	45
SJ 03261	SJAR	SJ		2	2	4	17	30N	11W	231815	4078164*	88	50	38
SJ 03263	SJAR	SJ		2	2	4	09	30N	11W	233456	4079719*	63	35	28
SJ 03265	SJAR	SJ		3	3	1	16	30N	11W	232028	4078358*	90	70	20
SJ 03266	SJAR	SJ		3	4	1	17	30N	11W	230837	4078392*	30	10	20
SJ 03268	SJAR	SJ		2	2	2	09	30N	11W	233482	4080523*	61	10	51
SJ 03269	SJAR	SJ		4	3	2	17	30N	11W	231431	4078381*	80	10	70
SJ 03276	SJAR	SJ		4	1	3	17	30N	11W	230629	4078002*	60	20	40
SJ 03281	SJAR	SJ		4	3	2	10	30N	11W	234653	4079873*	62	32	30
SJ 03282	SJAR	SJ		4	3	2	10	30N	11W	234653	4079873*	70	30	40
SJ 03303	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	55	30	25
SJ 03304	SJAR	SJ		2	1	1	09	30N	11W	232287	4080581*	55	30	25
SJ 03305	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	50		
SJ 03310	SJAR	SJ		3	3	1	16	30N	11W	232028	4078358*	55	20	35
SJ 03313	SJAR	SJ		4	1	4	08	30N	11W	231467	4079598*	58	20	38
SJ 03319	SJAR	SJ		4	3	1	17	30N	11W	230643	4078404*	55	31	24

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SJ 03342	SJAR	SJ		3	1	1	09	30N	11W	232087	4080381*	50	31	19
SJ 03354	SJAR	SJ		3	3	1	10	30N	11W	233666	4079903*	80	30	50
SJ 03356	SJAR	SJ		1	3	1	10	30N	11W	233666	4080103*	55	30	25
SJ 03367	SJAR	SJ		4	4	3	08	30N	11W	231050	4079206*	29	5	24
SJ 03373	SJAR	SJ		3	1	1	17	30N	11W	230447	4078811*	50	35	15
SJ 03374	SJAR	SJ		1	3	4	09	30N	11W	232844	4079334*	44	29	15
SJ 03378	SJAR	SJ		2	4	2	08	30N	11W	231879	4080189*	50		
SJ 03381	SJAR	SJ		2	2	2	08	30N	11W	231895	4080592*	50		
SJ 03398	SJAR	SJ		1	2	2	08	30N	11W	231695	4080592*	80	20	60
SJ 03419	SJAR	SJ		2	4	4	08	30N	11W	231847	4079381*	41	9	32
SJ 03423	SJAR	SJ		3	3	1	09	30N	11W	232073	4079977*	50	20	30
SJ 03431	SJAR	SJ		4	1	08	30N	11W	230985	4080115*	50			
SJ 03436	SJAR	SJ		3	4	1	17	30N	11W	230837	4078392*	20		
SJ 03444	SJAR	SJ		3	3	1	10	30N	11W	233666	4079903*	60		
SJ 03471	SJAR	SJ		1	1	4	09	30N	11W	232857	4079737*	20	5	15
SJ 03480	SJAR	SJ		4	2	3	08	30N	11W	231067	4079610*	50		
SJ 03482	SJAR	SJ		2	3	1	09	30N	11W	232273	4080177*	50		
SJ 03499	SJAR	SJ		1	1	1	09	30N	11W	232087	4080581*	53	12	41
SJ 03572	SJAR	SJ		2	1	3	10	30N	11W	233854	4079702*	70		
SJ 03639	SJAR	SJ		4	2	2	08	30N	11W	231895	4080392*	60	24	36
SJ 03642	SJAR	SJ		2	1	4	08	30N	11W	231467	4079798*	58	32	26
SJ 03646	SJAR	SJ		4	2	2	08	30N	11W	231895	4080392*	61	24	37
SJ 03653	SJAR	SJ		4	2	2	08	30N	11W	231895	4080392*	62	26	36
SJ 03718 POD1	SJAR	SJ		2	2	4	17	30N	11W	231815	4078164*	68	41	27
SJ 03724 POD1	SJAR	SJ		1	3	1	09	30N	11W	232073	4080177*	47	36	11
SJ 03726 POD1	SJAR	SJ		3	1	1	09	30N	11W	232087	4080381*	47	30	17
SJ 03750 POD1	SJAR	SJ		3	3	1	17	30N	11W	230499	4078391	20	6	14
SJ 03771 POD1	SJAR	SJ		3	3	1	17	30N	11W	230499	4078391	20	6	14
SJ 03821 POD 1	SJAR	SJ		3	4	1	17	30N	11W	230826	4078404	13	1	12

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

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POD Number	POD		Q Q Q							X	Y	Depth Well	Depth Water	Water Column
	Sub-Code	basin	County	64	16	4	Sec	Tws	Rng					
SJ 03853 POD1	SJAR	SJ	2	1	4	17	30N	11W	231375	4078263		38	24	14
SJ 03862 POD2	SJAR	SJ	2	3	2	09	30N	11W	233126	4080190		18	4	14
SJ 03862 POD3	SJAR	SJ	2	3	2	09	30N	11W	233129	4080168		18	4	14
SJ 03889 POD1	SJAR	SJ	1	1	2	09	30N	11W	232969	4080501		37	15	22
SJ 03894 POD1	SJAR	SJ	1	3	1	10	30N	11W	233753	4079958		60	23	37
SJ 04025 POD1	SJAR	SJ	3	3	1	09	30N	11W	231993	4080042		36	28	8
SJ 04060 POD1	SJAR	SJ	4	3	1	09	30N	11W	232192	4079996		36	14	22
SJ 04093 POD1	SJ	SJ		4	2	09	30N	11W	233494	4079963		28	20	8
SJ 04096 POD1	SJAR	SJ	4	3	2	17	30N	11W	231379	4078288		66	25	41
SJ 04150 POD1	SJAR	SJ	2	3	1	17	30N	11W	230627	4078637		20	15	5
SJ 04239 POD1	SJAR	SJ		3	1	09	30N	11W	232190	4080130		47	31	16
SJ 04274 POD1	SJAR	SJ	1	3	1	17	30N	11W	230507	4078501		30	30	0
SJ 04298 POD1	SJAR	SJ	2	4	1	08	30N	11W	231203	4080299		270	250	20
SJ 04355 POD1	SJAR	SJ	4	2	1	17	30N	11W	231070	4078825		22	4	18
SJ 04356 POD1	SJAR	SJ	4	2	1	17	30N	11W	231094	4078739		38	3	35
SJ 04440 POD1	SJAR	SJ	3	1	4	10	30N	11W	234458	4079505		200		
SJ 04443 POD1	SJAR	SJ	2	1	2	17	30N	11W	231486	4078985		50		

Average Depth to Water: **27 feet**

Minimum Depth: **1 feet**

Maximum Depth: **300 feet**

Record Count: 159

PLSS Search:

Section(s): 16, 8, 9, 10, 15, **Township:** 30N **Range:** 11W
17, 20, 21, 22

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.

5/17/22 9:56 AM

Page 6 of 6

WATER COLUMN/ AVERAGE
DEPTH TO WATER

30-045-26625

3943

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit E Sec. 21 Twp 30 Rng 11Name of Well/Wells or Pipeline Serviced FIFIELD #4

cps 190'

Elevation 5754' Completion Date 11/5/87 Total Depth 380' Land Type* N/ACasing, Sizes, Types & Depths N/AIf Casing is cemented, show amounts & types used N/AIf Cement or Bentonite Plugs have been placed, show depths & amounts used
N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 100' NO SAMPLEDepths gas encountered: N/AType & amount of coke breeze used: N/ADepths anodes placed: 350', 340', 330', 320', 310', 300', 290', 280', 270', 260'Depths vent pipes placed: 380'Vent pipe perforations: 280'Remarks: gb #1

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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.

MERIDIAN OIL INC.

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOGDrilling Log (Attach Hereto) ☐Completion Date 11-5-87

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
1902W	<u>FIFIELD #4</u> <u>FIFIELD</u>		<u>79 IV</u>	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Bad
Location	Anode Size	Anode Type	Size Bar:	
<u>E21-30-11</u>	<u>2" x 60"</u>	<u>Duration</u>	<u>6 3/4"</u>	
Feet Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used
<u>380</u>	<u>375</u>			
Anode Depth				
<u>#1 350'</u>	<u>#2 340'</u>	<u>#3 330'</u>	<u>#4 320'</u>	<u>#5 310'</u>
<u>#6 300'</u>	<u>#7 290'</u>	<u>#8 280'</u>	<u>#9 270'</u>	<u>#10 260'</u>
Anode Output (Amps)				
<u>#1 5.3</u>	<u>#2 5.2</u>	<u>#3 5.4</u>	<u>#4 5.9</u>	<u>#5 5.0</u>
<u>#6 5.8</u>	<u>#7 4.9</u>	<u>#8 6.2</u>	<u>#9 7.2</u>	<u>#10 6.9</u>
Anode Depth				
<u>#11</u>	<u>#12</u>	<u>#13</u>	<u>#14</u>	<u>#15</u>
<u>#16</u>	<u>#17</u>	<u>#18</u>	<u>#19</u>	<u>#20</u>
Anode Output (Amps)				
<u>#11</u>	<u>#12</u>	<u>#13</u>	<u>#14</u>	<u>#15</u>
<u>#16</u>	<u>#17</u>	<u>#18</u>	<u>#19</u>	<u>#20</u>
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts <u>11.6</u>	Amps <u>20.3</u>	Ohms <u>.57</u>		

Remarks: DRILLED 380' LOGGED 375' DRILLER SAID WATER
AT 100' NOT ENOUGH FOR SAMPLE. INSTALLED 380' OF 1" PVC
VENT PIPE; PERFORATED BOTTOM 280'

Rectifier Size: 40 V 16 A
 Addn'l Depth: _____
 Depth Credit: 125 ✓
 Extra Cable: 30 ✓
 Ditch & 1 Cable: 10 ✓
 Ditch & 2 Cable: 180 -?
 25' Meter Pole: _____
 20' Meter Pole: 1
 10' Stub Pole: _____
 Junction Box: 1

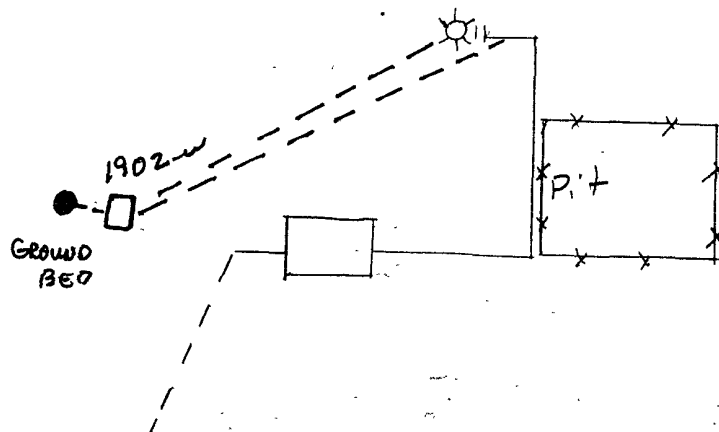
4300.00 ✓
 -437.50 ✓
3862.50
 7.50 ✓
 4.30 ✓
176.40 99.00
 300.00
 40.00

4390.70
 219.54
4610.24
 431330
 21567
4528.97 OK

5754

All Construction Completed

Randy Smith
 (Signature)



DEEP WELL GROUNDWATER LOG

Date 11-4-87

File # 4 Meridian Oil

Well No.

Location

Fifeird

- Volts Applied

11.6

57 20.3
Amperes

Released to Imaging: 7/27/2022 8:25:01 AM

BURGE CORROSION SYSTEMS INC.

P.O. BOX 1359

AZTEC, NEW MEXICO 87410

DRILLING AND LOGGING LOG

1902W

JOB NUMBER 147

HOLE DIAMETER 6 3/4 IN

DATE 11-3-87

WELL NAME Fifield #4

HOLE DEPTH _____ FT

FINAL READING _____ VOLTS

COMPANY NAME Meridian

NUM OF ANODES _____

FINAL READING _____ AMPS

LEGAL DESCRIPTION 1/4 E S 21 T 30 R 11

WATER DEPTH 40 FT

FINAL READING _____ OHMS

DEPTH	SOIL TYPE	LOG AMPS	INITIAL AMPS	FINAL AMPS	HOLE DEPTH	SOIL TYPE	LOG AMPS	INITIAL AMPS	FINAL AMPS	HOLE DEPTH	SOIL TYPE	LOG AMPS	INITIAL AMPS	FINAL AMPS
5	Sand				245	11				485				
10	Sand				250	11				490				
15	Sandstone				255	11				495				
20	11				260	11				500				
25	Watersand				265	11				505				
30	11				270	11				510				
35	11				275	11				515				
40	Shale Clay				280	Shale				520				
45	11				285	11				525				
50	11				290	Sandstone				530				
55	11				295	11				535				
60	11				300	Water Sand				540				
65	11				305	11				545				
70	11				310	Shale				550				
75	11				315	11				555				
80	11				320	Water Sand				560				
85	11				325	11				565				
90	11				330	11				570				
95	11				335	Shale				575				
100	11				340	11				580				
105	Shale				345	11				585				
110	11				350	11				590				
115	11				355	Sandstone				595				
120	11				360	11				600				
125	11				365	11				605				
130	11				370	11				610				
135	11				375	11				615				
140	11				380	11				620				
145	11				385	11				625				
150	11				390					630				
155	11				395					635				
160	11				400					640				
165	11				405					645				
170	11				410					650				
175	11				415					655				
180	11				420					660				
185	11				425					665				
190	Sandstone				430					670				
195	11				435					675				
200	Shale				440					680				
205	11				445					685				
210	11				450					690				
215	Water Sand				455					695				
220	11				460					700				
225	Shale				465					705				
230	11				470					710				
235	Water Sand				475					715				
240	11				480					720				

1 30-045-09392
3 30-045-26626

3944

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)Operator MERIDIAN OIL INC. Location: Unit C Sec. 22 Twp 30 Rng 11Name of Well/Wells or Pipeline Serviced FULLER #1, #3

cps 1903w

Elevation 5789' Completion Date 11/11/87 Total Depth 280' Land Type* N/ACasing, Sizes, Types & Depths 65' OF 7" PVC CASINGIf Casing is cemented, show amounts & types used N/AIf Cement or Bentonite Plugs have been placed, show depths & amounts used
N/ADepths & thickness of water zones with description of water when possible:
Fresh, Clear, Salty, Sulphur, Etc. 80' NO SAMPLEDepths gas encountered: N/AType & amount of coke breeze used: N/ADepths anodes placed: 245', 230', 210', 200', 190', 170', 160', 150', 140', 130'Depths vent pipes placed: N/AVent pipe perforations: 220'Remarks: gb #1

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MAY 31 1991

OIL 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.

MERIDIAN OIL INC.

Post Office Box 4239

Farmington, New Mexico 87499

(505) 327-0251

WELL CASING

Running Log (Attach Here)

CATHODIC PROTECTION CONSTRUCTION REPORT Completion Date 11-11-87

DAILY LOG

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check								
1903w	Fuller #3 Fuller #1		.29 N	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Bad								
Location:	Anode Size:	Anode Type:	Size Bit:									
C22-30-11	2" x 60"	Duriron	6 3/4									
Depth Drilled:	Depth Logged:	Drilling Rig Time	Total Lbs. Coke Used	Loss Circulation Mat'l Used								
280	276'	6 hrs										
Anode Depth	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10		
245	230	210	200	190	170	160	150	140	130			
Anode Output (Amps)	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10		
4.0	3.8	3.7	4.4	4.1	4.7	5.9	5.9	5.4	6.0			
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20		
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20		
Total Circuit Resistance	No. 8 C.P. Cable Used					No. 2 C.P. Cable Used						
Volts 11.8	Amps 17.9	Ohms 1.66										

Remarks: Set a total of 45' of 7" casing. Vent pipe is perforated up to 60'. Water was at 80'. No water sample was taken.

40 16 4300.00 140.00 @ 3 hrs.
 Rectifier Size: 60 V 28 A 1550.00 910.00
 Addn'l Depth: 420.00 - casing
 Depth Credit: 2240 3.50 -784.00 5032.00
 Extra Cable: 30 7.50 4846.00
 Ditch & 1 Cable: 86' 36.98 68.20
 Ditch & 2 Cable: 124' 68.20
 25' Meter Pole:
 20' Meter Pole: 3000.00
 10' Stub Pole:
 Junction Box: 40.00

All Construction Completed

Randy Smith
(Signature)

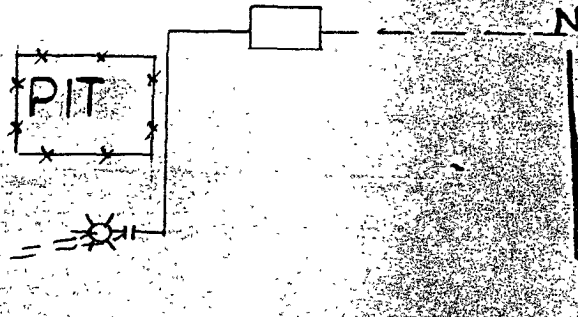
GROUND BED LAYOUT SKETCH

5638.68 5328.68
 1x 281.93 26643.
 5920.61 5595.11

G.B.

4

6



BUR CORROSION SYSTEMS, INC.

P.O. BOX 1359 PHONE 334-6141

AZTEC, NEW MEXICO 87410

DEEP WELL GROUND BED LOG

Date 11-24-87

Company

Meridian Oil

Well No.

1 #3

Location

Fuller.

Volts Applied 11.78

Amperes 17.9

5		230	2.5	✓	②	455	②	245	3.1	680	4.0				
10		235	2.4			460	②	230	3.0	685	3.8				
15		240	2.6			465	③	210	3.1	690	3.7				
20		245	2.5	✓	①	470	④	200	3.5	695	4.4				
25		250	2.4			475	⑤	190	3.1	700	4.1				
30		255	2.3			480	⑥	170	3.6	705	4.7				
35		260	2.3			485	⑦	160	4.8	710	5.9				
40		265	2.7			490	⑧	150	4.8	715	5.9				
45		270	2.3			495	⑨	140	4.1	720	5.4				
50		275	1.2	2.7	4	500	⑩	130	4.4	725	6.0				
55		280				505				730					
60		285				510				735					
65		290				515				740					
70		295				520				745					
75		300				525				750					
80		305				530				755					
85		310				535				760					
90		315				540				765					
95		320				545				770					
100		325				550				775					
105		330				555				780					
110		335				560				785					
115		340				565				790					
120		345				570				795					
125		350				575				800					
130		355				580				805					
135		360				585				810					
140		365				590				815					
145		370				595				820					
150		375				600				825					
155		380				605				830					
160		385				610				835					
165		390				615				840					
170		395				620				845					
175		400				625				850					
180		405				630				855					
185		410				635				860					
190		415				640				865					
195		420				645				870					
200		425				650				875					
205		430				655				880					
210		435				660				885					
215		440				665				890					
220		445				670				895					
225		450				675				900					

CLASS 200 PVC

1" vent pipe
281' - bottom 200' PVC
PVC lined

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Oil Inc. Location: Unit G Sec. 16 Twp 30 Rng 11Name of Well/Wells or Pipeline Serviced Gonzales State Com #1Elevations 5700 Completion Date 7-20-95 Total Depth 380 Land Type FCasing Strings, Sizes, Types & Depths Set 96' of 8" P.V.C.If Casing Strings are cemented, show amounts & types used Cemented
with 17 sacks of Type I & II cement.If 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. 120 and was clearDepths gas encountered: no gasGround bed depth with type & amount of coke breeze used: 380 with
108 (5016) sacks of Asbery 218RDepths anodes placed: #1 is at 365 and #15 is at 155Depths vent pipes placed: Bottom to SurfaceVent pipe perforations: up to 130'

Remarks: _____

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JAN 11 1996OIL 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.

30-045-09331

**DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO**

Operator Meridian Oil Inc. Location: Unit 2 Sec. 21 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced _____

Morris A#6

Elevation 5791 Completion Date 10/9/94 Total Depth 448' Land Type P

Casing Strings, Sizes, Types & Depths 10 1/8 Set 99' of 8" PVC casing.

NO GAS or Boulders, BUT WATER WAS ENCOUNTERED AT 55' DURING CASING

If Casing Strings are cemented, show amounts & types used Cemented

WITH 20 SACKS.

If Cement or Bentonite Plugs have been placed, show depths & amounts used

NONE

Depths & 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 375'. A WATER SAMPLE WAS TAKEN.

Depths gas encountered: NONE

Ground bed depth with type & amount of coke breeze used: 448' Depth.

Used 58 SACKS of Lotesco SW (5800#)

Depths anodes placed: 425', 416', 405', 395', 385', 375', 365', 355', 220', 195', 185', 170', 160', 150', + 140'.

Depths vent pipes placed: SURFACE TO 448'.

Vent pipe perforations: BOTTOM 320'.

Remarks: _____

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R JAN 20 1995

OIL COR. DIV.
DIST. 9

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-Free.
If Federal or Indian, add Lease Number.

#1R 30-045-22990
COM #2 30-045-26842

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICO
(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC. Location: Unit P Sec. 17 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced TAYLOR #1R, COM #2

cps 1928w

Elevation 5680' Completion Date 4/8/89 Total Depth 420' Land Type* N/A

Casing, Sizes, Types & Depths N/A

If Casing is cemented, show amounts & types used N/A

If Cement or Bentonite Plugs have been placed, show depths & amounts used

N/A

Depths & thickness of water zones with description of water when possible:

Fresh, Clear, Salty, Sulphur, Etc. 65'

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 345', 225', 210', 195', 180', 140', 125', 110', 95', 80'

Depths vent pipes placed: 415'

Vent pipe perforations: 380'

Remarks: gb #1

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.

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST.

FM 07-0238 (Rev. 10-82)

WELL CATHODIC

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Camp 413-889

Drilling Log (Attach Hereto) ☐

PROP. I.D. 071045500

Completion Date 4/18/51

CPS #	Well Name, Line or Plant:	Work Order #	Series:	Ins. Union Class:								
1928 W	Taylor #1 R TAYLOR COM #2	2689A	.87V N									
Location: <u>SE 17-30-11</u>	Anode Size: <u>2" X 60"</u>	Anode Type: <u>DURATION</u>	Size Bit: <u>6 3/4"</u>									
Depth Drilled: <u>420'</u>	Depth Logged: <u>415'</u>	Drilling Rig Time	Total Lbs. Cable Used	Lost Circulation Mat'ls Used								
Anode Depth	#1 <u>345'</u>	#2 <u>225'</u>	#3 <u>210'</u>	#4 <u>195'</u>	#5 <u>180'</u>	#6 <u>140'</u>	#7 <u>125'</u>	#8 <u>110'</u>	#9 <u>95'</u>	#10 <u>80'</u>		
Anode Output (Amps)	#1 <u>4.5</u>	#2 <u>5.0</u>	#3 <u>6.0</u>	#4 <u>6.2</u>	#5 <u>6.8</u>	#6 <u>4.0</u>	#7 <u>4.5</u>	#8 <u>5.4</u>	#9 <u>4.5</u>	#10 <u>4.5</u>		
Anode Depth	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20		
Anode Output (Amps)	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20		
Total Circuit Resistance	No. 8 C.P. Cable Used					No. 2 C.P. Cable Used						
Volts <u>11.6 V</u>	Amps <u>28.0 A</u>	Ohms <u>41</u>										

Remarks: WATER AT 65', INSTALLED 415' of 1" P.V.C. VENT PIPE
PERFORATED 380'. TOOK WATER SAMPLE

Gad. Pole 4074.00

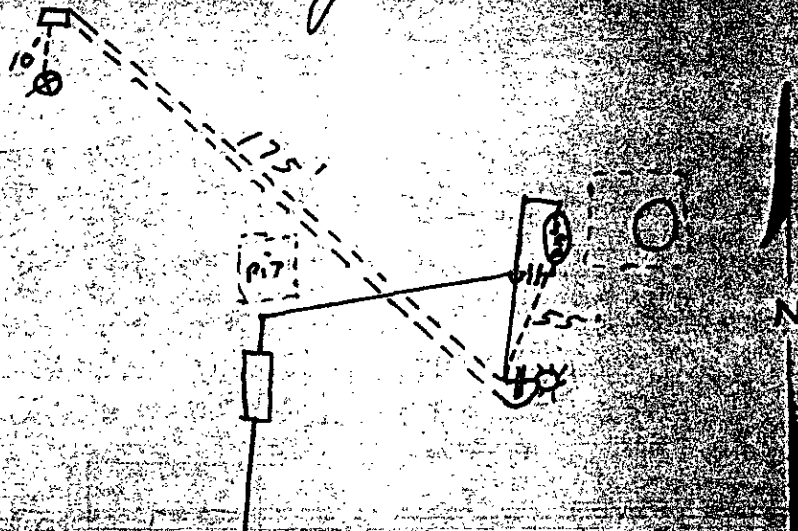
Rectifier Size: 40 V 16 A \$669.00
 Addn'l Depth: - 85' -297.50
 Depth Credit: - 85'
 Extra Cable: 215' 51.60
 Ditch & 1 Cable: 240' 168.00

25' Meter Pole: -
 20' Meter Pole: 1 297.00
 10' Stub Pole: -
 Junction Box: 1 225.00

\$5187.10
 TAX - 259.36
 TOTAL 5446.46

All Construction Completed

JE. Halls
 (Signature)



5680

VERIDIAN OIL

P.O. Box 4289 Phone 527-0251

FARMINGTON, N.H.

Date 7/8/77

DEEP WELL GROUNDWATER LOG

Company Meridian Oil

Well No. Taylor Cam 2 Location SE 17-30-11

Volts Applied 2000 11.6

5					230	2.0					455					680				
10					235	1.8					460					685				
15					240	1.5					465					690				
20					245	1.6					470					695				
25					250	1.9					475					700				
30					255	1.5					480					705				
35					260	1.6					485					710				
40					265	1.5					490					715				
45					270	1.7					495					720				
50					275	1.8					500					725				
55					280	1.8					505					730				
60					285	1.8					510					735				
65	1.0				290	1.8					515					740				
70	2.1				295	1.6					520					745				
75	2.4				300	1.8					525					750				
80	2.3	-			305	1.6					530					755				
85	2.0				310	1.7					535					760				
90	2.1				315	1.5					540					765				
95	2.2	-			320	1.3					545					770				
100	2.1				325	1.3					550					775				
105	2.1				330	1.7					555					780				
110	2.5	-			335	1.5					560					785				
115	2.4	-			340	2.0					565					790				
120	2.4				345	1.8	-				570					795				
125	2.3	-			350	1.7					575					800				
130	2.2				355	1.8	-				580					805	1-3			
135	2.1				360	1.8					585					810	2-2			
140	2.1	-			365	1.7					590					815	3-2			
145	1.8				370	1.8					595					820	4-2			
150	1.7				375	1.4					600					825	5-2			
155	1.9				380	1.5					605					830	6-2			
160	2.0				385	1.4					610					835	7-2			
165	2.7				390	1.0					615					840	8-2			
170	1.8				395	1.3					620					845	9-2			
175	1.9				400	1.3					625					850	10-2			
180	2.2	-			405	1.4					630					855				
185	2.4				410	1.2					635					860				
190	2.4				415						640					865				
195	2.3	-			420						645					870				
200	2.3				425						650					875				
205	2.1				430						655					880				
210	2.1	-			435						660					885				
215	2.1				440						665					890				
220	2.0				445						670					895				
					450						675					900				

T.O.
Drilled

CPS 1988 ✓

D. CIASS DRILLING CO.Drill No. D-3

DRILLER'S WELL LOG - 7-88

S. P. No. Taylor Com #2 Date 4-8-88

Client _____ Prospect _____

County _____ State New Mexico

If hole is a redrill or if moved from original staked position show distance and direction moved: _____

FROM	TO	FORMATION — COLOR — HARDNESS
0	40	SOFT SANDSTONE
40	45	Shale
45	65	SOFT SANDSTONE
65	75	SAND (Water)
75	200	Shale & SAND
200	225	Shale
225	290	Shale & SAND
290	320	SAND
320	400	Shale & SAND
400	420	SAND

Mud _____ Brn _____ Lime _____

Rock Bit Number _____ Make _____

Remarks: _____

Driller RONNIE BROWN

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS
NORTHWESTERN NEW MEXICOOperator Meridian Location: Unit SW Sec. 22 Twp 30 Rng 11

Name of Well/Wells or Pipeline Serviced

ELLIOTT Fed. #1-22 AND Morris A#10. 2228WElevation _____ Completion Date 11/2/91 Total Depth 380 Land Type _____Casing Strings, Sizes, Types & Depths Drilled 100' AND SET 8" PVC
CASING.If Casing Strings are cemented, show amounts & types used Cemented
WITH 22 SACKSIf 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 FRESH WATER AT 125'Depths gas encountered: NONEGround bed depth with type & amount of coke breeze used: Drilled TO
380' AND USED 16 SACKS OF Lotesco, + 74 SACKS OF AsburyDepths anodes placed: 365', 355', 345', 315', 305', 295', 285', 275', 265', 255', 245', + 235'Depths vent pipes placed: SURFACE TO 380'Vent pipe perforations: BOTTOM 260'

Remarks: _____

RECEIVED
FEB 24 1992OIL CON. DIV. I
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.

CPS GROUND BED CONSTRUCTION WORKSHEET

CPS#	P/L NAME(s), NUMBER(s)					
2228W	Elliott Fed #1-22 And Morris A #10					
*LO95	TOTAL	VOLTS	AMPS	= OHMS	DATE	NAME
		11.7	30.2	.39	11/2/91	JOHN L. MOSS
REMARKS (notes for construction log)						
Drilled 380'. Installed 380' of Vent Pipe, with the Bottom 260' Perforated. Driller Reported water at 125'						

DEPTH	LOG ANODE	ANODE *	DEPTH	LOG ANODE	ANODE *	DEPTH	LOG ANODE	ANODE *	DEPTH	LOG ANODE	ANODE *	
100			295	4.3	6	490			685			
105			300	4.2		495			690			
110			305	4.8	5	500			695			
115			310	4.2		505			700			
120	2.6		315	4.2	4	510			ANODE	DEPTH	NO.	FULLY
125	2.6		320	3.0		515			*		COKE	COKE D
130	2.7		325	2.3		520			1	365	3.2	5.3
135	2.9		330	2.1		525			2	355	3.6	5.9
140	2.8		335	2.4		530			3	345	3.5	6.0
145	2.9		340	2.9		535			4	315	4.4	6.6
150	3.0		345	3.1	3	540			5	305	4.3	6.1
155	2.6		350	2.8		545			6	295	4.4	6.2
160	2.5		355	3.9	2	550			7	285	4.8	7.2
165	2.6		360	3.1		555			8	275	4.8	7.4
170	2.6		365	3.1	1	560			9	265	4.5	7.6
175	2.3		370	1.5		565			10	255	4.6	8.4
180	1.6		375	.6		570			11	245	5.2	8.9
185	1.2		380			575			12	235	4.7	7.1
190	1.4		385			580			13			
195	1.4		390			585			14			
200	1.3		395			590			15			
205	1.1		400			595			16			
210	2.8		405			600			17			
215	4.6		410			605			18			
220	4.4		415			610			19			
225	4.4		420			615			20			
230	4.5		425			620			21			
235	4.6	12	430			625			22			
240	4.5		435			630			23			
245	5.0	11	440			635			24			
250	5.0		445			640			25			
255	4.3	10	450			645			26			
260	4.4		455			650			27			
265	4.4	9	460			655			28			
270	4.4		465			660			29			
275	4.5	8	470			665			30			
280	4.4		475			670						
285	4.5	7	480			675						
	4.2		485			680						

DISTRIBUTION - original - permanent CPS FILE

copy - Division Corrosion Supervisor

copy - Region Corrosion Specialist

API WATER ANALYSIS REPORT FORM

Laboratory No. 25-91108-1E

Company <u>MERIDIAN</u>		Sample No.		Date Sampled <u>11-2-91</u>	
Field <u>Ellice Feed #1-22; Morris A#10</u>		Legal Description <u>SW - 22 - 30 - 11</u>		County or Parish <u>San Juan</u>	
Lease or Unit <u>2228W</u>		Well		Depth <u>125'</u>	
				Formation <u>Water Table</u>	
Type of Water (Produced, Supply, etc.) <u>Produced</u>		Sampling Point		Water, B/D	
				Sampled By <u>J. L. Moss</u>	

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	<u>1,680</u>	<u>73</u>
Calcium, Ca	<u>228</u>	<u>11.4</u>
Magnesium, Mg	<u>17</u>	<u>1.4</u>
Barium, Ba		

OTHER PROPERTIES

pH	<u>7.57</u>
Specific Gravity, 60/60 F.	<u>1.0123</u>
Resistivity (ohm-meters) <u>68</u> F.	<u>1.2</u>

Total Dissolved Solids (calc.)

5,990

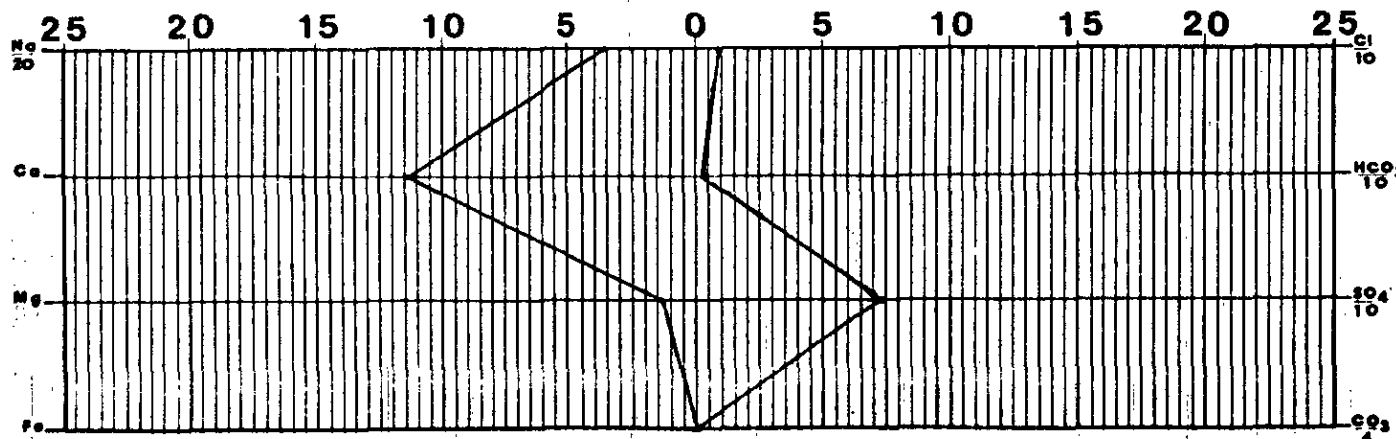
ANIONS

Chloride, Cl	<u>305</u>	<u>8.6</u>
Sulfate, SO_4	<u>3,500</u>	<u>73</u>
Carbonate, CO_3	<u>-</u>	<u>-</u>
Bicarbonate, HCO_3	<u>255</u>	<u>4.19</u>

Iron, Fe (total)

Sulfide, as H_2S

REMARKS & RECOMMENDATIONS:

ATTN: C.W. O'DONNELL

Date Received <u>8th. Nov. 1991.</u>	Preserved	Date Analyzed <u>26th. Dec. 1991.</u>	Analyzed By <u>R.H.</u>
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TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311



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: RB21200 PM: Matt Melvin AFE: Pending
2. Originating Site: Aztec Com 4 #2	
3. Location of Material (Street Address, City, State or ULSTR): UL O Section 16 T30N R11W; 36.805079, -107.994599	
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 <u>50</u> yd ³ /bbls Known Volume (to be entered by the operator at the end of the haul) <u>61</u> yd ³ /bbls	
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Thomas Long <i>Thomas Long</i> , 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) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> 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) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)	
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, Thomas Long <i>Thomas Long</i> 05-09-2022, representative for Enterprise Products Operating authorizes <u>Envirotech, Inc.</u> to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <u>Greg Crabtree</u> , representative for <u>Envirotech, Inc.</u> 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: Kelly Oil Field Services

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: *Greg Crabtree*

Surface Waste Management Facility Authorized Agent

TITLE: Enviro Manager

TELEPHONE NO.:

505-632-0615

DATE: 5/9/22



APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Aztec Com 4#2 (05/11/22)
Ensolum Project No. 05A1226192

**Photograph 1**

Photograph Description: View of the in-process excavation activities.

**Photograph 2**

Photograph Description: View of the in-process excavation activities.

**Photograph 3**

Photograph Description: View of the final excavation.



SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Aztec Com 4#2 (05/11/22)
Ensolum Project No. 05A1226192



Photograph 4

Photograph Description: View of the site after initial restoration.





APPENDIX E

Regulatory Correspondence

From: [Velez, Nelson, EMNRD](#)
To: [Long, Thomas](#)
Cc: [Stone, Brian](#); [Kyle Summers](#); [Ranee Deechilly](#)
Subject: RE: [EXTERNAL] Aztec Com 4#2- UL; UL O Section 16 T30N R11W; 36.805079, -107.994599; Incident #nAPP2213148781
Date: Wednesday, May 11, 2022 3:32:23 PM

[**EXTERNAL EMAIL**]

Tom,

Thank you for the notice. After our telecom discussion this afternoon, your request by way of a variance (19.15.29.14A (1 & 2) for the sampling notification within the 48 hours is approved (19.15.29.12D (1a).

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.

Regards

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@state.nm.us

Hrs.: 7:00–11:00 am & 12:00–3:30 pm Mon.–Thur.
7:00–11:00 am & 12:00–4:00 pm Fri.

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, May 11, 2022 1:41 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>; Kyle Summers <ksummers@ensolum.com>; Ranee Deechilly <rdeechilly@ensolum.com>
Subject: [EXTERNAL] Aztec Com 4#2- UL; UL O Section 16 T30N R11W; 36.805079, -107.994599; Incident #nAPP2213148781

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

Nelson,

This email is to inform you that Enterprise had a release of natural gas and condensate from the

Aztec Com 4#2 pipeline on Friday, May 6, 2022. The pipeline was isolated, depressurized, locked and tagged out. No washes were affected. No emergency services responded. There were no fires nor injuries. No liquids were observed on the ground surface. Enterprise began repairs and remediation today and determined this release reportable per NMOCD regulation due the volume of impacted subsurface soil. This email is also a notification that Enterprise will be collecting soil samples for laboratory analysis tomorrow May 12, 2022 at 12:00 p.m. 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



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
Aztec Com 4#2 (05/11/22)
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
Excavation Composite Soil Samples													
S-1	5.12.22	C	7.5 to 8	<0.087	<0.17	<0.17	<0.35	ND	<17	<9.7	<49	ND	<60
S-2	5.12.22	C	0 to 8	<0.099	<0.20	<0.20	<0.39	ND	<20	10	<48	10	<60
S-3	5.12.22	C	0 to 7.5	0.024	0.19	<0.046	0.61	0.82	<4.6	15	<48	15	<60
S-4	5.12.22	C	0 to 8	0.021	0.14	<0.038	0.34	0.50	<3.8	12	<49	12	<60
S-5	5.12.22	C	0 to 8	<0.021	0.15	<0.042	0.42	0.57	<4.2	13	<50	13	<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)

NA = Not Analyzed

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

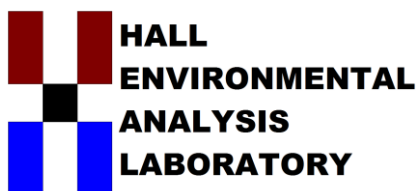
DRO = Diesel Range Organics

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

May 23, 2022

Kyle Summers

ENSOLUM

606 S. Rio Grande Suite A

Aztec, NM 87410

TEL: (903) 821-5603

FAX:

RE: Aztec Com 4 2 5 6 22

OrderNo.: 2205618

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/13/2022 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 white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2205618

Date Reported: 5/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-1

Project: Aztec Com 4 2 5 6 22

Collection Date: 5/12/2022 12:05:00 PM

Lab ID: 2205618-001

Matrix: SOIL

Received Date: 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2022 10:54:49 AM	67451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/13/2022 10:53:48 AM	67448
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/13/2022 10:53:48 AM	67448
Surr: DNOP	84.3	51.1-141		%Rec	1	5/13/2022 10:53:48 AM	67448
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	5/13/2022 9:06:55 AM	67437
Surr: BFB	97.1	37.7-212		%Rec	5	5/13/2022 9:06:55 AM	67437
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.087		mg/Kg	5	5/13/2022 9:06:55 AM	67437
Toluene	ND	0.17		mg/Kg	5	5/13/2022 9:06:55 AM	67437
Ethylbenzene	ND	0.17		mg/Kg	5	5/13/2022 9:06:55 AM	67437
Xylenes, Total	ND	0.35		mg/Kg	5	5/13/2022 9:06:55 AM	67437
Surr: 4-Bromofluorobenzene	95.3	70-130		%Rec	5	5/13/2022 9:06:55 AM	67437

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	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 range due to dilution or matrix interference		

Page 1 of 9

Analytical Report

Lab Order 2205618

Date Reported: 5/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-2

Project: Aztec Com 4 2 5 6 22

Collection Date: 5/12/2022 12:10:00 PM

Lab ID: 2205618-002

Matrix: SOIL

Received Date: 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2022 11:07:14 AM	67451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	10	9.7		mg/Kg	1	5/13/2022 11:25:40 AM	67448
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2022 11:25:40 AM	67448
Surr: DNOP	87.2	51.1-141		%Rec	1	5/13/2022 11:25:40 AM	67448
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	5/13/2022 9:30:18 AM	67437
Surr: BFB	101	37.7-212		%Rec	5	5/13/2022 9:30:18 AM	67437
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.099		mg/Kg	5	5/13/2022 9:30:18 AM	67437
Toluene	ND	0.20		mg/Kg	5	5/13/2022 9:30:18 AM	67437
Ethylbenzene	ND	0.20		mg/Kg	5	5/13/2022 9:30:18 AM	67437
Xylenes, Total	ND	0.39		mg/Kg	5	5/13/2022 9:30:18 AM	67437
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	5	5/13/2022 9:30:18 AM	67437

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	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 range due to dilution or matrix interference		

Page 2 of 9

Analytical Report

Lab Order 2205618

Date Reported: 5/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-3

Project: Aztec Com 4 2 5 6 22

Collection Date: 5/12/2022 12:15:00 PM

Lab ID: 2205618-003

Matrix: SOIL

Received Date: 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2022 11:19:39 AM	67451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	15	9.6		mg/Kg	1	5/13/2022 11:36:22 AM	67448
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/13/2022 11:36:22 AM	67448
Surr: DNOP	103	51.1-141		%Rec	1	5/13/2022 11:36:22 AM	67448
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/13/2022 9:53:40 AM	67437
Surr: BFB	101	37.7-212		%Rec	1	5/13/2022 9:53:40 AM	67437
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.024	0.023		mg/Kg	1	5/13/2022 9:53:40 AM	67437
Toluene	0.19	0.046		mg/Kg	1	5/13/2022 9:53:40 AM	67437
Ethylbenzene	ND	0.046		mg/Kg	1	5/13/2022 9:53:40 AM	67437
Xylenes, Total	0.61	0.092		mg/Kg	1	5/13/2022 9:53:40 AM	67437
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	5/13/2022 9:53:40 AM	67437

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	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 range due to dilution or matrix interference		

Page 3 of 9

Analytical Report

Lab Order 2205618

Date Reported: 5/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-4

Project: Aztec Com 4 2 5 6 22

Collection Date: 5/12/2022 12:20:00 PM

Lab ID: 2205618-004

Matrix: SOIL

Received Date: 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2022 11:32:04 AM	67451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	12	9.7		mg/Kg	1	5/13/2022 11:47:01 AM	67448
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/13/2022 11:47:01 AM	67448
Surr: DNOP	90.3	51.1-141		%Rec	1	5/13/2022 11:47:01 AM	67448
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	5/13/2022 10:17:05 AM	67437
Surr: BFB	98.3	37.7-212		%Rec	1	5/13/2022 10:17:05 AM	67437
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	0.021	0.019		mg/Kg	1	5/13/2022 10:17:05 AM	67437
Toluene	0.14	0.038		mg/Kg	1	5/13/2022 10:17:05 AM	67437
Ethylbenzene	ND	0.038		mg/Kg	1	5/13/2022 10:17:05 AM	67437
Xylenes, Total	0.34	0.077		mg/Kg	1	5/13/2022 10:17:05 AM	67437
Surr: 4-Bromofluorobenzene	96.7	70-130		%Rec	1	5/13/2022 10:17:05 AM	67437

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	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 range due to dilution or matrix interference		

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Analytical Report

Lab Order 2205618

Date Reported: 5/23/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM

Client Sample ID: S-5

Project: Aztec Com 4 2 5 6 22

Collection Date: 5/12/2022 12:25:00 PM

Lab ID: 2205618-005

Matrix: SOIL

Received Date: 5/13/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	5/13/2022 11:44:30 AM	67451
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	13	9.9		mg/Kg	1	5/13/2022 11:57:42 AM	67448
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/13/2022 11:57:42 AM	67448
Surr: DNOP	101	51.1-141		%Rec	1	5/13/2022 11:57:42 AM	67448
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	5/13/2022 10:40:31 AM	67437
Surr: BFB	100	37.7-212		%Rec	1	5/13/2022 10:40:31 AM	67437
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.021		mg/Kg	1	5/13/2022 10:40:31 AM	67437
Toluene	0.15	0.042		mg/Kg	1	5/13/2022 10:40:31 AM	67437
Ethylbenzene	ND	0.042		mg/Kg	1	5/13/2022 10:40:31 AM	67437
Xylenes, Total	0.42	0.083		mg/Kg	1	5/13/2022 10:40:31 AM	67437
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	5/13/2022 10:40:31 AM	67437

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	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
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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2205618

23-May-22

Client: ENSOLUM

Project: Aztec Com 4 2 5 6 22

Sample ID: MB-67451	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 67451	RunNo: 87973								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3120035	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-67451	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 67451	RunNo: 87973								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3120036	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.5	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 range due to dilution or matrix interference		

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

WO#: 2205618

23-May-22

Client: ENSOLUM**Project:** Aztec Com 4 2 5 6 22

Sample ID: 2205618-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 67448	RunNo: 87975								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3118514 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.4	46.90	9.220	86.9	36.1	154			
Surr: DNOP	3.8		4.690		81.8	51.1	141			

Sample ID: 2205618-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: S-1	Batch ID: 67448	RunNo: 87975								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3118515 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.7	48.26	9.220	90.7	36.1	154	5.77	33.9	
Surr: DNOP	4.5		4.826		93.2	51.1	141	0	0	

Sample ID: LCS-67448	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 67448	RunNo: 87975								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3118521 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	68.9	135			
Surr: DNOP	4.3		5.000		85.6	51.1	141			

Sample ID: MB-67448	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 67448	RunNo: 87975								
Prep Date: 5/13/2022	Analysis Date: 5/13/2022	SeqNo: 3118522 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.9		10.00		78.9	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 range due to dilution or matrix interference		

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

WO#: 2205618

23-May-22

Client: ENSOLUM**Project:** Aztec Com 4 2 5 6 22

Sample ID: mb-67437	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 67437	RunNo: 87967								
Prep Date: 5/12/2022	Analysis Date: 5/13/2022	SeqNo: 3119095 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	960		1000		96.3	37.7	212			

Sample ID: lcs-67437	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 67437	RunNo: 87967								
Prep Date: 5/12/2022	Analysis Date: 5/13/2022	SeqNo: 3119096 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	104	72.3	137			
Surr: BFB	2100		1000		210	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 range due to dilution or matrix interference		

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

WO#: 2205618

23-May-22

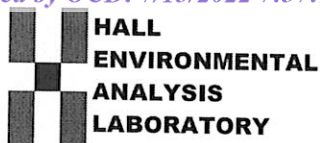
Client: ENSOLUM**Project:** Aztec Com 4 2 5 6 22

Sample ID: mb-67437	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 67437	RunNo: 87967								
Prep Date: 5/12/2022	Analysis Date: 5/13/2022	SeqNo: 3119121 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	0.97		1.000		96.5	70	130			

Sample ID: LCS-67437	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 67437	RunNo: 87967								
Prep Date: 5/12/2022	Analysis Date: 5/13/2022	SeqNo: 3119122 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	1.000	0	80.1	80	120			
Toluene	0.86	0.050	1.000	0	85.8	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.0	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.8	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	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 range due to dilution or matrix interference		



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: 2205618

RcptNo: 1

Received By: Juan Rojas

5/13/2022 7:00:00 AM

Completed By: Tracy Casarrubias

5/13/2022 7:25:23 AM

Reviewed By: NB5/13/22

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: gn 5/13/22

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	2.8	Good	Yes			

Chain-of-Custody Record

Client: Ensolum, LLC

Mailing Address: 606 S Rio Grande, Suite A

Aztec, NM 87410

Phone #:

email or Fax#: Ksummers@ensolum.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

SAME DAY

☐ Standard ☒ Rush 108/0

Project Name:

Aztec Com 4#2 (5/6/22)

Project #: see notes

Project Manager: J Summers

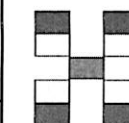
Sampler:

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): $28 - 0 = 2.8$ ($^{\circ}\text{C}$)[illegible]Preservative
Type

HEAL No.
770.5418



HALL ENVIRONMENTAL ANALYSIS LABORATORY


www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Date:	Time:	Relinquished by:
5/12/22	1343	

Received by:	Via:	Date	Time
<i>[Signature]</i>	<i>[Signature]</i>	5/3/22	1343

Remarks: PM-Tom Long (EPR00)
SAMEDAY Pay Key - RB21200
 Non AFE - NS9548

Date:	Time:	Relinquished by:
5/12/22	1817	Christina Whetstone

Received by: Via: Date Time

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

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 124852

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 124852
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	7/27/2022