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: **151618**
Contact Name: **Thomas Long**	Contact Telephone: **505-599-2286**
Contact email:**tjlong@eprod.com**	**Incident #** *(assigned by OCD):* **NAPP2100423987**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.673469** Longitude **-107.723081** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Blanco C-51**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: **12/24/2020**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
K	**7**	**28N**	**8W**	**San Juan**

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☒ Condensate	Volume Released (bbls): **3-5 Barrels**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **14.63 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release On December 24, 2020, Enterprise had a release of natural gas and natural gas liquids from the Blanco C-51 pipeline riser. An area of approximately 20 feet in diameter was impacted by the released fluids. No washes/waterways were affected. The pipeline was isolated, depressurized, locked and tagged out. Enterprise evaluated the release site on December 31, 2020. Soil samples collected for laboratory analysis indicated no environmental impacts above NMOCD Tier I remediation standards. A third party closure report is included with this "Final." C-141.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

☒ Description of remediation activities

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

Printed Name: Jon E. Fields Title: Director, Environmental

Signature: Jon E. Fields Date: 8/25/2021

email: jefields@eprod.com Telephone: (713) 381-6684

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: Nelson Velez Date: 03/03/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

CLOSURE REPORT

Property:

Blanco C-51 (12/24/20)
SW ¼, S7 T28N R8W
San Juan County, New Mexico

NM EMNRD OCD Incident ID No. NAPP2100423987

April 7, 2021
Ensolum Project No. 05A1226130

Prepared for:

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

Prepared by:

Chad D'Aponti
Environmental Scientist

Kyle Summers, CPG
Sr. Project Manager

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LIST OF APPENDICES

ENSOLUM

CLOSURE REPORT

Blanco C-51 (12/24/20)
SW ¼, S7 T28N R8W
San Juan County, New Mexico

Ensolum Project No. 05A1226130

1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Blanco C-51 (12/24/20) (Site)
Incident ID	NAPP2100423987
Location:	36.673469 ° North, 107.723081 ° West Southwest (SW) ¼ of Section 7, Township 28 North, Range 8 West San Juan County, New Mexico
Property:	United States (US) Bureau of Land Management (BLM)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On December 24, 2021, a release of natural gas was identified at the Blanco C-51 drip riser. Enterprise subsequently isolated and locked the line out of service and replaced the valve on the drip riser. On December 31, 2021, Enterprise initiated activities to remediate potential petroleum hydrocarbon impact resulting from the release.

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

1.2 Project Objective

The primary objective of the closure activities was to evaluate constituent of concern (COC) concentrations in the on-Site soils with respect to the applicable New Mexico EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. To address the activities related to oil and gas releases, the New Mexico EMNRD OCD references New Mexico Administrative Code (NMAC) 19.15.29 *Releases,* which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD imaging database to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following bullets are provided in **Appendix B**.

- The 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). Several PODs with recorded depths to water were identified in the database that are located in the same Public Land Survey System (PLSS) section as the Site as well as in adjacent sections. The closest POD (SJ-04069) is located 0.8 miles northwest of the Site. This POD is a monitoring well network that includes 16 monitoring wells (SJ-04069 POD-1 through POD-16). The monitoring well network is located at the Hilcorp Energy Company Standard Oil Com #1 well site (previously operated by El Paso Natural Gas Company). The elevation for the well site is approximately 5,689 feet (29 feet lower in elevation than the Site (5,718 feet)). Data records for this site indicate an average depth to water of 23 feet below grade surface (bgs). The average depth to water for additional PODs located over one (1) mile in adjacent sections is approximately 400 feet bgs. (**Figure A**, **Appendix B**).

- Several cathodic protection wells were identified within one (1) mile of the Site as well as in adjacent PLSS sections. The closest cathodic protection well is located approximately 915 feet northwest of the Site near the Riddle G #1A oil/gas well site. The Riddle G #1A cathodic protection well is located at a lower elevation (5,687 feet, based on the well record) than the Site. The record for this cathodic well indicates a depth to water of approximately 20 feet bgs. The records for the remaining cathodic wells located near the Site indicate water depths ranging from 40 feet bgs to 120 feet bgs (**Figure B**, **Appendix B**).

- The Site is located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or significant watercourse. The Site is located approximately 180 feet north of Largo Canyon Wash (**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 (5) 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 (**Figure E**, **Appendix B**).

- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.

- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is located within 300 feet of a wetland. The Site is located approximately 218 feet north of a freshwater emergent wetland (**Figure F**, **Appendix B**).

- Based on information identified in the New Mexico Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine (**Figure G**, **Appendix B**).

- The Site is not located within an unstable area.

- Based on information identified in the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not located within a 100-year floodplain (**Figure H**, **Appendix B**).

Based on the identified siting criteria, the depth to water at the Site is estimated to be less than 50 feet bgs. The applicable cleanup goals for soils remaining in place at the Site include:

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

*Constituents are measured in milligrams per kilogram (mg/kg)
[1] – Total Petroleum Hydrocarbon (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range (MRO).
[2] – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)

3.0 SITE ASSESSMENT

On the day of the release, Enterprise reported the Site to the New Mexico EMNRD OCD due to the proximity to Largo Canyon Wash and the dark color of the fluids that were released from the drip riser. On December 31, 2020, before any corrective action commenced, a Ensolum representative assessed the Site and observed that there was no soil staining from the previously observed dark fluids, possibly indicating that the release was comprised of oxygen deficient produced water.

Field screening results did not indicate elevated levels of petroleum hydrocarbon impact and therefore no remedial actions were implemented prior to confirmation sampling.

West States Energy Contractors, Inc., (WSEC) provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The lithology encountered at the site consisted primarily of unconsolidated silty sandy clay.

The map in **Figure 3** (**Appendix A**) identifies approximate soil sample locations with respect to the drip riser (**Appendix A**) and well tie. Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

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

Ensolum's soil sampling program included the collection of two (2) composite soil samples (S-1 and FP-1) for laboratory analysis. The composite samples were comprised of five (5) aliquots each and represent an estimated 200 square foot sample area per guidelines outlined in Section D of 19.15.29.12 NMAC. A clean shovel was utilized to obtain fresh aliquots from the release area.

On December 31, 2020, sampling was performed at the Site. The BLM and New Mexico EMNRD OCD were notified of the sampling event although no representatives were present during sampling activities. Regulatory correspondence is provided in **Appendix D**.

Composite soil sample S-1 (0.25') was collected from the area surrounding the drip riser. Composite soil sample FP-1 (0.25') was collected from the flow path.

The soil samples were 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, New Mexico, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

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

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

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples (S-1 and FP-1) to the applicable New Mexico EMNRD OCD closure criteria.

- The laboratory analytical results for the composite soil samples indicate benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 10 mg/kg.
- The laboratory analytical results for the composite soil samples indicate total BTEX is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- The laboratory analytical results for the composite soil samples indicate combined TPH GRO/DRO/MRO is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- The laboratory analytical results for the composite soil samples indicate chloride is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for chlorides.

The laboratory analytical results are summarized in **Table 1** (**Appendix E**).

7.0 RECLAMATION AND REVEGETATION

The Site did not exhibit concentration of COC above the applicable closure criteria, but the area in the immediate vicinity of the drip valve was back-dragged/graded following the receipt of the sample results to provide a suitable driving surface.

8.0 FINDINGS AND RECOMMENDATION

- Two (2) composite soil samples were collected from the Site. Based on laboratory analytical results, benzene, BTEX, chloride, or combined TPH GRO/DRO/MRO exceedances were not identified in the Site soils.

- The site did not require remediation.

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.

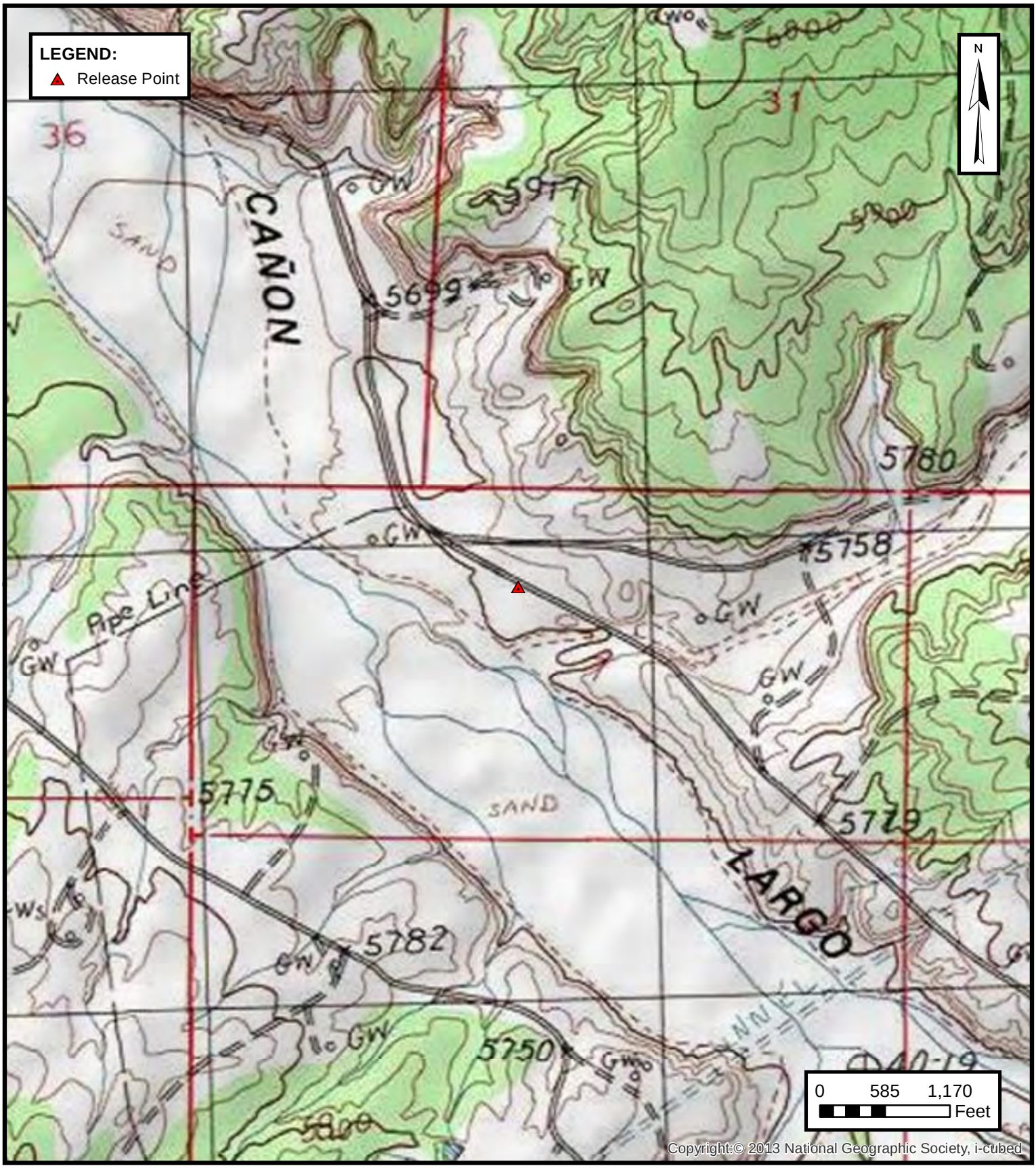
9.3 Reliance

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 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.

ENSOLUM

APPENDIX A

Figures



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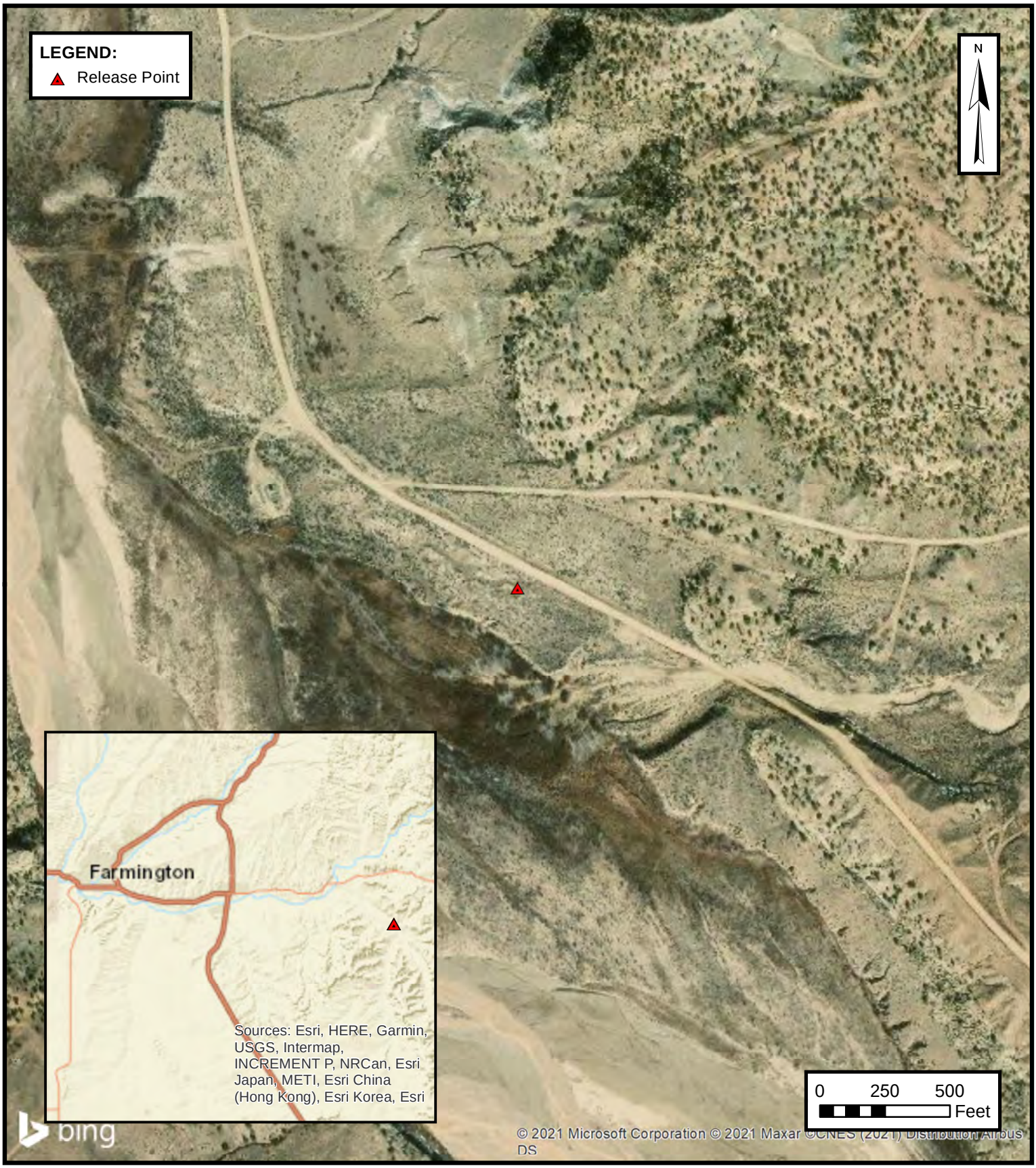
Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE
1



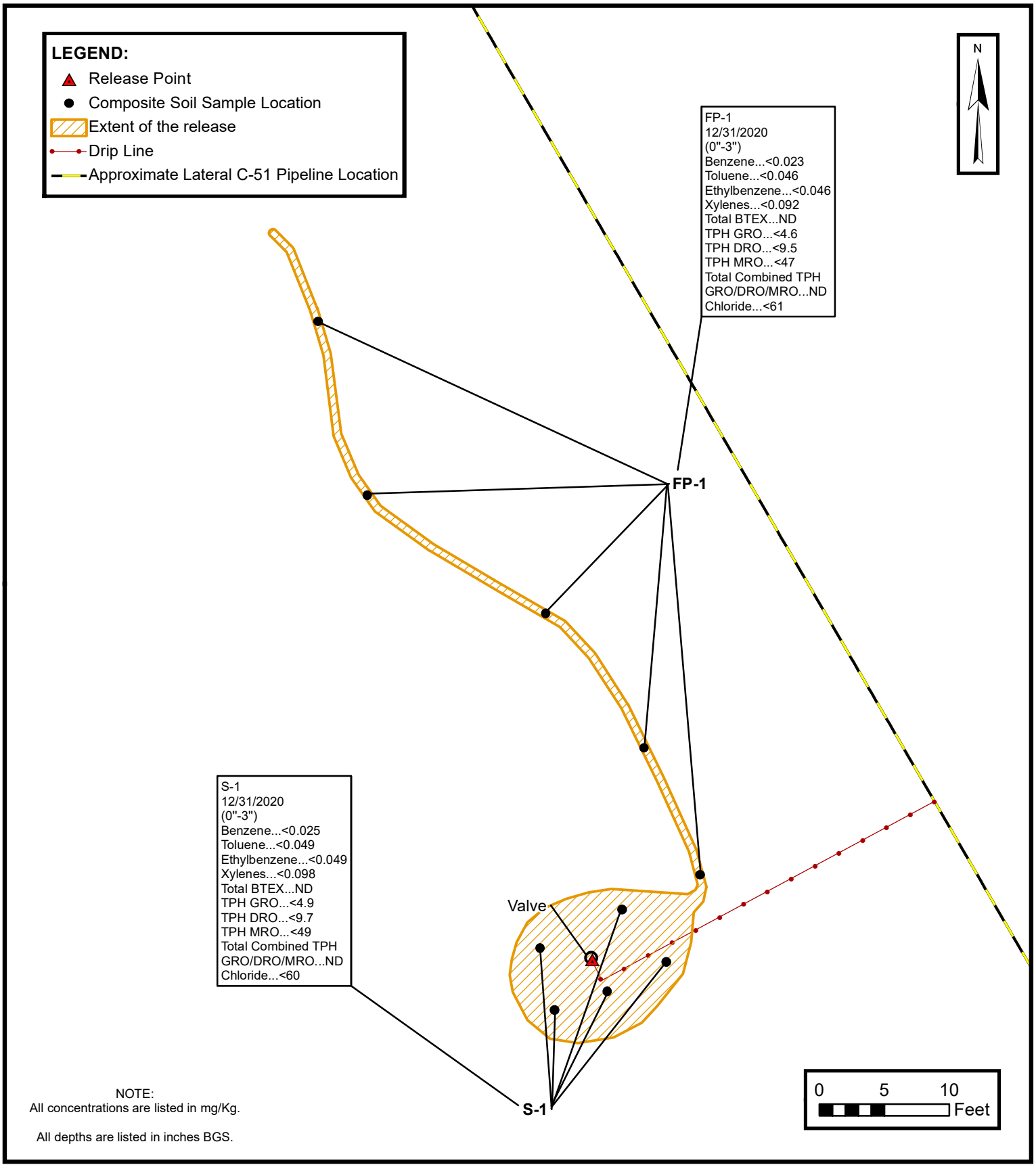
ENSOLUM
Environmental & Hydrogeologic Consultants

SITE VICINITY MAP

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE
2



NOTE:
All concentrations are listed in mg/Kg.

All depths are listed in inches BGS.

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Environmental & Hydrogeologic Consultants

SITE MAP

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

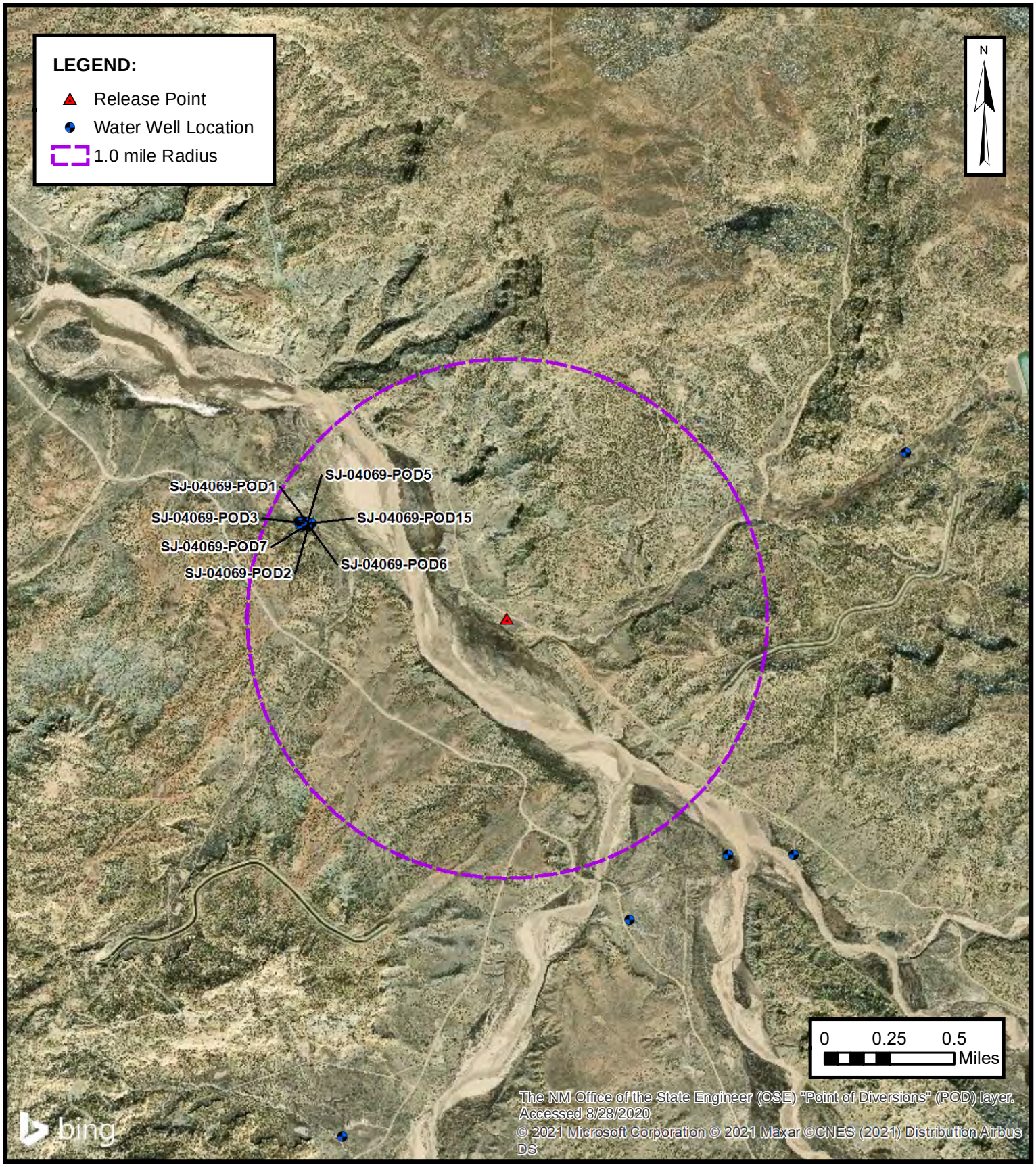
PROJECT NUMBER: 05A1226130

FIGURE
3

ENSOLUM

APPENDIX B

Siting Figures and Documentation



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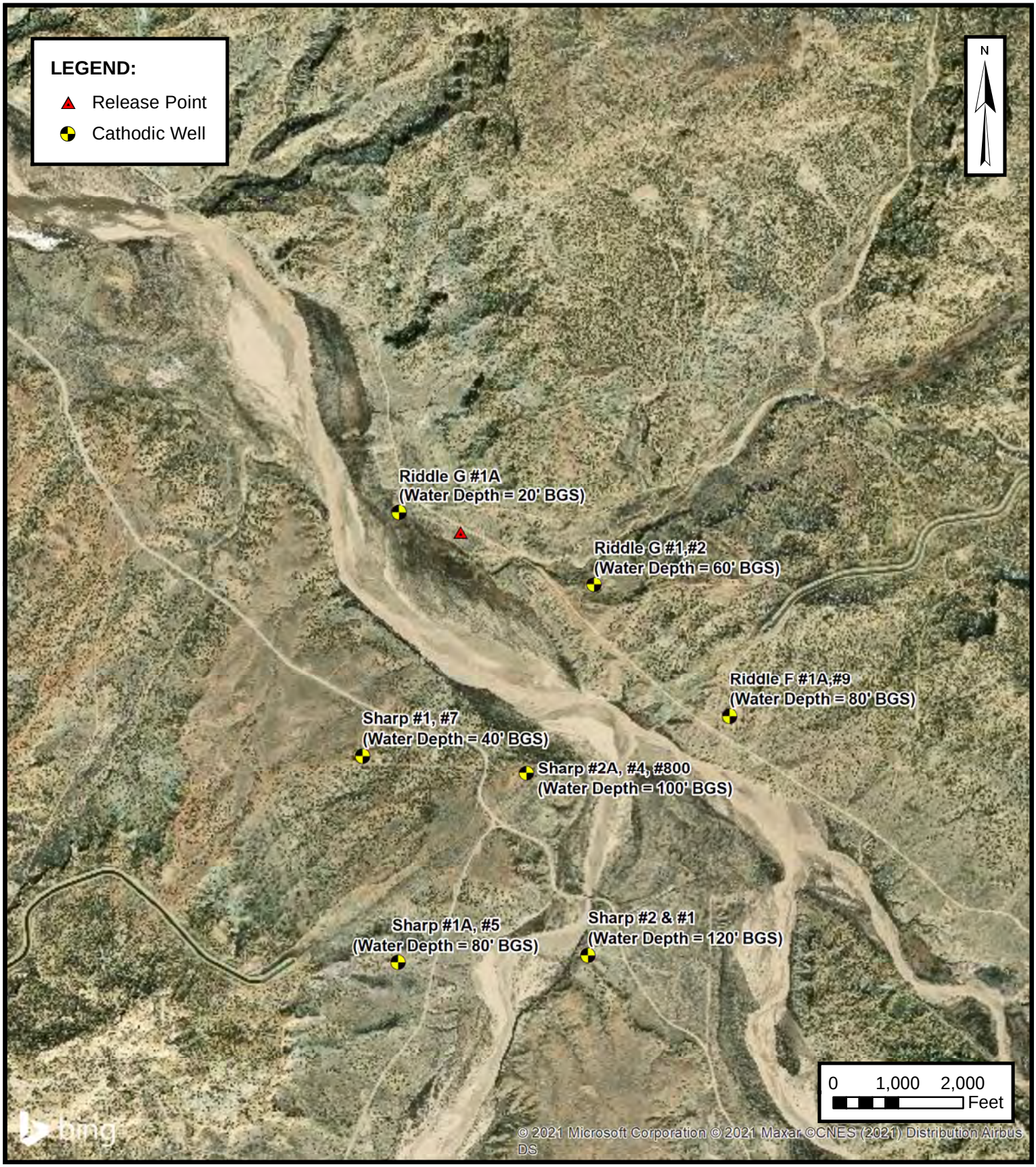
1.0 MILE RADIUS WATER WELL MAP

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE

A



ENSOLUM
Environmental & Hydrogeologic Consultants

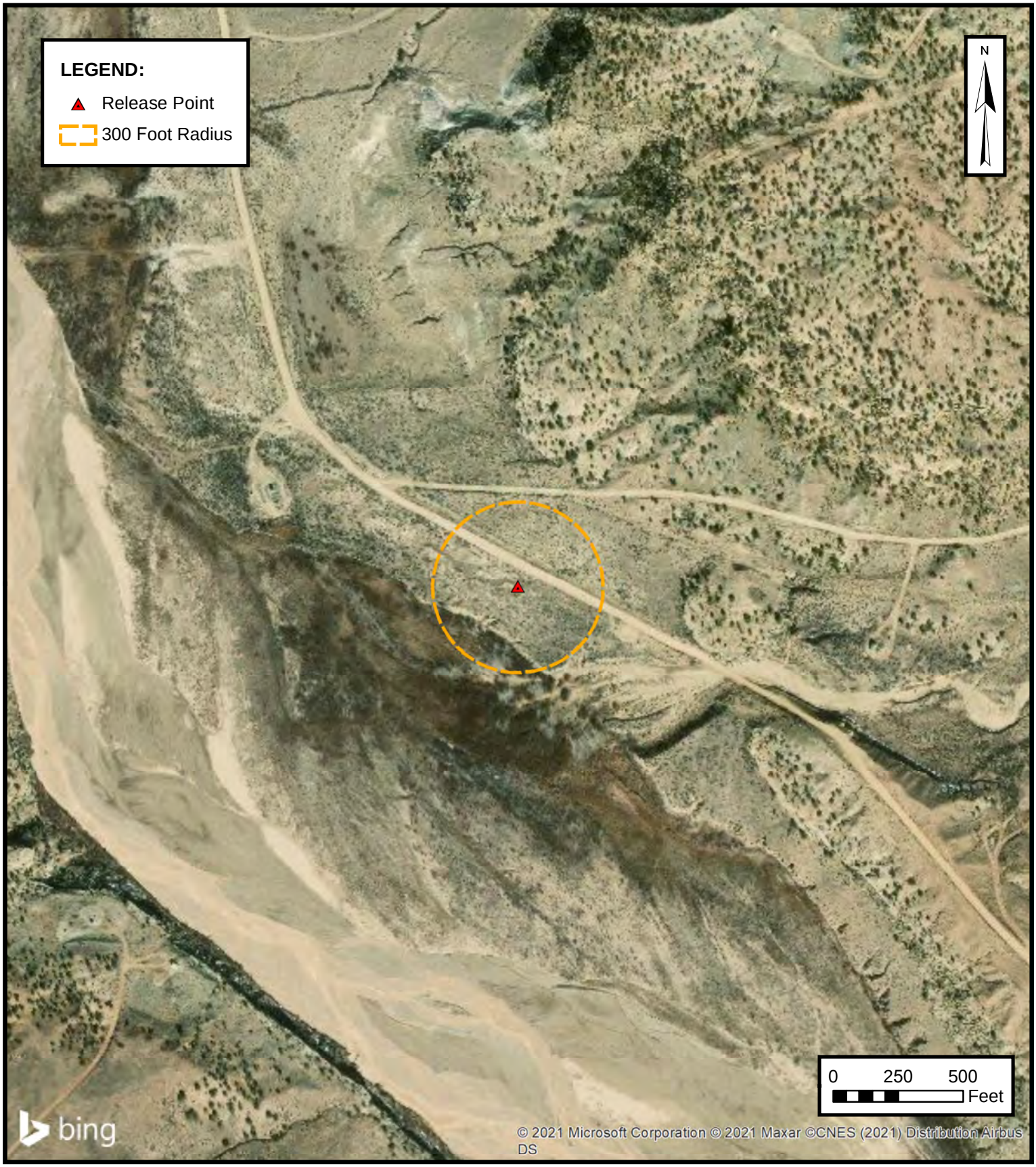
CATHODIC PROTECTION WELL RECORDED DEPTH TO WATER

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE

B



ENSOLUM
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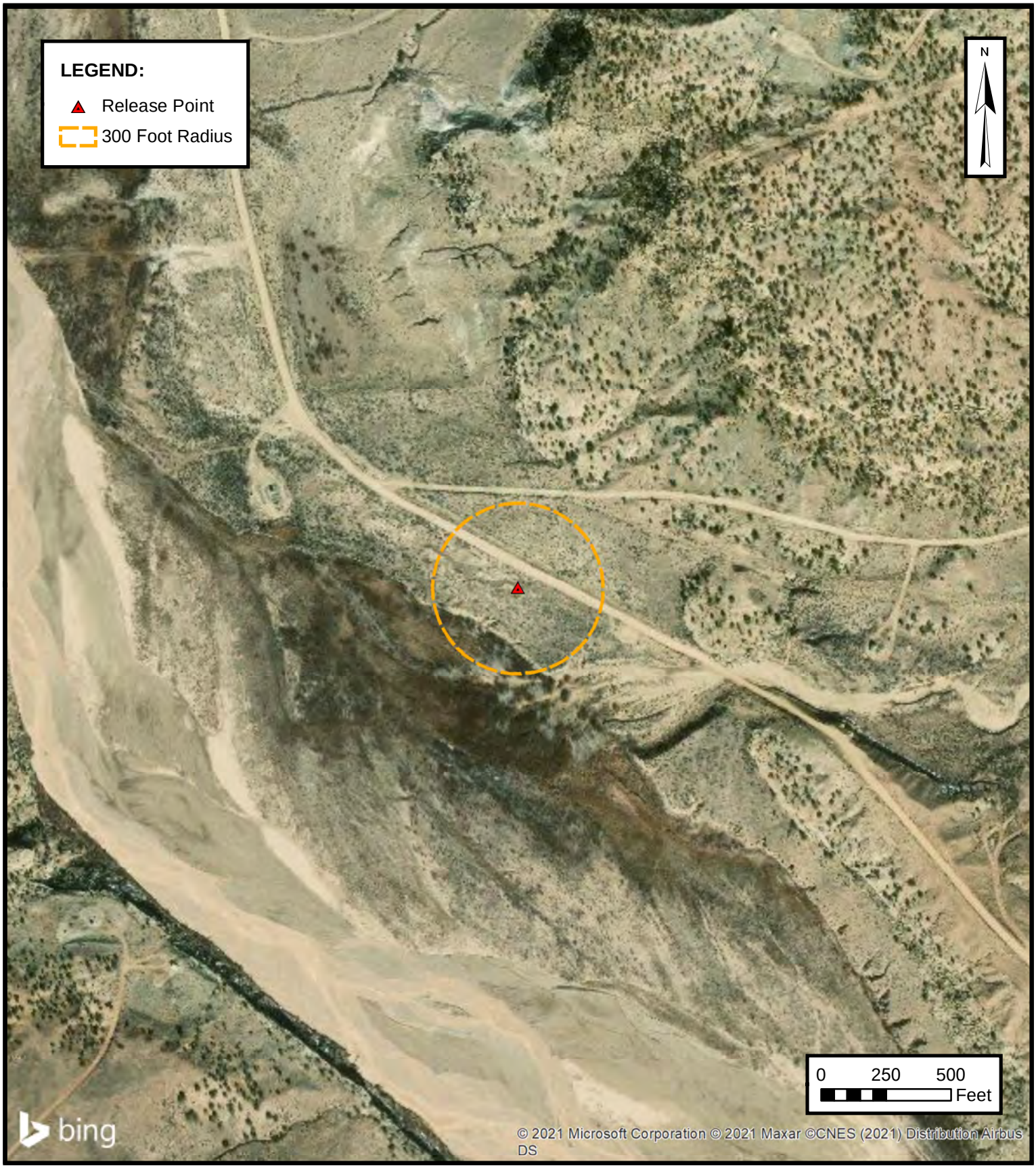
300 FOOT RADIUS
WATERCOURSE AND DRAINAGE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE
C

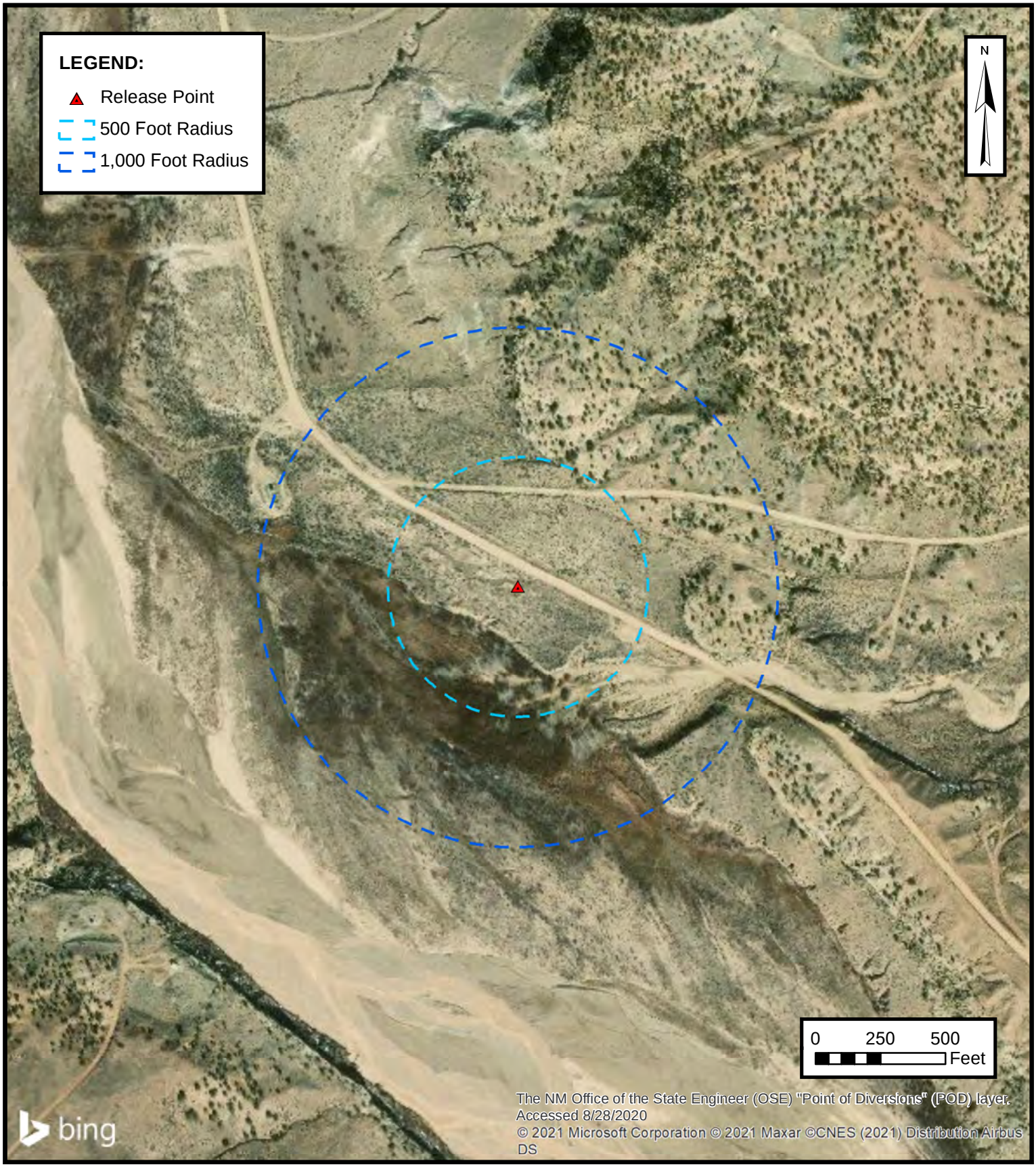


ENSOLUM
Environmental & Hydrogeologic Consultants

300 FOOT RADIUS
OCCUPIED STRUCTURE IDENTIFICATION
ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE
D



ENSOLUM
Environmental & Hydrogeologic Consultants

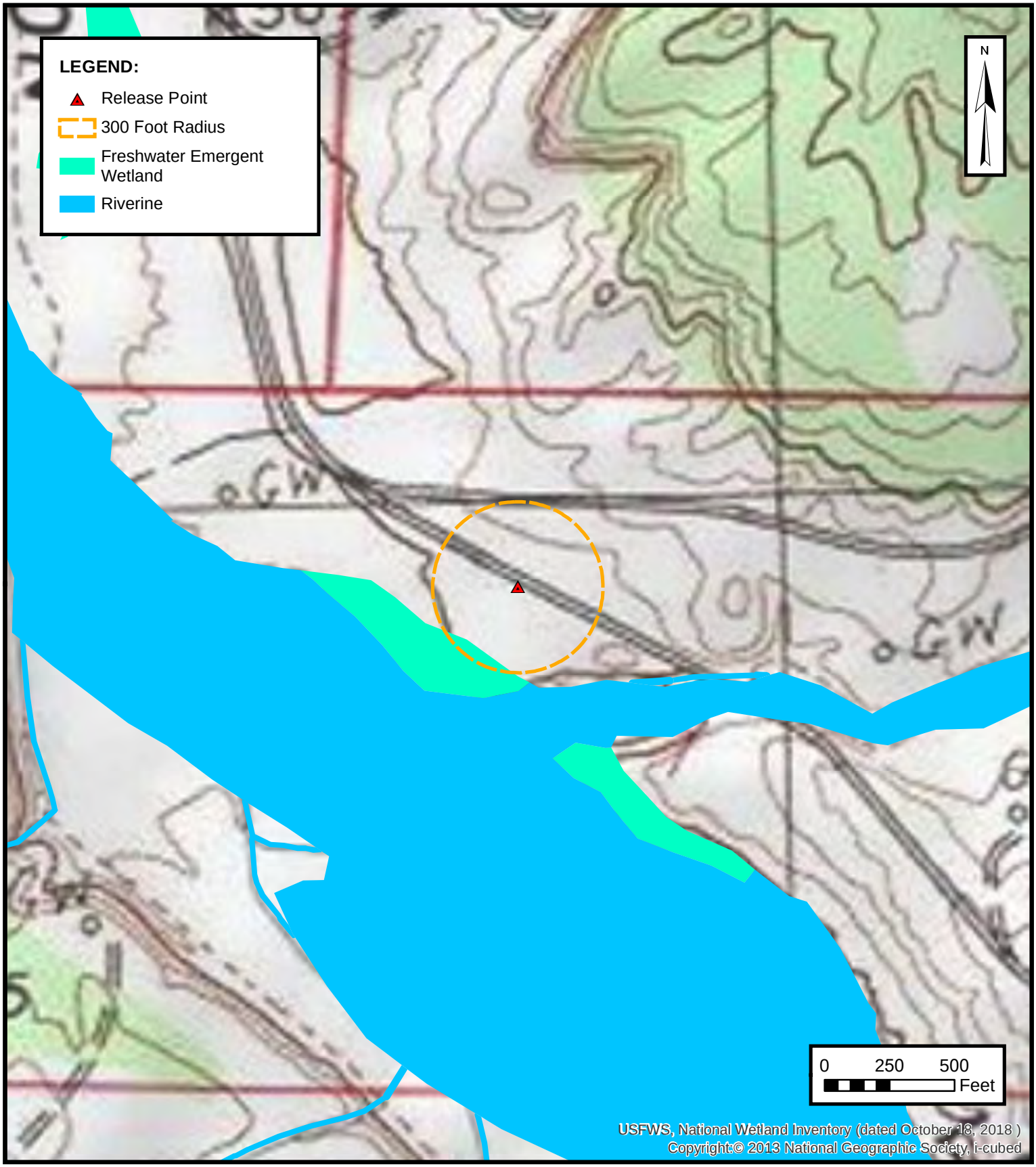
WATER WELL AND NATURAL SPRING LOCATION

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE

E



ENSOLUM
Environmental & Hydrogeologic Consultants

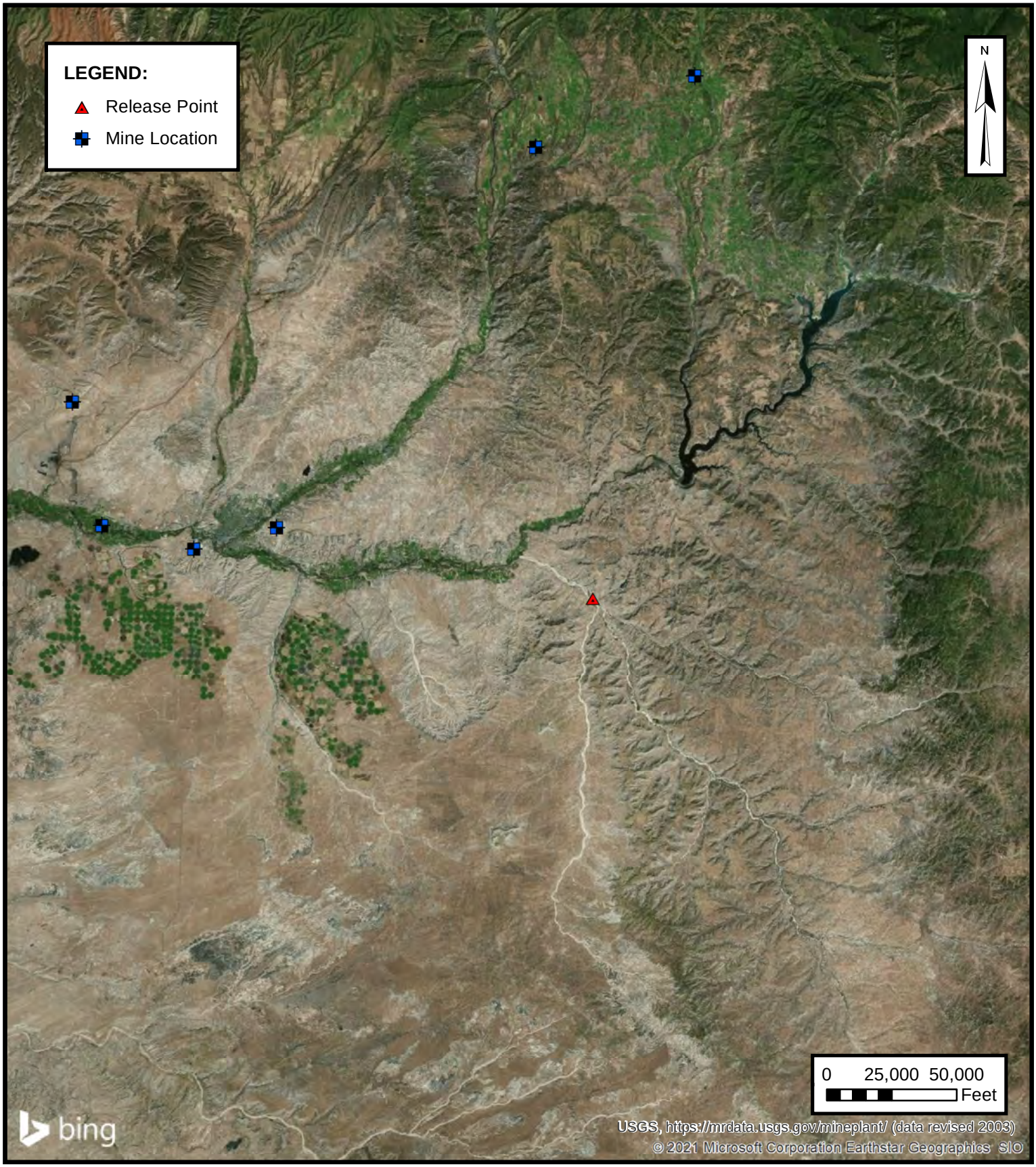
WETLANDS

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE

F



ENSOLUM
Environmental & Hydrogeologic Consultants

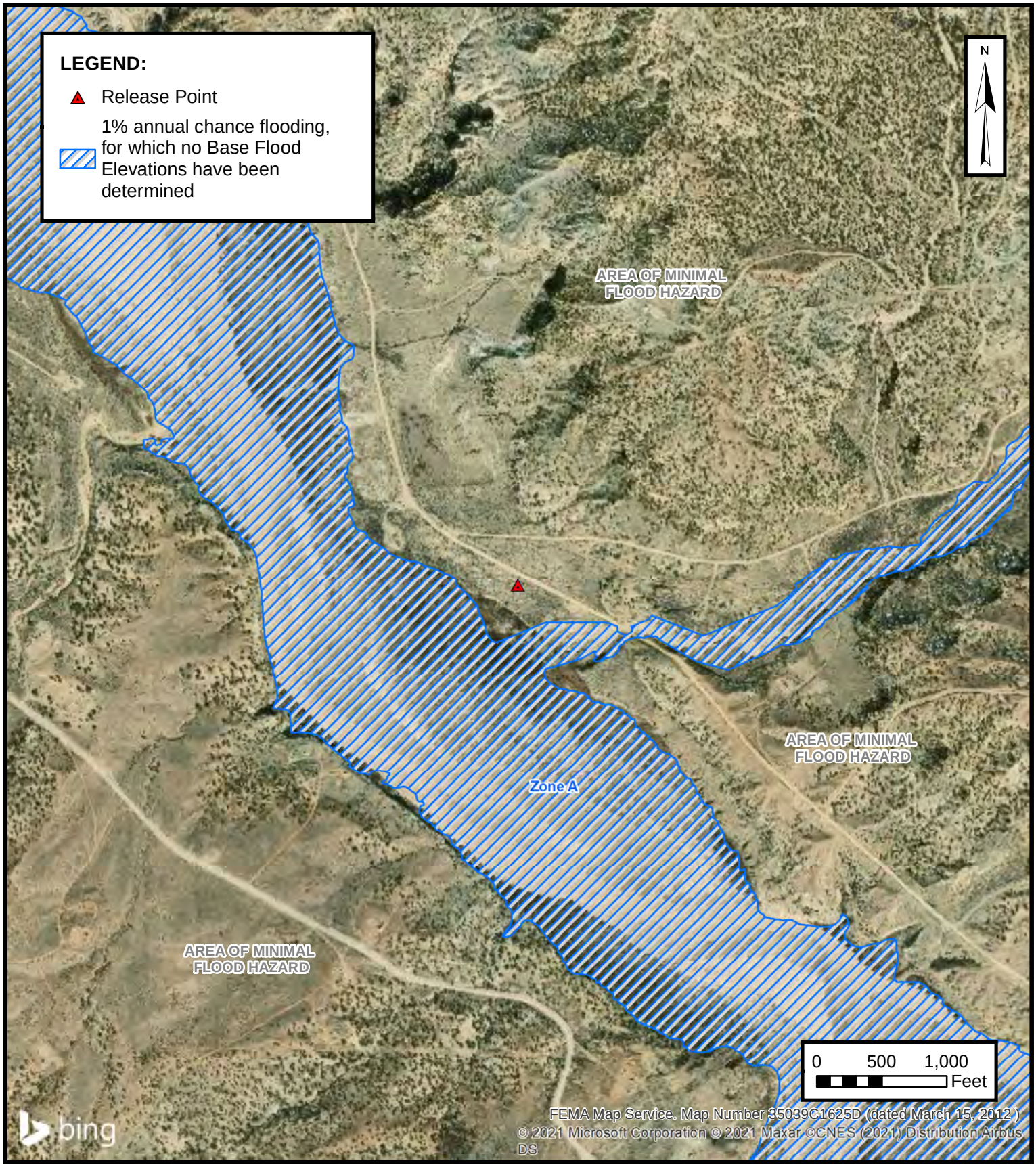
MINES, MILLS AND QUARRIES

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

FIGURE

G



ENSOLUM
Environmental & Hydrogeologic Consultants

100-YEAR FLOOD PLAIN MAP

ENTERPRISE FIELD SERVICES, LLC
BLANCO C-51 (12/24/20)
SW ¼, S7 T28N R8W, San Juan County, New Mexico
36.673469 ° N, 107.723081 ° W

PROJECT NUMBER: 05A1226130

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 Code	Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 00163 S		SJ	SJ	2	4	4	18	28N	08W	257354	4060237*	1450	800	650
SJ 00209		SJ	SJ	1	2	3	17	28N	08W	257969	4060618*	15		
SJ 00209 -AMENDED-S	O		SJ	1	1	4	17	28N	08W	258371	4060609*	15		
SJ 00209 S		SJ	SJ	1	1	4	17	28N	08W	258371	4060609*	15	0	15

Average Depth to Water: **400 feet**

Minimum Depth: **0 feet**

Maximum Depth: **800 feet**

Record Count: 4

PLSS Search:

Section(s): 7, 8, 17, 18 **Township:** 28N **Range:** 08W

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 31, 32 **Township:** 29N **Range:** 08W

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-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 04069 POD12	SJ	SJ		4	3	36	29N	09W	255393	4062734	30	13	17
SJ 04069 POD13	SJ	SJ		4	3	36	29N	09W	255399	4062714	31	18	13
SJ 04069 POD14	SJ	SJ		4	3	36	29N	09W	255415	4062703	40		
SJ 04069 POD15	SJ	SJ		4	3	36	29N	09W	255473	4062725	35	20	15
SJ 04069 POD16	SJ	SJ		4	3	36	29N	09W	255445	4062735	30	17	13
SJ 04069 POD5	SJ	SJ	1	4	3	36	29N	09W	255447	4062735	20		

Average Depth to Water: **17 feet**
Minimum Depth: **13 feet**
Maximum Depth: **20 feet**

Record Count: 6

PLSS Search:

Section(s): 36 **Township:** 29N **Range:** 09W

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 12, 13 **Township:** 28N **Range:** 09W

30-045-22776

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

Operator MERIDIAN OIL Location: Unit SW Sec. 7 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced RIDDLE G #1A

cps 1359w

Elevation 5687' Completion Date 6/6/79 Total Depth 380' Land Type* N/A

Casing, Sizes, Types & Depths 50' OF 8" CASING

If Casing is cemented, show amounts & types used 10'

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. 20' WATER FLOWING OUT OF HOLE

NEXT A.M.

Depths gas encountered: N/A

Type & amount of coke breeze used: 60 SACKS

Depths anodes placed: 355', 315', 305', 265', 235', 225', 180', 160', 110', 90'

Depths vent pipes placed: 370' of 1" PIPE

Vent pipe perforations: 300'

Remarks: gb #1

RECEIVED
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.

Natural Gas Company

-238 (Rev. 11-71)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

CONTRACT #1

ng Log (Attach Hereto). ☐ 2 x 60 ANODES Completion Date 6-6-79

lame	Location	CPS No.
Riddle G #1A	SW 7-28-8	1359 W

& Size Bit Used	Work Order No.
6 3/4"	57264-21

Hole Depth	Total Drilling Rig Time	Total ~~Lbs~~ Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
380'	See Below	60 Sacks		

e Depth	#2	#3	#4	#5	#6	#7	#8	#9	#10
355	315	305	265	235	225	180	160	110	90
e Output (Amps)									
5.1	4.3	5.0	5.2	5.3	4.7	4.9	4.5	4.3	5.3

ie Depth	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20
ie Output (Amps)	# 12	# 13	# 14	# 15	# 16	# 17	# 18	# 19	# 20

d Circuit Resistance				No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
ts 10.2	Amps 23.3	Ohms .44			

arks: DRILLER Said Hit water @ 20', DRILLED TO 380'. Next A.M. had WTR Flowing. Set 50' of 8" Casing. INSTALLED 370' of 1" VENT PIPE perforated 300' of VENT PIPE. Slurryed 60 Sacks of coke, left APPROX. 10' open hole, IN case hole Needs TO be cemented TO STOP WATER flow. STATIC - 600' S = .65

40V 16A Rect

20' meter Pole

Tch + 1 cable - 160'

Extra cable - 137'

Hole - ~~120'~~ 95'

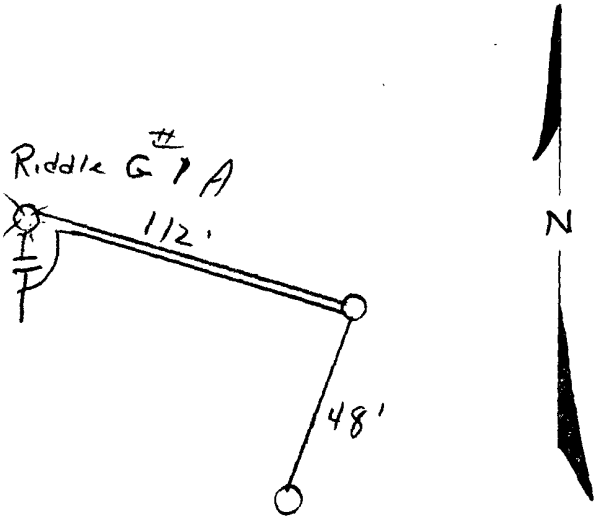
Pay for cementing Hole

Pay 405' Hole

All Construction Completed

Willis Dwight Jr.
(Signature)

GROUND BED LAYOUT SKETCH



DISTRIBUTION:
WHITE – Division Corrosion Office
YELLOW – Area Corrosion Office
PINK – Originator File

5687

El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: ___ of ___
Date: 6-6-79
By:
File:

Riddle G #1A W10-57264-21
SW 7-28-8
1359 W
STATIC 600' S .65

10 2x60 ANODES
1 20' METER POLE
DITCH + 1 CABLE 160'
EXTRA CABLE 137'
HOLE - 120'

DRILLER SAID HIT WATER @ 20' DRILLED TO 380', NEXT MORNING WATER FLOWING OUT OF HOLE.
INSTALLED 370' 1" VENT PIPE
PERFORATED 350' OF VENT PIPE
INSTALLED 50' 8" CASING 3 HRS
SLURRYED 60 SACKS COKE
LEFT APPROX. 10' OPEN HOLE
IN CASE WE NEED TO CEMENT

MW		gals/mol
16.04	C_1	6.4
30.07	C_2	10.12
44.10	C_3	10.42
58.12	IC_4	12.38
58.12	nC_4	11.93
72.15	IC_5	13.85
72.15	nC_5	13.71
86.18	IC_6	15.50
86.18	C_6	15.57
100.21	IC_7	17.2
100.21	C_7	17.46
114.23	C_8	19.39
28.05	$C_2^=$	9.64
42.08	$C_3^=$	9.67

MISC. MW		gals/mol
32.00	O_2	3.37
28.01	CO	4.19
44.01	CO_2	6.38
64.06	SO_2	5.50
34.08	H_2S	5.17
28.01	N_2	4.16
2.02	H_2	3.38

20			70	4.1		20	2.9		
25			75	4.2		25	2.0		
30			80	3.6	(7)	30	1.4		
35			85	3.7		35	1.2		
40			90	2.8		40	1.2		
45			95	1.5		45	1.6		~~4.5.79 1hr~~
50	3.4		200	1.6		50	3.3		6.6.79 12h
55	3.9		05	2.9		55	3.8	(1)	
60	4.0		10	2.8		60	4.4		
65	3.5		15	1.4		65	3.7		
70	2.8		20	2.7		20	3.5		
75	2.6		25	3.6	(6)	75	3.2		
80	2.6		30	3.9		80	3.0	T.D.	
85	3.0		35	3.6	(5)				
90	3.6	(10)	40	4.1					
95	3.9		45	4.2					
100	4.2		50	4.2					
05	4.2		55	4.3					
10	3.5	(9)	60	4.3					
15	2.6		65	3.8	(4)				
20	2.0		70	3.4					
25	2.1		75	2.9					
30	2.4		80	1.6					
35	2.1		85	1.4					
40	2.5		90	1.6					
45	4.0		95	1.8					
50	4.1		300	3.4					
55	3.5		05	4.1	(3)				
60	3.5	(8)	10	3.8					
65	3.8		15	3.5	(2)				

(1)	355 - 3.8	5.1
(2)	315 - 3.4	4.3
(3)	305 - 3.8	5.0
(4)	265 - 4.3	5.2
(5)	235 - 4.0	5.3
(6)	225 - 3.5	4.7
(7)	180 - 4.1	4.9
(8)	160 - 3.5	4.5
(9)	110 - 3.5	4.3
(10)	90 - 3.6	5.3

10.2 V 23.3 A .44 Ω

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-9563 Date 6-13-79

Operator EPNG Well Name Riddle G # 1A

Location SW 7-28-8 County San Juan State NM

Field Formation

Sampled From GPS

Date Sampled By

Tbg. Press. Csg. Press. Surface Csg. Press

	ppm	epm		ppm	epm
Sodium	1288	56	Chloride	20	1
Calcium	456	23	Bicarbonate	98	2
Magnesium	59	5	Sulfate	3875	81
Iron	Present		Carbonate	0	0
H_2S	Absent		Hydroxide	0	0

cc: D.C.Adams
R.A.Ullrich
E.R.Paulek
J.W.McCarthy
~~A.M.Smith~~
W.B.Shropshire
File

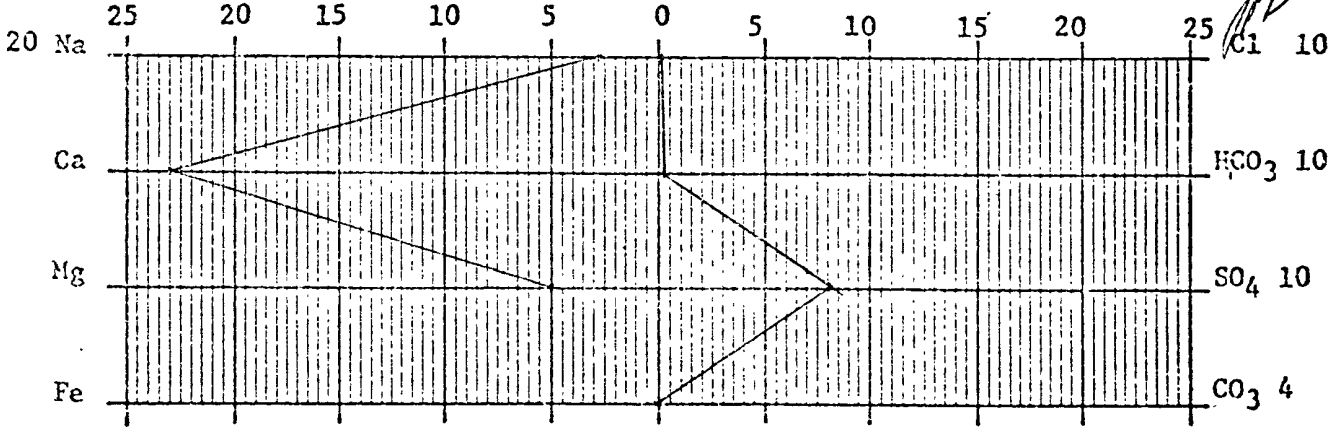
Total Solids Dissolved 7038

pH 7.8

Sp. Gr. 1.0071 at 60°F

Resistivity 170 ohm-cm at 73 °F

Chemist



Scale: epm

Form 22-2 (Rev. 1-61)

EL PASO NATURAL GAS COMPANY
DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE Ripple C - #1A WELL NO. 1359W CONTRACTOR WOLVERINE RIG NO. W2 REPORT NO. DATE 6-6 1972

MORNING

Driller Rod FRYE Total Men In Crew 3

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	50	BLOW SAND		
50	200	Shale + SAND		
200	380	SAND & Shale STRKS		

NO. DC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
BIT NO.
SERIAL NO.
SIZE 1-5⅞ 1-6¾
TYPE
MAKE
STANDS
SINGLES
DOWN ON KELLY
TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED
8 sacks Gel
3 " Hulls
1 " CEDAR FIBER

FROM	TO	TIME BREAKDOWN
		2 HRS water time.
		3 HRS Set Surface Casing.

REMARKS –
DRILLED 380'
LOGGED 380.

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
BIT NO.
SERIAL NO.
SIZE
TYPE
MAKE
STANDS
SINGLES
DOWN ON KELLY
TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ____ SIZE ____ LENG. ____
NO. DC ____ SIZE ____ LENG. ____
BIT NO.
SERIAL NO.
SIZE
TYPE
MAKE
STANDS
SINGLES
DOWN ON KELLY
TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Company Supervisor

1200

1A- 30-045-23684
9- 30-045-21153

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

Operator MERIDIAN OIL Location: Unit NW Sec. 17 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced RIDDLE F #1A, #9

cps 1566w

Elevation 5809' Completion Date 8/25/81 Total Depth 340' 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. 80' SAMPLE TAKEN

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 305', 285', 265', 245', 225', 205', 185', 165', 145', 125'

Depths vent pipes placed: 340'

Vent pipe perforations: 300'

Remarks: gb #1

RECEIVED
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.

8425.2
2 ✓ 07

El Paso Natural Gas Company
Form 7-238 (Rev. 11-71)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto). ☐ Completion Date 8-25-81

Well Name	Location	CPS No.
RIDDLE F 1A	NW 17-28-8	1566W
Type & Size Bit Used		**Work Order No.**
RIDDLE F 9		57654-21-50-2

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
340' LOG 331'				55273-19-50-2

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	305	285	265	245	225	205	185	165	145	125
Anode Output (Amps)	4.12	5.52	4.28	4.00	5.82	4.95	5.17	6.34	2.43	3.0
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

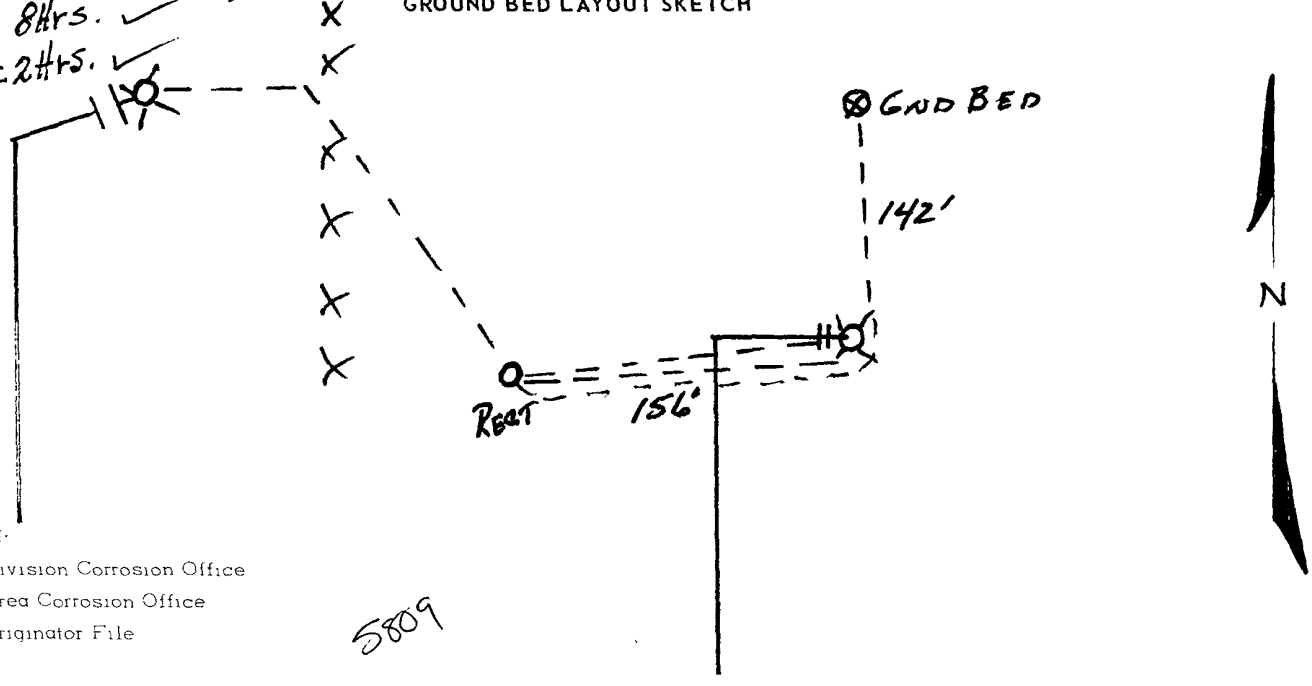
Total Circuit Resistance				No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.51	Amps 23.5	Ohms .48			

Remarks: STATIC ON F 1A = .95E STATIC ON F 9 =.
NEGATIVE TO # F9 WAS PLOWED W/ DOZIER
ESTIMATE 5 GAL WATER PER MIN AT 80'
40' 1" PLAIN VENT PIPE BALANCE PER
1-60V-30A Rect. ✓
1-20' Meter Pole ✓
DITCH W/ CABLE: 2.98' ✓
XTRA CABLE = ~~192'~~ ✓
Depth Credit: 332' - 169' ✓
Hrs. Reg. = 8 Hrs. ✓
Hrs. O.T. = 2 Hrs. ✓

All Construction Completed

BT
(Signature)

GROUND BED LAYOUT SKETCH



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5809

Form 7-1 (Rev 9-77)

El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: 2 of 5
Date:
By: BT
File:

1566W

NW17-28-8
57654-21-50-2
55273-19-50-2

RIDDLE "F" 1A
"F" 9

WATER AT 80' UNABLE TO GET SAMPLE HAD TO INJECT TO KEEP HOLE FROM CAVING. DRILLED TO

LOGED TO 340' TD 331'

40' 1¼ PLAIN VENT PIPE BALANCE PERFORATED

MW		gals/mol
16.04	C_1	6.4
30.07	C_2	10.12
44.10	C_3	10.42
58.12	iC_4	12.38
58.12	nC_4	11.93
72.15	iC_5	13.85
72.15	nC_5	13.71
86.18	iC_6	15.50
86.18	C_6	15.57
100.21	iC_7	17 2
100.21	C_7	17.46
114.23	C_8	19.39
28.05	$C_2^=$	9.64
42.08	$C_3^=$	9.67

80			80	1.89		80	1.95
85			85	1.76	-7	85	1.97 -2
90			90	1.79		90	1.95
95			95	1.77		95	1.92
100			200	1.70		300	1.81
5	1.05		5	1.75	-6	5	1.69 -1
10	99		10	1.77		10	1.73
15	1.00		15	1.75		15	1.64
20	1.05		20	1.90		20	1.52
25	.98	-10	25	1.85	-5	25	1.25
30	1.01		30	1.89		30	1.45
35	1.10		35	1.82		35	TD 331
40	1.18		40	1.71		40	
45	1.17	-9	45	1.67	-4	45	
50	1.23		50	1.57		50	
55	1.21		55	1.51		55	
60	1.56		60	1.76		60	
65	1.80	-8	65	1.80	-3	65	
70	1.92		70	1.90		70	
75	1.93		75	1.93		75	

MISC. MW		gals/mol
32.00	O_2	3.37
28.01	CO	4.19
44 01	CO_2	6.38
64.06	SO_2	5 50
34 08	H_2S	5 17
28.01	N_2	4 16
2.02	H_2	3 38

1 = 305'	1.73	- 3.29	4.12
2 = 285'	1.95	- 4.65	5.52
3 = 265'	1.90	- 3.65	4.28
4 = 245'	1.57	- 3.26	4.00
5 = 225'	1.89	- 4.10	5.82
6 = 205'	1.77	- 3.68	4.95
7 = 185'	1.79	- 3.74	5,17
8 = 165'	1.92	- 4 36	6.34
9 = 145'	1.23	- 1.82	2.43
10 = 125'	1.01	- 1.45	3.00

11.51 VOLTS
23.5 Amps
.48 Ω

EL PASO NATURAL GAS COMPANY
SAN JUAN DIVISION
FARMINGTON, NEW MEXICO
PRODUCTION DEPARTMENT WATER ANALYSIS

Analysis No. 1-10307 Date 9-11-81

Operator El Paso Natural Gas Well Name Riddle F-1A CPS 1566 W

Location NW 17-28-8 County San Juan State New Mexico

Field Blanco Formation

Sampled From 80'

Date Sampled 8-25-81 By B. T.

Tbg. Press. Csg. Surface Csg. Press.

	ppm	epm		ppm	epm
Sodium	2348	102.1	Chloride	82	2.3
Calcium	277	13.9	Bicarbonate	78	1.3
Magnesium	25	2.1	Sulfate	5,500	114.4
Iron			Carbonate	0	0
H_2S			Hydroxide	0	0

Total Solids Dissolved 7,912

pH 6.9

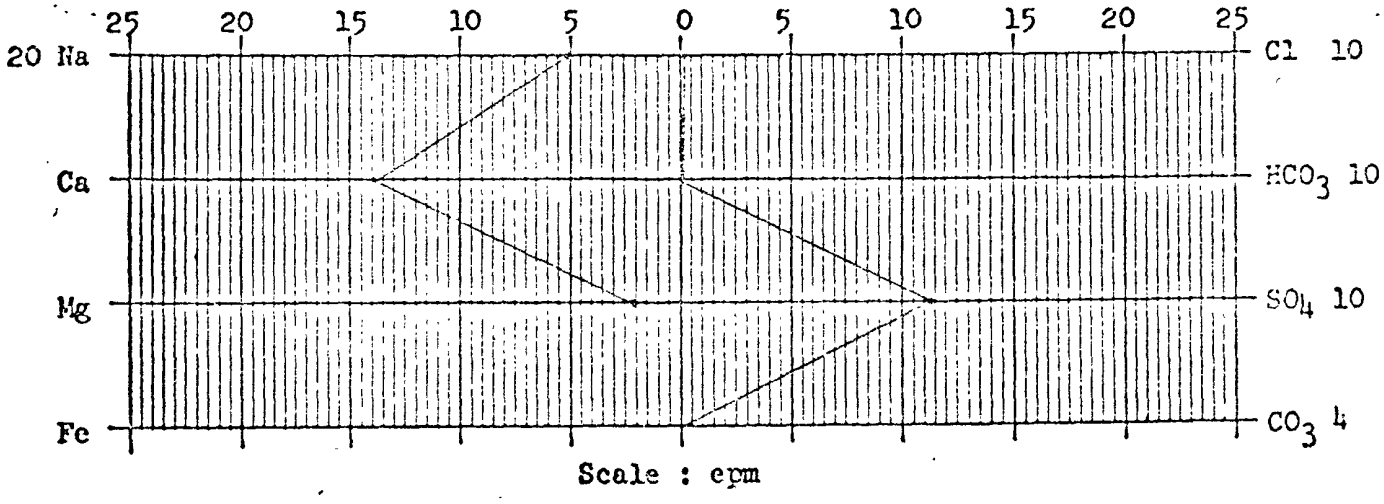
Sp. Gr. 1.0024 At 60°F

Resistivity 108 ohm-cm at 74°F

cc: R. A. Ullrich
E. R. Paulek
J. W. McCarthy
J. D. Evans
W. B. Shropshire
D. C. Adams
File

HCO_3 taken to pH 4.0

Dennis P. Bird RZE
Chemist



Form 22-2 (Rev 5-79)

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

Riddle F 1A F9 — LEASE — WELL NO.

CONTRACTOR Stony Drilling — RIG NO. 2 — REPORT NO. CFS 15664 — DATE Aug 25 1981

MORNING

Driller — Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ____ SIZE ____ LENG. ____

BIT NO. ____ NO. DC ____ SIZE ____ LENG. ____

S L NO. ____ STANDS

SIZE ____ SINGLES

TYPE ____ DOWN ON KELLY

MAKE ____ TOTAL DEPTH

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED
Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN
0	90	Sand
90	160	Sand & Shale
160	340	Shale

REMARKS –

Water 80 5 gallon Min

Drilled 340 TD 331

DAYLIGHT

Driller — Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ____ SIZE ____ LENG. ____

BIT NO. ____ NO. DC ____ SIZE ____ LENG. ____

SERIAL NO. ____ STANDS

SIZE ____ SINGLES

TYPE ____ DOWN ON KELLY

MAKE ____ TOTAL DEPTH

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED
Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller — Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

NO. DC ____ SIZE ____ LENG. ____

BIT NO. ____ NO. DC ____ SIZE ____ LENG. ____

SERIAL NO. ____ STANDS

SIZE ____ SINGLES

TYPE ____ DOWN ON KELLY

MAKE ____ TOTAL DEPTH

MUD RECORD			MUD, ADDITIVES USED AND RECEIVED
Time	Wt.	Vis.	

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Steve Stony — Company Supervisor ____

#1 30-045-07542
#2 30-045-21155

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

Operator MERIDIAN OIL Location: Unit SE Sec. 7 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced RIDDLE G #1, #2

cps 469w

Elevation 5753' Completion Date 10/8/73 Total Depth 300' 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. 60'

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

Depths gas encountered: N/A

Type & amount of coke breeze used: 5100 lbs.

Depths anodes placed: 275', 240', 220', 210', 195', 185', 170', 160', 140', 120'

Depths vent pipes placed: N/A

Vent pipe perforations: 237'

Remarks: gb #2

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.

El Paso Natural Gas Company
Form 7-238 (Rev. 1-69)

WELL CASING
CATHODIC PROTECTION CONSTRUCTION REPORT
DAILY LOG

Drilling Log (Attach Hereto). ☐ Completion Date 10-8-7

Well Name	Location	CPS No.
Riddle "G" #1	SE 7-28-8	469w
Type & Size Bit Used		**Work Order No.**
6 3/4		90108

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
300		5,100		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	275	240	220	210	195	185	170	160	140	12[illegible]
Anode Output (Amps)	3.7	4.7	4.8	5.2	4.5	4.7	4.9	4.8	4.8	4.[illegible]

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

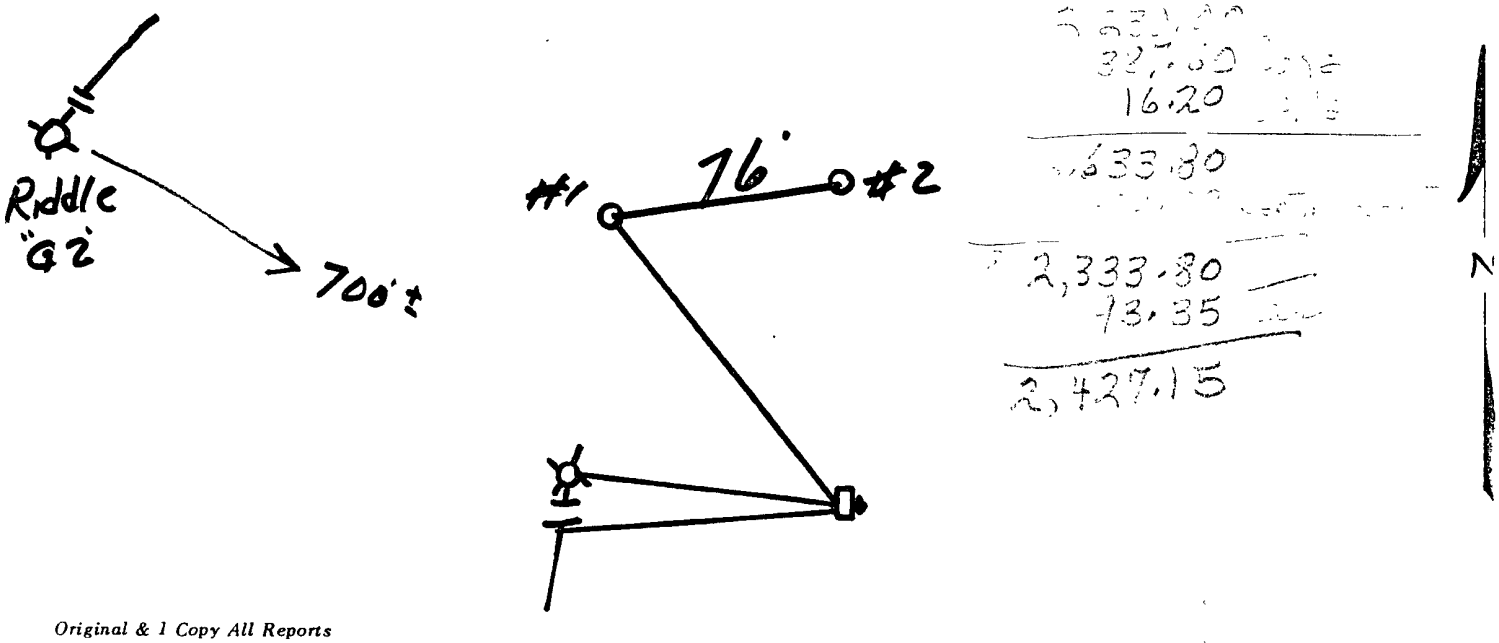
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.9	Amps 17.0	Ohms 0.70	86'	

Remarks: Driller Said Blew water out of hole at 60'
Water Standing Next Morning at 20'
Vent Perforated 237'
Pump 51 Sacks Coke

All Construction Completed

Darrels
(Signature)

GROUND BED LAYOUT SKETCH



16.20
633.80
2,333.80
13.35
2,427.15

Original & 1 Copy All Reports

C.P. S. # 469

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE Riddle WELL NO. C #1 CONTRACTOR Morrow RIG NO. 1 REPORT NO. DATE 10-8 1973

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	40	dry sand		
40	60	wet sand water		
60	100	sand		
100	240	shale		

BIT NO. NO. DC SIZE LENG.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS - blew water out of hole @ 60 ft.

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
240	300	sand		

BIT NO. NO. DC SIZE LENG.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS -

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. STANDS

SIZE SINGLES

TYPE DOWN ON KELLY

MAKE TOTAL DEPTH

MUD RECORD

Time	Wt.	Vis.

MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS -

SIGNED: Toolpusher Joe Morrow Company Supervisor

Form 7-1 (Rev. 5-63)

EL PASO NATURAL GAS COMPANY

ENGINEERING DEPARTMENT

Sheet ____ of ____

Date: ________

By: ________

CPS 469 W

[illegible]	17	205	34	Water Standing @ 20'					
	16	10	32	Blew water out at 60'					
40	24		33	Vent Perf 237					
	17	20	29						
50	11		25	Pump 51 Bags					
	10	30	26						
60	11		27						
	11	40	29						
70	12		25						
	16	50	24						
80	15		20						
	13	60	15				log	wtr	coke
90	13		17		1	275	2.4	2.7	3.7
	17	70	15		2	240	29	34	4.7
100	16		24		3	220	29	35	4.8
	27	80	15		4	210	32	37	5.2
10	30		11		5	195	31	33	45
	27	90	13		6	185	30	34	47
20	29		13		7	170	33	36	49
	32	300	13	TD	8	160	30	36	48
30	33				9	140	31	35	48
	30				10	120	29	35	45
40	31								
	36								
50	35				11.9V	17.0A	= 0.7Ω		
	33								
60	36								
	27								
70	33								
	34						.7		
80	30				170	119.0			
	30					119 0			
90	29								
	31								
200	3.4								

MW		gals/mol
16	C_1	6.4
30	C_2	9.56
44	C_3	10.42
58	IC_4	12.38
58	NC_4	11.93
72	IC_5	13.85
72	NC_5	13.71
86	IC_6	15.50
86	C_6	15.57
100	IC_7	17.2
100	C_7	17.46
114	C_8	19.38
28	C_2	9.64
42	C_3	9.67

MISC.

MW		gals/mol
44	CO_2	6.38
34	H_2S	5.17
28	N_2	4.16
2	H_2	3.38

30-045-21154
#1 = 30-045-07494

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

Operator MERIDIAN OIL Location: Unit NW Sec. 18 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced SHARP #1, #7

cps 677w

Elevation 6772' Completion Date 12/2/82 Total Depth 400' 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. DAMP AT 40'

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

Depths gas encountered: N/A

Type & amount of coke breeze used: 3500 lbs.

Depths anodes placed: 360', 350', 310', 300', 290', 280', 270', 260', 250', 225'

Depths vent pipes placed: 375' OF 1" VENT PIPE

Vent pipe perforations: 360'

Remarks: cgb #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.

FM 07-0238 (Rev. 6-82)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto). ☐ Completion Date 12-2-82

CPS #	Well Name, Line or Plant:	Work Order #	Static:	Ins. Union Check
677-W	SHARP #1 SHARP #7	90096-19-50-2063 55257-19-50-2063		☐ Good ☐ Bad

Location:	Anode Size:	Anode Type:	Size Bit:
NW 18-28-8	2"	DURION	6 3/4

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
400'	375'		APPROX 3500		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	360'	350'	310	300	290	280	270	260	250	225
Anode Output (Amps)	4.20	4.10	4.05	4.40	4.45	4.30	3.90	4.60	4.70	5.0C
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 12.3	Amps 14.6	Ohms .84		

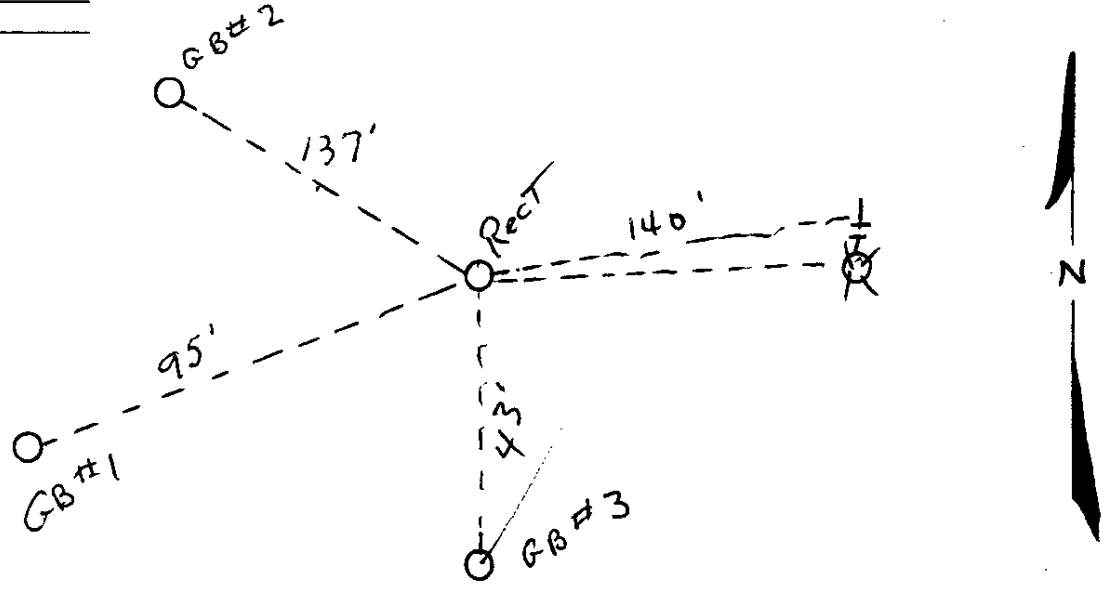
Remarks: DRILLER Said damp at 40', made CONNECTION, PIPE WAS STUCK IN hole INJECTED WATER & WORKED PIPE FREE. DID NOT GET WATER SAMPLE. WATER STANDING AT 75' NEXT A.M. INSTALLED 375' OF 1" VENT PIPE, PERFORATED 360' OF VENT PIPE. SLURRIED 3500# OF COKE BREEZE

Rectifier Size: — V — A
Addn'l Depth —
Depth Credit: 125'
Extra Cable: — 10
Ditch & 1 Cable: ~~50~~ 43
25' Meter Pole: —
20' Meter Pole: —
10' Stub Pole: —

All Construction Completed

Willis Knight Jr
(Signature)

GROUND BED LAYOUT SKETCH



ENGINEERING CALCULATION SHEET

60		65	3.40		
65		70	3.20	(7)	
70		75	3.85		
75	.62	80	3.60	(6)	
80	1.20	85	3.40		
85	1.60	90	3.70	(5)	
90	1.30	95	3.65		
95	1.25	300	3.75	(4)	
100	1.35	05	3.45		
05	1.40	10	3.45	(3)	
10	1.40	15	3.05		
15	1.45	20	1.50		
20	1.70	25	1.05		
25	1.30	30	1.20		
30	1.20	35	1.45		
35	1.20	40	1.70		
40	1.30	45	3.20		
45	1.40	50	3.40	(2)	
50	1.60	55	3.65		
55	1.50	60	3.50	(1)	
60	1.40	65	3.60		
65	1.45	70	3.20		
70	1.50	75	2.85	T.D	
75	2.00	80			
80	1.90	85			
85	1.40	90			
90	1.25	95			
95	1.00	400			
200	1.40				
05	2.80				
10	3.35				
15	3.30				
20	3.40				
25	3.75	(10)			
30	3.90				
35	4.25				
40	4.15				
45	4.00				
50	3.50	(9)			
55	3.70				
60	3.90	(8)			

DRILLER said damp at 40 made CONNECTION, PIPE WAS STUCK IN hole. INJECTED WITH WATER, WORKED PIPE FREE. DID NOT GET WATER SAMPLE. WATER STANDING AT 75' NEXT AM.

INSTALLED 375' OF 1" VENT PIPE. PERFORATED 360' OF VENT PIPE, SURVEYED APPROX 3500# OF COKE

	Reg	O.T
12-1-82	8	1
12-2-82	8	

(1)	360	3.50	4.20
(2)	350	3.40	4.10
(3)	310	3.45	4.05
(4)	300	3.75	4.40
(5)	290	3.70	4.45
(6)	280	3.50	4.30
(7)	270	3.20	3.90
(8)	260	3.90	4.60
(9)	250	3.50	4.70
(10)	225	3.70	5.00

V 12.3 A 14.6 Ω .84

Page
Date 12-3-82
By WR

Form 22-2 (Rev. 5-79)

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

~~CPS 677-W~~ CPS 677-W SHARP #167

LEASE WELL NO. CONTRACTOR 3-C % Corrosion Cont. RIG NO. 2 REPORT NO. 14 DATE Dec 15 1982

MORNING

Driller BRIAN Total Men In Crew 3

FROM	TO	FORMATION	WT-BIT	R.P.M.
0	40	Sand, water		
40	60	Bentonite		
60	360	Sand & Bentonite		
360	360	shale		

BIT NO.
S. AL NO.
SIZE 6 3/4
TYPE Button
MAKE SAME

NO. DC ___ SIZE 4½ LENG. 20'
NO. DC ___ SIZE ___ LENG. ___
STANDS
SINGLES 20
DOWN ON KELLY
TOTAL DEPTH 400'

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS – Had to go to INJECTION at 40'
Got stuck for an hour at that point
Holes making good water amount.
Total hole depth 400'
Total Log depth 375'

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.
360	400	sand & shale		

BIT NO.
SERIAL NO.
SIZE
TYPE
MAKE

NO. DC ___ SIZE ___ LENG. ___
NO. DC ___ SIZE ___ LENG. ___
STANDS
SINGLES
DOWN ON KELLY
TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO.
SERIAL NO.
SIZE
TYPE
MAKE

NO. DC ___ SIZE ___ LENG. ___
NO. DC ___ SIZE ___ LENG. ___
STANDS
SINGLES
DOWN ON KELLY
TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Brian Burge Company Supervisor

1284 #1A 30-045-23988
#5 30-045-21160

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

Operator MERIDIAN OIL Location: Unit SW Sec. 18 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced SHARP #1A, #5

cps 1573w

Elevation 5829' Completion Date 9/9/81 Total Depth 380' 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. DAMP AT 80' WET AT 100' - 120'

Depths gas encountered: N/A

Type & amount of coke breeze used: 4560 lbs.

Depths anodes placed: 355', 345', 335', 325', 300', 270', 260', 245', 230', 220'

Depths vent pipes placed: 380'

Vent pipe perforations: 320'

Remarks: gb #1

RECEIVED
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.

El Paso Natural Gas Company
Form 7-238 (Rev. 11-71)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto). ☐ 2 x 60 ANODES Completion Date 9-9-81

Well Name	Location	CPS No.
SHARP #1A SHARP #5	SW 18-28-8	1573 W

Type & Size Bit Used	Work Order No.
6 3/4	57654-21 55325-19

Anode Hole Depth	Total Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
380' logged 380'		4560		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	355'	345'	335'	325'	300'	270'	260'	245'	230'	220'
Anode Output (Amps)	5.2	4.6	5.4	4.5	3.8	3.5	3.7	4.6	3.6	3.7

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.9	Amps 21.4	Ohms .55		

Remarks: SHARP #1A STATIC 600' NM .76 SHARP #5 STATIC 600' S .80

DRILLER SAID DAMP AT 80', WET 100' TO 120'. WAITED 20 MIN COULD NOT BLOW WATER.

INSTALLED 380' OF 1" VENT PIPE, PERFORATED 320' OF VENT PIPE.

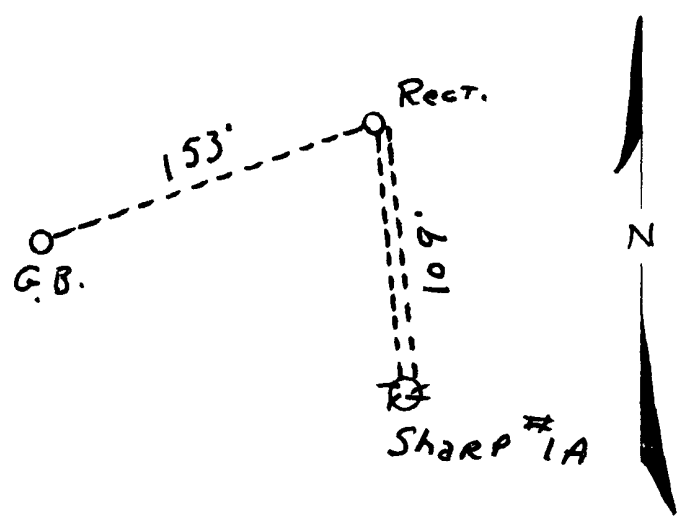
SLURRYED 4560 lbs. OF COKE

1 60V 30A RECT.
1 20' METER POLE
DITCH + 1 CABLE - 262' ✓
EXTRA CABLE - 129' ✓
HOLE DEPTH — 120' ✓
SET 10' OF 8" PRC CASING OHR.

All Construction Completed

Willis Knight Jr.
(Signature)

GROUND BED LAYOUT SKETCH



Time	Reg	O.T
9-8-81	4	2
9-9-81	8	4

DISTRIBUTION:
WHITE — Division Corrosion Office
YELLOW — Area Corrosion Office
PINK — Originator File

5829

Form 7-1 (Rev 9-77)

El Paso Natural Gas Company
ENGINEERING CALCULATION

Sheet: of
Date: 9-9-81
By: WK
File:

SHARP # 1A W/O 57656-21 STATIC 600' NW .76
SHARP # 5 W/O 55329-19 STATIC 600 S .80
SW 18-28-8
CPS 1573 W

160V 30A RECT
1 20' METER POLE
DITCH - 1 CABLE - 262'
EXTRA CABLE - 129'
HOLE DEPTH - 120'

DRILLER SAID DAMP AT 80',
100' TO 120' SAND WET, WARM
20 MIN. COULD NOT BLOW WATER.
INSTALLED 380' OF 1" VENT PIPE
PERFORATED 320' OF VENT PIPE

SET 10' OF 8" PVC CASING

SLURRIED 4560 lbs. OF COKE

MW		gals/mol
16.04	C_1	6.4
30.07	C_2	10.12
44.10	C_3	10.42
58.12	iC_4	12.38
58.12	nC_4	11.93
72.15	iC_5	13.85
72.15	nC_5	13.71
86.18	iC_6	15 50
86.18	C_6	15.57
100.21	iC_7	17 2
100.21	C_7	17.46
114.23	C_8	19.39
28.05	$C_2^=$	9.64
42.08	$C_3^=$	9.67

MISC. MW		gals/mol
32.00	O_2	3 37
28.01	CO	4 19
44.01	CO_2	6 38
64 06	SO_2	5 50
34 08	H_2S	5 17
28 01	N_2	4 16
2 02	H_2	3 38

120		70	2.60 6
25	1.10	75	1.80
30	1.70	80	1.30
35	1.80	85	1.70
40	1.80	90	1.20
45	1.50	95	2.10
50	1.40	300	2.90 5
55	1.40	05	2.40
60	1.80	10	1.40
65	1.50	15	1.50
70	1.50	20	2.90
75	1.70	25	3.80 4
80	1.70	30	3.80
85	2.60	35	4.10 3
90	3.40	40	3.60
95	3.80	45	3.40 2
200	4.00	50	3.70
05	4.00	55	4.00 1
10	3.60	60	3.90
15	3.20	65	3.80
20	3.00 10	70	3.80
25	3.00	75	3.60
30	2.70 9	80	3.60 T.D.
35	1.80	85	
40	3.10	90	
45	2.80 8	95	
50	2.40	400	
55	1.90		
60	2.90 7		
65	3.00		

①	355	4.2	5.2
②	345	3.5	4.6
③	335	4.1	5.4
④	325	3.7	4.5
⑤	300	2.9	3.8
⑥	270	2.5	3.5
⑦	260	2.7	3.7
⑧	245	2.8	4.0
⑨	230	2.7	3.6
⑩	220	2.9	3.7

11.9 V
21.4 A
.55 Ω

Form 22-2 (Rev 5-79)

EL PASO NATURAL GAS COMPANY

DRILLING DEPARTMENT

DAILY DRILLING REPORT

LEASE Sharp #1A & #5 WELL NO. CPS 1573-W CONTRACTOR CPS RIG NO. REPORT NO. DATE 9-9 1981

MORNING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

S L NO. NO. DC SIZE LENG.

SIZE STANDS

TYPE SINGLES

MAKE DOWN ON KELLY

TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN
0	120	SAND
120	180	SANDY SHALE
180	270	SHALE
270	290	SAND
290	380	SHALE

REMARKS –

WATER 100' TO 120'

DRILLED 380' T.D. 380'

DAYLIGHT

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. NO. DC SIZE LENG.

SIZE STANDS

TYPE SINGLES

MAKE DOWN ON KELLY

TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

EVENING

Driller Total Men In Crew

FROM	TO	FORMATION	WT-BIT	R.P.M.

BIT NO. NO. DC SIZE LENG.

SERIAL NO. NO. DC SIZE LENG.

SIZE STANDS

TYPE SINGLES

MAKE DOWN ON KELLY

TOTAL DEPTH

MUD RECORD Time	Wt.	Vis.	MUD, ADDITIVES USED AND RECEIVED

FROM	TO	TIME BREAKDOWN

REMARKS –

SIGNED: Toolpusher Carl Foutz Company Supervisor Gary E Mikish

#2 30-045-13219
#1 30-045-07494 3846

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

Operator Meridian Oil Inc Location: Unit P Sec. 18 Twp 28 Rng 08

Name of Well/Wells or Pipeline Serviced

SHARP #2 AND #1 (WATER WELL)

Elevation 5729 Completion Date 3-5-93 Total Depth 266' Land Type F

Casing Strings, Sizes, Types & Depths 3/3 SET 98' OF 8" PVC CASING.
NO GAS, WATER, OR BOULDERS WERE ENCOUNTERED DURING CASING.

If Casing Strings are cemented, show amounts & types used CEMENTED
WITH 21 SACKS.

If Cement or Bentonite Plugs have been placed, show depths & amounts used
NO PLUGS

Depths & thickness of water zones with description of water: Fresh, Clear, Salty, Sulphur, Etc. 150' AND WAS CLEAR.

Depths gas encountered: NO GAS

Ground bed depth with type & amount of coke breeze used: 266' WITH 64 (5016) SACKS OF ASBURY GRAPHITE

Depths anodes placed: #1 IS AT 255' AND #15 IS AT 143'

Depths vent pipes placed: BOTTOM TO SURFACE

Vent pipe perforations: UP TO 120'

Remarks:

RECEIVED
JAN 31 1994
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.

API WATER ANALYSIS REPORT FORM

Laboratory No. 25-93035-12

Company	Sample No.	Date Sampled
MERIDIAN OIL		3-5-93

Field	Legal Description	County or Parish	State
5180	P 18-28-8	San Juan	NM

Lease or Unit	Well	Depth	Formation	Water, B/D
	Sharp #2		M.V.	

Type of Water (Produced, Supply, etc.)	Sampling Point	Sampled By
		R. Smith

DISSOLVED SOLIDS

CATIONS	*mg/l*	*me/l*
Sodium, Na (calc.)	1900	84
Calcium, Ca	180	8.8
Magnesium, Mg	12	1.0
Barium, Ba		

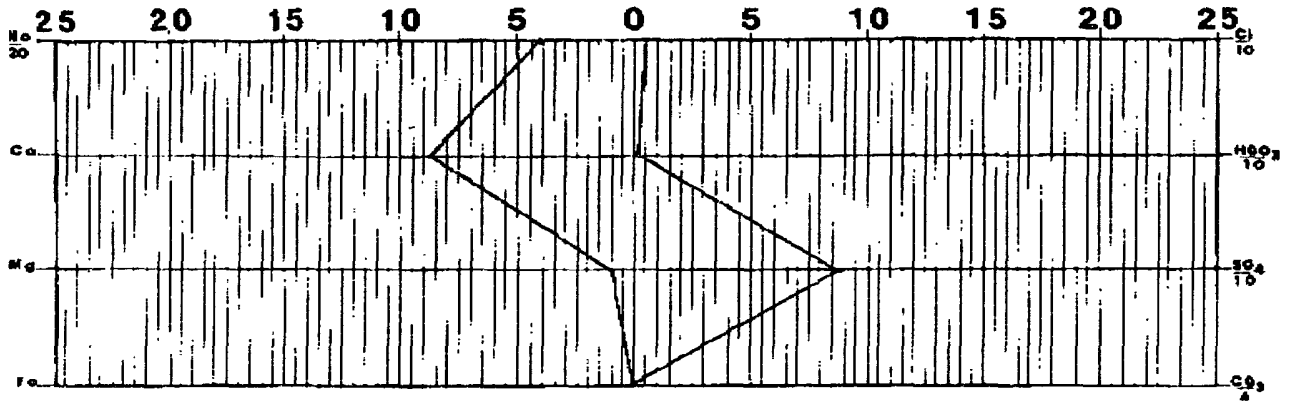
ANIONS		
Chloride, Cl	140	4.0
Sulfate, So_4	4200	88
Carbonate, CO_3	–	–
Bicarbonate, HCO_3	98	1.6

OTHER PROPERTIES

pH	7.7
Specific Gravity, 60/60 F.	1.4
Resistivity (ohm-meters) 71 F.	1.0091
Total Dissolved Solids (calc.)	6600
Iron, Fe (total)	
Sulfide, as H_2S	

REMARKS & RECOMMENDATIONS.

ATTN: Bill Donahue



Date Received	Preserved	Date Analyzed	Analyzed By
March 15th, 1993.		March 18th, 1993	R.H.

TECH, Inc.
333 East Main
Farmington
New Mexico
87401
505/327-3311

#2A 30-045-23815
#4 30-045-21158
#800 30-045-27292

3893

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 G Sec. 18 Twp 28 Rng 8

Name of Well/Wells or Pipeline Serviced SHARP #2A, #4, #800

cps 1952w

Elevation 5775' Completion Date 5/24/88 Total Depth 380' Land Type* N/A

Casing, Sizes, Types & Depths 20' OF 8" PVC CASING

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. 100'

RECEIVED
MAY 31 1991
OIL CON. DIV.
DIST. 3

Depths gas encountered: N/A

Type & amount of coke breeze used: N/A

Depths anodes placed: 340', 330', 320', 305', 295', 285', 275', 245', 235', 225'

Depths vent pipes placed: 380'

Vent pipe perforations: 280'

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.

FM-47-0238 (Rev. 10-82)

WELL CASING

CATHODIC PROTECTION CONSTRUCTION REPORT

DAILY LOG

Drilling Log (Attach Hereto) ☐ Comp. 6-21-88 Completion Date 5/24/88

CPS #	Well Name, Line or Plant	Work Order #	Static	Ins. Union Check
1952 W	SHARP #2A 47921A	2047921A	600 55 .20 V	☒ Good ☐ Bad
	SHARP #4 44730A	2044730A	Bond Box 2-B	

Location	Anode Size	Anode Type	Size Bit
6-18-28-8	2" X 60"	Durion	6 3/4

Depth Drilled	Depth Logged	Drilling Rig Time	Total Lbs. Coke Used	Lost Circulation Mat'l Used	No. Sacks Mud Used
380'	380'				

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Anode Depth	340	330	326	305	295	285	275	245	235	225
Anode Output (Amps)	5.4	6.4	5.7	5.0	5.1	6.2	4.8	5.6	5.9	4.2

	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20
Anode Depth										
Anode Output (Amps)										

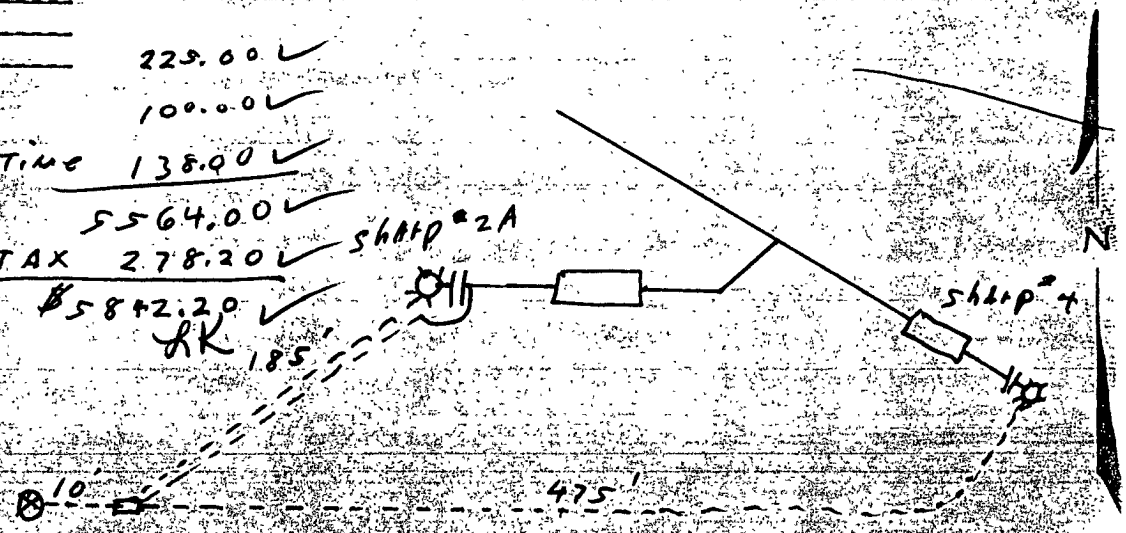
Total Circuit Resistance			No. 8 C.P. Cable Used	No. 2 C.P. Cable Used
Volts 11.8	Amps 26.8	Ohms .44		

Remarks: Water at 100', Took water SAMPLE, INSTALLED 20' of 8" P.V.C. surface CASEING, 1 Hr. setting Time INSTALLED 380' of 1" P.V.C. VENT pipe, Perforated 280'.

	GB	4074.00 V
Rectifier Size:	40 V 16 A	669.00 V
Addn'l Depth		
Depth Credit:	-120	-420.00 V
Extra Cable:	225'	54.00 V
Ditch & 1 Cable:	610'	427.00 V
25' Meter Pole:		
20' Meter Pole:	1	297.00 V
10' Stub Pole:		
Junction Box:	1	225.00 V
20' of 8" P.V.C. CASEING		100.00 V
1 Hr. CASEING SETTING TIME		138.00 V
		5564.00 V
	TAX	278.20 V
		$5842.20 V

All Construction Completed

J. A. Slate
(Signature)



Cathodic Protection Services Co.
1608 Schofield Ln.
P.O. Bo... 8
Farmington, NM 87499
(505) 327-9215
(505) 325-1946

1952 W

Date: 5/24/88

Company: Meridian oil

Well No.: SJ 28-8 Unit 264 (handwritten; reads "Sjup 2A # 64") Location: G 18-28-8 Volts Applied: 11.8 V Amperes: 26.8 A

Depth	Reading	Depth	Reading	Depth	Reading	Depth	Reading
5		230	3.0	455		680	
10		235	3.2 — (9)	460		685	
15		240	3.0	465		690	
20		245	3.1 — (8)	470		695	
25		250	2.6	475		700	1 - 340 - 3.7 - 5.4
30		255	2.3	480		705	2 - 330 - 4.8 - 6.4
35		260	2.1	485		710	3 - 320 - 4.2 - 5.7
40		265	1.8	490		715	4 - 305 - 3.6 - 5.0
45		270	2.0	495		720	5 - 295 - 4.1 - 5.1
50		275	3.1 — (7)	500		725	6 - 285 - 4.7 - 6.2
55		280	3.1	505		730	7 - 275 - 3.5 - 4.8
60		285	3.4 — (6)	510		735	8 - 245 - 4.3 - 5.6
65		290	3.4	515		740	9 - 235 - 4.5 - 5.9
70		295	3.0 — (5)	520		745	10 - 225 - 3.2 - 4.2
75		300	2.6	525		750	
80		305	3.3 — (4)	530		755	
85		310	3.0	535		760	
90		315	2.8	540		765	
95		320	3.1 — (3)	545		770	
100	1.5 WAter	325	3.1	550		775	
105	1.2	330	3.4 — (2)	555		780	
110	1.3	335	3.1	560		785	
115	1.6	340	3.0 — (1)	565		790	
120	1.4	345	2.5	570		795	
125	1.5	350	2.1	575		800	
130	1.4	355	1.3	580		805	
135	1.2	360	1.2	585		810	
140	1.1	365	1.3	590		815	
145	0.9	370	2.0	595		820	
150	.9	375	1.9	600		825	
155	.9	380	T.D. Drilled T.	605		830	
160	.9	385		610		835	
165	2.0	390		615		840	
170	2.6	395		620		845	
175	2.7	400		625		850	
180	2.5	405		630		855	
185	2.2	410		635		860	
190	2.1	415		640		865	
195	1.8	420		645		870	
200	1.7	425		650		875	
205	1.7	430		655		880	
210	2.2	435		660		885	
215	3.0	440		665		890	
220	3.0	445		670		895	
225	3.2 — (10)	450		675		900	

D. Cross DRILLING CO. 1952

Drill No. 3

DRILLER'S WELL LOG

S. P. No. Sharp #2A Date 5-27-88

Client Meridian Oil Co. Prospect

County San Juan State New Mex.

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

FROM	TO	FORMATION — COLOR — HARDNESS
0	5	Sandy Clay
5	20	Sand
20	50	Shale
50	85	Soft Sandstone
85	100	Sand
100	105	Shale
105	170	Sandstone
170	190	Shale
190	210	Sandstone
210	370	Shale
370	380	Sandstone

Mud Bran Lime

Rock Bit Number Make

Remarks: Water @ 100'

Set 20' Casing 1 Hr.

Driller Connie Brown

ENSOLUM

APPENDIX C

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Blanco C-51 (12/24/20)
Ensolum Project No. 05A1226130

ENSOLUM

Photograph 1 Photograph Description: View of the release area near the drip riser.	
Photograph 2 Photograph Description: View of the flow path.	
Photograph 3 Photograph Description: View of the flow path.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Blanco C-51 (12/24/20)
Ensolum Project No. 05A1226130

ENSOLUM

Photograph 4 Photograph Description: View of the final restoration.	

ENSOLUM

APPENDIX D

Regulatory Correspondence

From: Smith, Cory, EMNRD
To: Long, Thomas; "shall@blm.gov"
Cc: Stone, Brian
Subject: [EXTERNAL] RE: Blanco C-51 - UL K Section 7 T28N R8W; 36.673469, -107.723081
Date: Thursday, December 31, 2020 1:53:21 PM

[Use caution with links/attachments]

Tom,

OCD approves Enterprise request to forgo the 48 hour sampling notice and collect confirmation samples in accordance to 19.15.29 NMAC so long as the Surface owner also approves the request.

Thanks,

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Long, Thomas <tjlong@eprod.com>
Sent: Thursday, December 31, 2020 1:45 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; 'shall@blm.gov' <shall@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXT] FW: Blanco C-51 - UL K Section 7 T28N R8W; 36.673469, -107.723081

Cory/Sheri,

The email is a follow up to our phone conversation earlier today. Enterprise requested a variance from the 48 hour sample notification requirement, so we could collect soil samples today. Verbally, you approved the request. Please acknowledge acceptance of this request. If you have any questions, please call or email.

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

Enterprise Products

From: Long, Thomas

Sent: Thursday, December 24, 2020 3:14 PM
To: 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>; 'slandon@blm.gov' <slandon@blm.gov>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Blanco C-51 - UL K Section 7 T28N R8W; 36.673469, -107.723081

Cory/Sheri,

This email is a notification that Enterprise has a release of natural gas liquids on the Blanco C-51 today at approximately 1330. The release is a result of a freeze on a riser. There is an area of approximately 20 feet in diameter impacted by the released fluids. No washes were affected. The pipeline was isolated, depressurized, locked out and tagged out. The release is located at UL K Section 7 T28N R8W; 36.673469, -107.723081. The fluids will be recovered as much and practicable and the area will be secured. I will keep you informed as to when remediation activities will be scheduled. I have attached a picture. 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

Enterprise Products

ENSOLUM

APPENDIX E

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Blanco C-51 (12/24/20)
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Sample Depth (inches)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				**10**	**NE**	**NE**	**NE**	**50**				**100**	**600**
Evaluation Composite Soil Samples													
S-1	12.31.20	C	0 to 3	<0.025	<0.049	<0.049	<0.098	ND	<4.9	<9.7	<49	ND	<60
FP-1	12.31.20	C	0 to 3	<0.023	<0.046	<0.046	<0.092	ND	<4.6	<9.5	<47	ND	<61

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

ND = Not Detected above the Practical Quantitation Limits or Reporting Limits

NE = Not established

mg/kg = milligram per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbon

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

ENSOLUM

APPENDIX F

Laboratory Data Sheets & Chain of Custody Documentation

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 13, 2021

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

RE: Blanco C 51 OrderNo.: 2101055

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/5/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2101055**
Date Reported: **1/13/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** S-1
Project: Blanco C 51 **Collection Date:** 12/31/2020 10:30:00 AM
Lab ID: 2101055-001 **Matrix:** SOIL **Received Date:** 1/5/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	60		mg/Kg	20	1/12/2021 2:37:39 PM	57484
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/6/2021 2:48:38 PM	57346
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/6/2021 2:48:38 PM	57346
Surr: DNOP	127	30.4-154		%Rec	1	1/6/2021 2:48:38 PM	57346
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/6/2021 6:26:51 PM	57343
Surr: BFB	99.1	75.3-105		%Rec	1	1/6/2021 6:26:51 PM	57343
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.025		mg/Kg	1	1/6/2021 6:26:51 PM	57343
Toluene	ND	0.049		mg/Kg	1	1/6/2021 6:26:51 PM	57343
Ethylbenzene	ND	0.049		mg/Kg	1	1/6/2021 6:26:51 PM	57343
Xylenes, Total	ND	0.098		mg/Kg	1	1/6/2021 6:26:51 PM	57343
Surr: 4-Bromofluorobenzene	97.3	80-120		%Rec	1	1/6/2021 6:26:51 PM	57343

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	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2101055**
Date Reported: **1/13/2021**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: ENSOLUM **Client Sample ID:** FP-1
Project: Blanco C 51 **Collection Date:** 12/31/2020 10:35:00 AM
Lab ID: 2101055-002 **Matrix:** SOIL **Received Date:** 1/5/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **VP**	
Chloride	ND	61		mg/Kg	20	1/12/2021 3:14:53 PM	57484
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/6/2021 3:12:22 PM	57346
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/6/2021 3:12:22 PM	57346
Surr: DNOP	107	30.4-154		%Rec	1	1/6/2021 3:12:22 PM	57346
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/6/2021 6:50:23 PM	57343
Surr: BFB	100	75.3-105		%Rec	1	1/6/2021 6:50:23 PM	57343
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.023		mg/Kg	1	1/6/2021 6:50:23 PM	57343
Toluene	ND	0.046		mg/Kg	1	1/6/2021 6:50:23 PM	57343
Ethylbenzene	ND	0.046		mg/Kg	1	1/6/2021 6:50:23 PM	57343
Xylenes, Total	ND	0.092		mg/Kg	1	1/6/2021 6:50:23 PM	57343
Surr: 4-Bromofluorobenzene	99.3	80-120		%Rec	1	1/6/2021 6:50:23 PM	57343

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	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101055**

13-Jan-21

Client: ENSOLUM

Project: Blanco C 51

Sample ID: **MB-57484** SampType: **MBLK** TestCode: **EPA Method 300.0: Anions**

Client ID: **PBS** Batch ID: **57484** RunNo: **74555**

Prep Date: **1/12/2021** Analysis Date: **1/12/2021** SeqNo: **2632728** Units: **mg/Kg**

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

Sample ID: **LCS-57484** SampType: **LCS** TestCode: **EPA Method 300.0: Anions**

Client ID: **LCSS** Batch ID: **57484** RunNo: **74555**

Prep Date: **1/12/2021** Analysis Date: **1/12/2021** SeqNo: **2632729** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101055**

13-Jan-21

Client: ENSOLUM

Project: Blanco C 51

Sample ID: **MB-57346** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **PBS** Batch ID: **57346** RunNo: **74443**

Prep Date: **1/5/2021** Analysis Date: **1/6/2021** SeqNo: **2628118** 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	10		10.00		103	30.4	154			

Sample ID: **LCS-57346** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**

Client ID: **LCSS** Batch ID: **57346** RunNo: **74443**

Prep Date: **1/5/2021** Analysis Date: **1/6/2021** SeqNo: **2628119** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	68.9	141			
Surr: DNOP	5.3		5.000		107	30.4	154			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101055**

13-Jan-21

Client: ENSOLUM

Project: Blanco C 51

Sample ID: **mb-57343**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **57343**	RunNo: **74434**
Prep Date: **1/5/2021**	Analysis Date: **1/6/2021**	SeqNo: **2627830** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	75.3	105			

Sample ID: **lcs-57343**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **57343**	RunNo: **74434**
Prep Date: **1/5/2021**	Analysis Date: **1/6/2021**	SeqNo: **2627831** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.5	106			
Surr: BFB	1100		1000		111	75.3	105			S

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2101055**

13-Jan-21

Client: ENSOLUM

Project: Blanco C 51

Sample ID: **mb-57343**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **57343**	RunNo: **74434**
Prep Date: **1/5/2021**	Analysis Date: **1/6/2021**	SeqNo: **2627869** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	80	120			

Sample ID: **LCS-57343**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **57343**	RunNo: **74434**
Prep Date: **1/5/2021**	Analysis Date: **1/6/2021**	SeqNo: **2627870** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.8	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.2	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical Quanitative Limit
S	% Recovery outside of range due to dilution or matrix
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: **ENSOLUM** Work Order Number: **2101055** RcptNo: 1

Received By: **Cheyenne Cason** **1/5/2021 7:50:00 AM**

Completed By: **Desiree Dominguez** **1/5/2021 8:23:40 AM** DD

Reviewed By: DAD 01/05/21

Chain of Custody

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

Log In

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

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SGL 1/5/21

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

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

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good	Yes			

Chain-of-Custody Record

Client: Ensolum

Mailing Address: 606 S Rio Grande Suit A 87410

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Blanco C-51

Project #:

Project Manager: K Summers

Sampler: CD Aguilar

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.6 - 0.2 = 3.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2101055	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, ~~Br~~, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/31	1030	S	S-1	1 4oz Jar	Cool	-001	X	X					X			
12/31	1035	S	FP-1	1 4oz Jar	Cool	-002	X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/31/20	1130		~~Fed Ex~~		~~1/4~~ 12/31/20	1130
1/4/21	1626				1/4/21	1626

Remarks: PM Tom Long
~~AFE #~~ PO Pay Key - RB21200

Seal intact COC 1/5/21

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.

1/4/21 1753 (illegible)

COC 1/5/21 0750

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 45848

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 45848
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/3/2022