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)*: **NCS1923943013**
Contact mailing address: **614 Reilly Ave, Farmington, NM 87401**	

Location of Release Source

Latitude **36.280306** Longitude **-107.359030** *(NAD 83 in decimal degrees to 5 decimal places)*

Site Name **Jicarilla #6**	Site Type **Natural Gas Gathering Pipeline**
Date Release Discovered: : **7/14/2019**	Serial Number *(if applicable)*: **N/A**

Unit Letter	Section	Township	Range	County
I	**28**	**24N**	**5W**	**Rio Arriba**

Surface Owner: ☐ State ☐ Federal ☒ Tribal ☐ Private (*Name*: **Jicarilla Apache Tribe**)

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 BBLs**	Volume Recovered (bbls): **None**
☒ Natural Gas	Volume Released (Mcf): **< 1 MCF**	Volume Recovered (Mcf): **None**
☐ Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

Cause of Release: On July 14, 2019, Enterprise discovered a release of natural gas liquids on the Jicarilla #6 pipeline dogleg. The released fluids impacted an area of approximately two feet in diameter. The pipeline was isolated, depressurized, locked out and tagged out. Enterprise began remediation of the release on August 13, 2019 at which time Enterprise determined the release was reportable per NMOCD regulation, due to the volume of impacted subsurface soil. Remediation was completed on August 14, 2019. The final excavation measured approximately 7 feet long by 7 feet wide by 5.5 feet deep. Approximately 8 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. 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: 8/31/2020

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: 05/16/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

Jicarilla #6 Well Tie Pipeline
Release Closure Report

Unit Letter I, Section 28, Township 24 North, Range 5 West
Rio Arriba County, New Mexico

July 15, 2020

Prepared for:
Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:
Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Rule Engineering, LLC
Solutions to Regulations for Industry

Enterprise Field Services, LLC
Jicarilla #6 Well Tie Pipeline
Release Closure Report

Prepared for:

Enterprise Field Services, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:

Rule Engineering, LLC
501 Airport Drive, Suite 205
Farmington, New Mexico 87401

Heather M. Woods

Heather M. Woods, P.G., Area Manager

July 15, 2020

Table of Contents

Tables

Figures

Appendices

1.0 Introduction

This closure report summarizes the remedial activities undertaken at the Jicarilla #6 Well Tie Pipeline release site to remediate potential hydrocarbon impact below applicable closure criteria as outlined in 19.15.29 of the New Mexico Authority Code (NMAC).

1.1 Release Summary

Operator	Enterprise Field Services, LLC (Enterprise)		
Site Name	Jicarilla #6 Well Tie Pipeline Release		
Site Location Description	Unit Letter I, Section 28, Township 24 North, Range 5 West (N36.280306, W107.359030)		
Land Jurisdiction	Jicarilla Apache Nation		
Discovery Date	July 14, 2019		
Release Source	Leaking flange on dogleg riser		
Substance(s) Released	Pipeline liquids and natural gas		
Volume of Soil Transported for Disposal/Remediation	Approximately 8 cubic yards	**Remedial Excavation Dimensions**	Approximately 7 feet by 7 feet and 3 to 5.5 feet deep
Disposal Facility	Envirotech Landfarm (Permit NM-01-0011)		

A topographic map of the location reproduced from the United States Geological Society quadrangle map of the area is included as Figure 1 and an aerial site map is included as Figure 2.

2.0 Closure Criteria Determination

The release site is located on the Jicarilla Apache Nation which utilizes the recommendations from the New Mexico Oil Conservation Division (NMOCD) for release response with oversight provided by the Jicarilla Apache Nation Environmental Protection Office (JANEPO). The remediation standards for the release location are determined per 19.15.29 of the NMAC and are selected by depth to groundwater with a concentration of less than 10,000 milligrams per kilogram (mg/kg) total dissolved solids (TDS) and several additional factors outlined in 19.15.29.12(4)(e) NMAC. A summary of the determination and supporting documents are included in Appendix A.

Closure criteria for the soils impacted at the release location are determined by the *"less than or equal to 50 feet"* category of Table 1, 19.15.29.12 NMAC. These remedial standards are as follows: 600 milligrams per kilogram (mg/kg) chloride per United States Environmental Protection Agency (USEPA) Method 300.0 or SM 4500-Cl B; 100 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and mineral range organics (MRO) per USEPA Method 8015M; 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX) per USEPA Method 8021B or 8260B; and 10 mg/kg benzene per USEPA Method 8021B or 8260B.

Rule

3.0 Field Activities

On August 14, 2019, Enterprise initiated remediation activities at the location. Oil Field Trash provided heavy equipment operation and repair support. Rule Engineering, LLC (Rule) personnel provided excavation guidance and collected confirmation samples from the resultant excavation. The final repair excavation was an irregular shape which measured approximately 7 feet by 7 feet by 3 to 5.5 feet in depth. Approximately 8 cubic yards of soil were transported to the Envirotech Landfarm near Bloomfield, New Mexico for disposal/remediation. The repair excavation was backfilled with clean, imported material from a nearby stockpond as directed by JANEPO staff.

A depiction of the excavation with sample locations is included as Figure 2. A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix B (Note: Additional volumes of material are reported on this form from clean-up/remedial activity at the neighboring pig receiver and sump). A photograph log is included in Appendix C. A copy of regulatory correspondence is included in Appendix D.

4.0 Confirmation Soil Sampling

Rule collected confirmation excavation soil samples (SC-1 through SC-4) from the sidewalls and base of the excavation. Each confirmation soil sample is a representative composite comprised of five equivalent portions of soil collected from the sampled area.

A portion of each sample was field screened for volatile organic compounds (VOCs). Field screening for VOC vapors was conducted with a photoionization detector (PID). Before beginning field screening, the PID was calibrated with 100 parts per million (ppm) isobutylene gas. Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per USEPA Method 8021B and TPH (GRO/DRO/MRO) per USEPA 8015D and chlorides per USEPA Method 300.0. Laboratory analytical results are summarized in Table 1, and the analytical laboratory report is included in Appendix E.

5.0 Laboratory Analytical Results

Laboratory analytical results for final excavation confirmation samples SC-1 through SC-4 reported benzene, total BTEX, total TPH (GRO/DRO/MRO), and chloride concentrations below the laboratory reporting limits, which are below the remediation standards for all the constituents.

Laboratory analytical results are summarized in Table 1, confirmation sample locations are illustrated on Figure 3, and the analytical laboratory report is included in Appendix E.

6.0 Reclamation and Revegetation

The excavation was backfilled with clean, imported material from a nearby stockpond as directed by JANEPO staff. The area was contoured as near as possible to original grade and will be re-seeded with a JANEPO approved seed mixture.

7.0 Recommendation

Hydrocarbon impacted soils associated with the Jicarilla #6 well tie pipeline release have been excavated and transported to an approved landfarm for disposal/remediation. Laboratory analytical results for the confirmation samples collected from the excavation report benzene, total BTEX, and TPH concentrations below the remediation standards set forth for the release. Therefore, no further work is recommended.

8.0 Closure and Limitations

This report has been prepared for the exclusive use of Enterprise and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Enterprise. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

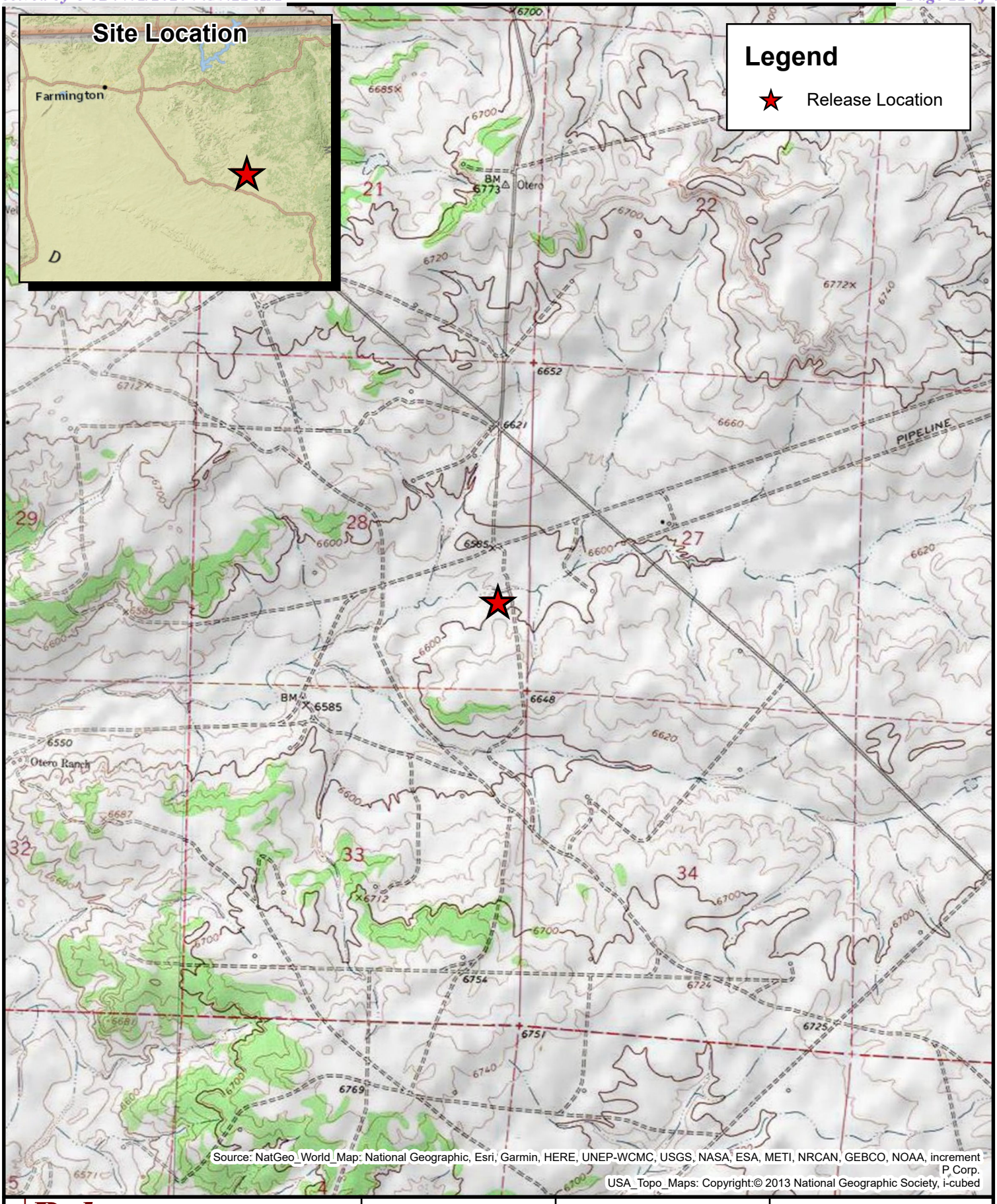
Table

Table 1. Summary of Laboratory Analytical Results
Enterprise Field Services
Jicarilla #6 Well Tie Pipeline Release
Rio Arriba County, New Mexico

Sample Name	Date	Approximate Sample Depth (ft bgs)	Sample Location	Laboratory Analytical Results								
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylben-zene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Chloride (mg/kg)
Remediation Standard*				**10**	**NE**	**NE**	**NE**	**50**	**100**			**600**
SC-1	8/14/2019	0 - 5.5	West Wall	<0.024	<0.049	<0.049	<0.097	ND	<4.9	<9.9	<50	<60
SC-2	8/14/2019	0 - 5.5	East Wall	<0.021	<0.042	<0.042	<0.083	ND	<4.2	<9.1	<46	<60
SC-3	8/14/2019	3	West Base	<0.022	<0.043	<0.046	<0.087	ND	<4.3	<9.8	<49	<60
SC-4	8/14/2019	5.5	East Base	<0.021	<0.043	<0.043	<0.086	ND	<4.3	<9.7	<48	<60

Notes:
ft bgs - feet below grade surface
mg/kg - milligrams per kilogram
NE - not established
ND - not detected above laboratory reporting limits
BTEX - total benzene, toluene, ethylbenzene, and xylenes
TPH - total petroleum hydrocarbons
GRO - gasoline range organics
DRO - diesel range organics
MRO - mineral oil range organics
*Per Table 1 of 19.15.29.12 NMAC, based on category *"less than or equal to 50 feet" depth* to groundwater

Figures



Rule Engineering, LLC
Solutions to Regulations for Industry

0 1,000 2,000 4,000 Feet

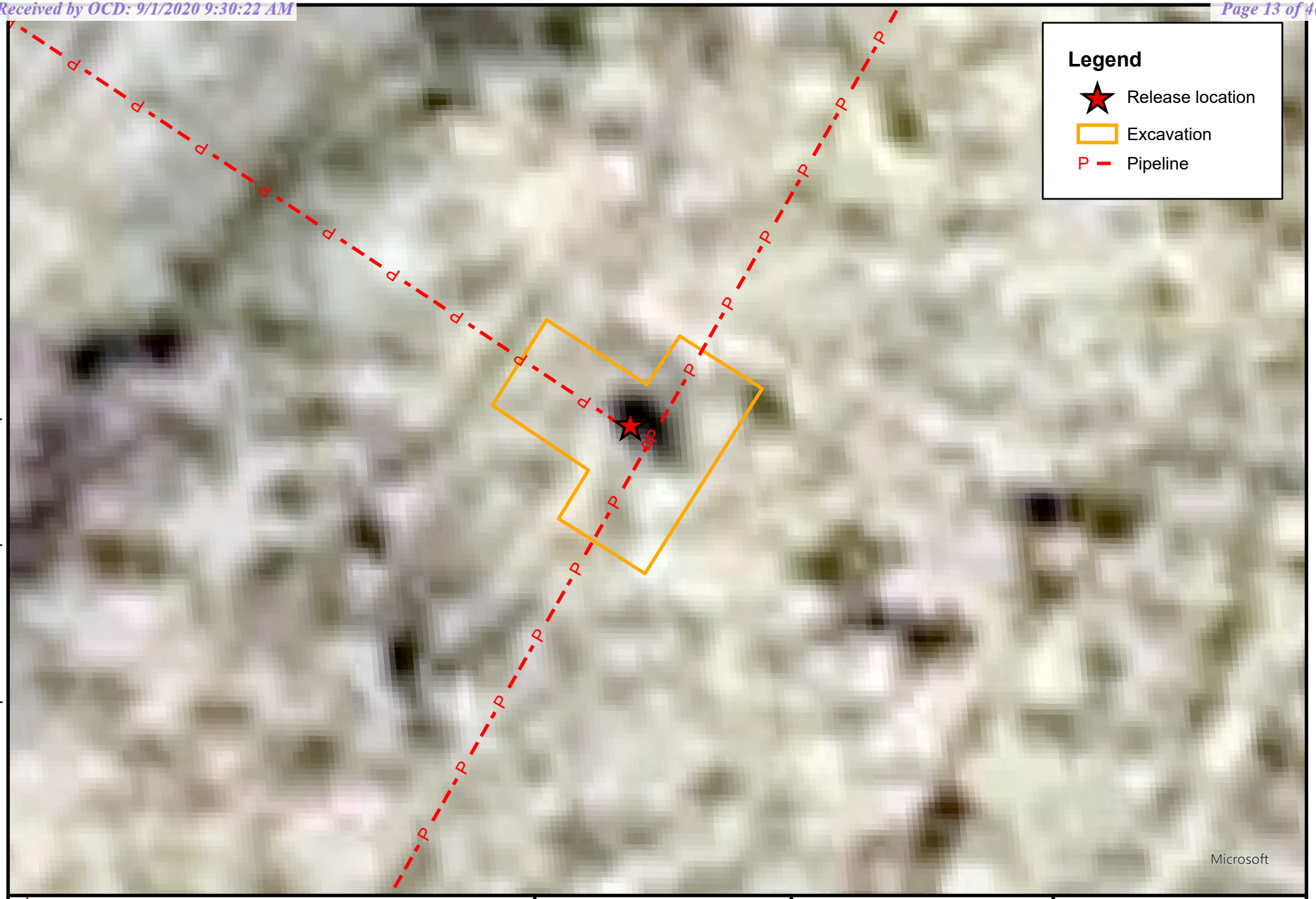
Otero Store Quadrangle
1:24,000

Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

Figure 1
Topographic Site Map
Enterprise Jicarilla #6

Document Path: M:\27 GIS CAD\Enterprise Products\Enterprise Products.aprx



Rule Engineering, LLC
Solutions to Regulations for Industry

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1:48

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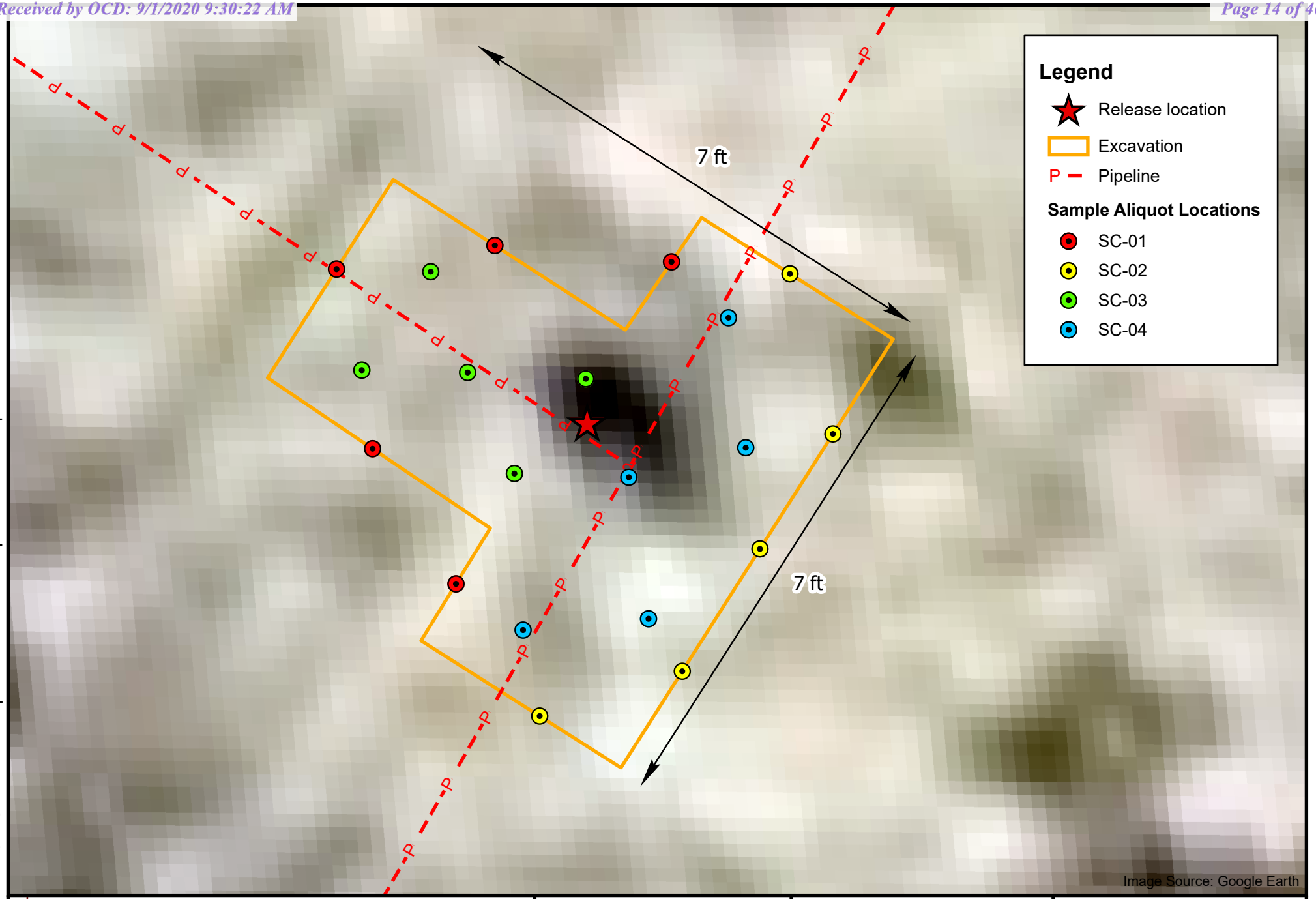
Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

Figure 2
Aerial Site Map
Jicarilla #6

Date: 7/14/2020

Document Path: M:\27 GIS CAD\Enterprise Products\Enterprise Products.aprx



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Rule Engineering, LLC
Solutions to Regulations for Industry

0 1.25 2.5 5 Feet
1:20.72

N

Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

Figure 3
Sample Location Map
Jicarilla #6

Date: 7/14/2020

Appendix A

Closure Criteria Determination and Documentation

Closure Criteria Determination
Jicarilla #6 Well Tie Pipeline Release

Per 19.15.29 NMAC, the release site characteristics are as follows:

- Depth to groundwater at the site is anticipated to be **less than 50 feet** below ground surface based on the area's geology and geomorphology. A search of the New Mexico Office of the State Engineer (NMOSE) Water Rights Reporting System reported no points of diversion within Sections 20, 21, 22, 27, 28, 29, 32,33 and 34 of Township 24 North and Range 5 West. A search of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) online imaging database did not provide any cathodic well records for those same Sections.

The location **is** within:

- 300 feet of any continuously flowing watercourse or any other significant water course. *A tributary to Cañon Largo is located approximately 100 feet north of the release site*.
- 300 feet of a wetland. *The tributary to Cañon Largo is listed as a riverine wetland on the United States Fish & Wildlife Service's National Wetlands Inventory Wetlands Mapper.*

The location is **not** within:

- ½ mile of known water sources, including private and domestic water sources.
- 200 feet of any lakebed, sinkhole or playa lake.
- 300 feet of an occupied permanent residence, school, hospital, institution or church.
- 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
- incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
- 1,000 feet of any fresh water well or spring.
- the area overlying a subsurface mine.
- an unstable area.
- 100-year floodplain.

Jicarilla #6 Well Tie Pipeline 1-Mile Radius Water Well and Cathodic Well Map

7/14/2020, 3:50:29 PM

OSE District Boundary

Conveyances

- Acequia
- Acequia Tunnel
- Canal
- Channel
- Closed Drain
- Community Ditch
- Connector
- Culvert
- Ditch
- Diversion Weir
- Drain
- Feeder
- Interior Drain
- Lateral
- Pipe
- Wasteway
- Other
- Unknown

1:18,056

0 0.15 0.3 0.6 mi

0 0.28 0.55 1.1 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, OSE GIS

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

No records found.

PLSS Search:

Section(s): 20, 21, 22, 27, 28, 29, 32, 33, 34 **Township:** 24N **Range:** 05W

Legend

- Release Location
- 300 Foot Radius

Approx. 100 feet
to nearest watercourse
- a tributary to Canon Largo

Note: No occupied structures are located within 300 feet of the site.

Source: USA_Topo_Maps: Copyright:© 2013 National Geographic Society, i-cubed
World Imagery: Microsoft

Rule Engineering, LLC
Solutions to Regulations for Industry

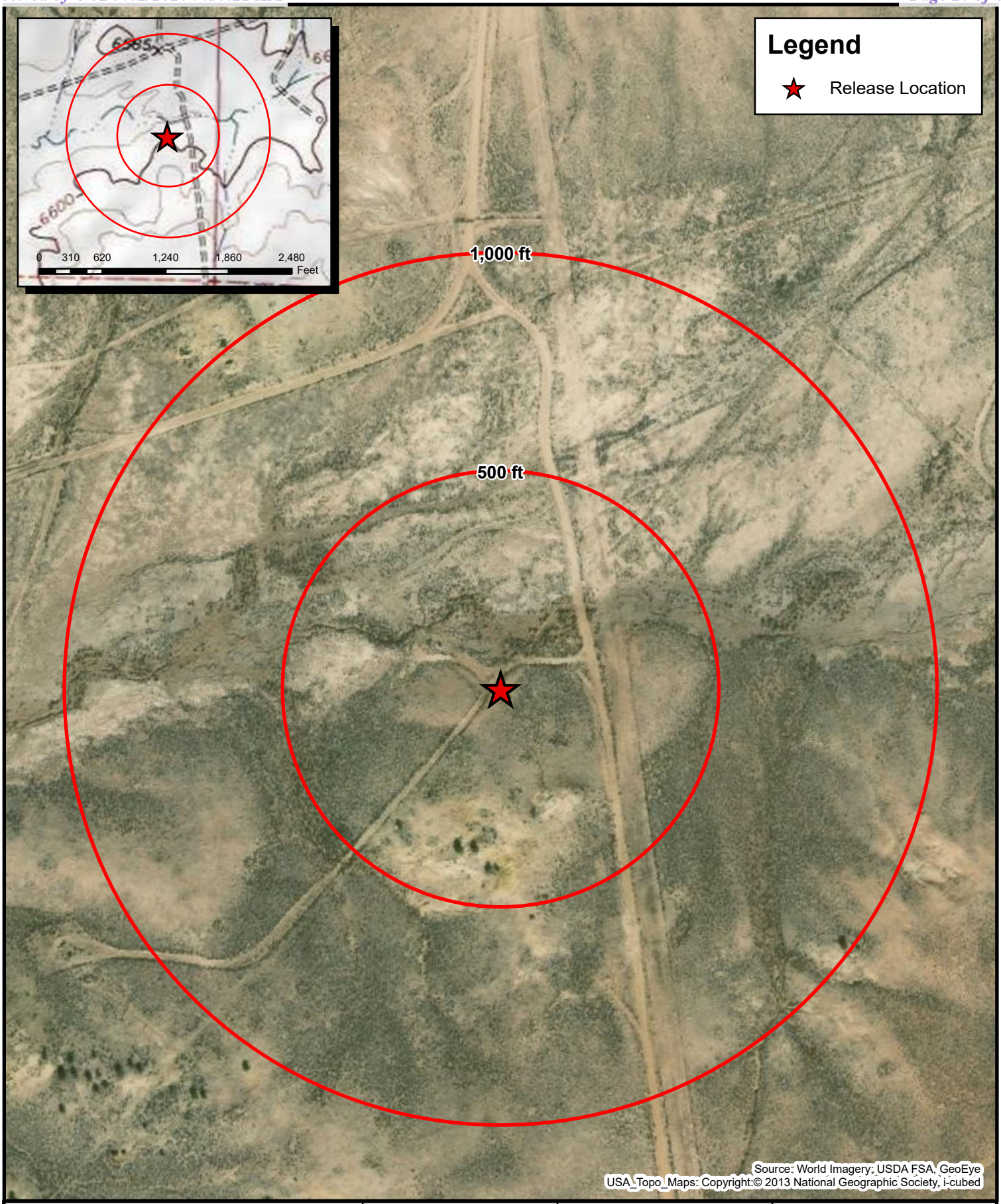
0 40 80 160
Feet
1:1,000

Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

Watercourses and Occupied Structure Map
Enterprise Jicarilla #6

7/15/20



Rule Engineering, LLC
Solutions to Regulations for Industry

0 155 310 620
Feet
1:3,500

Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

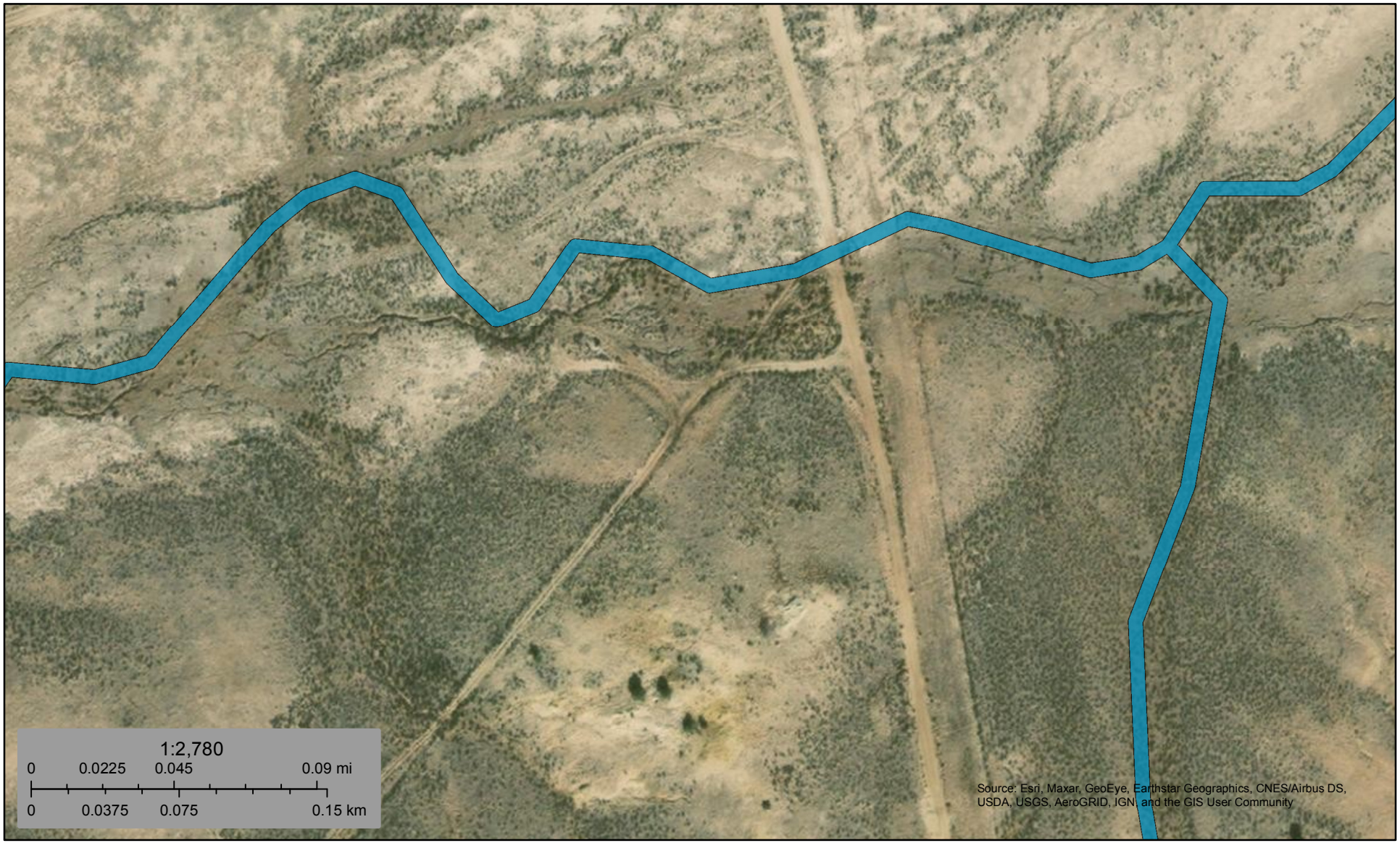
Water Wells and Natural Springs Map
Enterprise Jicarilla #6

7/15/20

U.S. Fish and Wildlife Service

National Wetlands Inventory

Jicarilla #6 Well Tie Pipeline



July 11, 2020

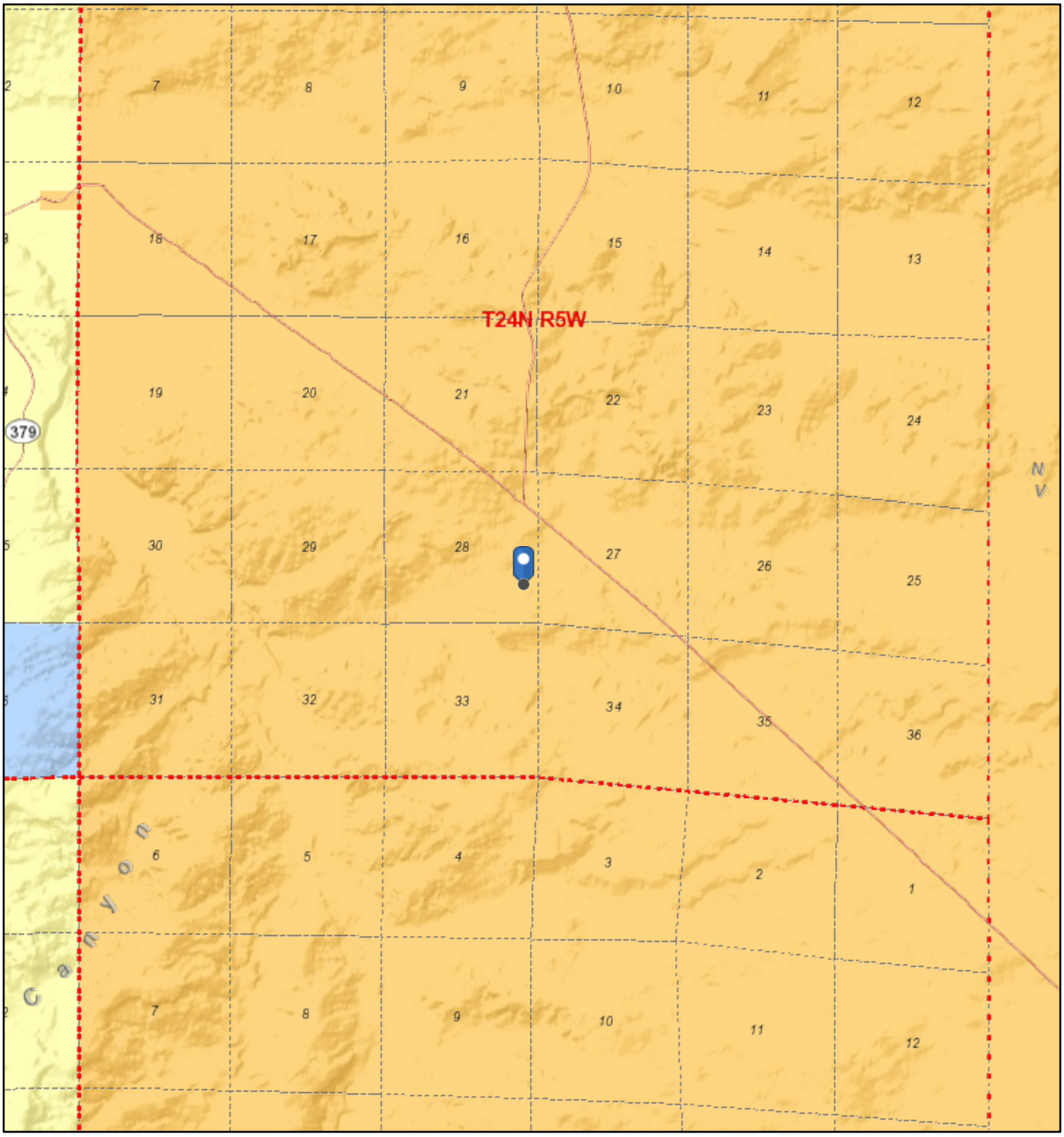
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Jicarilla #6 Area Mines



7/15/2020, 11:48:02 AM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

EMNRD MMD GIS Coordinator

New Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

Document Path: M:\27 GIS CAD\Enterprise Products\Enterprise Products.aprx

Rule Engineering, LLC
Solutions to Regulations for Industry

0 135 270 540 Feet
1:3,000

Enterprise Products

I-S28-T24N-R5W
N36.280306, W107.359030
Rio Arriba County, New Mexico

Flood Hazard Map
Enterprise Jicarilla #6

Appendix B

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

97857-1026

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

2. Originating Site:
Jicarilla #6/Lateral 2C-16

3. Location of Material (Street Address, City, State or ULSTR):
Section 28 T24N R5W;36.2803, -107.3590

August 2019

4. Source and Description of Waste: Hydrocarbon impacted soil/sludge/hydro-excavation material.
Source: Remediation activities associated with a natural gas pipeline leak.
Description: Hydrocarbon/Condensate impacted soil/sludge associated natural gas pipeline release.
Estimated Volume 50 (yd³ / bbls) Known Volume (to be entered by the operator at the end of the haul) 17/130 yd³ / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

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

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

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

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long 8-12-19, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

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

5. Transporter: ~~OFT~~ and Subcontractors L+L, CNJ

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 TITLE: Enviro Manager DATE: 8/12/19
SIGNATURE: Greg Crabtree TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

Appendix C

Photograph Log

Photograph Log
Jicarilla #6 Well Tie Pipeline Release
Enterprise Field Services, LLC

Photograph #1	
Client: Enterprise	
Site Name: Jicarilla #6 Well Tie Pipeline Release	
Date Photo Taken: August 14, 2019	
Release Location: N36.280306, W107.359030 I-28-24N-5W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing north, view of the final excavation extents.

Photograph #2	
Client: Enterprise	
Site Name: Jicarilla #6 Well Tie Pipeline Release	
Date Photo Taken: August 14, 2019	
Release Location: N36.280306, W107.359030 I-28-24N-5W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing south, view of the final excavation extents.

Photograph Log
Jicarilla #6 Well Tie Pipeline Release
Enterprise Field Services, LLC

Photograph #3	
Client: Enterprise	
Site Name: Jicarilla #6 Well Tie Pipeline Release	
Date Photo Taken: August 14, 2019	
Release Location: N36.280306, W107.359030 I-28-24N-5W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing southeast, view of the final excavation extents.

Photograph #4	
Client: Enterprise	
Site Name: Jicarilla #6 Well Tie Pipeline Release	
Date Photo Taken: June 4, 2020	
Release Location: N36.280306, W107.359030 I-28-24N-5W Rio Arriba County, NM	
Photo Taken by: Brian Roberts	Description: Facing east, view of the backfilled and recontoured excavation location.

Appendix D

Correspondence

From: Long, Thomas
To: "Smith, Cory, EMNRD (Cory.Smith@state.nm.us)"; Hobson Sandoval
Cc: Stone, Brian
Subject: FW: Drip from flange, Jicarilla #6, Lat 36.2803 Lon -107.3590 T-24-N R-5-W Sec 28
Date: Tuesday, August 20, 2019 7:10:00 AM
Attachments: Rpt_1908839_Enterprise_Jicarilla_6_Final_v1.pdf

Hobson/Cory,

Please find the attached lab report for the Jicarilla #6 excavation. All sample results are below the NMOCD Tier I standards. If you have any questions, please all or email.

Sincerely,

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Long, Thomas
Sent: Tuesday, August 13, 2019 2:19 PM
To: 'Hobson Sandoval' <hsandoval2012@gmail.com>; 'Smith, Cory, EMNRD (Cory.Smith@state.nm.us)' <Cory.Smith@state.nm.us>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: FW: Drip from flange, Jicarilla #6, Lat 36.2803 Lon -107.3590 T-24-N R-5-W Sec 28

Hobson/Cory,

This email is to notify you that Enterprise began remediation activities on this release yesterday and has determined it reportable per NMOCD regulation due to the volume of impacted subsurface soil. I will keep you informed as to when will be collecting soil samples for laboratory analysis. If you have any questions, please all or email.

Tom Long
505-599-2286 (office)
505-215-4727 (Cell)
tjlong@eprod.com

From: Stone, Brian <bmstone@eprod.com>
Sent: Tuesday, July 16, 2019 2:17 PM
To: hsandoval2012@gmail.com
Cc: Long, Thomas <tjlong@eprod.com>
Subject: Drip from flange, Jicarilla #6, Lat 36.2803 Lon -107.3590 T-24-N R-5-W Sec 28

Hobson,

This is a courtesy notification that Enterprise discovered a dripping flange on the Jicarilla #6 pipeline

at the location specified above. An area of approximately two feet in diameter was impacted by the release fluids. The flange bolts were tightened, stopping the drip. Remediation has not been scheduled yet. If you have any questions, please call or email.

Sincerely,

Brian Stone (970) 210-2170

Appendix E

Analytical Laboratory Report

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 19, 2019

Heather Woods

Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 325-1055
FAX:

RE: Enterprise Jicarilla 6 OrderNo.: 1908839

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/15/2019 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 **1908839**
Date Reported: **8/19/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-1
Project: Enterprise Jicarilla 6
Collection Date: 8/14/2019 12:00:00 PM
Lab ID: 1908839-001
Matrix: MEOH (SOIL)
Received Date: 8/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/15/2019 11:29:24 AM	46814
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/15/2019 10:43:54 AM	46805
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/15/2019 10:43:54 AM	46805
Surr: DNOP	83.8	70-130		%Rec	1	8/15/2019 10:43:54 AM	46805
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	8/15/2019 9:47:14 AM	G62165
Surr: BFB	101	77.4-118		%Rec	1	8/15/2019 9:47:14 AM	G62165
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	8/15/2019 9:47:14 AM	B62165
Toluene	ND	0.049		mg/Kg	1	8/15/2019 9:47:14 AM	B62165
Ethylbenzene	ND	0.049		mg/Kg	1	8/15/2019 9:47:14 AM	B62165
Xylenes, Total	ND	0.097		mg/Kg	1	8/15/2019 9:47:14 AM	B62165
Surr: 4-Bromofluorobenzene	93.0	80-120		%Rec	1	8/15/2019 9:47:14 AM	B62165

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

Qualifiers:

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

Analytical Report
Lab Order **1908839**
Date Reported: **8/19/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC
Client Sample ID: SC-2
Project: Enterprise Jicarilla 6
Collection Date: 8/14/2019 12:05:00 PM
Lab ID: 1908839-002
Matrix: MEOH (SOIL)
Received Date: 8/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/15/2019 11:41:48 AM	46814
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/15/2019 11:08:19 AM	46805
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/15/2019 11:08:19 AM	46805
Surr: DNOP	84.8	70-130		%Rec	1	8/15/2019 11:08:19 AM	46805
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	8/15/2019 10:09:59 AM	G62165
Surr: BFB	106	77.4-118		%Rec	1	8/15/2019 10:09:59 AM	G62165
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	8/15/2019 10:09:59 AM	R62165
Toluene	ND	0.042		mg/Kg	1	8/15/2019 10:09:59 AM	R62165
Ethylbenzene	ND	0.042		mg/Kg	1	8/15/2019 10:09:59 AM	R62165
Xylenes, Total	ND	0.083		mg/Kg	1	8/15/2019 10:09:59 AM	R62165
Surr: 4-Bromofluorobenzene	97.0	80-120		%Rec	1	8/15/2019 10:09:59 AM	R62165

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 **1908839**
Date Reported: **8/19/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC **Client Sample ID:** SC-3
Project: Enterprise Jicarilla 6 **Collection Date:** 8/14/2019 12:10:00 PM
Lab ID: 1908839-003 **Matrix:** MEOH (SOIL) **Received Date:** 8/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/15/2019 11:54:12 AM	46814
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	8/15/2019 11:32:36 AM	46805
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/15/2019 11:32:36 AM	46805
Surr: DNOP	72.7	70-130		%Rec	1	8/15/2019 11:32:36 AM	46805
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	8/15/2019 9:50:10 AM	G62164
Surr: BFB	99.9	77.4-118		%Rec	1	8/15/2019 9:50:10 AM	G62164
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.022		mg/Kg	1	8/15/2019 9:50:10 AM	B62164
Toluene	ND	0.043		mg/Kg	1	8/15/2019 9:50:10 AM	B62164
Ethylbenzene	ND	0.043		mg/Kg	1	8/15/2019 9:50:10 AM	B62164
Xylenes, Total	ND	0.087		mg/Kg	1	8/15/2019 9:50:10 AM	B62164
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	1	8/15/2019 9:50:10 AM	B62164

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 **1908839**
Date Reported: **8/19/2019**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC **Client Sample ID:** SC-4
Project: Enterprise Jicarilla 6 **Collection Date:** 8/14/2019 12:15:00 PM
Lab ID: 1908839-004 **Matrix:** MEOH (SOIL) **Received Date:** 8/15/2019 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CAS**	
Chloride	ND	60		mg/Kg	20	8/15/2019 12:06:37 PM	46814
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **BRM**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/15/2019 9:55:01 AM	46805
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/15/2019 9:55:01 AM	46805
Surr: DNOP	87.1	70-130		%Rec	1	8/15/2019 9:55:01 AM	46805
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	8/15/2019 10:13:34 AM	G62164
Surr: BFB	94.1	77.4-118		%Rec	1	8/15/2019 10:13:34 AM	G62164
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.021		mg/Kg	1	8/15/2019 10:13:34 AM	B62164
Toluene	ND	0.043		mg/Kg	1	8/15/2019 10:13:34 AM	B62164
Ethylbenzene	ND	0.043		mg/Kg	1	8/15/2019 10:13:34 AM	B62164
Xylenes, Total	ND	0.086		mg/Kg	1	8/15/2019 10:13:34 AM	B62164
Surr: 4-Bromofluorobenzene	93.2	80-120		%Rec	1	8/15/2019 10:13:34 AM	B62164

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#: **1908839**
19-Aug-19

Client: Rule Engineering LLC
Project: Enterprise Jicarilla 6

Sample ID: **MB-46814**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **46814**	RunNo: **62163**							
Prep Date: **8/15/2019**	Analysis Date: **8/15/2019**	SeqNo: **2111358**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-46814**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **46814**	RunNo: **62163**							
Prep Date: **8/15/2019**	Analysis Date: **8/15/2019**	SeqNo: **2111359**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

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#: **1908839**

19-Aug-19

Client: Rule Engineering LLC

Project: Enterprise Jicarilla 6

Sample ID: **MB-46805**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **46805**	RunNo: **62154**
Prep Date: **8/15/2019**	Analysis Date: **8/15/2019**	SeqNo: **2109604** 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	9.5		10.00		94.6	70	130			

Sample ID: **LCS-46805**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **46805**	RunNo: **62154**
Prep Date: **8/15/2019**	Analysis Date: **8/15/2019**	SeqNo: **2109605** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.9	63.9	124			
Surr: DNOP	4.7		5.000		93.3	70	130			

Sample ID: **LCS-46758**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **46758**	RunNo: **62154**
Prep Date: **8/13/2019**	Analysis Date: **8/15/2019**	SeqNo: **2110663** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **1908839**
19-Aug-19

Client: Rule Engineering LLC
Project: Enterprise Jicarilla 6

Sample ID: **RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **G62164** RunNo: **62164**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110710** 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	1100		1000		108	77.4	118			

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **G62164** RunNo: **62164**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110718** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	88.0	80	120			
Surr: BFB	1100		1000		109	77.4	118			

Sample ID: **1908839-003AMS** SampType: **MS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-3** Batch ID: **G62164** RunNo: **62164**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110721** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.3	21.72	0	92.2	69.1	142			
Surr: BFB	960		868.8		111	77.4	118			

Sample ID: **RB** SampType: **MBLK** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS** Batch ID: **G62165** RunNo: **62165**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110831** 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		103	77.4	118			

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS** Batch ID: **G62165** RunNo: **62165**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110832** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.8	80	120			
Surr: BFB	1200		1000		122	77.4	118			S

Sample ID: **1908839-003AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-3** Batch ID: **G62164** RunNo: **62164**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110978** Units: **mg/Kg**

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
D	Sample Diluted Due to Matrix
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
PQL	Practical 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#: **1908839**
19-Aug-19

Client: Rule Engineering LLC
Project: Enterprise Jicarilla 6

Sample ID: **1908839-003AMSD** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **SC-3** Batch ID: **G62164** RunNo: **62164**
Prep Date: Analysis Date: **8/15/2019** SeqNo: **2110978** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.3	21.72	0	90.4	69.1	142	1.93	20	
Surr: BFB	930		868.8		107	77.4	118	0	0	

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#: **1908839**
19-Aug-19

Client: Rule Engineering LLC
Project: Enterprise Jicarilla 6

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B62164**	RunNo: **62164**
Prep Date:	Analysis Date: **8/15/2019**	SeqNo: **2110774** 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	1.1		1.000		107	80	120			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B62164**	RunNo: **62164**
Prep Date:	Analysis Date: **8/15/2019**	SeqNo: **2110775** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	99.4	80	120			
Toluene	1.1	0.050	1.000	0	106	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.2	0.10	3.000	0	108	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID: **RB**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **B62165**	RunNo: **62165**
Prep Date:	Analysis Date: **8/15/2019**	SeqNo: **2110859** 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		97.0	80	120			

Sample ID: **100NG BTEX LCS**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **B62165**	RunNo: **62165**
Prep Date:	Analysis Date: **8/15/2019**	SeqNo: **2110862** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.7	80	120			
Toluene	1.0	0.050	1.000	0	100	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		105	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1908839**

19-Aug-19

Client: Rule Engineering LLC

Project: Enterprise Jicarilla 6

Sample ID: **1908839-001AMS** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **SC-1** Batch ID: **B62165** RunNo: **62171**

Prep Date: Analysis Date: **8/16/2019** SeqNo: **2112351** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9709	0	92.0	63.9	127			
Toluene	0.95	0.049	0.9709	0	98.1	69.9	131			
Ethylbenzene	0.98	0.049	0.9709	0	101	71	132			
Xylenes, Total	2.9	0.097	2.913	0	99.5	71.8	131			
Surr: 4-Bromofluorobenzene	0.97		0.9709		100	80	120			

Sample ID: **1908839-001AMSD** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**

Client ID: **SC-1** Batch ID: **B62165** RunNo: **62171**

Prep Date: Analysis Date: **8/16/2019** SeqNo: **2112352** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9709	0	90.4	63.9	127	1.81	20	
Toluene	0.93	0.049	0.9709	0	95.5	69.9	131	2.73	20	
Ethylbenzene	0.95	0.049	0.9709	0	97.8	71	132	3.22	20	
Xylenes, Total	2.8	0.097	2.913	0	97.0	71.8	131	2.57	20	
Surr: 4-Bromofluorobenzene	0.94		0.9709		97.0	80	120	0	0	

Qualifiers:

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

Sample Log-In Check List

Client Name: **RULE ENGINEERING LL** Work Order Number: **1908839** RcptNo: **1**

Received By: **Erin Melendrez** **8/15/2019 8:00:00 AM**

Completed By: **Erin Melendrez** **8/15/2019 8:19:14 AM**

Reviewed By: dr 8/05/19

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. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
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: _____

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	1.7	Good	Yes			
2	4.3	Good	Yes			
3	3.8	Good	Yes			

Chain-of-Custody Record

Client: Rule Engineering

Mailing Address: 501 Airport Dr. Ste 205
Farmington, NM 87401

Phone #: (505) 716-2787

email or Fax#: hwoods@ruleengineering.com
tjlong@epred.com

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name:
Enterprise Jicarilla #6

Project #:

Project Manager:
Heather Woods

Sampler: Heather Woods

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.5+0.2(CF)=1.7°C
4.1+0.2(CF)=4.3°C; 3.6+0.2(CF)=3.8

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1908839	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles (Y or N)
8/14/19	1200	Soil	SC-1	(1) 4oz Glass	Non	-001	+		+					+							
8/14/19	1205	Soil	SC-2	"	"	-002	+		+					+							
8/14/19	1210	Soil	SC-3	"	"	-003	+		+					+							
8/14/19	1215	Soil	SC-4	"	"	-004	+		+					+							

N/S

Date:	Time:	Relinquished by:	Received by:	Date	Time
8/14/19	1707	Heather M. Woods	Christ Waits	8/14/19	1707
8/14/19	2040	Christ Waits	Courier	8/15/19	0800

Remarks:
Direct Bill to Enterprise
Non-AFE: N43382
Supervisor: Dwayne Dixson

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 9919

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 9919
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	5/19/2022