August 19, 2024

EMNRD/OCD

Attn: Victoria Venegas

South St. Francis Dr.

Santa Fe, NM 87505

Re: EOG Resources, Inc.
Red Tank Containment and Recycle Facility

Dear Mrs. Venegas,

EOG Resources, Inc. submits the attached C-147 registration.

Thank you for allowing EOG Resources to promote water reuse in the State of New Mexico. Please find attached the C-147 form with accompanying documentation for the Red Tank Containment and Recycle Facility.

The package follows the order of Form C-147 for easier review by OCD.

Please do not hesitate to contact me with any questions, comments, or concerns.

Sincerely,

Blake Grooms
EOG Resources
Water Resources Engineer

C-147 Registration Package for Red Tank Containment and Recycle Facility

Section 19, Township 22-S, Range 32-E, Lea County

Prepared for:

EOG Resources, Inc.
5509 Champions Drive

Midland, TX 79706

Prepared by:

Blake Grooms
Blake_grooms@eogresources.com
432-269-2530

Form C-147

State of New Mexico
Energy Minerals and Natural Resources
Department Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
https://www.emnrd.nm.gov/ocd/ocd-e-permitting/

Form C-147
Revised October 11, 2022

Recycling Facility and/or Recycling Containment

Type of Facility: ☑ Recycling Facility ☐ Recycling Containment*

Type of action: ☑ Permit ☐ Registration ☐ Modification ☐ Extension ☐ Closure ☐ Other (explain) _____

*** At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.**

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: EOG Resources, Inc. (For multiple operators attach page with information) OGRID #: _____
Address: 5509 Champions Dr. Midland, TX 79706
Facility or well name (include API# if associated with a well): Red Tank Containment and Reuse Facility
OCD Permit Number: 1RF-530 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr SE 1/4 Section 19 Township 22 South Range 32 East County: Lea County
Surface Owner: ☑ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☑ **Recycling Facility:**
Location of recycling facility (if applicable): Latitude 32.373096° Longitude -103.710331° NAD83
Proposed Use: ☐ Drilling* ☑ Completion* ☐ Production* ☐ Plugging *
The re-use of produced water may NOT be used until fresh water zones are cased and cemented
☐ Other, ***requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.***
☑ Fluid Storage
☑ Above ground tanks ☑ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type _____
☐ Activity permitted under 19.15.36 NMAC explain type: _____ ☐ Other explain _____
☐ For multiple or additional recycling containments, attach design and location information of each containment
☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date: _____

3.
☑ **Recycling Containment:**
☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)
Center of Recycling Containment (if applicable): Latitude 32.374292° Longitude -103.710280° NAD83
☐ For multiple or additional recycling containments, attach design and location information of each containment
☑ Lined ☑ Liner type: Thickness 60 Primary 40 Secondary mil ☐ LLDPE ☑ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☑ Welded ☐ Factory ☐ Other _____ Volume: 1,217,436 bbl Dimensions: L 710 x W 620 x D 22
☐ Recycling Containment Closure Completion Date: _____

4.

Bonding:

☑ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC **(These containments are limited to only the wells owned or operated by the owners of the containment.)**

☐ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond $_____ **(work on these facilities cannot commence until bonding amounts are approved)**

☐ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

Fencing:

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☑ Alternate. Please specify Please see attached Variance Request Detail

6.

Signs:

☑ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

☑ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

If a Variance is requested, it must be approved prior to implementation.

ALL CONSTRUCTION AND OPERATION VARIANCES HAVE BEEN PREVIOUSLY APPROVED BY NMOCD

8.

Siting Criteria for Recycling Containment

Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.

General siting

Ground water is less than 50 feet below the bottom of the Recycling Containment. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☑ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; written approval obtained from the municipality	☐ Yes ☑ No ☐ NA
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division	☐ Yes ☑ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map	☐ Yes ☑ No
Within a 100-year floodplain. FEMA map	☐ Yes ☑ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; aerial photo; satellite image	☐ Yes ☑ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site	☐ Yes ☑ No

9.
Recycling Facility and/or Containment Checklist:
Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.

- ☑ Design Plan - based upon the appropriate requirements.
- ☑ Operating and Maintenance Plan - based upon the appropriate requirements.
- ☑ Closure Plan - based upon the appropriate requirements.
- ☑ Site Specific Groundwater Data -
- ☑ Siting Criteria Compliance Demonstrations –
- ☑ **Certify that notice of the C-147 (only) has been sent to the surface owner(s)**

10.
~~Operator Application Certification~~:
I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): Blake Grooms Title: Water Resources Engineer

Signature: Blake Grooms Date: 8/19/2024

Email Address: blake_grooms@eogresources.com Telephone: 432-269-2530

11.
OCD Representative Signature: Victoria Venegas **Approval Date:** 08/23/2024

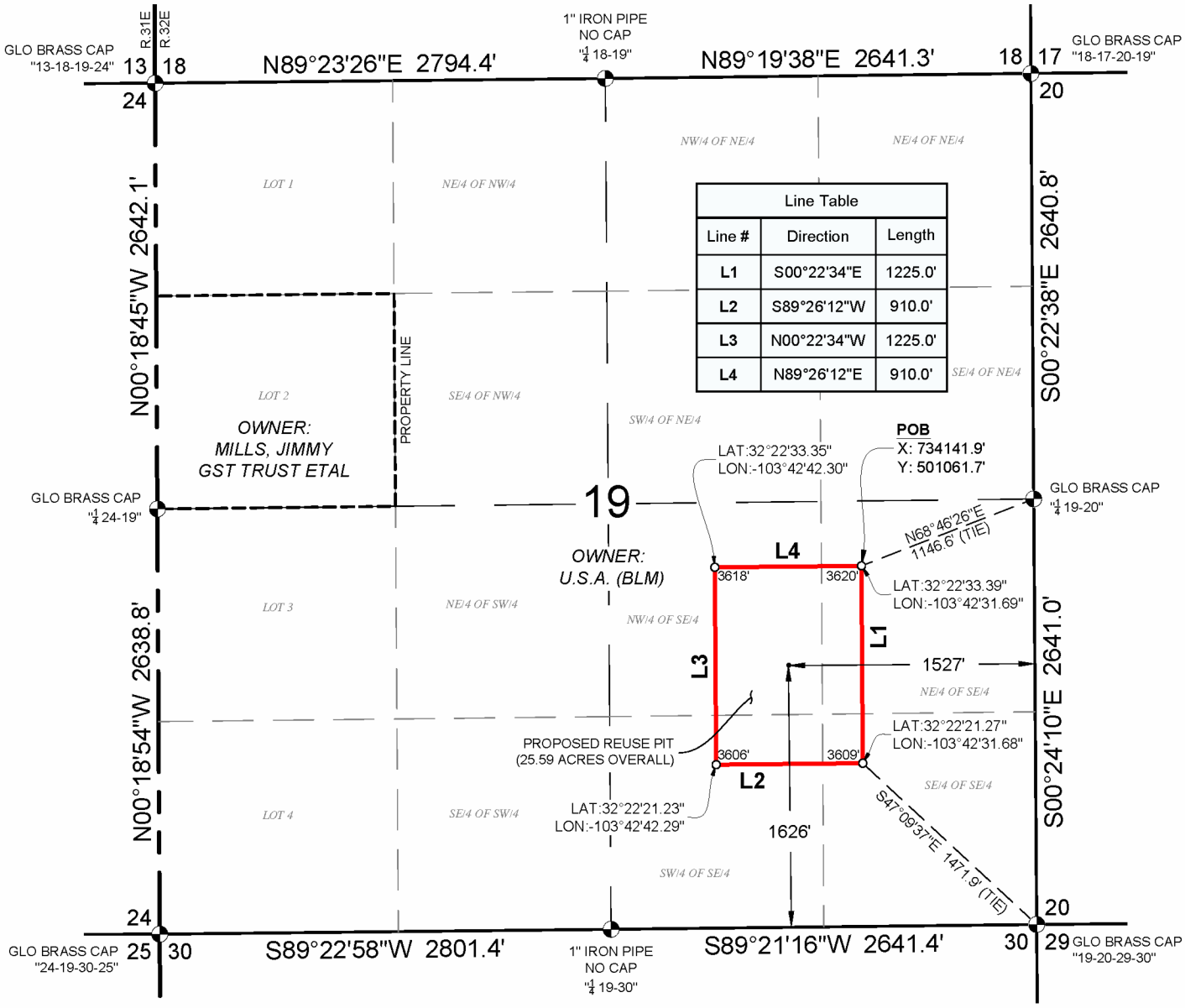
Title: Environmental Specialist **OCD Permit Number:** 1RF-530

- [X] OCD Conditions
- [ ] Additional OCD Conditions on Attachment

X

Survey Plats

SECTION 19, TOWNSHIP 22 SOUTH, RANGE 32 EAST,
LEA COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	S00°22'34"E	1225.0'
L2	S89°26'12"W	910.0'
L3	N00°22'34"W	1225.0'
L4	N89°26'12"E	910.0'

RED TANK PROPOSED REUSE PIT

SITE DESCRIPTION

A PROPOSED SITE SITUATED IN THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 22 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT A POINT FROM WHICH A GLO BRASS CAP FOUND AND ACCEPTED AS THE EAST QUARTER CORNER OF SAID SECTION 19 BEARS N68°46'26"E, 1146.6 FEET, SAID POINT BEING THE NORTHEAST CORNER HEREOF;

THENCE THE FOLLOWING FOUR (4) COURSES AND DISTANCES: S00°22'34"E, 1225.0 FEET, S89°26'12"W, 910.0 FEET, N00°22'34"W, 1225.0 FEET, N89°26'12"E, 910.0 FEET TO THE **POINT OF BEGINNING**, CONTAINING 25.59 ACRES.

NW/4 OF SE/4 = 13.94 ACRES
NE/4 OF SE/4 = 5.24 ACRES
SW/4 OF SE/4 = 1.75 ACRES
SE/4 OF SE/4 = 4.66 ACRES

PROPOSED REUSE PIT
POINT FOR BEGIN/END OR ANGLE POINT
FOUND MONUMENT AS SHOWN

0 500' 1000'
SCALE: 1"= 1000'

NOTES:
- BEARINGS, COORDINATES, AND DISTANCES SHOWN HEREON ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83- 2011 (EPOCH 2010) FRAMEWORK, AS DERIVED BY OPUS SOLUTION. THE ELEVATIONS SHOWN HEREON AREA BASED ON NAVD 88.
- LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT

BRANDON MOSER NEW MEXICO 22502 PROFESSIONAL SURVEYOR 11/09/2023

I, BRANDON A. MOSER, NEW MEXICO PROFESSIONAL SURVEYOR NO. 22502, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS INSTRUMENT IS AN EASEMENT PLAT OF A PROPOSED EASEMENT.

BRANDON A. MOSER, N.M. P.L.S. **No.22502**

SURVEY DATE: 10/04/2023
JOB NO.: B22.EOG.0083

DRAFT: RH
SHEET: 1 OF 1

eog resources

RED TANK PROPOSED REUSE PIT
SEC. 19, T-22-S, R-32-E, N.M.P.M.,
LEA COUNTY, NEW MEXICO

PETROLEUM FIELD SERVICES, LLC
DBA: ASCENT GEOMATICS SOLUTIONS
8620 WOLFF CT.
WESTMINSTER, CO 80031
OFFICE: (303) 928-7128

ASCENT GEOMATICS SOLUTIONS

P:\EOG_B220083\PRODROWSITE\EOG_RED_TANK_REUSE_PIT 11/9/23 2:57 PM Rhomeley

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

04/05/2024

Well Name: AMAZING 19 FED

Well Location: T22S / R32E / SEC 19 / TR B / 32.381857 / -103.712177

County or Parish/State: LEA / NM

Well Number: 714H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM90

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002551186

Well Status: Producing Oil Well

Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Sundry ID: 2771568

Type of Submission: Notice of Intent

Type of Action: Surface Disturbance

Date Sundry Submitted: 01/24/2024

Time Sundry Submitted: 12:56

Date proposed operation will begin: 01/24/2024

Procedure Description: 1-25-2024 EOG Resources, Inc request authorization for 30.47 acres of disturbance for the Red Tank Reuse Pit and its associated infrastructure namely, a road with two entrances into the Pit, one 16.9kV OHE line, and two 24 inch buried poly pipelines in a 30-foot easement. Please see attached plats and pdf description of the proposed actions.

Surface Disturbance

Is any additional surface disturbance proposed?: Yes

Proposed Disturbance(acres): 30.47

Interim Reclamation (acres): 30.47

Long Term Disturbance (acres): 30.47

Surface Disturbance:

NOI Attachments

Surface Disturbance

EP_RED_TANK_REUSE_PIT_OHE_LINE_20231110_20240213143241.pdf

EP_RED_TANK_REUSE_PIT_ACCESS_ROADS_R1_20240213143241.pdf

EP_RED_TANK_REUSE_PIT_WATER_20231107_20240213143241.pdf

BO_RED_TANK_REUSE_PIT_20240213143241.pdf

Red_Tank_Reuse_Pit_Sundry_Detail_20240213143241.pdf

Well Name: AMAZING 19 FED

Well Location: T22S / R32E / SEC 19 / TR B / 32.381857 / -103.712177

County or Parish/State: LEA / NM

Well Number: 714H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM90

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002551186

Well Status: Producing Oil Well

Operator: EOG RESOURCES INCORPORATED

Conditions of Approval

Specialist Review

COAs_Produced_Water_Pond_20240404082427.pdf

Authorized

Buried_Pipeline_20240404095426.pdf

Overhead_Electric_Distribution_Lines_20240404095416.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: EMILY FOLLIS

Signed on: FEB 13, 2024 02:33 PM

Name: EOG RESOURCES INCORPORATED

Title: Sr. Regulatory Administrator

Street Address: 5509 Champions Drive

City: Midland **State:** TX

Phone: (432) 848-9163

Email address: emily_follis@eogresources.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: BOBBY BALLARD

BLM POC Title: Natural Resource Specialist

BLM POC Phone: 5752342235

BLM POC Email Address: bballard@blm.gov

Disposition: Approved

Disposition Date: 04/05/2024

Signature: Cody R. Layton

C-147 Detail

C-147 DETAIL

Red Tank Containment Pit

Operator and Facility / Location Detail

The proposed reuse water containment facility & containment pit referred to as the Red Tank Containment and Recycle Facility, will be owned and operated by EOG Resources, Inc. (EOG) and located in Township 22 South, Range 32 East, and Section 19 in southeastern Lea County.

Recycling Facility Detail

The proposed containment pit will be located adjacent to the Red Tank Water Recycling Facility and will hold treated water for use in EOG hydraulic fracturing operations. The adjacent recycling facility will utilize advanced water treatment technologies to produce a clean brine effluent prior to storage and subsequent reuse. An oxidation and solids removal/filtering system will treat the incoming influent stream to internal standards sufficient for hydraulic fracturing reuse applications.

Recycling Containment Detail

EOG is proposing to construct a multi-liner single containment pit utilizing a leak detection system to ensure an intact leak-free barrier system. As depicted in the attached design plan and schematics, *Red Tank Reuse Pit*, the proposed pits will incorporate standards that meet or exceed the required standards per 19.15.34.12 NMAC. The proposed recycle containment will be approximately 514 x 423' inside floor dimensions each with 4:1 inside and outside berm grades. The approximate wall height will average 10ft from outside ground level to ensure no surface water run-on will occur. The top of the levee shall be approximately 30ft wide 2% outside sloping grade to ensure no surface water run-on will occur. The containment pit floor and wall preparation will include laser-finished grade free of rocks, debris, and sharp edges, compacted to

a density to ensure an unyielding base. At the onset of pit construction, all vegetative material and topsoil will be removed and stockpiled at the outside toe of the levee slopes. The interior liner system of the containment pit will consist of a 10-ounce geotextile felt base layer to protect the secondary geomembrane liner from any protruding floor irregularities. The secondary geomembrane liner will be composed of 40 mil HDPE. Between the secondary and primary liners will consist of 200 mil geonet sloping to the leak detection trough. The primary liner consists of a 60 mil HDPE liner. All liners will meet or exceed EPA SW-846 method 9090A. All seams will be oriented vertically with 4–6-inch liner overlap and all seam testing shall exceed all guidelines. As depicted in the attached design plan, *Red Tank Reuse Pit,* the proposed containment pit will include a center-aligned leak detection trough and collection sump completed with perforated pipe and pump casing allowing for the installation of a leak detection pump system. Both inlet and discharge manifold systems, depicted in *Red Tank Reuse Pit,* will be installed to prevent any liner damage from water entrance velocity or hose installation. Two audible bird deterrents will be utilized to deter any native birds and wildlife from the containment

BONDING

EOG will source and distribute reuse water for the Red Tank Containment and Recycle Facility from wells solely operated by EOG. Therefore, attached are the details of Bond Number 6196102 – United State Department of the Interior Bureau of Land Management.

FENCING

Please see the Variance detail.

SIGNAGE

As shown in the attached example sign, EOG shall place the appropriate signage along the water recycling facility and containment pit perimeter that meets all guidelines established in 19.15.34.12 C NMAC.

VARIANCES

Included are three variances as indicated in Section 7 of the C-147 registration form. NMOCD has previously approved all construction and operation variances.

1. Install two audible Mega Blaster Pro bird deterrents capable of covering up to 30 acres each.
2. Enclose the perimeter with a 6-foot galvanized chain link fence with 3 strands 45-degree barbed wire arm toppers.
3. Utilize 40-mil HDPE liner, in leu of the 30-mil string reinforced liner.

SITING CRITERIA FOR RECYCLING CONTAINMENT

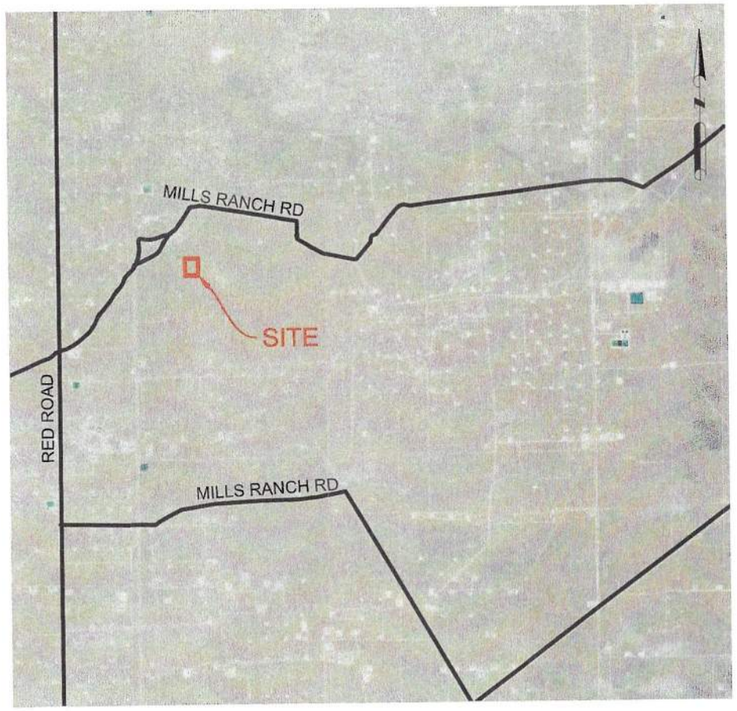
Enclosed within this submittal are comprehensive third-party reports detailing conformity to siting criteria described in Section 8 of the C-147 registration form; a detailed list and description of these attachments can be found in the subsequent section.

RECYCLING FACILITY AND CONTAINMENT CHECKLIST

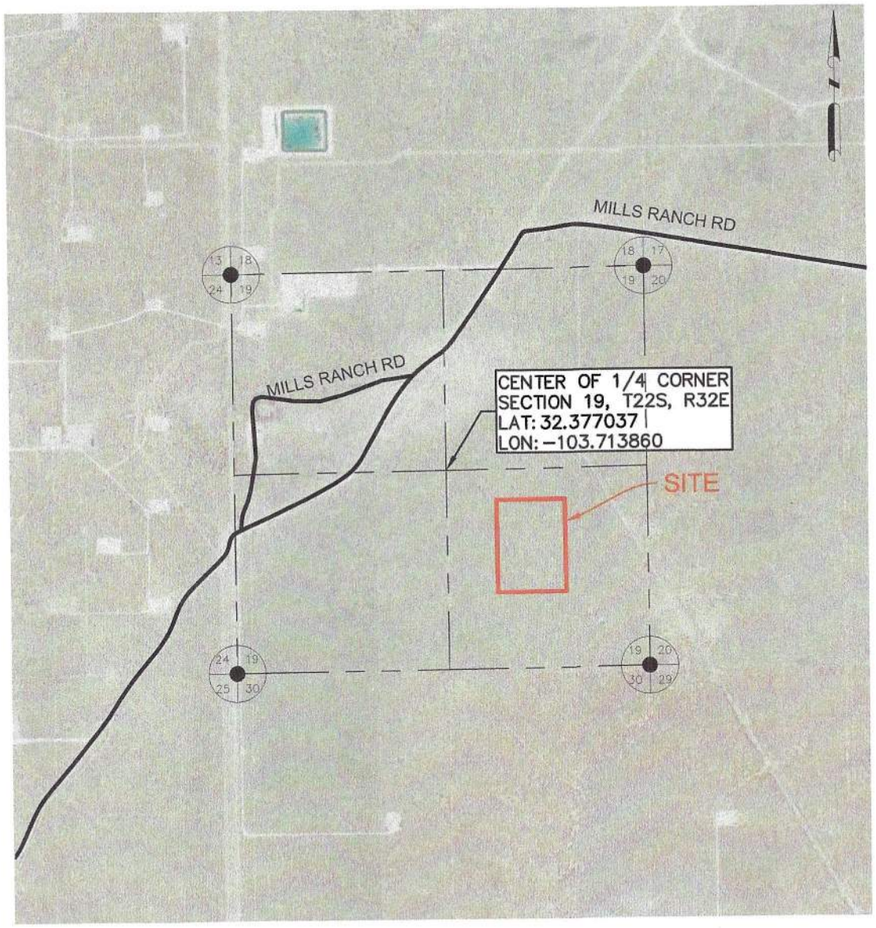
As indicated in Section 9 on the attached C-147 form, all the required attachments have been included on the submittal, and certification of C-147 delivery to the landowner is acknowledged.

Recycling Containment Design Drawings

EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN



REGIONAL MAP
N.T.S.



VICINITY MAP
N.T.S.

DRAWING INDEX		
SHEET NO.	TITLE	REV.
01	COVER SHEET	0
02	POND LAYOUT	0
03	POND CALCULATIONS	0
04	CROSS SECTIONS	0
05	DETAILS	0
06	DETAILS	0
07	DETAILS	0

NOTES:
1. COORDINATES ARE GRID AS DERIVED FROM GPS OBSERVATIONS AND ARE BASED ON STATE PLANE COORDINATES FOR NEW MEXICO EAST ZONE NAD-83 AND US SURVEY FOOT.
2. EXISTING UTILITY LOCATIONS SHOWN ARE TAKEN FROM AVAILABLE RECORDS PROVIDED BY THE UTILITY OWNER AND FIELD LOCATIONS OF SURFACE APPURTENANCES. LOCATIONS SHOWN ARE GENERALLY SCHEMATIC IN NATURE AND MAY NOT ACCURATELY REFLECT THE SIZE AND LOCATION OF EACH INDIVIDUAL UTILITY. SOME UTILITY LINES MAY NOT BE SHOWN.
3. ANY DAMAGES THAT MAY OCCUR TO REAL PROPERTY OR EXISTING IMPROVEMENTS SHALL BE RESTORED BY THE CONTRACTOR TO AT LEAST THE SAME CONDITION THAT THE REAL PROPERTY OR EXISTING IMPROVEMENTS WERE IN PRIOR TO THE DAMAGES.

811 Know what's below. Call before you dig.

DATA SOURCE:
AERIAL IMAGERY: NAIP 2021

PUBLICLY AVAILABLE DATA SOURCES HAVE NOT BEEN INDEPENDENTLY VERIFIED BY ASCENT.

MARK A. SKELSKEY NEW MEXICO 28079 PROFESSIONAL ENGINEER
06 27 2024

DISCLAIMER:
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

ASCENT GEOMATICS SOLUTIONS
ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
eog resources

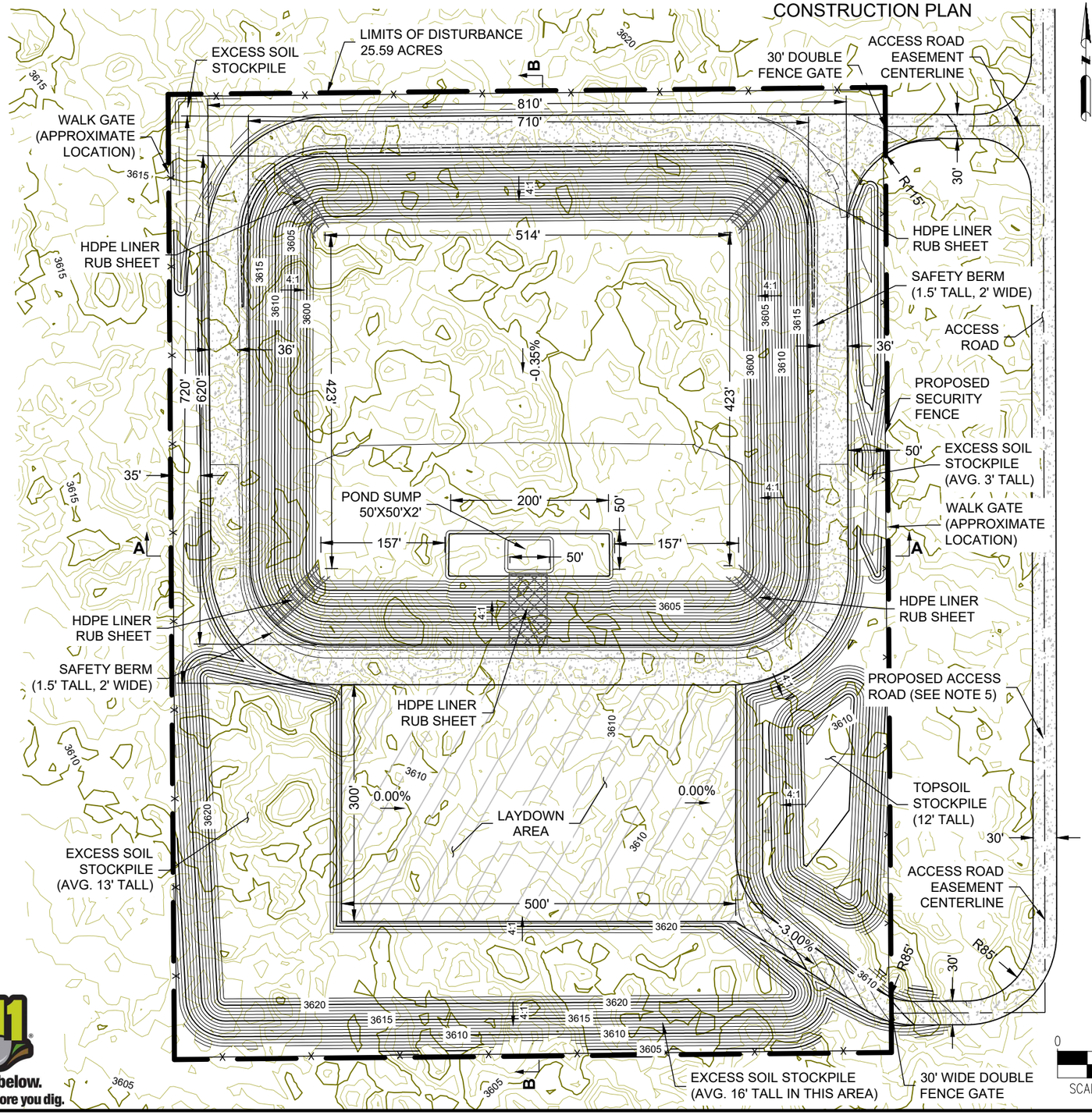
SHEET NAME: COVER SHEET
RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24
		MS	06/27/24

DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 01 OF 07

\\agsfs\projects\EOG___B240050\PROD\Grading\1_Cover.dwg

EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN



0 75 150
SCALE: 1"= 150'

LEGEND:

- EXISTING MAJOR CONTOUR (5280)
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR (5280)
- PROPOSED MINOR CONTOUR
- SECTION LINE
- OIL & GAS LOCATION
- PROPOSED FENCE
- PROPOSED BERM DRIVE & ACCESS ROAD
- PROPOSED STAGING/LAYDOWN PAD
- PROPOSED RUB SHEET

NOTES:

1. WATER LEVEL IN REUSE PITS SHALL NOT EXCEED THE 3' FREEBOARD ELEVATION, 3,613.50-FT. EMBANKMENT HEIGHT SHALL NOT EXCEED 6' ABOVE EXISTING GRADE ELEVATIONS.
2. THE BASE OF ALL FILL EMBANKMENTS SHALL BE KEYED INTO EXISTING COMPACTED SUBGRADE A MINIMUM OF 2 FEET.
3. ALL REUSE PIT EMBANKMENT FILL MATERIAL SHALL BE COMPACTED IN 6 INCH (MAXIMUM) LIFTS TO 95% OF THE MAXIMUM MODIFIED PROCTOR DENSITY (MINIMUM) AT THE OPTIMUM MOISTURE CONTENT (-2% TO 2%) TO ACHIEVE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
4. IF EXCESS MATERIAL IS ENCOUNTERED, THIS CAN BE DISPOSED OF IN THE STOCKPILE AREA.
5. CONNECT TO EXISTING ACCESS ROAD, IMPROVE EXISTING ACCESS ROAD AS NEEDED.

MARK A. SKELSKEY
NEW MEXICO
28079
PROFESSIONAL ENGINEER
06-27-2024

DISCLAIMER:
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

Know what's below. Call before you dig.

ASCENT GEOMATICS SOLUTIONS
ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
eog resources

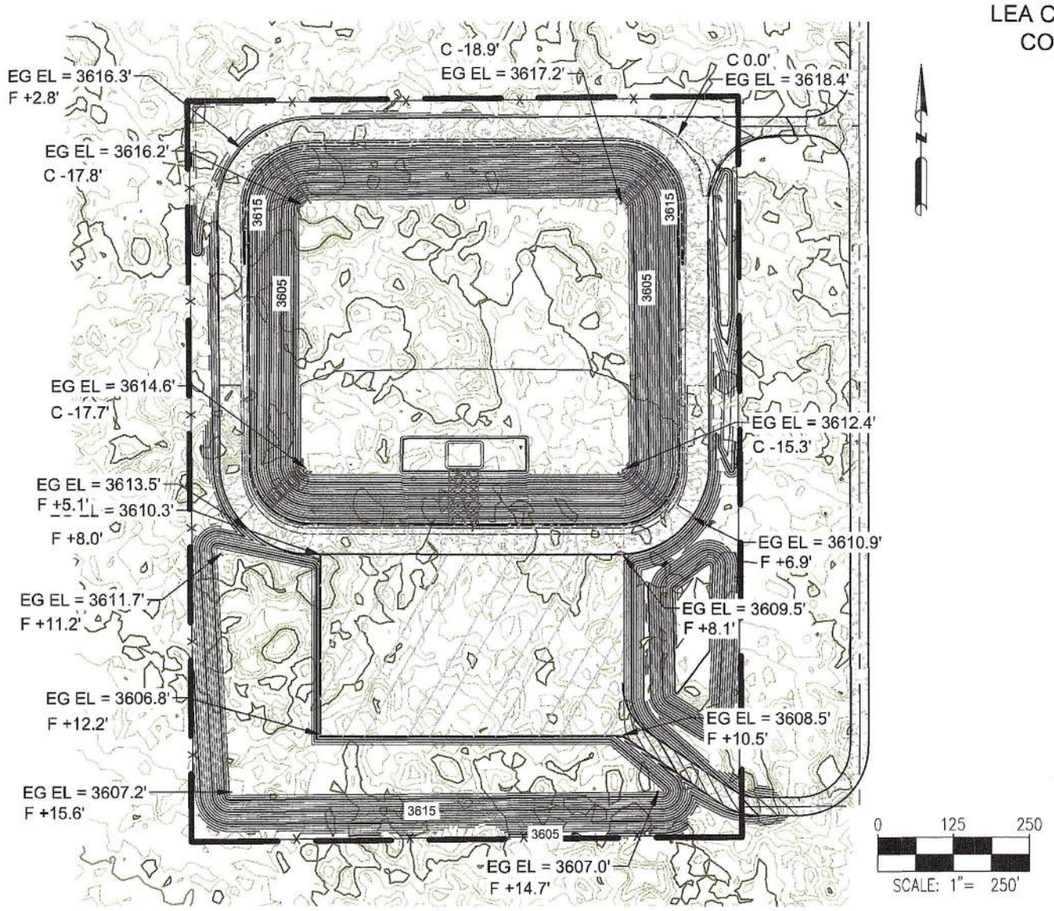
SHEET NAME: POND LAYOUT

RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24
		MS	06/27/24

DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 02 OF 07

EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN



RED TANK REUSE PIT STAGE STORAGE					
ELEV	DEPTH (FT)	AREA (ACRES)	VOL (BBLS)	VOL (ACRE FT)	VOL(CY)
3,596.00	0.00	0.49	0.00	0.00	0.00
3,596.50	0.50	2.97	7,522.78	0.97	1,564.34
3,597.00	1.00	4.90	22,622.39	2.92	4,704.27
3,597.50	1.50	5.69	43,141.89	5.56	8,971.25
3,598.00	2.00	5.78	65,401.07	8.43	13,599.99
3,598.50	2.50	5.87	88,013.50	11.34	18,302.19
3,599.00	3.00	5.97	110,981.40	14.30	23,078.31
3,599.50	3.50	6.06	134,307.03	17.31	27,928.82
3,600.00	4.00	6.15	157,992.62	20.36	32,854.17
3,600.50	4.50	6.25	182,040.40	23.46	37,854.85
3,601.00	5.00	6.34	206,452.63	26.61	42,931.31
3,601.50	5.50	6.44	231,231.53	29.80	48,084.03
3,602.00	6.00	6.53	256,379.35	33.05	53,313.45
3,602.50	6.50	6.63	281,898.32	36.33	58,620.06
3,603.00	7.00	6.72	307,790.69	39.67	64,004.31
3,603.50	7.50	6.82	334,058.69	43.06	69,466.68
3,604.00	8.00	6.92	360,704.57	46.49	75,007.62
3,604.50	8.50	7.02	387,730.56	49.98	80,627.61
3,605.00	9.00	7.11	415,138.90	53.51	86,327.11
3,605.50	9.50	7.21	442,931.83	57.09	92,106.58
3,606.00	10.00	7.31	471,111.59	60.72	97,966.49
3,606.50	10.50	7.42	499,680.42	64.41	103,907.31
3,607.00	11.00	7.52	528,640.56	68.14	109,929.50
3,607.50	11.50	7.62	557,994.25	71.92	116,033.53
3,608.00	12.00	7.72	587,743.73	75.76	122,219.86
3,608.50	12.50	7.82	617,891.23	79.64	128,488.96
3,609.00	13.00	7.93	648,439.00	83.58	134,841.29
3,609.50	13.50	8.03	679,389.27	87.57	141,277.32
3,610.00	14.00	8.14	710,744.29	91.61	147,797.52
3,610.50	14.50	8.24	742,506.29	95.70	154,402.35
3,611.00	15.00	8.35	774,677.51	99.85	161,092.28
3,611.50	15.50	8.45	807,260.20	104.05	167,867.76
3,612.00	16.00	8.56	840,256.58	108.30	174,729.28
3,612.50	16.50	8.67	873,668.91	112.61	181,677.29
3,613.00	17.00	8.78	907,499.42	116.97	188,712.26
3,613.50	17.50	8.88	954,217.88	122.99	198,427.25
3,614.00	18.00	8.99	988,891.46	127.46	205,637.54
3,614.50	18.50	9.10	1,011,522.41	130.38	210,343.59
3,615.00	19.00	9.21	1,047,048.03	134.96	217,731.05
3,615.50	19.50	9.32	1,083,003.02	139.59	225,207.80
3,616.00	20.00	9.44	1,119,389.63	144.28	232,774.31
3,616.50	20.50	9.55	1,156,210.09	149.03	240,431.03
3,617.00	21.00	9.66	1,193,466.65	153.83	248,178.44
3,617.00	21.00	7.49	1,193,466.65	153.83	248,178.44
3,617.50	21.50	9.70	1,210,844.75	156.07	251,792.18
3,618.00	22.00	1.38	1,217,436.46	156.92	253,162.90

Description		Quantity	Unit
Liner Areas			
	Out-Slope Area	201,877	SQ.FT
	Pond Area	432,726	SQ.FT
	Rub Sheet	15,688	SQ.FT
Piping			
	6" HDPE Casing Pipe	112	LN.FT
	4" HDPE Collection Pipe	410	LN.FT
	12 HDPE Suction Line	112	LN.FT
Roads			
	Site Access Road & Berm Drive (6" Gravel)	298,282	SQ.FT
Fences			
	6' Chain Link Fence	4,182	LN.FT
	Access Gate, 2-Truck, 2-Walk	4	EA
Mass Grading			
	Clearing and Grubbing	25.59	ACRE

EARTHWORKS QUANTITIES

TOTAL CUT FOR SITE	180,524	CY
TOTAL FILL FOR SITE	180,421	CY
TOPSOIL (6" DEPTH)	11,993	CY
TOTAL EXPORT	103	CY
TOTAL GRADING AREA	21.1	ACRES

*VOLUMES ASSUME A CUT FACTOR OF 0.9.

POND SUMMARY

MAX VOLUME	1,156,210	BBLS
MAX AREA	9.55	ACRES
MAX ELEVATION OF POND	3,616.50	FT
3' FREEBOARD ELEVATION	3,613.50	FT
VOLUME AT FREEBOARD	954,218	BBLS

MARK A. SKELSKEY
NEW MEXICO
28079
PROFESSIONAL ENGINEER

06-27-2024

DISCLAIMER:
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

811 Know what's below. Call before you dig.

ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR: eog resources

SHEET NAME: POND CALCULATIONS
RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24

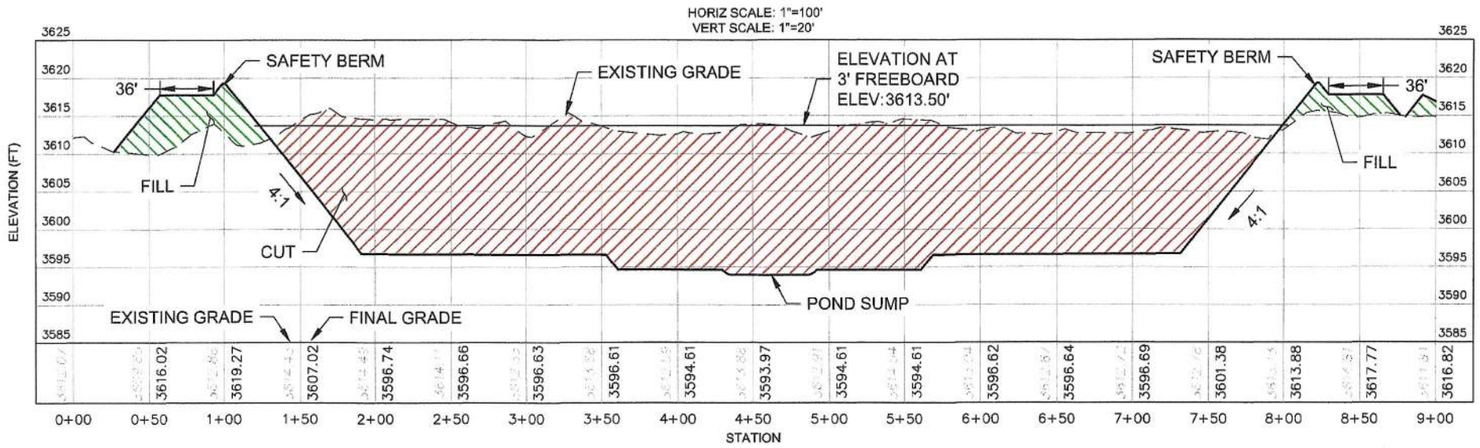
DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO: 03 OF 07

\\agsfs\projects\EOG___B240050\PROD\Grading\3_PondCalculations.dwg

EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN

WEST

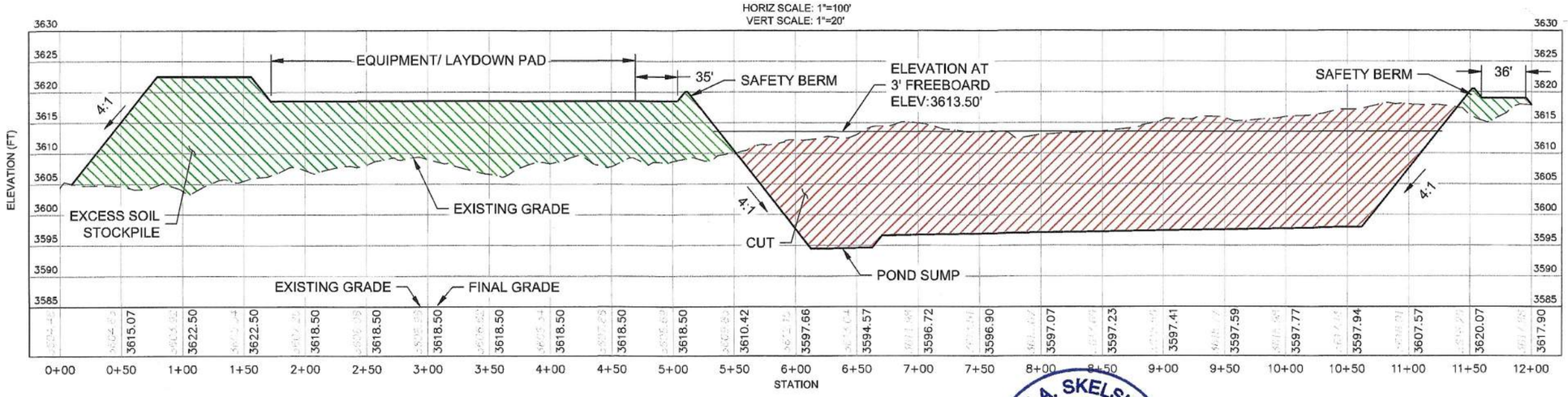
EAST



SECTION A - LOOKING NORTH

SOUTH

NORTH



SECTION B - LOOKING WEST

DISCLAIMER:
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. PARCEL LINES, IF DEPICTED HAVE NOT BEEN FIELD VERIFIED AND MAY BE BASED UPON PUBLICLY AVAILABLE DATA THAT ALSO HAS NOT BEEN INDEPENDENTLY VERIFIED.

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ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
eog resources

SHEET NAME:
CROSS SECTIONS

RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24

DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 04 OF 07

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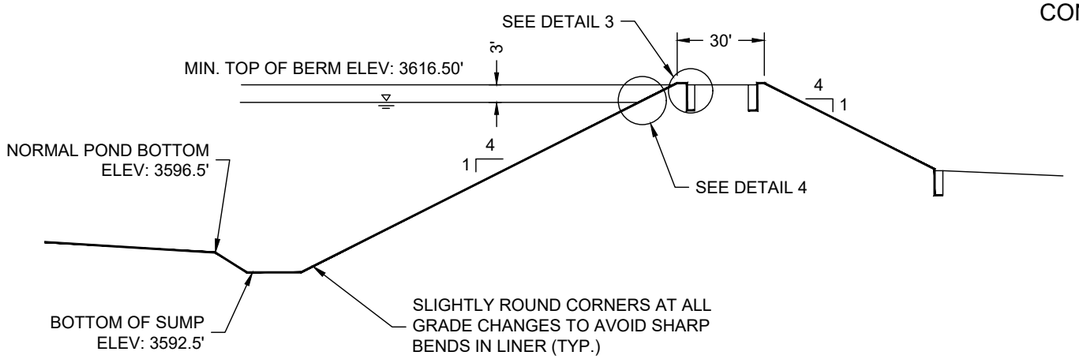
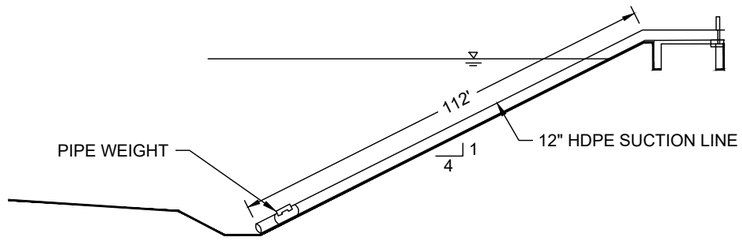
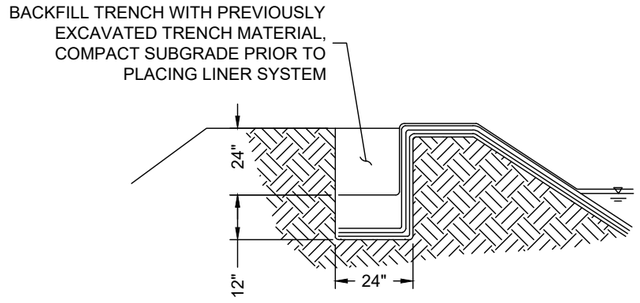
EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN



1 TYPICAL BERM SECTION
N.T.S.

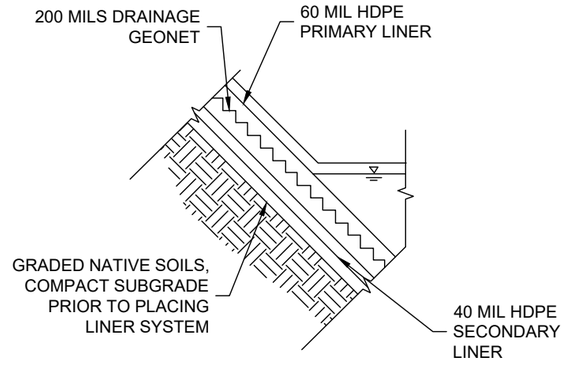


2 SUCTION PIPE SECTION
N.T.S.



NOTES:
1. AMOUNT OF LAYERS WILL VARY BY POND TYPE AND WHERE A RUB SHEET IS UTILIZED.

3 TYPICAL ANCHOR TRENCH
N.T.S.



4 BRINE WATER LINER SYSTEM
N.T.S.

MARK A. SKELSKEY
NEW MEXICO
28079
PROFESSIONAL ENGINEER
06-27-2024

Know what's below. Call before you dig.

ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
eog resources

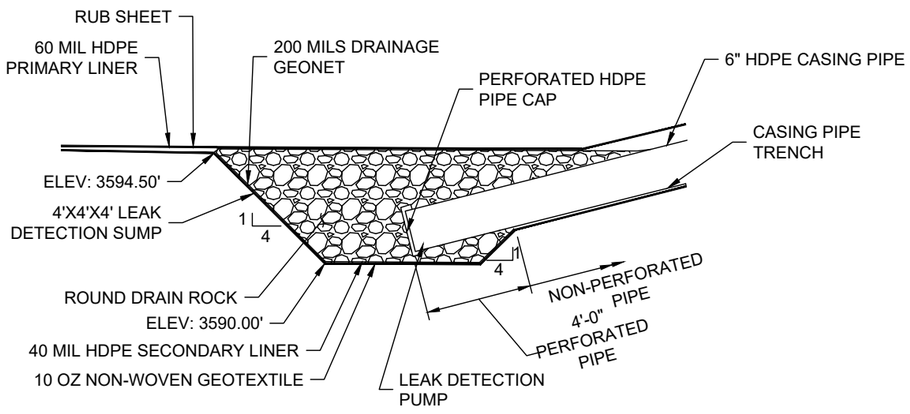
SHEET NAME: DETAILS

RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

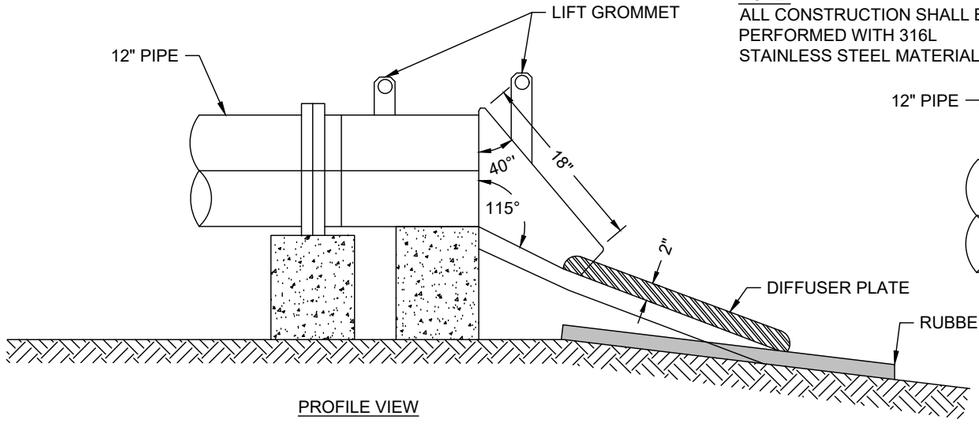
REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24
		MS	06/27/24

DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 05 OF 07

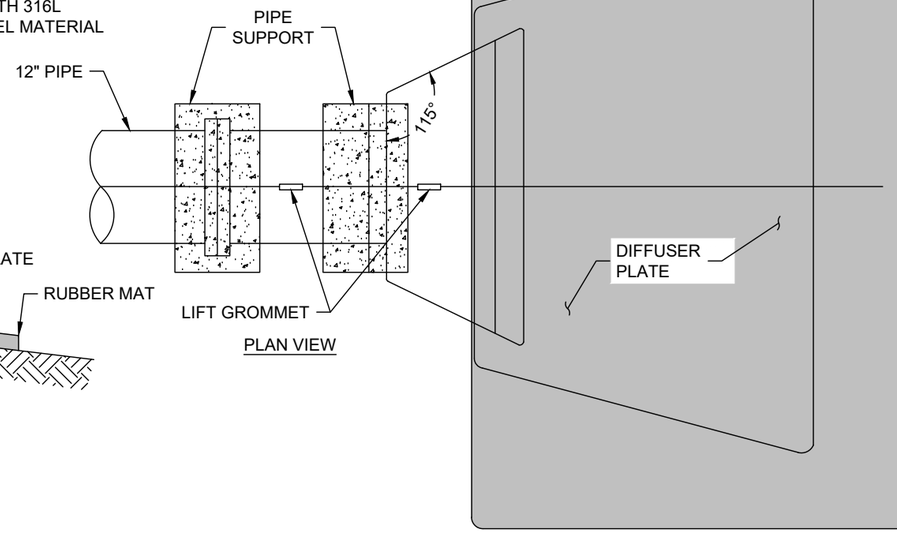
EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN

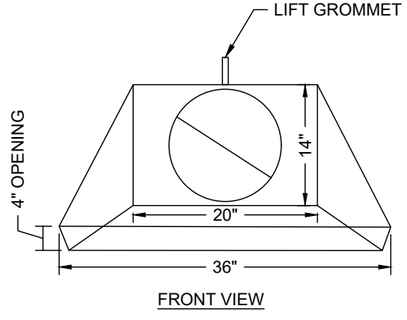


5 LEAK DETECTION SUMP
N.T.S.



NOTE:
ALL CONSTRUCTION SHALL BE PERFORMED WITH 316L STAINLESS STEEL MATERIAL





6 POND FILL APPARATUS
N.T.S.

Know what's below. Call before you dig.

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8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
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SHEET NAME: DETAILS

RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

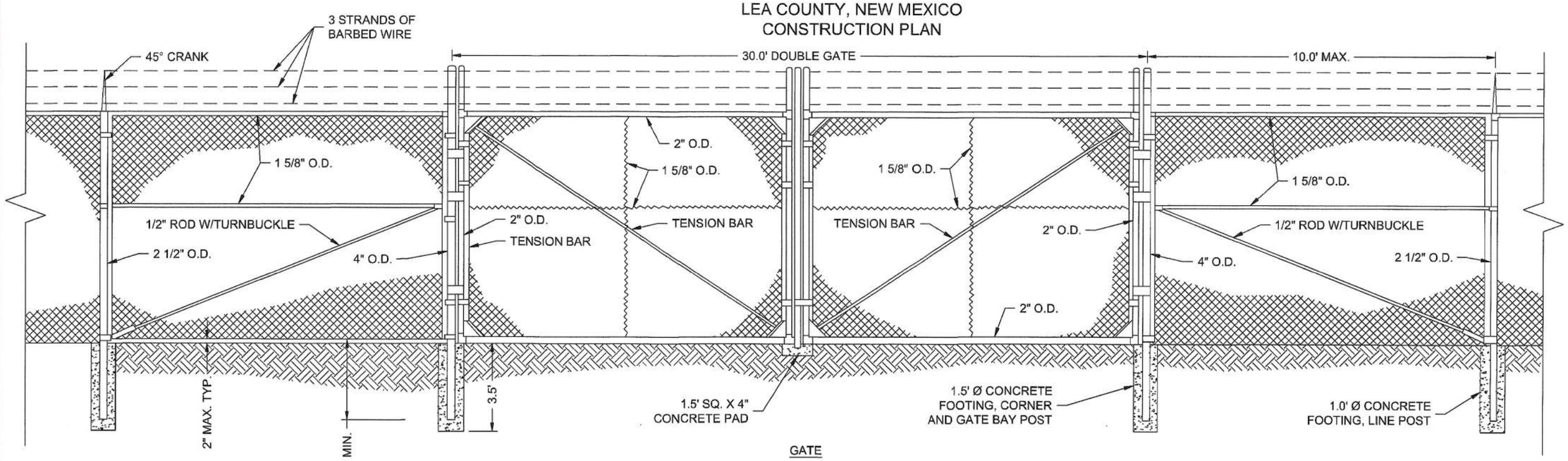
REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24

BY MS 06/27/24

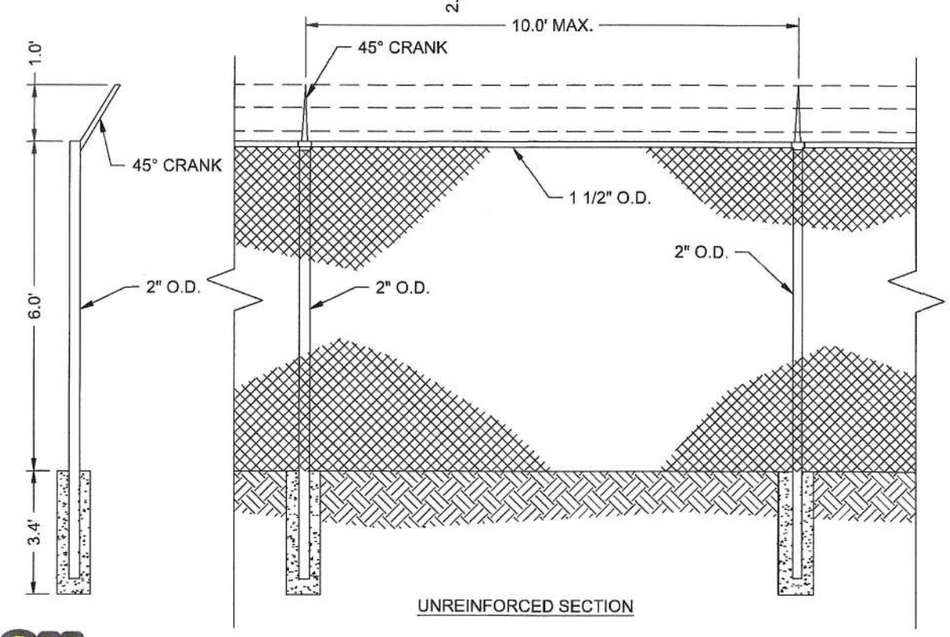
DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 06 OF 07

MARK A. SKELSKEY
NEW MEXICO
28079
PROFESSIONAL ENGINEER
06-27-2024

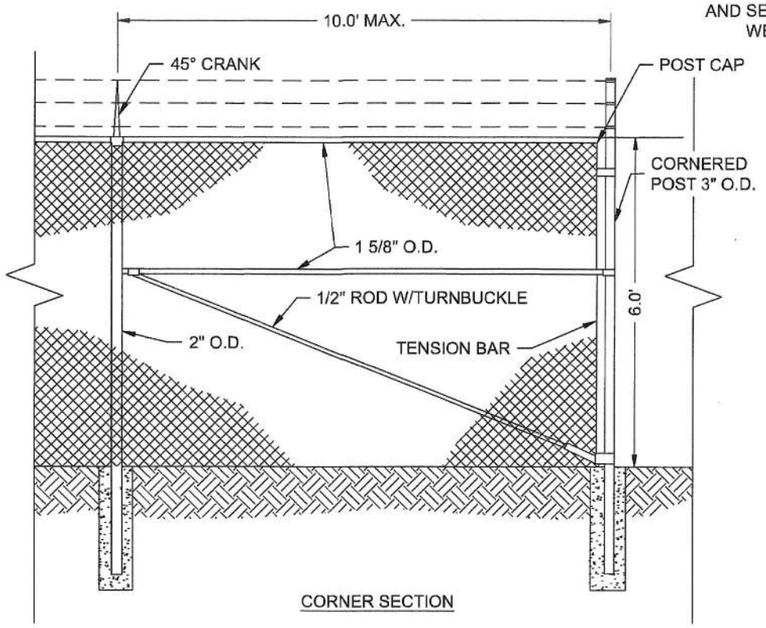
EOG RESOURCES, INC.
RED TANK REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN



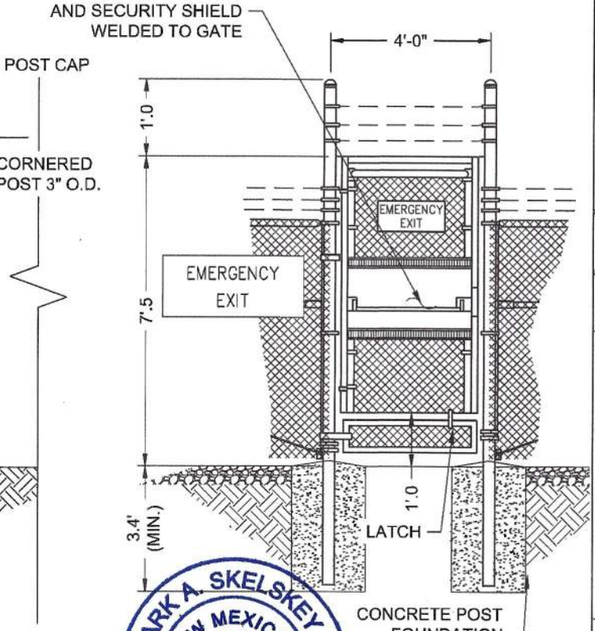
GATE



UNREINFORCED SECTION



CORNER SECTION



WALK GATE DETAIL

7 PERMANENT 6' CHAINLINK FENCE WITH BARBED WIRE DETAIL
N.T.S.

Know what's below. Call before you dig.

\\agsfs\projects\EOG__B240050\PROD\Grading\5_Details.dwg

MARK A. SKELSKEY
NEW MEXICO
28079
PROFESSIONAL ENGINEER
06.27.2024

ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:
eog resources

SHEET NAME: DETAILS

RED TANK 1-M BBL REUSE PIT
NW 1/4 SE 1/4 SECTION 19
T22S, R32E, NEW MEXICO P.M
LEA COUNTY, NEW MEXICO

REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	OS	06/27/24

DRAWING DATE: 06/27/24
DRAFTED BY: OS
SHEET NO. 07 OF 07

Liner Installation

Installation Procedure

(This is a "Layman's" guide specific instructions follow as determined by IAGI)

1. Mobilize equipment and crew to location.
2. Once at location before any work is done complete a "JSA" and an equipment check list.
3. Inspect subgrade to determine if it is acceptable to begin work.
4. Begin excavation a 2'x2' anchor trench around the pits perimeter once a line locate has been completed
5. Once subgrade is accepted and before liner is deployed pull samples from one of the rolls to be used and test welders and seam quality (samples will be kept for QAQC documentation).
6. Anytime the welders set for more than two hours or a notable change in temperature occurs, the welders must be retested (samples will be kept for QAQC documentation)
7. The deployment direction will be determined by the direction of the wind on the first day, panels will be deployed moving in the direction that puts the wind at the back of the installer so that it is less likely for wind to get under the material and create air pockets, and unnecessary wrinkles.

a. NOTE: You must also look at the forecast and consider any changing wind directions.

8. The first panel will be laid across the width of the pit five feet from the toe, the panel will be "squared" up with the pit and secured in place with the sand bags.
9. You then will begin end cap deployment. Panels will be pulled 3-5 feet past the first toe pull that was installed, corners will be "cut in" so that there are no perpendicular welds on the wall after end cap is completed.
10. Once the end cap is complete proceed with the floor installation.
    a. Note: For each panel pull overlap and adjust from there for the welder tract
    b. Note: Each pull will be pulled out to account for the current wind direction. Make sure that the end flap is not in the wind, if needed lift the flap of the installed panel and pull underneath it.
11. Complete the second end cap the same as in #8
12. If the pit is a "multi-layer" pit, or the customer has requested air channel testing you will now begin the QC and air test's.
    a. All extrusion welds will be Vacuum tested
    b. All testing will be done in accordance to IAGI standards
13. Net will now be installed in the floor using zip ties every 6" to secure panels together
14. Secondary layer will be installed in the same manner as # 4-11
15. "Dump Pads" or "Rub Sheets" will be installed in the requested location of the customer and will be alternate in color to the main liner. They will be extruded fully.
16. Sand bags will be installed around the entire toe of the pit to ballast the pit until water is available.
17. Documentation will be done throughout the installation, noting the roll numbers, and length of each panel. All repairs will also be documented.

Patriot Environmental, LLC
220 W. Carl Hubbell Blvd. #671
Meeker, OK 74855

Sign

6.

Signs:

☑ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

48”x48”

eog resources

RED TANK REUSE WATER PIT

SE/4 SEC.19 - T22S - R32E

LEA COUNTY, NM

32.374292^{O}, -103.710280^{O}

Variances

7.

Variances:

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

Check the below box only if a variance is requested:

☑ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

If a Variance is requested, it must be approved prior to implementation.

ALL CONSTRUCTION AND OPERATION VARIANCES HAVE BEEN PREVIOUSLY APPROVED BY NMOCD

Variance Request for Bird Deterrent

Re: Red Tank Containment and Recycle Facility

EOG Resources, Inc. (EOG) would like to request the OCD's approval for a variance regarding bird deterrents at the location described above. EOG proposed to utilize the Bird-X-Mega Blaster Pro, creating intermittent distress calls to create a "danger zone" that frightens native and or migrating birds and wildlife from the water recycling facility and containment pit area. Two units would be installed, each containing two built-in high-output amplifiers and housing 20 speakers, capable of producing up to 125 decibels and a frequency range from 2,000 – 10,000 Hz.

Please see details below:

Mega Blaster Pro – Specs:

- Coverage: Up to 20 acres from single unit
- Box Dimensions: Box1: 23" x 18" x 16" (23 lbs., unit & speaker), Box2: 32" x 24" x 5" (17 lbs., solar panel)
- Power Input: 12vDC (3 amps) via solar panel and battery
- Sound Pressure: Up to 125 decibels
- Frequency: 2,000 – 10,000 Hz
- Library of predator calls
- Full customizable to the species of bird in our area of operation
- Compliance: UL & CE listed
- EPA Est. 075310-OR-001
- Included: Generating unit with two built-in high-output amplifiers, 20-speaker tower with audio cables, 40-watt solar panel, battery clips, and all mounting hardware
- The unit is typically mounted with a tripod setup. The tripod would be a typical sturdy tripod that would used to support a large PA speaker. The pole that would fit into the top of the tripod that the speaker tower, control box and solar panel mount should be ¾" diameter and be 6-12 feet tall. The taller the pole the greater the distance the sound will travel.
- The effective range of the Mega Blaster Pro is 30 acres, in a circular coverage pattern around the 20-speaker tower with a radius of about 666 feet. The 20-speaker tower features 5 speakers pointing in each direction to create the even dispersal

This is the typical configuration EOG proposes to utilize at the Red Tank Containment and Recycle Facility.

Variance Request for Bird Deterrent

Re: Red Tank Containment and Recycle Facility

EOG Resources, Inc. (EOG) would like to request the OCD's approval for a variance regarding the fencing at the location described above. EOG proposes to utilize a 6-foot galvanized chain-link fence with 3 strands of barbed wire on the top of the chain-link fencing. The 3 strands of barbed wire will be mounted on a galvanized bracket with a 45-degree angle pointing toward the outside of the location. Each post hole will be drilled via an auger to ensure a consistent and accurate depth and will be set in concrete. Six 18" x 18" swinging gates will be installed at ground level for temporary waterlines to pass through. The gates will remain closed as depicted in the pictures below to ensure no wildlife can access the containment site when no waterlines are present.

Please see the details below.

This is the typical configuration EOG proposes to utilize at the Red Tank Containment and Recycle Facility.

Variance Request for Secondary Liner

Re: Red Tank Containment and Recycle Facility

EOG Resources, Inc. (EOG) would like to request the OCD's approval for a variance regarding the secondary liner at the location described above. EOG proposes to utilize 40-mil HDPE for the secondary liner, in lieu of a 30-mil LLDPE string-reinforced liner. The standard LLDPE string-reinforced liner has a hydraulic conductivity no greater than $1x10^{-9}$ cm/sec and meets or exceeds the EPA SW-846 method 9090A per 19.15.34.12 NMAC.

The proposed 40-mil HDPE Geomembrane liner has a typical Hydraulic Conductivity no greater than 10^{-12} cm/sec, per the attached letter from Solmax. This hydraulic conductivity of no greater than 10^{-12} cm/sec exceeds the standard 30-mil LLDPE string-reinforced liner and EPA SW-846 method 9090A.

eog resources

RAVEN INDUSTRIES INC.

Statement of Performance

SUBJECT: Raven HD400 and HD600 geomembrane liners

IN REFERENCE TO: Hydraulic conductivity rating

DATE: April 15, 2022

Raven Industries hereby certifies that our Hydraline HD40 and HD60 polyethylene membranes have hydraulic conductivity of less than 1×10^{-10} cm/sec.

Permeance is calculated from Water Vapor Transmission (WVT) data generated by test method ASTM E96 *Water Vapor Transmission of Materials* or F1249 *Water Vapor Transmission Rate Through Plastic Film and Sheeting Using a Modulated Infrared Sensor*. Using this data, specific hydraulic conductivity rates for the two materials are as follows:

Hydraline HD40	2.10×10^{-12} cm/sec
Hydraline HD60	4.08×10^{-13} cm/sec

Clint Boerhave

Clint Boerhave
Staff Quality Engineer
Raven Industries – Engineered Films Division

Siting Criteria for Recycling Containment

8.
Siting Criteria for Recycling Containment

***Instructions:** The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.*

General siting	
Ground water is less than 50 feet below the bottom of the Recycling Containment. NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; written approval obtained from the municipality	☐ Yes ☒ No ☐ NA
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map	☐ Yes ☒ No
Within a 100-year floodplain. FEMA map	☐ Yes ☒ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; aerial photo; satellite image	☐ Yes ☒ No
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site	☐ Yes ☒ No

16 August 2024

Blake Grooms
EOG Resources, Inc.
5509 Champions Drive
Midland, Texas, 79706

Re: Red Tank Reuse Pit - Comprehensive Resource Review
Lea County, New Mexico

Dear Mr. Grooms,

Goshawk Environmental Consulting, Inc. (Goshawk) conducted a comprehensive desktop resource review and limited field investigations for the proposed Red Tank Reuse Pit in Lea County, New Mexico. The work was conducted on behalf of our client, EOG Resources, Inc. (EOG). The resource review and subsequent surveys addressed Waters of the US (WATERS), Threatened or Endangered (T/E) species, and cultural resources. The purpose of these investigations was to evaluate whether the proposed project contained any protected resources, the approximate size and location of identified protected resources, and associated development constraints, if applicable.

INTRODUCTION

The Red Tank Reuse Pit will include one double-lined water pit with leak detection (proposed project). The proposed project is situated on federally owned land within Section 19 of Township 22S, Range 32E. The proposed project will encompass approximately 25.58 acres, measuring approximately 1,225 feet long by 910 feet wide. The proposed project is located in a rural portion of Lea County, where land use is primarily cattle ranching and oil/gas exploration and production.

WATERS REVIEW

Regulatory Background and Methodology

Investigations to identify potential WATERS within the proposed project included a desktop resource review, followed by field investigations. The resource review included inspection of available US Geological Survey (USGS) 7.5-minute topographic quadrangles for Bootleg Ridge and The Divide, New Mexico; recent digital aerial orthoimagery; and the Natural Resource Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO). Field investigations were performed in accordance with US Army Corps of Engineers (USACE) guidelines, utilizing the *Corps of Engineers Wetlands Delineation Manual – Technical Report Y-87-1* (January 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) – ERDC/EL TR-08-28* (September 2008).

The jurisdictional status of identified features was determined based on 33 CFR 328.3(a), along with the USACE–Environmental Protection Agency (EPA) joint guidance on Clean Water Act (CWA) jurisdiction, following the US Supreme Court's decision in *Rapanos v. United States* and *Carabell v. United States*. Current guidance states that the USACE and EPA will assert jurisdiction over (1) traditionally navigable waters (TNWs) and all wetlands adjacent to TNWs;(2) relatively permanent waters (RPWs), which include non-navigable tributaries of TNWs that typically flow year-round or

have continuous flow at least seasonally, and all wetlands that are directly abutting RPWs; and (3) other water bodies such as non-RPWs; wetlands adjacent to non-RPWs; and wetlands adjacent to but not directly abutting an RPW that are analyzed and determined to have a significant nexus with a TNW. A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or an insubstantial effect on the chemical, physical, and/or biological integrity of a TNW.

LITERATURE REVIEW

Topographic Map

The topographic quadrangle (Figure 1, Appendix A) indicates the proposed project is entirely within grasslands (white background). The terrain is relatively flat, with an approximate elevation of 3,610 feet above mean sea level. No mapped waterbodies are indicated within the proposed project. The nearest mapped tributary is runoff from a water tank (Red Tank) shown approximately 1,930 feet northwest of the proposed project. An unimproved road is also mapped approximately 190 feet east of the proposed project. Drainage occurs by overland sheet flow to the southwest.

The proposed project is within the Salt Lake Watershed and the Upper Pecos River basin. The nearest direct line point to the Pecos River is approximately 19.5 miles west-southwest. There are no range improvements mapped within 1,000 feet of the proposed project.

Aerial Orthoimagery

The aerial orthoimagery (Figure 2, Appendix A) indicates the proposed project is within relatively open rangeland, dominated by shrubs. The unimproved road indicated on the topographic map is visible on the aerial orthoimagery as a caliche road. Additional oil/gas infrastructure (well pads, roads, and pipeline rights-of-way) is visible north of the proposed project.

Soils

The NRCS SSURGO spatial data (Figure 3, Appendix A) indicates the soil map units underlying the proposed project consist entirely of Maljamar and Palomas fine sands (MF). The Maljamar series consists of deep to a petrocalcic horizon, well-drained soils formed in moderately sandy to sandy mixed sediments somewhat reworked by wind. Maljamar soils are typically found on sandy plains and have slopes of 2 to 5 percent. The Palomas series consists of very deep, well-drained soils formed in mixed alluvium. Palomas soils are typically found on broad plains, alluvial fans, and piedmont slopes and have slopes of 1 to 9 percent. These soil types are not considered hydric.

Precipitation

Data derived from the National Centers for Environmental Information indicated that mean annual precipitation in Lea County for the period of 1991 to 2020 was 12.5 inches. However, Lea County has only received 3.94 inches of precipitation in the last seven months (January 2024 to July 2024).

Subsurface Water

Based on a search of the New Mexico Office of the State Engineer (NM OSE) online GIS tool, the project falls within the Carlsbad underground water basin. Based on the 2004 report *The Carlsbad Area Groundwater Flow Model* by Peggy Barroll, David Jordan, and Greg Ruskauff (Barroll et al.),

there are two primary aquifers within the Carlsbad underground water basin. These include the alluvial aquifer of the Pecos River and its associated tributaries, and the Permian Capitan reef aquifer. The two aquifers share a direct connection in the form of the Carlsbad Spring, through which the Permian Capitan reef aquifer contributes water to the Pecos River. Flow within the Pecos River alluvial aquifer follows a general trench of northeast to southwest flow. Historical data reviewed in Barroll et al. indicates groundwater levels have fluctuated by 40 feet or more over the past 60 years.

EOG contracted to have one subsurface water monitoring well drilled within the footprint of the proposed project to determine the presence and depth of groundwater (Figure 4, Appendix A). The well was left open for 48 hours and did not locate groundwater.

Nearby Municipalities, Residences, or Service Institutions

The proposed project does not fall within any municipal boundaries. The nearest municipalities are Carlsbad (31.0 miles west), Eunice (32.4 miles east), and Hobbs (35.5 miles northeast) (Figure 5, Appendix A). Apart from the monitoring well discussed above, the nearest water well is 3.87 miles away; as such, no municipal freshwater well fields will be impacted. A review of aerial orthoimagery indicates that the only improvements in the vicinity of the proposed project include well pads, roads, and pipeline rights-of-way. No residences, schools, hospitals, institutions, or churches exist within the vicinity of the proposed project.

Subsurface Mines

A search of the State of New Mexico Energy, Minerals, and Natural Resources Department (EMNRD) Mining and Mineral Division (MMD) online database indicated there are 150 known mines within Lea County and 226 known mines in nearby Eddy County. No mines, active or inactive, are registered within Section 19 of Township 22S, Range 32E. The EMNRD MMD Registered Mines Web Map indicates that the nearest mine to the proposed project is the Dagger West Pit, which lies 5.52 miles northeast in Lea County. The mine is shown as an active aggregate mine.

FIELD INVESTIGATIONS

A field investigation was conducted on 8 November 2023 to determine the presence of potential WATERS within the proposed project. The proposed project was traversed on foot. The conditions were generally consistent with those depicted on the topographic map and aerial orthoimagery described above. The area was relatively flat and dominated by shrubland vegetation, intermixed with grasses, forbs, and bare ground. Vegetation within the area consisted primarily of creosote, broom snakeweed, honey mesquite, sand sagebrush, shinnery oak, yucca, and threeawn. Vegetative coverage within the site was approximately 40-45 percent.

Drainage occurs primarily by overland sheet flow toward the southwest. No evidence of an ordinary high water mark (OHWM) or standing water was found within the proposed project. Additionally, no flowing watercourse, lakebed, sinkhole, or playa exhibiting an OHWM were found within the proposed project or within the surrounding area. As mentioned earlier, the nearest waterbody exhibiting an OHWM is 1,930 feet northwest of the proposed project.

REGULATORY DEVELOPMENT CONSTRAINTS

It is Goshawk's opinion that construction of the proposed project will not impact any regulated WATERS. It is important to note that only USACE has the authority to make a formal determination defining its jurisdictional limits under the CWA. Approved jurisdictional determinations are made by USACE in accordance with internal policies and procedures in place at that time and on a case-by-case basis using information at its disposal (such as other permits in the local area and case law) that may not be readily available to the public. Therefore, Goshawk's opinion should not be considered authoritative and cannot wholly eliminate uncertainty regarding USACE's jurisdictional limits.

FEMA FLOODPLAIN

REGULATORY BACKGROUND

Floodplain management is regulated under the Federal Emergency Management Agency (FEMA); however, a local floodplain administrator is usually responsible for implementation within a community. A local floodplain administrator will operate under FEMA's minimum floodplain management standards or the state and/or local regulations, which provide standards for the purpose of flood damage prevention and reduction. Floodplain management standards are based on FEMA floodplain maps, which identify special flood hazard areas.

REGULATORY DEVELOPMENT CONSTRAINTS

Lea County would be the floodplain administrator for the proposed project. Although Lea County participates in the National Flood Program, FEMA floodplain maps have not been produced for rural portions of Lea County. The proposed project falls within FEMA flood hazard zone D, which indicates that the area has not been assessed for flood hazards by FEMA, and within panel 35025C1575D, which is listed as "Not Printed." Therefore, the proposed project can be developed without any correspondence with Lea County for purposes of floodplain consideration.

THREATENED OR ENDANGERED SPECIES

REGULATORY BACKGROUND AND METHODOLOGY

The Endangered Species Act prohibits any action that causes a "take" of any listed T/E species. A "take" is defined as harm or harassment, including hunting, wounding, killing, trapping, and the capture or collection of individuals of listed species. The law also protects against the degradation or loss of vital habitat for listed species. The US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service are the regulatory authorities for federally listed T/E species.

State-listed T/E species are protected under the New Mexico Wildlife Conservation Act (17-2-41). The New Mexico Department of Game and Fish (NMDGF) has the authority to establish a list of fish and wildlife species that are endangered or threatened. Unlike the federal act, the state's regulation makes no provision for the protection of wildlife species from indirect take (e.g., destruction of habitat or unfavorable management practices); rather, it protects from the unlawful killing, trade, or transportation of state-listed species. Therefore, the state-listed species are only a potential development constraint if listed species are determined to be currently occupying the proposed project.

The proposed project was evaluated for federally and state-listed T/E species. An internet search of the USFWS Information for Planning and Consultation (IPaC) screening tool was used to identify federally listed T/E species "that should be considered as part of an effects analysis" for the proposed project. Additionally, a report from the New Mexico Department of Game and Fish (NMDGF) Biota Information System of New Mexico (BISON-M) was obtained and reviewed for Lea County.

Resource Review

The federally listed T/E species listed in the IPaC Trust Resource Report within 5 miles of the proposed project (Appendix D) include: the lesser prairie-chicken (*Tympanuchus pallidicinctus*), northern aplomado falcon (*Falco femoralis septentrionalis*), Mexican spotted owl (*Strix occidentalis lucida*), piping plover (*Charadrius melodus*), Pecos gambusia (*Gambusia nobilis*), Gypsum wild buckwheat (*Eriogonum gypsophilum*), Lee pincushion cactus (*Coryphantha sneedii var. leei*), Sneed pincushion cactus (*Coryphantha sneedii var. sneedii*), Wright's marsh thistle (*Cirsium wrightii*), and Texas hornshell (*Popenaias popeii*).

The state-listed T/E species in the NMDGF BISON-M County List for Lea County dated 9 August 2024 (Appendix E) include: the lesser prairie-chicken (*Tympanuchus pallidicinctus*), broad-billed hummingbird (*Tympanuchus pallidicinctus*), least tern (*Cynanthus latirostris*), bald eagle (*Sternula antillarum*), northern aplomado falcon (*Falco femoralis septentrionalis*), peregrine falcon (*Falco peregrinus*), Bell's vireo (*Vireo bellii*), Baird's Sparrow (*Centronyx bairdii*), and dunes sagebrush lizard (*Sceloporous arenicolus*). Fish and mollusks are also listed for Lea County; however, due to the nature of the proposed project and lack of potential habitat, these species would not occur within the proposed project.

Lesser Prairie-Chicken

Populations of the lesser prairie-chicken can currently be found in Colorado, Kansas, New Mexico, Oklahoma, and Texas. The species requires large, relatively contiguous tracts of native grasslands containing sand sagebrush and shinnery oak thickets in order to thrive. Habitat degradation and fragmentation throughout much of their historical range has greatly reduced their population numbers and distribution. Despite the presence of shinnery oak and sand sagebrush, the high density of honey mesquite, broom snakeweed, and other non-preferred vegetative species, likely precludes the proposed project from providing ample habitat for the LPC.

Northern Aplomado Falcon

The northern aplomado falcon is listed for many coastal and West Texas counties (including Lea County) within its historic range. Historically, the falcon utilized open desert grasslands and/or savannas in West Texas, where scattered shrubs and trees provided roosting and nesting locations. The proposed project does not occur within an open grassland vegetative community. Furthermore, land use of this area (primarily cattle ranching and oil/gas exploration and production) likely precludes the northern aplomado falcon from utilizing the project vicinity.

Mexican Spotted Owl

The Mexican spotted owl is listed for areas near the Guadalupe Mountains (including Lea County) within its historic range. Historically, the owl utilized mature old-growth forests in deep, cool canyons.

The steep slopes and rocky cliffs within the canyons provide an ideal habitat for nesting. There are no old-growth forests near the proposed project; therefore, the Mexican spotted owl would not utilize this area.

PIPING PLOVER

According to the USFWS IPaC, the piping plover is conditional and only needs to be considered for wind-related projects within the migratory routes of this species. Although this species occasionally stop at points along migration routes, use of the proposed project would be unlikely, due to the lack of suitable habitat.

PECOS GAMBUSIA

The historical range of the Pecos gambusia was the Pecos River Basin in western Texas and southeast New Mexico. Present day populations exist only in Jeff Davis and Pecos counties near Balmorhea, and in Leon and the Diamond-Y Spring near Fort Stockton, which are not within the vicinity of the proposed project.

GYPSUM WILD BUCKWHEAT

Gypsum wild buckwheat is found in Lea County. The three known locations are north of Carlsbad at Seven River Hills, south of Black River Village, and in the drainages of Ben Slaughter Draw and Hay Hollow. It is found in sparsely vegetated areas high in gypsum and in association with other gypsum loving plants such as hairy crinklemat, gypsum blazingstar, and gyp ringstem. None of the known locations are within the vicinity of the proposed project; therefore, it is unlikely that the proposed project would negatively impact any gypsum wild buckwheat.

LEE PINCUSHION CACTUS

The Lee pincushion cactus is endemic to New Mexico and is restricted to areas within Eddy County, particularly within or adjacent to Carlsbad Caverns National Park and the Guadalupe Mountains. This cactus occurs primarily on steep limestone slopes within Chihuahuan Desert scrubland communities at elevations ranging from 4,000 to 5,000 feet. The proposed project is within shrublands with elevations lower than what is considered primary Lee pincushion cactus habitat; therefore, impacts to this species are unlikely.

SNEED PINCUSHION CACTUS

The Sneed pincushion cactus can be found in the Chihuahuan Desert, particularly in far western Texas and southern New Mexico, including Lea County. This species occurs primarily on steep, exposed limestone slopes in shrubland or grassland communities with elevations ranging between 3,900 to 7,700 feet. The proposed project does not include areas of exposed limestone; therefore, impacts to this species are unlikely.

WRIGHT'S MARSH THISTLE

Wright's marsh thistle occurs in wet, alkaline soils in spring seeps and marshy edges of streams and ponds between 3,450 and 7,850 feet in elevation. The proposed project is within shrublands, and no aquatic habitats are present within the vicinity of the proposed project; therefore, impacts to this species are unlikely.

TEXAS HORNSHELL

The Texas hornshell historically occurred in the Pecos-Rio Grande drainage; however, due to an increase in salinity, much of this habitat is no longer considered suitable. This species is currently only found in four locations: an 8.5-mile stretch of the Black River in New Mexico, the Lower Rio Grande in Texas, the Devil's River in Texas, and the Delaware River in New Mexico. Due to the distance to one of the four known occupied locations, it is unlikely that the proposed project would negatively impact the Texas hornshell.

No impacts are expected to any of the federally listed T/E species. State regulations prohibit the taking, possession, transportation, or sale of any state-listed T/E species. Since Lea County has the potential to support state-listed T/E species, care should be taken to avoid direct impacts (including harassment, harm, killing, and/or collection) to any species that may inhabit the proposed project. The state-listed birds would have the ability to leave the proposed project area during active construction to avoid impacts. However, slower-moving species (reptiles and amphibians) are ground-dwelling and relatively slow-moving, which makes them more likely to be impacted by construction activities than other state-listed species.

CULTURAL RESOURCES DESKTOP REVIEW

REGULATORY BACKGROUND AND METHODOLOGY

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires Federal agencies to consider the effects of their actions on historic properties and provide the State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on their projects. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed on or eligible for listing on the National Register of Historic Places (NRHP). The New Mexico Prehistoric and Historic Sites Preservation Act and the New Mexico Cultural Properties Act provide protection of archaeological sites (prehistoric and historic) listed in the State Register of Cultural Properties or on the NRHP.

The regulatory process seeks to determine if a project will have an "effect" on historic properties. The term "effect" is defined as an "alteration to the characteristics of historic property qualifying it for inclusion in, or eligibility for the National Register (of Historic Places)." An effect is "adverse" when it will endanger those qualities that make the property eligible for inclusion on the NRHP.

Goshawk performed an archival review to evaluate the potential for historic properties present near the proposed project. The Archaeological Records Management Section's (ARMS) New Mexico Cultural Resources Information System (NMCRIS) online database, geospatial data obtained from the US Bureau of Land Management (BLM) Carlsbad Field Office, and the NRCS Web Soil Survey were utilized for the review.

ARCHIVAL REVIEW

Archival Research

According to NMCRIS, the proposed proposed project and surrounding area was subjected to partial archaeological survey under one seismic survey project, but otherwise had not been surveyed for

cultural resources. Previous surveys have yielded largely negative results in the immediate vicinity of the proposed project (Table 1).

Table 1: Surveys Undertaken Within 1,640 feet (500 meters) of the Proposed Project

Activity Number	Organization Name	Lead Agency	Total Acres	Sites Visited	Date of Survey Start/End
23196	Pecos Archaeological Consultants	US Bureau of Land Management Roswell District	57.80	2	13 December 1984 to 2 May 1985
78900	US Bureau of Land Management Carlsbad Field Office	US Bureau of Land Management Carlsbad Field Office	97.86	1	12 February to 10 May 2002
80449	Clifton, Don Consulting Archaeologist	US Bureau of Land Management Carlsbad Field Office	12.50	0	29 September to 2 October 2002
83331	Clifton, Don Consulting Archaeologist	US Bureau of Land Management Roswell District	15.60	0	8 May to 12 May 2003
92639	Clifton, Don Consulting Archaeologist	US Bureau of Land Management Carlsbad Field Office	53.25	0	20 April to 22 April 2015
138075	APAC	US Bureau of Land Management Carlsbad Field Office	789.69	3	23 February to 3 May 2017
154040	Goshawk Environmental Consulting	US Bureau of Land Management Carlsbad Field Office	11.43	1	27 September 2023

There are five previously documented archaeological sites within 500 meters (1,640 feet) of the proposed project.

The nearest site, LA 187817, is located 278.8 feet (84.9 meters) north of the proposed project. Site LA 187817 was originally recorded in 2017 by the APAC. The site measured approximately 534.8 by 347.8 feet (163 by 106 meters). The assemblage included lithic debitage, fire cracked rock, and groundstone tools, and was not dated to a specific period. In 2017, the SHPO determined the site eligible for listing on the NRHP. The site was revisited by Goshawk in 2023 under NMCRIS activity 154040.

National Register Properties

No NRHP-listed properties have been recorded near the proposed project. According to the NMCRIS database, the nearest NRHP-listed property is the Red Tank Site (LA 43257). This site lies approximately .6 mile northwest of the proposed project and consists of prehistoric and historic components. The remains of a camp define the prehistoric component, while the Red Tank makes up the historical component. As mentioned earlier, the Red Tank is still in use today, therefore retaining its eligible status.

Soils Analysis

As discussed earlier, soils mapped within the proposed project consisted entirely of Maljamar and Palomas fine sands.

REGULATORY DEVELOPMENT CONSTRAINTS

The cultural resources archival review determined there is a moderate probability for the presence of significant prehistoric resources within the proposed project. No impacts to cultural resources would be expected by the proposed project.

SUMMARY

Based on the results of the Comprehensive Resource Review, it is Goshawk's opinion that the construction of the proposed Red Tank Reuse Pit is unlikely to impact any sensitive cultural resources, groundwater resources; or natural resources, including WATERS and T/E species. Based on the negative results from previous cultural resources surveys, it is Goshawk's opinion that the proposed project is not likely to contain significant cultural resources. In the unlikely event that cultural resources (including human remains) are discovered, all construction or maintenance activities should be immediately halted, and a qualified archaeologist should be notified. If you have any questions or desire additional information, please contact our office.

Sincerely,

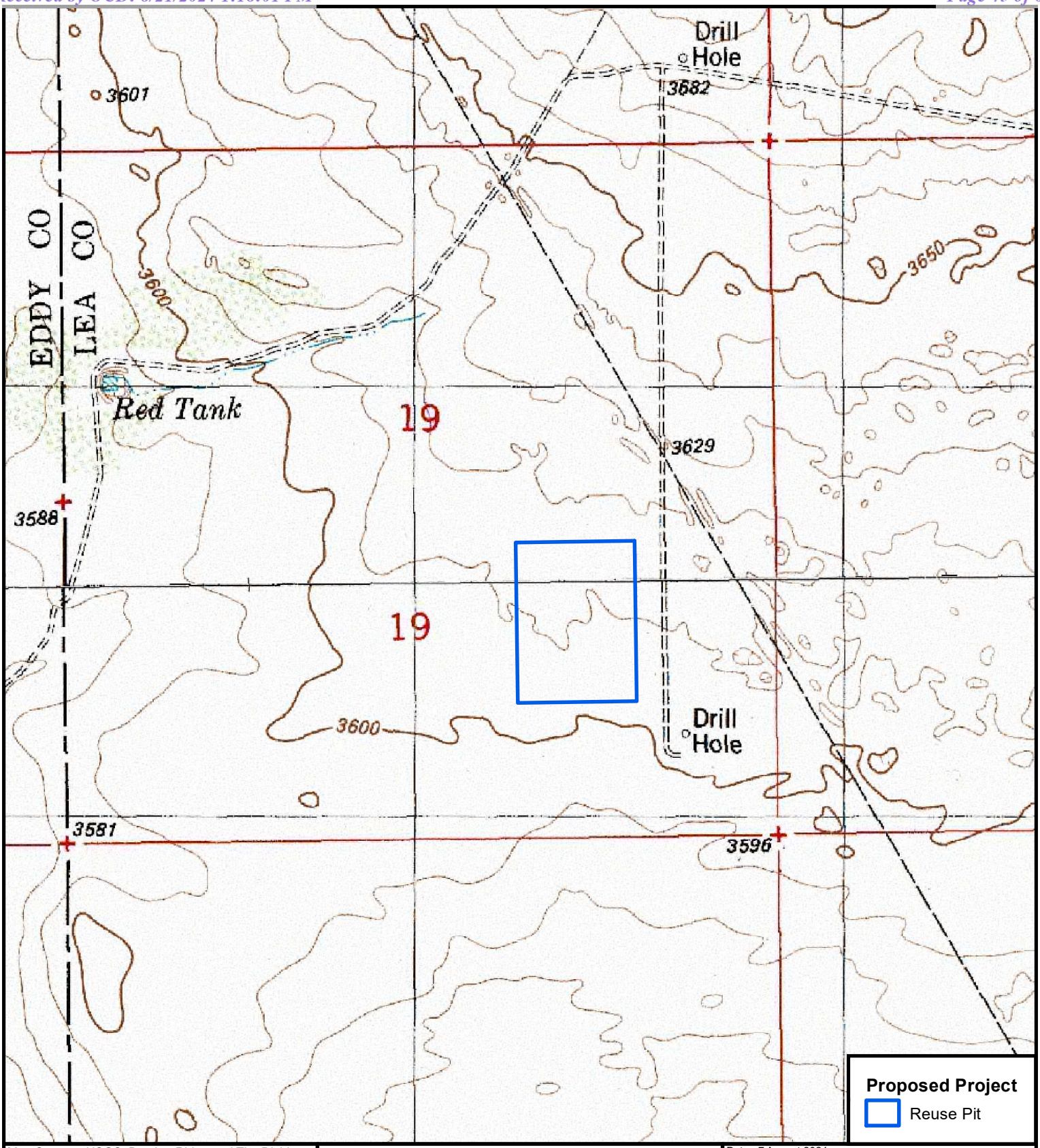
Thomas Norris
Environmental Specialist/Ecologist

Andrew Beckert
Archaeologist

GOSHAWK
ENVIRONMENTAL CONSULTING, INC.

APPENDIX A

FIGURES



Map Source: USGS, Bootleg Ridge and The Divide, New Mexico Quadrangles.

0 500 1,000 Feet

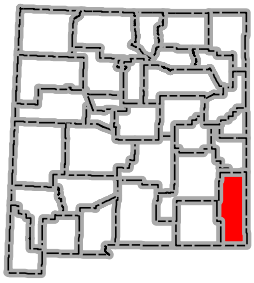
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 1
USGS Topographic
Lea County, New Mexico

Red Tank Reuse Pit

Township 22S; Range 32E; Section 19

Date: 7 August 2024



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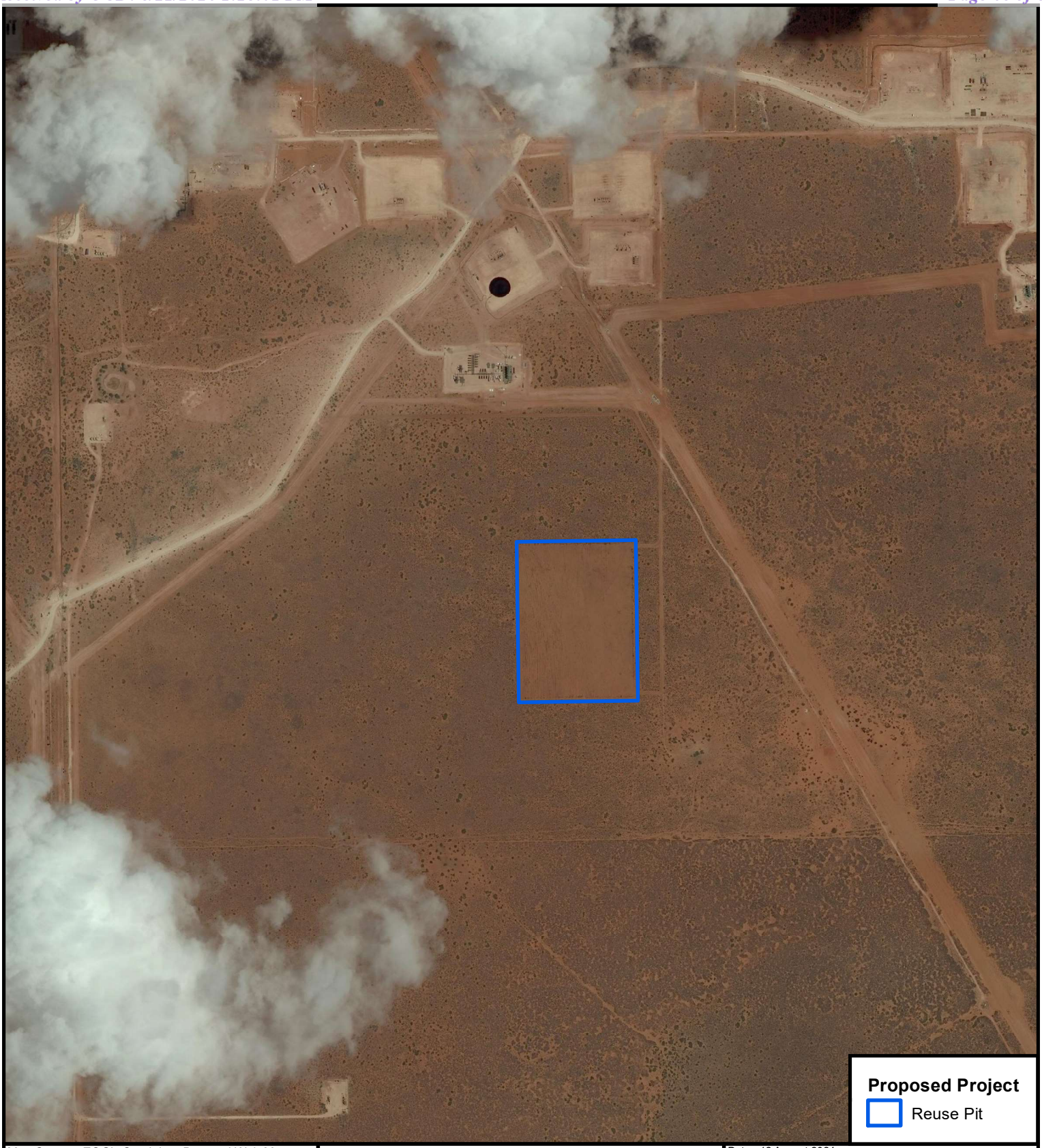


Map Source: EOG's Spatial on Demand Web Map Service - Maxar Most Recent Layer

0 500 1,000 Feet

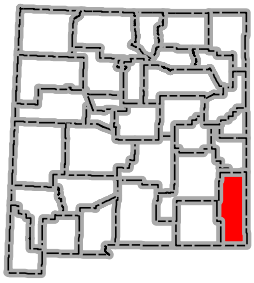
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 2
Aerial Orthoimagery
Lea County, New Mexico

Red Tank Reuse Pit

Township 22S; Range 32E; Section 19

Date: 12 August 2024



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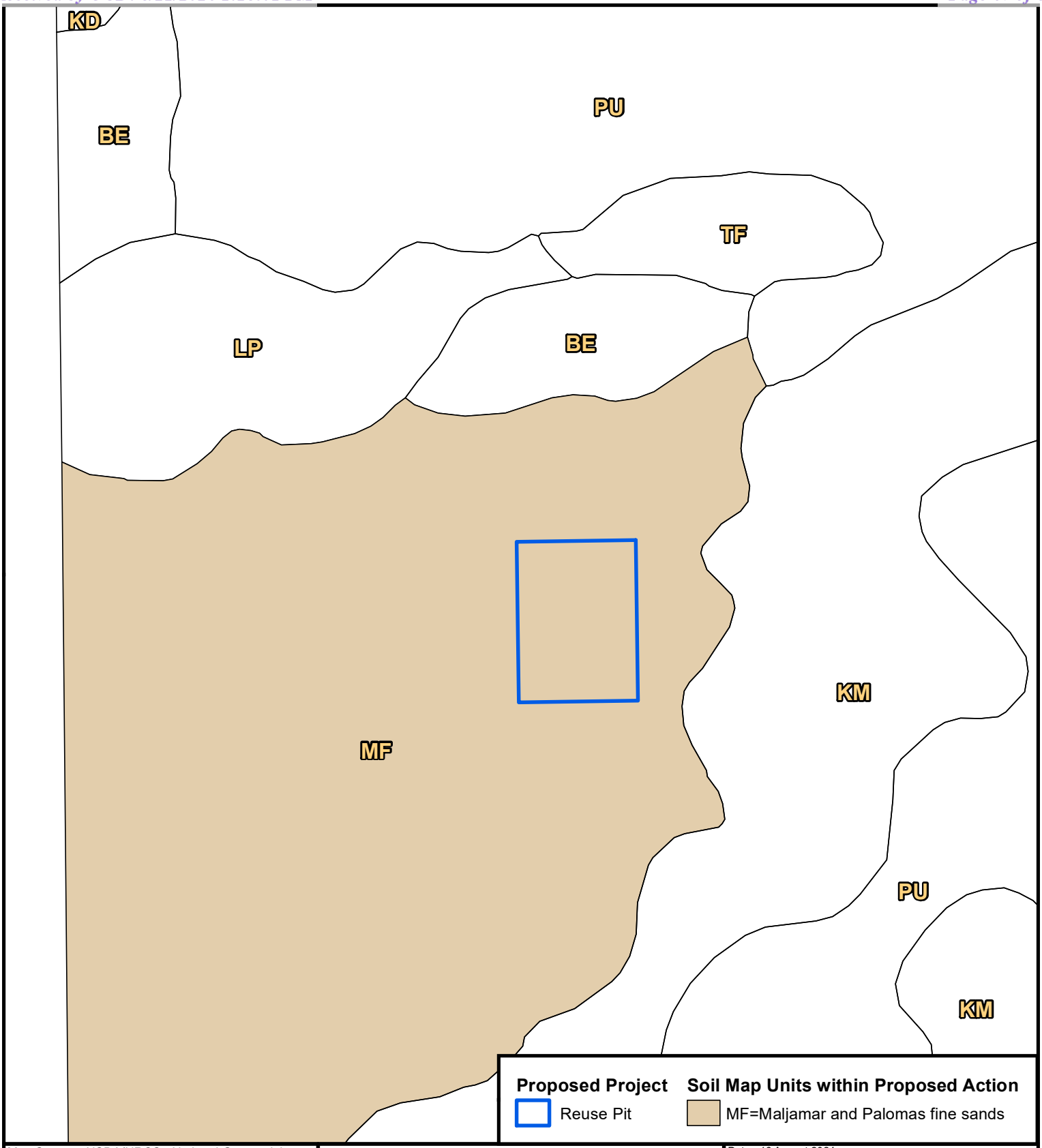


Map Source: USDA/NRCS - National Geospatial Center of Excellence. Soil Survey Geographic (SSURGO) Lea County, New Mexico.

0 500 1,000 Feet

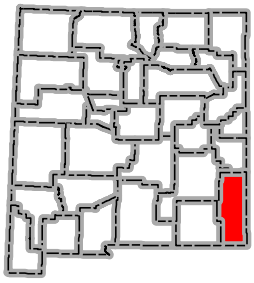
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 3
NRCS SSURGO
Lea County, New Mexico

Red Tank Reuse Pit

Township 22S; Range 32E; Section 19

Date: 16 August 2024



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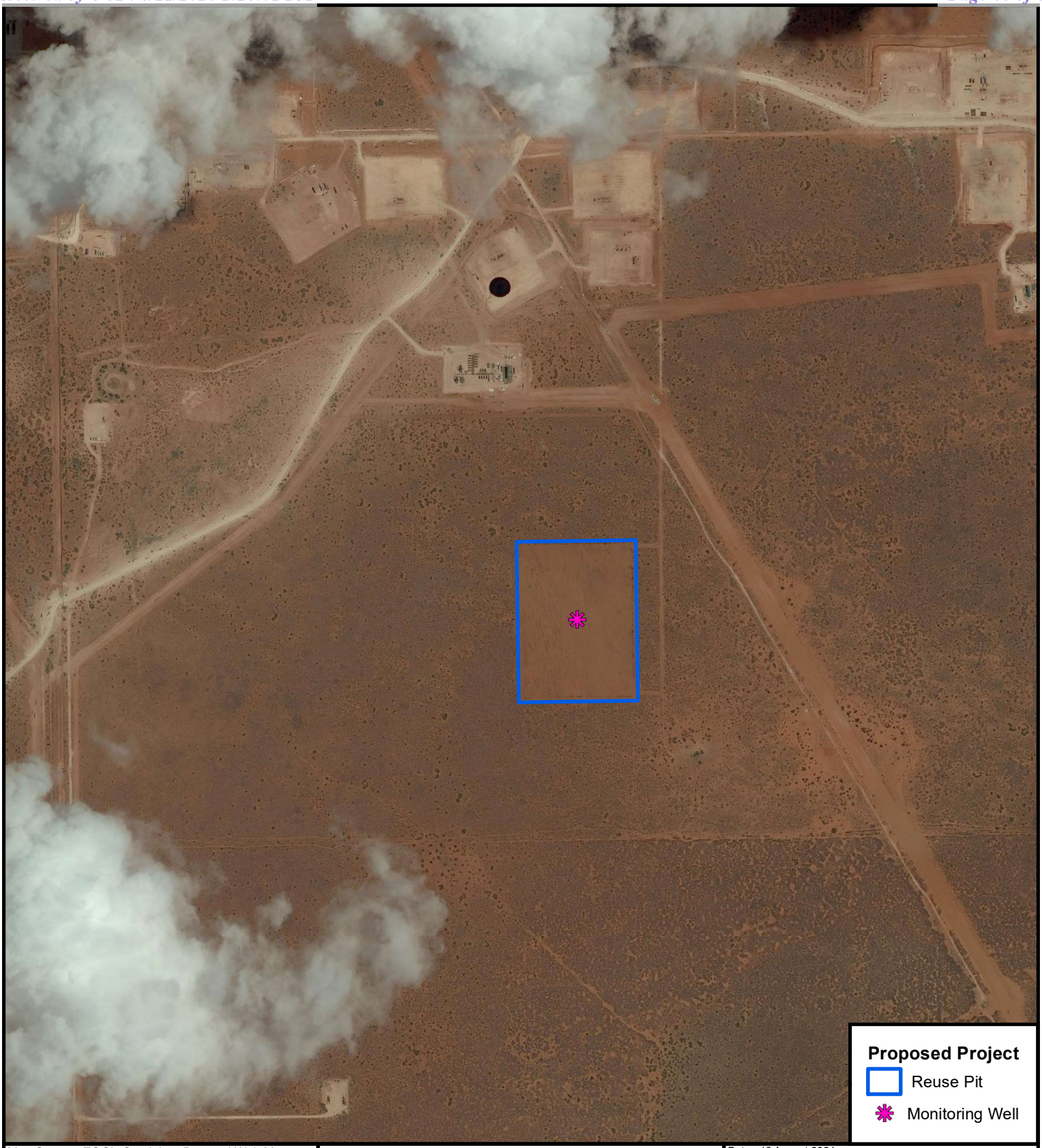


Map Source: EOG's Spatial on Demand Web Map Service - Maxar Most Recent Layer

0 500 1,000 Feet

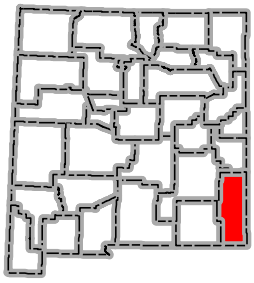
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 4
Monitoring Well Location
Lea County, New Mexico

Red Tank Reuse Pit

Township 22S; Range 32E; Section 19

Date: 12 August 2024



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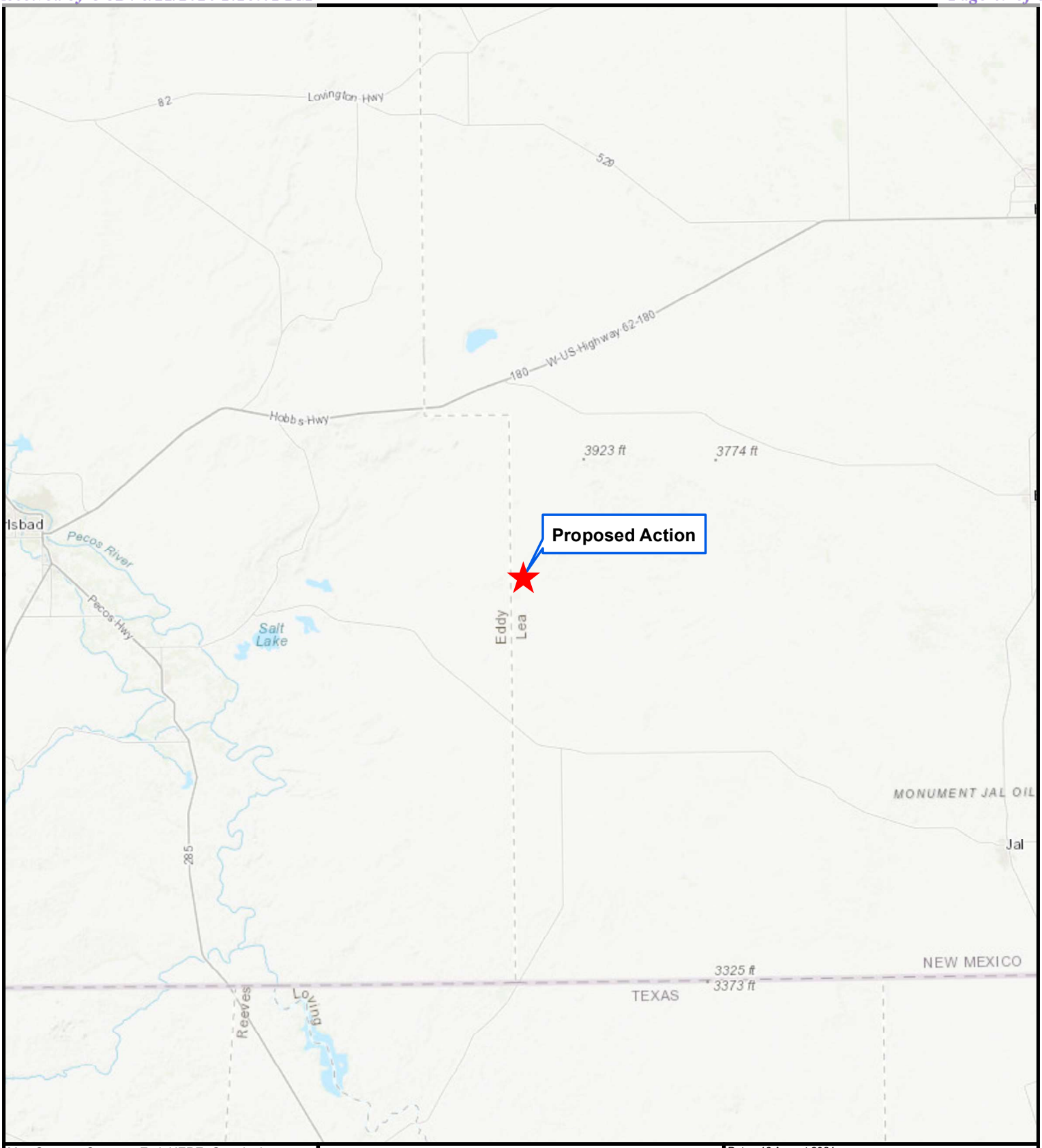


Map Source: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, (c) OpenStreetMap contributors, and the GIS User Community

0 4 8 Miles

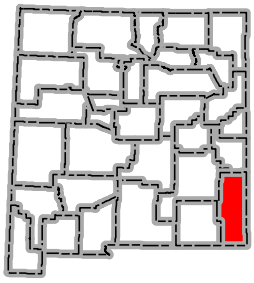
GOSHAWK ENVIRONMENTAL CONSULTING, INC.

Figure 5
Vicinity
Lea County, New Mexico

Red Tank Reuse Pit

Township 22S; Range 32E; Section 19

Date: 16 August 2024



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GOSHAWK ENVIRONMENTAL CONSULTING, INC.

APPENDIX B

PHOTOS

Photo #: 1	Date: 8 November 2023
Relatively Flat Terrain within Proposed Project	

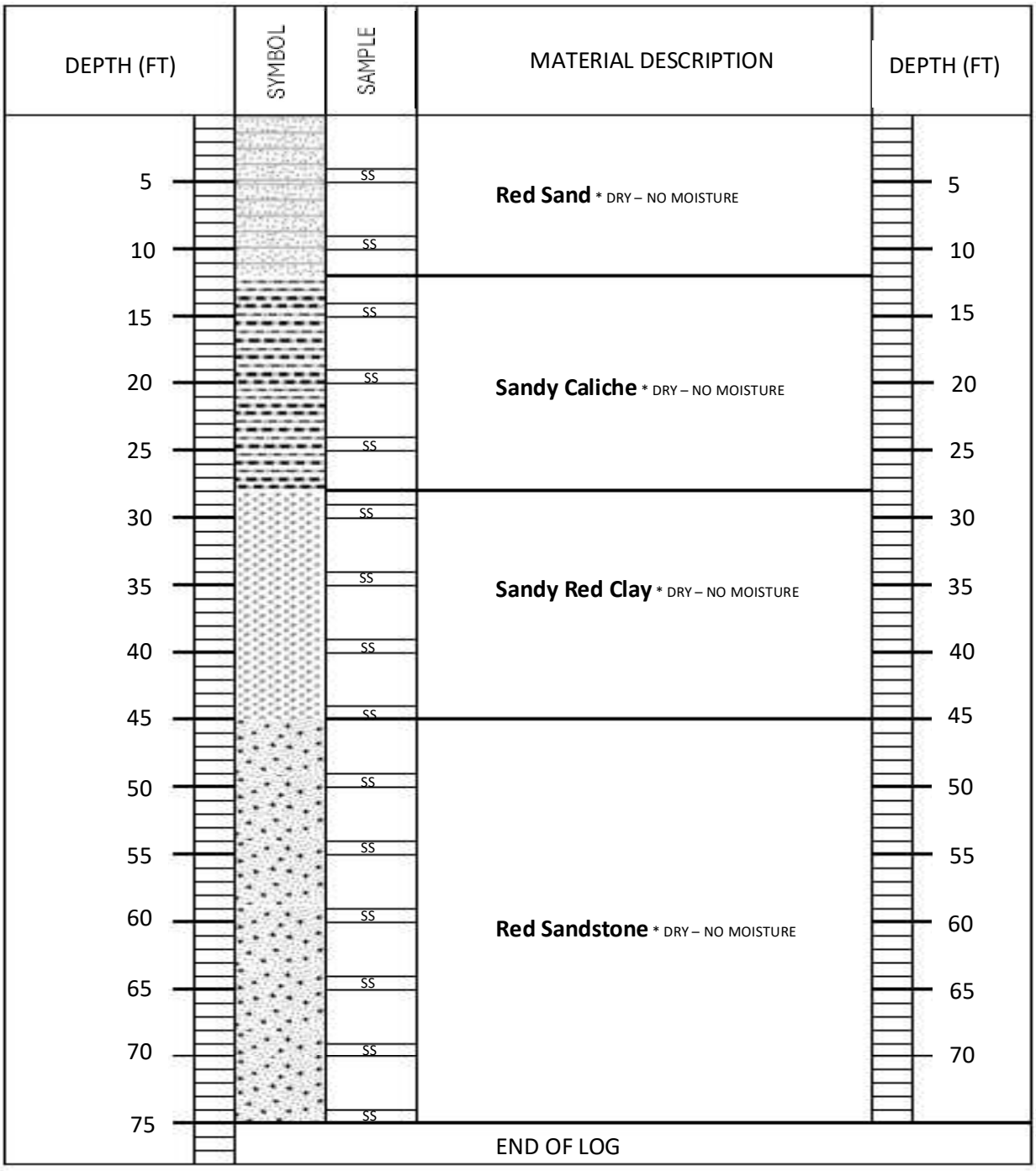
Photo #: 2	Date: 8 November 2023
Typical Shrubland Vegetation Intermixed with Grasses and Forbs within Proposed Project	

APPENDIX C

LITHOLOGY REPORT

SOIL BORING / MONITORING WELL LOG

Project: Red Tank Reuse Containment & Recycle Facility
Project Number: EOG - 07152024
Client: EOG Resources, Inc.
Boring File Number: C 04837
Total Depth: 75 Feet
Surface Elevation: 3617 FT
Latitude: 32.374292°
Drilling Company: Elite Drillers Corporation
Driller: Bryce Wallace
Drillers License Number: WD-1706
Drilling Method: Air Rotary
Bore Hole Diameter: 6-1/8"
Date Drilled: 07/15/2024
Longitude: -103.710280°



*NOTE: NO GROUNDWATER WAS PRESENT DURING OR AT THE COMPLETION OF DRILLING ACTIVITIES.

Operating and Maintenance Plan

OPERATING AND MAINTENANCE PLAN

Red Tank Containment Pit

OVERVIEW

The attached plan details the operational requirements regarding the Red Tank Containment Pit. In addition, the required reporting, and inspections as well as the appropriate actions/notifications are listed.

PURPOSE

The attached plan implements the operational requirement as outlined by NMOCD under 19.15.34 NMAC. The application of this plan will ensure the reuse water containment pit is operated in a manner that minimizes any risk to health, safety, and the environment.

OPERATIONAL REQUIREMENTS

Below are the operational requirements that must be always adhered to. Deviation from these requirements is prohibited.

- Inlet flow
  - Recycling facility effluent stream water must meet all water quality norms before water is introduced into the containment pit. These norms are to include no detected oil in the stream.
  - Inlet water may only be introduced into the containment pit via the diffuser manifold so as to not cause any stress or damage to the liner system.
  - A minimum of 3ft of freeboard will be maintained in the reuse water containment pit at all times.

- Effluent Flow
  - Effluent water may only exit the reuse water containment via the permanent discharge header system; no external hoses or pipes may be placed into the pit at any time.
  - Effluent water may only be transferred to EOG completion operations.
- Volume Reporting
  - All influent and effluent volumes are to be logged daily. These volumes are to be tracked via inbound and outbound mag meters and tracked via paper and SCADA systems.
- Site Inspection
  - The pit and surrounding area are to be inspected daily while water is contained within the pit. These inspections are to include all inlet/outlet piping, berms, exposed liner, surrounding grounds, and fencing.
- Leak Detection Testing
  - Leak detection testing shall be conducted weekly. Testing shall include starting the leak detection sump pump to determine if any fluid has collected in the collection sump. The sump pump shall be run for a minimum of 5 minutes to allow for inlet flow. If any flow is detected the proper notification to the Hobbs NMOCD will occur and drainage will commence.

Reporting, Monitoring, and Inspection Plan

- List of Weekly Reporting and Inspections to be completed:
  - Influent and Effluent Volume Reporting
  - Visually inspect the Facility and Containment Pit
  - Leak Detection test to ensure the integrity of the primary liner has not deteriorated
- List of Monthly Reporting and Inspections to be completed:
  - Monthly volume report via Form C-148
  - Leak Detection test
  - Visual inspection of the Facility and Containment Pit

Notifications

In the event of a leak detection denoting a compromised liner below the water level, notice shall be provided via the OCD Permitting Online Portal.

ASSOCIATED FORMS

- List of Associated forms for Operating and Maintenance Plan
    - NA

Closure Plan

WATER CONTAINMENT CLOSURE PLAN

Red Tank Containment Pit

OVERVIEW

The attached plan details the requirements regarding the closure of the Red Tank Containment Pit. In addition, the required sampling and reporting obligations are detailed.

PURPOSE

The attached plan implements the closure requirement as outlined by NMOCD under 19.15.34.14 NMAC. The application of this plan will ensure the reuse water containment pit is closed and reclamation is completed in a manner that minimizes any risk to health, safety, and the environment.

CLOSURE REQUIREMENTS

- Containment Pit Drainage
  - All reuse water remaining in the containment pit shall be removed from the impoundment within 60 days of operations cessation. The removed fluids will then be transferred to a division-approved disposal facility. Records of all removal, transfer, and disposal activities shall be retained for inclusion in the final closure report submittal.
- Liner Material Removal and Disposal
  - Removal of the liner shall be conducted in a manner that minimizes any risk of soil disturbance to the surface within and surrounding the containment. The removed liner material will then be transferred to and disposed of at a division-approved disposal facility. Records of all removal,

transfer, and disposal activities shall be retained for inclusion in the final closure report submittal.

- Soil Sampling
  - Soil sampling shall be conducted at the locations depicted in the below schematic, Sampling Point Diagram, by a qualified third-party contractor and analyzed at NELAC certified laboratory.
  - If any contaminant concentration is higher than the parameters listed in Table 1 in 19.15.34.14 NMAC, notice shall be provided to the Hobbs NMOCD office before proceeding with closure.
  - If all sample concentrations are less than or equal to the parameters listed in Table 1 in 19.15.34.14 NMAC, then closure can proceed, backfilling with non-waste containing, uncontaminated, earthen material.
  - Sampling Diagram

- Site Reclamation and Re-vegetation
  - Following closure, reclamation of the containment's location can commence and ensure that it is returned to a safe and stable location that blends with the surrounding undisturbed area. Topsoil and subsoils shall be replaced to original positions and contoured to achieve erosion-free long-term stability and preservation of surface water flow patterns.
  - The disturbed area shall then be reseeded in the first favorable growing season following the closure of the containment. The surface area shall be restored to the condition that existed prior to the construction of the containment.
  - Reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have

been completed and a uniform vegetative cover has been established that reflects a life form ratio of +/- 50% of pre-disturbance levels and a total percent plant cover of at least 70% of pre-disturbance levels, excluding noxious weeds.

CLOSURE AND RECLAMATION REPORT SUBMITTAL / NOTICE

- Closure Report
  - Within 60 days of closure completion, EOG shall submit a closure report on form C-147 to the NMOCD Hobbs office, including required attachments, to document all closure activities including sampling results and the details of any backfilling, capping, or covering.
  - The closure report shall certify that all information in the report and attachments is correct and that EOG has complied with all applicable closure requirements and conditions specified in the division rules or directives.
- Reclamation Notice
  - EOG shall notify the NMOCD Hobbs office when all reclamation and re-vegetation are complete.

NOTIFICATIONS

In the event of any deviance from this closure plan or exceeding a sampling constituent, notice shall be provided via the OCD Permitting Online Portal.

ASSOCIATED FORMS

- List of Associated forms for containment pit closure
  - NA

Venegas, Victoria, EMNRD

From: Venegas, Victoria, EMNRD
Sent: Friday, August 23, 2024 1:38 PM
To: Patricia Donald
Subject: 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825]
Attachments: C-147 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] 08.23.2024.pdf

1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825]

Good afternoon Ms. Donald.
NMOCD has reviewed the recycling containment permit application and related documents, submitted by [7377] EOG RESOURCES INC on August 21, 2024, Application ID: 376190, for 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] in Unit Letter J, Section 19, Township 22S, Range 32E, Lea County, New Mexico. [7377] EOG RESOURCES INC requested variances from 19.15.34 NMAC for 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825].

The following variances have been approved:

- The variance from 19.15.34.13.E NMAC for the installation of an audible “Bird-X Mega Blaster Pro” bird deterrence system is approved.
- The variance to NMAC 19.15.34.12.D to install a 6-foot galvanized chain-link fence with 3 strands of barbed wire on the top of the chain-link fencing. is approved.
- The variance to 19.15.34.12.A.(4) NMAC for the installation of a 40-mil HDPE secondary liner is approved. The proposed liner system cross-section for the earthen containments is as follows: prepare subgrade, 10 oz. geotextile, 40-mil HDPE secondary liner, 200-mil geonet, 60-mil HDPE primary liner.

The form C-147 and related documents for 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is approved with the following conditions of approval:

- The purpose of this permit is for oil and gas activities regulated under the NMAC 19.15.34.3 STATUTORY AUTHORITY: 19.15.34 NMAC is adopted pursuant to the Oil and Gas Act, Paragraph (15) of Section 70-2-12(B) NMSA 1978, which authorizes the division to regulate the disposition of water produced or used in connection with the drilling for or producing of oil and gas or both and Paragraph (21) of Section 70-2-12(B) NMSA 1978 which authorizes the regulation of the disposition of nondomestic wastes from the exploration, development, production or storage of crude oil or natural gas.
- 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is approved for five years of operation from the date of permit application of August 21, 2024.
- 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] permit expires on August 21, 2029. If [7377] EOG RESOURCES INC wishes to extend operations past five years, an annual permit extension request must be submitted using an OCD form C-147 through OCD Permitting by July 21, 2029.
- 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] consists of one (1) earthen containment. The total fluid capacity of 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is 1,217,436.00 BBL.
- Water reuse and recycling from 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is limited to wells owned and operated by [7377] EOG RESOURCES INC.
- [7377] EOG RESOURCES INC shall construct, operate, maintain, close, and reclaim 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] in compliance with NMAC 19.15.34 NMAC.

- [7377] EOG RESOURCES INC shall notify OCD, through OCD Permitting when construction of 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] commences.
- [7377] EOG RESOURCES INC shall notify NMOCD through OCD Permitting when recycling operations commence and cease at 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825].
- A minimum of 3-feet freeboard must be maintained at 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] at all times during operations.
- [7377] EOG RESOURCES INC shall submit monthly reports of recycling and reuse of produced water, drilling fluids, and liquid oil field waste on OCD form C-148 via OCD Permitting even if there is zero activity.
- If less than 20% of the total fluid capacity is utilized every six months, beginning from the first withdrawal, operations of the 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is considered ceased and a notification of cessation of operations should be sent electronically to OCD Permitting. A request to extend the cessation of operation, not to exceed six months, may be submitted using a C-147 form through OCD Permitting. If after that 6-month extension period, the 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] is not utilized at a minimum of 20% fluid capacity, no additional extensions would be granted, and the operator would be directed to remove all fluids and proceed with the closure requirements.
- [7377] EOG RESOURCES INC shall inspect the recycling containment and associated leak detection systems weekly while it contains fluids. The operator shall maintain a current log of such inspections and make the log available for review by the Division upon request according to 19.15.34.13.A.
- [7377] EOG RESOURCES INC shall comply with 19.15.29 NMAC Releases in the event of any release of produced water or other oil field waste at 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825].

Please reference number 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] in all future communications.
Regards,

Victoria Venegas ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. Artesia, NM 88210
(575) 909-0269 | Victoria.Venegas@emnrd.nm.gov
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 376190

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 376190
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
vvenegas	NMOCD has reviewed and approved the recycling containment permit application and related documents, submitted by [7377] EOG RESOURCES INC on August 21, 2024, Application ID: 376190, for 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825]. • 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] permit expires on August 21, 2029. • [7377] EOG RESOURCES INC shall construct, operate, maintain, close, and reclaim 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825] in compliance with NMAC 19.15.34 NMAC. • [7377] EOG RESOURCES INC shall comply with 19.15.29 NMAC Releases in the event of any release of produced water or other oil field waste at 1RF-530 - RED TANK CONTAINMENT AND REUSE FACILITY [fVV2423639825].	8/23/2024