



December 21, 2023

EMNRD/OCD

Attn: Victoria Venegas

South St. Francis Dr.

Santa Fe, NM 87505

Re: EOG Resources, Inc.
Smokin' 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 Smokin 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 Smokin' Containment and Recycle Facility

Section 34, Township 23-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

Form C-147
Revised October 11, 2022

https://www.emnrd.nm.gov/ocd/ocd-e-permitting/

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 #: 7377
Address: 5509 Champions Dr. Midland, TX 79706
Facility or well name (include API# if associated with a well): Smokin Containment and Reuse Facility
OCD Permit Number: IRF-515 (For new facilities the permit number will be assigned by the district office)
U/L or Qtr/Qtr W1/2 of NW1/4 Section 34 Township 23 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 32.263271° Longitude -103.668908° 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 32.264413° Longitude -103.668993° 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: 1,255,841 bbl Dimensions: L 709 x W 680 x D 21
 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.

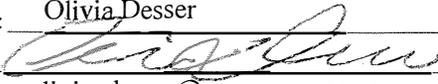
General siting

<p><u>Ground water is less than 50 feet below the bottom of the Recycling Containment.</u> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
<p>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.</p> <ul style="list-style-type: none"> - Written confirmation or verification from the municipality; written approval obtained from the municipality 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA
<p>Within the area overlying a subsurface mine.</p> <ul style="list-style-type: none"> - Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Within an unstable area.</p> <ul style="list-style-type: none"> - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Within a 100-year floodplain. FEMA map</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lake bed, sinkhole, or playa lake (measured from the ordinary high-water mark).</p> <ul style="list-style-type: none"> - Topographic map; visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</p> <ul style="list-style-type: none"> - Visual inspection (certification) of the proposed site; aerial photo; satellite image 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>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.</p> <ul style="list-style-type: none"> - NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>Within 500 feet of a wetland.</p> <ul style="list-style-type: none"> - US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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.

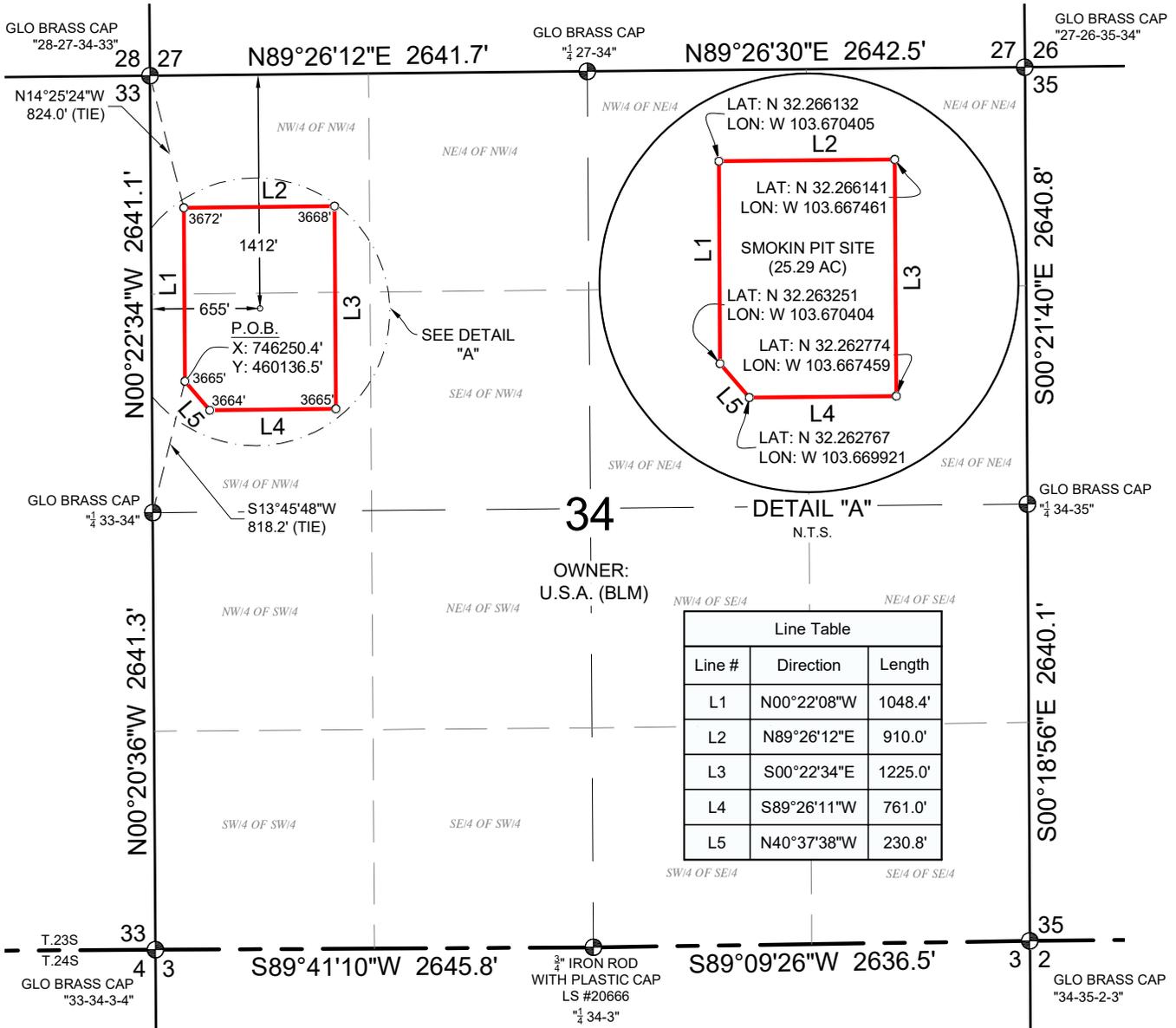
Name (Print): Olivia Desser Title: Water Resources Manager
 Signature:  Date: 12/8/2023
 e-mail address: olivia_desser@eogresources.com Telephone: 432-238-8639

11. **OCD Representative Signature:** Victoria Venegas Approval Date: 01/09/2024
 Title: Environmental Specialist OCD Permit Number: 1RF-515

OCD Conditions _____
 Additional OCD Conditions on Attachment _____

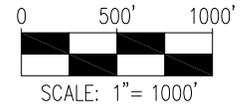
Survey Plats

SECTION 34, TOWNSHIP 23 SOUTH, RANGE 32 EAST,
LEA COUNTY, NEW MEXICO



- 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.
 - LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT

- PROPOSED SITE
- POINT FOR BEGIN/END OR ANGLE POINT
- ⊕ FOUND MONUMENT AS SHOWN



I, CHAD W. WALSH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 27061, 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.

CHAD W. WALSH, N.M. P.L.S. No. 27061
 SURVEY DATE: 06/14/2023 DRAFT: KS
 JOB NO.: B22.EOG.0080 SHEET: 1 OF 1

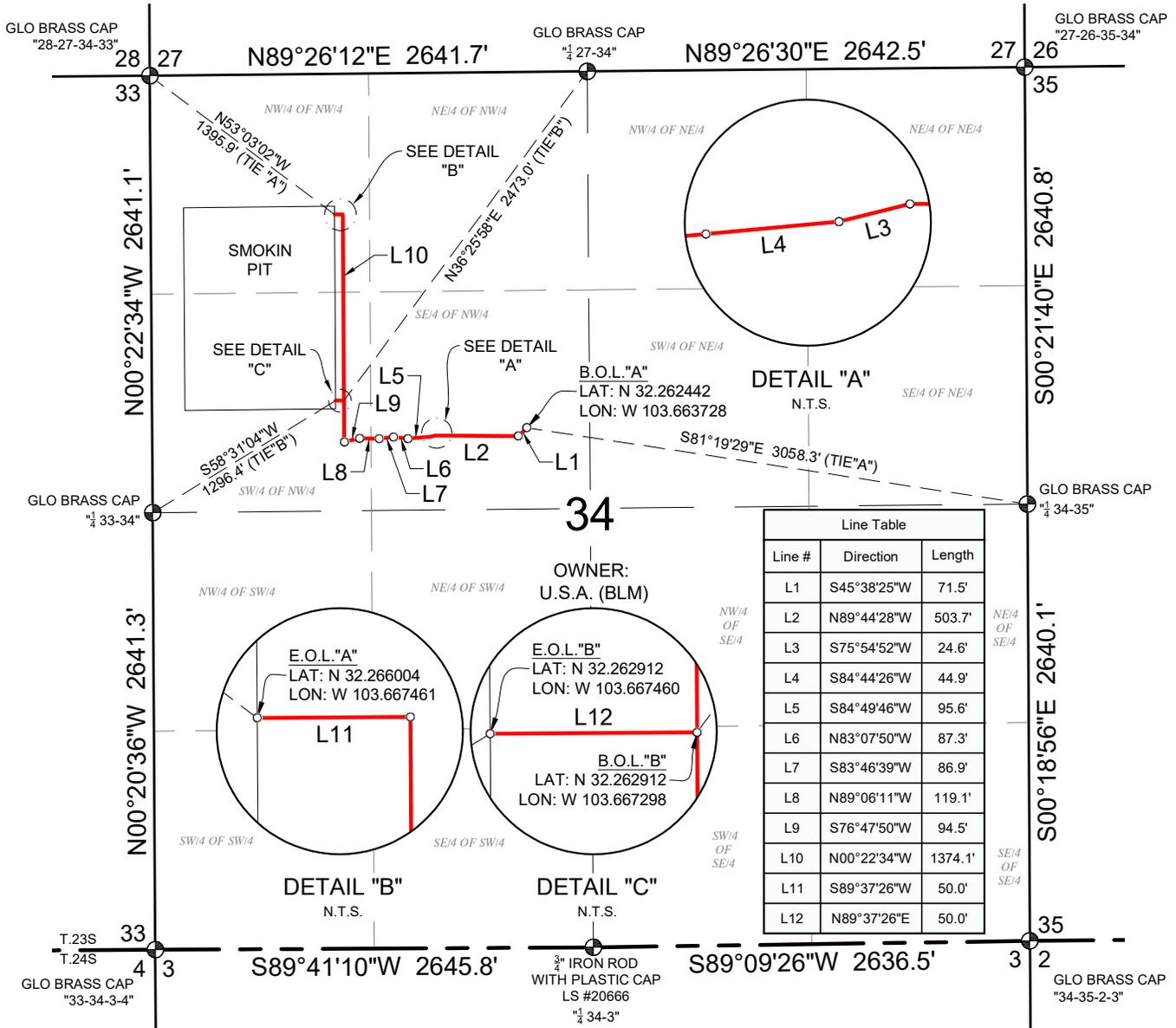


SMOKIN PIT PROPOSED SITE
 SEC. 34, T-23-S, R-32-E, N.M.P.M.,
 LEA COUNTY, NEW MEXICO



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

SECTION 34, TOWNSHIP 23 SOUTH, RANGE 32 EAST,
LEA COUNTY, NEW MEXICO



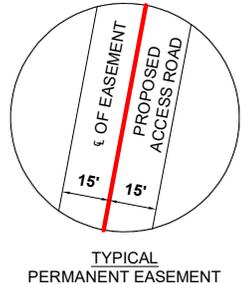
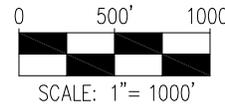
Line Table		
Line #	Direction	Length
L1	S45°38'25"W	71.5'
L2	N89°44'28"W	503.7'
L3	S75°54'52"W	24.6'
L4	S84°44'26"W	44.9'
L5	S84°49'46"W	95.6'
L6	N83°07'50"W	87.3'
L7	S83°46'39"W	86.9'
L8	N89°06'11"W	119.1'
L9	S76°47'50"W	94.5'
L10	N00°22'34"W	1374.1'
L11	S89°37'26"W	50.0'
L12	N89°37'26"E	50.0'

SMOKIN PIT PROPOSED ACCESS ROAD
CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 2602.2 FEET, 157.7 RODS OR 0.49 MILES IN LENGTH, SITUATED IN SECTION 34, TOWNSHIP 23 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE SURVEY OF CENTERLINE AS SHOWN HEREON.

- PROPOSED ACCESS ROAD
- POINT FOR BEGIN/END OR ANGLE POINT
- ⊕ FOUND MONUMENT AS SHOWN

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.
 • LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT



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.

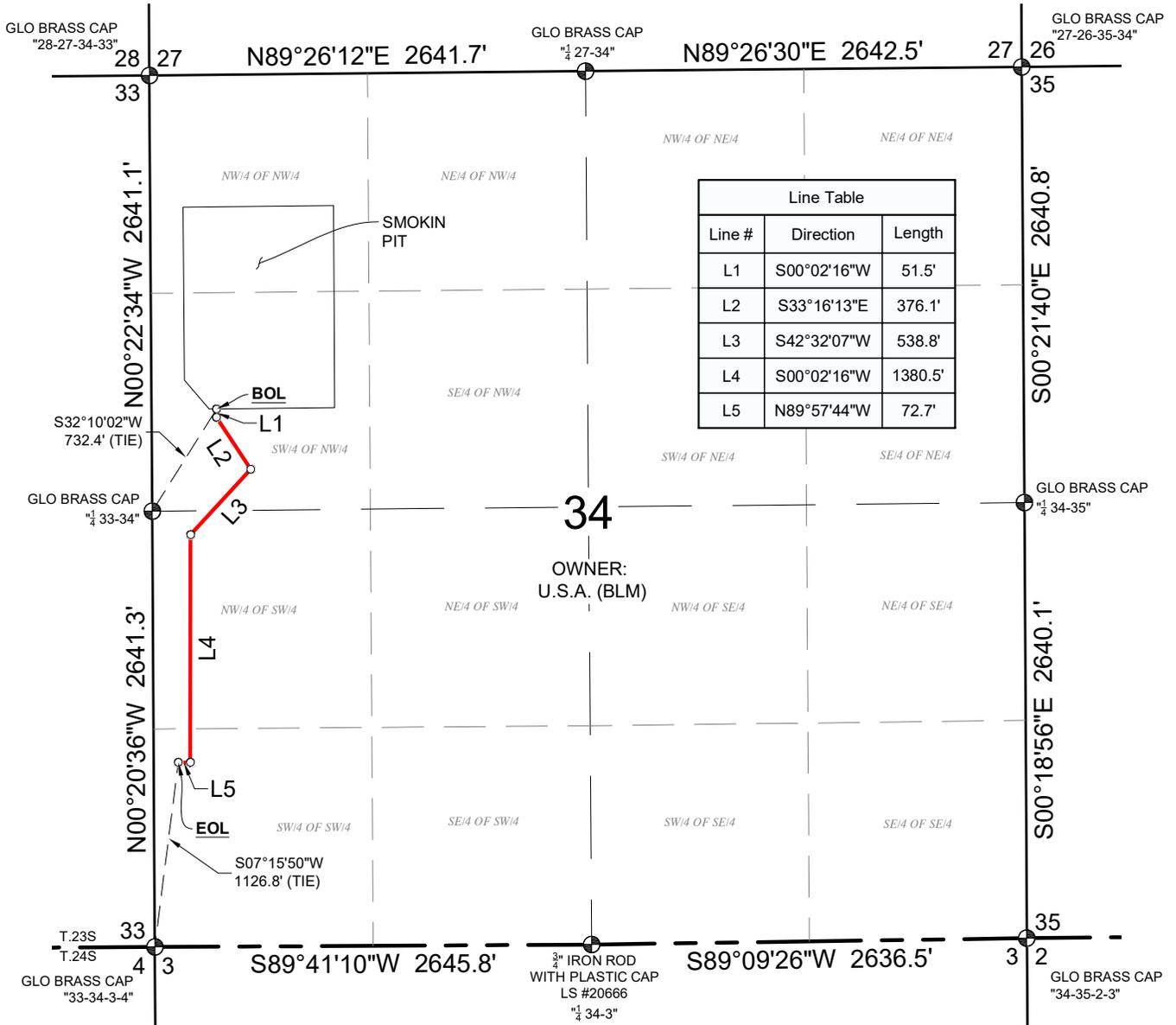
BRANDON A. MOSER, N.M. P.L.S. No.22502
 SURVEY DATE: 02/03/2023 DRAFT: TB
 JOB NO.: B22.EOG.0080 SHEET: 1 OF 1

eog resources
SMOKIN PIT PROPOSED ACCESS ROAD
 SEC. 34, T-23-S, R-32-E, N.M.P.M.,
 LEA COUNTY, NEW MEXICO

ASCENT
 GEOMATICS SOLUTIONS

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

SECTION 34, TOWNSHIP 23 SOUTH, RANGE 32 EAST,
LEA COUNTY, NEW MEXICO



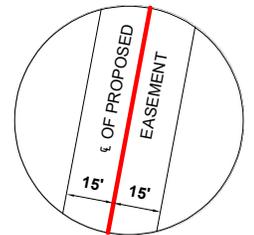
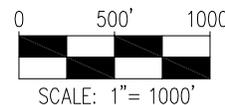
SMOKIN PIT PROPOSED OVERHEAD ELECTRIC LINE

CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 2419.6 FEET, 146.6 RODS OR 0.46 MILES IN LENGTH, SITUATED IN SECTION 34, TOWNSHIP 23 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE SURVEY OF CENTERLINE AS SHOWN HEREON.

- PROPOSED OVERHEAD ELECTRIC LINE
- POINT FOR BEGIN/END OR ANGLE POINT
- ⊕ FOUND MONUMENT AS SHOWN

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.
 • LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT



TYPICAL N.T.S R.O.W. EASEMENT



I, CHAD W. WALSH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 27061, 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.

CHAD W. WALSH, N.M. P.L.S.
 SURVEY DATE: 06/14/2023
 JOB NO.: B22.EOG.0080

No. 27061
 DRAFT: KS
 SHEET: 1 OF 1



SMOKIN PIT PROPOSED OVERHEAD ELECTRIC LINE
 SEC. 34, T-23-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

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

Well Name: PEGASUS 3 FED COM	Well Location: T24S / R32E / SEC 3 / SESE / 32.2411037 / -103.6565548	County or Parish/State: LEA / NM
Well Number: 701H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM94850	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547258	Well Status: Producing Oil Well	Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Sundry ID: 2739492

Type of Submission: Notice of Intent

Type of Action: Surface Disturbance

Date Sundry Submitted: 07/06/2023

Time Sundry Submitted: 06:18

Date proposed operation will begin: 07/06/2023

Procedure Description: 07/07/2023 EOG Resources, INC. (EOG) requests authorization for a 25.59 acre water pit for the Smokin' Reuse Pit located in the NW quarter of Section 34, T23S, R32E, Lea County, New Mexico. The Smokin' Reuse Pit will not only service the new Pegasus wells we drill/frac but other Fed wells in nearby leases. EOG requests authorization for one 30' wide right-of-way (ROW) with an additional 20' of TWS to construct, operate & maintain one above ground power line that will power the meters at the proposed Smokin' Reuse Pit, this line will have less than 30,000 volt capacity & will travel a total of 134.2 rods. The proposed power line will leave the west side of the Poseidon LGL Station and travel north while paralleling the proposed Smokin' Reuse Pit water line and end at the Southwest corner of the proposed Smokin' Reuse Pit. EOG also requests authorization for a 30' wide ROW to construct, operate, and maintain one access road with a 24' drivable surface. The road will start off of an existing road that leads to the Diamond 34 Federal #1 well which is located on the southeast side of the NW quarter of this section. This proposed new road will travel a total 157.7 rods and will tie into the NE corner and SE corner of the proposed Smokin' Reuse Pit. The onsite for the Smokin' Reuse Pit, road & power line was conducted with Zane Kirsch (BLM), Zane Homesley (GOSHawk Environmental), and Ascent Geomatics (Survey) in June out in the field. We are having to resubmit this Sundry because we had to remove the southwest corner of the site because the Froderick well pad & road clipped it as well as minor reroute to the power line. I have also attached the proof of payment for the original Sundry. Let me know if you have any questions, thank you.

Well Name: PEGASUS 3 FED COM

Well Location: T24S / R32E / SEC 3 / SESE / 32.2411037 / -103.6565548

County or Parish/State: LEA / NM

Well Number: 701H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM94850

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002547258

Well Status: Producing Oil Well

Operator: EOG RESOURCES INCORPORATED

Surface Disturbance

Is any additional surface disturbance proposed?: Yes

Proposed Disturbance(acres): 28.91

Interim Reclamation (acres): 28.91

Long Term Disturbance (acres): 28.91

Surface Disturbance:

NOI Attachments

Procedure Description

Smokin_Reuse_Pit__EA_20230706061833.pdf

EOG__SMOKIN_RESUE_PIT__for_7423.04_6_20_20230706061821.pdf

EP_SMOKIN_PIT_SITE_SEC34_R1_20230706061821.pdf

EP_SMOKIN_PIT_OVERHEAD_ELECTRIC_SEC34_R2_20230706061821.pdf

EP_SMOKIN_PIT_ACCESS_ROAD_SEC34_20230706061821.pdf

Conditions of Approval

Specialist Review

COAs_for_Smokin_Pit_20230721101452.pdf

Well Name: PEGASUS 3 FED COM

Well Location: T24S / R32E / SEC 3 / SESE / 32.2411037 / -103.6565548

County or Parish/State: LEA / NM

Well Number: 701H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM94850

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002547258

Well Status: Producing Oil Well

Operator: EOG RESOURCES INCORPORATED

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: JUL 06, 2023 06:18 AM

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: 07/28/2023

Signature: Cody R. Layton

C-147 Detail

C-147 DETAIL

Smokin Containment Pit

OPERATOR AND FACILITY / LOCATION DETAIL

The proposed reuse water containment facility & containment pit referred to as the Smokin Containment and Recycle Facility, will be owned and operated by EOG Resources, Inc. (EOG) and located in Township 23 South, Range 32 East, and Section 34 in southeastern Lea County.

RECYCLING FACILITY DETAIL

The proposed containment pit will be located adjacent to the Smokin 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, *Smokin 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 769 x 680' 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, *Smokin 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 *Smokin 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 Smokin 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 lieu of the 30-mil string reinforced liner.

SITING CRITERIA FOR RECYCLING CONTAINMENT

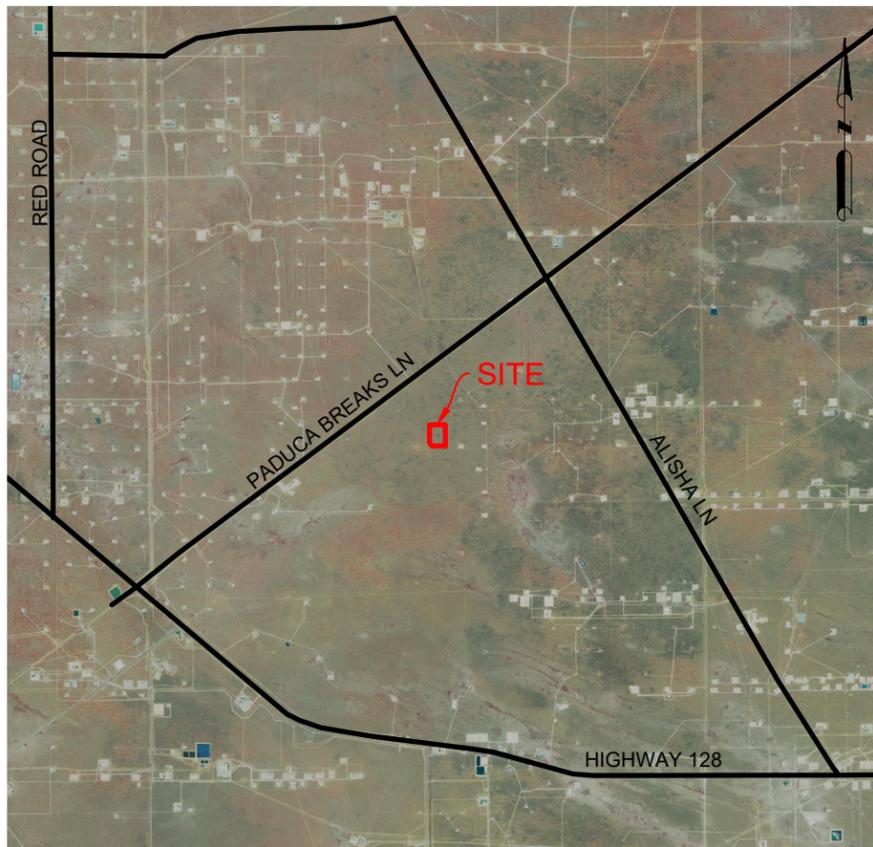
Enclosed within this submittal are comprehensive third-party reports detailing conformity to siting criteria described in Section 8 of the C-147 registration form; a detailed list and description of these attachments can be found in the subsequent section.

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.

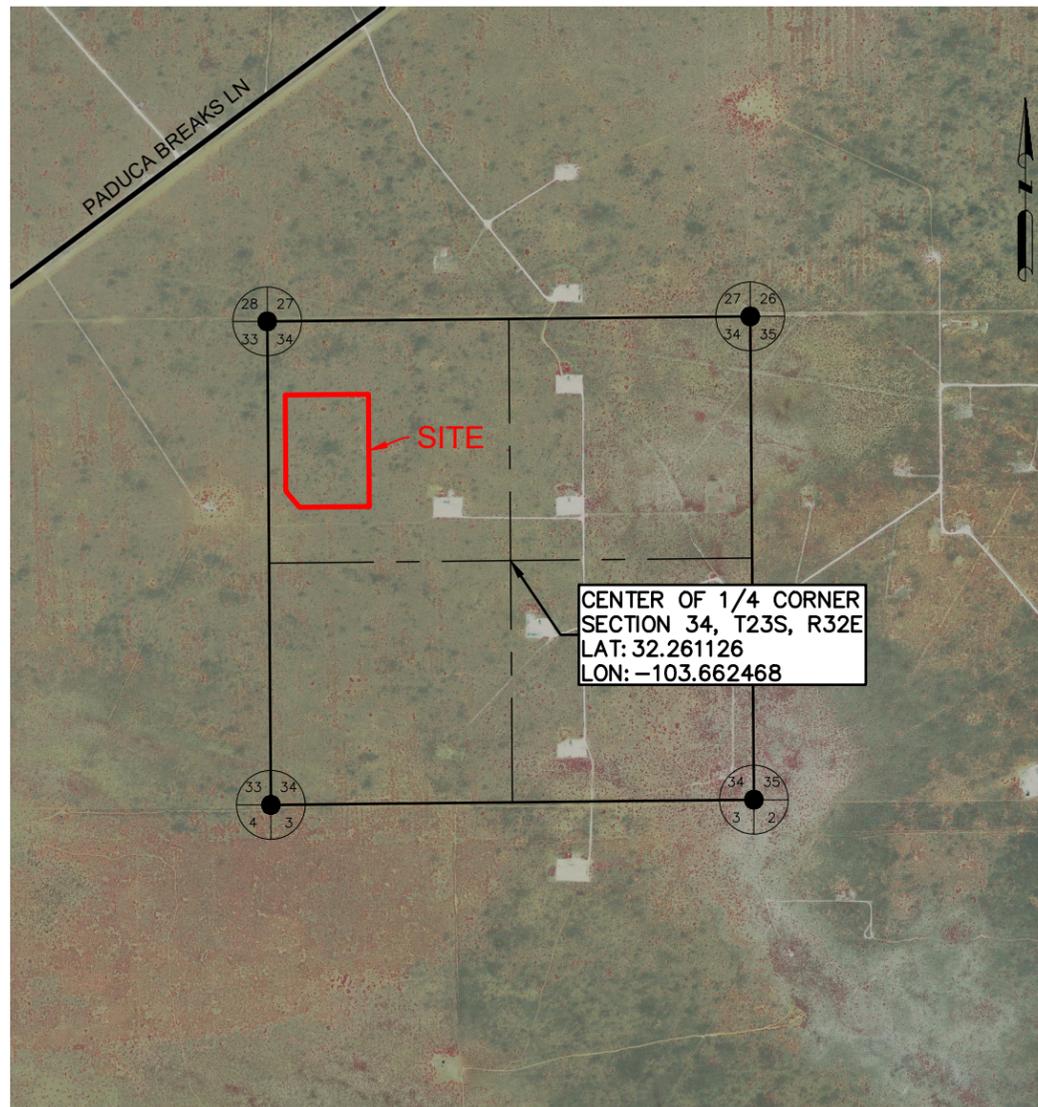
Recycling Containment Design Drawings

EOG RESOURCES, INC. SMOKIN 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 1	0
06	DETAILS 2	0
07	DETAILS 3	0

NOTES:

- 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.
- 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.
- 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.

DATA SOURCE:
AERIAL IMAGERY: NAIP 2020

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

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

PREPARED FOR:



SHEET NAME:
COVER SHEET
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO

REV.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	10/23/23	AS

DRAWING DATE: 10/23/23
DRAFTED BY: AS
SHEET NO. 01 OF 07



Know what's below.
Call before you dig.

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



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

PREPARED FOR:



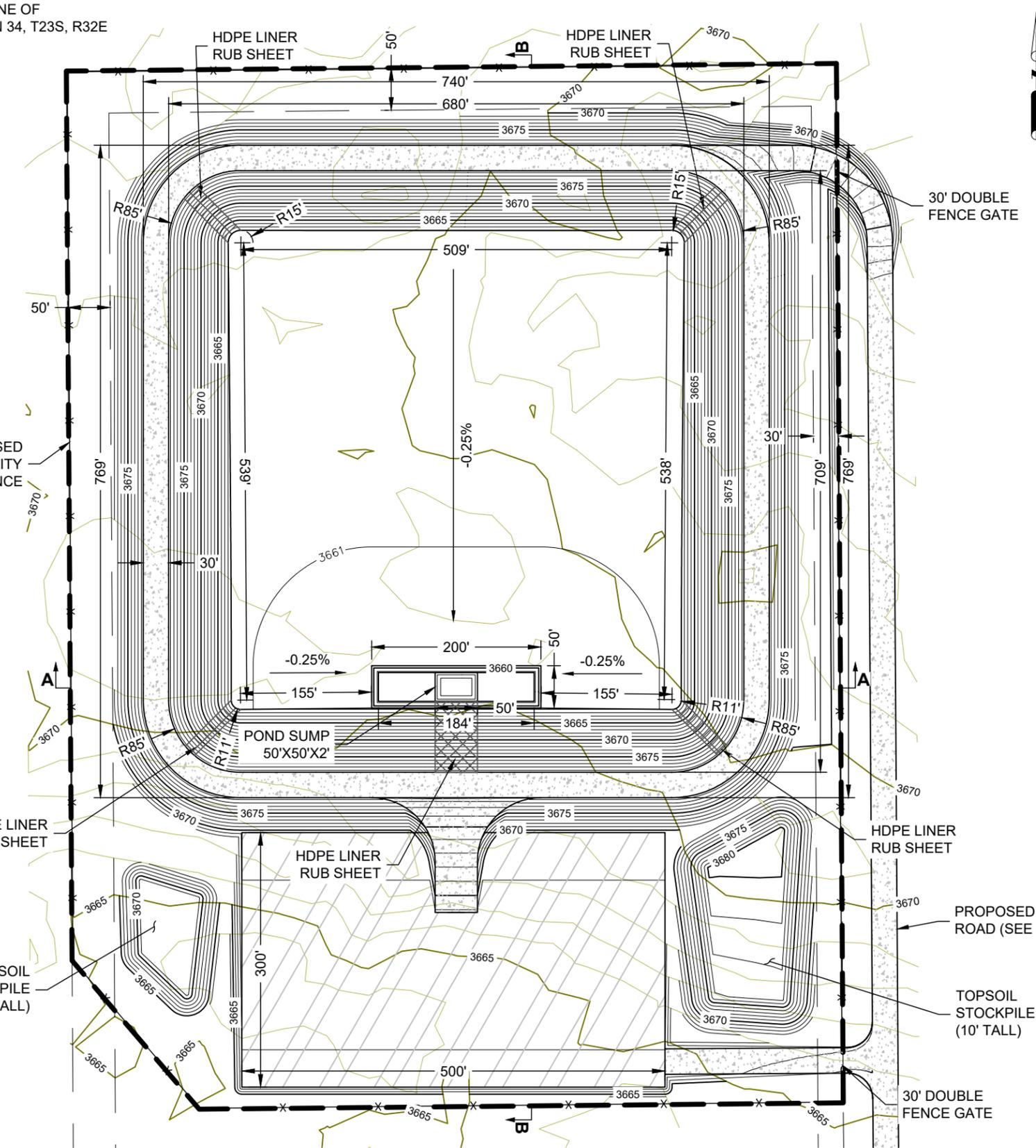
LEGEND:

- 5280 EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 5280 PROPOSED MAJOR CONTOUR
- 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, 3,676.55-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 6INCH (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.

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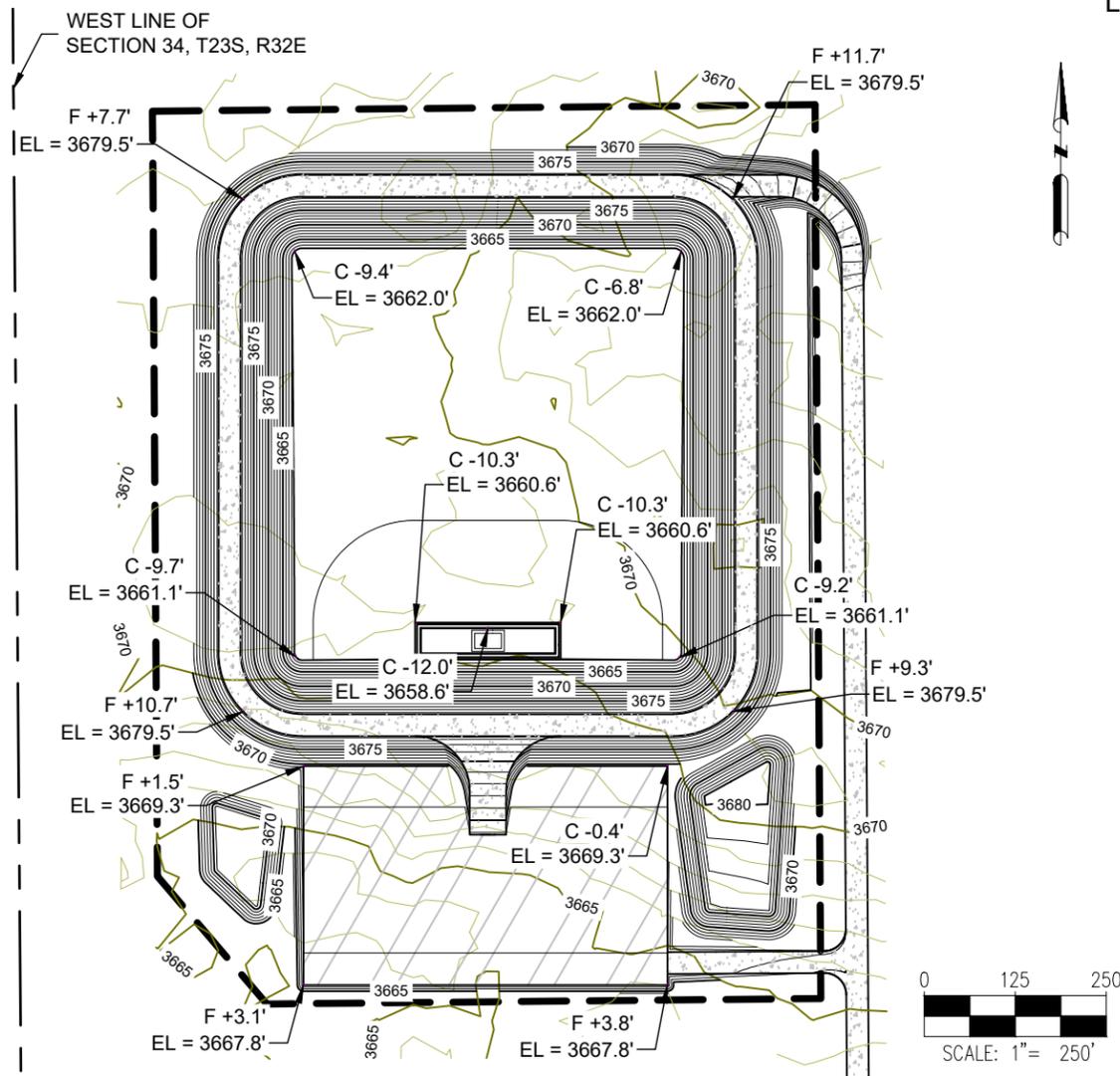


REV.	DESCRIPTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	10/23/23	AS

DRAWING DATE: 10/23/23
DRAFTED BY: AS
SHEET NO. 02 OF 07



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



SMOKIN REUSE PIT STAGE STORAGE					
ELEV	DEPTH (FT)	AREA (ACRES)	VOL (BBLs)	VOL (ACRE FT)	VOL(CY)
3,658.65	0.00	0.14	0.00	0.00	0.00
3,658.70	0.05	0.15	56.10	0.01	11.67
3,659.20	0.55	0.17	660.46	0.09	137.34
3,659.70	1.05	0.19	1,345.60	0.17	279.81
3,660.20	1.55	0.21	2,114.38	0.27	439.68
3,660.70	2.05	0.38	3,028.22	0.39	629.71
3,661.20	2.55	3.15	9,501.35	1.22	1,975.78
3,661.70	3.05	5.75	26,798.12	3.45	5,572.60
3,662.20	3.55	7.07	52,825.38	6.81	10,984.91
3,662.70	4.05	7.17	80,459.08	10.37	16,731.27
3,663.20	4.55	7.28	108,485.94	13.98	22,559.38
3,663.70	5.05	7.38	136,908.20	17.65	28,469.72
3,664.20	5.55	7.48	165,728.10	21.36	34,462.75
3,664.70	6.05	7.58	194,947.88	25.13	40,538.93
3,665.20	6.55	7.69	224,569.75	28.95	46,698.73
3,665.70	7.05	7.79	254,595.98	32.82	52,942.60
3,666.20	7.55	7.90	285,028.77	36.74	59,271.03
3,666.70	8.05	8.00	315,870.39	40.71	65,684.47
3,667.20	8.55	8.11	347,123.04	44.74	72,183.38
3,667.70	9.05	8.22	378,788.98	48.82	78,768.23
3,668.20	9.55	8.32	410,870.44	52.96	85,439.49
3,668.70	10.05	8.43	443,369.65	57.15	92,197.62
3,669.20	10.55	8.54	476,288.84	61.39	99,043.09
3,669.70	11.05	8.65	509,630.26	65.69	105,976.36
3,670.20	11.55	8.76	543,396.14	70.04	112,997.89
3,670.70	12.05	8.87	577,588.71	74.45	120,108.15
3,671.20	12.55	8.98	612,210.21	78.91	127,307.60
3,671.70	13.05	9.09	647,262.87	83.43	134,596.72
3,672.20	13.55	9.20	682,748.93	88.00	141,975.95
3,672.70	14.05	9.32	718,670.62	92.63	149,445.78
3,673.20	14.55	9.43	755,030.18	97.32	157,006.66
3,673.70	15.05	9.54	791,829.85	102.06	164,659.06
3,674.20	15.55	9.66	829,071.85	106.86	172,403.44
3,674.70	16.05	9.77	866,758.42	111.72	180,240.27
3,675.20	16.55	9.89	904,891.81	116.63	188,170.02
3,675.70	17.05	10.00	943,474.24	121.61	196,193.14
3,676.20	17.55	10.12	982,507.94	126.64	204,310.10
3,676.55	17.90	10.20	1,010,101.24	130.20	210,048.06
3,676.70	18.05	10.24	1,021,995.16	131.73	212,521.37
3,677.20	18.55	10.36	1,061,938.13	136.88	220,827.41
3,677.70	19.05	10.47	1,102,339.08	142.08	229,228.69
3,678.20	19.55	10.59	1,143,200.26	147.35	237,725.67
3,678.70	20.05	10.71	1,184,523.88	152.68	246,318.82
3,679.20	20.55	10.83	1,226,312.20	158.06	255,008.59
3,679.55	20.90	10.92	1,255,841.84	161.87	261,149.21

Description	Quantity	Unit
Liner Areas		
Out-Slope Area	131,747	SQ.FT
Pond Area	475,572	SQ.FT
Rub Sheet	9,542	SQ.FT
Piping		
6" HDPE Casing Pipe	90	LN.FT
4" HDPE Collection Pipe	550	LN.FT
12 HDPE Suction Line	90	LN.FT
Roads		
Site Access Road & Berm Drive (6" Gravel)	176,371	SQ.FT
Fences		
6' Chain Link Fence	4,103	LN.FT
Access Gate, 2-Truck, 2-Walk	4	EA
Mass Grading		
Clearing and Grubbing	25.29	ACRE

EARTHWORKS QUANTITIES		
TOTAL CUT FOR SITE	95,576	CY
TOTAL FILL FOR SITE	94,734	CY
TOPSOIL (6" DEPTH)	10,652	CY
TOTAL EXPORT	0	CY
TOTAL GRADING AREA	19.81	ACRES

POND SUMMARY		
MAX VOLUME	1,255,841.84	BBLs
MAX AREA	10.92	ACRES
MAX ELEVATION OF POND	3679.55	FT
3' FREEBOARD ELEVATION	3676.55	FT
VOLUME AT FREEBOARD	1,010,101.24	BBLs

*VOLUMES ASSUME A CUT FACTOR OF 0.9.



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

PREPARED FOR:



SHEET NAME:
POND CALCULATIONS
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO

BY	DATE	DESCRIPTION
AS	10/23/23	ISSUED FOR CONSTRUCTION

REV.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	10/23/23

DRAWING DATE:
10/23/23
DRAFTED BY:
AS
SHEET NO.
03 OF 07



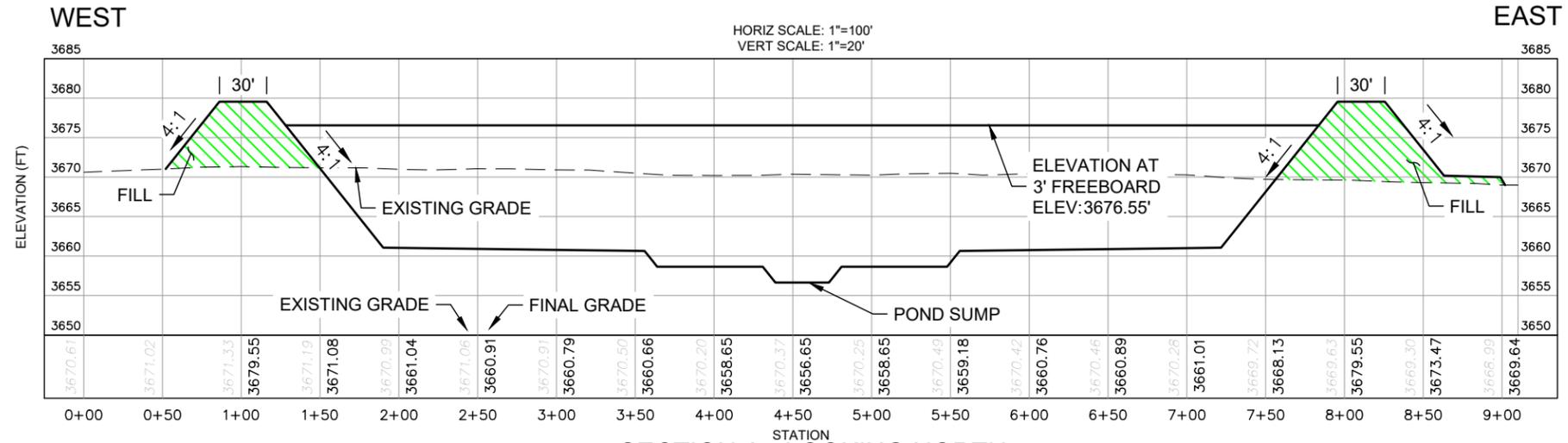
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10.23.2023

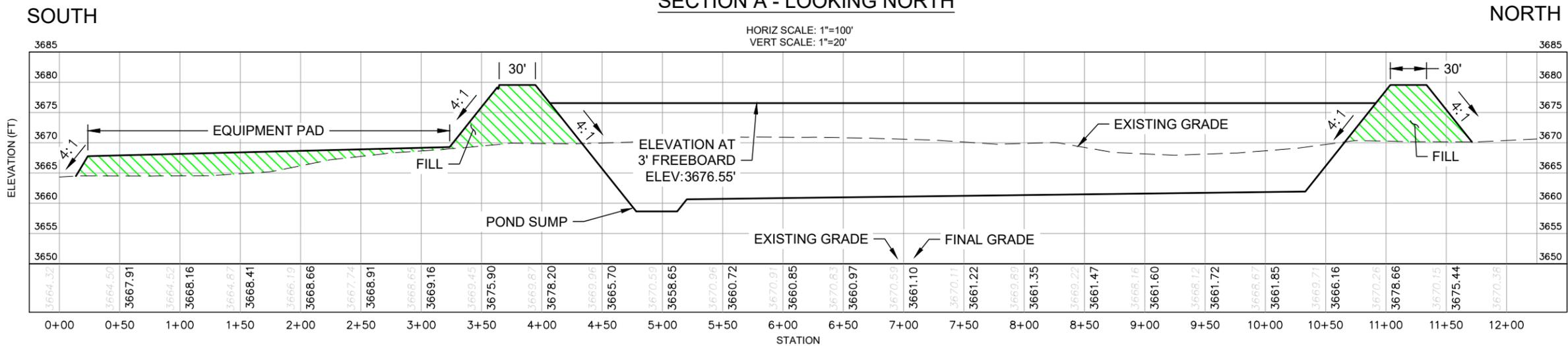
EOG RESOURCES, INC.
SMOKIN REUSE PIT
LEA COUNTY, NEW MEXICO
CONSTRUCTION PLAN

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

PREPARED FOR:



SECTION A - LOOKING NORTH



SECTION B - LOOKING WEST

SHEET NAME:
CROSS SECTIONS
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO

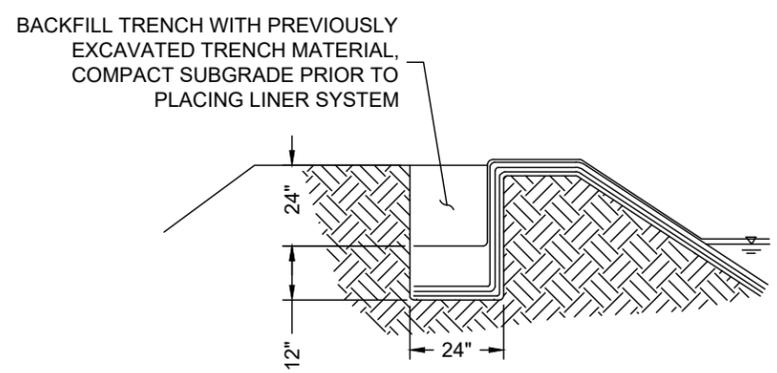
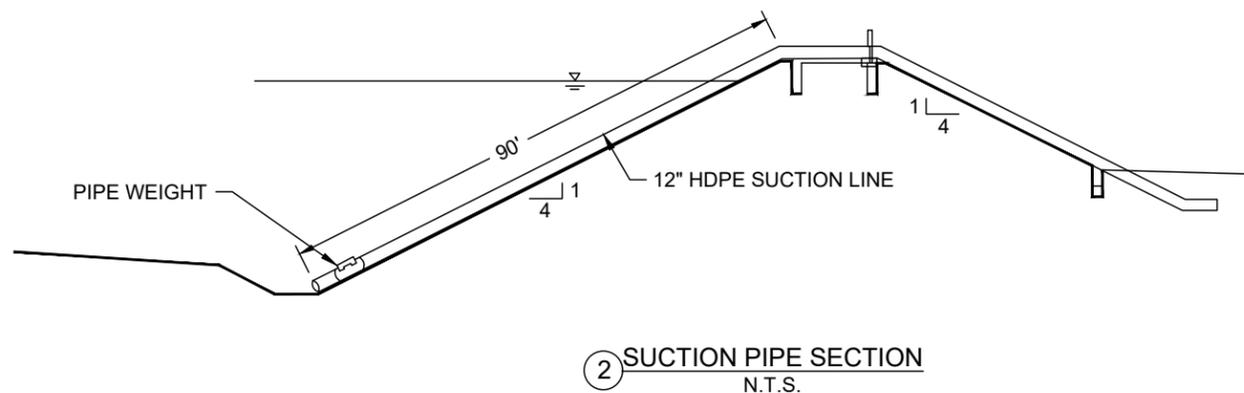
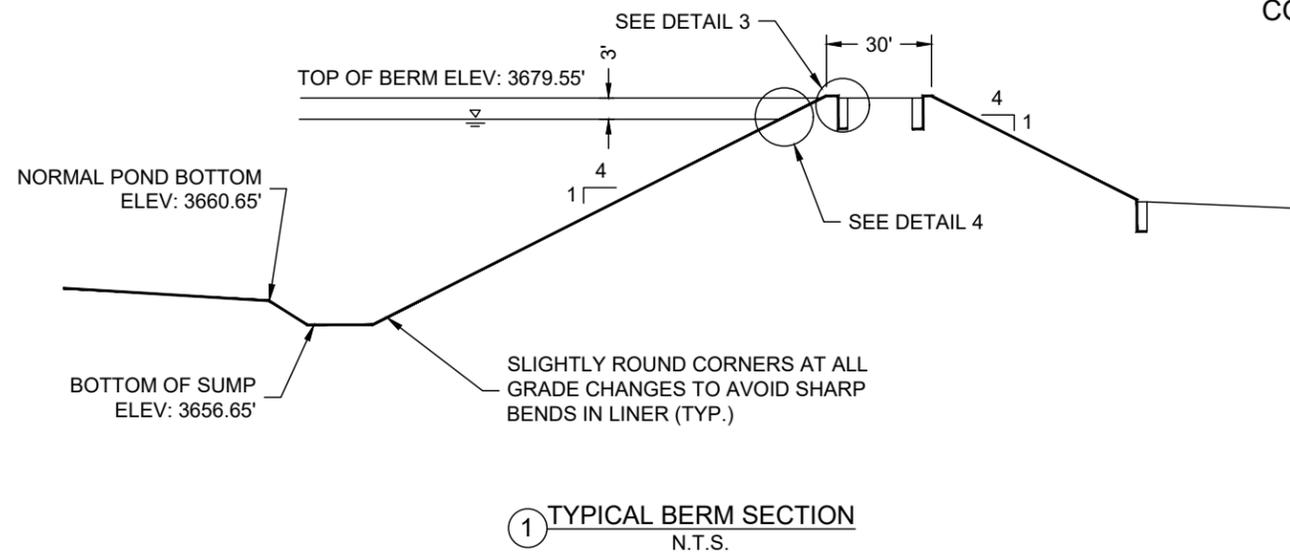
REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	AS	10/23/23

DRAWING DATE:
10/23/23
DRAFTED BY:
AS
SHEET NO.
04 OF 07

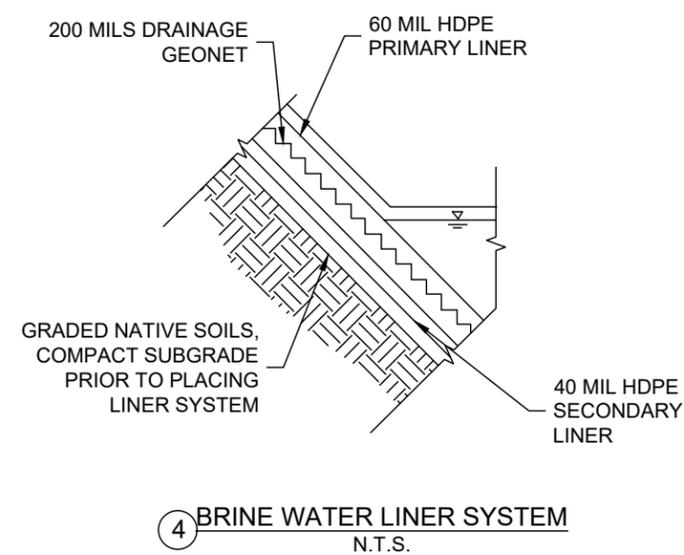


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EOG RESOURCES, INC. SMOKIN REUSE PIT LEA COUNTY, NEW MEXICO CONSTRUCTION PLAN



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



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

PREPARED FOR:
EOG resources

SHEET NAME:
DETAILS 1
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO

REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	AS	10/23/23

DRAWING DATE: 10/23/23
DRAFTED BY: AS
SHEET NO. 05 OF 07



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

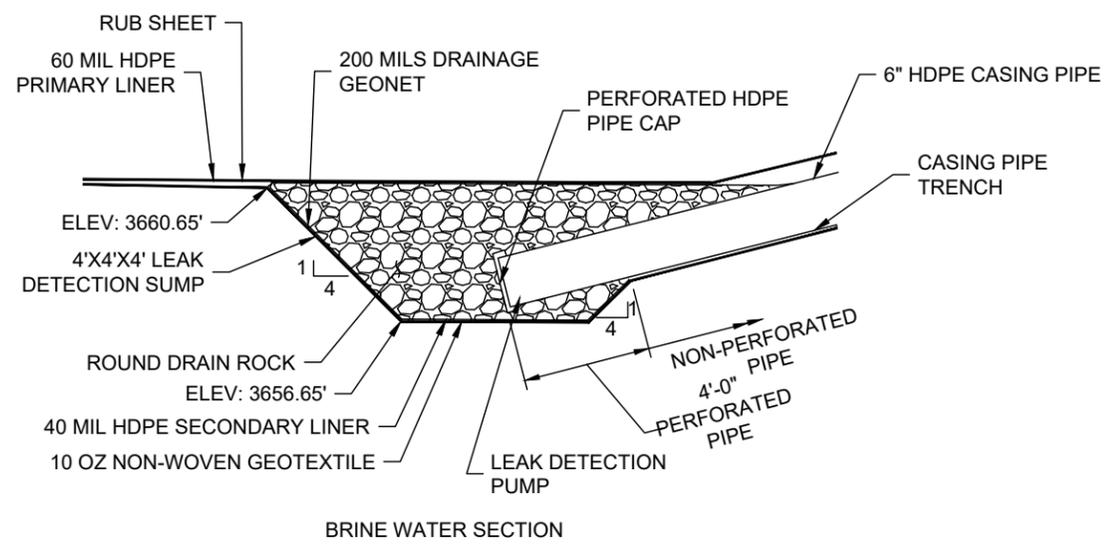


ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:

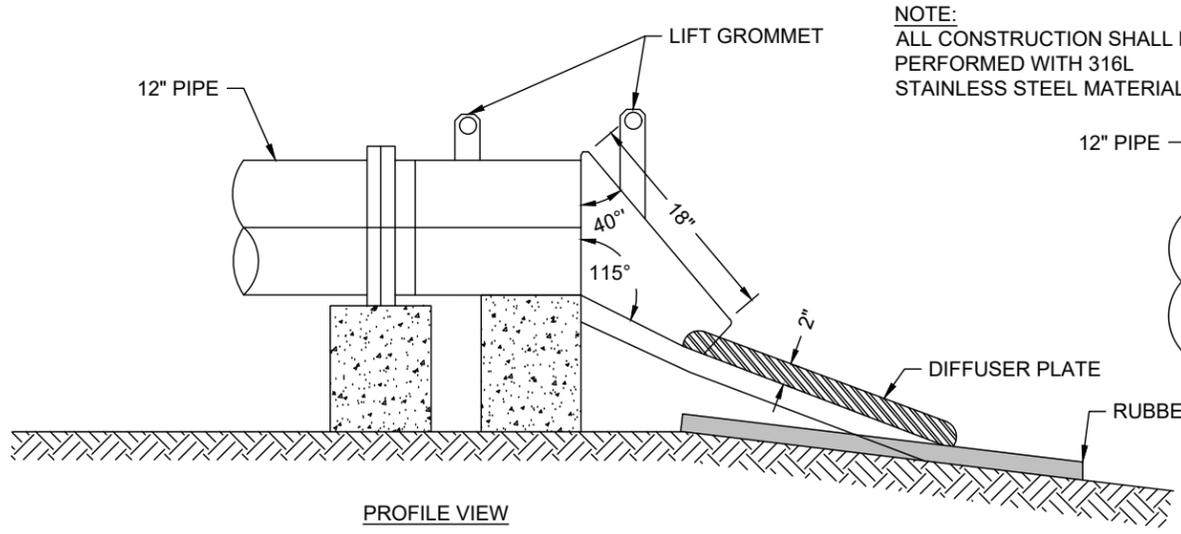


SHEET NAME:
DETAILS 2
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO



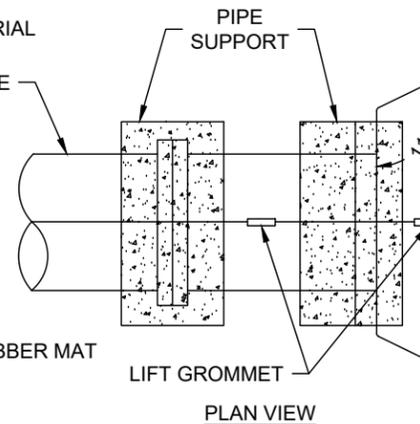
BRINE WATER SECTION

5 LEAK DETECTION SUMP
N.T.S.

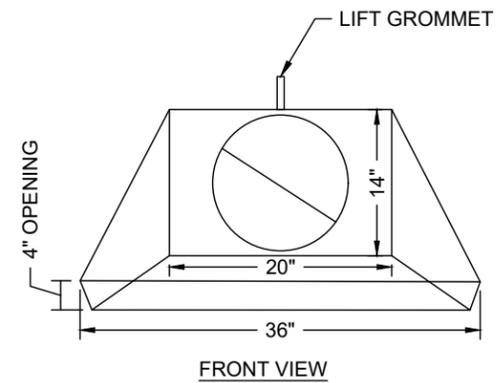
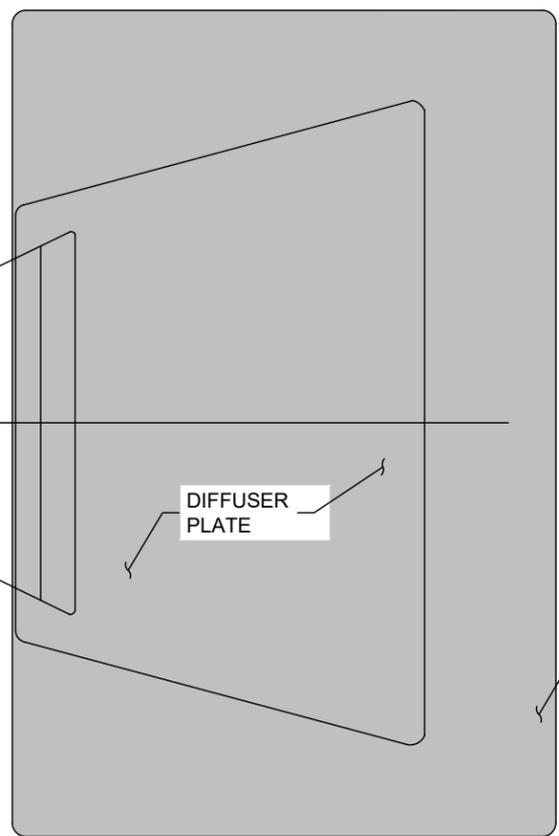


PROFILE VIEW

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



PLAN VIEW



FRONT VIEW

6 POND FILL APPARATUS
N.T.S.

REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	AS	10/23/23

DRAWING DATE:
10/23/23
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AS
SHEET NO.
06 OF 07



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

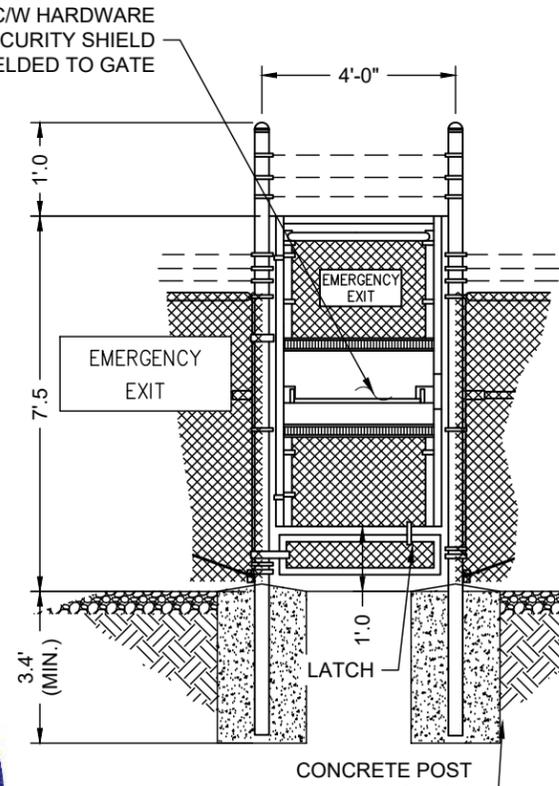
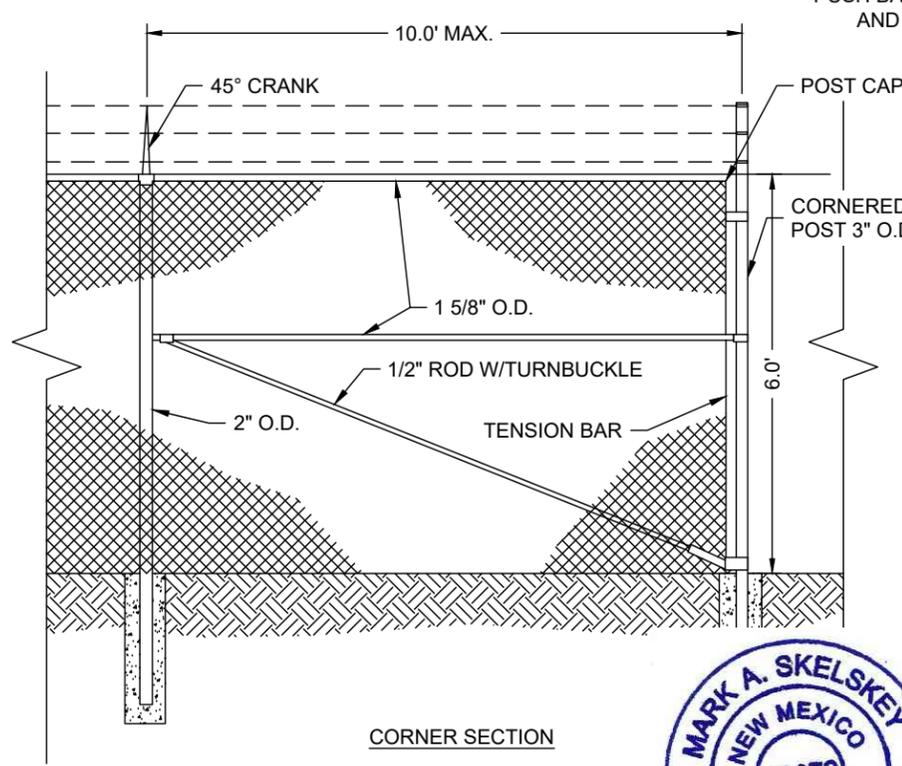
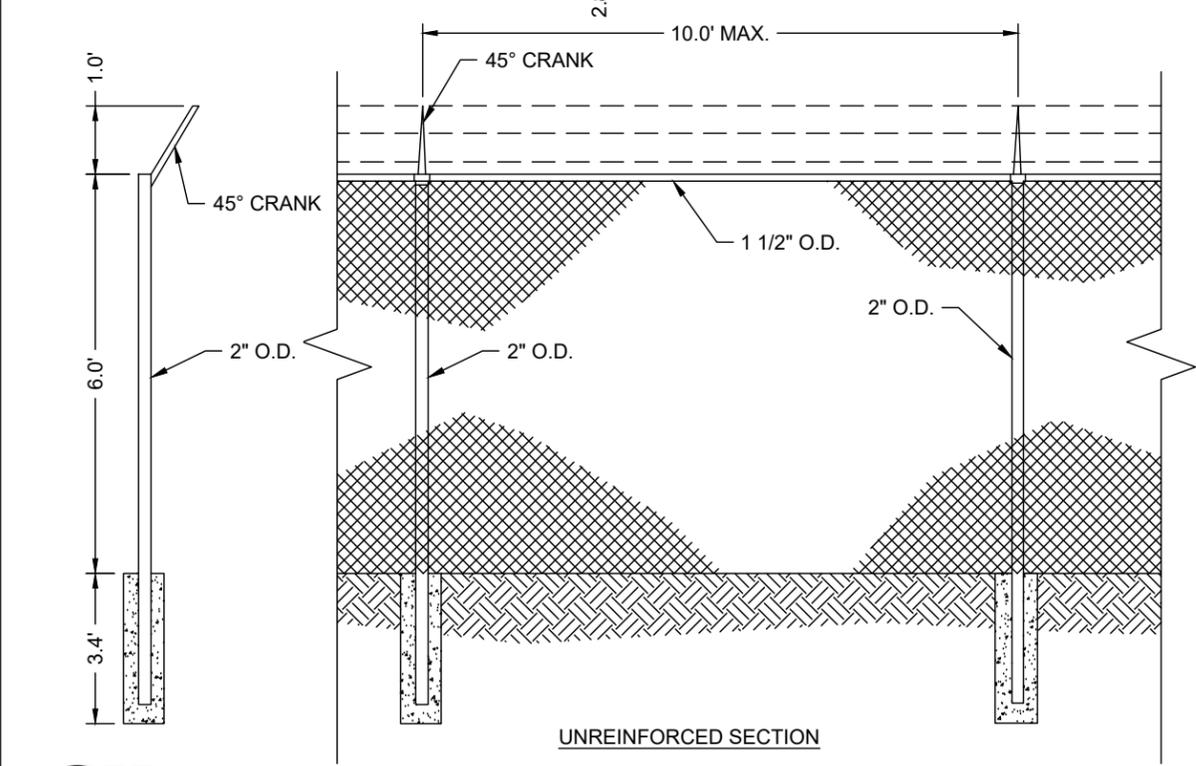
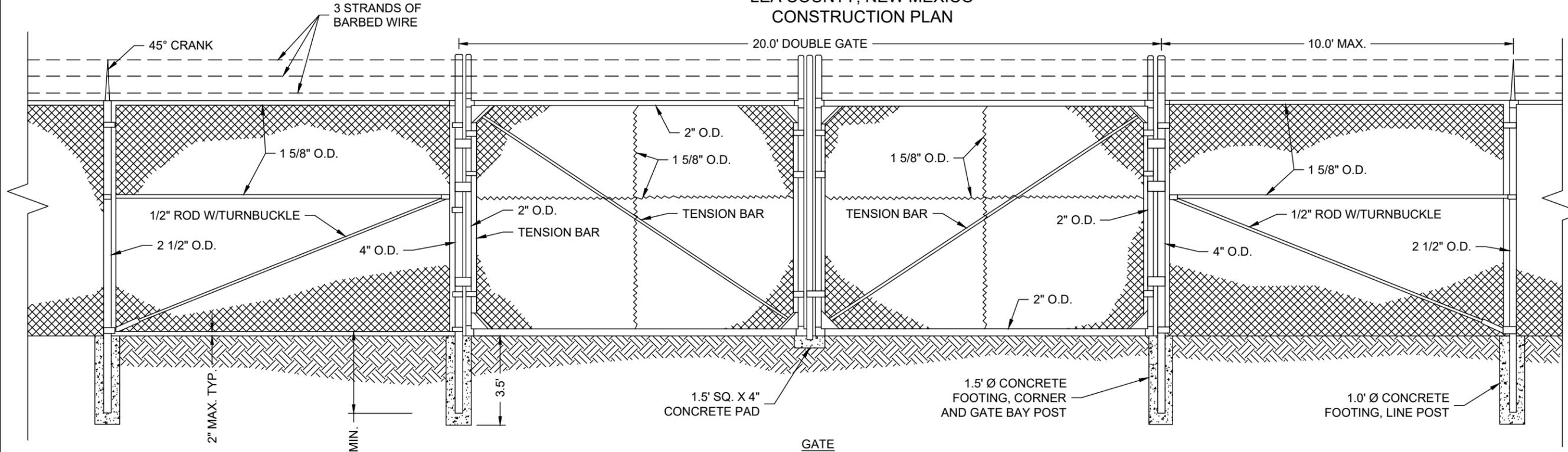


ASCENT GEOMATICS SOLUTIONS
8620 WOLFF COURT
WESTMINSTER, CO 80031
(303) 928-7128

PREPARED FOR:



SHEET NAME: DETAILS 3
SMOKIN 1-M BBL REUSE PIT
W 1/2 NW 1/4 SECTION 34,
T23S, R32E, NEW MEXICO P.M.
LEA COUNTY, NEW MEXICO



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



REV.	REVISION DESCRIPTION	BY	DATE
0	ISSUED FOR CONSTRUCTION	AS	10/23/23

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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

Bonding

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.

BOND NO. 6196102

BOND

THIS BOND REPLACES AND SUPERSEDES BOND NO. JP0923, EFFECTIVE 08/13/2003

Form 3000-4
(June 1988)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Bond Number

6196102

OIL AND GAS OR GEOTHERMAL LEASE BOND

Act of February 25, 1920 (30 U.S.C. 181 et seq.)
Act of August 7, 1947 (30 U.S.C. 351-359)
Department of the Interior Appropriations Act, FY 1981 (42 U.S.C. 6508)
Act of December 24, 1970 (30 U.S.C. 1001-1025)
Other Oil and Gas and Geothermal Leasing Authorities as Applicable

Lease Serial Number (For Individual Bond Only)

CHECK ONE: OIL AND GAS GEOTHERMAL RESOURCES

CHECK ONE:

SURETY BOND

KNOW ALL BY THESE PRESENTS, THAT EOG RESOURCES, INC. AND ENERGY SEARCH, INCORPORATED (A WHOLLY OWNED SUBSIDIARY OF EOG RESOURCES, INC.) (name)

of 333 CLAY STREEY, SUITE 4200, HOUSTON, TEXAS 77002

(address)

as principal, and SAFECO INSURANCE COMPANY OF AMERICA

(name)

of P.O. BOX 34526, SEATTLE, WA 98124-1526

(address)

, as surety,

are held and firmly bound unto the United States of America in the sum of ONE HUNDRED FIFTY THOUSAND & 00/100***

dollars (\$ 150,000.00***),

lawful money of the United States, which may be increased or decreased by a rider hereto executed in the same manner as this bond.

PERSONAL BOND

KNOW ALL BY THESE PRESENTS, That _____ (name)

of _____, as principal, is held and firmly bound unto the United States of America in the sum of _____ (address)

_____ dollars (\$ _____), lawful money of the United States which sum may be

increased or decreased by a rider hereto executed in the same manner as this bond.

The principal, in order to more fully secure the United States in the payment of the aforesaid sum, hereby pledges as security therefore United States negotiable securities of a par value equal to the amount specified. The principal, pursuant to the authority conferred by Section 1 of the Act of September 13, 1982 (31 U.S.C. 9303), does hereby constitute and appoint the Secretary of the Interior to act as his attorney. The interest accruing on the United States securities deposited, in the absence of any default in the performance of any of the conditions, or stipulations set forth in this bond and the instrument(s) granting rights and interests in Federal lands, must be paid to the principal. The principal hereby for himself/herself, any heirs, executors, administrators, successors, and assigns, joint and severally, ratifies and confirms whatever the Secretary shall do by virtue of these presents.

The principal/surety shall apply this bond or the Secretary shall transfer this deposit as security for the faithful performance of any and all of the conditions and stipulations as set forth in this bond and the instruments granting rights and interests in Federal lands. In the case of any default in the performance of the conditions and stipulations of such undertaking, it is agreed that: (1) for a Surety Bond, the surety/principal shall apply the bond or any portion thereof; (2) for a Personal Bond, the Secretary shall have full power to assign, appropriate, apply or transfer the deposit or any portion thereof, to the satisfaction of any damages, assessments, late payment charges, penalties, or deficiencies arising by reason of such default.

This bond is required for the use and benefit of (1) the United States; (2) the owner of any of the land subject to the coverage of this bond, who has a statutory right to compensation in connection with a reservation of the oil and gas and geothermal deposits to the United States; (3) any lessee, permittee, or contractor, under a lease, permit, or resource sale contract issued, or to be issued, by the United States covering the same land subject to this bond, covering the use of the surface or the prospecting for, or the development of other mineral deposits in any portion of such land, to be paid to the United States. For such payment, well and truly to be made, we bind ourselves and each of our heirs, executors, administrators, successors, and assigns, jointly and severally.

This bond shall cover all surface disturbing activities related to drilling operations on a Federal leasehold(s) in accordance with authorization(s) granted under the Acts cited above for:

CHECK ONE:

NATIONWIDE BOND - Operations conducted by or on behalf of the principal(s) or on the leasehold(s) of the principal(s) in the United States including the National Petroleum Reserve in Alaska (NPR-A) when a rider sufficient to bring the amount in conformance with 43 CFR 3134 is provided, and provided a rider is obtained, also coverage of multiple exploration operations.

STATEWIDE BOND - Operations conducted by or on behalf of the principal(s) or on the leasehold(s) of the principal(s), except the NPR-A, and, provided a rider is obtained, also coverage of multiple exploration operations within the single state of _____

INDIVIDUAL BOND - Operations conducted by or on behalf of the principal or on the leasehold of the principal on the single lease identified by the serial number above.

NATIONAL PETROLEUM RESERVE IN ALASKA (NPR-A) BOND - This bond shall cover:

NPR-A LEASE BOND - The terms and conditions of a single lease.

NPR-A WIDE BOND - The terms and conditions of all leases, and provided a rider is obtained, coverage of multiple exploration operations.

(Continued on reverse)

**IMPORTANT NOTICE TO SURETY BOND CUSTOMERS REGARDING
THE TERRORISM RISK INSURANCE ACT OF 2002**

As a surety bond customer of one of the SAFECO insurance companies (SAFECO Insurance Company of America, General Insurance Company of America, First National Insurance Company, American States Insurance Company of American Economy Insurance Company), it is our duty to notify you that the Terrorism Risk Insurance Act of 2002 extends to "surety insurance". This means that under certain circumstances we may be eligible for reimbursement of certain surety bond losses by the United States government under a formula established by this Act.

Under this formula, the United States government pays 90% of losses caused by certified acts of terrorism that exceed a statutorily established deductible to be paid by the insurance company providing the bond. The Act also establishes a \$100 billion cap for the total of all losses to be paid by all insurers for certified acts of terrorism. Losses on some or all of your bonds may be subject to this cap.

This notice does not modify any of the existing terms and conditions of this bond, the underlying agreement guaranteed by this bond, any statutes governing the terms of this bond or any generally applicable rules of law.

At this time there is no premium charge resulting from this Act.



POWER OF ATTORNEY

SAFECO Insurance Company
PO Box 34526
Seattle, WA 98124-1526

No. 5713

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

*****DONALD R. GIBSON; SANDRA PARKER; WILLIAM L. POWER; MELISSA HADDICK; TANNIS MATTSO; JACQUELINE KIRK; CURTIS WILLEFORD; JOE MARTINEZ; TERRI MORRISON; MARY ANN GARCIA; Houston, Texas*****

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 7th day of November 2001

R.A. Pierson

R.A. PIERSON, SECRETARY

Mike McGavick

MIKE MCGAVICK, PRESIDENT

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

- (i) The provisions of Article V, Section 13 of the By-Laws, and
- (ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
- (iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, R.A. Pierson, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 27th day of August 2003



R.A. Pierson

R.A. PIERSON, SECRETARY

Surety Bond Number: 6196102
BLM Bond Number: NM2308

BOND INCREASE RIDER

Attaching to and forming part of nationwide surety bond number 6196102, BLM bond number NM2308, executed 08/13/2003, on behalf of EOG Resources Inc. and Energy Search Inc. as Principals and Safeco Insurance Company of America as Surety, in favor of the U.S. Department of the Interior, Bureau of Land Management as obligee, in the amount of One Hundred Fifty Thousand Dollars and No/100 (\$150,000).

It is understood and agreed that effective April 4, 2014, the amount of the bond is increased by Three Hundred Five Thousand dollars (\$305,000). The monies secured by this rider in the amount of \$305,000 shall be reserved for use by the BLM Wyoming Buffalo Field Office, to reduce liability to the Government, per Washington Office Instruction Memorandum No.2013-151.

All other terms, limitations, and conditions of said bond except as herein expressly modified shall remain unchanged.

Total penal sum is now amended to read Four Hundred Fifty Five Thousand dollars (\$455,000).

Liabilities covered by surety bond 6196102, BLM bond number NM2308, include, but are not limited to:

- the obligation to properly plug and abandon all existing wells;
- reclamation of the lease area(s);
- any unpaid rentals or royalties accruing;
- restoration of any lands or surface waters adversely affected by lease operations after the abandonment or cessation of oil and gas operations on the lease(s);

Executed this 7th day of August, 2014.

Witness:

*EOG Resources Inc.
Energy Search Inc.
P.O. Box 4362
Houston, TX 77210-4362*

Name/Address of Witness for Principal

Name/Address of Principal

Signature of Witness for Principal

Name/Signature/Title of Person Signing for Principal

Witness:

*Safeco Insurance Company of America
62 Maple Ave.
Keene, NH 03431*

Name/Address of Witness for Surety

Name/Address of Surety

Mary Pena

Signature of Witness for Surety
Mary Pena

Gina A. Rodriguez

Name/Signature/Title of Person Signing for Surety
Gina A. Rodriguez, Attorney in Fact

Please Note: A power of attorney document for the surety's representative must accompany this rider.

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKING.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6552578

First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Sandra Parker, Melissa Haddick, Terri L. Morrison, Tannis Mattson, Gina A. Rodriguez, Mary Pena

all of the city of Houston, state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 28th day of April, 2014.



First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

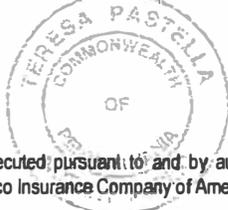
By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 28th day of April, 2014, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 7th day of August, 2014.



By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

SURETY RIDER

Liberty Mutual Surety
1001 4th Avenue, Suite 1700
Seattle, WA 98154

To be attached to and form a part of

Bond No. 6196102

Type of

Bond: Oil and Gas or Geothermal Lease Bond

dated

effective August 13, 2003
(MONTH-DAY-YEAR)

executed by EOG Resources, Inc. and Energy Search, Incorporated (A Wholly Owned Subsidiary of EOG Resources, Inc.) , as Principal,
(PRINCIPAL)

and by Safeco Insurance Company of America , as Surety,

in favor of United States of America, Department of the Interior, Bureau of Land Management
(OBLIGEE)

in consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing

CHANGE PRINCIPAL:

From: EOG Resources, Inc. and Energy Search, Incorporated (A Wholly Owned Subsidiary of EOG Resources, Inc.)

To: EOG Resources, Inc.

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider

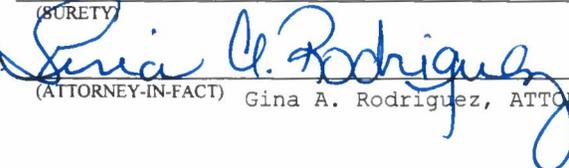
is effective 09/20/2013
(MONTH-DAY-YEAR)

Signed and Sealed September 30, 2013
(MONTH-DAY-YEAR)

EOG Resources, Inc.
(PRINCIPAL)

By: _____
(PRINCIPAL)

Safeco Insurance Company of America
(SURETY)

By:  _____
(ATTORNEY-IN-FACT) Gina A. Rodriguez, ATTORNEY-IN-FACT

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

5529847

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. _____

First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, **GINA A. RODRIGUEZ; JOE MARTINEZ; MARY PENA; MELISSA HADDICK; SANDRA PARKER; TANNIS MATTSON; TERRI L. MORRISON**

all of the city of HOUSTON, state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 22nd day of August, 2012.



First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

By: [Signature]
Gregory W Davenport, Assistant Secretary

STATE OF WASHINGTON ss
COUNTY OF KING

On this 22nd day of August, 2012, before me personally appeared Gregory W. Davenport, who acknowledged himself to be the Assistant Secretary of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Seattle, Washington, on the day and year first above written.



By: [Signature]
KD Riley, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Gregory W. Davenport, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, David M. Carey, the undersigned, Assistant Secretary, of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 30th day of September, 2013.



By: [Signature]
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-810-832-8740 between 9:00 am and 4:30 pm PST on any business day



SURETY RIDER

Liberty Mutual Surety
1001 4th Avenue, Suite 1700
Seattle, WA 98154

To be attached to and form a part of

Bond No. 6196102

Type of

Bond: Oil and Gas or Geothermal Lease Bond

dated

effective August 13, 2003
(MONTH-DAY-YEAR)

executed by EOG Resources, Inc. and Energy Search, Incorporated (A Wholly Owned , as Principal.
(PRINCIPAL)

and by Safeco Insurance Company of America , as Surety.

in favor of United States of America, Department of the Interior, Bureau of Land Management
(OBLIGEE)

in consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing
the Bond to Include Seismic Related Activities Off Lease on Federal Lands

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider

is effective February 17, 2010
(MONTH-DAY-YEAR)

Signed and Sealed February 22, 2010
(MONTH-DAY-YEAR)

EOG Resources, Inc. and Energy Search, Incorporated (A
Wholly Owned Subsidiary of EOG Resources, Inc.)
(PRINCIPAL)

By: _____
(PRINCIPAL)

Safeco Insurance Company of America
(SURETY)

By: Amy Fowler
(ATTORNEY-IN-FACT) Amy Fowler





POWER OF ATTORNEY

Safeco Insurance Company of America
General Insurance Company of America
1001 4th Avenue
Suite 1700
Seattle, WA 98154

No. 5713

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

*****AMY FOWLER; DON ALD R. GIBSON; MELISSA HADDICK; JACQUELINE KIRK; JOE MARTINEZ; TANNIS MATTSON; TERRI MORRISON; SANDRA PARKER; MARY PENA; ELIZABETH RHODES; GINA A. RODRIGUEZ; Houston, Texas*****

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 21st day of March, 2009

Dexter R. Legg (handwritten signature)

TAMIKOLAJEWSKI (handwritten signature)

Dexter R. Legg, Secretary

Timothy A. Mikolajewski, Vice President

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

- (i) The provisions of Article V, Section 13 of the By-Laws, and
(ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
(iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Dexter R. Legg, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 22nd day of February, 2010



Dexter R. Legg (handwritten signature)

Dexter R. Legg, Secretary

ASSUMPTION OF LIABILITY RIDER
ATTACHED TO AND MADE A PART OF BOND NO. 6196102

In consideration for any additional premium or other consideration, and the consent by the United States to terminate the period of liability on the below identified bond, the undersigned principal and surety hereby agree that bond number 6196102 shall assume any and all liabilities that may be outstanding on the below identified surety bond.

Surety bond number JP0923,
BLM Bond Number _____,
Carrying the same undersigned principal and
St. Paul Fire and Marine Insurance Company as surety,

Liabilities assumed include, but are not limited to, the obligations to properly plug and abandon all wells to which surety bond number JP0923, BLM Bond Number _____, applies and to pay any rentals or royalties heretofore accruing. Provided, however, that this rider shall not act to increase the potential or cumulative liability of the undersigned surety above the face amount of the bond to which this rider attaches.

Executed this 1st day of October, 2003.

Witnesses:

Name of Witness
333 Clay Street, Suite 4200
Houston, TX 77002
Address of Witness
333 Clay Street, Suite 4200
Houston, TX 77002
Principal's Address
Maria D. Garcia
Name of Witness, Maria D. Garcia
1000 Louisiana, Suite 4000
Houston, TX 77002
Address of Witness
P.O. Box 34526
Seattle, WA 98124-1526
Surety's Address

**EOG Resources, Inc. and Energy Search,
Incorporated (a wholly owned Subsidiary
of EOG Resources, Inc.)**

Name of Principal

BY: _____
Name and title of person executing for Principal

Safeco Insurance Company of America
Name of Surety
Tannis Mattson
BY: _____
Name and title of person executing for Surety
Tannis Mattson, Attorney-in-Fact

Please Note: A power of attorney document for the surety's representative must accompany this rider

**IMPORTANT NOTICE TO SURETY BOND CUSTOMERS REGARDING
THE TERRORISM RISK INSURANCE ACT OF 2002**

As a surety bond customer of one of the SAFECO insurance companies (SAFECO Insurance Company of America, General Insurance Company of America, First National Insurance Company, American States Insurance Company of American Economy Insurance Company), it is our duty to notify you that the Terrorism Risk Insurance Act of 2002 extends to "surety insurance". This means that under certain circumstances we may be eligible for reimbursement of certain surety bond losses by the United States government under a formula established by this Act.

Under this formula, the United States government pays 90% of losses caused by certified acts of terrorism that exceed a statutorily established deductible to be paid by the insurance company providing the bond. The Act also establishes a \$100 billion cap for the total of all losses to be paid by all insurers for certified acts of terrorism. Losses on some or all of your bonds may be subject to this cap.

This notice does not modify any of the existing terms and conditions of this bond, the underlying agreement guaranteed by this bond, any statutes governing the terms of this bond or any generally applicable rules of law.

At this time there is no premium charge resulting from this Act.



POWER OF ATTORNEY

SAFECO Insurance Company
PO Box 34526
Seattle, WA 98124-1526

No. 5713

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

*****DONALD R. GIBSON; SANDRA PARKER; WILLIAM L. POWER; MELISSA HADDICK; TANNIS MATTSO; JACQUELINE KIRK; CURTIS WILLEFORD; JOE MARTINEZ; TERRI MORRISON; MARY ANN GARCIA; Houston, Texas*****

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 13th day of November, 2003

R.A. Pierson

R.A. PIERSON, SECRETARY

Mike McGavick

MIKE MCGAVICK, PRESIDENT

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

Article V, Section 13. - FIDELITY AND SURETY BONDS ... the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business... On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

- (i) The provisions of Article V, Section 13 of the By-Laws, and
- (ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
- (iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, R.A. Pierson, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 13th day of October, 2003



R.A. Pierson

R.A. PIERSON, SECRETARY

Surety Bond Number: 6196102
BLM Bond Number: NM2308

BOND INCREASE RIDER

Attaching to and forming part of nationwide surety bond number 6196102, BLM bond number NM2308, executed 08/13/2003, on behalf of EOG Resources Inc. and Energy Search Inc. as Principals and Safeco Insurance Company of America as Surety, in favor of the U.S. Department of the Interior, Bureau of Land Management as obligee, in the amount of One Hundred Fifty Thousand Dollars and No/100 (\$150,000).

It is understood and agreed that effective April 4, 2014, the amount of the bond is increased by Three Hundred Five Thousand dollars (\$305,000). The monies secured by this rider in the amount of \$305,000 shall be reserved for use by the BLM Wyoming Buffalo Field Office, to reduce liability to the Government, per Washington Office Instruction Memorandum No.2013-151.

All other terms, limitations, and conditions of said bond except as herein expressly modified shall remain unchanged.

Total penal sum is now amended to read Four Hundred Fifty Five Thousand dollars (\$455,000).

Liabilities covered by surety bond 6196102, BLM bond number NM2308, include, but are not limited to:

- the obligation to properly plug and abandon all existing wells;
- reclamation of the lease area(s);
- any unpaid rentals or royalties accruing;
- restoration of any lands or surface waters adversely affected by lease operations after the abandonment or cessation of oil and gas operations on the lease(s);

Executed this 7th day of August, 2014.

Witness:

*EOG Resources Inc.
Energy Search Inc.
P.O. Box 4362
Houston, TX 77210-4362*

Name/Address of Witness for Principal

Name/Address of Principal

Signature of Witness for Principal

Name/Signature/Title of Person Signing for Principal

Witness:

*Safeco Insurance Company of America
62 Maple Ave.
Keene, NH 03431*

Name/Address of Witness for Surety

Name/Address of Surety

Mary Pena

Signature of Witness for Surety
Mary Pena

Gina A. Rodriguez

Name/Signature/Title of Person Signing for Surety
Gina A. Rodriguez, Attorney in Fact

Please Note: A power of attorney document for the surety's representative must accompany this rider.

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKING.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 6552578

First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Sandra Parker, Melissa Haddick, Terri L. Morrison, Tannis Mattson, Gina A. Rodriguez, Mary Pena

all of the city of Houston, state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 28th day of April, 2014.



First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

By: [Signature]
David M. Carey, Assistant Secretary

STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 28th day of April, 2014, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 7th day of August, 2014.



By: [Signature]
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.



Surety Bond Rider

To: Bureau of Land Management
PO Box 1828 Cheyenne, WY 82003

EOG Resources, Inc.
1111 Bagby Sky Lobby 2 Houston, TX 77002

RE: Assumption of Liability & Increase

Assumption of Liability

- Effective 6/13/19, the statewide bonds B002953 will be assumed under the nationwide bond 6196102. The replacement bond assumes all obligations of the original bonds from the date of issuance of the surety bond. Termination of liability under the surety bonds B002953 is a condition precedent to the assumption of liability.

Increase Bond Amount

- Pursuant to the assumption of liability in the above paragraph, bond 6196102 will increase from \$962,625 to \$4,757,625.

All notices, including claims should be sent to:

Liberty Mutual Surety
1001 4th Avenue Suite #1700
Seattle, WA 98154

The Surety's obligations remain in full force and effective pursuant to the terms and conditions of the surety bond.

Signed, sealed and dated this 13 day of June, 2019.

(SURETY)

By: 
 Assistant Secretary
 Liberty Mutual Insurance Company and
 Safeco Insurance Company of America

SURETY RIDER

To be attached to and form a part of

Bond No. 6196102

dated effective 08/13/2003 (MONTH-DAY-YEAR)

executed by EOG Resources, Inc. , as Principal, (PRINCIPAL)

and by SAFECO Insurance Company of America , as Surety,

in favor of United States Department of the Interior (OBLIGEE)

in consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing

The Bond Amount to:

Four Million Seven Hundred Fifty Seven Thousand Six Hundred Twenty Five & 00/100 (\$4,757,625.00)

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider is effective 06/13/2019 (MONTH-DAY-YEAR)

Signed and Sealed 06/13/2019 (MONTH-DAY-YEAR)

By: EOG Resources, Inc. (PRINCIPAL) Robert R. Went

BB

By: SAFECO Insurance Company of America (SURETY) Tannis Mattson, Attorney-in-Fact

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.



American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

Certificate No: 8200601

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American States Insurance Company is a corporation duly organized under the laws of the State of Indiana, that First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Orlando Aguirre, Mario Arzamendi, Mary Ann Garcia, Tannis Mattson, Sandra Parker, Gina A. Rodriguez, Laura E. Sudduth, Amanda Turman-Avina

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 22nd day of February, 2019.

American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America



By: [Signature]
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 22nd day of February, 2019 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorney-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 13th day of June, 2019.



By: [Signature]
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

SURETY RIDER

To be attached to and form a part of

Bond No. 6196102

dated effective 08/13/2003 (MONTH-DAY-YEAR)

executed by EOG Resources, Inc. (PRINCIPAL), as Principal,

and by SAFECO Insurance Company of America, as Surety,

in favor of United States Department of the Interior (OBLIGEE)

in consideration of the mutual agreements herein contained the Principal and the Surety hereby consent to changing

The Bond Amount to:

Nine Hundred Sixty Two Thousand Six Hundred Twenty Five & 00/100 (\$962,625.00)

Nothing herein contained shall vary, alter or extend any provision or condition of this bond except as herein expressly stated.

This rider is effective 05/17/2019 (MONTH-DAY-YEAR)

Signed and Sealed 06/05/2019 (MONTH-DAY-YEAR)

EOG Resources, Inc. (PRINCIPAL)

By: Robert L. West (PRINCIPAL) [Signature] _____

SAFECO Insurance Company of America (SURETY)

By: Tannis Mattson, Attorney-in-Fact [Signature] _____

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.



American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

Certificate No: 8200601

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American States Insurance Company is a corporation duly organized under the laws of the State of Indiana, that First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America are corporations duly organized under the laws of the State of New Hampshire (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Orlando Aguirre, Mario Arzamendi, Mary Ann Garcia, Tannis Mattson, Sandra Parker, Gina A. Rodriguez, Laura E. Sudduth, Amanda Turman-Avina

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 22nd day of February, 2019.



American States Insurance Company
First National Insurance Company of America
General Insurance Company of America
Safeco Insurance Company of America

By: [Signature]
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 22nd day of February, 2019 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: [Signature]
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-law and Authorizations of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America, which are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorney-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, of American States Insurance Company, First National Insurance Company of America, General Insurance Company of America, and Safeco Insurance Company of America do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of June, 2019.



By: [Signature]
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

Increase Rider

BOND AMOUNT \$4,757,625.00

BOND NO. 6196102 / BLM BOND NO. NM2308

To be attached and form a part of Bond No. 6196102 / BLM Bond No. NM2308 dated the 13th day of August, 2003, executed by Liberty Mutual Insurance Company as surety, on behalf of EOG Resources, Inc. as current principal of record, and in favor of United States Department of the Interior Bureau of Land Management, as Obligee, and in the amount of Four Million Seven Hundred Fifty Seven Thousand Six Hundred Twenty Five Dollars and 00/100 (\$4,757,625.00).

In consideration of the agreed premium charged for this bond, it is understood and agreed that Liberty Mutual Insurance Company hereby consents that effective from the 30th day of April, 2021, said bond shall be amended as follows:

THE BOND PENALTY SHALL BE Increased:

FROM: Four Million Seven Hundred Fifty Seven Thousand Six Hundred Twenty Five Dollars and 00/100 (\$4,757,625.00)

TO: Four Million Eight Hundred Fifteen Thousand One Hundred Twenty Five Dollars and 00/100 (\$4,815,125.00)

DESCRIPTION: Increasing Bond Amount by \$57,500.00, Reserved Specifically for the Casper Field Office

The Increase of said bond penalty shall be effective as of the 30th day of April, 2021, and does hereby agree that the continuity of protection under said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act and/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 30th day of April, 2021.

BY: Robert L. West EOG Resources, Inc.
PRINCIPAL

BY: David T. Miclette Liberty Mutual Insurance Company
SURETY
David T. Miclette, ATTORNEY-IN-FACT

THE ABOVE BOND IS HEREBY AGREED TO AND ACCEPTED BY:

United States Department of the Interior Bureau of Land Management
OBLIGEE

BY: _____
TITLE



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8204952-971801

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alyson Cannichael; Ashley Britt; Barry K. McCord; David T. Miclette; Lacey Mayfield; Lauren O. Moudy; Nikole Jeannette; Robert C. Davis; Robert M. Overbey, Jr.; Tabitha Dorman

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, In pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of March, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 15th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 30th day of April, 2021.



By: Renee C. Llewellyn, Assistant Secretary

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Increase Rider

BOND AMOUNT \$4,815,125.00

BOND NO. 6196102 / BLM BOND NO. NM2308

To be attached and form a part of Bond No. 6196102 / BLM Bond No. NM2308 dated the 13th day of August, 2003, executed by Liberty Mutual Insurance Company as surety, on behalf of EOG Resources, Inc. as current principal of record, and in favor of United States Department of the Interior Bureau of Land Management, as Obligee, and in the amount of Four Million Eight Hundred Fifteen Thousand One Hundred Twenty Five Dollars and 00/100 (\$4,815,125.00).

In consideration of the agreed premium charged for this bond, it is understood and agreed that Liberty Mutual Insurance Company hereby consents that effective from the 2nd day of July, 2021, said bond shall be amended as follows:

THE BOND PENALTY SHALL BE Increased:

FROM: Four Million Eight Hundred Fifteen Thousand One Hundred Twenty Five Dollars and 00/100 (\$4,815,125.00)

TO: Four Million Eight Hundred Sixty Three Thousand Nine Hundred Ninety Seven Dollars and 00/100 (\$4,863,997.00)

DESCRIPTION: Increasing Bond Amount by \$48,872.00, Reserved Specifically for the Buffalo Field Office

The Increase of said bond penalty shall be effective as of the 2nd day of July, 2021, and does hereby agree that the continuity of protection under said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act and/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 2nd day of July, 2021.

BY: Robert R. West EOG Resources, Inc.
PRINCIPAL

BY: David T. Miellette Liberty Mutual Insurance Company
SURETY
David T. Miellette, ATTORNEY-IN-FACT

THE ABOVE BOND IS HEREBY AGREED TO AND ACCEPTED BY:

United States Department of the Interior Bureau of Land Management
OBLIGEE

BY: _____
TITLE



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8204952-971801

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alyson Carmichael; Ashley Britt; Barry K. McCord; David T. Miclette; Lacey Mayfield; Lauren O. Moudy; Nikole Jeannette; Robert C. Davis; Robert M. Overbey, Jr.; Tabitha Dorman

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of March, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey

David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 15th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 2nd day of July, 2021.



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

INCREASE RIDER

BOND AMOUNT \$4,879,747.00

BOND NO. 6196102 / BLM BOND NO. NM2308/NMB105513751

To be attached and form a part of Bond No. 6196102 / BLM Bond No. NM2308/NMB105513751 dated the 13th Day of August, 2003, executed by Liberty Mutual Insurance Company as surety, on behalf of EOG Resources, Inc. as current principal of record, and in favor of the United States Department of the Interior, Bureau of Land Management, as Obligee, and in the amount of Four Million Eight Hundred Seventy Nine Thousand Seven Hundred Forty Seven Dollars and 00/100 (\$4,879,747.00).

In consideration of the agreed premium charged for this bond, it is understood and agreed that Liberty Mutual Insurance Company hereby consents that effective from the 8th Day of May, 2023, said bond shall be amended as follows:

THE BOND PENALTY SHALL BE INCREASED:

FROM: Four Million Eight Hundred Seventy Nine Thousand Seven Hundred Forty Seven Dollars and 00/100 (\$4,879,747.00)

TO: Eight Million One Hundred Nineteen Thousand Ninety Dollars and 00/100 (\$8,119,090.00)

DESCRIPTION: Increasing bond amount by \$3,239,343.00 specifically for the offices as outlined below

- Buffalo Field Office – Current bond amount \$1,499,622.00, decreasing by \$838,032.00 to a new amount of \$661,590.00
- Pinedale Field Office – Current bond amount \$472,625.00, decreasing by \$472,625.00 to a new amount of \$0.00, which will remove from bond
- Pecos District Office – Current bond amount \$2,700,000.00 increasing by \$4,550,000.00 to a new amount of \$7,250,000.00
- Nationwide - Current bond amount \$150,000.00, no adjustment made

The INCREASE of said bond penalty shall be effective as of the 8th Day of May, 2023, and does hereby agree that the continuity of protection under said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act and/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 8th Day of May, 2023.

EOG Resources, Inc.

PRINCIPAL

BY: 

Liberty Mutual Insurance Company

SURETY

BY: 
David T. Miclette, ATTORNEY-IN-FACT

THE ABOVE BOND IS HEREBY AGREED TO AND ACCEPTED BY:

United States Department of the Interior, Bureau of Land Management
OBLIGEE

BY: _____



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8210001-971801

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Stacey Bosley, Ashley Britt, Robert C. Davis, Will Duke, Lacey Hitchcock, Nikole Jeannette, Andrew Kim, Barry K. McCord, David T. Miclette, Jennifer Mitchell, Robert M. Overbey, Jr., Stacy Owens

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 24th day of April, 2023.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 24th day of April, 2023 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 8th day of May, 2023.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

Increase Rider

BOND AMOUNT \$4,863,997.00

BOND NO. 6196102 / BLM BOND NO. NM2308

To be attached and form a part of Bond No. 6196102 / BLM Bond No. NM2308 dated the 13th day of August, 2003, executed by Liberty Mutual Insurance Company as surety, on behalf of EOG Resources, Inc. as current principal of record, and in favor of United States Department of the Interior Bureau of Land Management, as Obligee, and in the amount of Four Million Eight Hundred Sixty Three Thousand Nine Hundred Ninety Seven Dollars and 00/100 (\$4,863,997.00).

In consideration of the agreed premium charged for this bond, it is understood and agreed that Liberty Mutual Insurance Company hereby consents that effective from the 29th day of July, 2021, said bond shall be amended as follows:

THE BOND PENALTY SHALL BE Increased:

FROM: Four Million Eight Hundred Sixty Three Thousand Nine Hundred Ninety Seven Dollars and 00/100 (\$4,863,997.00)

TO: Four Million Eight Hundred Seventy Nine Thousand Seven Hundred Forty Seven Dollars and 00/100 (\$4,879,747.00)

DESCRIPTION: Increasing Bond Amount by \$15,750.00, Reserved Specifically for the Buffalo Field Office

The Increase of said bond penalty shall be effective as of the 29th day of July, 2021, and does hereby agree that the continuity of protection under said bond subject to changes in penalty shall not be impaired hereby, provided that the aggregate liability of the above mentioned bond shall not exceed the amount of liability assumed by it at the time the act and/or acts of default were committed and in no event shall such liability be cumulative.

Signed, sealed and dated this 29th day of July, 2021.

EOG Resources, Inc.
PRINCIPAL

BY: Robert L. West

Liberty Mutual Insurance Company
SURETY

BY: David T. Miclette
David T. Miclette, ATTORNEY-IN-FACT

THE ABOVE BOND IS HEREBY AGREED TO AND ACCEPTED BY:

United States Department of the Interior Bureau of Land Management
OBLIGEE

BY: _____
TITLE



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8204952-971801

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alyson Carmichael; Ashley Britt; Barry K. McCord; David T. Miclette; Lacey Mayfield; Lauren O. Moudy; Nikole Jeannette; Robert C. Davis; Robert M. Overbey, Jr.; Tabitha Dorman

all of the city of Houston state of TX each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 15th day of March, 2021.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 15th day of March, 2021 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

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ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

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I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 29th day of July, 2021.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

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"



SMOKIN REUSE WATER PIT

W/NW SEC.34 - T23S - R32E

EDDY COUNTY, NM

32.263271^o, -103.668908^o

CAUTION

**PPE
REQUIRED**

DANGER

**H₂S
MAY BE PRESENT**

DANGER

**NO
SMOKING**

NOTICE

**AUTHORIZED
PERSONNEL ONLY**

Variations

7.

Variations:

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: Smokin 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 3/4" 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 Smokin Containment and Recycle Facility.





Variance Request for Bird Deterrent

Re: Smokin 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 Smokin Containment and Recycle Facility.





Variance Request for Secondary Liner

Re: Smokin 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 1×10^{-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.



RAVEN INDUSTRIES INC.

Statement of Performance

We Solve Great Challenges.

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
Staff Quality Engineer
Raven Industries – Engineered Films Division

Siting Criteria for Recycling Containment

<p>8. <u>Siting Criteria for Recycling Containment</u></p> <p><i>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.</i></p>	
<p><u>General siting</u></p> <p><u>Ground water is less than 50 feet below the bottom of the Recycling Containment.</u> NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</p> <p>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</p> <p>Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division</p> <p>Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map</p> <p>Within a 100-year floodplain. FEMA map</p> <p>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</p> <p>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</p> <p>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</p> <p>Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>



11 December 2023

Blake Grooms
Water Resources Engineer II
EOG Resources, Inc.
5509 Champions Drive
Midland, TX 79706

**Re: Smokin Reuse Containment & Recycle Facility - Comprehensive Resource Review –
Lea County, New Mexico**

Dear Mr. Grooms:

Goshawk Environmental Consulting, Inc. (Goshawk) conducted a comprehensive desktop resource review and a limited field investigation for the proposed Smokin Reuse Containment & Recycle Facility (proposed project) in Lea County, New Mexico. The work was conducted on behalf of our client, EOG Resources, Inc. (EOG). This resource review included 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. All figures and attachments are provided in Appendices A-D.

INTRODUCTION

The Smokin Reuse Containment & Recycle Facility will include one reuse pit, one access road, and one electric line (proposed project). The main facility is approximately 909 feet wide on its horizontal axis and 1,224 feet long on its vertical axis. It will encompass approximately 25.28 acres. The proposed project is on federally managed lands in Township 23 South, Ranges 32 East, Section 34. The facility site is generally 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 resource review, followed by a field investigation. The resource review included inspection of the available US Geological Survey (USGS) 7.5-minute topographic quadrangle for Oil Center, New Mexico; recent digital aerial orthoimagery; and the Natural Resource Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO). The field investigation was 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 US Army Core of Engineers (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) indicates the proposed project is entirely within grasslands (white background). The terrain is relatively flat, with elevations ranging from slightly below 3,650 feet above mean sea level (AMSL), to slightly above 3,670 feet AMSL. Drainage occurs by overland sheet flow to the southeast of the proposed project. No mapped waterbodies (noted by a dot-dash blue line) are indicated within the proposed project. A mapped stream is shown approximately 9 miles southeast of the proposed project.

The proposed project is within the Lower Pecos River Watershed. The nearest direct line point to the Pecos River is approximately 18.9 miles west-southwest. There are no improvements mapped within the proposed project; however, unimproved roads are mapped to both the north and west of the proposed project.

Aerial Orthoimagery

The aerial orthoimagery (Figure 2) indicates the proposed project is within relatively open shrubland. A relatively recent pipeline right-of-way (ROW) is visible 178 feet to the east. The unimproved roads mapped on the USGS topographic maps are also visible on the aerial orthoimagery.

Soils

The NRCS SSURGO spatial data (Figure 3) indicates the soil map units underlying the proposed project are Pyote and Maljamar fine sands (PU). The Pyote series consists of very deep, well-drained, moderately rapidly permeable soils formed in sandy and loamy sediments that have been modified by wind. These soils are typically located on nearly level to gently undulating uplands. Slopes range from 0 to 5 percent. 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 located on sandy plains and have slopes of 2 to 5 percent.

Precipitation

Data derived from the National Centers for Environmental Information indicated that mean annual precipitation in Lea County for the period of April 1900 to March 2021 was 15.0 inches. However, Lea County only received 10.52 inches of precipitation in the last 12 months (November 2022 to October 2023).

Subsurface Water



EOG contracted to have one subsurface monitoring well drilled in the vicinity of the proposed project to determine the presence and depth of groundwater (Figure 4). The well was left open for 48 hours. No groundwater was encountered (Appendix B).

FIELD INVESTIGATION

A field investigation was conducted on 03 January 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 grasses intermixed with shrubs and forbs. Vegetation within the area consisted primarily of honey mesquite (*Prosopis glandulosa*), sand sagebrush (*Artemisia filifolia torr*), croton (*Codiaeum variegatum*), and broom snakeweed (*Gutierrezia sarothrae*). Vegetative coverage within the site was approximately 70 percent.

Drainage was confirmed to occur primarily by overland sheet flow toward the southeast, as indicated in the topographic quadrangle. 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 its immediate vicinity.

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.

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. The proposed project falls within panel 35025C1725D, which is listed as "Not Printed." Therefore, the proposed project can be developed without 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 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.

Literature and agency file searches were conducted to identify the potential occurrence of any federally and state-listed T/E species near the proposed project. An internet search of the USFWS *Information, Planning, and Conservation System* (IPaC) was conducted for Lea County 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 NMDGF Biota Information System of New Mexico (BISON-M) was obtained and reviewed for Lea County.

RESOURCE REVIEW

The T/E species listed in the IPaC Trust Resource Report for the proposed project (Appendix C) include the lesser prairie-chicken (*Tympanuchus pallidicinctus*) and northern aplomado falcon (*Falco femoralis septentrionalis*). Critical habitat for these species is not designated within the proposed project or the immediate vicinity.

The state-listed T/E species on NMDGF BISON-M County List for Lea County dated 13 November 2023 (Appendix D) include: broad-billed hummingbird (*Cyananthus latirostris*), least tern (*Sterna antillarum*), bald eagle (*Haliaeetus leucocephalus*), aplomado falcon (*Falco femoralis*), peregrine falcon (*Falco peregrinus*), bell’s vireo (*Vireo bellii*), baird’s sparrow (*Centronyx bairdii*), and dunes sagebrush lizard (*Sceloporus 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 at the proposed project.

DEVELOPMENT CONSTRAINTS

The northern aplomado falcon is listed for many southeastern New Mexico counties (including Lea County) within its historic range. Historically, the falcon utilized open desert grasslands and/or savannas, where scattered shrubs and trees provide roosting and nesting locations. Although the proposed project is within a shrubland, the land uses in this area (heavy cattle ranching and oil/gas exploration and production) likely preclude the northern aplomado falcon from utilizing the site. The proposed project is within the historic range for the lesser prairie-chicken. The field investigation



revealed the vegetative community could generally be described as a shrubland. Dominant species included honey mesquite, sand sagebrush, croton, and broom snakeweed. Despite the presence of sand sagebrush, the high density of honey mesquite, broom snakeweed, and other non-preferred vegetative species, coupled with the significant amount of oil/gas development in the general area, likely precludes the proposed project from providing ample habitat for the lesser prairie-chicken.

State regulations prohibit the taking, possession, transportation, or sale of any state-listed T/E species. Because 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 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.

The dunes sagebrush lizard is more commonly found in portions of Lea County where large sand dunes exist. The proposed project lacks suitable habitat for the dunes sagebrush lizard. Care should be taken to avoid harassment, harm, killing, and/or collecting of these species, including slower-moving species. No further investigations relative to T/E species are recommended.

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 on 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 (CFO), and the NRCS Web Soil Survey were utilized for the review.



ARCHIVAL REVIEW

Archival Research

According to NMCRIS, the proposed project was subjected to partial archaeological survey under a single seismic survey project (NMCRIS Activity 45928). A total of eleven archaeological surveys have been undertaken within 500 meters (1,640 feet) of the proposed project. Previous surveys have yielded largely negative results in the immediate vicinity of the proposed project (Table 1).

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

Activity Number	Organization Name	Lead Agency	Total Acres	Sites Visited	Report Date
7393	Pecos Archaeological Consultants	BLM Roswell District	9.90	2	12/31/1984
19198	New Mexico Archaeological Services, Inc	BLM Roswell District	9.72	0	12/31/1987
45928	Moore Anthropological Research	BLM Roswell District	1,448.49	9	12/31/1993
51846	Powers Elevation	BLM Roswell District	61.60	0	12/31/1995
59963	Pecos Archaeological Consultants	BLM Roswell District	296.00	1	12/31/1998
67704	Desert West Archaeological Services	BLM CFO	6.56	0	12/31/2000
71082	Desert West Archaeological Services	BLM CFO	7.49	0	12/31/2000
71083	Desert West Archaeological Services	BLM CFO	3.00	0	12/31/2000
72404	Geo-Marine, Inc.	BLM CFO	13.99	0	12/31/2000
133550	APAC	BLM CFO	1,460.19	6	6/18/2015
153407	Goshawk Environmental Consulting	BLM CFO	0.00	0	7/17/2023

There are no previously documented archaeological sites within 500 meters (1,640 feet) of the proposed project.

The nearest site, LA 129607, is located 1,111 meters (3,646 feet) east northeast of the proposed project. The site was recorded in 2000 by Desert West Archaeological Services under NMCRIS Activity 67871. The site consisted of lithic debitage, stone tool manufacturing items, ground stone tools, Roswell Red on Black ceramic sherds, and unidentified corrugated brownware ceramic sherds. No features were observed. The site was associated with the Jornada Mogollon as a result of the diagnostic ceramics. The SHPO and the BLM determined the site to be eligible for listing on the NRHP.

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 Pope's Wells Site (LA 69016). This site consists of the remains of a camp and well site that was part of efforts to establish a water well in the area in the 1850's. The Pope's Wells Site lies approximately 18.9 miles southwest of the proposed project.

Soils Analysis

As noted earlier, soils mapped within the proposed project consist of Pyote and Maljamar fine sands. 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. Pyote series soils consists of very deep, well-drained, moderately rapidly permeable soils formed in sandy and loamy sediments that have been modified by wind. These soils are typically located on nearly level to gently undulating uplands. Slopes range from 0 to 5 percent. Both of these soils exhibit a moderate probability of containing temporally stratified deposits. Considering the soils present, there is a moderate probability for the presence of significant cultural resources within the proposed project.

DEVELOPMENT CONSTRAINTS

The cultural resources archival review determined there is a moderate probability for the presence of significant prehistoric resources within the proposed project. However, the proposed project is located on federally owned lands managed by the BLM CFO, and within the Permian Basin Programmatic Agreement (PBPA) area. The PBPA allows for certain projects that are within the prescribed area and greater than 30.5 meters (100 feet) from any eligible or unevaluated archaeological sites to be mitigated by payment into a research fund for special archaeological research projects in the area. EOG has elected to partake in the PBPA for this project. As such, no pedestrian cultural resources surveys were undertaken by Goshawk, and the project is considered fully mitigated by the BLM CFO.

SUMMARY

Based on the results of the resource review, it is Goshawk’s opinion that the construction of the proposed Smokin Reuse Containment & Recycle Facility is unlikely to impact any sensitive natural resources, including WATERS and T/E species. EOG has elected to partake in the PBPA for cultural resources clearance of the proposed project. In the unlikely event that human remains or funerary objects are discovered, all construction activities should be immediately halted, and the BLM CFO should be notified. If you have any questions or desire additional information, please contact our office.

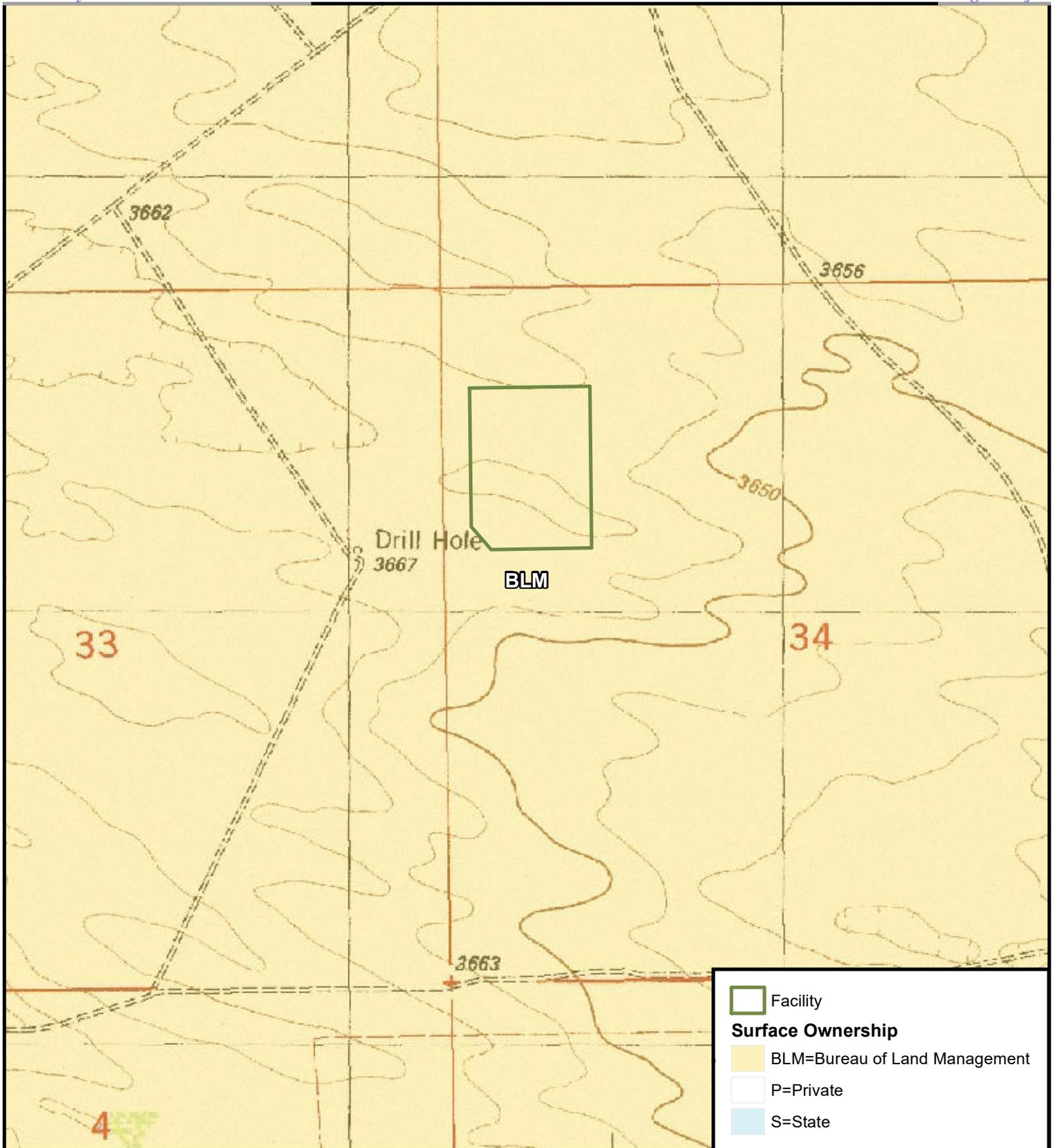
Sincerely,

Zane Homesley
President

Steven Evans, MA, RPA
Cultural Resources Manager



**APPENDIX A
FIGURES**

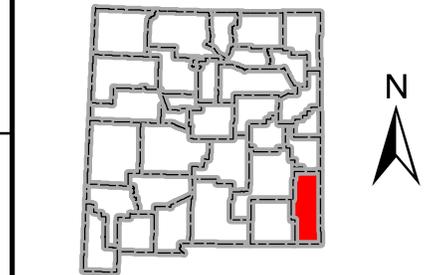


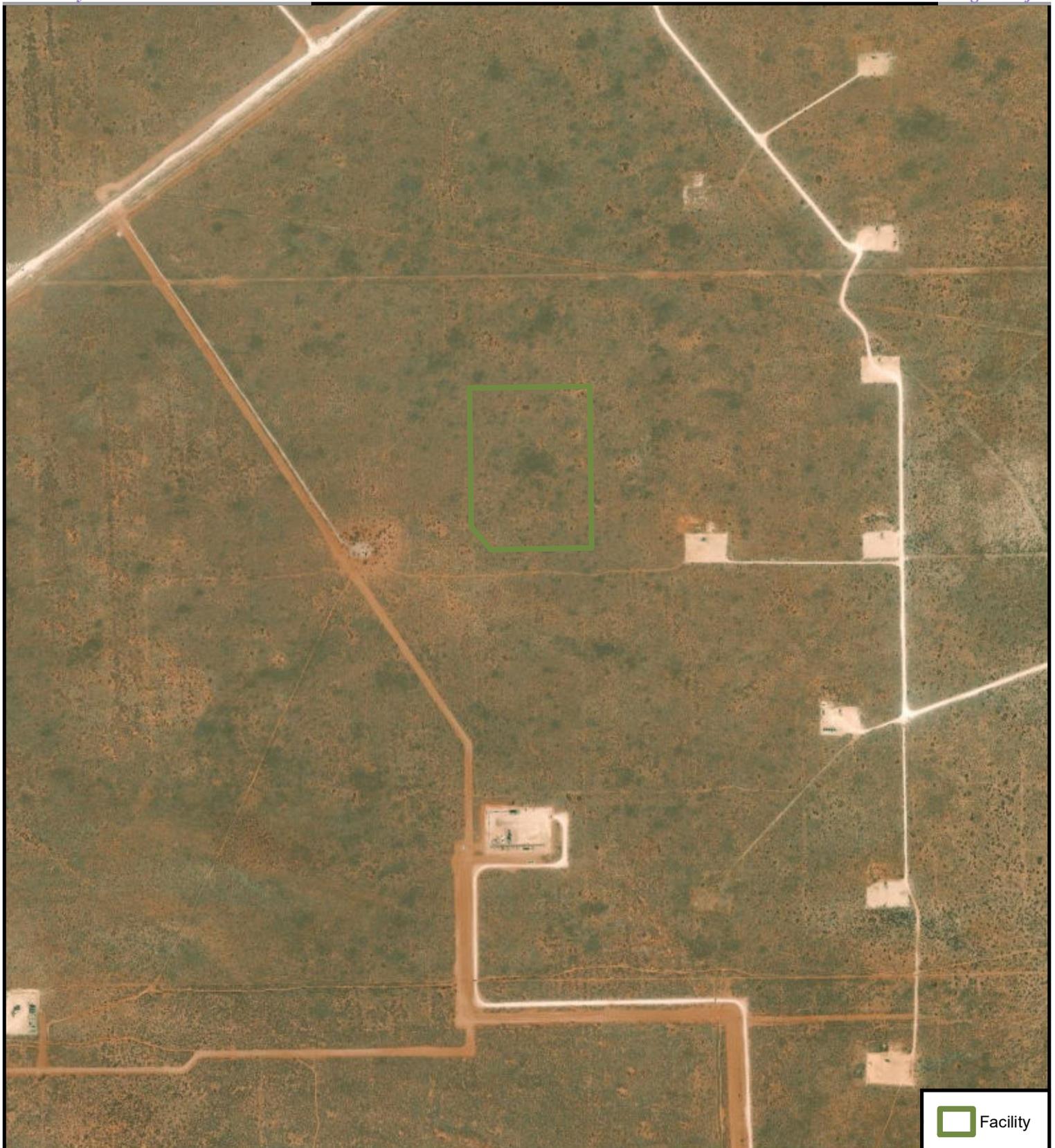
Map Source: U.S. Bureau of Land Management - New Mexico State Office - GIS Data Download; USGS, Oil Center, New Mexico Quadrangle.

Date: 13 November 2023

Figure 1
USGS Topographic
Lea County, New Mexico

**Smokin Reuse Containment
& Recycle Facility**
Township 23S; Range 32E; Section 34





 Facility

Map Source: U.S. Bureau of Land Management -
New Mexico State Office - GIS Data Download;
USGS, Oil Center, New Mexico Quadrangle.

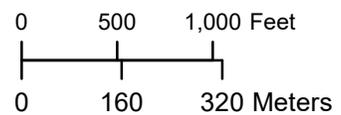
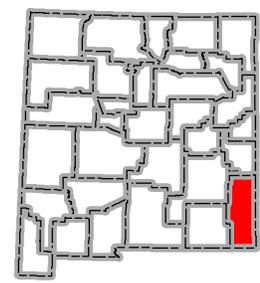
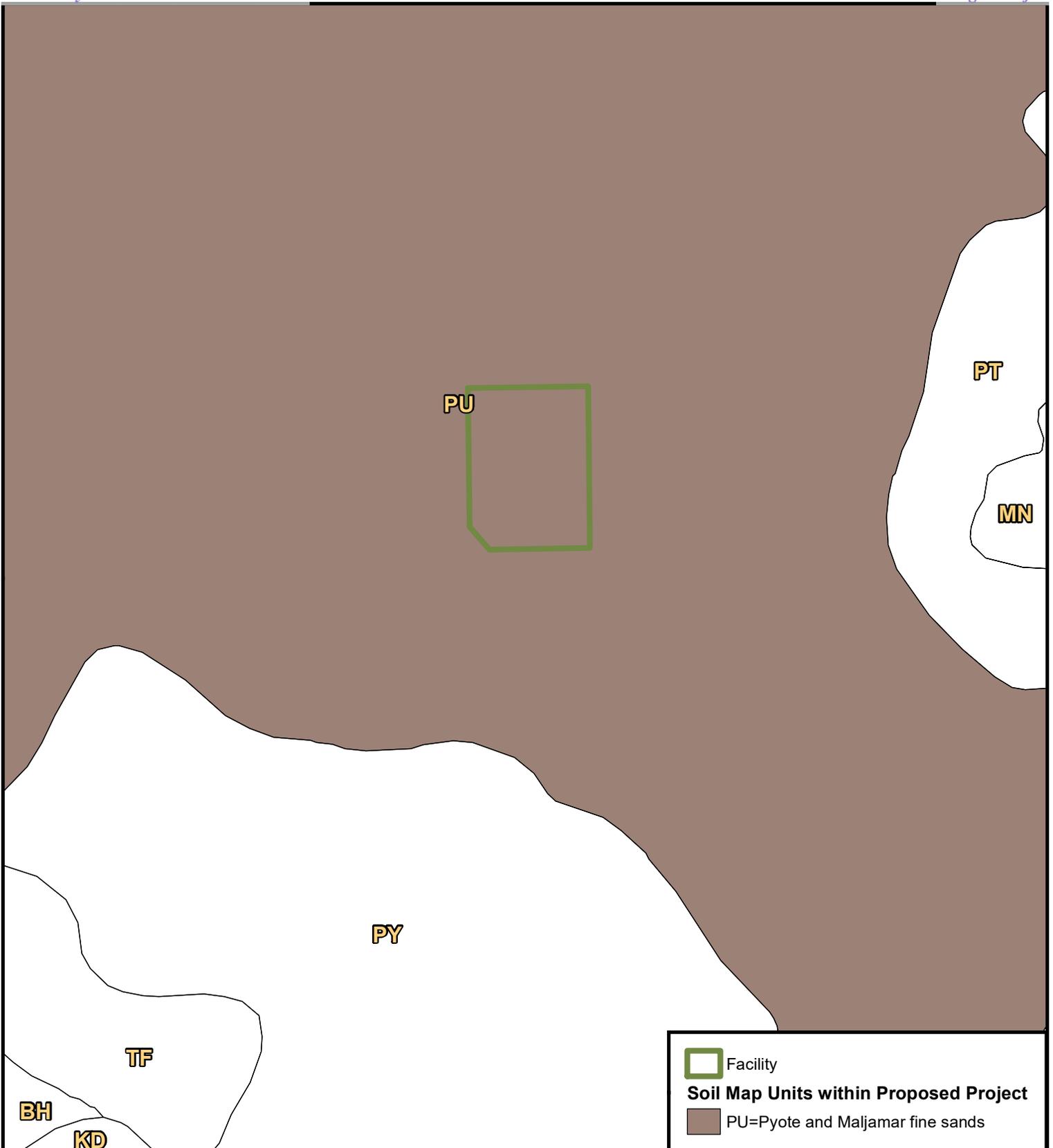


Figure 2
Aerial Orthoimagery
Lea County, New Mexico

**Smokin Reuse Containment
& Recycle Facility**
Township 23S; Range 32E; Section 34

Date: 13 November 2023





 Facility
Soil Map Units within Proposed Project
 PU=Pyote and Maljamar fine sands

Map Source: U.S. Bureau of Land Management -
 New Mexico State Office - GIS Data Download;
 USGS, Oil Center, New Mexico Quadrangle.

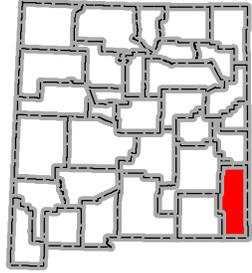
0 500 1,000 Feet
 0 160 320 Meters

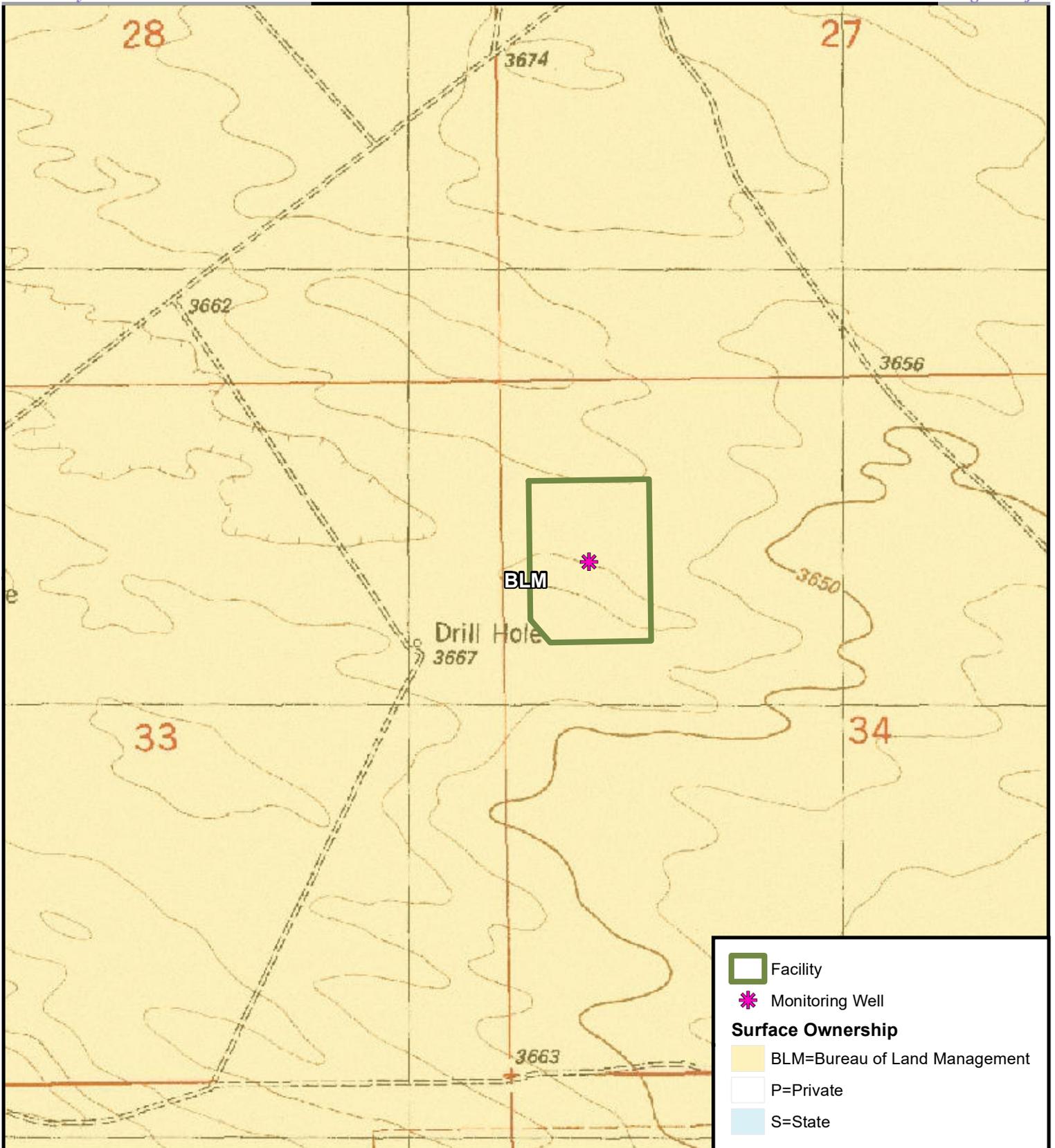


Figure 3
 Soil Data
 Lea County, New Mexico

**Smokin Reuse Containment
 & Recycle Facility**
 Township 23S; Range 32E; Section 34

Date: 13 November 2023



Map Source: U.S. Bureau of Land Management -
 New Mexico State Office - GIS Data Download;
 USGS, Oil Center, New Mexico Quadrangle.

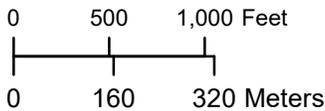
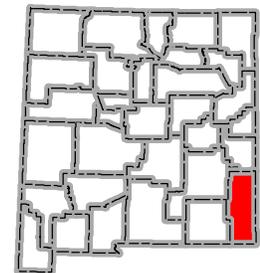


Figure 4
 Monitoring Well Location
 Lea County, New Mexico

**Smokin Reuse Containment
 & Recycle Facility**
 Township 23S; Range 32E; Section 34

Date: 13 November 2023





APPENDIX B
Lithology Report

SOIL BORING / MONITORING WELL LOG

Project: <u>Smokin Reuse Containment & Recycle Facility</u>	Drilling Company: <u>Elite Drillers Corporation</u>
Project Number: <u>EOG - 10272023</u>	Driller: <u>Bryce Wallace</u>
Client: <u>EOG Resources, Inc.</u>	Drillers License Number: <u>WD-1706</u>
Boring File Number: <u>C 04780</u>	Drilling Method: <u>Air Rotary</u>
Total Depth: <u>75 Feet</u>	Bore Hole Diameter: <u>6-1/8"</u>
Surface Elevation: <u>3671 FT</u>	Date Drilled: <u>10/27/2023</u>
Latitude: <u>32.264413°</u>	Longitude: <u>-103.668993°</u>

DEPTH (FEET)	SYMBOL	SAMPLE	MATERIAL DESCRIPTION	DEPTH (FEET)
			Sand (Wind Blown) * DRY - NO MOISTURE	
5		SS	Red/Tan Sand * DRY - NO MOISTURE	5
10		SS		10
15		SS	Red/Tan Sandy Caliche * DRY - NO MOISTURE	15
20		SS		20
25		SS		25
30		SS		30
35		SS	Fine Reddish Tan Sand w/ Small Caliche * DRY - NO MOISTURE	35
40		SS		40
45		SS		45
50		SS		50
55		SS		55
60		SS		60
65		SS		65
70		SS	70	
75		SS	75	
END OF LOG				

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



APPENDIX C
USFWS IPAC RESOURCE TRUST REPORT

IPaC resource list

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On Thursday, December 14th, the ability to generate Official Species Lists and Determination Key Documents will be unavailable for a short time beginning at 12:30PM EST. These functions will be restored as soon as they are available. We appreciate your patience with this temporary disruption.



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that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Lea County, New Mexico



Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📠 (505) 346-2542

2105 Osuna Road Ne
Albuquerque, NM 87113-1001

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Tricolored Bat <i>Perimyotis subflavus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

Birds

NAME	STATUS
Lesser Prairie-chicken <i>Tympanuchus pallidicinctus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1924	Endangered
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1923	EXPN

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The [data](#) in this location indicates there are no migratory [birds of conservation concern](#) expected to occur in this area.

There may be migratory birds in your project area, but we don't have any survey data available to provide further direction. For additional information, please refer to the links above for recommendations to minimize impacts to migratory birds or contact your local FWS office.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or

minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



APPENDIX D
NMDGF BISON-M COUNTY LIST



All Species

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<u>Taxonomic Group</u>	<u># Species</u>	<u>Taxonomic Group</u>	<u># Species</u>
Amphibians	10	Birds	164
Coleoptera; beetles	17	Crustaceans	2
Fish	3	Lepidoptera; moths and butterflies	48
Mammals	45	Molluscs	8
Odonata; dragonflies	30	Orthoptera; grasshoppers & crickets	63
Reptiles	37	Spiders	3

TOTAL SPECIES: 430

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Western Azure	Celastrina echo					No Photo
Lupine Blue	Plebejus lupini					No Photo
Gray Buckeye	Junonia grisea					No Photo
Virginia Opossum	Didelphis virginiana					View
Nine-banded Armadillo	Dasyus novemcinctus					View
Black-tailed Jackrabbit	Lepus californicus					View
Desert Cottontail Rabbit	Sylvilagus audubonii					View
Cave Myotis	Myotis velifer					No Photo
Coyote	Canis latrans					View
Common Gray Fox	Urocyon cinereoargenteus					View
Kit Fox	Vulpes macrotis					View
Swift Fox	Vulpes velox					View
Bobcat	Lynx rufus					View
Common Hog-nosed Skunk	Conepatus leuconotus					View
Striped Skunk	Mephitis mephitis					View
Western Spotted Skunk	Spilogale gracilis					View
American Badger	Taxidea taxus					View
Ringtail	Bassariscus astutus					View
Common Raccoon	Procyon lotor					View
Pronghorn	Antilocapra americana americana					View
Mule Deer	Odocoileus hemionus					View
White-tailed Deer (Texas)	Odocoileus virginianus texana					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Feral Pig	Sus scrofa					No Photo
Collared Peccary	Peccari tajacu sonoriensis; angulatus					View
American Beaver	Castor canadensis					View
White-toothed woodrat	Neotoma leucodon					View
Southern Plains Woodrat	Neotoma micropus canescens					No Photo
Northern Grasshopper Mouse	Onychomys leucogaster					No Photo
White-footed Mouse	Peromyscus leucopus					View
Deer Mouse	Peromyscus maniculatus					No Photo
Hispid Cotton Rat	Sigmodon hispidus berlandieri; confinis; texianus					View
Western Harvest Mouse	Reithrodontomys megalotis megalotis; aztecus					No Photo
Plains Harvest Mouse	Reithrodontomys montanus					No Photo
Yellow-faced Pocket Gopher	Cratogeomys castanops					No Photo
Jones' Pocket Gopher	Geomys knoxjonesi					No Photo
Chihuahuan Pocket Mouse	Chaetodipus eremicus					No Photo
Desert Pocket Mouse	Chaetodipus penicillatus					No Photo
Merriam's Kangaroo Rat	Dipodomys merriami					View
Ord's Kangaroo Rat	Dipodomys ordii					View
Banner-tailed Kangaroo Rat	Dipodomys spectabilis baileyi; clarenci; spectabilis					No Photo
Plains Pocket Mouse	Perognathus flavescens					No Photo
Silky Pocket Mouse	Perognathus flavus flavus; hopiensis					No Photo
Norway Rat	Rattus norvegicus					No Photo
Black-tailed Prairie Dog	Cynomys ludovicianus ludovicianus				Y	View
Rio Grande Ground Squirrel	Ictidomys parvidens					View
Thirteen-lined Ground Squirrel	Ictidomys tridecemlineatus arenicola; blanca; hollisteri					View
Eastern Fox Squirrel	Sciurus niger rufiventer; limitis					View
Spotted Ground Squirrel	Xerospermophilus spilosoma					No Photo
Northern Pintail	Anas acuta					View
Northern Bobwhite Quail	Colinus virginianus					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Scaled Quail	Callipepla squamata					View
Lesser Prairie-Chicken	Tympanuchus pallidicinctus		T		Y	View
Eared Grebe	Podiceps nigricollis				Y	View
Band-tailed Pigeon	Patagioenas fasciata					View
Eurasian Collared-Dove	Streptopelia decaocto					View
Mourning Dove	Zenaida macroura					View
Greater Roadrunner	Geococcyx californianus					View
Yellow-billed Cuckoo (eastern pop)	Coccyzus americanus occidentalis					No Photo
Lesser Nighthawk	Chordeiles acutipennis					View
Common Nighthawk	Chordeiles minor				Y	View
Common Poorwill	Phalaenoptilus nuttalli					No Photo
Rufous Hummingbird	Selasphorus rufus					View
Broad-billed Hummingbird	Cynanthus latirostris	T			Y	View
Sandhill Crane	Antigone canadensis					View
American Avocet	Recurvirostra americana					View
Killdeer	Charadrius vociferus					View
Mountain Plover	Charadrius montanus				Y	View
Snowy Plover	Charadrius nivosus				Y	View
Long-billed Curlew	Numenius americanus				Y	View
Pectoral Sandpiper	Calidris melanotos					View
Spotted Sandpiper	Actitis macularius					View
Solitary Sandpiper	Tringa solitaria					View
Wilson's Phalarope	Phalaropus tricolor					View
Least Tern	Sternula antillarum	E			Y	View
American Bittern	Botaurus lentiginosus				Y	View
White-faced Ibis	Plegadis chihi					View
Turkey Vulture	Cathartes aura					View
Osprey	Pandion haliaetus					View
Northern Harrier	Circus hudsonius					View
Sharp-shinned Hawk	Accipiter striatus					View
Cooper's Hawk	Accipiter cooperii					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Northern Goshawk	Accipiter gentilis					View
Bald Eagle	Haliaeetus leucocephalus	T			Y	View
Mississippi Kite	Ictinia mississippiensis					View
Harris's Hawk	Parabuteo unicinctus					View
Red-shouldered Hawk	Buteo lineatus					View
Swainson's Hawk	Buteo swainsoni					View
Red-tailed Hawk	Buteo jamaicensis					View
Ferruginous Hawk	Buteo regalis					View
Flammulated Owl	Psilosops flammeolus				Y	View
Great Horned Owl	Bubo virginianus					View
Burrowing Owl	Athene cunicularia				Y	View
Belted Kingfisher	Megaceryle alcyon					View
Red-headed Woodpecker	Melanerpes erythrocephalus				Y	View
Williamson's Sapsucker	Sphyrapicus thyroideus				Y	View
Ladder-backed Woodpecker	Dryobates scalaris					View
American Kestrel	Falco sparverius					View
Aplomado Falcon	Falco femoralis	E	E		Y	View
Peregrine Falcon	Falco peregrinus	T			Y	View
Arctic Peregrine Falcon	Falco peregrinus tundrius					No Photo
Ash-throated Flycatcher	Myiarchus cinerascens					View
Great Crested Flycatcher	Myiarchus crinitus					No Photo
Great Kiskadee	Pitangus sulphuratus					View
Cassin's Kingbird	Tyrannus vociferans					View
Western Kingbird	Tyrannus verticalis					View
Scissor-tailed Flycatcher	Tyrannus forficatus					View
Olive-sided Flycatcher	Contopus cooperi				Y	View
Western Wood Pewee	Contopus sordidulus					View
Willow Flycatcher	Empidonax traillii brewsteri; adastus					View
Least Flycatcher	Empidonax minimus					View
Hammond's Flycatcher	Empidonax hammondii					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Dusky Flycatcher	Empidonax oberholseri					View
Say's Phoebe	Sayornis saya					View
Loggerhead Shrike	Lanius ludovicianus				Y	View
Bell's Vireo	Vireo bellii	T			Y	View
Cassin's Vireo	Vireo cassinii					View
Blue-headed Vireo	Vireo solitarius					View
Plumbeous Vireo	Vireo plumbeus					View
Warbling Vireo	Vireo gilvus					View
Red-eyed Vireo	Vireo olivaceus					View
Woodhouse's Scrub Jay	Aphelocoma woodhouseii					View
Chihuahuan Raven	Corvus cryptoleucus					View
Horned Lark	Eremophila alpestris					View
Northern Rough-winged Swallow	Stelgidopteryx serripennis					View
Barn Swallow	Hirundo rustica					View
Cliff Swallow	Petrochelidon pyrrhonota					View
Verdin	Auriparus flaviceps					View
Red-breasted Nuthatch	Sitta canadensis					View
Rock Wren	Salpinctes obsoletus					View
House Wren	Troglodytes aedon					View
Bewick's Wren	Thryomanes bewickii					View
Cactus Wren	Campylorhynchus brunneicapillus					View
Blue-gray Gnatcatcher	Polioptila caerulea					View
Ruby-crowned Kinglet	Regulus calendula					View
Swainson's Thrush	Catharus ustulatus					View
Hermit Thrush	Catharus guttatus					View
Gray Catbird	Dumetella carolinensis					View
Curve-billed Thrasher	Toxostoma curvirostre					View
Brown Thrasher	Toxostoma rufum					View
Crissal Thrasher	Toxostoma crissale					View
Sage Thrasher	Oreoscoptes montanus					View
Northern Mockingbird	Mimus polyglottos					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
European Starling	Sturnus vulgaris					View
Phainopepla	Phainopepla nitens					View
House Sparrow	Passer domesticus					View
American Pipit	Anthus rubescens					View
Sprague's Pipit	Anthus spragueii				Y	View
Evening Grosbeak	Coccothraustes vespertinus				Y	View
House Finch	Haemorhous mexicanus					View
Pine Siskin	Spinus pinus					View
Lesser Goldfinch	Spinus psaltria					View
American Goldfinch	Spinus tristis					View
Thick-billed Longspur	Rhynchophanes mccownii				Y	View
Cassin's Sparrow	Peucaea cassinii				Y	View
Grasshopper Sparrow	Ammodramus savannarum perpallidus					View
Black-throated Sparrow	Amphispiza bilineata					View
Lark Sparrow	Chondestes grammacus					View
Lark Bunting	Calamospiza melanocorys					View
Chipping Sparrow	Spizella passerina					View
Clay-colored Sparrow	Spizella pallida					View
Field Sparrow	Spizella pusilla					View
Brewer's Sparrow	Spizella breweri					View
White-crowned Sparrow	Zonotrichia leucophrys					View
Sagebrush Sparrow	Artemisiospiza nevadensis				Y	View
Vesper Sparrow	Poocetes gramineus				Y	View
Baird's Sparrow	Centronyx bairdii		T		Y	View
Song Sparrow	Melospiza melodia					View
Lincoln's Sparrow	Melospiza lincolni					View
Rufous-crowned Sparrow	Aimophila ruficeps					View
Green-tailed Towhee	Pipilo chlorurus					View
Spotted Towhee	Pipilo maculatus					View
Yellow-breasted Chat	Icteria virens					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Yellow-headed Blackbird	Xanthocephalus xanthocephalus					View
Eastern Meadowlark	Sturnella magna					View
Western Meadowlark	Sturnella neglecta					View
Orchard Oriole	Icterus spurius					View
Bullock's Oriole	Icterus bullockii					View
Baltimore Oriole	Icterus galbula					View
Red-winged Blackbird	Agelaius phoeniceus					View
Brown-headed Cowbird	Molothrus ater					View
Rusty Blackbird	Euphagus carolinus					View
Brewer's Blackbird	Euphagus cyanocephalus					View
Great-tailed Grackle	Quiscalus mexicanus					View
Ovenbird	Seiurus aurocapilla					No Photo
Northern Waterthrush	Parkesia noveboracensis					View
Black-and-white Warbler	Mniotilta varia					View
Prothonotary Warbler	Protonotaria citrea					No Photo
Orange-crowned Warbler	Leiothlypis celata					View
Nashville Warbler	Leiothlypis ruficapilla					View
Virginia's Warbler	Leiothlypis virginiae				Y	View
Macgillivray's Warbler	Geothlypis tolmiei					View
Common Yellowthroat	Geothlypis trichas					View
Hooded Warbler	Setophaga citrina					View
American Redstart	Setophaga ruticilla					View
Northern Parula	Setophaga americana					No Photo
Yellow Warbler	Setophaga petechia					View
Chestnut-sided Warbler	Setophaga pensylvanica					No Photo
Yellow-rumped Warbler	Setophaga coronata					View
Black-throated Gray Warbler	Setophaga nigrescens				Y	View
Black-throated Green Warbler	Setophaga virens					View
Wilson's Warbler	Cardellina pusilla					View
Hepatic Tanager	Piranga flava					View
Summer Tanager	Piranga rubra					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Western Tanager	Piranga ludoviciana					View
Pyrrhuloxia	Cardinalis sinuatus					View
Rose-breasted Grosbeak	Pheucticus ludovicianus					View
Black-headed Grosbeak	Pheucticus melanocephalus					View
Blue Grosbeak	Passerina caerulea					View
Lazuli Bunting	Passerina amoena					View
Indigo Bunting	Passerina cyanea					View
Painted Bunting	Passerina ciris					View
Dickcissel	Spiza americana					View
Ornate Box Turtle	Terrapene ornata					View
Red-eared Slider	Trachemys scripta					View
Yellow Mud Turtle	Kinosternon flavescens					View
Sonoran Mud Turtle	Kinosternon sonoriense sonoriense				Y	View
Eastern Collared Lizard	Crotaphytus collaris					View
Long-nosed Leopard Lizard	Gambelia wislizenii					View
Common Lesser Earless Lizard	Holbrookia maculata maculata; bunkerj; ruthveni					View
Texas Horned Lizard	Phrynosoma cornutum					View
Round-tailed Horned Lizard	Phrynosoma modestum					View
Dunes Sagebrush Lizard	Sceloporus arenicolus	E	P		Y	View
Central Fence Lizard	Sceloporus consobrinus					View
Common Side-blotched Lizard	Uta stansburiana					View
Chihuahuan Spotted Whiptail	Aspidoscelis exsanguis					View
Texas Spotted Whiptail	Aspidoscelis gularis					View
Woodland Striped Whiptail	Aspidoscelis inornata junipera					No Photo
Marbled Whiptail	Aspidoscelis marmorata					View
Prairie Racerunner	Aspidoscelis sexlineata					View
Common Checkered Whiptail	Aspidoscelis tessellata					View
Many-lined Skink	Plestiodon multivirgatus					View
Great Plains Skink	Plestiodon obsoletus					View
Texas Blind Snake	Rena dissecta					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Glossy Snake	Arizona elegans					View
Coachwhip	Coluber flagellum					View
Ringneck Snake	Diadophis punctatus					View
Plains Hog-nosed Snake	Heterodon nasicus					View
Chihuahuan Nightsnake	Hypsiglena jani					View
Milk Snake	Lampropeltis gentilis					View
Desert Kingsnake	Lampropeltis splendida					View
Gophersnake	Pituophis catenifer					View
Texas Long-nosed Snake	Rhinocheilus lecontei					View
Ground Snake	Sonora semiannulata					View
Plains Black-headed Snake	Tantilla nigriceps					View
Smith's Black-headed Snake	Tantilla hobartsmithi					View
Marcy's Checkered Gartersnake	Thamnophis marcianus					View
Western Diamond-backed Rattlesnake	Crotalus atrox					View
Prairie Rattlesnake	Crotalus viridis					View
Western Massasauga	Sistrurus tergeminus				Y	View
Tiger Salamander	Ambystoma mavortium mavortium; nebulosum					View
Plains Spadefoot	Spea bombifrons					View
New Mexico Spadefoot	Spea multiplicata					View
Great Plains Toad	Anaxyrus cognatus					View
Western Green Toad	Anaxyrus debilis					View
Texas Toad	Anaxyrus speciosus					View
Woodhouse's Toad	Anaxyrus woodhousii					View
Plains Leopard Frog	Lithobates blairi				Y	View
Bullfrog	Lithobates catesbeianus					View
Couch's Spadefoot	Scaphiopus couchii					View
Grass Carp	Ctenopharyngodon idella					No Photo
Rainbow Trout	Oncorhynchus mykiss					View
Largemouth Bass	Micropterus salmoides					View
Decollate Snail	Rumina decollata					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Crested Snaggletooth Snail	Gastrocopta cristata					No Photo
Slim Snaggletooth Snail	Gastrocopta pellucida					No Photo
White-lipped Dagger Snail	Pupoides albilabris					No Photo
Multirib Vallonia Snail	Vallonia gracilicosta					No Photo
Lovely Vallonia Snail	Vallonia pulchella					No Photo
Black-bodied Glass Snail	Oxychilus draparnaudi					No Photo
Brown Gardensnail	Helix aspersa					View
Brine Shrimp	Artemia franciscana				Y	View
Versatile Fairy Shrimp	Branchinecta lindahli				Y	View
Tiger Beetle	Amblycheila picolominii					No Photo
Tiger Beetle	Cicindela circumptica johnsoni					No Photo
Tiger Beetle	Cicindela debilis					No Photo
Big Sand Tiger Beetle	Cicindela formosa rutilovirescens					View
Tiger Beetle	Cicindela hornii					No Photo
Tiger Beetle	Cicindela lemniscata					No Photo
Dainty Tiger Beetle	Cicindela lepida					No Photo
Tiger Beetle	Cicindela marutha					No Photo
Tiger Beetle	Cicindela nigrocoerula					No Photo
Tiger Beetle	Cicindela obsoleta obsoleta; santaclarae					No Photo
Tiger Beetle	Cicindela ocelleta					No Photo
Tiger Beetle	Cicindela scutellaris scutellaris					No Photo
Tiger Beetle	Cicindela tenuisignata					No Photo
Tiger Beetle	Cicindela togata					No Photo
Tiger Beetle	Tetracha carolina					No Photo
Stag Beetle	Pseudolucanus mazama					No Photo
Long-horned Beetle	Trachyderes mandibularis					No Photo
Sleepy Duskywing Skipper	Erynnis brizo					View
Funereal Duskywing Skipper	Erynnis funeralis					View
Common Sootywing Skipper	Pholisora catullus					View
Common Checkered Skipper	Pyrgus communis					View

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Dotted Roadside Skipper	Amblyscirtes eos					No Photo
Nysa Roadside Skipper	Amblyscirtes nysa					No Photo
Sachem Skipper	Atalopedes campestris					View
Orange Skipperling	Copaeodes aurantiaca					View
Uncas Skipper	Hesperia uncas uncas					No Photo
Fiery Skipper	Hylephila phlyeus					View
Pipevine Swallowtail Butterfly	Battus philenor					View
Black Swallowtail Butterfly	Papilio polyxenes asterius					View
Cabbage White Butterfly	Pieris rapae					View
Checkered White Butterfly	Pontia protodice					View
Orange Sulphur Butterfly	Colias eurytheme					View
Western Common Sulphur Butterfly	Colias philodice					View
Little Yellow Butterfly	Eurema lisa					View
Mexican Yellow Butterfly	Eurema mexicanum					No Photo
Sleepy Orange Butterfly	Eurema nicippe					View
Lyside Sulphur Butterfly	Kricogonia lyside					View
Dainty Sulphur Butterfly	Nathalis iole					View
Cloudless Sulphur Butterfly	Phoebis sennae					View
Southern Dogface Butterfly	Zerene cesonia					View
Frank's Common Hairstreak Butterfly	Strymon melinus					View
Arizona Blue Butterfly	Celastrina ladon cinerea					No Photo
Reakirt's Blue Butterfly	Hemiargus isola					View
Marine Blue Butterfly	Leptotes marina					View
Melissa Blue Butterfly	Plebejus melissa					View
Texas Blue Butterfly	Plebejus acmon					View
Western Pygmy-Blue Butterfly	Brephidium exilis					View
American Snout	Libytheana bachmanii					No Photo
Buckeye Butterfly	Junonia coenia					View
Mourning Cloak Butterfly	Nymphalis antiopa					View
Red Admiral Butterfly	Vanessa atalanta					View
Painted Lady Butterfly	Vanessa cardui					View

All Species Lea

Common Name	Scientific Name	NMGF	US FWS	Critical Habitat	SGCN	Photo
American Lady Butterfly	Vanessa virginiensis					View
Variegated Fritillary Butterfly	Euptoieta claudia					View
Crocale Patch Butterfly	Chlosyne lacinia					View
Painted Crescent Butterfly	Phyciodes picta					View
Pearl Crescent Butterfly	Phyciodes tharos Type A					View
Fulvia Checkerspot Butterfly	Thessalia fulvia					View
Goatweed Butterfly	Anaea andria					No Photo
Striated Queen	Danaus gilippus					View
Monarch Butterfly	Danaus plexippus		C			View
Gulf Fritillary Butterfly	Agraulis vanillae					View
Plateau Spreadwing	Lestes alacer					View
Paiute Dancer	Argia alberta					No Photo
Powdered Dancer	Argia moesta					View
Blue-ringed Dancer	Argia sedula					View
Double-striped Bluet	Enallagma basidens					No Photo
Boreal Bluet	Enallagma boreale					No Photo
Tule Bluet	Enallagma carunculatum					View
Familiar Bluet	Enallagma civile					View
Plains Forktail	Ischnura damula					View
Black-fronted Forktail	Ischnura denticollis					No Photo
Rambur's Forktail	Ischnura ramburii					View
Common Green Darner	Anax junius					View
Blue-eyed Darner	Rhionaeschna multicolor					View
Russet-tipped Clubtail	Stylurus plagiatus					No Photo
Red-tailed Pennant	Brachymesia furcata					No Photo
Four-spotted Pennant	Brachymesia gravida					No Photo
Western Pondhawk	Erythemis collocata					No Photo
Eastern Pondhawk	Erythemis simplicicollis					View
Comanche Skimmer	Libellula comanche					View
Widow skimmer	Libellula luctuosa					View
Twelve-spotted Skimmer	Libellula pulchella					View

All Species Lea

Common Name	Scientific Name	NMGF	US FWS	Critical Habitat	SGCN	Photo
Flame Skimmer	Libellula saturata					View
Roseate Skimmer	Orthemis ferruginea					View
Blue Dasher	Pachydiplax longipennis					View
Spot-winged Glider	Pantala hymenaea					View
Eastern Amberwing	Perithemis tenera					View
Common Whitetail	Plathemis lydia					View
Variegated meadowhawk	Sympetrum corruptum					View
Black Saddlebags	Tramea lacerata					View
Red Saddlebags	Tramea onusta					View
Jerusalem Cricket	Stenopelmatus mescaleroensis					No Photo
Lubber Grasshopper	Brachystola magna					View
Chihuahua Toad Hopper Grasshopper	Phrynotettix tsivavensis					No Photo
Green Fool Grasshopper	Acrolophitus hirtipes					No Photo
White Whiskers Grasshopper	Ageneotettix deorum					No Photo
Striped Slant-Faced Grasshopper	Amphitornus coloradus					No Photo
Elliott Grasshopper	Aulocara ellioti					No Photo
White Cross Grasshopper	Aulocara femoratum					No Photo
Black Males Grasshopper	Boopedon nubilum					View
Crenulated Grasshopper	Cordillacris crenulata					No Photo
Spotted Wing Grasshopper	Cordillacris occipitalis					No Photo
Velvet-Striped Grasshopper	Eritettix simplex					No Photo
Rufous Grasshopper	Heliaula rufa					No Photo
Pecos Clicker Grasshopper	Ligurotettix planum					No Photo
Mermiria Grasshopper	Mermiria bivittata					No Photo
Obscure Grasshopper	Opeia obscura					No Photo
Desert Toothpick Grasshopper	Paropomala pallida					No Photo
Wyoming Toothpick Grasshopper	Paropomala wyomingensis					No Photo
Four-Spotted Grasshopper	Phlibostroma quadrimaculatum					No Photo
Brown Spotted Range Grasshopper	Psoloessa delicatula					No Photo
Slant-Faced Grasshopper	Syrbula admirabilis					View
Speckled Rangeland Grasshopper	Arphia conspersa					No Photo

All Species Lea

Common Name	Scientific Name	NMGF	US FWS	Critical Habitat	SGCN	Photo
Red-Winged Grasshopper	Arphia pseudonietana					No Photo
Hayden's Grasshopper	Derotmema haydeni					No Photo
Carolina Grasshopper	Dissosteira carolina					No Photo
High Plains Grasshopper	Dissosteira longipennis					No Photo
Dusky Grasshopper	Encoptolophus costalis					No Photo
Grasshopper	Hadrotettix magnificus					No Photo
Three-Banded Range Grasshopper	Hadrotettix trifasciatus					No Photo
Blue Winged Grasshopper	Leprus wheeleri					No Photo
Pard Grasshopper	Metator pardalinus					No Photo
Mottled Sand Grasshopper	Spharagemon collare					No Photo
Grasshopper	Spharagemon cristatum					No Photo
Say's Grasshopper	Spharagemon equale					No Photo
Kiowa Range Grasshopper	Trachyrhachys kiowa					No Photo
Toothed Field Grasshopper	Trimerotropis agrestis					No Photo
Broad-Banded Grasshopper	Trimerotropis latifasciata					No Photo
Black-Winged Grasshopper	Trimerotropis melanoptera					No Photo
Pallid-Winged Grasshopper	Trimerotropis pallidipennis					View
Barren Land Grasshopper	Trimerotropis pristrinaria					No Photo
Great Crested Grasshopper	Tropidolophus formosus					View
Red Shanks Grasshopper	Xanthippus corallipes					No Photo
Lined Bird Grasshopper	Schistocerca alutacea lineata					No Photo
Green Bird Grasshopper	Schistocerca alutacea shoshone					No Photo
Gray Creosotebush Grasshopper	Clematodes larreae					No Photo
Fuzzy Olive-Green Grasshopper	Campylacantha olivacea					No Photo
Painted Grasshopper	Dactylotum bicolor					View
Grasshopper	Hesperotettix speciosus					No Photo
Green Streak Grasshopper	Hesperotettix viridis					No Photo
Narrow-Winged Spur-Throat Grasshopper	Melanoplus angustipennis					No Photo
Arizona Spur-Throat Grasshopper	Melanoplus arizonae					No Photo
Bowditch's Spur-Throat Grasshopper	Melanoplus bowditchi					No Photo

All Species Lea

<u>Common Name</u>	<u>Scientific Name</u>	<u>NMGF</u>	<u>US FWS</u>	<u>Critical Habitat</u>	<u>SGCN</u>	<u>Photo</u>
Differential Grasshopper	Melanoplus differentialis					No Photo
Yellow Spur-Throat Grasshopper	Melanoplus flavidus					No Photo
Grasshopper	Melanoplus foedus					No Photo
Gladston's Spur-Throat Grasshopper	Melanoplus gladstoni					No Photo
Glaucous-Legged Grasshopper	Melanoplus glaucipes					No Photo
Grasshopper	Melanoplus lakinus					No Photo
Flabellate Grasshopper	Melanoplus occidentalis					No Photo
Packard's Grasshopper	Melanoplus packardi					No Photo
Regal Spur-Throat Grasshopper	Melanoplus regalis					No Photo
Lesser Migratory Grasshopper	Melanoplus sanguinipes					No Photo
Platte Range Grasshopper	Mestobregna plattei					No Photo
Southern Black Widow	Latrodectus mactans					View
Spider	Neoscona crucifera					No Photo
Brown Recluse Spider	Loxosceles reclusa					View

Operating and Maintenance Plan



OPERATING AND MAINTENANCE PLAN

Smokin' Containment Pit

OVERVIEW

The attached plan details the operational requirements regarding the Smokin' 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

Smokin' Containment Pit

OVERVIEW

The attached plan details the requirements regarding the closure of the Smokin' 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: Tuesday, January 9, 2024 11:19 AM
To: Blake_grooms@eogresources.com; Patricia Donald; Olivia_Desser@eogresources.com
Subject: 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635]
Attachments: C-147 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635].pdf

1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635]

Good morning Mr. Grooms,

NMOCD has reviewed the recycling containment permit application and related documents, submitted by [7377] EOG RESOURCES INC on January 04, 2024, for 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] in Unit Letter D, Section 34, Township 23S, Range 32E, Lea County, New Mexico. [7377] EOG RESOURCES INC requested variances for 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] related to 19.15.34. NMAC

The following variances have been approved:

- The variance from 19.15.34.13.E NMAC for the installation of two audible 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 45-degree barbed wire arm toppers is approved.
- The variance to 19.15.34.12.A.(4) NMAC to install a 40-mil HDPE liner, in leu of the 30-mil string reinforced liner is approved.

The form C-147 and related documents for the 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] is approved with the following conditions of 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.
- [7377] EOG RESOURCES INC shall construct, operate, maintain, close, and reclaim the 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] in compliance with 19.15.34 NMAC.
- 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] is approved for five years of operation from the date of permit application. 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] permit expires on January 04, 2029.
- The 1RF-515 - SMOKE CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] will consist of one (1) earthen containment with a fluid capacity of 1,010,101 bbl.
- [7377] EOG RESOURCES INC LLC shall notify NMOCD when construction of the 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] commences.
- [7377] EOG RESOURCES INC shall notify NMOCD when recycling operations commence and cease at 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635].
- A minimum of 3-feet freeboard must be maintained 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] recycling containment, at all times during operations.
- If less than 20% of the total fluid capacity is utilized every six months, beginning from the first withdrawal, operation of the facility is considered ceased and notification of cessation of operations should be sent electronically to [OCD Online](#). An extension to extend the cessation of operation, not to exceed six months, may be submitted using a C-147 form through [OCD Online](#).

- [7377] EOG RESOURCES INC LLC shall submit monthly reports of recycling and reuse of produced water, drilling fluids, and liquid oil field waste on NMOCD form C-148 through [OCD Online](#) even if there is zero activity.
- [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 wastes at 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635].
- According to Table 1 of 19.15.34.14, the closure criteria for 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] is for groundwater depth of 51 to 100 feet.

PLEASE NOTE: For future applications, do not include information that is not required by the rule, this only makes the application more difficult to read and understand. In this application, the following appendices are not necessary and do not provide any information required in NMAC 19.15.34.11 SITING REQUIREMENTS FOR RECYCLING CONTAINMENTS:

1. APPENDIX D: NMDGF BISON-M COUNTY LIST
2. APPENDIX C: USFWS IPAC RESOURCE TRUST REPORT
3. THREATENED OR ENDANGERED SPECIES
4. CULTURAL RESOURCES DESKTOP REVIEW
5. BONDS

Please reference number 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [fVV2400853635] 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

<https://www.emnrd.nm.gov/ocd/>



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

COMMENTS

Action 300148

COMMENTS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 300148
	Action Type: [C-147] Water Recycle Long (C-147L)

COMMENTS

Created By	Comment	Comment Date
csmith	Application Return to Review. Application was assigned to incorrect Facility ID.	1/10/2024

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
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 811 S. First St., Artesia, NM 88210
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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 300148

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 300148
	Action Type: [C-147] Water Recycle Long (C-147L)

CONDITIONS

Created By	Condition	Condition Date
venegas	NMOCD has reviewed and approved the recycling containment permit application and related documents, submitted by [7377] EOG RESOURCES INC on January 04, 2024, for 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [FVV2400853635]. •[7377] EOG RESOURCES INC shall construct, operate, maintain, close, and reclaim the 1RF-515 - SMOKIN CONTAINMENT AND REUSE FACILITY ID [FVV2400853635] in compliance with 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 wastes at 1RF-515 - SMOKIN CONTAINMENT.	1/9/2024