AE Order Number Banner

Application Number: pEG2528351636

Initial Application Part I

SWD-2677

Blackbuck New Mexico LLC [373619]

Received: 10/02/2025

ACE Energy Advisors

September 30, 2025

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Subject: Blackbuck New Mexico LLC
Application for Authorization to Inject
Allegiance Federal SWD #1

OCD Manager,

Blackbuck New Mexico LLC (Blackbuck) is applying for administrative approval of the attached Application for Authorization to Inject (Form C-108) for their proposed Allegiance Federal SWD #1. The application is requesting authorization to dispose of saltwater from oil and gas production in the area via commercial disposal into the Devonian-Silurian Formation in Eddy County, NM.

Questions regarding this application or the included materials can be directed to Nate Alleman (Blackbuck Regulator Advisor Contractor) via telephone at 918-237-0559 or via email at nate.alleman@aceadvisors.com.

Sincerely,

Nathan Alleman

Nate Alleman
Chief Regulatory Advisor
Ace Energy Advisors

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Blackbuck New Mexico LLC **OGRID Number:** 373619
Well Name: Allegiance Federal SWD #1 **API:** 30-015-xxxxx
Pool: SWD; Devonian-Silurian **Pool Code:** 97869

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☐ Royalty, overriding royalty owners, revenue owners
C. ☒ Application requires published notice
D. ☒ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☒ Surface owner
G. ☒ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

09/30/2025
Date

Nathan Alleman
Print or Type Name

918-237-0559
Phone Number

Nathan Alleman
Signature

nate.alleman@aceadvisors.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance X Disposal _____Storage
Application qualifies for administrative approval? X Yes _____No

II. OPERATOR: Blackbuck New Mexico LLC

ADDRESS: 3200 Southwest Freeway, Houston, TX 77027

CONTACT PARTY: Ace Energy Advisors - Nate Alleman PHONE: (918) 237-0559

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes X No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Nate Alleman TITLE: Regulatory Consultant

SIGNATURE:  DATE: 09/30/2025

E-MAIL ADDRESS: nate.alleman@aceadvisors.com

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

Side 2

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

III. Well Data

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

Operator: Blackbuck New Mexico LLC (OGRID# 373619)
Lease/Well Name & Number: Allegiance Federal SWD #1
Legal Location: 394' FNL & 151' FWL - Unit Lot 4 – Section 5 R25S T27E – Eddy County
Coordinates: 32.165286, -104.220793

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Casing String	Hole Size (in)	Casing Size (in)	Casing Depth (ft)	Sacks Cement (sx)	Top of Cement (ft)	Method Determined
Surface	26"	20"	250'	438	Surface	Circulation
1st Intermediate	17-1/2"	13-3/8"	2,170'	1,210	Surface	Circulation
2nd Intermediate	12-1/4"	9-5/8"	10,684'	2,675	Surface	Circulation
Liner	8-3/4"	7-5/8"	9,680' - 13,123'	253	9,680'	Calculation -circulate to top of liner
Open Hole Injection Interval	6"	N/A	Open hole 13,123' - 14,360'	N/A	N/A	N/A

A wellbore diagram is included in ***Attachment 1***.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

7" x 5-1/2" fiberglass-coated tubing set at 13,103'

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Baker SC-2 or equivalent set at 13,103'

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

Injection Formation Name - Devonian-Silurian
Pool Name - SWD; Devonian-Silurian
Pool Code – 97869

(2) The injection interval and whether it is perforated or open-hole.

Open-hole injection between 13,123' - 14,360'

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

New drill for injection

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

None

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

- **Overlying**
  - Delaware (2,197' – 3,057')
  - Bone Spring (5,709' – 8,852')
  - Wolfcamp (8,852' – 10,784')
- **Underlying:** None

V. AOR Maps

Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

The following figures are included in ***Attachment 2***:

- **1.0-Mile & 2.0-Mile Well Map**
- **1.0-Mile Well List**
- **2.0-Mile & 2.0-Mile Lease Map**
- **1.0-Mile Surface Ownership Map**
- **1.0-Mile Mineral Ownership Map**
- **Potash District Map**
- **1.5-Mile Deep SWD Proximity Map:** The only pending or approved Injection Permit for a Deep SWD (Devonian or deeper) within 1.5 miles is Anthem Water Solutions' Grackle 072725 Federal SWD #1 (pBL2116955396), which is a pending C-108 application. A Viability Analysis included in ***Attachment 2*** demonstrates that the Grackle SWD is non-viable based on non-compliance with OCD and BLM requirements; therefore, the 1.5-mile setback requirement between Deep SWDs should not be applied to the Grackle SWD location.

VI. AOR List

Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

Details of the wells within the 1.0-mile AOR are included in ***Attachment 2***. No wells within the 1.0-mile AOR penetrate the top of the proposed injection zone.

VII. Operational Information

Attach data on the proposed operation, including:

(1) Proposed average and maximum daily rate and volume of fluids to be injected;

Maximum: 40,000 bpd
Average: 30,000 bpd

(2) Whether the system is open or closed;

The system will be closed.

(3) Proposed average and maximum injection pressure;

Maximum: 2,624 psi (surface)
Average: approx. 2,000 psi (surface)

(4) Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water;

It is anticipated that produced water from Delaware, Bone Spring & Wolfcamp production wells in the area will be injected into the proposed SWD. Therefore, water analysis from these formations was obtained and is included in ***Attachment 3***.

(5) If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

The proposed injection interval for this SWD is the Devonian-Silurian formation, which is a non-productive zone known to be compatible with formation water from the Delaware, Bone Spring & Wolfcamp formations. Water analyses of samples collected from the proposed injection formation in the area were obtained and are included in ***Attachment 4***.

VIII. Geologic Description

Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

Groundwater

The local alluvium acts as the principal aquifer used for drinking ground water, if present, near the Subject SWD. Around the Subject SWD, the base of the lowermost Underground Source of Drinking Water (USDW) is at the base of the Permian Rustler Formation which lies 224 feet (bgs), which contains the first anhydrite/salt layer in the Salado Fm. Office of the State Engineer (OSE) data for domestic and livestock water wells indicate the deepest freshwater-bearing strata in the area occurs at depths of less than 200 ft.

Proposed Injection Interval

The proposed injection interval, at depths of 13,123 ft – 14,360 ft, includes the Devonian and Silurian formations is a package of carbonates consisting of predominantly of dolomite with limestone and interbedded cherts. Dolomitic and limestone porosities are expected to range from 0% to 7% with higher skeletal cherts ranging greater than 7% due to secondary porosity in the form of vugs and fractures from weathering effects and compaction. Permeabilities in the 2-7% porosity dolomitic grainstones intervals are estimated to be in the 2-20 millidarcy range, with higher porosity intervals estimated to be in the 40-100 millidarcy range. The open hole injection interval is expected to be within the majority of the higher permeability intervals.

Overlying Confinement

Overlying Confinement is provided by approximately 179 cumulative feet of low-permeability limestone and shale of the Mississippian Limestone and Woodford Shale that will act as barrier to fluid flow and prevent upward migration of injectate into overlying formations.

With the top of the proposed injection interval at 13,123 ft, there is expected to be approximately 12,899 ft of vertical separation between the injected fluids and the base of the lowermost USDW, including the 179 ft thick permeability barrier immediately overlying the injection interval. In addition to the geologic isolation, the freshwater resources will be further isolated and protected by surface casing that will be set at approximately 250 ft (25 ft below the base of the lowermost USDW) and cemented to surface.

Underlying Confinement

Underlying Confinement is provided by approximately 335 cumulative feet of low-permeability carbonates of the Silurian-aged Montoya formation. The proposed well will TD approximately 47 ft above the top of the Ordovician Montoya and will not inject fluids into the Montoya itself in order to provide sufficient barrier to avoid injection into the Middle Ordovician Simpson, the Lower Ordovician Ellenburger, or the Cambrian and the Precambrian below. The Precambrian structure contours (Ruppel, 2009) show the basement to be at a depth of approximately 16,004 ft in this area. Therefore, the injection zone lies approximately 1,644 ft above the Precambrian basement.

IX. Proposed Stimulation Program

Describe the proposed stimulation program, if any.

A minor acid job utilizing 15-20% hydrochloric acid may be used to cleanup the wellbore.

X. Logging and Test Data

Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

Logs will be run and submitted to the Division once the well is completed.

XI. Groundwater Wells

Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

A review of New Mexico Office of the State Engineer (OSE) data returned records of zero groundwater wells located within the Subject SWD's 1-mile water well sampling radius. Due to the lack of water well sampling candidates, no water well samples were collected as a part of this application.

A map prepared with OSE's water well data is included in ***Attachment 5***, verifying that OSE's data does not indicate the presence of any water wells within 1 mile of the Subject SWD.

XII. No Hydrologic Connection Statement

Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

A geologic review conducted on offset wireline log data and published data did not identify any faulting in the vicinity of the proposed locations that would allow for the hydraulic communication between the injection interval and overlying USDWs. A signed Affirmative Statement by a qualified expert is included in ***Attachment 6***.

A Fault Slip Potential (FSP) Model was prepared for the proposed disposal operation using very conservative assumptions as inputs for the model. The model resulted in an FSP value of 0.0 on all faults after 20 years, demonstrating that, even under a very conservative scenario, the proposed SWD is not expected to contribute to seismicity. A summary of the methodology and findings of the FSP, along with an associated Seismic Potential Analysis, is included in ***Attachment 6.***

XIII. Proof of Notice

Applicants must complete the "Proof of Notice" section on the reverse side of this form.

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

A copy of the application was mailed to the Affected Persons, including the OCD District Office, surface owner, leasehold operators within the AOR, and BLM/SLO if they own minerals within the AOR. ***Attachment 7*** includes a list of the Affected Persons receiving notice of the application and the associated certified mailing receipts (green sheets).

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located.

A Public Notice was published in the Carlsbad Current-Argus, a newspaper of general circulation in the area, and the associated affidavit is included in ***Attachment 7***.

Attachment 1

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: ☐ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
	97869	SWD-DEVONIAN-SILURIAN	
Property Code	Property Name		Well Number
	ALLEGIANCE FEDERAL SWD		#1
OGRID No. 373619	Operator Name		Ground Level Elevation
	BLACKBUCK NEW MEXICO, LLC		3,405'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☐ Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	5	25S	27E	LOT 4	394' FNL	151' FWL	32.165286°	-104.220793°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: ☐Yes ☐No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐ Horizontal ☐ Vertical	Ground Floor Elevation:

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Nathan Alleman 09/19/2025

Signature Date

Nathan Alleman

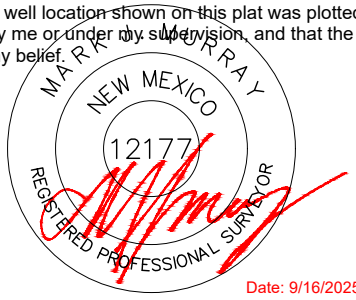
Printed Name

nate.alleman@aceadevisors.com

Email Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.



Date: 9/16/2025

Signature and Seal of Professional Surveyor

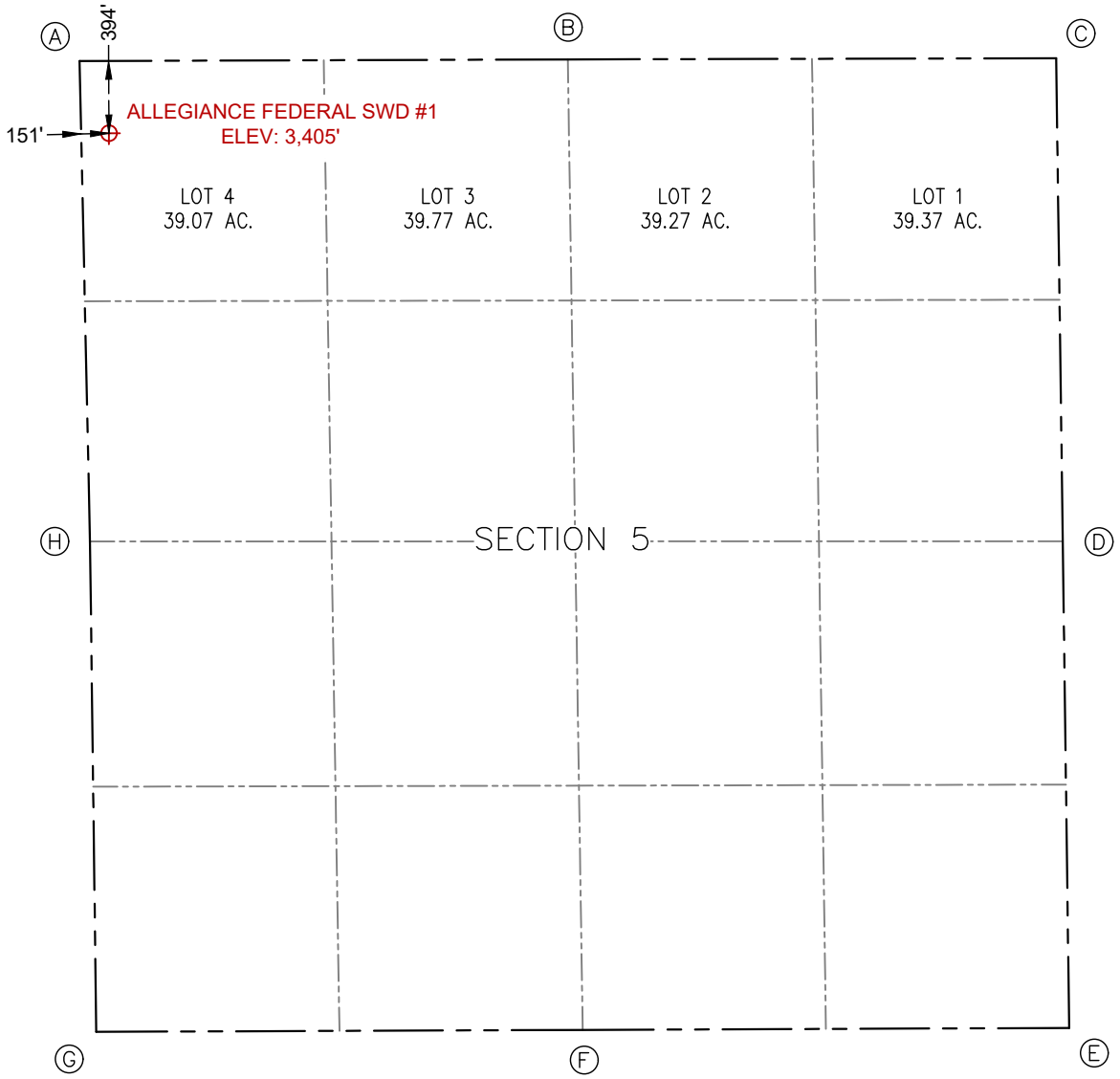
Certificate Number	Date of Survey	Revision Number
12177	9/16/2025	0

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



SURFACE HOLE LOCATION
394' FNL & 151' FWL
ELEV. = 3,405.00'

NAD 83 X = 576,160.98'
NAD 83 Y = 423,884.45'
NAD 83 LAT = 32.165286°
NAD 83 LONG = -104.220793°
NAD 27 X = 534,978.05'
NAD 27 Y = 423,826.81'
NAD 27 LAT = 32.165166°
NAD 27 LONG = -104.220296°

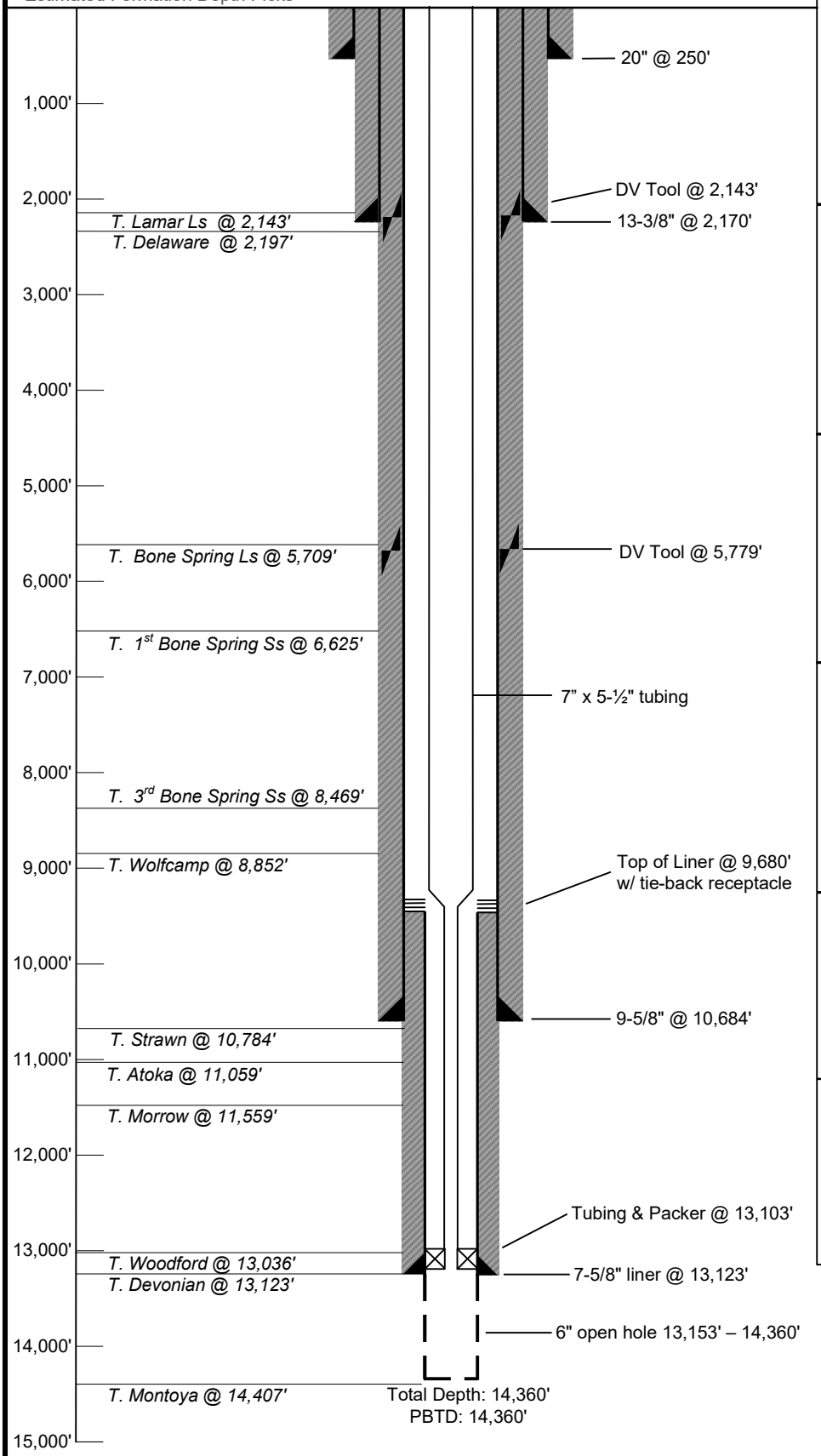
CORNER COORDINATES NEW MEXICO EAST - NAD 83	
POINT	NORTHING/EASTING
A	IRON PIPE W/ BRASS CAP N:424,278.06' E:576,001.38'
B	IRON PIPE W/ BRASS CAP N:424,286.78' E:578,659.43'
C	IRON PIPE W/ BRASS CAP N:424,293.29' E:581,318.48'
D	IRON PIPE W/ BRASS CAP N:421,663.45' E:581,354.47'
E	IRON PIPE W/ BRASS CAP N:419,013.75' E:581,388.93'
F	IRON PIPE W/ BRASS CAP N:419,003.04' E:578,740.44'
G	CALCULATED CORNER N:418,992.34' E:576,091.95'
H	IRON PIPE W/ BRASS CAP N:421,662.15' E:576,058.03'

Prepared By: ACE Energy Advisors

Allegiance Federal SWD #1

Proposed Wellbore Diagram

Prepared For: BLACKBUCK RESOURCES



Surface Casing

Casing Size:	20 in
Casing Type:	94 lb/ft J-55
Casing Depth:	250 ft
Hole Size:	26 in
Top of Cement:	Surface
Sks Cement:	438 sx
Cement Type:	Class C

1st Intermediate Casing

Casing Size:	13-3/8 in
Casing Type:	61 lb/ft J-55 BTC
Casing Depth:	2,170 ft
Hole Size:	17-1/2 in
Top of Cement:	Surface
Sks Cement:	1,210 sx
Cement Type:	Class C

2nd Intermediate Casing

Casing Size:	9-5/8 in
Casing Type:	53.5 lb/ft P110
Casing Depth:	10,684 ft
Hole Size:	12-1/4 in
Top of Cement:	Surface
Sks Cement:	2,675 in 3 stages
Cement Type:	Class C

Liner

Casing Size:	7-5/8 in
Casing Type:	29.7 lb/ft HCL-80
Casing Depth:	9,680 ft – 13,123 ft
Hole Size:	8-3/4 in
Top of Cement:	9,680 ft
Sks Cement:	253 sx
Cement Type:	Class C

Injection Tubing & Packer

Tubing Size:	7" x 5 1/2 in
Tubing Type	29# x 15.5# fiberglass lined
Tubing Depth:	13,103 ft
Packer Type:	Baker SC-2 or equivalent
Packer Depth:	13,103 ft

Injection Interval

Formation(s):	Devonian-Silurian
Top:	13,123 ft
Bottom:	14,360 ft
Hole size:	6 in
Cased or Open-Hole:	Open-Hole

Notes:

- *Listed depths are measured from ground surface.*
- *Depths and cement volumes are estimates based on evaluation of the available information.*

NOT TO SCALE

SC-2 Retrievable Packer

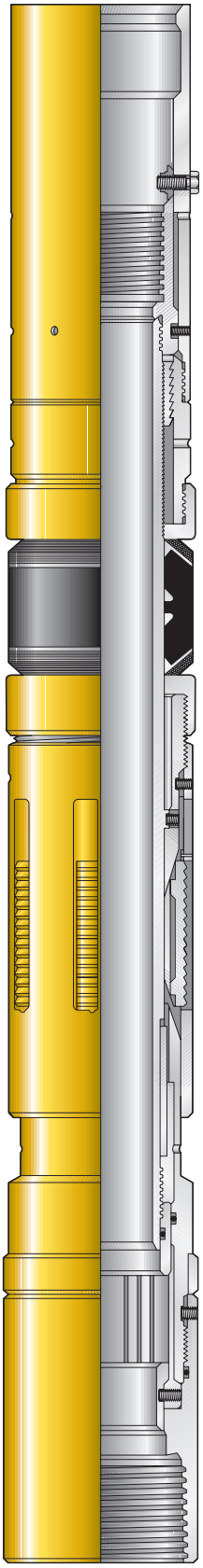
Product Family No. H48807

APPLICATION

The Baker Hughes SC-2™ retrievable packer is a high-performance, retrievable, sealbore packer. It can be run and set on electric wireline, slick line/tubing with the same setting tools used for the D packer.

Advantages

- Can be set with wireline or hydraulic setting tools
- Can be equipped with a variety of bottom guides (must be ordered separately)
- Packer easily accommodates tubing expansion or contraction
- Tubing and seals can be removed without accidentally unsetting packer
- Easy retrieval due to caged slips and releasing mechanism located in protected area below packing element
- Packer's releasing mechanism is not affected by differential pressure or tailpipe weight
- Case-hardened slips suitable for all grades of casing including V-150
- Compatible with standard Baker Hughes' seal accessories, tubing-conveyed perforating and gravel-packing systems



SC-2 Retrievable Packer
Product Family No. H48807

SPECIFICATION GUIDE

SC-2™ Retrievable Packer, Product Family No. H48807

Casing			Packer ✷					
OD		T & C Weight ▼	Size ●		Max Gage Ring OD		Max Packing Element	
in.	*mm*	lb/ft			in.	*mm*	in.	*mm*
5-1/2	*139.7*	20–23	55A2–26		4.485	*113.9*	4.406	*111.9*
		17–20	55A4–26		4.593	*116.6*	4.500	*114.3*
		13–15.5	55B–26		4.765	*121.0*	4.687	*119.0*
7	*177.8*	35–38	70A2–32		5.735	*145.6*	5.687	*144.4*
		29–32	70A4–32		5.820	*147.8*	5.750	*146.0*
		23–29	70B–32		6.000	*152.4*	5.937	*150.8*
		17–20	70C–32		6.250	*158.7*	6.187	*157.1*
7-5/8	*193.6*	33.7–39	76A2–32 ◆	76A2–40 ◆	6.440	*163.6*	6.375	*161.9*
		29.7–33.7	76A4–32 ◆	76A4–40 ◆	6.580	*167.1*	6.500	*165.1*
		24–29.7	76B2–32 ◆	76B2–40 ◆	6.690	*169.9*	6.625	*168.2*
		20–24	76B4–32 ◆	76B4–40 ◆	6.784	*172.3*	6.718	*170.6*
9-5/8	*244.4*	53.5–58.4	96A–47		8.191	*208.0*	8.125	*206.3*
		47–53.5	96A2–47		8.319	*211.3*	8.250	*209.5*
		40–47	96A4–47		8.465	*215.0*	8.375	*212.7*
		36–40	96B–47		8.619	*218.9*	8.500	*215.9*

Size	Sealbore Dia for Seal Nipples ■		Seal Accessory Size ▲	Min Bore Thru Seal Nipples	
	in.	*mm*		in.	*mm*
55A2–26	2.688	*68.2*	40–26	1.968	*50.0*
55A4–26					
55B–26					
70A2–32	3.250	*82.5*	80–32 or 81–32	2.406 or 1.995	*61.1 or 50.6*
70A4–32					
70B–32					
70C–32					
76A2–32					
76A2–40	4.000	*101.6*	80–40	3.000	*72.6*
76A4–32	3.250	*82.5*	80–32 or 81–32	2.406 or 1.995	*61.1 or 50.6*
76A4–40	4.000	*101.6*	80–40	3.000	*72.6*
76B2–32	3.250	*82.5*	80–32 or 81–32	2.406 or 1.995	*61.1 or 50.6*
76B2–40	4.000	*101.6*	80–40	3.000	*72.6*
76B4–32	3.250	*82.5*	80–32 or 81–32	2.406 or 1.995	*61.1 or 50.6*
76B4–40	4.000	*101.6*	80–40	3.000	*72.6*
96A–47	4.750	*120.6*	190–47 or 192–47	3.000 or 3.875	*72.6 or 98.4*
96A2–47					
96A4–47					
96B–47					

✷ *For information on packer or accessory sizes not found in this specification guide, refer to Baker Hughes' packer systems technical manual or your Baker Hughes representative.*

● *When proposed for use in other than the casing weight range shown, contact your Baker Hughes representative.*

■ *The maximum OD (including tolerance) of any part run through a production packer should be at least 1/16-in. (1.59mm) smaller than the minimum bore through the packer body. This may occasionally require that the coupling ODs be turned down.*

▲ *Tubing-seal assemblies, tubing seal and spacer nipples.*

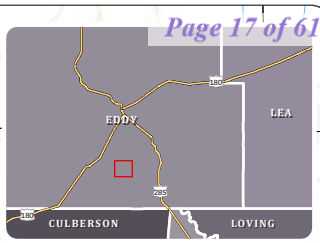
◆ *This tool available with 3.250 in. (82.5 mm) or 4.000 in. (101.6 mm) seal bore diameter and uses sizes 80-32/ 81–32 or 80–40 accessories respectively.*

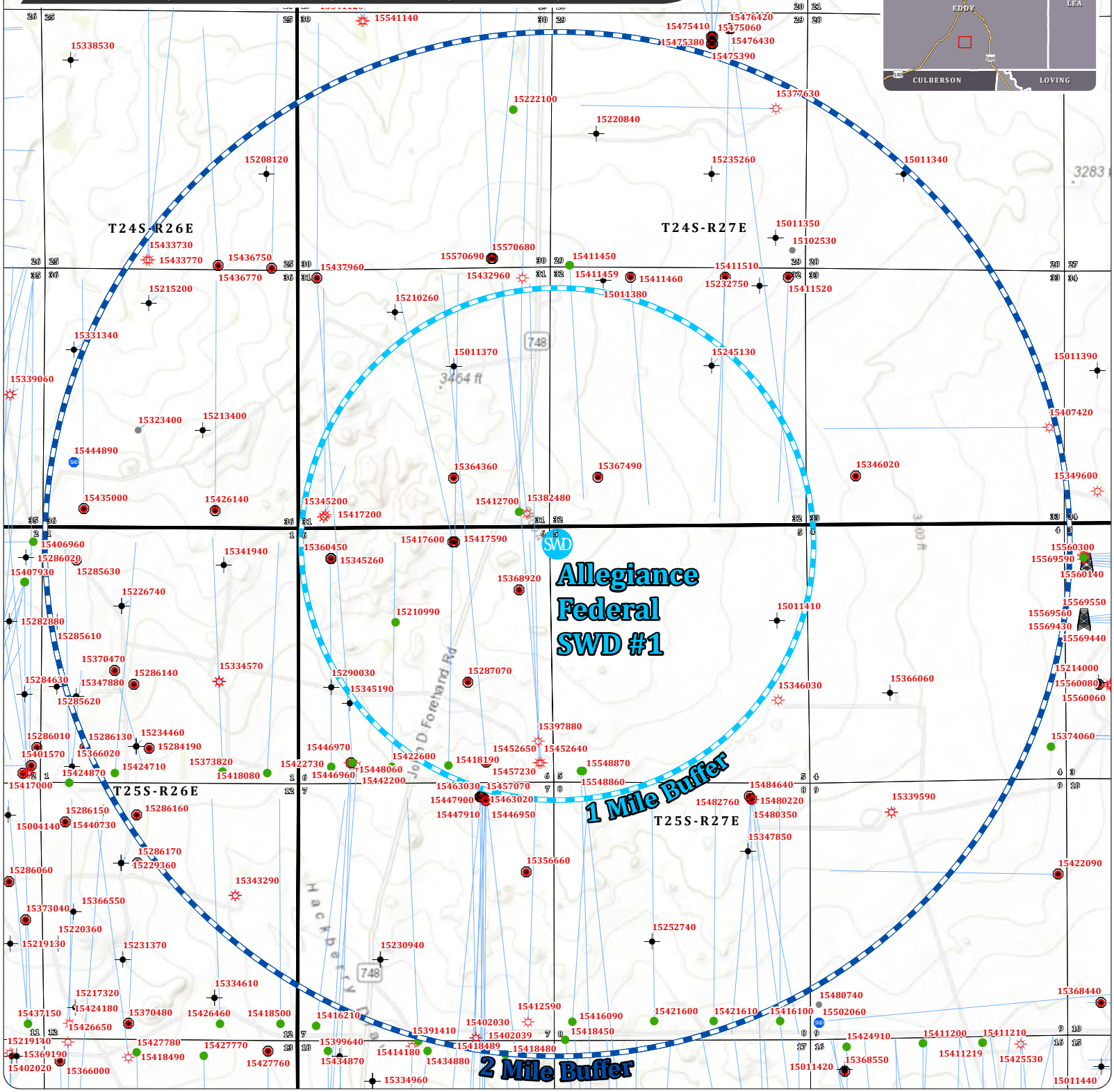
▼ *When selecting a SC-2 packer for a casing weight common to two size packers choose the packer with the smallest OD to maximize running clearances. Example: In 5-1/2-in. (139.7-mm), 20.0-lb/ft casing, use size 55A2–26.*

Attachment 2

WELL MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO





1:33,000	0	2,000	4,000	6,000 Feet

Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

Released to Imaging: 10/10/2025 2:30:12 PM

Rev: 0

Legend

- Proposed SWD
- 1 Mile Buffer
- 2 Mile Buffer
- Other
- Oil
- Gas
- Disposal
- Drilling
- Permitted
- Cancelled/Expired Permit
- P/A
- TA

Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

BLACKBUCK RESOURCES

1-mile Well List (Top of Injection Interval: 13,123')								
Well Name	API#	Well Type	Operator	Status	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
PRE-ONGARD WELL #001	30-015-01137	Oil	PRE-ONGARD WELL OPERATOR	Plugged	4/27/1949	G-31-24S-27E	14,865	Yes
PRE-ONGARD WELL #001	30-015-01141	Oil	PRE-ONGARD WELL OPERATOR	Plugged	N/A	H-05-25S-27E	2,367	No
PRE-ONGARD WELL #001	30-015-21099	Oil	PRE-ONGARD WELL OPERATOR	Cancelled	N/A	F-06-25S-27E	0	No
NEW MEXICO DM STATE #001	30-015-24513	Oil	J & G ENTERPRISE LTD. CO.	Plugged	4/14/1997	G-32-24S-27E	6,000	No
WOLF 6 #001	30-015-28707	Oil	ADVANCED DOWNHOLE INC	Cancelled	N/A	J-06-25S-27E	0	No
TAOS FEDERAL #001	30-015-34520	Gas	Coterra Energy Operating Co.**	Active	2/9/2006	4-31-24S-27E	12,337	No
MERGANSER 6 FED COM #001C	30-015-34526	Gas	CIMAREX ENERGY CO. OF COLORADO**	Cancelled	N/A	4-06-25S-27E	0	No
MERGANSER 6 FED COM #001	30-015-36045	Gas	CIMAREX ENERGY CO. OF COLORADO**	Expired	N/A	06-25S-27E	0	No
TAOS FEDERAL #002	30-015-36436	Gas	Coterra Energy Operating Co.	Expired	N/A	O-31-24S-27E	0	No
WOLF CREEK 32 STATE COM #001E	30-015-36749	Gas	CIMAREX ENERGY CO. OF COLORADO**	Cancelled	N/A	M-32-24S-27E	0	No
MERGANSER 6 FED COM #002	30-015-36892	Gas	CIMAREX ENERGY CO. OF COLORADO**	Expired	N/A	06-25S-27E	0	No
TAOS FEDERAL #003	30-015-38248	Oil	Coterra Energy Operating Co.**	Active	4/23/2011	P-31-24S-27E	10,591	No
SCOTER 6 FED COM #002	30-015-39788	Oil	CIMAREX ENERGY CO. OF COLORADO**	Active	6/26/2013	P-06-25S-27E	7457	No
TAOS FEDERAL #004H	30-015-41270	Oil	Coterra Energy Operating Co.**	Active	6/14/2013	P-31-24S-27E	7549	No
TAOS FEDERAL #005H	30-015-41720	Oil	Coterra Energy Operating Co.**	Active	11/18/2014	M-31-24S-27E	7,350	No
TAOS FEDERAL #006H	30-015-41759	Oil	Coterra Energy Operating Co.**	Cancelled	N/A	B-06-25S-27E	0	No
TAOS FEDERAL #007H	30-015-41760	Oil	Coterra Energy Operating Co.**	Cancelled	N/A	B-06-25S-27E	0	No
SCOTER 6 FEDERAL #003H	30-015-41819	Oil	CIMAREX ENERGY CO. OF COLORADO**	Active	3/1/2014	O-06-25S-27E	7,319	No
SCOTER 6 31 FEDERAL COM #044H	30-015-45264	Gas	Coterra Energy Operating Co.**	Active	10/21/2018	P-06-25S-27E	9,037	No
SCOTER 6 31 FEDERAL COM #043H	30-015-45265	Gas	Coterra Energy Operating Co.**	Active	3/30/2019	P-06-25S-27E	9,688	No
SCOTER 6 31 FEDERAL COM #029H	30-015-45723	Gas	Coterra Energy Operating Co.**	Cancelled	N/A	O-06-25S-27E	0	No
WHITE CITY 8 17 20 FEDERAL COM #001H	30-015-54886	Oil	Coterra Energy Operating Co.**	Active	5/2/2024	M-05-25S-27E	Bone Spring	No
WHITE CITY 8 17 20 FEDERAL COM #002H	30-015-54887	Oil	Coterra Energy Operating Co.**	Active	5/1/2024	M-05-25S-27E	7938	No

Notes:
- One well penetrates the injection interval within the AOR.
*- ** Operator of active, drilled well within AOR and will receive notification of this application.*

Horizontal Well w/ Surface Location Outside the 1.0-mile AOR						
Well Name	API#	Well Type	Operator	Field	Status	Depth
DOC HOLLIDAY 32 STATE COM 001	30-015-41145	Oil	EOG RESOURCES INC**	BONE SPRING WEST, WILLOW LAKE	Active	7,620
DOC HOLLIDAY 32 STATE COM 002	30-015-41146	Oil	DEVON ENERGY PRODUCTION COMPANY, LP	BONE SPRING, WEST, WILLOW LAKE	Cancelled	7,593
DOC HOLLIDAY 32 STATE COM 003	30-015-41151	Oil	DEVON ENERGY PRODUCTION COMPANY, LP	BONE SPRING, WEST, WILLOW LAKE	Cancelled	7,590
DOC HOLLIDAY 32 STATE COM 004	30-015-41152	Oil	DEVON ENERGY PRODUCTION COMPANY, LP	BONE SPRING, WEST, WILLOW LAKE	Cancelled	7,590
SCOTER 6 FEDERAL 004H	30-015-42260	Oil	CIMAREX ENERGY CO. OF COLORADO**	BONE SPRING O, COTTONWOOD DRAW	Active	7,329
SCOTER 6 FEDERAL 005H	30-015-42273	Oil	CIMAREX ENERGY CO. OF COLORADO**	BONE SPRING O, COTTONWOOD DRAW	Active	7,249
SCOTER 6 31 FEDERAL COM 007H	30-015-44806	Oil	COTERRA ENERGY OPERATING CO.**	WOLFCAMP GAS, PURPLE SAGE	Active	9,465

Notes:
*- ** Operator of active, drilled well within AOR and will receive notification of this application.*

Penetrating Well Casing and Cement Details								
API#	Type	Hole	Size	Depth	Sacks	TOC	Method	Problem
30-015-01137	Surface	12 1/4"	13 3/8"	400'	425	Surface	Circulation	No
	Intermediate	N/A	9 5/8"	5,194'	1,000	Surface	Circulation	
	Production	N/A	5 1/2"	12,150'**	N/A	N/A	N/A	
	OH	N/A	N/A	12,150' - 14,865'	N/A	N/A	N/A	

Notes:
*- ** Production casing was run when the well was re-entered. There are no records for this but a notice of intent proposed a depth of 12,150'.*

Plugged Penetrating Wells			
API#	Perfs	Casing Pulled	Plugs
30-015-01137	9,940 - 9,978 10,440 12,030 - 12,062 12,045 - 12,054 OH 12,150 - 14865	5,267' of 5 1/2"	60 sx 14,615 - 14865
			40 sx 14,340 - 14,440
			40 sx 14,140 - 14,240
			40 sx 13,180 - 13,280**
			Sq perfs 12,030 - 12,062 w/200 sx
			Set Model K BP @ 12,004.
			Sq perfs 12,045 - 12,054 w/ 50 sx
			Perf @ 10,440. Set CR @ 10,400.
			Cement 5 1/2 csg w/ 900 sx. TOC 6,000. (TS)
			CIPB @ 9,900. Sq perfs 9,940 - 9,978 w/ 50 sx
			Cut & recover 5,267' of 5 1/2" casing
			CIBP @ 2,375'
			25 sx @ 2,375
			20 sx at surface

Notes:
*- ** 1950 Abandonment Subsequent Sundry indicates cement plug of "40 sacks from 13280' to 13180' "*
1950 Abandonment NOI Sundry indicates cement plug of "40 sacks from 13280 to 13180 (top Devonian)"

Form 9-331 a
(March 1942)

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

APPROVED MAY 3 1949
Frank B. Stahl
ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces, N.M.
Lease No. ~~L.C.067412~~ 067214
Unit

Federal Wiggs

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Spudding	x		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Midland, Texas April 28, 1949

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

SW/4 of NE/4 of Sec. 31 (¼ Sec. and Sec. No.) T-24-S (Twp.) 27-E (Range) (Meridian)

Black River Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded 12-1/4" hole at 11:00 A.M., April 27, 1949

...SURVEY ...ED MAY 2 1949 ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1600

Midland, Texas

By A. J. Bedford

Title Division Chief Clerk

U. S. GOVERNMENT PRINTING OFFICE 16-8437-8

Budget Bureau No. 42-R358.5.
Approval expires 11-30-49.

Form 9-331a
(March 1942)

Land Office Las Cruces, N.M.

Lease No. 067214

Unit

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FEDERAL WILDCAT

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	X	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Midland, Texas May 4, 1949

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

SW/4 of NW/4 of Sec. 31 (¼ Sec. and Sec. No.) 24-S (Twp.) 27-E (Range) (Meridian)

Black River Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Set 13-3/8 inch casing as follows:

Size	Amount	Weight	Set At	Formation	Total Depth of Hole	No. Sacks Make Cement	Plug on Bottom
13-3/8"	383'	48#	400'	Anhy.	1027'	425 Sacks El Toro	8:00 AM 5-4-49

Halliburton method used.
Circulated out approx. 50 sacks cement.
Will test casing with 750# at 8:00 AM, 5-5-49.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1600

Midland, Texas

By J. F. Kellahin

Title Asst. Division Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16-6487-3

Form 9-331 a
(March 1942)

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

APPROVED: Frank B. Stubblefield, ACTING DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces, N.M.

Lease No. L.C. 067214

Unit

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FEDERAL WIGGS

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	X	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Midland, Texas, June 13, 19 49

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

SW/4 of NE/4 of Sec. 31 (¼ Sec. and Sec. No.) | 24-S (Twp.) | 27-E (Range) | (Meridian)

Black River Wildcat (Field) | Eddy (County or Subdivision) | New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Set 9-5/8" casing as follows:

Size	Amount	Weight	Set At	Formation	Total Depth of Well	No. Sacks Make Cement	Plug on Bottom
9-5/8"	5179.20'	36# 40#	5194'	Lime	5195'	1000 sacks El Toro 3300 sacks Trinity	3:50 PM 6-12-49 2:15 AM 6/13/49

Halliburton Method used.
Circulated out approx. 500 sacks excess cement.
Will test casing with 1000# at 2:15 AM, 6/15/49

U. S. GEOLOGICAL SURVEY
RECEIVED
JUN 17 1949
ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1600

Midland, Texas

By W. S. Dewey

Title Div. Petroleum Engineer

U. S. GOVERNMENT PRINTING OFFICE 16-8427-8

EES

Budget Bureau No. 42-R358.1.
Approval expires 11-30-49.

Form 9-331 a
(March 1942)

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces, N.M.
Lease No. L.C.067214
Unit
Federal Riggs

TRIPLICATE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Midland, Texas February 6, 19 50

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

SW/4 of NE/4 of Sec. 31 (¼ Sec. and Sec. No.) 24-S (Twp.) 27-E (Range) (Meridian)

Black River W/C (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

To plug and abandon well by placing cement plug as follows: 60 sacks cement from TD 14865 to 14615 (Ellenberger), 40 sacks from 14440 to 14340 (Montoya), 40 sacks from 14240 to 14140 (bottom Devonian), 40 sacks from 13280 to 13180 (top Devonian), 115 sacks from 11850 to 11550 (Pennsylvanian), 150 sacks from 10100 to 9800 (Wolfcamp), 80 sacks from 5294 to 5094 (Bottom 9-5/8" Csg.) and 40 sacks from 100 to surface. Interval between plugs to be filled with mud laden fluid. No casing will be recovered. Regulation marker to be installed.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company HUMBLE OIL & REFINING COMPANY

Address Box 1600
Midland, Texas

By [signature]

Title Division Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16-8437-3

Budget Bureau No. 42-R358.4.
Approval expires 11-30-49.

Form 9-331 a
(March 1952)

Land Office Las Cruces, N.M.

Lease No. L.C. 067214

Unit

Federal Wiggs

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

Midland, Texas February 22, 19 50

Well No. 1 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

SW/4 of NE/4 Sec 31 (¼ Sec. and Sec. No.) 24-S (Twp.) 27-E (Range) (Meridian)

Black River W/C (Field) Eddy County (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Plugged and abandoned well by placing cement plug of 60 sacks from TD of 14865' to 14615', 40 sacks from 14440' to 14340', 40 sacks from 14240' to 14140', 40 sacks from 13280' to 13180', 115 sacks from 11850' to 11550', 150 sacks from 10100' to 9800', 80 sacks from 5294 to 5094' and 40 sacks from 100' to surface. Interval between plugs filled with mud laden fluid. No casing was recovered. Installed regulation marker.

U. S GEOLOGICAL SURVEY
RECEIVED
FEB 27 1950
ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Humble Oil & Refining Company

Address Box 1600

Midland, Texas

By J. Runaway

Title Assistant Division Superintendent

U. S. GOVERNMENT PRINTING OFFICE 16-8457-2

EF!

Budget Bureau 42-R358.3.
Approval expires 12-31-55.

Form 9-331a
(Feb. 1951)

Land Office
Lease No. NM-07339
Unit

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention To Re-Enter & Re-Complete	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 18, 1958

Well No. Federal Wiggs 1-31 is located 1980 ft. from {N} line and 1980 ft. from {E} line of sec. 31

NE/4 Sec. 31 (¼ Sec. and Sec. No.) 24-S (Twp.) 27-E (Range) N.M.P.M. (Meridian)

Wildcat (Field) Eddy (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is Unknown at present ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

The above well was drilled by Humble Oil Company and abandoned in 1950 at a total depth of 14,665 feet.

It is proposed to drill out cement plugs, condition hole, cement 5-1/2" casing at approximately 12,150 feet, perforate, treat and test the Pennsylvanian and Morrow formations for commercial production.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Union Oil Company of California

Address 619 West Texas Avenue
Midland, Texas

By [signature]

Title Ass't. Drilling Supt.

GOVERNMENT PRINTING OFFICE 16—8437-5

FEDERAL-WIGGS NO. 1-31
DETAILED ACCOUNT OF WORK PERFORMED
DURING JUNE, 1958

Ran delta temperature logs, set Baker FBC at 11,969' and squeezed perforations 12,030-62' with 200 sacks cealment (1666 gallons). Drilled cement 11,968 to 12,063' with 4-3/4" bit.

Lane-Wells perforated 12,046-54' with 4 jet shots per foot. Ran and landed 2" EUE tubing 11,974' and acidized perforations 12,046-54' with 2000 gallons of Dowell breakdown acid. Swabbed load water (spent acid water by analysis).

Ran radio-active survey through perforations at 12,046-54'.

Set 5-1/2" Model K bridge plug at 12,004' and squeezed perforations 12,046-54' with 50 sacks cement. Waited on cement and then perforated 5-1/2" casing at 10,440' with 4 holes.

Ran and landed 2" EUE tubing with packer at 10,155'. Broke circulation through perforations 10,440' at 2200# and circulated free at 1400#. Pulled out with tubing.

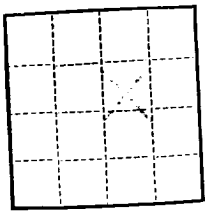
Set 5-1/2" Baker Model K magnesium retainer at 10,400' and cemented 5-1/2" casing through perforations at 10,440' with 900 sacks Diamix cement.

Laid down 2" EUE tubing. Ran temperature survey and found top of cement at 6000'.

Well shut in as of June 18, 1958.

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Form 9-331a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

Land Office ____

Lease No. [illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
JAN 11 1961
O. C. C.
ARTESIA, OFFICE

RECEIVED
JAN 11 1961
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	X
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

January 6, 1960

Federal Riggs
Well No. 1-31 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

NE/4 Sec. 31 (¼ Sec. and Sec. No.) 24-S (Twp.) 27-E (Range) N.M.P.M. (Meridian)

Wildcat (Field) Eddy County (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3460 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Well was temporarily abandoned June 23, 1958. Rigged up double drum unit on December 1, 1960. Conditioned mud from surface to 10,400', which is effective depth in the 5-1/2" casing above cement retainer. Perforated Wolfcamp zone 9940-78' with 4 jets/ft. Acidized perforations 9940-78' with 500 gallons and sand-oil-frac with 30,000 gallons mud acid. Have slight gas show, T.S.T.M. Well now shut-in. SIPP (72 hrs) 400#. Now evaluating for further treatment.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Union Oil Company of California

Address 619 West Texas Avenue

Midland, Texas

By R. W. Yarbrough

Title Drilling Supt.

GPO 862040

Federal Wiggs No. 1-31 - Treatment History

Perforations 12,030 - 12,062': Treated with 27,500 gallons mud acid, 2000 gallons breakdown acid and 23,060 gallons of acid frac. No commercial production. Squeezed perfs. with 200 sacks cealment.

Perforations 12.046 - 54' Treated with 2000 gallons of Dowell breakdown acid. Swabbed spent acid water with no commercial production. Squeezed perfs. with 50 sacks cement.

Perforations 9940-78' Treated with 3500 gallons of mud acid, 500 gallons LST and NE acid and sand-fraced with 10,000 gallons of slick water with 3750# sand. No commercial production.

Details of perforations and treatments previously filed on Form 9-331-a.

N. M. O. C. C. COPY

Form 9-331a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-01137

Land Office
Lease No.
Unit

RECEIVED
JUN 23 1961
O. C. C.
ARTESIA, OFFICE

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		Location Plat (See attached sheet)	X

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

April 21, 1961

Federal W-BCS
Well No. 1-31 is located 1820 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 31

NE/4, Sec. 31 (¼ Sec. and Sec. No.) | 26-S (Twp.) | 27-E (Range) | N.M.P.M. (Meridian)

Wildcat (Field) | Eddy (County or Subdivision) | New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3160 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Well plugged and abandoned as follows on April 20, 1961.

Squeezed perfs 9240-70' with 50 sx regular cmt under cmt ret from bridge plug set at 9240'.

Cut and recovered 151 jts (5057') of 5-1/2" O.D. 17# J-55 casing.

With 9-5/8" cmt ret from bridge plug set at 5075' spotted 50 sx cmt, plug 5160-5025', 25 sx plug 2573-2453' and 20 sx cmt plug in top of 9-5/8" casing.

Well capped with a steel plate and location identified by a 4" O.D. pipe marker.

RECEIVED
APR 24 1961
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Union Oil Company of California

Address 619 W. Texas Avenue

Midland, Texas

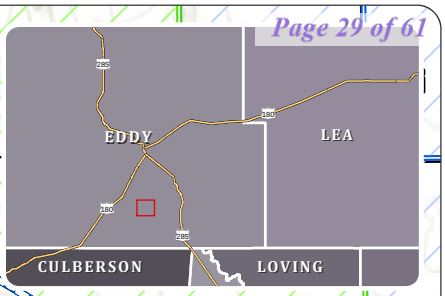
By

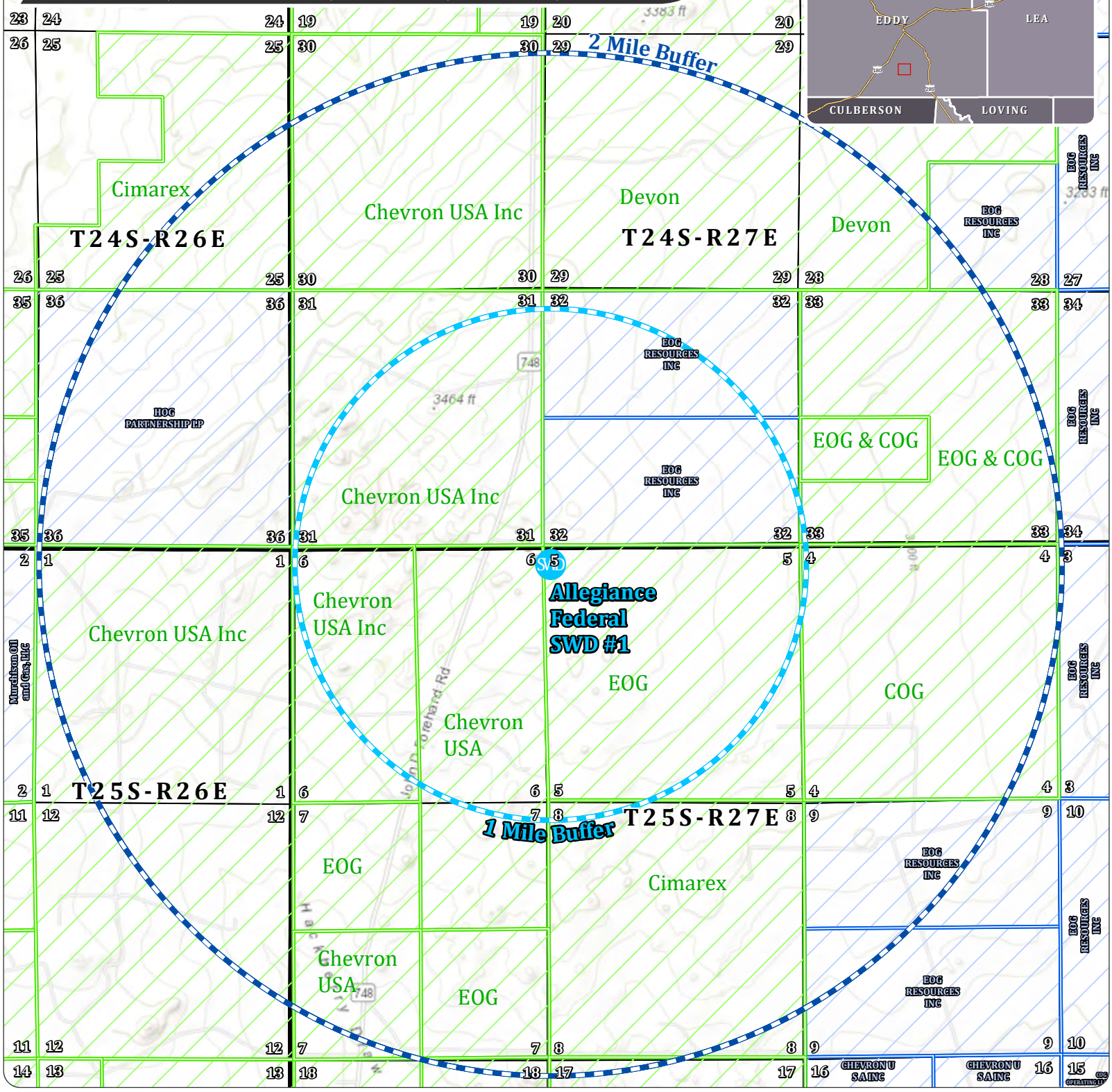
Title Production Clerk

GPO 862040

LEASEHOLDER MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO





1:33,000

0 2,000 4,000 6,000 Feet

Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

Released to Imaging: 10/10/2025 2:30:12 PM

Rev: 0

Legend

- Proposed SWD
- 1 Mile Buffer
- 2 Mile Buffer
- BLM Mineral Leases
- NMSLO Mineral
- Private Mineral

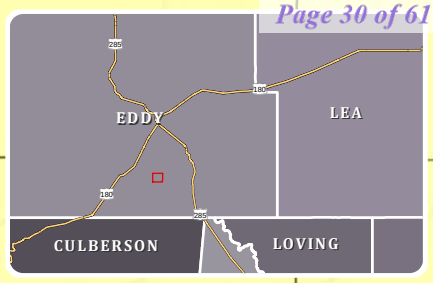
Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

BLACKBUCK® RESOURCES

SURFACE OWNERSHIP MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO



T24S-R26E

T24S-R27E

T25S-R26E

T25S-R27E

Allegiance Federal SWD #1

1 Mile Buffer

1:18,000	0	1,000	2,000	3,000 Feet

Legend

- Proposed SWD
- 1 Mile Buffer
- Federal Land
- State of NM Land
- Private Land

Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

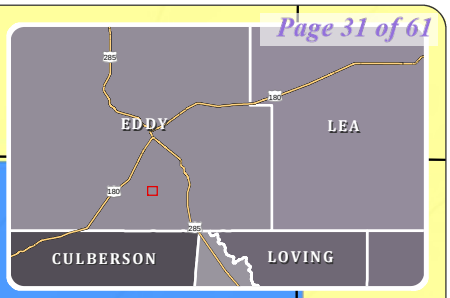
Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com
Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

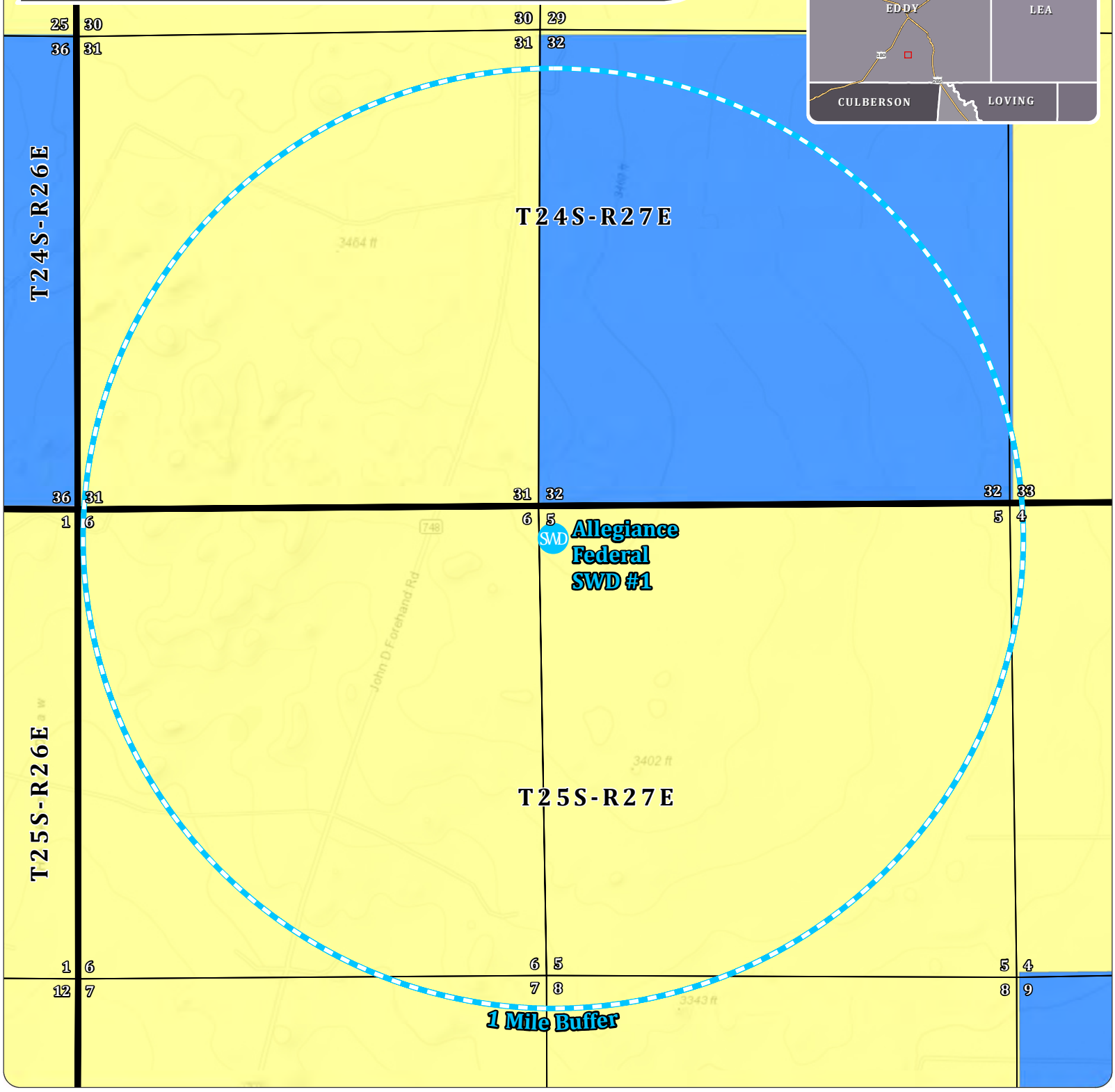
Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

Rev: 0

MINERAL OWNERSHIP MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO





1:18,000	0	1,000	2,000	3,000 Feet

Legend

- Proposed SWD
- 1 Mile Buffer
- Subsurface minerals (NMSLO)
- All minerals are owned by U.S. (BLM)
- Private minerals

Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

BLACKBUCK RESOURCES

Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com

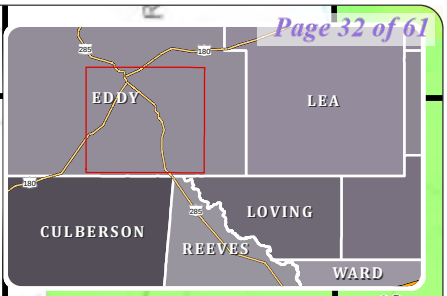
Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

Rev: 0

POTASH DISTRICT MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO



T22S-R25E | T22S-R26E | T22S-R27E | T22S-R28E | T22

T23S-R25E | T23S-R26E | T23S-R27E | T23S-R28E | T23S-R29E | T23S-R30E

T24S-R25E | T24S-R26E | T24S-R27E | T24S-R28E | T24S-R29E | T24S-R30E

T25S-R25E | T25S-R26E | T25S-R27E | T25S-R28E | T25S-R29E | T25S-R30E

T26S-R25E | T26S-R26E | T26S-R27E | T26S-R28E | T26S-R29E | T26S-R30E

Carlsbad
Salt Lake
Loving
Malaga
Whites City
285

14.95 Miles

SWD

Allegiance Federal SWD #1

1:220,000

0 20,000 40,000 Feet

Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

N

Rev: 0

Legend

SWD Proposed SWD

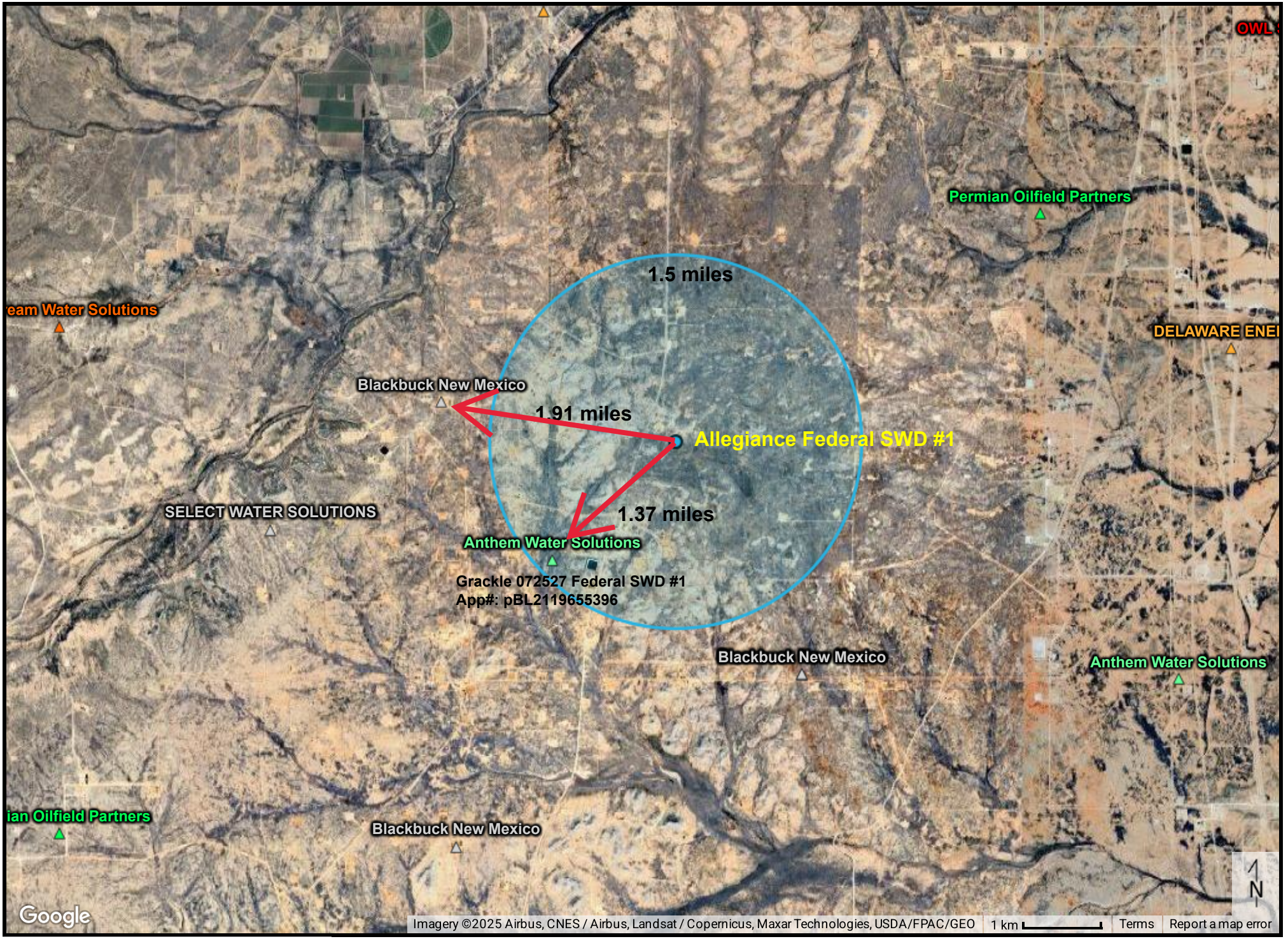
Potash District

Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

BLACKBUCK RESOURCES

Allegiance Federal SWD #1 - 1.5-mile Deep SWD Map



Data used with permission from B3 Insight

SWD Viability Analysis

Anthem – Grackle 072527 Federal SWD #1

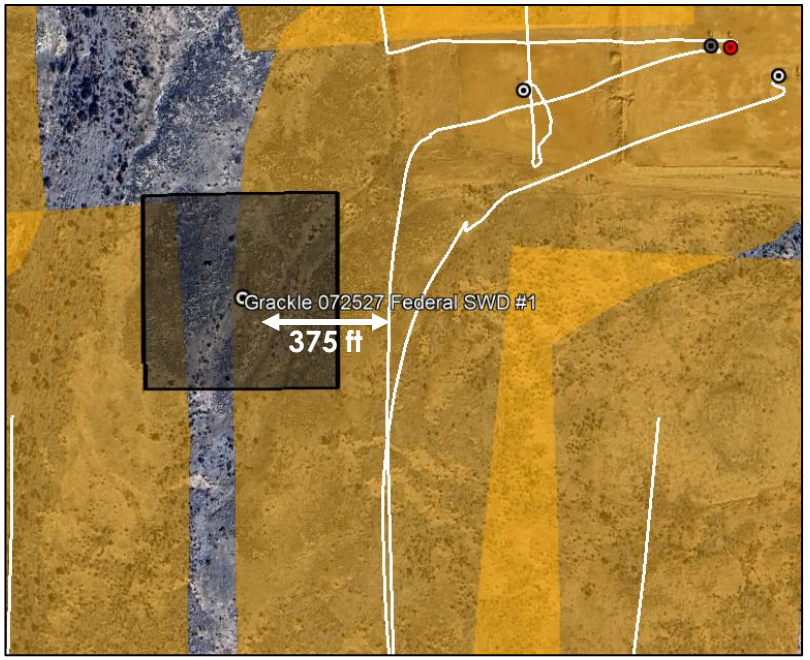
330' Fracture Zone Setback: Non-Compliant

This application is on Federal surface. An intermittent stream and a wetland are located ≈135 ft from the estimated wellpad boundary (400 ft x 400 ft) and ≈375 ft from the SHL, which will not comply with BLM's minimum requirements.

Data Sources:
- Stream/Blue Line: EPA's National Hydrography Dataset
- Wetland: FWS Wetland Inventory

330 ft Fracture Zone Setback: Non-Compliant

The SHL for this proposed Devonian SWD is located ≈300 ft from the completed lateral wellbore of Coterra's Davinci 18 Federal Com 009H (30-015-44697) that was drilled and completed in the Wolfcamp formation in 2018, which is not in compliance with OCD's requirement that SWDs be at least 330' from completed lateral wellbores.



Data Sources:
- As-Drilled Lateral Wellbores: Enverus

Summary Findings:
- The Grackle SWD's SHL does not meet BLM or OCD setback requirements, making it non-viable.
- Since the location is non-viable, the 1.5-mile setback between Deep SWDs should not be applied to this location.

Attachment 3

Source Formation Water Analysis														
Well Name	API	Latitude	Longitude	Sec.	Township	Range	Unit	Formation	Sampled	PH	TDS (Mg/L)	Chloride (Mg/L)	Bicarbonate (Mg/L)	Sulfate (Mg/L)
DOC HOLLIDAY 32 STATE COM #001	30-015-41145	32.1804123	-104.220192	32	24S	27E	D	BONE SPRING 2ND SAND	2014	6.7	193,316	120,600	171	17
PREACHER 19 FEDERAL #003H	30-015-41887	32.1957703	-104.2276001	19	24S	27E	O	BONE SPRING 2ND SAND	2014	6.5	193,786	119,000	130	34
PREACHER 19 FEDERAL #003H	30-015-41887	32.1957703	-104.2276001	19	24S	27E	O	BONE SPRING 2ND SAND	2015	7	177,820	108,941	366	0
JOSEY WALES 16 STATE COM #003H	30-015-41090	32.2103996	-104.1936798	16	24S	27E	O	BONE SPRING 2ND SAND	2013	6.47	179,420	112,857	146	573
DOC HOLLIDAY 32 STATE COM #001	30-015-41145	32.1804123	-104.220192	32	24S	27E	D	BONE SPRING 2ND SAND	2014	6.3	205,799	128,749	122	17
PREACHER 19 FEDERAL #003H	30-015-41887	32.1957703	-104.2276001	19	24S	27E	O	BONE SPRING 2ND SAND	2014	5.8	203,718	125,605	144	34
JOSEY WALES 16 STATE COM #003H	30-015-41090	32.2103996	-104.1936798	16	24S	27E	O	BONE SPRING 2ND SAND	2015	7.6	176,589	109,722	146	0
DOC HOLLIDAY 32 STATE COM #001	30-015-41145	32.1804123	-104.220192	32	24S	27E	D	BONE SPRING 2ND SAND	2015	7.3	197,760	123,850	146	0
DOC HOLLIDAY 32 STATE COM #001	30-015-41145	32.1804123	-104.220192	32	24S	27E	D	BONE SPRING 2ND SAND	2014	7.3	127,682	77,098	195	0
PREACHER 19 FEDERAL #003H	30-015-41887	32.1957703	-104.2276001	19	24S	27E	O	BONE SPRING 2ND SAND	2014	7.4	312,558	186,000	201	3,947
PREACHER 19 FEDERAL #003H	30-015-41887	32.1957703	-104.2276001	19	24S	27E	O	BONE SPRING 2ND SAND	2014	7.4	312,550	186,000	201	0
JOSEY WALES 16 STATE COM #003H	30-015-41090	32.2103996	-104.1936798	16	24S	27E	O	BONE SPRING 2ND SAND	2015	6.5	179,141	109,123	73	0
DOC HOLLIDAY 32 STATE COM #001	30-015-41145	32.1804123	-104.220192	32	24S	27E	D	BONE SPRING 2ND SAND	2015	7	203,230	124,269	49	0
IRRITABLE 22 STATE COM #002H	30-015-41359	32.1219177	-104.1758957	22	25S	27E	B	BONE SPRING 2ND SAND	2015	6.8	161,087	100,324		544
BRADLEY FEDERAL #002	30-015-00387	32.2255516	-104.256218	11	24S	26E	P	DELAWARE			230,993	137,300	650	3,099
CRAWFORD #001	30-015-01121	32.2294731	-104.1977081	9	24S	27E	K	DELAWARE			95,055	58,570	95	187
ST HAMILTON #001	30-015-01126	32.2109222	-104.186203	15	24S	27E	M	DELAWARE			301,812	189,600	192	2,040
FED J #001	30-015-22471	32.0730133	-104.2359085	6	26S	27E	E	DELAWARE	1978	5.7	255,599	160,000	24	330
FED J #001	30-015-22471	32.0730133	-104.2359085	6	26S	27E	E	DELAWARE		7.4	265,727	158,000	37	3,600
FED J #001	30-015-22471	32.0730133	-104.2359085	6	26S	27E	E	DELAWARE		7.6	255,336	156,000	76	790
FED J #001	30-015-22471	32.0730133	-104.2359085	6	26S	27E	E	DELAWARE		8.5	263,830	157,000	78	3,700
WHITE CITY PENN GAS COM UNIT 1 #001	30-015-00408	32.1937523	-104.3088455	29	24S	26E	A	WOLFCAMP	1960	7		10,000	645	1,320
LEE J FED #001	30-015-05973	32.2155037	-104.3304367	18	24S	26E	J	WOLFCAMP		8.1		9,100		7,300
HABANERO 17 FEDERAL COM #001H	30-015-36108	32.2218475	-104.2062683	17	24S	27E	A	WOLFCAMP	2015	6.5	108,205	65,927	146	0
SERRANO 29 FEDERAL #001H	30-015-37763	32.1898842	-104.2062149	29	24S	27E	H	WOLFCAMP	2015	6.9	102,136	62,813	183	0
SERRANO 29 FEDERAL #001H	30-015-37763	32.1898842	-104.2062149	29	24S	27E	H	WOLFCAMP	2015	6.5	100,995	63,450	268	0

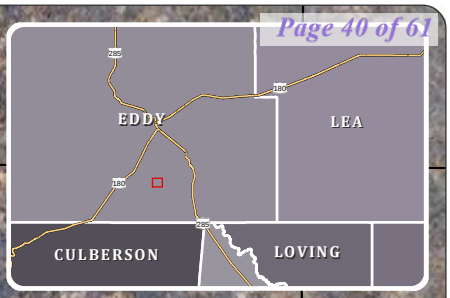
Attachment 4

Disposal Formation Water Analysis														
Well Name	API	Latitude	Longitude	Sec.	Township	Range	Unit	Formation	Sampled	PH	TDS (Mg/L)	Chloride (Mg/L)	Bicarbonate (Mg/L)	Sulfate (Mg/L)
JURNEGAN POINT #001	30-015-10280	32.2405243	-104.423912	5	24S	25E	M	DEVONIAN	1964	7	229,706	136,964	198	2,511
JURNEGAN POINT #001	30-015-10280	32.2405243	-104.423912	5	24S	25E	M	DEVONIAN	1964	7	203,100	121,100	175	2,220
WHITE CITY PENN GAS COM UNIT 1 #001	30-015-00408	32.1937523	-104.3088455	29	24S	26E	A	DEVONIAN	1960	7		10,120	653	1,336

Attachment 5

WATER WELL MAP

SECTION 5, TOWNSHIP 25 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO



T24S-R26E

T24S-R27E

T25S-R26E

T25S-R27E

Allegiance Federal SWD #1

1 Mile Buffer

1:18,000

0 1,000 2,000 3,000 Feet

Project Managed By:
ACE Energy Advisors
(918) 237-0559
nate.alleman@aceadvisors.com

Map Prepared By:
COOSA CONSULTING
(432) 631-4738
info@coosaconsulting.com

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

Rev: 0

Legend

- Proposed SWD
- 1 Mile Buffer

NMOSE Points of Diversion

- Active
- Pending
- Changed Location of Well
- Inactive
- Capped
- Plugged
- Unknown

Allegiance Federal SWD #1

OPERATOR:
BLACKBUCK NEW MEXICO LLC

BLACKBUCK RESOURCES

Water Well Sampling Table							
Water Well ID	OSE Status	Owner	Available Contact Information	Use	Latitude	Longitude	Notes
No water wells within 1.0 miles							

Attachment 6

ACE Energy Advisors

Subject C-108 Application for Authorization to Inject – Affirmative Geologic Statement
Blackbuck New Mexico LLC
Allegiance Federal SWD #1
394' FNL & 151' FWL - Section 5 R25S T27E
Eddy County, New Mexico

After examination of publicly available geologic and engineering data, there is no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Jason Currie
Geologist. TXBG-PG Lic# 10329
Point Bar Energy

Date 9/19/2025

ACE Energy Advisors

SEISMIC RISK ASSESSMENT

Well Information

Well Name: Allegiance Federal SWD #1

Operator: Blackbuck New Mexico LLC

Legal Location: Sec 5 Township 25S Range 27 E

General Location: Eddy County, New Mexico

Geologic Evaluation Performed By:

Jason Currie

Geologist. TXBG-PG Lic# 10329

Point Bar Energy, LLC

Project Managed By:

Nate Alleman

Ace Energy Advisors

September 19, 2025

GENERAL INFORMATION

Blackbuck New Mexico LLC's (Blackbuck) proposed Allegiance Federal SWD #1 (hereinafter referred to as the "Subject SWD") is located in Section 5 T25S, R27E, approximately 8 miles southeast of Whites City, NM in the Permian Basin. Blackbuck proposes to dispose of produced water within the Devonian-Silurian formations through open-hole injection at a depth of 13,123 ft to 14,360 ft below ground surface (bgs).

This report provides a description of the Subject SWD and proposed injection formation, existing groundwater sources, geologic isolation to prevent vertical migration of fluids, and assesses the potential for operation of the Subject SWD to result in induced seismicity based on the proximity and characteristics of known faulting and seismicity in the area.

GEOLOGY & SUBSURFACE OVERVIEW

DEEP SWD PROXIMITY

The Subject SWD is located approximately 1.9 miles from the nearest active or permitted Deep SWD (Devonian or deeper), which is the Freedom 36 State SWD #001, (30-015-44489, SWD-2136).

GROUNDWATER SOURCES

The local alluvium acts as the principal aquifer used for drinking ground water, if present, near the Subject SWD. Around the Subject SWD, the base of the lowermost Underground Source of Drinking Water (USDW) is at the base of the Permian Rustler formation which lies 224 feet (bgs), which contains the first anhydrite/salt layer in the Salado Fm. Office of the State Engineer (OSE) data for domestic and livestock water wells indicate the deepest freshwater-bearing strata in the area occurs at depths of less than 200 ft.

VERTICAL MIGRATION OF FLUIDS

Proposed Injection Interval

The proposed injection interval, at depths of 13,123 ft – 14,360 ft bgs, includes the Devonian and Silurian formations and is a package of carbonates consisting of predominantly of dolomite with limestone and interbedded cherts. Dolomitic and limestone porosities are expected to range from 0% to 7% with higher skeletal cherts ranging greater than 7% due to secondary porosity in the form of vugs and fractures from weathering effects and compaction. Permeabilities in the 2-7% porosity dolomitic grainstones intervals are estimated to be in the 2-20 millidarcy range, with higher porosity intervals estimated to be in the 40-100 millidarcy range (Ruppel and Holtz, 1994). The open hole injection interval is expected to be within the majority of the higher permeability intervals.

Overlying Confinement

Overlying Confinement is provided by approximately 179 cumulative feet of low-permeability limestone and shale of the Mississippian Limestone and Woodford Shale that will act as barrier to fluid flow and prevent upward migration of injectate into overlying formations.

With the top of the proposed injection interval at 13,123 ft, there is expected to be approximately 12,899 ft of vertical separation between the injected fluids and the base of the lowermost USDW, including the 179 ft thick permeability barrier immediately overlying the injection interval. In addition to the geologic isolation, the freshwater resources will be further isolated and protected by surface casing that will be set at

approximately 250 ft (25 ft below the base of the lowermost USDW) and cemented to surface.

Underlying Confinement

Underlying Confinement is provided by approximately 335 cumulative feet of low-permeability carbonates of the Silurian-aged Montoya formation. The proposed well will TD approximately 47 ft above the top of the Ordovician Montoya and will not inject fluids into the Montoya itself in order to provide sufficient barrier to avoid injection into the Middle Ordovician Simpson, the Lower Ordovician Ellenburger, or the Cambrian and the Precambrian below. The Precambrian structure contours (Ruppel, 2009) show the basement to be at a depth of approximately 16,004 ft in this area. Therefore, the injection zone lies approximately 1,644 ft above the Precambrian basement.

SEISMIC RISK ASSESSMENT

The Seismic Risk Assessment consisted of a review of publicly available data including recorded seismic events, known faults and subsurface conditions, as well as Fault Slip Potential (FSP) modeling based on current and future subsurface conditions within the Seismic Area of Interest (Seismic AOI); a 6-mile radius around the Subject SWD.

Historical Seismicity

A search of U.S. Geological Survey (USGS) and New Mexico Tech earthquake catalogs resulted in no recorded seismic events ≥M2.5 within the 6-mile Seismic AOI (Seismic AOI) since 1970. An expanded search of these earthquake catalogs showed the nearest seismic event ≥M2.5 to be an M2.59 that occurred approximately 8 miles to the northeast in 2019 (Exhibit 1).

Faults and Subsurface Conditions

Blackbuck does not own any 2D or 3D seismic data in the area of this Subject SWD. Fault interpretations are based on well-to-well correlations and publicly available data and software as follows:

- USGS Quaternary Fault & Fold database shows no quaternary faults in the nearby area.
- New Mexico Bureau of Geology and Mineral Resources. Open-file Geologic Map 304: Geologic Map Database of New Mexico.
- Basement faults as documented in the Snee & Zoback paper, "State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity", published in the February 2018 issue of the SEG journal, The Leading Edge, along with a method for determining the probability of fault slip in the area.
- Basement faults as documented in the Horne et al (2021) paper, "Basement-Rooted Faults of the Delaware basin and Central Basin Platform, Permian Basin, West Texas and Southeastern New Mexico".
- Fault data was also correlated to the NMOCD SWD Applications & Fault Map dated 02/14/2022, and to fault maps as published in the New Mexico Geological Society Special Publication 13A, "Energy and Mineral Resources of New Mexico: Petroleum Geology," by R. F. Broadhead, 2017.
- Fault interpretations in Pennsylvania intervals by Price, Buddy J., Xavier Janson, Charles Kerans,--Controls on mixed carbonate-siliciclastic slope morphology, early Permian, northern Delaware Basin, U.S.A., Marine and Petroleum Geology, Volume 143,2022.

A structure contour map (*Ex. 1*) of the Precambrian basement shows the Subject SWD is approximate 1 mile from the nearest basement-rooted fault, located to the northeast, as inferred by Horne (2021). Information about known, nearby faults based on GIS data from NM BGMRS (2003), Horne et al. (2021) and Price (2022) is listed in Exhibit 4.

Snee and Zoback (2020) states, "The profound rotation of SHmax within the Delaware subbasin and Northwest shelf could be an expression of a transition from dominantly approximately north–south SHmax orientations around the Rio Grande Rift (RGF) to approximately east–west and east-northeast–west-southwest orientations that reflect the general state of stress in the central United States. Around the Subject SWD, Snee and Zoback indicate a S_{Hmax} direction of S35°E and an A_{Φ} of 0.52, indicating an extensional (normal) stress regime.

Fault Slip Potential (FSP) Modeling

Software developed by the Stanford Center for Induced and Triggered Seismicity allows for the probabilistic screening of deep penetrating faults near the proposed injection zone (Walsh et al., 2016; Walsh et al., 2017). This software uses parameters such as stress orientations, fault strike/dip, injection rates, fault friction coefficients, etc. to estimate the potential for fault slip.

This FSP was performed using the best available data as subsurface/geologic input parameters (Exhibits 2, 3, 4 and 5). Additionally, to provide a conservative result, the modeled daily injection rate for pending SWDs was their maximum proposed injection rate [barrels per day (bpd)] and the modeled daily injection rate for the existing, active SWDs was their maximum historical reported injection rate (bpd). Since sustaining these maximum injection rates throughout the duration of the modeled time periods is not realistic, this approach provides an overly conservative modeling scenario.

Even with this overly conservative scenario, the model resulted in a zero (0%) percent FSP value (i.e. chance of slip) on all faults within the Seismic AOI over 20 years (Exhibit 1). The attached exhibits provide additional details of the model, including expected increase in pore pressure and pore pressure required for each fault to slip for each 5-yr interval.

CONCLUDING STATEMENTS

The Devonian-Silurian sequence in the area of the Subject SWD is well suited as a disposal interval because of the following findings:

1. The Mississippian limestone and Woodford shale formations provide a low permeability barrier overlying the injection interval to prevent upward migration into overlying formations and USDW's,
2. The Montoya formation provide a low permeability barrier underlying the injection interval to prevent downward fluid migration which could result in hydrologic communication with Precambrian basement rock,
3. Sufficient permeabilities and porosities in the injection zone over an injection interval thickness of 1,237 ft is expected to allow for suitably high injection rates at low surface injection pressures, and
4. FSP and Pore Pressure modeling using conservative inputs resulted in an FSP value of zero (0) on all faults within the 6-mile Seismic AOI, demonstrating that the likelihood for operation of the Subject SWD to contribute to seismicity in the areas is minimal, at best.

Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 1. Seismic AOI Map with Deep SWDs, seismic events, faults, structural contours of the Precambrian basement in feet below sea level (Horne et al., 2021). Faults within the 6-mile Seismic AOI are colored based on probability of fault slip as modeled using Fault Slip Potential software (Walsh and Zoback, 2016).

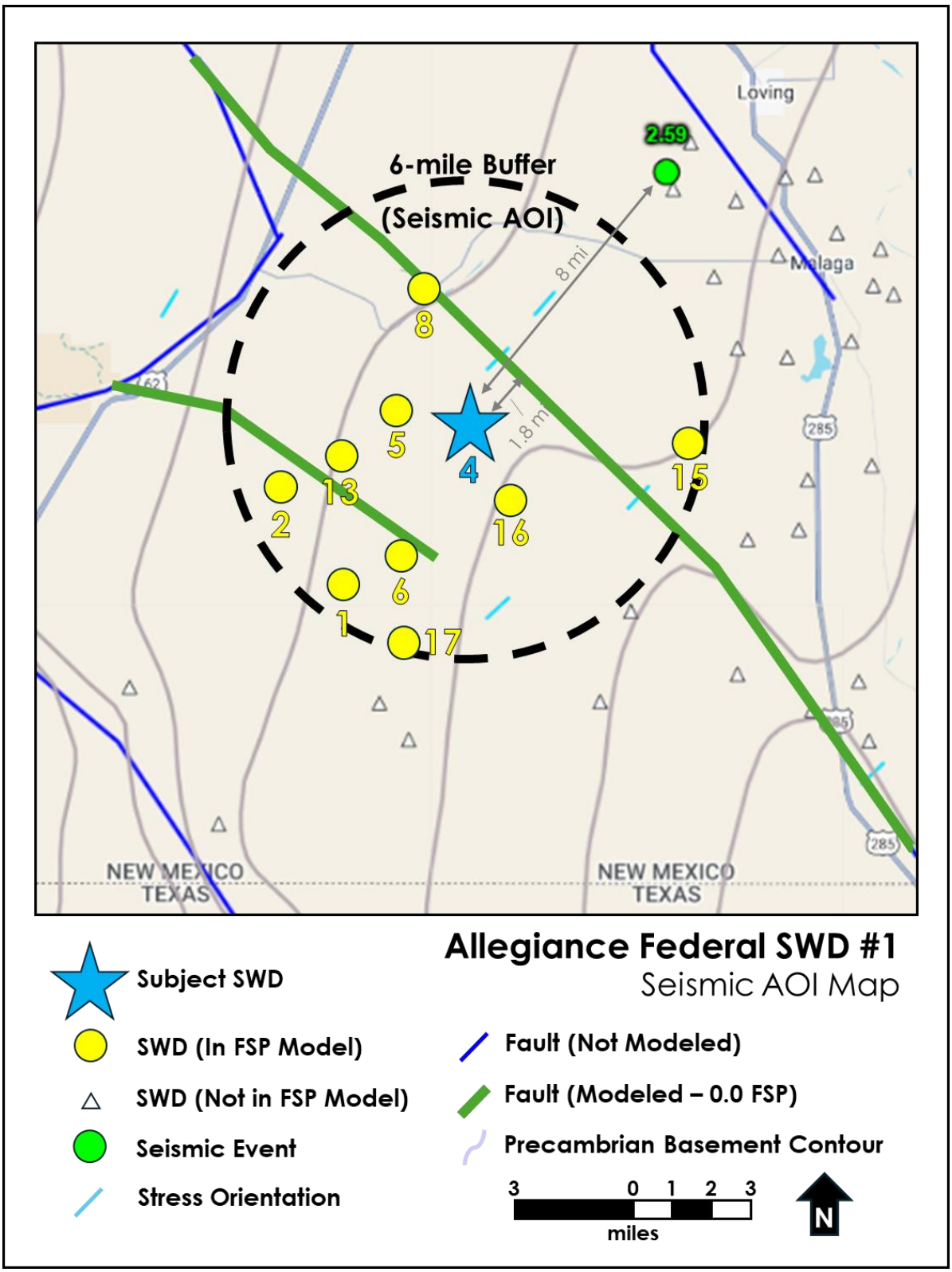


Exhibit 2. FSP Model SWD & Injection Rate Inputs

ID	Operator	Well Name	Status	Modeled Rate (BWPD)	API#	Order#	Latitude	Longitude
1	Blackbuck	Justice SWD #1	Pending	40,000*	N/A	N/A	32.107441	-104.275712
2	Blackbuck	Independence SWD #1	Pending	40,000*	N/A	N/A	32.142649	-104.302793
4	Blackbuck	Allegiance Federal SWD #1	Pending	40,000*	N/A	N/A	32.165286	-104.220793
5	Blackbuck	Freedom 36 State SWD #1	Active	29,842**	015-44489	SWD-2136	32.169967	-104.2529831
6	Blackbuck	Liberty 24 Federal COM #1	Active	23,646**	015-33094	SWD-1216	32.118125	-104.2509842
8	Delaware Energy	Hood SWD #1	Active	16,952**	015-44851	SWD-1732	32.215370	-104.239006
13	Select Water Solutions	Ringer Federal 36	Active	3,679**	015-33187	SWD-1343	32.15502	-104.276535
15	Mewbourne Oil	Boomerang 6 Fee SWD #1	Active	23,754**	015-49429	SWD-2442	32.15925217	-104.1269531
16	Blackbuck	Patriot State SWD #1	Approved	25,000*	015-50206	SWD-2466	32.138134	-104.2033997
17	Solaris	Cottonwood 36 State #1	Active	6,931**	015-29560	SWD-1226	32.084450	-104.248700

*Proposed/Approved maximum injection rate (no injection history)
**Highest reported monthly average injection rate

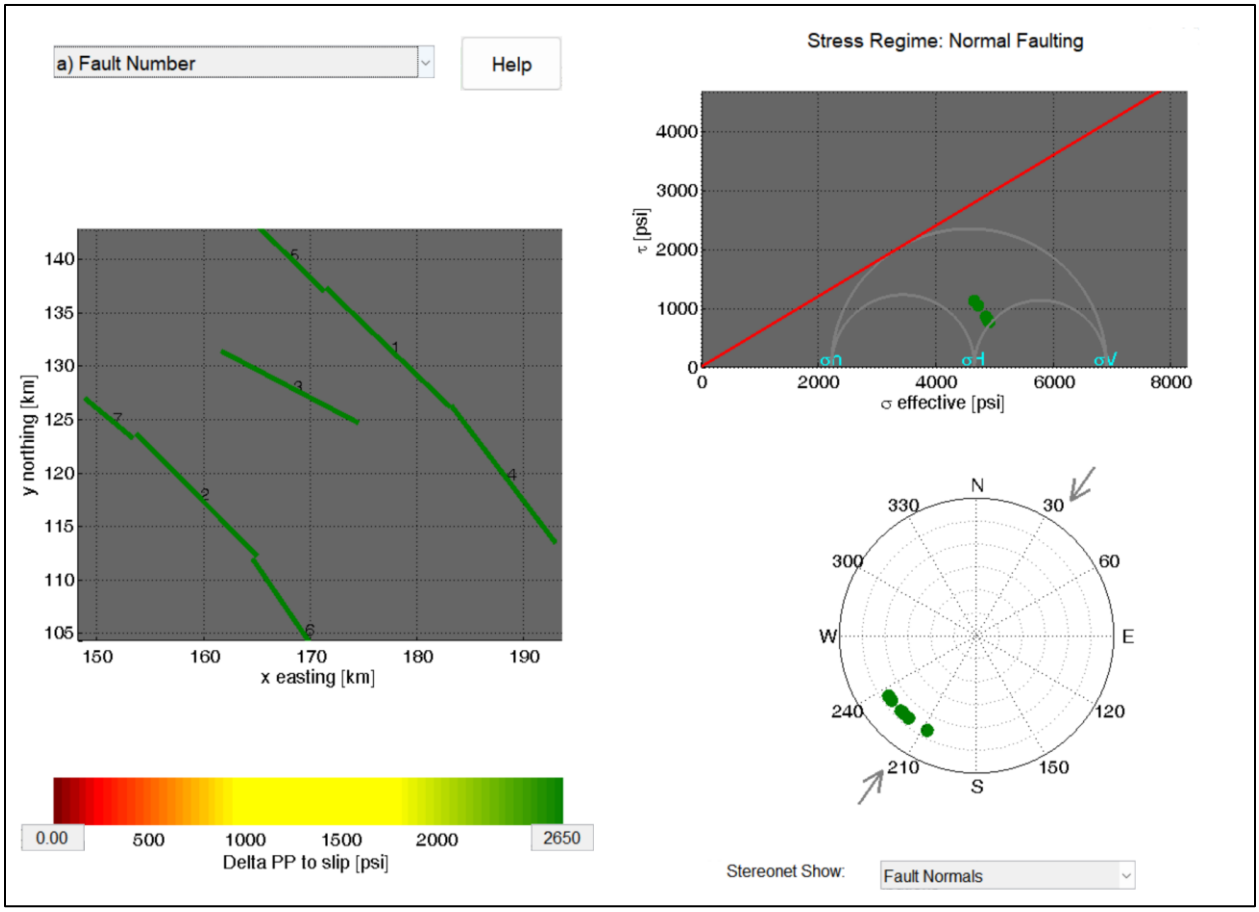
Exhibit 3. FSP Model Geologic Inputs

Faults	Value	Notes/Source
Friction Coefficient	0.58	Hennings et. Al. (2021)
Dip Angle	70	Horne et al. (2021)
Stress	**Value**	**Notes/Source**
Vertical Stress Gradient	1.06	Hurd and Zoback (2012)
Max Horizontal Stress Direction (deg)	35	Snee and Zoback (2018)
Depth for Calculation	13,000	Proposed Injection Zone
Initial Reservoir Pressure Gradient (psi/ft)	0.48	calculated from mud weight (ppg) used in drilling at these depths
A Phi Parameter	0.52	Snee and Zoback (2018)
Reference Friction Coefficient	0.7	Hennings et. al. (2021)
Hydrology/Formation Characteristics	**Value**	**Notes/Source**
Reservoir Thickness (ft)	1,237	Proposed Injection Zone, Devonian-Silurian
Porosity (%)	5	Ruppel and Holtz (1994)
Permeability (mD)	20	Ruppel and Holtz (1994)
Injection Rate (bbl/day)	40,000	Maximum Proposed Injection Rate
Fluid Density (kg/m3)	1,100	Salt Water Density
Fluid Compressibility (/Pa)	4 e-10	
Rock Compressibility (/Pa)	1.08 e-09	

Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 4: Basement Fault Model Characteristics and Results

Fault Number with highest FSP	distance to proposed SWD (mi)	Strike (deg)	Dip (deg)	FSP (2047)	▲Pore Pressure after 20 years (psi)	▲Pore Pressure needed for 100% FSP (psi)	▲Pore Pressure needed for 50% FSP (psi)
Fault3	3.2	298	70	0	220	4500	3600
Fault 1	1.8	314	70	0	161	4500	3500



Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 5. FSP Model Fault & SWD Inputs to the Stanford FSP software showing the proximity of the Subject SWD (Red Star) to modeled SWD locations and injection rates, modeled injection rates of modeled SWDs, modeled faults within Seismic AOI, and stress orientation of 35 degrees.

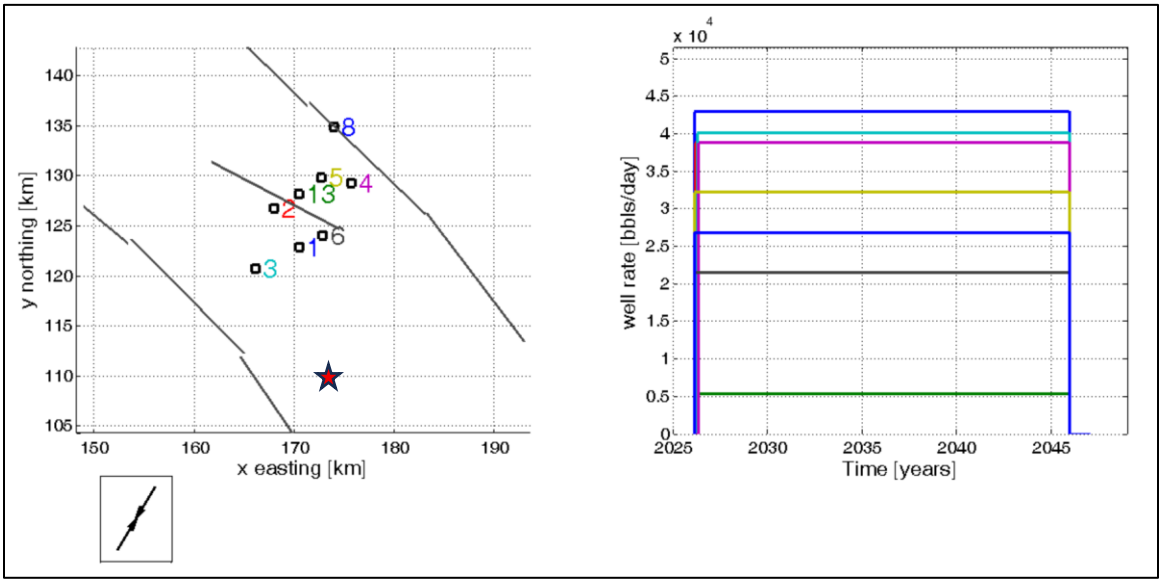
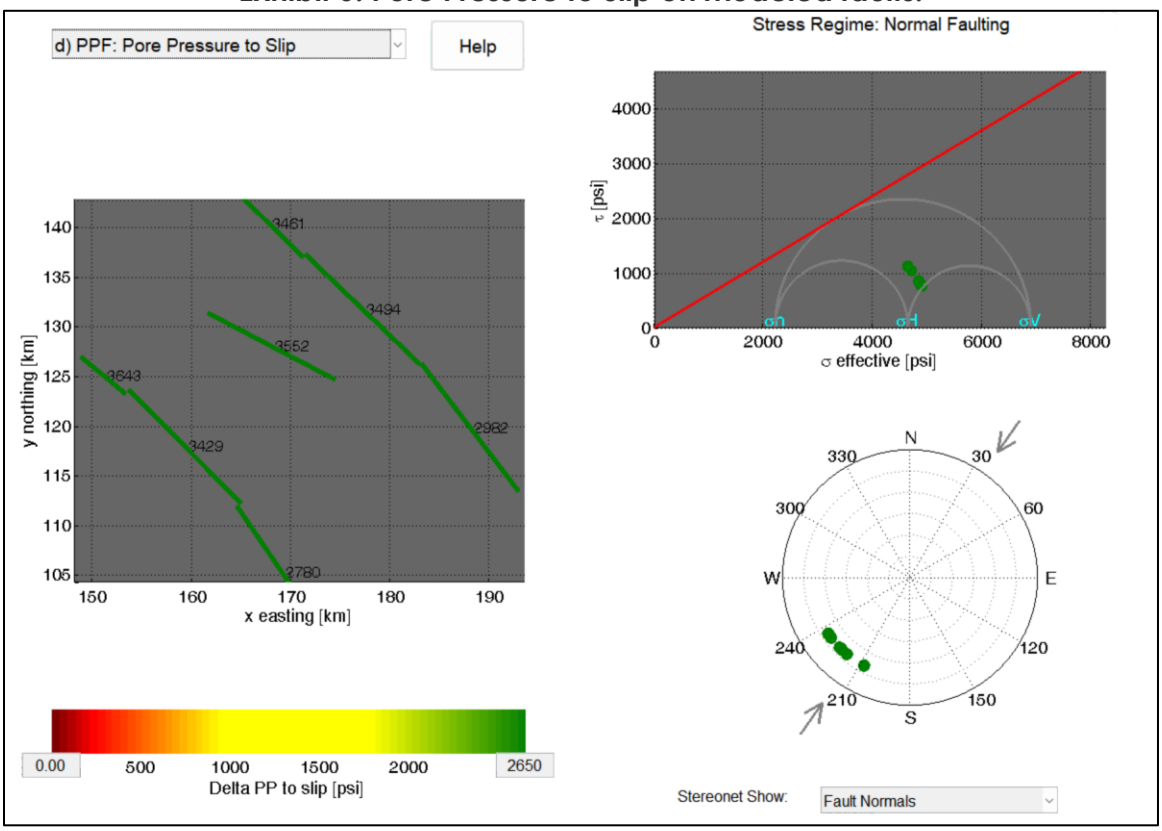


Exhibit 6: Pore Pressure to Slip on Modeled faults.



Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 7: Pore Pressure Required for Fault Slip

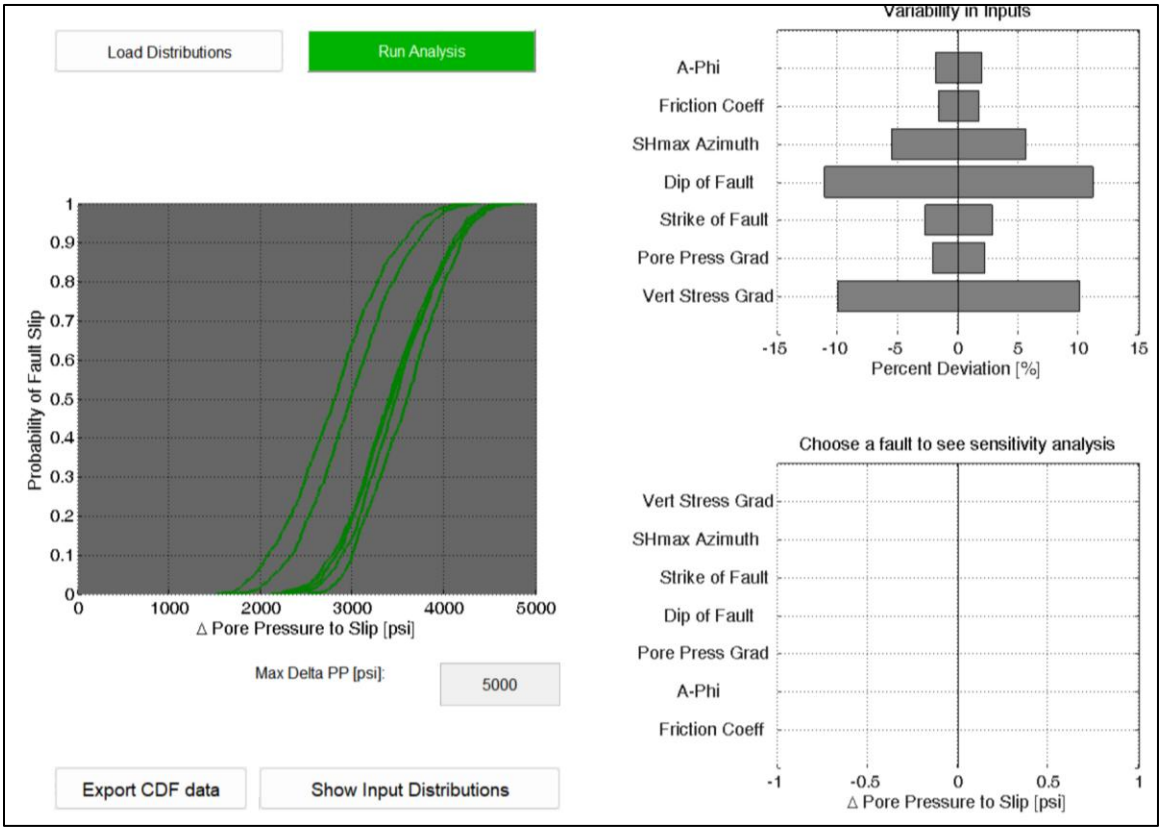
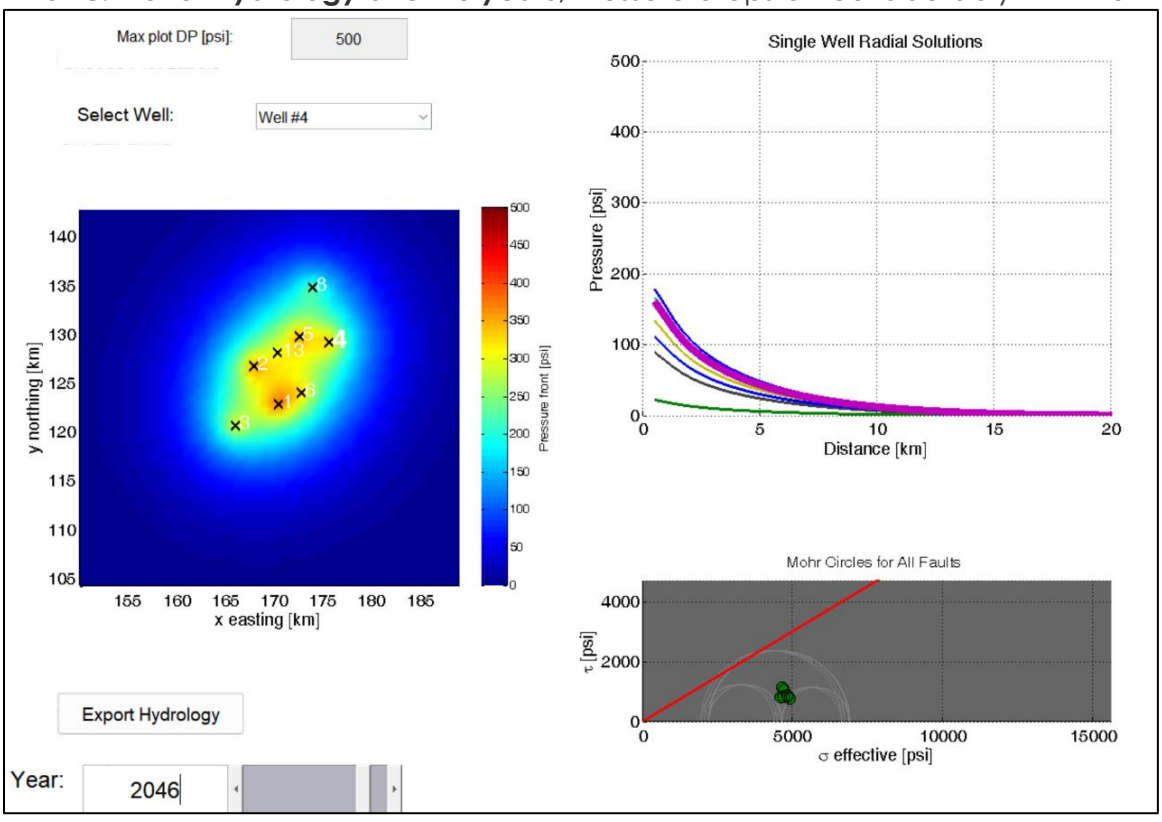


Exhibit 8: Plot of Hydrology after 20 years, Pressure drops off considerably within 5 km



Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 9: Year 5 Fault Slip Probability (0% on all faults after 5 years)

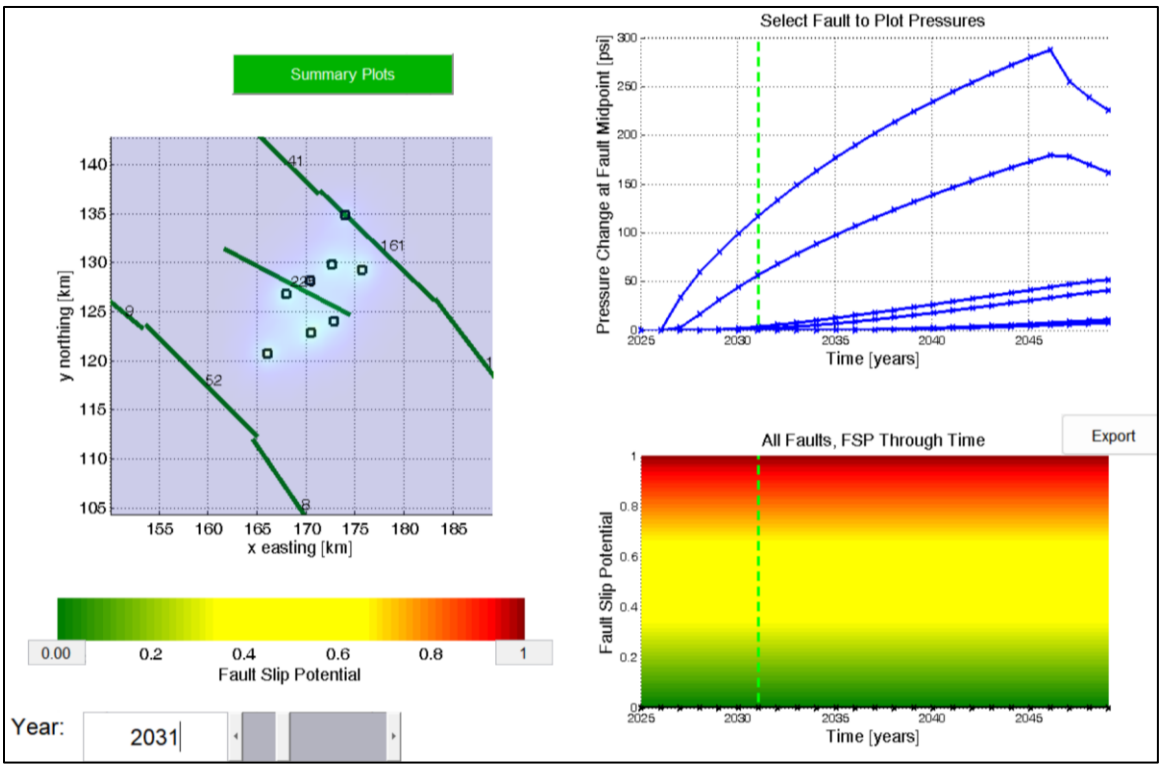
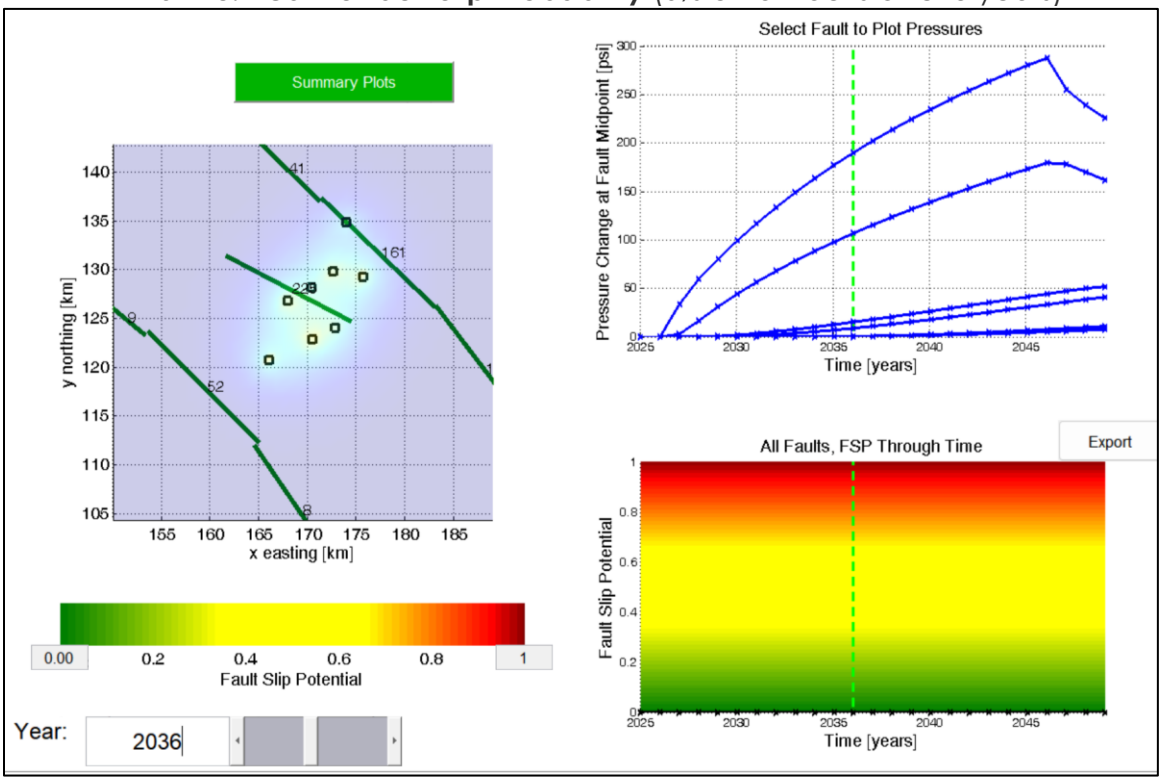


Exhibit 10: Year 10 Fault Slip Probability (0% on all faults after 5 years)



Seismic Risk Assessment
Blackbuck - Allegiance Federal SWD #1

Exhibit 11: Year 15 Fault Slip Probability (0% on all faults after 5 years)

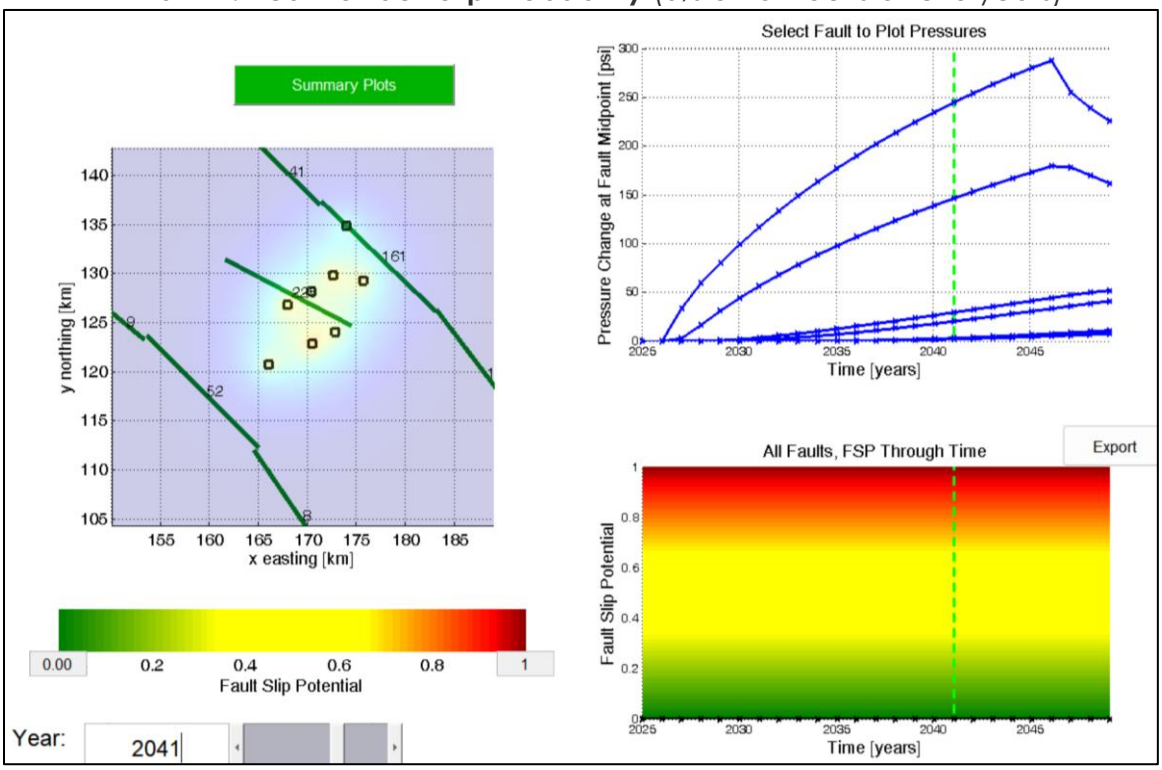
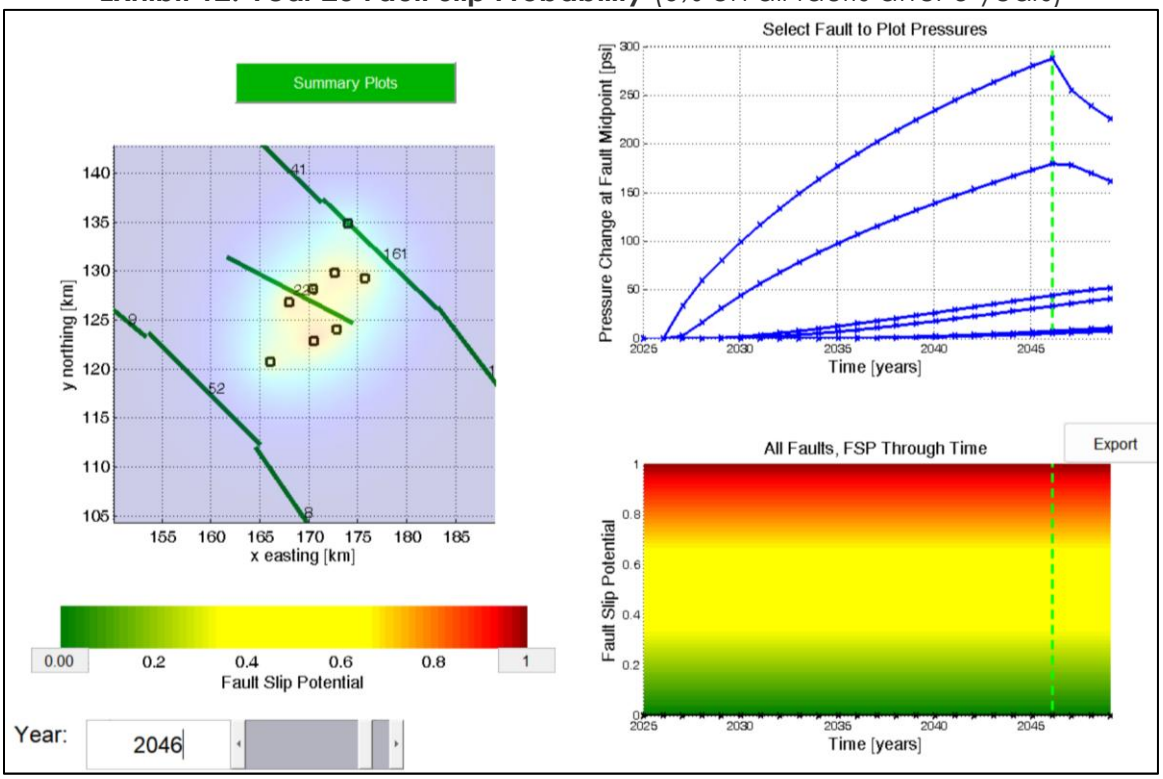


Exhibit 12: Year 20 Fault Slip Probability (0% on all faults after 5 years)



References Cited

Broadhead, R. F. "Energy and Mineral Resources of New Mexico: Petroleum Geology." *Special Publication 13A, Energy and Mineral Resources of New Mexico*, New Mexico Geological Society, 2017.

Hennings, Peter H., Noam Z. Dvory, Elizabeth A. Horne, Peng Li, Alexandros Savvaidis, and Mark Zoback. "Stability of the Fault Systems That Host-Induced Earthquakes in the Delaware Basin of West Texas and Southeast New Mexico." The Seismic Record, vol. 1, no. 2, July 2021, pp. 96–106. The Seismic Record, doi:10.1785/0320210020

Horne, E. A., Hennings, P. H., and Zahm, C. K., 2021, Basement-rooted faults of the Delaware Basin and Central Basin Platform, Permian Basin, West Texas and southeastern New Mexico, in Callahan, O. A., and Eichhubl, P., eds., The geologic basement of Texas: a volume in honor of Peter T. Flawn: The University of Texas, Bureau of Economic Geology Report of Investigations No. 286, doi:10.23867/RI0286C6.

Hurd, O; Zoback, MD, 2012, Intraplate earthquakes, regional stress and fault mechanics in the Central and Eastern U.S. and Southeastern Canada. Tectonophysics, 581:182-92.

New Mexico Bureau of Geology and Mineral Resources. Open-file Geologic Map 304: Geologic Map Database of New Mexico, adapted from Geologic Map of New Mexico, 2003, scale 1:500,000. 2022, doi:10.58799/OF-GM-304.

New Mexico Oil Conservation Division. *SWD Applications & Fault Map*. 14 Feb. 2022.

New Mexico Tech, 2024, "Recent Seismic Events — New Mexico Tech Seismological Observatory", New Mexico Bureau of Geology & Mineral Resources, https://geoinfo.nmt.edu/nmtso/events/home.cfml

Price, Buddy J., Xavier Janson, Charles Kerans,--Controls on mixed carbonate-siliciclastic slope morphology, early Permian, northern Delaware Basin, U.S.A.,Marine and Petroleum Geology, Volume 143,2022,105773, ISSN 0264-8172, https://doi.org/10.1016/j.marpetgeo.2022.105773.

Ruppel, S.C., 2009, Integrated synthesis of the Permian basin: data and models for recovering existing and undiscovered oil resources from the largest oil-bearing basin: U.S. Oil & Natural GasTechnology, Bureau Economic Geology, The University of Texas at Austin, p. 1-959.

Ruppel, S.C, and Holtz, M.H., 1994, Depositional and Diagentic Facies Patterns and Reservoir Development in Silurian and Devonian Rocks of the Permian Basin, Bureau Economic Geology, The University of Texas at Austin, Report of Investigations No. 216

Snee, J.-E.L., Zoback, M.D., 2018, State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity: Leading Edge, v. 37, p. 127–134.

USGS, 2024, "Earthquake Hazards Program", https://www.usgs.gov/programs/earthquake-hazards

Walsh, F. R., and Zoback, M. D., (2016) Probabilistic assessment of potential fault slip related to injection induced earthquakes: Application to north central Oklahoma, USA, Geology, Data Repository item 2016334, doi:10.1130/G38275.1

Walsh, F. R., Zoback, M. D., Pais, D., Weingarten, M., and Tyrrell, T. (2017) FSP 1.0: A Program for Probabilistic Estimation of Fault Slip Potential Resulting From Fluid Injection, User Guide from the Stanford Center for Induced and Triggered Seismicity, available at SCITS.Stanford.edu/software

Attachment 7

Statement of Affected Person Notification

A copy of the C-108 application has been provided to the following Affected Persons as notification of the subject Application for Authorization to Inject (C-108).

Entity Name	Entity Address	Mailing Date
Site Surface Owner		
Bureau of Land Management	Oil and Gas Division 620 E Greene St. Carlsbad, NM 88220	09/19/2025
Applicable Mineral Owners		
Bureau of Land Management	Oil and Gas Division 620 E Greene St. Carlsbad, NM 88220	09/19/2025
State Land Office	602 N Canal, Suite B Carlsbad, NM 88220	09/19/2025
OCD District Office		
OCD - District 2	506 W. Texas Ave. Artesia, NM 88210	09/19/2025
Leaseholders		
EOG Resources, Inc.	5509 Champions Drive Midland, TX 79706	09/19/2025
Chevron USA Inc.	P.O. Box 2100 Houston, TX 77252	09/19/2025
Cimarex Energy	6001 Deauville Blvd, Ste 300 N Midland, TX 79706	09/19/2025
COG Operating, LLC	600 W Illinois Ave Midland, TX 79701	09/19/2025
Well Operators		
EOG Resources, Inc.	5509 Champions Drive Midland, TX 79706	09/19/2025
Coterra Energy Operating Co.	6001 Deauville Blvd, Ste 300 N Midland, TX 79706	09/19/2025
Cimarex Energy Co. of Colorado	6001 Deauville Blvd, Ste 300 N Midland, TX 79706	09/19/2025

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com
063S0010282448

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3554 70

Bureau of Land Management
620 E Greene St
Carlsbad NM 88220-6292

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com
063S0011446202

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3555 62

State Land Office
602 N Canal St Ste B
Carlsbad NM 88220-5826

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com
063S0010282479

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3555 00

OCD - District 2
506 W Texas Ave
Artesia NM 88210-2041

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com
063S0010282448

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3555 79

EOG Resources, Inc.
5509 Champions Dr
Midland TX 79706-2843

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com 063S001144624 1

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3513 80

Chevron USA Inc.
Po Box 2100
Houston TX 77252-2100

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com 063S001144618 1

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3510 21

Cimarex Energy
6001 Deauville Ste 300
Midland TX 79706-2671

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com 063S001144622 1

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3510 38

COG Operating, LLC
600 W Illinois Ave
Midland TX 79701-4882

Nathan Alleman
Ace Energy Advisors
501 Se Fph Blvd Ste 201
BARTLESVILLE OK 74003-3931

$6.04⁰ US POSTAGE IMI FIRST-CLASS FROM 74003 09/19/2025 Stamps.com 063S001144624 1

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®

9407 1118 9956 1980 3514 65

Coterra Energy Operating Co.
6001 Deauville Ste 300
Midland TX 79706-2671

Affidavit of Publication

No. 63310

State of New Mexico Publisher

County of Eddy:

Adrian Hedden

being duly sworn, sayes that he is the **Publisher**

of the Carlsbad Current Argus, a weekly newspaper of general circulation, published in English at Carlsbad, said county and state, and that the hereto attached

Legal Ad

was published in a regular and entire issue of the said Carlsbad Current Argus, a weekly newspaper duly qualified for that purpose within the meaning of Chapter 167 of the 1937 Session Laws of the state of New Mexico for

1 Consecutive weeks/day on the same day as follows:

First Publication	September 18, 2025
Second Publication	
Third Publication	
Fourth Publication	
Fifth Publication	
Sixth Publication	
Seventh Publication	
Eighth Publication	

Subscribed ans sworn before me this

18th day of Septermber 2025

LATISHA ROMINE
Notary Public, State of New Mexico
Commission No. 1076338
My Commission Expires
05-12-2027

Latisha Romine

Latisha Romine

Notary Public, Eddy County, New Mexico

Copy of Publication:

Blackbuck Resources, LLC, 3200 Southwest Freeway, Houston, TX 77027, (OGRID# 373619), is filing Form C-108 (Application for Authorization to Inject) with the New Mexico Oil Conservation Division seeking administrative approval for commercial saltwater injection into its Allegiance Federal SWD #1. This will be a new well located 394' FNL & 151' FWL in Section 5 Township 25S Range 27E in Eddy County, NM, which is approximately 9.1 miles East of Whites City. The purpose of the well is to inject produced water from permitted oil and gas wells in the area for commercial disposal into the Devonian-Silurian formation at depths of 13,123'- 14,360' at a maximum surface injection pressure of 2,624 psi and a maximum injection rate of 40,000 barrels of water per day.
Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr. Additional information may be obtained by contacting the operator contact, Nate Alleman, at (918) 237-0559 or info@aceadvisors.com.
63310-Published in Carlsbad Current Argus Sept. 18, 2025.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: Blackbuck New Mexico LLC 3200 Southwest Freeway Houston, TX 77027	OGRID: 373619
	Action Number: 511888
	Action Type: [C-108] Fluid Injection Well (C-108)

CONDITIONS

Created By	Condition	Condition Date
erica.gordan	None	10/10/2025