

**STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION**

**APPLICATION OF SELECT WATER
SOLUTIONS, LLC FOR APPROVAL
OF A SALTWATER DISPOSAL WELL,
LEA COUNTY, NEW MEXICO.**

CASE NO. _____

APPLICATION

Pursuant to 19.15.26.8 NMAC, Select Water Solutions, LLC (“Select Water”) requests that the New Mexico Oil Conservation Division (“Division”) issue an order approving a saltwater disposal well in Lea County, New Mexico. In support of its application, Select Water states the following.

1. Select Water (OGRID No. 289068) seeks an order approving its proposed Coyote Fed 14 SWD #1, to be drilled at a location 2,631' from the north line and 901' from the east line (Unit H) of Section 14, Township 26 South, Range 35 East, Lea County, New Mexico, for the purpose of produced water disposal.
2. Select Water seeks authorization to inject produced water into the Bell Canyon and Cherry Canyon formations (SWD; Bell Canyon-Cherry Canyon; Code 96802), at a depth of approximately 5,175 feet to 6,420 feet.
3. Select Water proposes to inject an average of 15,000 barrels of water per day up to a maximum of 20,000 barrels of water per day.
4. Select Water requests that the Division approve a maximum surface injection pressure of 1,035 psi.
5. A Division Form C-108, which includes an area of review map, structural cross sections, seismic sections and analysis, no hydrologic connection statement, reservoir characterization, source water analysis, injection formation water analysis, water well map and

data, reservoir performance modeling, list of wells, and list of affected parties, is attached as Exhibit A.

6. The granting of this application will prevent waste and protect correlative rights.

WHEREFORE, Select Water requests that this application be set for hearing on February 5, 2026, and that, after notice and hearing, the Division enter an order approving this application and authorizing Select Water to inject produced water into the Coyote Fed 14 SWD #1.

Respectfully submitted,

HARDY MCLEAN LLC

/s/ Dana S. Hardy

Dana S. Hardy
Jaclyn M. McLean
Jaime R. Kennedy
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Santa Fe, NM 87501
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Counsel for Select Water Solutions, LLC

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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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: _____ **OGRID Number:** _____
Well Name: _____ **API:** _____
Pool: _____ **Pool Code:** _____

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

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

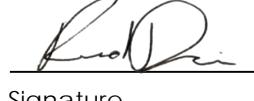
3) CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are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

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

Date

Print or Type Name

Phone Number



Signature

e-mail Address

<u>FOR OCD ONLY</u>	
<input type="checkbox"/>	Notice Complete
<input type="checkbox"/>	Application Content Complete

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 Disposal Storage
Application qualifies for administrative approval? Yes No

II. OPERATOR: Select Water Solutions, LLC

ADDRESS: 1820 N I-35, Gainesville, TX 76240

CONTACT PARTY: David Cheek

PHONE: 405-482-7508

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 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: Reed Davis

TITLE: Geophysicist

SIGNATURE: 

DATE: 01/05/2026

E-MAIL ADDRESS: rdavis@all-llc.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: File Electronically Via OCD Permitting

Application for Authorization to Inject
Well Name: Coyote Fed 14 SWD #1

III – Well Data *(The wellbore diagram is included as Attachment 1)*

A.

(1) General Well Information:

Operator: Select Water Solutions, LLC (OGRID No. 289068)
Lease Name & Well Number: Coyote Fed 14 SWD #1
Location Footage Calls: 2,631' FNL & 901' FEL
Legal Location: Lot H, S14 T26S R35E
Ground Elevation: 3,028'
Proposed Injection Interval: 5,175' – 6,420'
County: Lea

(2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Conductor	20"	18-5/8"	94.5 lb/ft	120'	35	Surface	Circulation
Surface	17-1/2"	13-3/8"	54.5 lb/ft	910'	685	Surface	Circulation
Intermediate	12-1/4"	9-5/8"	40.0 lb/ft	5,065'	1,395	Surface	Circulation
Production	8-3/4"	7-5/8"	29.7 lb/ft	6,440'	2,345	Surface	CBL
Tubing		5-1/2"	17.0 lb/ft	5,150'			

(3) Tubing Information:

5-1/2" (17.0 lb/ft) fiberglass or equivalent lined tubing with setting depth of 5,150'.

(4) Packer Information: SC-2 or equivalent packer set at 5,150'.

B.

(1) Injection Formation Name: Bell Canyon and Cherry Canyon

Pool Name: SWD; BELL CANYON-CHERRY CANYON

Pool Code: 96802

(2) Injection Interval: Perforated injection between 5,175' – 6,420'

(3) Drilling Purpose: New drill for saltwater disposal

(4) Other Perforated Intervals: No other perforated intervals exist.

(5) Overlying Oil and Gas Zones: Below are the approximate formation tops for known oil and gas producing zones in the area.

- None

Underlying Oil and Gas Zones: Below are the approximate formation tops for known oil and gas producing zones in the area.

- Brushy Canyon (7,680')
- Bone Spring (9,005')
- Wolfcamp (12,275')

V – Well and Lease Details

The following maps and documents are included as **Attachment 2**:

- 2-mile Production Review Map
- 1-mile Problem Well Map
- 1-mile AOR Well Table
- 2-Mile Lease Map
- 2-Mile Mineral Ownership Map
- 2-Mile Surface Ownership Map
- Potash Lease Map

VI – AOR Well List

As recommended by the Oil Conservation Division (OCD) in Cases 23686 and 23687 Exhibit 11a 1.d, the proposed Select Delaware Mountain Group SWDs have been planned with uniform spacing and a one-mile radius area of review.

A list of the well(s) within the 1-mile AOR is included in **Attachment 2**.

Two wells have been drilled in the 1-mile AOR. Both of these wells have been properly cased and cemented through the proposed injection zone.

VII – Proposed Operation

- (1) **Proposed Maximum Injection Rate:** 20,000 bpd
Proposed Average Injection Rate: 15,000 bpd
Step Rate Test: Select intends to conduct a Step Rate Test (SRT) at the proposed Coyote Fed 14 SWD #1 location, prior to commencement of injection, to determine the formation fracture gradient and maximum allowable surface injection pressure.
- (2) A **closed-loop system** will be used.
- (3) **Proposed Maximum Injection Pressure:** 1,035 psi (surface)
Proposed Average Injection Pressure: Approximately 776 psi (surface)
- (4) **Source Water Analysis:** The expected injectate will consist of produced water from production wells completed in the Abo, Yeso Group, Avalon Shale, Bone Spring, and Wolfcamp formations. Publicly available water quality analysis from the Go-Tech database is included for these formations as **Attachment 3**.
- (5) **Injection Formation Water Analysis:** The proposed SWD will be injecting water into the Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group, which are non-productive zones known to be compatible with formation water from the Abo, Yeso Group, Avalon Shale, Bone Spring, and Wolfcamp formations. Water analyses from the Delaware Mountain Group in the area are included as **Attachment 4**.

VIII – Geologic Description

The proposed injection interval includes the Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group from 5,175' –6,420'. The Guadalupian-age Bell Canyon and Cherry Canyon formations consist primarily of sandstones and siltstones with significant primary porosity and permeability, indicating these formations are viable injection targets. Select Water

Solutions, LLC will not perforate or inject into the Lamar Dolomite or Brushy Canyon Formation of the Delaware Mountain Group.

Further reservoir characterization, including discussion of the injection formation, overlying and underlying confinement zones, and historic use of the field is included as **Attachment 5**. In addition, structural and seismic cross sections depicting the area are included as **Appendix A**. Expert evaluation of the 3-D seismic section and structural cross sections are included within the *3-D Seismic Interpretation Statement* as **Attachment 8**.

Reservoir performance modeling, over 20 years, is included as **Appendix B**.

The base of the USDW is the Rustler Formation at a depth of approximately 910 feet. Depth of the nearest water well in the area is approximately 105 feet below ground surface.

IX – Proposed Stimulation Program

A small cleanup acid job may be used to remove mud and drill cuttings from the formation. However, no other formation stimulation is currently planned.

X – Logging and Test Data

Logs to be run include gamma ray, resistivity, neutron density, and sonic and will be submitted to the Division upon completion of the well.

Every two years, a static bottomhole pressure reading will be obtained, and a report will be generated to summarize performance based on injection volume, injection pressure, and any additional information collected during the period. The evaluation will include a delineation of the injection pressure front and a Hall's plot for each year and every four years an injection survey will be conducted.

XI – Fresh Groundwater Samples

Based on a review of data from the New Mexico Office of the State Engineer, there are no groundwater wells located within 1-mile of the proposed SWD location.

A water well map is included as **Attachment 6**.

XII – No Hydrologic Connection Statement

No publicly known faulting is present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing program has been designed to ensure there will be no hydrologic connection between the injection interval and overlying USDWs.

A signed *No Hydrologic Connection Statement* is included as **Attachment 7**.

XIII – Notice

A list of notice recipients is included as **Attachment 9**.

Attachments

Attachment 1:

- C-102
- Wellbore Diagram
- Packer Diagram

Attachment 2: Area of Review Information:

- 2-mile Production Review Map
- 1-mile Problem Well Map
- 1-mile AOR Well Table
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map

Attachment 3: Source Water Analysis

Attachment 4: Injection Formation Water Analysis

Attachment 5: Reservoir Characterization

Attachment 6: Water Well Map and Well Data

Attachment 7: No Hydrologic Connection Statement

Attachment 8: List of Affected Persons

Appendix A: Seismic and Structural Cross Sections

Appendix B: Reservoir Performance Modeling

Attachment 1

- C-102
- Wellbore Diagram
- Packer Diagram

C-102		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
Property Code	Property Name COYOTE FED 14 SWD		Well Number #1
OGRID No.	Operator Name SELECT WATER SOLUTIONS, LLC		Ground Level Elevation 3028'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Location

UL H	Section 14	Township 26 S	Range 35 E	Lot	Ft. from N/S 2631' FNL	Ft. from E/W 901' FEL	Latitude 32.043291°	Longitude -103.332669°	County LEA
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Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
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Order Numbers.		Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
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Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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Unitized Area or Area of Uniform Interest	Spacing Unit Type <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3028'
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OPERATOR CERTIFICATIONS		SURVEYOR CERTIFICATIONS
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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.

 January 5, 2026

Signature Date

Reed Davis

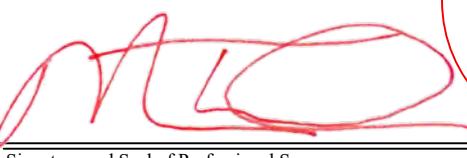
Printed Name

rdavis@all-llc.com

Email Address

SURVEYOR CERTIFICATIONS

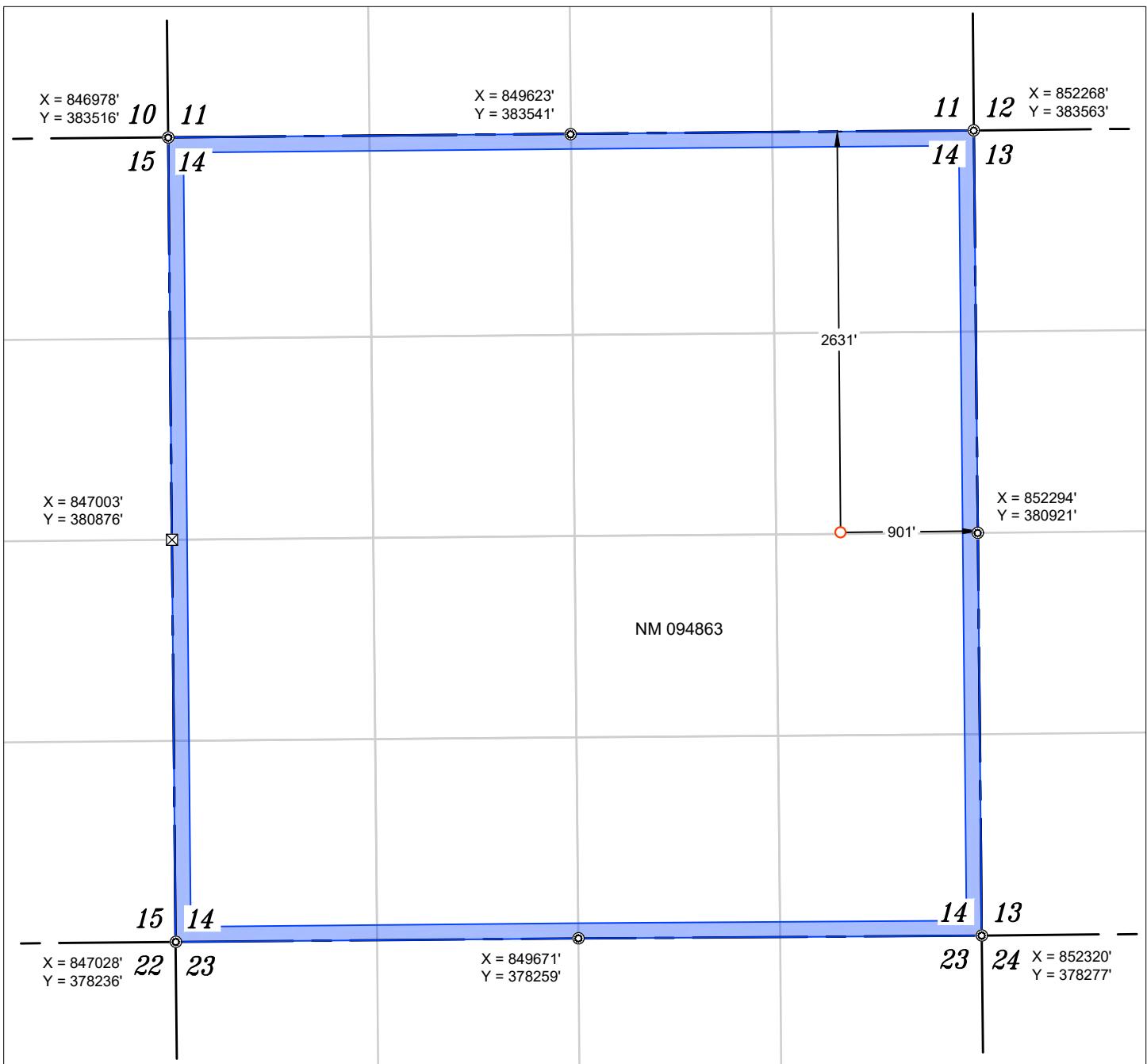
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

 	
Signature and Seal of Professional Surveyor	

23203 OCTOBER 6, 2025

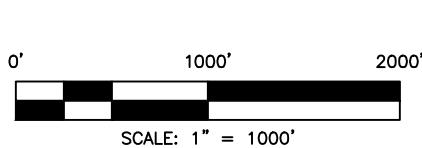
Certificate Number Date of Survey

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.



WELL NAME: COYOTE FED 14 SWD #1
 ELEVATION: 3028'

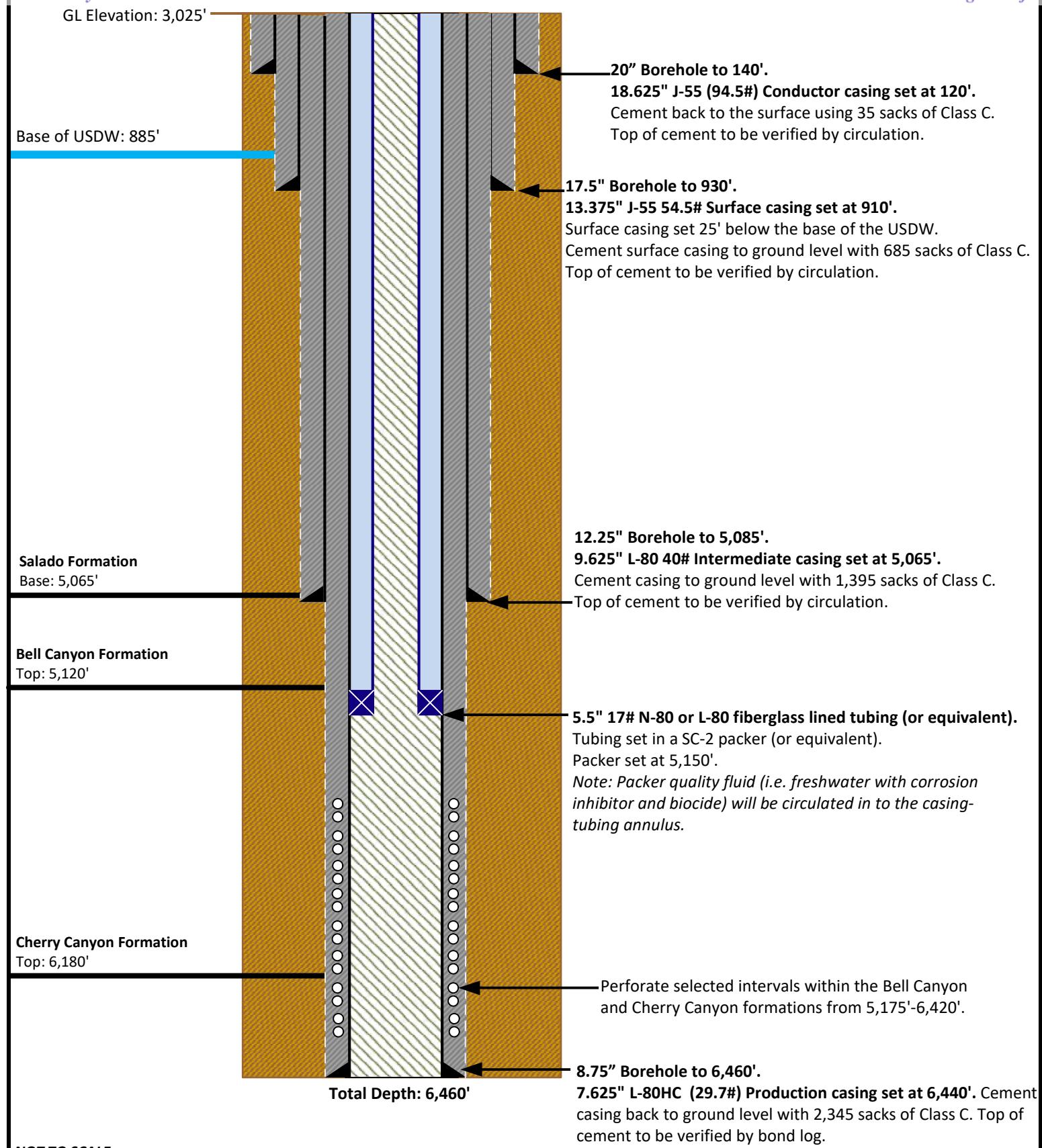
NAD 83 (SHL) 2631' FNL & 901' FEL
LATITUDE = 32.043291°
LONGITUDE = -103.332669°
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32.043164°
LONGITUDE = -103.332210°
STATE PLANE NAD 83 (N.M. EAST)
N: 380924.16' E: 851392.45'
STATE PLANE NAD 27 (N.M. EAST)
N: 380866.66' E: 810204.25'



- FOUND MONUMENT
- CALC. CORNER
- SHL
- HORIZONTAL SPACING UNIT
- STATE OIL & GAS LEASE
- BLM OIL & GAS LEASE

NOTES

1. ALL COORDINATES, BEARINGS, AND DISTANCES CONTAINED HEREIN ARE GRID, BASED UPON THE NEW MEXICO STATE PLANE COORDINATES SYSTEM, NORTH AMERICAN DATUM 83, NEW MEXICO EAST (3001).
2. THIS DOCUMENT IS BASED UPON AN ON THE GROUND SURVEY PERFORMED DURING OCTOBER, 2025. CERTIFICATION OF THIS DOCUMENT IS ONLY TO THE LOCATION OF THIS EASEMENT IN RELATION TO RECORDED MONUMENT OF DEEDS PROVIDED BY THE CLIENT.
3. ELEVATIONS MSL, DERIVED FROM G.N.S.S. OBSERVATION AND DERIVED FROM SAID ON-THE-GROUND SURVEY.



NOT TO SCALE

Note: Listed depths and cement volumes are approximates based on available information.

Prepared by:
ALL CONSULTING
Prepared for:
SELECT

Drawn by: Joshua Ticknor

Project Manager: Reed Davis

Date: 06/10/2025

**Coyote Fed 14 SWD #1
Proposed Wellbore Diagram
Operated by Select Water Solutions, LLC
S14, T26S, R35E
Lea County, New Mexico**

SC-2 Retrievable Packer

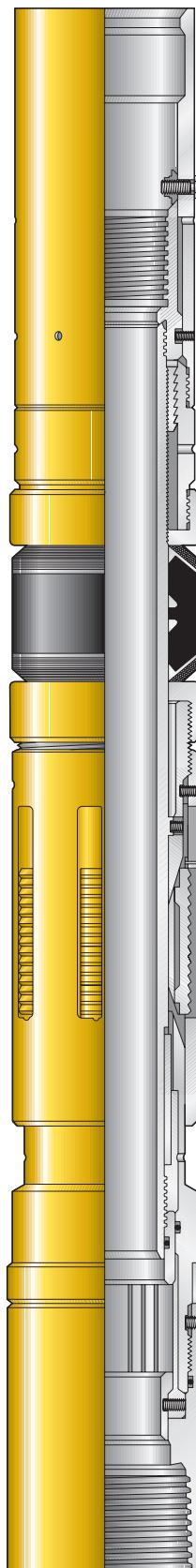
Product Family No. H48807

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 ◆	6.440	163.6	6.375	161.9
		29.7-33.7	76A4-32 ◆	6.580	167.1	6.500	165.1
		24-29.7	76B2-32 ◆	6.690	169.9	6.625	168.2
		20-24	76B4-32 ◆	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.

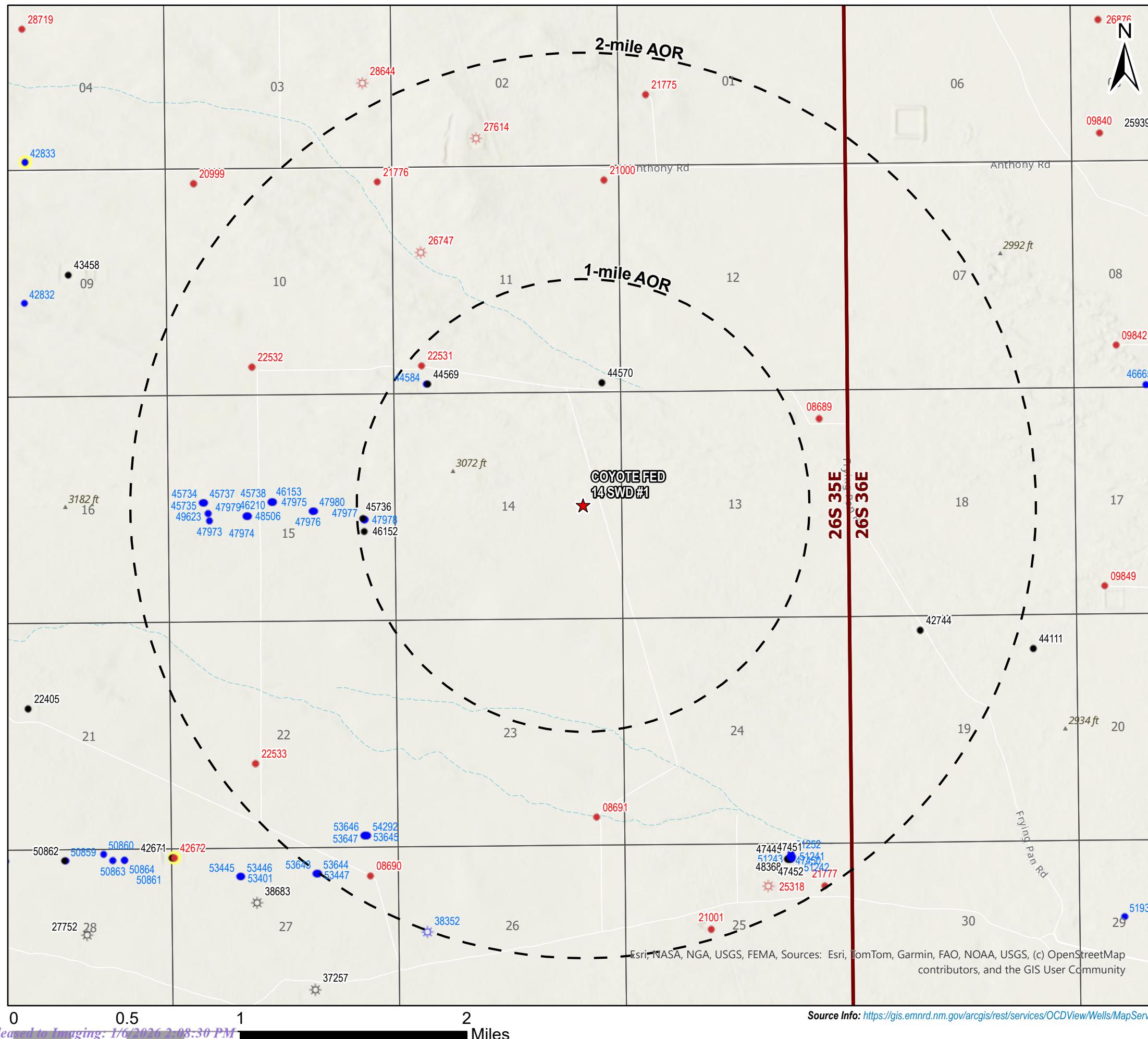
◆ This tool available with 3.250 in. (82.5 mm) or 4.000 in. (101.6 mm) seal bore diameter and uses sizes 80-32/ 81-32 or 80-40 accessories respectively.

▼ 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

Area of Review Information:

- 2-mile Production Review Map
- 1-mile Problem Wells Map
- 1-mile AOR Well Table
- 2-mile Lease Map
- 2-mile Mineral Ownership Map
- 2-mile Surface Ownership Map
- Potash Lease Map



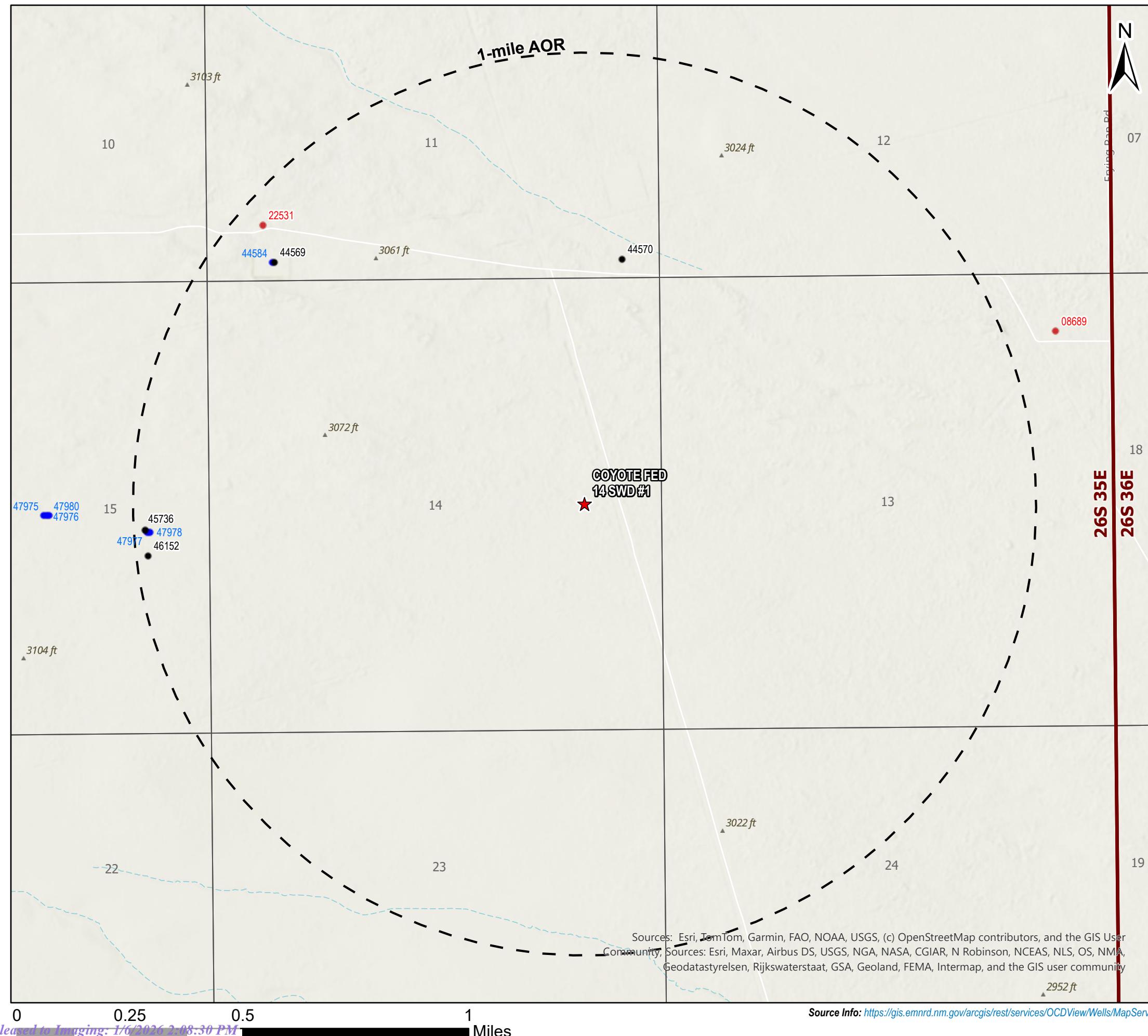
Legend

- Proposed SWD (1)
- Gas, Active (3)
- Gas, New (1)
- Gas, Plugged (5)
- Oil, Active (16)
- Oil, New (43)
- Oil, Plugged (18)
- Wells Producing from Target Injection Zone

2-mile Production Review

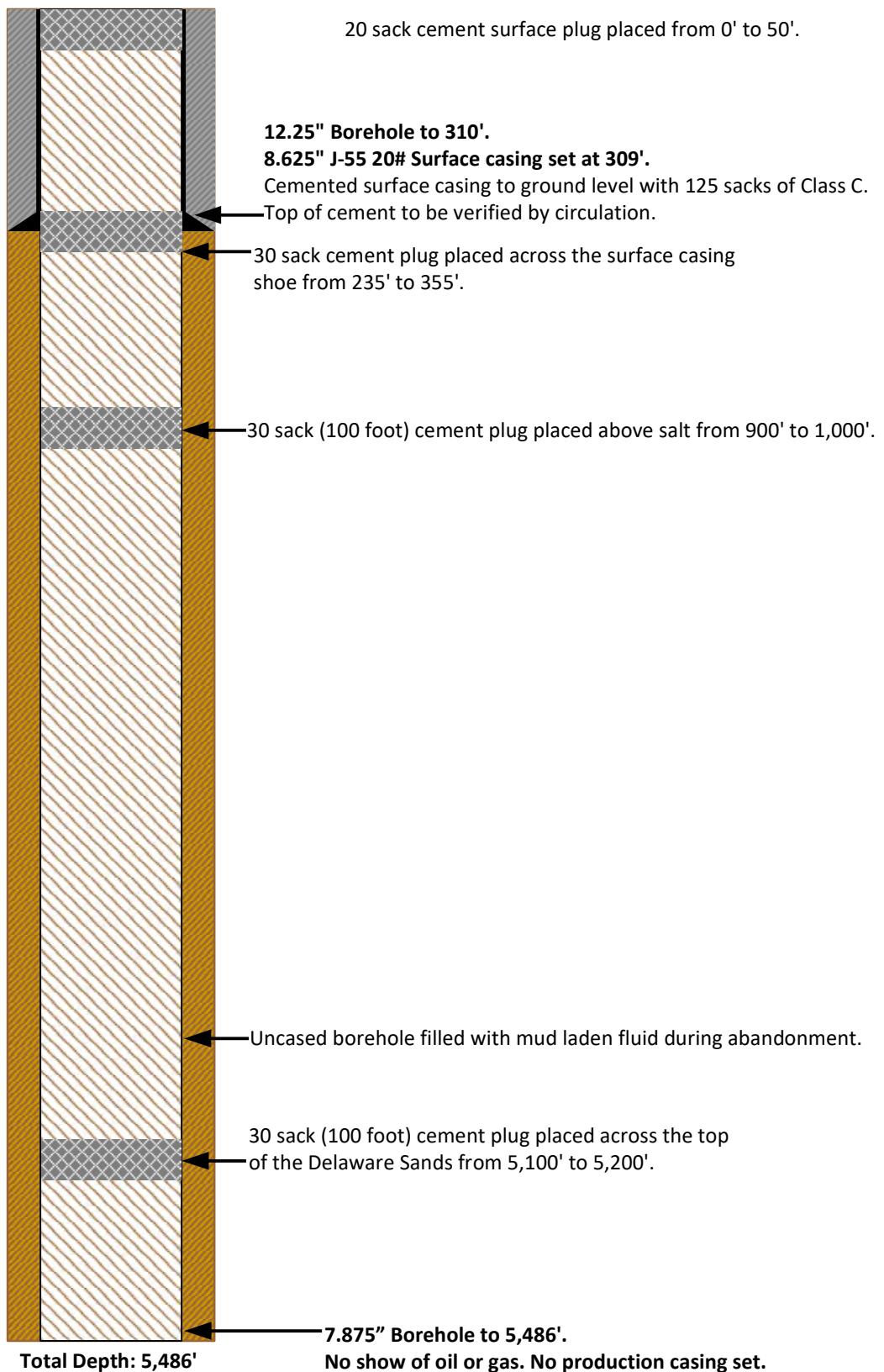
COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO



AOR Tabulation for Coyote Fed 14 SWD #1 (Bell Canyon and Cherry Canyon - Injection Interval: 5,175' - 6,420'), Lea County							
Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
DeMooy Federal #1	30-025-22531	Oil	Sinclair Oil & Gas Company	4/26/1968	11-26S-35E	5,486'	Yes
Tatanka Federal #006H	30-025-44584	Oil	Franklin Mountain Energy LLC	Cancelled	11-26S-35E	NA	NA
Tatanka Federal #001H	30-025-44569	Oil	Franklin Mountain Energy LLC	5/27/2018	11-26S-35E	12,531'	Yes
Tatanka Federal Com #004H	30-025-44570	Oil	Franklin Mountain Energy LLC	10/22/2019	11-26S-35E	12,119'	Yes
Arena Roja Federal Unit 15 22 #007H	30-025-47977	Oil	Devon Energy	Cancelled	15-26S-35E	NA	NA
Arena Roja Federal Unit 15 22 #004H	30-025-45736	Oil	Devon Energy	9/6/2019	15-26S-35E	12,526'	Yes
Arena Roja Federal Unit 15 22 #008H	30-025-47978	Oil	Devon Energy	Cancelled	15-26S-35E	NA	NA
Arena Roja Federal Unit 15 22 #003H	30-025-46152	Oil	Devon Energy	7/7/2019	15-26S-35E	12,396	Yes
Pre-Ongard Well #003	30-025-27749	Oil	Hanagan Petroleum Corp	Cancelled	12-26S-35E	NA	NA
Arena Roja Federal Unit #004C	30-025-38610	Gas	Devon Energy Production Company, LP	Cancelled	15-26S-35E	NA	NA
Arena Roja Federal Unit #011	30-025-39595	Gas	Devon Energy Production Company, LP	Cancelled	14-26S-35E	NA	NA
Tatanka Federal #005H	30-025-44571	Oil	COG Operating LLC	Cancelled	11-26S-35E	NA	NA
Tatanka Federal #002H	30-025-44582	Oil	COG Operating LLC	Cancelled	11-26S-35E	NA	NA
Tatanka Federal #003H	30-025-44583	Oil	COG Operating LLC	Cancelled	11-26S-35E	NA	NA

Casing / Plugging Information for Wells Penetrating the Coyote Fed 14 SWD #1 Injection Zone							
Well Name	Type	Set Depth	Casing Size	TOC	TOC Method Determined	Sk's of Cement	Hole Size
DEMOOY FEDERAL #1	Surface	309'	8-5/8"	Surface	Circulation	125	12-1/4"
	Intermediate	NA	NA	NA	NA	NA	NA
	Production	NA	NA	NA	NA	NA	NA
	Well was plugged as a dry hole. A 100-foot cement plug set from 5,100' - 5,200'. Proposed injection zone is isolated.						
TATANKA FEDERAL #001H	Surface	953'	13-3/8"	Surface	Circulation	800	17-1/2"
	Intermediate	5,070'	10-3/4"	Surface	Circulation	1025	12-1/4"
	Intermediate	11,590'	7-3/4"	875'	Calculated TOC = 875'	875	9-3/4"
	Production	19,722'	5"	Surface	Circulation	750	6-3/4"
No Issues.							
TATANKA FEDERAL COM #004H	Surface	962'	10-3/4"	Surface	Circulation	750	14-3/4"
	Intermediate	11,630'	7-5/8"	Surface	Circulation	1850	10"
	Production	22,565'	5-1/2"	Surface	Circulation	1525	6-3/4"
	No Issues.						
ARENA ROJA FEDERAL UNIT 15 22 #004H	Surface	1,064'	13-3/8"	Surface	Circulation	1160	17-1/2"
	Intermediate	12,096'	8-5/8"	Surface	Circulation	790	9-3/4"
	Production	20,432'	5-1/2"	10,420'	Calculated TOC = 10,420'	1240	7-3/4"
	No Issues.						
ARENA ROJA FEDERAL UNIT 15 22 #003H	Surface	1,071'	13-3/8"	Surface	Circulation	1160	17-1/2"
	Intermediate	11,332'	8-5/8"	8,493'	Calculated TOC = 8,493'	630	9-3/4"
	Production	20,321'	5-1/2"	Surface	Circulation	2785	7-3/4"
	No Issues.						

**NOT TO SCALE**

Note: Listed depths and cement volumes are approximates based on available information.

Prepared by:
ALL CONSULTING
 Prepared for:
SELECT

Drawn by: Joshua Ticknor

Project Manager: Reed Davis

Date: 07/18/2025

DeMooy Federal #1 API: 30-025-22531

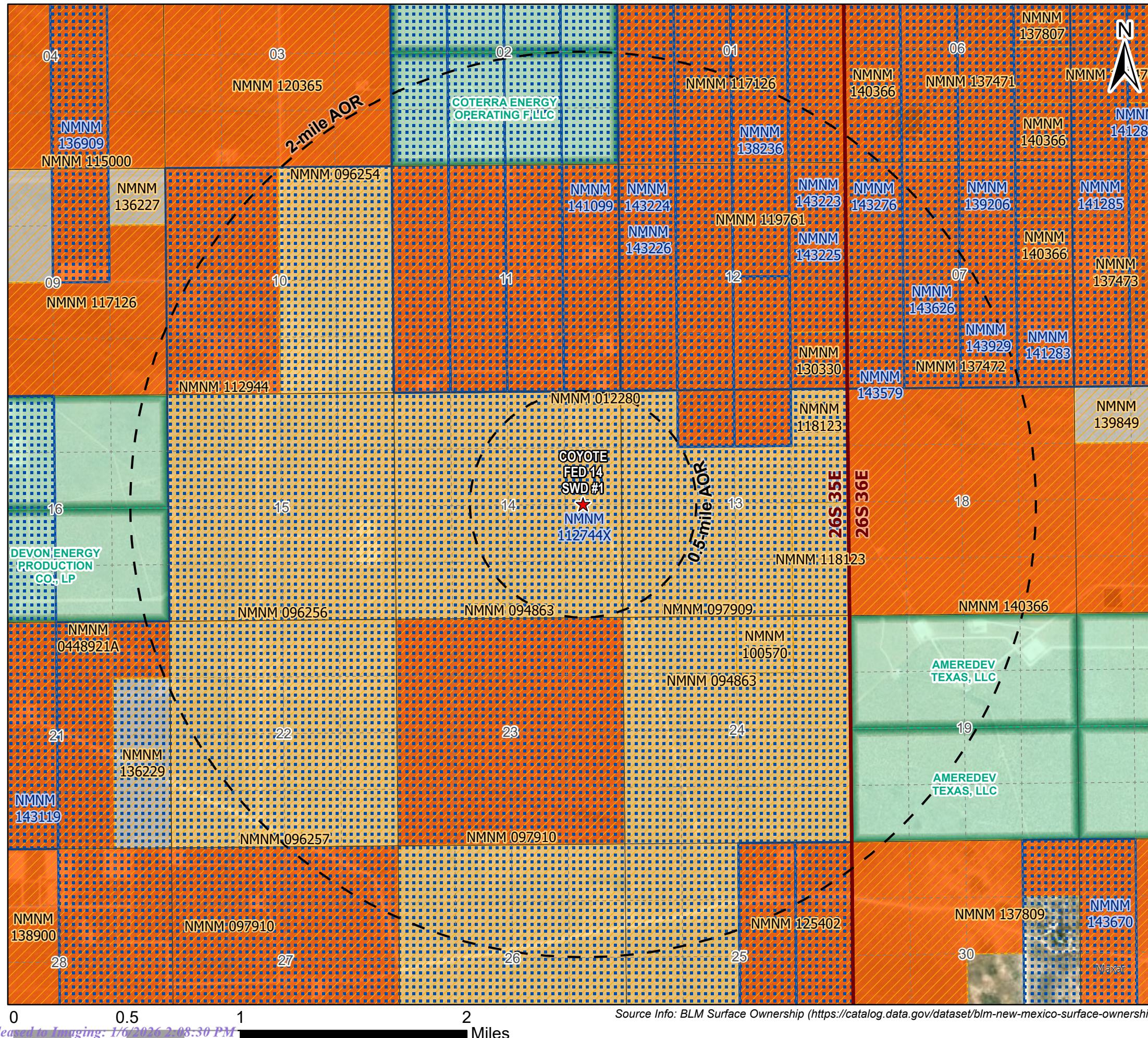
Plugged Wellbore Diagram

Drilled by Sinclair Oil and Gas Company

Spud: 4/26/1968 P&A: 5/6/1968

S11, T26S, R35E

Lea County, New Mexico



1/2-mile Affected Parties AOR

BLM Unit Operators:

- COG OPERATING LLC
- DEVON ENERGY PROD CO LP
- FRANKLIN MOUNTAIN ENERGY LLC

BLM Lessees:

- CHEVRON USA INC
- DEVON ENERGY CO LP
- FRANKLIN MOUNTAIN ENERGY LLC

Mineral Lease AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

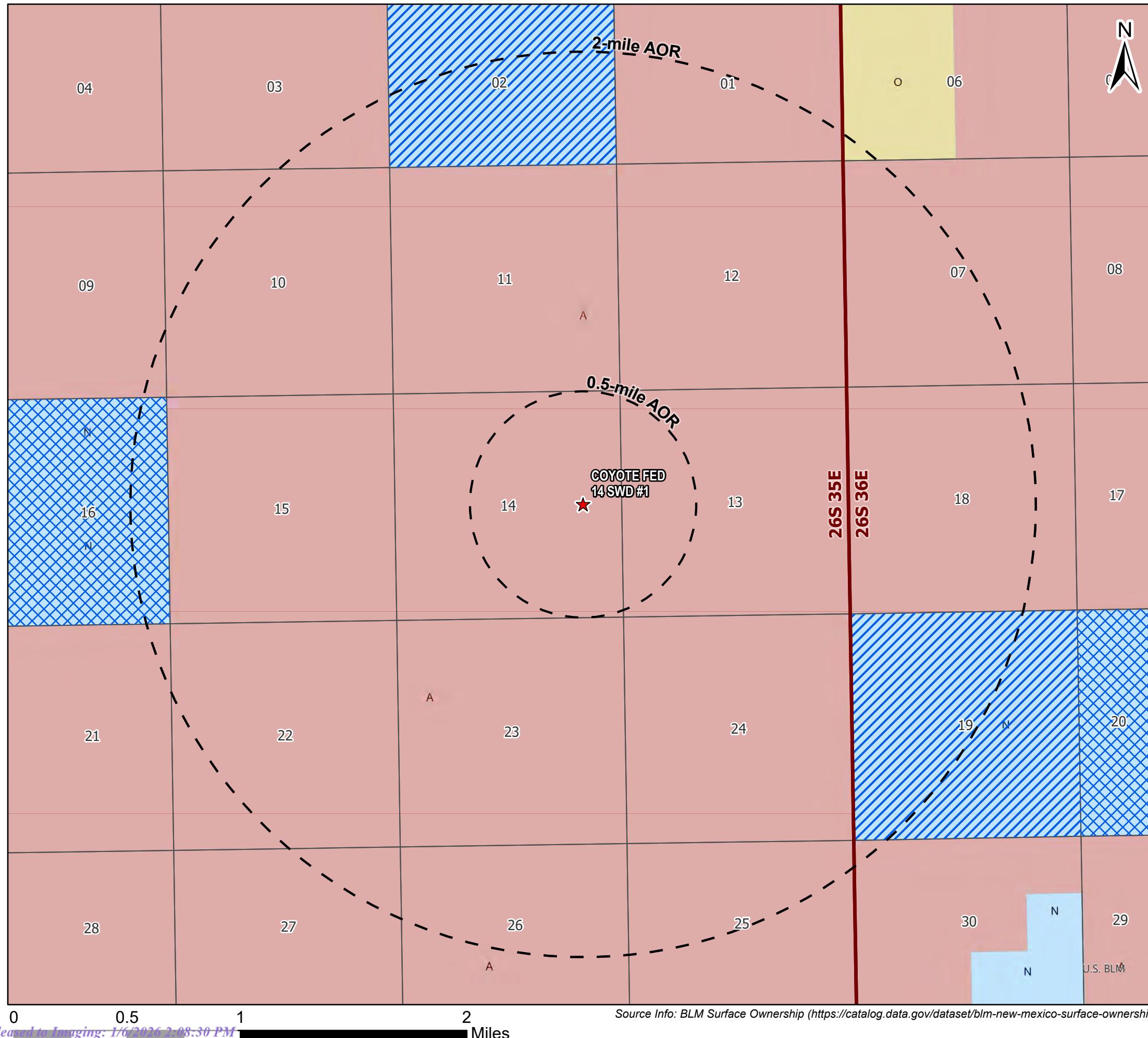
Proj Mgr: Reed Davis	September 26, 2025	Mapped by: Ben Bockelmann
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Prepared for:



Prepared by:





Legend

- Proposed SWD
- NMSLO Ownership
- Subsurface
- Surface
- Surface and Subsurface
- Mineral Ownership
- A-All minerals are owned by U.S.
- N-No minerals are owned by the U.S.
- O-Only oil and gas are owned by the U.S.

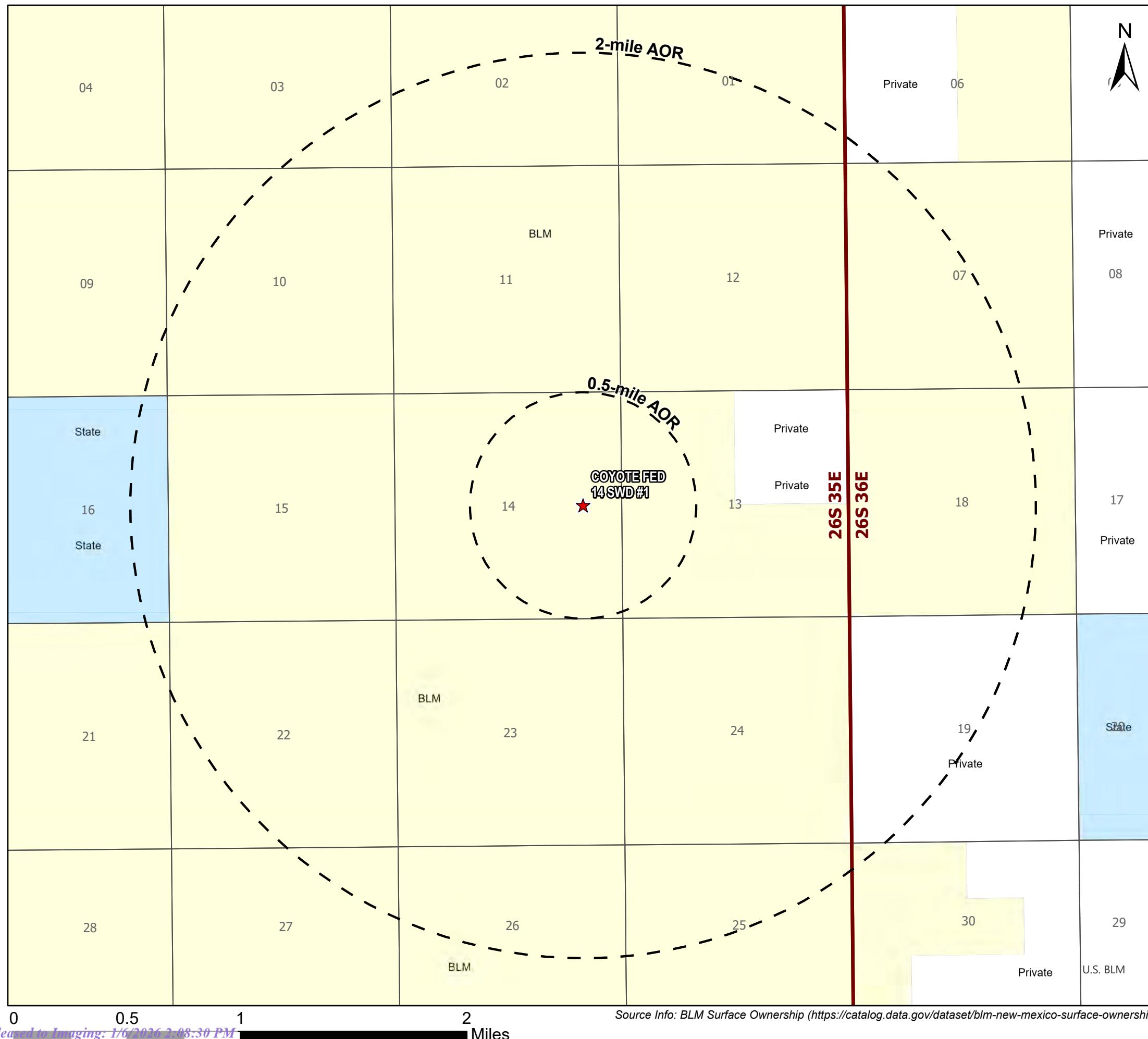
2-mile Mineral Ownership AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Reed Davis	September 26, 2025	Mapped by: Ben Bockelmann
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Prepared for: SELECT	Prepared by: ALL CONSULTING
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Legend

★ Proposed SWD

Land Ownership

BLM

P

S

2-mile Surface Ownership AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

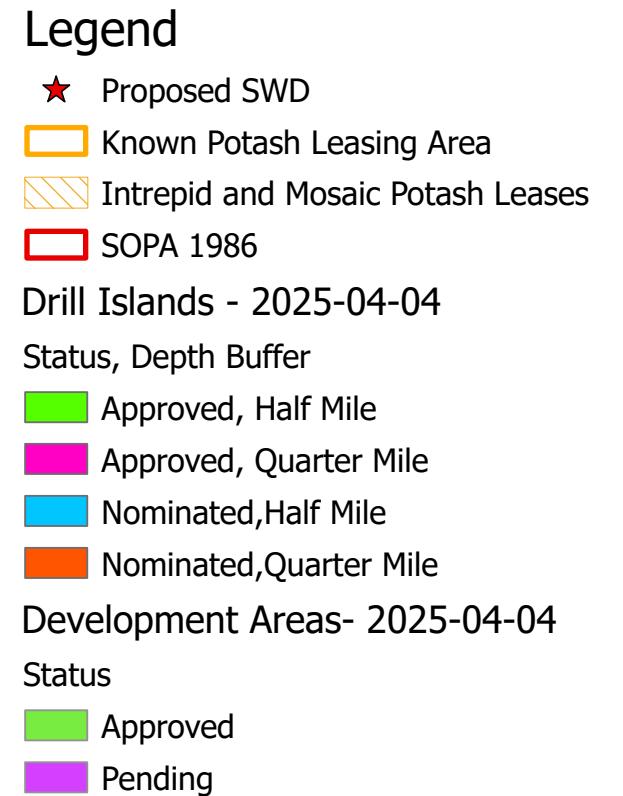
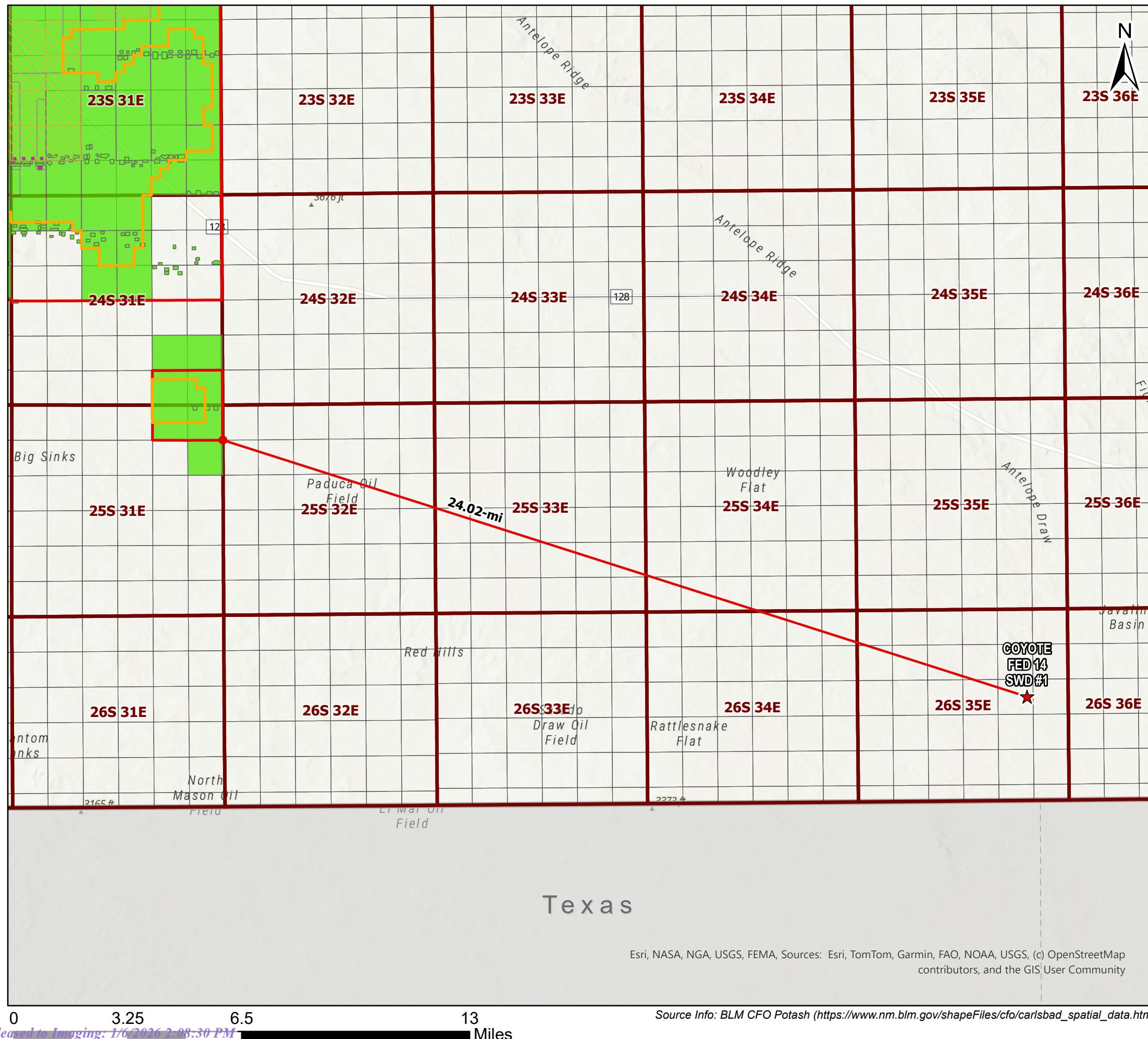
Proj Mgr:
Reed Davis

September 26, 2025

Mapped by:
Ben Bockelmann

Prepared for:
SELECT

Prepared by:
ALL CONSULTING



Potash Lease AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Reed Davis	September 26, 2025	Mapped by: Ben Bockelmann
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Prepared for:

	Prepared by: 
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Attachment 3

Source Water Analysis

Coyote Fed 14 SWD #1 - Source Water Analysis (Avalon, Bone Spring, Delaware [Brushy Canyon], Wolfcamp, Yesso Group formations)

Well Name	API	Latitude	Longitude	Formation	Tds (mg/L)	Sodium (mg/L)	Calcium (mg/L)	Iron (mg/L)	Barium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Strontium (mg/L)	Manganese (mg/L)	Chloride (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)	H2S (mg/L)
LEARCY MCBUFFINGTON #014	3002520208	32.1239586	-103.1113434	BLINEBRY/TUBB/DRINKARD	63222	-	2750	1	-	566	-	-	-	5216	-	1061	3156	1254
CARLSON FEDERAL #002	3002511707	32.1103554	-103.1315765	BLINEBRY	122000	-	-	-	-	-	-	-	-	75000	-	488	1740	-
LANGLIE A FEDERAL #001	3002511631	32.1293907	-103.183815	TUBB	307000	-	-	-	-	-	-	-	-	180000	-	244	7380	-
RATTLESNAKE 13 FEDERAL #002H	3002541247	32.050499	-103.4204483	DELAWARE-BRUSHY CANYON	227045.4	64080.1	14521.3	40.3	-	2543.8	-	-	3.57	143469	-	122	0	-
RAGIN CAJUN 13 FEDERAL #001H	3002541259	32.0369835	-103.4278412	DELAWARE-BRUSHY CANYON	165212.8	45382.9	10714.8	38.4	-	1824.7	-	-	3.14	105060	-	244	18	-
RATTLESNAKE 13 12 FEDERAL COM #001H	3002540912	32.0369568	-103.416214	DELAWARE-BRUSHY CANYON	243517.1	73409.8	15800	18.8	-	2869	-	-	3.12	149966.2	-	48.8	560	-
BELL LAKE 19 STATE #001H	3002541024	32.1964722	-103.6176224	BONE SPRING 2ND SAND	134649.2	44572.9	6215	37.9	-	759.3	-	-	0.93	81681.6	-	244	765	-
BELL LAKE 19 STATE #004H	3002541517	32.1964722	-103.6087875	BONE SPRING 2ND SAND	133460.5	44483.1	5917	30.5	-	718.2	-	-	0.83	80981.7	-	244	675	-
SALADO DRAW 6 FEDERAL #001H	3002541293	32.0657196	-103.5146942	BONE SPRING 3RD SAND	99401.9	34493.3	3295	0.4	-	396.8	-	-	0.37	59986.5	-	109.8	710	-
FIGHTING OKRA 18 FEDERAL COM #001H	3002540382	32.0435333	-103.5164566	AVALON UPPER	201455.9	66908.6	9313	10	-	1603	-	-	1.6	121072.7	-	1024.8	940	-
ICHABOD 7 FEDERAL #001H	3002540043	32.0511932	-103.5014954	AVALON UPPER	1508.7	317.4	90.7	0	-	55.4	-	-	0	242.4	-	125	675	-

Attachment 4

Injection Formation Water Analysis

Coyote Fed 14 SWD #1 - Injection Formation Water Analysis (Delaware, Bell Canyon, and Cherry Canyon formations)																		
Well Name	API	Latitude	Longitude	Formation	Tds (mg/L)	Sodium (mg/L)	Calcium (mg/L)	Iron (mg/L)	Barium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Srontium (mg/L)	Manganese (mg/L)	Chloride (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Sulfate (mg/L)	H2S (mg/L)
RATTLESNAKE 13 FEDERAL #002H	3002541247	32.050499	-103.4204483	DELAWARE-BRUSHY CANYON	227045.4	64080.1	14521.3	40.3	-	2543.8	-	-	3.57	143469	-	122	0	-
RAGIN CAJUN 13 FEDERAL #001H	3002541259	32.0369835	-103.4278412	DELAWARE-BRUSHY CANYON	165212.8	45382.9	10714.8	38.4	-	1824.7	-	-	3.14	105060	-	244	18	-
RATTLESNAKE 13 12 FEDERAL COM #001H	3002540912	32.0369568	-103.416214	DELAWARE-BRUSHY CANYON	243517.1	73409.8	15800	18.8	-	2869	-	-	3.12	149966.2	-	48.8	560	-
NORTH EL MAR UNIT #017	3002508430	32.0166054	-103.617691	DELAWARE	254756	-	-	-	-	-	-	-	159400	-	80	210	-	
NORTH EL MAR UNIT #057	3002508440	32.0019455	-103.6131134	DELAWARE	259554	-	-	-	-	-	-	-	163000	-	61	253	-	
GOEDEKE #002	3002508407	32.0597992	-103.5579987	DELAWARE	293925	-	-	-	-	-	-	-	184000	-	85	210	-	

Note: Select agrees to collect one formation water sample for analysis prior to commencing commercial injection operations, given that no Bell Canyon or Cherry Canyon data addressing H2S, cations, and anions is available within 1/2-mile.

Sampling results will be electronically provided to NMOCD within 30-days of analysis.

Attachment 5

Reservoir Characterization

Reservoir Characterization at the Coyote Fed 14 SWD #1

1. Injection Formation and Confinement

a. Injection Formation

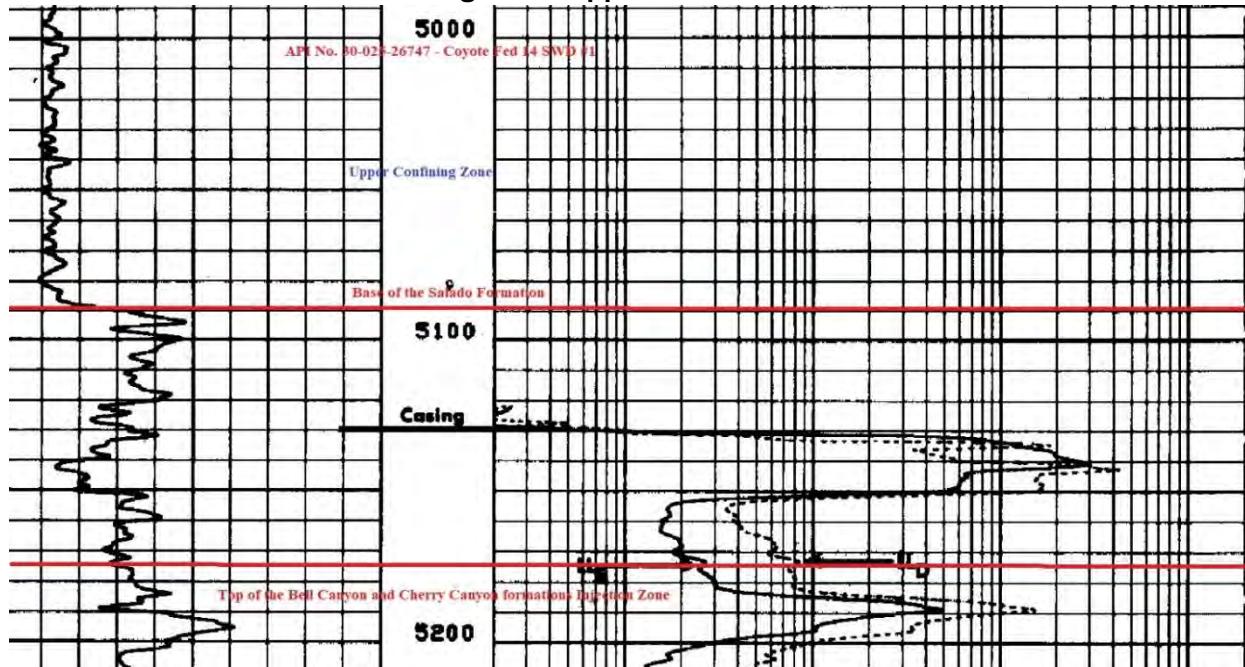
The proposed injection interval includes the Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group from 5,175' – 6,420'. The Guadalupian-age Bell Canyon and Cherry Canyon members consist primarily of sandstones and siltstones with significant primary porosity and permeability, indicating these formations are viable injection targets. Select will not perforate or inject into the Lamar Dolomite or Brushy Canyon Formation of the Delaware Mountain Group. Reservoir performance modeling suggests injection pressure into the Bell Canyon-Cherry Canyon injection interval would be below the fracture pressures of the upper and lower confining layers.

b. Upper Confinement

Nearby open hole geophysical well logs indicate the proposed Bell Canyon-Cherry Canyon injection interval is overlain by thousands of feet of tight evaporites within the Salado Formation, which will prevent the upward migration of fluids and act as the upper confining layer.

Estimated fracture gradient for the upper confinement layer is 0.726 psi/ft, per reservoir performance modeling in **Appendix B**.

Figure 1 – Upper Confinement

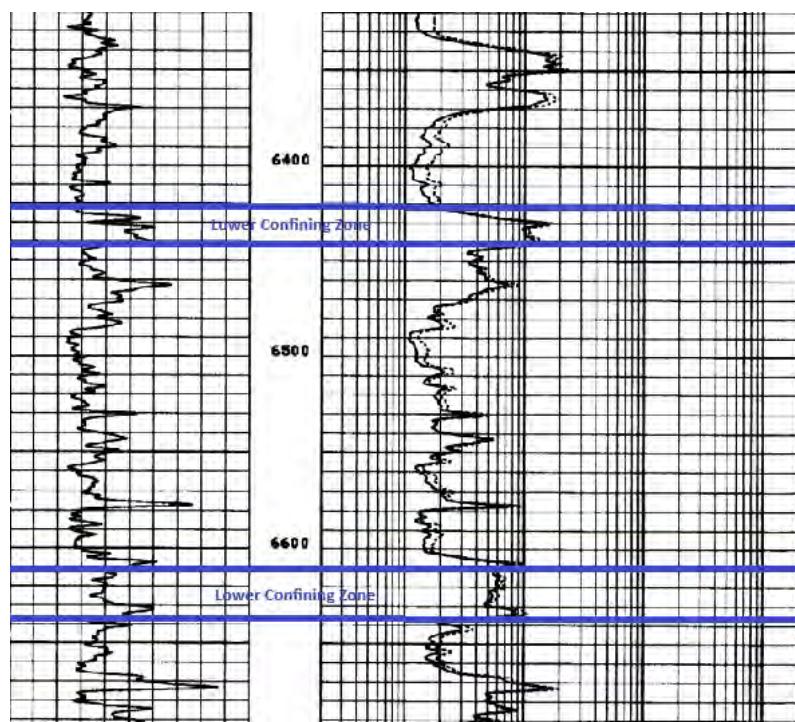


c. Lower Confinement

Nearby open hole geophysical well logs indicate the proposed Bell Canyon-Cherry Canyon injection interval is underlain by approximately 55 feet of low porosity and low permeability rocks within the Cherry Canyon Formation of the Delaware Mountain Group, which will prevent the downward migration of fluid and act as the lower confining layer.

Estimated fracture gradient for the lower confinement layer is 0.771 psi/ft, per reservoir performance modeling in **Appendix B**.

Figure 2 – Lower Confinement



2. Historic Field Usage

a. Offset Production

A review of all wells in the NMOCD database within a 2-mile radius of the Coyote Fed 14 SWD #1 does not show any historic or current hydrocarbon production from the Bell Canyon or Cherry Canyon formations of the Delaware Mountain Group.

b. Commercial Water Sources

A review of all wells in the NMOCD and OSE databases within a 2-mile radius of the Coyote Fed 14 SWD #1 does not show any historic or current commercial water supply sources from the Delaware Mountain Group.

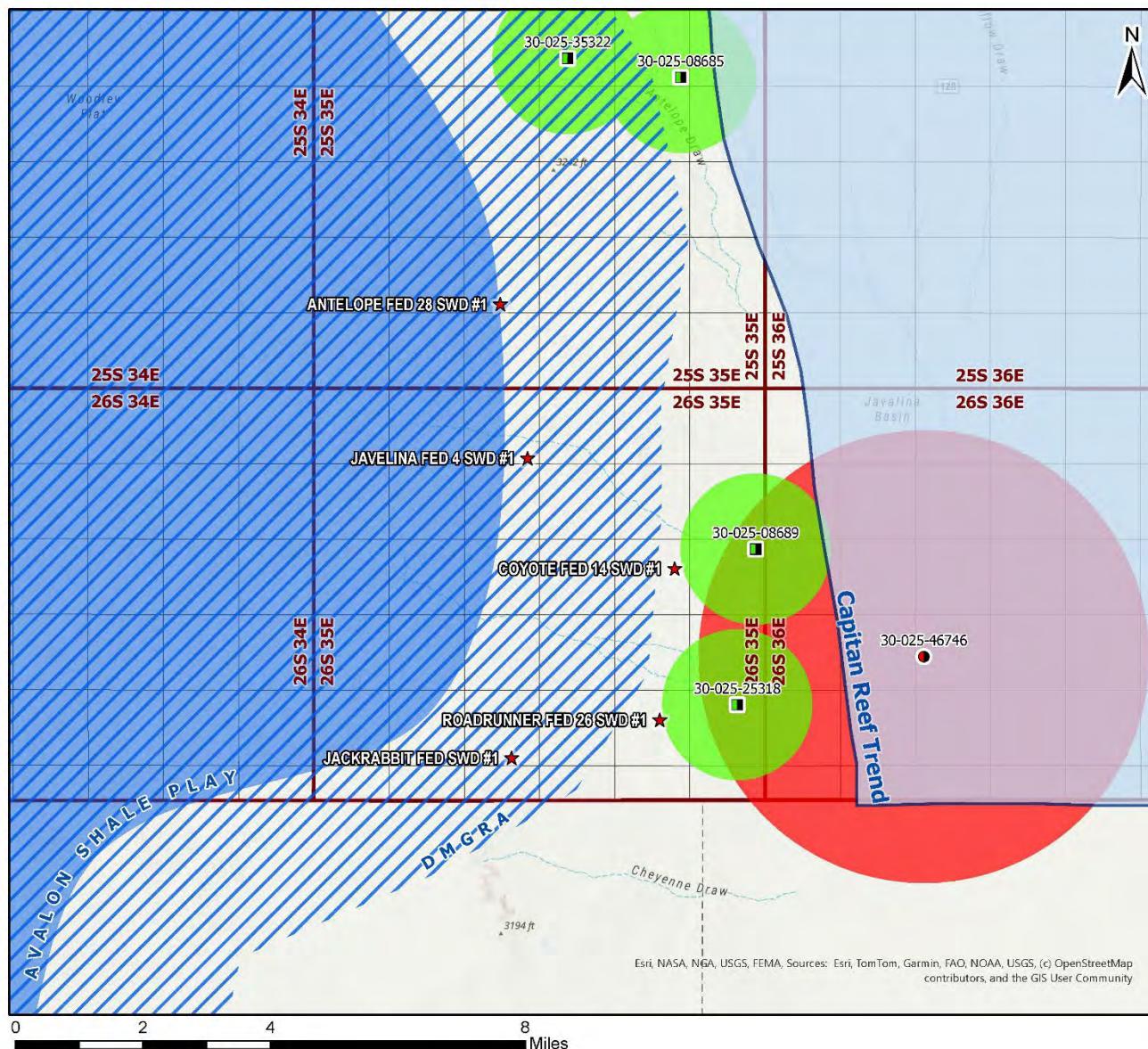
c. Enhanced Oil Recovery

A review of all wells in the NMOCD database within a 2-mile radius of the Coyote Fed 14 SWD #1 does not show any historic or current enhanced oil recovery operations utilizing the overlying Lamar Dolomite, or the underlying Brushy Canyon.

d. Additional OCD Exhibit 11a Requirements

No Delaware Acid Gas Injection wells are located within three miles of the proposed Coyote Fed 14 SWD #1. In addition, the proposed SWD is located outside of the Avalon Shale play, the Capitan Reef Trend, and has been positioned more than one mile from any identified wells with potential wellbore concerns or lack of data for evaluation (see **Figure 3**).

Figure 3 – Delaware Mountain Group Area of Interest

**Legend**

- Proposed SWDs (5)
- Potential Problem Wells (11)
- Delaware AGI Well (1)
- Potential Problem Wells - 1-mile Buffer
- Delaware AGI Well - 3-mile Buffer
- Delaware Mountain Group Risk Area
- Avalon Shale Play
- Capitan Reef Trend

Delaware Mountain Group Area of Interest

LEA COUNTY, NEW MEXICO

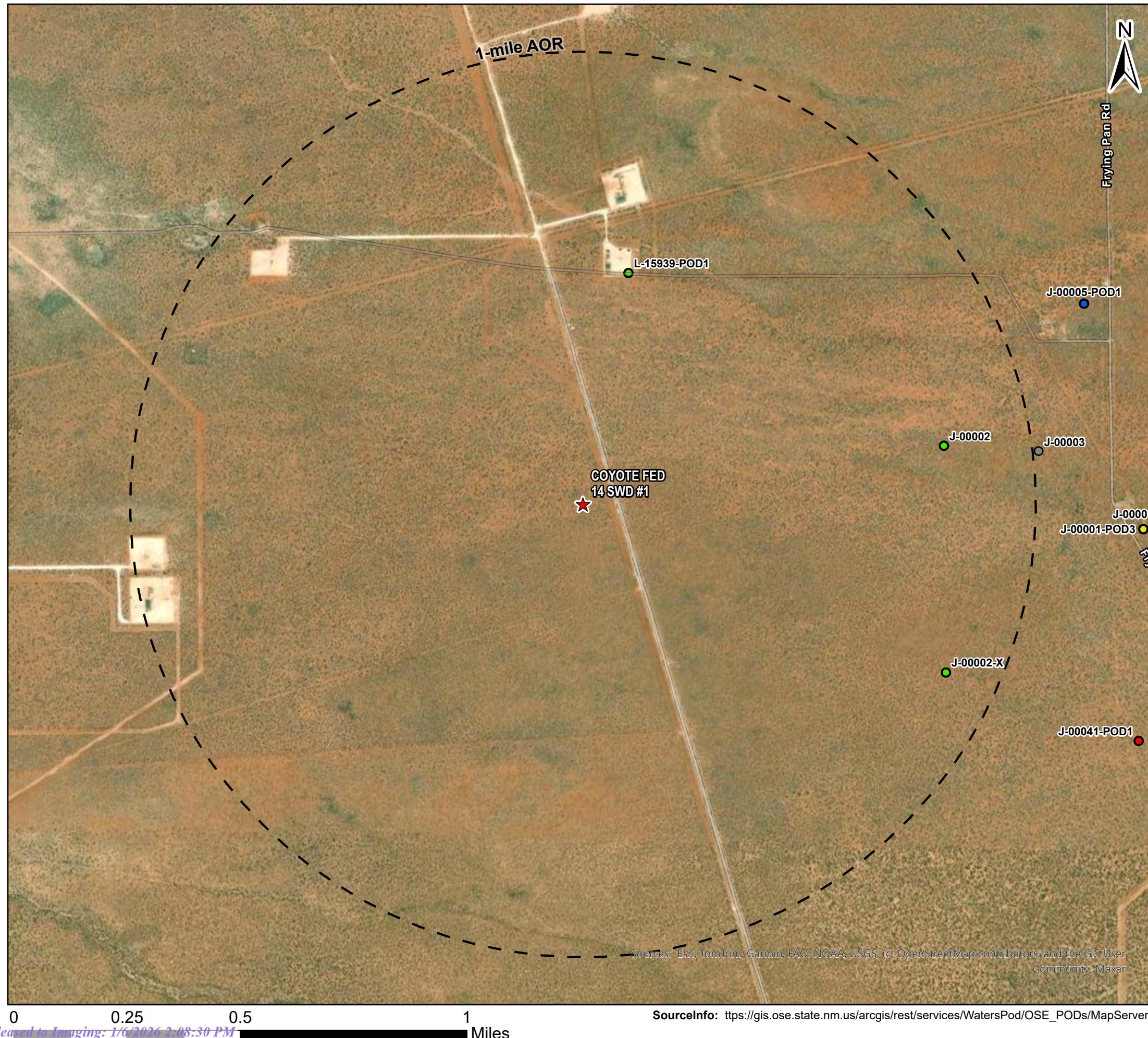
Proj Mgr: Reed Davis	July 24, 2025	Mapped by: Ben Bockelmann
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Prepared for:

Prepared by:

Attachment 6

Water Well Map and Well Data



Legend

- ★ Proposed SWD
- OSE Water PODs
- POD Status
 - Active (1)
 - Pending (3)
 - Changed Location of Well (1)
 - Inactive (1)
 - Capped (0)
 - Plugged (1)
 - Unknown (1)

1-mile Water Well AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr:
Reed Davis

September 26, 2025

Mapped by:
m Bockelmann

Prepared for:

Prepared by:

Prepared for:

Prepared by:
ALL CONSULTING

Coyote Fed 14 SWD #1 - Water Well Sampling Rationale					
Water Wells	Owner	Available Contact Information	Use	Sampling Required	Notes
J 00002	City of Jal	Van Myrick: Public Works Director 575-395-3340 vanmyrick@cityofjal.us	Municipal	Yes	Contacted via phone message and email on 7/18/2025, awaiting response.

Attachment 7

No Hydrologic Connection Statement



RE: Select Water Solutions LLC – Coyote Fed 14 SWD #1 application, Lea County, New Mexico

ALL Consulting LLC (ALL) has performed a thorough hydrologic investigation related to the one saltwater disposal well (SWD) listed above. The investigation was conducted to determine if there were any existing or potential connections between the proposed injection zones in the Bell Canyon and Cherry Canyon formations and the deepest underground source of drinking water (USDW).

ALL performed an assessment and analysis of the subsurface geophysical log data along with published documents on the groundwater in this vicinity of Lea County, New Mexico. The area is within the South Plain and the surficial geology is Quaternary alluvial deposits consisting predominantly of sand and silt deposits. In this area the depths to potable water for stock and domestic supplies are less than 175 feet below the surface. The USDW is the Rustler Formation and the base of the USDW plus 25 feet into the anhydrite unit is approximately 910 feet below the surface.

Based on ALL's assessment and analysis there is containment through multiple confining zones above the proposed Bell Canyon and Cherry Canyon injection zones and the USDW and over 4,265 feet of vertical separation between the base of the USDW and the top of the injection interval. Additionally, there is no evidence of faults that would allow for communication between the USDW and Bell Canyon and Cherry Canyon injection zones.

Tom Tomastik

June 11, 2025

Tom Tomastik

Date

Chief Geologist and Regulatory Specialist

ALL Consulting LLC

Attachment 8

List of Affected Persons

Coyote Fed 14 SWD #1 - Notice of Application Recipients						
Affected Party Classification	Entity - Proof of Notice	Entity - As Mapped/Exhibited	Address	City	State	Zip Code
Surface and Mineral Owner	New Mexico Bureau of Land Management	BLM	620 E Greene St.	Carlsbad	NM	88220
NMOCD District Office	New Mexico Oil Conservation District 1	N/A	1625 N. French Drive	Hobbs	NM	88240
BLM - Lessee and Unit Operator	Devon Energy Production Company, LP	DEVON ENERGY PROD CO LP	333 West Sheridan Ave.	Oklahoma City	OK	73102
Well Operator	Pre-Ongard Well Operator	SINCLAIR OIL & GAS COMPANY	NA	NA	NA	NA
Well Operator	Pre-Ongard Well Operator	HANAGAN PETROLEUM CORP	NA	NA	NA	NA
BLM - Lessee	CHEVRON U S A INC	CHEVRON USA INC	6301 Deauville	Midland	TX	79706-2964
BLM - Unit Operator	COG OPERATING LLC	COG OPERATING LLC	600 W Illinois Ave	Midland	TX	79701
BLM - Lessee	FRANKLIN MOUNTAIN ENERGY LLC	FRANKLIN MOUNTAIN ENERGY LLC	44 Cook St Ste 1000	Denver	CO	80206

Note: The affected parties above received notification of this C-108 application.

BLM Unit Operators and Lessee information was retrieved from BLM MLRS (<https://mlrs.blm.gov/s/>).

NMSLO Lessee information retrieved from NMOCD Operator Search (<https://wwwapps.emnrd.nm.gov/OCD/OCDPermitting/Operators/Search/OperatorSearch.aspx>).

Appendix A

Seismic and Structural Cross Sections

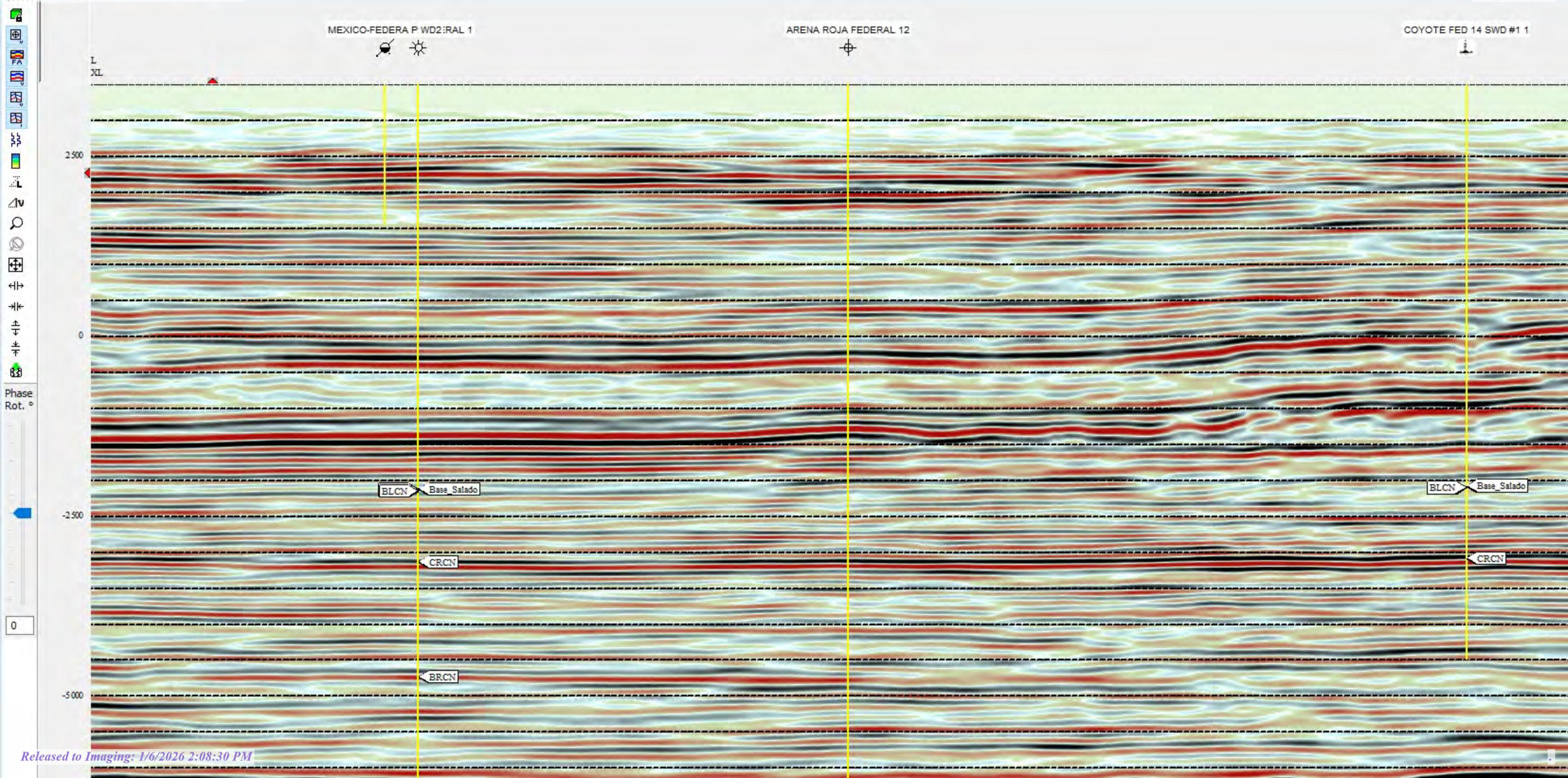
Appendix A-1

Seismic J-J'

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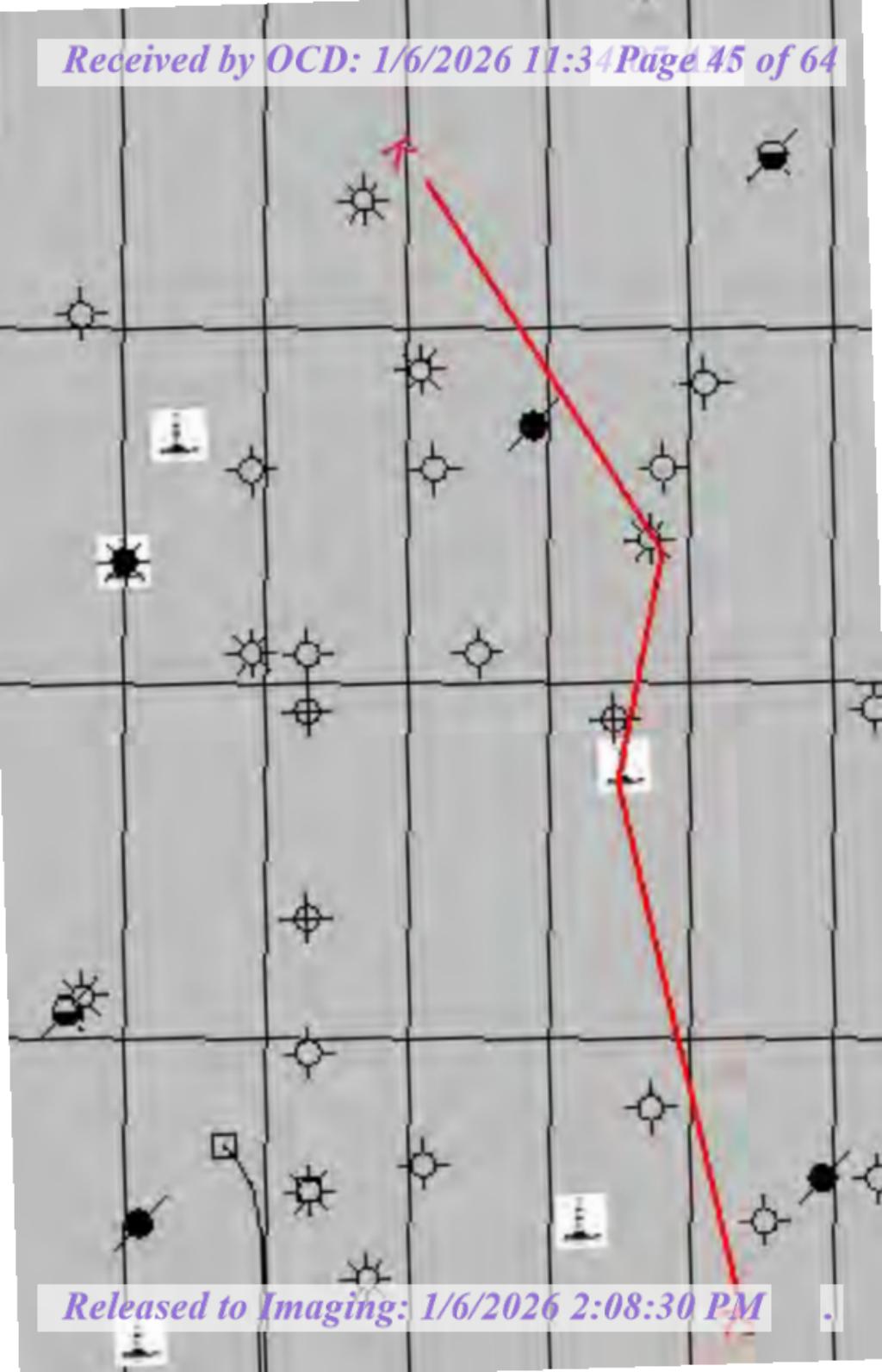
Page 42 of 64

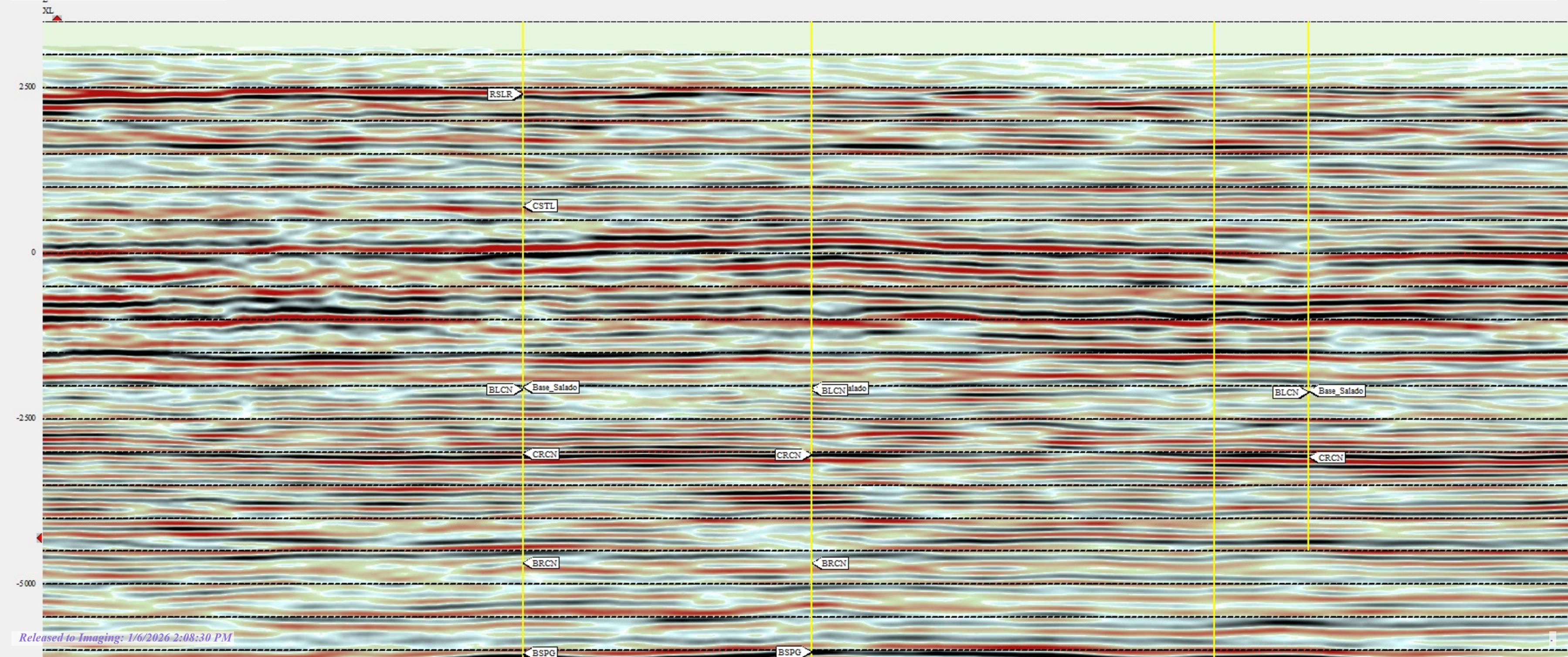
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Appendix A-2

Seismic K-K'





Appendix A-3

Structural J-J'



BLCN = Top Bell Canyon
CRCN = Top Cherry Canyon
BRCN = Top Brushy Canyon
BSPG = Top Bone Springs

Appendix A-4

Structural K-K'



BLCN = Top Bell Canyon
CRCN = Top Cherry Canyon
BRCN = Top Brushy Canyon
BSPG = Top Bone Springs

Appendix A-5

Structural L-L'



Appendix A-6

Structural M-M'



Appendix B

Reservoir Performance Modeling



Southeast Lea County Four DMG SWDs east of Jal New Mexico

TASP Group, January 5, 2026
Dave Childers, Sr. Reservoir Engineer

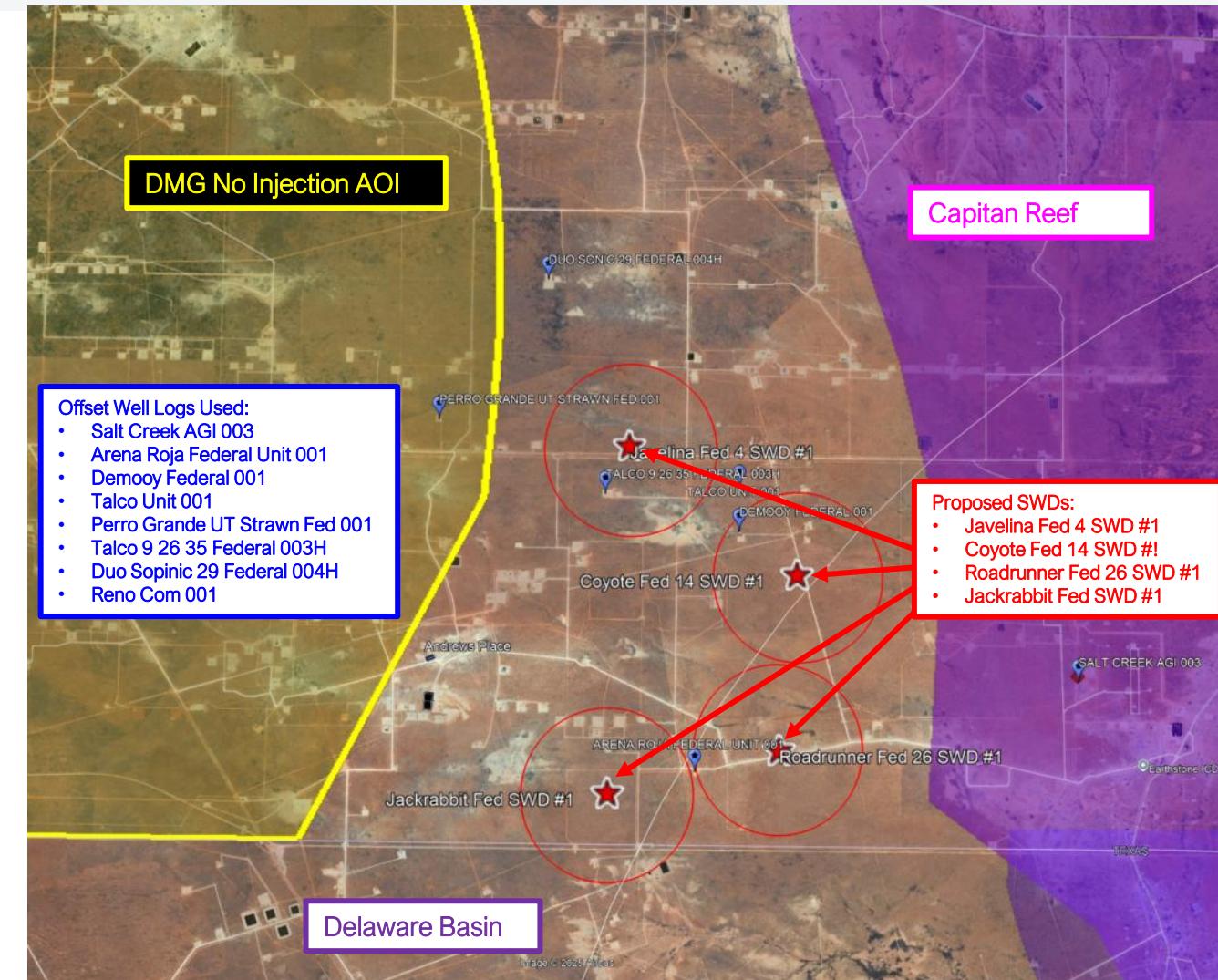


Scope of Work

- Determine:
 - Reservoir and geomechanical properties to approximate reservoir and wellbore hydraulics.
 - Analyze confining layers and estimate fracture gradients.
 - Estimate operational pressure gradients based on maximum injection rates and SWD life.
- Proposed SWDs:
 - Javelina Fed 4 SWD #1
 - Coyote 14 SWD #1
 - Roadrunner Fed 26 SWD #1
 - Jackrabbit Fed SWD #1

Locations & Offset Logs

- Review viability of SWD operations based on disposal injection rates.
- DMG Formation Injection Targets
 - Bell Canyon
 - Cherry Canyon
- Confining Layers
 - Lamar (upper interval)
 - Brushy Canyon (lower interval)



Injection Interval

Well Name	Target Interval	Top of Interval Approximated (ft)	Gross Injection Zone Thickness (ft)
Javelina Fed 4 SWD #1	Bell Canyon	5,360'	1,140'
	Cherry Canyon	6,275'	
	Base of Injection Zone	6,500'	
	Brushy Canyon	7,780'	
Coyote Fed 14 SWD #1	Bell Canyon	5,175'	1,245'
	Cherry Canyon	6,180'	
	Base of Injection Zone	6,420'	
	Brushy Canyon	7,550'	
Roadrunner Fed 26 SWD #1	Bell Canyon	5,400'	1,010'
	Cherry Canyon	6,205'	
	Base of Injection Zone	6,410'	
	Brushy Canyon	7,750'	
Jackrabbit Fed SWD #1	Bell Canyon	5,305'	1,195'
	Cherry Canyon	6,275'	
	Base of Injection Zone	6,500'	
	Brushy Canyon	7,700'	

Offset Wells used to Estimate Reservoir/Geomechanical Properties

API	Well Name	Lat.	Long.	Interval of Interest	Top of Interval (feet)	Thickness	Logs Used to Ascertain Reservoir and Geomechanical Properties					
							Porosity	Rock Density	Water or Hydrocarbon bearing Layers	Lithology	Lithology	Geomechanical Properties
300255186500	Salt Creek AGI 003	32° 1'40.67"N	103°16'39.73"W	Saldo Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	1900 5300 6200 7200	1900	Yes	Yes	Yes	Yes	Yes	Yes
300253725700	Arena Roja Federal Unit 001	32° 0'44.66"N	103°21'11.39"W	Salt Bell Canyon Cherry Canyon (Approximation) Brushy Canyon (Approximation)	4876 5156 6350 7650	2494	No	Yes	No	Yes	No	No
300252253100	Demooy Federal 001	32° 3'8.46"N	103°20'40.96"W	Salado Bell Canyon Cherry Canyon (Approximation) Brushy Canyon (Approximation)	1900 5250 6250 7625	2375	No	No	No	No	Yes	Yes
300252674700	Talco Unit 001	32° 3'34.62"N	103°20'41.02"W	Saldo Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	1900 5250 6250 7650	2400	No	No	Yes	No	Yes	Yes
300252735900	Perro Grande UT Strawn Fed 001	32° 4'13.84"N	103°24'15.85"W	Saldo Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	1900 5350 6550 7875	2525	No	No	Yes	No	Yes	No
300254345800	Talco 9 26 35 Federal 003H	32° 3'30.11"N	103°22'16.54"W	Lamar Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	5332 5360 6300 7770	2410	Yes	Yes	Yes	Yes	Yes	No
300254309000	Duo Sopnic 29 Federal 004H	32° 5'40.23"N	103°22'59.30"W	Lamar Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	5239 5269 6329 7827	2558	No	No	No	No	No	No
300252686700	Reno Com 001	32° 8'55.60"N	103°20'34.62"W	Saldo Bell Canyon Cherry Canyon Brushy Canyon (Approximation)	1900 5300 6180 7325	2025	Yes	Yes	Yes	Yes	No	Yes

Isopach Thickness: Top of Bell Canyon - Bottom of Cherry Canyon

- Zones of interest (ZOI) are Bell Canyon and Cherry Canyon formations.
 - Average depth, thickness, and injection interval is provided in the table below.

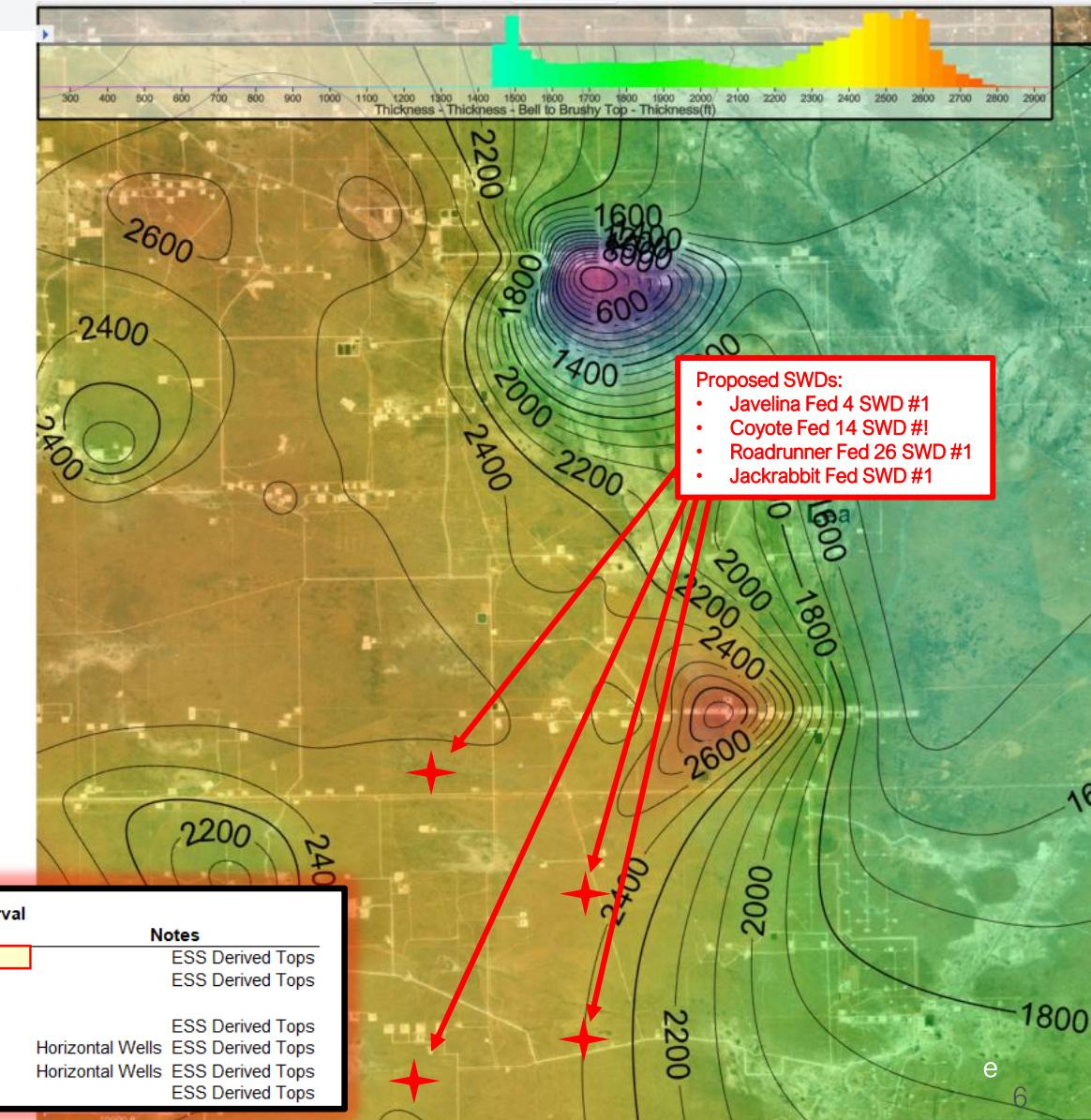
Summary of lower Permian stratigraphic nomenclature, Permian Basin region

System	Series	Delaware Basin Formations	CBP & NW Shelf Formations	Midland Basin Formations
Permian	Ochoan	Dewey Lake	Dewey Lake	Dewey Lake
		Rustler	Rustler	Rustler
		Salado	Salado	Salado
		Castile		
	Guadalupian	Lamar	Tansill	Tansill
		Bell Canyon	Yates	Yates
		Cherry Canyon	Seven Rivers	Seven Rivers
		Brushy Canyon	Goat Seep	Queen
			Upper San Andres	Grayburg
			Lower San Andres	Grayburg
	Leonardian			San Andres
			Cutoff Member / 1 st Carb / Avalon	Holt / Upper Leonard
			1 st Sand	Clearfork
			2 nd Sand	Glorieta
			3 rd Carb / 3 rd Sand	Upper Clearfork
	Wolfcampian			Middle Clearfork
				Tubb
				Dean
				Wolfcamp
	Virgilian			Wolfcamp A
				Wolfcamp B
				Wolfcamp C1
	Missourian			Wolfcamp C2
Pennsylvanian	Desmoinesian	Strawn	Cisco	Cisco
		Lime Detrital		

Preliminary Formation Targets



Formation	Top of Interval Avg (ft)	Gross Target Interval Avg (ft)	Notes
Bell	5,310	1,148	ESS Derived Tops
Cherry	6,234		ESS Derived Tops
Base of Injection Interval	6,458		ESS Derived Tops
Brushy	7,695		ESS Derived Tops
Bone Springs	9,250		ESS Derived Tops
Wolfcamp	12,375		ESS Derived Tops
Strawn	13,500		ESS Derived Tops



Findings

- Fracture Gradients:

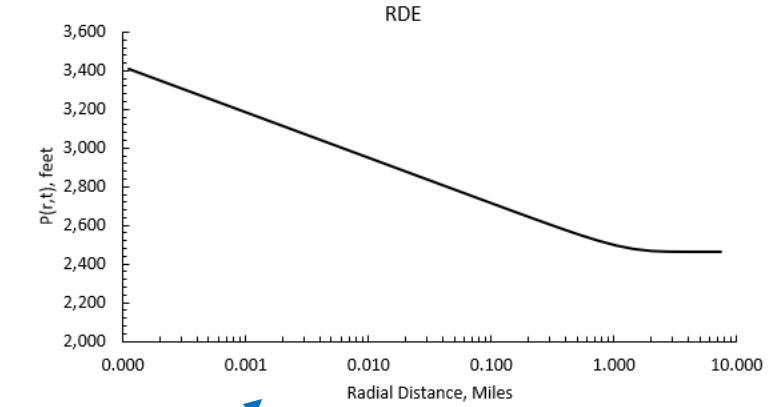
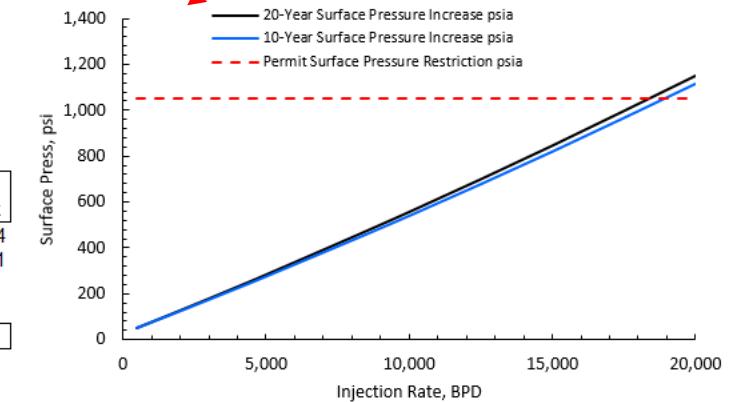
- Fracture Models used to estimate fracture limits (Bourgoine, 1986).
- Triangular distribution with cumulative distribution function was used to estimate the most probable fracture gradient.
 - Deviation from the most likely fracture gradient will result in lower probable fracture gradient outcomes.
- Pressure gradients from injection operations are less than upper and lower confining layer fracture gradients indicating injectate confinement.

Fracture Mechanic Models	Upper Layer psi/ft	Lower Layer psi/ft
Hubbert and Willis Correlation	0.639	0.646
Mathews and Kelly Correlation	0.823	0.866
Pennebaker Correlation	0.814	0.871
Eaton Correlation	0.637	0.675

Offset Well Logs with Triangular Distribution	Fracture Gradient psi/ft min	Fracture Gradient psi/ft mean	Fracture Gradient psi/ft max
Upper Confining Layer	0.637	0.726	0.814
Lower Confining Layer	0.646	0.771	0.871

Most likely Fracture Gradients

Near Wellbore Model		
NMOCD Surface Pressure Gradient Constraint =	0.2	psi/ft
Model		
Rate =	20,000	BPD
Pore Pressure = Initial Pressure ~	2,455	psi/ft
Well Life =	10	years
Injection Interval =	1,125	feet
Likely Porosity =	21.8%	dim
Minimum effective permeability k_{eff} >=	19.2	md
Pressure Gradient due to Injection Ops. =	0.64	psi/ft
Flow Capacity (kh) =	21,600	md-ft
Rate =	20,000	BPD
Pore Pressure = Initial Pressure ~	2,455	psi/ft
Well Life =	20	years
Injection Interval =	1,125	feet
Likely Porosity =	21.8%	dim
Minimum effective permeability k_{eff} >=	19.93	md
Pressure Gradient due to Injection Ops. =	0.64	psi/ft
Flow Capacity (kh) =	22,421	md-ft



Near Wellbore Hydraulic Model:

- Coupling of reservoir and wellbore hydraulic models to estimate the pressure response as a function of injection rate (Spivey et.al, 2013, and Lee et.al, 2003).

Radial Diffusion Model:

- Estimate of pressure diffusion with respect to SWD well life (Spivey et.al, 2013, and Lee et.al, 2003).

Conclusions

- Injection pressure into the Bell/Cherry Canyon is below the fracture pressures of the upper and lower confining zones (Injectate Confinement).
- Radial Diffusion Model shows that initial pressure of 2,455 psi will be approached at approximately two-miles away from the wellbore with an injection rate of 20k bwpd for 20-years.
- Pressure Gradient (PG) near wellbore is approximately 0.64 psi/ft or 12.3 ppg EMW
 - Near Wellbore PG levels are around 0.64 psi/ft for 10 or 20-year time period.
- Simulations presented are for the least amount of flow capacity (kh) needed for disposal. We expect that the kh could be significantly higher due to additional height available and having higher reservoir porosity and permeability contrasts.
 - Step rate test will quantify the actual fracture gradient of the injection zone followed by a pressure fall off test to determine the actual reservoir properties.

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 - Bourgoyne, A. T., Millheim, K. K., Chenevert, M. E., & Young, F. S. (1986). Applied drilling engineering. Society of Petroleum Engineers.
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