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.

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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 2,026' from the north line and 1,070' 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 7,500 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 September 11, 2025, 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
125 Lincoln Ave, Ste. 223
Santa Fe, NM 87501
Phone: (505) 230-4410
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dhardy@hardymclean.com jmclean@hardymclean.com

Counsel for Select Water Solutions, LLC

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geolog	ABOVE THIS TABLE FOR OCC CO OIL CONSERV ical & Engineerin rancis Drive, San	/ATION DIVISIOI g Bureau –	
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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

<u>APPLICATION FOR AUTHORIZATION TO INJECT</u>

I.	PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? Yes X 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? YesXNo 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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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: 07/28/25
*	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:

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: 2,026' FNL & 1,070' FEL

Legal Location: Lot H, S14 T26S R35E

Ground Elevation: 3,025'

Proposed Injection Interval: 5,175' – 7,500'

County: Lea

(2) Casing Information:

Туре	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	7,520′	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'.

В.

(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′ 7,500′
- (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.

Five wells have been drilled in the 1-mile AOR. 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'-7,500'. 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.

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

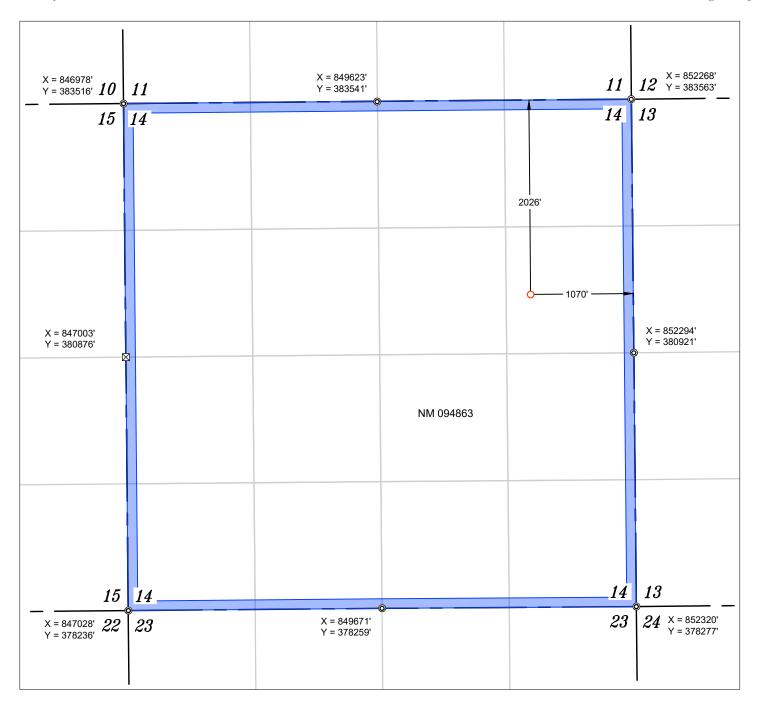
Attachment 8: List of Affected Persons

Appendix A: Seismic and Structural Cross Sections

Appendix B: Reservoir Performance Modeling

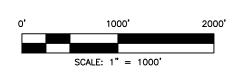
- C-102
- Wellbore Diagram
- Packer Diagram

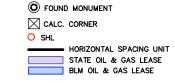
<u>C-10</u>)2		State of New Mexico Energy, Minerals & Natural Resources Department											
Submit	Electronicall	ly				ATION DIVISION								
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					WELL LOCA	ATION INFORMATION	I							
API Nı	ımber		Pool Code			Pool Name								
Propert	ty Code		Property Na	ime	COYO	TE FED 14 SWD			Well Number	er #1				
OGRII	O No. 28	9068	Operator Na	nme	SELECT WA	TER SOLUTIONS, LL	.C		Ground Leve	el Elevation 3025'				
Surface	e Owner: 🗆 S	State Fee	Tribal 🛛 Fe	deral		Mineral Owner: □ S	tate 🗆 Fee	□ Tribal 🛛	Federal					
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Dedica	ted Acres	Infill or Defin	ning Well	Defining	Well API	Overlapping Spacing V	Unit (Y/N)	Consolida	tion Code					
Order	Numbers.	ı				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	1	Longitude	County				
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					First 7	ake Point (FTP)								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude		Longitude	County				
					Last 7	 Take Point (LTP)								
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude]	Longitude	County				
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Unitize	ed Area or Ar	ea of Uniform I	nterest	Spacing	Unit Type □ Hor	izontal Vertical	Grou	nd Floor Ele	evation: 3025'					
						_								
OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the be 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 min interest, or to a voluntary pooling agreement or a compulsory pooling order hereto, entered by the division.						SURVEYOR CERTIFI I hereby certify that the well surveys made by me or unde of my belief.	location shown							
consent in each	of at least one t tract (in the tar, will be located	tal well, I further of lessee or owner of get pool or format or obtained a con	a working inter- tion) in which an upulsory pooling	est or unlease by part of the corder from t	ed mineral interest well's completed	1	- 285	Tan 20	70, 158 SIC	DNAL SURVEYOR				
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Joshua Ticknor						21209	JANUAR	Y 27, 202	25					
Printed						Certificate Number	Date of Sur	vey						
	jti	cknor@all	-llc.com											
Email A	Address													



WELL NAME: <u>COYOTE FED 14 SWD #1</u> ELEVATION: <u>3025'</u>

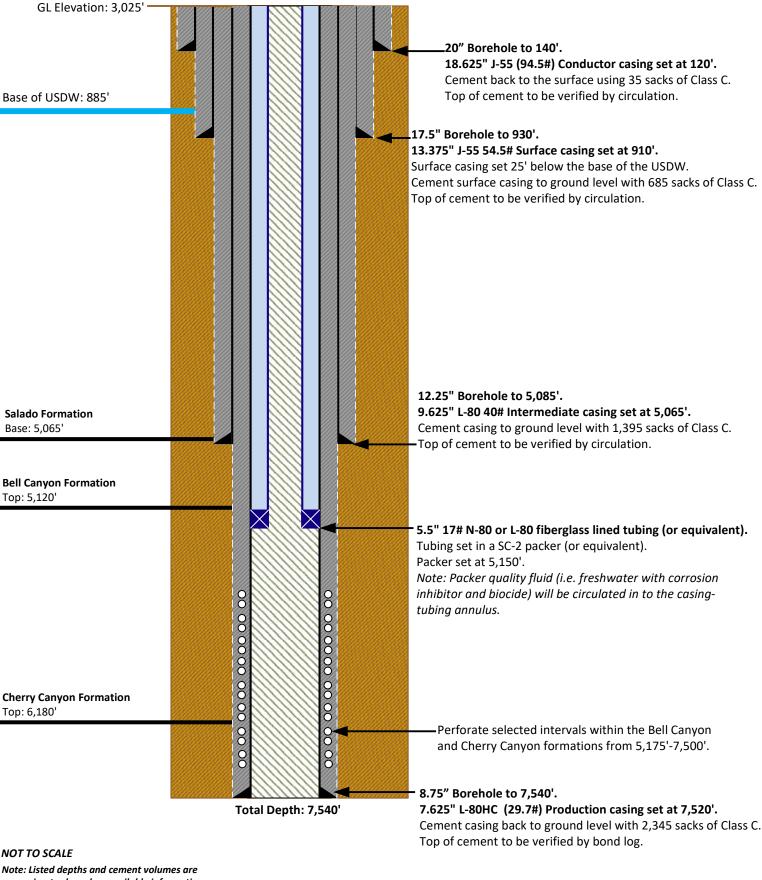






<u>NOTES</u>

- 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 JANUARY, 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.



approximates based on available information.



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

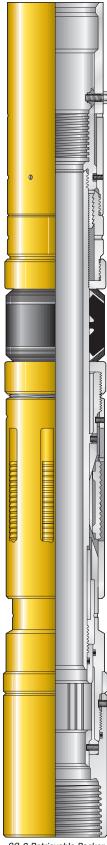
Product Family No. H48807

APPLICATION

The Baker Hughes SC- 2^{TM} 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, tubingconveyed 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	*			
C)D	T & C Weight ▼	Siz	e •	Max Gago	e Ring OD	Max Packing Element		
in.	mm	lb/ft			in.	mm	in.	mm	
		20-23	55A2	2–26	4.485	113.9	4.406	111.9	
5-1/2	139.7	17–20	55A	1–26	4.593	116.6	4.500	114.3	
		13–15.5	55B	-26	4.765	121.0	4.687	119.0	
		35–38	70A	2–32	5.735	145.6	5.687	144.4	
7	177.0	29–32	70A4–32		5.820	147.8	5.750	146.0	
7	177.8	23–29	70B-32		6.000	152.4	5.937	150.8	
		17–20	700	-32	6.250	158.7	6.187	157.1	
		33.7–39	76A2-32 ◆	76A2-40 ◆	6.440	163.6	6.375	161.9	
7-5/8	102.6	29.7–33.7	76A4-32 ◆	76A4-40 ◆	6.580	167.1	6.500	165.1	
7-5/6	193.6	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	
		53.5-58.4	96A–47		8.191	208.0	8.125	206.3	
0.5/0	244.4	47–53.5	96A2–47 96A4–47		8.319	211.3	8.250	209.5	
9-5/8	244.4	40-47			8.465	215.0	8.375	212.7	
		36–40	96B	-47	8.619	218.9	8.500	215.9	

	Sealbore Dia fo	r Seal Nipples ■	Seal	Seal Min Bore Thru Seal Nipp Accessory					
Size	in.	mm	Accessory Size ▲	in.	mm				
55A2-26									
55A4-26	2.688	68.2	40–26	1.968	50.0				
55B-26									
70A2-32									
70A4-32									
70B-32	3.250	82.5	80-32 or 81-32	2.406 or 1.995	61.1 or 50.6				
700–32									
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									
96A2-47	4.750	120.6	190–47 or 192–47	3.000 or 3.875	72.6 or 98.4				
96A4-47	4.750	120.0	190-47 UI 192-47	3.000 01 3.073	72.0 UI 90.4				
96B-47									

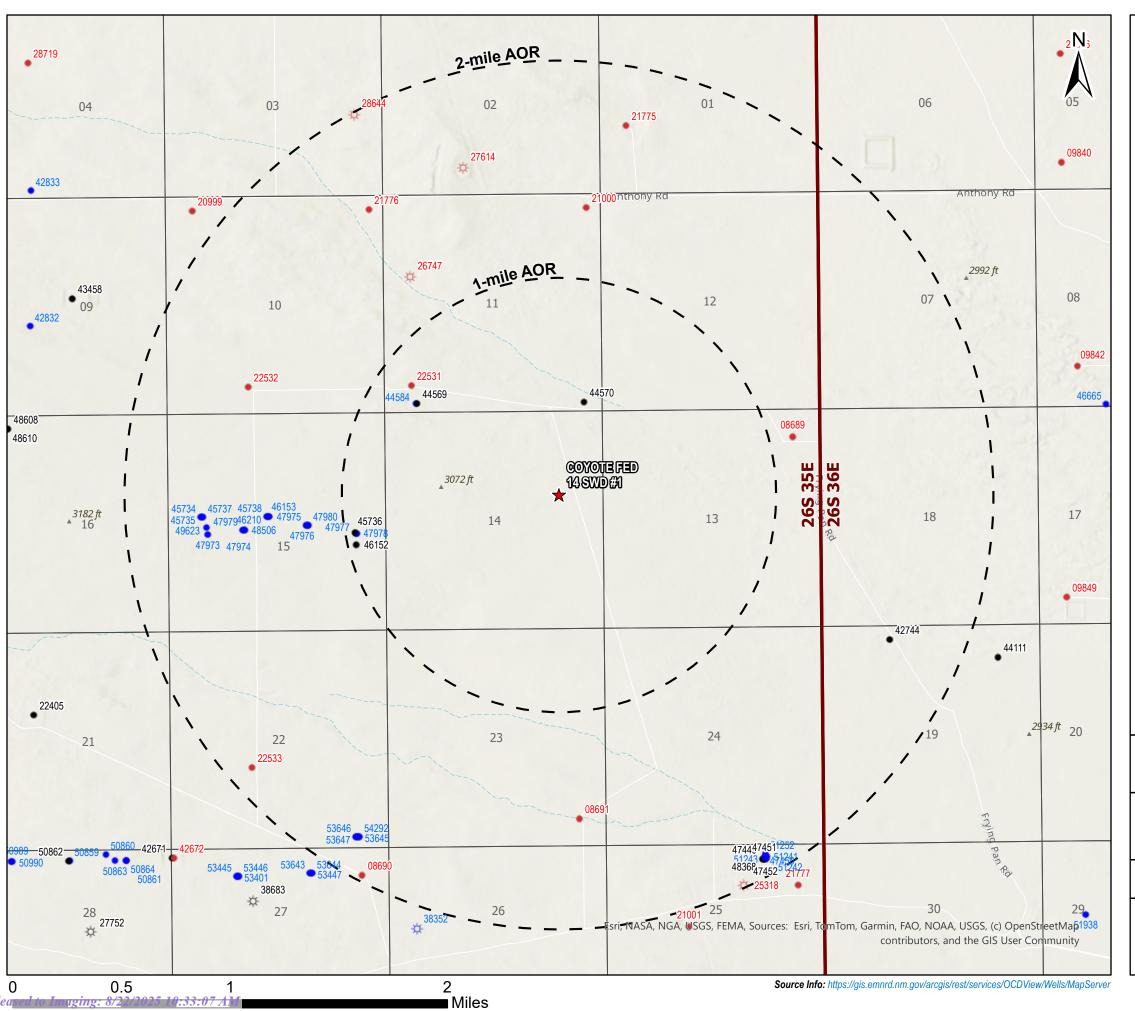
- * For information on packer or accessory sizes not found in this specification guide, refer to Baker Hughes' packer systems technical manual or your Baker Hughes representative.
- When proposed for use in other than the casing weight range shown, contact your Baker Hughes representative.
- The maximum 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.

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

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Legend

- ★ Proposed SWD (1)
- Gas, Active (2)
- Gas, Plugged (4)
- Oil, Active (19)
- Oil, New (43)
- Oil, Plugged (18)
- Wells Producing from Target Injection Zone (0)

2-mile Production Review

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Reed Davis

May 12, 2025

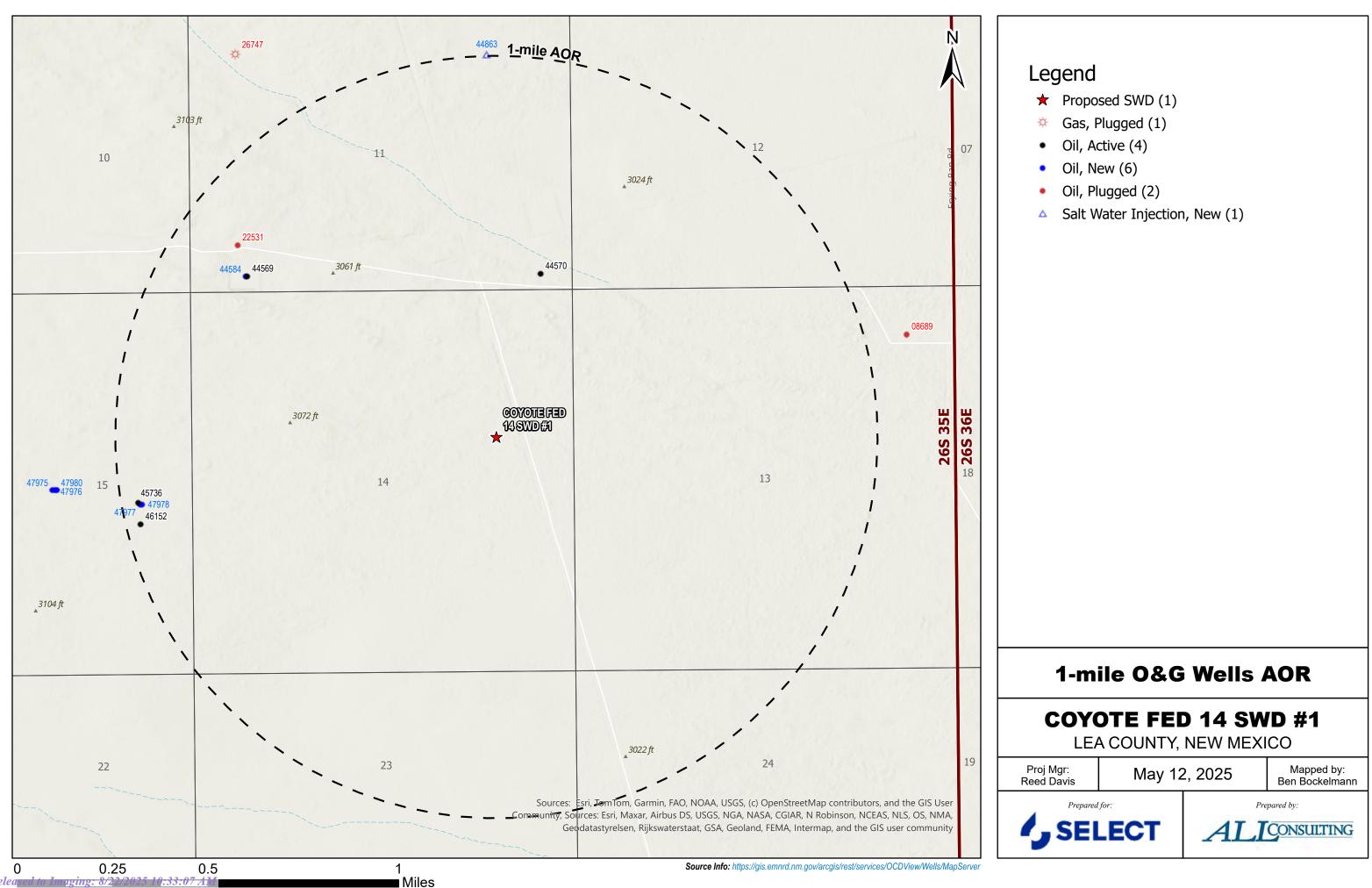
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,	AOR Tabulation f	for Coyote Fe	d 14 SWD #1 (Bell Canyon and Cherr	y Canyon - Inject	tion Interval: 5,175' - 7,	500'), Lea County	
Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
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 Inf	ormation for Wells Penetrat	ing the Coyote I	ed 14 SWD #1 Injection	Zone	
Well Name	Туре	Set Depth	Casing Size	тос	TOC Method Determined	Sks of Cement	Hole Size
	Surface	309'	8-5/8"	Surface	Circulation	125	12-1/4"
DENACOV EEDEDAL #1	Intermediate	NA	NA	NA	NA	NA	NA
DEMOOY FEDERAL #1	Production	NA	NA	NA	NA	NA	NA
	Well was plugged	as a dry hole. A 1	00-foot cement plug set from 5,100' - 5,2	00'. Proposed injection	zone is isolated.		•
	Surface	953'	13-3/8"	Surface	Circulation	800	17-1/2"
	Intermediate	5,070'	10-3/4"	Surface	Circulation	1025	12-/14"
TATANKA FEDERAL #001H	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.				·		•
	Surface	962'	10-3/4"	Surface	Circulation	750	14-3/4"
CATANIKA EEDEDAL COM HOOMI	Intermediate	11,630'	7-5/8"	Surface	Circulation	1850	10"
TATANKA FEDERAL COM #004H	Production	22,565'	5-1/2"	Surface	Circulation	1525	6-3/4"
	No Issues.				·		•
	Surface	1,064'	13-3/8"	Surface	Circulation	1160	17-1/2"
ADENIA DOLA FEDERAL LINIT 45 22 1100 411	Intermediate	12,096'	8-5/8"	Surface	Circulation	790	9-3/4"
ARENA ROJA FEDERAL UNIT 15 22 #004H	Production	20,432'	5-1/2"	10,420'	Calculated TOC = 10,420'	1240	7-3/4"
	No Issues.				·		•
	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"
ARENA ROJA FEDERAL UNIT 15 22 #003H	Production	20,321'	5-1/2"	Surface	Circulation	2785	7-3/4"
	No Issues.			•	•		•

12.25" Borehole to 310'.
8.625" J-55 20# Surface casing set at 309'.
Cemented surface casing to ground level with 125 sacks of Class C.
Top of cement to be verified by circulation.

30 sack cement plug placed across the surface casing shoe from 235' to 355'.

-30 sack (100 foot) cement plug placed above salt from 900' to 1,000'.

20 sack cement surface plug placed from 0' to 50'.

Uncased borehole filled with mud laden fluid during abandonment.

30 sack (100 foot) cement plug placed across the top of the Delaware Sands from 5,100' to 5,200'.

7.875" Borehole to 5,486'.

Total Depth: 5,486'

No show of oil or gas. No production casing set.

NOT TO SCALE

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



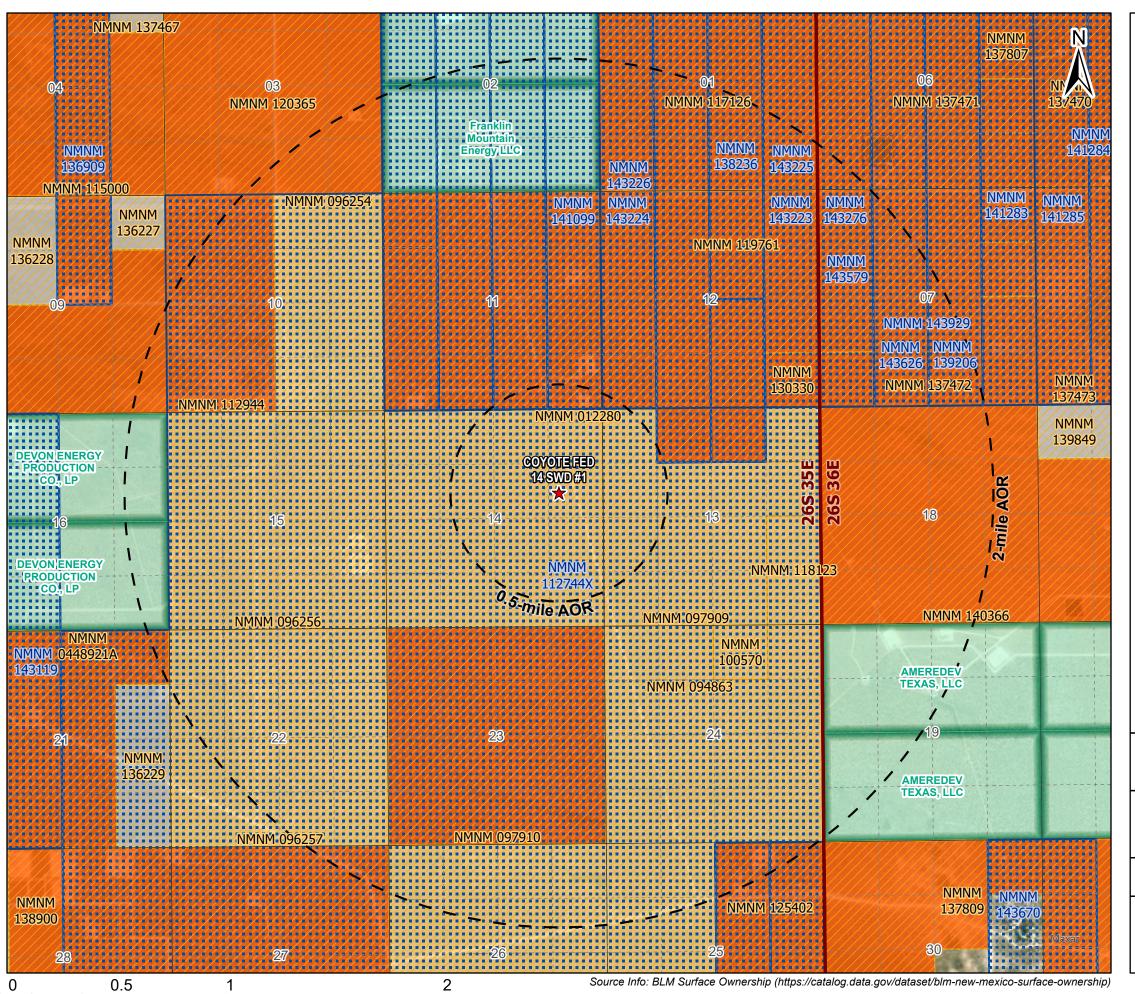
Drawn by: Joshua Ticknor

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

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Legend

- ★ Proposed SWD
- NMSLO Mineral Leases
- BLM Communitization Units

BLM O&G Leases

Case Disposition

Authorized

Production Status

- Held by Actual Production
- Held by Allocated Production
- Non-Producing

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 PROD CO LP
- FRANKLIN MOUNTAIN ENERGY LLC

Mineral Lease AOR

COYOTE FED 14 SWD #1

LEA COUNTY, NEW MEXICO

Proj Mgr: Reed Davis June 06, 2025

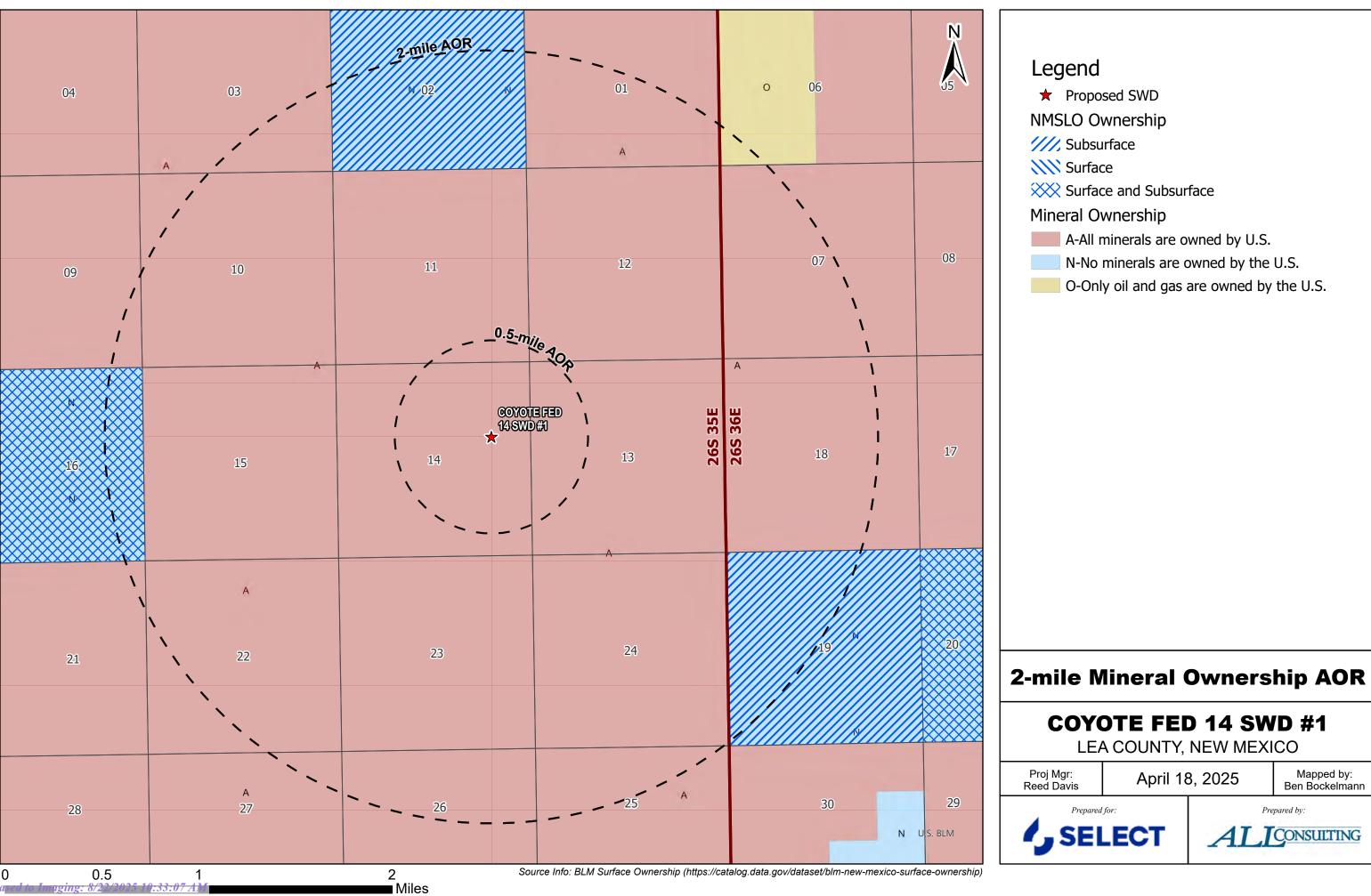
Mapped by: Ben Bockelmann





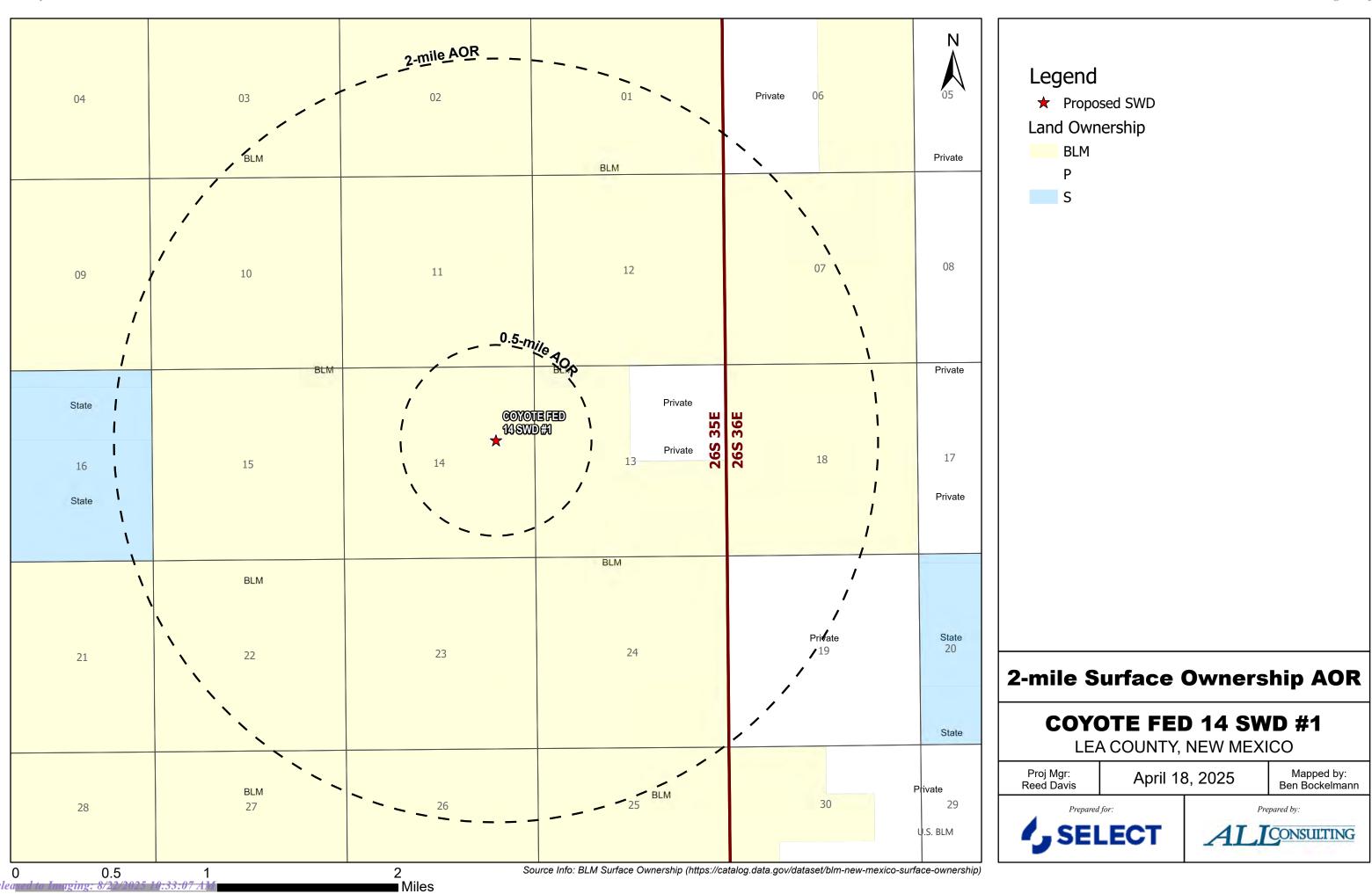
■Miles

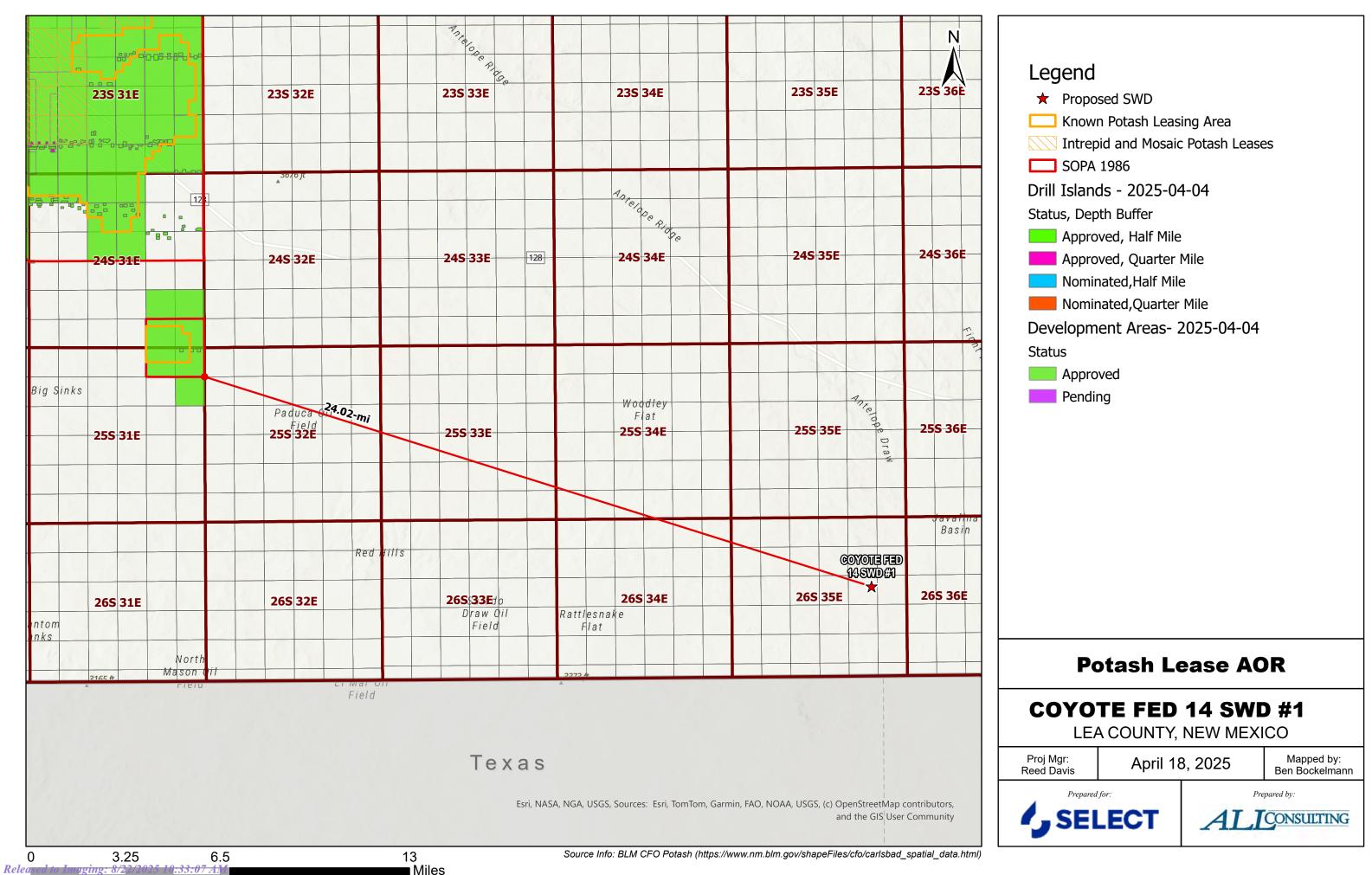
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Mapped by: Ben Bockelmann







Source Water Analysis

		Coyote Fed	14 SWD #1	- Source Water Analysis (Ava	lon, Bone	Spring, De	elaware	[Brushy	Canyo	n], Wolfcan	np, Yeso G	roup form	nations)					
Well Name	API	Latitude	Longitude	Formation	Tds	Sodium	Calcium	Iron	Barium	Magnesium	Potassium	Strontium	Manganese	Chloride	Carbonate	Bicarbonate	Sulfate	H2S
Well Name	AFI	Latitude	Longitude	Tormation	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(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	-

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Injection Formation Water Analysis

		Coy	ote Fed 14 S	WD #1 - Injection Formation	Water An	alysis (D	elaware,	Bell Ca	nyon, a	and Cherry	Canyon fo	rmations)						1
Well Name	API	Latitude	Longitude	Formation	Tds (mg/L)	Sodium (mg/L)	Calcium (mg/L)				Potassium (mg/L)	Strontium (mg/L)	Manganese (mg/L)	Chloride (mg/L)	Carbonate (mg/L)	Bicarbonate (mg/L)	Sulfate (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.

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Reservoir Characterization

Reservoir Characterization at the Coyote Fed 14 SWD #1

1. Injection Formation and Confinement

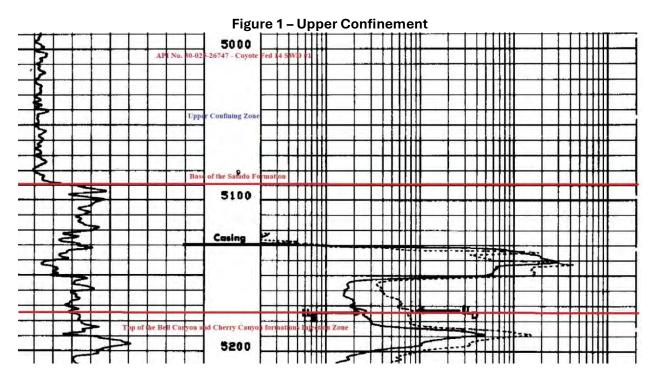
a. Injection Formation

The proposed injection interval includes the Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group from 5,175' – 7,500'. 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*.

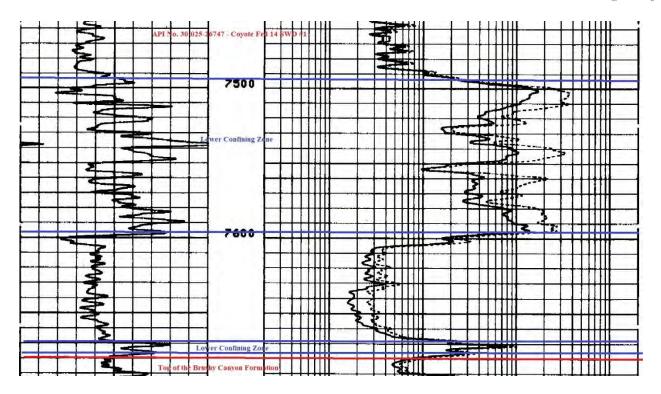


c. Lower Confinement

Nearby open hole geophysical well logs indicate the proposed Bell Canyon-Cherry Canyon injection interval is underlain by approximately 110 feet of low porosity and low permeability rocks within the lower Brushy 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.

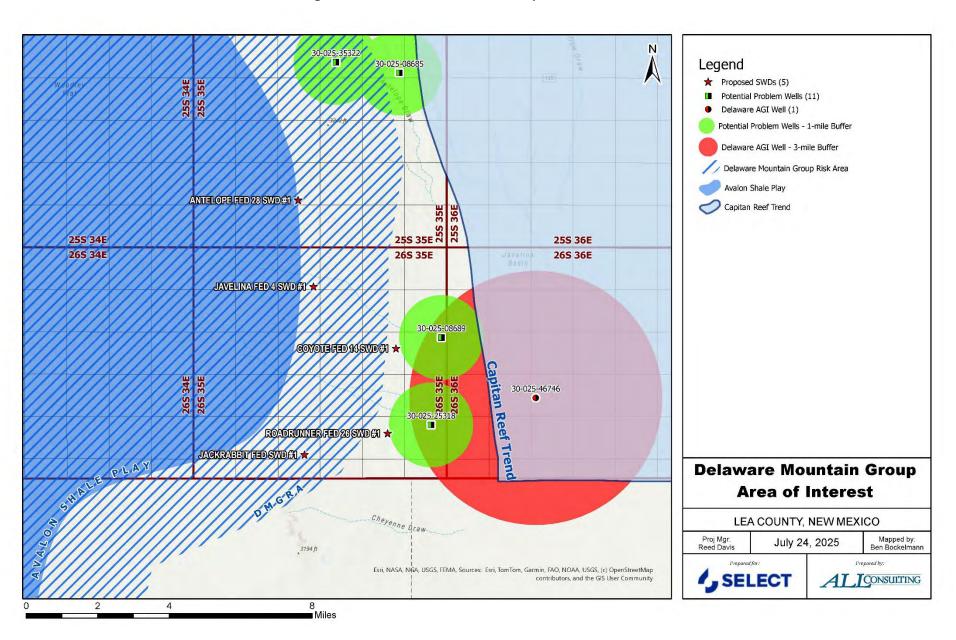
c. Enhanced Oil Recovery

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

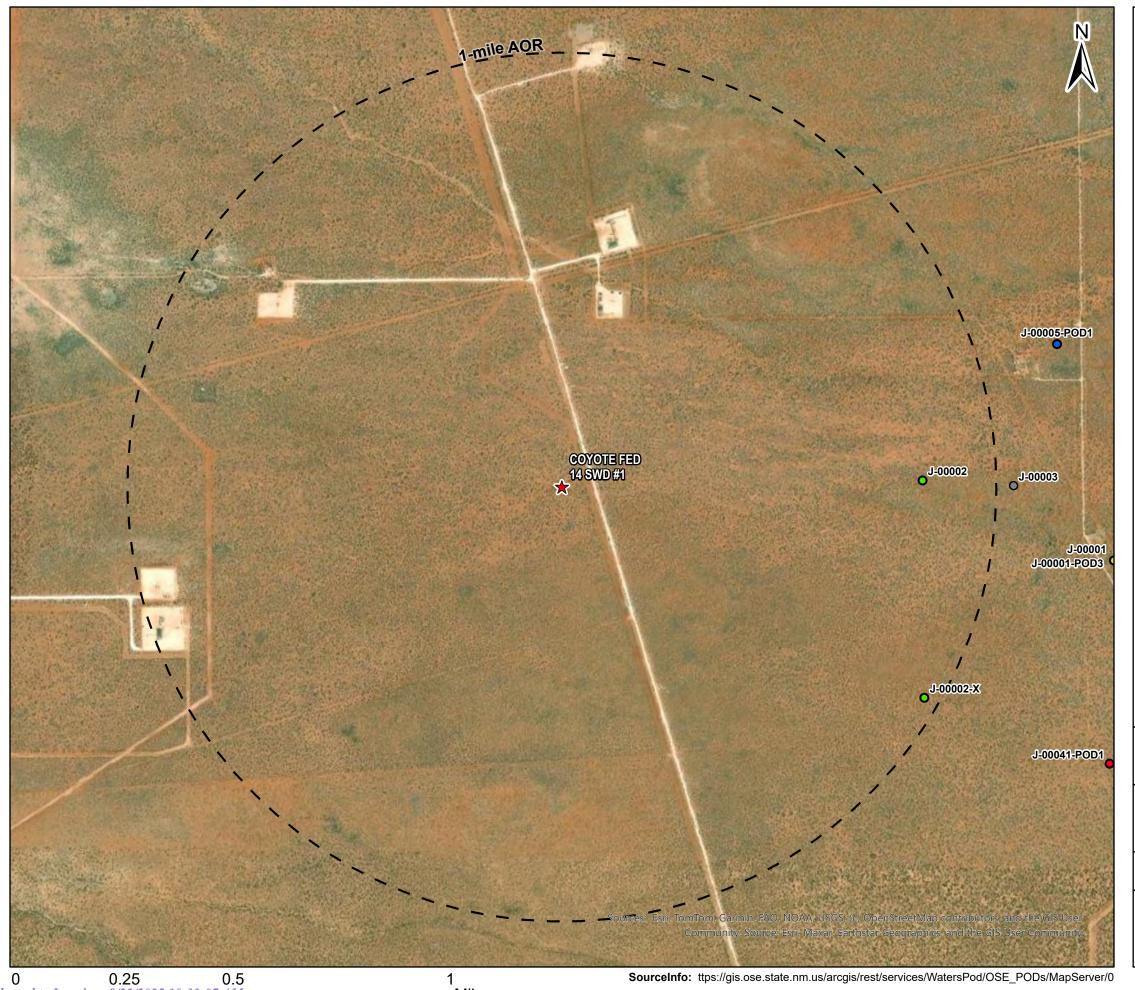
No Delaware Acid Gas Injection wells are located within three miles of the proposed Coyote Fed 14 SWD #1. In addition, the proposed SWD is located outside of the Avalon Shale play, the Capitan Reef Trend, and has been positioned more than one mile from any identified wells with potential wellbore concerns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

Figure 3 - Delaware Mountain Group Area of Interest



Water Well Map and Well Data

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Legend

★ Proposed SWD

OSE Water PODs

POD Status

- Active (1)
- Pending (2)
- 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

April 18, 2025

Mapped by: Ben Bockelmann





Miles

P
ag
e
35
50
3
6
63

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.

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	<u>June 11, 2025</u>				
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		

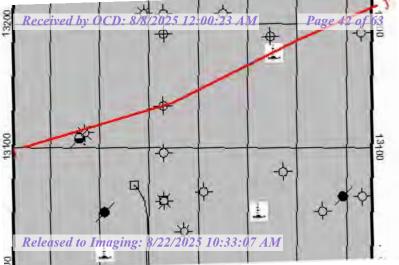
Note: The affected parties above received notification of this C-108 application.

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

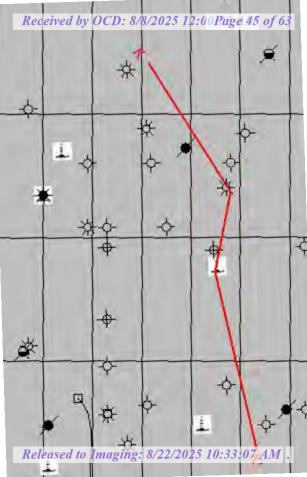
NMSLO Lessee information retreived from NMOCD Operator Search (https://www.apps.emnrd.nm.gov/OCD/OCDPermitting/Operators/Search/OperatorSearch.aspx).

Seismic and Structural Cross Sections

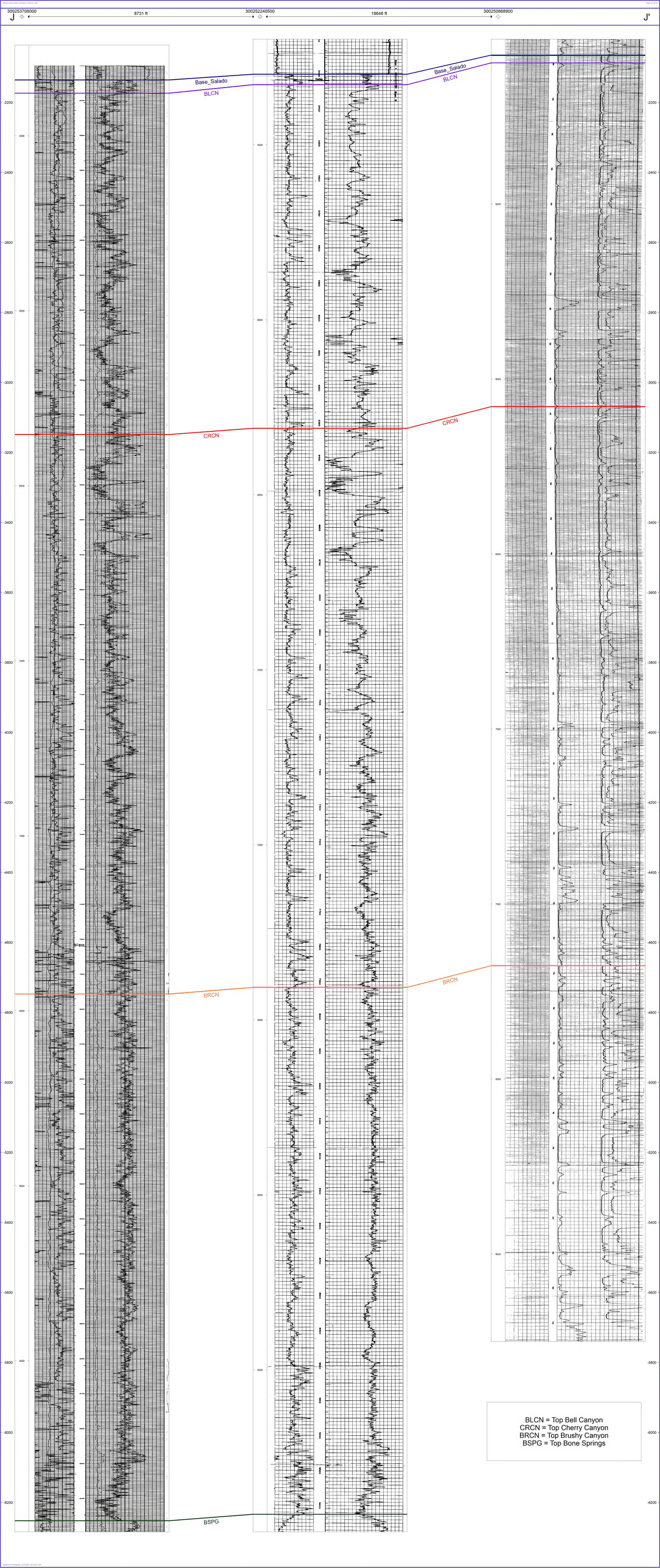
Seismic J-J'



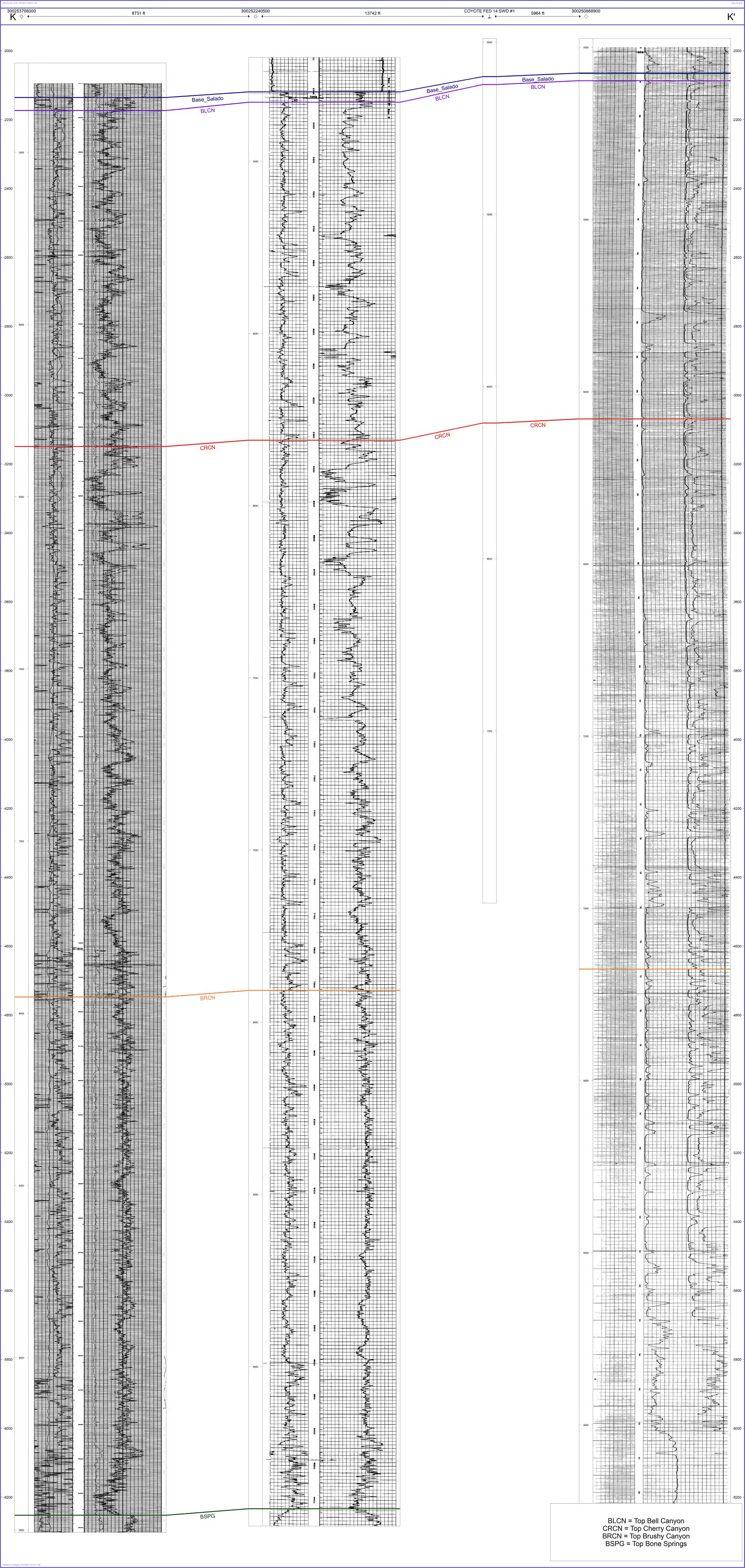
Seismic K-K'



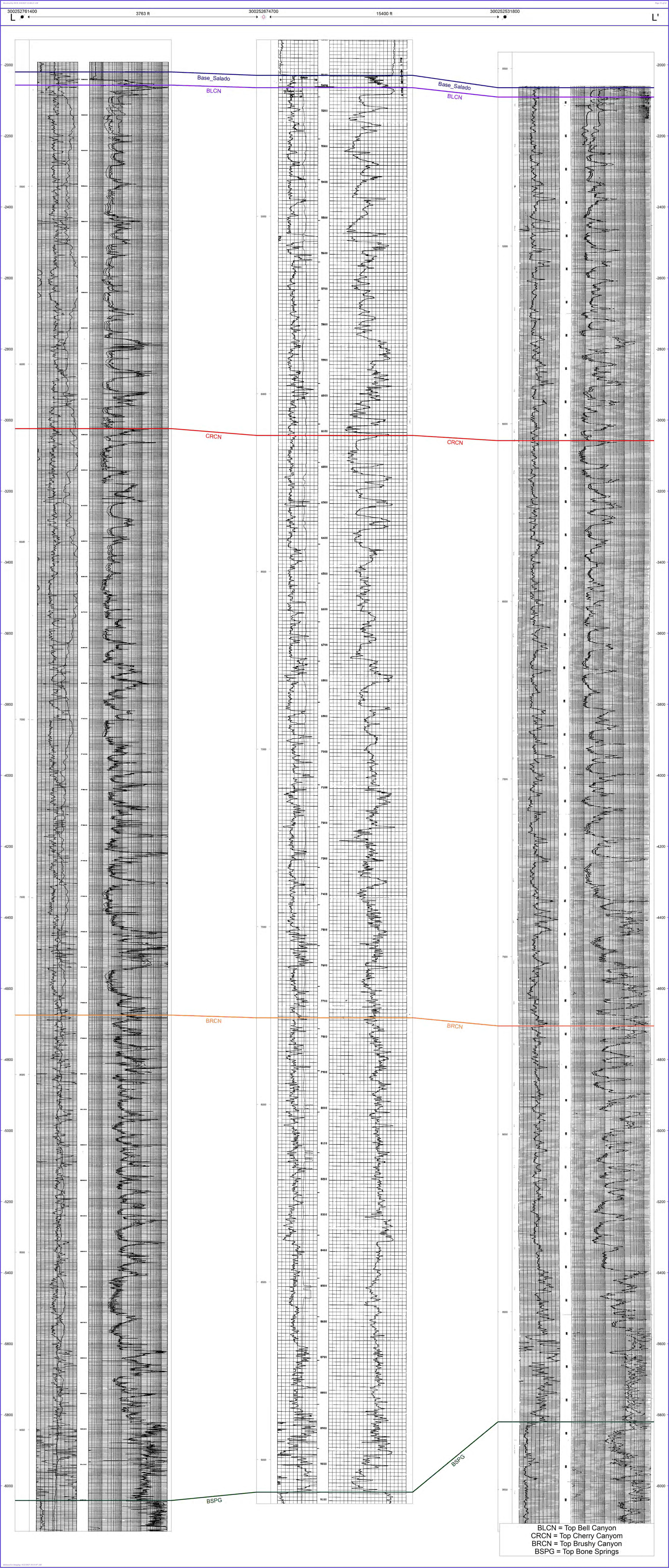
Structural J-J'



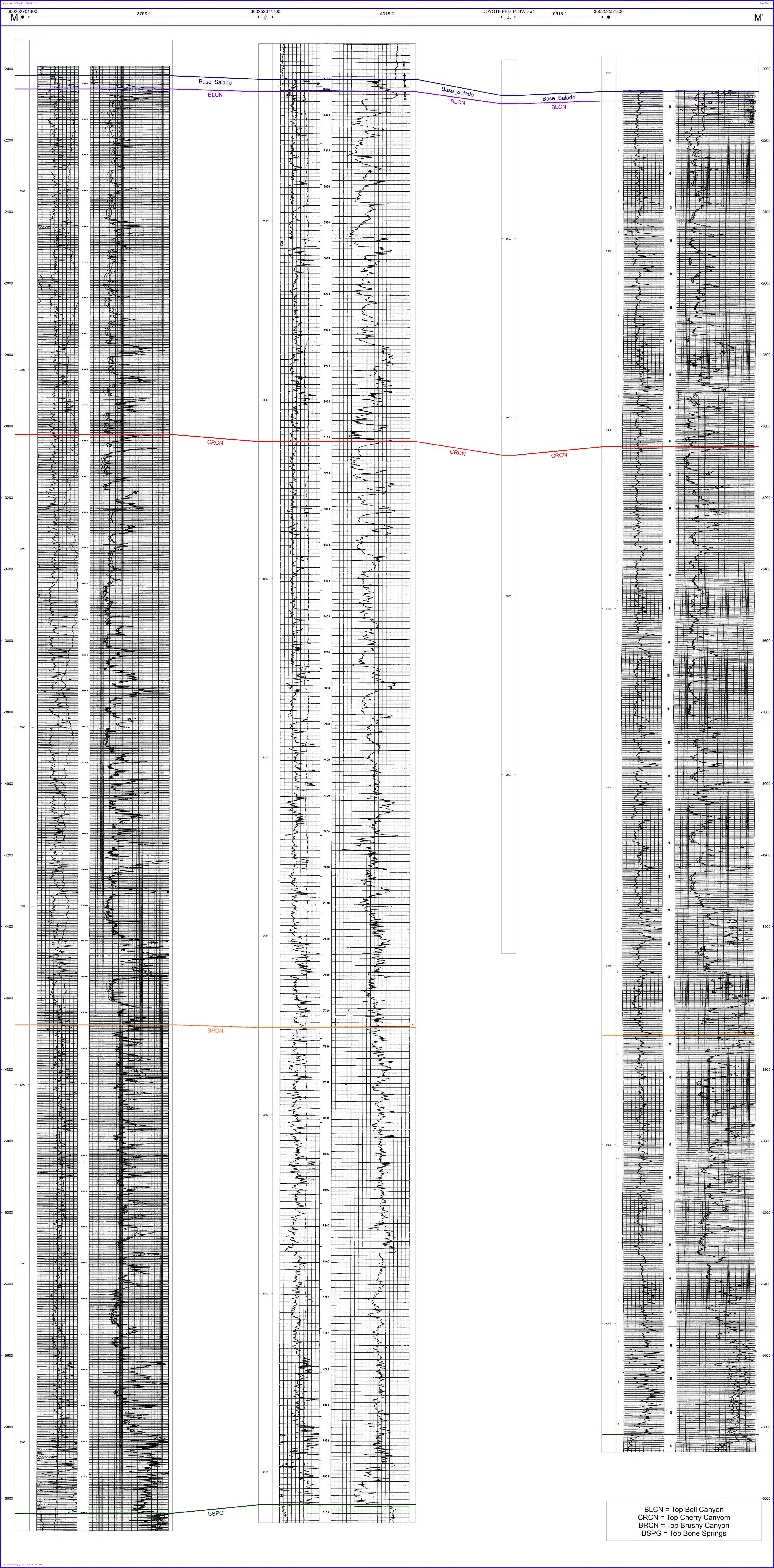
Structural K-K'



Structural L-L'



Structural M-M'



Appendix B

Reservoir Performance Modeling

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Southeast Lea County 5 DMG SWDs east of Jal New Mexico

TASP Group, June 9, 2025

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.

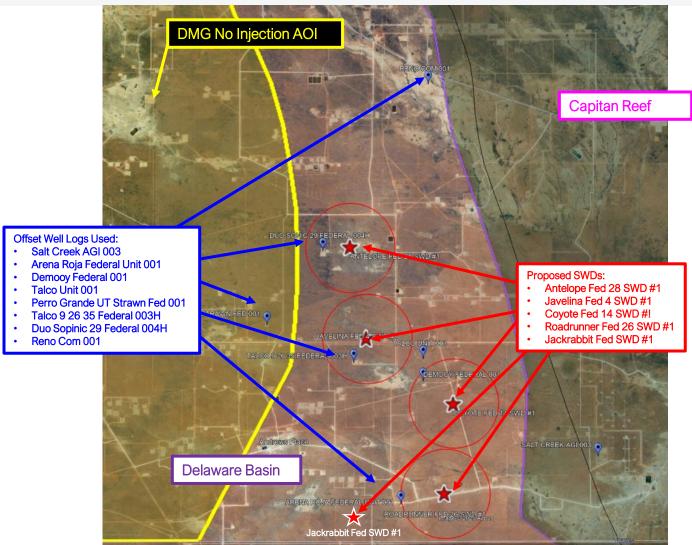
Proposed SWDs:

- Antelope Fed 28 SWD #1
- 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)





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Injection Interval

Well Name	Target Interval	Top of Interval Approximated (ft)	Gross Injection Zone Thickness (ft)		
	Bell Canyon	5,250'			
•	Cherry Canyon	2,500'			
	Brushy Canyon	7,750'			
Javelina Fed 4 SWD #1	Bell Canyon	5,350'			
	Cherry Canyon	2,430'			
	Brushy Canyon	7,780'			
Coyote Fed 14 SWD #1	Bell Canyon				
	Cherry Canyon	6,250'	2,350'		
	Brushy Canyon				
	Bell Canyon	5,275'			
Roadrunner Fed 26 SWD #1	Cherry Canyon	6,300'	2,475'		
	Brushy Canyon	7,750'			
Jackrabbit Fed SWD #1	Bell Canyon	5,250'			
	Cherry Canyon	6,350'	2,450'		
	Brushy Canyon	7,700'			

Offset Wells used to Estimate Reservoir/Geomechanical Properties

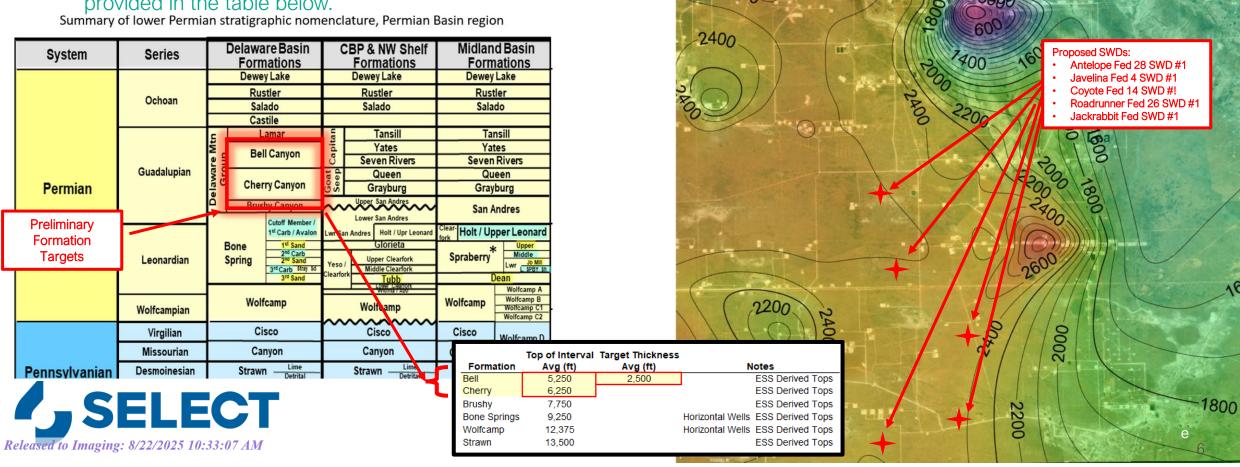
					Logs Used to Ascertain Reservoir and Geomechanical Properties					roperties
					Porosity	Rock Density	Water or Hydrocarbon bearing Layers	Lithology	Lithology	Geomechanical Properties
API Well Name	Lat. Long.	Interval of Interest	Top of Interval (feet	Thickness				Photoelectric		Sonic DT
300255186500 Salt Creek AGI 003	32° 1'40.67"N 103°16'39.73"W		1900		Yes	Yes	Yes	Yes	Yes	Yes
		Bell Canyon	5300	1900						
		Cherry Canyon	6200							
000000000000000000000000000000000000000		Brushy Canyon (Approximation)	7200					.,		
300253725700 Arena Roja Federal Unit 001	32° 0'44.66"N 103°21'11.39"W		4876	2404	No	Yes	No	Yes	No	No
		Bell Canyon	5156	2494						
		Cherry Canyon (Approximation	6350							
300252253100 Demooy Federal 001	32° 3'8.46"N 103°20'40.96"W	Brushy Canyon (Approximation)	7650 1900		No	No	No	No	Yes	Yes
300232233100 Demoty Federal 001	32 3 0.46 N 103 20 40.96 W	Bell Canyon	5250	2375	140	140	140	INO	res	res
		Cherry Canyon (Approximation	6250	2313						
		Brushy Canyon (Approximation)	7625							
300252674700 Talco Unit 001	32° 3'34.62"N 103°20'41.02"W		1900		No	No	Yes	No	Yes	Yes
Talco Olik GOT	32 334.02 N 103 20 41.02 W	Bell Canyon	5250	2400	140	140	103	110	103	103
		Cherry Canyon	6250	2.00						
		Brushy Canyon (Approximation)	7650							
300252735900 Perro Grande UT Strawn Fed 001	32° 4'13.84"N 103°24'15.85"W		1900		No	No	Yes	No	Yes	No
		Bell Canyon	5350	2525						
		Cherry Canyon	6550							
		Brushy Canyon (Approximation)	7875							
300254345800 Talco 9 26 35 Federal 003H	32° 3'30.11"N 103°22'16.54"W	Lamar	5332		Yes	Yes	Yes	Yes	Yes	No
		Bell Canyon	5360	2410						
		Cherry Canyon	6300							
		Brushy Canyon (Approximation)	7770							
300254309000 Duo Sopnic 29 Federal 004H	32° 5'40.23"N 103°22'59.30"W		5239		No	No	No	No	No	No
		Bell Canyon	5269	2558						
		Cherry Canyon	6329							
200252202702 0 004	200 0155 001111 40000015 : 2011111	Brushy Canyon (Approximation)	7827		37	W				
300252686700 Reno Com 001	32° 8'55.60"N 103°20'34.62"W		1900	2025	Yes	Yes	Yes	Yes	No	Yes
		Bell Canyon	5300	2025						
		Cherry Canyon	6180							
		Brushy Canyon (Approximation)	7325							



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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.



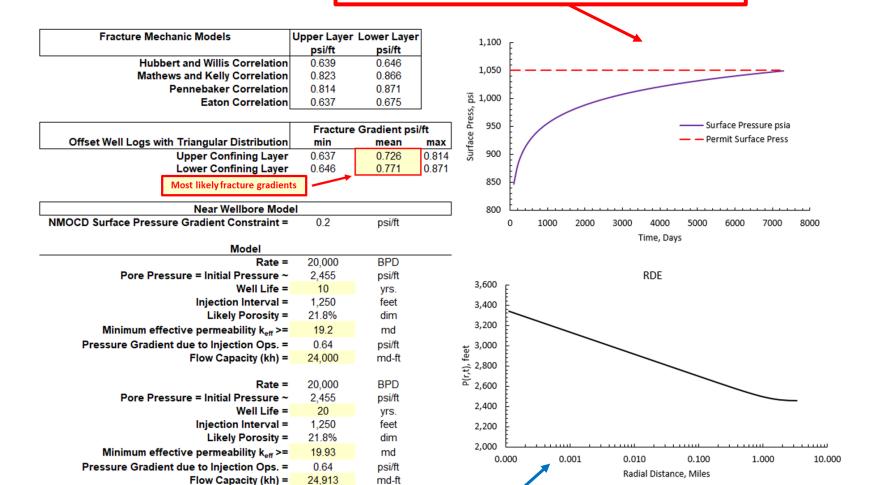
Findings

• Fracture Gradients:

- Fracture Models used to estimate fracture limits (Bourgoyne, 1986).
- Triangular distribution with cumulative distribution function was used to estimate the most probable fracture gradient.
 - Deviation from the most likely facture 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.

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*).



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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 20years.
- 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.



References

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