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. 25548

SUPPLEMENTAL EXHIBIT INDEX

In accordance with the Oil Conservation Division's requests at the February 5, 2026 hearing, Select Water Solutions, LLC hereby submits the following Supplemental Exhibits:

Exhibit G: **Revised C-108 Q&A form**

Exhibit H: **Proposed Logging Program**

Exhibit I: **Revised Wellbore Diagram**

Exhibit J: **Revised Reservoir Characterization**

Exhibit K: **Seismic Potential Letter**

Exhibit L: **Revised Reservoir Modeling Slides**

Respectfully submitted,

HARDY MCLEAN LLC

/s/ Dana S. Hardy

Dana S. Hardy
Jaclyn M. McLean
Jaime R. Fontaine
Yarithza Peña
125 Lincoln Ave, Ste. 223
Santa Fe, NM 87501
Phone: (505) 230-4410
dhardy@hardymclean.com
jmclean@hardymclean.com
jfontaine@hardymclean.com
ypena@hardymclean.com

Attorneys for Select Water Solutions, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served on the following counsel of record via electronic mail on February 19, 2026:

Michael H. Feldewert
Adam G. Rankin
Paula M. Vance
HOLLAND & HART, LLP
Post Office Box 2208
Santa Fe, New Mexico 87504
(505) 988-4421
(505) 983-6043 Facsimile
mfeldewert@hollandhart.com
agrankin@hollandhart.com
pmvance@hollandhart.com
Attorneys for Devon Energy Production Company, L.P

Elizabeth Ryan
Keri L. Hatley
ConocoPhillips
1048 Paseo de Peralta
Santa Fe, New Mexico 87501
(505) 780-8000
beth.ryan@conocophillips.com
keri.hatley@conocophillips.com
Attorneys for COG Operating LLC

/s/ Dana S. Hardy
Dana S. Hardy

Jackrabbit Fed SWD #1
Supplemental Information

Jackrabbit Fed SWD #1

Summary of Revisions

1. Clarified conductor casing to be cemented via pump and plug method.
2. Clarified sonic log will be used to analyze geomechanical properties of the injection formation and upper confinement.
3. Added proposed logging program.
4. Added use of DV Tools for cementing intermediate and production casing strings.
5. Added use of on/off tool and landing nipples to SC-2 or equivalent packer.
6. Revised upper perforation to be at least 100' below the base of the Salado and Castile Formations.
7. Clarified upper and lower confinement to be the Salado and Castile Formations and Cherry Canyon Formation respectively.
8. Added seismic potential letter.

Exhibit G

Revised C-108 Q&A form

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

III – Well Data

A.

(1) General Well Information:

Operator: Select Water Solutions, LLC (OGRID No. 289068)
Lease Name & Well Number: Jackrabbit Fed SWD #1
Location Footage Calls: 566' FSL & 1,968' FEL
Legal Location: Lot O, S28 T26S R35E
Ground Elevation: 3,161'
Proposed Injection Interval: 5,365' – 6,500'
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	1,040'	650	Surface	Circulation
Intermediate	12-1/4"	9-5/8"	40.0 lb/ft	5,290'	1,090	Surface	Circulation
Production	8-3/4"	7-5/8"	29.7 lb/ft	7,780'	3,060	Surface	CBL
Tubing		5-1/2"	17.0 lb/ft	5,345'			

(3) Tubing Information:

5-1/2" (17.0 lb/ft) fiberglass or equivalent lined tubing with setting depth of 5,345'.

(4) Packer Information: SC-2 or equivalent packer set at 5,345' with on/off tool and landing nipples.

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 5,365' – 7,750'
(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 (7,915')
- Bone Spring (9,340')
- Wolfcamp (12,600')

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 Jackrabbit Fed 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: 1,073 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 5,365' – 6,500'. 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.

The base of the USDW is the Rustler Formation at a depth of approximately 1,040 feet. There are no water wells within the one-mile radius.

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. The sonic log will be used to evaluate the geomechanical properties of the upper confining and injection zones.

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.

Exhibit H

Proposed Logging Program

Logging Program

Select Water Solutions to collect open-hole log data to further establish the reservoir properties of the upper confining zone and injection interval. Log suite to include Gamma Ray, Neutron-Density, Resistivity and Sonic (compressional and shear) tools (Quad Combo). Select will plan to perform the logging procedure on the first well drilled in the four-well program. Should hole conditions prohibit safe execution of the logging procedure, the next well in the drilling program will be utilized.

The four proposed Delaware Mountain Group SWDs (Javelina Fed 4 SWD #1, Coyote Fed 14 SWD #1, Roadrunner Fed 26 SWD #1, Jackrabbit Fed SWD #1) reside within a geologically similar area in Lea County, New Mexico, and Select believes that this suite of log data collected on one well will be more or less representative of the local geology, confining zone and injection interval of the three other wells in the program.

Run 1:

TD intermediate section 150'-200' below the base of the Salado. Requires sufficient rat-hole for tool string, to be confirmed upon selection of logging vendor and tool string lengths.

Run quad-combo log suite from TD up to 250' above base of Salado and Castile Formations. Pull GR-Neutron to surface.

Set casing at base of Salado and Castile Formations and cement.

Drill Injection section.

Run 2:

TD injection section at proposed TD in the Cherry Canyon.

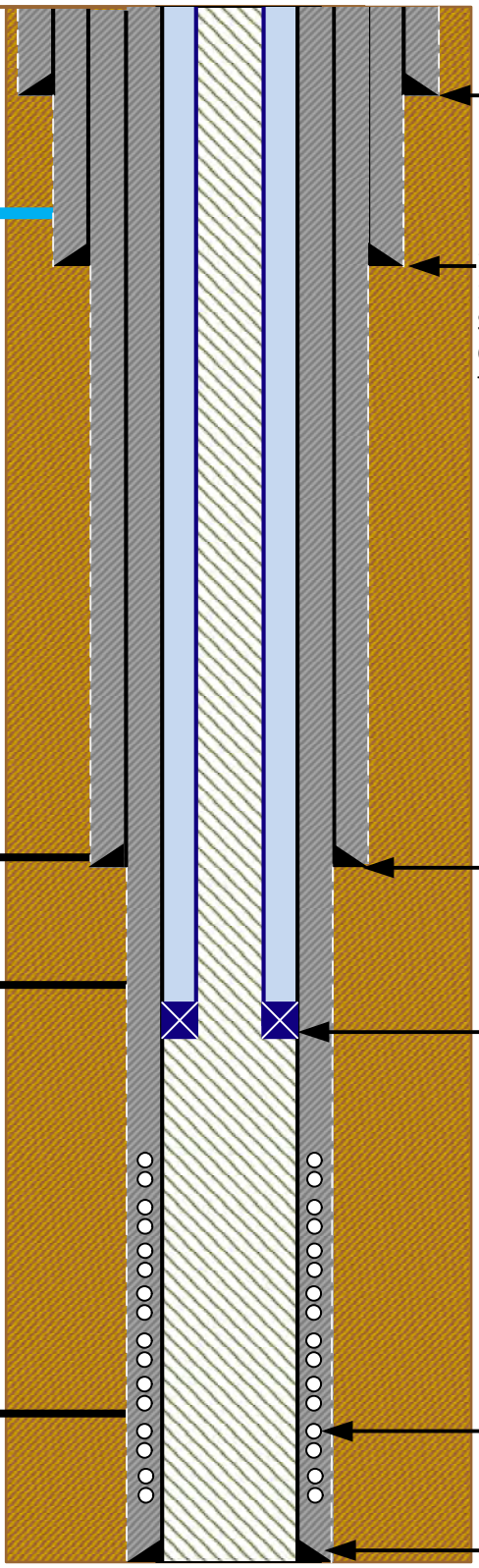
Run quad-combo log suite up to intermediate casing.

Set production casing and cement.

Run radial CBL.

Exhibit I

Revised Wellbore Diagram



GL Elevation: 3,161'

Base of USDW: 1,015'

Salado and Castile Formations Base: 5,265'

Bell Canyon Formation Top: 5,305'

Cherry Canyon Formation Top: 6,315'

Total Depth: 6,540'

20" Borehole to 140'.
18.625" J-55 (94.5#) Conductor casing set at 120'.
Cement, via pump and plug, back to the surface using 35 sacks of Class C. Top of cement to be verified by circulation.

17.5" Borehole to 1,060'.
13.375" J-55 54.5# Surface casing set at 1,040'.
Surface casing set 25' below the base of the USDW.
Cement surface casing to ground level with 650 sacks of Class C.
Top of cement to be verified by circulation.

DV Tools to be utilized for cementing of intermediate and production strings, at appropriate depths pending conditions.

12.25" Borehole to 5,310'.
9.625" L-80 40# Intermediate casing set at 5,290'.
Cement casing to ground level with 1,090 sacks of Class C.
Top of cement to be verified by circulation.

5.5" 17# N-80 or L-80 fiberglass lined tubing (or equivalent).
Tubing set in a SC-2 packer (or equivalent).
Packer set at 5,345' with on/off tool.
Note: Packer quality fluid (i.e. freshwater with corrosion inhibitor and biocide) will be circulated in to the casing-tubing annulus.

Perforate selected intervals within the Bell Canyon and Cherry Canyon formations from 5,365'- 6,500'.

8.75" Borehole to 6,540'.
7.625" L-80HC (29.7#) Production casing set at 6,520'. Cement casing back to ground level with 3,060 sacks of Class C. Top of cement to be verified by bond log.

NOT TO SCALE

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

Revised 2/15/2026 by R.D

Prepared by: ALL CONSULTING *Prepared for:* SELECT	**Drawn by: Joshua Ticknor** **Project Manager: Reed Davis** **Date: 7/23/2025**	**Jackrabbit Fed SWD #1** **Proposed Wellbore Diagram** **Operated by Select Water Solutions. LLC** **S14, T26S, R35E** **Lea County, New Mexico**

Exhibit J

Revised Reservoir Characterization

Reservoir Characterization at the Jackrabbit Fed SWD #1

1. Injection Formation and Confinement

a. Injection Formation

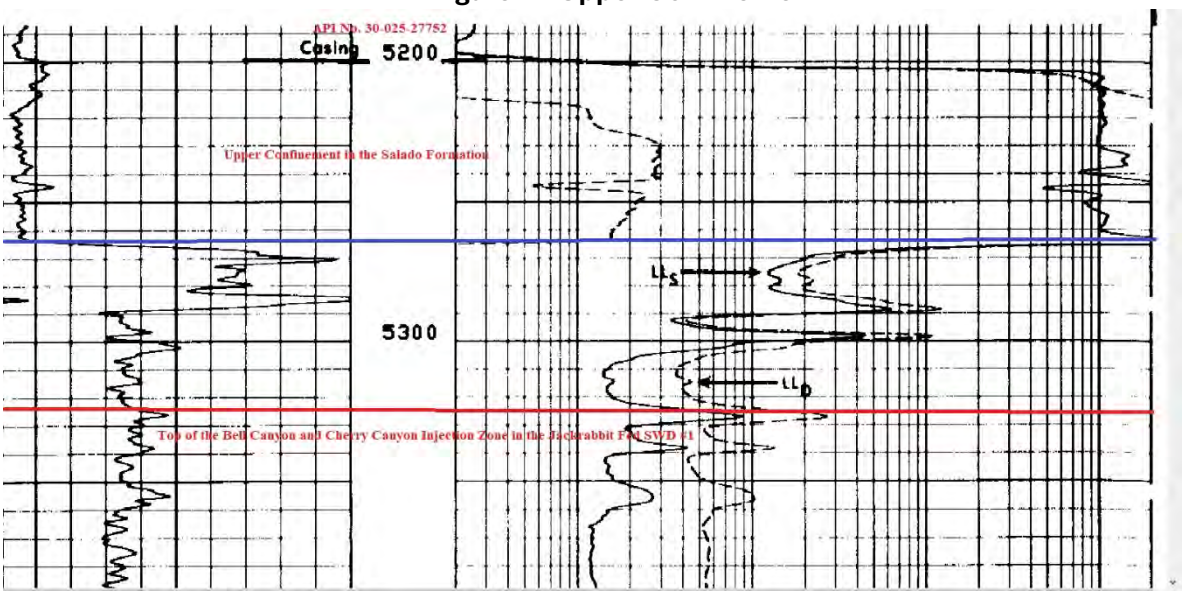
The proposed injection interval includes the Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group from 5,365' – 6,500'. The Guadalupian-age Bell Canyon and Cherry Canyon members consist primarily of sandstones and siltstones with significant primary porosity and permeability, indicating 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 and Castile Formations, 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

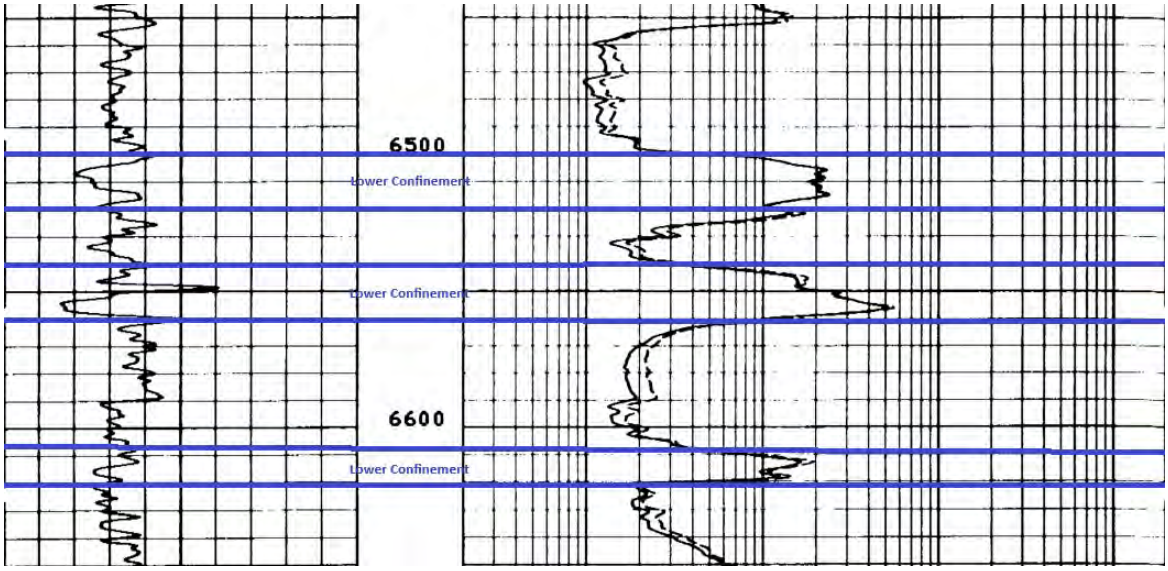


c. Lower Confinement

Nearby open hole geophysical well logs indicate the proposed Bell Canyon-Cherry Canyon injection interval is underlain by approximately 50 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 Jackrabbit Fed 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 Jackrabbit Fed 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 Jackrabbit Fed 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 3-miles of the proposed Jackrabbit Fed 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 1-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

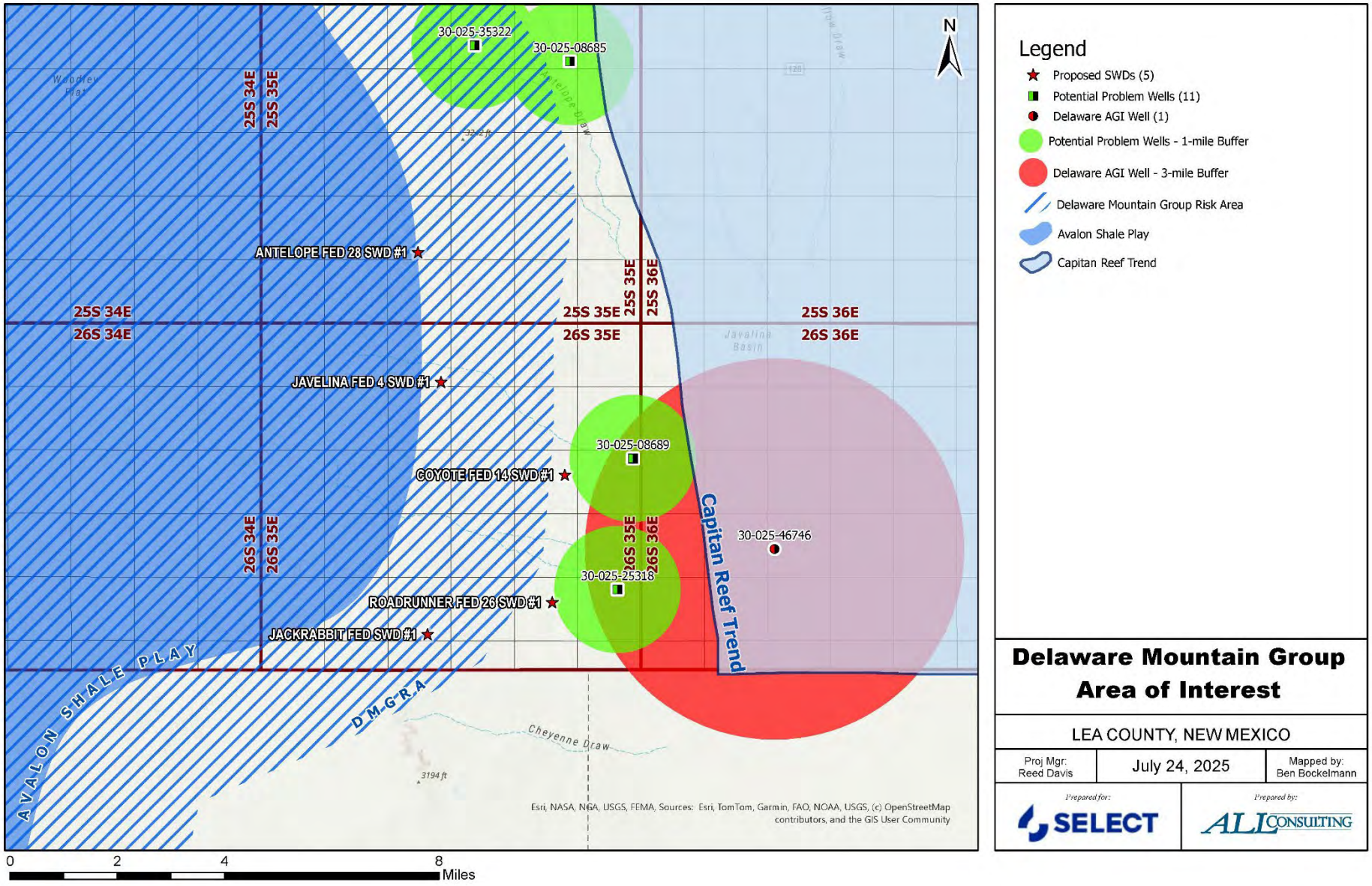


Exhibit K

Seismic Potential Letter

ALL CONSULTING
GOVERNMENT RELATIONS · ENERGY · PLANNING · TECHNOLOGY
ENGINEERING · ENVIRONMENTAL

February 15, 2026

PN 1619.SWD.20

Mr. Phillip Goetze, P.G.
NM EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: **Select Water Solutions, LLC**
Jackrabbit Fed SWD #1 - Seismic Potential Letter

Dear Mr. Goetze,

At the request of Select Water Solutions, LLC (Select), ALL Consulting, LLC (ALL) has assessed the potential injection-induced seismicity risks in the vicinity of Select's Jackrabbit Fed SWD #1, a proposed saltwater disposal (SWD) facility in Lea County, New Mexico, and summarized the findings in this letter. This assessment used publicly available data to identify the proximity and characteristics of seismic events and known faults to evaluate the potential for the operation of the Jackrabbit Fed SWD #1 to contribute to seismic activity in the area.

Geologic Evaluation

The Jackrabbit Fed SWD #1 is requesting a permit to inject into the Bell Canyon and Cherry Canyon formations at a depth of 5,365 to 6,500 feet below ground surface (bgs). The Bell Canyon and Cherry Canyon formations of the Delaware Mountain Group consist primarily of sandstones and siltstones with significant primary porosity and permeability. The Bell Canyon is overlain by thousands of feet of tight evaporites within the Salado and Castile Formations, which will prevent the upward migration of fluids and at as the upper confining layer (see **Attachment 1**). Additionally, nearby open hole geophysical logs indicate the proposed Bell Canyon and Cherry Canyon injection interval is underlain by approximately 50 feet of low porosity and permeability rocks within the Cherry Canyon, which will prevent the downward migration of fluids and act as the lower confining layer (see **Attachment 2**). A stratigraphic chart depicting the geologic setting is included as **Figure 1**.[1]

Seismic Events and Fault Data

A review of United States Geological Survey (USGS) and New Mexico Tech Seismological Observatory (NMTSO) earthquake catalogues determined that **sixty (60) seismic events M2.5 or**

[1] Yang, K.-M., & Dorobek, S. L. (1995). The Permian Basin of west Texas and New Mexico: Tectonic history of a "composite" Foreland Basin and its effects on stratigraphic development. *Stratigraphic Evolution of Foreland Basins*, 149–174. https://doi.org/10.2110/pec.95.52.0149

larger have been recorded within 10 miles of the proposed Jackrabbit Fed SWD #1. The closest recorded seismic event was a M1.77 that occurred on April 16, 2023, and was located approximately 0.71 miles east of the Jackrabbit Fed SWD #1 (see **Attachment 3**). All M2.5 or larger events were recorded at 4.97 km or deeper, far below the proposed injection interval in the Precambrian basement.

Fault data from United States Geological Survey (USGS) and the Texas Bureau of Economic Geology (BEG)[2] indicates that the closest known shallow fault is located approximately 11.03 miles east of the Jackrabbit Fed SWD #1 (see **Attachment 3**). Several Precambrian basement faults were identified within 10 miles of the Jackrabbit Fed SWD #1, however these identified faults are approximately 6,500 feet below the proposed injection interval.[3]

Figure 1 – Delaware Basin Stratigraphic Chart (Adapted from Yang and Dorobek 1995)

SYSTEM	SERIES/ STAGE	CENTRAL BASIN PLATFORM	DELAWARE BASIN
PERMIAN	OCHOAN	DEWEY LAKE RUSTLER SALADO	DEWEY LAKE RUSTLER SALADO CASTILE
	GUADALUPIAN	TANSILL YATES SEVEN RIVERS QUEEN GRAYBURG SAN ANDRES GLORIETA	DELAWARE MT GROUP BELL CANYON CHERRY CANYON BRUSHY CANYON
	LEONARDIAN	CLEAR FORK WICHITA	BONE SPRING
	WOLFCAMPIAN	WOLFCAMP	WOLFCAMP
PENNSYLVANIAN	VIRGILIAN	CISCO	CISCO
	MISSOURIAN	CANYON	CANYON
	DESMOINESIAN	STRAWN	STRAWN
	ATOKAN	ATOKA — BEND	ATOKA — BEND
	MORROWAN	(ABSENT)	MORROW
MISSISSIPPIAN	CHESTERIAN MERAMECIAN OSAGEAN KINDERHOOKIAN	CHESTER MERAMEC OSAGE "BARNETT"	CHESTER MERAMEC OSAGE "BARNETT"
		KINDERHOOK	KINDERHOOK
DEVONIAN		WOODFORD DEVONIAN	WOODFORD DEVONIAN
SILURIAN		SILURIAN SHALE FUSSELMAN	MIDDLE SILURIAN FUSSELMAN
ORDOVICIAN	UPPER	MONTOYA	SYLVAN MONTOYA
	MIDDLE	SIMPSON	SIMPSON
	LOWER	ELLENBURGER	ELLENBURGER
CAMBRIAN	UPPER	CAMBRIAN	CAMBRIAN
PRECAMBRIAN			

Seismic Potential Evaluation

Experience in evaluating induced seismic events indicates that most injection-induced seismicity throughout the U.S. (e.g., Oklahoma, Ohio, Texas, New Mexico, and Colorado) occurs as a result of injection into Precambrian basement rock, into overlying formations that are in hydraulic communication with the Precambrian basement rock, or as a result of injection near critically stressed and optimally oriented faults. Seismicity at basement depths occurs because critically stressed faults generally originate in crystalline basement rock and may also extend into overlying sedimentary formations. [4]

Injection into either the Precambrian basement rock or its overlying formations that are hydraulically connected to the basement rock through faulting or fracture networks can increase the pore pressure and may lead to the fault slipping, resulting in a seismic event.[4] As such, the vertical distance between the injection formation and Precambrian basement rock and the presence or lack of faulting within the injection interval are major considerations when determining the risk of injection-induced seismicity.

---

[2] Horne E. A. Hennings P. H., and Zahm C. K. 2021. Basement structure of the Delaware Basin, in The Geologic Basement of Texas: A Volume in Honor of Peter Flawn, Callahan O. A., and Eichubl P., The University of Texas at Austin, Bureau of Economic Geology.

[3] G. Randy Keller, J. M. Hills &; Rabah Djeddi, A regional geological and geophysical study of the Delaware Basin, New Mexico and West Texas, Trans Pecos Region (West Texas) (1980).

[4] Ground Water Protection Council and Interstate Oil and Gas Compact Commission. *Potential Injection-Induced Seismicity Associated with Oil & Gas Development: A Primer on Technical and Regulatory Considerations Informing Risk Management and Mitigation.* 2015. 141 pages.

Geophysical data from nearby well records, aeromagnetic surveys, and gravity surveys indicate the top of the Precambrian basement to be approximately 13,000 feet bgs at the Jackrabbit Fed SWD #1, or approximately 6,500 feet below the proposed injection interval.[3] In addition, publicly available fault data does not indicate any transmissive faulting is present above the Precambrian basement around the Jackrabbit Fed SWD #1. **There are insufficient Precambrian basement penetrations and/or well data regarding Precambrian basement depth to generate an accurate structural contour map of the Precambrian basement in the vicinity of the proposed SWD.**

Per the NMTSO seismic catalog, the nearest reported event was a M1.77 which occurred on April 16, 2023, at 5.00 km depth. The default reported depth of 5.00 km indicates the seismic network in the area is not dense enough to accurately report hypocenter depths.

Class II SWDs in New Mexico are administratively permitted with a maximum pressure gradient of 0.2 psi/ft. Select will be performing a step-rate test at the well once drilled to determine fracture gradients of the formations. Typical SWD permitting standards in New Mexico would indicate that formation parting pressure would not be exceeded by the Jackrabbit Fed SWD #1.

Conclusion

As experts on the issue of induced seismicity, seismic monitoring, and mitigation, it is our opinion that the potential for the Jackrabbit Fed SWD #1 to cause injection-induced seismicity is expected to be minimal. This conclusion assumes the Jackrabbit Fed SWD #1 will be operated below formation parting pressure and is based on (1) the presence of numerous confining layers above and below the injection interval, (2) the vertical and lateral distance between the injection zone and Precambrian basement rock in which the nearest fault has been identified, and (3) the lack of historic shallow seismicity near the proposed Jackrabbit Fed SWD #1.

Sincerely,
ALL Consulting

Reed Davis
Geophysicist

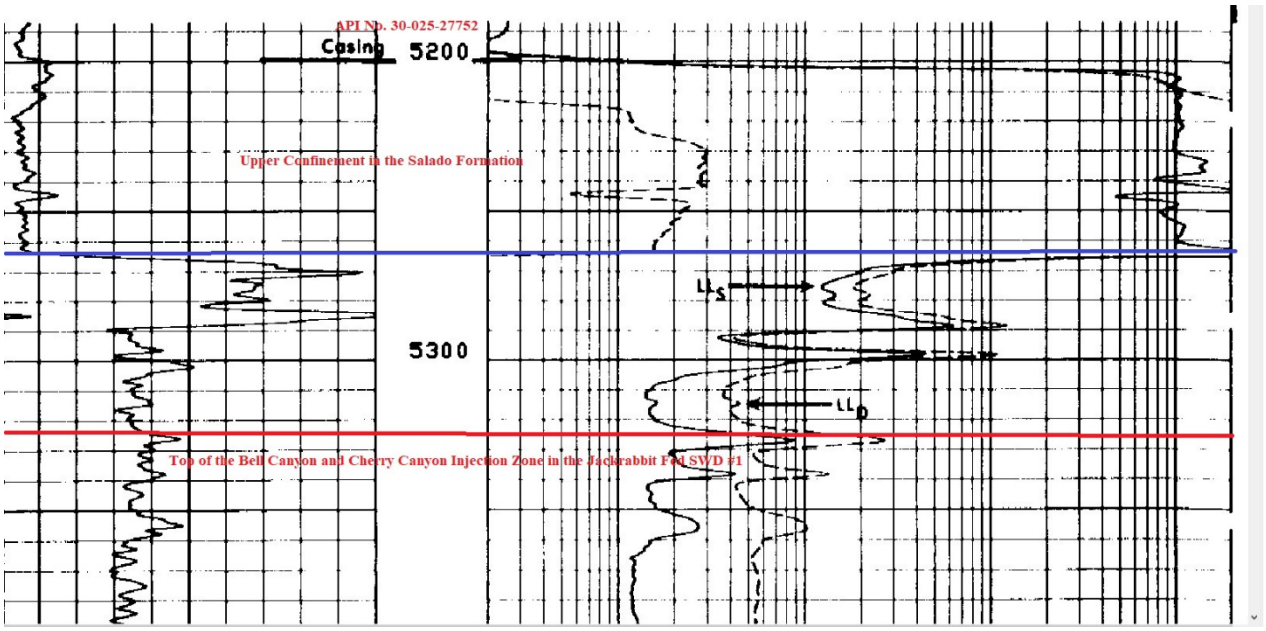
Thomas Tomastik
Chief Geologist

Select Water Solutions, LLC
Jackrabbit Fed SWD #1 Seismic Information
February 15, 2026

Attachment 1
Upper Confining Zone

Select Water Solutions, LLC
Jackrabbit Fed SWD #1 Seismic Information
February 15, 2026

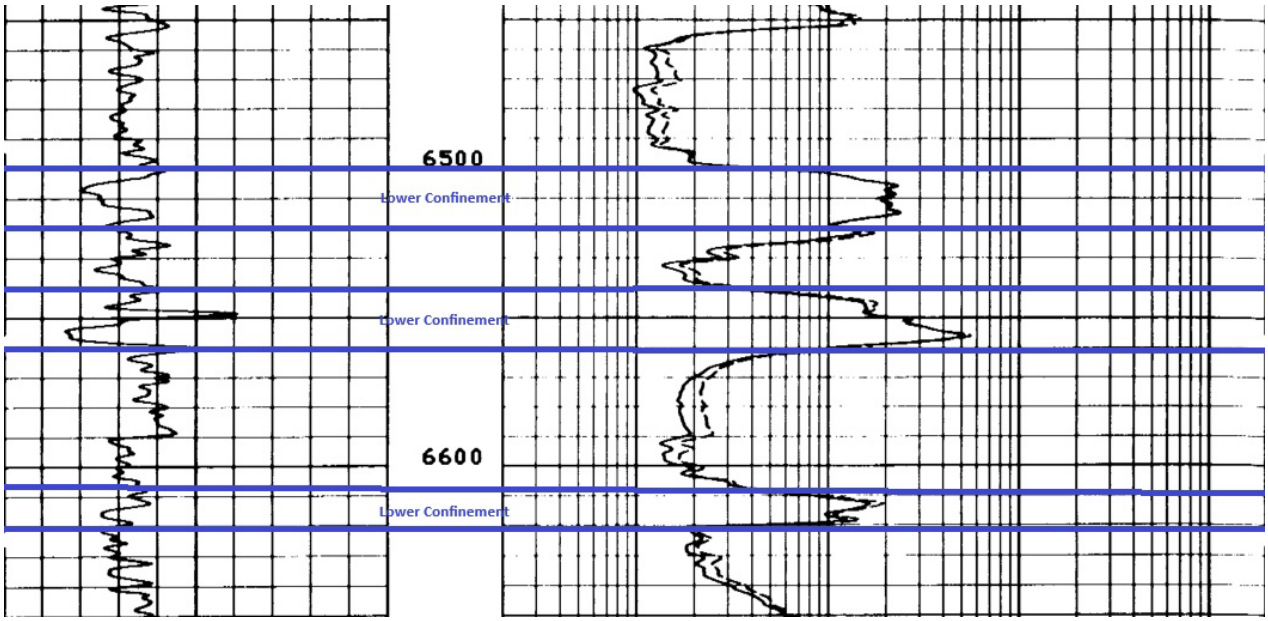
Upper Confining Zone from API No. 025-27752



Attachment 2
Lower Confining Zone

Select Water Solutions, LLC
Jackrabbit Fed SWD #1 Seismic Information
February 15, 2026

Lower Confining Zone from API No. 025-27752

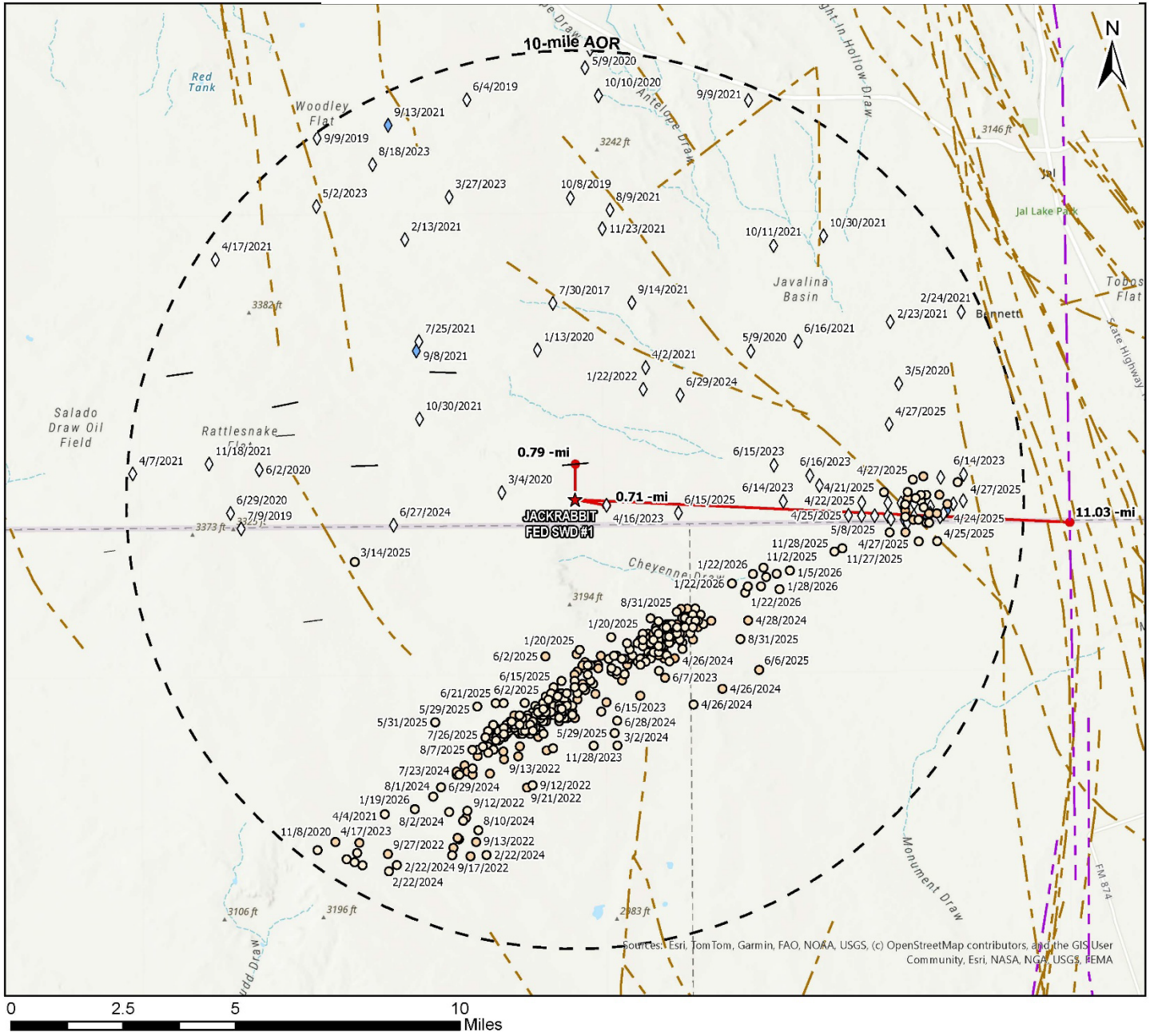


Select Water Solutions, LLC
Jackrabbit Fed SWD #1 Seismic Information
February 15, 2026

Attachment 3
Seismic Analysis Map

Select Water Solutions, LLC
Jackrabbit Fed SWD #1 Seismic Information
February 15, 2026

Jackrabbit Fed SWD #1 Nearby Seismic Events and Faults



Legend

- Proposed SWDs
- Shallow Faults
- Deep Faults

Stress Orientations (Lund, Snee, Zoback 2020)

Indicator, Quality

- Wellbore, A (5)
- Wellbore, B (2)
- Wellbore, C (2)

USGS Seismic Events - 2/10/2026

Magnitude

- 0.0 - 2.0 (298)
- 2.1 - 3.0 (127)
- 3.1 - 4.0 (6)
- 4.1 - 5.0 (0)
- 5.1 - 5.4 (0)

NMTSO Seismic Events - 2/11/2026

Magnitude

- 0 - 2.0 (70)
- 2.1 - 3.0 (6)
- 3.1 - 4.0 (1)
- 4.1 - 4.5 (0)

Seismic Analysis AOR

JACKRABBIT FED SWD #1
LEA COUNTY, NEW MEXICO

Proj Mgr: Reed Davis	February 11, 2026	Mapped by: Ben Bockelmann

Prepared for: SELECT
Prepared by: ALL CONSULTING

Exhibit L

Revised Reservoir Modeling Slides

Southeast Lea County Four DMG SWDs east of Jal New Mexico

TASP Group, February 5, 2026

Dave Childers, Sr. Reservoir Engineer

5 YEARS WTTR LISTED NYSE

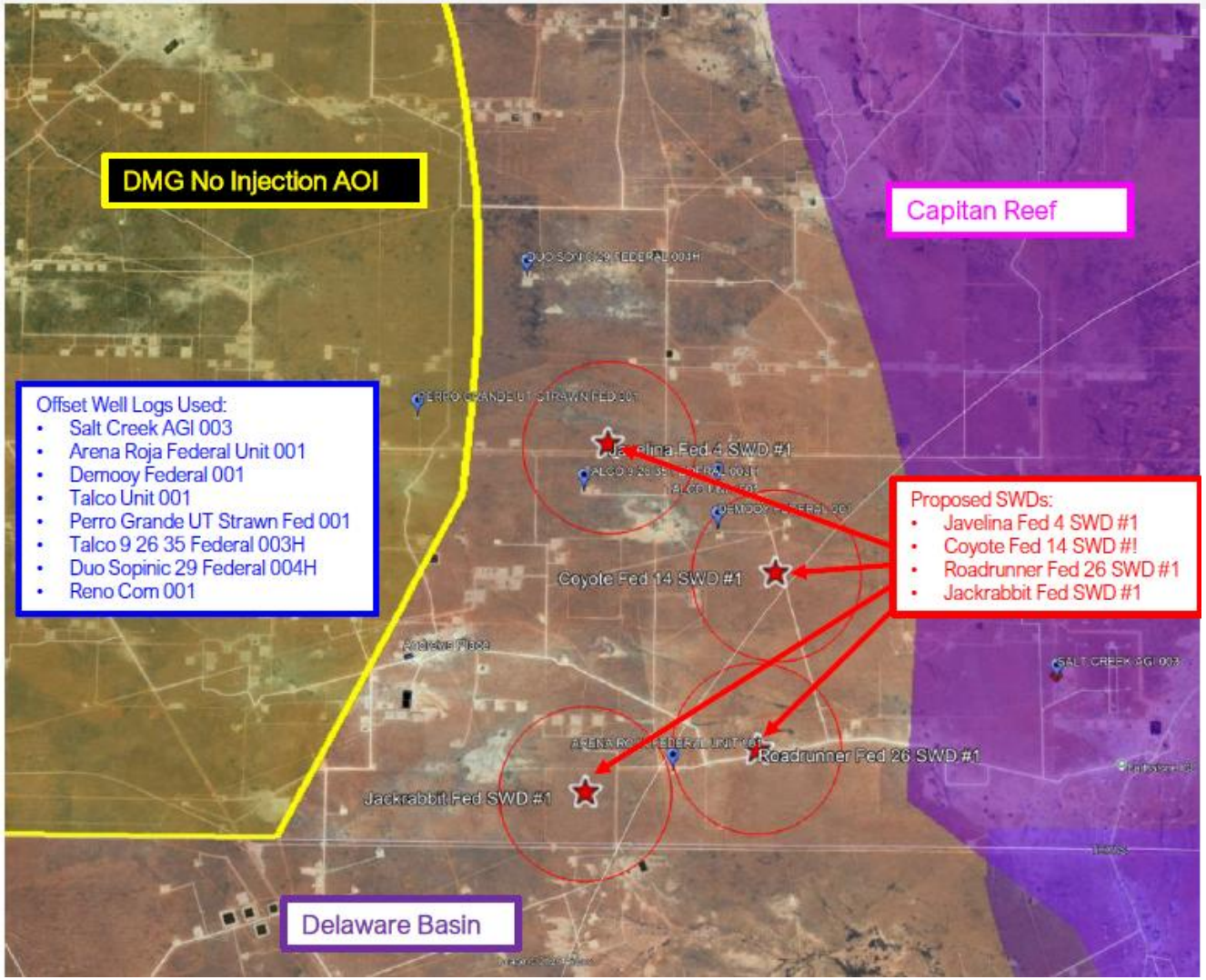
Scope of Work

- 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

SELECT

Locations & Offset Logs

- Review viability of SWD operations based on disposal injection rates.
- DMG Formation Injection Targets
  - Bell Canyon
  - Cherry Canyon
- Confining Layers
  - Salado (upper confining interval, 100' below the top of the interval)
  - Cherry Canyon (lower interval, bottom portion of the Cherry Canyon)



SELECT

Injection Interval

Well Name	Target Interval	Top of Interval Approximate (ft)	Gross Injection Zone Thickness (ft)
Javelina Fed 4 SWD # 1	Bell Canyon	5,405	1,095
	Cherry Canyon	6,275	
	Base of Injection Zone	6,500	
	Brushy Canyon	7,780	
Coyote Fed 14 SWD # 1	Bell Canyon	5,275	1,145
	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	5,365	1,135
	Cherry Canyon	6,275	
	Base of Injection Zone	6,500	
	Brushy Canyon	7,700	

SELECT

Offset Wells used to Estimate Reservoir/Geomechanical Properties

							Logs Used to Ascertain Reservoir and Geomechanical Properties					
							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	Neutron	Density	Resistivity	Photoelectric	Gamma Ray	Sonic DT
300255186500	Salt Creek AGI 003	32° 1'40.67"N	103°16'39.73"W	Saldo	1900		Yes	Yes	Yes	Yes	Yes	Yes
				Bell Canyon	5300	1900						
				Cherry Canyon	6200							
				Brushy Canyon (Approximation)	7200							
300253725700	Arena Roja Federal Unit 001	32° 0'44.66"N	103°21'11.39"W	Salt	4876		No	Yes	No	Yes	No	No
				Bell Canyon	5156	2494						
				Cherry Canyon (Approximation	6350							
				Brushy Canyon (Approximation)	7650							
300252253100	Demooy Federal 001	32° 3'8.46"N	103°20'40.96"W	Salado	1900		No	No	No	No	Yes	Yes
				Bell Canyon	5250	2375						
				Cherry Canyon (Approximation	6250							
				Brushy Canyon (Approximation)	7625							
300252674700	Talco Unit 001	32° 3'34.62"N	103°20'41.02"W	Saldo	1900		No	No	Yes	No	Yes	Yes
				Bell Canyon	5250	2400						
				Cherry Canyon	6250							
				Brushy Canyon (Approximation)	7650							
300252735900	Perro Grande UT Strawn Fed 001	32° 4'13.84"N	103°24'15.85"W	Saldo	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	Lamar	5239		No	No	No	No	No	No
				Bell Canyon	5269	2558						
				Cherry Canyon	6329							
				Brushy Canyon (Approximation)	7827							
300252686700	Reno Com 001	32° 8'55.60"N	103°20'34.62"W	Saldo	1900		Yes	Yes	Yes	Yes	No	Yes
				Bell Canyon	5300	2025						
				Cherry Canyon	6180							
				Brushy Canyon (Approximation)	7325							

SELECT

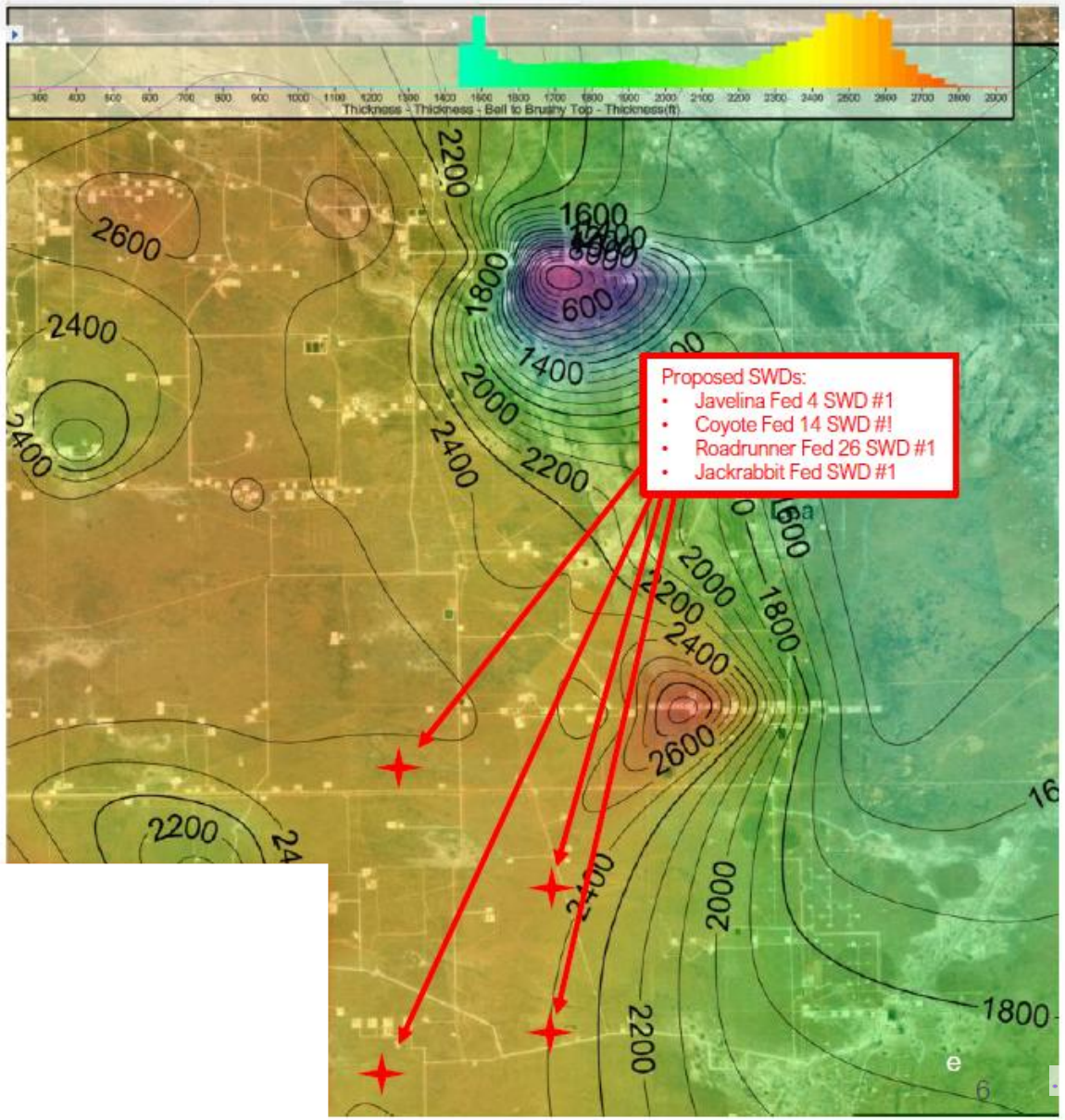
Isopach Thickness: Top of Bell Canyon - Bottom of Cherry Canyon

- 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
		Delaware Mtn Group: Bell Canyon	Goat Seep Capitan: Yates	Yates
		Delaware Mtn Group: Cherry Canyon	Seven Rivers	Seven Rivers
			Queen	Queen
			Grayburg	Grayburg
		Brushy Canyon	Upper San Andres	San Andres
			Lower San Andres	
	Leonardian	Bone Spring: Cutoff Member / 1st Carb / Avalon	Lwr San Andres / Holt / Upr Leonard	Clear-fork: Holt / Upper Leonard
		Bone Spring: 1st Sand	Glorieta	
		Bone Spring: 2nd Carb / 2nd Sand	Yeso / Clearfork: Upper Clearfork	Spraberry*: Upper / Middle / Lwr (Jo Mill, L. SPBY Sh)
		Bone Spring: 3rd Carb Stray Sd / 3rd Sand	Middle Clearfork / Tubb	Dean
	Wolfcampian	Wolfcamp	Wolfcamp	Wolfcamp: Wolfcamp A / Wolfcamp B / Wolfcamp C1 / Wolfcamp C2
Pennsylvanian	Virgilian	Cisco	Cisco	Cisco / Wolfcamp D
	Missourian	Canyon	Canyon	Canyon
	Desmoinesian	Strawn (Lime / Detrital)	Strawn (Lime / Detrital)	Strawn (Lime / Detrital)

Formation Targets



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.

Fracture Mechanic Models	Upper Layer psi/ft	Lower Layer psi/ft
Hubbert and Willis Correlation	0.639	0.648
Mathews and Kelly Correlation	0.823	0.868
Pennebaker Correlation	0.814	0.871
Eaton Correlation	0.637	0.675

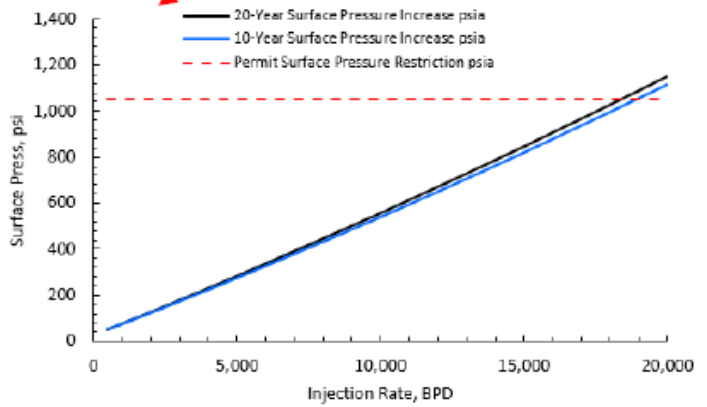
Offset Well Logs with Triangular Distribution	Fracture Gradient psi/ft min	mean	max
Upper Confining Layer	0.637	0.726	0.814
Lower Confining Layer	0.646	0.771	0.871

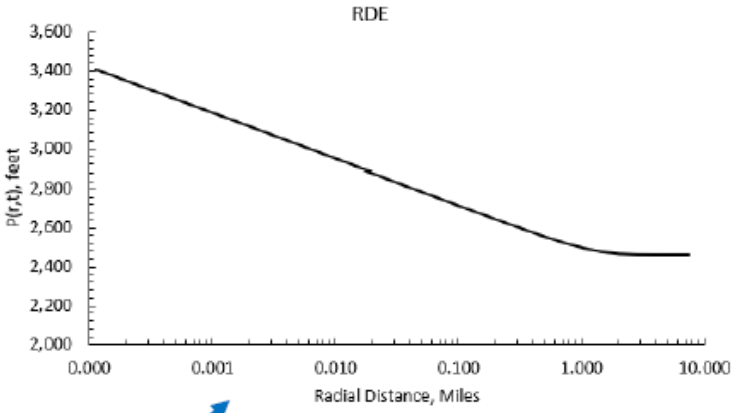
Most likely Fracture Gradients

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	yrs.
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	yrs.
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)*.

SELECT

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.

SELECT

References

- Applied Drilling Engineering by Bourgoyne:
  - Bourgoyne, A. T., Millheim, K. K., Chenevert, M. E., & Young, F. S. (1986). Applied drilling engineering. Society of Petroleum Engineers.
- Applied Well Test Interpretation by Spivey and Lee
  - Spivey, J. P., & Lee, W. J. (2013). Applied well test interpretation. Society of Petroleum Engineers.
- Pressure Transient Analysis by Lee, Rollins, and Spivey (SPE Textbook Volume 9)
  - Lee, W. J., Rollins, J. B., & Spivey, J. P. (2003). Pressure transient testing (Vol. 9). Society of Petroleum Engineers.