



Chevron DMG SWD Pilot Project

Case Nos. 23686, 23687

Chevron Water Strategy Team
November 8-9, 2023

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

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN LEA COUNTY, NEW MEXICO.**

CASE NO. 23686

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN EDDY COUNTY, NEW MEXICO.**

CASE NO. 23687

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Tab A: Application Case No. 23686 (includes C-108)

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

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN LEA COUNTY, NEW MEXICO.**

CASE NO. 23686

APPLICATION

Chevron USA Inc. ("Chevron"), OGRID No. 4323, through its undersigned attorneys, hereby applies to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico.

In support of this application, Chevron states as follows:

(1) Chevron proposes to drill the Papa Squirrel State SWD #1 well at a surface location 1,928' from the South line and 870' from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(2) Chevron seeks authority to inject salt water into the Bell Canyon/Cherry Canyon/Brushy Canyon from 4,625' to 8,939'.

(3) The tubing packer will be set at 4,525' feet, and production casing and cement will be set at 8,500'.

(4) Chevron requests that the Division approve a maximum daily injection rate for the well of 20,000 BWPD.

(5) Chevron requests that a maximum pressure of 925 psi be approved for the well.

(6) A proposed C-108 for the subject well is attached hereto in Attachment A.

(7) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, Chevron requests that this application be set for hearing before an Examiner of the Oil Conservation Division on August 3, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: 

Deana Bennett
Earl E. DeBrine, JR.
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 23686: Application of Chevron USA Inc. for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving the Papa Squirrel State SWD #1 well at a surface location 1,928' from the South line and 870' from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 4625 feet to 8939 feet. The tubing packer will be set at 4525 feet, and production casing and cement will be set at 8500 feet. The maximum anticipated injection rate will be 20,000 BWPD and maximum surface injection pressure will be 925 psi. Said area is located approximately 26 miles west of Jal, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ X _____ Disposal _____ Storage
Application qualifies for administrative approval? _____ X _____ Yes _____ No

II. OPERATOR: Chevron USA Inc.

ADDRESS: 6301 Deauville Blvd, Midland, TX 79706

CONTACT PARTY: Tom Merrifield PHONE: 661-448-7489

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

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. **ATTACHMENT 1**

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. **ATTACHMENT 2**

VII. Attach data on the proposed operation, including: **ATTACHMENT 3**

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. 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. **ATTACHMENT 4**

IX. Describe the proposed stimulation program, if any. **ATTACHMENT 5**

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **ATTACHMENT 6**

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. **ATTACHMENT 7**

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. **ATTACHMENT 8**

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **ATTACHMENT 9**

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

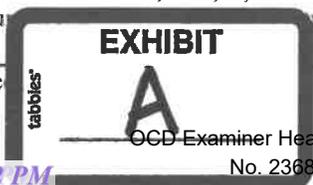
NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

XV. 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 circled initial: _____

DISTRIBUTION: Original and one copy to the appropriate District Office



OCD Examiner Hearing - Nov. 8-9, 2023

No. 23686, 23687

Side 2

III. WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	³ Pool Code 96100	³ Pool Name SWD; DELAWARE
⁴ Property Code	⁵ Property Name PAPA SQUIRREL SWD	
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	
		⁶ Well Number 1
		⁹ Elevation 3204'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	26 SOUTH	32 EAST, N.M.P.M.		1928'	SOUTH	870'	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	26 SOUTH	32 EAST, N.M.P.M.		1928'	SOUTH	870'	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>PAPA SQUIRREL SWD NO. 1 WELL</p> <p>X= 716,780' Y= 379,275' NAD 27 LAT. 32.040812° N LONG. 103.633727° W</p> <p>X= 757,958' Y= 379,332' NAD83/2011 LAT. 32.040937° N LONG. 103.634198° W</p> <p>ELEVATION +3204' NAVD 88</p> </div> <div style="text-align: center; margin-top: 20px;"> <p>CORNER COORDINATES TABLE (NAD 27)</p> <p>A - X=715890.15', Y=382677.22' B - X=721215.23', Y=382746.10' C - X=715922.04', Y=377338.54' D - X=721248.72', Y=377390.10'</p> </div>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>E-mail Address _____</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>01/25/2022 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <div style="text-align: center;"> </div> <p>Certificate Number _____</p>

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chevron U.S.A. Inc.

WELL NAME & NUMBER: Papa Squirrel SWD 1

WELL LOCATION: 1928' from South, 870' from West, L 13, 26 South, 32 East, N.M.P.M.
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

See next page

Hole Size: 17-1/2" Casing Size: 13-3/8"
Cemented with: 380 sx. or 497 ft³
Top of Cement: Surface Method Determined: Volumetric

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 10-3/4"
Cemented with: 320 sx. or 758 ft³
Top of Cement: Surface Method Determined: Volumetric

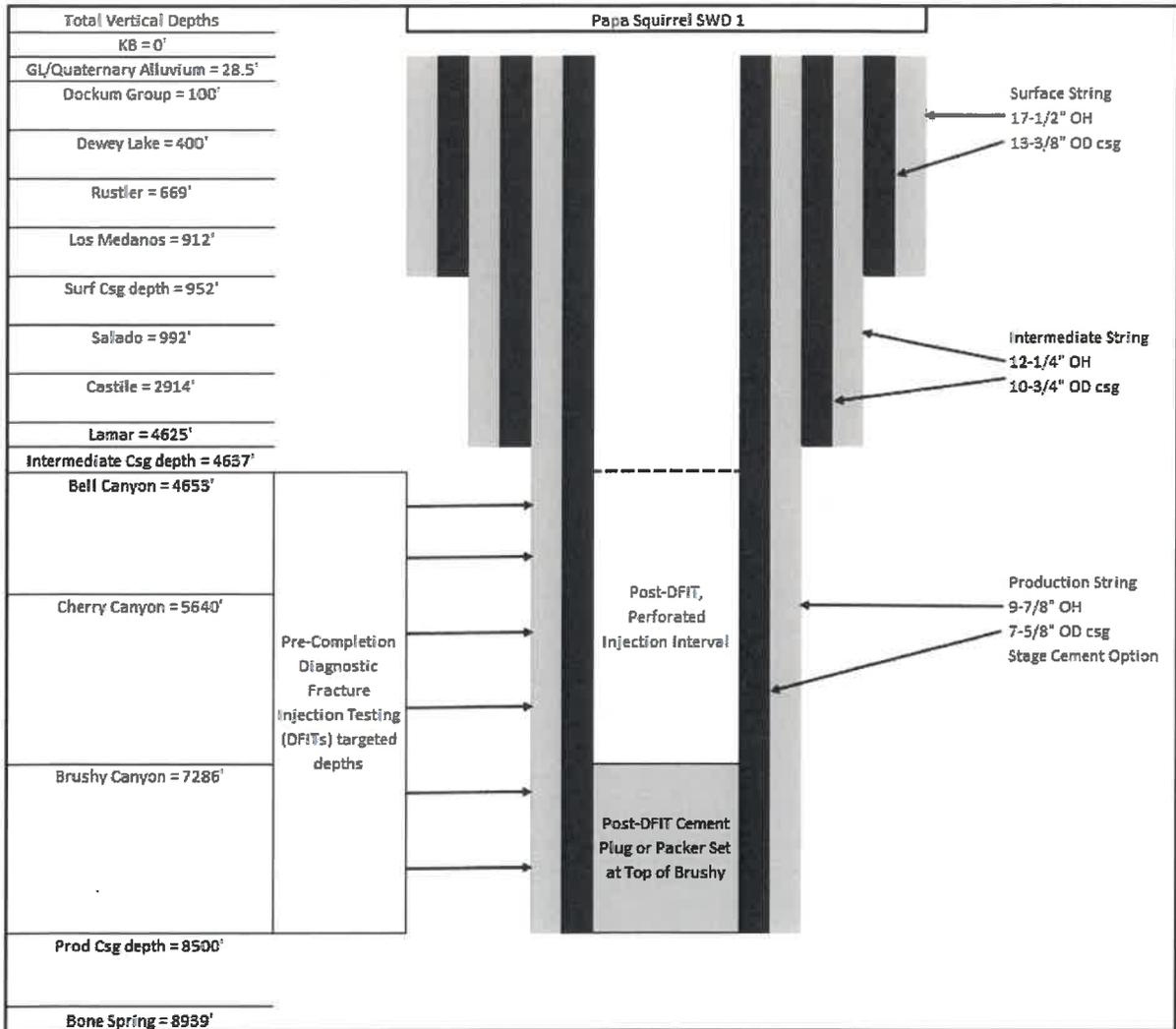
Production Casing

Hole Size: 9-7/8" Casing Size: 7-5/8"
Cemented with: 650 sx. or 1529 ft³
Top of Cement: Surface Method Determined: Volumetric
Total Depth: 8500'

Injection Interval

4625' feet to 8939' *

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the (Perforated or Open Hole; indicate which) Brushy, but are contained by the Bone Spring Limestone.



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 5-1/2" Lining Material: _____
 Type of Packer: Hydraulically set packer
 Packer Setting Depth: 4525'
 Other Type of Tubing/Casing Seal (if applicable): _____

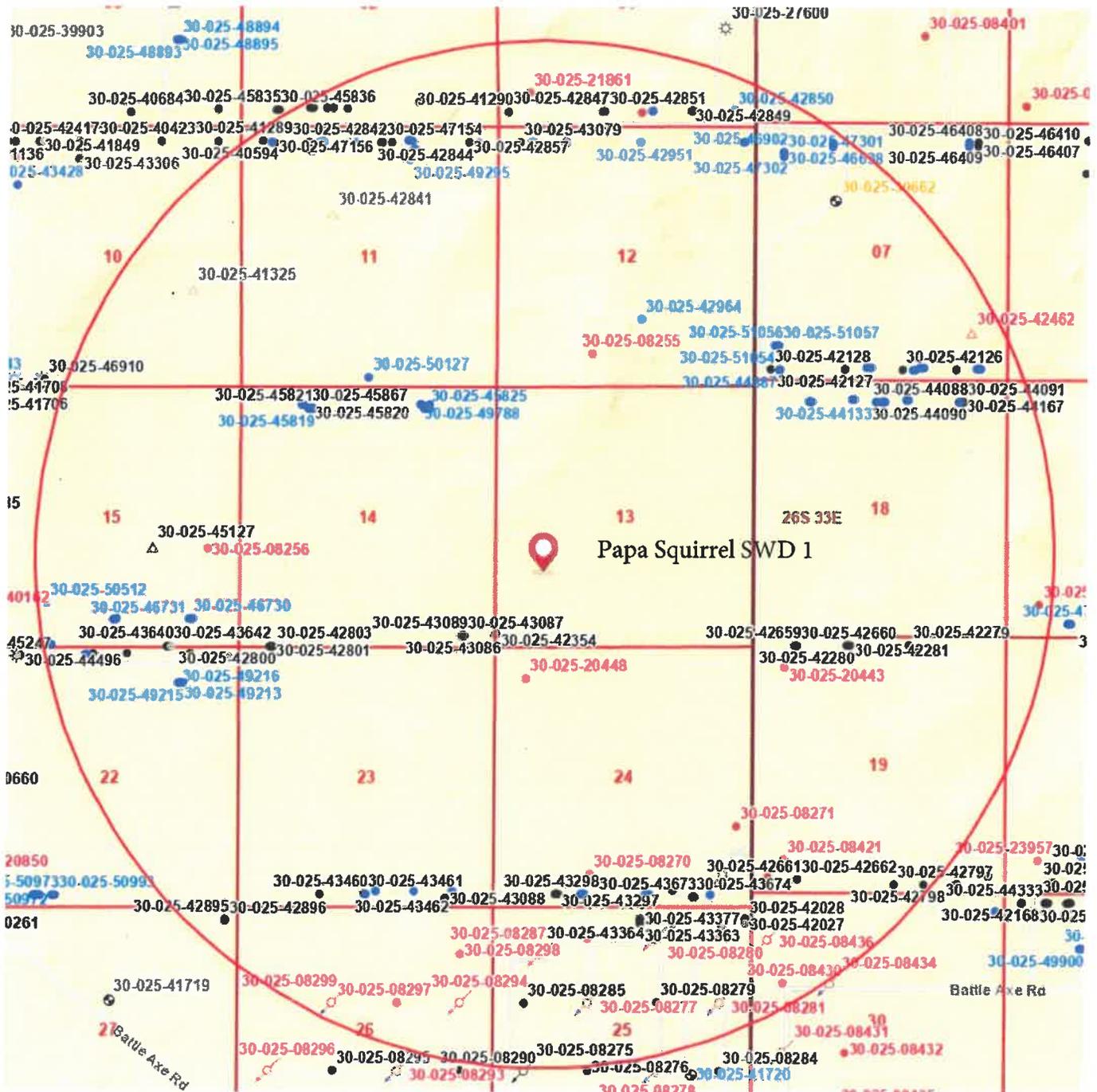
Additional Data

1. Is this a new well drilled for injection? Yes No
 If no, for what purpose was the well originally drilled? _____
2. Name of the Injection Formation: Bell Canyon, Cherry Canyon, and Brushy Canyon *
3. Name of Field or Pool (if applicable): SWD; Delaware Mountain Group
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____
No, this is a proposed new SWD well.
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Depths are within a 3 mile area.
Atoka (14,418-14,545 ft MD), Avalon (8,819-9,749 ft TVD), Bone Spring (8,706-12,028 ft TVD),
Devonian (17,468-17,567 ft MD), Morrow (15,999-16,050 ft MD), Pennsylvanian (14,370-14,826 ft MD),
Silurian (17,464-17,512 ft MD), and Wolfcamp (9,065-13,145 ft TVD).

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone.

ATTACHMENT 1

Item V

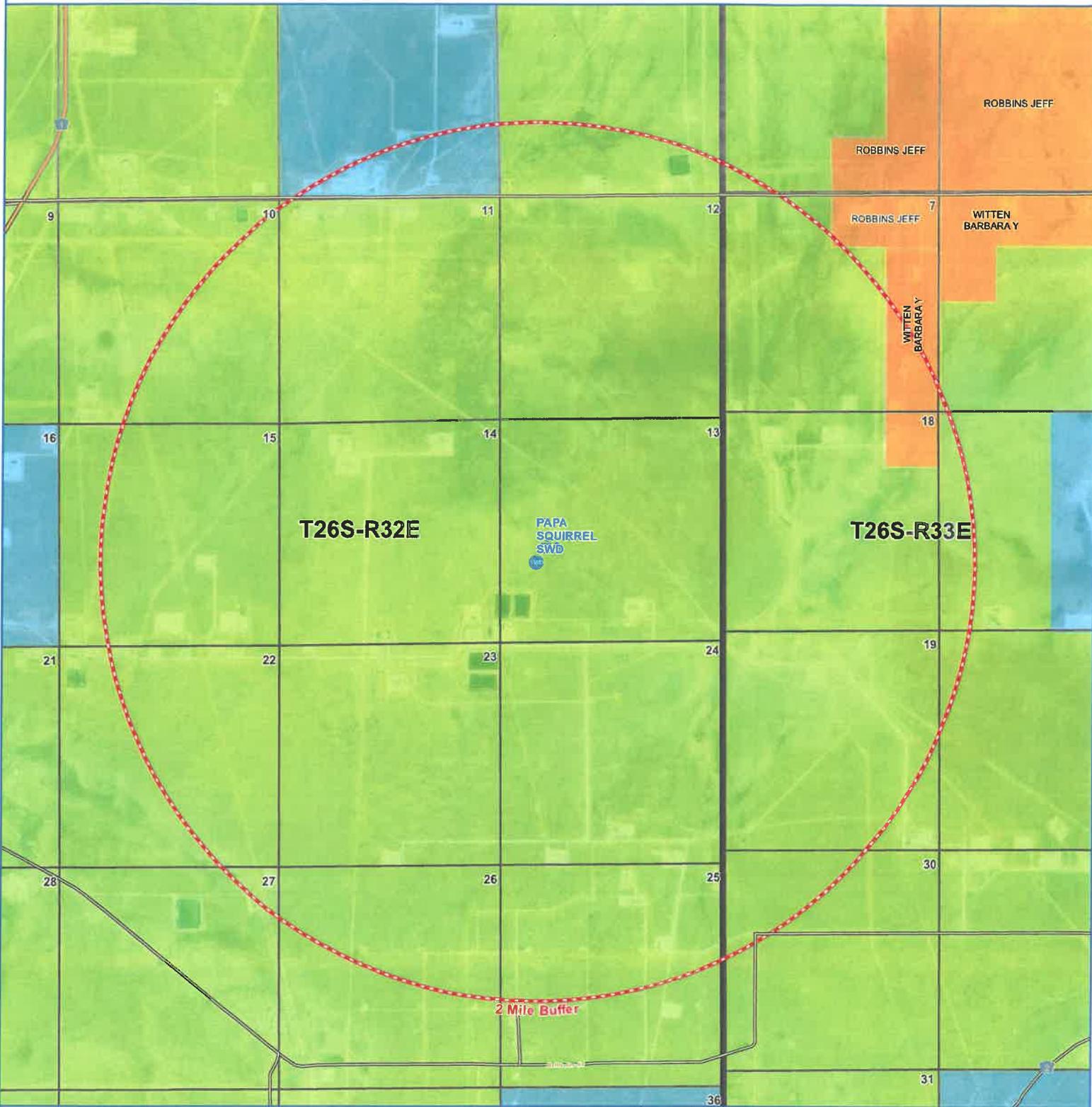


Papa Squirrel SWD 1: 2.0 mile radius circle map showing all wells within the radius.

SURFACE OWNERSHIP MAP

PAPA SQUIRREL SWD

Section 13, Township 26 South, Range 32 East, Lea County, New Mexico



0.2 0.1 0 0.2 0.4 0.6 0.8 Miles
1,000 500 0 1,000 2,000 3,000 4,000 Feet

Map Tech: VKV 1" = 3,250'

Date: 8/17/2022 1:39,000

Legend

- Proposed SWD
- 2 Mile Buffer
- Federal
- State
- Private



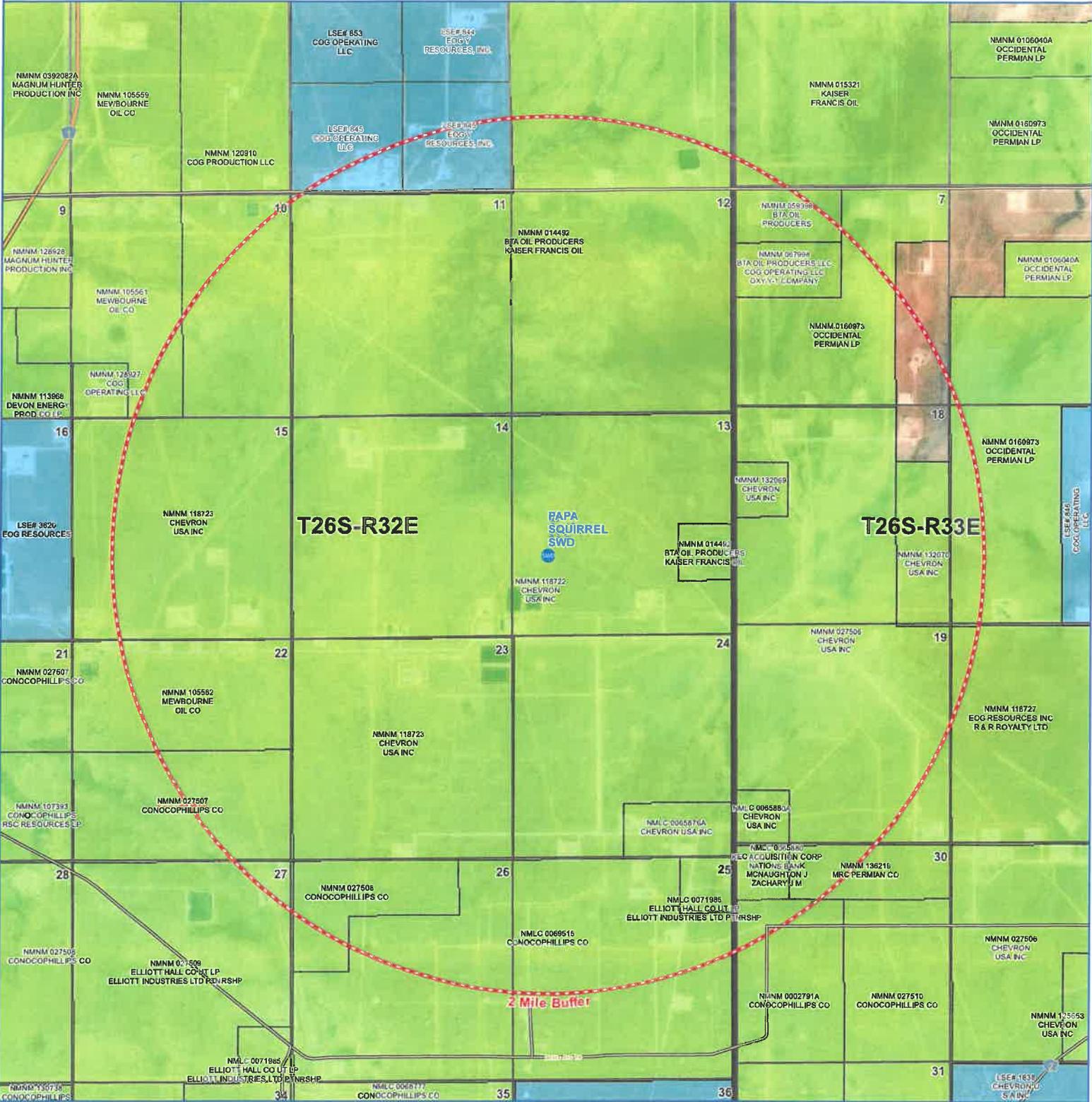
Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Units: Feet

PAPA SQUIRREL SWD
SHL Location & Penetration Point:
1928' FSL & 870' FWL
Section 13, Township 26 South,
Range 32 East of P.M.
Lea County, New Mexico
OPERATOR:
CHEVRON U.S.A. INC.

FEDERAL & STATE LEASES MAP

PAPA SQUIRREL SWD

Section 13, Township 26 South, Range 32 East, Lea County, New Mexico



- Legend**
- Proposed SWD
 - 2 Mile Buffer
 - Federal Lease
 - State Lease

Map Tech: VKV 1" = 3,250'

Date: 8/17/2022 1:39,000

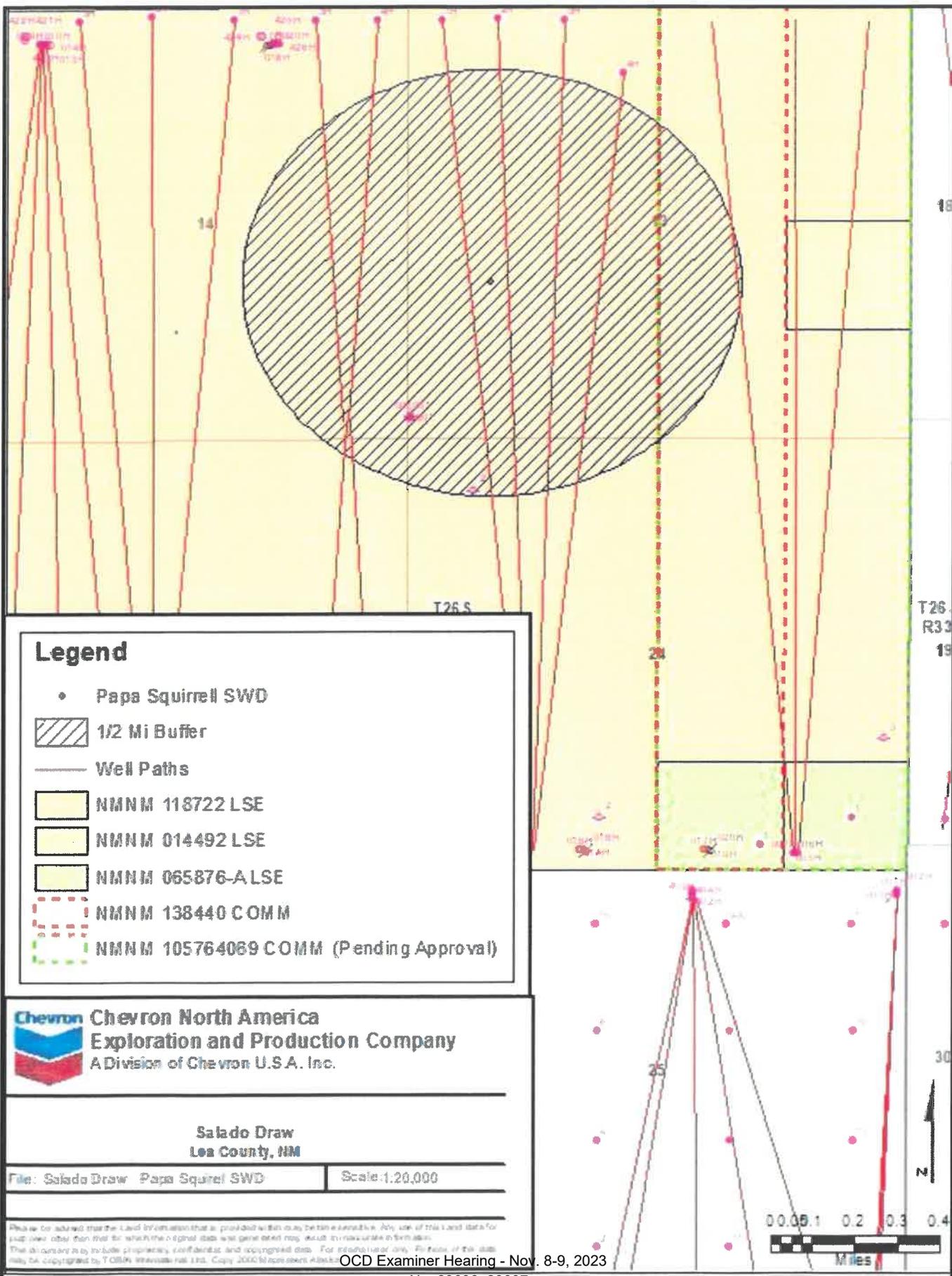


Coordinate System:
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 541,337.5000
 False Northing: 0.0000
 Central Meridian: -104.3333
 Scale Factor: 0.9999

PAPA SQUIRREL SWD
 SHL Location & Penetration Point:
 1928' FSL & 870' FWL
 Section 13, Township 26 South,
 Range 32 East of P.M.
 Lea County, New Mexico
 OPERATOR:
CHEVRON U.S.A. INC.



Federal and State Lease Map (1/2 Mi Radius)



ATTACHMENT 2

Item VI

API	Well Name	Well Type	Well Status	OGRID Name	Section	Township	Range	Latitude 83	Longitude 83	Measured Depth	Vertical Depth	Associated Pools	Plug Date	Miles from SWD
30-025-43086	SD WE 14 FEDERAL P7 #003H	Oil	Active	CHEVRON U.S.A INC	14 26S	32E	32.0362	-103.6393	13,816	9,074	[97838] JENNINGS, UPPER BONE SPRING SHALE		0.4	
30-025-43087	SD WE 14 FEDERAL P7 #004H	Oil	Active	CHEVRON U.S.A INC	14 26S	32E	32.0362	-103.6391	13,816	9,074	[97838] JENNINGS, UPPER BONE SPRING SHALE		0.4	
30-025-43089	SD WE 23 FEDERAL P7 #004H	Oil	Active	CHEVRON U.S.A INC	14 26S	32E	32.0362	-103.639	14,002	9,030	[97838] JENNINGS, UPPER BONE SPRING SHALE		0.4	
30-025-42354	SALADO DRAW SWD 13 #001	SWD	Active	NGL WATER SOLUTIONS PERMIAN, LLC	13 26S	32E	32.0364	-103.637	18,675	18,675	[97869] SWD, DEVONIAN-SILURIAN		0.3	
30-025-20448	PRE-ONGARD WELL #002	Oil	Plugged (site released)	PRE-ONGARD WELL OPERATOR	24 26S	32E	32.0338	-103.6349	0	4,645	No Data	8/20/1963	0.4	

Data tabulation of wells in Area of Review of the Papa Squirrel SWD 1.

APPROVED

Budget Bureau No. 42-R358.4.
Form Approved.

Form 9-881a
(Feb. 1951)

AUG 21 1963 (SUBMIT IN TRIPLICATE)

Land Office _____
Lease No. **LC - 065876 - A**
Unit _____



J. L. GORDON **UNITED STATES**
ACTING DISTRICT **DEPARTMENT OF THE INTERIOR**
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

FEDERAL LEPTFIELD "DR" August 20, 1963

Well No. 2 is located 660 ft. from N line and 660 ft. from W line of sec. 24

<u>NW/4 Section 24</u> (1/4 Sec. and Sec. No.)	<u>26-S</u> (Twp.)	<u>32-E</u> (Range)	<u>10PM</u> (Meridian)
<u>Wildcat</u> (Field)	<u>Lea</u> (County or Subdivision)	<u>New Mexico</u> (State or Territory)	

The elevation of the derrick floor above sea level is 3182.8 ft.

DETAILS OF WORK

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

Well was completed dry at a total depth of 4645' on 8-19-63.

It is proposed to run drill pipe to 4645'. Spot cement plug from 4645 to 4545'; mud to 800'; cement to 750'; mud to 425'; cement to 375'; mud to 50'; and cement to surface leaving 304' of 8-5/8" casing in hole. Set marker and abandon.

Location will be cleaned up and pits filled.

Verbal approval received from Mr. J. L. Gordon, by phone 8-20-61.

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

Company Gulf Oil Corporation
Address P. O. Box 980
Kermit, Texas

ORIGINAL SIGNATURE
BY
W. W. WHITAKER
By _____
Title Area Engineer

Form 9-381a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

APPROVED

UNITED STATES

FEB 3 1964

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

E. G. HUBBLE
ACTING DISTRICT ENGINEER

AP 37 025 00

Land Office

Lease No. LC-065876-A

Unit

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 20, 1964

Federal Littlefield "DF"

Well No. 2 is located 600 ft. from $\left\{ \begin{matrix} N \\ S \end{matrix} \right\}$ line and 600 ft. from $\left\{ \begin{matrix} E \\ W \end{matrix} \right\}$ line of sec. 24

NW/4 Sec. 24 26-3 32-E NPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
 Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3100.3 ft.

DETAILS OF WORK

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

Well was completed dry at 4645' on 8-19-63.

Ran drill pipe open ended to 4645' and spotted 35 sacks cement 4645' to 4545'; mud 4545' to 300'; 20 sacks cement to 750'; mud to 425'; 20 sacks cement to 375'; mud to 50'; 20 sacks cement to surface leaving 384' of 8 5/8" casing in hole. Set marker & abandoned.

Location is cleaned up and ready for inspection.

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

Company Gulf Oil Corporation

Address P. O. Box 980

Kernit, Texas

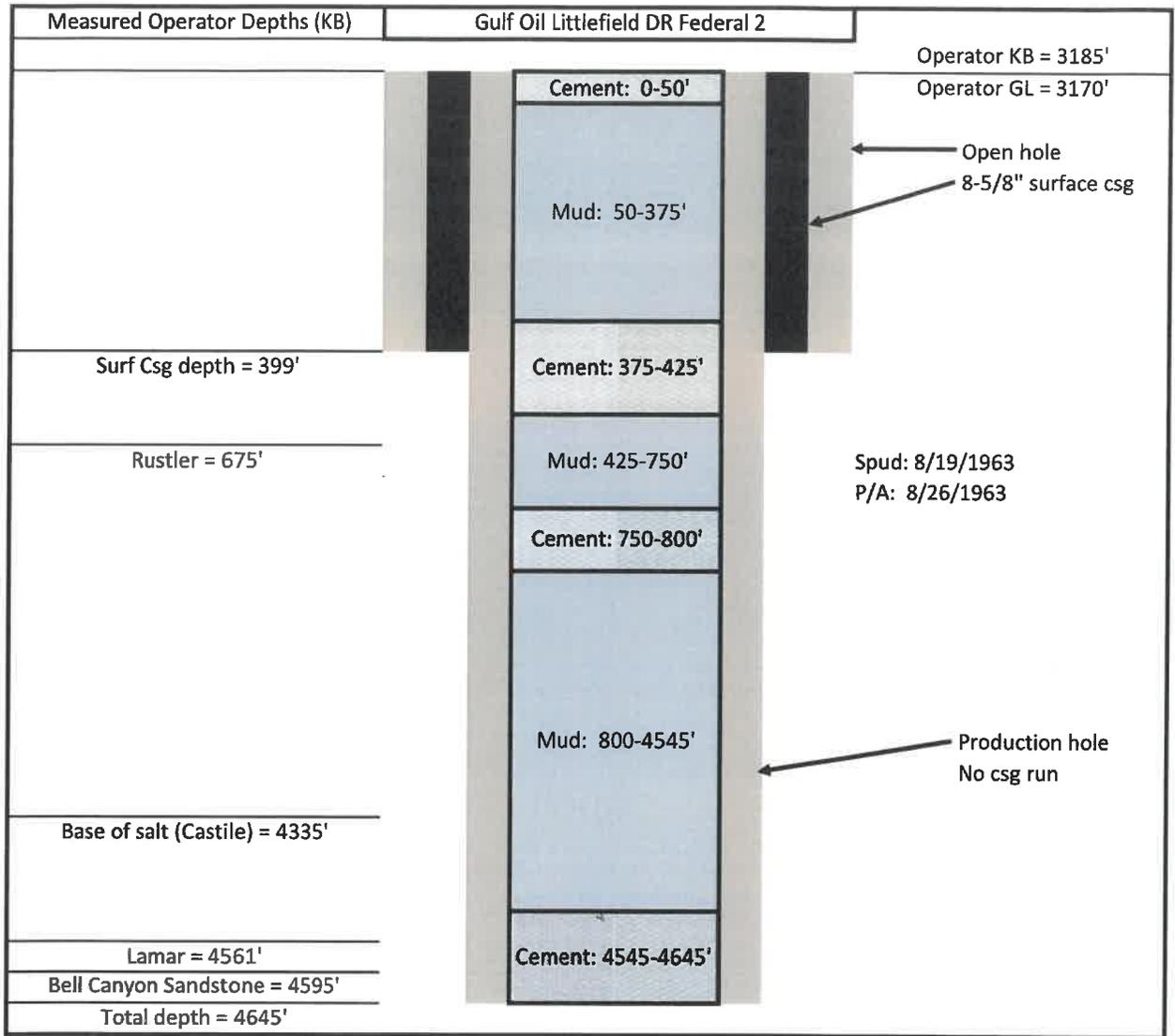
ORIGINAL SIGNED

By W. W. WHITAKER

Title Area Engineer

COUNTY		Lea		FIELD		Wildcat		STATE		N.M.		NO.	
WC		OPR		Gulf Oil Corporation				MAP					
NO.		2		LSE Littlefield "DR" Federal									
SEC.		24		T. 26S		BLK. R		32E		SUR.		CO-ORD.	
LOC.		660'		fr N & W Lines of Sec.									
MI.		FROM		P&A		CLASS.		EL.					
SPUD.		8-13-63		COMP.		8-20-63		FORMATION		DATUM		FORMATION DATUM	
IRL.				LOG:									
				Rust		675							
CSG. & SX.				B/Salt		4335							
8 5/8"		399'		250		Del ls		4561					
						Del sd		4595					
TBG.		DEPTH		SIZE									
LOGS		EL GR RA		IND HC A									
						TD 4645'		PB					
PROD INT.		(DAILY RATE)		BS&W		GH		GOR		GTY		C. P. T. P. HRS. TEST	
PLUGGED & ABANDONED													
Distribution limited and publication prohibited by subscribers' agreement. Reproduction rights reserved by Williams & Lee Scouting Service, Inc.													
CONT.		Johnn Drlg. Co.		PROP DEPTH		4950'		TYPE					
DATE													

8-19-63 F.R. 8-15-63, Delaware PD 4950'-Johnn Drlg. Co.
 8-26-63 Drlg. 4435'. Oper's Elev. 3185' KB.
 TD 4645', PLUGGED & ABANDONED.
 No tests or cores.



Schematic of plugging detail of Gulf Littlefield DR Federal 2 (API 30-025-20445).

ATTACHMENT 3

Item VII

Item	Well 5.5" tubing	Papa Squirrel SWD #1
1)	Permit Max Rate (bwpd)	20,000
1)	Permit Avg Daily Rate (bwpd)	15,000
2)	System	closed
3)	Permit Max Pressure (psig)	925
3)	Permit Avg Pressure (psig)	750

Item	Water Requirements	
4)	Injected fluid is produced water.	Source WQ of injectate and receiving formation is not required per application.
5)	Disposal Zone Water Quality	for non-productive in 1 mile
	SD24 13 FED P416 17H (API 3002547303)	
	Results on next page	

Sample Name / Well			SD24 13 FED P416 17H
Date Received			Tuesday, June 21, 2022
Lab Sample #			25168
Address of Testing Laboratory			Northpark Geotechnical Center 100 Northpark Blvd., Covington, LA 70433
Date sampled			6/16/2022
Time Sampled			12:00
Area & Block			Salado Draw
Depth			6504.00ft MD
Reservoir			Cherry Canyon
Analyte	Method	Symbol	mg/L
Chloride	IC	Cl ⁻	159942
Bromide	IC	Br	1135.2
Iodide	IC	I ⁻	35.68
Sulfate	IC	SO ₄ ²⁻	564.12
Nitrate	IC	NO ₃ ⁻	10.63
Phosphate	IC	as PO ₄ ³⁻	BDL
Total Alkalinity	Titration	as HCO ₃ ⁻	1127
Organic Acids	Titration	NVWA	ND
Weak Bases	Titration	as NH ₄ ⁺	ND
Bicarbonate	<i>Titration (calc.)</i>	as HCO ₃ ⁻	NA
Acetate	IC	CH ₃ COO ⁻	BDL
Propionate	IC	(C ₂ H ₅)COO ⁻	BDL
Formate	IC	HCOO ⁻	BDL
Butyrate	IC	(C ₃ H ₇)COO ⁻	BDL
Sodium	ICP-AES	Na	64989
Potassium	ICP-AES	K	1808.07
Calcium	ICP-AES	Ca	33684.88
Magnesium	ICP-AES	Mg	2305.32
Strontium	ICP-AES	Sr	1361.01
Barium	ICP-AES	Ba	<0.1
Iron	ICP-AES	Fe	<0.05
Manganese	ICP-AES	Mn	<0.05
Lithium	ICP-AES	Li	15.32
Aluminum	ICP-AES	Al	0.72
Silicon	ICP-AES	Si	1.60
Boron	ICP-AES	B	24.19
Phosphorus	ICP-AES	P	0.39

Zinc	ICP-AES	Zn	2.44
Lead	ICP-AES	Pb	<0.25
Nickel	ICP-AES	Ni	<0.1
Chromium	ICP-AES	Cr	<0.05
Copper	ICP-AES	Cu	<0.1
Molybdenum	ICP-AES	Mo	<0.05
Sulfur (<i>total</i>)	ICP-AES	S	449.50
Properties	Method	Units	
Field pH	colorimetric	(-log(H ⁺))	8.12
Lab pH (25°C)	potentiometric	(-log(H ⁺))	8.77
TDS	<i>calculated</i>	mg/L	266525
Density (60°F, 1 bar)	Anton Parr meter	g/cm ³	1.190
Conductivity @ 25°C	measured	µmhos/cm	226610
Resistivity @ 25°C	measured	ohm-m	0.044
Charge Balance Error	<i>calculated</i>	%	2.36

Abbreviations:

ICP-AES: <i>Inductively Coupled Plasma Atomic Emission Spectroscopy</i>
IC: <i>Ion Chromatography</i>
BDL: Below Detection Limit
< * : Below Reporting Limit (*)
NT: Not Tested
ND: Not Detected
NA: Not Available / Not Applicable

ATTACHMENT 4

Item VIII

Formation/Geologic Feature Tops & Datum	Lithology	TVD (from Datum)	Z (SSTVD)
KB (Kelly Bushing)	Datum	0.0	3,232.5
GL (ground surface)	Ground Surface	28.5	3,204.0
01 - Dockum Group	Sandstone	100.0	3,132.5
02 - Dewey Lake	Sandstone	400.0	2,832.5
03 - Rustler	Carbonates	669.0	2,563.5
04 - Los Medanos	Siltstone	912.0	2,320.5
05 - Saldo	Halite	992.2	2,240.3
06 - Castile	Anhydrite	2914.4	318.1
07 - Lamar	Carbonates	4625.3	-1,392.8
08 - Bell Canyon	Sandstone	4652.9	-1,420.4
09 - Cherry Canyon	Sandstone	5640.1	-2,407.6
10 - Brushy Canyon	Sandstone	7285.5	-4,053.0
11 - Bone Spring Limestone	Carbonate	8939.0	-5,706.5

Geologic prognosis tops of all formations to be encountered in the Papa Squirrel SWD 1.

ATTACHMENT 5

Item IX

Proposed acid stimulation as part of the completion for the Papa Squirrel SWD 1.

1. MI/RU Petroplex Acid and Gladiator N2 Unit
2. Perform pressure pumping checklist and record in wellview.
3. Rig up Petroplex acid lines and tie in to 4-1/16" wing valve on tree. Test all lines against wing valve to 2,100 psi for 5 min
 - Install tee in Petroplex lines to allow N2 line to be rigged up. Test all N2 lines against wing valve to 2,100 psi for 5 min
4. Pump Acid job per Petroplex Pump Schedule diverting with N2 as required.
 - Max pressure for job will be 925 psi
 - Discuss with WOE for operational pressure limits during job.
 - Diversion will be treated with 1,250 scf/bbl of N2
5. Once acid is complete R/D Petroplex and Gladiator
6. Secure and shut in well.

ATTACHMENT 6

Item X

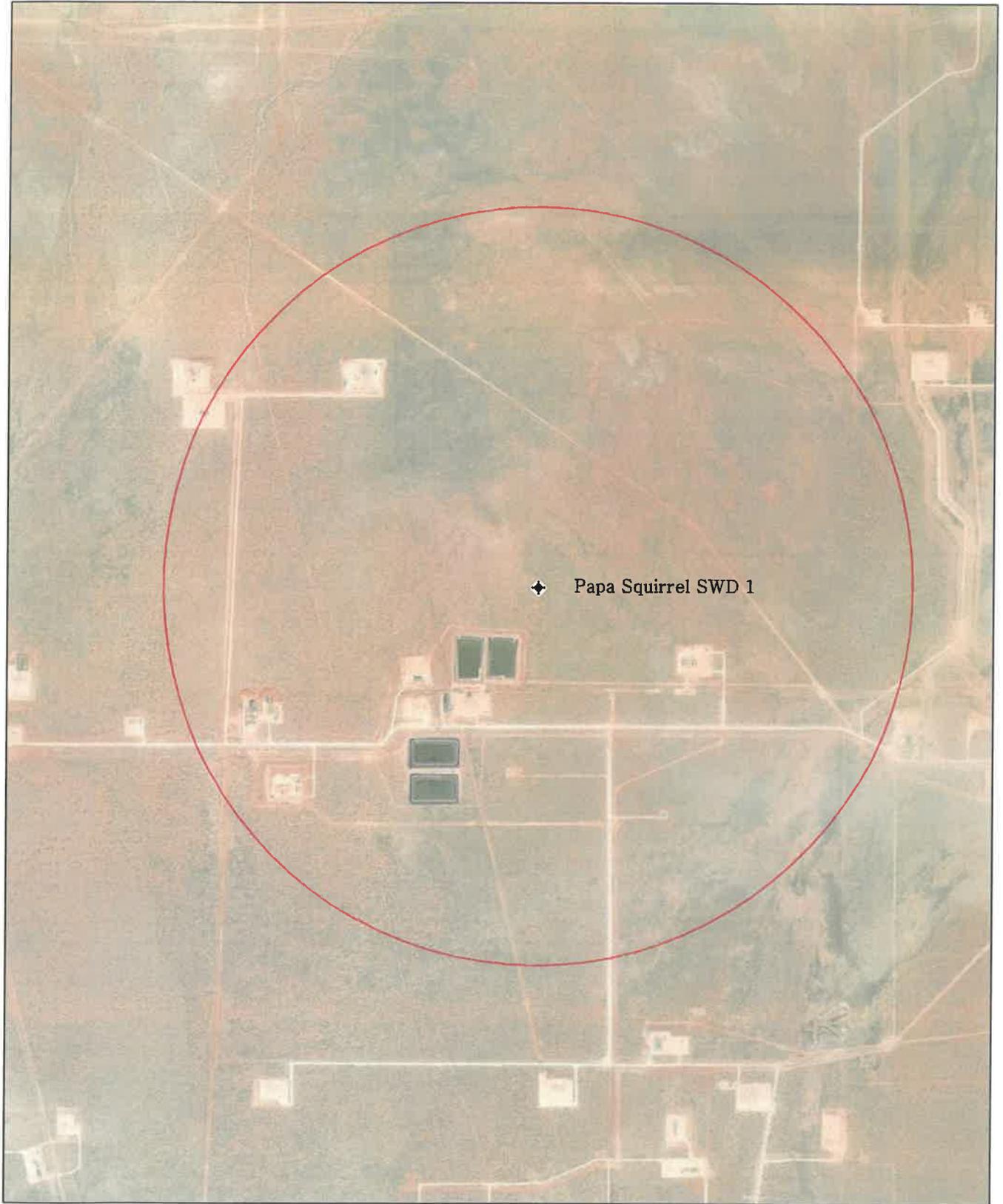
No logs have been run on the Papa Squirrel SWD 1. This is a planned well.

The following open hole logs are planned to be run if hole conditions allow: gamma-ray, resistivity, neutron-density, sonic, and image logs.

Production casing will be installed from surface to near the base of the Brushy Canyon Formation. A total of approximately six Diagnostic Fracture Injection Tests (DFITs) are planned for the Bell Canyon, Cherry Canyon and Brushy Canyon Formations. After the DFITs are run, the Brushy Canyon will be plugged. The Cherry Canyon and Bell Canyon will be perforated to the base of the Lamar Limestone. A step rate test will be run on the Bell Canyon and Cherry Canyon Formation permitted injection interval.

ATTACHMENT 7

Item XI



No fresh water wells within one mile of the Papa Squirrel SWD 1.



ATTACHMENT 8

Item XII



George T. (Tom) Merrifield, Jr., PG
SWD DRP Geologist
Chevron U.S.A. Inc.
6301 Deauville Blvd
Midland, TX 79706
Phone +1 661-448-7489
tommerrifield@chevron.com

April 10, 2023

Dylan Fuge, Acting Director
Oil Conservation Division
1220 South St. Francis Dr.
Sante Fe, New Mexico 87505

**Re: Affirmation Statement C-108 Applications
Papa Squirrel SWD 1 and Severitas 2 State SWD 1**

Dear Mr. Fuge:

With the increase of induced seismicity due to deep produced water injection, in 2021 Chevron decided to evaluate the potential for shallow injection in both Texas and New Mexico with exhaustive manpower and technical effort.

This effort led to the following technical evaluations of the DMG: (1) the location of high confident shallow faults in our active development areas using available seismic reflection data (2) assessment of seismic risk of any such shallow faults, (3) other geologic and reservoir engineering assessments addressing storage capabilities, potential impacts, and mitigation, and (4) collaboration and joint efforts with other operators.

Both the Papa Squirrel SWD 1 and Severitas 2 State SWD 1 are locations which we find no indication of open faults at the surface or in the subsurface and no indication of hydraulic connection between the proposed injection zone (Bell Canyon and Cherry Canyon) and an underground source of drinking water (USDW). Both locations have low potential for fault slip and induced seismicity.

Respectively yours,

A handwritten signature in black ink that reads "G. T. Merrifield, Jr." in a cursive style.

G. T. Merrifield, Jr., PG
TX (#10838) and CA (#9274)

ATTACHMENT 9

Item XIII

Notice to Surface Owners, Leasehold Operators, and Affected Persons within ½ Mi Radius

Surface Owner:

United States of America (Bureau of Land Management)	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4
	Section 14: All
	Section 15: All
	Section 23: All

Note: All part of T-26-S, R-33-E, NMPPM, Lea County, NM

Leasehold Operator within ½ radius:

Operator	Well Name	API
Chevron U.S.A. Inc.	SD WE 24 FEDERAL P23 001H	30-025-43318
	SD WE 24 FEDERAL P23 002H	30-025-43296
	SD WE 24 FEDERAL P23 003H	30-025-43297
	SD WE 24 FEDERAL P23 004H	30-025-43298
	SD WE 14 FEDERAL P7 003H	30-025-43086
	SD WE 14 FEDERAL P7 004H	30-025-43087
	SD WE 23 FEDERAL P7 003H	30-025-43088
	SD WE 23 FEDERAL P7 004H	30-025-43089
	SD WE 24 FEDERAL P24 005H	30-025-43674
	SD WE 24 FEDERAL P24 006H	30-025-43673
	SD WE 24 FEDERAL P24 007H	30-025-43675
	SD 24 13 FEDERAL P415 013H	30-025-49072
	SD 24 13 FEDERAL P415 014H	30-025-49073
	SD 24 13 FEDERAL P415 015H	30-025-49074
	SD 24 13 FEDERAL P416 017H	30-025-47303
SD 24 13 FEDERAL P416 018H	30-025-47311	
SD 24 13 FEDERAL P416 019H	30-025-47312	
NGL Water Solutions Permian LLC	SALADO DRAW SWD 13-1	30-025-42354

Working Interest Owners within ½ mile radius:

Lease	Lands	Depths	WI Owner (%)	WI (%)
NMNM 118722	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4 Section 14: All Section 15: All Section 23: All Section 24: N/2, N/2 of S/2, S/2 of SW/4	All	Chevron U.S.A. Inc.	100.000000%
SD WE P24 5H Comm Agreement (Pending Approval)	Section 13: W/2 of E/2 Section 24: W/2 of E/2	Bone Spring	Chevron U.S.A. Inc.	100.000000%
SD 24 13 Fed P416 Comm Agreement (Pending Approval)	Section 13: E/2 Section 24: E/2	Wolfcamp	Chevron U.S.A. Inc.	99.453125%
			Royalty Clearinghouse 2003 LLC	0.078125%
			Atlas OBO Energy LP	0.468750%

Note: All part of T-26-S, R-33-E, NMPPM, Lea County, NM

Mineral Interest Owner within ½ mile radius:

Lease	Lands	Depths	Federal /State Mineral Interest (MI) Owner	MI (%)
NMNM 118722	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4 Section 14: All Section 15: All Section 23: All Section 24: N/2, N/2 of S/2, S/2 of SW/4	All	United States of America	100.000000%
SD WE P24 5H Comm Agreement (Pending Approval)	Section 13: W/2 of E/2 Section 24: W/2 of E/2	Bone Spring	United States of America	100.000000%
SD 24 13 Fed P416 Comm Agreement (Pending Approval)	Section 13: E/2 Section 24: E/2	Wolfcamp	United States of America	100.000000%

Note: All part of T-26-S, R-33-E, NMPM, Lea County, NM

Tab B: Application Case No. 23687 (includes C-108)

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

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN EDDY COUNTY, NEW MEXICO.**

CASE NO. 23687

APPLICATION

Chevron USA Inc. ("Chevron"), OGRID No. 4323, through its undersigned attorneys, hereby applies to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Eddy County, New Mexico.

In support of this application, Chevron states as follows:

(1) Chevron proposes to drill the Severitas 2 State SWD #1 well at a surface location 185' from the North line and 1,082' from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well.

(2) Chevron seeks authority to inject into the Bell Canyon/Cherry Canyon/Brushy Canyon from 2,343' to 6,012'.

(3) The tubing packer will be set at 2,243' and production casing and cement will be set at 5,500'.

(4) Chevron requests that the Division approve a maximum daily injection rate for the well of 15,000 BWPD.

(5) Chevron requests that a maximum pressure of 468 psi be approved for the well.

(6) A proposed C-108 for the subject well is attached hereto in Attachment A.

(7) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, Chevron requests that this application be set for hearing before an Examiner of the Oil Conservation Division on August 3, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: 
Deana Bennett
Earl E. DeBrine, JR.
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 23687: Application of Chevron USA Inc. for approval of salt water disposal well in Eddy County, New Mexico. Applicant seeks an order approving the Severitas 2 State SWD #1 well at a surface location 185' from the North line and 1,082' from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 2343 feet to 6012 feet. The tubing packer will be set at 2243 feet, and production casing and cement will be set at 5500 feet. The maximum anticipated injection rate will be 15,000 bwpd and maximum surface injection pressure will be 468 psi. Said location is approximately 13 miles southwest of Malaga, New Mexico.

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: Chevron USA Inc.

ADDRESS: 6301 Deauville Blvd, Midland, TX 79706

CONTACT PARTY: Tom Merrifield PHONE: 661-448-7489

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. **ATTACHMENT 1**

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. **ATTACHMENT 2**

VII. Attach data on the proposed operation, including: **ATTACHMENT 3**

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. 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. **ATTACHMENT 4**

IX. Describe the proposed stimulation program, if any. **ATTACHMENT 5**

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **ATTACHMENT 6**

*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. **ATTACHMENT 7**

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. **ATTACHMENT 8**

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **ATTACHMENT 9**

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

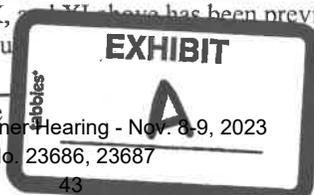
NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

XV. 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 submission: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to _____ Office



Side 2

III. WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96100		³ Pool Name SWD; DELAWARE	
⁴ Property Code		⁵ Property Name SEVERITAS 2 STATE SWD			⁶ Well Number 001
⁷ OGRID No. 4323		⁸ Operator Name CHEVRON U.S.A. INC.			⁹ Elevation 3172'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26 SOUTH	27 EAST, N.M.P.M.		185'	NORTH	1082'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26 SOUTH	27 EAST, N.M.P.M.		185'	NORTH	1082'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------	-------------------------------	----------------------------------	-------------------------

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.

<p>¹⁶</p> <p>HHNM SEVERITAS 2 STATE SWD No.001 X = 555,115' (NAD27 NM E) Y = 392,257' LAT. 32.078306° N (NAD27) LONG. 104.155388° W</p> <p>X = 698,295' (NAD83/86 NM E) LAT. 32.078429° N (NAD83/86) LONG. 104.155880° W ELEV. +3172' (NAVD88)</p> <p>CORNER COORDINATES TABLE (NAD 27)</p> <p>A - Y=392441.43, X=553545.42 B - Y=392443.13, X=556198.44 C - Y=389739.69, X=553503.51 D - Y=389786.09, X=556173.73 E - Y=387033.94, X=553461.53 F - Y=387127.27, X=556148.39</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>E-mail Address _____</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>04/27/2022 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>ROBERT L. LASTRAPES NEW MEXICO 23006 05/02/2022 PROFESSIONAL SURVEYOR</p> <p>Certificate Number _____</p>

INJECTION WELL DATA SHEET

Side 1

OPERATOR: Chevron U.S.A. Inc.

WELL NAME & NUMBER: Severitas 2 State SWD 1

WELL LOCATION: 185' from North, 1082' from East, A 2, 26 South, 27 East, N.M.P.M.

FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA
Surface Casing

See next page

Hole Size: 17-1/2" Casing Size: 13-3/8"
Cemented with: 253 sx. 337 or ft³
Top of Cement: Surface Method Determined: Volumetric

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 10-3/4"
Cemented with: sx. or ft³
Top of Cement: Surface Method Determined: Volumetric

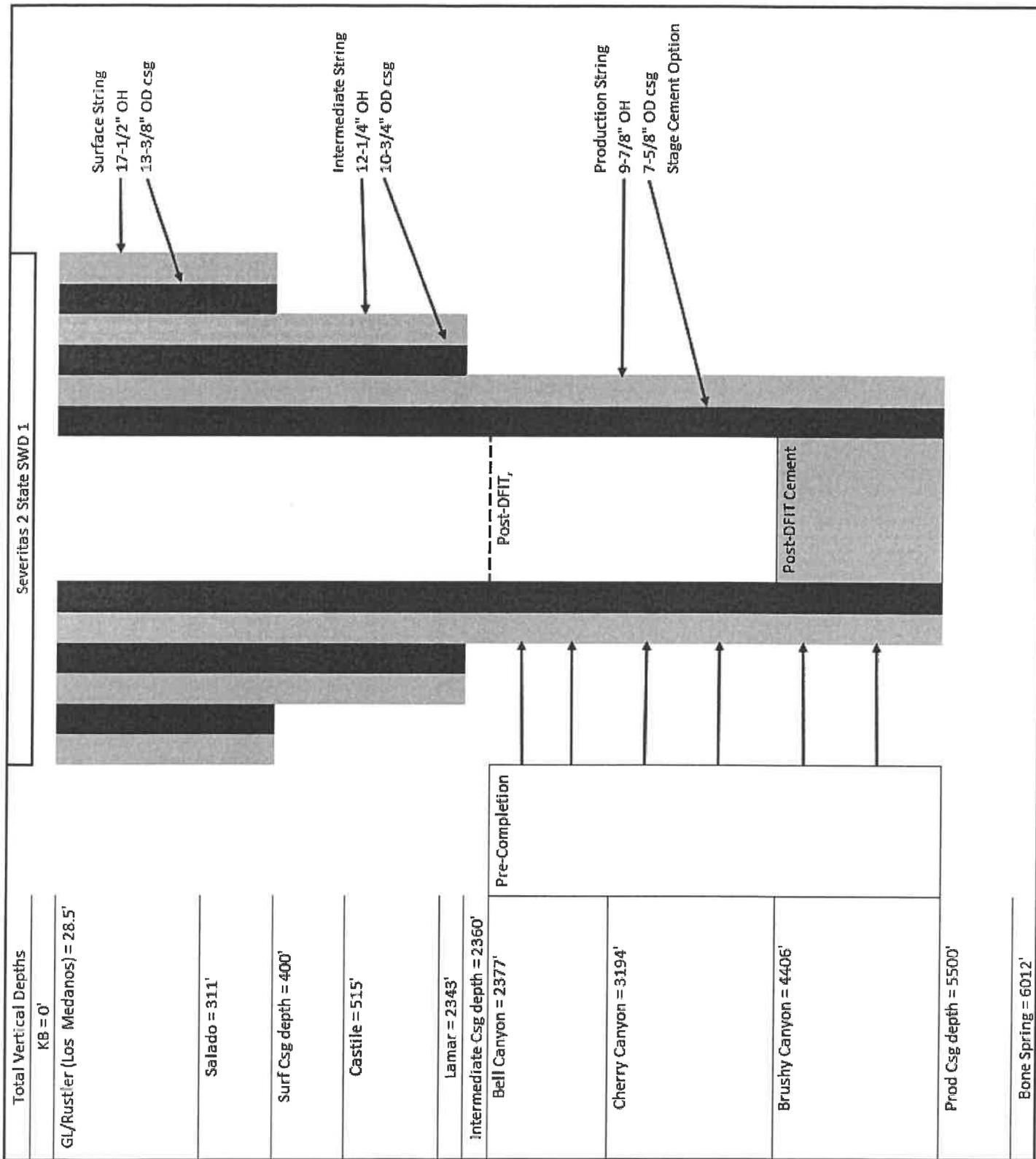
Production Casing

Hole Size: 9-7/8" Casing Size: 7-5/8"
Cemented with: 377 sx. 901 or ft³
Top of Cement: Surface Method Determined: Volumetric

Total Depth: 5500'

Injection Interval 2343 * 6012' *
feet to

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the (Perforated or Open Hole; indicate which) Brushy, but are contained by the Bone Spring Limestone.



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 5-1/2" Lining Material: _____

Type of Packer: Hydraulically set packer

Packer Setting Depth: 2243'

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Bell Canyon, Cherry Canyon, and Brushy Canyon *

3. Name of Field or Pool (if applicable): SWD; Delaware

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _____
No, this is a proposed new SWD well.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Depths are within a 3 mile area.
Atoka (11,643-11,794), Bone Spring (5840-18,860),
Morrow (11,966-12,697), Pennsylvanian (11,154-12,522), and
Strawn (11,694-11,719), and Wolfcamp (9299-21,655)

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone.

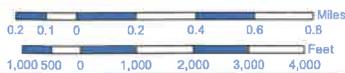
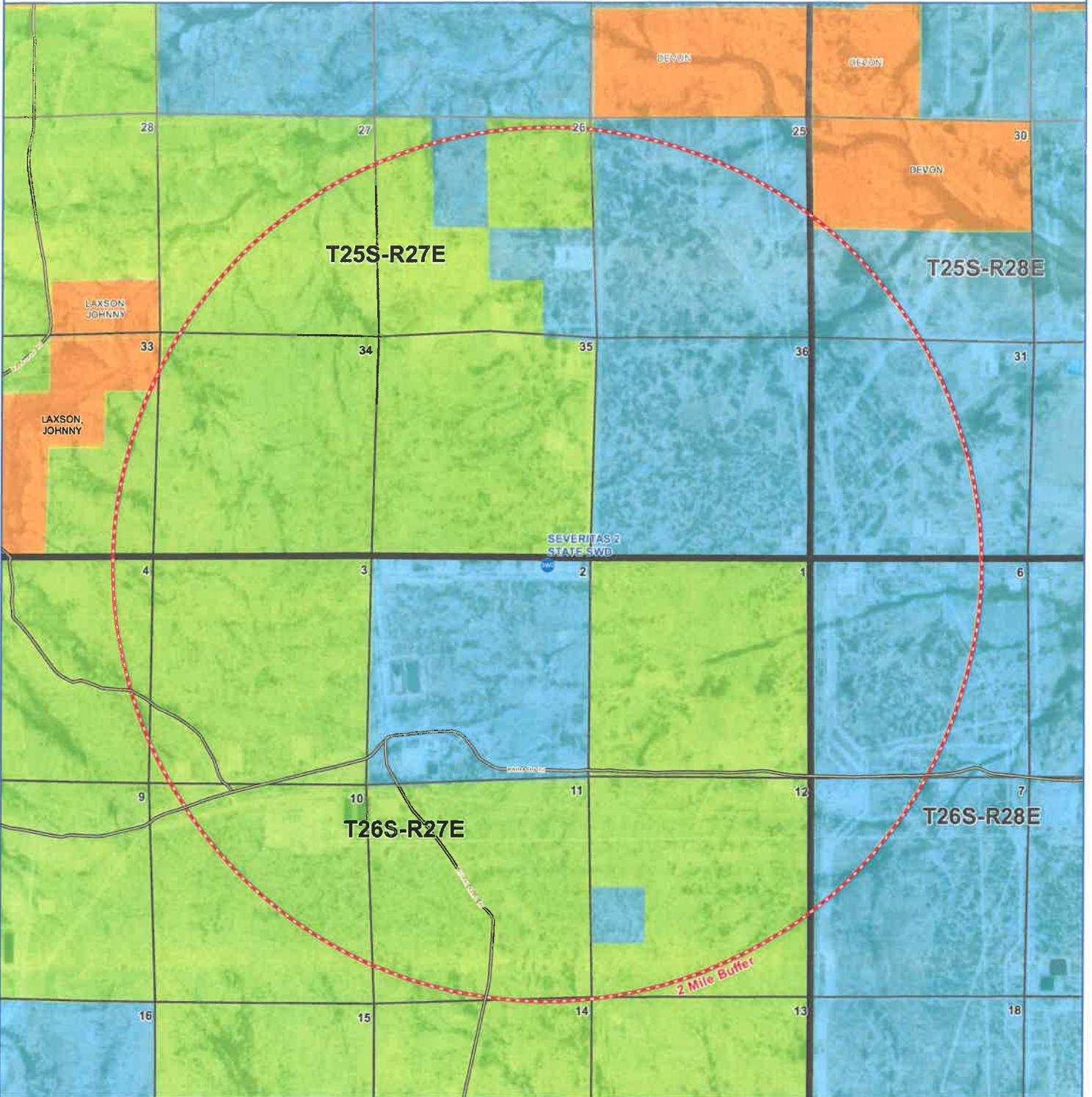
ATTACHMENT 1

Item V

SURFACE OWNERSHIP MAP

SEVERITAS 2 STATE SWD

Section 2, Township 26 South, Range 27 East, Eddy County, New Mexico



- Legend**
- Proposed SWD
 - 2 Mile Buffer
 - Federal
 - State
 - Private

Map Tech: VKV 1" = 3,250'

Date: 8/17/2022 1:39,000



PO BOX 1001, Fort Worth, Texas 76101



Coordinate System:
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 541,337,6000
 False Northing: 0.0000
 Central Meridian: -104.3333
 Scale Factor: 0.9999
 Latitude Of Origin: 31.0000
 Units: Foot US



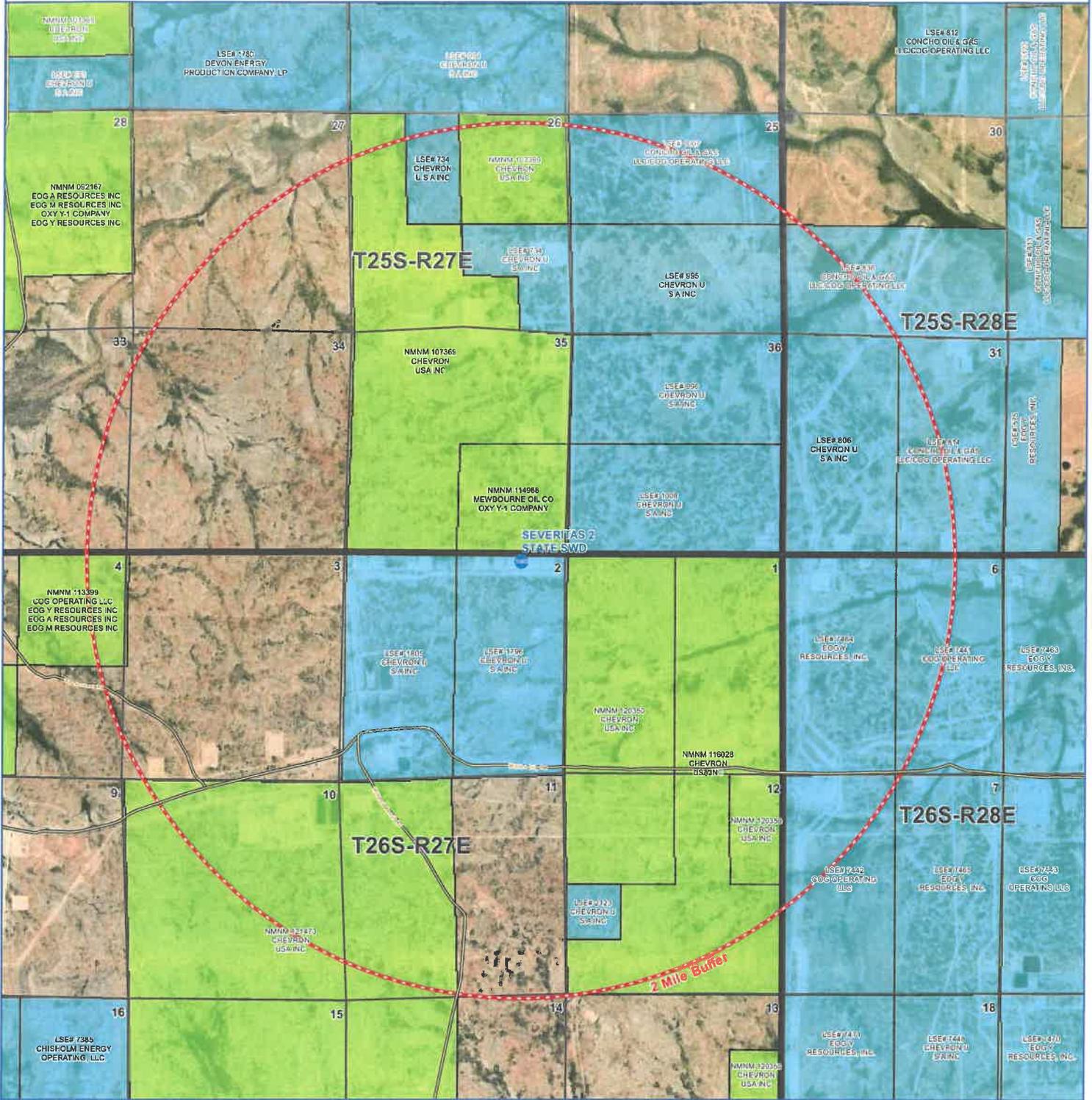
SEVERITAS 2 STATE SWD
 SHL Location & Penetration Point:
 185' FNL & 1082' FEL
 Section 2, Township 26 South,
 Range 27 East of P.M.
 Eddy County, New Mexico
OPERATOR:
CHEVRON U.S.A. INC.



FEDERAL & STATE LEASES MAP

SEVERITAS 2 STATE SWD

Section 2, Township 26 South, Range 27 East, Eddy County, New Mexico



0.2 0.1 0 0.2 0.4 0.6 0.8 Miles
1,000 500 0 1,000 2,000 3,000 4,000 Feet

Map Tech: VKV	1" = 3,250'
Date: 8/17/2022	1:39,000

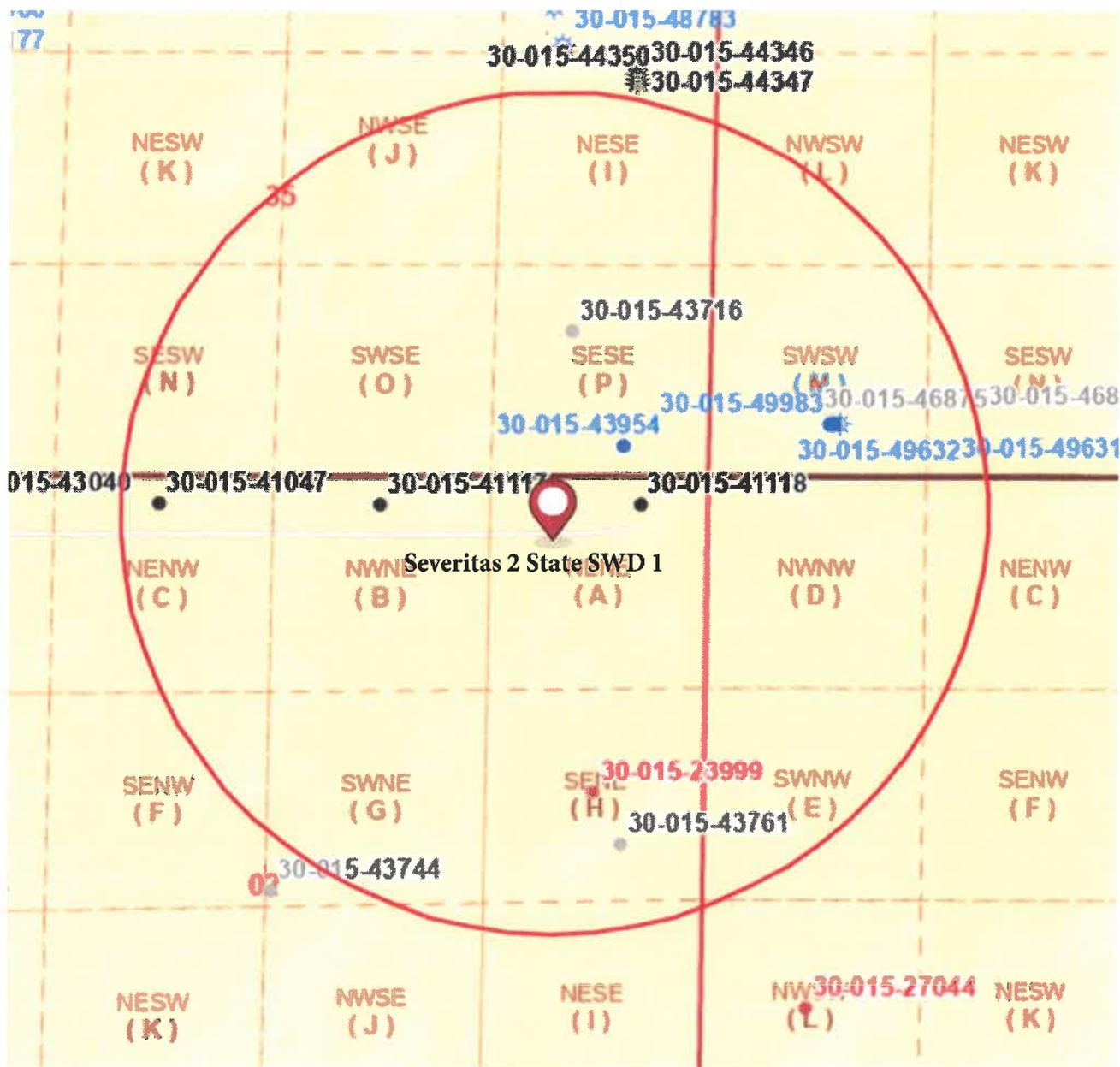
PO BOX 1001, Fort Worth, Texas 76101

Legend

- Proposed SWD
- 2 Mile Buffer
- Federal Lease
- State Lease

Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337,5000
False Northing: 0.0000
Central Meridian: -104.3333
Scale Factor: 0.9999
Latitude Of Origin: 31.6000
Units: Foot US

SEVERITAS 2 STATE SWD
SHL Location & Penetration Point:
185' FNL & 1082' FEL
Section 2, Township 26 South,
Range 27 East of P.M.
Eddy County, New Mexico
OPERATOR:
CHEVRON U.S.A. INC.



Severitas 2 State SWD 1: 0.5 mile radius circle map showing wells in Area of Review (AOR).

ATTACHMENT 2

Item VI

Section	Township	Range	Latitude 83	Longitude 83	Measured Depth	Vertical Depth	Associated Pools	Plug Date	Miles from SWD
LC 36	25S	27E	32.0798	-104.1499	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
LC 2	26S	27E	32.0785	-104.1632	12,619	7,792	[16800] DELAWARE RIVER, BONE SPRING		0.4
LC 2	26S	27E	32.0785	-104.1588	12,556	7,768	[16800] DELAWARE RIVER, BONE SPRING		0.2
GY 14	25S	26E	32.0814	-104.155	0	0	[97494] COTTONWOOD DRAW, BONE SPRING (O)		0.2
WELL 2	26S	27E	32.0735	-104.1546	0	0	[16800] DELAWARE RIVER, BONE SPRING	5/15/1987	0.3
WELL 35	25S	27E	32.0795	-104.154	0	0	[16800] DELAWARE RIVER, BONE SPRING		0.2
WELL 24	25S	26E	32.0726	-104.154	0	0	[97494] COTTONWOOD DRAW, BONE SPRING (O)		0.4
WELL 2	26S	27E	32.0785	-104.1537	12,759	7,789	[16800] DELAWARE RIVER, BONE SPRING		0.1
WELL 36	25S	27E	32.0798	-104.1498	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
WELL 36	25S	27E	32.0798	-104.1499	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
WELL 36	25S	27E	32.0798	-104.1499	0	0	[16800] DELAWARE RIVER, BONE SPRING; [30216] HAY HOLLOW, BONE SPRING, NORTH		0.3

Data tabulation of wells in Area of Review of the Severitas 2 State SWD 1.

WAYNE MOORE

403 N. MARIENFELD
MIDLAND, TEXAS 79701

RECEIVED

APR 25 1983

O. C. D.
ARTESIA, OFFICE

April 18, 1983

Mr. Leslie A. Clements
Supervisor District II
Energy and Mineral Department
P.O. Drawer DD
Artesia, New Mexico 88210

WAYNE MOORE - AZTEC STATE #1, SEC 2-T26S-R27E, LEASE #L-6791,
EDDY COUNTY, NEW MEXICO

Mr. Clements,

This is in reference to your letter of April 11, 1983, concerning
the above listed lease.

The well was perforated in the Bone Springs Section (perfs. 6125-
6727, 37 perforations) and put on pump for testing. Down hole and
surface equipment problems plagued the operation as testing continued,
thus the testing took much longer than anticipated.

The well, although operating at a small profit, is not sufficiently
productive so as to warrant the drilling of additional Bone Springs
wells on this lease. With that in mind a completion in the Delaware
Section is now in the final planning stage.

(See attached letter). We plan to:

- A. Set a cast iron bridge plug at the top
of the Bone Springs.
- B. Spot 50' of cement on top of this bridge
plug.
- C. Perforate below the zones of interest
and circulate cement 200' into the
8-5/8" casing set at 2330'.
- D. Perforate and test zones of interest
in the Delaware Section.

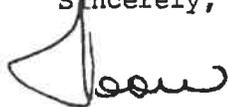
WAYNE MOORE

403 N. MARIENFELD
MIDLAND, TEXAS 79701

Mr. Clements, sorry for the delay in reporting, but we've until recently, been at a loss as to what to do with the well. We will file reports as this work progresses. Please let me know if you require additional information.

Thank you for your help with this problem.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom E. Moore', with a large, stylized initial 'T'.

Tom E. Moore

TEM/mp

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES OF NOTICE	
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OIL CONSERVATION DIVISION

P. O. BOX 208
SANTA FE, NEW MEXICO 87501

Form O-101
Revised 11-1-77

MAY 31 1983

O. C. D.
ARTESIA, OFFICE

3a. Indicate Type of Notice
State Other

3b. State No. & Date of Notice
L-6791

3c. Field and State
Aztec State

3d. Well No.
#1

3e. Field and State
Wildcat - Bone Springs

11. Elevation (Show whether DF, RT, GR, etc.)
3174' GR

12. County
Eddy

SUNDRY NOTICES AND REPORTS ON WELLS

1. Indicate Type of Well
OIL WELL GAS WELL OTHER

Name of Operator
Wayne Moore ✓

Address of Operator
403 N. Marienfeld, Midland

Location of Well
UNIT LETTER H 1980 FEET FROM THE N LINE AND 660 FEET FROM THE E LINE, SECTION 2 TOWNSHIP 26S RANGE 27E

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

REPAIR REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK ALTERING CASING

PLUG AND ABANDON COMMENCE DRILLING OPERATIONS PLUG AND ABANDON

CHANGE PLANS CASING TEST AND CEMENT JOB

OTHER

1. List Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and completion of work, SEE RULE 1103.)

- A. Set cast iron bridge plug at 5700' (top of Bone Springs) and spot cement from 5645' to 5700'. (4-27-83)
- B. Perforate two holes at 4890. (4-27-83)
- C. Pump 1300 sacks class "C" cement, 2% Gel, 5 lbs Salt/sk, .3cfe2, 1/2 lb cello flake, wt. 13.7 yld = 1.38 (4-28-83)
- D. Ran temperature survey - top of cement 700' from surface.
- E. Perforate 4752 - 4798 with 13 holes. (5-12-83)
- F. Acidize and Frac (5-15-83)
- G. Swab test with oil & gas show (5-17-83)
- H. Put on pump for additional testing (5-25-83)

I certify that the information furnished herein is true and complete to the best of my knowledge and belief.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPT.

NO. OF COPIES RECEIVED	
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LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

WATER CONSERVATION DIVISION
 P. O. BOX 2488
 SANTA FE, NEW MEXICO 87501
 DEC 05 1984
 O. C. D.
 ARTESIA, OFFICE

Form C-103
Revised 10-1-70

3a. Indicate Type of Lease
 State Fee

3. State Oil & Gas Lease No.
 E-6791

7. Unit Agreement Name

8. Farm or Lease Name
 Aztec State

9. Well No.
 #1

10. Field and Pool, or Wildcat
 Wildcat-Bone Springs

11. County
 Eddy

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO OPERATE OR PLUG BACK TO A DIFFERENT RESERVOIR.
 USE "APPLICATION FOR PERMIT - " (FORM C-101) FOR SUCH PROPOSALS.)

WELL GAS WELL OTHER: 30-015-23999

Name of Operator
 WAYNE MOORE ✓

Address of Operator
 403 N. Marienfeld, Midland, Texas 79701

Location of Well
 UNIT LETTER H 1980 FEET FROM THE N LINE AND 660 FEET FROM
 THE E LINE, SECTION 2 TOWNSHIP 26S RANGE 27E BLMPL.

15. Elevation (Show whether DF, RT, CR, etc.)
 3174' GL

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
 NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
REPAIR OR ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPER. <input type="checkbox"/>	PLUG AND ABANDONMENT <input checked="" type="checkbox"/>
DRILL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 110B.

Oct. 2, 1984

Spot 25SX Plug @ 4750'

Oct 3, 1984

TAG Plug - Plug in Place
 Set Bridge Plug at 2370'
 Spot 50 Sx Plug on Top of Bridge Plug
 Spot 25 Sx Plug @ 750'
 Spot 50 Sx Plug @ 400'
 Spot Plug 30' to Surface

Oct 4, 1984

Put up Regulation Surface Marker

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

DATE 11/2/84 TITLE Partner DATE November 5, 1984

APPROVED BY Danell Moore TITLE Geologist DATE May 1987

CONDITIONS OF APPROVAL, IF ANY:

STATE OF NEW MEXICO
OIL AND MINERAL DEPARTMENT

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FIELD OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87501

RECEIVED BY
MAR 12 1984
O. C. D.
ARTEBIA, OFFICE

Form C-101
Revised 10-1-78

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO OPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL GAS WELL OTHER: DRY HOLE

Name of Operator: WAYNE MOORE

Address of Operator: 403 N Marienfeld Midland Texas 79701

Location of Well: H 1980 FEET FROM THE N LINE AND 660 FEET FROM E LINE, SECTION 2 TOWNSHIP 26S RANGE 27E NMPM.

11. Elevation (Show whether DP, RT, GR, etc.)
3174' GL

Type of Lease
State Fee

State Oil & Gas Lease No.
L-6791

1. Unit Agreement Name

2. Name of Lease Name
AZTEC STATE

3. Well No.
#1

10. Field and Pool, or WH/col
WILDCAT - P. 210 S. 210 S.

12. County
EDDY

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

<input type="checkbox"/> REMEDIAL WORK	<input checked="" type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> REMEDIAL WORK	<input type="checkbox"/> ALTERING CASING
<input type="checkbox"/> EARLY ABANDON	<input type="checkbox"/> CHANGE PLANS	<input type="checkbox"/> COMMENCE DRILLING OPER.	<input type="checkbox"/> PLUG AND ABANDONMENT
<input type="checkbox"/> ON ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/> CASING TEST AND CEMENT JOG	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> OTHER _____	<input type="checkbox"/>

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1700.

1. Set Bridge Plug @ ~~2320'~~ ^{2370'} in 4 1/2" Casing
 2. Spot 50' cement plug on top of Bridge Plug
 3. Spot 50' cement plug at ~~354'~~ ^{354'} in 4 1/2" casing
 4. Run 1 joint and spot plug to surface in 4 1/2" casing
 5. Put up regulation marker at surface

WELL HISTORY 13 3/8" set at 354' - cement cir.
 8 5/8" set at 2320' - cement cir.
 4 1/2" set at 6333' cement to 700'

Perf. 6125 - 6478
 BP at 5700' 50' cement on top BP
 Perf 4752' - 4798'
 Perf 2840' - 2920'
 Perf 2694 - 2712'

*** ADDITIONAL PLUGS**
 SPOT 25 SX @ 4750' & TAG
 SPOT 25 SX @ 750' - (Top Cmt.)
 NOTIFY OCD 24 hrs Prior
 To setting 1st plug.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

is Leslie A. Clements TITLE PARTNER DATE 3-8-84

Original Signed By
Leslie A. Clements OCD Examiner Hearing - Nov. 8-9, 2023

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. DRAWER DD
ARTESIA, NEW MEXICO 88210

DATE 1-22-85

Wayne Moore
403 N. Marienfield
Midland, Tx. 79701

Gentlemen:

Re: Plugging Reports

Form C-103, Report of Plugging for your Aztec St. 1 H 2-26-27
Lease Well # Unit S-T-R

cannot be approved until a Division representative has made an inspection of the location and found it to be cleared to comply with Division Rules and Regulations. Please check each item in the space provided to indicate that the work has been done.

- () 1. All pits have been filled and leveled.
- () 2. Rat hole and cellar have been filled and leveled.
- () 3. A steel marker 4" in diameter and approximately 4' above mean ground level has been set in concrete. It must show the quarter-quarter section or unit designation, section, township and range numbers which have been permanently stenciled or welded on the marker.
- () 4. The location has been leveled as nearly as possible to original top ground contour and has been cleared of all junk and equipment.
- () 5. The dead men and tie downs have been cut and removed.
- () 6. If a one well lease or last remaining well on lease, the battery and burn pit locations have been leveled and cleared of all junk and equipment.

The above are minimum requirements and no plugging bond will be cancelled until all locations for plugged and abandoned wells have been inspected and Form C-103 approved.

When all of the work outlined above has been done, please notify this office by filling in the blank form below and returning this letter to us so that our representative will not have to make more than one trip to the location.

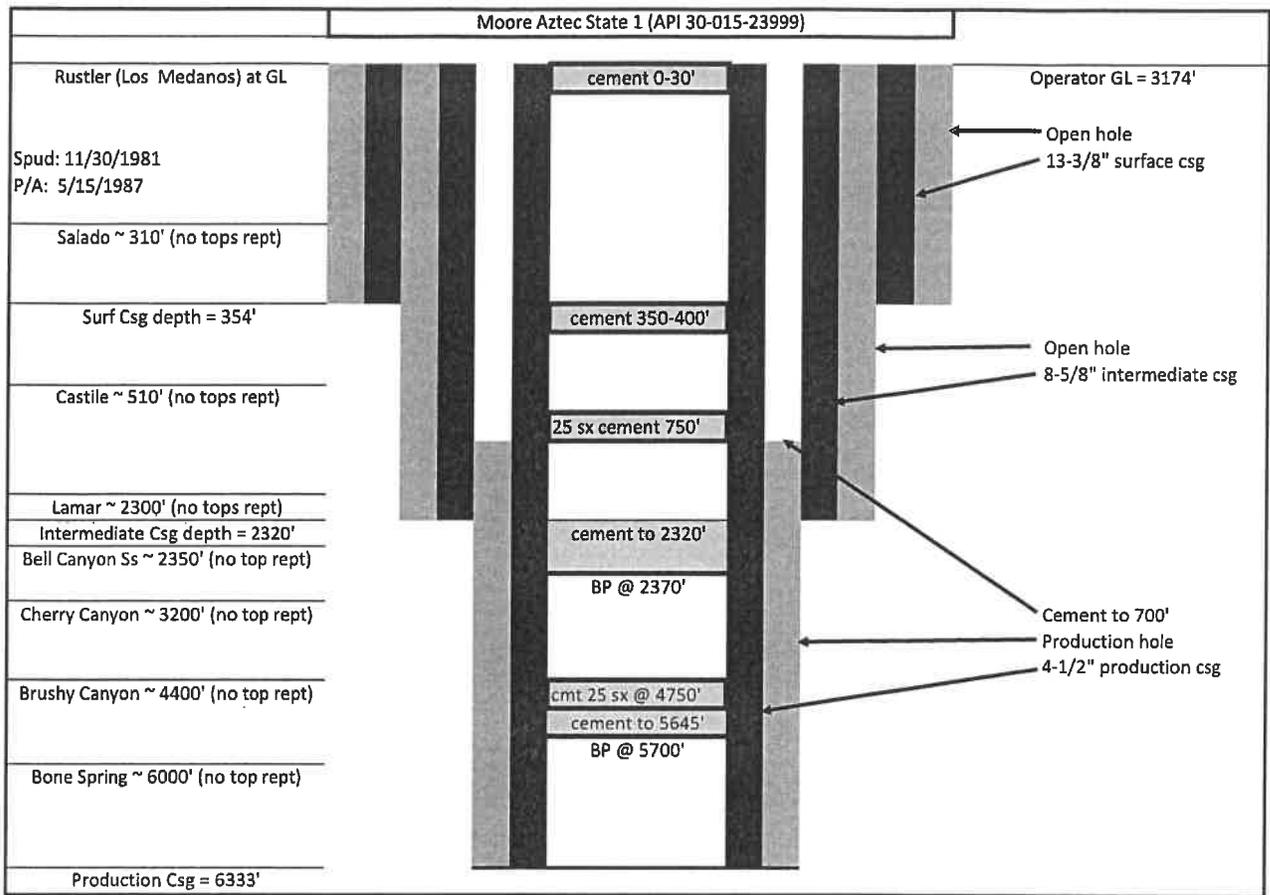
OIL CONSERVATION DIVISION

Larry Brooks
DISTRICT GEOLOGIST

FILL IN BELOW AND RETURN

I certify that the above work has been done and the _____
Lease

is ready for your inspection and approval.



Schematic of plugging detail of Moore Aztec State 1 (API 30-015-23999).

ATTACHMENT 3

Item VII

Item	Well 5.5" tubing	Severitas 2 State SWD #1
1)	Permit Max Rate (bwpd)	15,000
1)	Permit Avg Daily Rate	12,500
2)	System	closed
3)	Permit Max Pressure (psig)	468
3)	Permit Avg Pressure (psig)	400
Water Requirements		
4)	Reinjected produced water	source WQ of injectate and receiving formation is not required per application
5)	Disposal Zone Water	for non-productive in 1 mile
	Chicken Hawk State 1 (API 3001533682)	
	Results on next page	

WATER SAMPLES REPRESENTATIVE OF WATER BEING INJECTED INTO THE PROPOSED SWD WELL												
Bone Spring												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2011128832	Craig St. Com	1H	William D Polk	9/30/2011	9/21/2011	1.13	3.15	194940.50	6.80		2390.00	664.00
Delaware												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2011128361	Chicken Hawk State	1	William D Polk	9/28/2011	9/13/2011	1.12	3.17	189454.89	6.90		4133.30	725.18

Water Sample Representative of Receiving Formation Water

ATTACHMENT 4

Item VIII

Formation/Geologic Feature Tops & Datum	Lithology	TVD (from Datum)	Z (SSITVD)
KB (Kelly Bushing)	Datum	0.0	3200.5
GL (ground surface)	Ground Surface	28.5	3172.0
01 - Rustler (Los Medanos at surface)	Mudstone, Salt & Anhydrite	28.5	3172.0
02 - Salado	Gypsum & Anhydrite	310.5	2890.0
03 - Castile	Anhydrite & Salt	514.8	2685.7
04 - Lamar	Carbonate	2343.3	857.2
05 - Bell Canyon	Sandstone	2376.9	823.6
06 - Cherry Canyon	Sandstone, Siltstone & Carbonate	3193.6	6.9
07 - Brushy Canyon	Sandstone, Mudstone & Carbonate	4405.8	-1205.3
08 - Bone Spring	Carbonate	6011.7	-2811.2

Geologic prognosis tops of all formations to be encountered in the Severitas 2 State SWD 1.

ATTACHMENT 5

Item IX

Proposed acid stimulation as part of the completion for the Severitas 2 State SWD 1.

1. MI/RU Petroplex Acid and Gladiator N2 Unit
2. Perform pressure pumping checklist and record in wellview.
3. Rig up Petroplex acid lines and tie in to 4-1/16" wing valve on tree. Test all lines against wing valve to 2,100 psi for 5 min
 - Install tee in Petroplex lines to allow N2 line to be rigged up. Test all N2 lines against wing valve to 2,100 psi for 5 min
4. Pump Acid job per Petroplex Pump Schedule diverting with N2 as required.
 - Max pressure for job will be 468 psi
 - Discuss with WOE for operational pressure limits during job.
 - Diversion will be treated with 1,250 scf/bbl of N2
5. Once acid is complete R/D Petroplex and Gladiator
6. Secure and shut in well.

ATTACHMENT 6

Item X

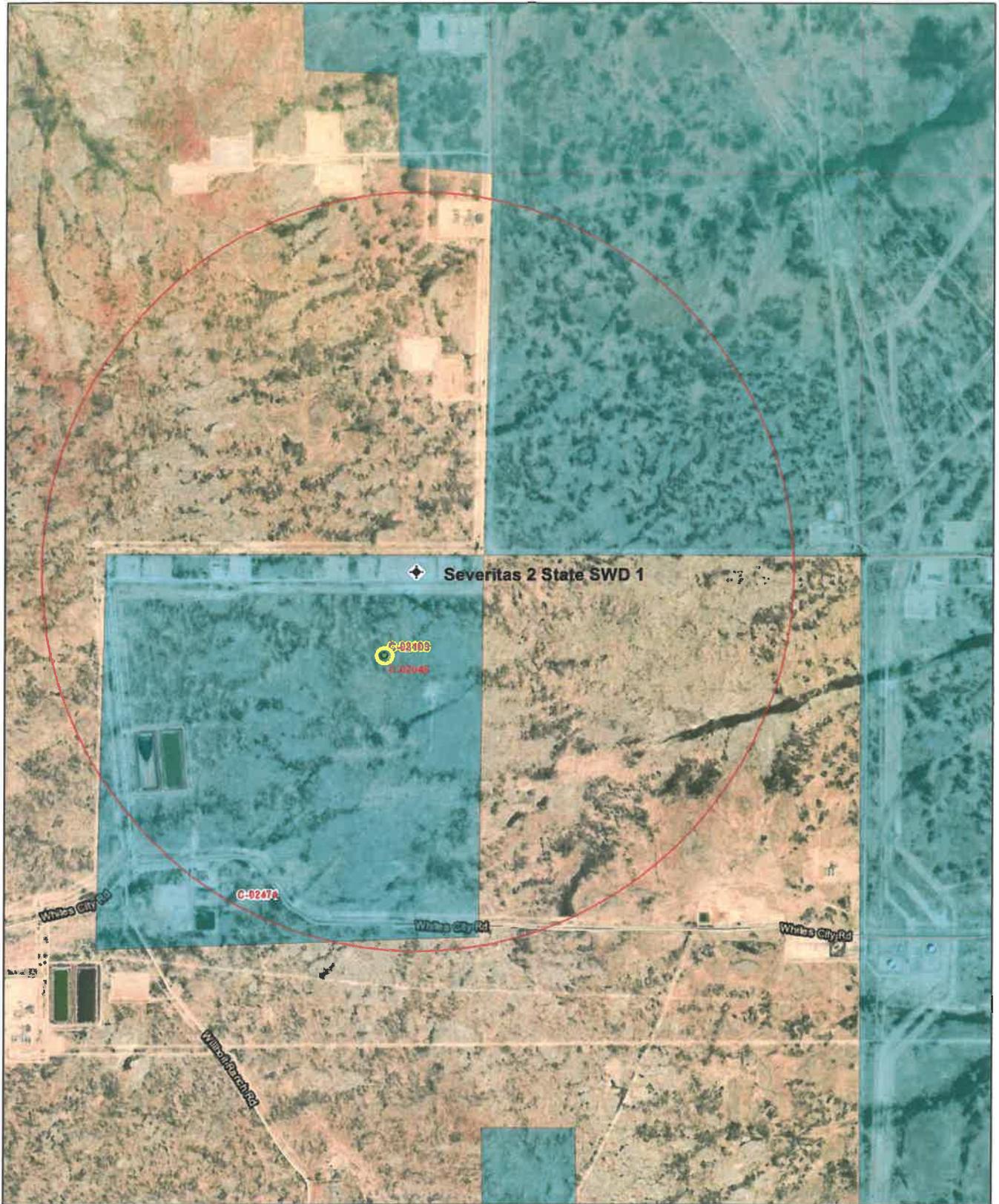
No logs have been run on the Severitas 2 State SWD 1. This is a planned well.

The following open hole logs are planned to be run if hole conditions allow: gamma-ray, resistivity, neutron-density, sonic, and image logs.

Production casing will be installed from surface to near the base of the Brushy Canyon Formation. A total of approximately six Diagnostic Fracture Injection Tests (DFITs) are planned for the Bell Canyon, Cherry Canyon and Brushy Canyon Formations. After the DFITs are run, the Brushy Canyon will be plugged. The Cherry Canyon and Bell Canyon will be perforated to the base of the Lamar Limestone. A step rate test will be run on the Bell Canyon and Cherry Canyon Formation permitted injection interval.

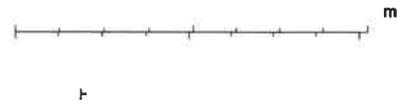
ATTACHMENT 7

Item XI



-
-
-
-

Both the C-02103 and the C-02048 permits have expired with no evidence wells were drilled. The C-02474 was drilled in 1913 and may have not been used past 1918. No lab reports available. The well is confined to the first 100 ft in the Alluvium. No Rustler Aquifer exists in the immediate area.





New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 465436 Transaction Desc: C 02048 File Date: 01/31/1983

Primary Status: EXP Expired Permit
 Secondary Status: EXP Expired
 Person Assigned: *****
 Applicant: DELAWARE RANCH INC

Events

Date	Type	Description	Comment	Processed By
 01/31/1983	APP	Application Received	*	*****
02/02/1983	FIN	Final Action on application		*****
02/02/1983	WAP	General Approval Letter		*****
03/01/1984	EXP	Expired Permit (well log late)		*****
05/20/2011	ARV	Rec & Arch - file location	C 02048 Box: 1870	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 02048		3		STK 72-12-1 LIVESTOCK WATERING

****Point of Diversion**

C 02048	579582	3549072*	
---------	--------	----------	---

An () after northing value indicates UTM location was derived from PLSS - see Help

Remarks

LOCATION: DELEWARE RANCH PROPERTIES

ABSTRACTOR'S NOTE: PER LETTER DATED 03/01/1984, THIS PERMIT IS EXPIRED. NO WELL RECORD ON FILE WITH THE OFFICE OF THE STATE ENGINEER.

Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.

- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved
 Action Date: 02/02/1983
 Log Due Date: 02/29/1984
 State Engineer:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:16 AM

TRANSACTION SUMMARY



New Mexico Office of the State Engineer Water Right Summary



WR File Number: C 02103 **Subbasin:** C **Cross Reference:** -
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING
Primary Status: EXP EXPIRED
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: DELAWARE RANCH INC

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
468575	72121	1984-05-14	EXP	EXP	C 02103	T		3	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q	64Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 02103				2	02	26S 27E	579582	3549072*	

An () after northing value indicates UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:12 AM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 468575 Transaction Desc: C 02103 File Date: 05/14/1984

Primary Status: EXP Expired Permit
Secondary Status: EXP Expired
Person Assigned: *****
Applicant: DELAWARE RANCH INC

Events

Date	Type	Description	Comment	Processed By
 05/14/1984	APP	Application Received	*	*****
05/14/1984	FIN	Final Action on application		*****
05/14/1984	WAP	General Approval Letter		*****
06/03/1985	EXP	Expired Permit (well log late)		*****
05/23/2011	ARV	Rec & Arch - file location	C 02103 Box: 1871	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 02103		3		STK 72-12-1 LIVESTOCK WATERING
**Point of Diversion				
C 02103		579582	3549072*	

An () after northing value indicates UTM location was derived from PLSS - see Help

Remarks

LOCATION: DELAWARE RANCH PROPERTIES.

ABSTRACTOR'S NOTE: PER LETTER DATED 06/03/1985, THIS PERMIT IS EXPIRED. NO WELL RECORD ON FILE WITH THE OFFICE OF THE STATE ENGINEER.

Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved
Action Date: 05/14/1984
Log Due Date: 05/31/1985
State Engineer:

The data is furnished by the NMOSE/TSC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:14 AM

TRANSACTION SUMMARY

(W. & W.) Kelly Polk Wala
Revised December 1975

2-03119
24th

198101

IMPORTANT — READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM.

Declaration of Owner of Underground Water Right

Coolsbad

BASIN NAME:

Declaration No. C-2474 Date received December 12, 1995

STATEMENT

- Name of Declarant Martha Skem
Mailing Address 321 South Canyon, Coolsbad
County of Eddy, State of N. Mex
- Source of water supply Shallow
(artesian or shallow water aquifer)
- Describe well location under one of the following subheadings:
a. $\frac{1}{4}$ SE $\frac{1}{4}$ SW of Sec. 2 Twp. 26S, Rge. 27E, N.M.P.M., in
Eddy County.
b. Tract No. _____ of Map No. _____ of the _____
c. X = _____ feet, Y = _____ feet, N. M. Coordinate System _____ Zone
in the _____ Grant.
On land owned by State of N. Mex
- Description of well: date drilled 1913 driller Hepler Bros depth 100 feet.
outside diameter of casing 6 inches; original capacity 5 gal. per min.; present capacity 5
gal. per min.; pumping lift _____ feet; static water level _____ feet (above) (below) land surface;
make and type of pump Windmill
make, type, horsepower, etc., of power plant _____
Fractional or percentage interest claimed in well 100%
- Quantity of water appropriated and beneficially used 3 acre ft.
(acre feet per acre) (acre feet per annum)
for Livestock purposes:
- Acreage actually irrigated _____ acres, located and described as follows (describe only lands actually irrigated):

Subdivision	Sec.	Twp.	Range	Acres Irrigated	Owner

(Note: location of well and acreage actually irrigated must be shown on plot on reverse side.)

- Water was first applied to beneficial use _____ month _____ day _____ year 1913 and since that time has been used fully and continuously on all of the above described lands or for the above described purposes except as follows: _____

8. Additional statements or explanations. These wells and tanks were put into use between 1912 and 1918 by the Hepler Bros. Since then the Ranch has changed ownership from James Pardee Britton, Fowler Bros, Oklahoma Ranch Inc, and Martha Skem.

I, _____ being first duly sworn upon my oath, depose and say that the above is a full and complete statement prepared in accordance with the instructions on the reverse side of this form and submitted in evidence of ownership of a valid underground water right, that I have carefully read each and all of the items contained therein and that the same are true to the best of my knowledge and belief.

Martha W. Skem, declarant.

Subscribed and sworn to before me this 1 day of DECEMBER, A.D. 1995

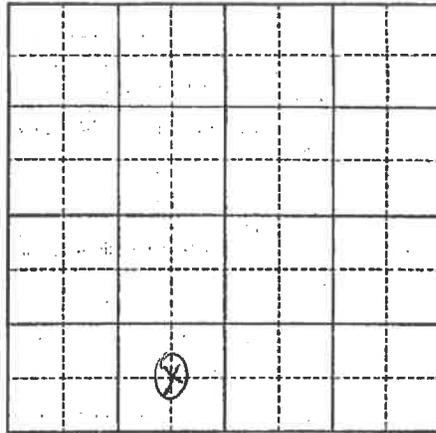
My commission expires 02/22/99 _____ Notary Public

FILED UNDER NEW MEXICO LAW A DECLARATION IS ONLY A STATEMENT OF FACTS AND DOES NOT CONSTITUTE APPROVAL OR REJECTION OF THE CLAIM ACCEPTANCE FOR FILING.

T-198101

Locate well and areas actually irrigated as accurately as possible on following plat:

Section (s) _____ Township _____ Range _____ N. T. R. T.



INSTRUCTIONS

Declaration shall be executed (preferably typewritten) in triplicate and must be accompanied by a \$1.00 filing fee. Each of triplicate copies must be properly signed and attested.

A separate declaration must be filed for each well in use.

All blanks shall be filled out fully. Required information which cannot be sworn to by declarant shall be supplied by affidavit of person or persons familiar with the facts and shall be submitted herewith.

Secs. 1-3. Complete all blanks.

Sec. 4. Fill out all blanks applicable as fully as possible.

Sec. 5. Irrigation use shall be stated in acre feet of water per acre per year applied on the land. If used for domestic, municipal, or other purposes, state total quantity in acre feet used annually.

Sec. 6. Describe only the acreage actually irrigated. When necessary to clearly define irrigated acreages, describe to nearest 2 1/4 acre subdivision. If located on unsurveyed lands, describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily-located natural object.

Sec. 7. Explain and give dates as nearly as possible of any years when all or part of acreage claimed was not irrigated.

Sec. 8. If well irrigates or supplies supplemental water to any other land than that described above, or if land is also irrigated from any other source, explain under this section. Give any other data necessary to fully describe water right.

If additional space is necessary, use a separate sheet or sheets and attach securely hereto.

SK



STATE OF NEW MEXICO

STATE ENGINEER OFFICE
ROSWELL

THOMAS C. TURNEY
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

December 12, 1995

FILES: ^{C-2474} ~~C-2473~~ thru C-2481;
LWD-C-64 thru LWD-C-70

Martha Skeen
321 South Canyon
Carlsbad, NM 88220

Dear Ms. Skeen:

Enclosed are your copies of Declaration of Owner of Underground Water Right, and Declaration of Ownership of Livestock Water Dam or Tank, as numbered above, which have been accepted for filing in the office of the State Engineer.

Please refer to these numbers in all future correspondence concerning these declarations.

The acceptance for filing of these declarations by this office does not indicate affirmation or rejection of the statements contained therein.

Sincerely,

Richard C. Cibak
Area Supervisor

tg
Enclosures
cc: Santa Fe
Hydro Section

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
95 DEC 15 AM 10 51

ATTACHMENT 8

Item XII



George T. (Tom) Merrifield, Jr., PG
SWD DRP Geologist
Chevron U.S.A. Inc.
6301 Deauville Blvd
Midland, TX 79706
Phone +1 661-448-7489
tommerrifield@chevron.com

April 10, 2023

Dylan Fuge, Acting Director
Oil Conservation Division
1220 South St. Francis Dr.
Sante Fe, New Mexico 87505

**Re: Affirmation Statement C-108 Applications
Papa Squirrel SWD 1 and Severitas 2 State SWD 1**

Dear Mr. Fuge:

With the increase of induced seismicity due to deep produced water injection, in 2021 Chevron decided to evaluate the potential for shallow injection in both Texas and New Mexico with exhaustive manpower and technical effort.

This effort led to the following technical evaluations of the DMG: (1) the location of high confident shallow faults in our active development areas using available seismic reflection data (2) assessment of seismic risk of any such shallow faults, (3) other geologic and reservoir engineering assessments addressing storage capabilities, potential impacts, and mitigation, and (4) collaboration and joint efforts with other operators.

Both the Papa Squirrel SWD 1 and Severitas 2 State SWD 1 are locations which we find no indication of open faults at the surface or in the subsurface and no indication of hydraulic connection between the proposed injection zone (Bell Canyon and Cherry Canyon) and an underground source of drinking water (USDW). Both locations have low potential for fault slip and induced seismicity.

Respectively yours,

G. T. Merrifield, Jr., PG
TX (#10838) and CA (#9274)

ATTACHMENT 9

Item XIII

Notices will be sent to the following surface owners, leasehold operators, mineral interest owners, etc., within ½ mile radius.

- Bureau of Land Management
- State Land Office
- COG Operating, LLC

Note: Chevron is the operator of the wells within the 0.5 mile area of review shown in Attachment 1.

Tab C: Support Letters

Stefan Hussenoeder
22777 Springwoods Village Parkway
Spring, TX 77389
(364) 502-0163 (o)
(713) 208-7967 (m)
hussenoeder@exxonmobil.com



November 2, 2023

New Mexico Oil Conservation Division
Via e-filing in Case No. 23686 and via email to OCD.Engineer@emnrd.nm.gov

Re: Support for Chevron USA Inc.'s Papa Squirrel State SWD #1 well, proposed to be located in Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico.

Dear New Mexico Oil Conservation Division:

XTO respectfully submits this letter in support of Chevron USA Inc.'s ("Chevron") Papa Squirrel State SWD #1 well, proposed to be located in Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, and proposed to inject into the Bell Canyon/Cherry Canyon formations. XTO has had discussions with Chevron regarding the location of the proposed injection well and the target injection zone, and understands it is a pilot project with a primary purpose of information gathering rather than large scale disposal.

XTO supports Chevron's proposed Papa Squirrel State SWD #1 well, and supports approval of Chevron's application in Case No. 23686.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stefan Hussenoeder', written over a horizontal line.

Stefan Hussenoeder
Geoscience Technology Advisor
XTO, An ExxonMobil Subsidiary

Stefan Hussenoeder
22777 Springwoods Village Parkway
Spring, TX 77389
(364) 502-0163 (o)
(713) 208-7967 (m)
hussenoeder@exxonmobil.com



November 2, 2023

New Mexico Oil Conservation Division
Via e-filing in Case No. 23686 and via email to OCD.Engineer@emnrd.nm.gov

Re: Support for Chevron USA Inc.'s Severitas 2 State SWD #1 proposed to be located in Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico

Dear New Mexico Oil Conservation Division:

XTO respectfully submits this letter in support of Chevron USA Inc.'s ("Chevron") Severitas 2 State SWD #1 well, proposed to be located in Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico, and proposed to inject into the Bell Canyon/Cherry Canyon formations. XTO has had discussions with Chevron regarding the location of the proposed injection well and the target injection zone, and understands it is a pilot project with a primary purpose of information gathering rather than large scale disposal.

XTO supports Chevron's proposed Severitas 2 State SWD #1 well, and supports approval of Chevron's application in Case No. 23687.

Sincerely,

A handwritten signature in black ink that reads 'Stefan Hussenoeder'.

Stefan Hussenoeder
Geoscience Technology Advisor
XTO, An ExxonMobil Subsidiary



Coterra Energy Inc.
Permian Business Unit
6001 Deauville Blvd
Suite 300N
Midland, TX 79706

T 432-571-7800
F 432-571-7832
coterra.com

October 23, 2023

New Mexico Oil Conservation Division

Via e-filing in Case No. 23686 and via email to OCD.Engineer@emnrd.nm.gov

Re: Support for Chevron USA Inc.'s Papa Squirrel State SWD #1 well, proposed to be located in Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico.

Dear New Mexico Oil Conservation Division:

[Insert entity name] respectfully submits this letter in support of Chevron USA Inc.'s ("Chevron") Papa Squirrel State SWD #1 well, proposed to be located in Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico, and proposed to inject into the Bell Canyon/Cherry Canyon formations. [Entity name] has had discussions with Chevron regarding the location of the proposed injection well and the target injection zone and supports Chevron's proposal.

Granting the proposed application is in the interest of conservation, will prevent waste and will protect correlative rights. Additionally, the consideration of and granting the application based upon evidence adduced at the hearing will demonstrate that the Division has in place regulations and procedure for the management and disposal of produced water in a manner that allows for the development of the State's oil and gas resources for the benefit of the people while protecting the environment. Chevron has evaluated the potential impacts of the proposed well and its analysis has demonstrated that it will not interfere with existing or future oil and gas production within the Bell Canyon and Cherry Canyon formations and will reduce the potential for induced seismicity associated with deeper injection wells. The information generated by this pilot project will provide the Division and other operators with valuable information for the disposition of produced water.

In sum, Coterra Energy supports Chevron's proposed Papa Squirrel State SWD #1 well, and supports approval of Chevron's application in Case No. 23686.

Sincerely,

Phillip G. Levasseur
Manager, Regulatory Compliance
Coterra Energy



Coterra Energy Inc.
Permian Business Unit
6001 Deauville Blvd
Suite 300N
Midland, TX 79706

T 432-571-7800
F 432-571-7832
coterra.com

October 23, 2023

New Mexico Oil Conservation Division

Via e-filing in Case No. 23687 and via email to OCD.Engineer@emnrd.nm.gov

Re: Support for Chevron USA Inc.'s Severitas 2 State SWD #1 proposed to be located in Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico

Dear New Mexico Oil Conservation Division:

[Insert entity name] respectfully submits this letter in support of Chevron USA Inc.'s ("Chevron") Severitas 2 State SWD #1 proposed to be located in Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico, and proposed to inject into the Bell Canyon/Cherry Canyon formations. [Entity name] has had discussions with Chevron regarding the location of the proposed injection well and the target injection zone and supports Chevron's proposal.

Granting the proposed application is in the interest of conservation, will prevent waste and will protect correlative rights. Additionally, the consideration of and granting the application based upon evidence adduced at the hearing will demonstrate that the Division has in place regulations and procedure for the management and disposal of produced water in a manner that allows for the development of the State's oil and gas resources for the benefit of the people while protecting the environment. Chevron has evaluated the potential impacts of the proposed well and its analysis has demonstrated that it will not interfere with existing or future oil and gas production within the Bell Canyon and Cherry Canyon formations and will reduce the potential for induced seismicity associated with deeper injection wells. The information generated by this pilot project will provide the Division and other operators with valuable information for the disposition of produced water.

In sum, Coterra Energy supports Chevron's proposed Severitas 2 State SWD #1 well, and supports approval of Chevron's application in Case No. 23687.

Sincerely,

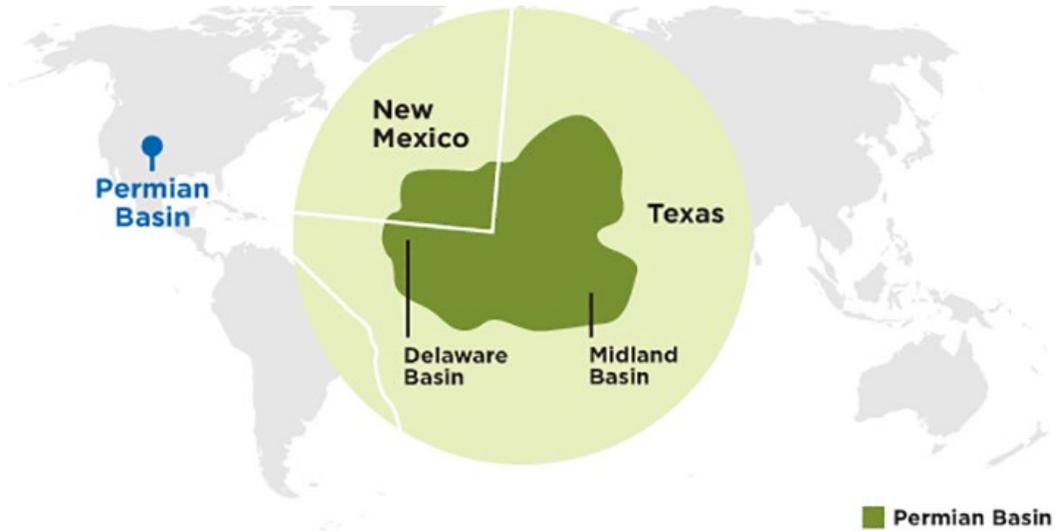
Phillip G. Levasseur

Manager, Regulatory Compliance

Coterra Energy

Tab D: Consolidated Hearing Presentation

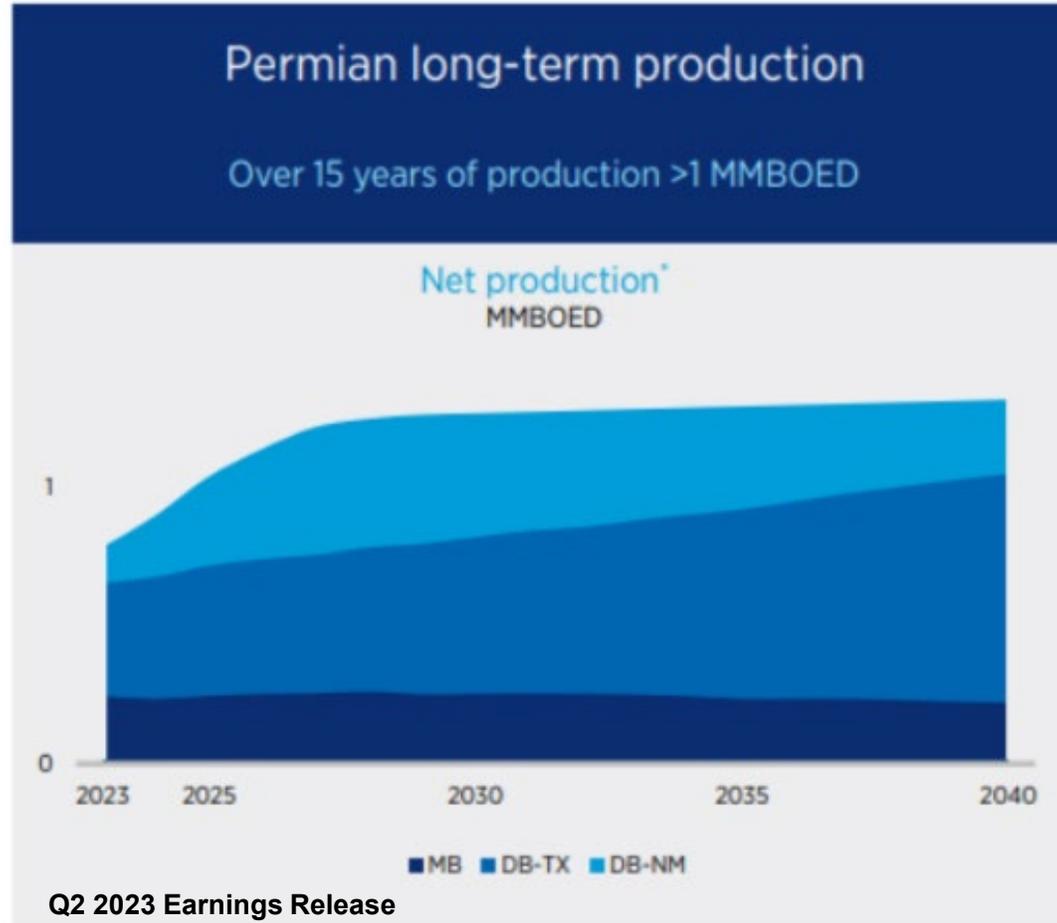
Chevron Permian Operations and Long-Term Focus



Chevron currently operates a total of 68 active SWD wells within the Permian Basin with six in New Mexico.

	Name	Land area
	District of Columbia	39,000 acres
	Rhode Island	660,000 acres
	Delaware	1,200,000 acres
	MCBU	2,200,000 acres
	Connecticut	3,100,000 acres

2021 CID



Chevron is committed to New Mexico and plans to increase production into the next decade.

Chevron SWD Pilot Project: Opportunities and Benefits

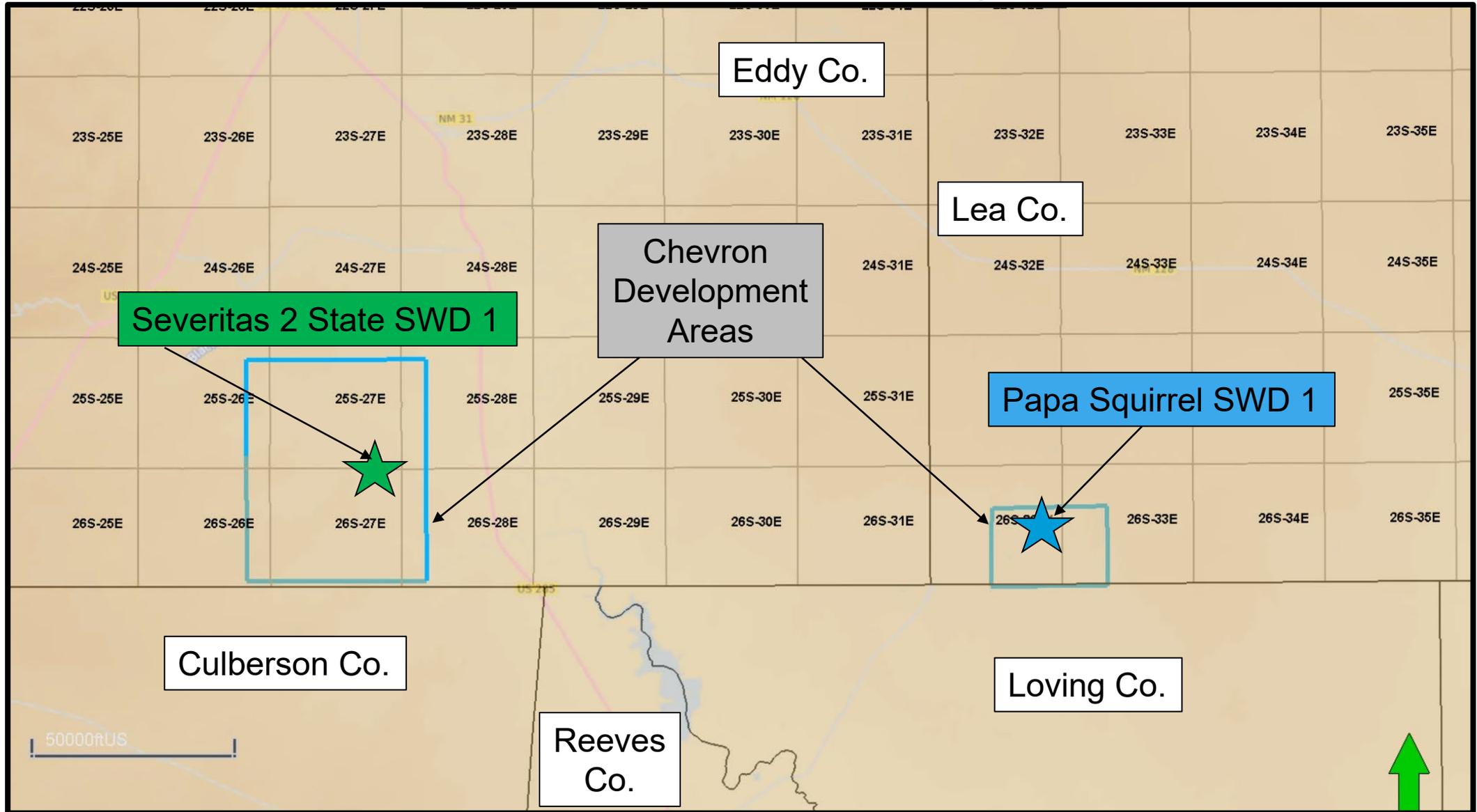
- Since 2021 Chevron has undertaken manpower-intensive, regional, sub-regional, and local investigations of Delaware Mountain Group (DMG) SWD reservoir potential, risks, and correlative rights and waste issues in the Permian Basin.
- This investigation driven by:
 - Need for additional water disposal options to address high volumes of produced water from Bone Spring and Wolfcamp formations.
 - Need for disposal options that do not impair correlative rights and that prevent waste. Certain DMG areas are depleted or geology indicates low likelihood of unknown oil in the area, and therefore good option for disposal.
 - Low potential for induced seismicity.
 - Need to have disposal options that are protective of underground sources of drinking water.
- Chevron developed a proposal for a 2-well SWD pilot project that are theoretically sound in application, but also contain a surveillance, analysis, and mitigation plan to address correlative rights, waste, and protection of underground sources of drinking water.
- Chevron presented this plan to an operator working group, met numerous times, solicited and incorporated feedback into the plan, and secured their support for the proposal presented herein.
- Chevron also met with the NMOCD and the NMSLO.

SWD Pilot Project: Opportunities and Benefits

- Chevron selected the Papa Squirrel and Severitas SWDs as pilot SWDs due to variation in injection thickness, containment zones, and the low potential for adverse impacts to offset production.
- Well bore design (3-string casing) will protect the aquifer.
- Targeted operational injection is the Bell Canyon and Cherry Canyon formations. No nearby DMG production.
- Chevron is proposing data gathering and reporting programs, which will create greater data sets regarding the potential to use DMG for injection.
- Chevron is also proposing monitoring programs, to address impacts to correlative rights and waste if such issues arise during the course of operation.
- Chevron has conducted a thorough review of technical field, subsurface and literature data to plan for and propose locations to mitigate seismicity.

- Chevron supports open data collection and dissemination to support broad learnings and collaboration.

Location Map of Chevron Pilot Project SWD Wells



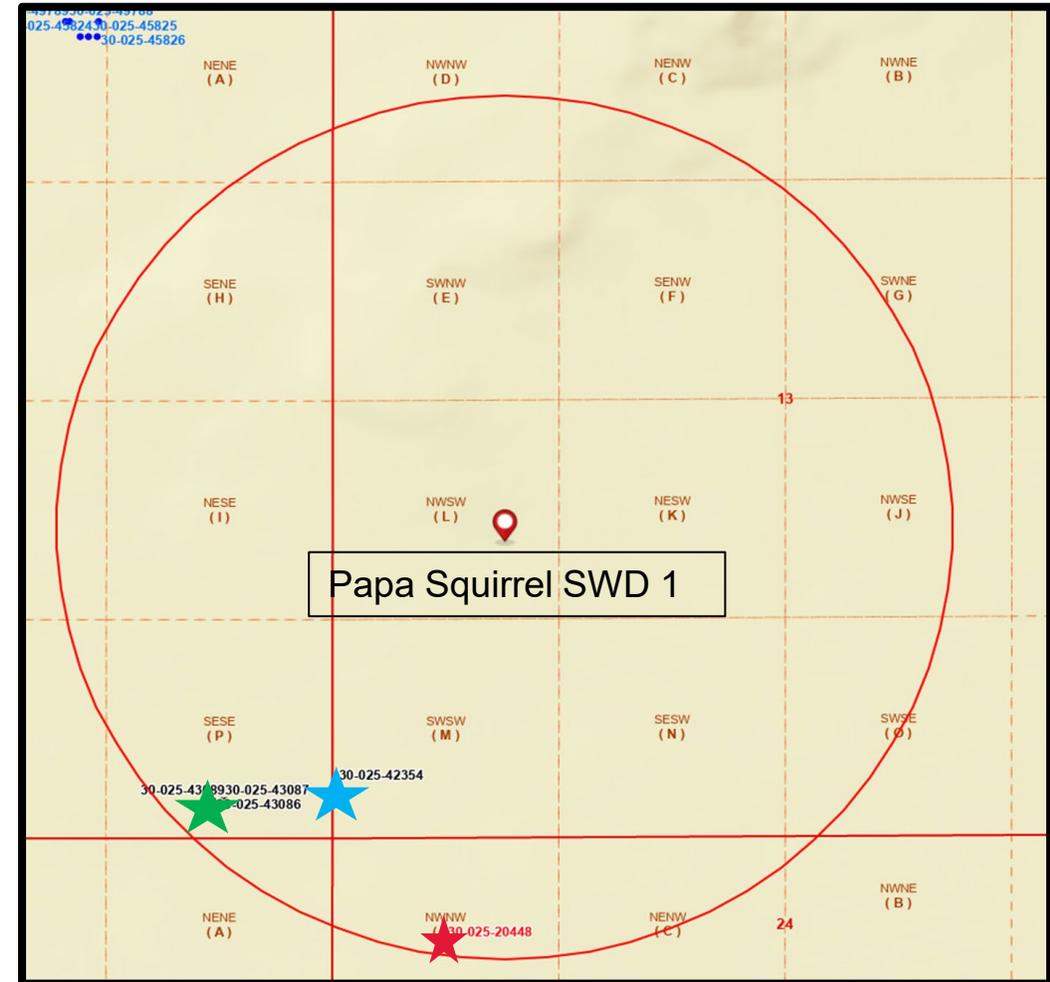
Papa Squirrel SWD: Wells Penetrate DMG in 1/2-Mile Radius

AOR wells

- Three active Bone Spring horizontal producers
 - All Chevron operated ★
- No DMG production within 1/2 - 2 miles
- NGL Devonian-Silurian SWD ★
- The closest Delaware Mountain Group (DMG) producers lie 1.5-2.0 miles to the southeast; all three wells produce less than 1 barrel per day (B/D).

API	Well Name	Well Type	Well Status	OGRID Name	Production Target	Plug Date	Miles from SWD
30-025-43086	SD WE 14 FEDERAL P7 #003H	Oil	Active ★	CHEVRON U S A INC	Bone Spring		0.4
30-025-43087	SD WE 14 FEDERAL P7 #004H	Oil	Active ★	CHEVRON U S A INC	Bone Spring		0.4
30-025-43089	SD WE 23 FEDERAL P7 #004H	Oil	Active ★	CHEVRON U S A INC	Bone Spring		0.4
30-025-42354	SALADO DRAW SWD 13 #001	SWD	Active ★	NGL WATER SOLUTIONS PERMIAN, LLC	Devonian-Silurian		0.3
30-025-20448	PRE-ONGARD WELL #002	Oil	Plugged (site released) ★	PRE-ONGARD WELL OPERATOR		8/20/1963	0.4

Abandonment report provided ★

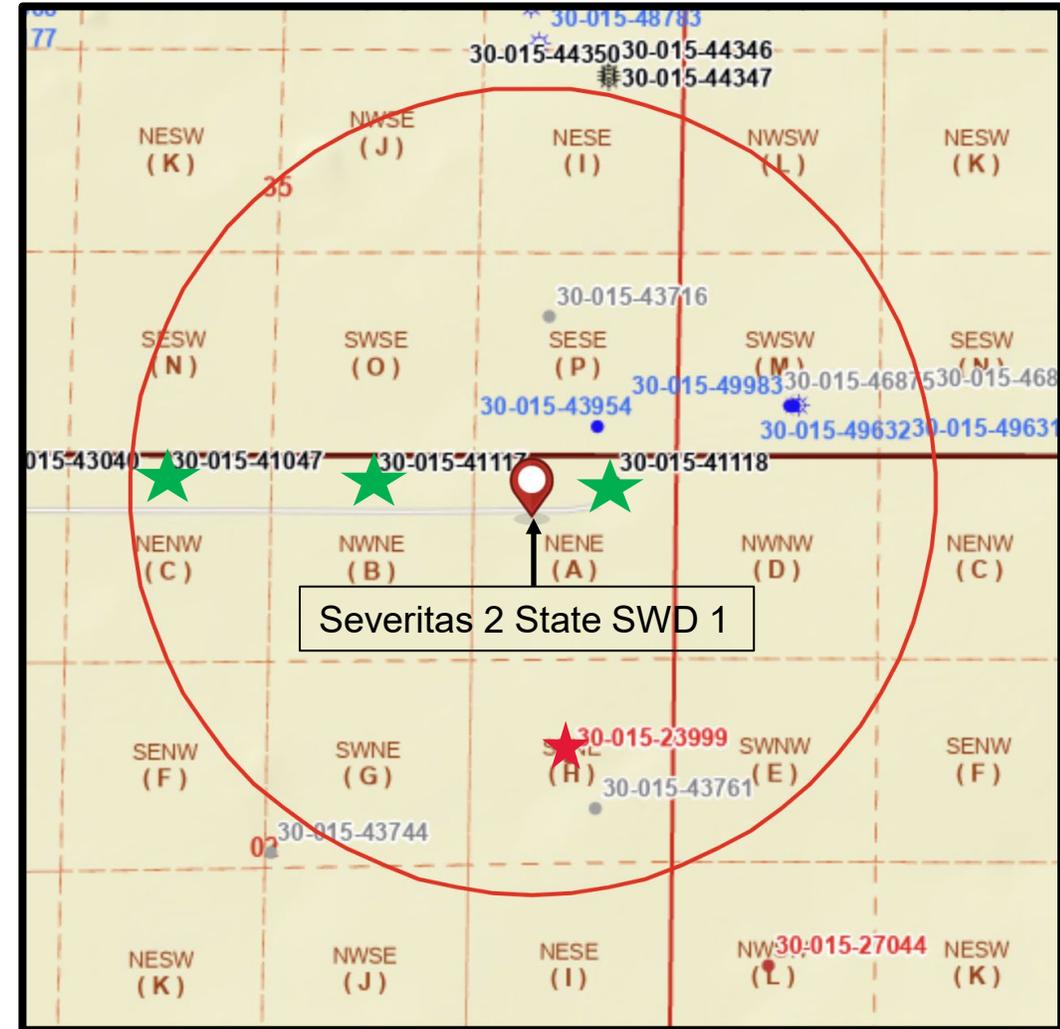


Severitas SWD: Wells Penetrate DMG in 1/2-Mile Radius

AOR wells

- Three active Bone Spring horizontal producers
 - All Chevron operated ★
- No DMG production within 2 miles
- No DMG SWD or EOR injection

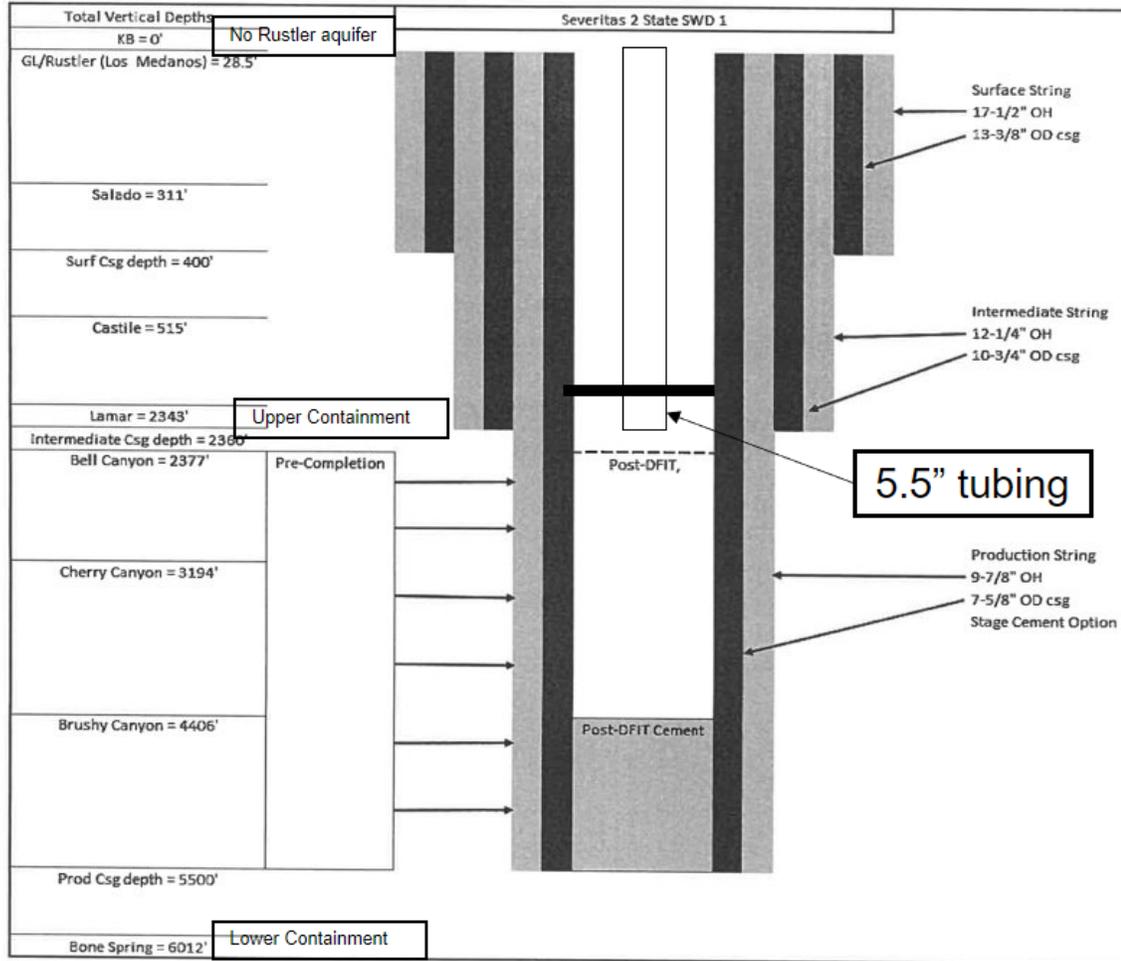
API	Well Name	Well Type	Well Status	OGRID Name	Production Target	Plug Date	Miles from SWD
30-015-46875	ATTICUS STATE COM #706C	Gas	Cancelled	COG OPERATING LLC	Wolfcamp		0.3
30-015-41047	SKEEN 2 26 27 STATE #002H	Oil ★	Active	CHEVRON U S A INC	Bone Spring		0.4
30-015-41117	SKEEN 2 26 27 STATE #003H	Oil ★	Active	CHEVRON U S A INC	Bone Spring		0.2
30-015-43716	GRYNBERG 11 FEDERAL COM #006C	Oil	Cancelled	CIMAREX ENERGY CO.	Bone Spring		0.2
30-015-23999	PRE-ONGARD WELL #001	Oil ★	Plugged (site released)	PRE-ONGARD WELL OPERATOR	Bone Spring	5/15/1987	0.3
30-015-43954	SAGE 35 B2PA FEDERAL COM #001H	Oil	New (abandoned location)	CHEVRON U S A INC	Bone Spring		0.2
30-015-43761	WHITE CITY 14 FEDERAL #016C	Oil	Cancelled	CIMAREX ENERGY CO.	Bone Spring		0.4
30-015-41118	SKEEN 2 26 27 STATE #004H	Oil ★	Active	CHEVRON U S A INC	Bone Spring		0.1
30-015-49632	ATTICUS STATE COM #705H	Gas	New (abandoned location)	COG OPERATING LLC	Wolfcamp		0.3
30-015-49633	ATTICUS STATE COM #706H	Oil	New (abandoned location)	COG OPERATING LLC	Wolfcamp		0.3
30-015-49983	ATTICUS STATE COM #522H	Oil	New	COG OPERATING LLC	Bone Spring		0.3



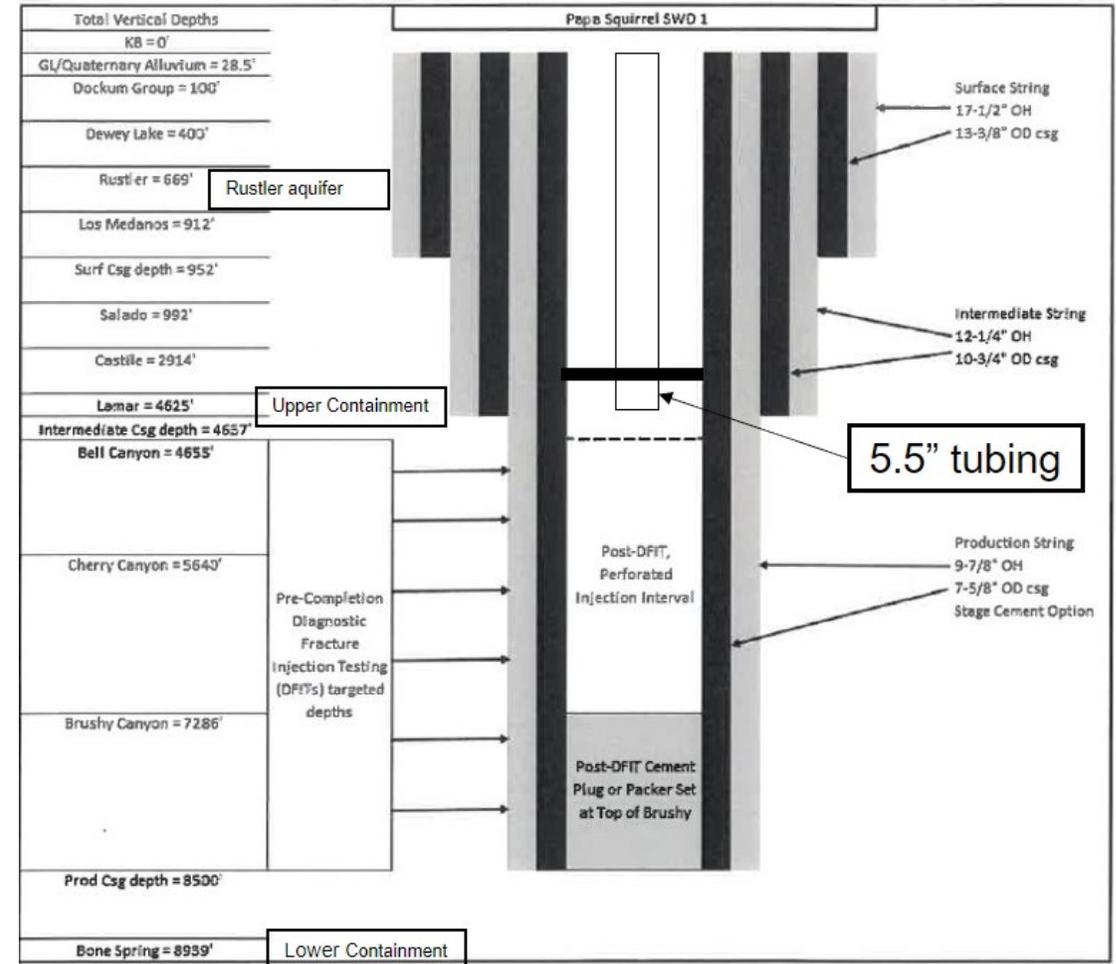
Abandonment report provided ★

Casing Design Protects Aquifer

Severitas 2 State SWD 1



Papa Squirrel SWD 1



Notifications

Severitas 2 State SWD 1

- Proof of Notice:
 - New Mexico State Land Office
 - Bureau of Land Management
 - COG Operating LLC

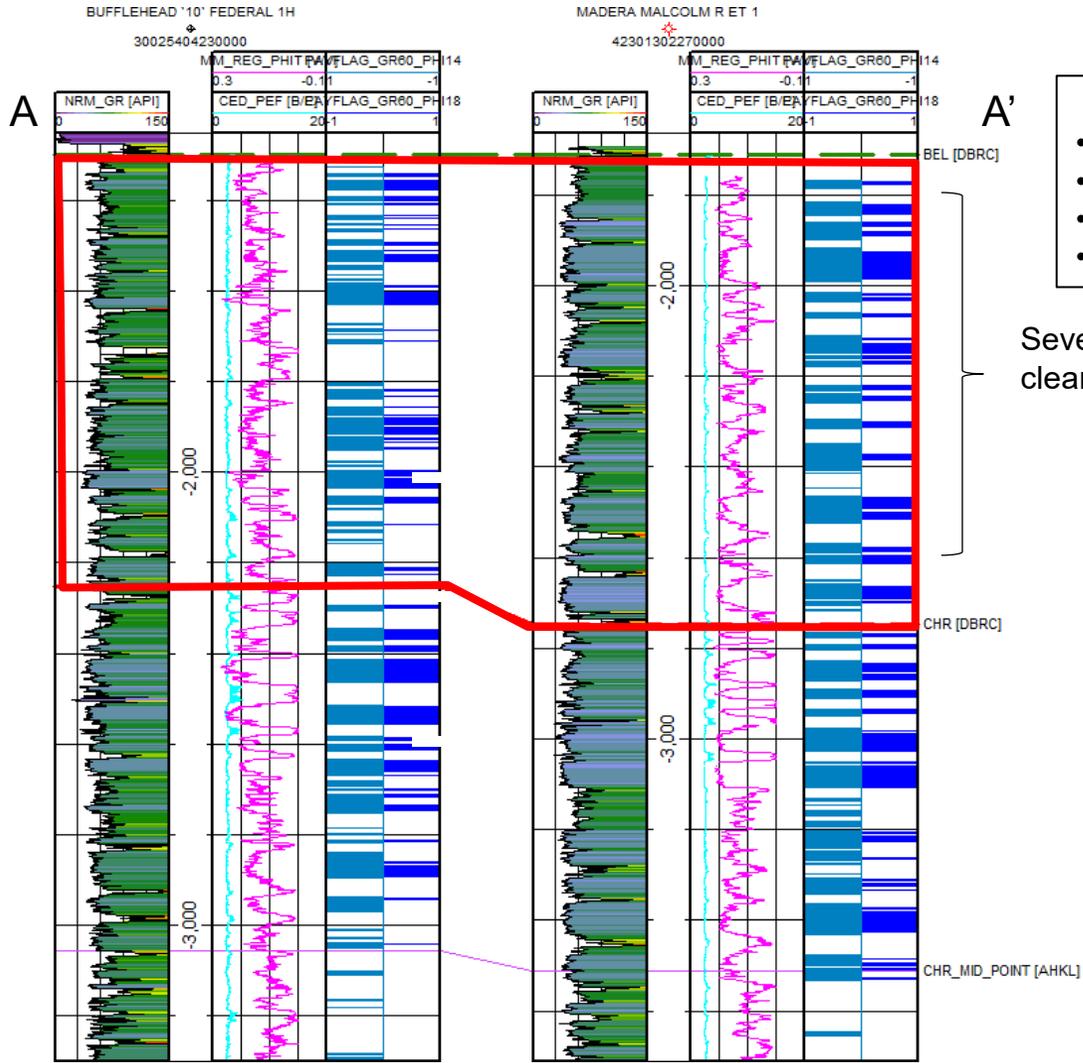
Papa Squirrel SWD 1

- Proof of Notice:
 - Bureau of Land Management
 - NGL
 - Royalty Clearinghouse 2003 LLC
 - Atlas OBO Energy LP

Geological Analysis of DMG Productive Zones



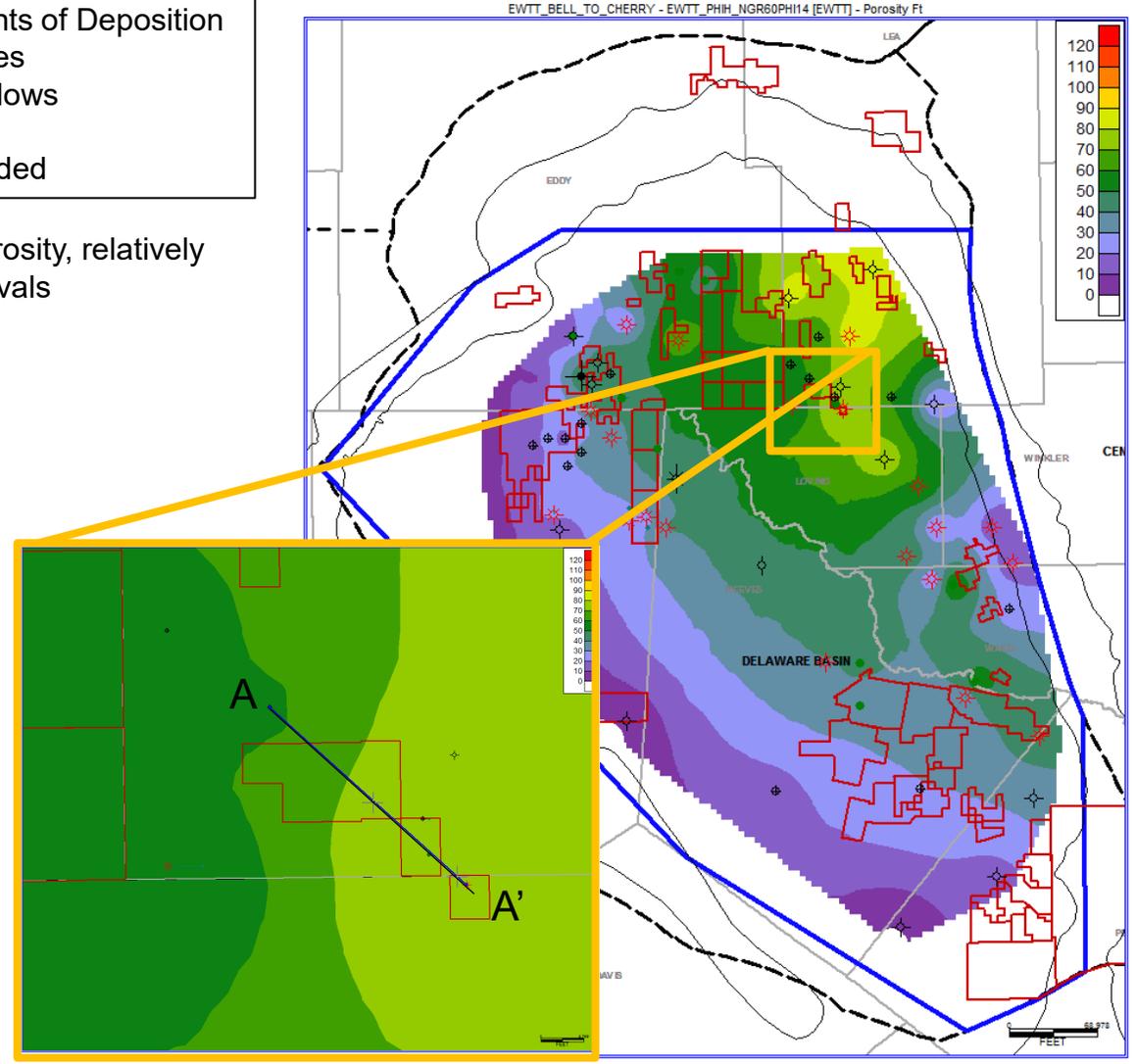
Bell Canyon High Porosity Clean Sand: Papa Squirrel



- Environments of Deposition
- Turbidites
 - Debris flows
 - Hybrid
 - Suspended

Several high porosity, relatively clean sand intervals

Net feet > 14% porosity map



10-11 possible injection zones (sands) within the Bell Canyon
 Porosity range ~14%-23%
 Permeability 0.4-3.0 md

Upper Cherry Canyon High Porosity Clean Sand: Papa Squirrel

BUFFLEHEAD 10' FEDERAL 1H

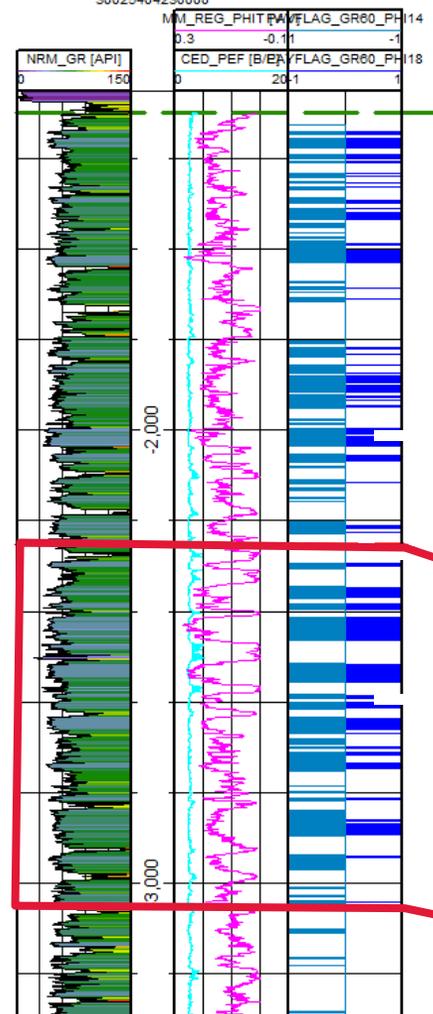
MADERA MALCOLM R ET 1

30025404230000

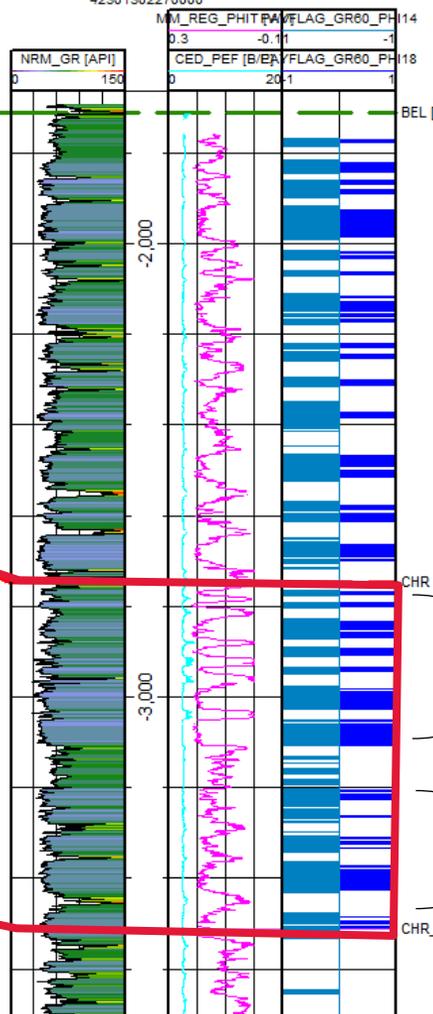
42301302270000

Net feet > 14% porosity map

A



A'



- Environments of Deposition
- Turbidites
 - Debris flows
 - Hybrid
 - Suspended

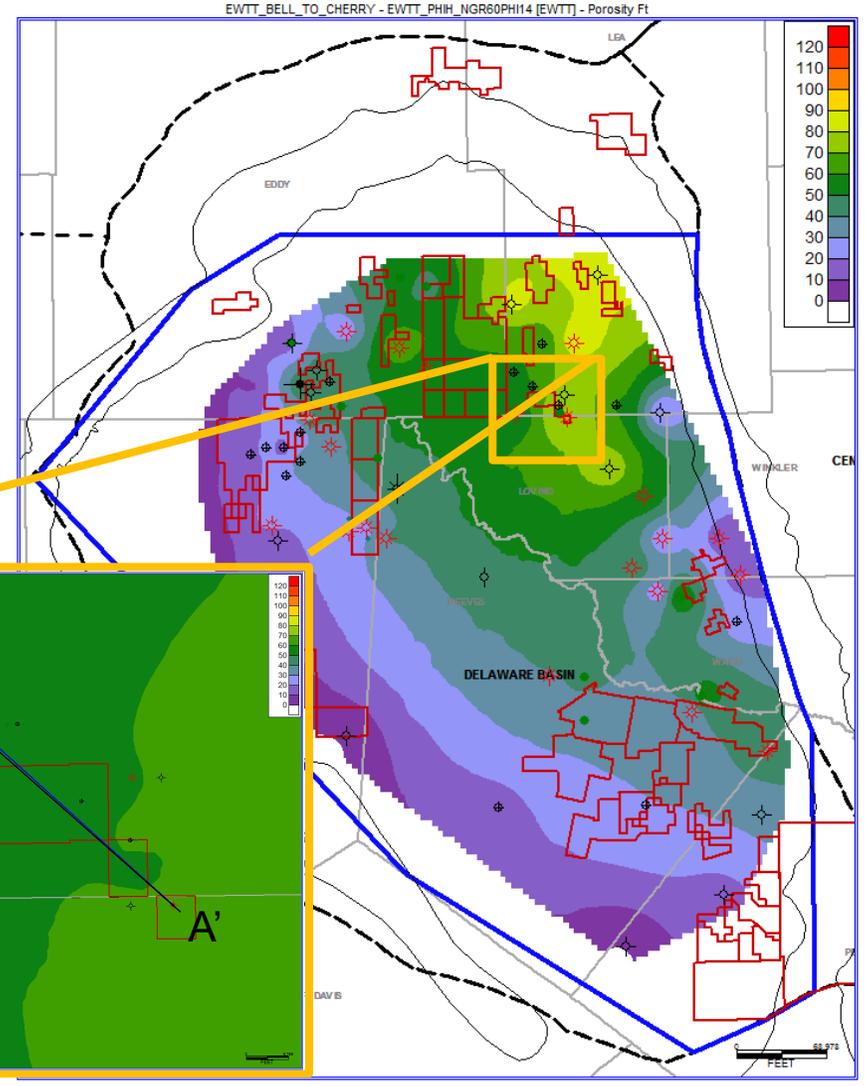
BEL [DBRC]

CHR [DBRC]

Zone 1

Zone 2

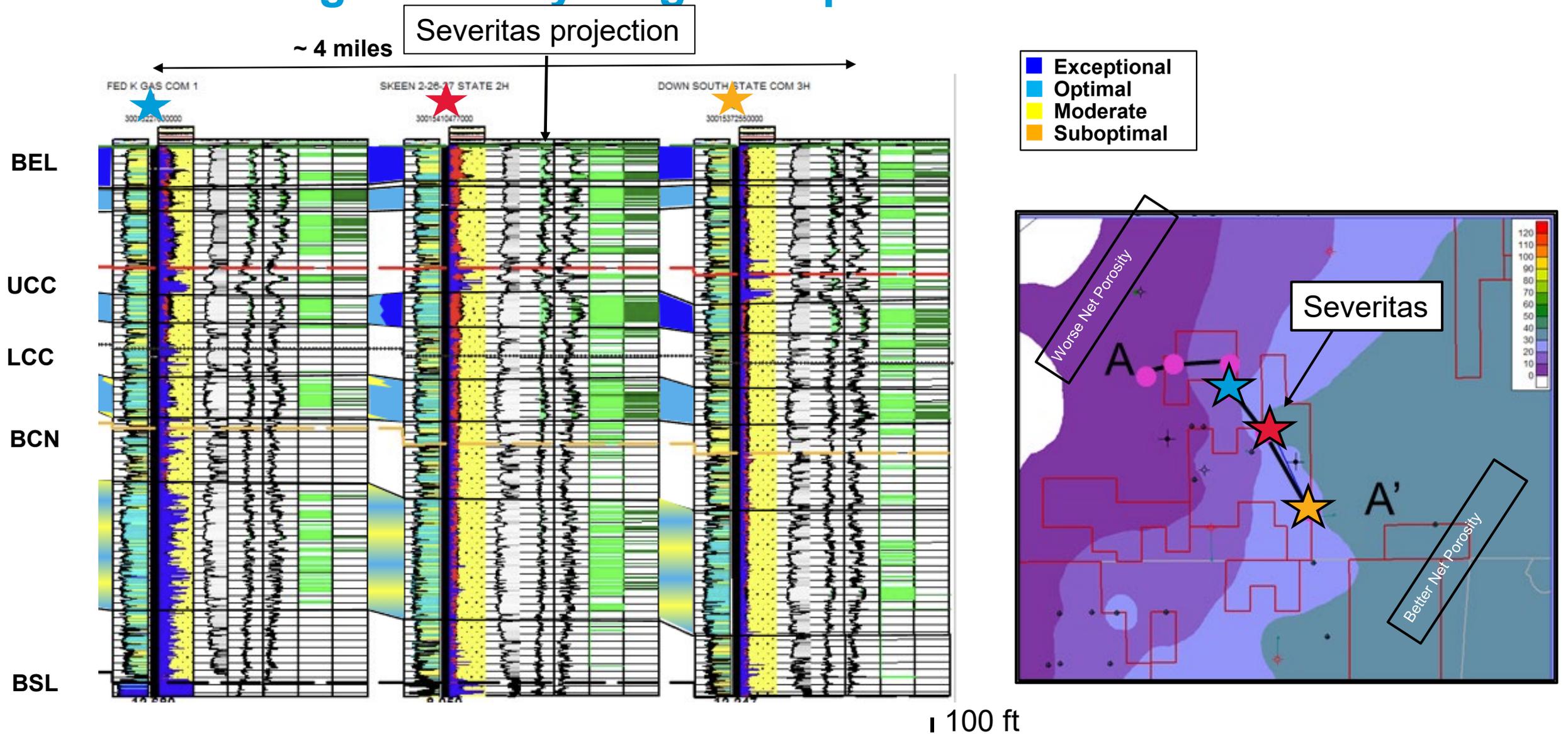
CHR_MID_POINT [AHKL]



Two main zones in Upper Cherry that have high porosity sands: 14%-23%
 Permeability ranges between 0.4-3.0 md
 Zone 1 has 4 low porosity carbonates interbedded between the sands.
 Zone 2 has no carbonates.



High Porosity Targets Improve to SE: Severitas



- Reservoir quality across the area of the Severitas is relatively consistent with slight degradation towards NW
- Best reservoir is in Bell Canyon, followed by Upper Cherry Canyon

Drill Stem Tests Confirm Low DMG Productivity

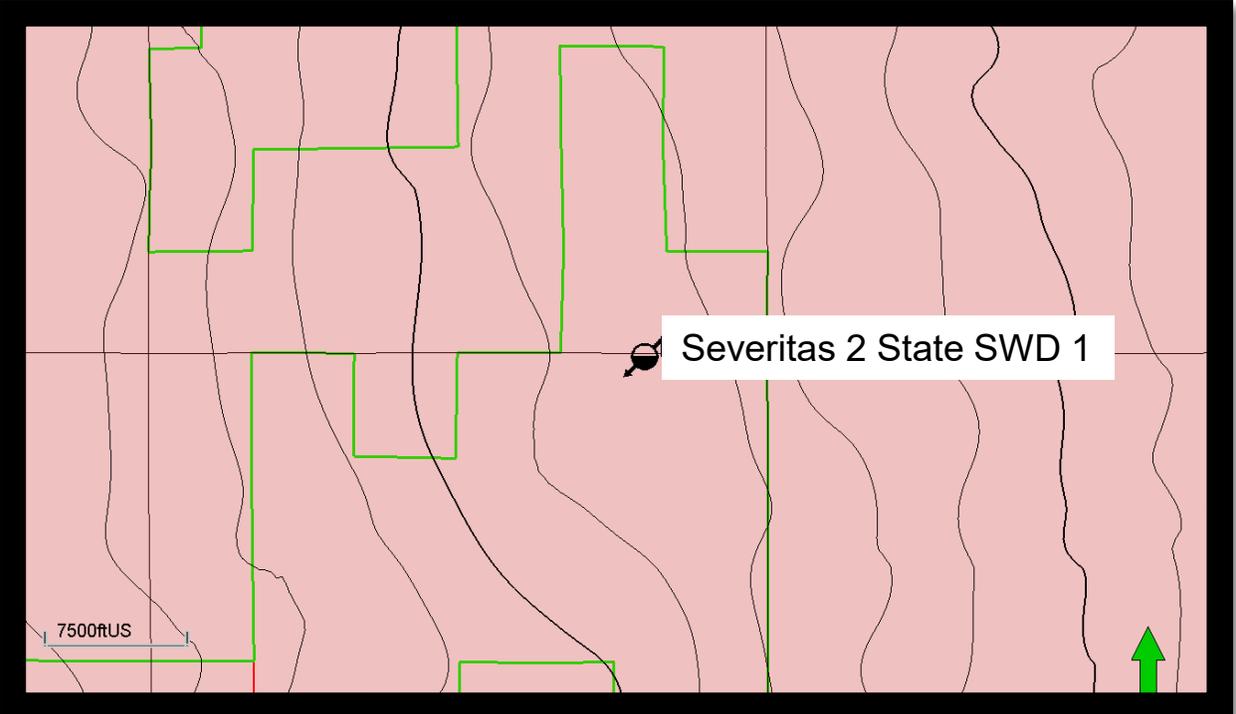
Severitas 2 State SWD 1

- No DSTs were taken in the DMG within 2 miles from the Severitas 2 State SWD 1.
- Two DSTs were taken within three miles
 - The State “23” 1 (30015277900) was drilled and P&A in 1994.
 - The East Apple Unit 1 (3001526105) was P&A in 2017 after:
 - Producing from parent and 2 SS:
 - 14k barrels oil
 - 31k Mcf gas
 - 41k barrels water
- Risks of impact to DMG hydrocarbons appear very low.

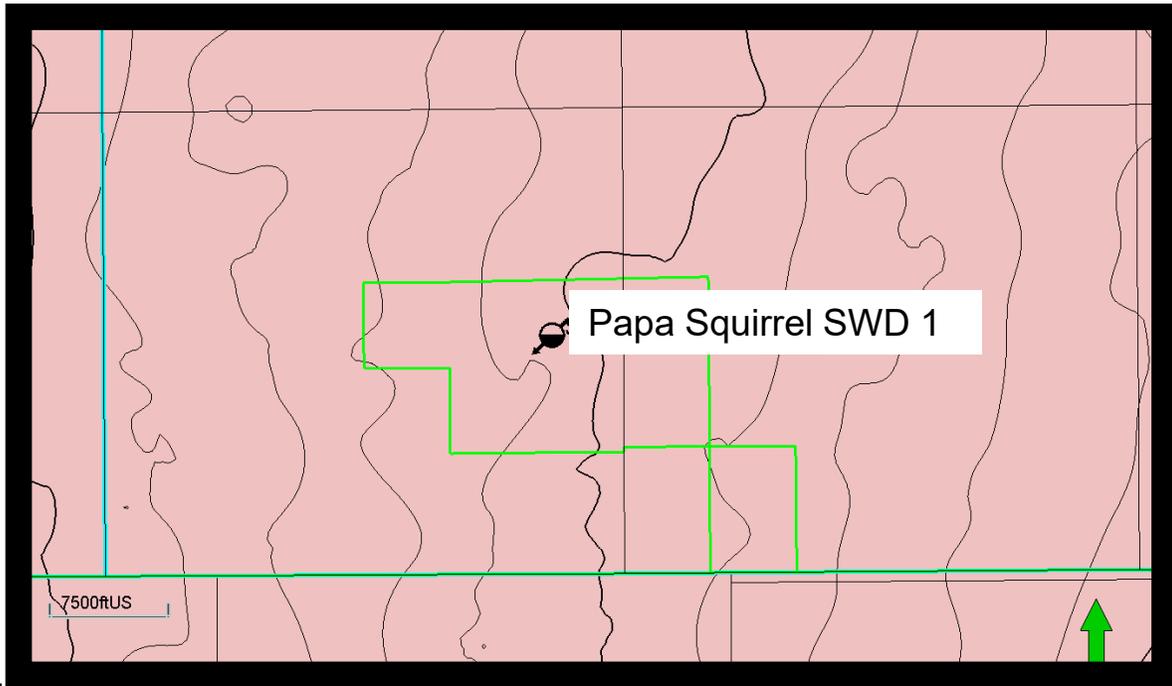
Papa Squirrel SWD 1

- No DSTs have been taken in the DMG within 2 or 3 miles from the Papa Squirrel SWD 1.

Geologic Structure Maps Suggest Low Likelihood of Hydrocarbons in DMG



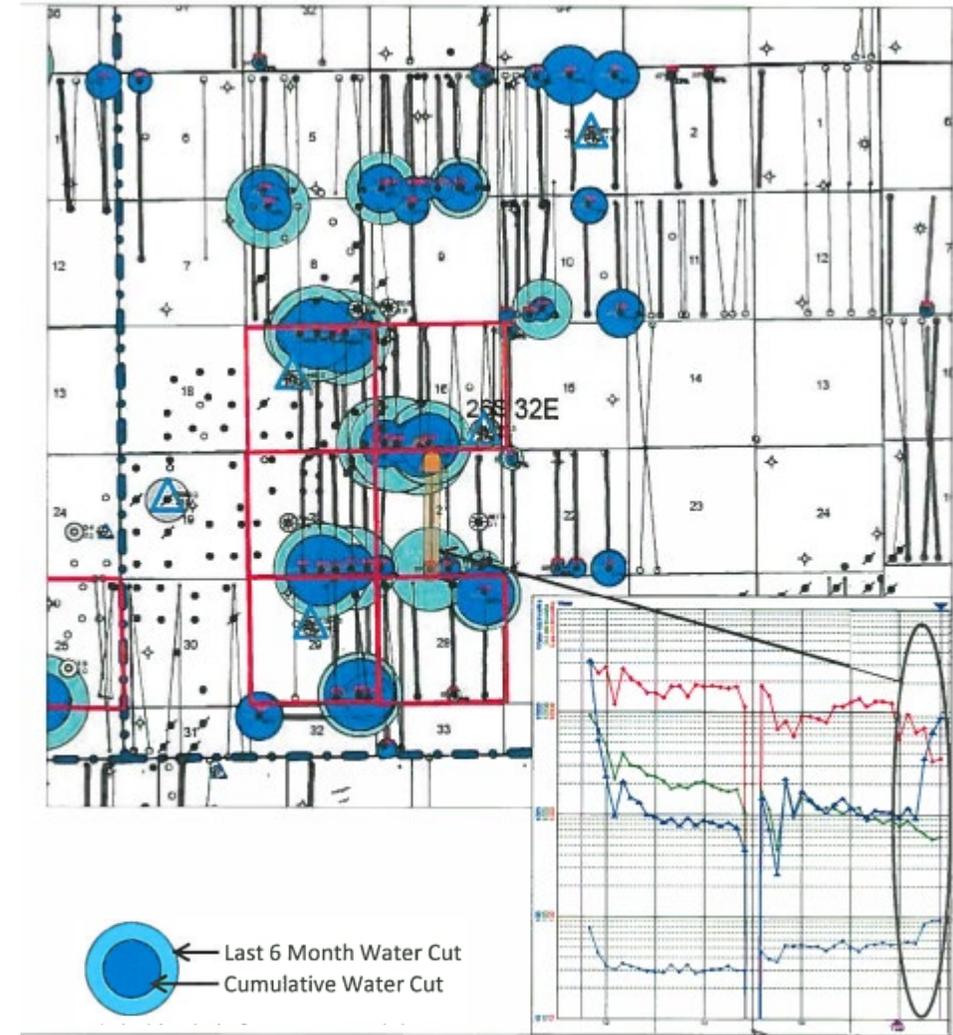
- No faults are interpreted from seismic data in the lower containment layer, Bone Spring Limestone, within 2 miles of either well.
- No faults are interpreted across the upper containment horizon, Lamar Limestone, within 2 miles of either well.
- Large density differences in the Castile result in significant velocity variations and seismic interpretation uncertainties which cannot be resolved.



- The continuity of the sands in the Bell and Cherry Canyon, coupled with the lack of structural closure, suggest little chance of hydrocarbon trapping in the area.
- Chevron is not targeting the Brushy Canyon, as it is a known unconventional target, but not productive in the immediate areas.
- However, the same surveillance data program implemented for the deeper production, will be implemented for any offset DMG unconventional wells, if encountered in the future.

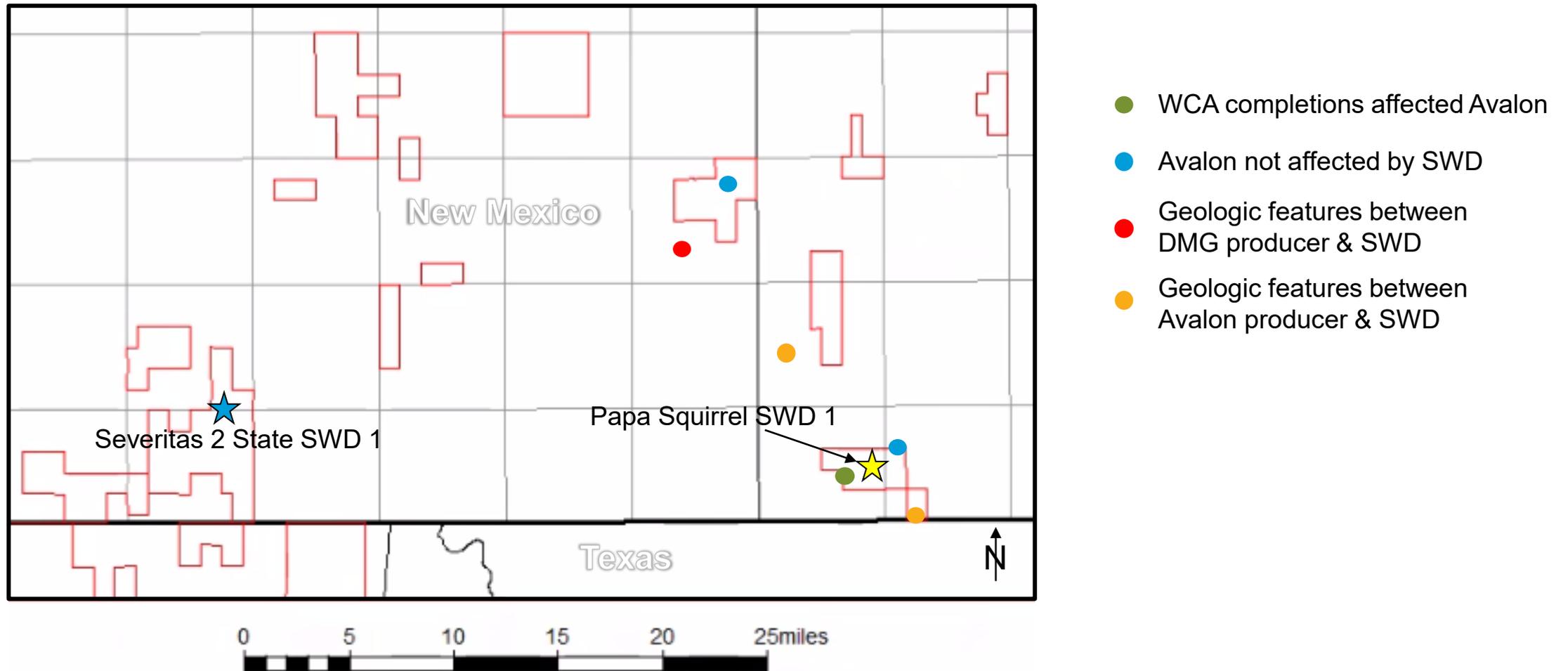
Watercut is not a definitive test of SWD interference

- In 2016, an operator workgroup shared observations with the OCD regarding Avalon and DMG production changes potentially being caused by DMG injection
- Potentially affected wells were identified when the last 6-month water cuts were higher than the cumulative water cuts.
- **Hypothesis was that watercut increases were due to shallow SWD in the area.**
- **Other potential causes were typically not investigated**



Case Study Locator Map

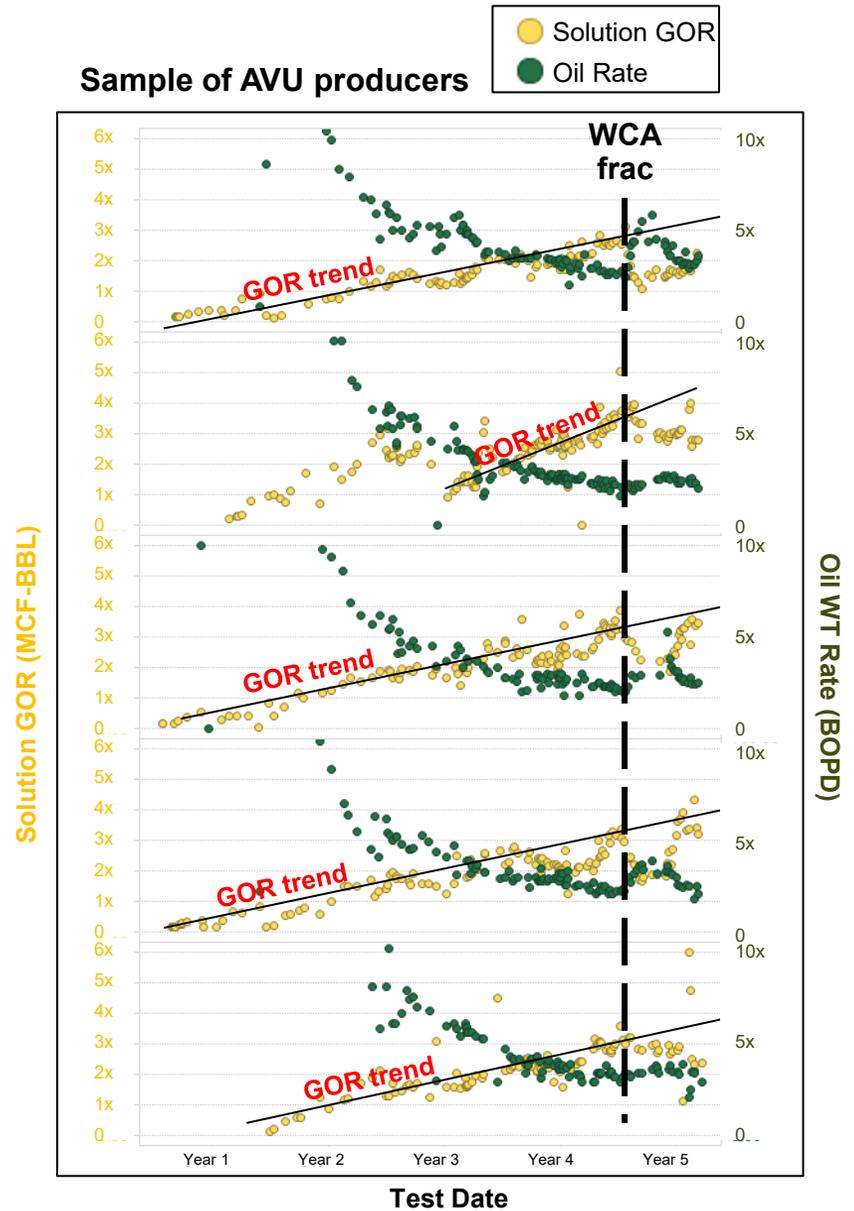
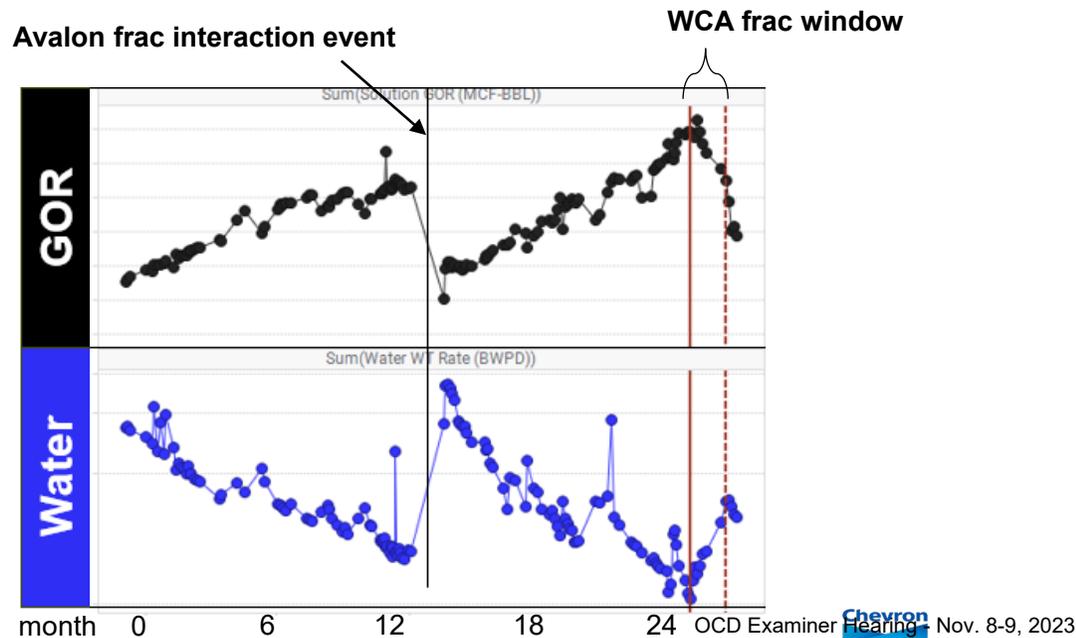
Several case studies indicate alternative hypotheses can explain the observed increases in water cut.



Wolfcamp Completions Affect Avalon Production

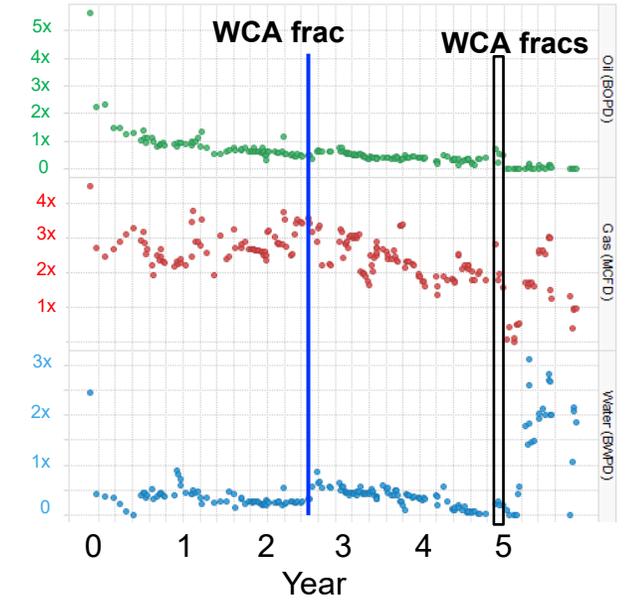
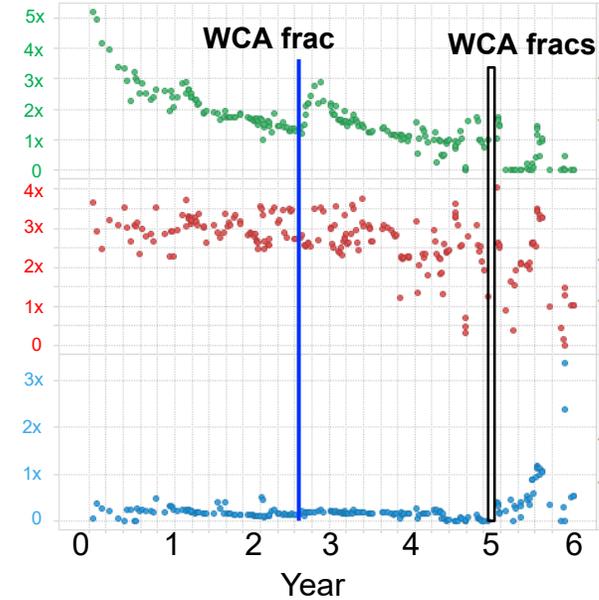
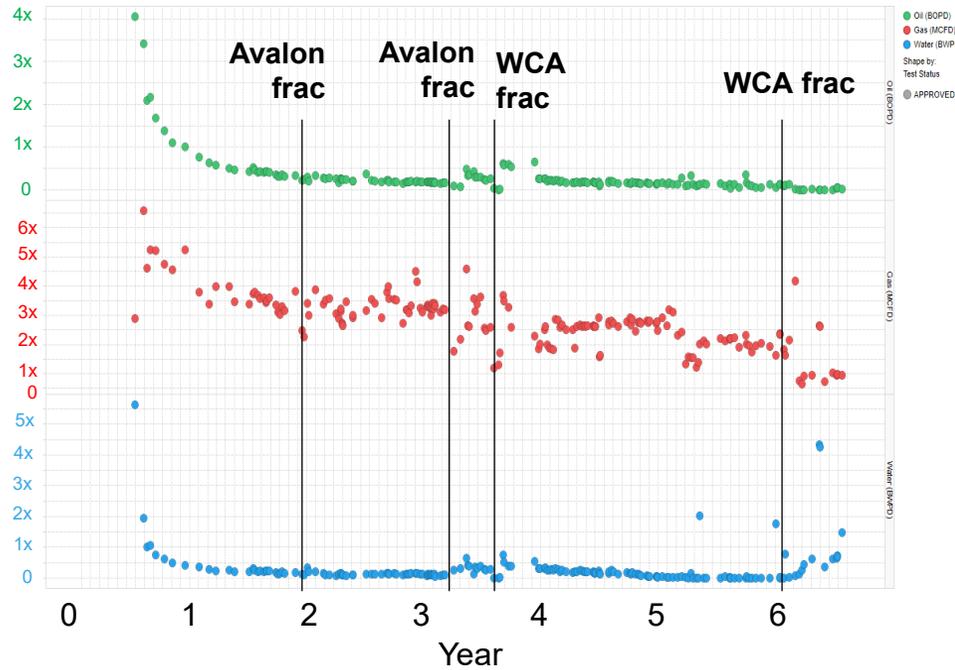
Wolfcamp Completions Result in Avalon Production Interaction

- 2019-2020: Observed significant production changes in Avalon wells overlying WCA fracs.
 - increases in liquids production (oil and water)
 - Order of magnitude decrease in producing gas-oil ratio (GOR)
- Assessment indicated WCA completions correlated with these changes
- In 2020, subsurface team confirmed the interactions with targeted surveillance
- **Each pad of WCA wells has since predictably resulted in an Avalon watercut and GOR changes**

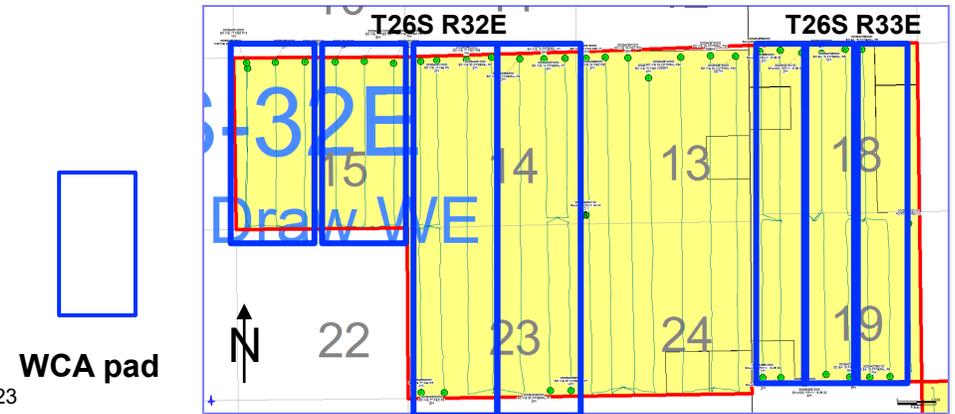


Wolfcamp Completions Have Initiated Extended Periods Of Water Influx in Nearby Avalon Wells

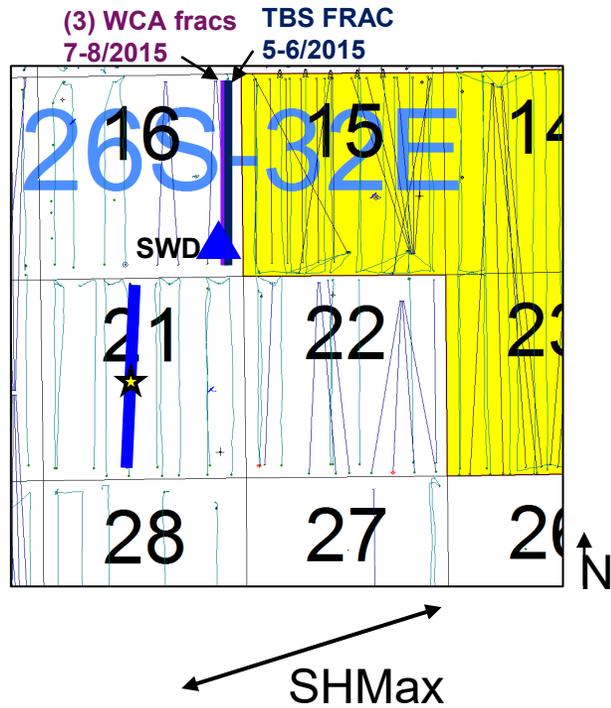
7 unique pads of WCA completions have interacted with ~40 Avalon producers



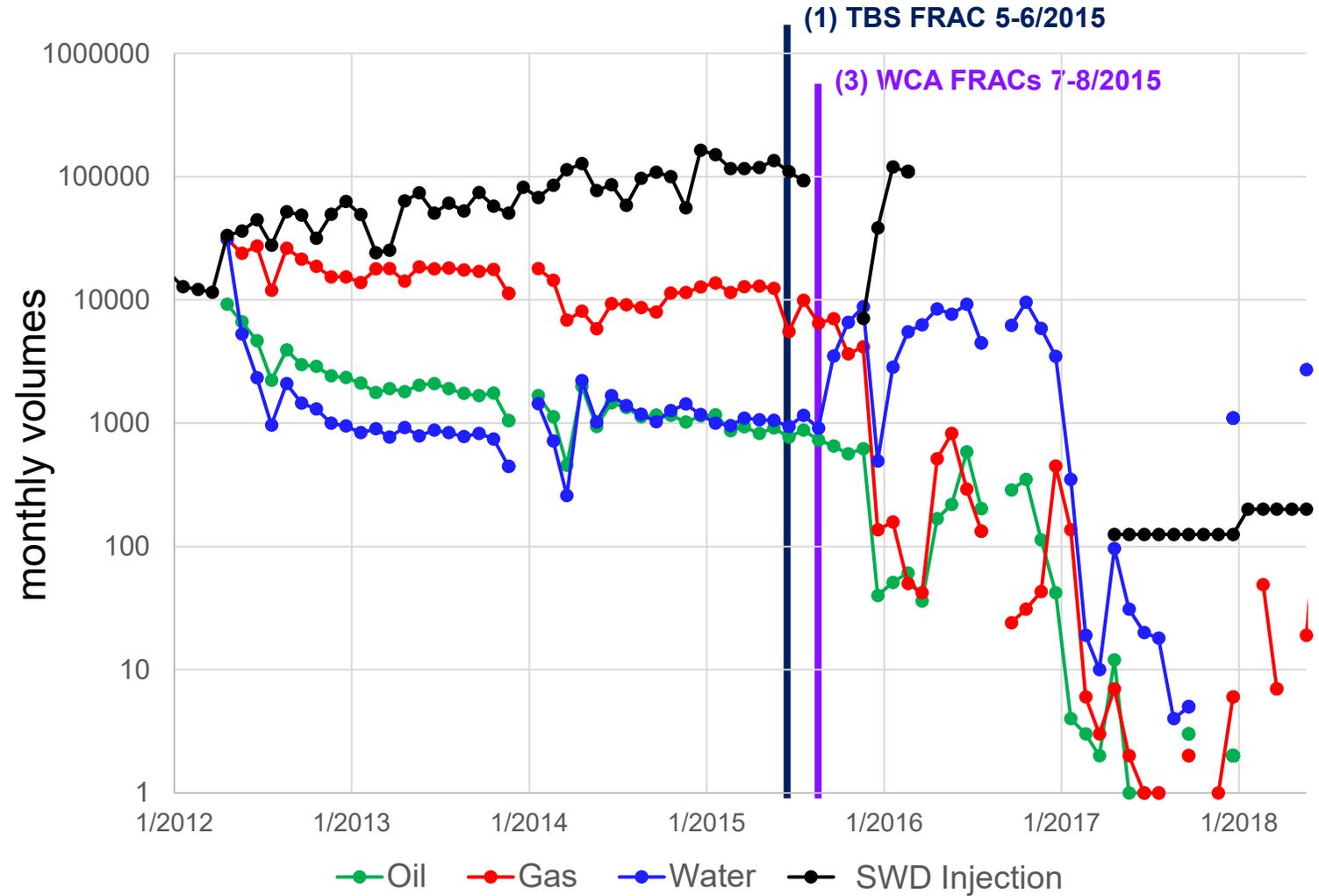
- Many Wolfcamp fracture interactions were long-lasting which is not typical of the general industry view of fracture interaction duration
- This long-lasting increase in water production following Wolfcamp completions is consistent with observations shared by industry in 2016 thought to be potential SWD interactions



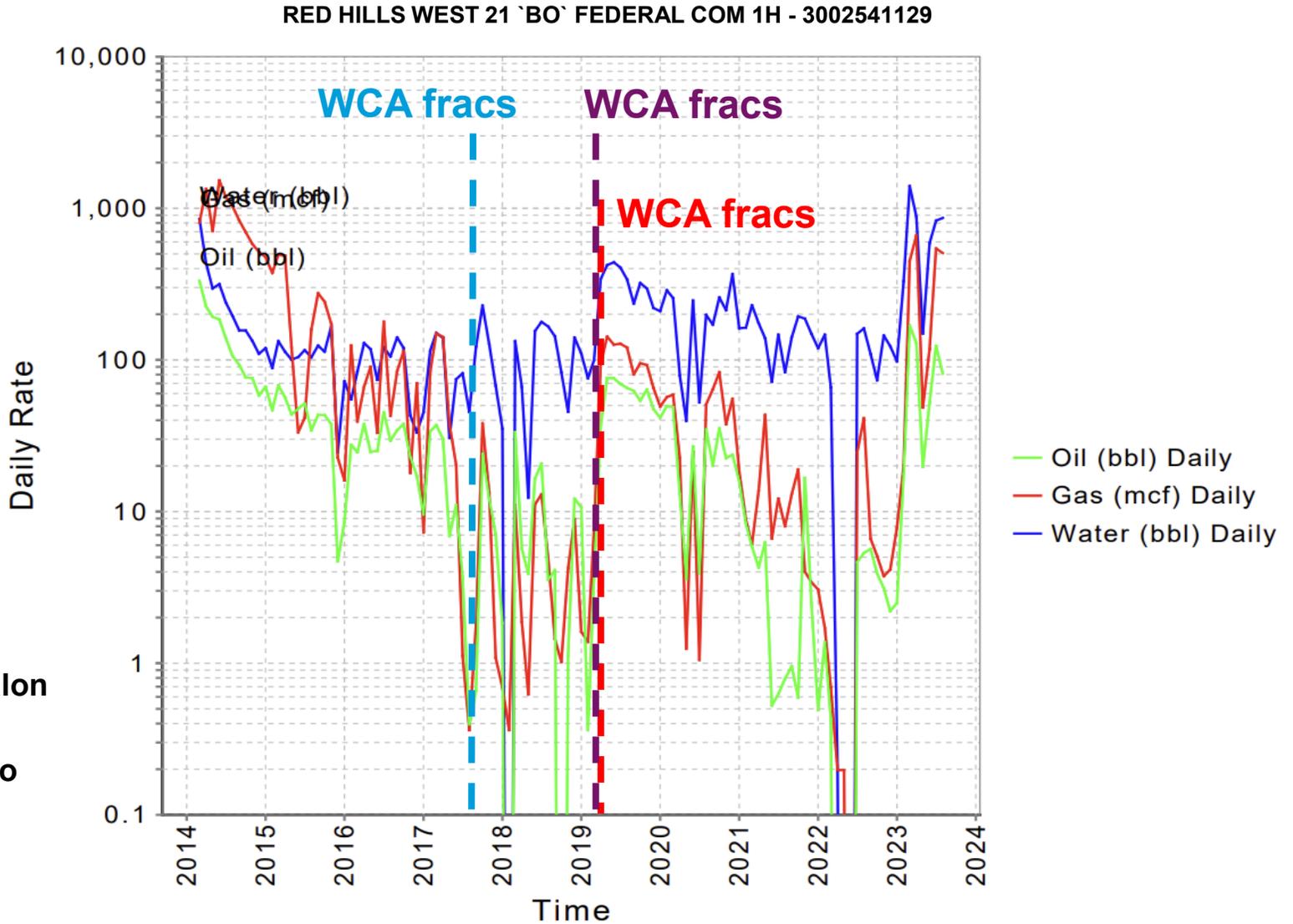
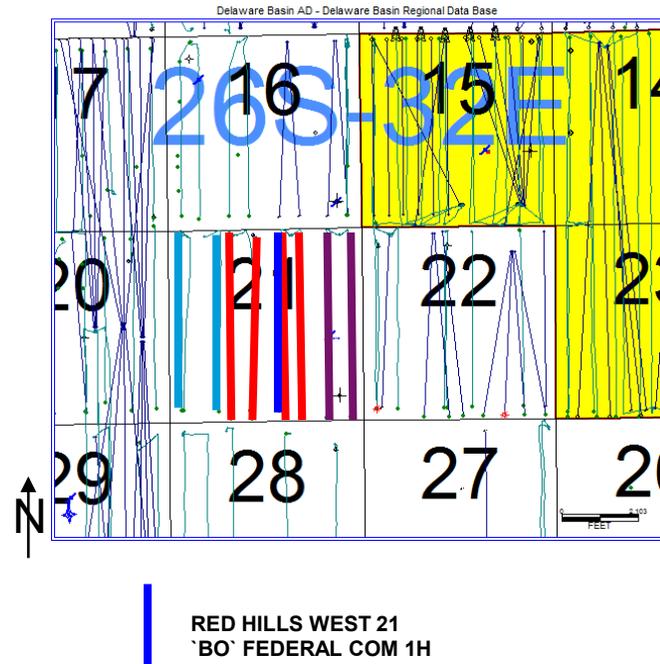
Wolfcamp completions correlate with production changes in the Avalon previously interpreted as SWD communication



The initiation of the watering out event correlates with the Wolfcamp completion dates in well files



Wolfcamp completions impact Avalon production

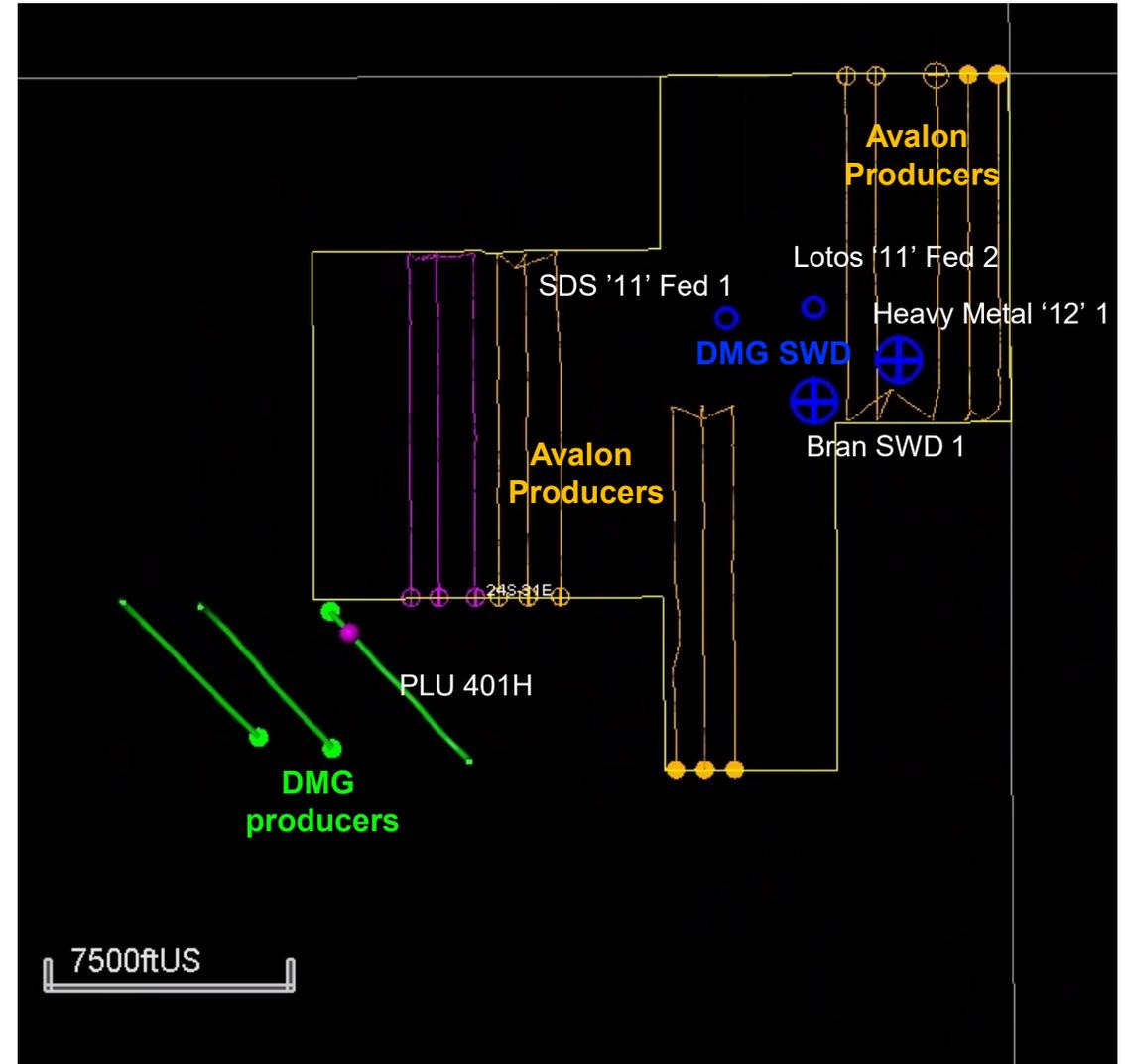


- Following underlying WCA completions, oil and water production jumped significantly in this Avalon well.
- Consistent with observations in Chevron's Salado Draw

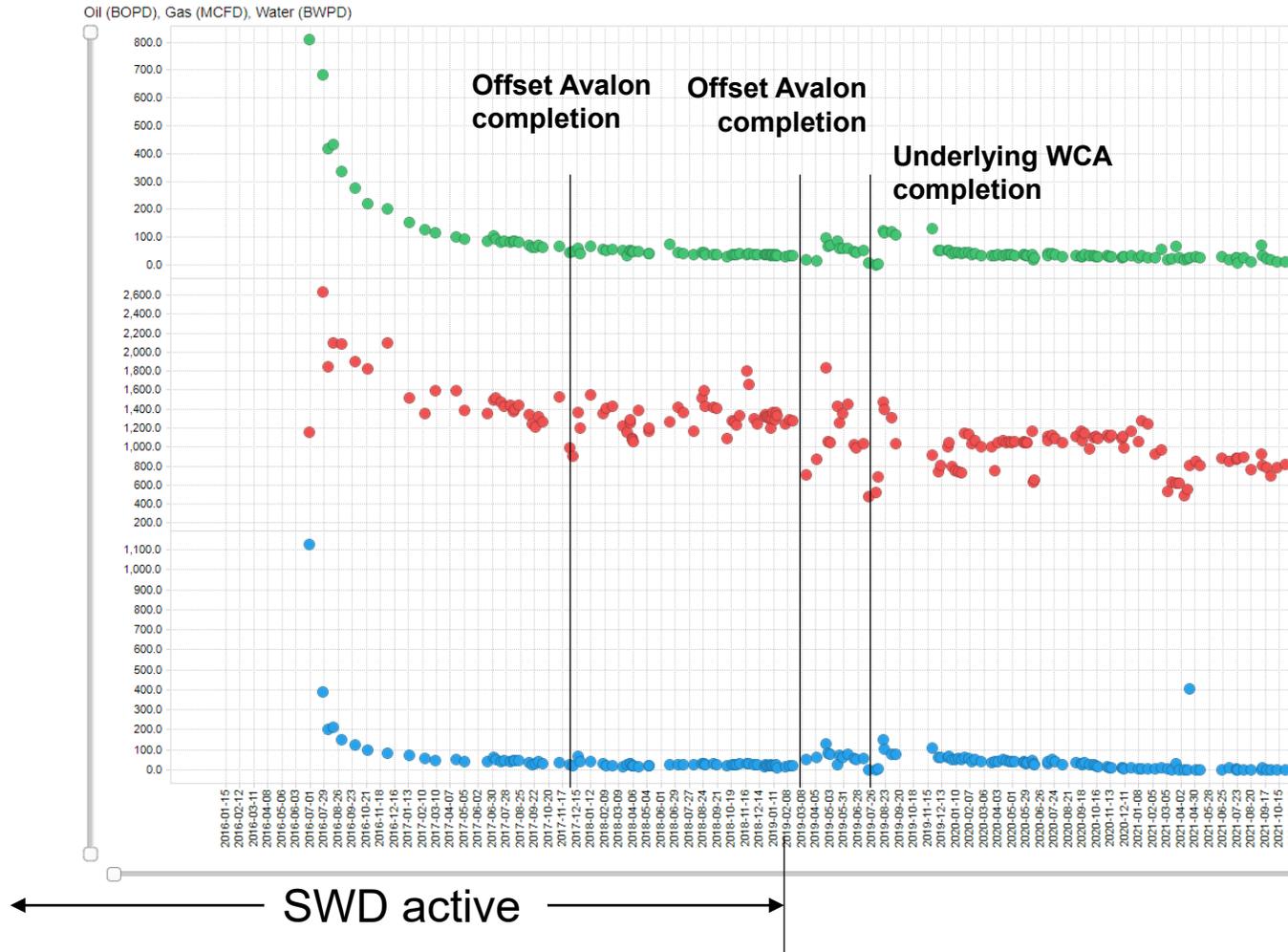
Avalon wells not affected by DMG disposal

Chevron Avalon wells not affected by overlying DMG disposal

- Chevron Lower Avalon wells located between DMG SWD and DMG producers were not affected by injection
- The DMG producers experienced high water production and pressure increases that correlated with DMG injection
- Chevron's Avalon wells produced at stable rates and water cuts with no indication of interaction with the DMG disposal wells



Chevron Avalon wells not affected by DMG injection across lease line

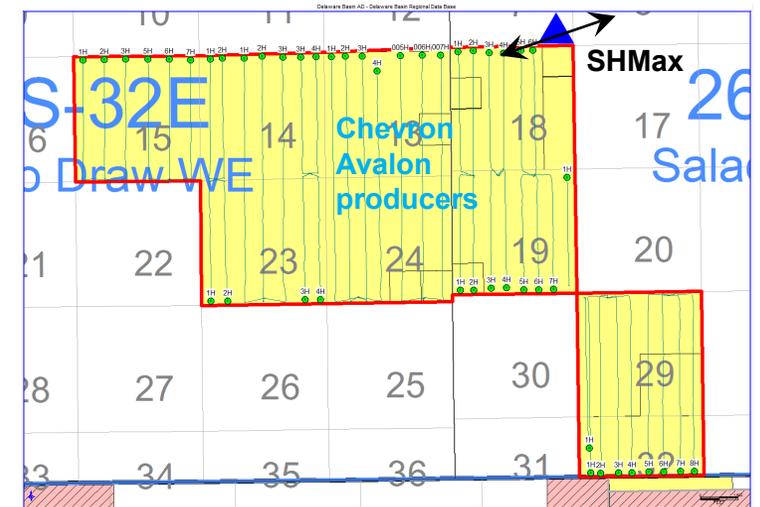


Near the end of SWD injection period:

- Avalon static bottom hole pressures 500 – 800 psig
- 40-60 bbl/day total fluid at a 50% water cut
- Stable decline rates

Mesa B: 3002542462 (P&A)

- Typical inj. rate = 2-4 Mbpd
- Last injection Feb 2019
- 1.8MM bbl. cumulative

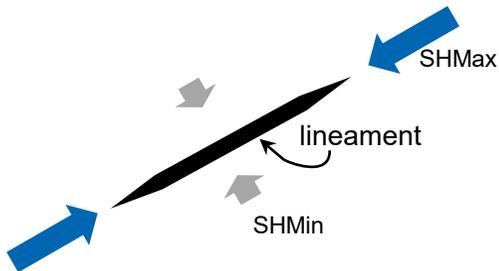


In cases where DMG SWD is a possible cause of DMG or Avalon water production, faulting or lineaments were identified

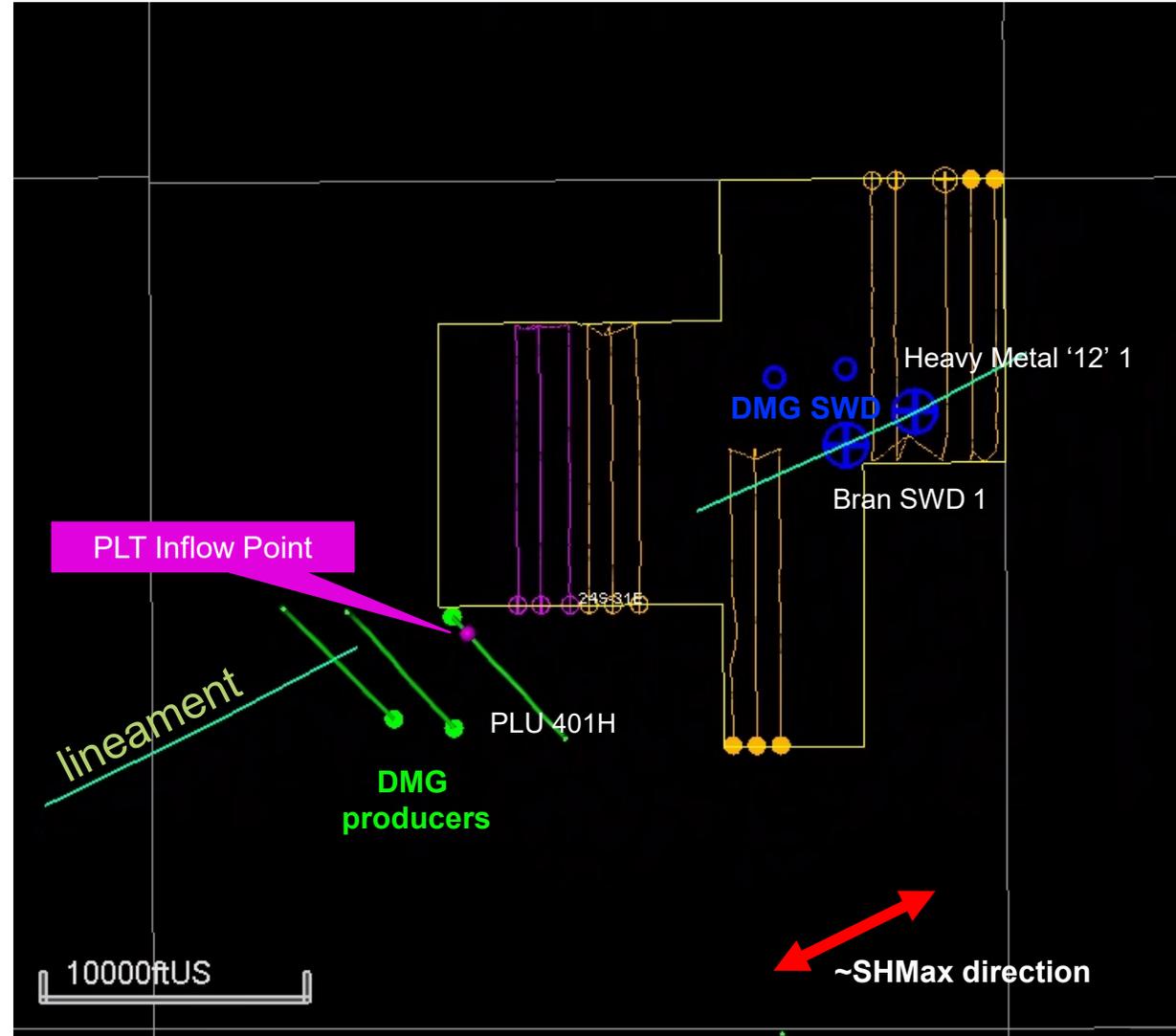
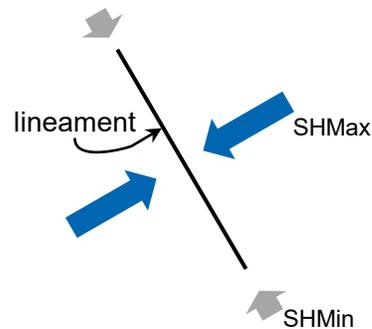
Lineaments parallel to SHmax identified between injectors and DMG producers

- 2 potential lineaments mapped on vertically exaggerated 3-D seismic horizons may provide insights into the communication within the DMG between Mesquite SWD's and the PLU 401H (Brushy Canyon well)
- **When SHmax aligns with a lineament or fault, the effect is an opening force on the lineament allowing for fluid migration**

Fractures striking parallel to SHMax open, enabling fluid migration

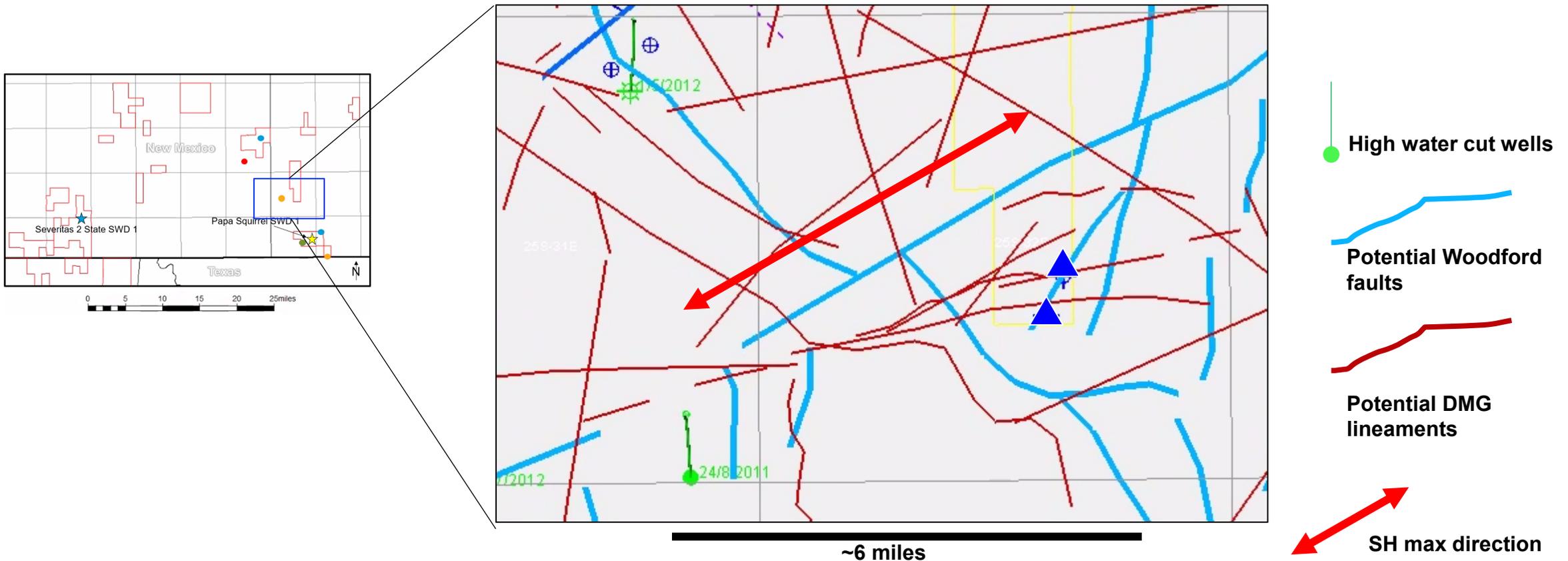


Lineaments striking perpendicular to SHMax close, restricting fluid migration



Lineaments Parallel to SHmax Potentially Contribute to Water Intflux

- Basement strike slip fault system is co-parallel with overlying network of DMG lineaments
 - Producer and SWDs are ~4.5 miles apart
 - Woodford features coincident with possible DMG lineament networks are not widely observed
 - Correlation between SHmax direction and lineaments look to be a potential contributor in this case

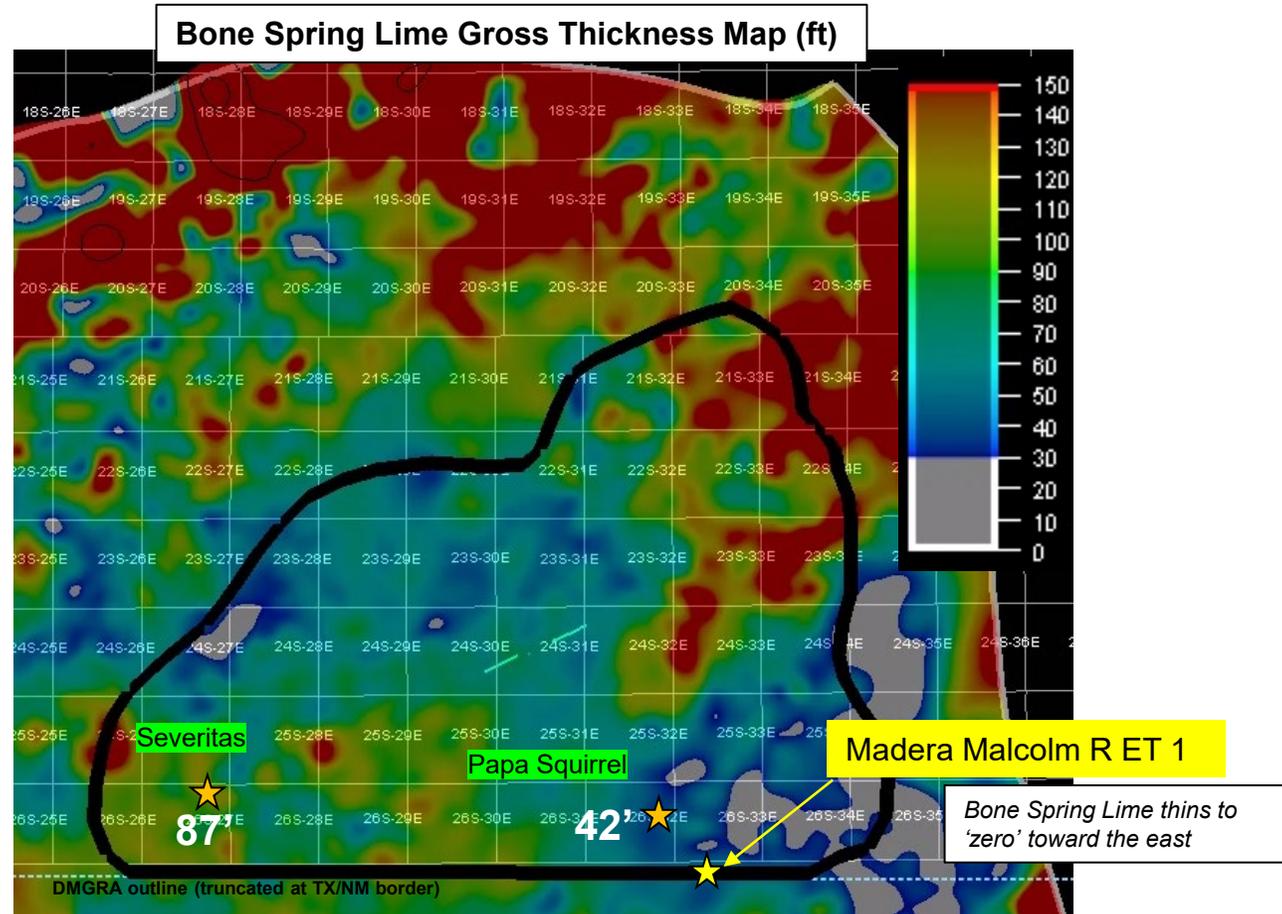


Bone Spring Limestone (BSL) Lower Containment

Bone Spring Lime thickness varies across the basin

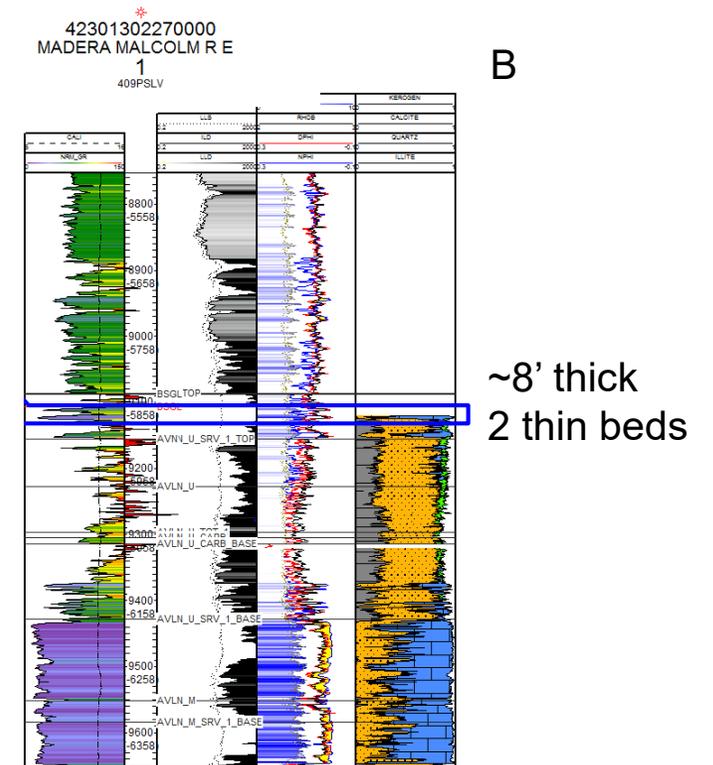
Modeling Overview:

- To determine the amount of Avalon completion gal/cluster that would require to breach an 8' foot thick Bone Spring Lime formation
- A breach in the Bone Spring Lime may lead to watering out underlying Avalon development wells



BSL isochore is 87 and 42 feet, respectively, in the Severitas and Papa Squirrel.

Bone Spring Lime



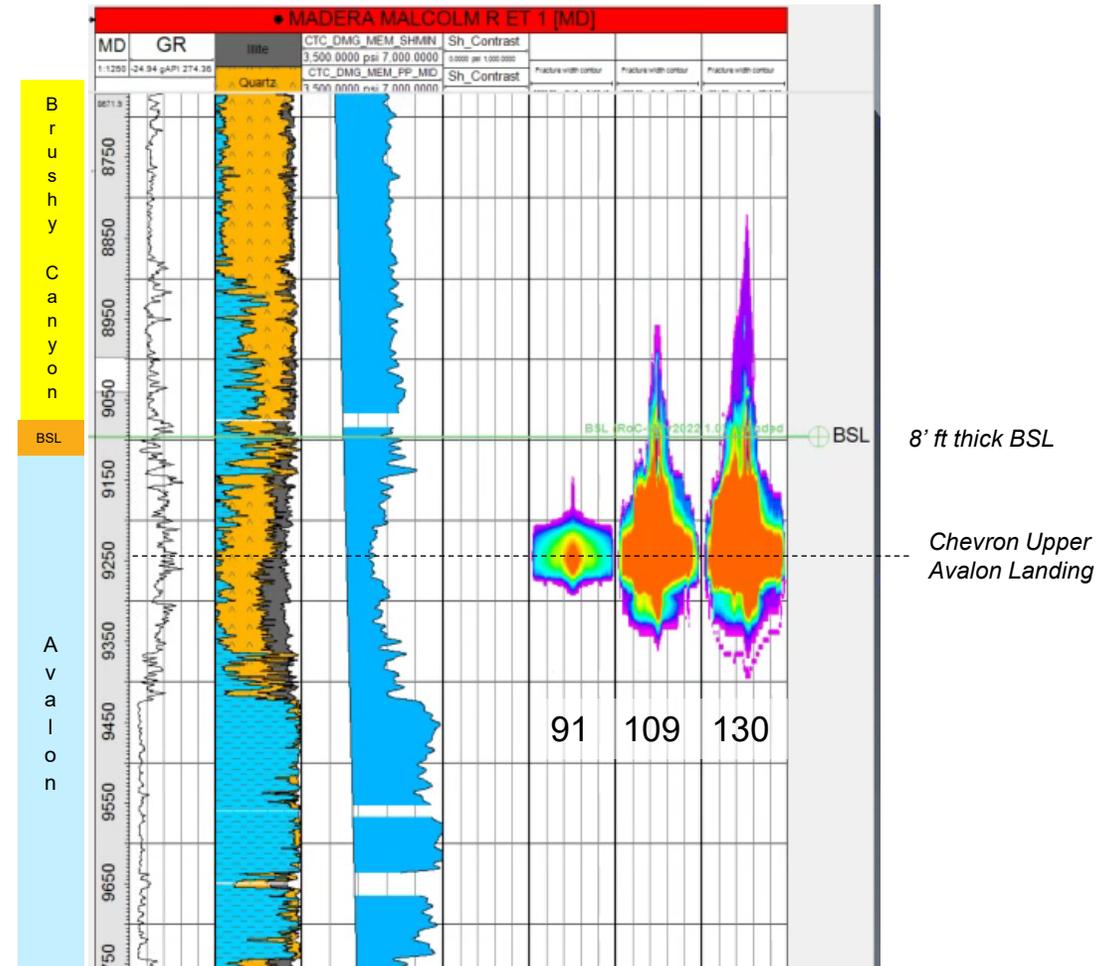
Models Indicate an 8' Thick Bone Spring Lime is not Breached by Typical-sized Avalon Completions

Methodology

- Planar 3D in Kinetix was used to assess the chance of fracture growth into the DMG for each sensitivity.
 - Base pump schedule: 1500 #/ft 1500 gal/ft at 6 clusters on 45' spacing
 - SVC sensitivities: 69, 79, 91 Kgal/cluster [1500, 1750, 2000 intensities]
 - Pump Rate sensitivities: 70 & 100 bbl/min
- SVC sensitivities to find the point at which the rock breach through the Bone Spring Lime [91, 109, 130K gal/cluster]

Results:

- Simulation shows low chance of breaching through the BSL. At volumes higher than 109 Kgal/cluster, the chances of breaching through the Bone Spring Lime increases.
- BSL isochore is 87 and 42 feet, respectively, in the Severitas and Papa Squirrel. There is a much less likely chance of breaching in subject SWDs.**
- The Bone Spring Lime is not breached during intentional Avalon hydraulic fracture operations. SWD operating at lower pressure gradients and greater vertical offset are unlikely to breach the Bone Spring Lime.**

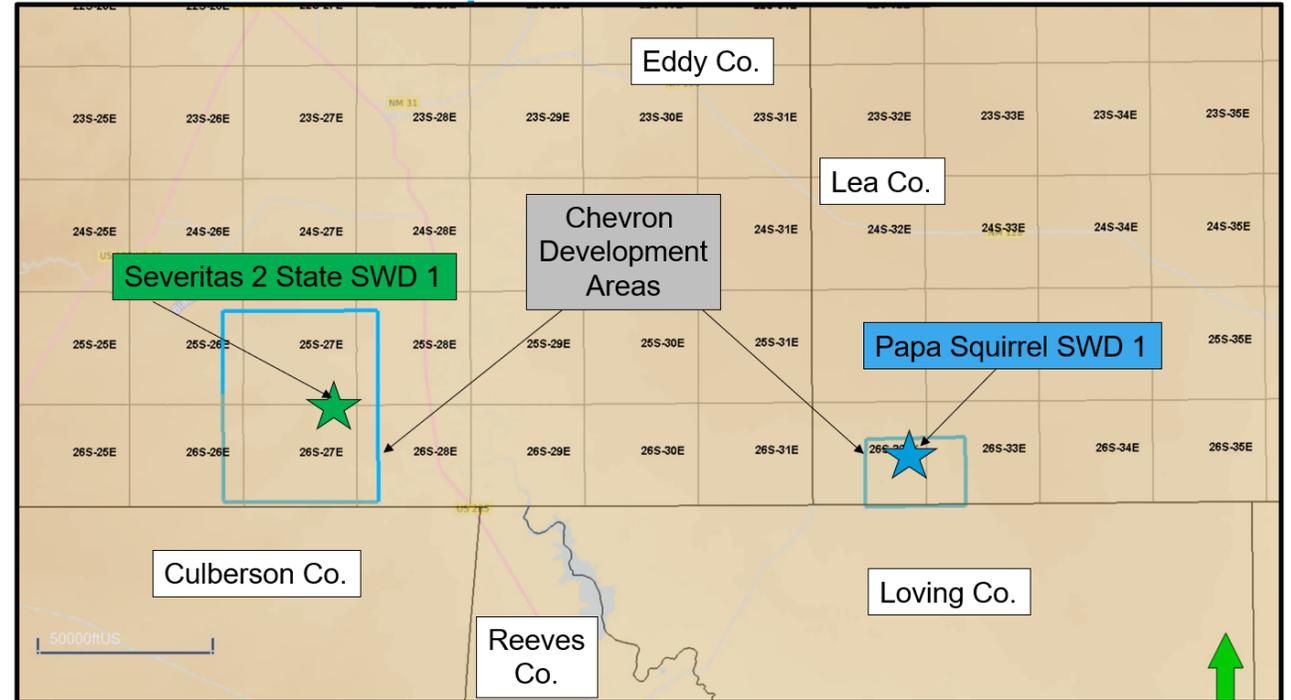
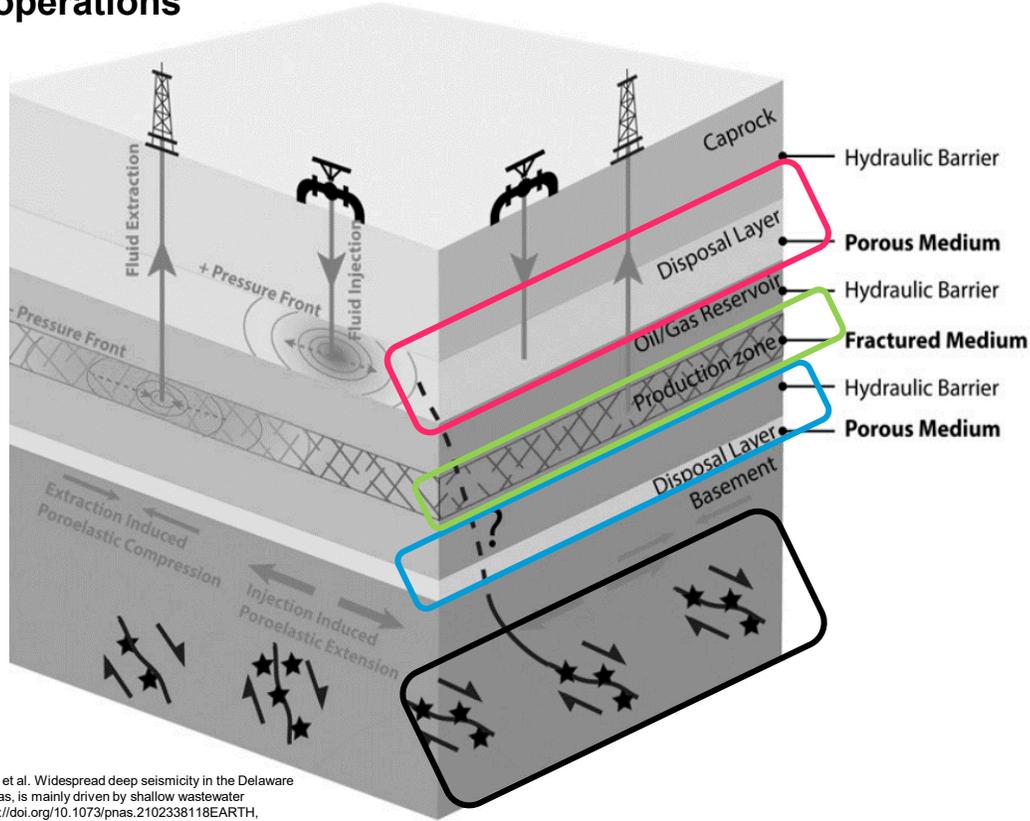


Summary

- **Watercut is not a definitive test of SWD interference**
- **Wolfcamp completions have consistently resulted in Avalon watercut and gas-oil-ratio changes in Chevron's Salado Draw area**
- **Avalon producers are operated offsetting and underlying DMG injection without indications of communication**
- **When SHMax aligns with a lineament, the effect is an opening force on the lineament enabling fluid migration**
- **The Bone Spring Lime is not breached during Avalon completions. SWD operations at lower pressure gradients and greater vertical offset are unlikely to breach the Bone Spring Lime**

Seismicity Review

Geological theoretical layer model for Permian Basin operations



Modified From Zhai et al. Widespread deep seismicity in the Delaware Basin, Texas, is mainly driven by shallow wastewater injection <https://doi.org/10.1073/pnas.2102338118> EARTH, ATMOSPHERIC, AND PLANETARY SCIENCES

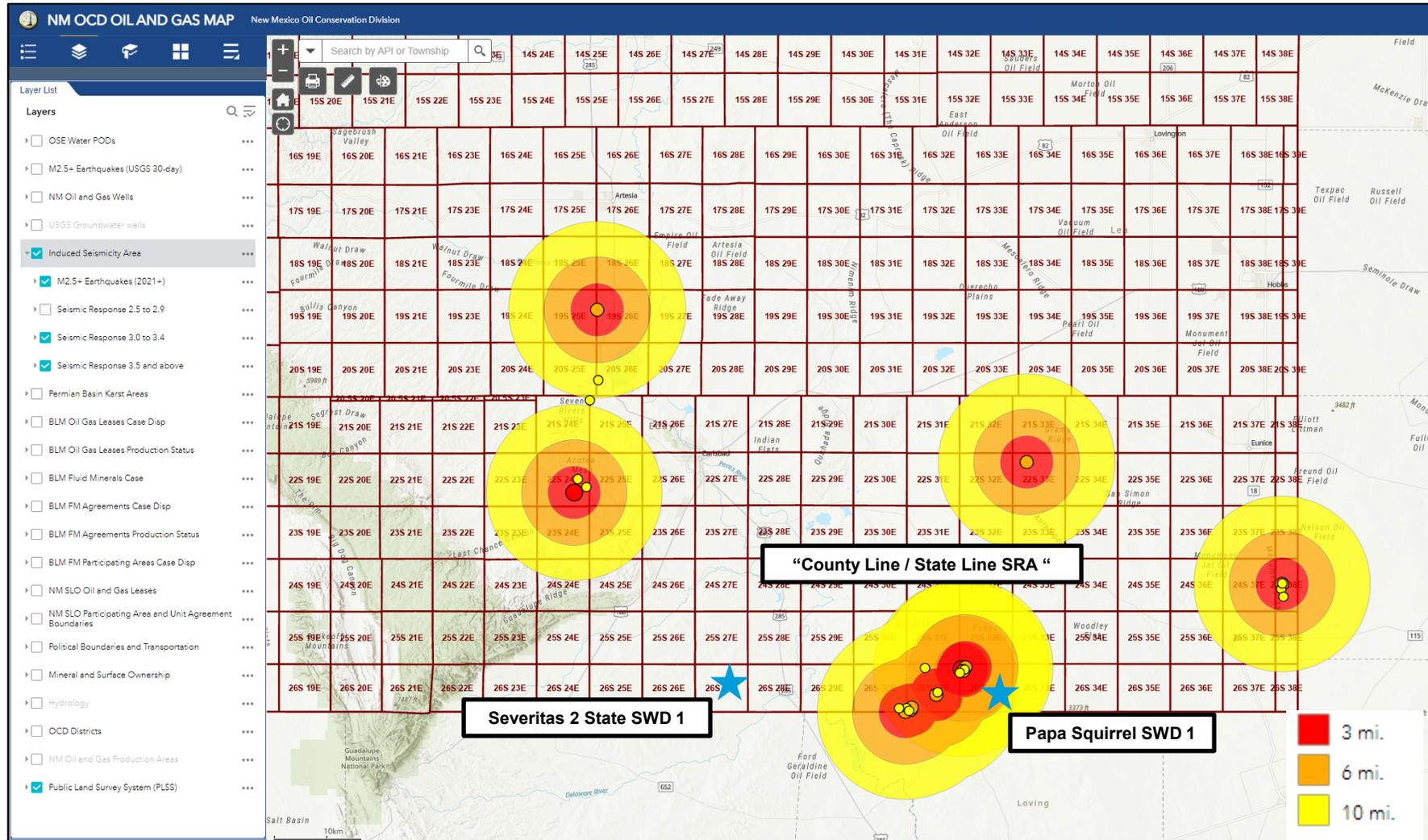
Shallow injection: in SE. New Mexico ~ 5,000 – 7,000'

Production: in SE. New Mexico ~ 6,500-12,500'

Deep injection: in SE. New Mexico ~ 17,000-20,000'

Seismicity ~ 20,000'+

New Mexico Seismic Review Areas "SRA"

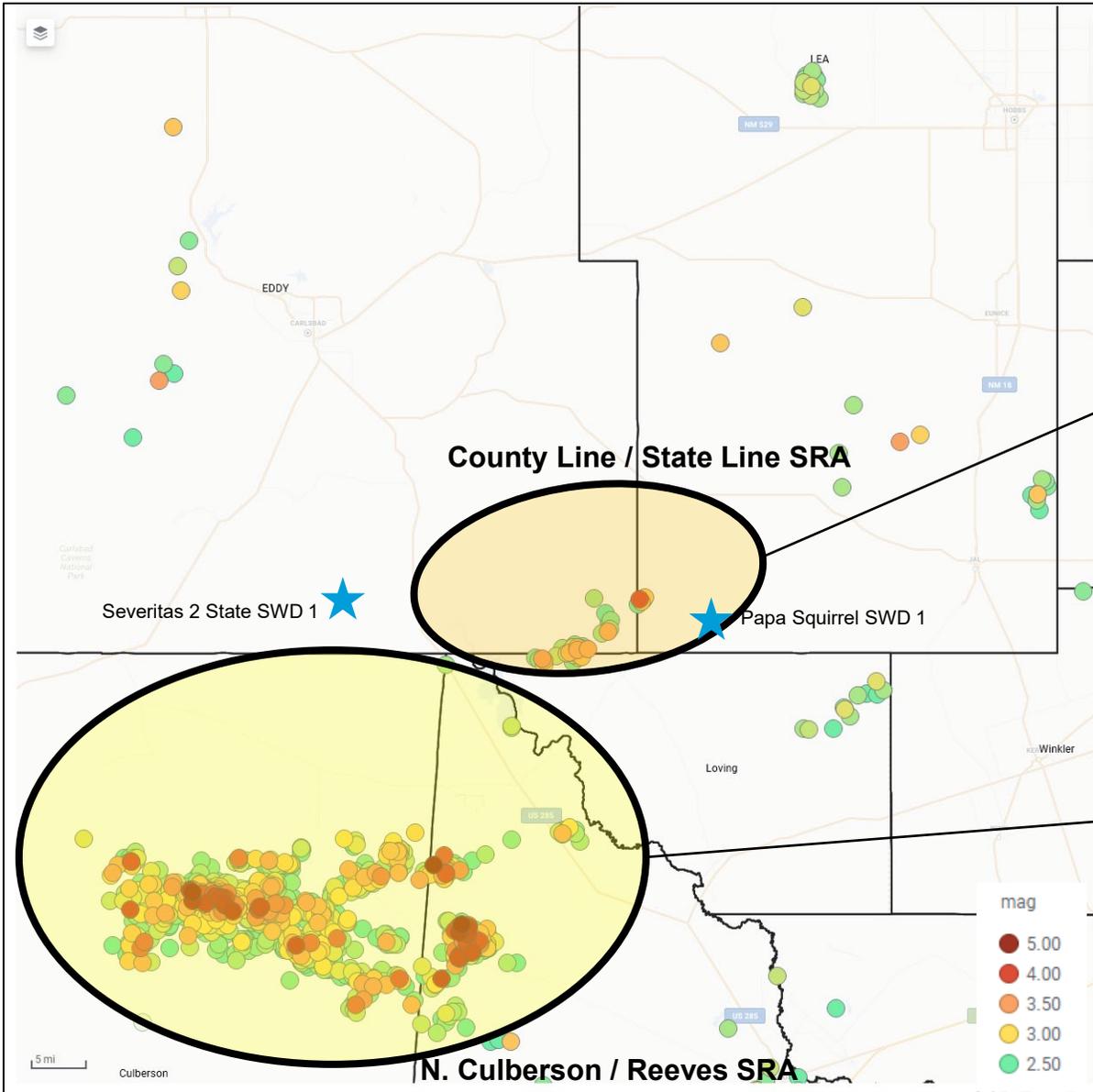


Map depicts current NMOCD SRA area (as of 9/29/23)

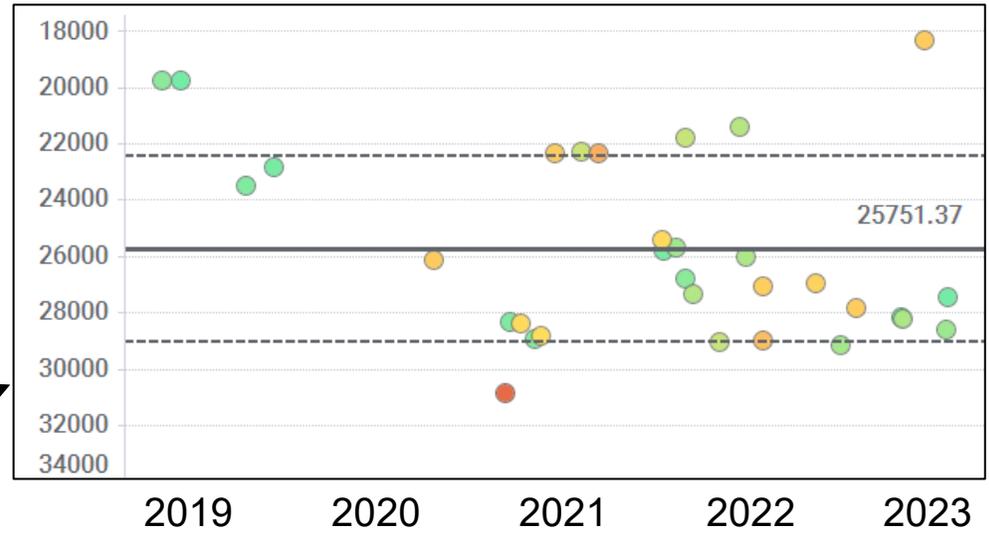
Papa Squirrel SWD 1 lies within the "County Line / State Line" SRA

Severitas 2 State SWD 1 is outside of any SRA

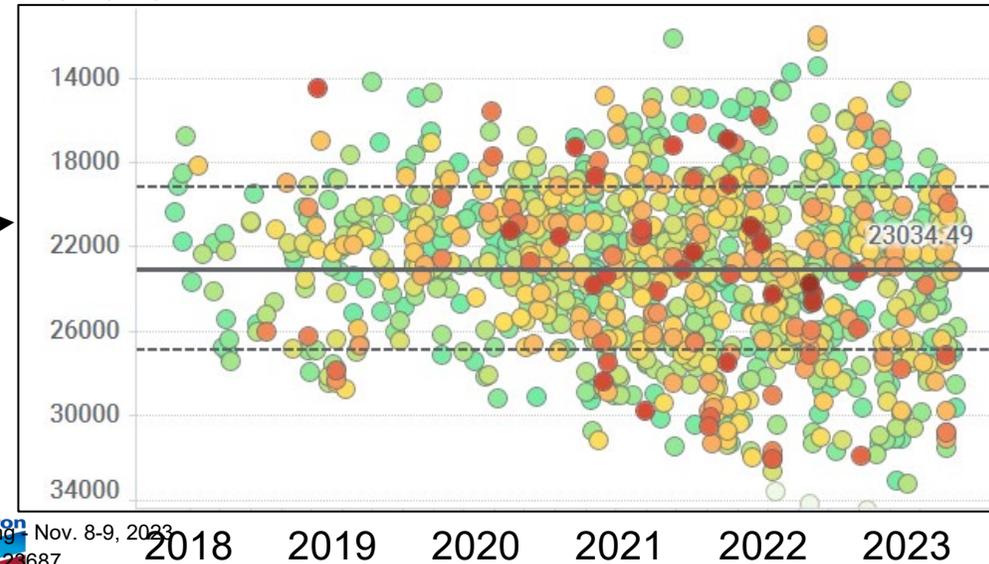
Deep Seismicity within N. Delaware Basin



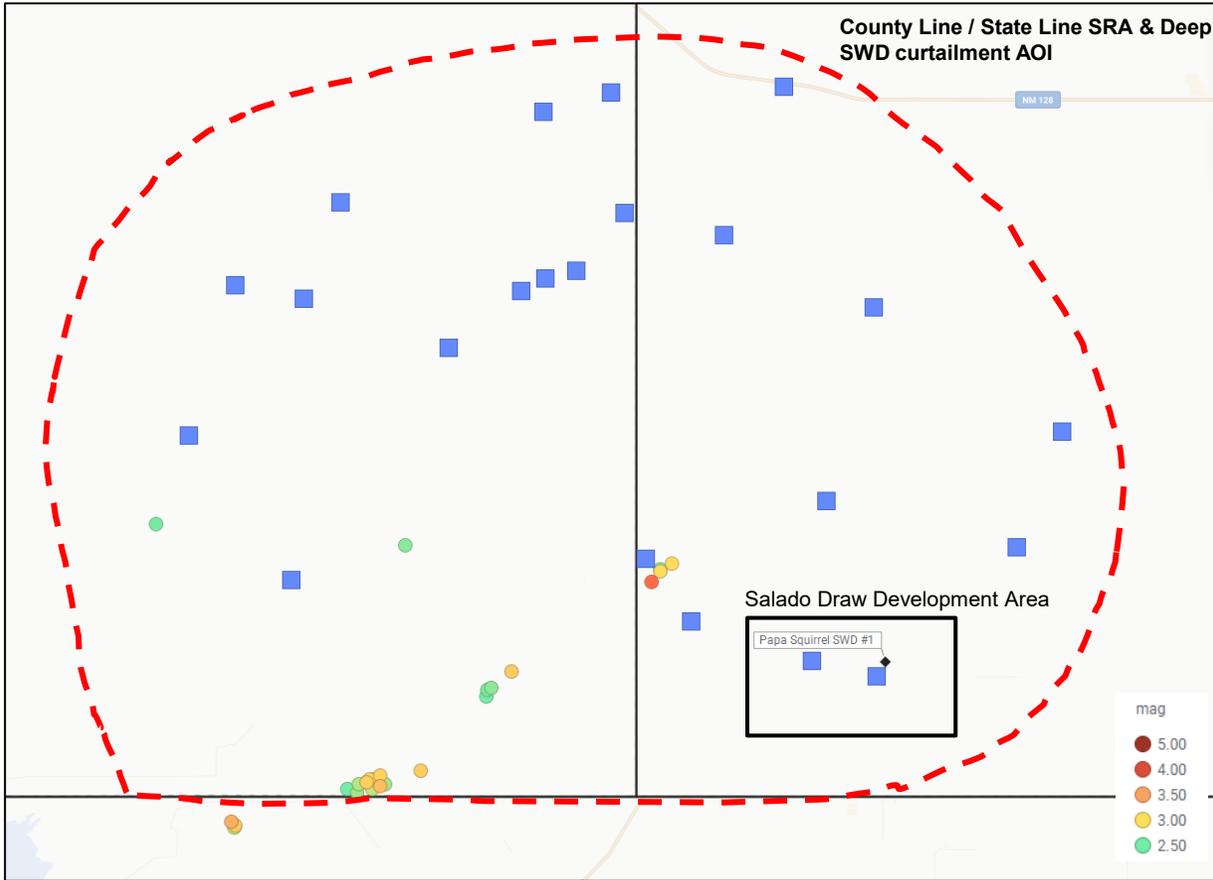
Depth (feet) of events within SE. New Mexico over time



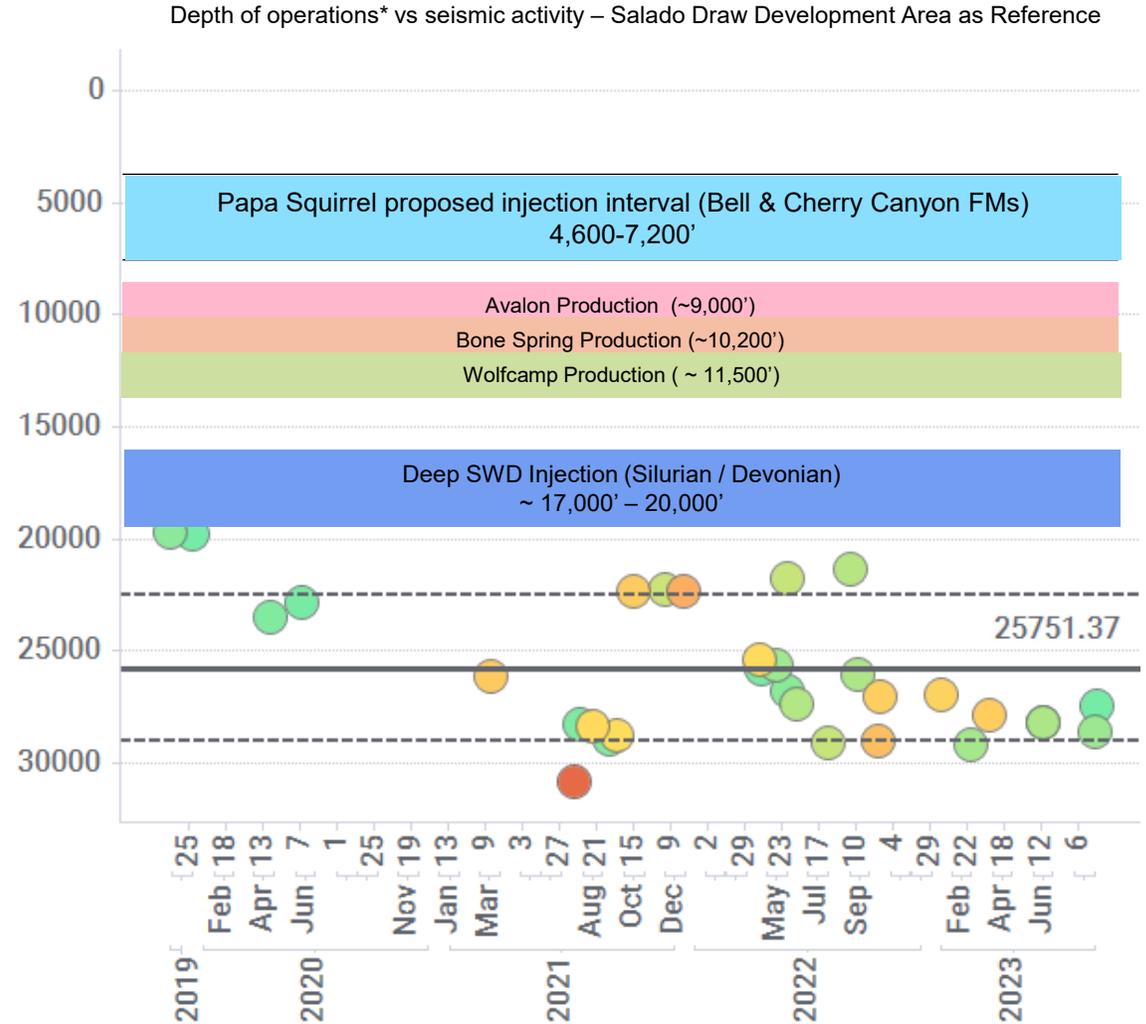
Depth (feet) of events within N. Culberson / Reeves SRA over time



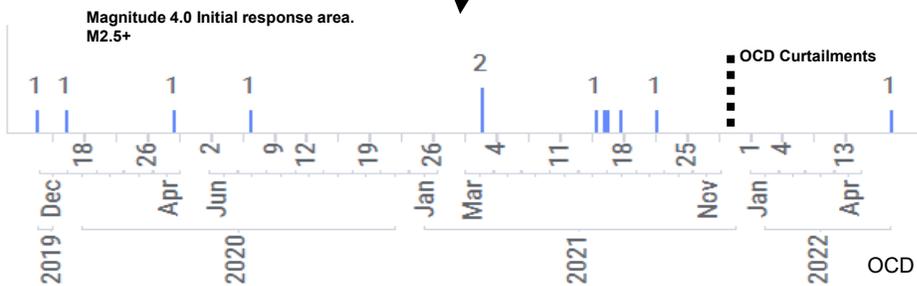
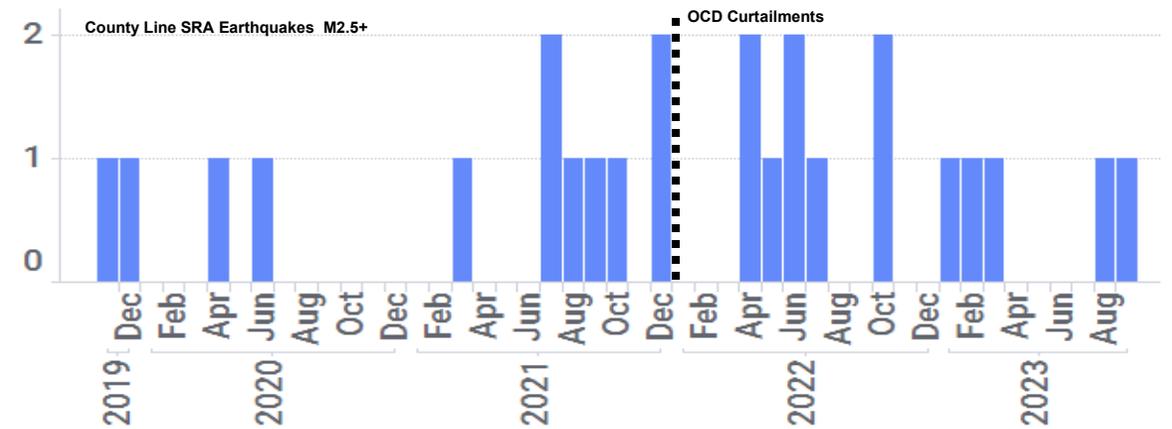
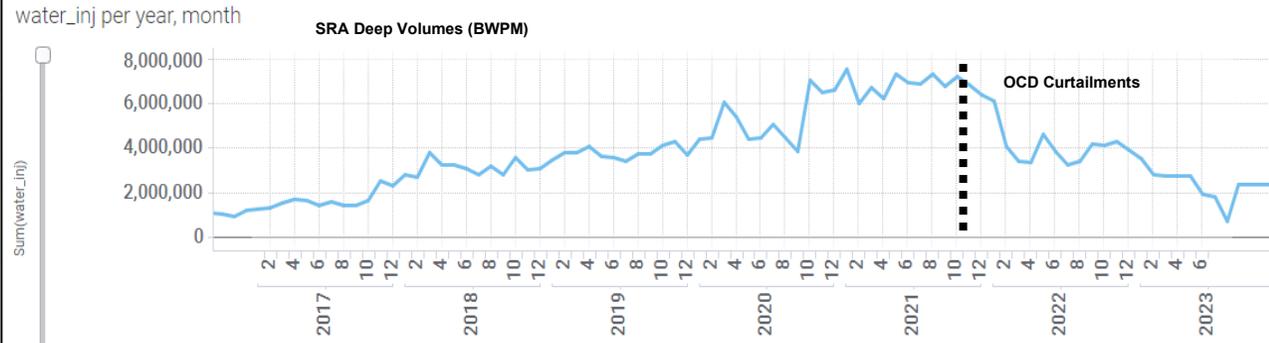
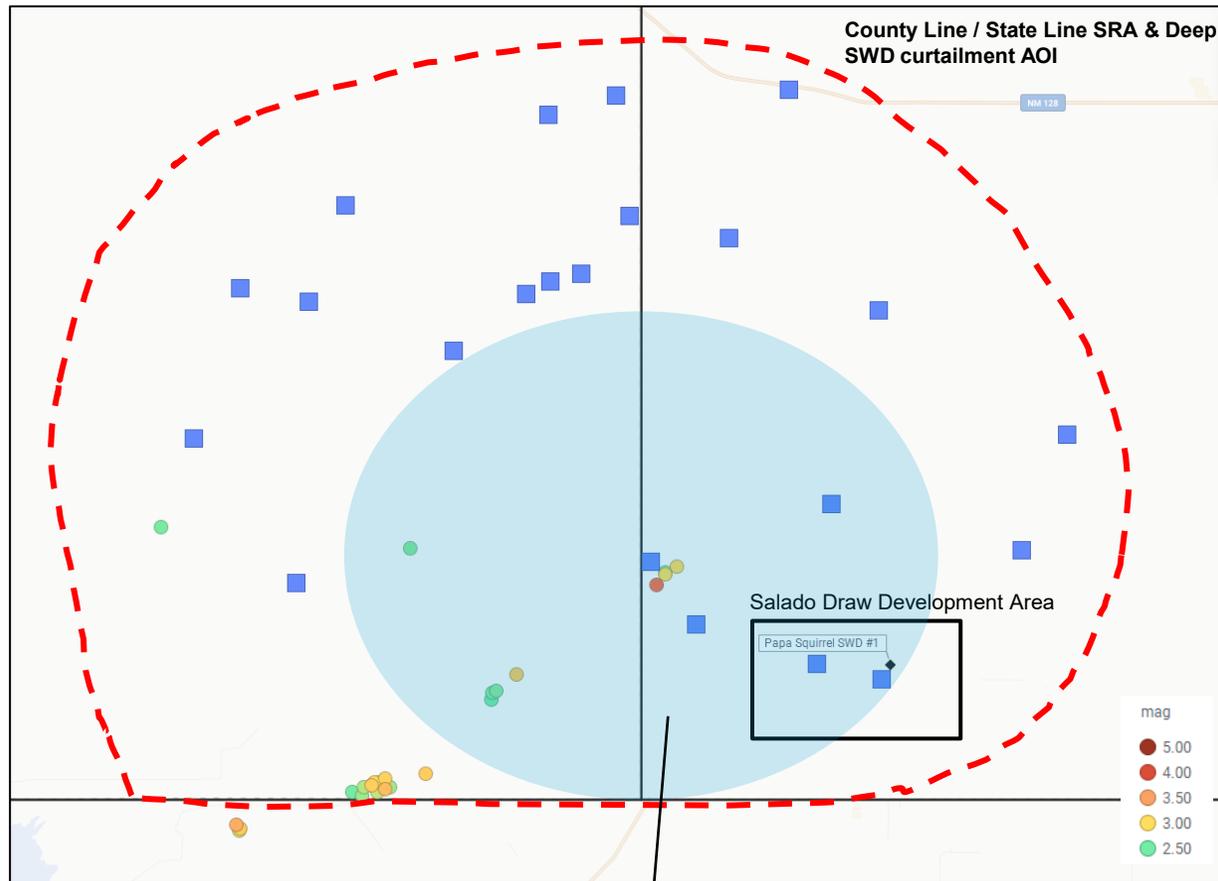
Seismicity Confined within Silurian / Devonian



Blue wells note deep SWD wells within the SRA boundary. Only deep SWD wells are curtailed or impacted by SRA protocol.

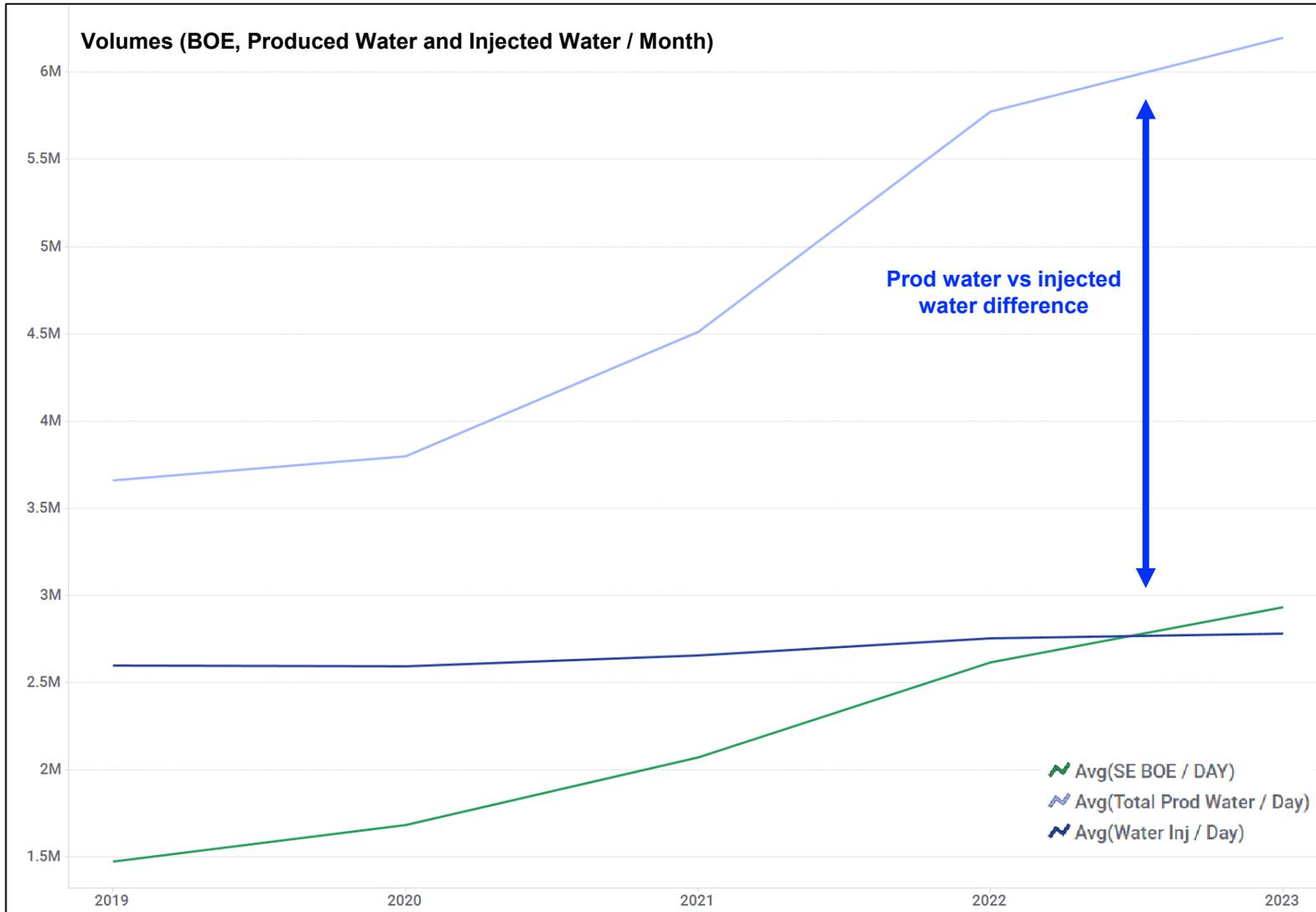


SRA Volume Curtailments Correlate with Reduced Seismic Activity



Above note deep SWD volumes curtailed within SRA. Curtailments took daily average deep volumes from ~235KBPD to ~ 100KBPD. Within the immediate M4.0 area, seismicity has fallen off (bottom left plot) with only one M2.5+ event within 6.0 miles of M4.0 event. Most of the recent events right along the NM / TX border.

SE New Mexico (Permian Basin) Production



Plot for SE New Mexico (Eddy and Lea CO)

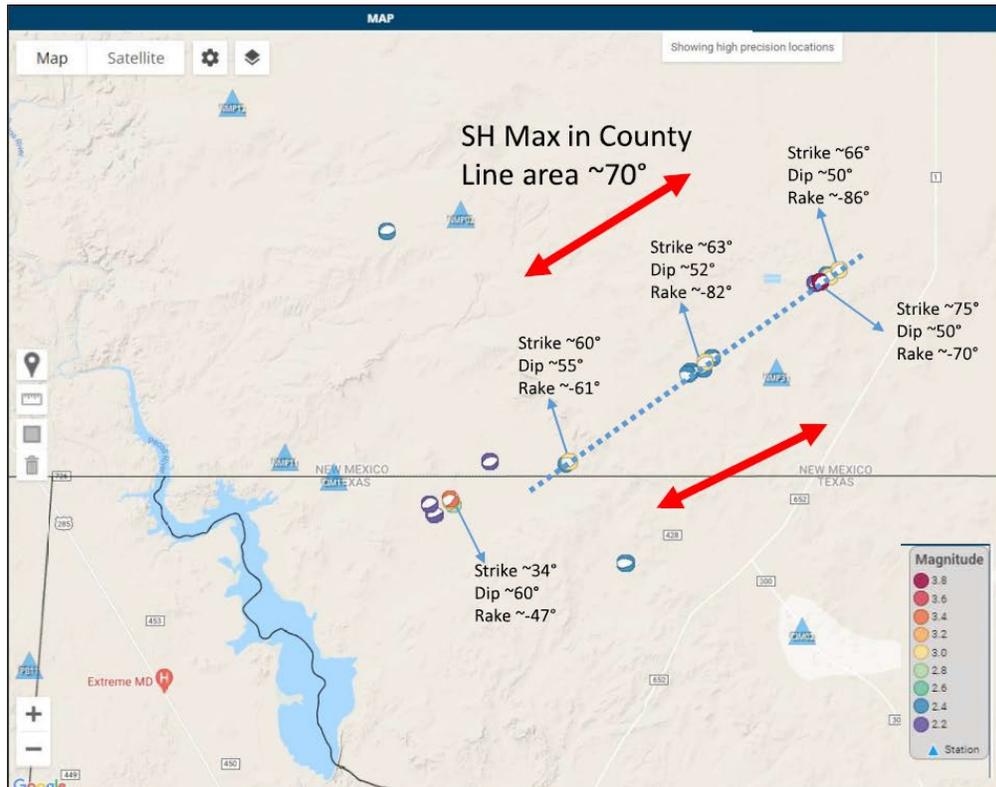
~ 3MM BWPD difference vs total water production and injection

Data from NMOCD Statistics (<https://www.emnrd.nm.gov/ocd/ocd-data/statistics/>)- S. New Mexico Only.

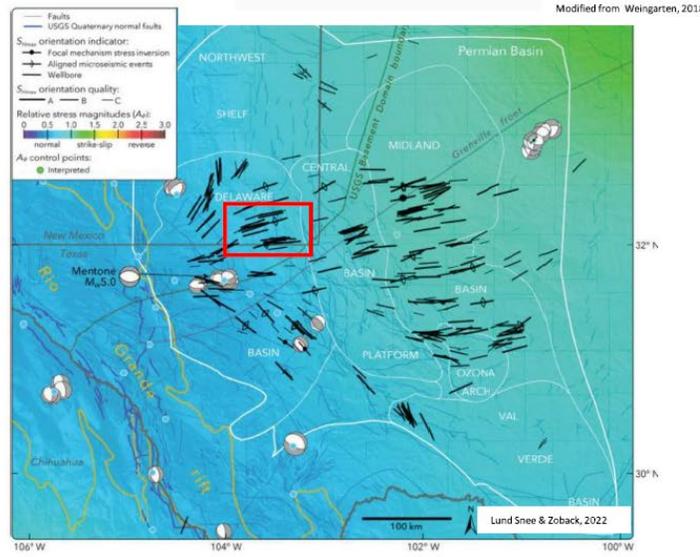
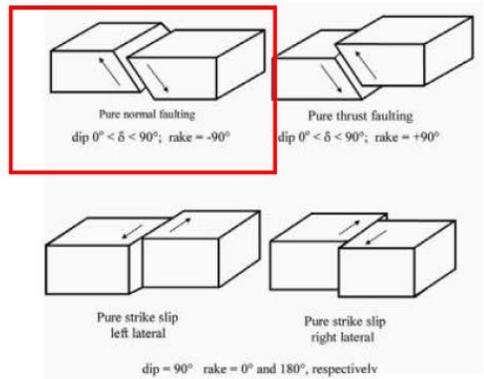
OCD Examiner Hearing - Nov. 8-9, 2023

No. 23686, 23687

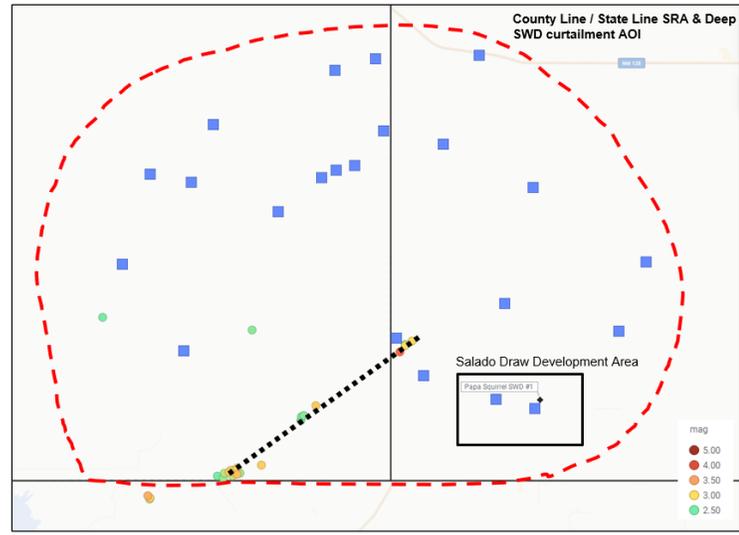
Chevron Undertook In-Depth Technical Review



Fault properties
 \sim Dip of 52°
 \sim Strike of 65°
 \sim Rake of -70°

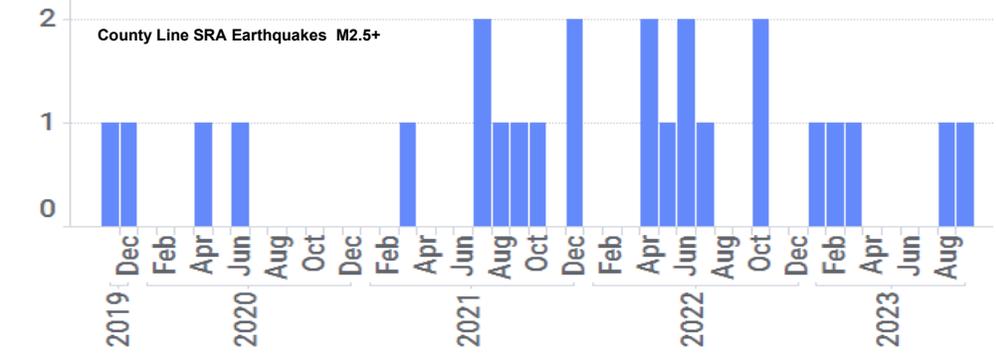


Lundstern, J.-E., and M.D. Zoback (2016), State of stress in Texas: Implications for induced seismicity, *Geophys. Res. Lett.*, 43, 10, 208–10,214, doi:10.1002/2016GL070974.

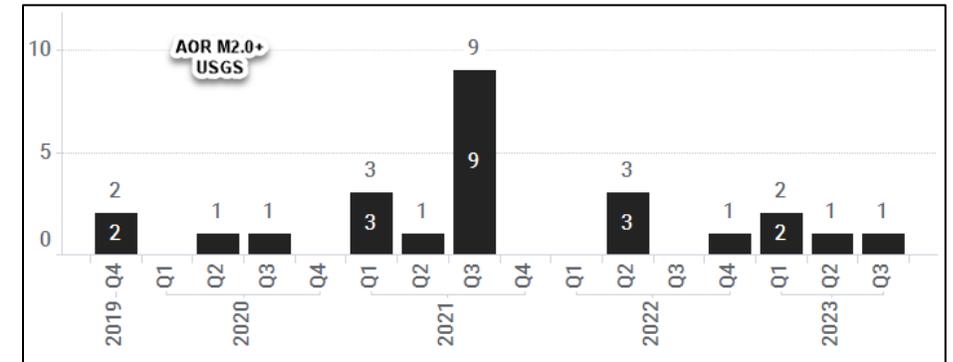
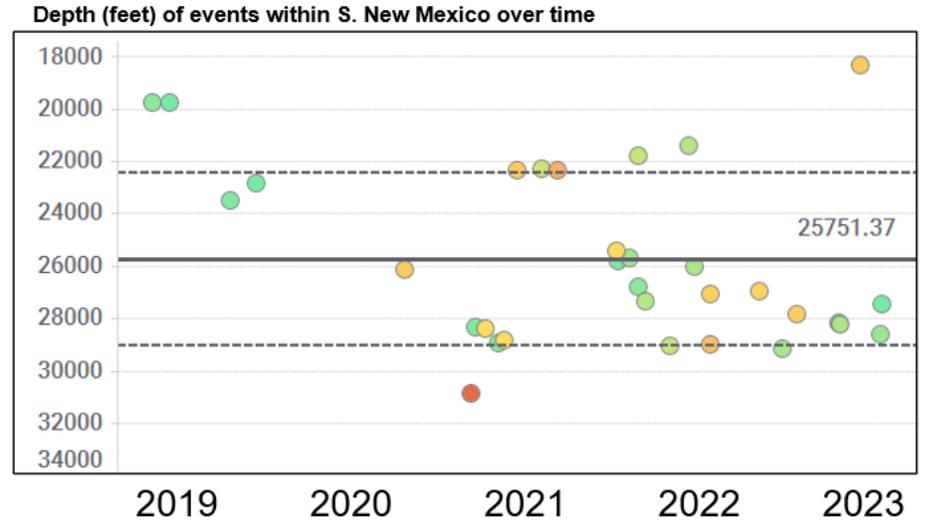
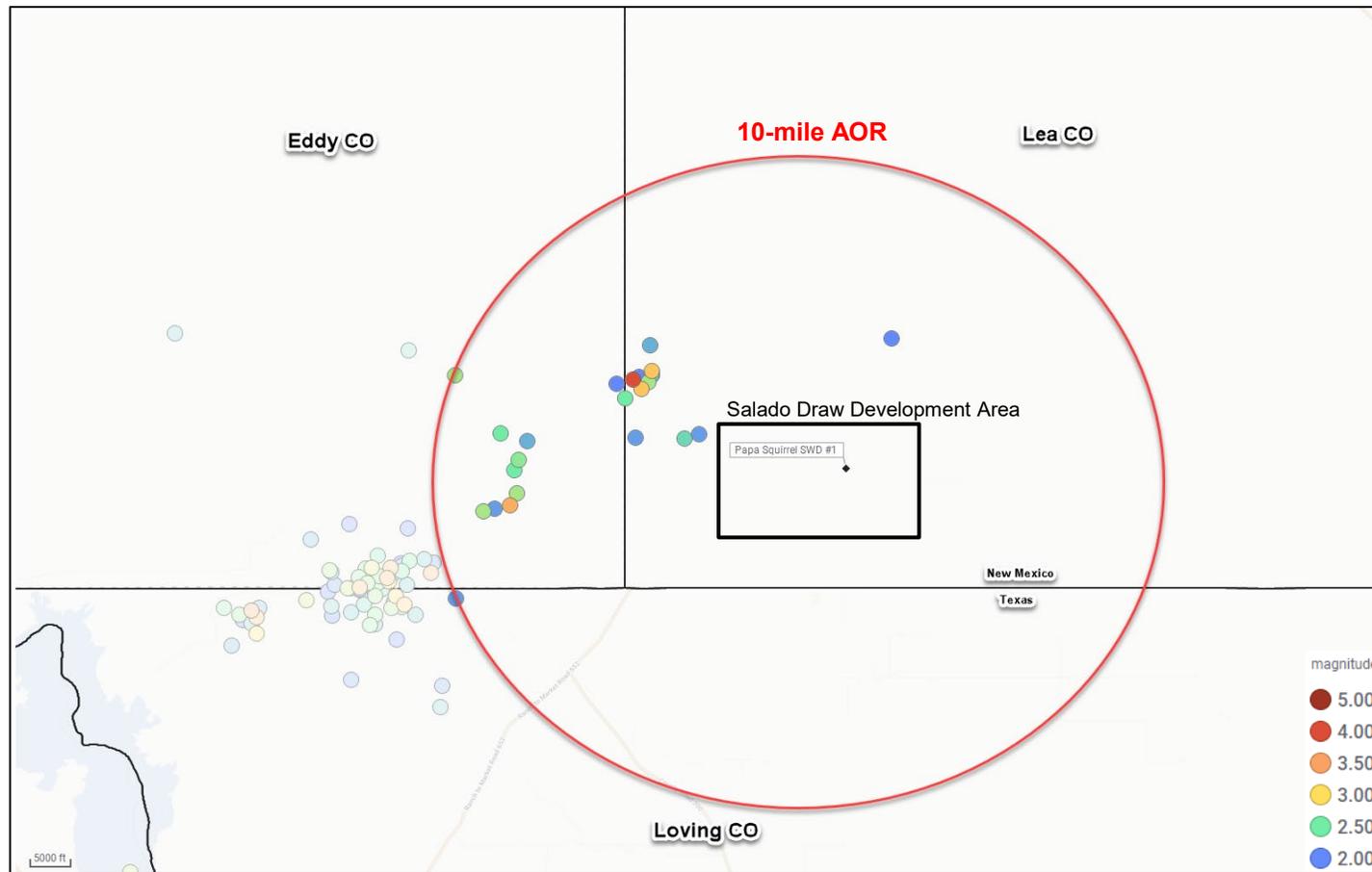


Based off stress data, SE New Mexico is in a dominantly normal faulting stress environment. Thus, faults oriented roughly parallel to this direction are more geologically prone to movement.

The Moment Tensors (MT) from Earthquake catalogs provide robust agreement with faults movement and regional stress.



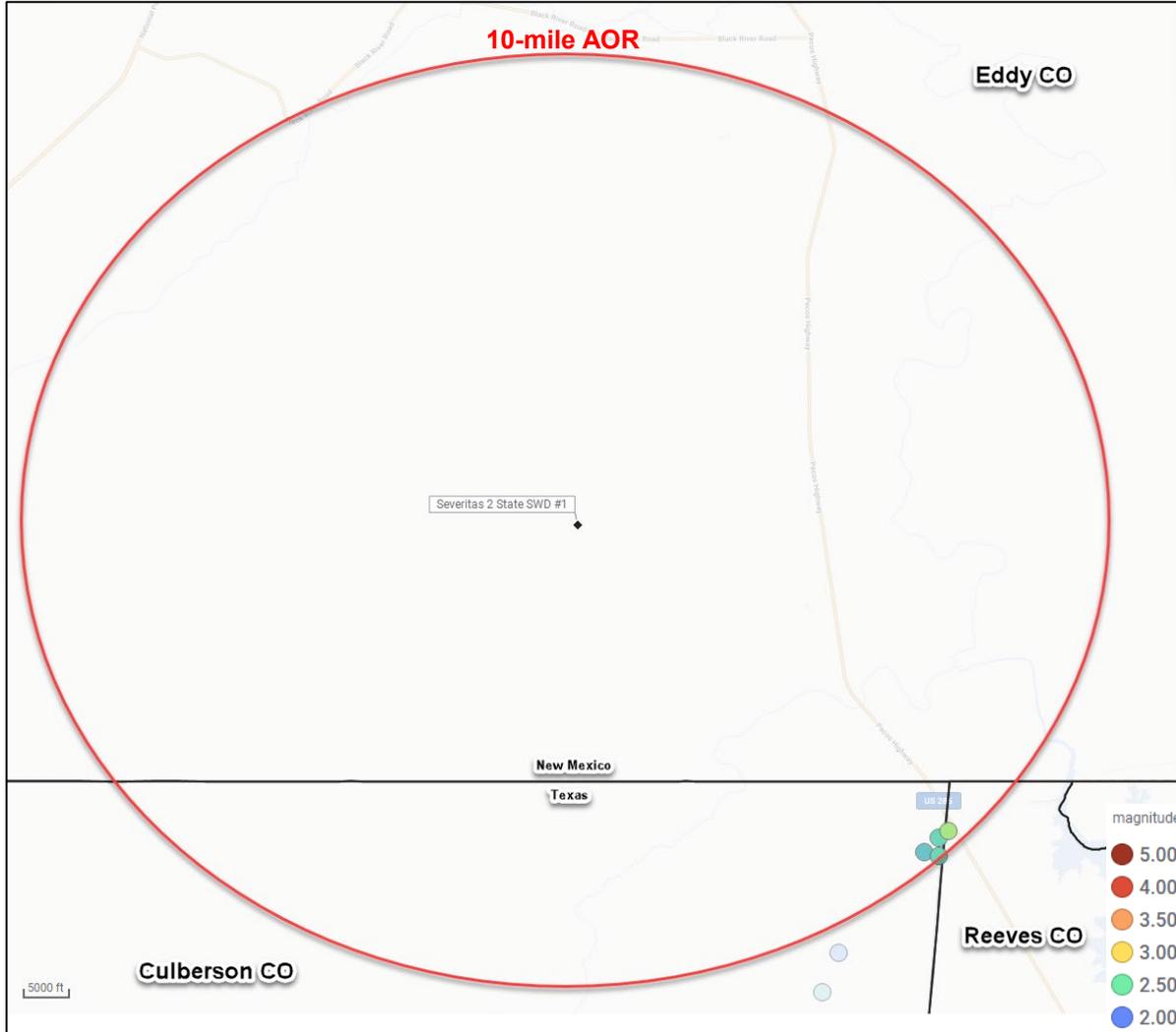
Papa Squirrel SWD 1 Seismicity Review



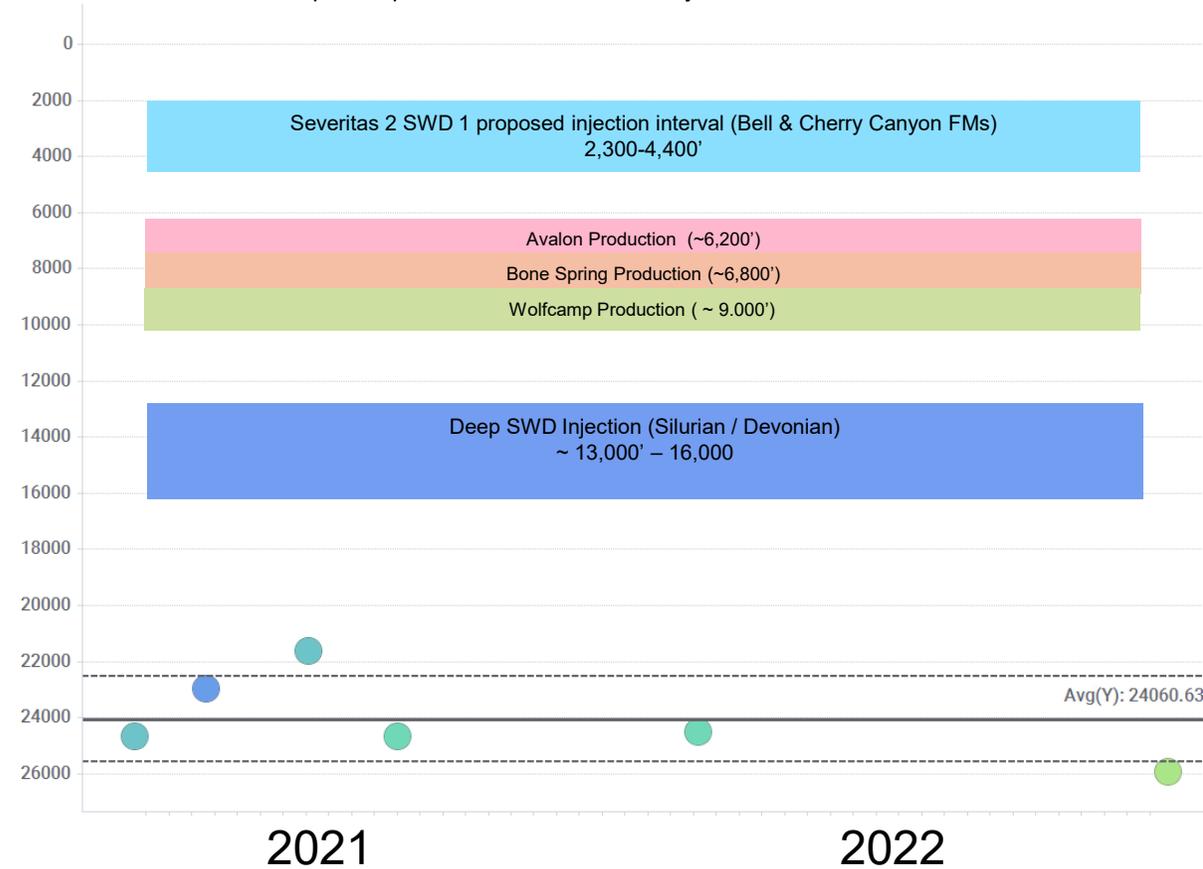
Events within 10 miles of Papa Squirrel SWD 1 location are within County Line / State Line SRA. Depth of events over 15,000' deep vs injection formation of Papa Squirrel.

Closest M2.5+ event ~ 5.7 miles from Papa Squirrel location

Severitas 2 State SWD 1 Seismicity Review



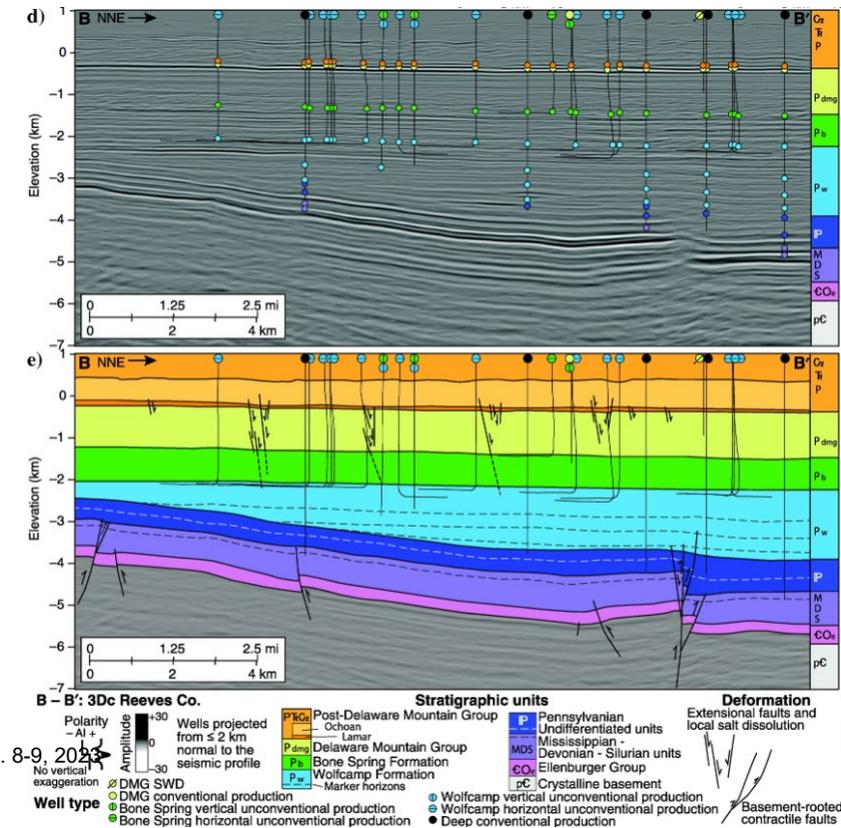
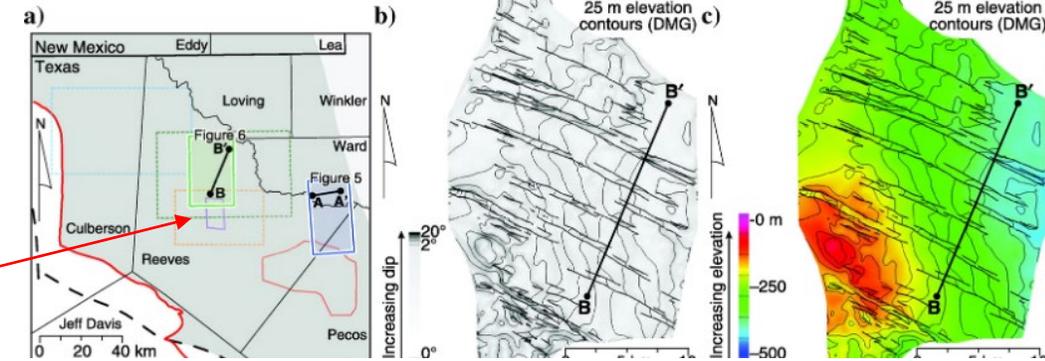
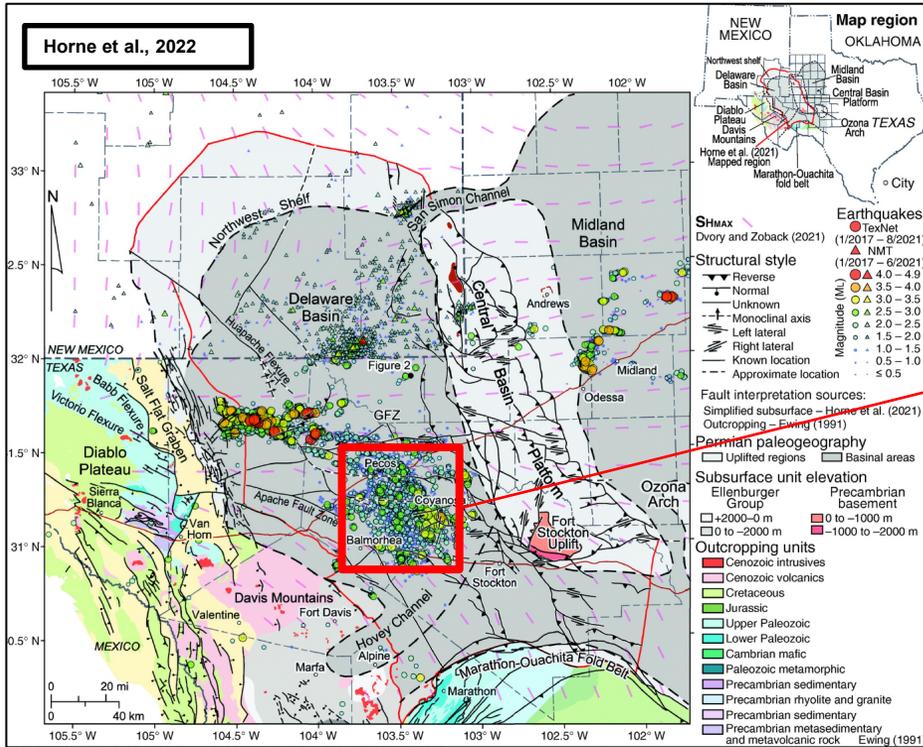
Depth of operations* vs seismic activity – Severitas Area as Reference



Only five events (largest magnitude 2.3) within 10 miles of proposed Severitas 2 State SWD 1 location (all events within Texas). Depth of events over 20,000' TVD.

Shallow (DMG Related) Seismicity – Southern Delaware Basin

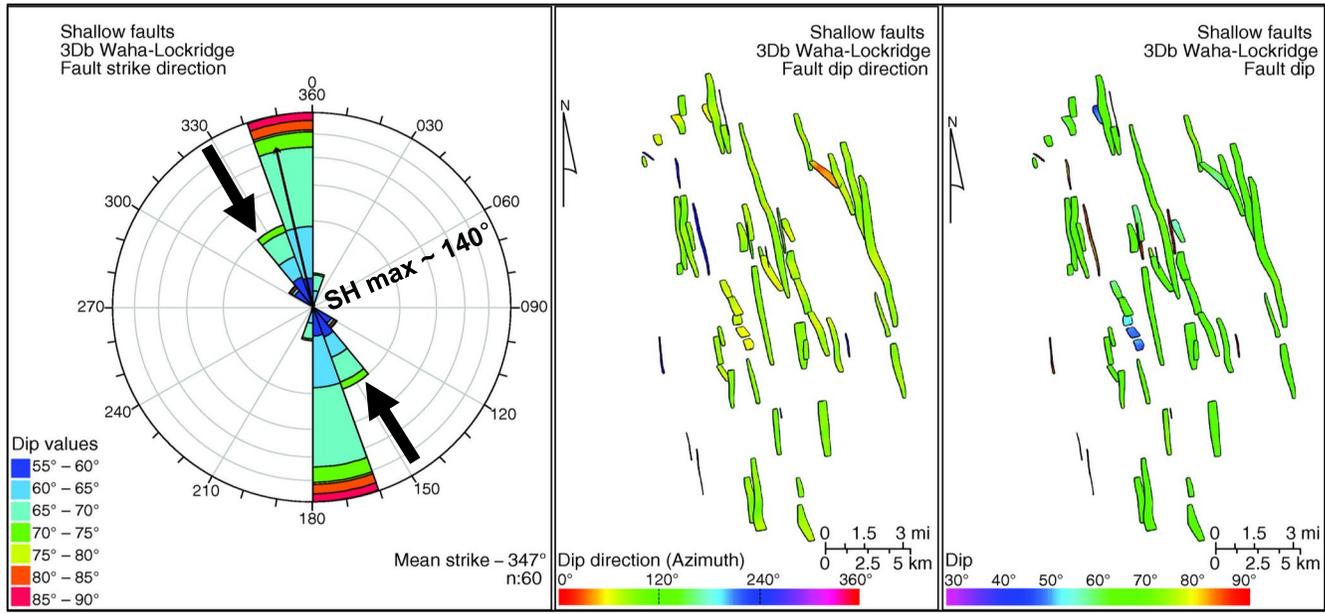
S. Reeves and Pecos



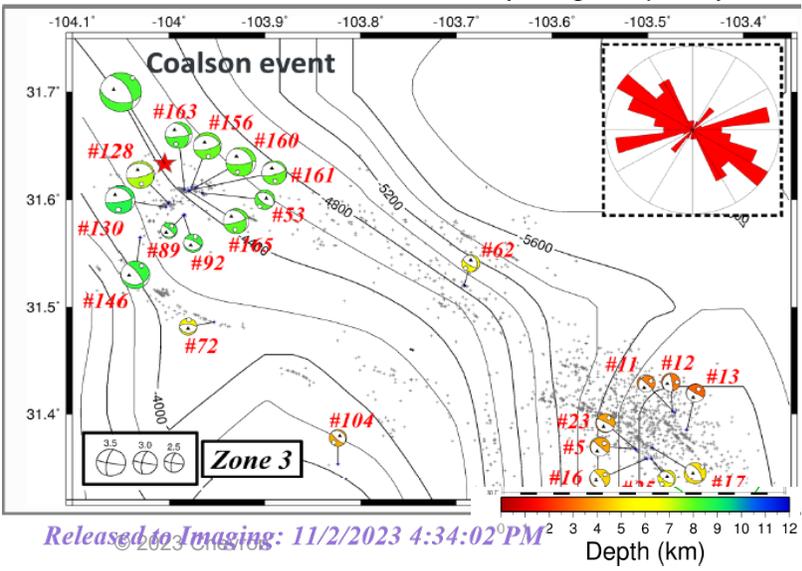
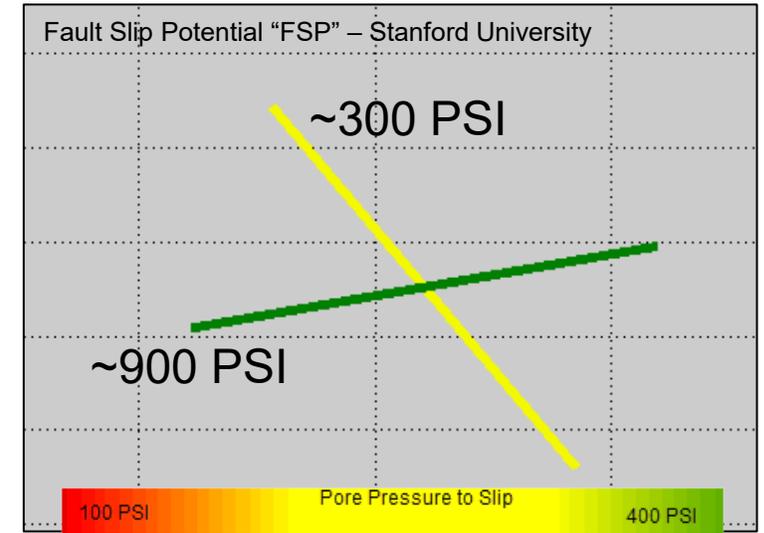
Elizabeth A. Horne, Peter H. Hennings, Katie M. Smye, Scott Staniewicz, Jingyi Chen, and Alexandros Savvaidis, (2022), "Structural characteristics of shallow faults in the Delaware Basin," *Interpretation* 10: T807-T835. <https://doi.org/10.1190/INT-2022-0005.1>

Shallow (DMG Related) Seismicity – Southern Delaware Basin

S. Reeves and Pecos



(Huang et al., 2022)

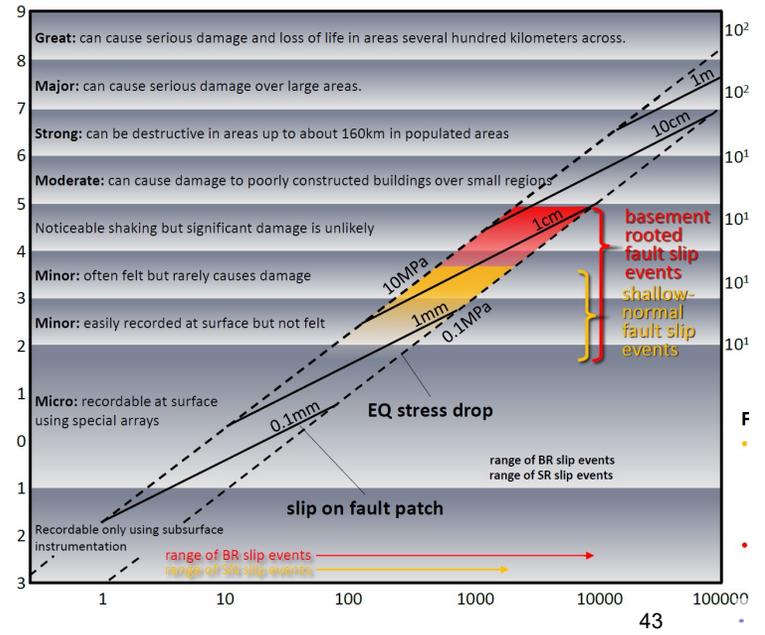


Above Left: shallow fault orientations roughly parallel with SH max direction.

Above Right: Fault Slip Potential output for S. Reeves, noting importance of fault orientation w/ SH max.

Below Left: moment tensor (MT) solutions nothing depth of EQ's within S. Reeves and associated w/ shallow faulting.

Below Right: relation to fault size, stress and potential EQ magnitude.



Elizabeth A. Horne, Peter H. Hennings, Katie M. Smye, Scott Staniewicz, Jingyi Chen, and OCD Examiner Hearing - Nov. 8, 2023
 Savvaidis, (2022), "Structural characteristics of shallow faults in the Delaware Basin," *Interpretation* 10: T807-814. No. 23686, 23687
 T835. <https://doi.org/10.1190/INT-2022-0005.1>

Mark D. Zoback and Steven M. Gorelick, (2012) Earthquake triggering and large-scale geologic storage of carbon dioxide" *PNAS* Vol 109, no. 26.

Notional SWD Interference and Communication & Resolution Framework Created in Collaboration with other Industry Operators

Signpost /
Triggering
Event

Producer determines that potential interference is occurring¹

Producer or SWD operator contacts industry / offset operators requesting a review of their potential SWD to producer interference case. Below are examples of potential data that could be provided.

- Daily production rate vs time graphs for the impacted producer(s)
- Water analysis, before and after impact of interference, from the impacted producer(s)
- Dates and location of all nearby fracture stimulation operations known to operator
- SWD daily injection rate and pressure versus time data for SWD well(s)
- Map and cross sections showing the location of the impacted wells and the suspected SWD well(s)

Process of
Elimination

Determine if FSI (Fracture Stimulation Interference) is the potential cause

Groups review the data submitted and consults with the producer and / or SWD operator.

Potential outcomes:

- Recommendations for more testing or information gathering
- Interpretation that the perceived injection well interference (IWI) is due to fracture stimulation interference (FSI).

Data
Collection
(optional)

If FSI confirmed, no further action

If FSI eliminated, collect data to confirm IWI (Injection Well Interference)

- Potential tests to confirm IWI
 - Pulse/Interference Testing
 - Tracer Study
 - More produced water testing

Remediation

If no SWD interference confirmed, no further action

If IWI confirmed, take remedial action

- Potential outcomes
 - SWD operator volunteers to reduce injection rate or plug back well
 - Perform more test(s) and review results
 - Further reduce injection rates if needed
 - Producer decides to seek legal or regulatory resolutions

Escalation

If action successful, continue implementing remediation

If action unsuccessful, take increased remediation action

Seek resolution with OCD or otherwise

- NMOCD holds authority to alter or terminate SWD wells that have demonstrated connectivity

OCD Examiner Hearing: Nov. 8-9, 2023

No. 23686, 23687

¹ Chevron plans to monitor its own producers within two miles of an injector for a monthly average water cut increase of two standard deviations over the previous 3-month average to flag water influx

Chevron's Proposed SWD Data Collection & Surveillance Program

Surveillance	Purpose
<p align="center">Quad Combo Logs <i>(Gamma Ray, Resistivity, Neutron / Density and Sonic)</i></p>	<ul style="list-style-type: none"> • Injection interval depths & thicknesses • Fill spatial gaps in key modeling logs (i.e., sonic logs for DMG) • FE properties for injectivity validation through rate transient analysis (RTA) work • Stress properties from Sonic • Inputs to mechanical earth model (MEM)
<p align="center">XRMI Log <i>(X-tended Range Micro Imager [formation image log])</i></p>	<ul style="list-style-type: none"> • Natural Fractures & stress orientation identification • Inputs to MEM model
<p align="center">Downhole Pressure Gauge</p>	<ul style="list-style-type: none"> • Pore pressure and frac gradient models and 1D MEM updates • Injector performance evaluation and forecasting
<p align="center">Spinner Surveys</p>	<ul style="list-style-type: none"> • Identify high permeability zones; compare with log data
<p align="center">Water Chemistry</p>	<ul style="list-style-type: none"> • Water chemistry profiles for bench-to-bench communication analysis • Water source identification and allocation
<p align="center">DFIT</p>	<ul style="list-style-type: none"> • Identify fracture closure stress in DMG (Bell, Cherry, and Brushy) • Support geomechanics modeling
<p align="center">Step Rate Tests</p>	<ul style="list-style-type: none"> • Identify rate and pressure at which the reservoir as an aggregate fractures • Understand operating limits of SWD
<p align="center">Tracers</p>	<ul style="list-style-type: none"> • Identify if injected wastewater is being produced by offset unconventional wells
<p align="center">Downhole Gauges in offset Producers</p>	<ul style="list-style-type: none"> • Measure influence/communication of injectors on offset producers
<p align="center">Production Monitoring</p>	<ul style="list-style-type: none"> • Monitor water cut trends to identify communication between injectors and producers

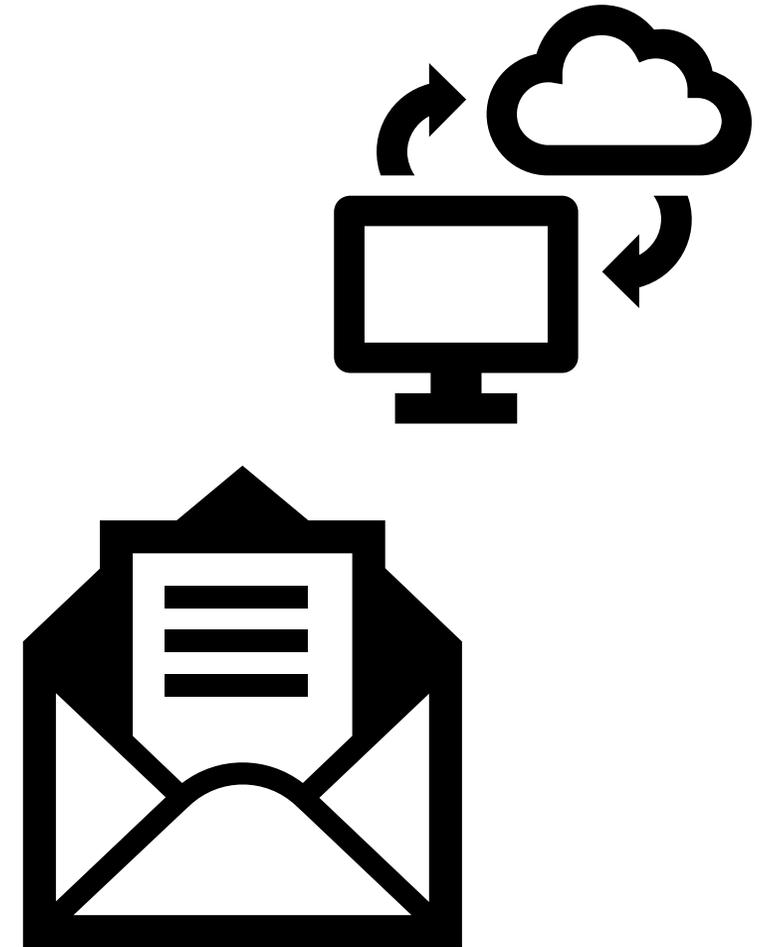
Chevron's Proposed SWD Data Collection & Surveillance Program Timeline

SWD SPUD

Category	Pre SWD-Spud	Execution	Injection Start Up	3 – 6 months	> 6 months
Injectivity/Injection rates	Reservoir pressure measured from reservoir formation tester (RFT) in development wells → improved max rate calculation	Well logs to determine porosity, thickness and fracture presence	Step Rate Test established max injection rate and injectivity without fracturing reservoir.	Spinner surveys to identify high perm zones	Hall plot monitored injectivity change through time.
			Image logs to identify high perm zones from fractures / faults		
Injection capacity fill-up volume/timing	Reservoir pressure measured from RFT in development wells	Well logs to determine porosity, thickness and fracture presence	SRT established frac gradient and fracture pressure limit.	Rate transient analysis derived initial reservoir pressure, reservoir boundary size, and forecasted fill-up time.	
			Reservoir and bottom hole pressure from DHPG for pressure and injector performance monitoring		
Reservoir pressure monitoring	Reservoir pressure measured from RFT in development wells		Reservoir pressure at SWD measured prior to SRT		
			Reservoir pressure from DHPG to monitor change in reservoir pressure with time		
Fracturing pressure		Conduct DFIT, analyze pressure gradient from logs, calibrate with DFIT.		Forecasted BHP increase from RTA derived reservoir model and how it compares with SRT established frac gradient and fracture pressure limit.	
			Reservoir pressure from DHPG to monitor change in reservoir pressure with time		
Injection zone conformance	Downhole water sampling of DMG from RFT on development wells		Analyze SRT to determine injection rate limits	Monitor offset producing wells for unexplained increase in water cut, acquire water samples, and run downhole memory gauges	
			Image logs to identify high perm zones from fractures / faults	Spinner surveys to identify high perm zones	
			Run tracer in injector, sample offset producers		
				Forecasted fill up time from RTA	
			Routine water sampling to monitor and compare injected water with baseline aquifer chemistry		
			INSAR ground level monitoring		

Pilot Project Data Reporting

- Chevron's proposed plan for data submittals to NMOCD will be in the same format as those to other operators.
- Transfer of data and interpretations to operators is straight forward.
- Chevron is committed to engaging with NMOCD on data submissions



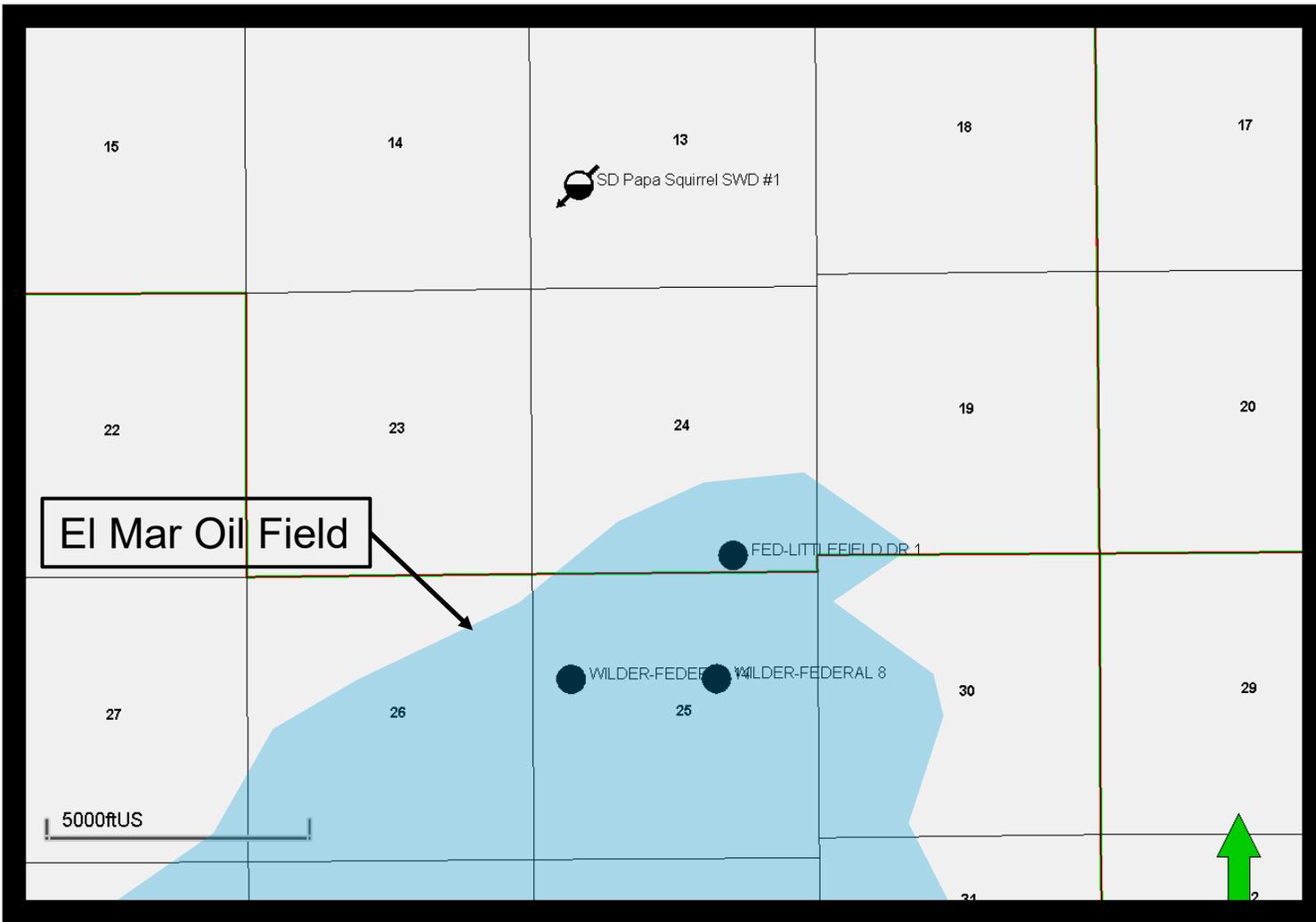
Seismicity Section & Data Collection Conclusions

- Current working hypothesis, supported by modern day research and observations, note that recent increases in deep disposal volumes is attributed to the increase in seismicity across the northern Delaware Basin of Texas and SE NM
- Seismic events within the AORs of the Papa Squirrel and Severitas locations are well over 15,000' deeper than the injection intervals and to date, do not suggest that shallow SWD operations are, in this area, contributing to seismicity
- Chevron has conducted a thorough review of technical field, subsurface and literature data to plan for and propose locations to mitigate seismicity
- Proposed SWD pilots will collect an industry leading dataset to understand subsurface issues and opportunities w/r/t injection operations
- Chevron supports open data collection and dissemination to support broad learnings and collaboration

DMG Production Assessment



DMG Production within a Two-Mile Radius Papa Squirrel SWD 1 and Severitas 2 State SWD 1

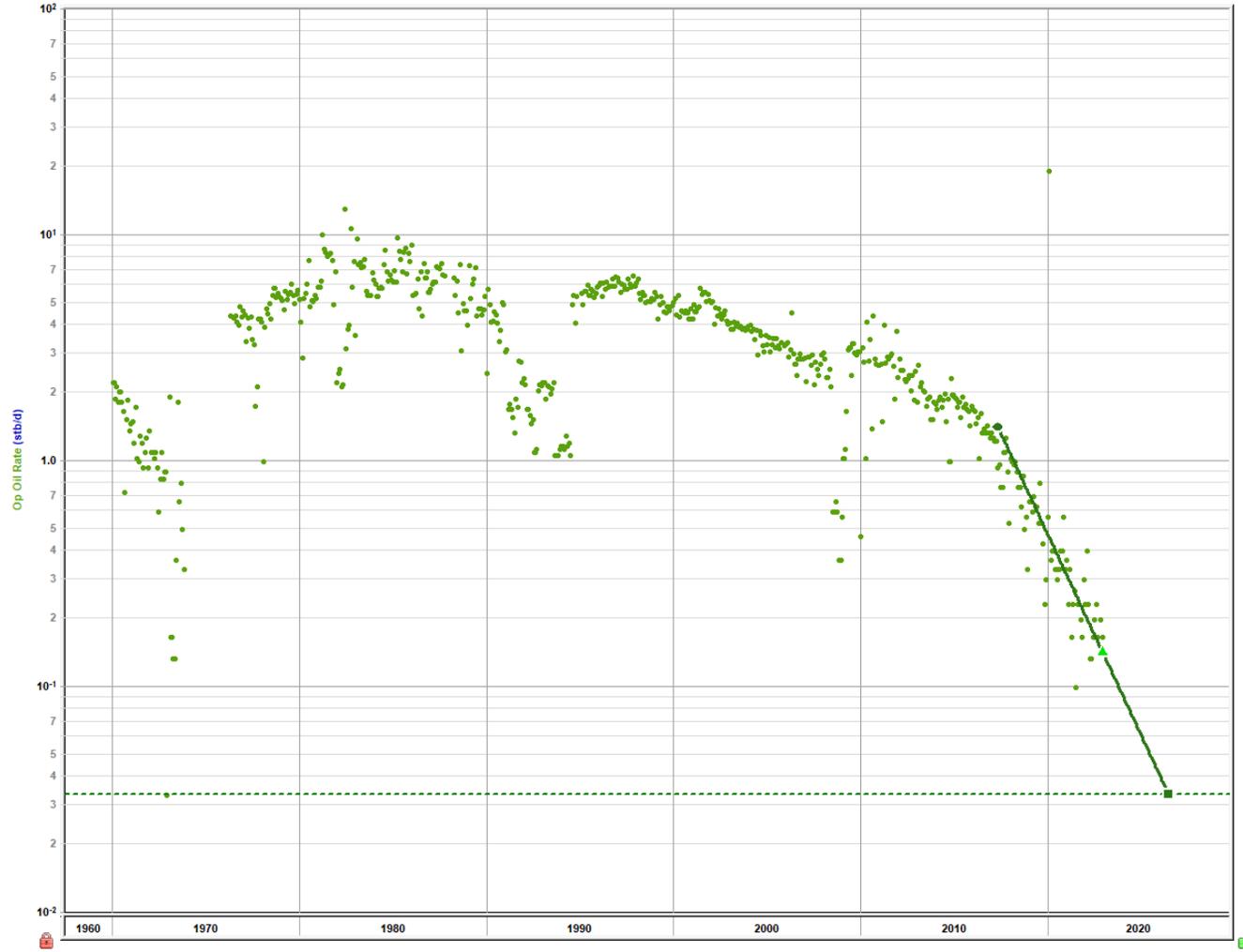


- The only active DMG producers within 2-mile radius of the Papa Squirrel SWD 1 proposed well lie within the El Mar Field:
 - Sahara Fed-Littlefield DR 1
 - Sahara Wilder-Federal 8
 - Sahara Wilder-Federal 14
- There are no active DMG producers within 2-mile radius of the Severitas 2 State SWD 1 proposed well.

Sahara Fed-Littlefield DR 1* Decline Analysis

Decline Type	Exponential
Annual Decline, %/year	33.67
Cutoff Rate, BO/Month	1.0
End Date	June 2026
Remaining Oil, MSTB	0.096

Most current production is less than 1 B/D.



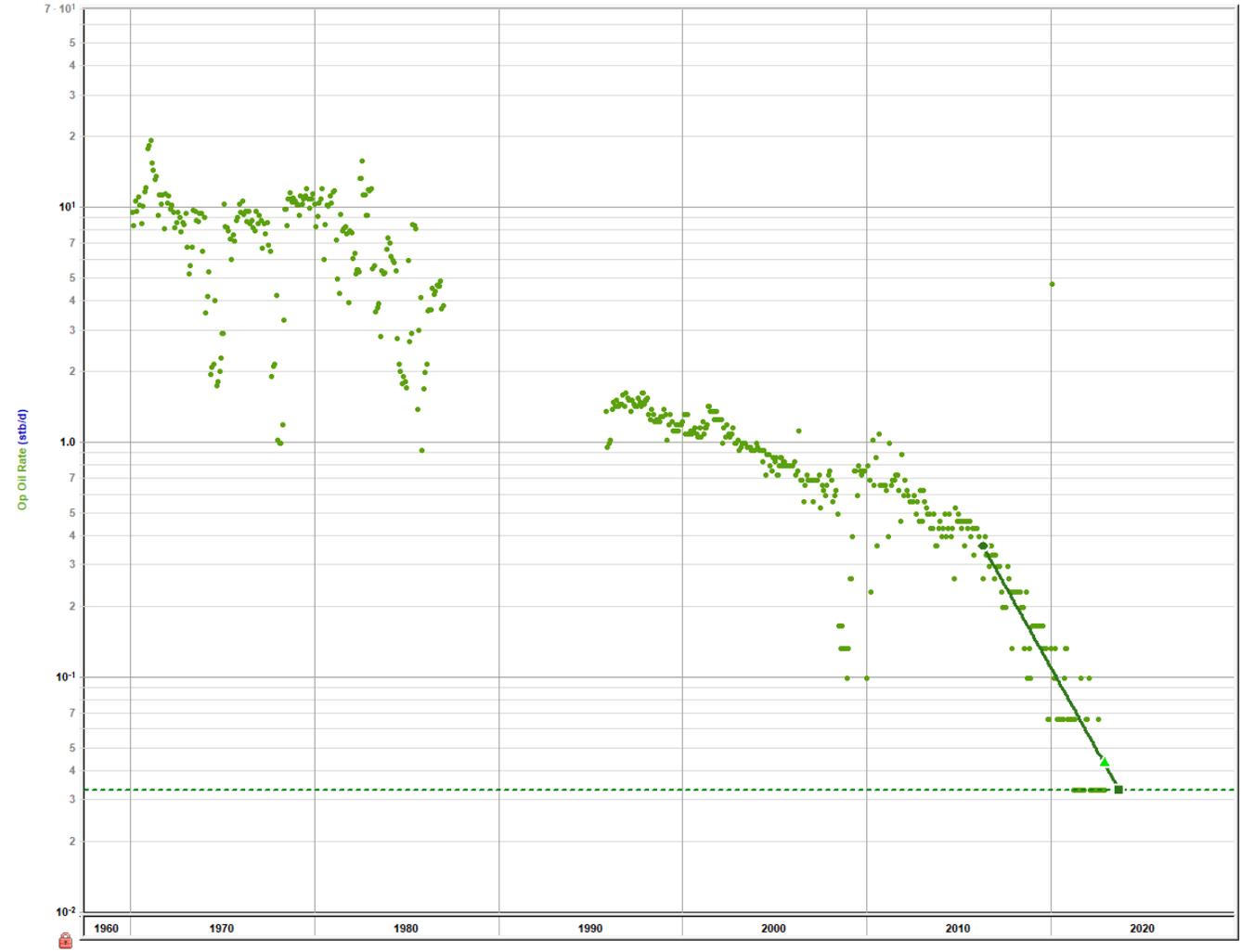
Gas excluded from analysis due to data missing post 1994

*API #: 30-025-08268

Sahara Wilder-Federal 8* Decline Analysis

Decline Type	Exponential
Annual Decline, %/year	27.62
Cutoff Rate, BO/Month	1.0
End Date	Sep 2023
Remaining Oil, MSTB	0.011

Most current production is less than 1 B/D.



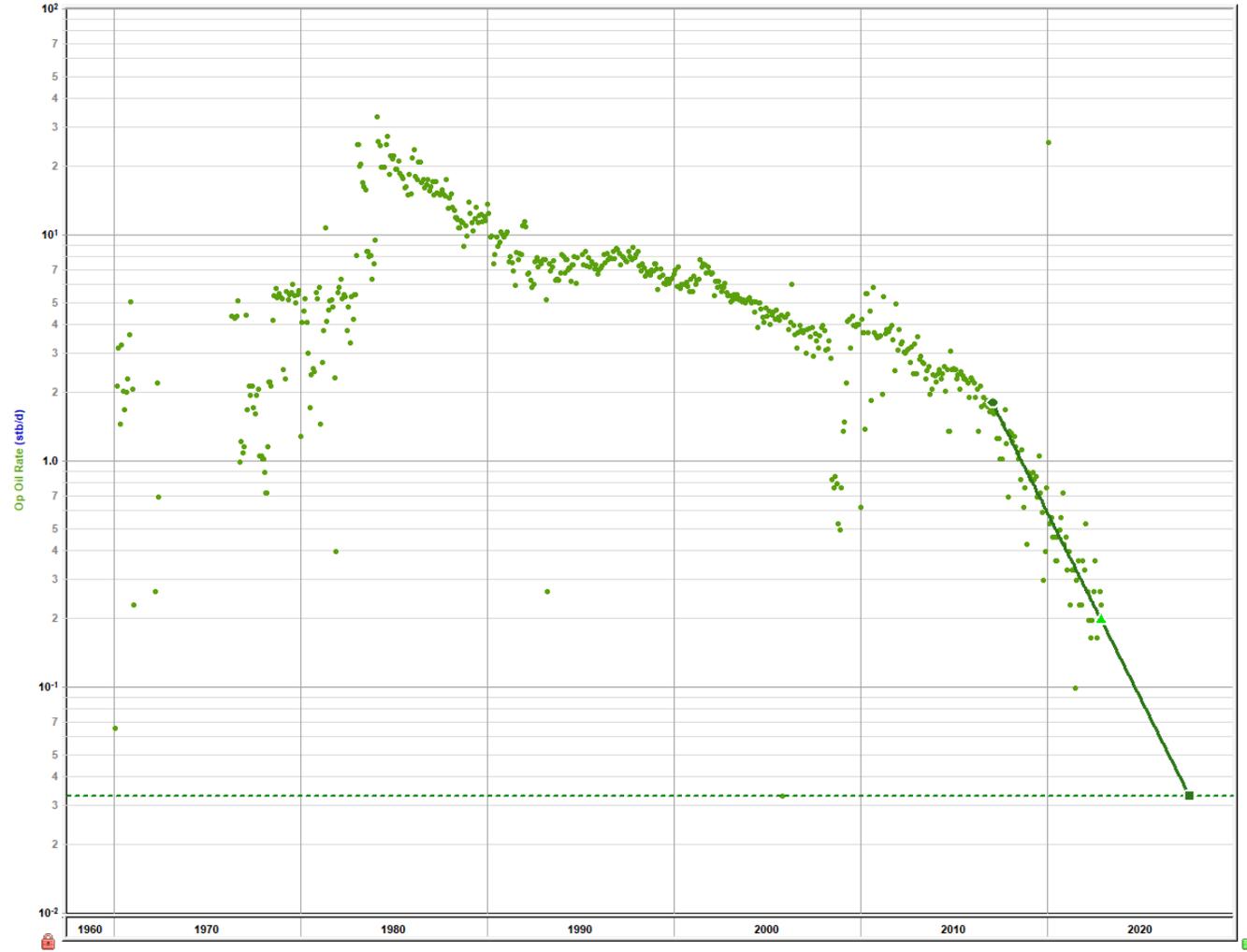
Gas excluded from analysis due to data missing post 1986

*API #: 30-025-08279

Sahara Wilder-Federal 14* Decline Analysis

Decline Type	Exponential
Annual Decline, %/year	31.58
Cutoff Rate, BO/Month	1.0
End Date	Aug 2027
Remaining Oil, MSTB	0.158

Most current production is less than 1 B/D.



Gas excluded from analysis due to data missing post 1997

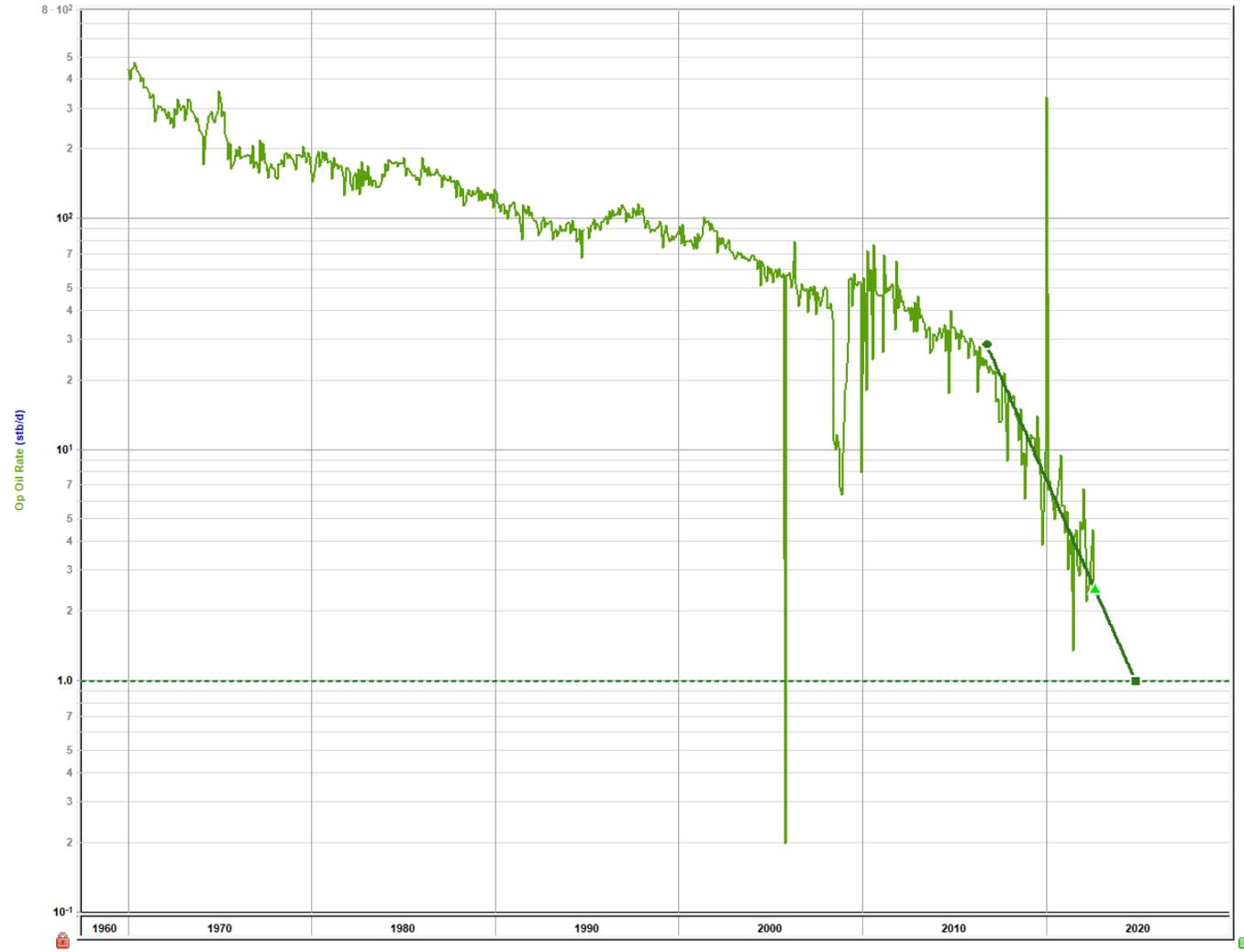
*API #: 30-025-08285

El Mar Field Decline Analysis

Demonstrates Limited Remaining Reserves in Entire Field

Decline Type	Exponential
Annual Decline, %/year	33.82
Cutoff Rate, BO/Month	30.0
End Date	Nov 2024
Remaining Oil, MSTB	1.313

El Mar Field Well Count: 20 in 2022
 Most recent well drilled:



Gas excluded from analysis due to data missing post 1997

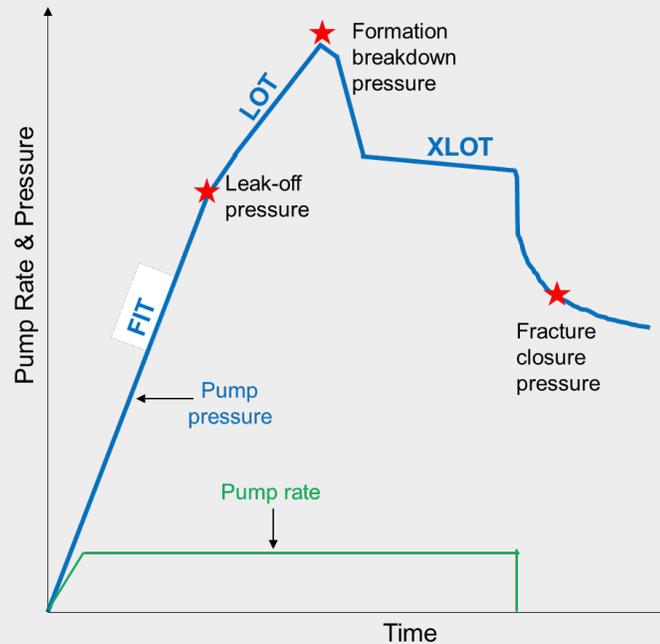
Lamar Limestone Upper Containment

Extended Leak-off Test – Lamar Limestone Seal

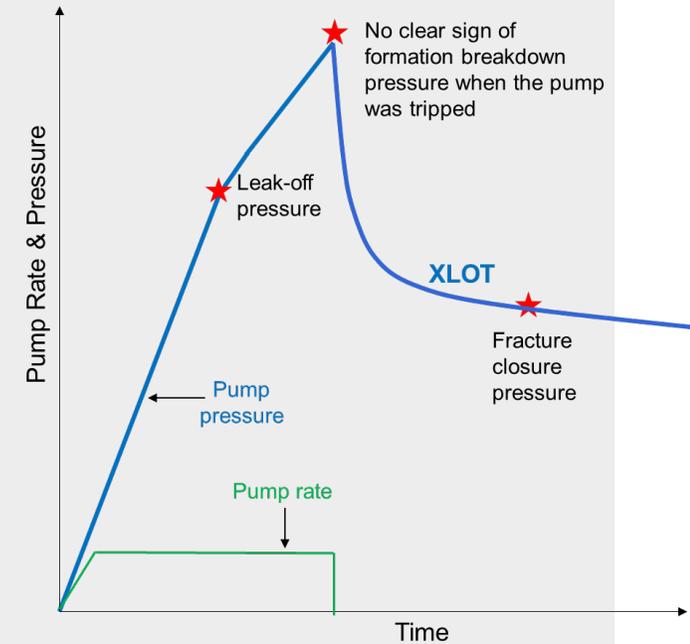
No Signs of Seal Breakdown at High Pressure

- Formation Integrity Test (FIT)
 - A test to evaluate the strength and integrity of a new formation and it is the first step after drilling a casing shoe.
- Leak-Off Test (LOT)
 - A test to determine the fracture pressure of the open formation, usually conducted immediately after drilling below a new casing shoe.
- Extended Leak-Off Test (XLOT)
 - With minor modifications, LOT becomes XLOT to provide fracture closure pressure (FCP).
 - Chevron Conducted XLOT on well 174WA in Oct 2022

Typical FIT, LOT and XLOT Test Behavior



174 WA XLOT Test Behavior



- Due to pump tripping at max pressure of 2200 psi, no clear sign of formation breakdown pressure was observed during any of the three 174WA XLOT tests.
- Max pressure during the XLOT is significantly higher than pressures encountered during injection operation.

Lamar XLOT Test Data Summary

Test	Cycle 1	Cycle 2	Cycle 3
Test date	10/29/2022	10/29/2022	10/29/2022
Pumping start time	1:24:45 AM	2:08:28 AM	2:40:58 AM
Pumping duration (mm:ss)	2:17	1:41	1:38
Total injection volume (bbl)	0.59	0.73	1.18
Average injection rate (bpm)	0.26	0.43	0.72
Shut-in time (min)	23.5	23.0	32.0
Flowback volume (bbl)	-	0.25	0.20
Surface ISIP (psi)	1,744	1,713	1,701
ISIP at csg shoe (1583.94ft TVD) (psi)	2,499	2,468	2,456
Leak off pressure (psi)	2,380	2,411	2,426
Leak off pressure (ppg)	28.90	29.27	29.45
Fracture closure time (min)	10.8	14.6	18.0
Minimum stress at casing shoe (psi)	1930	1821	1,799 - 1,729
Minimum stress gradient (psi/ft)	1.22	1.15	1.14 - 1.10
Minimum stress gradient (ppg)	23.43	22.11	21.84

- Casing Shoe Depth ~1584 ft.
- The XLOT results clearly show that the Lamar has higher closure stress (1.1–1.22 psi/ft) and ultralow perm.
- Higher values in tensile strength, Young’s Modulus and fracture toughness make the Lamar difficult to break down. LOP: 1.5–1.53 psi/ft
- Above properties and testing pressure behavior suggest that Lamar can act as a seal during disposal in the DMG

No sign of clear formation breakdown observed up to 2,200psi surface pressure (36.4ppg EMW)

* Minimum stress from the G-dP/dG Plot is used as the value is more evident.

** Fracture closure from Cycle 1 may not occur.

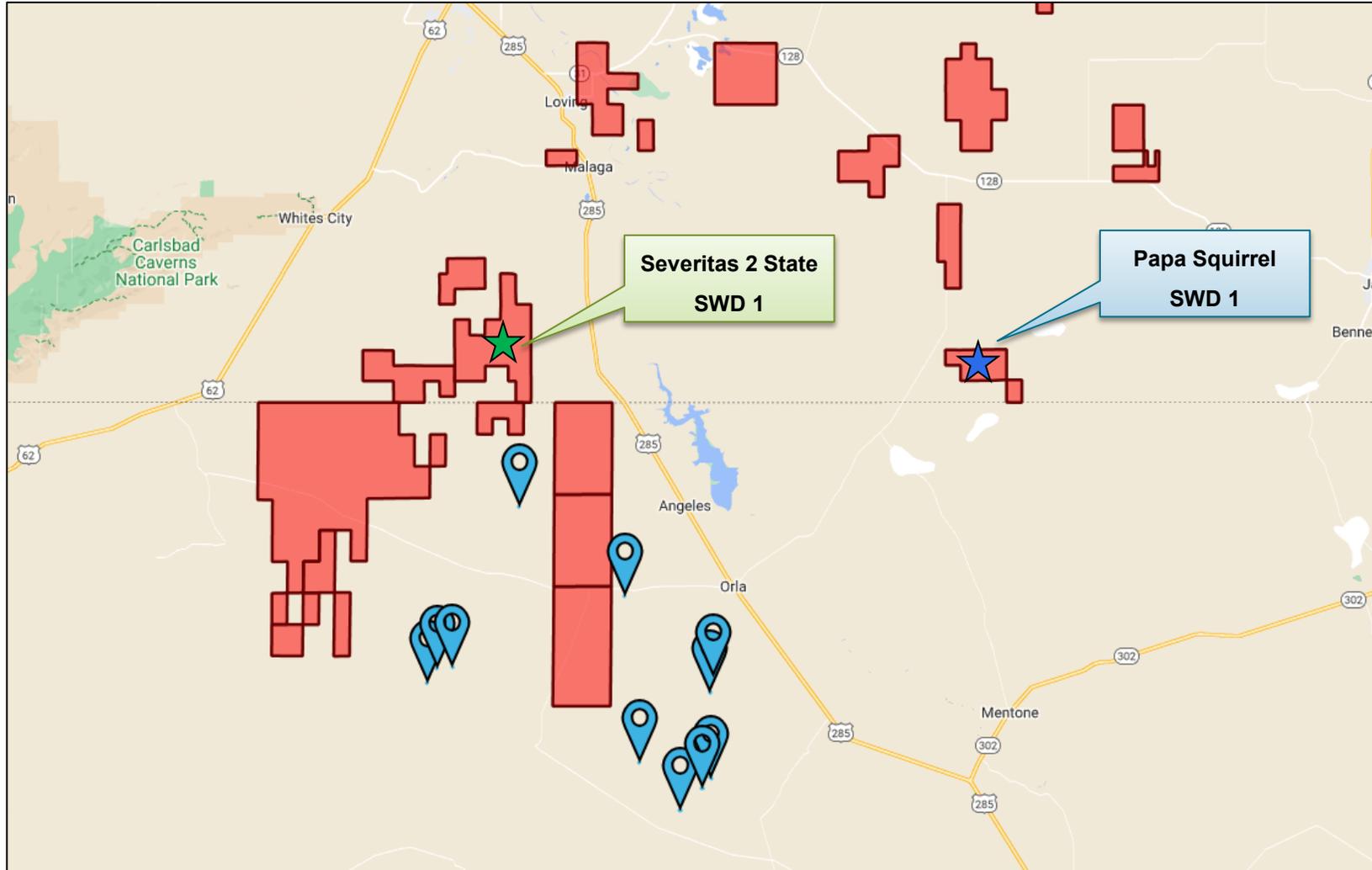
*** No density log data available to calculate overburden stress, but it is estimated to be around 1.2 psi/ft.

- Reduction in ISIP from Cycles 1 to 3 indicates the rock was weakened and fracture complexity was reduced.
- Reduction in closure stress suggests that the impact of multiple fractures diminished after each injection.
- The fracture closure time was longer than the model predicted, which indicates that Lamar is tighter than 1md.

Max BHP gradient during injection operations will be ~ 0.7 psi/ft giving a safety factor on the Lamar fracture closure pressure of 1.57 – 1.74

Injection Modeling and Reservoir Pressure Impacts

Location of Wells with Sufficient Data for Rate Transient Analysis



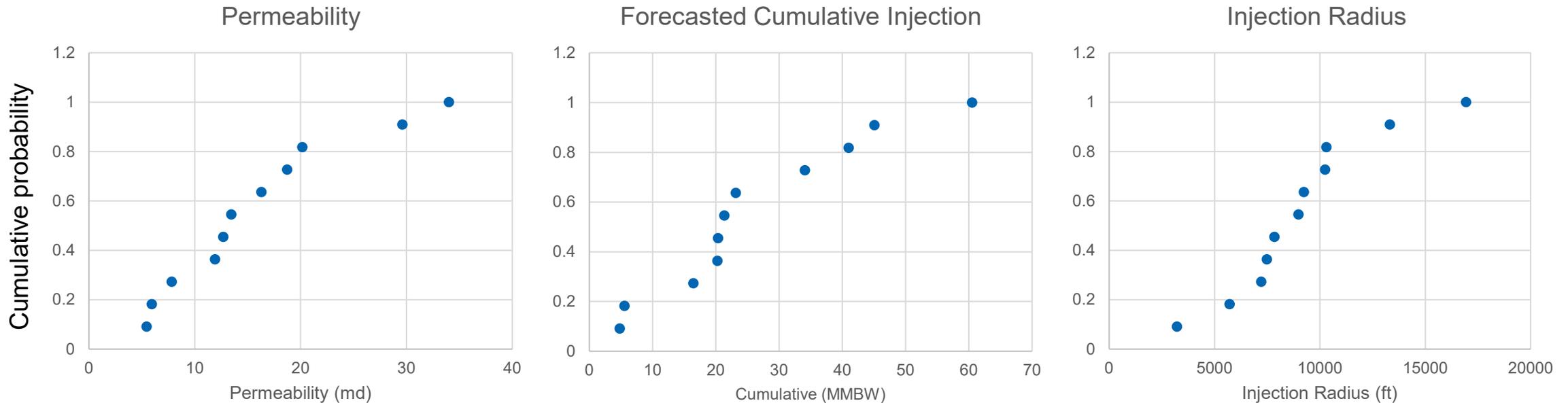
OCD Examiner Hearing, Nov. 8-9, 2023

No. 23686, 23687

Rate Transient Analysis Summary on DMG Injectors

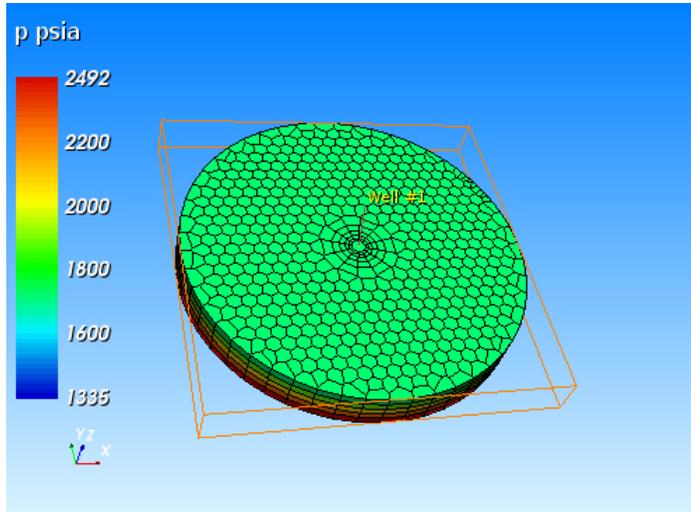
- Rate Transient Analysis (RTA) is the primary method used to understand the part of the reservoir the injector accesses (permeability, boundary type/distance), measure near wellbore effects (skin), and forecast (rate, cumulative injection, reservoir pressure)
- Well data taken from 11 wells with publicly reported daily rates and pressures and analyzed through RTA to infer properties below
 - Cumulative injection dependent on injection radius and interval thickness; injection rates dependent on permeability
 - Forecasted cumulative volumes based on a 0.2 psi/ft surface pressure limitation

Parameter	P10 Value	P50 Value	P90 Value
Permeability (md)	6 md	13 md	30 md
Injection Radius (ft)	5,717 ft	8,979 ft	13,314 ft
Cumulative Injection (MMBW)	5.54 MMBW	21.34 MMBW	45.08 MMBW

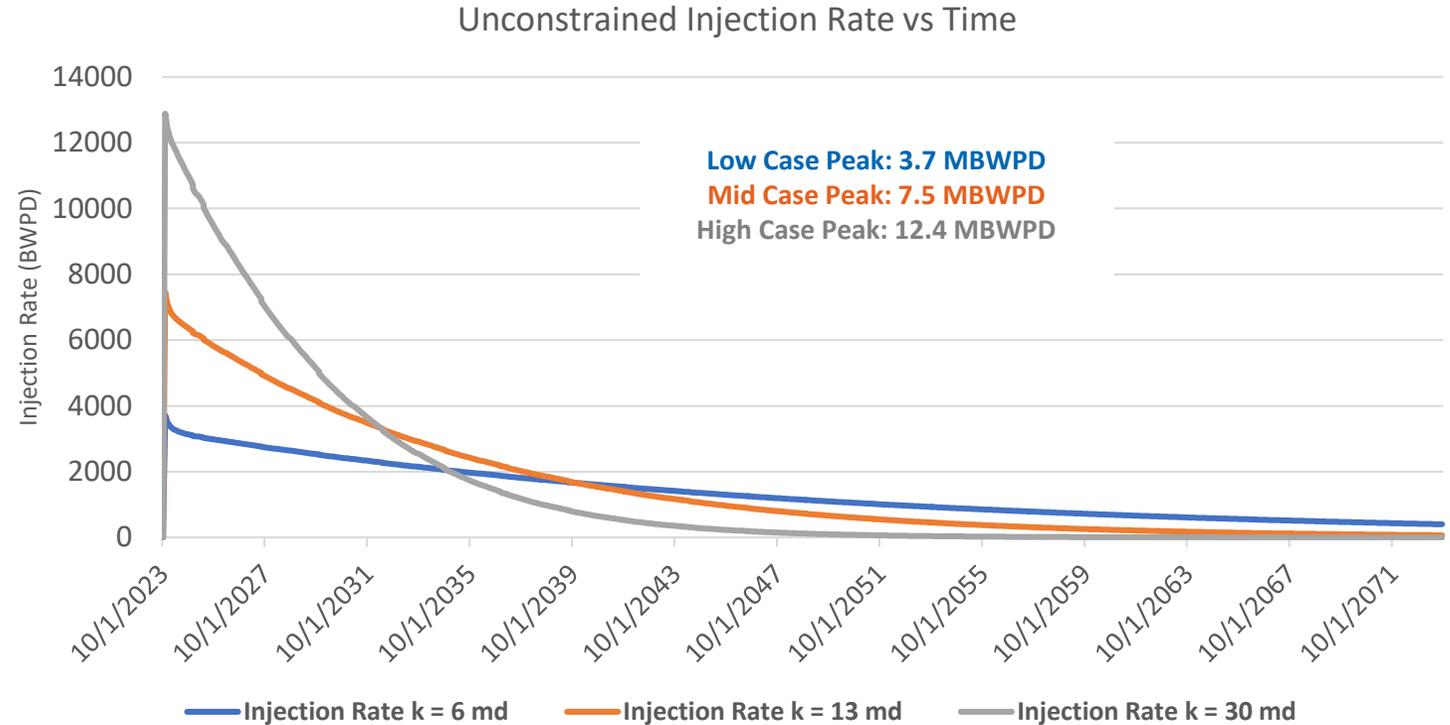


Severitas 2 State SWD 1 Modeling Results

Cumulative storage 28.8 MMBW



Pi	1236.0 psi
T	98 F
Water TDS	160000 ppm
Bell Top	2376.9 ft
Bell Thickness	816.7 ft
Bell Porosity	17.0%
Cherry Thickness	1212.2 ft
Cherry Porosity	15.5%
THP	475 psi
Boundary Radius	8979 ft
Cumulative Storage	28.8 MMBW

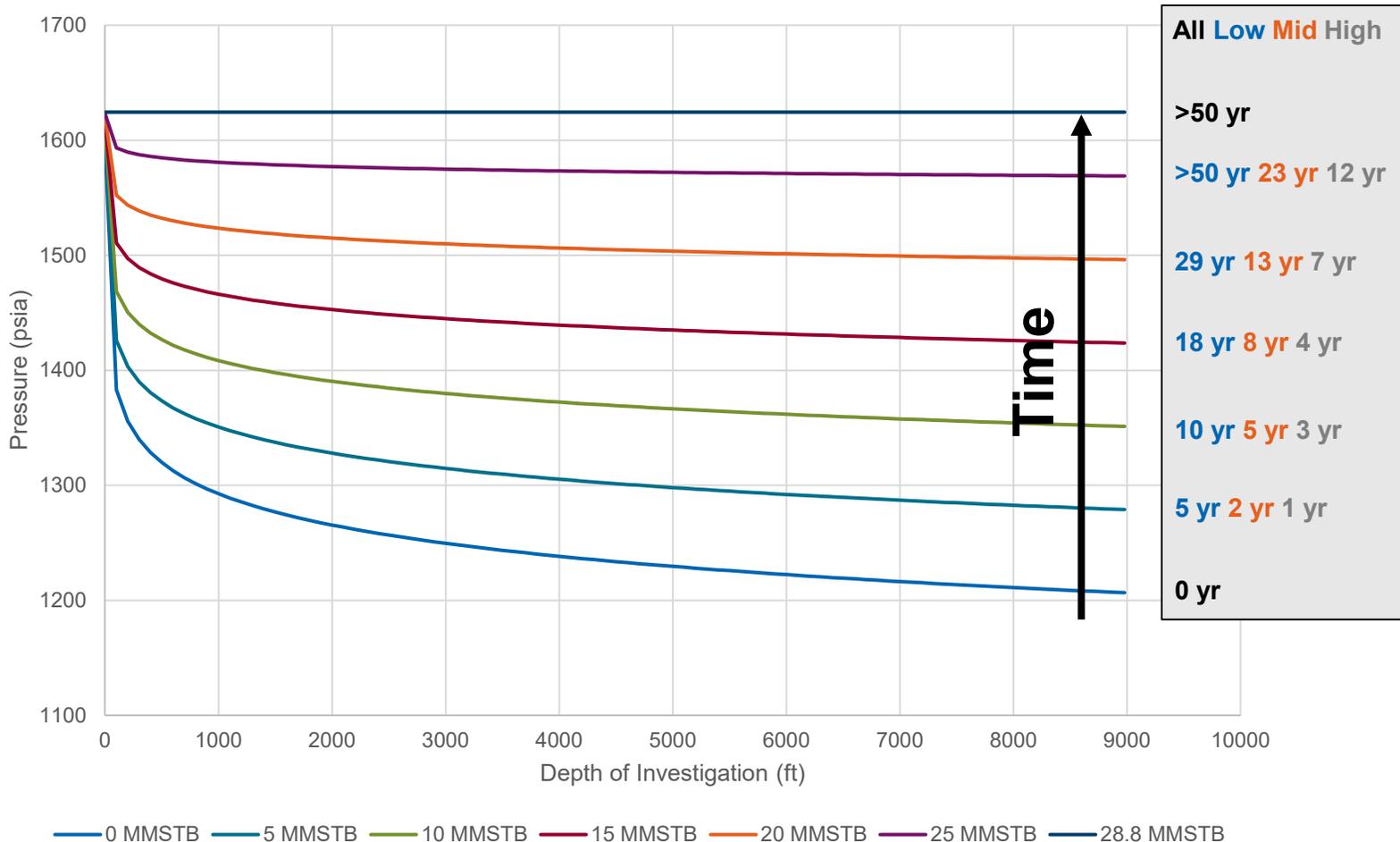


- Homogenous flow model created to simulate injection rates through time
- Inputs were taken from geological log correlations and general RTA statistics
- Injection profiles shown are unconstrained on rate but subject to maximum permitted surface pressure (0.2 psi/ft)

Severitas 2 State SWD 1 Modeling Results

Reservoir Pressure Increases Slowly Over Time

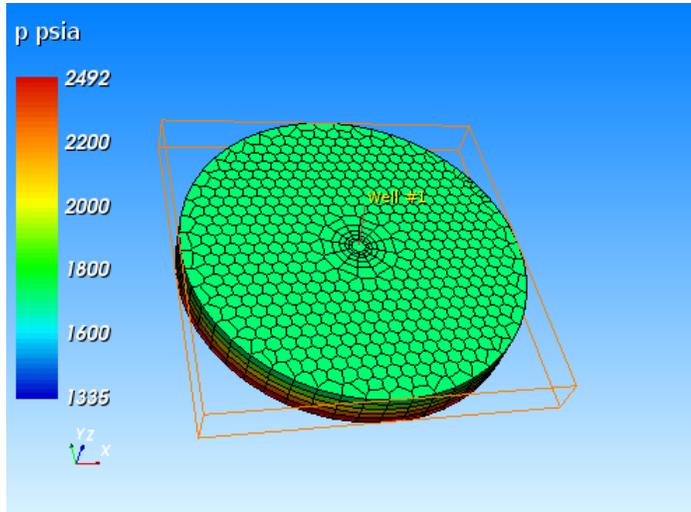
Reservoir Pressure vs Depth of Investigation



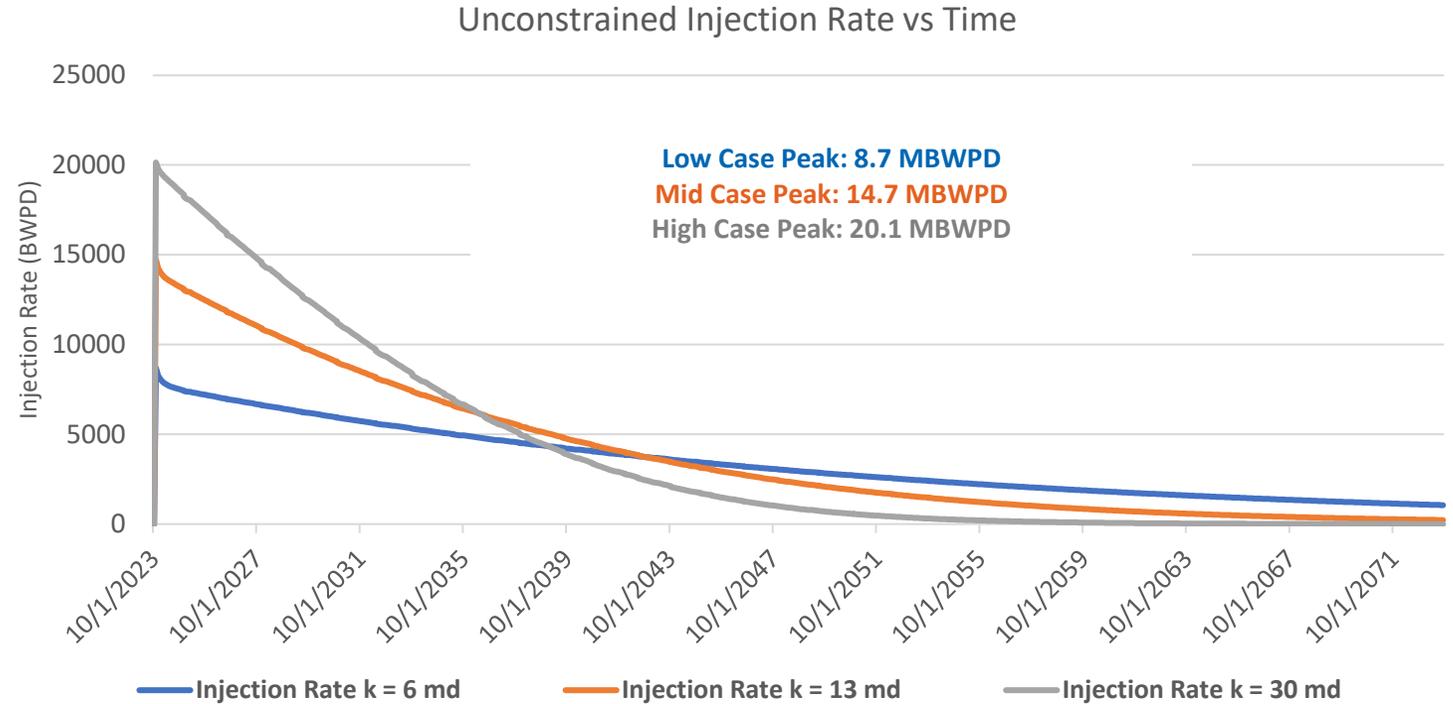
- Reservoir pressure plot shows pressure at different depths of investigation at different times in the well's life (based on P50 permeability of 13 md)
 - Reflects the BHP which would be recorded in a theoretical observation well placed at a given distance away from the injector
- Reservoir pressure increase is relatively slow, with a 300-psi increase taking more than a decade

Papa Squirrel SWD 1 Modeling Results

Cumulative storage 72.9 MMBW



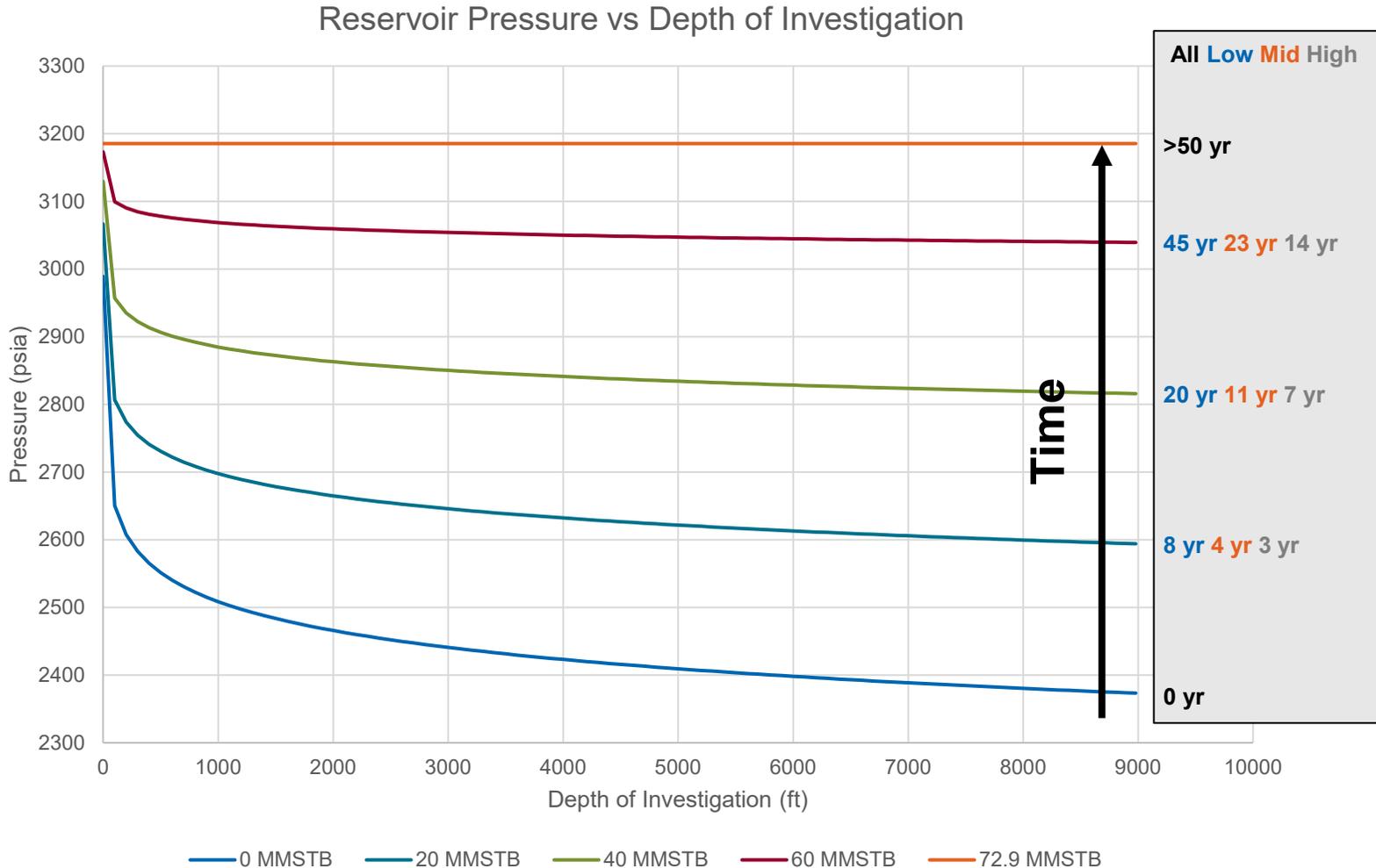
Pi	2419.2 psi
T	98 F
Water TDS	160000 ppm
Bell Top	4652.9 ft
Bell Thickness	987.2 ft
Bell Porosity	17.5%
Cherry Thickness	1645.4 ft
Cherry Porosity	15.0%
THP	931 psi
Boundary Radius	8979 ft
Cumulative Storage	72.9 MMBW



- Homogenous flow model created to simulate injection rates through time
- Inputs were taken from geological log correlations and general RTA statistics
- Injection profiles shown are unconstrained on rate but subject to maximum permitted surface pressure (0.2 psi/ft)

Papa Squirrel SWD 1 Modeling Results

Reservoir Pressure Increases Slowly Over Time



- Reservoir pressure plot shows pressure at different depths of investigation at different times in the well's life (based on P50 permeability of 13 md)
 - Reflects the BHP which would be recorded in a theoretical observation well placed at a given distance away from the injector
- Reservoir pressure increase is relatively slow, with a 450-psi increase taking more than a decade

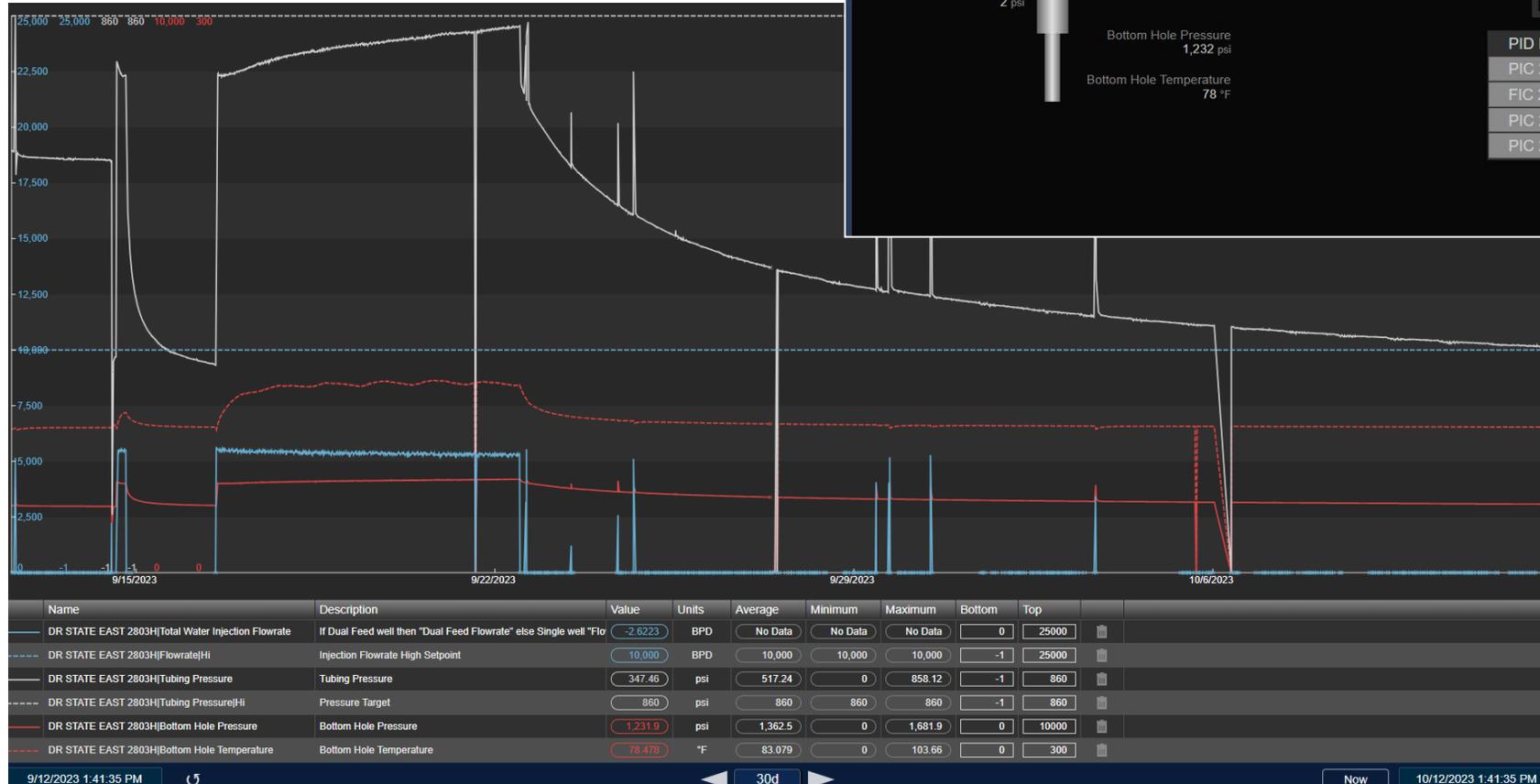
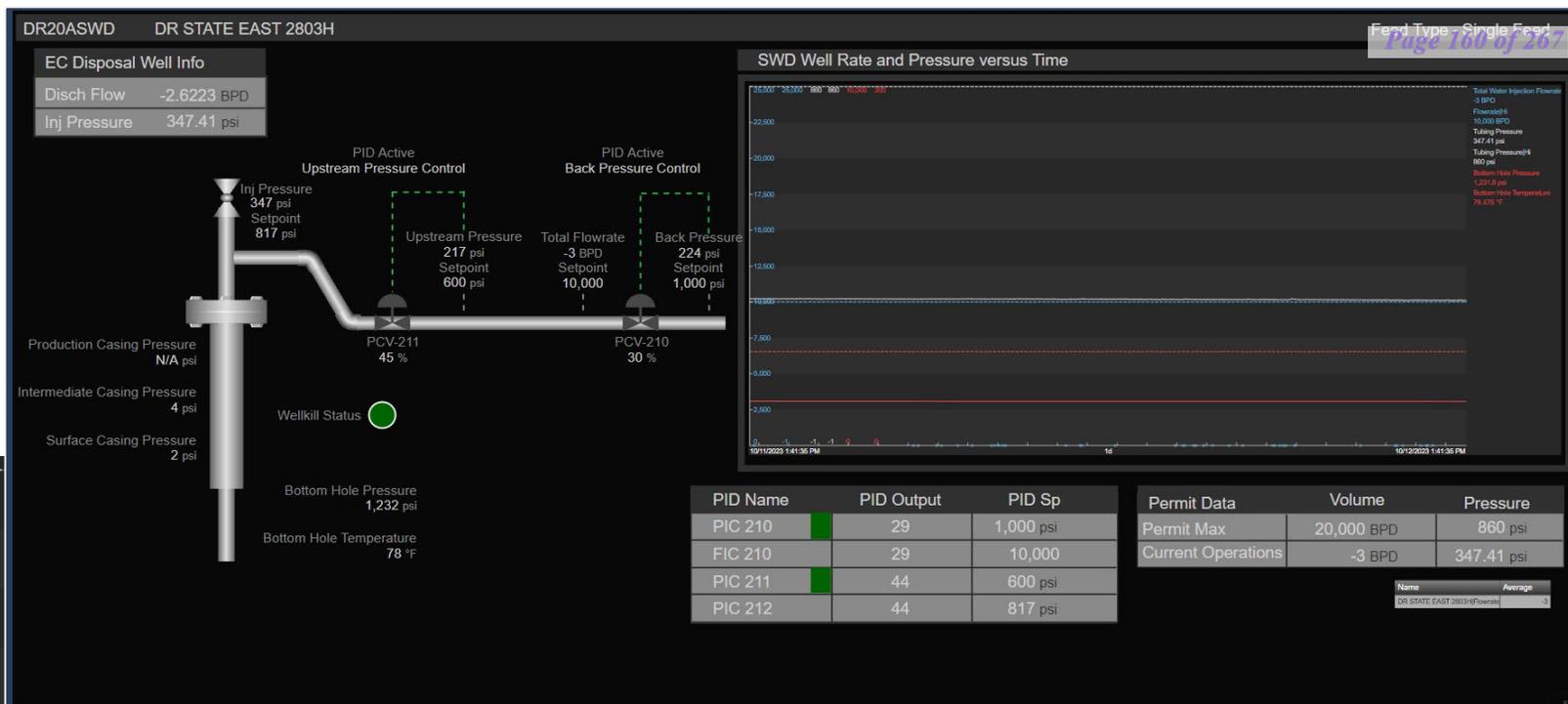
Surface Systems

SWD Control Logic

Active Monitoring to Ensure Safe Operations

- High-pressure flowlines carry fluids from facility H-pumps to wells for disposal. Flowrate and pressure are controlled with 1-2 chokes by a local PLC at the wellsite.
- Well flowrate is constantly monitored by an on-site flowmeter.
- Chokes ensure tubing pressure remains at target ~25 psig below permit.
 - Operator callout issued if pressure increases to or above permit for 30 second. Automatic well shut-in occurs if pressure is not lowered within 30 min.
 - Automatic well shut-in will also occur if pressure is greater than 110% of permit pressure for more than 30 seconds.
- Wellhead controls target minimum required backpressure on the high-pressure water transfer line. The transfer line is allowed to pressure up if the additional pressure is required to reach tubing pressure setpoint. If line pressure increases above normal operating pressures, protections on the facility side will shut down H-pumps.
- The controls have been designed to work for standalone shallow disposal wells or for a network of wells. Networked wells may be all shallow or a combination of shallow and deep.

SCADA Continuous Data Monitoring



- Data collected by SCADA: flowrate, injection pressure, bottom hole pressure, control valve pressures, casing pressures, temperatures, etc.
- Chevron has integrated operations control center where data from all facilities and wells are actively monitored
- Examples from TX SWD

Solids Handling

SWD facilities fitted with filtration system to improve injected water quality

- Flush tank (API 12F 750 BBL) collects solids from filter
 - Water and solids from the filter flush enter the tank
 - Solids settle in the cone bottom
 - High level switch for the solids alerts operations when tank cleaning is needed
 - Truck connection is provided for solids removal to solid waste facility (similar to drilling tailings and recovered frac sand)
 - Water from flush tank is routed back to charge pumps

Engineering Key Takeaways

- SWD wells proposed by Chevron are in the best interests of conservation, prevention of waste, and will not impair correlative rights.
- The nearest DMG producers/field to our proposed injectors are depleted.
- The Lamar Limestone is a very competent seal above the DMG; downhole pressures associated with SWD operations do not come close to the fracture closure, leak-off, or breakdown pressures of the Lamar.
- DMG SWD well analogs tend to influence the reservoir out to ~1.7 miles, reservoir pressure within that radius expected to increase slowly.
 - Severitas peak rates estimated between 3.7-12.4 MBWPD and 29 MMBW total storage capacity.
 - Papa Squirrel peak rates estimated between 8.7-20.1 MBWPD and 73 MMBW total storage capacity.
- Chevron standard operations feature active monitoring and control logic to ensure safe operations, with real time continuous data collection: flowrate, tubing pressure, bhp, temperature, etc.
- SWD facilities fitted with filtration system to improve injected water quality; solids removed to solid waste facilities.



Concluding Remarks

Concluding Remarks

- Industry needs produced water (PW) optionality to support continued development in New Mexico
- Deep saltwater disposal (SWD) is contributing to the increase of seismicity in areas of the Permian Basin
- Evidence indicates DMG disposal can be done within the Avalon exclusion zone in a manner that protects correlative right and prevents waste.
- DMG disposal can also be done in a manner that is protective of underground sources of drinking water.
- Goals of Chevron's DMG SWD pilot program:
 - Evaluate injection conformance of the Delaware Mountain Group
 - Monitor injected fluids and identify mitigations to keep water in zone
 - Provide open and clear dissemination of data to key stakeholders

Tab E: Witness Resumes

George T. (Tom) Merrifield, Jr., PG

Chevron USA, 6301 Deauville Blvd, Midland, TX 79706

Cell: (661) 448-7489; Email: tommerrifield@chevron.com**EDUCATION:**

Texas A&M University , College Station, TX	May 1976
▪ BS in Geology	
Southern Illinois University , Carbondale, IL	Aug. 1979
▪ MS in Geology:	
Texas A&M University , College Station, TX	
▪ PhD candidate in Geology	No degree

LICENSES:

- Registered Geologist, Texas, #10838, 2010 (active)
- Professional Geologist, California, #9274, 2015 (active)
- Registered Geologist, Arizona, #33752, 1999 (inactive)

PROFESSIONAL EXPERIENCE BRIEF:

Chevron, Midcontinent Business Unit , Midland, TX	Mar 22-present
▪ SWD DRP Geologist: Permitting, planning and executing all SWD wells in Permian Basin.	
Chevron, San Joaquin Business Unit , Bakersfield, CA	Jul 20-Mar 22
▪ Senior Environmental & Permitting Specialist, Hydrogeology: Addressed UIC regulatory issues both water and steam.	
Chevron, San Joaquin Business Unit , Bakersfield, CA	Jun 13-Jul 20
▪ Asset Development Geologist: Lost Hills Oil Field and addressed CA regulations on frac and UIC permitting.	
Chevron, San Joaquin Business Unit , Bakersfield, CA	Oct 12-Jun 13
▪ Execution Geologist: Lost Hills/Coalinga Oil Fields water- and steam-flood, 3-yr, 2-rig. 70 well oversight.	
Balmorhea Geoscience Services , Gilbert, AZ	Aug. 08-Jun 13
▪ Owner, Principal Geologist: water well design/installation/testing; permitting; groundwater flow modeling.	
Fluid Solutions , Phoenix, AZ	Dec. 99-Aug 08
▪ Member, Principal Geologist: water well design/install; G&G interpretations; groundwater flow modeling; permitting.	
Arizona Department of Environmental Quality , Phoenix, AZ	May 97-Dec. 99
▪ Hydrologist III, Aquifer Protection Permitting: G&G review, monitor well designs and state regulations.	
Delta Environmental , Phoenix, AZ	Feb 97-May 97
▪ Environmental Geophysicist: seismic reflection, refraction, gravity, magnetics, and resistivity	
Ocean Drilling Program , College Station, TX	Aug 90-Jun 96
▪ Research Assistant: G&G well and core database management; technical writing	
Texas A&M University , College Station, TX	Aug 86-Aug 90
▪ Graduate Student: rock fracture, fault, fluid-flow mechanics, surface and subsurface geology	
Exxon Company USA , Midland, TX	May 80-Aug 86
▪ Senior Geologist: West Texas Exploration, Operations Geology, Frontier, well log/geophysics interpretations	
Atlantic Richfield Co , Midland, TX and Denver, CO	Summer 76, 77, and 78
▪ Summer internships geologist oil and gas exploration	

SKILL EXPERIENCE (some years overlapping):

- 25 years: water regulations of oil and gas, environmental, and water resource.
- 10 years: Underground Injection Control (UIC) permitting in CA, NM, and TX.
- 15 years: oil and gas exploration and asset development with 8 years in Permian Basin.
- 19 years: hydrogeology.
- Academic background in rock mechanics and structural geology.

G.T. Merrifield, Jr., PG

Jason R. Parizek

Sr. Earth Scientist, Chevron

+1 (432) 208-3521
JRParizek@chevron.com
Midland, Texas

RELAVENT EXPERIENCE

- 2023 - Present

Sr. Earth Scientist, New Mexico Asset Development
Chevron, Midland, Tx

Plan and oversee execution of horizontal well programs. Plan, oversee, and conduct technical studies and technology assessments. Mentor and provide technical assurance for early career colleagues.
- 2021 - 2023

Regional Earth Scientist, Permian Basin
Chevron, Midland, Tx

Planned horizontal drilling programs on a cross-functional team. Coordinated geosteering operations and teams, selected and called casing points, planned and oversaw execution of data collection programs.
- 2018 - 2021

Sr. Operations Earth Scientist, Delaware Basin Operations
Chevron, Midland, Tx

Assessed and planned refrac program, up hole recompletions, fracture driven interaction mitigation pilots, and production diagnostics and optimization programs with production engineers.
- 2016 - 2018

Operations Earth Scientist, San Joaquin Valley, California
Chevron, McKittrick, Ca

Planned and executed vertical and horizontal well sidetrack drilling programs. Managed the reservoir management and data collection program for water and sour gas disposal operations.
- 2013 - 2016

Development Geologist, San Joaquin Valley, California
Chevron, Bakersfield, Ca

Planned and executed vertical and horizontal well drilling programs in heavy oil steam-flooded reservoirs. Executed at wellsite, drilling and wireline logging operations as G&G representative.

EDUCATION

- December 2013

MSc. Earth Sciences
San Diego State University, San Diego, California
- May 2012

BSc. Earth Sciences
San Diego State University, San Diego, California

Resume of Bryce Taylor

Senior PE Advisor
MCBU AD Water Strategy Team
MCBU – Permian Basin Development

Overall Experience: 11.5 years in Chevron/industry

Work Experience

Water Strategy Petroleum Engineering Advisor for Permian – 2 years
Reservoir Engineer for Unconventionals in Midland Basin in Permian – 4.5 years
Production Engineer for Heavy Oil in California – 2.5 years
Reservoir Engineer for Heavy Oil assets in California – 2.5 years

Education

Master's Degree Petroleum Engineering University of Southern California 2020
Bachelor's Degree Mechanical Engineering Brigham Young University 2012

Resume of Cody Comiskey

Current Title: Subsurface Advisor: Chevron MCBU

Education

Texas Tech University, B.S. Geophysics *cum laude*, 2011

Baylor University, M.S. Geophysics, Earthquake Seismology, 2013

Experience

Anadarko Petroleum Corp 2013-November 2019

- Onshore development, Marcellus business unit (2013-2016)
- Global Technical Center, West Africa exploration and development (2016-2017)
- Analytics and modeling – onshore development (2017-2018)
- Onshore analytics subsurface supervisor (2019)

Chevron November 2019-current

- MCBU subsurface advisor focused on seismicity and produced water management

Tab F: Hearing Notices

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

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN LEA COUNTY, NEW MEXICO.**

CASE NO. 23686

SELF-AFFIRMED DECLARATION OF DEANA M. BENNETT

Deana M. Bennett, attorney in fact and authorized representative of Chevron USA, Inc., the Applicant herein, declares as follows:

1) The above-referenced Application was provided under notice letter, dated July 13, 2023, and attached hereto, as Exhibit A.

2) Exhibit B is the mailing list, which show the notice letters were delivered to the USPS for mailing on July 13, 2023.

3) Exhibit C is the certified mailing tracking information, which is automatically complied by CertifiedPro, the software Modrall uses to track the mailings. This spreadsheet shows the names and addresses of the parties to whom notice was sent and the status of the mailing.

4) Exhibit D is the Affidavit of Publication from the Hobbs News-Sun, confirming that notice of the August 3, 2023 hearing was published on July 16, 2023.

5) I attest under penalty of perjury under the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief.

Dated: November 1, 2023



Deana M. Bennett



MODRALL SPERLING
LAWYERS

July 13, 2023

Deana M. Bennett
505.848.1834
dmb@modrall.com

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**Re: APPLICATION OF CHEVRON U.S.A. INC. TO APPROVE
SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW
MEXICO.**

CASE NO. 23686

TO: AFFECTED PARTIES

This letter is to advise you that Chevron U.S.A. Inc. (“Chevron”) has filed the enclosed application.

In Case No. 23686, Chevron seeks an order approving the Papa Squirrel State SWD #1 well at a surface location 1,928’ from the South line and 870’ from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 4625 feet to 8939 feet. The tubing packer will be set at 4525 feet, and production casing and cement will be set at 8500 feet. The maximum anticipated injection rate will be 20,000 BWPD and maximum surface injection pressure will be 925 psi. Said area is located approximately 26 miles west of Jal, New Mexico.

The hearing will be conducted remotely on August 3, 2023 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/>. This hearing is subject to continuance by the Division to a subsequent docket date.

As a party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

Modrall Spierling
Roehl Harris & Sisk P.A.
500 Fourth Street NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico 87103-2168

Tel: 505.848.1800
www.modrall.com

EXHIBIT A

Page 2

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,



Deana M. Bennett

Attorney for Applicant

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

APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN LEA COUNTY, NEW MEXICO.

CASE NO. 23686

APPLICATION

Chevron USA Inc. ("Chevron"), OGRID No. 4323, through its undersigned attorneys, hereby applies to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, Chevron states as follows:

(1) Chevron proposes to drill the Papa Squirrel State SWD #1 well at a surface location 1,928' from the South line and 870' from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(2) Chevron seeks authority to inject salt water into the Bell Canyon/Cherry Canyon/Brushy Canyon from 4,625' to 8,939'.

(3) The tubing packer will be set at 4,525' feet, and production casing and cement will be set at 8,500'.

(4) Chevron requests that the Division approve a maximum daily injection rate for the well of 20,000 BWPD.

(5) Chevron requests that a maximum pressure of 925 psi be approved for the well.

(6) A proposed C-108 for the subject well is attached hereto in Attachment A.

(7) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, Chevron requests that this application be set for hearing before an Examiner of the Oil Conservation Division on August 3, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: 
Deana Bennett
Earl E. DeBrine, JR.
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 23686: Application of Chevron USA Inc. for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving the Papa Squirrel State SWD #1 well at a surface location 1,928' from the South line and 870' from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 4625 feet to 8939 feet. The tubing packer will be set at 4525 feet, and production casing and cement will be set at 8500 feet. The maximum anticipated injection rate will be 20,000 BWPD and maximum surface injection pressure will be 925 psi. Said area is located approximately 26 miles west of Jal, New Mexico.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance _____ X Disposal _____ Storage
Application qualifies for administrative approval? _____ x Yes _____ No

II. OPERATOR: Chevron USA Inc.
ADDRESS: 6301 Deauville Blvd, Midland, TX 79706
CONTACT PARTY: Tom Merrifield PHONE: 661-448-7489

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

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. **ATTACHMENT 1**

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. **ATTACHMENT 2**

VII. Attach data on the proposed operation, including: **ATTACHMENT 3**

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. 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. **ATTACHMENT 4**

IX. Describe the proposed stimulation program, if any. **ATTACHMENT 5**

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **ATTACHMENT 6**

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. **ATTACHMENT 7**

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. **ATTACHMENT 8**

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **ATTACHMENT 9**

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: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

XV. 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 circulate to: _____

DISTRIBUTION: Original and one copy to the appropriate District Office



Side 2

III. WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

Page 2

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720
 District II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720
 District III
 1000 Rin Brazos Road, Aztec, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
 Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-102
 Revised August 1, 2011
 Submit one copy to appropriate
 District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 96100	³ Pool Name SWD; DELAWARE
⁴ Property Code	⁵ Property Name PAPA SQUIRREL SWD	
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁶ Well Number 1 ⁹ Elevation 3204'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	26 SOUTH	32 EAST, N.M.P.M.		1928'	SOUTH	870'	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	26 SOUTH	32 EAST, N.M.P.M.		1928'	SOUTH	870'	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------	-------------------------------	----------------------------------	-------------------------

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.

<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <p>PAPA SQUIRREL SWD NO. 1 WELL</p> <p>X= 716,780' Y= 378,275' NAD 27 LAT. 32.040812° N LONG. 109.634727° W</p> <p>X= 757,968' Y= 378,332' NAD83/2011 LAT. 32.040837° N LONG. 109.634188° W</p> <p>ELEVATION = 3204' NAVD 88</p> </div> <div style="margin-top: 20px; text-align: center;"> <p>CORNER COORDINATES TABLE (NAD 27)</p> <p>A - X=715890.15', Y=382677.22' B - X=721215.23', Y=382746.10' C - X=715922.04', Y=377338.54' D - X=721248.72', Y=377390.10'</p> </div>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>E-mail Address _____</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>01/25/2022 Date of Survey</p> <p>Signature and Seal of Professional Surveyor _____</p> <div style="text-align: center; margin-top: 10px;"> </div> <p>Certificate Number _____</p>

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Chevron U.S.A. Inc.

WELL NAME & NUMBER: Papa Squirrel SWD 1

WELL LOCATION: 1928' from South, 870' from West, L 13, 26 South, 32 East, N.M.P.M.

FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

'Surface Casine

See next page

Hole Size: 17-1/2" Casing Size: 13-3/8"

Cemented with: 380 sx. or 497 ft³

Top of Cement: Surface Method Determined: Volumetric

Intermediate Casine

Hole Size: 12-1/4" Casing Size: 10-3/4"

Cemented with: 320 sx. or 758 ft³

Top of Cement: Surface Method Determined: Volumetric

Production Casine

Hole Size: 9-7/8" Casing Size: 7-5/8"

Cemented with: 650 sx. or 1529 ft³

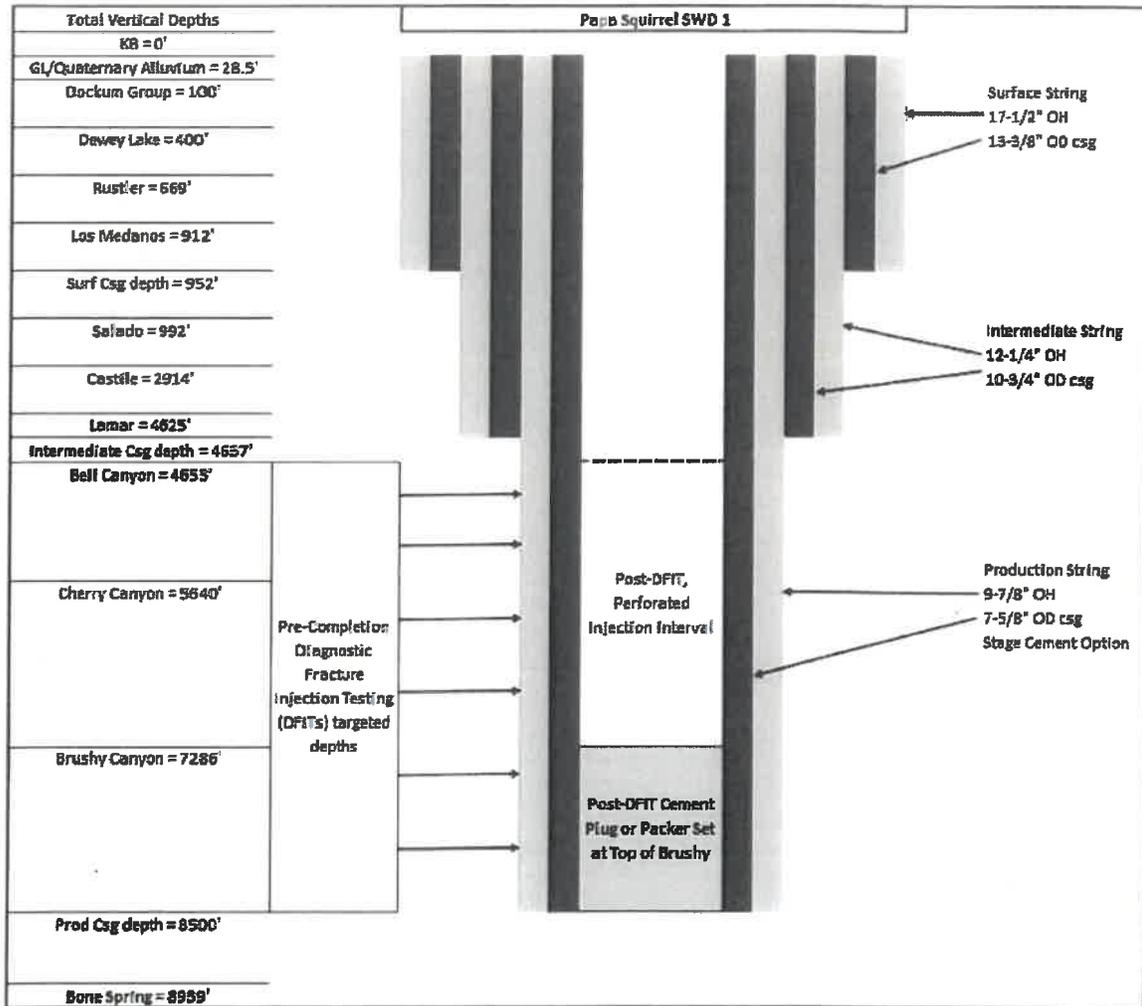
Top of Cement: Surface Method Determined: Volumetric

Total Depth: 8500'

Injection Interval

4625' feet to 8939' *

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone. (Perforated or Open Hole; indicate which)



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 5-1/2" Lining Material: _____
Type of Packer: Hydraulically set packer
Packer Setting Depth: 4525'
Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? X Yes _____ No
If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Bell Canyon, Cherry Canyon, and Brushy Canyon *

3. Name of Field or Pool (if applicable): SWD; Delaware Mountain Group

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
No, this is a proposed new SWD well.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Depths are within a 3 mile area.
Atoka (14,418-14,545 ft MD), Avalon (8,819-9,749 ft TVD), Bone Spring (8,706-12,028 ft TVD), Devonian (17,468-17,567 ft MD), Morrow (15,999-16,050 ft MD), Pennsylvanian (14,370-14,826 ft MD), Silurian (17,464-17,512 ft MD), and Wolfcamp (9,065-13,145 ft TVD).

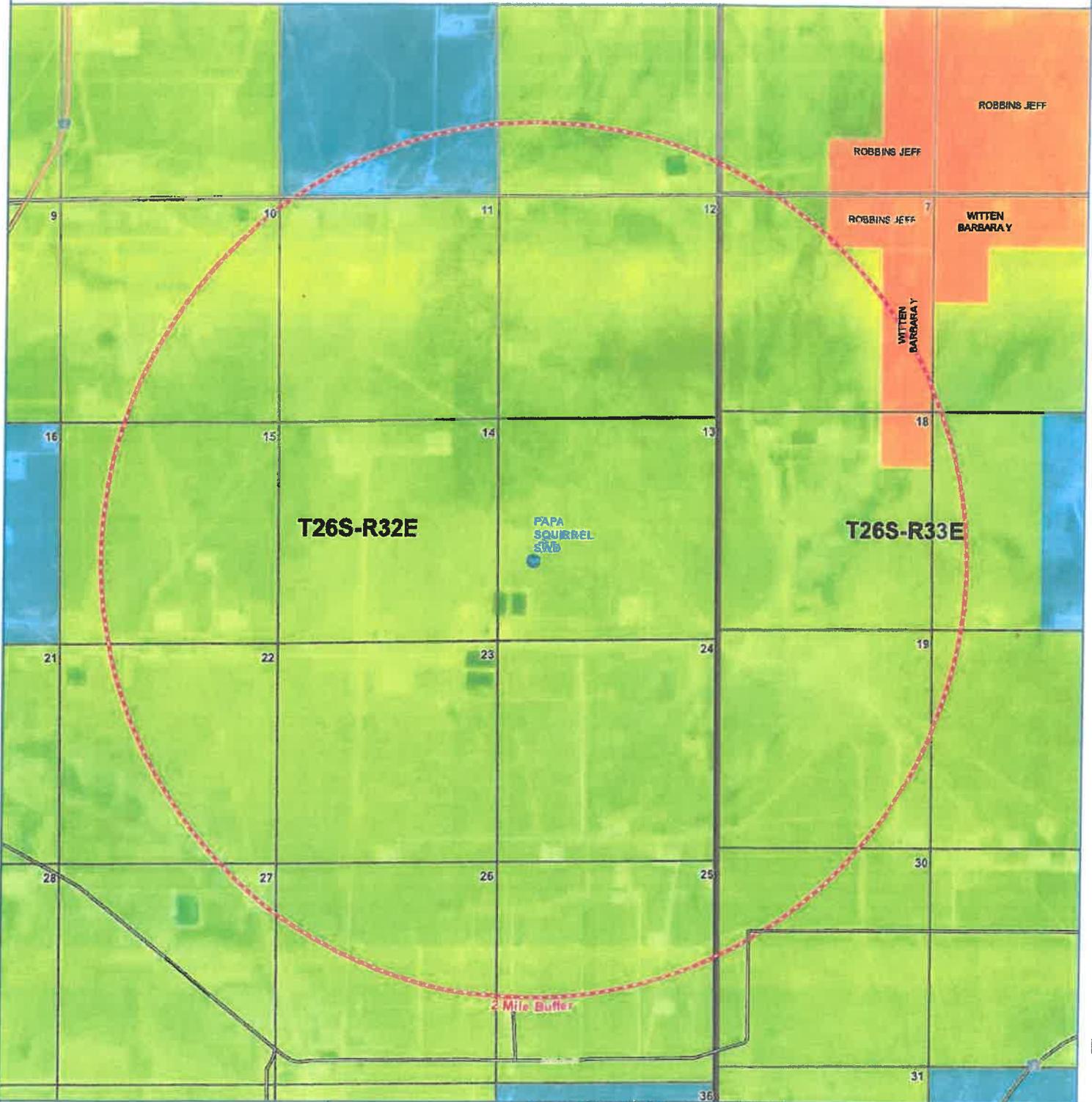
* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone.

ATTACHMENT 1

Item V

SURFACE OWNERSHIP MAP PAPA SQUIRREL SWD

Section 13, Township 26 South, Range 32 East, Lea County, New Mexico



Map Tech: VKV 1" = 3,250'

Date: 8/17/2022 1:39,000



PO BOX 1001, Fort Worth Texas 76101
Released to Imaging: 7/3/2023 4:36:03 PM

- Legend**
- Proposed SWD
 - 2 Mile Buffer
 - Federal
 - State
 - Private

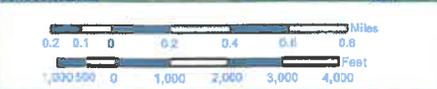
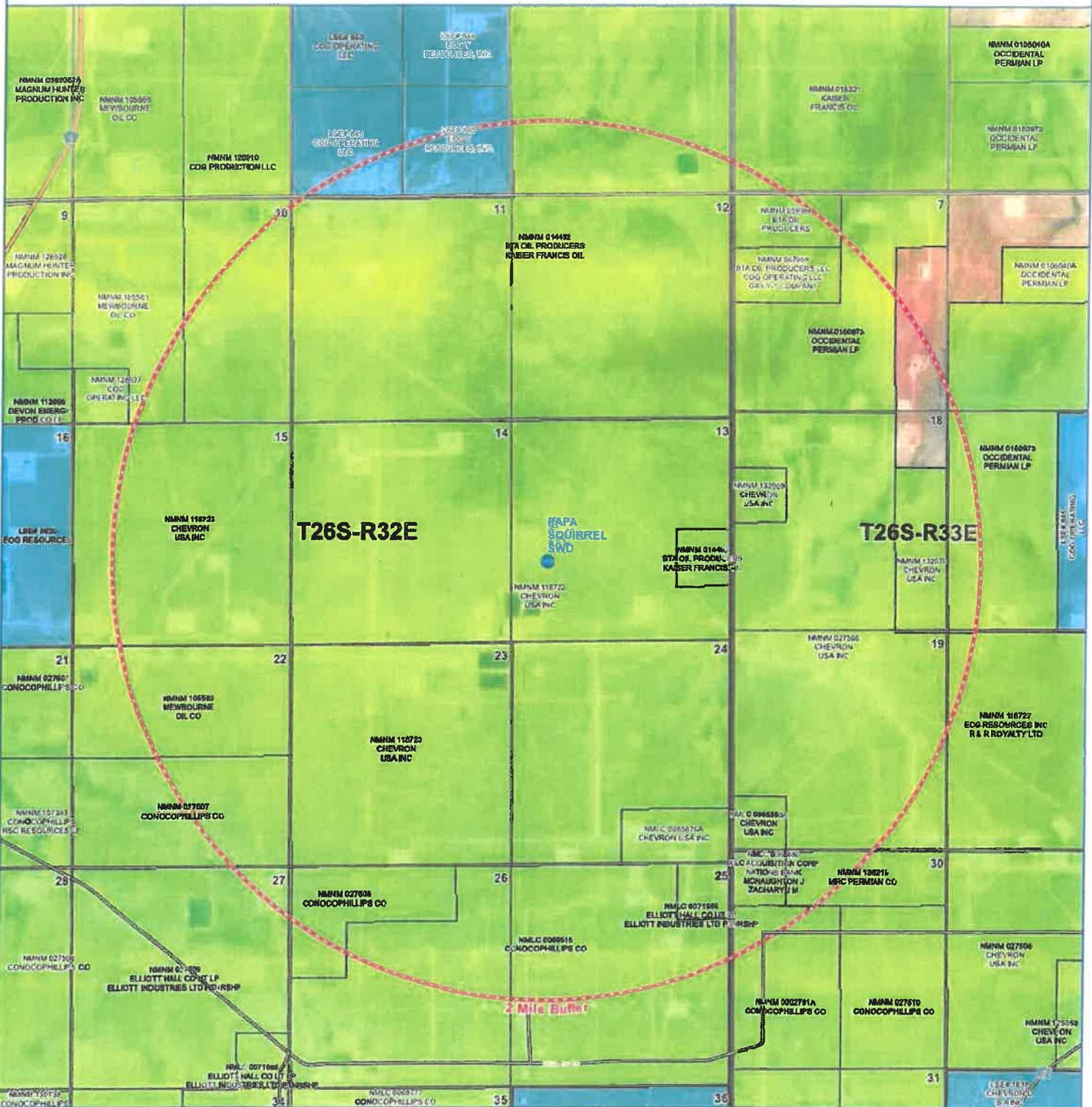


Coordinate System:
NAD 1983 StatePlane New Mexico East FIPS 5001 Feet
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 541,337.5000
False Northing: 0.0000
Central Meridian: -104.2333
Scale Factor: 0.9999
Latitude Of Origin: 31.0000
Units: Foot US

PAPA SQUIRREL SWD
SHL Location & Penetration Point:
1928' FSL & 870' FWL
Section 13, Township 26 South,
Range 32 East of P.M.
Lea County, New Mexico
OPERATOR:
CHEVRON U.S.A. INC

FEDERAL & STATE LEASES MAP

Section 13, Township 26 South, Range 32 East, Lea County, New Mexico



Map Tech: VKV 1" = 3,250'

Date: 8/17/2022 1:39,000



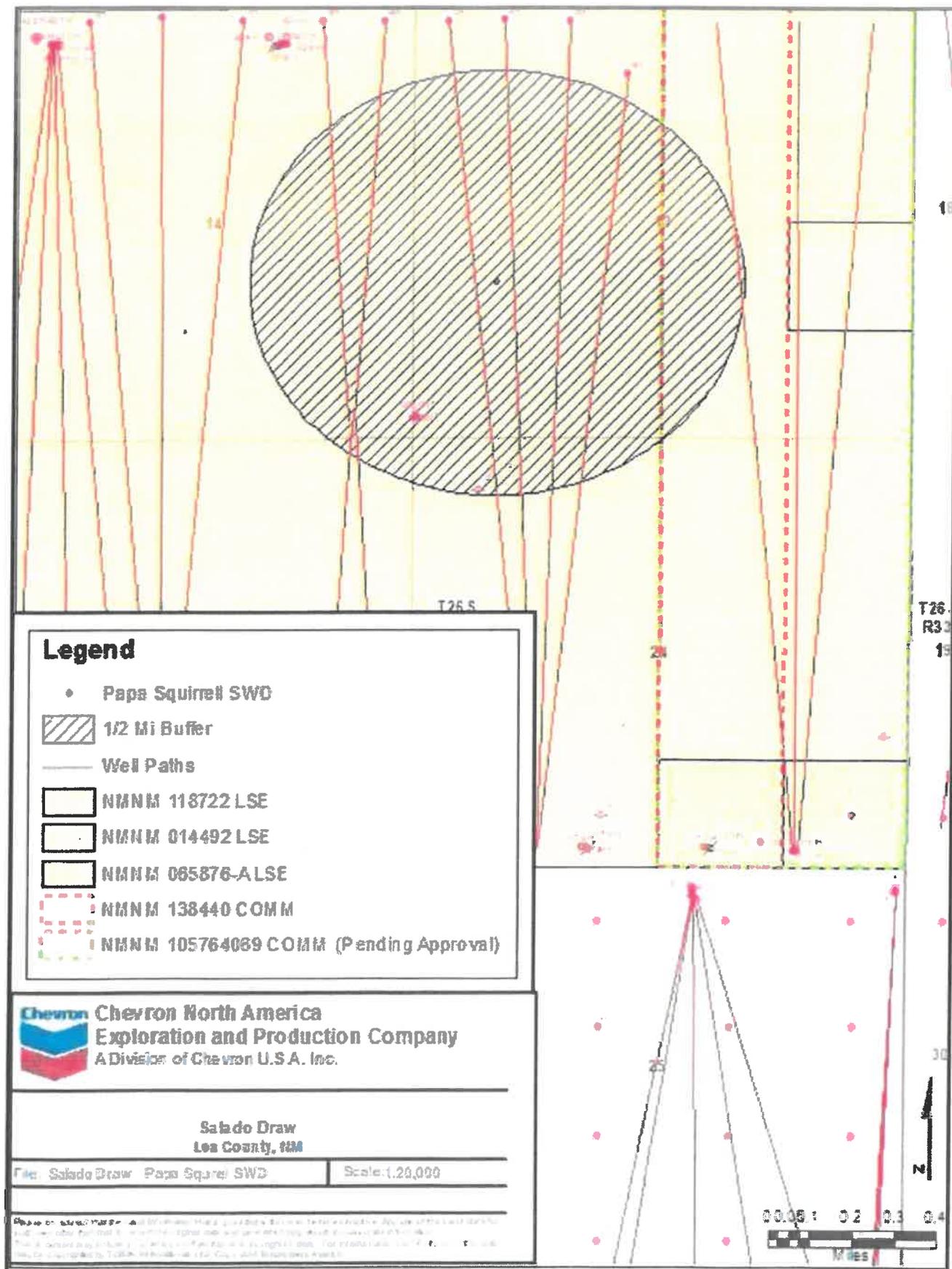
PO BOX 1001, Fort Worth, Texas 76101
Released to Imaging: 7/3/2023 4:36:03 PM

- Legend**
- Proposed SWD
 - 2 Mile Buffer
 - Federal Lease
 - State Lease

Coordinate System:
 NAD 1983 StatePlane New Mexico East FIPS 3001 Feet
 Projection: Transverse Mercator
 Datum: North American 1983
 False Easting: 541,357.5900
 False Northing: 0.0000
 Central Meridian: -104.3833
 Scale Factor: 0.9999
 Latitude Of Origin: 31.0000
 Units: Feet US

PAPA SQUIRREL SWD
 SHL Location & Penetration Point:
 1928' FSL & 870' FWL
 Section 13, Township 26 South,
 Range 32 East of P.M.
 Lea County, New Mexico
OPERATOR:
CHEVRON U.S.A. INC.

Federal and State Lease Map (1/2 Mi Radius)



ATTACHMENT 2

Item VI

API	Well Name	Well Type	Well Status	OGRID Name	Section	Township	Range	Latitude B3	Longitude B3	Measured Depth	Vertical Depth	Associated Pools	Plug Date	Miles from SWD
30-025-43086	SD WE 14 FEDERAL P7 #003H	Oil	Active	CHEVRON U S A INC	14 26S	32E	32.0362	-103.6393	13,816	9,074	[97838] JENNINGS, UPPER [97869] BONE SPRING SHALE		0.4	
30-025-43087	SD WE 14 FEDERAL P7 #004H	Oil	Active	CHEVRON U S A INC	14 26S	32E	32.0362	-103.6391	13,816	9,074	[97838] JENNINGS, UPPER [97869] BONE SPRING SHALE		0.4	
30-025-43089	SD WE 23 FEDERAL P7 #004H	Oil	Active	CHEVRON U S A INC	14 26S	32E	32.0362	-103.6399	14,002	9,030	[97838] JENNINGS, UPPER [97869] BONE SPRING SHALE		0.4	
30-025-42354	SALADO DRAW SWD 13 #001	SWD	Active Plugged (site released)	NGL WATER SOLUTIONS PERMIAN, LLC	13 26S	32E	32.0364	-103.637	18,675	18,675	[97869] SWD, DEVONIAN- SILURIAN		0.3	
30-025-20448	PRE-ONGARD WELL #002	Oil		PRE-ONGARD WELL OPERATOR	24 26S	32E	32.0338	-103.6349	0	4,645	No Data	8/20/1963	0.4	

Data tabulation of wells in Area of Review of the Papa Squirrel SWD 1.

APPROVED

Budget Bureau No. 42-R358.4.
Form Approved.

Form 9-881a
(Feb. 1961)

AUG 21 1963 (SUBMIT IN TRIPLICATE)

Land Office _____

Lease No. **LC - 065876 - A**

Unit _____



J. L. GORDON UNITED STATES
ACTING DISTRICT DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....		SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....	<input checked="" type="checkbox"/>		

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

FEDERAL LEASEFIELD "12"

August 20, 1963

Well No. 2 is located 660 ft. from N line and 660 ft. from W line of sec. 24

NW/4 Section 24 26-S 32-E NPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wilcat Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3182.8 ft.

DETAILS OF WORK

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

Well was completed dry at a total depth of 4645' on 8-19-63.

It is proposed to run drill pipe to 4645'. Spot cement plug from 4645 to 4545'; mud to 800'; cement to 750'; mud to 425'; cement to 375'; mud to 50'; and cement to surface leaving 384' of 8-5/8" casing in hole. Set marker and abandon.

Location will be cleaned up and pits filled.

Verbal approval received from Mr. J. L. Gordon, by phone 8-20-61.

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

Company Gulf Oil Corporation
Address P. O. Box 980
Merit, Texas

ORIGINAL SIGNATURE BY
W. W. WHITAKER
By _____
Title Area Engineer

690 914974

Budget Bureau No. 42-R358.4.
 Form Approved.

Form 9-881a
 (Feb. 1951)



(SUBMIT IN TRIPLICATE)
APPROVED
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

FEB 3 1964
 E. G. HUBBLE
 ACTING DISTRICT ENGINEER

Land Office _____
 Lease No. 12-065876-A
 Unit _____

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 20, 1964

Federal Littlefield "DR"

Well No. 2 is located 600 ft. from N line and 600 ft. from W line of sec. 24

14N/4 Sec. 24 26-3 32-12 N7P4M
 (4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Lee New Mexico
 (Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3182.8 ft.

DETAILS OF WORK

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

Well was completed dry at 4645' on 8-19-63.

Ran drill pipe open ended to 4645' and spotted 35 sacks cement 4645' to 4545'; mud 4545' to 300'; 20 sacks cement to 750'; mud to 425'; 20 sacks cement to 375'; mud to 50'; 20 sacks cement to surface leaving 384' of 8 5/8" casing in hole. Set marker & abandoned.

Location is cleaned up and ready for inspection.

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

Company Gulf Oil Corporation

Address P. O. Box 980

Kermit, Texas

ORIGINAL SIGNED

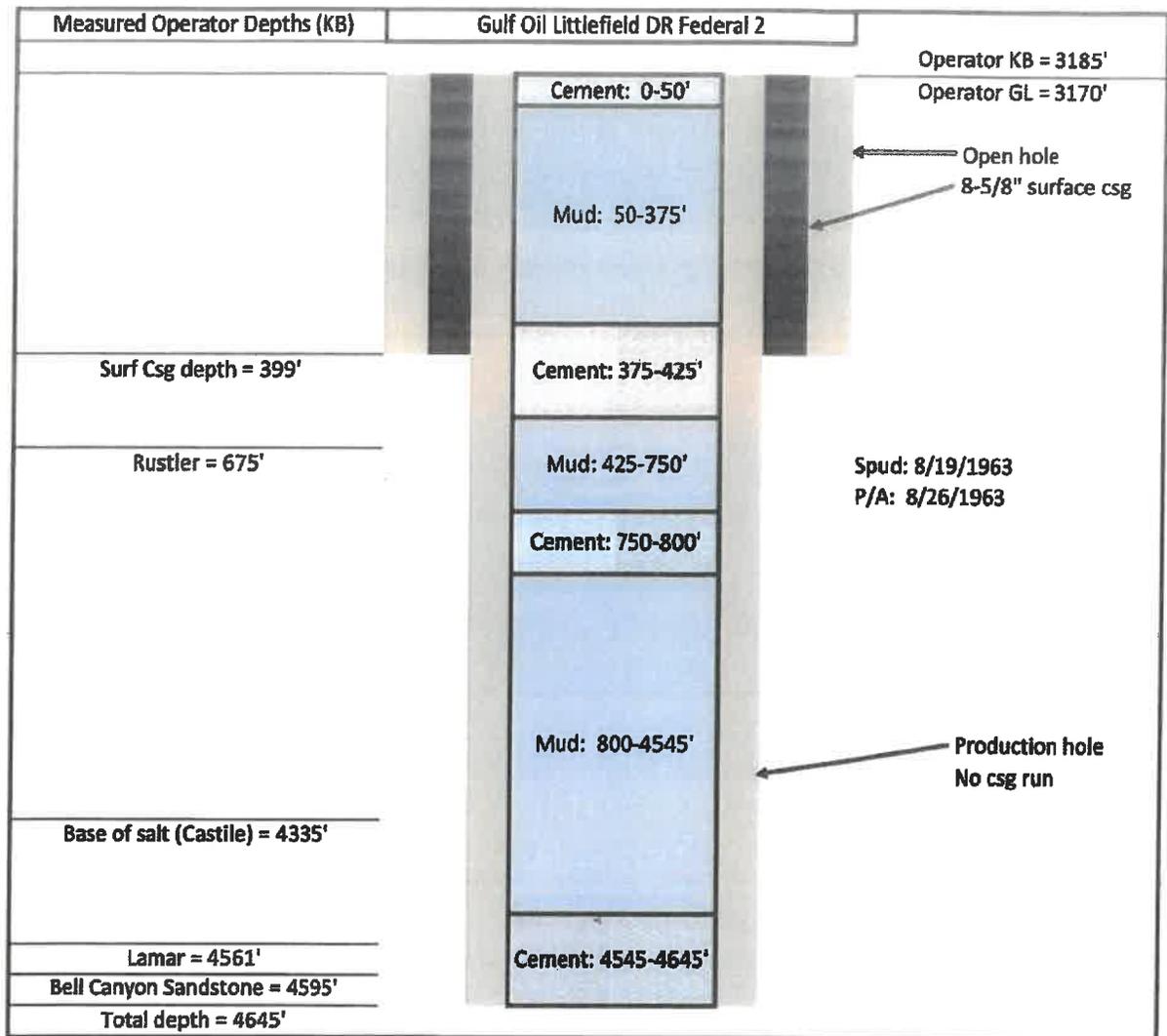
By W. W. WHITAKER

Title Area Engineer

GPO 914974

COUNTY		Lea	FIELD		Wildcat	STATE		N.M.	NO.	
WC	OPR.	Gulf Oil Corporation						MAP		
NO.	2	LSE Littlefield "DR" Federal								
SEC.	24	T. 26S	BLK.	32E	SUR.		CO-ORD.			
LOC.	660' fr N & W Lines of Sec.									
SPUD.	8-13-63	MI.	FROM	P&A	CLASS.	EL.				
TRT.			LOG:							
CSG. & SX.			Rust	675						
	8 5/8"	399'	250	B/Salt	4335					
				Del ls	4561					
				Del sd	4595					
TBG.	DEPTH	SIZE								
LOGS	EL	GR	RA	IND	HC	A				
						TD 4645'		PB		
PROD INT.	(DAILY RATE)	BS&W	GH	GOR	QTY	C. P.	T. P.	HRS. TEST		
PLUGGED & ABANDONED										
Distribution limited and publication prohibited by subscribers' agreement. Reproduction rights reserved by Williams & Lee Scouting Service, Inc.										
CONT.	Johnn Drlg. Co.			PROP DEPTH	4950'	TYPE				
DATE										

8-19-63 F.R. 8-15-63, Delaware PD 4950' - Johnn Drlg. Co.
 8-19-63 Drlg. 4435'. Oper's Elev. 3185' KB.
 8-26-63 TD 4645', PLUGGED & ABANDONED.
 No tests or cores.



Schematic of plugging detail of Gulf Littlefield DR Federal 2 (API 30-025-20445).

ATTACHMENT 3

Item VII

Item	Well 5.5" tubing	Papa Squirrel SWD #1
1)	Permit Max Rate (bwpd)	20,000
1)	Permit Avg Daily Rate (bwpd)	15,000
2)	System	closed
3)	Permit Max Pressure (psig)	925
3)	Permit Avg Pressure (psig)	750

Item	Water Requirements	
4)	Injected fluid is produced water.	Source WQ of injectate and receiving formation is not required per application.
5)	Disposal Zone Water Quality	for non-productive in 1 mile
	SD24 13 FED P416 17H (API 3002547303)	
	Results on next page	

Sample Name / Well			SD24 13 FED P4 16 17H
Date Received			Tuesday, June 21, 2022
Lab Sample #			25168
Address of Testing Laboratory			Northpark Geotechnical Center 100 Northpark Blvd., Covington, LA 70433
Date sampled			6/16/2022
Time Sampled			12:00
Area & Block			Salado Draw
Depth			6504.00ft MD
Reservoir			Cherry Canyon
Analyte	Method	Symbol	mg/L
Chloride	IC	Cl ⁻	159942
Bromide	IC	Br ⁻	1135.2
Iodide	IC	I ⁻	35.68
Sulfate	IC	SO ₄ ²⁻	564.12
Nitrate	IC	NO ₃ ⁻	10.63
Phosphate	IC	as PO ₄ ³⁻	BDL
Total Alkalinity	Titration	as HCO ₃ ⁻	1127
Organic Acids	Titration	NVWA	ND
Weak Bases	Titration	as NH ₄ ⁺	ND
Bicarbonate	Titration (calc.)	as HCO ₃ ⁻	NA
Acetate	IC	CH ₃ COO ⁻	BDL
Propionate	IC	(C ₂ H ₅)COO ⁻	BDL
Formate	IC	HCOO ⁻	BDL
Butyrate	IC	(C ₃ H ₇)COO ⁻	BDL
Sodium	ICP-AES	Na	64989
Potassium	ICP-AES	K	1808.07
Calcium	ICP-AES	Ca	33684.88
Magnesium	ICP-AES	Mg	2305.32
Strontium	ICP-AES	Sr	1361.01
Barium	ICP-AES	Ba	<0.1
Iron	ICP-AES	Fe	<0.05
Manganese	ICP-AES	Mn	<0.05
Lithium	ICP-AES	Li	15.32
Aluminum	ICP-AES	Al	0.72
Silicon	ICP-AES	Si	1.60
Boron	ICP-AES	B	24.19
Phosphorus	ICP-AES	P	0.39

Zinc	ICP-AES	Zn	2.44
Lead	ICP-AES	Pb	<0.25
Nickel	ICP-AES	Ni	<0.1
Chromium	ICP-AES	Cr	<0.05
Copper	ICP-AES	Cu	<0.1
Molybdenum	ICP-AES	Mo	<0.05
Sulfur (<i>total</i>)	ICP-AES	S	449.50
Properties	Method	Units	
Field pH	colorimetric	(-log(H ⁺))	8.12
Lab pH (25°C)	potentiometric	(-log(H ⁺))	8.77
TDS	<i>calculated</i>	mg/L	266525
Density (60°F, 1 bar)	Anton Parr meter	g/cm ³	1.190
Conductivity @ 25°C	measured	µmhos/cm	226610
Resistivity @ 25°C	measured	ohm-m	0.044
Charge Balance Error	<i>calculated</i>	%	2.36

Abbreviations:

ICP-AES: <i>Inductively Coupled Plasma Atomic Emission Spectroscopy</i>
IC: <i>Ion Chromatography</i>
BDL: Below Detection Limit
< * : Below Reporting Limit (*)
NT: Not Tested
ND: Not Detected
NA: Not Available / Not Applicable

ATTACHMENT 4

Item VIII

Formation/Geologic Feature Tops & Datum	Lithology	TVD (from Datum)	Z (SSTVD)
KB (Kelly Bushing)	Datum	0.0	3,232.5
GL (ground surface)	Ground Surface	28.5	3,204.0
01 - Dockum Group	Sandstone	100.0	3,132.5
02 - Dewey Lake	Sandstone	400.0	2,832.5
03 - Rustler	Carbonates	669.0	2,563.5
04 - Los Medanos	Siltstone	912.0	2,320.5
05 - Saldo	Halite	992.2	2,240.3
06 - Castile	Anhydrite	2914.4	318.1
07 - Lamar	Carbonates	4625.3	-1,392.8
08 - Bell Canyon	Sandstone	4652.9	-1,420.4
09 - Cherry Canyon	Sandstone	5640.1	-2,407.6
10 - Brushy Canyon	Sandstone	7285.5	-4,053.0
11 - Bone Spring Limestone	Carbonate	8939.0	-5,706.5

Geologic prognosis tops of all formations to be encountered in the Papa Squirrel SWD 1.

ATTACHMENT 5

Item IX

Proposed acid stimulation as part of the completion for the Papa Squirrel SWD 1.

1. MI/RU Petroplex Acid and Gladiator N2 Unit
2. Perform pressure pumping checklist and record in wellview.
3. Rig up Petroplex acid lines and tie in to 4-1/16" wing valve on tree. Test all lines against wing valve to 2,100 psi for 5 min
 - Install tee in Petroplex lines to allow N2 line to be rigged up. Test all N2 lines against wing valve to 2,100 psi for 5 min
4. Pump Acid job per Petroplex Pump Schedule diverting with N2 as required.
 - Max pressure for job will be 925 psi
 - Discuss with WOE for operational pressure limits during job.
 - Diversion will be treated with 1,250 scf/bbl of N2
5. Once acid is complete R/D Petroplex and Gladiator
6. Secure and shut in well.

ATTACHMENT 6

Item X

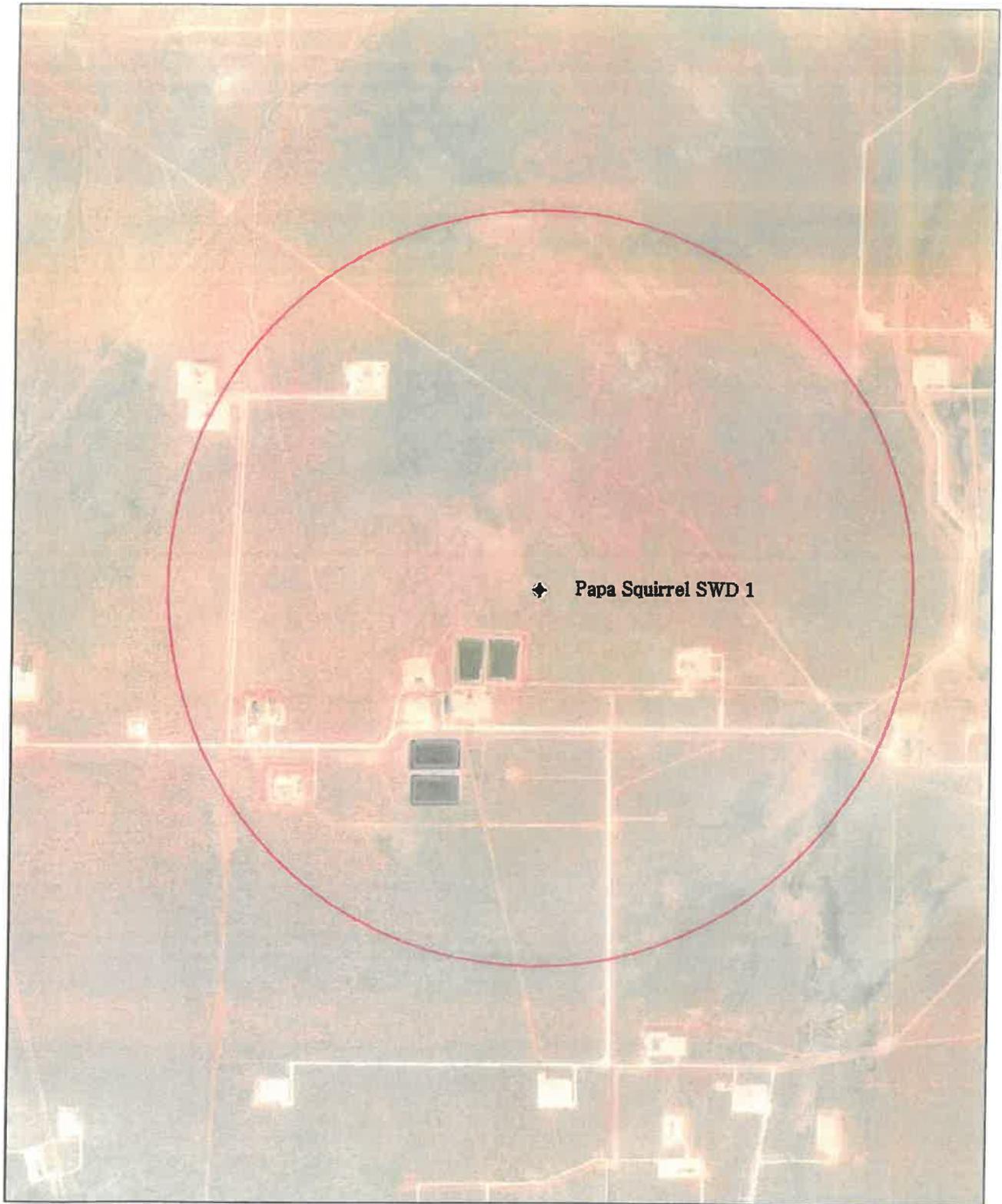
No logs have been run on the Papa Squirrel SWD 1. This is a planned well.

The following open hole logs are planned to be run if hole conditions allow: gamma-ray, resistivity, neutron-density, sonic, and image logs.

Production casing will be installed from surface to near the base of the Brushy Canyon Formation. A total of approximately six Diagnostic Fracture Injection Tests (DFITs) are planned for the Bell Canyon, Cherry Canyon and Brushy Canyon Formations. After the DFITs are run, the Brushy Canyon will be plugged. The Cherry Canyon and Bell Canyon will be perforated to the base of the Lamar Limestone. A step rate test will be run on the Bell Canyon and Cherry Canyon Formation permitted injection interval.

ATTACHMENT 7

Item XI



**No fresh water wells within one mile
of the Papa Squirrel SWD 1.**



ATTACHMENT 8

Item XII

ATTACHMENT 8

Item XII



George T. (Tom) Merrifield, Jr., PG
SWD DRP Geologist
Chevron U.S.A. Inc.
6301 Deauville Blvd
Midland, TX 79706
Phone +1 661-448-7489
tommerrifield@chevron.com

April 10, 2023

Dylan Fuge, Acting Director
Oil Conservation Division
1220 South St. Francis Dr.
Sante Fe, New Mexico 87505

**Re: Affirmation Statement C-108 Applications
Papa Squirrel SWD 1 and Severitas 2 State SWD 1**

Dear Mr. Fuge:

With the increase of induced seismicity due to deep produced water injection, in 2021 Chevron decided to evaluate the potential for shallow injection in both Texas and New Mexico with exhaustive manpower and technical effort.

This effort led to the following technical evaluations of the DMG: (1) the location of high confident shallow faults in our active development areas using available seismic reflection data (2) assessment of seismic risk of any such shallow faults, (3) other geologic and reservoir engineering assessments addressing storage capabilities, potential impacts, and mitigation, and (4) collaboration and joint efforts with other operators.

Both the Papa Squirrel SWD 1 and Severitas 2 State SWD 1 are locations which we find no indication of open faults at the surface or in the subsurface and no indication of hydraulic connection between the proposed injection zone (Bell Canyon and Cherry Canyon) and an underground source of drinking water (USDW). Both locations have low potential for fault slip and induced seismicity.

Respectively yours,

A handwritten signature in black ink, appearing to read "G. T. Merrifield, Jr.".

G. T. Merrifield, Jr., PG
TX (#10838) and CA (#9274)

ATTACHMENT 9

Item XIII

Notice to Surface Owners, Leasehold Operators, and Affected Persons within ½ Mi Radius

Surface Owner:

United States of America (Bureau of Land Management)	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4
	Section 14: All
	Section 15: All
	Section 23: All

Note: All part of T-26-S, R-33-E, NMPM, Lea County, NM

Leasehold Operator within ½ radius:

Operator	Well Name	API
Chevron U.S.A. Inc.	SD WE 24 FEDERAL P23 001H	30-025-43318
	SD WE 24 FEDERAL P23 002H	30-025-43296
	SD WE 24 FEDERAL P23 003H	30-025-43297
	SD WE 24 FEDERAL P23 004H	30-025-43298
	SD WE 14 FEDERAL P7 003H	30-025-43086
	SD WE 14 FEDERAL P7 004H	30-025-43087
	SD WE 23 FEDERAL P7 003H	30-025-43088
	SD WE 23 FEDERAL P7 004H	30-025-43089
	SD WE 24 FEDERAL P24 005H	30-025-43674
	SD WE 24 FEDERAL P24 006H	30-025-43673
	SD WE 24 FEDERAL P24 007H	30-025-43675
	SD 24 13 FEDERAL P415 013H	30-025-49072
	SD 24 13 FEDERAL P415 014H	30-025-49073
	SD 24 13 FEDERAL P415 015H	30-025-49074
	SD 24 13 FEDERAL P416 017H	30-025-47303
	SD 24 13 FEDERAL P416 018H	30-025-47311
SD 24 13 FEDERAL P416 019H	30-025-47312	
NGL Water Solutions Permian LLC	SALADO DRAW SWD 13-1	30-025-42354

Working Interest Owners within ½ mile radius:

Lease	Lands	Depths	WI Owner (%)	WI (%)
NMNM 118722	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4 Section 14: All Section 15: All Section 23: All Section 24: N/2, N/2 of S/2, S/2 of SW/4	All	Chevron U.S.A. Inc.	100.000000%
SD WE P24 5H Comm Agreement (Pending Approval)	Section 13: W/2 of E/2 Section 24: W/2 of E/2	Bone Spring	Chevron U.S.A. Inc.	100.000000%
SD 24 13 Fed P416 Comm Agreement (Pending Approval)	Section 13: E/2 Section 24: E/2	Wolfcamp	Chevron U.S.A. Inc.	99.453125%
			Royalty Clearinghouse 2003 LLC	0.078125%
			Atlas OBO Energy LP	0.468750%

Note: All part of T-26-S, R-33-E, NMPM, Lea County, NM

Mineral Interest Owner within ½ mile radius:

Lease	Lands	Depths	Federal /State Mineral Interest (MI) Owner	MI (%)
NMNM 118722	Section 13: N/2, SW/4, W/2 of SE/4 and SE/4 of SE/4 Section 14: All Section 15: All Section 23: All Section 24: N/2, N/2 of S/2, S/2 of SW/4	All	United States of America	100.000000%
SD WE P24 5H Comm Agreement (Pending Approval)	Section 13: W/2 of E/2 Section 24: W/2 of E/2	Bone Spring	United States of America	100.000000%
SD 24 13 Fed P416 Comm Agreement (Pending Approval)	Section 13: E/2 Section 24: E/2	Wolfcamp	United States of America	100.000000%

Note: All part of T-26-S, R-33-E, NMPPM, Lea County, NM

Karlene Schuman
Modrall Sperlberg Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: **CERTIFIED MAIL**
 07/13/2023

Firm Mailing Book ID: 249130

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0109 8675 77	United States of America Bureau of Land Management 301 Dinosaur Trail Santa Fe NM 87508	\$2.31	\$4.35	\$2.20	\$0.00	83420.0047 Papa Notice
2	9314 8699 0430 0109 8675 84	NGL Water Solutions Permian LLC 865 North Albion Street, Suite 400 Denver CO 80220	\$2.31	\$4.35	\$2.20	\$0.00	83420.0047 Papa Notice
3	9314 8699 0430 0109 8675 91	Royalty Clearinghouse 2003 LLC 201 W. 5th St. #1350 Austin TX 78701	\$2.31	\$4.35	\$2.20	\$0.00	83420.0047 Papa Notice
4	9314 8699 0430 0109 8676 07	Atlas OBO Energy LP 1900 Saint James Pl., St 800 Houston TX 77056	\$2.31	\$4.35	\$2.20	\$0.00	83420.0047 Papa Notice
5	9314 8699 0430 0109 8676 14	Mewbourne Oil Company Tim Harrington PO Box 7598 Tyler TX 75711	\$2.31	\$4.35	\$2.20	\$0.00	83420.0047 Papa Notice
Totals:			\$11.55	\$21.75	\$11.00	\$0.00	
Grand Total:						\$44.30	

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
5			



EXHIBIT B

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 249130
Generated: 11/1/2023 8:11:31 AM

USPS Article Number	Date Created	Reference Number	Name 1	Name 2	City	State	Zip	Postage	Fees	Firm MailBook ID	Mailing Status	Service Options	Mail Delivery Date
9314869904300109867614	2023-07-13 8:58 AM	83420.0047 Papa	Mewbourne Oil Company	Tim Harrington	Tyler	TX	75711	2.31	6.55	249130	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-18 8:56 AM
9314869904300109867607	2023-07-13 8:58 AM	83420.0047 Papa	Atlas OBO Energy LP		Houston	TX	77056	2.31	6.55	249130	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-17 12:14 PM
9314869904300109867591	2023-07-13 8:58 AM	83420.0047 Papa	Royalty Clearinghouse 2003 LLC		Austin	TX	78701	2.31	6.55	249130	Lost	Return Receipt - Electronic, Certified Mail	
9314869904300109867584	2023-07-13 8:58 AM	83420.0047 Papa	NGL Water Solutions Permian LLC		Denver	CO	80220	2.31	6.55	249130	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-19 3:37 PM
9314869904300109867577	2023-07-13 8:58 AM	83420.0047 Papa	United States of America	Bureau of Land M	Santa Fe	NM	87508	2.31	6.55	249130	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-17 1:11 PM

EXHIBIT C

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

Beginning with the issue dated
July 16, 2023
and ending with the issue dated
July 16, 2023.



Publisher

Sworn and subscribed to before me this
16th day of July 2023.



Business Manager

My commission expires
January 29, 2027

(Seat)

STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

01104570

00280692

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

DOLORES SERNA
MODRALL, SPERLING, ROEHL, HARRIS &
P. O. BOX 2168
ALBUQUERQUE, NM 87103-2168

LEGAL NOTICE
July 16, 2023

CASE NO. 23686: Notice to all affected parties, as well as heirs and devisees of: United States of America Bureau of Land Management; NGL Water Solutions Permian LLC; Royalty Clearinghouse 2003 LLC; Atlas OBO Energy LP of Application of Chevron USA Inc. for approval of salt water disposal well in Lea County, New Mexico. The State of New Mexico through its Oil Conservation Division hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on **August 3, 2023** to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/ocd/hearing-info/>. This hearing is subject to continuance by the Division to a subsequent docket date. Applicant seeks an order approving the Papa Squirrel State SWD #1 well at a surface location 1,928' from the South line and 870' from the West line, Unit L, Section 13, Township 26 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 4625 feet to 8939 feet. The tubing packer will be set at 4525 feet, and production casing and cement will be set at 8500 feet. The maximum anticipated injection rate will be 20,000 BWPD and maximum surface injection pressure will be 925 psi. Said area is located approximately 26 miles west of Jal, New Mexico. **#00280692**

EXHIBIT D

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

**APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN EDDY COUNTY, NEW MEXICO.**

CASE NO. 23687

SELF-AFFIRMED DECLARATION OF DEANA M. BENNETT

Deana M. Bennett, attorney in fact and authorized representative of Chevron USA, Inc., the Applicant herein, declares as follows:

- 1) The above-referenced Application was provided under notice letter, dated July 13, 2023, and attached hereto, as Exhibit A.
- 2) Exhibit B is the mailing list, which show the notice letters were delivered to the USPS for mailing on July 13, 2023.
- 3) Exhibit C is the certified mailing tracking information, which is automatically complied by CertifiedPro, the software Modrall uses to track the mailings. This spreadsheet shows the names and addresses of the parties to whom notice was sent and the status of the mailing.
- 4) Exhibit D is the Affidavit of Publication from the Carlsbad Current Argus, confirming that notice of the August 3, 2023 hearing was published on July 19, 2023.
- 5) I attest under penalty of perjury under the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief.

Dated: November 1, 2023



Deana M. Bennett



MODRALL SPERLING
LAWYERS

July 13, 2023

Deana M. Bennett
505.848.1834
dmb@modrall.com

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

**Re: APPLICATION OF CHEVRON U.S.A. INC. TO APPROVE
SALT WATER DISPOSAL WELL IN EDDY COUNTY, NEW
MEXICO.**

CASE NO. 23687

TO: AFFECTED PARTIES

This letter is to advise you that Chevron U.S.A. Inc. (“Chevron”) has filed the enclosed application.

In Case No. 23687, Chevron seeks an order approving the Severitas 2 State SWD #1 well at a surface location 185’ from the North line and 1,082’ from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 2343 feet to 6012 feet. The tubing packer will be set at 2243 feet, and production casing and cement will be set at 5500 feet. The maximum anticipated injection rate will be 15,000 bwpd and maximum surface injection pressure will be 468 psi. Said location is approximately 13 miles southwest of Malaga, New Mexico.

The hearing will be conducted remotely on August 3, 2023 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/>. This hearing is subject to continuance by the Division to a subsequent docket date.

As a party who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the application. Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

Modrall Sperring
Roehl Harris & Sisk P.A.

500 Fourth Street NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico 87103-2168

Tel: 505.848.1800
www.modrall.com

EXHIBIT A

Page 2

You are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division at least four business days in advance of a scheduled hearing before the Division or the Commission, but in no event later than 5:00 p.m. mountain time, on the Thursday preceding the scheduled hearing date, with a copy delivered to the undersigned.

Sincerely,



Deana M. Bennett

Attorney for Applicant

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

APPLICATION OF CHEVRON USA INC.
TO APPROVE SALT WATER DISPOSAL
WELL IN EDDY COUNTY, NEW MEXICO.

CASE NO. 23687

APPLICATION

Chevron USA Inc. ("Chevron"), OGRID No. 4323, through its undersigned attorneys, hereby applies to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Eddy County, New Mexico. In support of this application, Chevron states as follows:

- (1) Chevron proposes to drill the Severitas 2 State SWD #1 well at a surface location 185' from the North line and 1,082' from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well.
- (2) Chevron seeks authority to inject into the Bell Canyon/Cherry Canyon/Brushy Canyon from 2,343' to 6,012'.
- (3) The tubing packer will be set at 2,243' and production casing and cement will be set at 5,500'.
- (4) Chevron requests that the Division approve a maximum daily injection rate for the well of 15,000 BWPD.
- (5) Chevron requests that a maximum pressure of 468 psi be approved for the well.
- (6) A proposed C-108 for the subject well is attached hereto in Attachment A.

(7) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, Chevron requests that this application be set for hearing before an Examiner of the Oil Conservation Division on August 3, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: 
Deana Bennett
Earl E. DeBrine, JR.
Post Office Box 2168
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 23687: Application of Chevron USA Inc. for approval of salt water disposal well in Eddy County, New Mexico. Applicant seeks an order approving the Severitas 2 State SWD #1 well at a surface location 185' from the North line and 1,082' from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 2343 feet to 6012 feet. The tubing packer will be set at 2243 feet, and production casing and cement will be set at 5500 feet. The maximum anticipated injection rate will be 15,000 bwpd and maximum surface injection pressure will be 468 psi. Said location is approximately 13 miles southwest of Malaga, New Mexico.

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: Chevron USA Inc.

ADDRESS: 6301 Deauville Blvd, Midland, TX 79706

CONTACT PARTY: Tom Merrifield PHONE: 661-448-7489

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. ATTACHMENT 1

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. ATTACHMENT 2

VII. Attach data on the proposed operation, including: ATTACHMENT 3

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. 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. ATTACHMENT 4

IX. Describe the proposed stimulation program, if any. ATTACHMENT 5

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). ATTACHMENT 6

*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. ATTACHMENT 7

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. ATTACHMENT 8

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. ATTACHMENT 9

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

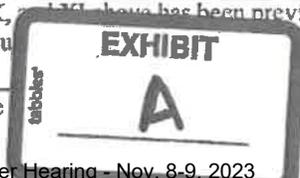
NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

E-MAIL ADDRESS: _____

XV. 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 submission: _____

DISTRIBUTION: Original and one copy to Santa Fe with one _____ Office



Side 2

III. WELL DATA

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

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720
District III
 1000 Rio Brazos Road, Aztec, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
 Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

Form C-102
 Revised August 1, 2011
 Submit one copy to appropriate
 District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96100		³ Pool Name SWD; DELAWARE	
⁴ Property Code		⁵ Property Name SEVERITAS 2 STATE SWD			⁶ Well Number 001
⁷ OGRID No. 4323		⁸ Operator Name CHEVRON U.S.A. INC.			⁹ Elevation 3172'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26 SOUTH	27 EAST, N.M.P.M.		185'	NORTH	1082'	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	2	26 SOUTH	27 EAST, N.M.P.M.		185'	NORTH	1082'	EAST	EDDY

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------	-------------------------------	----------------------------------	-------------------------

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.

<p>¹⁶</p> <p style="text-align: center;">A</p> <p style="text-align: center;">HHNM SEVERITAS 2 STATE SWD No.001 X = 555,115' (NAD27 NM E) Y = 382,257' LAT. 32.078306° N (NAD27) LONG. 104.155388° W</p> <p style="text-align: center;">B</p> <p style="text-align: center;">±1082'</p> <p style="text-align: center;">±185'</p> <p style="text-align: center;">C</p> <p style="text-align: center;">2</p> <p style="text-align: center;">D</p> <p style="text-align: center;">E</p> <p style="text-align: center;">F</p> <p style="text-align: center;">CORNER COORDINATES TABLE (NAD 27)</p> <p>A - Y=392441.43, X=553545.42 B - Y=392443.13, X=558198.44 C - Y=389739.69, X=553503.51 D - Y=389786.09, X=558173.73 E - Y=387033.94, X=553481.53 F - Y=387127.27, X=558148.39</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <p>E-mail Address _____</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>04/27/2022 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p style="text-align: center;"> ROBERT L. LASTRAPES NEW MEXICO 23006 05/02/2022 PROFESSIONAL SURVEYOR </p> <p>Certificate Number _____</p>

Side 1
INJECTION WELL DATA SHEET
OPERATOR: Chevron U.S.A. Inc.

WELL NAME & NUMBER: Severitas 2 State SWD 1

WELL LOCATION: 185' from North, 1082' from East, A UNIT LETTER SECTION TOWNSHIP RANGE

FOOTAGE LOCATION

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

See next page

Hole Size: 17-1/2" Casing Size: 13-3/8"
Cemented with: 253 sx. or 337 ft³
Top of Cement: Surface Method Determined: Volumetric

Intermediate Casing

Hole Size: 12-1/4" Casing Size: 10-3/4"
Cemented with: _____ sx. or _____ ft³
Top of Cement: Surface Method Determined: Volumetric

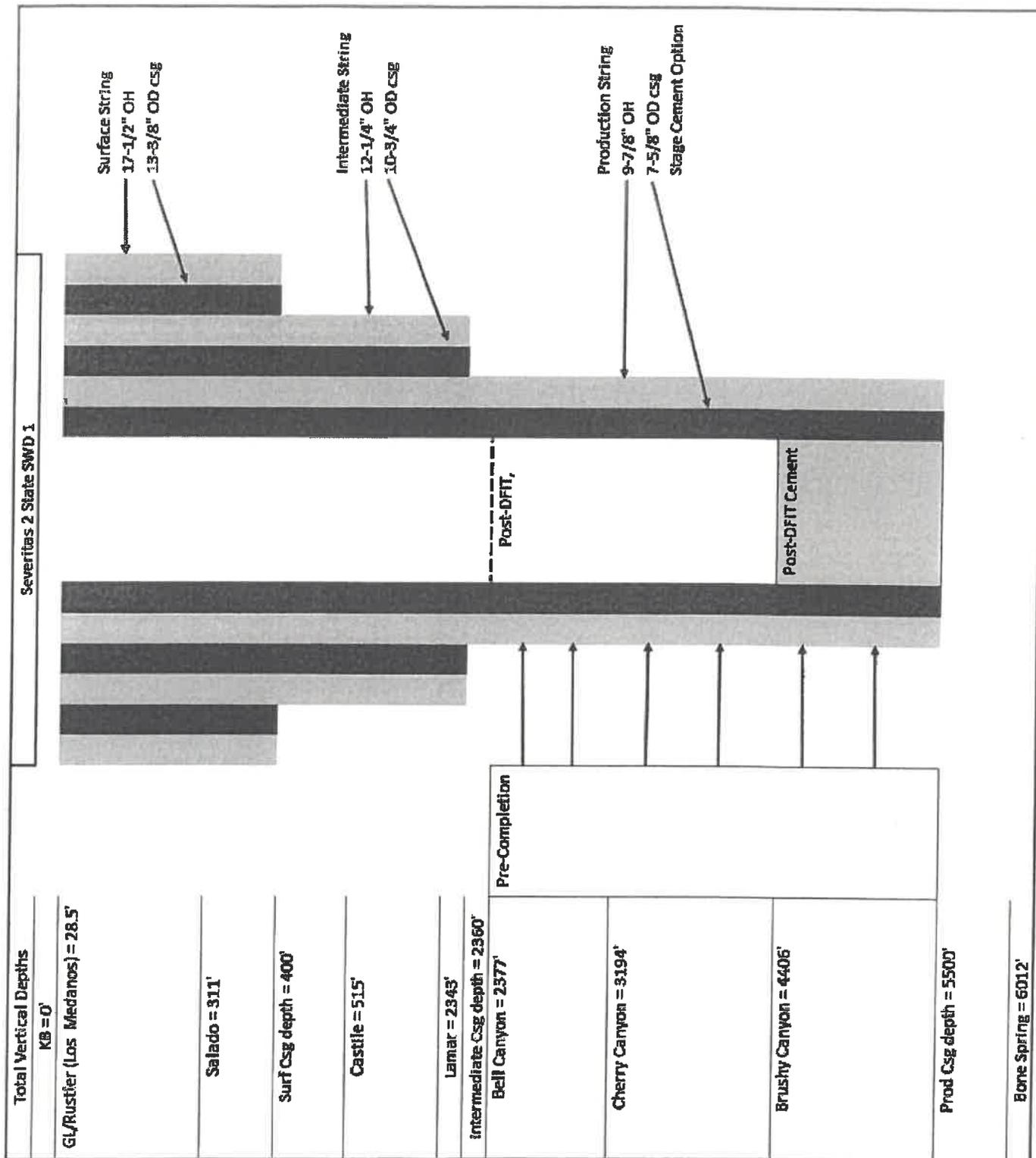
Production Casing

Hole Size: 9-7/8" Casing Size: 7-5/8"
Cemented with: 377 sx. or 901 ft³
Top of Cement: Surface Method Determined: Volumetric

Total Depth: 5500'

Injection Interval 2343 feet to 6012' *

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone. (Perforated or Open Hole; indicate which)



Side 2

INJECTION WELL DATA SHEET

Tubing Size: 5-1/2" Lining Material: _____
Type of Packer: Hydraulically set packer
Packer Setting Depth: 2243'
Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? Yes No
If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Bell Canyon, Cherry Canyon, and Brushy Canyon *

3. Name of Field or Pool (if applicable): SWD; Delaware

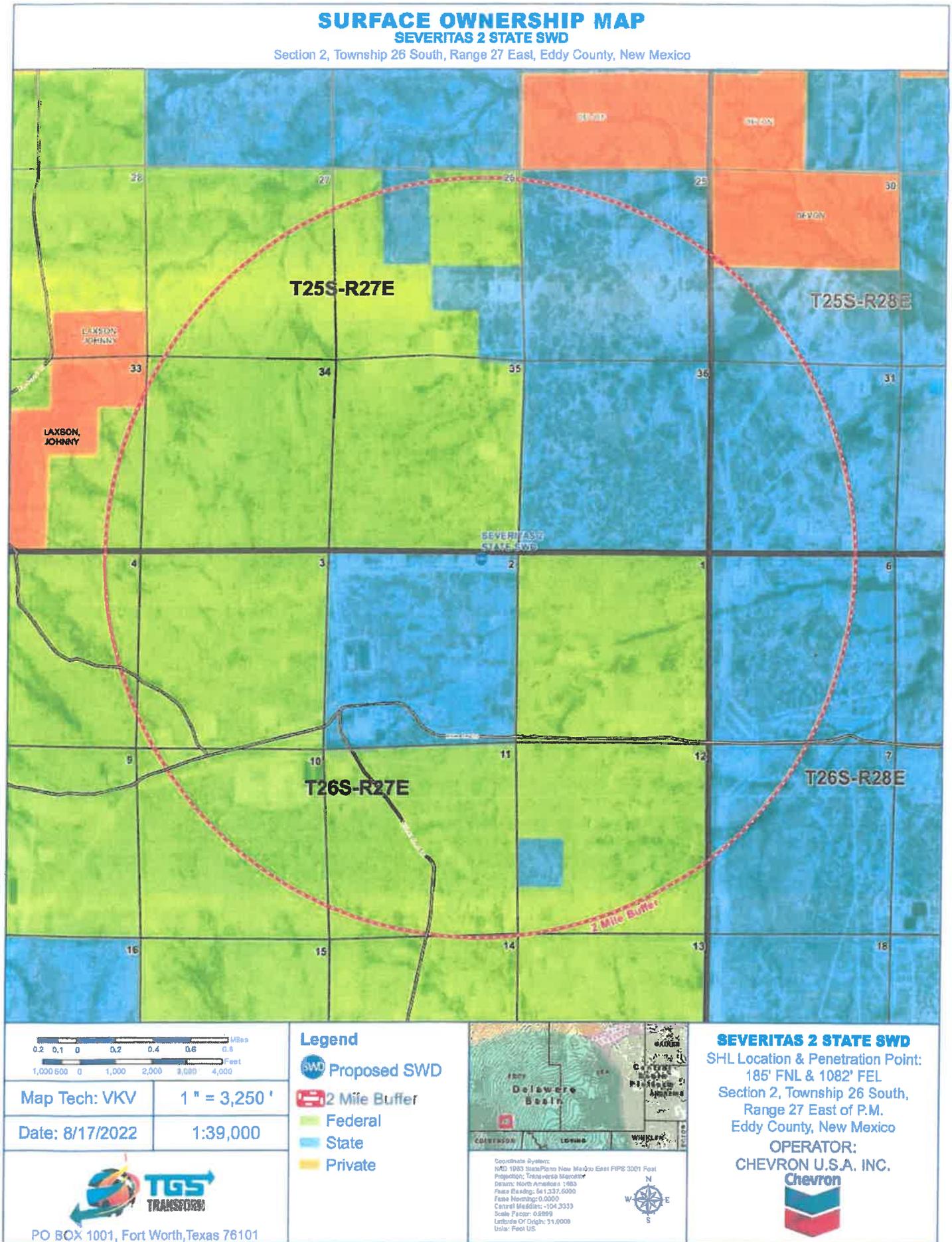
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.
No, this is a proposed new SWD well.

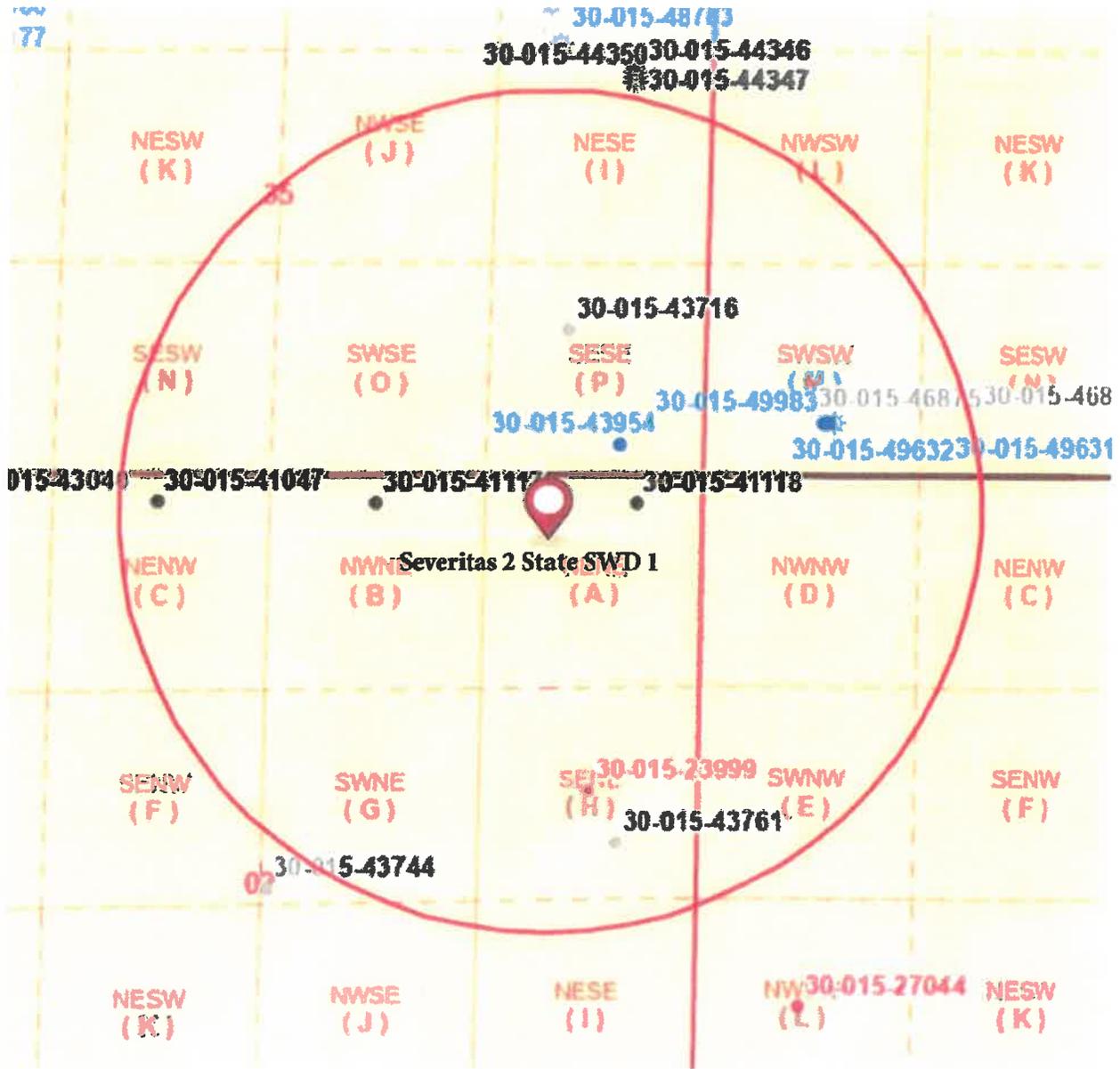
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Depths are within a 3 mile area.
Atoka (11,643-11,794), Bone Spring (5840-18,860),
Morrow (11,966-12,697), Pennsylvanian (11,154-12,522), and
Strawn (11,694-11,719), and Wolfcamp (9299-21,655)

* Brushy Canyon is included as a potential injection interval. The Brushy is not intentionally targeted for injection, but the SA&O data and analysis may indicate that fluids migrate into the Brushy, but are contained by the Bone Spring Limestone.

ATTACHMENT 1

Item V





Severitas 2 State SWD 1: 0.5 mile radius circle map showing wells in Area of Review (AOR).

ATTACHMENT 2

Item VI

Section	Township	Range	Latitude 83	Longitude 83	Measured Depth	Vertical Depth.	Associated Pools	Plug Date	Miles from SWD
36 LLC	25S	27E	32.0798	-104.1499	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
2 INC	26S	27E	32.0785	-104.1632	12,619	7,792	[16800] DELAWARE RIVER, BONE SPRING		0.4
2 INC	26S	27E	32.0785	-104.1588	12,556	7,768	[16800] DELAWARE RIVER, BONE SPRING		0.2
14 IGY	25S	26E	32.0814	-104.155	0	0	[97494] COTTONWOOD DRAW, BONE SPRING (O)		0.2
2 WELL	26S	27E	32.0735	-104.1546	0	0	[16800] DELAWARE RIVER, BONE SPRING	5/15/1987	0.3
35 INC	25S	27E	32.0795	-104.154	0	0	[16800] DELAWARE RIVER, BONE SPRING		0.2
24 IGY	25S	26E	32.0726	-104.154	0	0	[97494] COTTONWOOD DRAW, BONE SPRING (O)		0.4
2 INC	26S	27E	32.0785	-104.1537	12,759	7,789	[16800] DELAWARE RIVER, BONE SPRING		0.1
36 LLC	25S	27E	32.0798	-104.1498	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
36 LLC	25S	27E	32.0798	-104.1499	0	0	[98220] PURPLE SAGE, WOLFCAMP (GAS)		0.3
36 LLC	25S	27E	32.0798	-104.1499	0	0	[16800] DELAWARE RIVER, BONE SPRING; [30216] HAY HOLLOW, BONE SPRING, NORTH		0.3

Data tabulation of wells in Area of Review of the Severitas 2 State SWD 1.

WAYNE MOORE

403 N. MARIENFELD
MIDLAND, TEXAS 79701

RECEIVED

APR 25 1983

**O. C. D.
ARTESIA, OFFICE**

April 18, 1983

Mr. Leslie A. Clements
Supervisor District II
Energy and Mineral Department
P.O. Drawer DD
Artesia, New Mexico 88210

WAYNE MOORE - AZTEC STATE #1, SEC 2-T26S-R27E, LEASE #L-6791,
EDDY COUNTY, NEW MEXICO

Mr. Clements,

This is in reference to your letter of April 11, 1983, concerning
the above listed lease.

The well was perforated in the Bone Springs Section (perfs. 6125-
6727, 37 perforations) and put on pump for testing. Down hole and
surface equipment problems plagued the operation as testing continued,
thus the testing took much longer than anticipated.

The well, although operating at a small profit, is not sufficiently
productive so as to warrant the drilling of additional Bone Springs
wells on this lease. With that in mind a completion in the Delaware
Section is now in the final planning stage.

(See attached letter). We plan to:

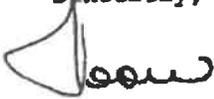
- A. Set a cast iron bridge plug at the top
of the Bone Springs.
- B. Spot 50' of cement on top of this bridge
plug.
- C. Perforate below the zones of interest
and circulate cement 200' into the
8-5/8" casing set at 2330'.
- D. Perforate and test zones of interest
in the Delaware Section.

WAYNE MOORE
403 N. MARIENFELD
MIDLAND, TEXAS 79701

Mr. Clements, sorry for the delay in reporting, but we've until recently, been at a loss as to what to do with the well. We will file reports as this work progresses. Please let me know if you require additional information.

Thank you for your help with this problem.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom E. Moore', with a stylized flourish at the end.

Tom E. Moore

TEM/mp

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

NO. OF SECTIONS	
DISTRICT	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OFFICER	

OIL CONSERVATION DIVISION

P. O. BOX 20800, SANTA FE, NEW MEXICO 87501

Form O-133
Revised 11-1-82

MAY 31 1983

O. C. D.
ARTESIA OFFICE

5a. Indicate Type of Notice
State

5. State No. & Date of Notice
L-6791

6. Name of Lease
Aztec State

7. Well No.
#1

8. Field and Section
Wildcat - Bone Springs

11. Elevation (Above Another DF, RT, GR, etc.)
3174 GA

12. County
Eddy

SUNDRY NOTICES AND REPORTS ON WELLS

OIL WELL GAS WELL OTHER

Name of Operator
Wayne Moore ✓
Address of Operator
403 N. Marienfeld, Midland

Location of Well
UNIT LETTER H 1980 FEET FROM THE N LINE AND 660 FEET FROM THE E LINE, SECTION 2 TRANSFER 26S RANGE 27E

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

REPAIR REMEDIAL WORK PLUG AND ABANDON

REPAIR BY ABANDON CHANGE PLANS

REPAIR OF A TUB CASING OTHER

SUBSEQUENT REPORT OF:

REMEDIAL WORK ALTERING LEASE

COMMENCE DRILLING OPERATIONS PLUG AND ABANDON

CASING TEST AND CEMENT JOB

OTHER

1. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting and completing work, SEE RULE 1103.)

- A. Set cast iron bridge plug at 5700' (top of Bone Springs) and spot cement from 5645' to 5700'. (4-27-83)
- B. Perforate two holes at 4890. (4-27-83)
- C. Pump 1300 sacks class "C" cement, 2% Gel, 5 lbs Salt/sk, .3cfe2, 1/2 lb cello flake, wt. 13.7 yld = 1.38 (4-28-83)
- D. Ran temperature survey - top of cement 700' from surface.
- E. Perforate 4752 - 4798 with 13 holes. (5-12-83)
- F. Acidize and Frac (5-15-83)
- G. Swab test with oil & gas show (5-17-83)
- H. Put on pump for additional testing (5-25-83)

(Signature)

TITLE

STATE OF NEW MEXICO
 ENERGY AND MINERALS DEPARTMENT

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	<input checked="" type="checkbox"/>
FILE	<input checked="" type="checkbox"/>
U.S.G.S.	
LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

WATER CONSERVATION DIVISION
 P. O. BOX 2028
 SANTA FE, NEW MEXICO 87501
 DEC 03 1984
 O. C. D.
 ARTESIA, OFFICE

Form C-103
 Revised 10-1-78

3a. Indicate Type of Lease
 State Fee

5. State Oil & Gas Lease No.
 E-6791

7. Unit Agreement Name

8. Firm or Lease Name
 Aztec State

9. Well No.
 #1

10. Field and Pool, or Wildcat
 Wildcat-Bone Springs

11. County
 Eddy

SUNDRY NOTICES AND REPORTS ON WELLS

DO NOT USE THIS FORM FOR OPERALS TO DRILL OR TO OPERATE ON PLUG BACK TO A DIFFERENT RESERVOIR.
 USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH OPERALS.

Oil Well Gas Well Other **30-015-23999**

Name of Operator
 WAYNE MOORE ✓

Address of Operator
 403 N. Marienfeld, Midland, Texas 79701

Location of Well
 1980 FEET FROM THE N LINE AND 660 FEET FROM
 THE E LINE, SECTION 2 TOWNSHIP 26S RANGE 27E BLMPL.

10. Elevation (Show whether SF, RT, GA, etc.)
 3174' GL

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
 NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

REFORM REMEDIAL WORK <input type="checkbox"/> IMPROVEMENT ABANDON <input type="checkbox"/> PLUG OR ALTER CASING <input type="checkbox"/> OTHER <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> OTHER <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> COMMENCE DRILLING OPER. <input type="checkbox"/> CASING TEST AND CEMENT JOB <input type="checkbox"/> OTHER <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/> PLUG AND ABANDONMENT <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>
--	--	---	--

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1 FOR.

- Oct. 2, 1984
 Spot 25SX Plug @ 4750'
- Oct 3, 1984
 TAG Plug - Plug in Place
 Set Bridge Plug at 2370'
 Spot 50 Sx Plug on Top of Bridge Plug
 Spot 25 Sx Plug @ 750'
 Spot 50 Sx Plug @ 400'
 Spot Plug 30' to Surface
- Oct 4, 1984
 Put up Regulation Surface Marker

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

ISSUED Wayne Moore TITLE Partner DATE November 5, 1984

APPROVED BY David Moore TITLE Geologist DATE May 10, 1987

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. DRAWER DD
ARTESIA, NEW MEXICO 88210

DATE 1-22-85

Wayne Moore
403 N. Marisfield
Midland, Tx. 79701

Gentlemen:

Re: Plugging Reports

Form C-103, Report of Plugging for your Aztec St. 1 H 2-26-27
Lease Well # Unit S-T-R

cannot be approved until a Division representative has made an inspection of the location and found it to be cleared to comply with Division Rules and Regulations. Please check each item in the space provided to indicate that the work has been done.

- () 1. All pits have been filled and leveled.
- () 2. Rat hole and cellar have been filled and leveled.
- () 3. A steel marker 4" in diameter and approximately 4' above mean ground level has been set in concrete. It must show the quarter-quarter section or unit designation, section, township and range numbers which have been permanently stenciled or welded on the marker.
- () 4. The location has been leveled as nearly as possible to original top ground contour and has been cleared of all junk and equipment.
- () 5. The dead men and tie downs have been cut and removed.
- () 6. If a one well lease or last remaining well on lease, the battery and burn pit locations have been leveled and cleared of all junk and equipment.

The above are minimum requirements and no plugging bond will be cancelled until all locations for plugged and abandoned wells have been inspected and Form C-103 approved.

When all of the work outlined above has been done, please notify this office by filling in the blank form below and returning this letter to us so that our representative will not have to make more than one trip to the location.

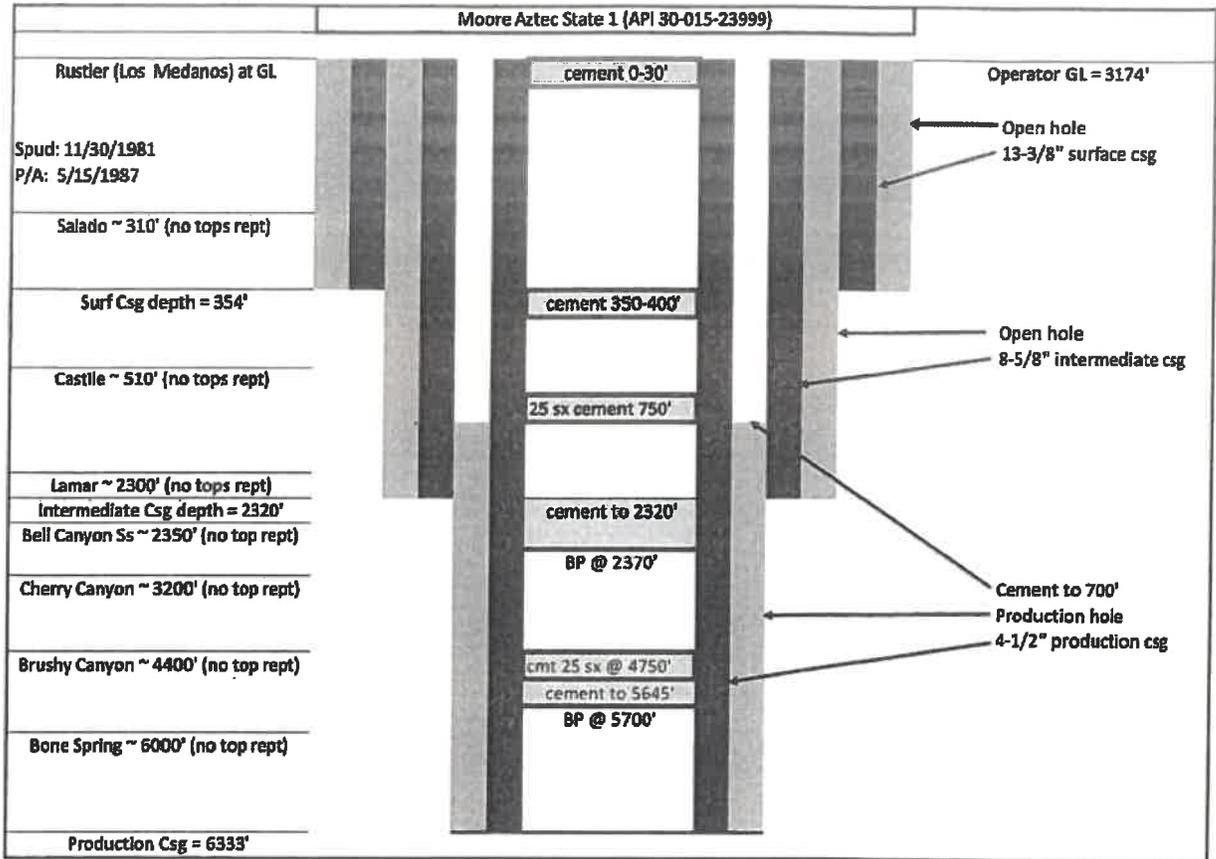
OIL CONSERVATION DIVISION

Samy Brooks
DISTRICT GEOLOGIST

FILL IN BELOW AND RETURN

I certify that the above work has been done and the _____
Lease
_____ is ready for your inspection and approval.

Well No. Unit: S-T-R
Released to Imaging: 7/3/2023 4:41:38 PM



Schematic of plugging detail of Moore Aztec State 1 (API 30-015-23999).

ATTACHMENT 3

Item VII

Item	Well 5.5" tubing	Severitas 2 State SWD #1
1)	Permit Max Rate (bwpd)	15,000
1)	Permit Avg Daily Rate	12,500
2)	System	closed
3)	Permit Max Pressure (psig)	468
3)	Permit Avg Pressure (psig)	400
Water Requirements		
4)	Reinjected produced water	source WQ of injectate and receiving formation is not required per application
5)	Disposal Zone Water	for non-productive in 1 mile
	Chicken Hawk State 1 (API 3001533682)	
Results on next page		

ATTACHMENT 4

Item VIII

Formation/Geologic Feature Tops & Datum	Lithology	TVD (from Datum)	Z (SSSTD)
KB (Kelly Bushing)	Datum	0.0	3200.5
GL (ground surface)	Ground Surface	28.5	3172.0
01 - Rustler (Los Medanos at surface)	Mudstone, Salt & Anhydrite	28.5	3172.0
02 - Salado	Gypsum & Anhydrite	310.5	2890.0
03 - Castile	Anhydrite & Salt	514.8	2685.7
04 - Lamar	Carbonate	2343.3	857.2
05 - Bell Canyon	Sandstone	2376.9	823.6
06 - Cherry Canyon	Sandstone, Siltstone & Carbonate	3193.6	6.9
07 - Brushy Canyon	Sandstone, Mudstone & Carbonate	4405.8	-1205.3
08 - Bone Spring	Carbonate	6011.7	-2811.2

Geologic prognosis tops of all formations to be encountered in the Severitas 2 State SWD 1.

ATTACHMENT 5

Item IX

Proposed acid stimulation as part of the completion for the Severitas 2 State SWD 1.

1. MI/RU Petroplex Acid and Gladiator N2 Unit
2. Perform pressure pumping checklist and record in wellview.
3. Rig up Petroplex acid lines and tie in to 4-1/16" wing valve on tree. Test all lines against wing valve to 2,100 psi for 5 min
 - Install tee in Petroplex lines to allow N2 line to be rigged up. Test all N2 lines against wing valve to 2,100 psi for 5 min
4. Pump Acid job per Petroplex Pump Schedule diverting with N2 as required.
 - Max pressure for job will be 468 psi
 - Discuss with WOE for operational pressure limits during job.
 - Diversion will be treated with 1,250 scf/bbl of N2
5. Once acid is complete R/D Petroplex and Gladiator
6. Secure and shut in well.

ATTACHMENT 6

Item X

No logs have been run on the Severitas 2 State SWD 1. This is a planned well.

The following open hole logs are planned to be run if hole conditions allow: gamma-ray, resistivity, neutron-density, sonic, and image logs.

Production casing will be installed from surface to near the base of the Brushy Canyon Formation. A total of approximately six Diagnostic Fracture Injection Tests (DFITs) are planned for the Bell Canyon, Cherry Canyon and Brushy Canyon Formations. After the DFITs are run, the Brushy Canyon will be plugged. The Cherry Canyon and Bell Canyon will be perforated to the base of the Lamar Limestone. A step rate test will be run on the Bell Canyon and Cherry Canyon Formation permitted injection interval.

ATTACHMENT 7

Item XI



Both the C-02103 and the C-02048 permits have expired with no evidence wells were drilled. The C-02474 was drilled in 1913 and may have not been used past 1918. No lab reports available. The well is confined to the first 100 ft in the Alluvium. No Rustler Aquifer exists in the immediate area.





New Mexico Office of the State Engineer Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 465436 Transaction Desc: C 02048 File Date: 01/31/1983

Primary Status: EXP Expired Permit

Secondary Status: EXP Expired

Person Assigned: *****

Applicant: DELAWARE RANCH INC

Events

Date	Type	Description	Comment	Processed By
01/31/1983	APP	Application Received	*	*****
02/02/1983	FIN	Final Action on application		*****
02/02/1983	WAP	General Approval Letter		*****
03/01/1984	EXP	Expired Permit (well log late)		*****
05/20/2011	ARV	Rec & Arch - file location	C 02048 Box: 1870	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 02048		3		STK 72-12-1 LIVESTOCK WATERING

**Point of Diversion

C 02048	579582	3549072*
---------	--------	----------

An () after numbering value indicates UTM location was derived from FLSS - see Help

Remarks

LOCATION: DELEWARE RANCH PROPERTIES

ABSTRACTOR'S NOTE: PER LETTER DATED 03/01/1984, THIS PERMIT IS EXPIRED. NO WELL RECORD ON FILE WITH THE OFFICE OF THE STATE ENGINEER.

Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer

** See Image For Any Additional Conditions of Approval **

Approval Code: A - Approved

Action Date: 02/02/1983

Log Due Date: 02/29/1984

State Engineer:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:16 AM

TRANSACTION SUMMARY



New Mexico Office of the State Engineer Water Right Summary

 **WR File Number:** C 02103 **Subbasin:** C **Cross Reference:** -
Primary Purpose: STK 72-12-1 LIVESTOCK WATERING
rel. license link **Primary Status:** EXP EXPIRED
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: DELAWARE RANCH INC

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
 rel. license link	468575	72121	1	2	C 02103	T		3	

Current Points of Diversion

POD Number	Well Tag	Source	Q				X		Y		Other Location Desc
			64Q16Q48sec	Twrs	Rng						
C 02103			2	02	26S	27E	579582	3549072*			

An () after northing value indicates UTM location was derived from PLSS - see Help

The data is furnished by the NMOSB/ISC and is accepted by the recipient with the expressed understanding that the OSB/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:12 AM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 468575 Transaction Desc: C 02103 File Date: 05/14/1984

Primary Status: EXP Expired Permit
 Secondary Status: EXP Expired
 Person Assigned: *****

Applicant: DELAWARE RANCH INC

Events

Date	Type	Description	Comment	Processed By
05/14/1984	APP	Application Received	*	*****
05/14/1984	FIN	Final Action on application		*****
05/14/1984	WAP	General Approval Letter		*****
06/03/1985	EXP	Expired Permit (well log late)		*****
05/23/2011	ARV	Rec & Arch - file location	C 02103 Box: 1871	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 02103		3		STK 72-12-1 LIVESTOCK WATERING

****Point of Diversion**

C 02103	579582	3549072*
---------	--------	----------

An () after northing value indicates UTM location was derived from FLSB - see Help

Remarks

LOCATION: DELAWARE RANCH PROPERTIES.

ABTRACTOR'S NOTE: PER LETTER DATED 06/03/1985, THIS PERMIT IS EXPIRED. NO WELL RECORD ON FILE WITH THE OFFICE OF THE STATE ENGINEER.

Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 05/14/1984

Log Due Date: 05/31/1985

State Engineer:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:14 AM

TRANSACTION SUMMARY



New Mexico Office of the State Engineer Water Right Summary

 **WR File Number:** C 02474 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: PLS NON 72-12-1 LIVESTOCK WATERING
 **Primary Status:** DCL DECLARATION
Total Acres: 0 **Subfile:** - **Header:** -
Total Diversion: 3 **Cause/Case:** -
Owner: MARTHA SKEEN

Documents on File

Trn #	Doc	File/Aet	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
 198101	DCL	1995-12-12	DCL	PRC	C-02474	T	0	3	

Current Points of Diversion

(NAD83 UTM in meters)

POB Number	Well Tag	Source	Q	Q	64 Q16Q4Sec	Tws	Rng	X	Y	Other Location Desc
C 02474			4	3	02	26S	27E	578964	3548029*	

An () after nothing value indicates UTM location was derived from PLSS - see Help

Priority Summary

Priority	Status	Acres	Diversion	Pod Number
12/31/1913	DCL	0	3	C 02474

Place of Use

Q	Q	256 64 Q16Q4Sec	Tws	Rng	Acres	Diversion	CU Use	Priority	Status	Other Location Desc
					0	3	PLS	12/31/1913	DCL	NO PLACE OF USE GIVEN

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

9/6/22 9:18 AM

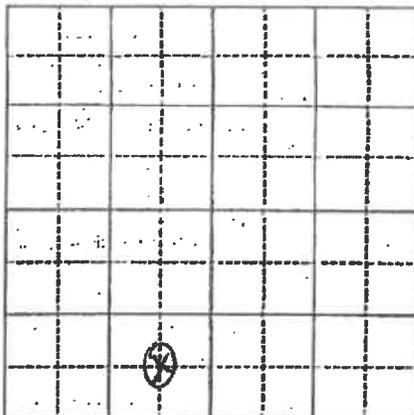
**WATER RIGHT
 SUMMARY**

Well Name _____

Location of Well _____

Locate well and area actually irrigated as accurately as possible on following plat:

Section (s) _____ Township _____ Range _____ N. M. P. M.



INSTRUCTIONS

Declaration shall be executed (preferably typewritten) in triplicate and must be accompanied by a \$1.00 filing fee. Each of triplicate copies must be properly signed and attested.

A separate declaration must be filed for each well in use.

All blanks shall be filled out fully. Required information which cannot be sworn to by declarant shall be supplied by affidavit of person or persons familiar with the facts and shall be submitted herewith.

Sec. 1-3. Complete all blanks.

Sec. 4. Fill out all blanks applicable as fully as possible.

Sec. 5. Irrigation use shall be stated in acre feet of water per acre per year applied on the land. If used for domestic, municipal, or other purposes, state total quantity in acre feet used annually.

Sec. 6. Describe only the acreage actually irrigated. When necessary to clearly define irrigated acreage, describe to nearest 1/4 acre subdivision. If located on unsurveyed lands, describe by legal subdivision "as projected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some permanent, easily-located natural object.

Sec. 7. Explain and give dates as nearly as possible of any years when all or part of acreage claimed was not irrigated.

Sec. 8. If well irrigates or supplies supplemental water to any other land than that described above, or if land is also irrigated from any other source, explain under this section. Give any other data necessary to fully describe water right.

If additional space is necessary, use a separate sheet or sheets and attach securely hereto.

SK



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

ROSWELL

THOMAS C. TURNEY
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
(505) 622-6521

December 12, 1995

FILES: ^{C-2474} ~~C-2473~~ thru C-2481;
LWD-C-64 thru LWD-C-70

Martha Skeen
321 South Canyon
Carlsbad, NM 88220

Dear Ms. Skeen:

Enclosed are your copies of Declaration of Owner of Underground Water Right, and Declaration of Ownership of Livestock Water Dam or Tank, as numbered above, which have been accepted for filing in the office of the State Engineer.

Please refer to these numbers in all future correspondence concerning these declarations.

The acceptance for filing of these declarations by this office does not indicate affirmation or rejection of the statements contained therein.

Sincerely,

Richard C. Cibak
Area Supervisor

tg
Enclosures
cc: Santa Fe
Hydro Section

95 DEC 15 PM 10 51
STATE ENGINEER OFFICE
SANTA FE, NEW MEXICO

ATTACHMENT 8

Item XII



George T. (Tom) Merrifield, Jr., PG
SWD DRP Geologist
Chevron U.S.A. Inc.
6301 Deauville Blvd
Midland, TX 79706
Phone +1 661-448-7489
tommerrifield@chevron.com

April 10, 2023

Dylan Fuge, Acting Director
Oil Conservation Division
1220 South St. Francis Dr.
Sante Fe, New Mexico 87505

**Re: Affirmation Statement C-108 Applications
Papa Squirrel SWD 1 and Severitas 2 State SWD 1**

Dear Mr. Fuge:

With the increase of induced seismicity due to deep produced water injection, in 2021 Chevron decided to evaluate the potential for shallow injection in both Texas and New Mexico with exhaustive manpower and technical effort.

This effort led to the following technical evaluations of the DMG: (1) the location of high confident shallow faults in our active development areas using available seismic reflection data (2) assessment of seismic risk of any such shallow faults, (3) other geologic and reservoir engineering assessments addressing storage capabilities, potential impacts, and mitigation, and (4) collaboration and joint efforts with other operators.

Both the Papa Squirrel SWD 1 and Severitas 2 State SWD 1 are locations which we find no indication of open faults at the surface or in the subsurface and no indication of hydraulic connection between the proposed injection zone (Bell Canyon and Cherry Canyon) and an underground source of drinking water (USDW). Both locations have low potential for fault slip and induced seismicity.

Respectively yours,

A handwritten signature in black ink, appearing to read "G. T. Merrifield, Jr." with a stylized flourish at the end.

G. T. Merrifield, Jr., PG
TX (#10838) and CA (#9274)

ATTACHMENT 9

Item XIII

Notices will be sent to the following surface owners, leasehold operators, mineral interest owners, etc., within ½ mile radius.

- Bureau of Land Management
- State Land Office
- COG Operating, LLC

Note: Chevron is the operator of the wells within the 0.5 mile area of review shown in Attachment 1.

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: **CERTIFIED MAIL**
 07/13/2023

Firm Mailing Book ID: 249154

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0109 8801 32	United States of America Bureau of Land Management 301 Dinosaur Trail Santa Fe NM 87508	\$2.55	\$4.35	\$2.20	\$0.00	83420.0047 severi Notice
2	9314 8699 0430 0109 8801 49	New Mexico State Land Office PO Box 1148 Santa Fe NM 87504	\$2.55	\$4.35	\$2.20	\$0.00	83420.0047 severi Notice
3	9314 8699 0430 0109 8801 56	COG Operating 600 W. Illinois Midland TX 79701	\$2.55	\$4.35	\$2.20	\$0.00	83420.0047 severi Notice
4	9314 8699 0430 0109 8801 63	Mewbourne Oil Company Tim Harrington PO Box 7598 Tyler TX 75711	\$2.55	\$4.35	\$2.20	\$0.00	83420.0047 severi Notice
Totals:			\$10.20	\$17.40	\$8.80	\$0.00	
Grand Total:						\$36.40	

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
4			



EXHIBIT B

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 249154
Generated: 11/1/2023 9:06:39 AM

USPS Article Number	Date Created	Reference Number	Name 1	Name 2	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300109880163	2023-07-13 11:11 AM	83420.0047 severi	Mewbourne Oil Company	Tim Harrington	Tyler	TX	75711	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-18 8:56 AM
9314869904300109880156	2023-07-13 11:11 AM	83420.0047 severi	COG Operating		Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-18 12:00 AM
9314869904300109880149	2023-07-13 11:11 AM	83420.0047 severi	New Mexico State Land Office		Santa Fe	NM	87504	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-17 10:27 AM
9314869904300109880132	2023-07-13 11:11 AM	83420.0047 severi	United States of America	Bureau of Land M:	Santa Fe	NM	87508	Delivered	Return Receipt - Electronic, Certified Mail	2023-07-17 1:11 PM

EXHIBIT C

Carlsbad Current Argus.

PART OF THE USA TODAY NETWORK

Affidavit of Publication

Ad # 0005771514

This is not an invoice

MODRALL SPERLING

POBOX 2168

ALBUQUERQUE, NM 87103

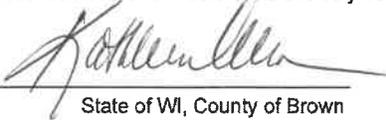
I, a legal clerk of the **Carlsbad Current Argus**, a newspaper published daily at the City of Carlsbad, in said county of Eddy, state of New Mexico and of general paid circulation in said county; that the same is a duly qualified newspaper under the laws of the State wherein legal notices and advertisements may be published; that the printed notice attached hereto was published in the regular and entire edition of said newspaper and not in supplement thereof in editions dated as follows:

07/19/2023

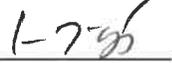


Legal Clerk

Subscribed and sworn before me this July 19, 2023:



State of WI, County of Brown
NOTARY PUBLIC



My commission expires

KATHLEEN ALLEN
Notary Public
State of Wisconsin

CASE NO. 23687: Notice to all affected parties, as well as heirs and devisees of: United States of America Bureau of Land Management; New Mexico State Land Office; COG Operating of Application of Chevron USA Inc. for approval of salt water disposal well in Eddy County, New Mexico. The State of New Mexico through its Oil Conservation Division hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on **August 3, 2023** to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/ocd/hearing-info/>. This hearing is subject to continuance by the Division to a subsequent docket date. Applicant seeks an order approving the Severitas 2 State SWD #1 well at a surface location 185' from the North line and 1,082' from the East line, Unit A, Section 2, Township 26 South, Range 27 East, NMPM, Eddy County, New Mexico for the purpose of operating a salt water disposal well. Injection formations will be the Bell Canyon/Cherry Canyon/Brushy Canyon from 2343 feet to 6012 feet. The tubing packer will be set at 2243 feet, and production casing and cement will be set at 5500 feet. The maximum anticipated injection rate will be 15,000 bwpd and maximum surface injection pressure will be 468 psi. Said location is approximately 13 miles southwest of Malaga, New Mexico. #5771514, Current Argus, July 19, 2023

Ad # 0005771514
PO #:
of Affidavits: 1

This is not an invoice

EXHIBIT D