

# AE Order Number Banner

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**Application Number: pMSG2319956571**

**SWD-2546**

**Permian Oilfield Partners, LLC [328259]**

RECEIVED:	REVIEWER:	TYPE:	APP NO:
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

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



ADMINISTRATIVE APPLICATION CHECKLIST

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

Applicant: Permian Oilfield Partners, LLC. OGRID Number: 328259  
 Well Name: Tardy Federal SWD #1 API: 30-025-Pending  
 Pool: SWD; Devonian-Silurian Pool Code: 97869

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

- 1) TYPE OF APPLICATION: Check those which apply for [A]  
 A. Location – Spacing Unit – Simultaneous Dedication  
 NSL       NSP (PROJECT AREA)       NSP (PRORATION UNIT)       SD
- B. Check one only for [ I ] or [ II ]  
 [ I ] Commingling – Storage – Measurement  
 DHC    CTB    PLC    PC    OLS    OLM  
 [ II ] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery  
 WFX    PMX    SWD    IPI    EOR    PPR

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

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

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

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

Sean Puryear

Print or Type Name

Signature

7-10-2023  
Date

817-600-8772  
Phone Number

spuryear@popmidstream.com  
e-mail Address

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL  
RESOURCES DEPARTMENT

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

FORM C-108  
Revised June 10, 2003

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: **Disposal**  
Application qualifies for administrative approval? **Yes**
- II. OPERATOR: **Permian Oilfield Partners, LLC.**  
ADDRESS: **P.O. Box 3329, Hobbs, NM 88241**  
CONTACT PARTY: **Sean Puryear** PHONE: **(817) 600-8772**
- 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? **No.**
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
  - 1. Proposed average and maximum daily rate and volume of fluids to be injected;
  - 2. Whether the system is open or closed;
  - 3. Proposed average and maximum injection pressure;
  - 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  - 5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.  
NAME: **Sean Puryear** TITLE: **Manager**  
SIGNATURE:  DATE: 7-10-2023  
E-MAIL ADDRESS: **spuryear@popmidstream.com**
- 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 submittal: \_\_\_\_\_

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

Side 2

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

**III A:** See attached wellbore diagram.

**III B:**

1. Is this a new well drilled for injection?  
Yes
2. Name of the Injection Formation:  
Devonian: Open Hole Completion
3. Name of Field or Pool (if applicable):  
SWD; Devonian-Silurian
4. Has the well ever been perforated in any other zone(s)?  
No: New Drill for Injection of Produced Water
5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

Overlying Potentially Productive Zones:

Delaware, Bone Spring, Wolfcamp, Strawn, Atoka & Morrow Tops all above 14,726'

Underlying Potentially Productive Zones:

None

**IV:** Is this an expansion of an existing project? No.

**V:** See attached Area of Review Analysis.

**VI:** There are no wells within the proposed wells area of review that penetrate the Devonian Formation.

**VII:**

1. The average injected volume anticipated is 40,000 BWPD. The maximum injected volume anticipated is 50,000 BWPD.
2. Injection will be through a closed system.
3. The average injection pressure anticipated is 2,000 psi. The proposed maximum injection pressure is 2,952 psi.
4. Disposal sources will be produced waters from surrounding wells in the Delaware, Avalon, Bone Spring and Wolfcamp formations. These formation waters are known to be compatible with Devonian formation water. Representative area produced water analyses were sourced from the NMT Go-Tech website. See attached Fluid Analyses.
5. Devonian water analyses from the area of review are unavailable. Representative water analyses were sourced from the NMT Go-Tech website. See attached Fluid Analyses.

**VIII:**

- Fluid injection will take place in the Devonian-Silurian formations. This sequence is bounded above by the Upper Devonian Woodford shale. Underlying the Woodford is the first injection formation, the Devonian, consisting of dolomitic and limestone carbonates & chert, followed by the Silurian Fusselman dolomite. The lower bound of the injection interval is the limestone of the Upper Ordovician Montoya. This proposed well will TD above the top of the Montoya, and will not inject fluids into the Montoya itself, in order to provide a sufficient barrier to preclude fluid injection into the Middle Ordovician Simpson, the Lower Ordovician Ellenburger, the Cambrian, and the PreCambrian below.

Injection zone porosities are expected to range from 0% to a high of 10%, with the higher ranges being secondary porosity in the form of vugs & fractures due to weathering effects, with occasional interbedded shaly intervals. Permeabilities in the 2-3% porosity grainstone intervals are estimated to be in the 10-15 mD range, with the higher porosity intervals conservatively estimated to be in the 40-50 mD range. It is these intervals of high secondary porosity and associated high permeability that are expected to take the majority of the injected water.

The Devonian-Silurian sequence is well suited for SWD purposes, with a low permeability shale barrier overlying the injection interval to prevent upward fluid migration to USDW's, a low permeability carbonate barrier underlying the injection interval to prevent downward fluid migration, sufficient permeabilities and porosities in zone, and multiple formations available over a large depth range. This large injection depth range means there is a large injection surface area available, allowing for low injection pressures at high injection rates.

<b>GEOLOGY PROGNOSIS</b>			
<b>FORMATION</b>	<b>TOP</b>	<b>BOTTOM</b>	<b>THICKNESS</b>
	KB TVD (ft)	KB TVD (ft)	(ft)
<b>Rustler</b>	1,457	1,705	248
<b>Salado</b>	1,705	3,381	1,676
<b>Yates</b>	3,381	3,734	353
<b>Capitan Reef</b>	3,734	5,048	1,314
<b>Delaware</b>	5,048	8,377	3,329
<b>Bone Spring</b>	8,377	10,977	2,600
<b>Wolfcamp</b>	10,977	12,270	1,293
<b>Lwr. Mississippian</b>	13,975	14,561	586
<b>Woodford</b>	14,561	14,726	165
<b>Devonian</b>	14,726	15,580	854
<b>Fusselman (Silurian)</b>	15,580	15,922	342
<b>Montoya (U. Ordovician)</b>	15,922	16,322	400
<b>Simpson (M. Ordovician)</b>	16,322	16,772	450

- Regional shallow fresh water in the Quaternary is known to exist at depths less than 1349'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 13,337'. There is a deeper potential USDW in the Capitan Reef formation. Depth from the bottom of this potential USDW to the injection zone is 9,678'. There is no USDW present below the injection interval.

- IX:** Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- X:** A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI:** According to the New Mexico Office of the State Engineer, there are 0 fresh water wells within the proposed well's one-mile area of review. There is one POD within the 1 mile AOR, CP-00750, but it has been reported as a dry hole, and no sample was obtained. See attached AOR water well map and POD information.
- XII:** Hydrologic affirmative statement attached.
- XIII:** Proof of notice and proof of publication attached.

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 <b>97869</b>		3 Pool Name <b>SWD; DEVONIAN-SILURIAN</b>	
4 Property Code		5 Property Name <b>TARDY FEDERAL SWD</b>			6 Well Number <b>1</b>
7 OGRID NO. <b>328259</b>		8 Operator Name <b>PERMIAN OILFIELD PARTNERS, LLC</b>			9 Elevation <b>3600'</b>

10 Surface Location

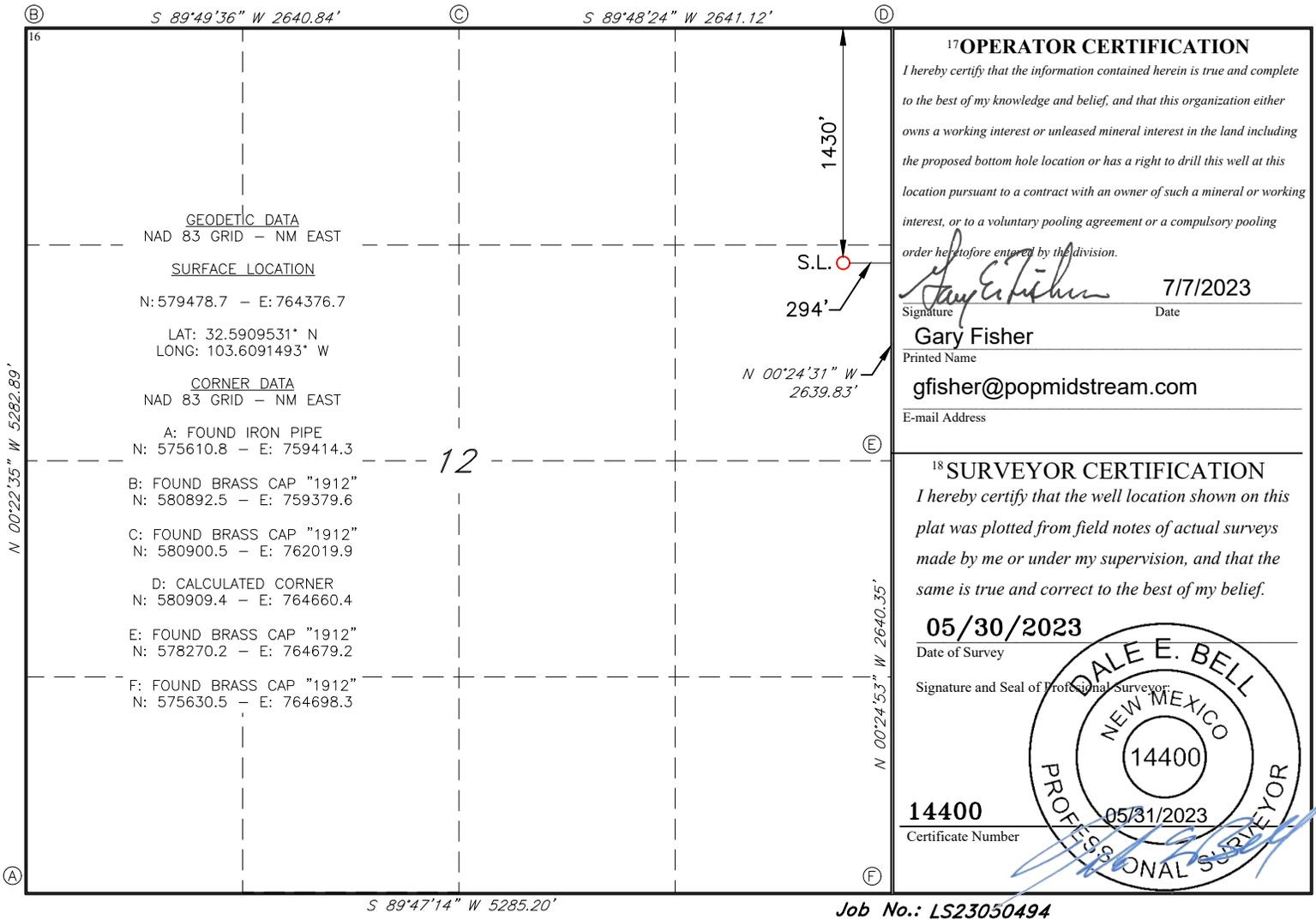
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
<b>H</b>	<b>12</b>	<b>20S</b>	<b>33E</b>		<b>1430</b>	<b>NORTH</b>	<b>294</b>	<b>EAST</b>	<b>LEA</b>

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

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

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



III (A)

**WELL CONSTRUCTION DATA**

Permian Oilfield Partners, LLC.

Tardy Federal SWD #1

1430' FNL, 294' FEL

Sec. 12, T20S, R33E, Lea Co. NM

Lat 32.5909531° N, Lon -103.6091493° W

GL 3600', RKB 3630'

**Surface - (Conventional)**

Hole Size: 26" Casing: 20" - 106.5# J-55 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1482'  
 Cement: 1365 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 18.5" Casing: 16" - 75# J-55 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 3684'  
 Cement: 1121 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 14.75" Casing: 13.375" - 68# HCL-80 FJ Casing  
 Depth Top: Surface  
 Depth Btm: 5073' ECP/DV Tool: 3784'  
 Cement: 768 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #3 - (Conventional)**

Hole Size: 12.25" Casing: 9.625" - 40# HCL-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 11027' ECP/5173'  
 Cement: 1802 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #4 - (Liner)**

Hole Size: 8.5" Casing: 7.625" - 39# HCL-80 FJ Casing"  
 Depth Top: 10827'  
 Depth Btm: 14761'  
 Cement: 253 sks - Class H + Additives  
 Cement Top: 10827' - Circulate, then Bond Log when well @ TD

**Intermediate #5 - (Open Hole)**

Hole Size: 6.5" Depth: 15897'  
 Inj. Interval: 14761' - 15897' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14716' Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ  
 X/O Depth: 10827' Casing (Fiberglass Lined)  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14726' Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives

III (A)

**WELLBORE SCHEMATIC**

Permian Oilfield Partners, LLC.  
 Tardy Federal SWD #1  
 1430' FNL, 294' FEL  
 Sec. 12, T20S, R33E, Lea Co. NM  
 Lat 32.5909531° N, Lon -103.6091493° W  
 GL 3600', RKB 3630'

**Surface - (Conventional)**

Hole Size: 26"  
 Casing: 20" - 106.5# J-55 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1482'  
 Cement: 1365 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 18.5"  
 Casing: 16" - 75# J-55 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 3684'  
 Cement: 1121 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 14.75"  
 Casing: 13.375" - 68# HCL-80 FJ Casing  
 Depth Top: Surface  
 Depth Btm: 5073'  
 Cement: 768 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)  
 ECP/DV Tool: 3784'

**Intermediate #3 - (Conventional)**

Hole Size: 12.25"  
 Casing: 9.625" - 40# HCL-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 11027'  
 Cement: 1802 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)  
 ECP/DV Tool: 5173'

**Intermediate #4 - (Liner)**

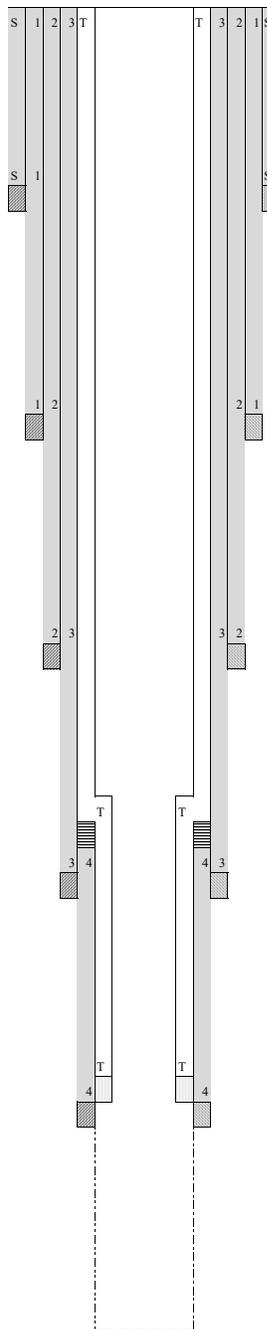
Hole Size: 8.5"  
 Casing: 7.625" - 39# HCL-80 FJ Casing"  
 Depth Top: 10827'  
 Depth Btm: 14761'  
 Cement: 253 sks - Class H + Additives  
 Cement Top: 10827' - Circulate, then Bond Log when well @ TD

**Intermediate #5 - (Open Hole)**

Hole Size: 6.5"  
 Depth: 15897'  
 Inj. Interval: 14761' - 15897' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14716'  
 Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 X/O Depth: 10827'  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14726'  
 Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives



XIII.



## PERMIAN OILFIELD PARTNERS

### Statement of Notifications

Re: C-108 Application for SWD Well  
Permian Oilfield Partners, LLC  
Tardy Federal SWD #1  
1430' FNL & 294' FEL  
Sec 12, T20S, R33E  
Lea County, NM

Permian Oilfield Partners, LLC has mailed notifications to affected persons as per the following list:

Tardy Federal SWD #1 - Affected Persons within 1 Mile Area of Review					
Notified Name	Notified Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
ADVANCE ENERGY PARTNERS HAT MESA LLC	11490 Westheimer Rd	Houston, TX 77077	USPS	9414811899562232745123	7/10/2023
B & J OPERATING INC	PO Box 1478	Pampa, TX 79066	USPS	9414811899562232745185	7/10/2023
BRECK OPERATING CORP	P.O. Box 911	Breckenridge, TX 76424	USPS	9414811899562232745321	7/10/2023
BTA OIL PRODUCERS LLC	104 S. Pecos St	Midland, TX 79701	USPS	9414811899562232745383	7/10/2023
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899562232745093	7/10/2023
BURLINGTON RESOURCES OIL & GAS CO LP	3300 N A St # 6	Midland, TX 79705	USPS	9414811899562232745079	7/10/2023
CHESAPEAKE EXPLORATION LLC	6100 North Western Ave	OKC, OK 73118	USPS	9414811899562232745406	7/10/2023
CHEVRON USA INC	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899562232745475	7/10/2023
COG OPERATING LLC	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899562232745529	7/10/2023
COLGATE OPERATING, LLC	300 North Marienfeld Street, STE 1000	Midland, TX 79701	USPS	9414811899562232742214	7/10/2023
COLLINS & WARE INC	508 W Wall Street, STE 1200	Midland, TX 79701	USPS	9414811899562232742238	7/10/2023
CONOCOPHILLIPS CO	PO Box 2197	Houston, TX 77252	USPS	9414811899562232742825	7/10/2023
DELMAR'S LIVING TRUST	PO Box 2546	Fort Worth, TX 76113	USPS	9414811899562232742849	7/10/2023
JAVELINA PARTNERS	616 Texas St.	Fort Worth, TX 76102	USPS	9414811899562232742870	7/10/2023
LEGACY RESERVES OPERATING, LP	15 Smith Road, STE 3000	Midland, TX 79705	USPS	9414811899562232742764	7/10/2023
LINDY'S LIVING TRUST	2400 South Hulen, Ste. 302	Fort Worth, TX 76109	USPS	9414811899562232742733	7/10/2023
MAGNUM HUNTER PRODUCTION INC	600 N. Marienfeld St., Suite 600	Midland, TX 79701	USPS	9414811899562232742948	7/10/2023
MOMENTUM OPERATING CO INC	P. O. Box 2439	Albany, TX 76430	USPS	9414811899562232742658	7/10/2023
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899562232742641	7/10/2023
PENROC OIL CORP	1515 W. Calle Sur Street Ste 101	Hobbs, NM 88240	USPS	9414811899562232742115	7/10/2023
PRIME ROCK RESOURCES	203 W Wall St #1000	Midland, TX 79701	USPS	9414811899562232742146	7/10/2023
WPX Energy Permian, LLC	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899562232742313	7/10/2023
ZORRO PARTNERS LTD	616 Texas St	Fort Worth, TX, 76102	USPS	9414811899562232742337	7/10/2023

Date: 7/10/2023

Sean Puryear  
Permian Oilfield Partners, LLC  
[spuryear@popmidstream.com](mailto:spuryear@popmidstream.com)

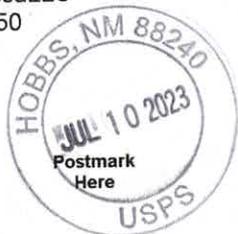
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7451 23

ARTICLE ADDRESSED TO:

Advance Energy Partners Hat MesaLLC  
11490 WESTHEIMER RD STE 950  
HOUSTON TX 77077-6841

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



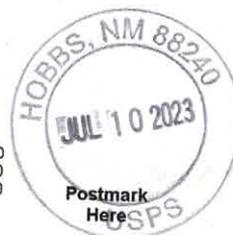
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7451 85

ARTICLE ADDRESSED TO:

B & J Operating Inc.  
PO BOX 1478  
PAMPA TX 79066-1478

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7453 21

ARTICLE ADDRESSED TO:

Breck Operating Corp.  
PO BOX 911  
BRECKENRIDGE TX 76424-0911

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7453 83

ARTICLE ADDRESSED TO:

BTA Oil Producers, LLC  
104 S PECOS ST  
MIDLAND TX 79701-5021

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7450 93

ARTICLE ADDRESSED TO:

Bureau of Land Management  
620 E GREENE ST  
CARLSBAD NM 88220-6292

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7450 79

ARTICLE ADDRESSED TO:

Burlington Resources Oil & Gas Co  
3300 N A ST BLDG 3  
MIDLAND TX 79705-5470

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



### U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7454 06

ARTICLE ADDRESSED TO:

Chesapeake Exploration LLC  
6100 N WESTERN AVE  
OKLAHOMA CITY OK 73118-1044

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



### U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7454 75

ARTICLE ADDRESSED TO:

Chevron USA  
6301 DEAUVILLE  
MIDLAND TX 79706-2964

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



### U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7455 29

ARTICLE ADDRESSED TO:

COG Operating LLC  
600 W ILLINOIS AVE  
MIDLAND TX 79701-4882

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



### U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7422 14

ARTICLE ADDRESSED TO:

Colgate Operating, LLC  
300 N MARIENFELD ST STE 1000  
MIDLAND TX 79701-4688

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



### U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7422 38

ARTICLE ADDRESSED TO:

Collins & Ware Inc.  
508 W WALL ST STE 1200  
MIDLAND TX 79701-5076

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



### U.S. Postal Service Certified Mail Receipt

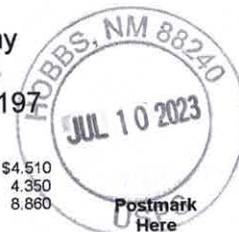
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ARTICLE ADDRESSED TO:

ConocoPhillips Company  
PO BOX 2197  
HOUSTON TX 77252-2197

**FEES**  
Postage Per Piece  
Certified Fee  
Total Postage & Fees:

\$4,510  
4,350  
8,860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7428 49

ARTICLE ADDRESSED TO:

Delmar's Living Trust  
PO BOX 2546  
FORT WORTH TX 76113-2546

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7428 70

ARTICLE ADDRESSED TO:

Javelina Partners  
616 TEXAS ST  
FORT WORTH TX 76102-4696

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



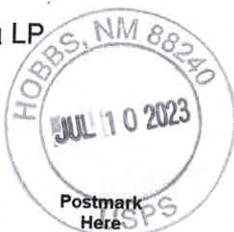
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ARTICLE NUMBER: 9414 8118 9956 2232 7427 64

ARTICLE ADDRESSED TO:

Legacy Reserves Operating LP  
15 SMITH RD STE 3000  
MIDLAND TX 79705-5461

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7427 33

ARTICLE ADDRESSED TO:

Lindy's Living Trust  
2400 SOUTH HULEN, STE 302  
FORT WORTH TX 76109-0000

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7429 48

ARTICLE ADDRESSED TO:

Magnum Hunter Production Inc.  
600 N MARIENFELD ST STE 600  
MIDLAND TX 79701-4405

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



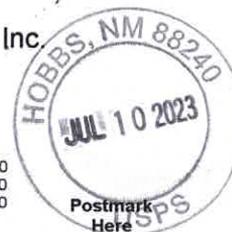
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7426 58

ARTICLE ADDRESSED TO:

Momentum Operating Co., Inc.  
PO BOX 2439  
ALBANY TX 76430-8020

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7426 41

ARTICLE ADDRESSED TO:

New Mexico State Land Office  
310 OLD SANTA FE TRL  
SANTA FE NM 87501-2708

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7421 15

ARTICLE ADDRESSED TO:

Penroc Oil Corp  
1515 W CALLE SUR ST STE 101  
HOBBS NM 88240-1318

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7421 46

ARTICLE ADDRESSED TO:

Prime Rock Resources  
203 W WALL ST STE 1000  
MIDLAND TX 79701-4525

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7423 13

ARTICLE ADDRESSED TO:

WPX Energy Permian, LLC  
333 W SHERIDAN AVE  
OKLAHOMA CITY OK 73102-5010

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7423 37

ARTICLE ADDRESSED TO:

Zorro Partners Ltd  
616 TEXAS ST  
FORT WORTH TX 76102-4696

<b>FEES</b>	
Postage Per Piece	\$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860



XIII.

# 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  
May 28, 2023  
and ending with the issue dated  
May 28, 2023.



Publisher

Sworn and subscribed to before me this  
28th day of May 2023.



Business Manager

My commission expires  
January 29, 2027

(Seal)  
STATE OF NEW MEXICO  
NOTARY PUBLIC  
GUSSIE RUTH BLACK  
COMMISSION # 1087528  
COMMISSION EXPIRES 01/29/2027

LEGAL NOTICE  
May 28, 2023  
Permian Oilfield Partners, LLC, PO Box 3329, Hobbs, NM 88241, phone (817)606-7630, attn. Gary Fisher, has filed form C-108 (Application for Authorization for Injection) with the New Mexico Oil Conservation Division seeking approval to drill a commercial salt water disposal well in Lea County, New Mexico. The proposed well is the Tardy Federal SWD #1, and is located 1430' FNL & 294' FEL, Unit H, Section 12, Township 20 South, Range 33 East, NMPM, approximately 22 mi WSW of Monument, NM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 14,761 feet to 15,897 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,952 psi.  
Interested parties must file objections or requests for hearing with the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505 within 15 days.  
#00279001

67115647

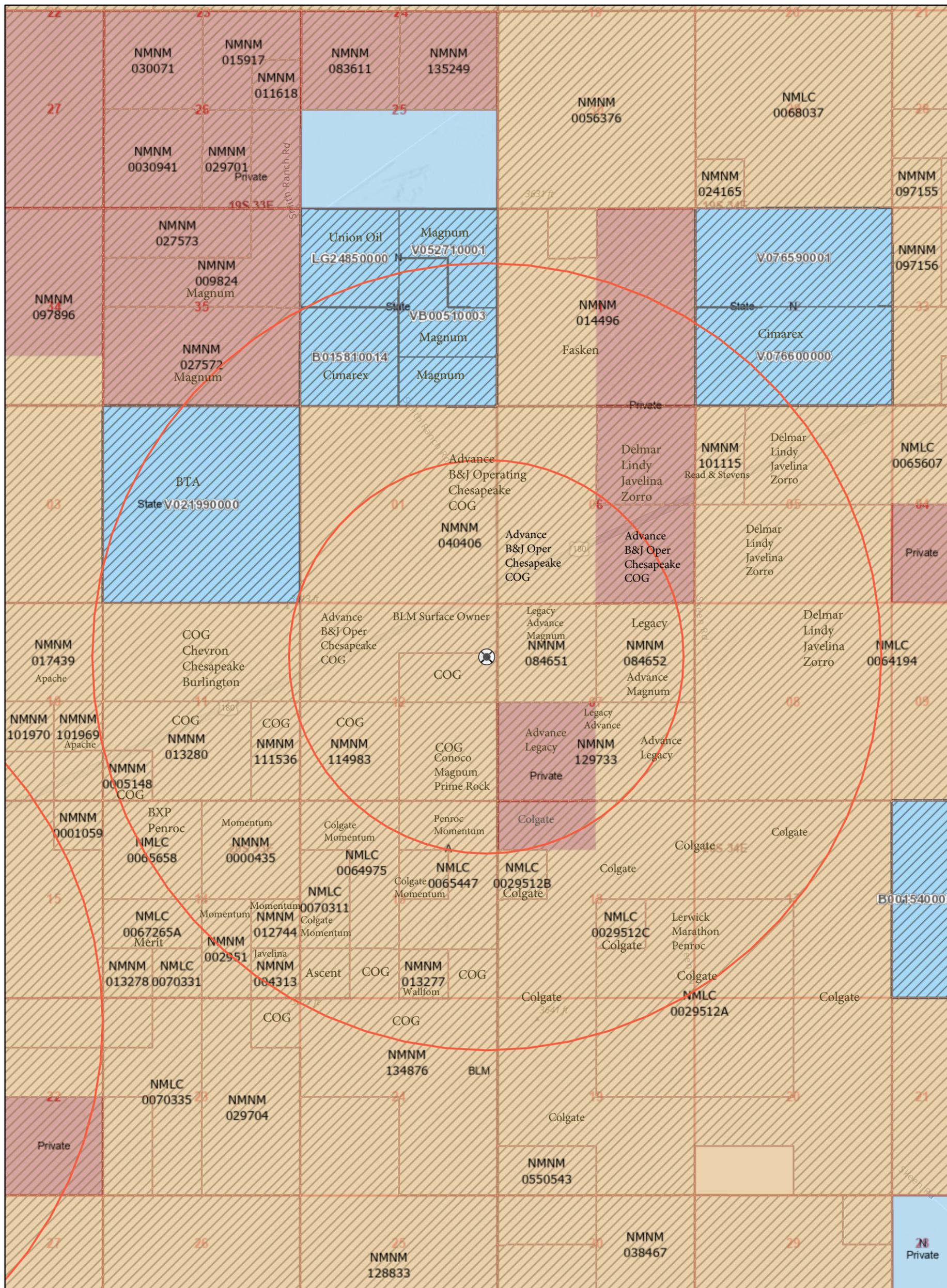
00279001

GARY FISHER  
PERMIAN OILFIELD PARTNERS, LLC  
PO BOX 3329  
HOBBS, NM 88241

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

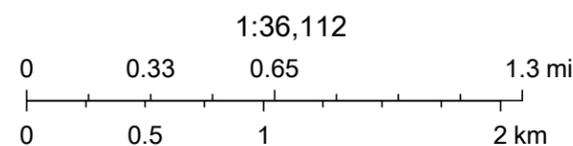
V (a)

# Tardy Federal SWD #1, 1 & 2 Mi AOR, Leases



6/2/2023, 10:38:41 AM

- Override 1
- Override 1
- Authorized
- Oil and Gas Leases
- Mineral Ownership**
- A-All minerals are owned by U.S.
- N-No minerals are owned by the U.S.
- Land Ownership**
- BLM
- P
- S
- PLSS First Division
- PLSS Townships

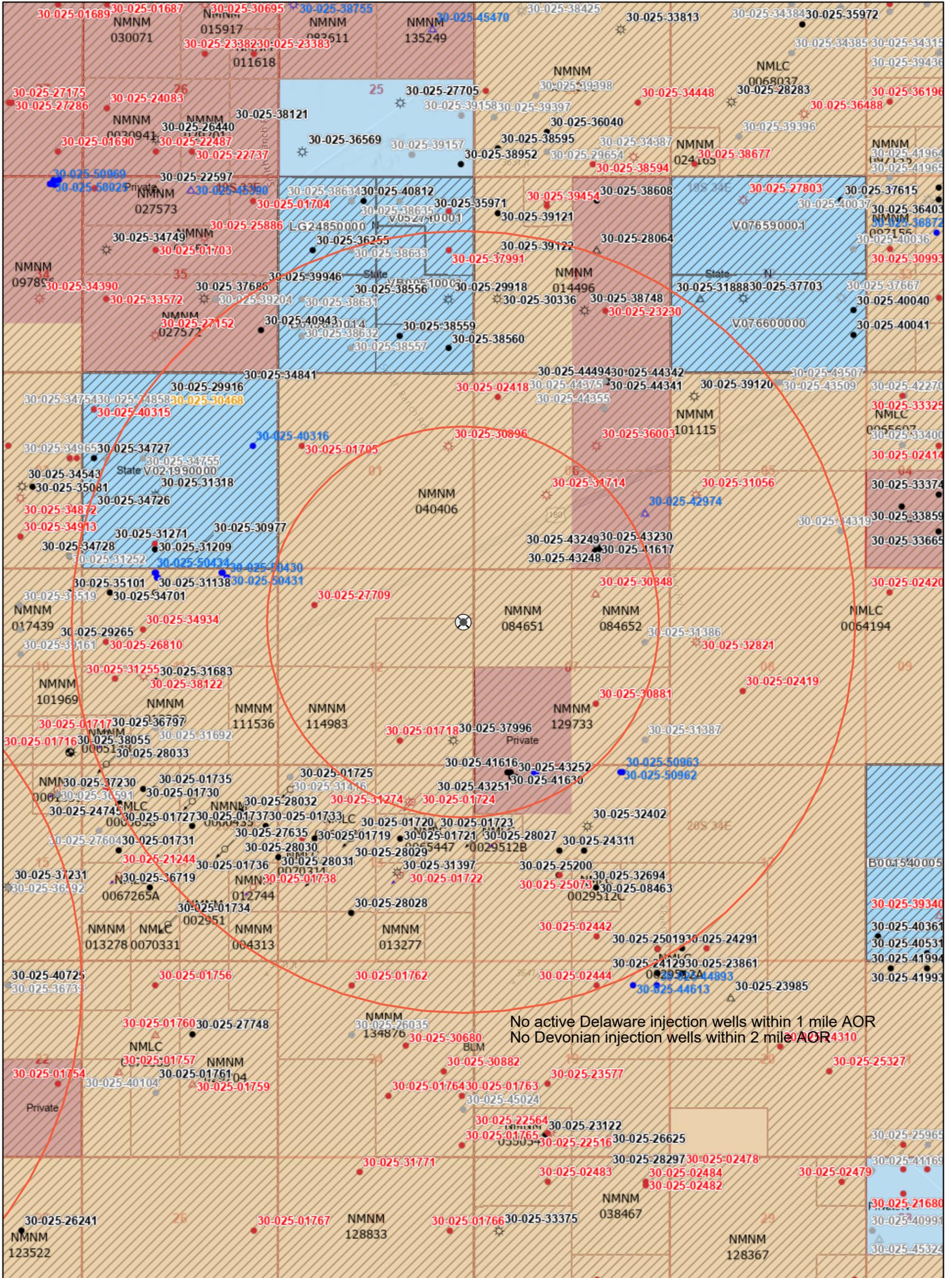


U.S. BLM  
 U.S. Department of Interior, Bureau of Land Management (BLM)  
 Esri, NASA, NGA, USGS, FEMA  
 BLM

New Mexico Oil Conservation Division

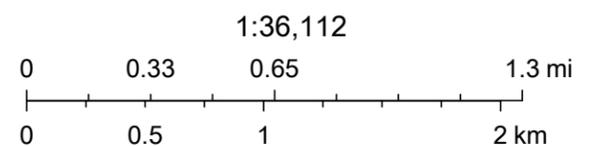
V (b)

# Tardy Federal SWD #1, 1 & 2 Mi AOR, Wells



6/2/2023, 10:27:31 AM

- Override 1
- Injection, Active
- Salt Water Injection, Cancelled
- Injection, Plugged
- Salt Water Injection, New
- Wells - Large Scale
- Oil, Active
- Salt Water Injection, Plugged
- Miscellaneous
- Oil, Cancelled
- Water, Plugged
- Gas, Active
- Oil, New
- Authorized
- Gas, Cancelled
- Oil, Plugged
- Oil and Gas Leases
- Gas, New
- Oil, Temporarily Abandoned
- Mineral Ownership
- Gas, Plugged
- Salt Water Injection, Active
- A-All minerals are owned by U.S.



U.S. BLM  
 U.S. Department of Interior, Bureau of Land Management (BLM)  
 Esri, NASA, NGA, USGS, FEMA  
 Oil Conservation Division of the New Mexico Energy, Minerals and

New Mexico Oil Conservation Division

V (c)

Tardy Federal SWD #1 - Wells Within 1 Mile Area of Review																
API Number	Current Operator	Well Name	Well Number	Well Type	Well Direction	Well Status	Section	Township	Range	OCD Unit Letter	Surface Location	Bottomhole Location	Formation	MD	TVD	
30-025-27709	COG OPERATING LLC	EAST SMITH RANCH FEDERAL	#001	Oil	Vertical	Plugged, Site Released	12	T20S	R33E	D	D-12-20S-33E 990 FNL 990 FWL	D-12-20S-33E 990 FNL 990 FWL	BONE SPRING	13700	13700	
30-025-01718	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	12	T20S	R33E	O	O-12-20S-33E 660 FSL 1980 FEL	O-12-20S-33E 660 FSL 1980 FEL	YATES-SEVEN RIVERS	3557	3557	
30-025-31274	WPX Energy Permian, LLC	SIX SHOOTER 13 FEDERAL	#001	Gas	Vertical	Plugged, Site Released	13	T20S	R33E	B	B-13-20S-33E 990 FNL 1750 FEL	B-13-20S-33E 990 FNL 1750 FEL	BONE SPRING	13675	13675	
30-025-01724	MOMENTUM OPERATING CO INC	TEAS YATES UNIT	#034	Injection	Vertical	Plugged, Site Released	13	T20S	R33E	B	B-13-20S-33E 990 FNL 1650 FEL	B-13-20S-33E 990 FNL 1650 FEL	YATES-SEVEN RIVERS	3536	3536	
30-025-30896	BRECK OPERATING CORP	GRACE 1 FEDERAL	#001	Gas	Vertical	Plugged, Site Released	01	T20S	R33E	H	H-01-20S-33E 1980 FNL 660 FEL	H-01-20S-33E 1980 FNL 660 FEL	BONE SPRING	9999	13740	
30-025-37996	COG OPERATING LLC	MARSHALL 12 FEDERAL COM	#001	Gas	Vertical	Active	12	T20S	R33E	P	P-12-20S-33E 660 FSL 550 FEL	P-12-20S-33E 660 FSL 550 FEL	MORROW	13700	13700	
30-025-43251	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#010H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 320 FNL 1045 FWL	D-07-20S-34E Lot: 1 340 FNL 432 FWL	BONE SPRING	15266	10251	
30-025-43252	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#011H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 320 FNL 1095 FWL	D-07-20S-34E Lot: 1 335 FNL 1062 FWL	BONE SPRING	14315	9404	
30-025-41630	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#002H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 200 FNL 910 FWL	D-07-20S-34E Lot: 1 280 FNL 672 FWL	BONE SPRING	15994	10899	
30-025-41616	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#001H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 200 FNL 1010 FWL	C-07-20S-34E 283 FNL 2036 FWL	BONE SPRING	14466	9439	
30-025-43250	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#009H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 320 FNL 995 FWL	C-07-20S-34E 354 FNL 2393 FWL	BONE SPRING	16000	10837	
30-025-43253	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#012H	Oil	Horizontal	Active	18	T20S	R34E	D	D-18-20S-34E Lot: 1 320 FNL 1145 FWL	C-07-20S-34E 328 FNL 1930 FWL	BONE SPRING	15200	10249	
30-025-47431	COG OPERATING LLC	WAR EAGLE FEDERAL COM	#701H	Oil	Horizontal	New	12	T20S	R33E	P	P-12-20S-33E 100 FSL 560 FEL	A-01-20S-33E Lot: 1 50 FNL 1000 FEL	WOLFCAMP	21255	11056	
30-025-47429	COG OPERATING LLC	WAR EAGLE FEDERAL COM	#504H	Oil	Horizontal	New	12	T20S	R33E	P	P-12-20S-33E 100 FSL 590 FEL	A-01-20S-33E Lot: 1 50 FNL 1000 FEL	BONE SPRING	20419	10290	
30-025-47430	COG OPERATING LLC	WAR EAGLE FEDERAL COM	#601H	Oil	Horizontal	New	12	T20S	R33E	P	P-12-20S-33E 100 FSL 530 FEL	A-01-20S-33E Lot: 1 50 FNL 330 FEL	BONE SPRING	21081	10875	
30-025-31714	COLLINS & WARE INC	QUIETMAN FEDERAL	#001	Gas	Vertical	Plugged, Site Released	06	T20S	R34E	K	K-06-20S-34E 1980 FSL 1980 FWL	K-06-20S-34E 1980 FSL 1980 FWL	MORROW	13700	13700	
30-025-31015	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Cancelled Apd	06	T20S	R34E	O	O-06-20S-34E 660 FSL 1980 FEL	O-06-20S-34E 660 FSL 1980 FEL	MORROW	13700	13700	
30-025-30881	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#001	Oil	Vertical	Plugged, Site Released	07	T20S	R34E	J	J-07-20S-34E 1650 FSL 1980 FEL	J-07-20S-34E 1650 FSL 1980 FEL	MORROW	13690	13690	
30-025-41305	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#003H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 474 FSL 2004 FEL	O-07-20S-34E 4944 FNL 1832 FEL	BONE SPRING	16028	10902	
30-025-30848	LEGACY RESERVES OPERATING, LP	HAMON FEDERAL COM	#001	Salt Water Disposal	Vertical	Plugged, Site Released	07	T20S	R34E	B	B-07-20S-34E 660 FNL 1980 FEL	B-07-20S-34E 660 FNL 1980 FEL	MORROW	13700	13700	
30-025-43330	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#005H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 605 FSL 1998 FEL	O-07-20S-34E 356 FSL 2429 FEL	BONE SPRING	14415	9498	
30-025-41617	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#004H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 420 FSL 1920 FEL	P-07-20S-34E 281 FSL 694 FEL	BONE SPRING	16190	10913	
30-025-43248	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#007H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 552 FSL 1914 FEL	P-07-20S-34E 328 FSL 1082 FEL	BONE SPRING	14545	9518	
30-025-43214	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#006H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 579 FSL 1956 FEL	O-07-20S-34E 334 FSL 1797 FEL	BONE SPRING	15430	10446	
30-025-43249	LEGACY RESERVES OPERATING, LP	HAMON A FEDERAL COM	#008H	Oil	Horizontal	Active	06	T20S	R34E	O	O-06-20S-34E 524 FSL 1872 FEL	P-07-20S-34E 343 FSL 449 FEL	BONE SPRING	15580	10509	
30-025-31386	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Cancelled Apd	07	T20S	R34E	H	H-07-20S-34E 1980 FNL 660 FEL	H-07-20S-34E 1980 FNL 660 FEL	BONE SPRING	9650	9650	
30-025-50961	COLGATE OPERATING, LLC	BATMAN FEDERAL COM	#131H	Oil	Horizontal	New	18	T20S	R34E	C	C-18-20S-34E 2324 FNL 1615 FWL	M-19-20S-34E Lot: 4 10 FSL 330 FWL	BONE SPRING	20962	10915	
30-025-50967	COLGATE OPERATING, LLC	BATMAN FEDERAL COM	#132H	Oil	Horizontal	New	18	T20S	R34E	C	C-18-20S-34E 232 FNL 1675 FWL	N-19-20S-34E 10 FSL 1658 FWL	BONE SPRING	21148	10915	
30-025-50968	COLGATE OPERATING, LLC	BATMAN FEDERAL COM	#201H	Oil	Horizontal	New	18	T20S	R34E	C	C-18-20S-34E 232 FNL 1645 FWL	M-19-20S-34E Lot: 4 10 FSL 998 FWL	WOLFCAMP	21298	11025	

VII (4)

Permian Oilfield Partners, LLC.  
 Tardy Federal SWD #1  
 1430' FNL, 294' FEL  
 Sec. 12, T20S, R33E, Lea Co. NM  
 Lat 32.5909531° N, Lon -103.6091493° W  
 GL 3600', RKB 3630'

Regional Source Water Analysis				
Well Name	MOBIL LEA STATE #003	COOTER 16 STATE COM #006H	PLAYA 2 STATE #002H	ZINNIA BKC FEDERAL #001
API	3002532105	3001537876	3002540549	3001527939
Latitude	32.5976906	32.123642	32.6830215	32.5462379
Longitude	-103.5367584	-103.9862061	-103.5371552	-104.0686035
Sec	2	16	2	27
Township	20S	25S	19S	20S
Range	34E	29E	34E	29E
Unit	M	O	M	E
Ftg NS	990S	330S	330S	1980N
Ftg EW	870W	1650E	760W	910W
County	Lea	Eddy	Lea	Lea
State	NM	NM	NM	NM
Field				
Formation	Delaware	Avalon Upper	3rd Bone Spring Sd	Wolfcamp
pH	5.5	7	6.48	5.7
TDS mgL	296822	193732	182368	189739
Sodium mgL	87727.9	74027.8	41450	
Calcium mgL	45355	513	8421	23920
Iron mgL	8.8125	104	28.1	0.3
Magnesium mgL		118	1264	963.2
Manganese mgL		1	0.8	
Chloride mgL	215237	113441	85041	116724
Bicarbonate mgL	143	1830	362	427
Sulfate mgL	293	2665	956	750
CO2 mgL		700	180	

VII (5)

Permian Oilfield Partners, LLC.  
 Tardy Federal SWD #1  
 1430' FNL, 294' FEL  
 Sec. 12, T20S, R33E, Lea Co. NM  
 Lat 32.5909531° N, Lon -103.6091493° W  
 GL 3600', RKB 3630'

Devonian Injection Zone Water Analysis			
Well Name	Leonard ST 1 (A) #001	LEA UNIT #008	LEA UNIT #009
API	3001503537	3002502431	3002502432
Latitude	32.6839676	32.5927162	32.578598
Longitude	-104.0347595	-103.511673	-103.5121155
Sec	1	12	13
Township	19S	20S	20S
Range	29E	34E	34E
Unit	M	B	B
Ftg NS	610S	810N	660N
Ftg EW	660W	1980E	2130E
County	Eddy	Lea	Lea
State	NM	NM	NM
Field			
Formation	Devonian	Devonian	Devonian
Sample Source	Drill Stem Test	Drill Stem Test	Unknown
pH			
TDS mgL	29011	33414	45778
Chloride mgL	16000	18570	26440
Bicarbonate mgL	520	227	1145
Sulfate mgL	1500	1961	729



**Attachment to C-108  
Permian Oilfield Partners, LLC  
Tardy Federal SWD #1  
1430' FNL & 294' FEL  
Sec 12, T20S, R33E  
Lea County, NM**

June 10, 2023

**STATEMENT REGARDING SEISMICITY**

Examination of the USGS and NMT seismic activity databases shows minimal historic seismic activity  $>M2.0$  in the area ( $< 5.64$  mile radius, 25 sq. mi.) of the proposed above referenced SWD well, with one  $M2.1$  event recorded 4.5 mi S of the proposed well in November 2020. This proposed well is not located within any current Seismic Response Area.

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

1. USGS Quaternary Fault & Fold database shows no quaternary faults in the nearby area.
2. Basement faults are documented in the Snee & Zoback paper, "State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity", published in the February 2018 issue of the SEG journal, The Leading Edge, along with a method for determining the probability of fault slip in the area.
3. Fault data was also correlated to the publicly available USGS GIS geologic units & structural features database, the NMOCD SWD Applications & Fault Map dated 02/14/2022, to the B3 Insights proprietary faults database, and to fault maps as published in the New Mexico Geological Society Special Publication 13A, "Energy and Mineral Resources of New Mexico: Petroleum Geology," by R. F. Broadhead, 2017.
4. The distance from the proposed injection well to the nearest known fault is approximately 4.0 mi (6.5 km). This fault depth is believed to be in the PreCambrian, well below the Devonian-Silurian injection interval, and separated vertically by the presence of the Montoya, Simpson and Ellenburger formations.
5. Permian Oilfield Partners ran modeling to check for fault slip assuming that any known faults penetrate the Devonian-Silurian injection zone. Software as discussed in #3 from

the Stanford Center for Induced and Triggered Seismicity, "FSP 1.0: A program for probabilistic estimation of fault slip potential resulting from fluid injection", was used to calculate the probability of the fault being stressed so as to create an induced seismic event.

6. As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 3.0 miles away from the nearest active or permitted Devonian disposal well (Fasken Quail 16 State SWD #9, SWD-1537). There is another permitted Devonian disposal well 3.1 miles to the SW, the Permian TDS, Coombes SWD #1, SWD-1996. Both of these wells are included in the below FSP analysis.
7. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years as per the FSP results screenshots below.

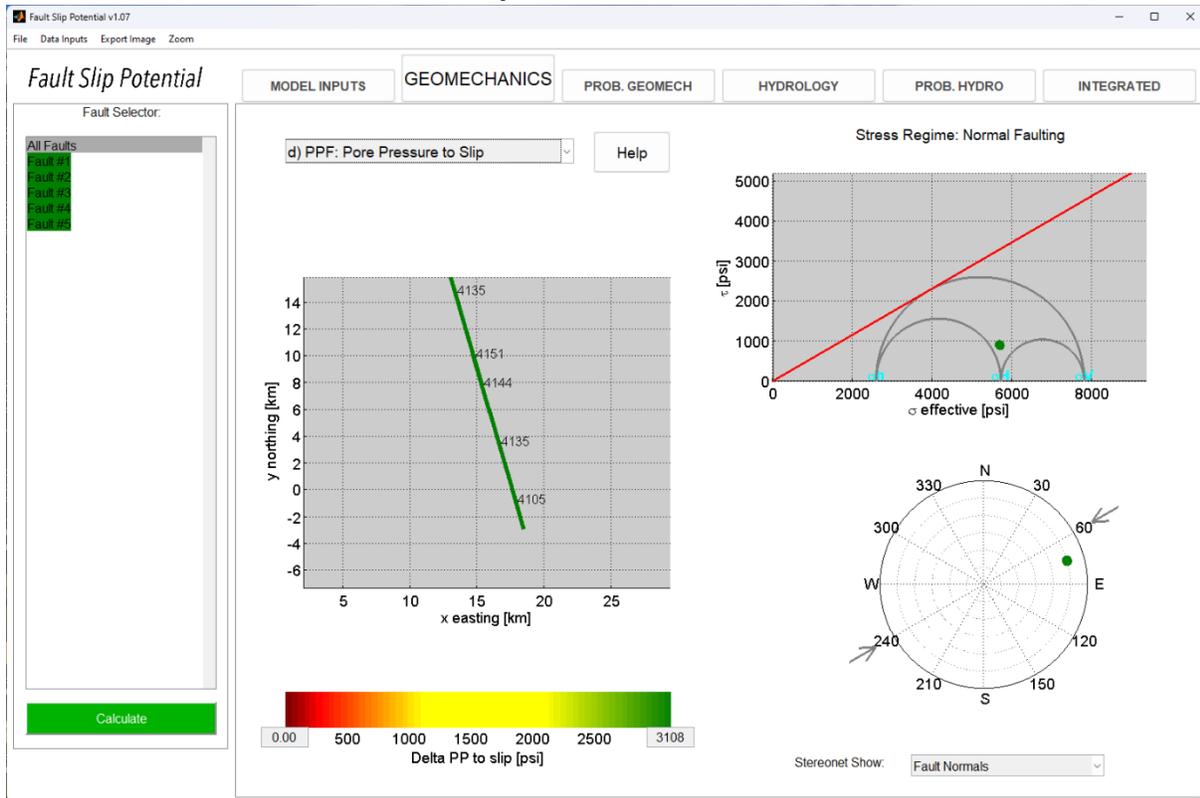
#### Input assumptions:

Tardy Fed SWD rate (BBL/day)	50000
Fasken Quail 16 SWD #9 rate (BBL/day)	1800
Permian TDS Coombes SWD rate (BBL/day)	30000
Interval height (ft)	1196
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.00
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14726
Initial res press gradient (psi/ft)	0.47
A phi	0.65
Friction coefficient	0.58
Weighted Average perm (mD)	19.3
Fluid density (kg/m <sup>3</sup> )	1100
Dynamic viscosity (Pa-s)	0.0003
Fluid compressibility (/Pa)	4 e-10
Rock compressibility (/Pa)	1.08 e-09

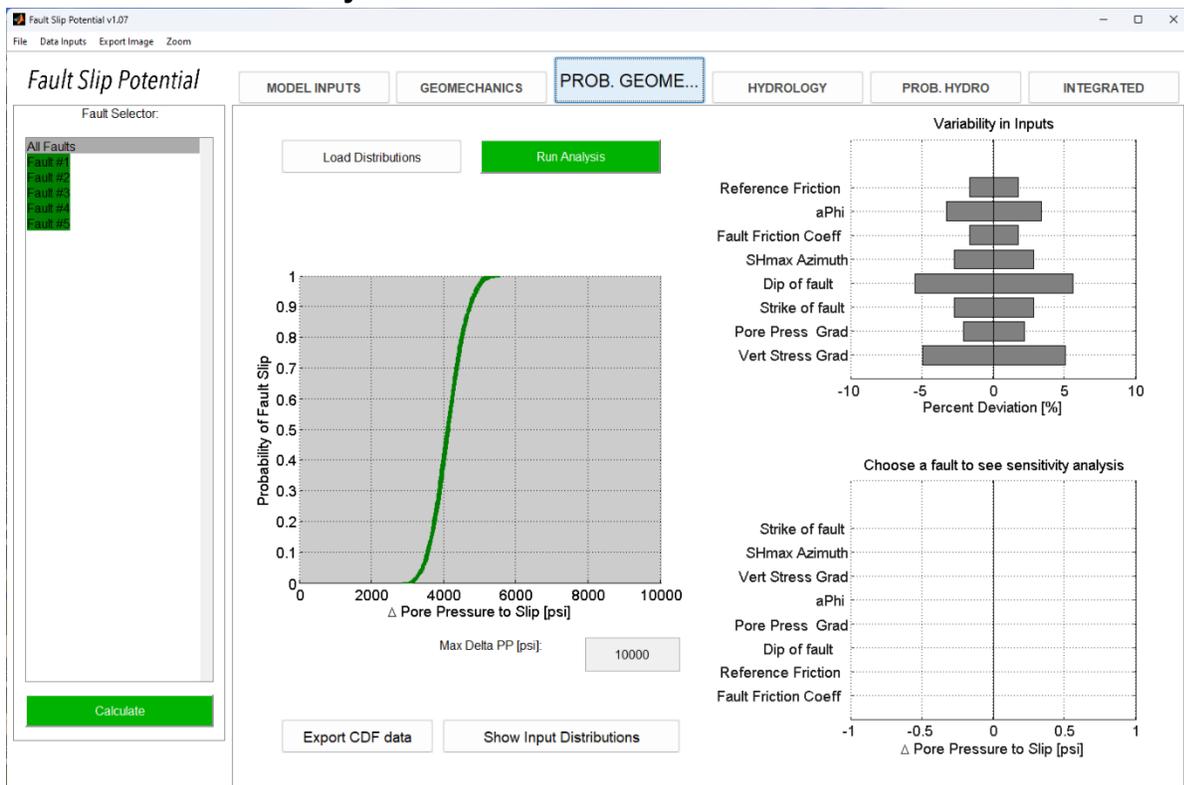
#### Note:

In screenshots below, injection well #1 is the proposed Tardy Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Permian TDS Coombes SWD #1.

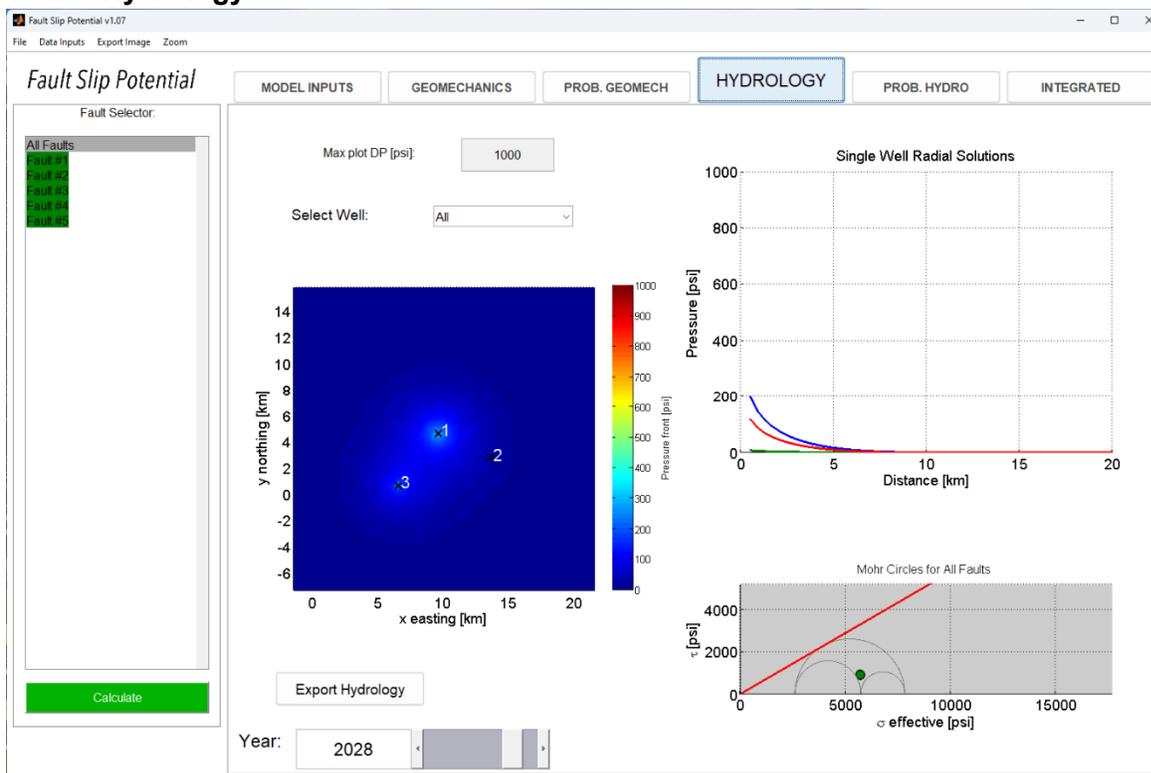
### Geomechanics Pore Pressure to Slip



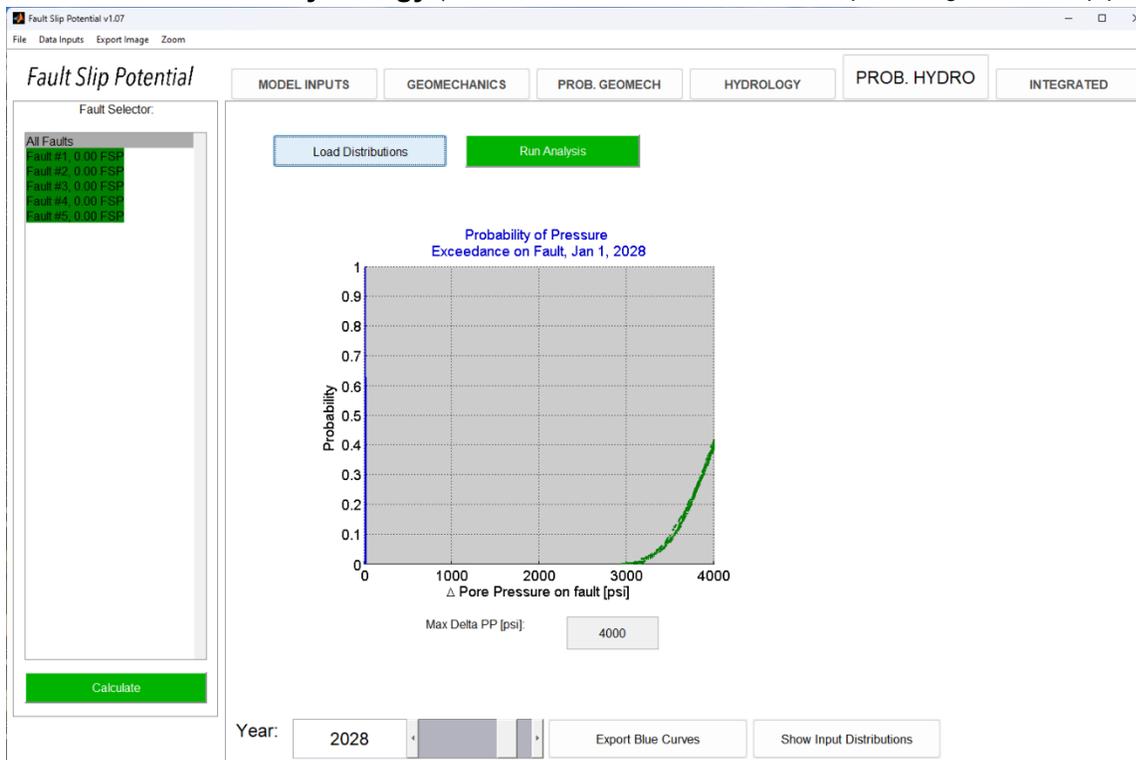
### GeoMechanics Variability



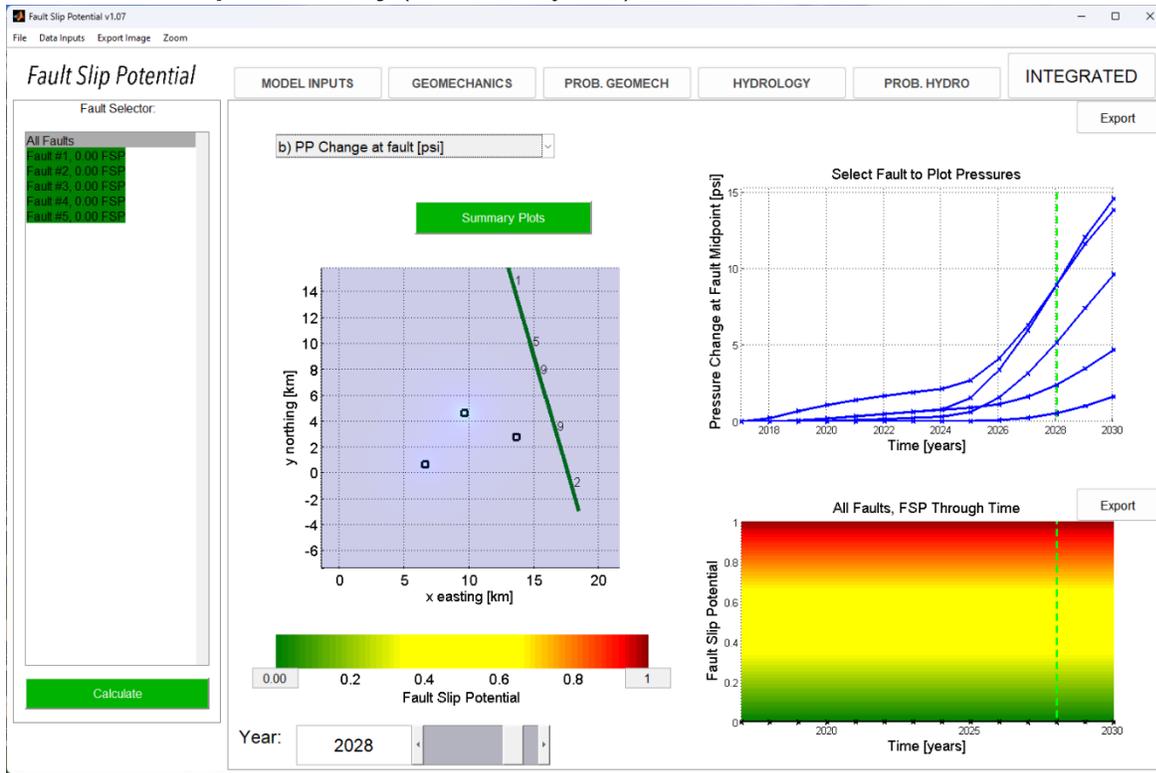
### Year 5 Hydrology



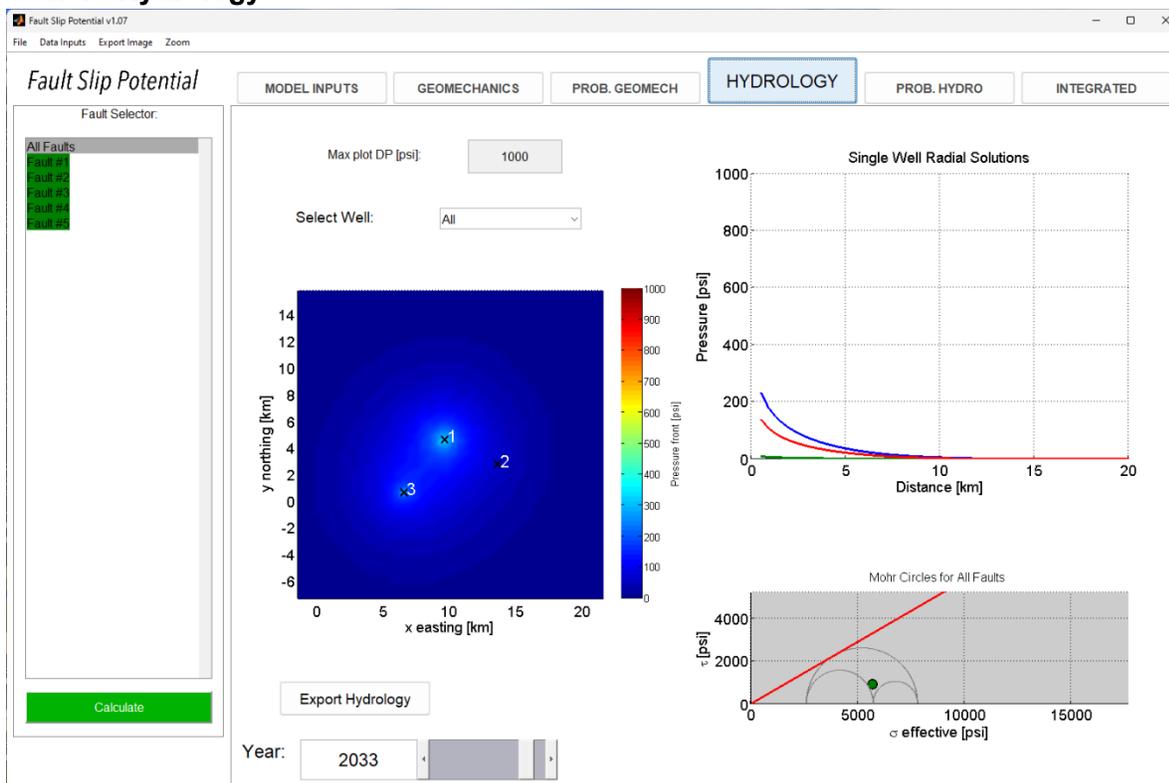
### Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



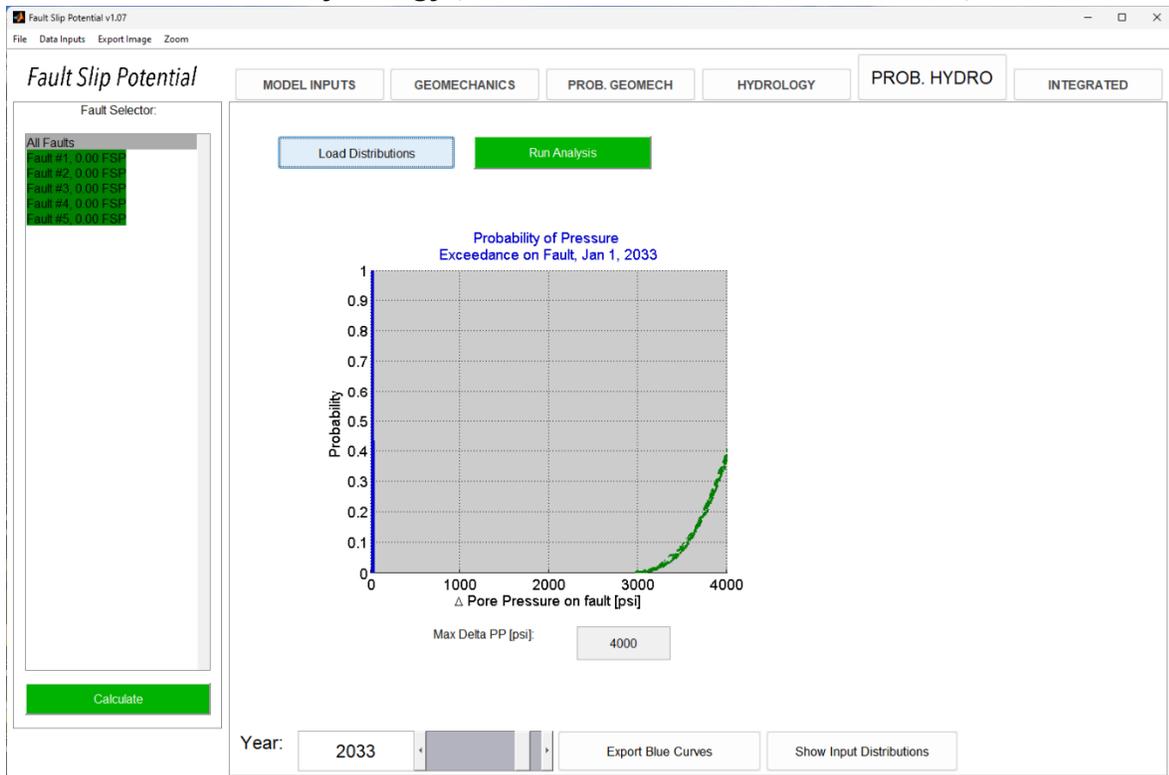
### Year 5 Fault Slip Probability (0% after 5 years)



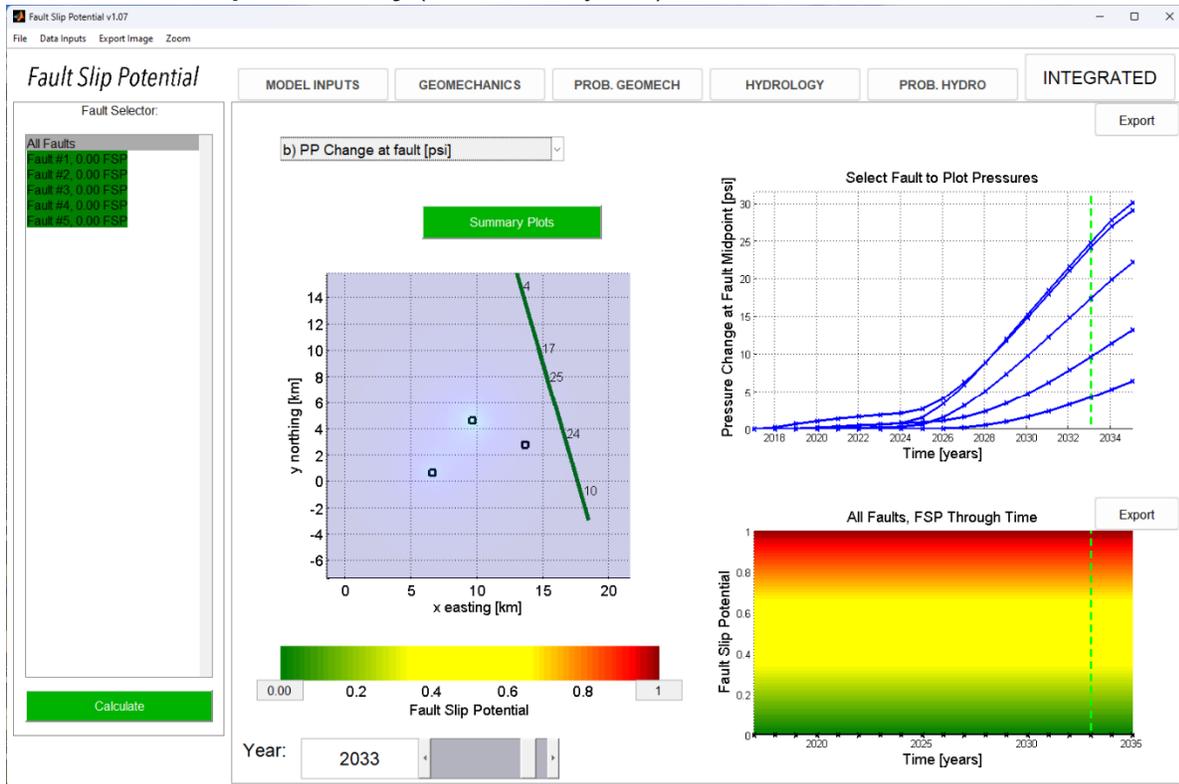
### Year 10 Hydrology



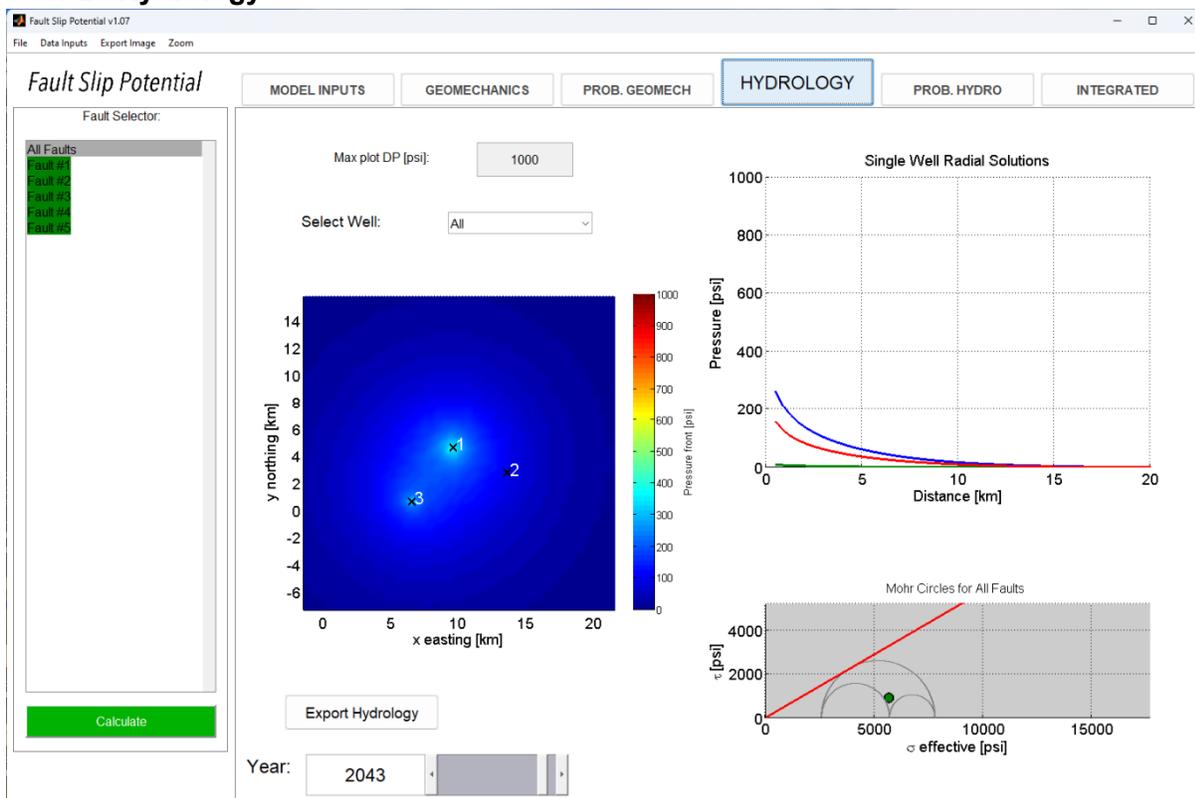
### Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



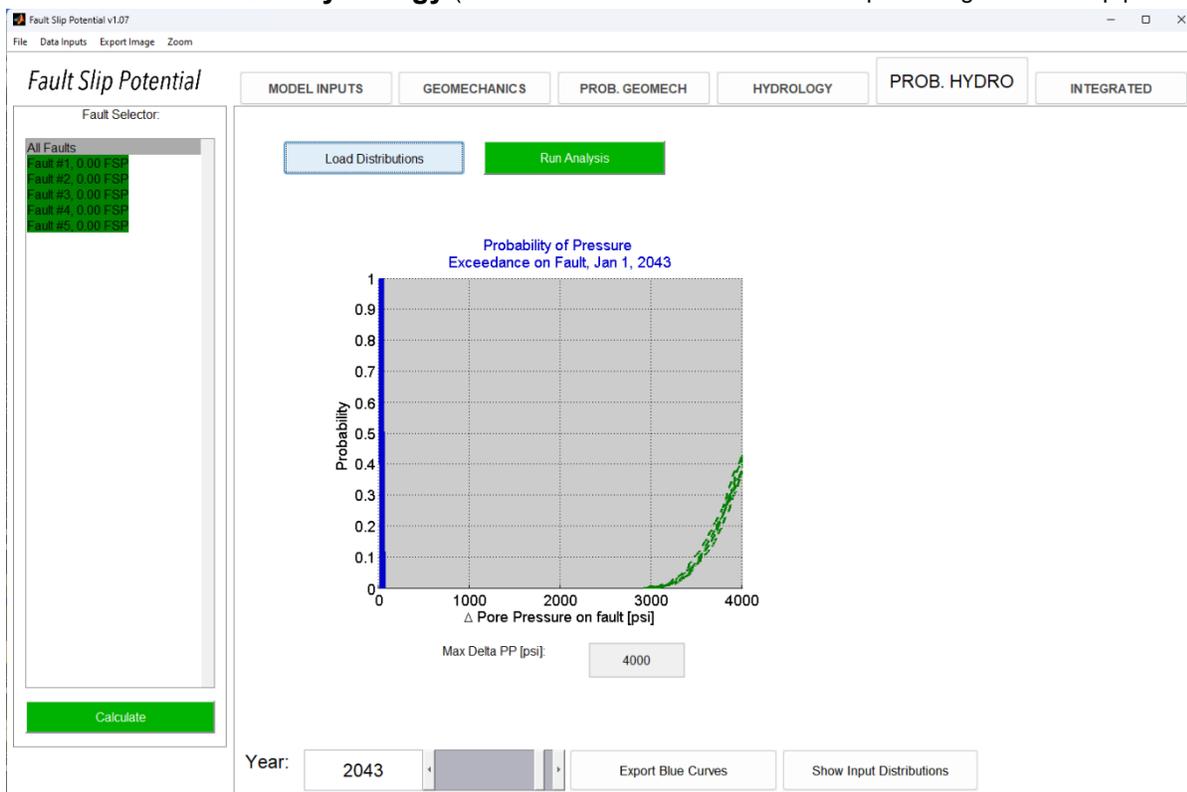
### Year 10 Fault Slip Probability (0% after 10 years)



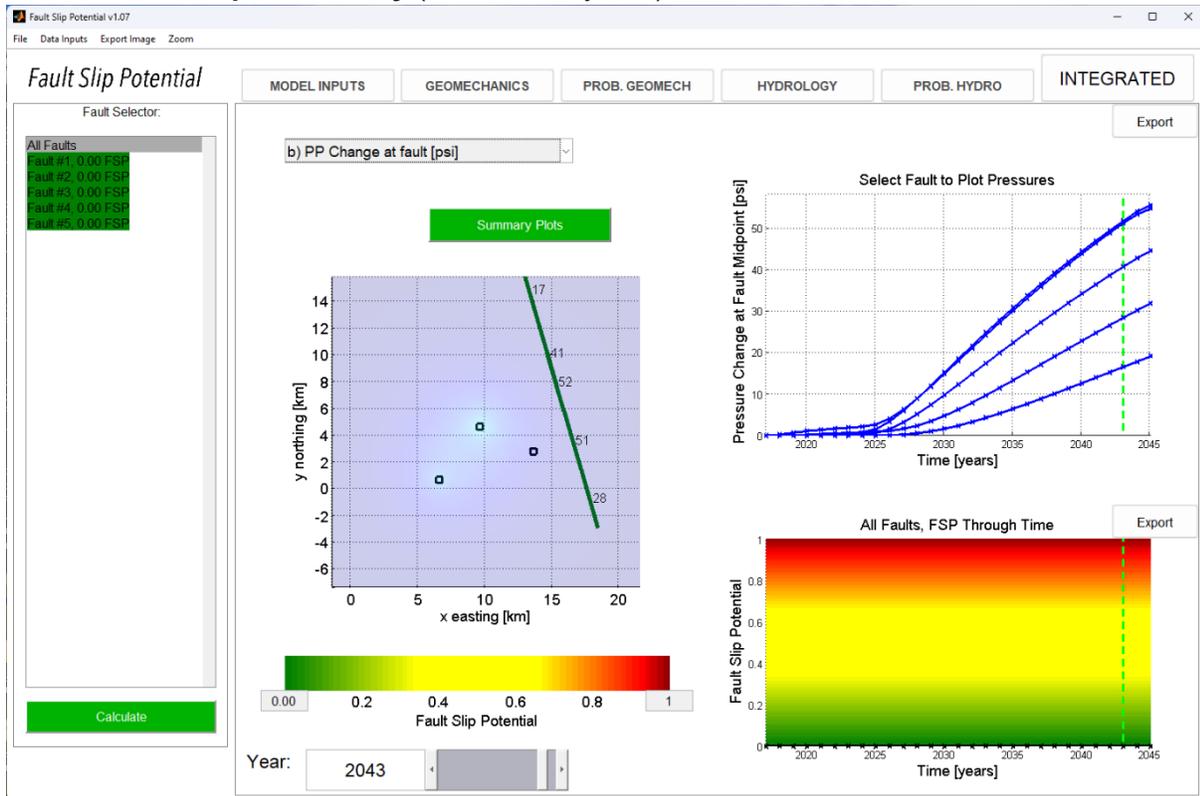
### Year 20 Hydrology



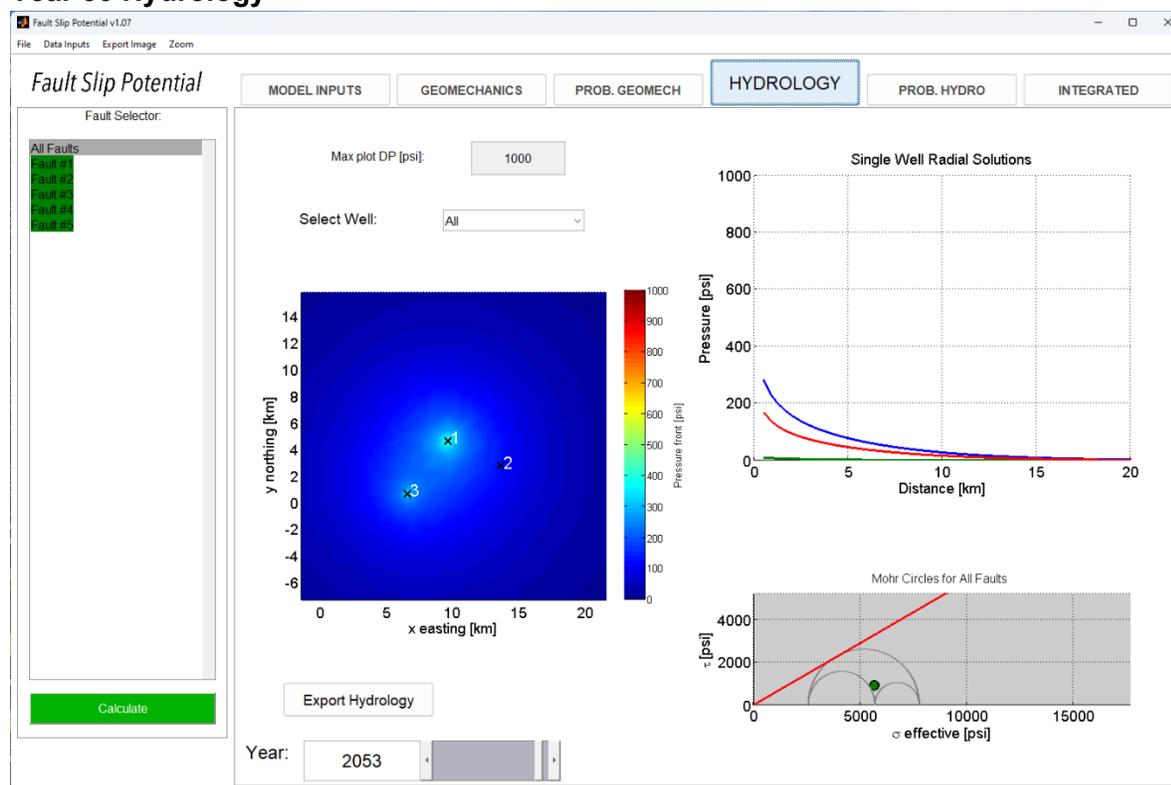
### Year 20 Probabilistic Hydrology (note no crossover between blue delta-pressure. & green fault slip press.)



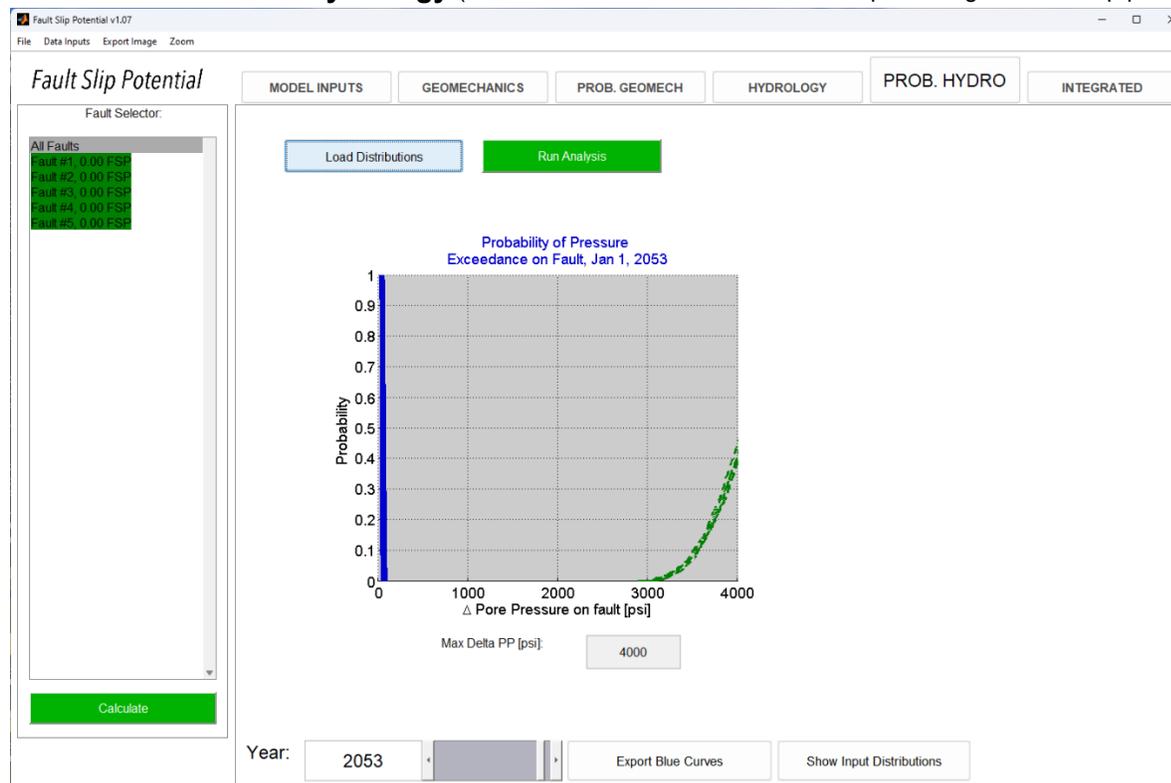
### Year 20 Fault Slip Probability (0% after 20 years)



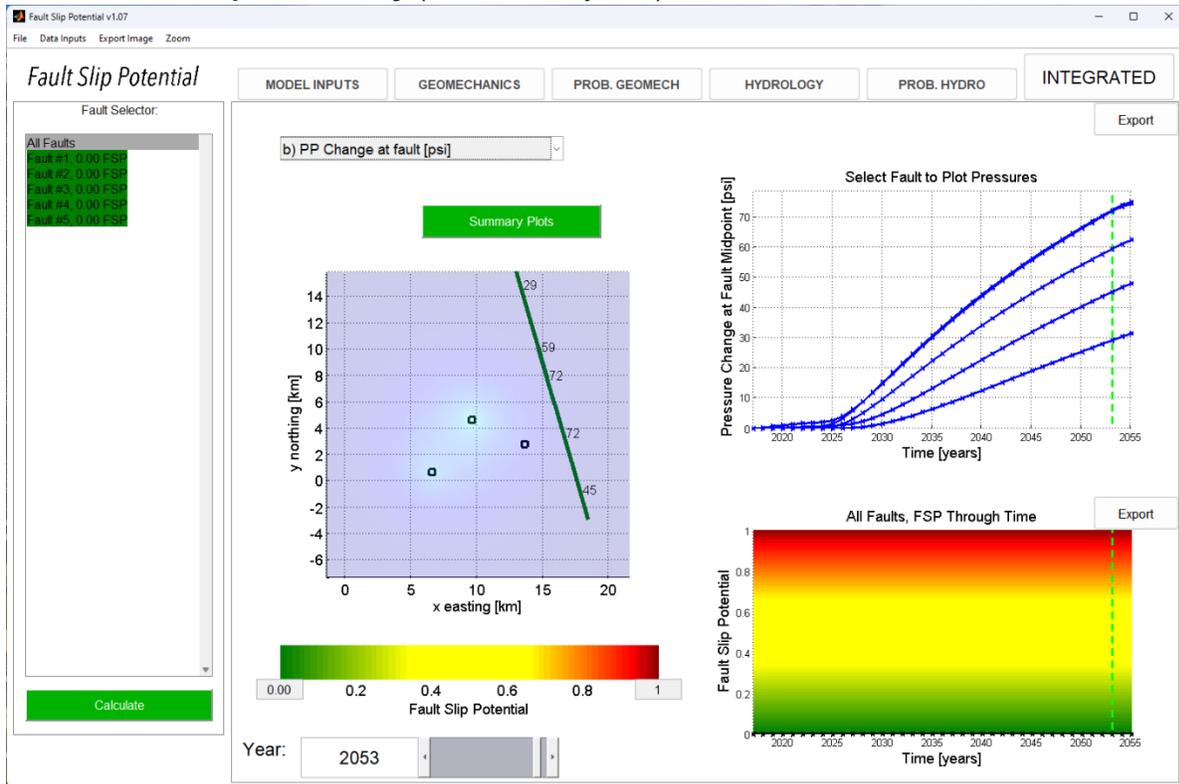
### Year 30 Hydrology



### Year 30 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



### Year 30 Fault Slip Probability (0% after 30 years)



[gfisher@popmidstream.com](mailto:gfisher@popmidstream.com)

(817) 606-7630



**Item XII. Affirmative Statement**

Re: C-108 Application for Authorization to Inject  
Permian Oilfield Partners, LLC  
Tardy Federal SWD #1  
1430' FNL & 294' FEL  
Sec 12, T20S, R33E  
Lea County, NM

Permian Oilfield Partners, LLC. has examined available geologic and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

A handwritten signature in black ink, appearing to read "Gary Fisher", is written in a cursive style.

Gary Fisher  
Manager  
Permian Oilfield Partners, LLC.

Date: 7/5/2023



# New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)  
(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
<a href="#">CP 00317</a>	CP	LE		3	4	3	05	20S	33E	623054	3607235*	680	325	355
<a href="#">CP 00653 POD1</a>	CP	LE		4	4	04		20S	33E	625573	3607367*	60		
<a href="#">CP 00748 POD1</a>	CP	LE			2	01		20S	33E	630197	3608428*			
<a href="#">CP 00798 POD1</a>	CP	LE		2	1	1	24	20S	33E	629348	3603892*	850		
<a href="#">CP 01090 POD1</a>	CP	LE			1	2	31	20S	33E	586045	3608526			
<a href="#">CP 01865 POD1</a>	CP	LE		4	3	2	02	20S	33E	628390	3608155	105	0	105
<a href="#">CP 01865 POD2</a>	CP	LE		3	1	3	02	20S	33E	627454	3607733	105	0	105

Average Depth to Water: **108 feet**  
 Minimum Depth: **0 feet**  
 Maximum Depth: **325 feet**

**Record Count: 7**

**PLSS Search:**

**Township: 20S**

**Range: 33E**

\*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.



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
 O=orphaned,  
 C=the file is closed)  
 (quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column	
<a href="#">CP 00654 POD1</a>	CP	LE		4	4	12	20S	34E	640103	3605947*		60			
<a href="#">CP 00655 POD1</a>	CP	LE		3	1	14	20S	34E	637294	3605108*		210			
<a href="#">CP 00656 POD1</a>	CP	LE		4	4	4	04	20S	34E	635342	3607391*		225		
<a href="#">CP 00657 POD1</a>	CP	LE		3	3	17	20S	34E	632465	3604239*		165			
<a href="#">CP 00665</a>	CP	LE		1	4	24	20S	34E	639740	3603128*		698	270	428	
<a href="#">CP 00750 POD1</a>	CP	LE		3	4	07	20S	34E	631639	3605834*		320			
<a href="#">CP 00799 POD1</a>	CP	LE		4	3	4	34	20S	34E	636666	3599364*		100		
<a href="#">CP 00800 POD1</a>	CP	LE		2	2	2	22	20S	34E	637007	3603994*		220		
<a href="#">CP 01204 POD1</a>	CP	LE		3	1	1	25	20S	34E	638755	3602250		370		
<a href="#">CP 01288 POD1</a>	CP	LE		4	4	2	34	20S	34E	637134	3600204		1255	758	497
<a href="#">CP 01289 POD1</a>	CP	LE		4	4	2	34	20S	34E	637037	3600261		1222	651	571
<a href="#">CP 01330 POD1</a>	CP	LE		4	2	1	34	20S	34E	636197	3600483		1349	684	665
<a href="#">CP 01334 POD1</a>	CP	LE		1	2	4	35	20S	34E	638402	3599879		1253	733	520
<a href="#">CP 01335 POD1</a>	CP	LE		4	1	4	35	20S	34E	638205	3599736		1307	735	572
<a href="#">CP 01352 POD1</a>	CP	LE		3	1	4	34	20S	34E	636559	3599716		1270	785	485
<a href="#">CP 01389 POD1</a>	CP	LE		1	1	1	34	20S	34E	635726	3600733		1250	1005	245
<a href="#">CP 01860 POD1</a>	CP	LE		3	3	2	30	20S	34E	631560	3600891		112		
<a href="#">CP 01867 POD1</a>	CP	LE		1	2	4	20	20S	34E	633584	3603189		200		
<a href="#">CP 01867 POD2</a>	CP	LE		1	2	4	20	20S	34E	633513	3603189		200		
<a href="#">CP 01867 POD3</a>	CP	LE		1	2	4	20	20S	34E	633580	3603242		220		
<a href="#">CP 01867 POD4</a>	CP	LE		1	2	4	20	20S	34E	633513	3603245		220		

\*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.

Average Depth to Water: **702 feet**

Minimum Depth: **270 feet**

Maximum Depth: **1005 feet**

---

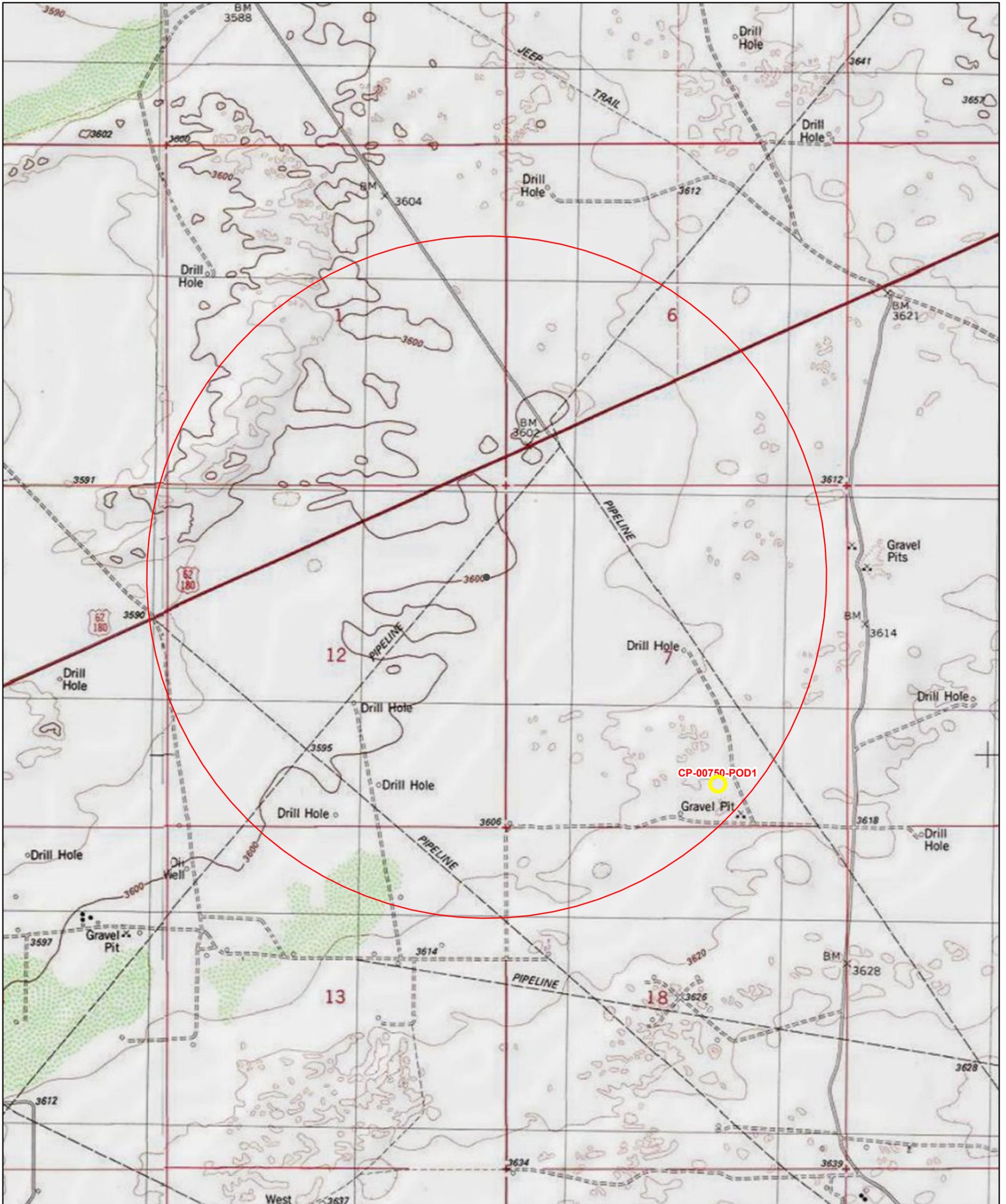
**Record Count: 21**

**PLSS Search:**

**Township: 20S**

**Range: 34E**

# XI. Water Wells Within 1 Mile - Tardy Federal SWD #1

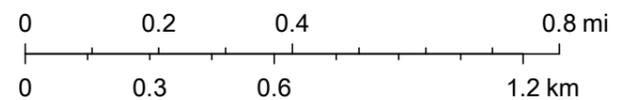


5/23/2023, 6:50:05 PM

 SiteBoundaries

POD CP-00750 reported as dry hole.

1:20,214



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# New Mexico Office of the State Engineer Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00750 POD1	3	4	07	20S	34E		631639	3605834*

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest)

(NAD83 UTM in meters)

<b>Driller License:</b>	421	<b>Driller Company:</b>	GLENN'S WATER WELL SERVICE						
<b>Driller Name:</b>	GLENN, CLARK A."CORKY" (LD)								
<b>Drill Start Date:</b>	06/20/1990	<b>Drill Finish Date:</b>	06/20/1990	<b>Plug Date:</b>					
<b>Log File Date:</b>	07/26/1990	<b>PCW Rcv Date:</b>			<b>Source:</b>				
<b>Pump Type:</b>			<b>Pipe Discharge Size:</b>			<b>Estimated Yield:</b>			
<b>Casing Size:</b>			<b>Depth Well:</b>	320 feet	<b>Depth Water:</b>				

\*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.

5/23/23 5:54 PM

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 475954      Transaction Desc: CP 00750      File Date: 06/22/1990

**Primary Status:** PMT Permit  
**Secondary Status:** APR Approved  
**Person Assigned:** \*\*\*\*\*  
**Applicant:** TXO PROD.  
**Contact:** GLENN'S WATER WELL SERVICE

### Events

Date	Type	Description	Comment	Processed By
06/22/1990	APP	Application Received	*	*****
06/22/1990	FIN	Final Action on application		*****
06/22/1990	WAP	General Approval Letter		*****
07/26/1990	LOG	Well Log Received	*	*****
07/26/1990	DRY	Dry well log received		*****
06/14/2011	ARV	Rec & Arch - file location	CP 00750 Box: 1879	*****
06/25/2013	EXP	Expired Permit (well log late)		*****
01/17/2017	QAT	Quality Assurance Completed	DATA/IMAGES	*****

### Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
CP 00750		3		
<b>**Point of Diversion</b>				
CP 00750 POD1		631639	3605834*	

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

### Remarks

TXO PROD. WILL USE THE WATER WELL IN THE DRILLING OF 1 HAMON "A" FEDERAL 1650 FSL, 1980 FEL, SECTION 7, TOWNSHIP 20-SOUTH, RANGE 34-EAST IN LEA COUNTY.  
"ABTRACTOR'S NOTE: THE POD FOR THIS PERMIT HAS BEEN RE-NUMBERED ACCORDING TO THE APPROVED OSE POD POLICY".

### Conditions

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 3 Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
- 5A A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water; pumping records shall be submitted to the District Supervisor for each calendar month on or before the 10th day of the following month.
- 6 The well shall be plugged upon completion of the permitted use, and a plugging report shall be filed with the State Engineer within 10 days.

### Action of the State Engineer

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

**Approval Code:** A - Approved  
**Action Date:** 06/22/1990  
**Log Due Date:** 06/30/1991  
**State Engineer:** John R. D Antonio,

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.

5/23/23 5:52 PM

TRANSACTION  
SUMMARY

Revised June 1972

STATE ENGINEER OFFICE  
WELL RECORD

475954

Section 1. GENERAL INFORMATION

(A) Owner of well TXO Prod. Owner's Well No. \_\_\_\_\_  
Street or Post Office Address c/o Glenn's Water Well Service,  
City and State P.O. Box 692 Tatum, N.M. 88267

Well was drilled under Permit No. CP-750 and is located in the:

- a. 1/4 1/4 SW 1/4 SE 1/4 of Section 7 Township 20-S. Range 34-E. N.M.P.M.
- b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_
- c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.
- d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Glenn's Water Well Service, Inc. License No. WD 421

Address P.O. Box 692 Tatum, N.M. 88267

Drilling Began 6/20/90 Completed 6/20/90 Type tools rotary Size of hole 7 7/8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 320 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well \_\_\_\_\_ ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
			dry hole	26
				AM 8 29

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO  
30 SEP 7 AM 10 06

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

STATE ENGINEER OFFICE  
SANTA FE NEW MEXICO  
30 SEP 7 AM 10 06

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method well was plugged with dirt

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 26, 1990

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. CP-750 Use OWD Location No. 20-34-7-4300

Section 6. LOG OF HOLE

Depth in Feet		Thickness in Feet	Color and Type of Material Encountered
From	To		
0	6	6	sand
6	16	10	caleche
16	20	4	sand
20	22	2	rock (soft)
22	32	10	sand
32	65	33	sandy clay
65	102	37	red clay
102	107	5	blue sand rock
107	118	11	brown shale
118	127	9	blue sand rock
127	130	3	brown shale
130	154	24	blue sand rock
154	159	5	limestone hard
159	178	19	red clay
178	191	13	brown shale
191	210	19	red clay
210	235	25	brown shale
235	278	43	brown shale (some light blue)
278	295	17	purple shale (some light blue)
295	306	11	yellow and blue clay
306	320	14	red clay

STATE ENGINEER  
 DIVISION OF WATER CONTROL  
 3001 E. 93RD ST.  
 DENVER, CO 80231

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

*Cory Johnson*  
 Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled. This form is used as a permanent record; only Section 1(a) and Section 5 need be completed.

**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 Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 241785

**CONDITIONS**

Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241	OGRID: 328259
	Action Number: 241785
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

**CONDITIONS**

Created By	Condition	Condition Date
mgebremichael	None	7/18/2023