



**Before the Oil Conservation Division  
Examiner Hearing October 19, 2023**

**Case No. 23808: Belated Federal SWD #1**

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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO.**

**CASE NO. 23808  
(BELATED)**

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# **Tab 1: Application and C-108**

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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO.**

**CASE NO. 23808**

**APPLICATION**

Permian Oilfield Partners, LLC (“Permian”), OGRID No. 328259, through its undersigned attorneys, hereby submits this application to the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-12, Rule No. 19.15.26, and Rule 19.15.4.8 for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, Permian states as follows:

(1) Permian proposes to drill the Belated Federal SWD Well #1 well at a surface location 637’ from the South line and 208’ from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet.

(3) Permian requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian requests approval of a maximum injection pressure of 2,927 psi for the well.

(5) On or about July 10, 2023, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

**Exhibit 1**



(6) Permian complied with the notice requirements for administrative applications, including mailing and publication in the Hobbs News Sun.

(7) Matador Production Company, MRC Permian Company and MRC Hat Mesa, LLC (successor to Advance Energy Partners Hat Mesa, LLC) submitted a protest with respect to Permian's administrative application.

(8) For this reason, Permian is submitting an application for hearing before a Division Examiner for this matter.

(9) To Permian's knowledge, no other protests were submitted.

(10) A proposed C-108 for the subject well is attached hereto as Attachment A, which is the C-108 that was submitted administratively.

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

WHEREFORE, Permian requests that this application be set for hearing before an Examiner of the Oil Conservation Division on October 5, 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 M. Bennett  
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Attorneys for Applicant



**CASE NO. 23808:Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico.** Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Belated Federal SWD Well #1 well at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

Revised March 23, 2017

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: Belated 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

☐ Notice Complete  
☐ 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 14,604'

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 2,927 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:**

1. 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>	1,695	2,161	466
<b>Salado</b>	2,161	3,438	1,277
<b>Delaware</b>	5,459	8,216	2,757
<b>Bone Spring</b>	8,216	10,929	2,713
<b>Wolfcamp</b>	10,929	12,222	1,293
<b>Lwr. Mississippian</b>	13,867	14,446	579
<b>Woodford</b>	14,446	14,604	158
<b>Devonian</b>	14,604	15,505	901
<b>Fusselman (Silurian)</b>	15,505	15,866	361
<b>Montoya (U. Ordovician)</b>	15,866	16,266	400
<b>Simpson (M. Ordovician)</b>	16,266	16,766	500

2. Regional shallow fresh water in the Quaternary is known to exist at depths less than 200'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 14,404'. 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. See attached 1 mile AOR water well map showing no active PODs in the AOR.
- 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>BELATED 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>3725'</b>

10 Surface Location

UL or lot no. <b>P</b>	Section <b>27</b>	Township <b>19S</b>	Range <b>34E</b>	Lot Idn	Feet from the <b>637</b>	North/South line <b>SOUTH</b>	Feet From the <b>208</b>	East/West line <b>EAST</b>	County <b>LEA</b>
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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.

<p>(C) <i>S 89°17'01" W 5283.59'</i></p> <p>(D)</p> <p>16</p> <p><u>GEODETIC DATA</u> NAD 83 GRID - NM EAST</p> <p><u>SURFACE LOCATION</u> N: 592296.3 - E: 785531.7 LAT: 32.6257672° N LONG: 103.5401562° W</p> <p><u>CORNER DATA</u> NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1912" N: 591625.3 - E: 780463.0</p> <p>B: FOUND BRASS CAP "1912" N: 594257.9 - E: 780440.4</p> <p>C: FOUND BRASS CAP "1912" N: 596892.0 - E: 780418.4</p> <p>D: FOUND BRASS CAP "1912" N: 596958.0 - E: 785700.5</p> <p>E: FOUND BRASS CAP "1912" N: 591661.5 - E: 785745.0</p> <p>F: FOUND BRASS CAP "1912" N: 591634.7 - E: 783105.5</p> <p>27</p> <p>(E) <i>N 00°28'46" W 2634.73'</i></p> <p>(F) <i>N 00°29'34" W 2633.22'</i></p> <p><i>S 89°47'44" E 2643.02'</i></p> <p><i>S 89°25'03" W 2640.16'</i></p> <p>208'</p> <p>S.L.</p> <p>637'</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><i>Gary Fisher</i> 7/6/2023 Signature Date Gary Fisher Printed Name gfisher@popmidstream.com 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>05/30/2023 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>14400 Certificate Number</p> <p>DALE E. BELL NEW MEXICO 14400 05/31/2023 PROFESSIONAL SURVEYOR</p>
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Job No.: LS23050490

III (A)

**WELL CONSTRUCTION DATA**

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26" Casing: 20" - 133# N-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1720'  
 Cement: 3208 sks - Class C + Additives (100% Excess)  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5" Casing: 13.375" - 68# HCP-110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 5409'  
 Cement: 2204 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25" Casing: 9.625" - 40# HCP110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 10979' ECP/DV Tool: 5509'  
 Cement: 1693 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #3 - (Liner)**

Hole Size: 8.75" Casing: 7.625" - 39# HCL-80 FJ Casing  
 Depth Top: 10779'  
 Depth Btm: 14639'  
 Cement: 237 sks - Class H + Additives  
 Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

Hole Size: 6.5" Depth: 15841'  
 Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594' Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 X/O Depth: 10779'  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14604' Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives

## III (A)

**WELLBORE SCHEMATIC**

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26"  
 Casing: 20" - 133# N-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1720'  
 Cement: 3208 sks - Class C + Additives (100% Excess)  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5"  
 Casing: 13.375" - 68# HCP-110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 5409'  
 Cement: 2204 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25"  
 Casing: 9.625" - 40# HCP110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 10979'  
 Cement: 1693 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)  
 ECP/DV Tool: 5509'

**Intermediate #3 - (Liner)**

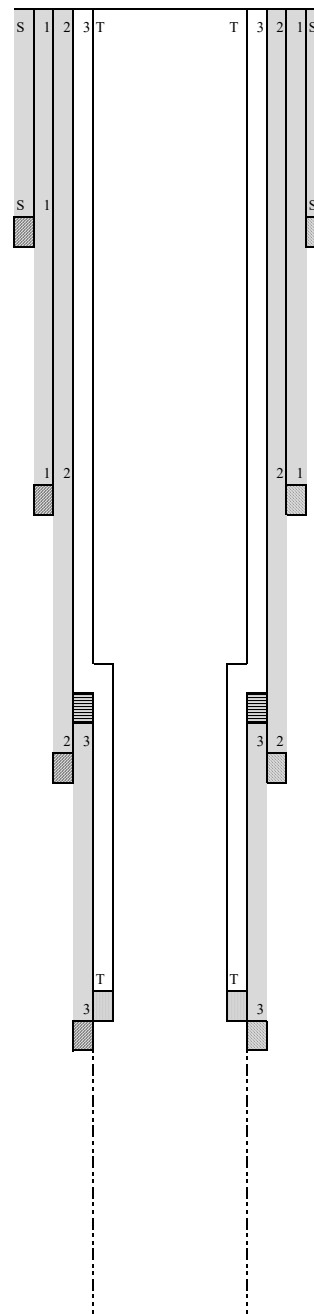
Hole Size: 8.75"  
 Casing: 7.625" - 39# HCL-80 FJ Casing  
 Depth Top: 10779'  
 Depth Btm: 14639'  
 Cement: 237 sks - Class H + Additives  
 Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

Hole Size: 6.5"  
 Depth: 15841'  
 Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594'  
 Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 X/O Depth: 10779'  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14604'  
 Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives



XIII.



## Statement of Notifications

Re: C-108 Application for SWD Well  
 Permian Oilfield Partners, LLC  
 Belated Federal SWD #1  
 637' FSL & 208' FEL  
 Sec 27, T19S, R34E  
 Lea County, NM

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

Belated 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
Balog Family Trust	PO Box 111890	Anchorage, AK 99504	USPS	9414811899562232727235	7/10/2023
Black Hills Gas Resources, Inc.	7001 Mt Rushmore Rd	Rapid City, SD 57702	USPS	9414811899562232727860	7/10/2023
BP America Production Company	1700 Platte St, Suite 150	Denver, CO 80202	USPS	9414811899562232727891	7/10/2023
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899562232727884	7/10/2023
Burlington Resources Oil & Gas LP	PO Box 2197	Houston, TX 77252	USPS	9414811899562232727839	7/10/2023
BXP Operating, LLC	11757 Katy Fwy, Suite 475	Houston, TX 77079	USPS	9414811899562232727754	7/10/2023
BXP Partners V LP	11757 Katy Fwy, Suite 475	Houston, TX 77079	USPS	9414811899562232727709	7/10/2023
Cargoil & Gas Co LLC	2981 Plaza Azul	Santa Fe, NM 87505	USPS	9414811899562232727778	7/10/2023
Chevron USA	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899562232727907	7/10/2023
Cimarex Energy Co. of Colorado	6001 Deauville Blvd, Ste 300N	Midland, TX 79706	USPS	9414811899562232727945	7/10/2023
Cimarex Energy Company	6001 Deauville Blvd, Ste 300N	Midland, TX 79706	USPS	9414811899562232727693	7/10/2023
Clarence Hyde Estate	6300 Ridgelea Pl., Suite 1018	Fort Worth, TX 76116	USPS	9414811899562232727129	7/10/2023
Contango Resources, LLC	111 E. 5TH Street, Suite 300	Fort Worth, TX 76102	USPS	9414811899562232727358	7/10/2023
Devon Energy Production Company, L	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899562232727303	7/10/2023
EOG Resources Inc.	PO Box 2267	Midland, TX 79702	USPS	9414811899562232727020	7/10/2023
Frances W Hyde Inc.	6300 Ridgelea Pl., Suite 1018	Fort Worth, TX 76116	USPS	9414811899562232727075	7/10/2023
Jack V Walker Revocable Trust	PO Box 102256	Anchorage, AK 99510	USPS	9414811899562232727426	7/10/2023
Lenox Mineral Title Holdings Inc.	420 Throckmorton St., Suite 1150	Fort Worth, TX 76102	USPS	9414811899562232727440	7/10/2023
Linn Operating, LLC	600 Travis Street, STE 1200	Houston, TX 77002	USPS	9414811899562232727471	7/10/2023
Matador Production Company	5400 LBJ Freeway, Ste 1500	Dallas, TX 75240	USPS	9414811899562232727525	7/10/2023
Matador Resources Co.	5400 LBJ Freeway, Ste 1500	Dallas, TX 75240	USPS	9414811899562232726214	7/10/2023
Merit Energy Company, LLC	13727 Noel Road, Suite 500	Dallas, TX 75240	USPS	9414811899562232726238	7/10/2023
Merit Energy Partners D-III	13727 Noel Road, Suite 1200	Dallas, TX 75240	USPS	9414811899562232726856	7/10/2023
Nadel and Gussman HEYCO, LLC	P. O. Box 1936	Roswell, NM 88202	USPS	9414811899562232726832	7/10/2023
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899562232726702	7/10/2023
Penroc Oil Corp.	PO Box 2769	Hobbs, NM 88241	USPS	9414811899562232726740	7/10/2023
Shogoiil & Gas Co II LLC	PO Box 29450	Santa Fe, NM 87592	USPS	9414811899562232726955	7/10/2023
XTO Energy Inc.	22777 Springwoods Village Pkwy, Suite 126	Spring, TX 77389	USPS	9414811899562232754804	7/10/2023

Sean Puryear  
 Permian Oilfield Partners, LLC  
[spuryear@popmidstream.com](mailto:spuryear@popmidstream.com)  
 Date: 7/10/2023

## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7272 35

## ARTICLE ADDRESSED TO:

Balog Family Trust  
PO BOX 111890  
ANCHORAGE AK 99511-1890

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7278 60

## ARTICLE ADDRESSED TO:

Black Hills Gas Resources, Inc.  
7001 MOUNT RUSHMORE RD  
RAPID CITY SD 57702-8752

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7278 91

## ARTICLE ADDRESSED TO:

BP America Production Company  
1700 PLATTE ST STE 150  
DENVER CO 80202-2837

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

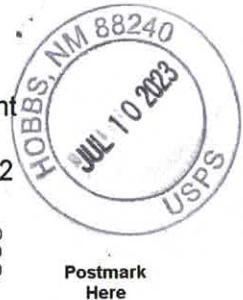
ARTICLE NUMBER: 9414 8118 9956 2232 7278 84

## ARTICLE ADDRESSED TO:

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

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7278 39

## ARTICLE ADDRESSED TO:

Burlington Resources Oil & Gas LP  
PO BOX 2197  
HOUSTON TX 77252-2197

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7277 54

## ARTICLE ADDRESSED TO:

BXP Operating, LLC  
11757 KATY FWY STE 475  
HOUSTON TX 77079-1761

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620





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

ARTICLE NUMBER: 9414 8118 9956 2232 7277 09

## ARTICLE ADDRESSED TO:

BXP Partners V LP  
11757 KATY FWY STE 475  
HOUSTON TX 77079-1761

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7277 78

## ARTICLE ADDRESSED TO:

Cargoil & Gas Co., LLC  
2981 PLAZA AZUL  
SANTA FE NM 87507-5337

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7279 07

## ARTICLE ADDRESSED TO:

Chevron USA  
6301 DEAUVILLE  
MIDLAND TX 79706-2964

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7279 45

## ARTICLE ADDRESSED TO:

Cimarex Energy Co. of Colorado  
6001 DEAUVILLE STE 300N  
MIDLAND TX 79706-2671

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7276 93

## ARTICLE ADDRESSED TO:

Cimarex Energy Company  
6001 DEAUVILLE STE 300N  
MIDLAND TX 79706-2671

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7271 29

## ARTICLE ADDRESSED TO:

Clarence Hyde Estate  
6300 RIDGELEA PL., STE 1018  
FORT WORTH TX 76116-0000

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7273 58

## ARTICLE ADDRESSED TO:

Contango Resources, LLC  
111 E 5TH ST STE 300  
FORT WORTH TX 76102-5472

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7273 03

## ARTICLE ADDRESSED TO:

Devon Energy Production Co., LP  
333 W SHERIDAN AVE  
OKLAHOMA CITY OK 73102-5010

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7270 20

## ARTICLE ADDRESSED TO:

EOG Resources, Inc.  
PO BOX 2267  
MIDLAND TX 79702-2267

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7270 75

## ARTICLE ADDRESSED TO:

Frances W Hyde Inc.  
6300 RIDGELEA PL, STE 1018  
FORT WORTH TX 76116-0000

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7274 26

## ARTICLE ADDRESSED TO:

Jack V Walker Revocable Trust  
PO BOX 102256  
ANCHORAGE AK 99510-2256

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7274 40

## ARTICLE ADDRESSED TO:

Lenox Mineral Title Holdings Inc.  
420 THROCKMORTON ST STE 1150  
FORT WORTH TX 76102-3761

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620





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

ARTICLE NUMBER: 9414 8118 9956 2232 7274 71

## ARTICLE ADDRESSED TO:

Linn Operating LLC  
600 TRAVIS ST STE 1200  
HOUSTON TX 77002-1279

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7275 25

## ARTICLE ADDRESSED TO:

Matador Production Company  
5400 LYNDON B JOHNSON FWY STE 1500  
DALLAS TX 75240-1017

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7262 14

## ARTICLE ADDRESSED TO:

Matador Resources Co.  
5400 LYNDON B JOHNSON FWY STE 1500  
DALLAS TX 75240-1017

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7262 38

## ARTICLE ADDRESSED TO:

Merit Energy Company, LLC  
13727 NOEL RD STE 500  
DALLAS TX 75240-7312

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7268 56

## ARTICLE ADDRESSED TO:

Merit Energy Partners D-III  
13727 NOEL RD STE 1200  
DALLAS TX 75240-7362

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7268 32

## ARTICLE ADDRESSED TO:

Nadel & Gussman HEYCO, LLC  
PO BOX 1936  
ROSWELL NM 88202-1936

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7267 02

## ARTICLE ADDRESSED TO:

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

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7267 40

## ARTICLE ADDRESSED TO:

Penroc Oil Corp.  
PO BOX 2769  
HOBBS NM 88241-2769

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

Postmark  
Here

## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7269 55

## ARTICLE ADDRESSED TO:

Shogoi & Gas Co II LLC  
PO BOX 29450  
SANTA FE NM 87592-9450

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



## U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7548 04

## ARTICLE ADDRESSED TO:

XTO Energy Inc.  
22777 SPRINGWOODS VILLAGE PKWY  
SPRING TX 77389-1425

## FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

Postmark  
Here

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 26, 2023  
and ending with the issue dated  
May 26, 2023.



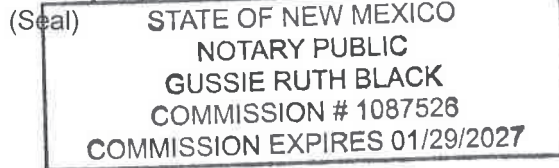
Publisher

Sworn and subscribed to before me this  
26th day of May 2023.



Business Manager

My commission expires  
January 29, 2027



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

### LEGAL NOTICE May 26, 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 Belated Federal SWD #1, and is located 637' FSL & 208' FEL, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, approximately 16 mi W of Monument, NM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 14,639 feet to 15,841 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,927 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.  
#00278993

67115647

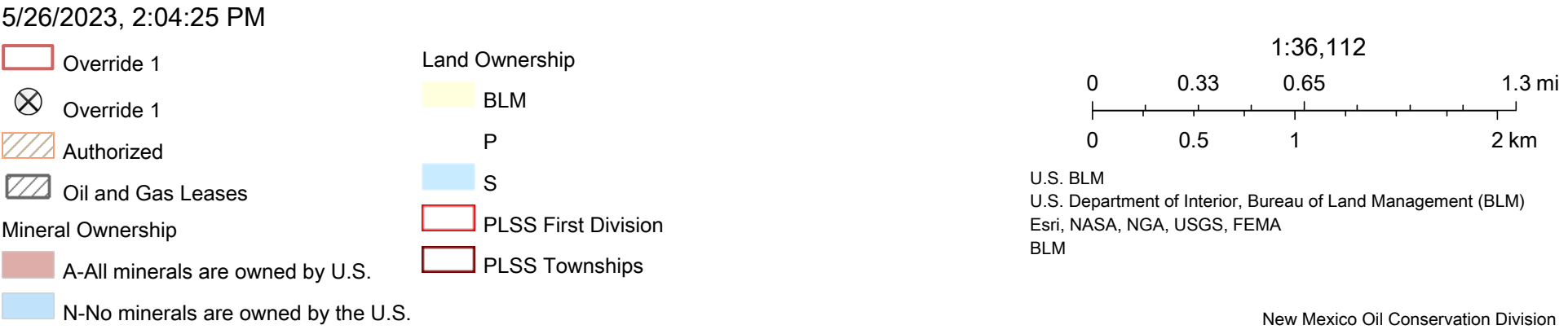
00278993

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

## Exhibit A



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

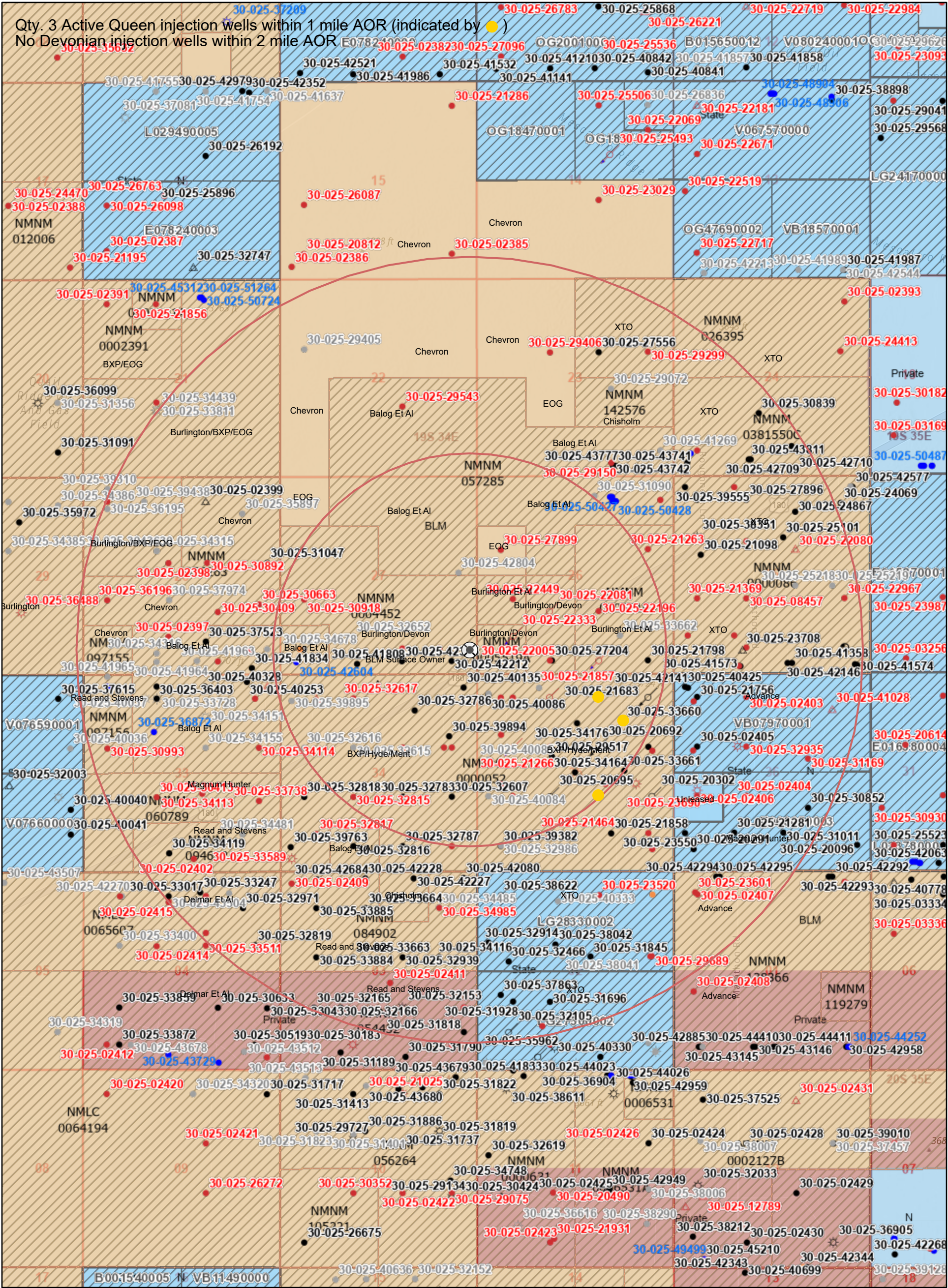




V (b)

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

Qty. 3 Active Queen injection wells within 1 mile AOR (indicated by ●)  
No Devonian injection wells within 2 mile AOR



5/26/2023, 2:08:56 PM

Override 1

Override 1

Wells - Large Scale

Miscellaneous

Gas, Active

Gas, Cancelled

Gas, New

Gas, Plugged

Injection, Active

Injection, Plugged

Oil, Active

Oil, Cancelled

Oil, New

Oil, Plugged

Oil, Temporarily Abandoned

Salt Water Injection, Active

Salt Water Injection, Plugged

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

1:36,112

00.330.651.3 mi

00.512 km

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

Exhibit A

Released to Imaging: 10/13/2023 7:58:54 AM



V (c)

Belated 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	
30-025-34176	BXP Operating, LLC	MESCALERO RIDGE UNIT	#026	Oil	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1350 FNL 2570 FEL	G-35-19S-34E 1350 FNL 2570 FEL	QUEEN	5236	5236	
30-025-34164	BXP Operating, LLC	MESCALERO RIDGE UNIT	#025	Oil	Vertical	Active	35	T19S	R34E	J	J-35-19S-34E 2620 FSL 2620 FEL	J-35-19S-34E 2620 FSL 2620 FEL	QUEEN	5204	5204	
30-025-20694	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#357	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	B	B-35-19S-34E 660 FNL 1980 FEL	B-35-19S-34E 660 FNL 1980 FEL	QUEEN	5250	5250	
30-025-21857	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#263	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	O	O-26-19S-34E 330 FSL 1980 FEL	O-26-19S-34E 330 FSL 1980 FEL	QUEEN	5150	5150	
30-025-20692	BXP Operating, LLC	MESCALERO RIDGE UNIT	#354	Injection	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1980 FNL 1980 FEL	G-35-19S-34E 1980 FNL 1980 FEL	QUEEN	5260	5260	
30-025-22196	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#006	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	J	J-26-19S-34E 1650 FSL 1980 FEL	J-26-19S-34E 1650 FSL 1980 FEL	QUEEN	5160	5160	
30-025-20565	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#352	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 1980 FSL 1980 FEL	J-35-19S-34E 1980 FSL 1980 FEL	QUEEN	5268	5268	
30-025-23319	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 2310 FSL 1800 FEL	J-35-19S-34E 0 FSL 1800 FEL	BONE SPRING	13980	13980	
30-025-36662	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#040	Oil	Vertical	Cancelled Apd	26	T19S	R34E	O	O-26-19S-34E 1000 FSL 1400 FEL	O-26-19S-34E 1000 FSL 1400 FEL	QUEEN	6000	6000	
30-025-21859	BP AMERICA PRODUCTION COMPANY	MESCALERO RIDGE UNIT	#017	Salt Water Disposal	Vertical	Plugged, Site Released	35	T19S	R34E	G	G-35-19S-34E 1980 FNL 1650 FEL	G-35-19S-34E 1980 FNL 1650 FEL	SEVEN RIVERS	4040	4040	
30-025-36660	BXP Operating, LLC	MESCALERO RIDGE UNIT	#023	Oil	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 1300 FNL 1300 FEL	A-35-19S-34E 1300 FNL 1300 FEL	QUEEN	5215	5215	
30-025-36661	BXP Operating, LLC	MESCALERO RIDGE UNIT	#024	Oil	Vertical	Active	35	T19S	R34E	H	H-35-19S-34E 2620 FNL 1300 FEL	H-35-19S-34E 2620 FNL 1300 FEL	QUEEN	5200	5200	
30-025-21798	BXP Operating, LLC	MESCALERO RIDGE UNIT	#262	Oil	Vertical	Active	26	T19S	R34E	P	P-26-19S-34E 330 FSL 660 FEL	P-26-19S-34E 330 FSL 660 FEL	QUEEN	5150	5150	
30-025-21683	BXP Operating, LLC	MESCALERO RIDGE UNIT	#015	Injection	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 660 FNL 660 FEL	A-35-19S-34E 660 FNL 660 FEL	QUEEN	5135	5135	
30-025-39895	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#020D	Oil	Horizontal	Cancelled Apd	34	T19S	R34E	D	D-34-19S-34E 730 FNL 330 FWL	A-34-19S-34E 330 FNL 330 FEL	BONE SPRING	15397	10840	
30-025-42604	CIMAREX ENERGY CO.	MALLON 27 FEDERAL COM	#004H	Oil	Horizontal	New	27	T19S	R34E	M	M-27-19S-34E 305 FSL 450 FWL	E-27-19S-34E 1650 FNL 450 FWL	BONE SPRING	13970	10860	
30-025-30725	Contango Resources, LLC	STIVASON FEDERAL	#005	Oil	Vertical	Approved Temporary Abandonment	27	T19S	R34E	M	M-27-19S-34E 660 FSL 550 FWL	M-27-19S-34E 660 FSL 550 FWL	QUEEN	5115	5115	
30-025-30918	MERIT ENERGY COMPANY, LLC	WEST PEARL FEDERAL	#001	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	L	L-27-19S-34E 1980 FSL 660 FWL	L-27-19S-34E 1980 FSL 660 FWL	SEVEN RIVERS	5300	5300	
30-025-34678	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#014	Oil	Vertical	Cancelled Apd	27	T19S	R34E	M	M-27-19S-34E 660 FSL 660 FWL	M-27-19S-34E 660 FSL 660 FWL	BONE SPRING	10300	10300	
30-025-32654	BLACK HILLS GAS RESOURCES, INC.	MALLON 27 FEDERAL	#003	Oil	Vertical	Cancelled Apd	27	T19S	R34E	E	E-27-19S-34E 1980 FNL 660 FWL	E-27-19S-34E 1980 FNL 660 FWL	DELAWARE	8300	8300	
30-025-34300	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#003	Oil	Vertical	Cancelled Apd	27	T19S	R34E	E	E-27-19S-34E 1980 FNL 660 FWL	E-27-19S-34E 1980 FNL 660 FWL	DELAWARE	8300	8300	
30-025-32605	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#001	Salt Water Disposal	Vertical	Plugged, Site Released	34	T19S	R34E	D	D-34-19S-34E 660 FNL 990 FWL	D-34-19S-34E 660 FNL 990 FWL	DELAWARE	6306	6306	
30-025-32616	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#005	Oil	Vertical	Cancelled Apd	34	T19S	R34E	E	E-34-19S-34E 1980 FNL 660 FWL	E-34-19S-34E 1980 FNL 660 FWL	BONE SPRING	10300	10300	
30-025-34349	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled Apd	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FWL	N-27-19S-34E 990 FSL 1980 FWL	DELAWARE	6200	6200	
30-025-32652	BLACK HILLS GAS RESOURCES, INC.	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled Apd	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FWL	N-27-19S-34E 990 FSL 1980 FWL	DELAWARE	6200	6200	
30-025-32815	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#013	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	K	K-34-19S-34E 1980 FSL 1980 FWL	K-34-19S-34E 1980 FSL 1980 FWL	DELAWARE	6270	6270	
30-025-32617	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#006	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	C	C-34-19S-34E 660 FNL 1980 FWL	C-34-19S-34E 660 FNL 1980 FWL	DELAWARE	8312	8312	
30-025-41808	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#003H	Oil	Horizontal	Active	27	T19S	R34E	N	N-27-19S-34E 260 FSL 2080 FWL	C-22-19S-34E 2316 FSL 1923 FWL	BONE SPRING	18260	10798	
30-025-32615	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#004	Oil	Vertical	Cancelled Apd	34	T19S	R34E	F	F-34-19S-34E 1980 FNL 1980 FWL	F-34-19S-34E 1980 FNL 1980 FWL	DELAWARE	6200	6200	
30-025-33737	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#004	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	O	O-27-19S-34E 660 FSL 1980 FEL	O-27-19S-34E 660 FSL 1980 FEL	QUEEN	7100	7100	
30-025-42315	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#002H	Oil	Horizontal	Active	27	T19S	R34E	O	O-27-19S-34E 330 FSL 1980 FEL	J-22-19S-34E 2310 FSL 1900 FEL	BONE SPRING	18297	10752	
30-025-32784	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#009	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	G	G-34-19S-34E 1980 FNL 1980 FEL	G-34-19S-34E 1980 FNL 1980 FEL	DELAWARE	10395	10395	
30-025-32783	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#008	Oil	Vertical	Active	34	T19S	R34E	J	J-34-19S-34E 1980 FSL 1980 FEL	J-34-19S-34E 1980 FSL 1980 FEL	DELAWARE	6300	6300	
30-025-32786	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#011	Oil	Vertical	Active	34	T19S	R34E	B	B-34-19S-34E 990 FNL 1650 FEL	B-34-19S-34E 990 FNL 1650 FEL	DELAWARE	7044	7044	
30-025-32653	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	P	P-27-19S-34E 660 FSL 990 FEL	P-27-19S-34E 660 FSL 990 FEL	DELAWARE	7100	7100	
30-025-32782	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#007	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FNL 860 FEL	H-34-19S-34E 1980 FNL 860 FEL	DELAWARE	6300	6300	
30-025-32785	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#010	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	P	P-34-19S-34E 660 FSL 660 FEL	P-34-19S-34E 660 FSL 660 FEL	DELAWARE	6340	6340	
30-025-39894	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#019H	Oil	Horizontal	Active	34	T19S	R34E	H	H-34-19S-34E 1690 FNL 720 FEL	E-34-19S-34E 1990 FNL 4915 FEL	BONE SPRING	15025	10875	
30-025-42212	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#001H	Oil	Horizontal	Active	27	T19S	R34E	P	P-27-19S-34E 330 FSL 660 FEL	I-22-19S-34E 2310 FSL 660 FEL	BONE SPRING	18255	10795	
30-025-32606	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#002	Oil	Vertical	Active	34	T19S	R34E	A	A-34-19S-34E 660 FNL 660 FEL	A-34-19S-34E 660 FNL 660 FEL	DELAWARE	6313	6313	
30-025-32607	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#003	Oil	Vertical	Active	34	T19S	R34E	I	I-34-19S-34E 1980 FSL 660 FEL	I-34-19S-34E 1980 FSL 660 FEL	DELAWARE	6300	6300	
30-025-42804	NADL AND GUSSMAN HEYCO, LLC	HARLEQUIN 27 22 FEDERAL	#001C	Oil	Horizontal	Cancelled Apd	27	T19S	R34E	H	H-27-19S-34E 2591 FNL 510 FEL	I-22-19S-34E 2311 FSL 510 FEL	BONE SPRING	15190	10800	
30-025-40135	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#020H	Oil	Horizontal	Active	34	T19S	R34E	A	A-34-19S-34E 380 FNL 330 FEL	D-34-19S-34E 760 FNL 4925 FEL	BONE SPRING	15352	10870	
30-025-21793	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FNL 660 FEL	H-34-19S-34E 1980 FNL 660 FEL	QUEEN	5150	5150	
30-025-40086	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#007H	Oil	Horizontal	Active	35	T19S	R34E	D	D-35-19S-34E 585 FNL 330 FWL	A-35-19S-34E 574 FNL 4940 FWL	BONE SPRING	15359	10913	
30-025-33046	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#019	Oil	Vertical	Cancelled Apd	35	T19S	R34E	D	D-35-19S-34E 550 FNL 330 FWL	D-35-19S-34E 550 FNL 330 FWL	DELAWARE	6300	6300	
30-025-40084	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005H	Oil	Horizontal	Cancelled Apd	35	T19S	R34E	L	L-35-19S-34E 1980 FSL 330 FWL	I-35-19S-34E 1980 FSL 510 FEL	BONE SPRING	15349	10990	
30-025-32983	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#001	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FNL 660 FWL	D-35-19S-34E 660 FNL 660 FWL	DELAWARE	8330	8330	
30-025-32984	BLACK HILLS GAS RESOURCES, INC.	MALLON 35 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1650 FNL 660 FWL	E-35-19S-34E 1650 FNL 660 FWL	DELAWARE	8300	8300	
30-025-27899	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	E	E-26-19S-34E 1980 FNL 660 FWL	E-26-19S-34E 0 FNL 660 FWL	QUEEN	5200	5200	
30-025-32985	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#003	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 2310 FSL 660 FWL	L-35-19S-34E 2310 FSL 660 FWL	DELAWARE	8330	8330	
30-025-40085	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006H	Oil	Horizontal	Cancelled Apd	35	T19S	R34E	E	E-35-19S-34E 2310 FNL 330 FWL	H-35-19S-34E 1980 FNL 510 FEL	BONE SPRING	15362	10990	
30-025-21267	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#013	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 1980 FSL 990 FWL	L-35-19S-34E 1980 FSL 990 FWL	QUEEN	5200	5200	
30-025-21613	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#014	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FNL 990 FWL	D-35-19S-34E 660 FNL 990 FWL	QUEEN	5050	5050	
30-025-21266	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#012	Injection	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1980 FNL 990 FWL	E-35-19S-34E 1980 FNL 990 FWL	QUEEN	5200	5200	
30-025-22333	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#007	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	M	M-26-19S-34E 990 FSL 990 FWL	M-26-19S-34E 990 FSL 990 FWL	QUEEN	5031	5031	
30-025-22449	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#008	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	L	L-26-19S-34E 1980 FSL 990 FWL	L-26-19S-34E 1980 FSL 990 FWL	QUEEN	5035	5035	
30-025-32987	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005C	Oil	Vertical	Cancelled Apd	35	T19S	R34E	C	C-35-19S-34E 400 FNL 1680 FWL	C-35-19S-34E 400 FNL 1680 FWL	DELAWARE	8200	8200	
30-025-32988	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006F	Oil	Vertical	Cancelled Apd	35	T19S	R34E	F	F-35-19S-34E 1720 FNL 1680 FWL	F-35-19S-34E 1720 FNL 1680 FWL	DELAWARE	8200	8200	
30-025-21072	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#005	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	F	F-35-19S-34E 1980 FNL 1980 FWL	F-35-19S-34E 0 FNL 1980 FWL	QUEEN	5286	5286	
30-025-22005	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	N	N-26-19S-34E 330 FSL 1980 FWL	N-26-19S-34E 0 FSL 1980 FWL	QUEEN	5220	5220	
30-025-20693	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#356	Injection	Vertical	Plugged, Site Released	35	T19S	R34E	C	C-35-19S-34E 660 FNL 1980 FWL	C-35-19S-34E 660 FNL 1980 FWL	QUEEN	5250	5250	
30-025-27204	BXP Operating, LLC	MESCALERO RIDGE UNIT	#269	Oil	Vertical	Active	26	T19S	R34E	N	N-26-19S-34E 330 FSL 2030 FWL	N-26-19S-34E 330 FSL 2030 FWL	QUEEN	5218		

VII (4)

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

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	Eddy
State	NM	NM	NM	NM
Field				
Formation	Delaware	Avalon Upper	3rd Bone Spring Sand	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.  
 Beat The Punch Federal SWD #1  
 798' FNL, 128' FEL  
 Sec. 25, T20S, R32E, Lea Co. NM  
 Lat 32.549220° N, Lon -103.711560° W  
 GL 3571', RKB 3601'

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**  
**Belated Federal SWD #1**  
**637' FSL & 208' FEL**  
**Sec 27, T19S, R34E**  
**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  $M2.2$  event recorded 5.6 mi SE of the proposed well in August 2021. 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 0.6 mi (1.0 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 4.1 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 4.3 miles to the NE, the Blackbuck Wildrye Fee SWD #1, SWD-2369, and an active Devonian disposal 5.1 miles to the NNE, the Solaris Wild Cobra 1 State SWD #2, SWD-1525. All three 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.

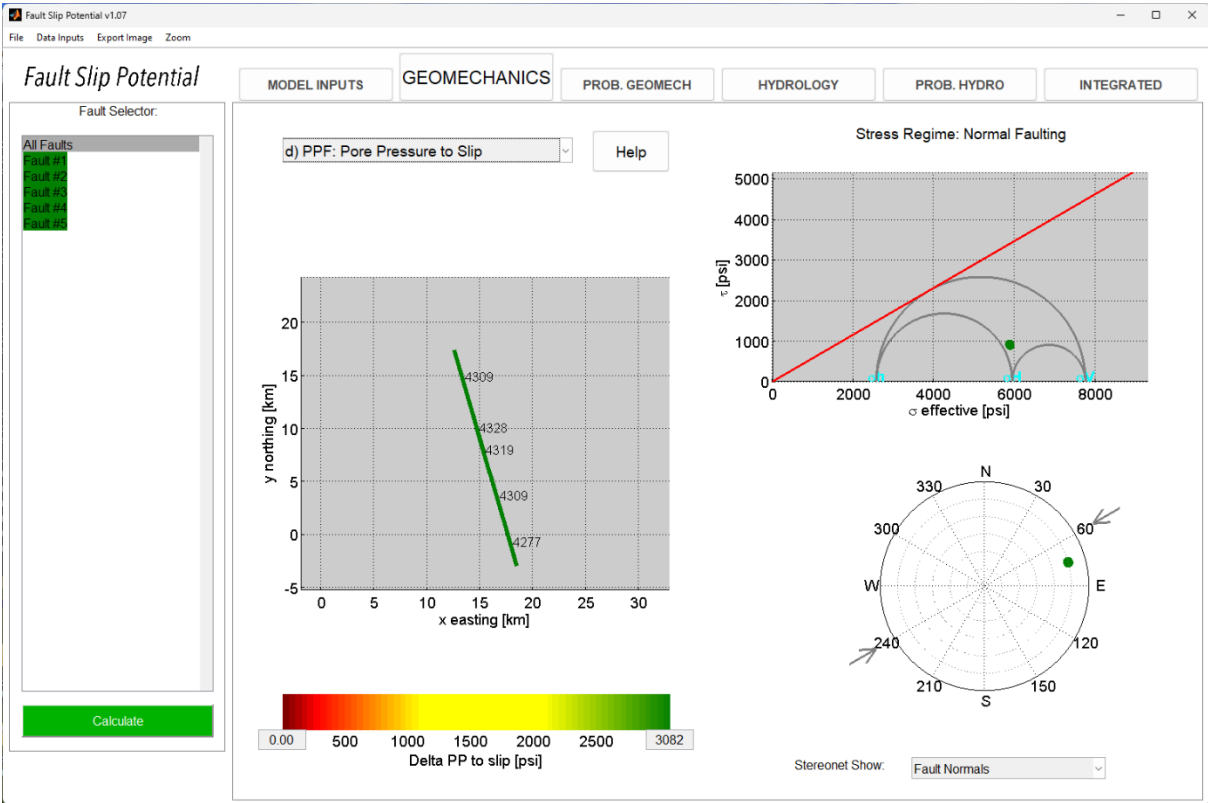
#### Input assumptions:

Belated Fed SWD rate (BBL/day)	50000
Fasken Quail 16 SWD #9 rate (BBL/day)	1800
Blackbuck Wildrye Fee SWD rate (BBL/day)	25000
Solaris Wild Cobra 1 SWD #2 (BBL/day)	2500
Interval height (ft)	1262
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.00
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14604
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/m3)	1100
Dynamic viscosity (Pa-s)	0.0003
Fluid compressibility (/Pa)	4 e-10
Rock compressibility (/Pa)	1.08 e-09

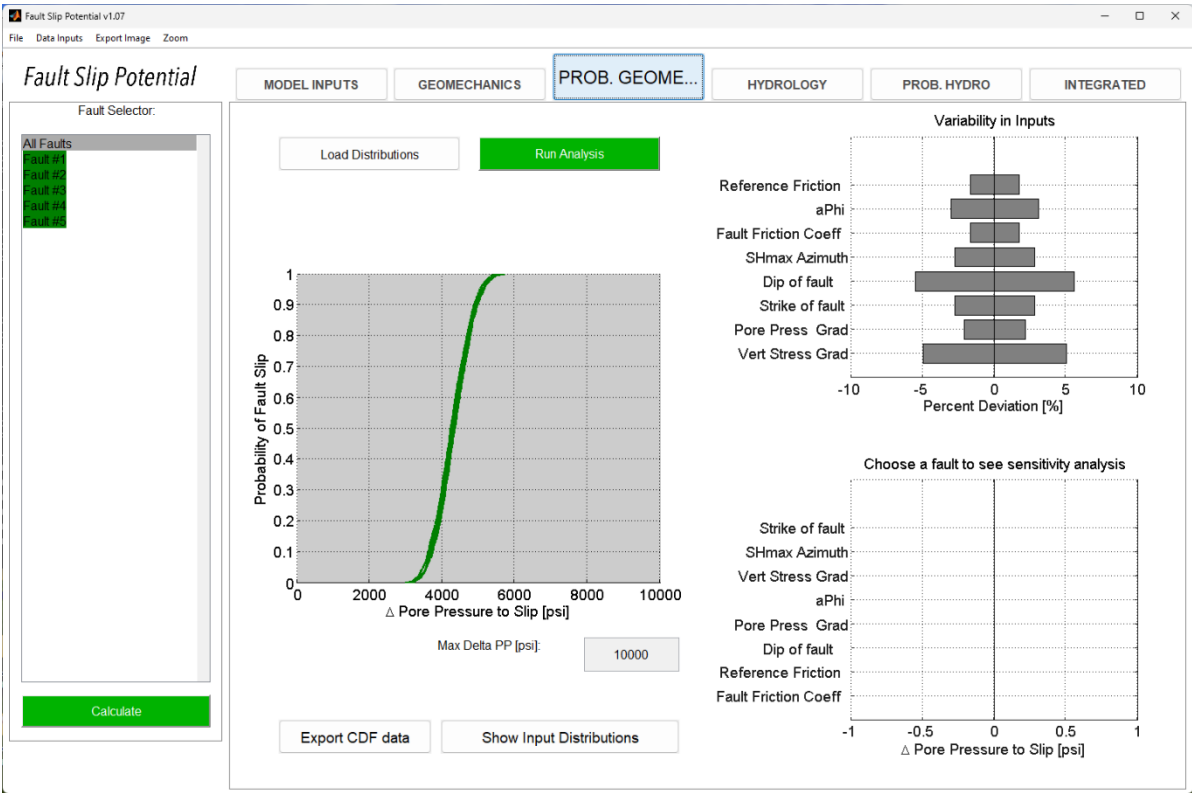
#### Note:

In screenshots below, injection well #1 is the proposed Belated Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Blackbuck Wildrye Fee SWD #1. Injection well #4 is the active Solaris Wild Cobra 1 State SWD #2.

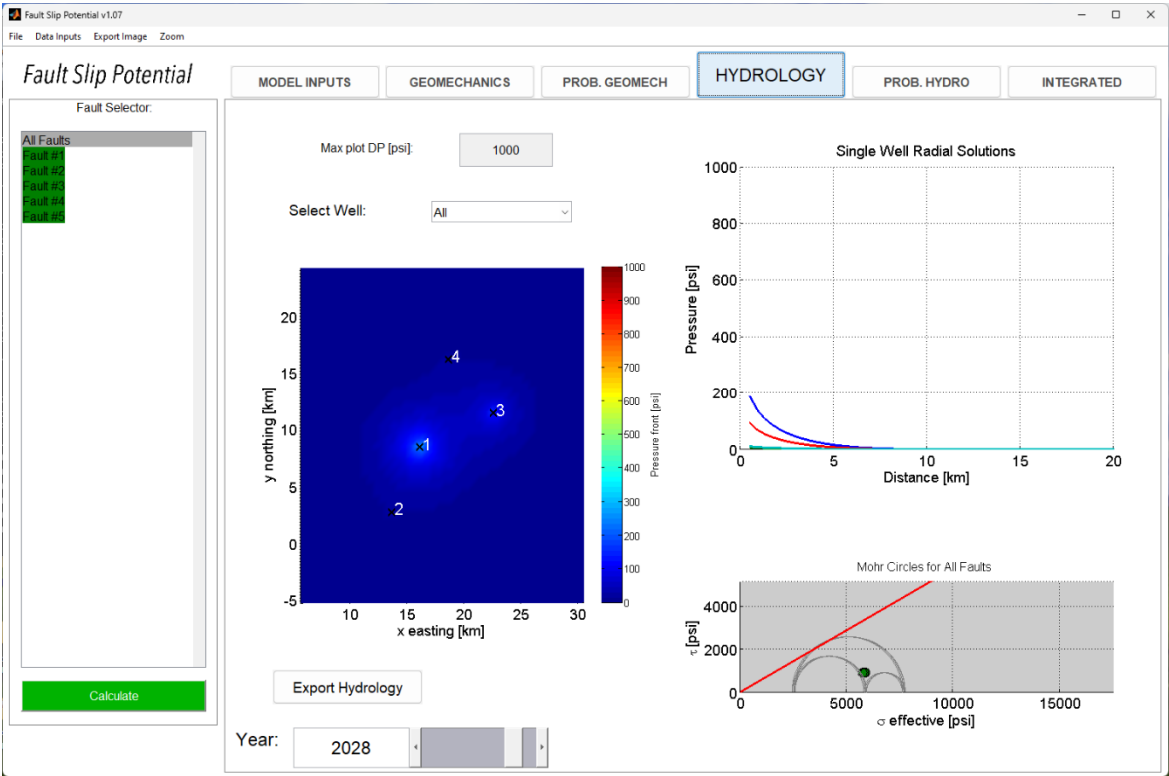
Geomechanics Pore Pressure to Slip



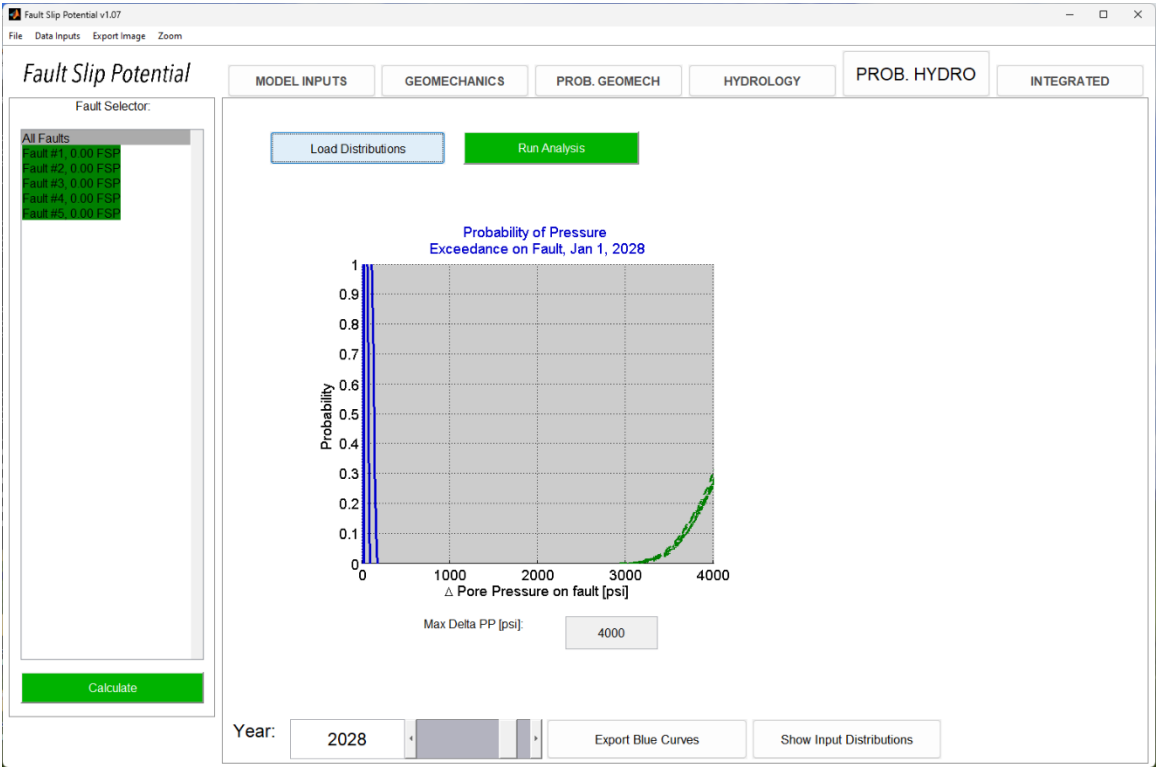
GeoMechanics Variability



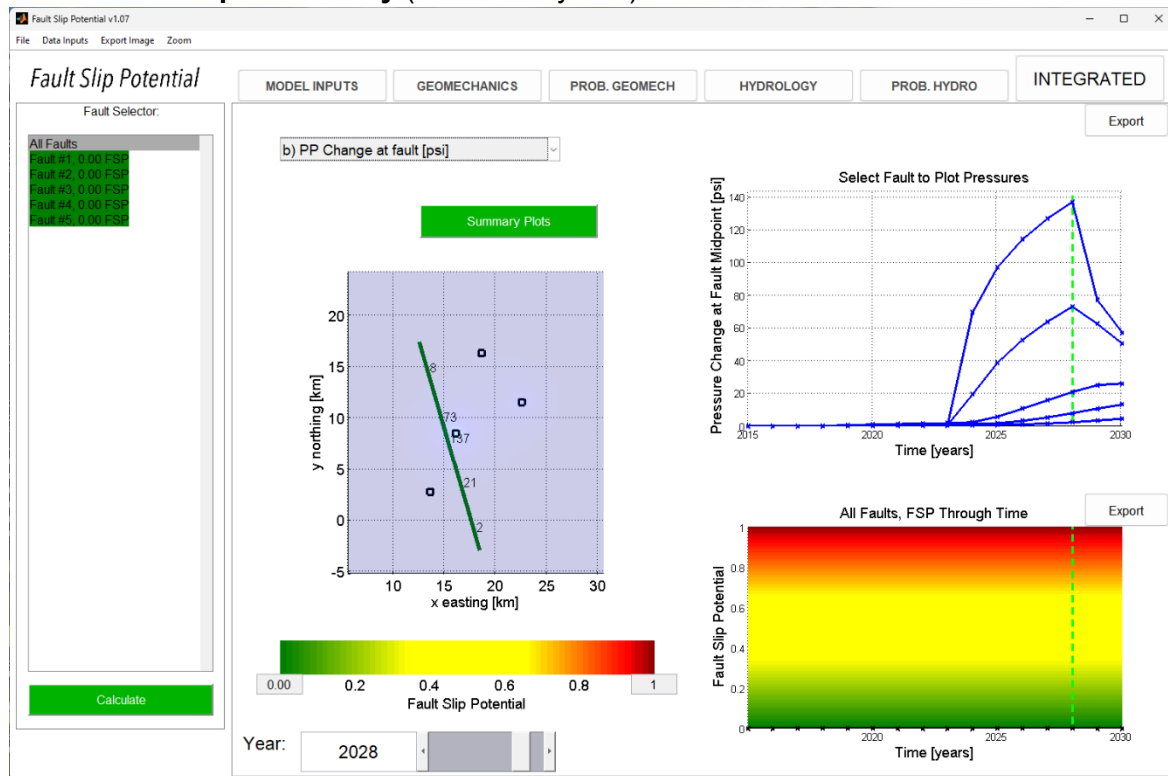
Year 5 Hydrology



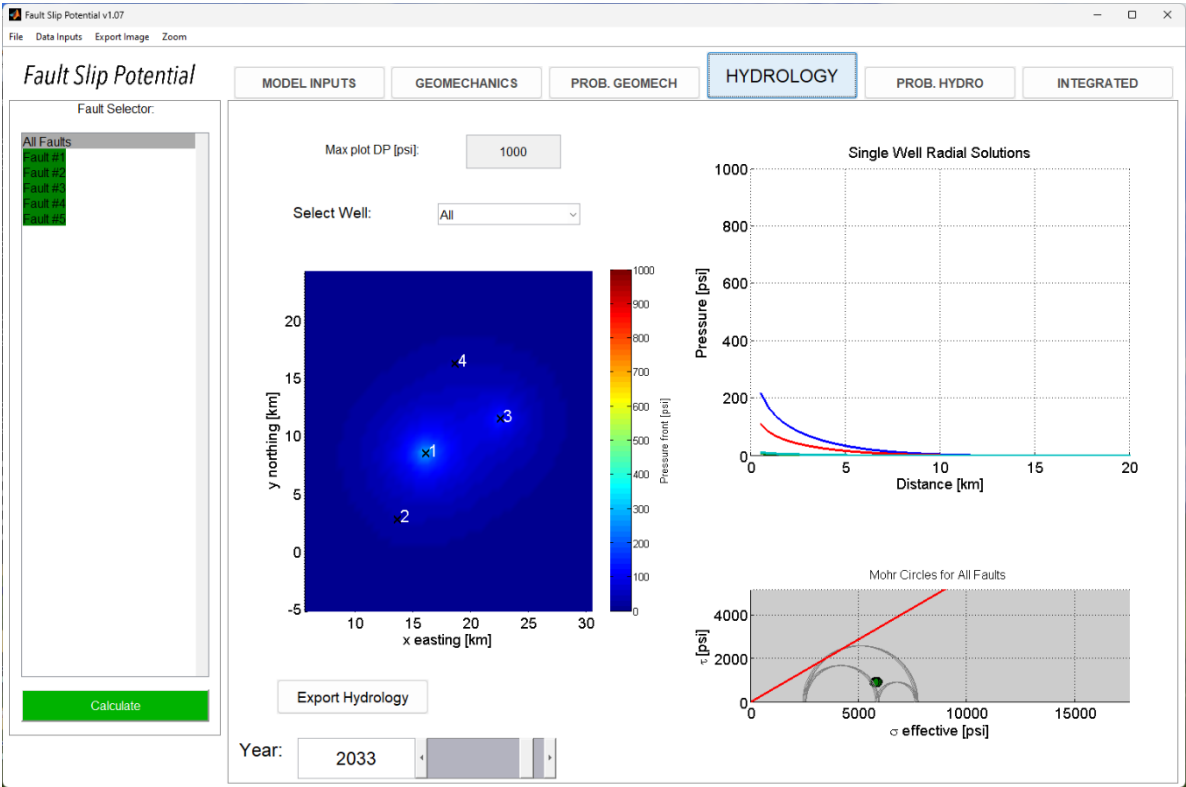
Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



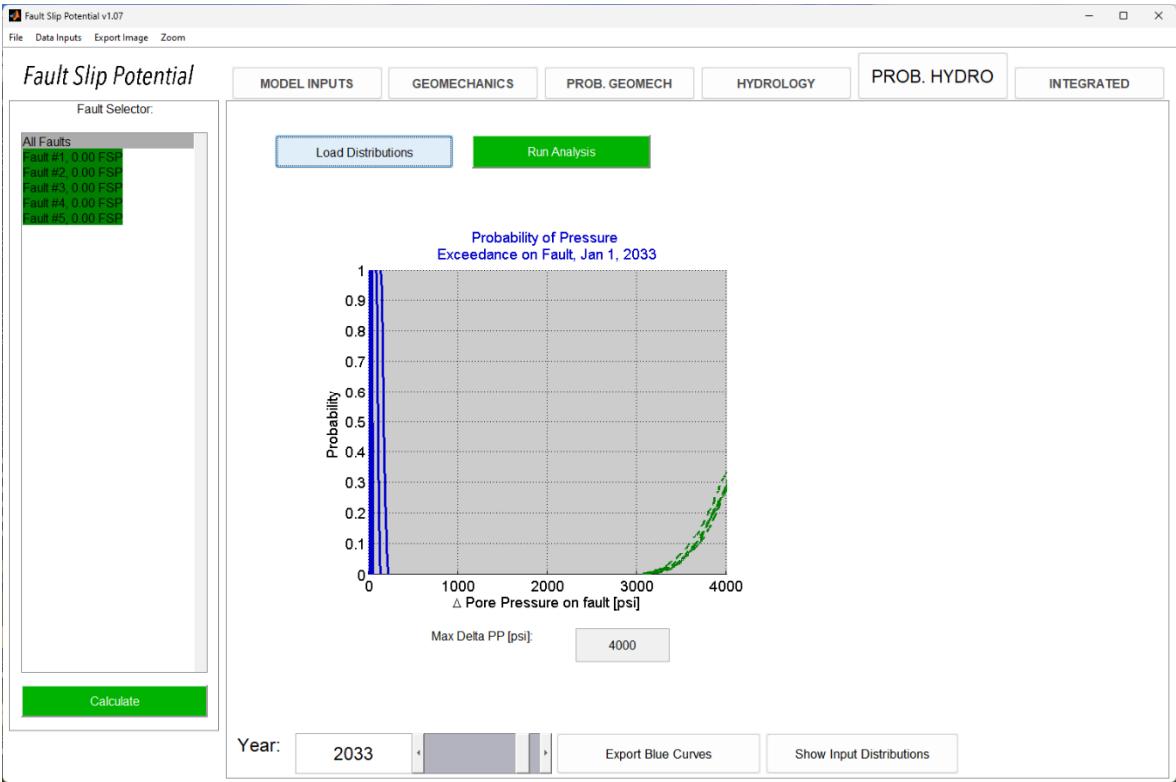
## Year 5 Fault Slip Probability (0% after 5 years)



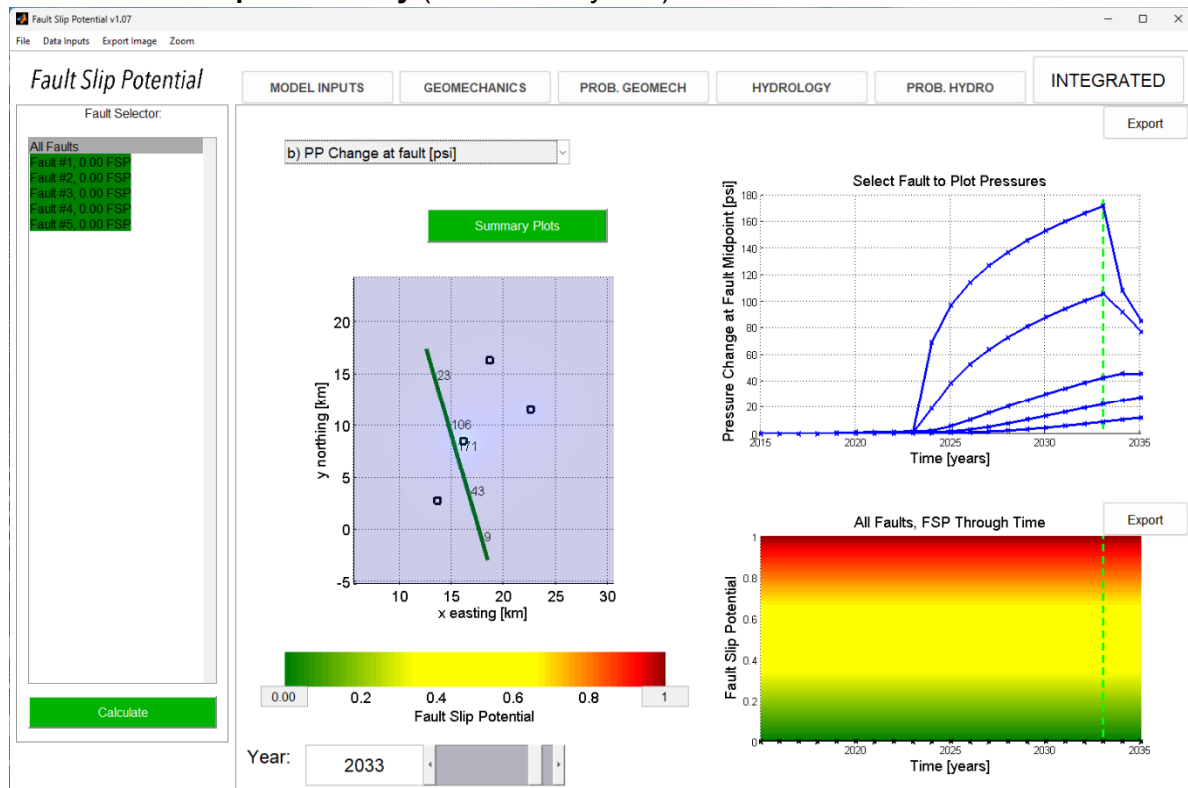
Year 10 Hydrology



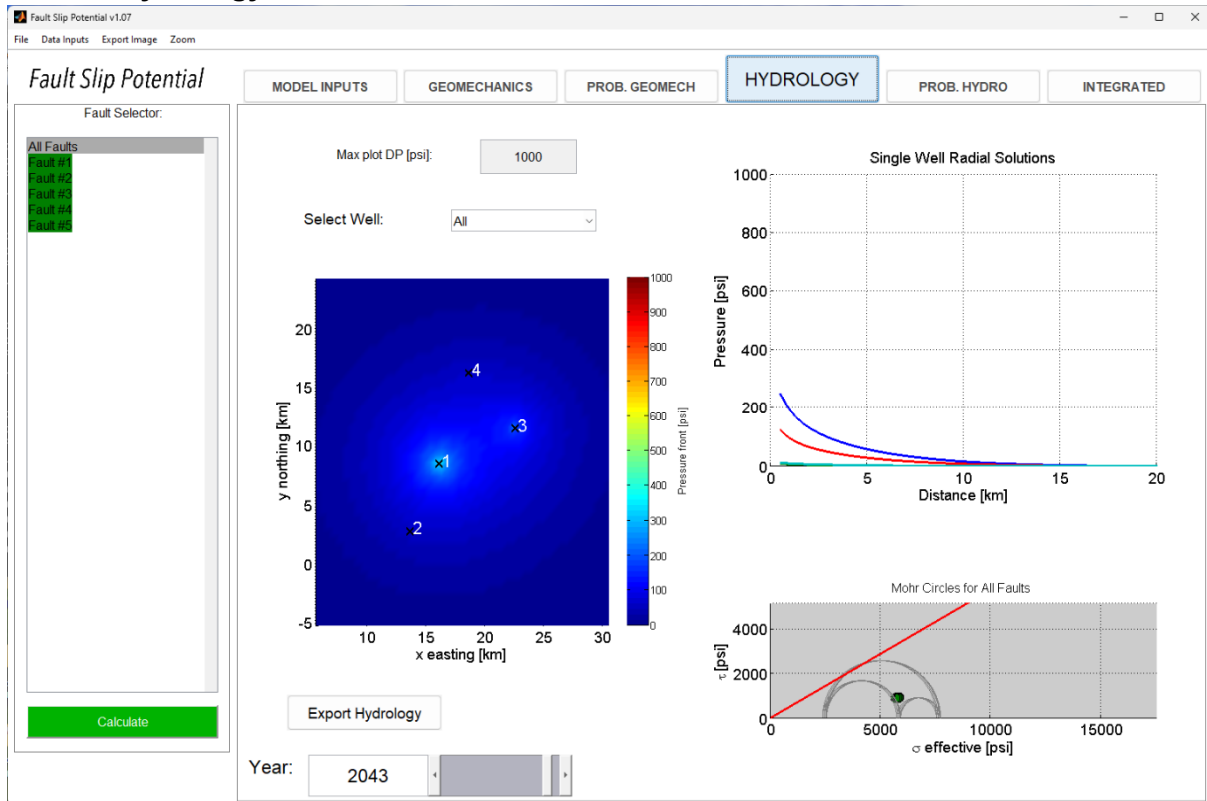
Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



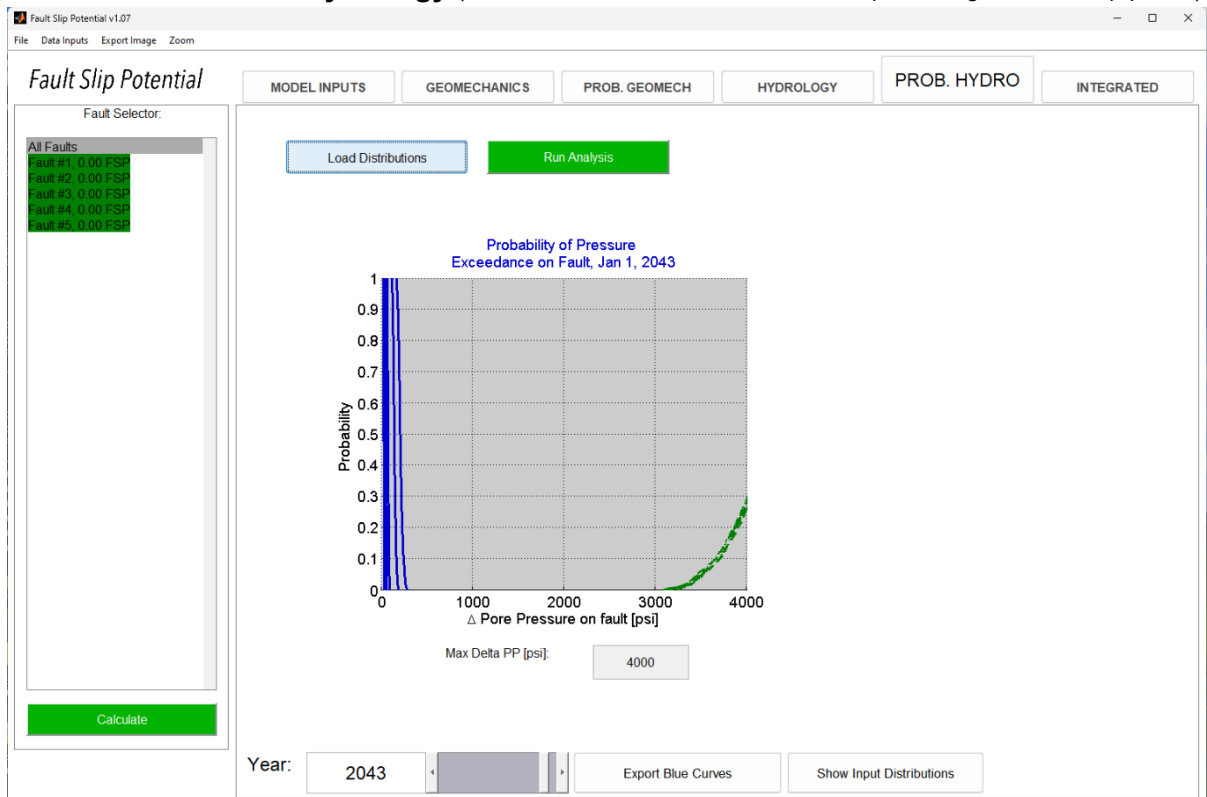
## Year 10 Fault Slip Probability (0% after 10 years)



## Year 20 Hydrology

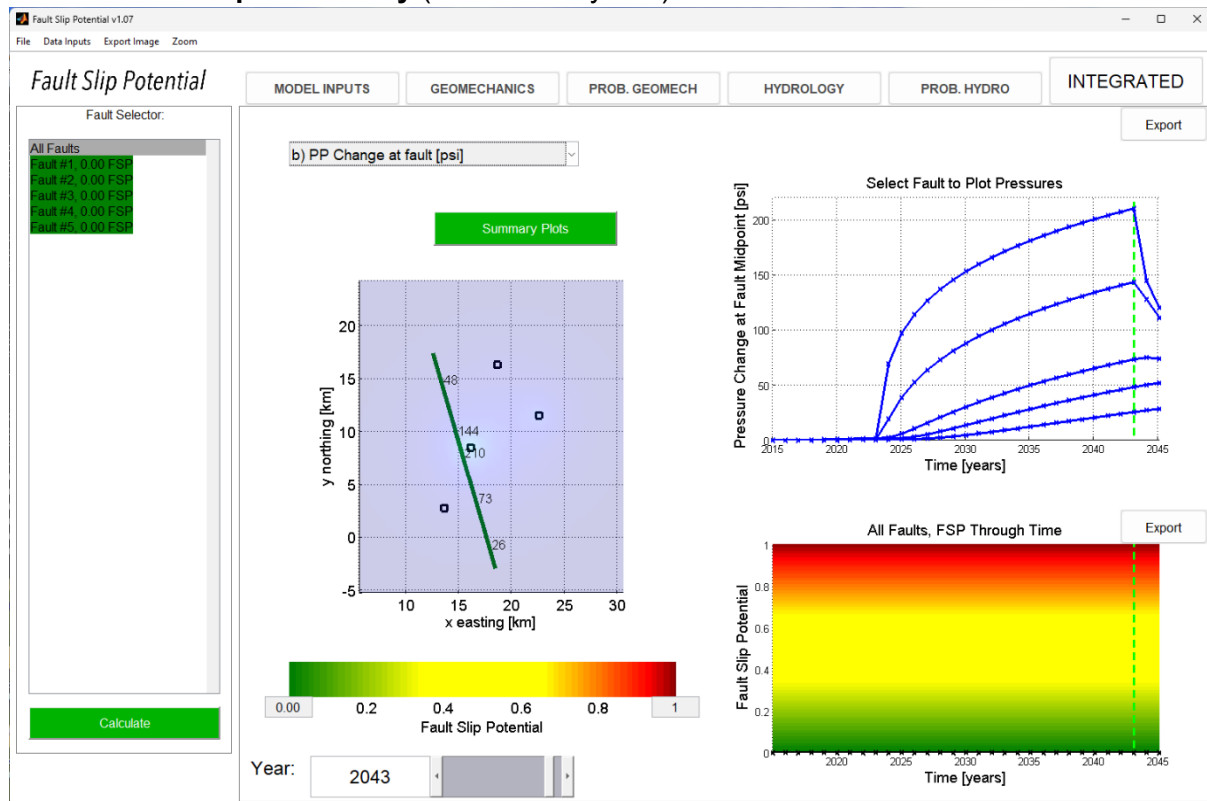


## Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)

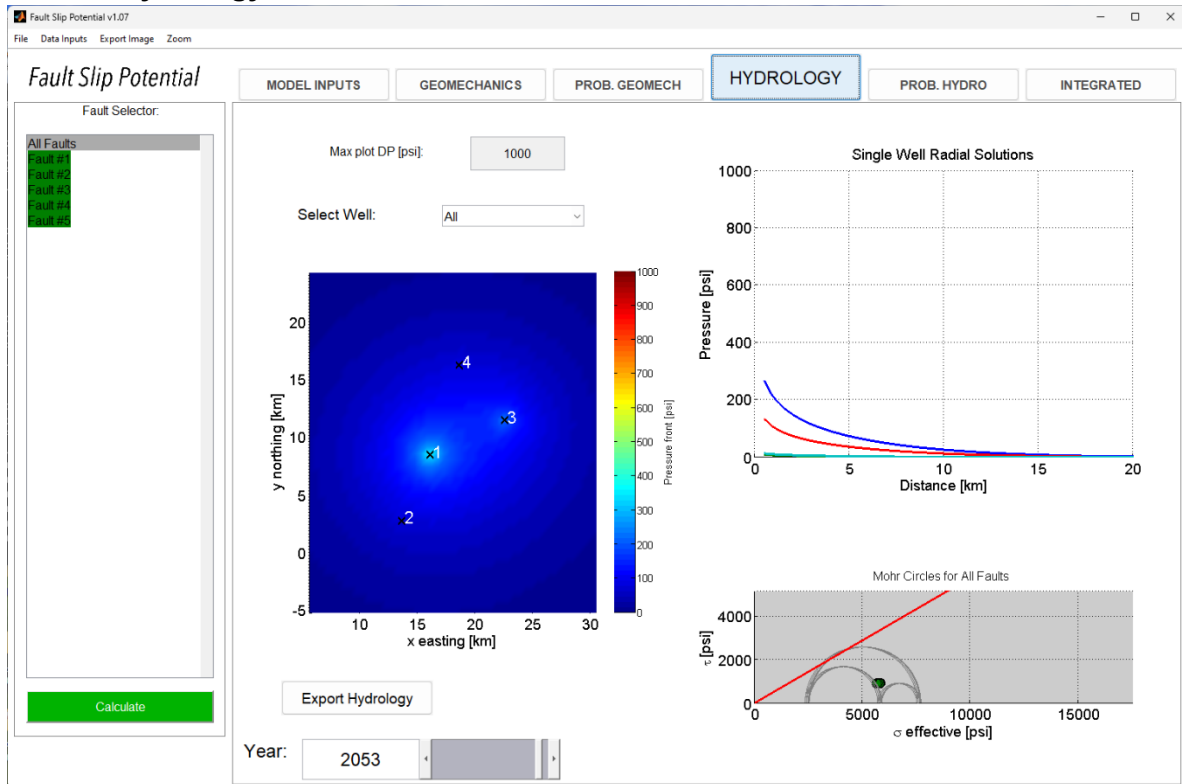




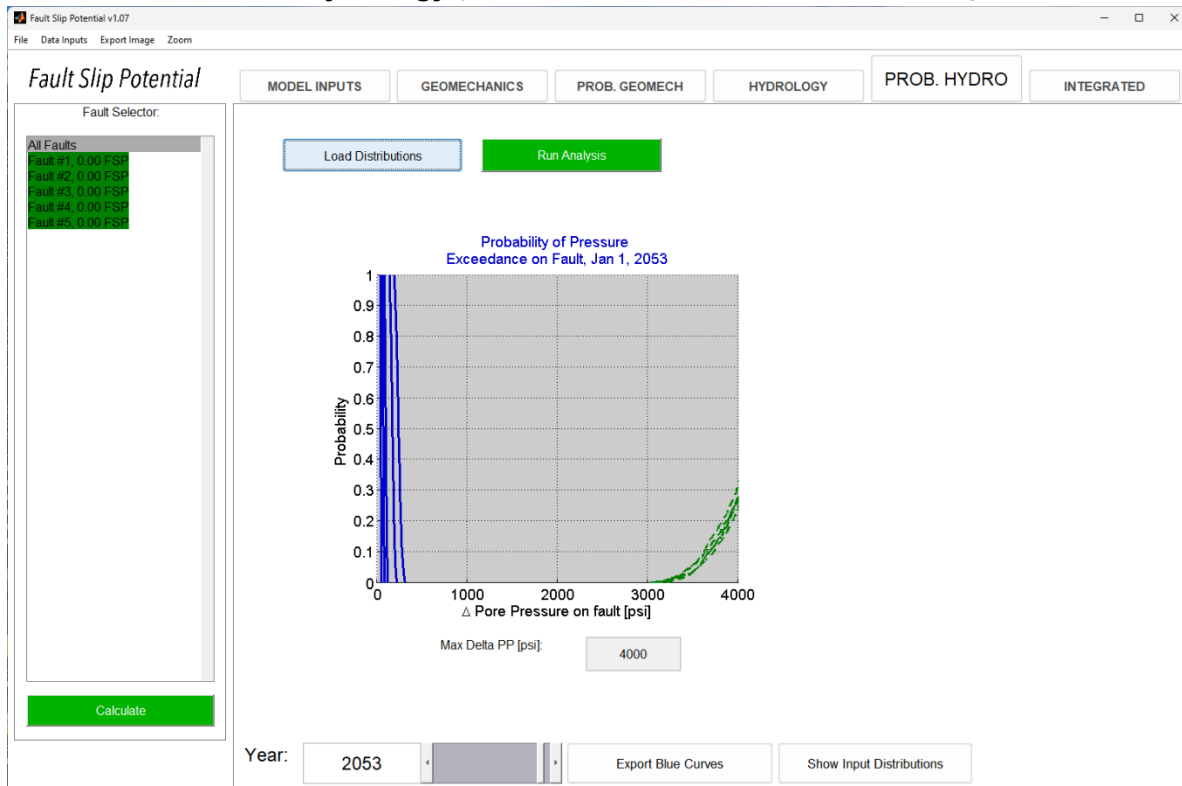
## Year 20 Fault Slip Probability (0% after 20 years)



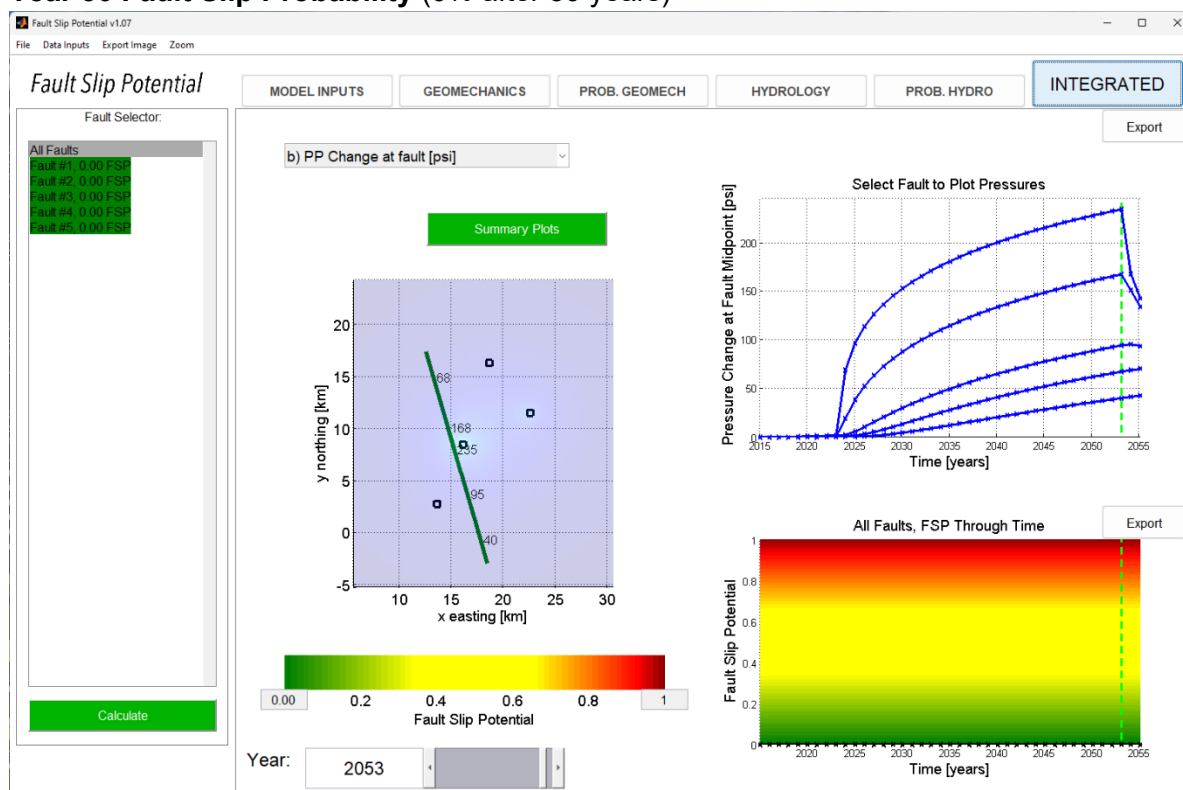
## Year 30 Hydrology



## 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



# 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 00683 POD1</a>	CP	LE		3	3	4	25	19S	34E	639530	3610685*	120	28	92
<a href="#">CP 00806 POD1</a>	CP	LE		4	4	04	19S	34E	635109	3617151*		50		
<a href="#">CP 00811 POD1</a>	CP	LE		4	4	09	19S	34E	635132	3615542*		50		
<a href="#">CP 00875</a>	CP	LE		3	4	3	05	19S	34E	632592	3617013*	200		
<a href="#">CP 01672 POD1</a>	CP	LE		1	3	1	36	19S	34E	638736	3610009	100		
<a href="#">L 04059</a>	L	LE		4	1	12	19S	34E	639146	3616412*		125	60	65
<a href="#">L 04723</a>	L	LE		1	1	1	11	19S	34E	637026	3616880*	145	123	22
<a href="#">L 06731</a>	L	LE		3	2	2	12	19S	34E	639844	3616727*	120	80	40
<a href="#">L 07213</a>	L	LE		4	1	4	31	19S	34E	631700	3609351*	160	110	50
<a href="#">L 10347</a>	L	LE		2	3	03	19S	34E	635909	3617566*		130		
<a href="#">L 10380</a>	L	LE		4	4	4	02	19S	34E	638428	3617102*	153	100	53
<a href="#">L 12103 POD1</a>	L	LE		3	3	4	02	19S	34E	637920	3617173	120		

Average Depth to Water: **83 feet**

Minimum Depth: **28 feet**

Maximum Depth: **123 feet**

Record Count: 12

PLSS Search:

Township: 19S

Range: 34E

\*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.

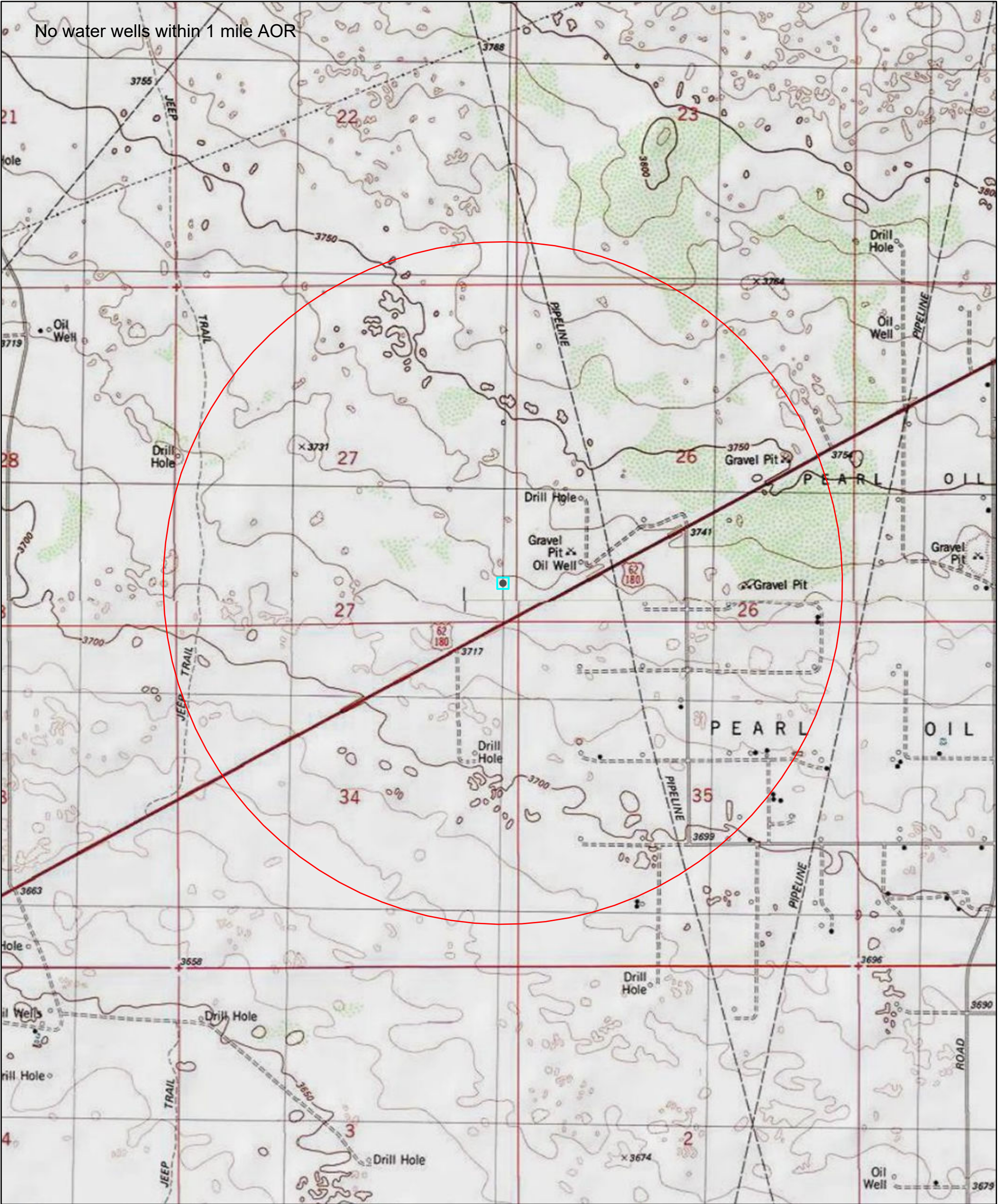
5/23/23 5:57 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



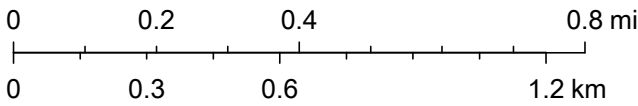
XI. Water Wells Within 1 Mile - Belated Federal SWD #1



5/23/2023, 7:03:27 PM

SiteBoundaries

1:20,214



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**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
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**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 241747

CONDITIONS

Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241	OGRID: 328259
	Action Number: 241747
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

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

## **Tab 2: Direct Written Testimony of Sean Puryear and Exhibits**

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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO.**

**CASE NO. 23808  
(BELATED)**

**DIRECT WRITTEN TESTIMONY OF SEAN PURYEAR**

Sean Puryear hereby states and declares as follows:

1. I am over the age of 18, I am the Chief Executive Officer of Permian Oilfield Partners, LLC ("Permian"), and I have personal knowledge of the matters stated herein.
2. I have worked for Permian since April 2019.
3. I have previously testified before the Oil Conservation Division ("Division") and my credentials have been accepted as a matter of record.
4. To briefly reiterate my credentials, I graduated from Texas Tech University with a Bachelor of Science in Petroleum Engineering, after which I've held several positions with a major area operator in southeastern New Mexico as a senior-level drilling engineer and operations supervisor, a senior production engineer and operations supervisor, a completions engineer, the senior water 2systems manager and engineer, along with several field engineering positions where I was directly involved in the drilling and completion of over 100 horizontal oil and gas wells in southeastern New Mexico.
5. As Chief Executive Officer of Permian, my responsibilities include management and oversight of drilling saltwater disposal wells, as well as design and construction of produced water infrastructure.

**Exhibit 2**



6. I have been directly involved in the drilling and completion of 15 saltwater disposal wells, both before I worked with Permian and with Permian.

7. My area of responsibility at Permian includes the area of Lea County in New Mexico.

8. I am familiar with the application Permian filed in this matter and I am familiar with the saltwater disposal well that is the subject of the application.

9. I submit the following information in support of Permian's request for an order approving drilling of a saltwater disposal well in Lea County, New Mexico. I understand that this document, the information contained herein, and the exhibits attached to this document constitute my direct testimony in this case.

10. Permian proposes to drill the Belated Federal SWD Well #1 well (the "Well") for the purpose of operating a produced water disposal well.

11. Permian intends to operate the Well and it will be a commercial disposal well. The Well is necessary to support oil and gas development in this area.

12. Permian originally filed this application as an administrative application on July 10, 2023. I submitted the application, which included all of the information required by the Division's form C-108. I did not receive any notifications from the Division that the application was incomplete.

13. It is my understanding that there is a 15-day deadline for submitting protests on administrative applications. Near the end of July, I believed the protest period had ended and no protests had been lodged because we had not been notified of any protests within the protest period.

14. Unbeknownst to Permian, Matador Production Company, MRC Permian Company, and MRC Hat Mesa, LLC (“Matador”) protested the Well on July 18, 2023. Permian only found about the protest a month later, on August 18, 2023. Matador’s protest and the Division’s email to Permian are included as **Exhibit 2.A**.

15. As far as I know, the Matador protest is the only protest that was submitted to OCD for the Well.

16. Based on the Division’s August 18 email and my understanding of Division practice, Permian has two options once Matador protested its administrative application—resolution of the protest either through negotiations with Matador or through a hearing.

17. Although I was hopeful that we could reach an agreement with Matador, given the time that had already passed between when Matador submitted its protest and when I learned of the protest and the amount of time between filing an application for hearing and being placed on an examiner hearing docket, Permian decided to also file a hearing application.

18. Permian began engaging in discussions with Matador on August 30 and filed its hearing application on September 5 to allow for an October 5 hearing.

19. **Tab 1** is the hearing application in Case No. 23808 that Permian filed with the Division. The application includes the C-108 that Permian submitted for administrative approval on July 10, 2023. In preparing for this hearing, I have reviewed the C-108 and did not identify any changes that require amending the C-108 or affect the accuracy of statements in the C-108.

20. In this case, Permian seeks an order from the Division to drill the Belated Federal SWD Well #1 at a surface location 637’ from the South line and 208’ from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the

purpose of operating a produced water disposal well. I have excerpted the C-102 from the C-108 and have attached it as **Exhibit 2.B**.

21. Permian is committed to putting the Well into service in the very near term. Permian has met with the Bureau of Land Management ("BLM"), which is the surface and mineral estate owner. Permian submitted the notice of staking to BLM on August 11, 2023 and Permian and BLM completed the on-site visit on September 5, 2023. BLM has confirmed the viability of the proposed location of the Well. See **Exhibits 2.C and 2.D**.

22. Permian's intent is to commence drilling the Well in August 2024 and to commence injection in November 2024.

23. Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet.

24. Permian requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

25. Permian requests approval of a maximum injection pressure of 2,927 psi for the well, which is consistent with the .2 gradient that the Division follows.

26. The C-108 discusses the well construction data information and includes the well bore diagram.

27. For the Division's convenience, I have excerpted the well construction data and the well bore design from the C-108 and have attached those as **Exhibit 2.E**.

28. Permian is proposing a four-string casing for the Well with the surface and intermediate strings being cemented to surface and the liner being cemented to the liner top, with excess cement being circulated to surface. The surface string should isolate any known freshwater zones. The first intermediate string will isolate the salt section, and the second

intermediate string will isolate the lower-pressure reservoir rock above the Wolfcamp. The fourth string, which is a liner, will be set to the top of the Devonian and tied back into the 7-5/8 200 feet, and this string will isolate the shales above the Devonian and below the Third Bone Spring.

29. The casing we are proposing for each depth is consistent with industry standards and is consistent with casings that Permian has used in other Devonian disposal wells. It is also consistent with what I understand other operators to be proposing for similar high volume SWDs, with similar tubing sizes. In my opinion, the casing is designed to and will protect freshwater resources.

30. We also intend to use a 7-inch tubing with premium gas tight connections and an insert fiberglass liner. It crosses over to a 5-1/2-inch tubing with premium gas tight connections as well with the same type of fiberglass insert liner. We intend to circulate cement off of the liner top and run a cement bond log to verify bond.

31. I have included a wellbore schematic that presents a visual representation of the casing, cement, and tubing.

32. We will also employ an inconel permanent-set packer that will help ensure the isolation of hydrocarbons and fresh water.

33. Permian will run a compensated neutron/gamma ray log from surface to TD upon well completion and Permian will submit the logs to the Division.

34. In terms of monitoring the Well after it is operational, we intend to employ a SCADA system that will constantly monitor the tubing pressure and the annular pressure outside of the tubing to ensure continuous mechanical integrity.

35. For the Division's convenience, I have excerpted the maps that identify wells within the 1- and 2-mile area of review ("AOR") from the C-108 and have attached them as **Exhibit 2.F**.

36. These maps identify wells within a one-mile radius of the Well. I have listed those wells on page 3 of Exhibit 2.F.

37. There are three injection wells within the AOR but none of them target the Devonian; their injection zone is the Queen formation.

38. I also reviewed whether there are any fresh water wells within the AOR. I did not find any freshwater wells within the AOR. I have excerpted the Water Well map and New Mexico Office of State Engineer Water Column/Average Depth to Water information as **Exhibit 2.G**. We included this information to confirm that the Well's surface setting depth was deeper than any known sources of fresh water.

39. I did submit a compatibility analysis derived from information from the NMT Go-Tech website, which is marked as **Exhibit 2.H**. The formation waters are compatible with the Devonian formation water.

40. As part of the administrative application process, I sent notice to affected parties. I followed OCD's regulations, in Rule 19.15.26.8(B), which requires notice to the surface owner and to each leasehold operator, and to any other affected person as that term is defined Rule 19.15.2.7(8). A query of the surface owner, all wellbores, operators, lease holders and mineral owners was run for the 1 mile AOR. Following the guidance of the NMOCD, POP sent notice to the surface owner on which the proposed well is located and all wellbore owners and designated operators within the proposed wells 1 mile area of review.

41. The parties to whom we sent notice of the administrative application was sent is included in the C-108. We also published notice and that publication is in the C-108.

42. Permian chose this particular location for this Well because of customer disposal needs offsetting the Well, it is near Highway 62/180, Permian plans to construct pipeline infrastructure that would intersect this location—Permian's plan is to have the main segment installed and online by April 2024. Permian's proposed location is also consistent with NMCOD's SWD spacing requirements, and BLM has confirmed that the surface location is viable. In addition, as discussed in more detail in Mr. Fisher's testimony, this location presents no induced seismicity concerns based on Permian's induced seismicity study.

43. Permian has the technical, operational, and other experience and qualifications to comply with NMOCD's regulatory requirements for SWDs. In fact, Permian agreed to modify certain of its older orders to include the Division's conditions contained in newer orders regarding seismicity.

44. It is my understanding that Matador has some concerns regarding seismic risks from the Well. Permian offered to and wanted to discuss Matador's concerns with Matador but to date Matador has not agreed to a meeting date nor is Matador willing to share any details of its seismic information with Permian.

45. Gary Fisher, President of Permian, prepared a seismicity study using publicly available information which found a zero percent chance of induced seismicity. Mr. Fisher's written testimony discusses that study in more detail. From Permian's perspective, based on Permian's modeling and the information available to Permian, there is little, if any risk, of fault slip from this Well.

46. It is my understanding that Matador may have 3D seismic information for this area. I understand that Matador may have licensing or confidentiality reasons for not sharing all of its 3D data with Permian. In an effort to understand Matador's concerns, our counsel asked Matador's counsel if Matador would be willing to share limited views of its seismic data or other information, so that Permian could verify the faulting or other issues of concern for Matador. So far, Matador has not provided any such data or information.

47. In an attempt to independently evaluate Matador's asserted seismicity concerns, I reviewed the 3D seismic database library on the Seismic Exchanges website to determine whether 3D seismic information exists near the Well. There is no nearby 3D seismic information available for Permian to purchase. *See Exhibit 2.I.* For this reason, it would not have provided any further information regarding faults of concern, if any, near the Well.

48. Given that there is no relevant 3D seismic information that Permian can purchase or access, Permian has had no way to verify or evaluate Matador's asserted concerns. If Matador has 3D seismic information, it should present that information to Permian and to the Division. Otherwise, the information Permian has provided shows little to no risk of induced seismicity, and apart from unsubstantiated statements, Matador has not demonstrated otherwise.

49. I personally reached out to Matador on a number of occasions to offer to meet with Matador and I asked our counsel to do the same, which she did. While Matador would initially agree to have a conversation with Permian, Matador would never commit to a date to meet. When Matador suggested a joint meeting with the Division, Permian agreed to pursue that option. Although Permian was clear that it would meet with Matador and the Division any day or time that worked for Matador and the Division, Matador never proposed any dates to meet with the Division.



50. In recent discussions with Matador's counsel, Matador has stated that it is only willing to meet with the Division after October 19. It is my understanding that Matador is only willing to agree to an in person meeting with the Division, even though we could meet with the Division virtually to discuss Matador's concerns.

51. I was also surprised that Matador protested seven of Permian's proposed SWDs. Permian's wells are approximately 43 miles apart. It seems unlikely to me that Matador has 3D seismic along this entire 43-mile length and unlikely that Matador has concerns about seismic that span this entire length. In my opinion, Matador's indiscriminant protest of nine Permian applications seems like a delay tactic.

52. It is also my understanding that Matador wants to have a series of meetings with the Division, which, in my opinion, is not necessary based on the information Permian currently has which shows no likelihood of induced seismicity. Permian's desire has been and continues to be to understand Matador's concerns and address them. Matador to date has not shared any concrete information or evidence with Permian that causes Permian to rethink the viability of the Well.

53. In my opinion, Matador is trying to delay meeting with Permian and has been trying to delay the hearing in this case, which I do not understand. If Matador has concerns with the location of the Well and the potential for induced seismicity, it makes sense to me that Matador would want to discuss those concerns with Permian and with the Division in a timely fashion and not continue to delay.

54. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.

55. In my opinion, the granting of Permian's application is in the interests of conservation and the prevention of waste. The Well will provide much needed capacity for produced water, which will, in turn, support oil and gas operators' ability to produce oil and gas. Conversely, constraints on disposal could lead to negative impacts on operators in the area and their ability to effectively and efficiently produce resources that they have under lease.

56. The attached exhibits were prepared by me, or compiled from company business records, or were prepared at my direction.

*[Signature page follows]*

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: October 12, 2023



---

Sean Puryear

# Protested SWD Application

By Matador; received 7/18/2023

**From:** [Kyle Perkins](#)  
**To:** [Engineer, OCD, EMNRD](#)  
**Subject:** [EXTERNAL] Matador's Protest of Permian Oilfield's Proposed Belated Federal SWD #1  
**Date:** Tuesday, July 18, 2023 4:27:45 PM  
**Attachments:** [image001.jpg](#)  
[3207\\_001.pdf](#)

**CAUTION:** This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Ladies and Gentlemen,

Matador Production Company and MRC Delaware Resources, LLC hereby protest Permian Oilfield Partners, LLC's proposed Belated Federal SWD #1, located in Section 27, Township 19 South, Range 34 East, Lea County, NM . A copy of the referenced application is attached for your convenience.

Please advise if this case is set for hearing.

Best regards,

**Kyle Perkins**  
**Vice President & Assistant General Counsel**  
**Regulatory and Operational Matters**

**Matador Resources Company**  
**5400 LBJ Freeway, Suite 1500**  
**Dallas, TX 75240**  
**(972) 371-5202 (office)**  
[kperkins@matadorresources.com](mailto:kperkins@matadorresources.com)



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**From:** [Goetze, Phillip, EMNRD](#)  
**To:** [Sean Puryear](#)  
**Cc:** [Kyle Perkins](#); [Gebremichael, Million, EMNRD](#); [Wrinkle, Justin, EMNRD](#); [Powell, Brandon, EMNRD](#); [Fuge, Dylan, EMNRD](#); [Moander, Chris, EMNRD](#); [Tremaine, Jesse, EMNRD](#)  
**Subject:** Notification of Protests for Permian Oilfield Partners C-108 Applications by Matador Production  
**Date:** Friday, August 18, 2023 1:13:00 PM

RE: C-108 Applications for: Belated Federal SWD #1; Beat the Punch Federal SWD #1; Tardy Federal SWD #1; Overdue Federal SWD #1; Thompson 35 Federal SWD #1; Browning 26 Federal SWD #1; and Ruger 31 Federal SWD #1.

Mr. Puryear:

The OCD was notified by Matador Production Company and MRC Permian Company that they are protesting seven C-108 applications recently submitted by Permian oilfield Partners, LLC ("Permian"). This operator has been identified as an affected person for the proposed UIC Class II wells being considered. Because of the protest, seven applications can no longer be reviewed administratively. Permian is being notified that for these applications to advance in the review process that there are two options: resolution of the protest through hearing or a negotiated resolution with the protesting party that results in the withdrawal of the protest. If the protest is withdrawn, then the application can be reviewed administratively. The applications will be retained pending a hearing or other resolution.

**Applications that are subjects of this notification:**

C-108 Application Well Name	OCD Appl. No.	Assigned SWD No.	Date of Protest
Belated Federal SWD #1	pMSG2319954754	SWD-2545	7/18/2023
Beat the Punch Federal SWD #1	pMSG2319953455	SWD-2544	7/18/2023
Tardy Federal SWD #1	pMSG2319956571	SWD-2546	7/18/2023
Overdue Federal SWD #1	pMSG2319959255	SWD-2548	7/18/2023
Thompson 35 Federal SWD #1	pMSG2323043390	SWD-2554	7/26/2023
Browning 26 Federal SWD #1	pMSG2323038040	SWD-2551	7/26/2023
Ruger 31 Federal SWD #1	pMSG2323040020	SWD-2552	7/26/2023

**Protest contact information:**

Kyle Perkins  
Vice President & Assistant General Counsel  
Regulatory and Operational Matters  
Matador Resources Company  
5400 LBJ Freeway, Suite 1500  
Dallas, TX 75240  
(972) 371-5202 (office)  
[kperkins@matadorresources.com](mailto:kperkins@matadorresources.com)

Please continue to provide OCD with information regarding the status of these applications including any resolution of protests. Please contact the UIC Group with any questions regarding this matter.  
PRG

Phillip R. Goetze  
UIC Group Manager  
Oil Conservation Division  
Energy, Minerals and Natural Resources Department  
Horizon Building  
8801 Horizon Blvd, Suite 260, Albuquerque, NM 87113  
Direct: 505.660.8274  
Email: [phillip.goetze@emnrd.nm.gov](mailto:phillip.goetze@emnrd.nm.gov)





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**District II**  
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**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 254716

CONDITIONS

Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241	OGRID: 328259
	Action Number: 254716
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	8/21/2023

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
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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>BELATED 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>3725'</b>

10 Surface Location

UL or lot no. <b>P</b>	Section <b>27</b>	Township <b>19S</b>	Range <b>34E</b>	Lot Idn	Feet from the <b>637</b>	North/South line <b>SOUTH</b>	Feet From the <b>208</b>	East/West line <b>EAST</b>	County <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.

<p>(C) S 89°17'01" W 5283.59'</p> <p>(D)</p> <p>16</p> <p>GEODETIC DATA NAD 83 GRID - NM EAST</p> <p>SURFACE LOCATION N: 592296.3 - E: 785531.7 LAT: 32.6257672° N LONG: 103.5401562° W</p> <p>CORNER DATA NAD 83 GRID - NM EAST</p> <p>A: FOUND BRASS CAP "1912" N: 591625.3 - E: 780463.0</p> <p>B: FOUND BRASS CAP "1912" N: 594257.9 - E: 780440.4</p> <p>C: FOUND BRASS CAP "1912" N: 596892.0 - E: 780418.4</p> <p>D: FOUND BRASS CAP "1912" N: 596958.0 - E: 785700.5</p> <p>E: FOUND BRASS CAP "1912" N: 591661.5 - E: 785745.0</p> <p>F: FOUND BRASS CAP "1912" N: 591634.7 - E: 783105.5</p> <p>27</p> <p>N 00°28'46" W 2634.73'</p> <p>N 00°29'34" W 2633.22'</p> <p>S 89°47'44" E 2643.02'</p> <p>S 89°25'03" W 2640.16'</p> <p>208'</p> <p>S.L.</p> <p>637'</p> <p>(E)</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 <i>Gary Fisher</i> Date 7/6/2023</p> <p>Printed Name Gary Fisher</p> <p>E-mail Address gfisher@popmidstream.com</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>05/30/2023 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>14400 Certificate Number</p> <p>DALE E. BELL NEW MEXICO 14400 05/31/2023 PROFESSIONAL SURVEYOR</p>
---	--	--

Job No.: LS23050490



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## NOS Detail Report

10/12/2023

**NOS ID:** 10400093876**Submission Date:** 08/15/2023

Highlighted data  
reflects the most  
recent changes  
[Show Final Text](#)

**Operator Name:** PERMIAN OILFIELD PARTNERS LLC**Well Name:** BELATED FEDERAL SWD**Well Number:** 1**Well Type:** INJECTION - DISPOSAL**Well Work Type:** Drill

### Section 1 - General

**NOS ID:** 10400093876**Submission Date:** 08/15/2023**BLM Office:** CARLSBAD**User:** Gary Fisher**Title:** President**Federal/Indian NOS:** FED**Is the first lease penetrated for production Federal or Indian?** FED**Surface access agreement in place?****Allotted?****Reservation:****Agreement in place?** NO**Federal or Indian agreement:****Agreement number:****Agreement name:****Keep application confidential?****Designated Agent?** N**NOS Operator:** PERMIAN OILFIELD PARTNERS LLC**Operator letter of**

### Designated Agent Info

**Agent Address:****Agent PO Box:****Agent city:****State:****Zip:****Agent Phone:****Agent Internet Address:**

### Operator Info

**Operator Organization Name:** PERMIAN OILFIELD PARTNERS LLC**Operator Address:** 726 EAST MICHIGAN DRIVE, SUITE 206**Operator PO Box:****Operator City:** HOBBS**State:** NM**Zip:** 88241**Operator Phone:** (817)600-8772**Operator Internet Address:**

# Exhibit 2.C

Page 1 of 4

**Section 2 - Well Information****Well Name:** BELATED FEDERAL SWD**Well Number:** 1**Well API Number:****Field/Pool or Exploratory?** Field and Pool**Field Name:** SWD; DEVONIAN-SILURIAN**Pool Name:**  
NULL\_POOL\_NAME\_VALUE**Use Existing Well Pad?** N**New surface disturbance?****Type of Well Pad:** SINGLE WELL**Multiple Well Pad Name:****Number:****Well Class:** DIRECTIONAL**Number of Legs:** 1**Well Type:** INJECTION - DISPOSAL**Describe Well Type:****Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:**

### Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83

**Vertical Datum:** NAVD88

**Survey number:**

**Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	637	FSL	208	FEL	19S	34E	27	Tract P	32.6257672	-103.5401562	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 04452	3725	0	0	N
KOP Leg #1																	0	0	
PPP Leg #1-1																	0	0	
EXIT Leg #1																	0	0	
BHL Leg #1	637	FSL	208	FEL	19S	34E	27	Tract P	32.6257672	-103.5401562	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 04452	-12116	15841	15841	N

### Section 4 - Other

**Anticipated Bottom Hole Pressure:** 7414

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** N

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen sulfide drilling operations plan required?** N

**Hydrogen sulfide drilling operations plan:**

**Will existing roads be used?** N

**Existing Road Map:**

**Existing Road Purpose:**

**ROW(s) Exist?**



Do the existing roads need to be improved?

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Will new roads be needed?

New Road Map:

New road type:

Access miscellaneous information:

Access Additional Attachment:

Reserve Pit being used? NO

Reserve pit length (ft.):

Reserve pit width (ft.):

Reserve pit depth (ft.):

Reserve pit volume (cu. yd.):

Survey Plat or Map:

Belated\_Federal\_SWD\_1\_C\_102\_20230814110951.pdf

SUPO Additional Information:

Other SUPO

Other Attachment:

General Comments:

AFMSS Portal Modules Finder Forms Knowledge Base Help Desk

GARY FISHER

NOS

Task Forwarding

Start Electronic

NOS Initiation

Name

Description

☐

NOS Process

Click to start a new Notice of Staking

Operator NOS Worklist

Operator My Running NOS Processes

Operator My Completed NOS Processes

Operator My Running NOS Processes

Quick Search

Monitor

	NOS ID	Operator	Create Date	BLM Office	Well Name/Well Number	Application Status	
	104000938		From: mm/dd/yyyy				
			To: mm/dd/yyyy				
✓	10400093878	PERMIAN OILFIELD PARTNERS LLC	2023-08-11 12:04	Carlsbad	OVERDUE FEDERAL SWD / 1	Submitted	
✓	10400093876	PERMIAN OILFIELD PARTNERS LLC	2023-08-11 11:41	Carlsbad	BELATED FEDERAL SWD / 1	Submitted	

Exhibit 2.D

III (A)

**WELL CONSTRUCTION DATA**

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26" Casing: 20" - 133# N-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1720'  
 Cement: 3208 sks - Class C + Additives (100% Excess)  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5" Casing: 13.375" - 68# HCP-110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 5409'  
 Cement: 2204 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25" Casing: 9.625" - 40# HCP110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 10979' ECP/DV Tool: 5509'  
 Cement: 1693 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #3 - (Liner)**

Hole Size: 8.75" Casing: 7.625" - 39# HCL-80 FJ Casing  
 Depth Top: 10779'  
 Depth Btm: 14639'  
 Cement: 237 sks - Class H + Additives  
 Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

Hole Size: 6.5" Depth: 15841'  
 Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594' Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 X/O Depth: 10779'  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14604' Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives

## III (A)

**WELLBORE SCHEMATIC**

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26"  
 Casing: 20" - 133# N-80 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 1720'  
 Cement: 3208 sks - Class C + Additives (100% Excess)  
 Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5"  
 Casing: 13.375" - 68# HCP-110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 5409'  
 Cement: 2204 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25"  
 Casing: 9.625" - 40# HCP110 BTC Casing  
 Depth Top: Surface  
 Depth Btm: 10979'  
 Cement: 1693 sks - Class C + Additives  
 Cement Top: Surface - (Circulate)  
 ECP/DV Tool: 5509'

**Intermediate #3 - (Liner)**

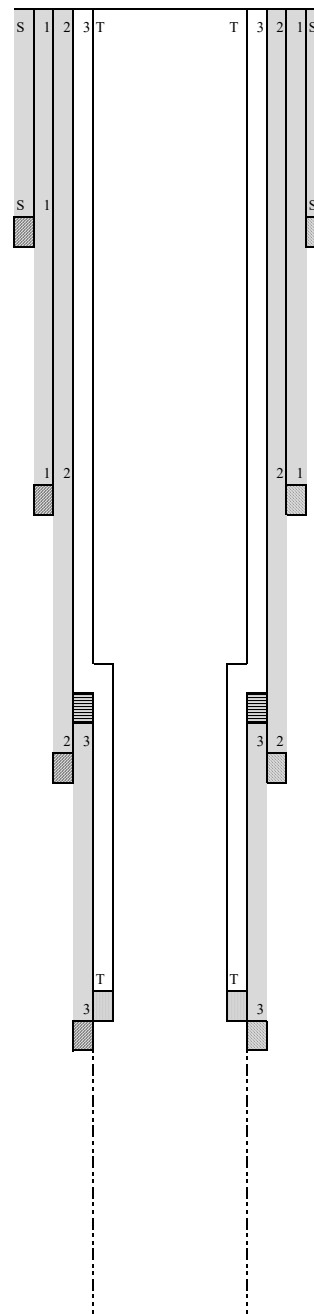
Hole Size: 8.75"  
 Casing: 7.625" - 39# HCL-80 FJ Casing  
 Depth Top: 10779'  
 Depth Btm: 14639'  
 Cement: 237 sks - Class H + Additives  
 Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

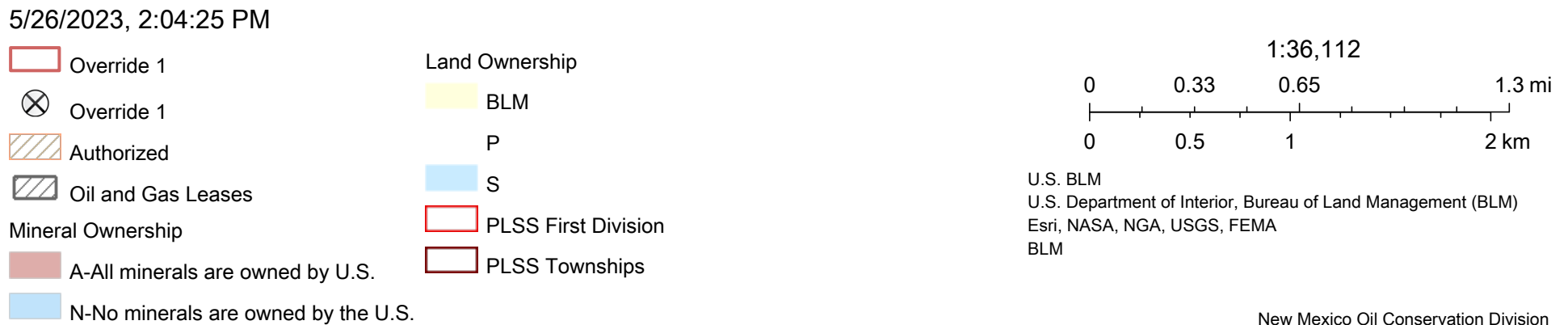
Hole Size: 6.5"  
 Depth: 15841'  
 Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594'  
 Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 X/O Depth: 10779'  
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
 Packer Depth: 14604'  
 Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
 Packer Fluid: 8.4 ppg FW + Additives

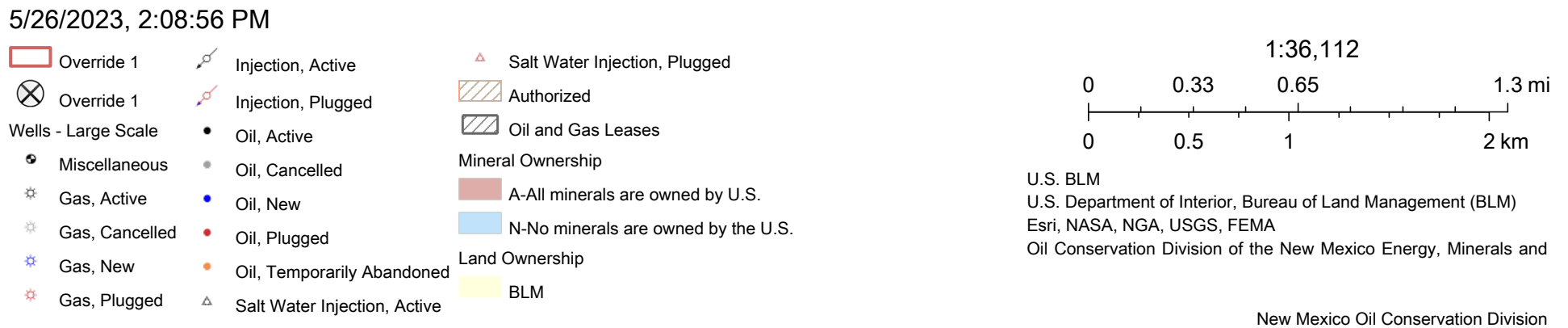


## Belated Federal SWD #1, 1 & 2 Mi AOR, Leases





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





V (c)

Belated 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	
30-025-34176	BXP Operating, LLC	MESCALERO RIDGE UNIT	#026	Oil	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1350 FNL 2570 FEL	G-35-19S-34E 1350 FNL 2570 FEL	QUEEN	5236	5236	
30-025-34164	BXP Operating, LLC	MESCALERO RIDGE UNIT	#025	Oil	Vertical	Active	35	T19S	R34E	J	J-35-19S-34E 2620 FSL 2620 FEL	J-35-19S-34E 2620 FSL 2620 FEL	QUEEN	5204	5204	
30-025-20694	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#357	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	B	B-35-19S-34E 660 FNL 1980 FEL	B-35-19S-34E 660 FNL 1980 FEL	QUEEN	5250	5250	
30-025-21857	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#263	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	O	O-26-19S-34E 330 FSL 1980 FEL	O-26-19S-34E 330 FSL 1980 FEL	QUEEN	5150	5150	
30-025-20692	BXP Operating, LLC	MESCALERO RIDGE UNIT	#354	Injection	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1980 FNL 1980 FEL	G-35-19S-34E 1980 FNL 1980 FEL	QUEEN	5260	5260	
30-025-22196	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#006	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	J	J-26-19S-34E 1650 FSL 1980 FEL	J-26-19S-34E 1650 FSL 1980 FEL	QUEEN	5160	5160	
30-025-20565	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#352	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 1980 FSL 1980 FEL	J-35-19S-34E 1980 FSL 1980 FEL	QUEEN	5268	5268	
30-025-23319	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 2310 FSL 1800 FEL	J-35-19S-34E 0 FSL 1800 FEL	BONE SPRING	13980	13980	
30-025-33662	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#040	Oil	Vertical	Cancelled Apd	26	T19S	R34E	O	O-26-19S-34E 1000 FSL 1400 FEL	O-26-19S-34E 1000 FSL 1400 FEL	QUEEN	6000	6000	
30-025-21859	BP AMERICA PRODUCTION COMPANY	MESCALERO RIDGE UNIT	#017	Salt Water Disposal	Vertical	Plugged, Site Released	35	T19S	R34E	G	G-35-19S-34E 1980 FNL 1650 FEL	G-35-19S-34E 1980 FNL 1650 FEL	SEVEN RIVERS	4040	4040	
30-025-33660	BXP Operating, LLC	MESCALERO RIDGE UNIT	#023	Oil	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 1300 FNL 1300 FEL	A-35-19S-34E 1300 FNL 1300 FEL	QUEEN	5215	5215	
30-025-33661	BXP Operating, LLC	MESCALERO RIDGE UNIT	#024	Oil	Vertical	Active	35	T19S	R34E	H	H-35-19S-34E 2620 FNL 1300 FEL	H-35-19S-34E 2620 FNL 1300 FEL	QUEEN	5200	5200	
30-025-21798	BXP Operating, LLC	MESCALERO RIDGE UNIT	#262	Oil	Vertical	Active	26	T19S	R34E	P	P-26-19S-34E 330 FSL 660 FEL	P-26-19S-34E 330 FSL 660 FEL	QUEEN	5150	5150	
30-025-21683	BXP Operating, LLC	MESCALERO RIDGE UNIT	#015	Injection	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 660 FNL 660 FEL	A-35-19S-34E 660 FNL 660 FEL	QUEEN	5135	5135	
30-025-39895	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#020D	Oil	Horizontal	Cancelled Apd	34	T19S	R34E	D	D-34-19S-34E 730 FNL 330 FWL	A-34-19S-34E 330 FNL 330 FEL	BONE SPRING	15397	10840	
30-025-42604	CIMAREX ENERGY CO.	MALLON 27 FEDERAL COM	#004H	Oil	Horizontal	New	27	T19S	R34E	M	M-27-19S-34E 305 FSL 450 FWL	E-27-19S-34E 1650 FNL 450 FWL	BONE SPRING	13970	10860	
30-025-30725	Contango Resources, LLC	STIVASON FEDERAL	#005	Oil	Vertical	Approved Temporary Abandonment	27	T19S	R34E	M	M-27-19S-34E 660 FSL 550 FWL	M-27-19S-34E 660 FSL 550 FWL	QUEEN	5115	5115	
30-025-30918	MERIT ENERGY COMPANY, LLC	WEST PEARL FEDERAL	#001	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	L	L-27-19S-34E 1980 FSL 660 FWL	L-27-19S-34E 1980 FSL 660 FWL	SEVEN RIVERS	5300	5300	
30-025-34678	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#014	Oil	Vertical	Cancelled Apd	27	T19S	R34E	M	M-27-19S-34E 660 FSL 660 FWL	M-27-19S-34E 660 FSL 660 FWL	BONE SPRING	10300	10300	
30-025-32654	BLACK HILLS GAS RESOURCES, INC.	MALLON 27 FEDERAL	#003	Oil	Vertical	Cancelled Apd	27	T19S	R34E	E	E-27-19S-34E 1980 FNL 660 FWL	E-27-19S-34E 1980 FNL 660 FWL	DELAWARE	8300	8300	
30-025-34300	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#003	Oil	Vertical	Cancelled Apd	27	T19S	R34E	E	E-27-19S-34E 1980 FNL 660 FWL	E-27-19S-34E 1980 FNL 660 FWL	DELAWARE	8300	8300	
30-025-32605	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#001	Salt Water Disposal	Vertical	Plugged, Site Released	34	T19S	R34E	D	D-34-19S-34E 660 FNL 990 FWL	D-34-19S-34E 660 FNL 990 FWL	DELAWARE	6306	6306	
30-025-32616	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#005	Oil	Vertical	Cancelled Apd	34	T19S	R34E	E	E-34-19S-34E 1980 FNL 660 FWL	E-34-19S-34E 1980 FNL 660 FWL	BONE SPRING	10300	10300	
30-025-34349	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled Apd	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FWL	N-27-19S-34E 990 FSL 1980 FWL	DELAWARE	6200	6200	
30-025-32652	BLACK HILLS GAS RESOURCES, INC.	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled Apd	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FWL	N-27-19S-34E 990 FSL 1980 FWL	DELAWARE	6200	6200	
30-025-32815	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#013	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	K	K-34-19S-34E 1980 FSL 1980 FWL	K-34-19S-34E 1980 FSL 1980 FWL	DELAWARE	6270	6270	
30-025-32617	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#006	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	C	C-34-19S-34E 660 FNL 1980 FWL	C-34-19S-34E 660 FNL 1980 FWL	DELAWARE	8312	8312	
30-025-41808	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#003H	Oil	Horizontal	Active	27	T19S	R34E	N	N-27-19S-34E 260 FSL 2080 FWL	C-22-19S-34E 2316 FSL 1923 FWL	BONE SPRING	18260	10798	
30-025-32615	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#004	Oil	Vertical	Cancelled Apd	34	T19S	R34E	F	F-34-19S-34E 1980 FNL 1980 FWL	F-34-19S-34E 1980 FNL 1980 FWL	DELAWARE	6200	6200	
30-025-33737	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#004	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	O	O-27-19S-34E 660 FSL 1980 FEL	O-27-19S-34E 660 FSL 1980 FEL	QUEEN	7100	7100	
30-025-42315	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#002H	Oil	Horizontal	Active	27	T19S	R34E	O	O-27-19S-34E 330 FSL 1980 FEL	J-22-19S-34E 2310 FSL 1900 FEL	BONE SPRING	18297	10752	
30-025-32784	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#009	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	G	G-34-19S-34E 1980 FNL 1980 FEL	G-34-19S-34E 1980 FNL 1980 FEL	DELAWARE	10395	10395	
30-025-32783	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#008	Oil	Vertical	Active	34	T19S	R34E	J	J-34-19S-34E 1980 FSL 1980 FEL	J-34-19S-34E 1980 FSL 1980 FEL	DELAWARE	6300	6300	
30-025-32786	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#011	Oil	Vertical	Active	34	T19S	R34E	B	B-34-19S-34E 990 FNL 1650 FEL	B-34-19S-34E 990 FNL 1650 FEL	DELAWARE	7044	7044	
30-025-32653	CIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	P	P-27-19S-34E 660 FSL 990 FEL	P-27-19S-34E 660 FSL 990 FEL	DELAWARE	7100	7100	
30-025-32782	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#007	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FNL 860 FEL	H-34-19S-34E 1980 FNL 860 FEL	DELAWARE	6300	6300	
30-025-32785	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#010	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	P	P-34-19S-34E 660 FSL 660 FEL	P-34-19S-34E 660 FSL 660 FEL	DELAWARE	6340	6340	
30-025-39894	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#019H	Oil	Horizontal	Active	34	T19S	R34E	H	H-34-19S-34E 1690 FNL 720 FEL	E-34-19S-34E 1990 FNL 4915 FEL	BONE SPRING	15025	10875	
30-025-42212	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#001H	Oil	Horizontal	Active	27	T19S	R34E	P	P-27-19S-34E 330 FSL 660 FEL	I-22-19S-34E 2310 FSL 660 FEL	BONE SPRING	18255	10795	
30-025-32606	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#002	Oil	Vertical	Active	34	T19S	R34E	A	A-34-19S-34E 660 FNL 660 FEL	A-34-19S-34E 660 FNL 660 FEL	DELAWARE	6313	6313	
30-025-32607	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#003	Oil	Vertical	Active	34	T19S	R34E	I	I-34-19S-34E 1980 FSL 660 FEL	I-34-19S-34E 1980 FSL 660 FEL	DELAWARE	6300	6300	
30-025-42804	NADL AND GUSSMAN HEYCO, LLC	HARLEQUIN 27 22 FEDERAL	#001C	Oil	Horizontal	Cancelled Apd	27	T19S	R34E	H	H-27-19S-34E 2591 FNL 510 FEL	I-22-19S-34E 2311 FSL 510 FEL	BONE SPRING	15190	10800	
30-025-40135	CIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#020H	Oil	Horizontal	Active	34	T19S	R34E	A	A-34-19S-34E 380 FNL 330 FEL	D-34-19S-34E 760 FNL 4925 FEL	BONE SPRING	15352	10870	
30-025-21793	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FNL 660 FEL	H-34-19S-34E 1980 FNL 660 FEL	QUEEN	5150	5150	
30-025-40086	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#007H	Oil	Horizontal	Active	35	T19S	R34E	D	D-35-19S-34E 585 FNL 330 FWL	A-35-19S-34E 574 FNL 4940 FWL	BONE SPRING	15359	10913	
30-025-33046	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#019	Oil	Vertical	Cancelled Apd	35	T19S	R34E	D	D-35-19S-34E 550 FNL 330 FWL	D-35-19S-34E 550 FNL 330 FWL	DELAWARE	6300	6300	
30-025-40084	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005H	Oil	Horizontal	Cancelled Apd	35	T19S	R34E	L	L-35-19S-34E 1980 FSL 330 FWL	I-35-19S-34E 1980 FSL 510 FEL	BONE SPRING	15349	10990	
30-025-32983	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#001	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FNL 660 FWL	D-35-19S-34E 660 FNL 660 FWL	DELAWARE	8330	8330	
30-025-32984	BLACK HILLS GAS RESOURCES, INC.	MALLON 35 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1650 FNL 660 FWL	E-35-19S-34E 1650 FNL 660 FWL	DELAWARE	8300	8300	
30-025-27899	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	E	E-26-19S-34E 1980 FNL 660 FWL	E-26-19S-34E 0 FNL 660 FWL	QUEEN	5200	5200	
30-025-32985	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#003	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 2310 FSL 660 FWL	L-35-19S-34E 2310 FSL 660 FWL	DELAWARE	8330	8330	
30-025-40085	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006H	Oil	Horizontal	Cancelled Apd	35	T19S	R34E	E	E-35-19S-34E 2310 FNL 330 FWL	H-35-19S-34E 1980 FNL 510 FEL	BONE SPRING	15362	10990	
30-025-21267	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#013	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 1980 FSL 990 FWL	L-35-19S-34E 1980 FSL 990 FWL	QUEEN	5200	5200	
30-025-21613	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#014	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FNL 990 FWL	D-35-19S-34E 660 FNL 990 FWL	QUEEN	5050	5050	
30-025-21266	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#012	Injection	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1980 FNL 990 FWL	E-35-19S-34E 1980 FNL 990 FWL	QUEEN	5200	5200	
30-025-22333	DEVON ENERGY PRODUCTION COMPANY, LP	MESCALERO RIDGE UNIT	#007	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	M	M-26-19S-34E 990 FSL 990 FWL	M-26-19S-34E 990 FSL 990 FWL	QUEEN	5031	5031	
30-025-22449	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#008	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	L	L-26-19S-34E 1980 FSL 990 FWL	L-26-19S-34E 1980 FSL 990 FWL	QUEEN	5035	5035	
30-025-32987	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005C	Oil	Vertical	Cancelled Apd	35	T19S	R34E	C	C-35-19S-34E 400 FNL 1680 FWL	C-35-19S-34E 400 FNL 1680 FWL	DELAWARE	8200	8200	
30-025-32988	CIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006F	Oil	Vertical	Cancelled Apd	35	T19S	R34E	F	F-35-19S-34E 1720 FNL 1680 FWL	F-35-19S-34E 1720 FNL 1680 FWL	DELAWARE	8200	8200	
30-025-21072	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#005	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	F	F-35-19S-34E 1980 FNL 1980 FWL	F-35-19S-34E 0 FNL 1980 FWL	QUEEN	5286	5286	
30-025-22005	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	N	N-26-19S-34E 330 FSL 1980 FWL	N-26-19S-34E 0 FSL 1980 FWL	QUEEN	5220	5220	
30-025-20693	LINN OPERATING, LLC	MESCALERO RIDGE UNIT	#356	Injection	Vertical	Plugged, Site Released	35	T19S	R34E	C	C-35-19S-34E 660 FNL 1980 FWL	C-35-19S-34E 660 FNL 1980 FWL	QUEEN	5250	5250	
30-025-27204	BXP Operating, LLC	MESCALERO RIDGE UNIT	#269	Oil	Vertical	Active	26	T19S	R34E	N	N-26-19S-34E 330 FSL 2030 FWL	N-26-19S-34E 330 FSL 2030 FWL	QUEEN	5218		



# 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 00683 POD1</a>	CP	LE		3	3	4	25	19S	34E	639530	3610685*	120	28	92
<a href="#">CP 00806 POD1</a>	CP	LE		4	4	04	19S	34E	635109	3617151*		50		
<a href="#">CP 00811 POD1</a>	CP	LE		4	4	09	19S	34E	635132	3615542*		50		
<a href="#">CP 00875</a>	CP	LE		3	4	3	05	19S	34E	632592	3617013*	200		
<a href="#">CP 01672 POD1</a>	CP	LE		1	3	1	36	19S	34E	638736	3610009	100		
<a href="#">L 04059</a>	L	LE		4	1	12	19S	34E	639146	3616412*		125	60	65
<a href="#">L 04723</a>	L	LE		1	1	1	11	19S	34E	637026	3616880*	145	123	22
<a href="#">L 06731</a>	L	LE		3	2	2	12	19S	34E	639844	3616727*	120	80	40
<a href="#">L 07213</a>	L	LE		4	1	4	31	19S	34E	631700	3609351*	160	110	50
<a href="#">L 10347</a>	L	LE		2	3	03	19S	34E	635909	3617566*		130		
<a href="#">L 10380</a>	L	LE		4	4	4	02	19S	34E	638428	3617102*	153	100	53
<a href="#">L 12103 POD1</a>	L	LE		3	3	4	02	19S	34E	637920	3617173	120		

Average Depth to Water: **83 feet**

Minimum Depth: **28 feet**

Maximum Depth: **123 feet**

Record Count: 12

PLSS Search:

Township: 19S

Range: 34E

\*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.

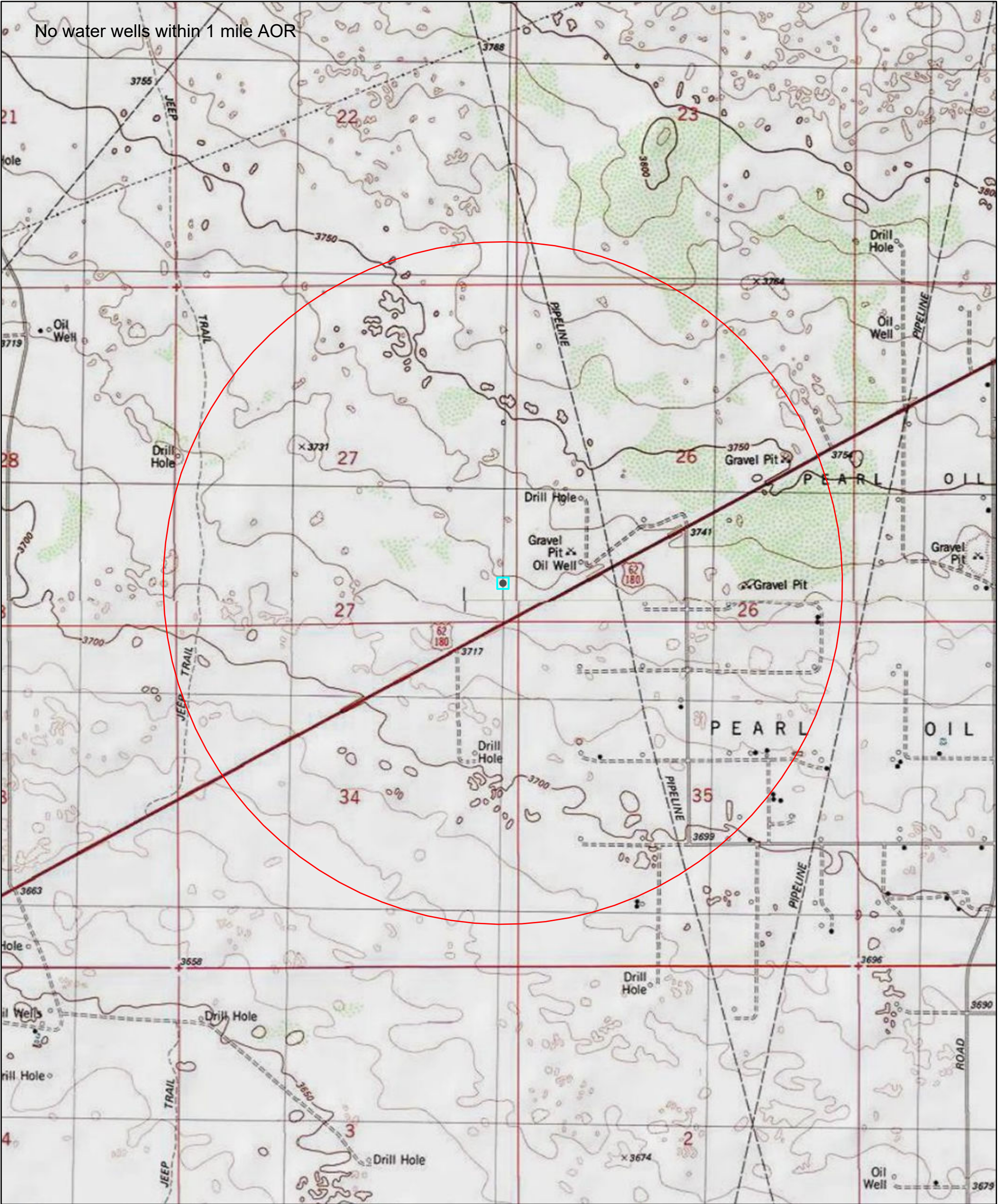
5/23/23 5:57 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



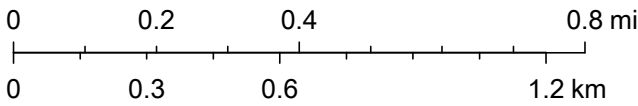
XI. Water Wells Within 1 Mile - Belated Federal SWD #1



5/23/2023, 7:03:27 PM

 SiteBoundaries

1:20,214



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U.S. Department of Energy Office of Legacy Management



VII (4)

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

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	Eddy
State	NM	NM	NM	NM
Field				
Formation	Delaware	Avalon Upper	3rd Bone Spring Sand	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.  
 Beat The Punch Federal SWD #1  
 798' FNL, 128' FEL  
 Sec. 25, T20S, R32E, Lea Co. NM  
 Lat 32.549220° N, Lon -103.711560° W  
 GL 3571', RKB 3601'

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



Exhibit 2.1



## **Tab 3: Direct Written Testimony of Gary Fisher**

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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO.**

**CASE NO. 23808  
(BELATED)**

**DIRECT WRITTEN TESTIMONY OF GARY FISHER**

Gary Fisher hereby states and declares as follows:

1. I am over the age of 18, I am the President of Permian Oilfield Partners, LLC (“Permian”), and I have personal knowledge of the matters stated herein.
2. I have worked for Permian since November 2018.
3. I have previously testified before the Oil Conservation Division (“Division”) and my credentials as an expert in geology log analysis and fault slip analysis have been accepted as a matter of record.
4. To briefly reiterate my credentials, I have over 30 years experience in the oil and gas field, including more recently, injection of produced water. I have a degree in mechanical engineering from the University of Southern California. After graduation, I worked for Schlumberger where I did open-hole logging, log analysis, interpretation of geology logs, etc. I was then employed by Numar Corporation (Halliburton) where my responsibilities again included logging and log analysis, geology, and geologic interpretations for customers. After that, I was employed by Core Labs where I was involved in fracture diagnostics, especially as related to hydraulic fracturing and correlation with microseismic. Immediately before joining Permian, I worked for Pioneer Energy Services where I did open-hole log analysis, geology, internal

instruction for the employees and also to other customers on log interpretation, geology, completion designs, many of which were for saltwater disposal. While at Pioneer, I was also involved in several special projects, one of which was an induced seismicity study in Oklahoma regarding all the Arbuckle injection problems. I authored the saltwater disposal logging and the MIT, or mechanical integrity test, procedures, which were incorporated by the Oklahoma Corporation Commission guidelines.

5. I have been a member of the Society of Petrophysicists and Well Log Analysts and I have been a member of the Society of Petroleum Engineers for 21 years. I have also been a contributing editor to the AESC green book. I have also been a member- presenter with the SPWLA Nuclear Special Interest Group.

6. In sum, my experience focuses on geology log analysis, fracture propagation, and induced seismicity.

7. As President of Permian, my responsibilities include management and oversight of drilling saltwater disposal wells.

8. I have prepared and submitted geology and seismic studies for Permian applications in numerous hearing examiner cases and in numerous administrative applications.

9. The Division has accepted the studies I have prepared in support of Permian applications.

10. I have been directly involved in the permitting, drilling and/or completion of approximately 50 saltwater disposal wells, both before I worked with Permian and with Permian.

11. My area of responsibility at Permian includes the area of Lea County in New Mexico.

12. I am familiar with the application Permian filed in this matter and I am familiar with the saltwater disposal well that is the subject of the application.

13. I submit the following information in support of Permian's request for an order approving drilling the Belated Federal SWD Well #1 in Lea County, New Mexico. I understand that this document, the information contained herein, and the exhibits attached to this document constitute my direct testimony in this case.

14. Permian proposes to drill the Belated Federal SWD Well #1 at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet.

15. I reviewed the geology of this area and prepared a study of the geology. The geology summary I prepared was submitted with the C-108, and I have excerpted that information as **Exhibit 3.A**.

16. Based on my geology study, I have concluded that the Silurian-Devonian formation is well suited for SWD purposes for several reasons. First, there have been a number of successfully drilled and operated Devonian wells in this area.

17. Second, the thickness of the injection zone is approximately 1,260 feet, which makes it well suited for the volumes and pressure Permian is requesting. The Devonian consists of dolomitic and limestone carbonates & chert and the Silurian consists of Fusselman dolomite.

18. 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.

19. Permeabilities in the Devonian do not necessarily correlate to high porosity. It is expected that the Devonian will be fractured, and the high porosity (10%) intervals can have similar permeabilities to the low porosity (2-3%) intervals. A conservative average permeability of 20 mD is used for fault slip analysis purposes, with an average porosity of 5.4% used based on log data from similar wells in the region.

20. Third, there are very strong upper and lower confining zones. The Woodford Shale is a very strong upper bound. The lower confining zones include the Upper Ordovician Montoya, which is very tight lined. 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. Below the Montoya is the Simpson, which is mostly shale, and will act as an additional barrier to keep injected fluids from penetrating the Cambrian or Bliss or Precambrian rocks.

21. The Upper Devonian Woodford shale in this area is approximately 158 feet thick.

22. The Upper Ordovician Montoya in this area is approximately 400 feet thick.

23. The Simpson in this area is approximately 500 feet thick.

24. In sum, 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.

25. I also analyzed whether there is risk to freshwater resources if the Well is drilled and concluded that there is no risk due to the Well's casing design, as well as the permeability barriers above the injection zone.

26. I examined available geologic and engineering data and found no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water. *See Exhibit 3.B* attached hereto, which is excerpted from the C-108.

27. In my opinion, operating the Well will not impact the correlative rights of mineral owners for several reasons. First, I analyzed whether there are any productive shales in the injection interval, and there are none. Second, I concluded that there is no risk to hydrocarbons above the injection interval, such as the Wolfcamp or Bone Spring because the Woodford will act as an upper hydraulic seal to the injection, and also the casing design takes that into account, and the cement job will seal that off.

28. I also prepared a statement regarding seismicity, which was included in the C-108, and which I have revised as discussed in herein.

29. The Well is not located within any current Seismicity Response Area.

30. The Seismicity Statement I prepared essentially models the probability of fault slip—fault slip is the displacement or movement of rock on each side of a fault. Fault slip potential or probability is the likelihood of a seismic event.

31. I undertook two analyses as part of the Seismicity Statement—a “desktop” review and modeling the fault slip potential.

32. As part of the desktop review, I reviewed the USGS and TexNext databases which showed no historic seismic activity >M2.0 in the area (5.64 mile radius, 25 sq. mile) of the Well,



with one M2.2 event recorded 5.6 miles southeast of the Well in August 2021. I also reviewed the USGS Quaternary Fault & Fold database, which shows no quaternary faults in the nearby area.

33. 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. I correlated fault data 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.

34. Based on this desktop review, I concluded the closest known fault is approximately 0.6 miles to the west of the Well. 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.

35. While Permian does not have 2D or 3D seismic data, and as Mr. Puryear testified none exists that is available for Permian to acquire, I have no reason to doubt the location of the closest fault based on the materials I reviewed.

36. I understand that Matador has asserted it has 3D seismic in this area but Matador has not shared that information or any conclusions Matador has reached from that data with Permian. If Matador has additional information on faults in this area, I would be happy to discuss that information with Matador and we have offered to meet with Matador any time they are available, but to date, Matador has not been willing to meet with us.

37. To model the fault slip potential, I used a publicly available version of the Stanford Center for Induced and Triggered Seismicity Fault slip Potential (“FSP”) software tool. The

Stanford FSP tool has been used by Permian and other SWD operators to prepare seismic studies presented to the Division and the Division has accepted the use of this modeling tool. In fact, the Stanford FSP analysis has been widely accepted as a modeling tool for probabilistically screening faults near injection wells.

38. The FSP tool models fault slip potential based on a number of inputs, including the thickness of the injection zone, the injection rate, the porosity, friction coefficients, fluid densities, viscosities, the location and orientation of the closest fault, etc.

39. One of the assumptions for the modeling is the injection from the proposed Well and other wells. When I prepared my original Seismicity Statement, I included injection from the proposed Well (at maximum injection of 50,000 bbl/day), the Quail 16 State SWD #9 (at its average injection rate), and the Coombes SWD (30,000 bbl/day rate). I have prepared a revised Seismic Statement, attached as **Exhibit 3.C**, which includes three additional existing injection wells (the Wildrye Fee SWD #1, the Wild Cobra 1 State SWD #2, and the Libby Berry Fee SWD #2). I used these wells' average injection rates. I also included Permian's proposed Overdue Federal SWD #1 at its maximum injection rate.

40. The inputs I used are included in Exhibit 3.C.

41. I also wanted to model a "worst-case" scenario, so I set some of the specification to show the maximum pressure, which would only occur if all of the fluid was injected straight down through the Montoya, through the Simpson, through the Ellenburger, all the way down into the basement faults. As I testified above, there are no known faults in this area in the Devonian-Silurian, but for purposes of the PFS, I assumed that faults penetrated the Devonian-Silurian injection zone. Again, this is a worst case scenario.

42. I modeled FSP and probabilistic hydrology over time as shown in the screen shots in Exhibit 3.C. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years.

43. The addition of the Wildrye Fee SWD #1, the Wild Cobra 1 State SWD #2, the Libby Berry Fee SWD #2, and Permian's proposed Overdue Federal SWD #1 did not change the modeling results— the probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years.

44. I attest that the information provided herein is correct and complete to the best of my knowledge and belief.

45. In my opinion, the granting of Permian's application is in the interests of conservation and the prevention of waste. The Well will provide much needed capacity for produced water, which will, in turn, support oil and gas operators' ability to produce oil and gas. Conversely, constraints on disposal could lead to negative impacts on operators in the area and their ability to effectively and efficiently produce resources that they have under lease.

46. The attached exhibits were prepared by me, or compiled from company business records, or were prepared at my direction.

*[Signature page follows]*

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: October 12, 2023

  
\_\_\_\_\_  
Gary Fisher

**VIII:**

1. 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>	1,695	2,161	466
<b>Salado</b>	2,161	3,438	1,277
<b>Delaware</b>	5,459	8,216	2,757
<b>Bone Spring</b>	8,216	10,929	2,713
<b>Wolfcamp</b>	10,929	12,222	1,293
<b>Lwr. Mississippian</b>	13,867	14,446	579
<b>Woodford</b>	14,446	14,604	158
<b>Devonian</b>	14,604	15,505	901
<b>Fusselman (Silurian)</b>	15,505	15,866	361
<b>Montoya (U. Ordovician)</b>	15,866	16,266	400
<b>Simpson (M. Ordovician)</b>	16,266	16,766	500

2. Regional shallow fresh water in the Quaternary is known to exist at depths less than 200'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 14,404'. There is no USDW present below the injection interval.



**Item XII. Affirmative Statement**

Re: C-108 Application for Authorization to Inject  
Permian Oilfield Partners, LLC  
Belated Federal SWD #1  
637' FSL & 208' FEL  
Sec 27, T19S, R34E  
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".

Gary Fisher  
Manager  
Permian Oilfield Partners, LLC.

Date: 7/5/2023

Exhibit 3.B





**Attachment to C-108  
Permian Oilfield Partners, LLC  
Belated Federal SWD #1  
637' FSL & 208' FEL  
Sec 27, T19S, R34E  
Lea County, NM**

June 10, 2023 (as revised 10/12/2023)

**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 M2.2 event recorded 5.6 mi SE of the proposed well in August 2021. This proposed well is not located within any current Seismic Response Area.

As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 4.1 miles away from the nearest active or permitted Devonian disposal well (Fasken Quail 16 State SWD #9, SWD-1537).

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.

## Exhibit 3.C

There is one known fault within the area of interest (< 5.64 mile radius, 25 sq. mi.) of the proposed above referenced SWD well, approximately 0.6 mi (1.0 km) to the west.

1. 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.
2. Devonian wells as noted in the table below are included in the FSP analysis. Both the Belated Fed SWD application and the Overdue Fed SWD application were modeled assuming simultaneous injection. Interval depth is the lesser of the Belated & Overdue, and interval height is the lesser of the Belated & Overdue.

UIC Order	Well Name	PLSS	Lat	Lon	Rate (bbl/day)
SWD-1537	Quail 16 State SWD #9	16-20S-34E	32.5687732	-103.5662994	1,800
SWD-1996	Coombes SWD #1	22-20S-33E	32.5558627	-103.6431607	30,000
SWD-2369	Wildrye Fee SWD #1	20-19S-35E	32.6521540	-103.4716360	25,000
SWD-1525	Wild Cobra 1 State SWD #2	1-19S-34E	32.6952372	-103.5170732	2,500
SWD-1777	Libby Berry Fee SWD #2	22-20S-34E	32.5644180	-103.5403940	15,870
Pending	Belated Federal SWD #1	27-19S-34E	32.6257672	-103.5401562	50,000
Pending	Overdue Federal SWD #1	5-20D-34E	32.6077848	-103.5747341	50,000

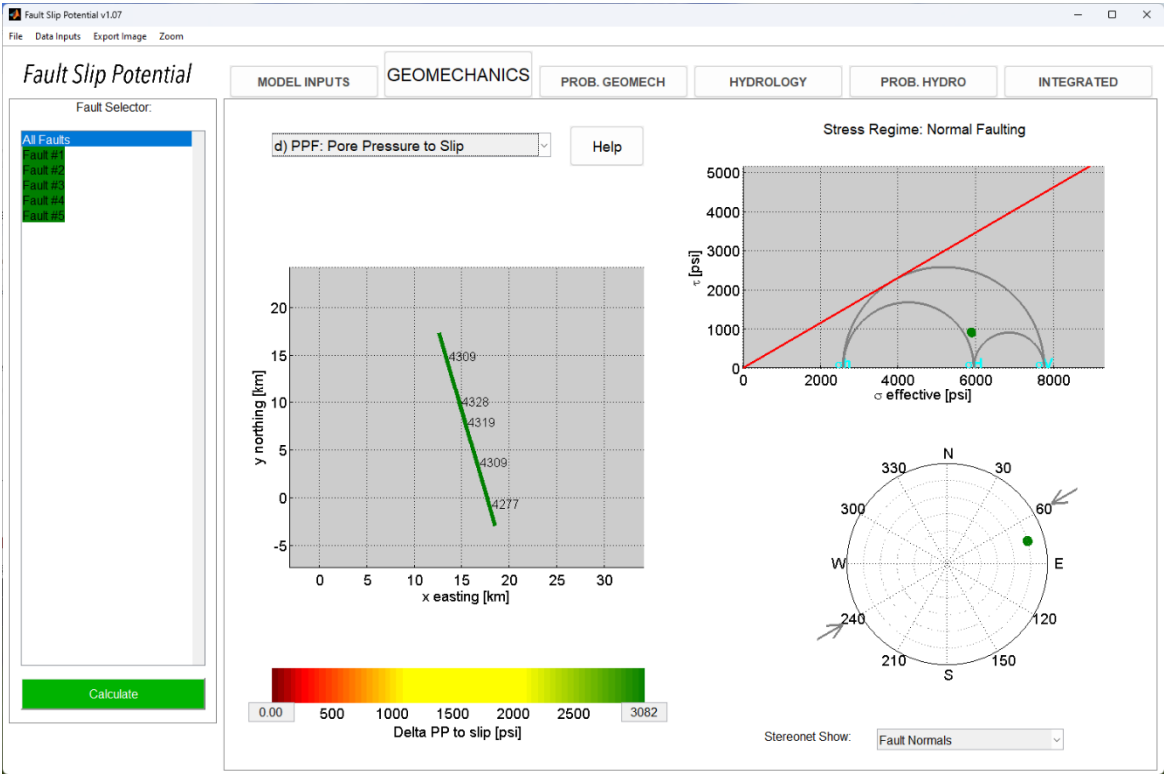
3. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years as per the FSP results screenshots below.

#### Input assumptions:

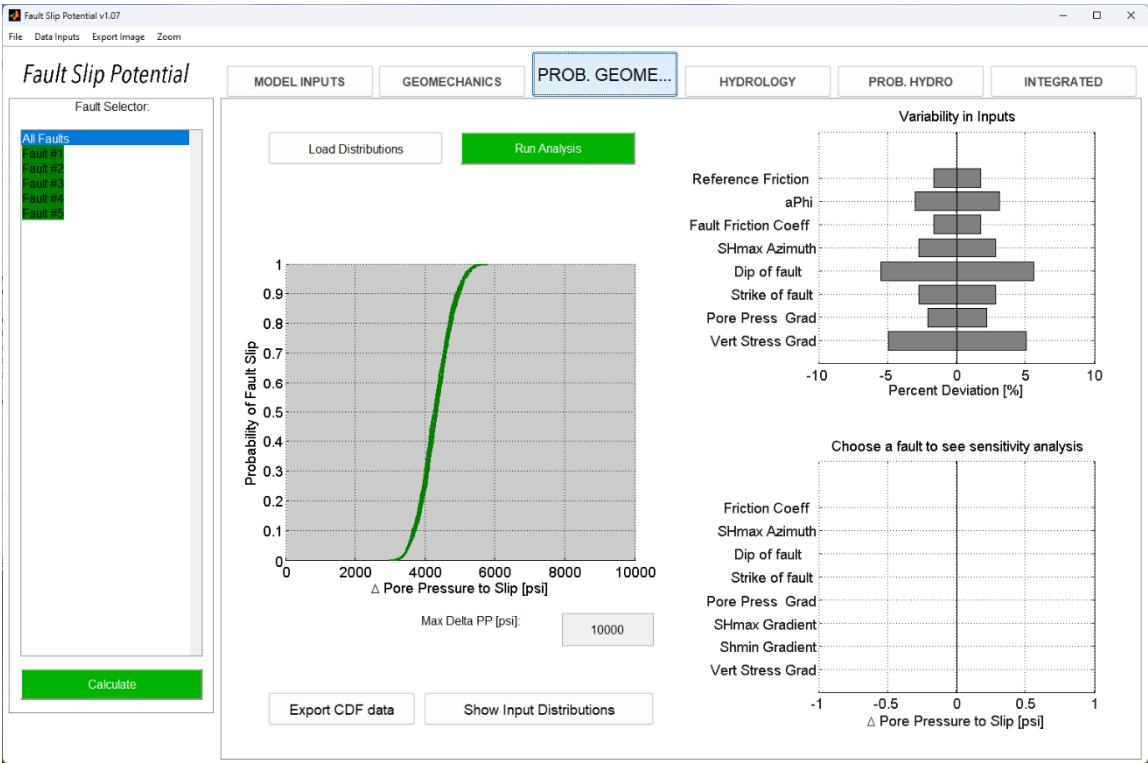
Interval height (ft)	1229
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.0
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14604
Initial res press gradient (psi/ft)	0.47
A phi	0.65
Friction coefficient	0.58
Weighted Average perm (mD)	20
Fluid density (kg/m3)	1100
Dynamic viscosity (Pa-s)	0.0003
Fluid compressibility (/Pa)	4 e-10
Rock compressibility (/Pa)	1.08 e-09

**Note:** In screenshots below,  
 Injection Well #1: Prop. Overdue Fed SWD #1  
 Injection Well #2: Quail 16 State SWD #9  
 Injection Well #3: Coombes SWD #1  
 Injection Well #4: Wildrye Fee SWD #1  
 Injection Well #5: Wild Cobra 1 State SWD #2  
 Injection Well #6: Libby Berry Fee SWD #2  
 Injection Well #7: Prop. Belated Fed SWD #1

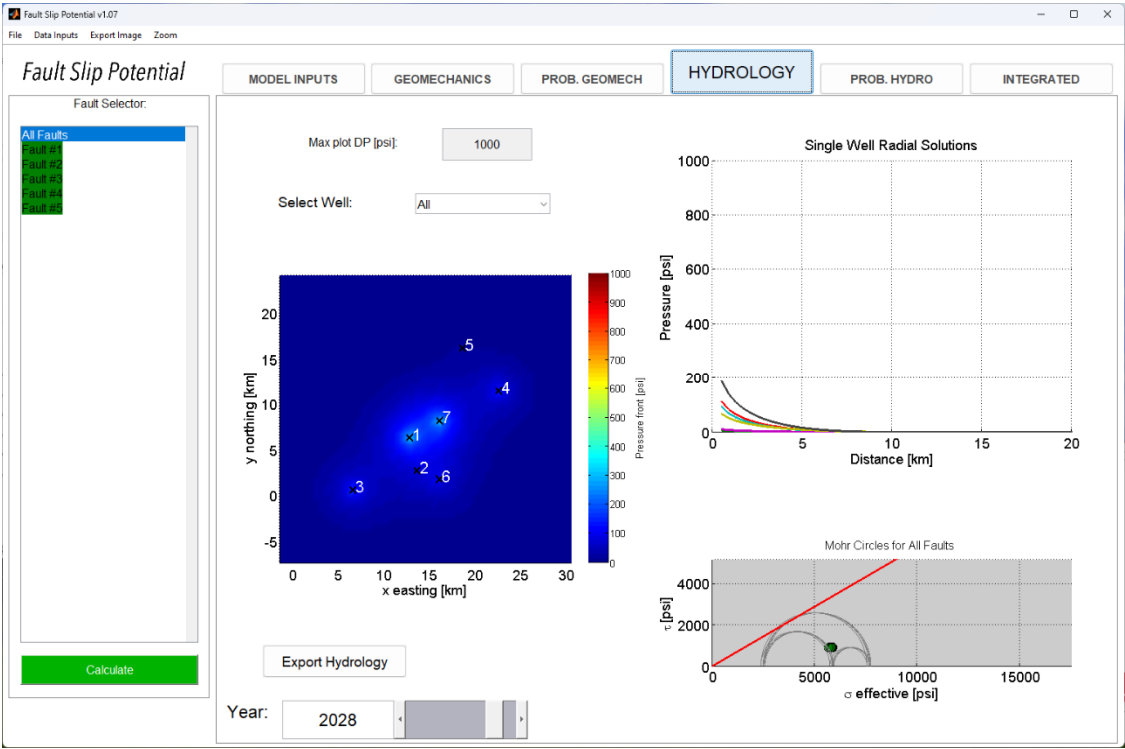
Geomechanics Pore Pressure to Slip



GeoMechanics Variability



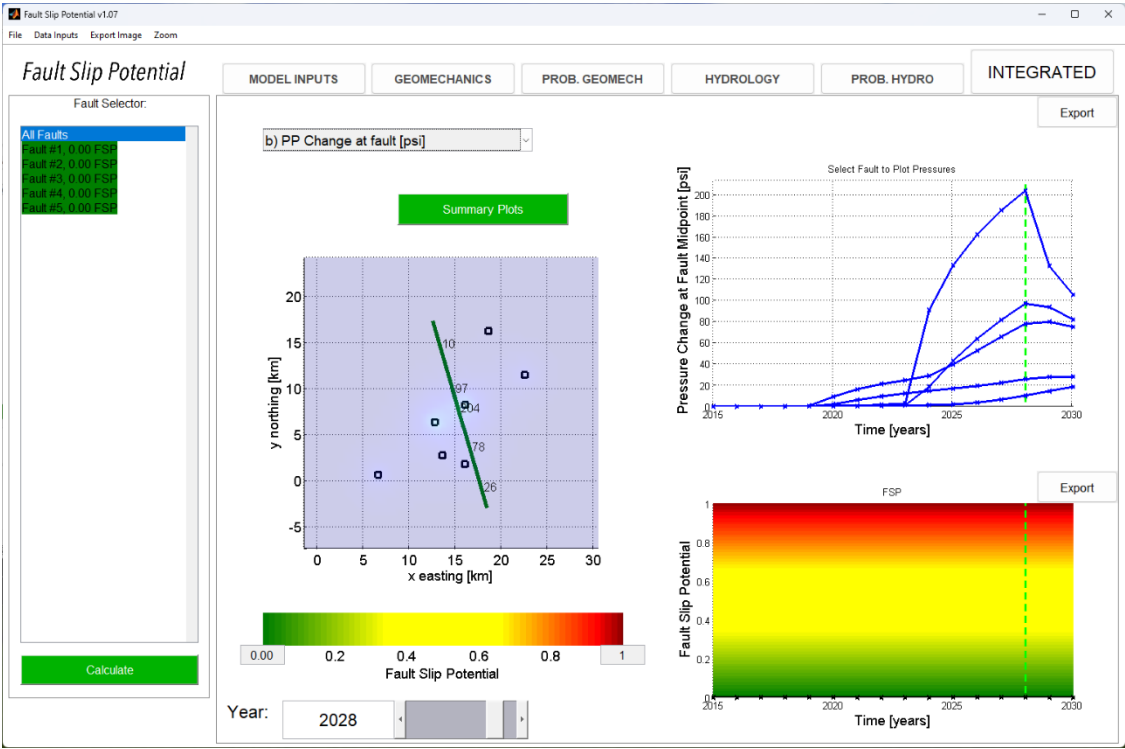
Year 5 Hydrology



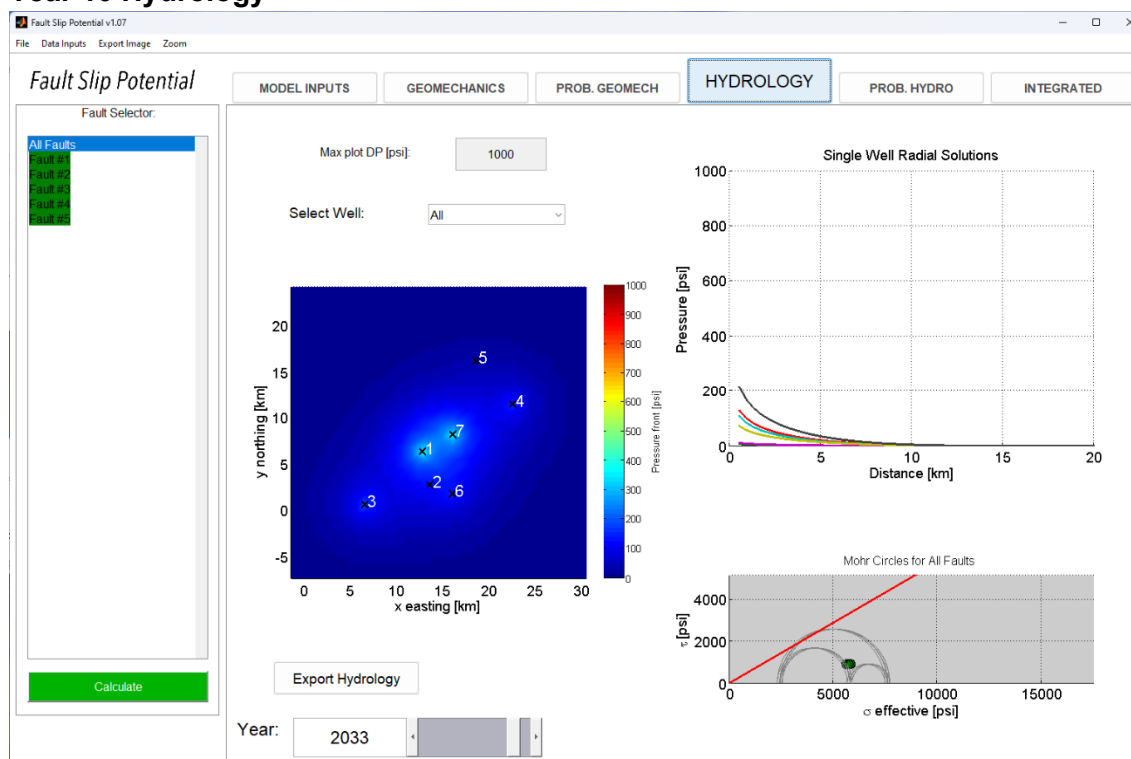
Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



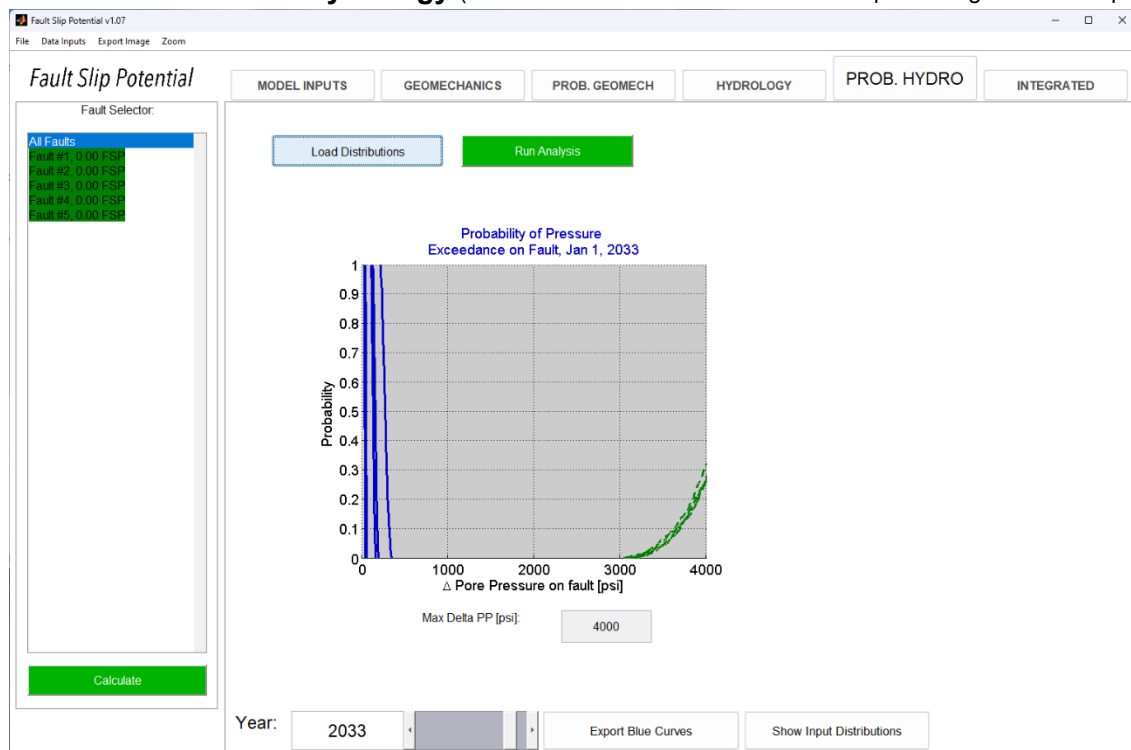
Year 5 Fault Slip Probability (0% after 5 years)



## Year 10 Hydrology

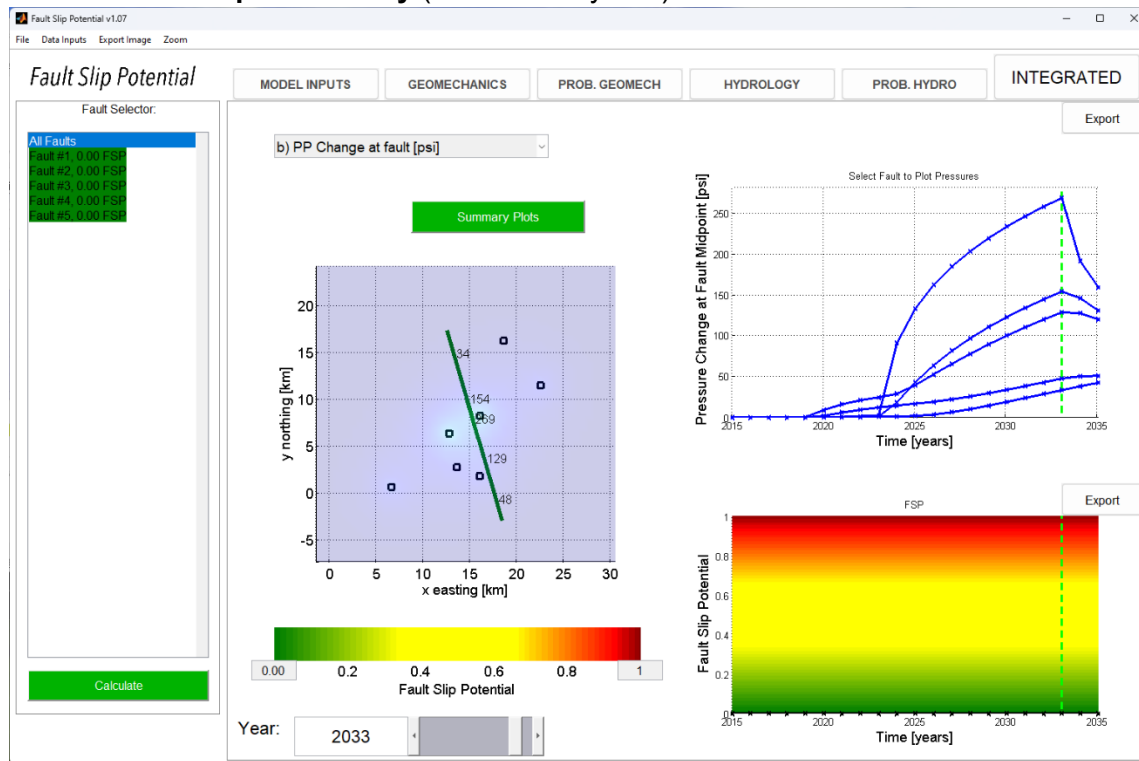


## Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. &amp; green fault slip press.)

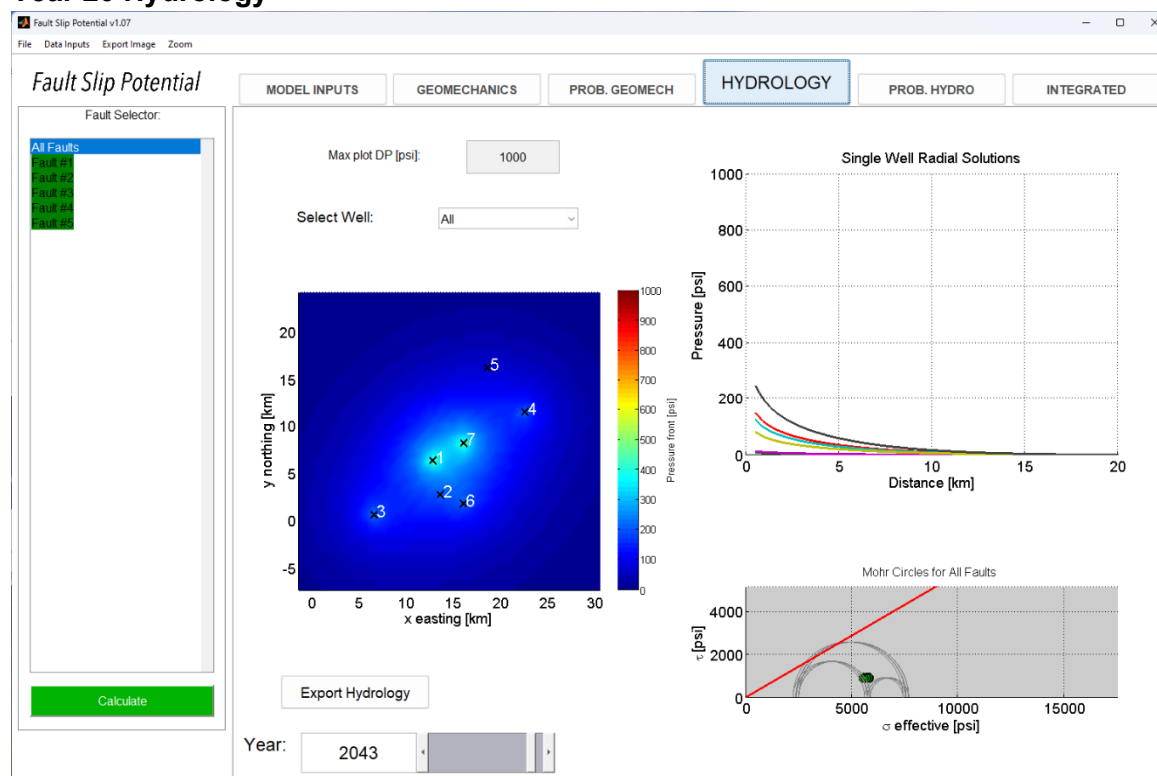




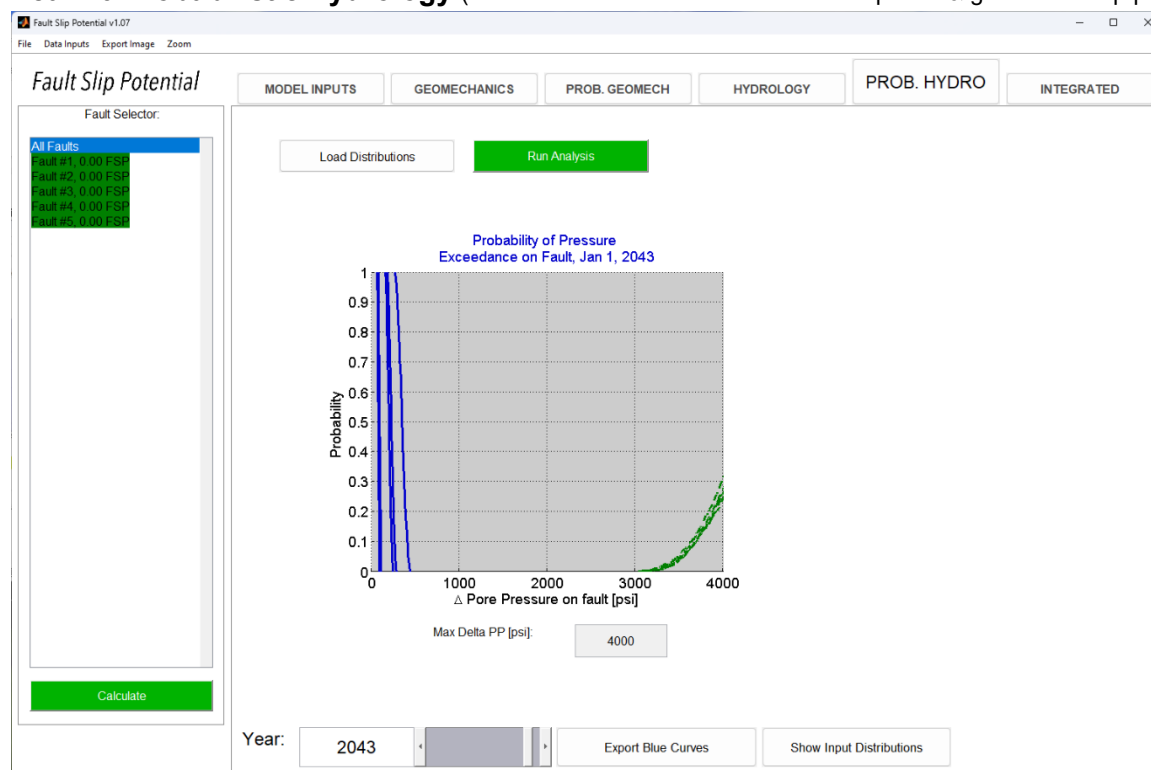
## Year 10 Fault Slip Probability (0% after 10 years)



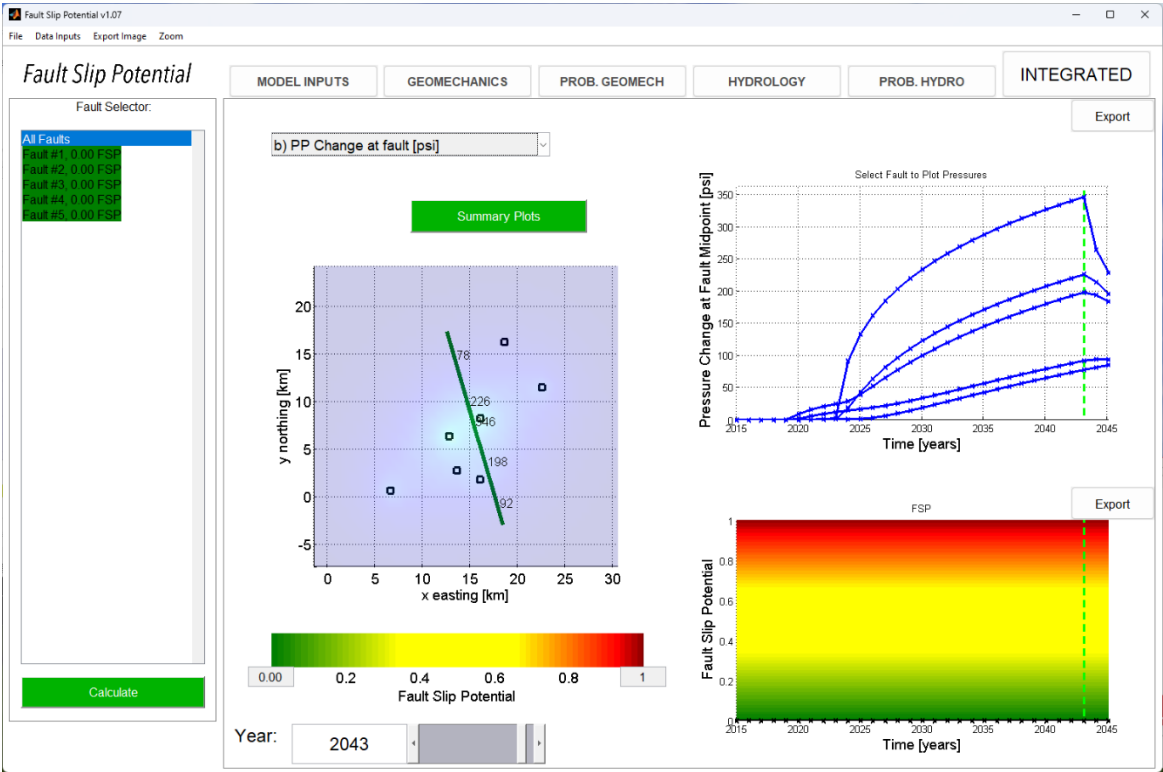
## Year 20 Hydrology



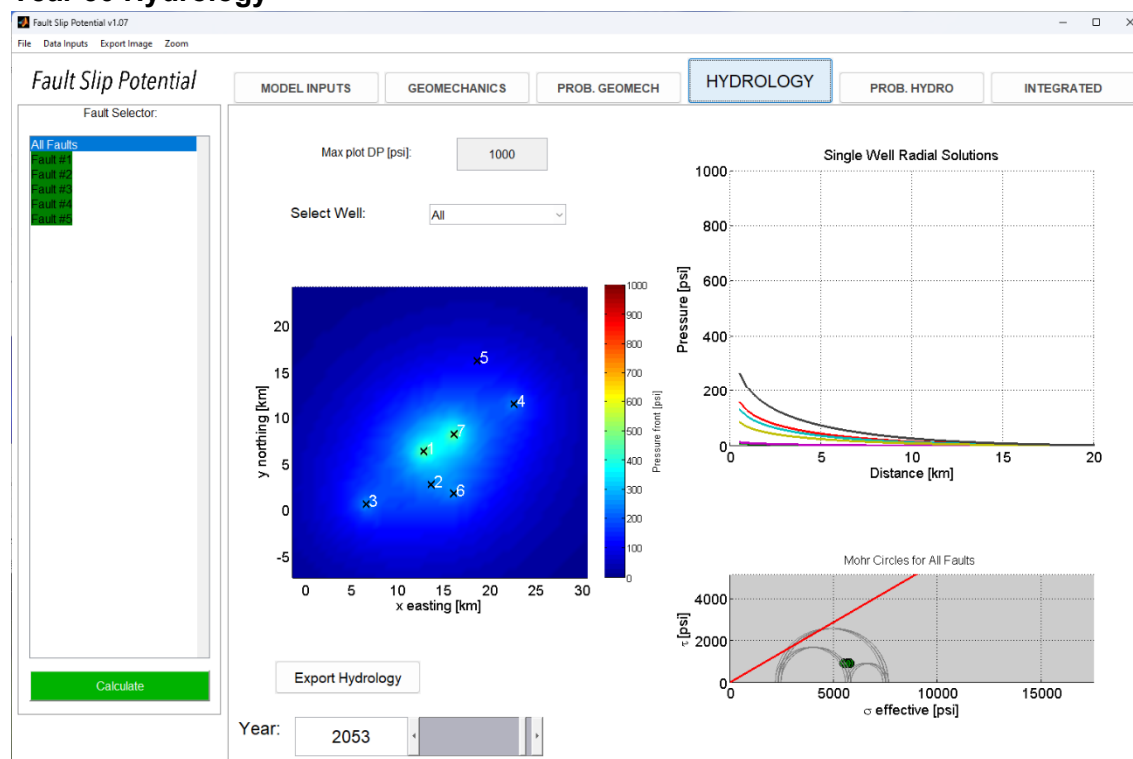
## Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. &amp; green fault slip press.)



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

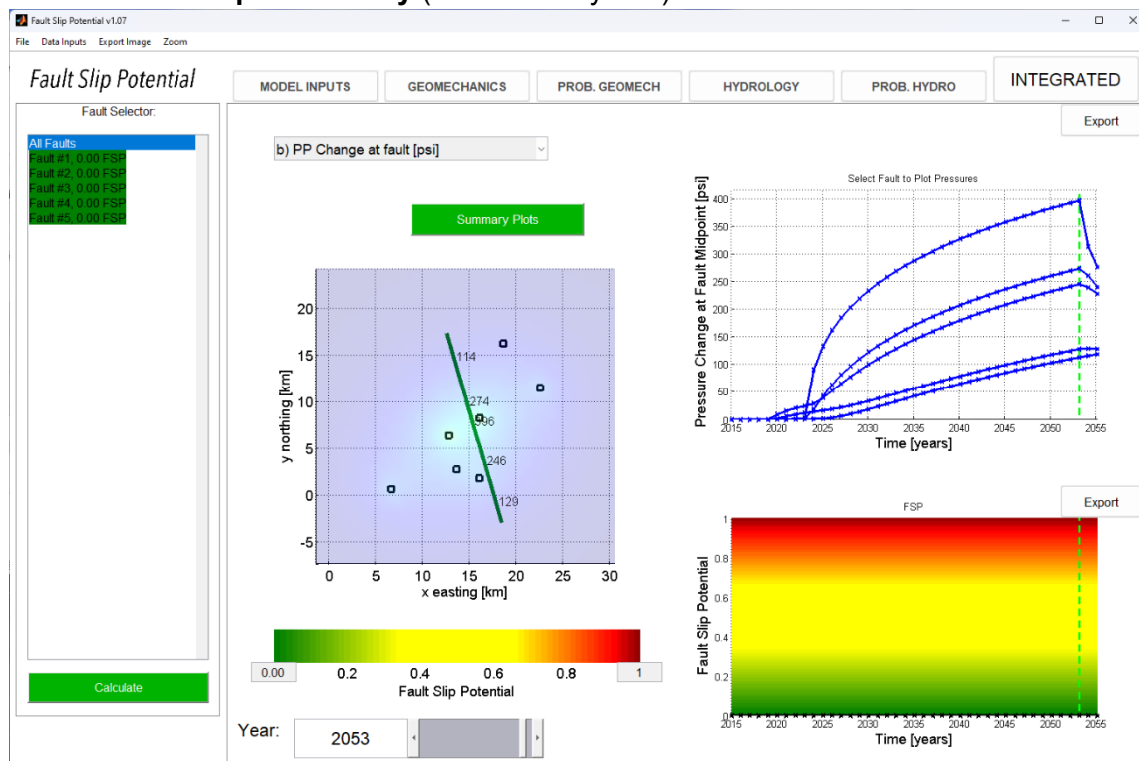


## Year 30 Hydrology



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



**Year 30 Fault Slip Probability (0% after 30 years)**[gfisher@popmidstream.com](mailto:gfisher@popmidstream.com)

(817) 606-7630

## **Tab 4: Notice Materials**



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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO**

**CASE NO. 23808**

**SELF-AFFIRMED DECLARATION OF DEANA M. BENNETT**

Deana M. Bennett, attorney in fact and authorized representative of Permian Oilfield Partners, LLC, the Applicant herein, declares as follows:

- 1) The above-referenced Application was provided under notice letter, dated September 28, 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 September 28, 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 shows the names and addresses of the parties to whom notice was sent and proof of delivery.
- 4) Exhibit D is the Affidavit of Publication from the Hobbs News-Sun, confirming that notice of the October 19, 2023 hearing was published on September 29, 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: October 12, 2023



\_\_\_\_\_  
Deana M. Bennett

**Exhibit 4**



September 28, 2023

Deana M. Bennett  
505.848.1834  
[dmb@modrall.com](mailto:dmb@modrall.com)

**VIA CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

**Re: APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC TO  
APPROVE SALT WATER DISPOSAL WELL IN LEA  
COUNTY, NEW MEXICO.**

**CASE NO. 23808**

TO: AFFECTED PARTIES

This letter is to advise you that Permian Oilfield Partners, LLC ("Permian") has filed the enclosed application.

In Case No. 23808, Permian seeks an order approving disposal into the Silurian-Devonian formation through the Belated Federal SWD Well #1 well at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

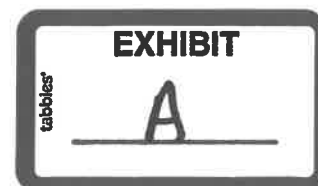
**The hearing will be conducted remotely on October 19, 2023 beginning at 8:15 a.m. To participate in the electronic hearing, see the instructions posted on the docket for the hearing date: <https://www.emnrd.nm.gov/ocd/hearing-info/>. This hearing is subject to continuance by the Division to a subsequent 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 Sperling  
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](http://www.modrall.com)

**Exhibit 4.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,

A handwritten signature in black ink that reads "Deana M. Bennett". The signature is written in a cursive style with a large initial "D".

Deana M. Bennett

*Attorney for Applicant*

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

**APPLICATION OF PERMIAN OILFIELD PARTNERS, LLC  
TO APPROVE SALT WATER DISPOSAL  
WELL IN LEA COUNTY, NEW MEXICO.**

**CASE NO. 23808**

**APPLICATION**

Permian Oilfield Partners, LLC ("Permian"), OGRID No. 328259, through its undersigned attorneys, hereby submits this application to the Oil Conservation Division pursuant to the provisions of NMSA 1978, § 70-2-12, Rule No. 19.15.26, and Rule 19.15.4.8 for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, Permian states as follows:

(1) Permian proposes to drill the Belated Federal SWD Well #1 well at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet.

(3) Permian requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian requests approval of a maximum injection pressure of 2,927 psi for the well.

(5) On or about July 10, 2023, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

(6) Permian complied with the notice requirements for administrative applications, including mailing and publication in the Hobbs News Sun.

(7) Matador Production Company, MRC Permian Company and MRC Hat Mesa, LLC (successor to Advance Energy Partners Hat Mesa, LLC) submitted a protest with respect to Permian's administrative application.

(8) For this reason, Permian is submitting an application for hearing before a Division Examiner for this matter.

(9) To Permian's knowledge, no other protests were submitted.

(10) A proposed C-108 for the subject well is attached hereto as Attachment A, which is the C-108 that was submitted administratively.

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

WHEREFORE, Permian requests that this application be set for hearing before an Examiner of the Oil Conservation Division on October 5, 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 M Bennett

Deana M. Bennett  
Earl DeBrine, Jr.  
Post Office Box 2168  
500 Fourth Street NW, Suite 1000  
Albuquerque, New Mexico 87103-2168  
Telephone: 505.848.1800  
[Deana.Bennett@modrall.com](mailto:Deana.Bennett@modrall.com)  
[eed@modrall.com](mailto:eed@modrall.com)  
*Attorneys for Applicant*





**CASE NO. 23808:Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico.** Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Belated Federal SWD Well #1 well at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

Revised March 23, 2017

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:** Belated 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**

☐

Notice Complete

☐

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.

---

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 14,604'

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 2,927 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:

1. 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.

GEOLOGY PROGNOSIS			
FORMATION	TOP	BOTTOM	THICKNESS
	KB TVD (ft)	KB TVD (ft)	(ft)
<b>Rustler</b>	1,695	2,161	466
<b>Salado</b>	2,161	3,438	1,277
<b>Delaware</b>	5,459	8,216	2,757
<b>Bone Spring</b>	8,216	10,929	2,713
<b>Wolfcamp</b>	10,929	12,222	1,293
<b>Lwr. Mississippian</b>	13,867	14,446	579
<b>Woodford</b>	14,446	14,604	158
<b>Devonian</b>	14,604	15,505	901
<b>Fusselman (Silurian)</b>	15,505	15,866	361
<b>Montoya (U. Ordovician)</b>	15,866	16,266	400
<b>Simpson (M. Ordovician)</b>	16,266	16,766	500

2. Regional shallow fresh water in the Quaternary is known to exist at depths less than 200'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 14,404'. There is no USDW present below the injection interval.

## Exhibit A



- 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. See attached 1 mile AOR water well map showing no active PODs in the AOR.
- 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

<sup>1</sup> API Number		<sup>2</sup> Pool Code 97869	<sup>3</sup> Pool Name SWD; DEVONIAN-SILURIAN
<sup>4</sup> Property Code	<sup>5</sup> Property Name BELATED FEDERAL SWD		<sup>6</sup> Well Number 1
<sup>7</sup> OGRID NO. 328259	<sup>8</sup> Operator Name PERMIAN OILFIELD PARTNERS, LLC		<sup>9</sup> Elevation 3725'

<sup>10</sup> Surface Location

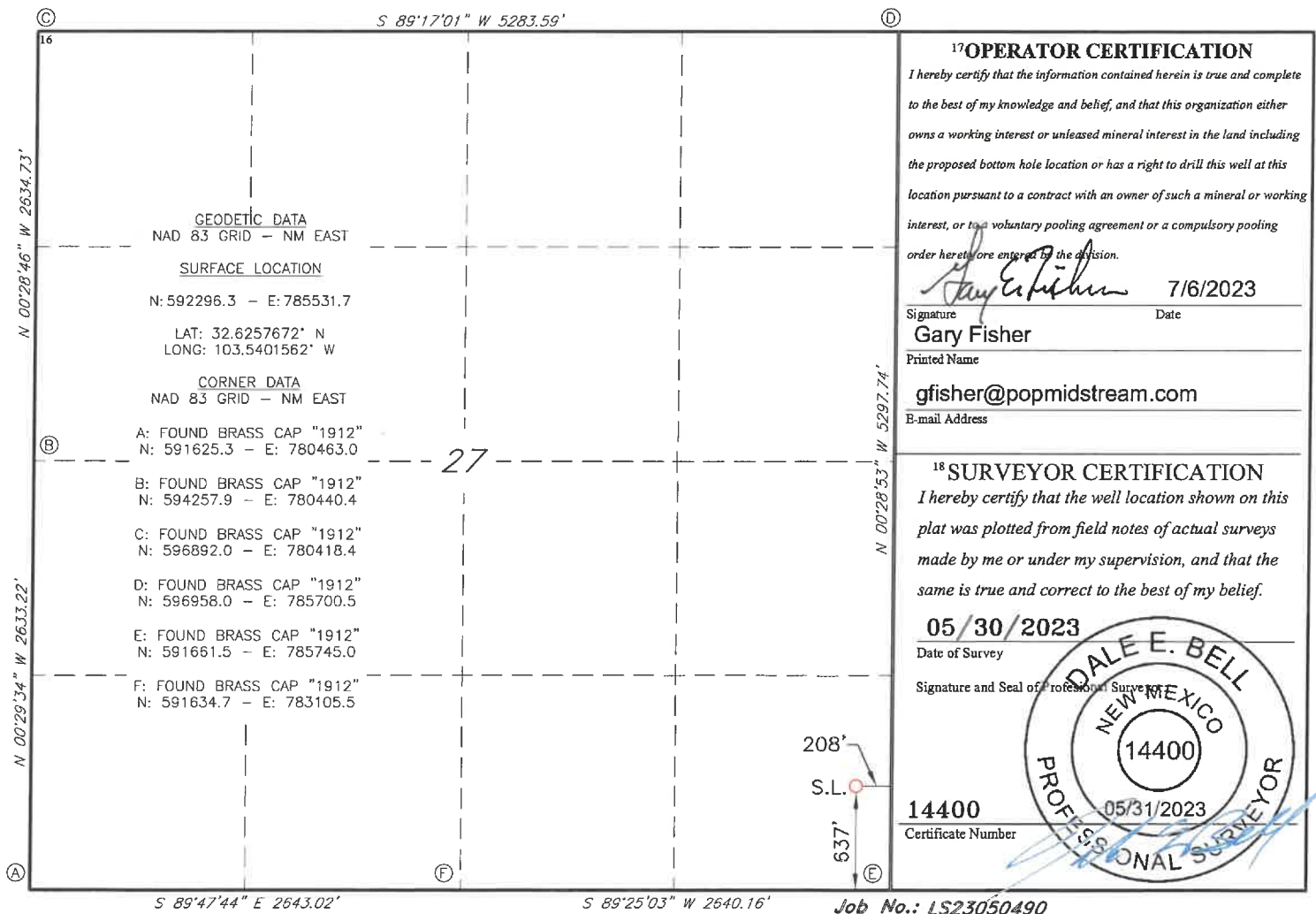
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	19S	34E		637	SOUTH	208	EAST	LEA

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.  
Belated Federal SWD #1  
637' FSL, 208' FEL  
Sec. 27, T19S, R34E, Lea Co. NM  
Lat 32.6257672° N, Lon -103.5401562° W  
GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26" Casing: 20" - 133# N-80 BTC Casing  
Depth Top: Surface  
Depth Btm: 1720'  
Cement: 3208 sks - Class C + Additives (100% Excess)  
Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5" Casing: 13.375" - 68# HCP-110 BTC Casing  
Depth Top: Surface  
Depth Btm: 5409'  
Cement: 2204 sks - Class C + Additives  
Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25" Casing: 9.625" - 40# HCP110 BTC Casing  
Depth Top: Surface  
Depth Btm: 10979' ECP/DV Tool: 5509'  
Cement: 1693 sks - Class C + Additives  
Cement Top: Surface - (Circulate)

**Intermediate #3 - (Liner)**

Hole Size: 8.75" Casing: 7.625" - 39# HCL-80 FJ Casing  
Depth Top: 10779'  
Depth Btm: 14639'  
Cement: 237 sks - Class H + Additives  
Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

Hole Size: 6.5" Depth: 15841'  
Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594' Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ  
X/O Depth: 10779' Casing (Fiberglass Lined)  
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
Packer Depth: 14604' Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
Packer Fluid: 8.4 ppg FW + Additives

III (A)

**WELLBORE SCHEMATIC**

Permian Oilfield Partners, LLC.  
Belated Federal SWD #1  
637' FSL, 208' FEL  
Sec. 27, T19S, R34E, Lea Co. NM  
Lat 32.6257672° N, Lon -103.5401562° W  
GL 3725', RKB 3755'

**Surface - (Conventional)**

Hole Size: 26"  
Casing: 20" - 133# N-80 BTC Casing  
Depth Top: Surface  
Depth Btm: 1720'  
Cement: 3208 sks - Class C + Additives (100% Excess)  
Cement Top: Surface - (Circulate)

**Intermediate #1 - (Conventional)**

Hole Size: 17.5"  
Casing: 13.375" - 68# HCP-110 BTC Casing  
Depth Top: Surface  
Depth Btm: 5409'  
Cement: 2204 sks - Class C + Additives  
Cement Top: Surface - (Circulate)

**Intermediate #2 - (Conventional)**

Hole Size: 12.25"  
Casing: 9.625" - 40# HCP110 BTC Casing  
Depth Top: Surface  
Depth Btm: 10979'  
Cement: 1693 sks - Class C + Additives  
Cement Top: Surface - (Circulate)  
ECP/DV Tool: 5509'

**Intermediate #3 - (Liner)**

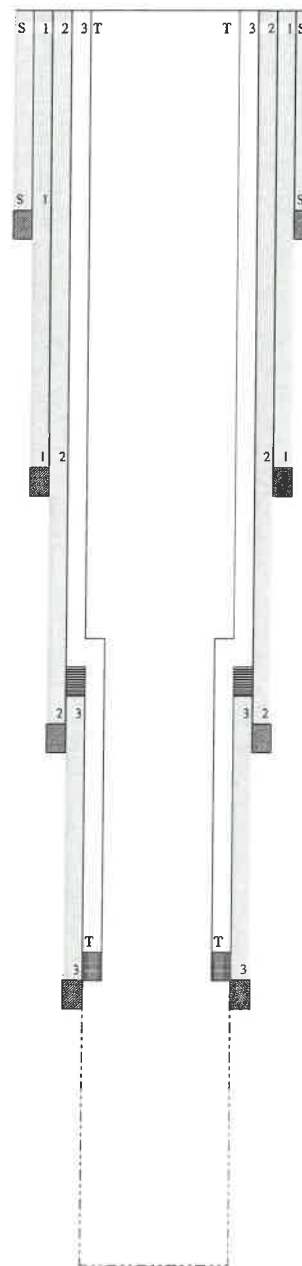
Hole Size: 8.75"  
Casing: 7.625" - 39# HCL-80 FJ Casing  
Depth Top: 10779'  
Depth Btm: 14639'  
Cement: 237 sks - Class H + Additives  
Cement Top: 10779' - (Circulate & Bond Log)

**Intermediate #4 - (Open Hole)**

Hole Size: 6.5"  
Depth: 15841'  
Inj. Interval: 14639' - 15841' (Open-Hole Completion)

**Tubing - (Tapered)**

Tubing Depth: 14594'  
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
X/O Depth: 10779'  
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)  
Packer Depth: 14604'  
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)  
Packer Fluid: 8.4 ppg FW + Additives



XIII.



### Statement of Notifications

Re: C-108 Application for SWD Well  
Permian Oilfield Partners, LLC  
Belated Federal SWD #1  
637' FSL & 208' FEL  
Sec 27, T19S, R34E  
Lea County, NM

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

Belated 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
Balog Family Trust	PO Box 111890	Anchorage, AK 99504	USPS	9414811899562232727235	7/10/2023
Black Hills Gas Resources, Inc.	7001 Mt Rushmore Rd	Rapid City, SD 57702	USPS	9414811899562232727860	7/10/2023
BP America Production Company	1700 Platte St, Suite 150	Denver, CO 80202	USPS	9414811899562232727891	7/10/2023
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899562232727884	7/10/2023
Burlington Resources Oil & Gas LP	PO Box 2197	Houston, TX 77252	USPS	9414811899562232727839	7/10/2023
BXP Operating, LLC	11757 Katy Fwy, Suite 475	Houston, TX 77079	USPS	9414811899562232727754	7/10/2023
BXP Partners V LP	11757 Katy Fwy, Suite 475	Houston, TX 77079	USPS	9414811899562232727709	7/10/2023
Cargoil & Gas Co LLC	2981 Plaza Azul	Santa Fe, NM 87505	USPS	9414811899562232727778	7/10/2023
Chevron USA	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899562232727907	7/10/2023
Cimarex Energy Co. of Colorado	6001 Deauville Blvd, Ste 300N	Midland, TX 79706	USPS	9414811899562232727945	7/10/2023
Cimarex Energy Company	6001 Deauville Blvd, Ste 300N	Midland, TX 79706	USPS	9414811899562232727693	7/10/2023
Clarence Hyde Estate	6300 Ridgelea Pl., Suite 1018	Fort Worth, TX 76116	USPS	9414811899562232727129	7/10/2023
Contango Resources, LLC	111 E. 5TH Street, Suite 300	Fort Worth, TX 76102	USPS	9414811899562232727358	7/10/2023
Devon Energy Production Company, L	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899562232727303	7/10/2023
EOG Resources Inc.	PO Box 2267	Midland, TX 79702	USPS	9414811899562232727020	7/10/2023
Frances W Hyde Inc.	6300 Ridgelea Pl., Suite 1018	Fort Worth, TX 76116	USPS	9414811899562232727075	7/10/2023
Jack V Walker Revocable Trust	PO Box 102256	Anchorage, AK 99510	USPS	9414811899562232727426	7/10/2023
Lenox Mineral Title Holdings Inc.	420 Throckmorton St., Suite 1150	Fort Worth, TX 76102	USPS	9414811899562232727440	7/10/2023
Linn Operating, LLC	600 Travis Street, STE 1200	Houston, TX 77002	USPS	9414811899562232727471	7/10/2023
Matador Production Company	5400 LBJ Freeway, Ste 1500	Dallas, TX 75240	USPS	9414811899562232727525	7/10/2023
Matador Resources Co.	5400 LBJ Freeway, Ste 1500	Dallas, TX 75240	USPS	9414811899562232726214	7/10/2023
Merit Energy Company, LLC	13727 Noel Road, Suite 500	Dallas, TX 75240	USPS	9414811899562232726238	7/10/2023
Merit Energy Partners D-III	13727 Noel Road, Suite 1200	Dallas, TX 75240	USPS	9414811899562232726856	7/10/2023
Nadel and Gussman HEYCO, LLC	P.O. Box 1936	Roswell, NM 88202	USPS	9414811899562232726832	7/10/2023
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899562232726702	7/10/2023
Penroc Oil Corp.	PO Box 2769	Hobbs, NM 88241	USPS	9414811899562232726740	7/10/2023
Shogoil & Gas Co II LLC	PO Box 29450	Santa Fe, NM 87592	USPS	9414811899562232726955	7/10/2023
XTO Energy Inc.	22777 Springwoods Village Pkwy, Suite 126	Spring, TX 77389	USPS	94148118995622327254804	7/10/2023

Sean Puryear  
Permian Oilfield Partners, LLC  
[spuryear@popmidstream.com](mailto:spuryear@popmidstream.com)  
Date: 7/10/2023

Exhibit A

U.S. Postal Service Certified Mail Receipt

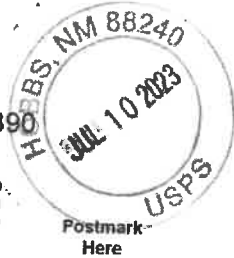
ARTICLE NUMBER: 9414 8118 9950 2232 7272 35

ARTICLE ADDRESSED TO:

Balog Family Trust  
PO BOX 111890  
ANCHORAGE AK 99511-1890

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

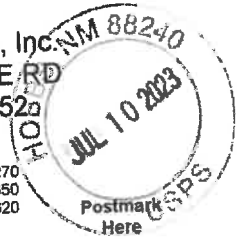
ARTICLE NUMBER: 9414 8118 9950 2232 7278 80

ARTICLE ADDRESSED TO:

Black Hills Gas Resources, Inc.  
7001 MOUNT RUSHMORE RD  
RAPID CITY SD 57702-8752

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

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ARTICLE ADDRESSED TO:

BP America Production Company  
1700 PLATTE ST STE 150  
DENVER CO 80202-2837

FEES

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Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

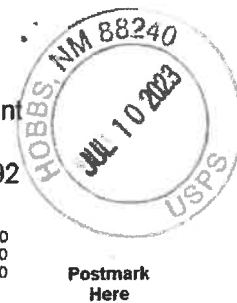
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ARTICLE ADDRESSED TO:

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

FEES

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Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9950 2232 7278 30

ARTICLE ADDRESSED TO:

Burlington Resources Oil & Gas LP  
PO BOX 2197  
HOUSTON TX 77252-2197

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

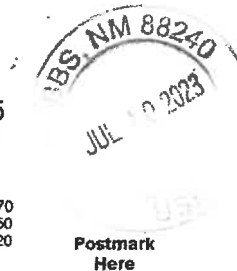
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ARTICLE ADDRESSED TO:

BXP Operating, LLC  
11757 KATY FWY STE 475  
HOUSTON TX 77079-1761

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620





U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7277 06

ARTICLE ADDRESSED TO:

BXP Partners V LP  
11757 KATY FWY STE 475  
HOUSTON TX 77079-1761

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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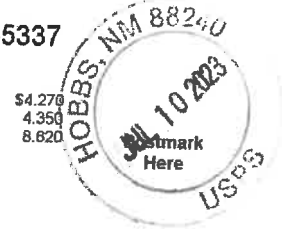
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ARTICLE ADDRESSED TO:

Cargoil & Gas Co., LLC  
2981 PLAZA AZUL  
SANTA FE NM 87507-5337

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7279 07

ARTICLE ADDRESSED TO:

Chevron USA  
6301 DEAUVILLE  
MIDLAND TX 79706-2964

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7279 45

ARTICLE ADDRESSED TO:

Cimarex Energy Co. of Colorado  
6001 DEAUVILLE STE 300N  
MIDLAND TX 79706-2671

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7279 83

ARTICLE ADDRESSED TO:

Cimarex Energy Company  
6001 DEAUVILLE STE 300N  
MIDLAND TX 79706-2671

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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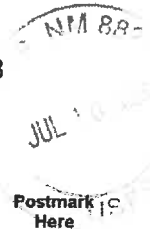
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ARTICLE ADDRESSED TO:

Clarence Hyde Estate  
6300 RIDGELEA PL., STE 1018  
FORT WORTH TX 76116-0000

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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#### ARTICLE ADDRESSED TO:

Contango Resources, LLC  
111 E 5TH ST STE 300  
FORT WORTH TX 76102-5472

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

ARTICLE NUMBER: 9414 8118 9956 2232 7273 03

#### ARTICLE ADDRESSED TO:

Devon Energy Production Co., LP  
333 W SHERIDAN AVE  
OKLAHOMA CITY OK 73102-5010

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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#### ARTICLE ADDRESSED TO:

EOG Resources, Inc.  
PO BOX 2267  
MIDLAND TX 79702-2267

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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#### ARTICLE ADDRESSED TO:

Frances W Hyde Inc.  
6300 RIDGELEA PL, STE 1018  
FORT WORTH TX 76116-0000

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

ARTICLE NUMBER: 9414 8118 9956 2232 7274 26

#### ARTICLE ADDRESSED TO:

Jack V Walker Revocable Trust  
PO BOX 102256  
ANCHORAGE AK 99510-2256

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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#### ARTICLE ADDRESSED TO:

Lenox Mineral Title Holdings Inc.  
420 THROCKMORTON ST STE 1150  
FORT WORTH TX 76102-3761

<b>FEES</b>	
Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

ARTICLE NUMBER: 9414 8118 9956 2232 7274 71

**ARTICLE ADDRESSED TO:**

Linn Operating LLC  
600 TRAVIS ST STE 1200  
HOUSTON TX 77002-1279

**FEES**

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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**ARTICLE ADDRESSED TO:**

Matador Resources Co.  
5400 LYNDON B JOHNSON FWY STE 1500  
DALLAS TX 75240-1017

**FEES**

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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

ARTICLE NUMBER: 9414 8118 9956 2232 7288 56

**ARTICLE ADDRESSED TO:**

Merit Energy Partners D-III  
13727 NOEL RD STE 1200  
DALLAS TX 75240-7362

**FEES**

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Certified Fee	4.350
Total Postage & Fees:	8.620



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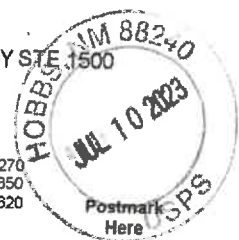
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**ARTICLE ADDRESSED TO:**

Matador Production Company  
5400 LYNDON B JOHNSON FWY STE 1500  
DALLAS TX 75240-1017

**FEES**

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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**ARTICLE ADDRESSED TO:**

Merit Energy Company, LLC  
13727 NOEL RD STE 500  
DALLAS TX 75240-7312

**FEES**

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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

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**ARTICLE ADDRESSED TO:**

Nadel & Gussman HEYCO, LLC  
PO BOX 1936  
ROSWELL NM 88202-1936

**FEES**

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7267 02

ARTICLE ADDRESSED TO:

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

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7267 40

ARTICLE ADDRESSED TO:

Penroc Oil Corp.  
PO BOX 2769  
HOBBS NM 88241-2769

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



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U.S. Postal Service Certified Mail Receipt

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ARTICLE ADDRESSED TO:

Shogoi & Gas Co II LLC  
PO BOX 29450  
SANTA FE NM 87592-9450

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620

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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 7548 04

ARTICLE ADDRESSED TO:

XTO Energy Inc.  
22777 SPRINGWOODS VILLAGE PKWY  
SPRING TX 77389-1425

FEES

Postage Per Piece	\$4.270
Certified Fee	4.350
Total Postage & Fees:	8.620



Postmark  
Here

Exhibit A

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 26, 2023  
and ending with the issue dated  
May 26, 2023.



Publisher

Sworn and subscribed to before me this  
26th day of May 2023.



Business Manager

My commission expires  
January 29, 2027

(Seal)

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

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

### LEGAL NOTICE May 26, 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 Belated Federal SWD #1, and is located 637' FSL & 208' FEL, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, approximately 16 mi W of Monument, NM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 14,639 feet to 15,841 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,927 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.  
#00278993

67115647

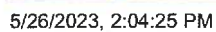
00278993

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

## Exhibit A



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



- Land Ownership**

  - 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

1:36,112

0 0.33 0.65 1.3 mi  
0 0.5 1 2 km

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

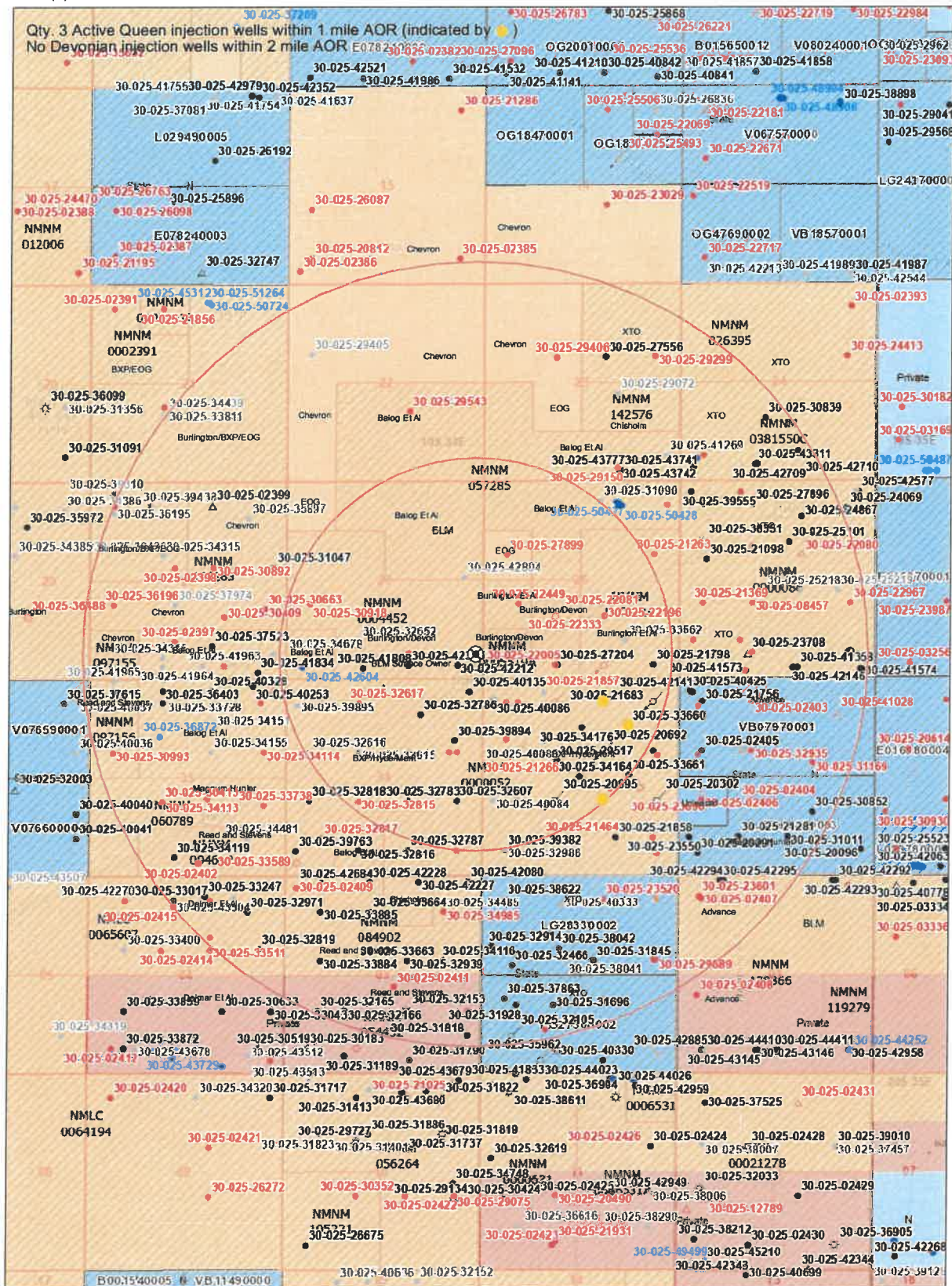
New Mexico Oil Conservation Division

## Exhibit A



V (b)

## Belated Federal SWD #1, 1 &amp; 2 Mi AOR, Wells



5/26/2023, 2:08:56 PM

- Override 1
- Injection, Active
- Injection, Plugged
- 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

## Exhibit A

Released to Imaging: 9/5/2023 4:29:54 PM

Released to Imaging: 10/13/2023 7:58:54 AM



Received by OCD: 9/5/2023 3:21:20 PM

Page 23 of 40

V (c)

Related 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
30-025-34176	BP Operating, LLC	MESCALERO RIDGE UNIT	#026	Oil	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1850 FSL 2570 FEL	G-35-19S-34E 1350 FSL 2570 FEL	QUEEN	5238	5238
30-025-34164	BP Operating, LLC	MESCALERO RIDGE UNIT	#025	Oil	Vertical	Active	35	T19S	R34E	J	J-35-19S-34E 2620 FSL 2620 FEL	J-35-19S-34E 2820 FSL 2620 FEL	QUEEN	5204	5204
30-025-20694	UNION OPERATING, LLC	MESCALERO RIDGE UNIT	#157	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	B	B-35-19S-34E 660 FSL 1980 FEL	B-35-19S-34E 660 FSL 1980 FEL	QUEEN	5250	5250
30-025-21857	UNION OPERATING, LLC	MESCALERO RIDGE UNIT	#263	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	O	O-26-19S-34E 330 FSL 1580 FEL	O-26-19S-34E 330 FSL 1980 FEL	QUEEN	5150	5150
30-025-20693	BP Operating, LLC	MESCALERO RIDGE UNIT	#554	Injection	Vertical	Active	35	T19S	R34E	G	G-35-19S-34E 1980 FSL 1980 FEL	G-35-19S-34E 1980 FSL 1980 FEL	QUEEN	5260	5260
30-025-22196	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#006	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	J	J-26-19S-34E 1650 FSL 1980 FEL	J-26-19S-34E 1650 FSL 1980 FEL	QUEEN	5160	5160
30-025-20585	UNION OPERATING, LLC	MESCALERO RIDGE UNIT	#152	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 1980 FSL 1980 FEL	J-35-19S-34E 1980 FSL 1980 FEL	QUEEN	5268	5268
30-025-28218	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	J	J-35-19S-34E 2310 FSL 1980 FEL	J-35-19S-34E 1980 FSL 1980 FEL	BONE SPRING	13980	13980
30-025-33662	DEVON ENERGY PRODUCTION COMPANY LP	MESCALERO RIDGE UNIT	#040	Oil	Vertical	Cancelled April	26	T19S	R34E	D	O-26-19S-34E 1000 FSL 1400 FEL	O-26-19S-34E 1000 FSL 1400 FEL	QUEEN	6000	6000
30-025-21859	BP AMERICA PRODUCTION COMPANY	MESCALERO RIDGE UNIT	#017	Salt Water Disposal	Vertical	Plugged, Site Released	35	T19S	R34E	G	G-35-19S-34E 1980 FSL 1650 FEL	G-35-19S-34E 1980 FSL 1650 FEL	SEVEN RIVERS	4040	4040
30-025-33660	BP Operating, LLC	MESCALERO RIDGE UNIT	#023	Oil	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 1300 FSL 1300 FSL	A-35-19S-34E 1300 FSL 1300 FSL	QUEEN	5275	5275
30-025-33661	BP Operating, LLC	MESCALERO RIDGE UNIT	#034	Oil	Vertical	Active	35	T19S	R34E	H	H-35-19S-34E 3620 FSL 1300 FEL	H-35-19S-34E 2820 FSL 1300 FEL	QUEEN	5200	5200
30-025-21799	BP Operating, LLC	MESCALERO RIDGE UNIT	#262	Oil	Vertical	Active	26	T19S	R34E	P	P-26-19S-34E 380 FSL 660 FSL	P-26-19S-34E 380 FSL 660 FSL	QUEEN	5150	5150
30-025-21663	BP Operating, LLC	MESCALERO RIDGE UNIT	#015	Injection	Vertical	Active	35	T19S	R34E	A	A-35-19S-34E 660 FSL 660 FEL	A-35-19S-34E 660 FSL 660 FEL	QUEEN	5135	5135
30-025-31895	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#0020	Oil	Horizontal	Cancelled April	34	T19S	R34E	D	D-34-19S-34E 750 FSL 330 FSL	A-34-19S-34E 330 FSL 330 FSL	BONE SPRING	15977	15977
30-025-42604	CHIMAREX ENERGY CO.	MALLON 27 FEDERAL COM	#004H	Oil	Horizontal	New	27	T19S	R34E	M	M-27-19S-34E 305 FSL 450 FSL	E-27-19S-34E 2650 FSL 450 FSL	BONE SPRING	13970	13970
30-025-30725	Compass Resources, LLC	STIVSON FEDERAL	#005	Oil	Vertical	Approved Temporary Abandonment	27	T19S	R34E	M	M-27-19S-34E 660 FSL 550 FSL	M-27-19S-34E 660 FSL 550 FSL	QUEEN	5115	5115
30-025-30918	MERIT ENERGY COMPANY, LLC	WEST PEARL FEDERAL	#001	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	L	L-27-19S-34E 1980 FSL 600 FSL	L-27-19S-34E 1980 FSL 600 FSL	SEVEN RIVERS	6300	6300
30-025-34678	CHIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#014	Oil	Vertical	Cancelled April	27	T19S	R34E	M	M-27-19S-34E 660 FSL 660 FSL	M-27-19S-34E 660 FSL 660 FSL	BONE SPRING	10200	10200
30-025-32654	BLACK HILLS GAS RESOURCES, INC.	MALLON 37 FEDERAL	#003	Oil	Vertical	Cancelled April	27	T19S	R34E	E	E-27-19S-34E 1880 FSL 660 FSL	E-27-19S-34E 1880 FSL 660 FSL	DELAWARE	8300	8300
30-025-34300	CHIMAREX ENERGY CO. OF COLORADO	MALLON 37 FEDERAL	#003	Oil	Vertical	Cancelled April	27	T19S	R34E	E	E-27-19S-34E 1880 FSL 660 FSL	E-27-19S-34E 1880 FSL 660 FSL	DELAWARE	8300	8300
30-025-32605	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#001	Salt Water Disposal	Vertical	Plugged, Site Released	34	T19S	R34E	D	D-34-19S-34E 660 FSL 990 FSL	D-34-19S-34E 660 FSL 990 FSL	DELAWARE	6306	6306
30-025-32636	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#005	Oil	Vertical	Cancelled April	34	T19S	R34E	E	E-34-19S-34E 1280 FSL 660 FSL	E-34-19S-34E 1280 FSL 660 FSL	BONE SPRING	10200	10200
30-025-34489	CHIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled April	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FSL	N-27-19S-34E 990 FSL 1980 FSL	DELAWARE	6300	6300
30-025-32682	BLACK HILLS GAS RESOURCES, INC.	MALLON 27 FEDERAL	#001	Oil	Vertical	Cancelled April	27	T19S	R34E	N	N-27-19S-34E 990 FSL 1980 FSL	N-27-19S-34E 990 FSL 1980 FSL	DELAWARE	6300	6300
30-025-32815	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#013	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	K	K-34-19S-34E 1980 FSL 1980 FSL	K-34-19S-34E 1980 FSL 1980 FSL	DELAWARE	6170	6170
30-025-32637	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#006	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	C	C-34-19S-34E 660 FSL 1980 FSL	C-34-19S-34E 660 FSL 1980 FSL	DELAWARE	8012	8012
30-025-41808	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#002H	Oil	Horizontal	Active	27	T19S	R34E	N	N-27-19S-34E 360 FSL 580 FSL	C-27-19S-34E 2316 FSL 1953 FSL	BONE SPRING	18020	18078
30-025-32615	BLACK HILLS GAS RESOURCES, INC.	MALLON 34 FEDERAL	#004	Oil	Vertical	Cancelled April	34	T19S	R34E	F	F-34-19S-34E 1980 FSL 1980 FSL	F-34-19S-34E 1980 FSL 1980 FSL	DELAWARE	6300	6300
30-025-33737	CHIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#004	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	D	D-27-19S-34E 660 FSL 1980 FEL	O-27-19S-34E 660 FSL 1980 FEL	QUEEN	7100	7100
30-025-40315	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#002H	Oil	Horizontal	Active	27	T19S	R34E	O	O-27-19S-34E 330 FSL 1980 FEL	J-27-19S-34E 2510 FSL 1980 FEL	BONE SPRING	18277	18773
30-025-32784	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#009	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	G	G-34-19S-34E 1280 FSL 1980 FSL	G-34-19S-34E 1280 FSL 1980 FSL	DELAWARE	10995	10995
30-025-32783	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#008	Oil	Vertical	Active	34	T19S	R34E	J	J-34-19S-34E 1980 FSL 1980 FSL	J-34-19S-34E 1980 FSL 1980 FSL	DELAWARE	6300	6300
30-025-32786	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#011	Oil	Vertical	Active	34	T19S	R34E	B	B-34-19S-34E 990 FSL 1650 FEL	B-34-19S-34E 990 FSL 1650 FEL	DELAWARE	7044	7044
30-025-32633	CHIMAREX ENERGY CO. OF COLORADO	MALLON 27 FEDERAL	#012	Oil	Vertical	Plugged, Site Released	27	T19S	R34E	P	P-27-19S-34E 660 FSL 990 FEL	P-27-19S-34E 660 FSL 990 FEL	DELAWARE	7120	7120
30-025-32782	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#017	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FSL 990 FEL	H-34-19S-34E 1980 FSL 990 FEL	DELAWARE	6300	6300
30-025-32785	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#010	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	P	P-34-19S-34E 660 FSL 660 FEL	P-34-19S-34E 660 FSL 660 FEL	DELAWARE	6340	6340
30-025-38894	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#018H	Oil	Horizontal	Active	34	T19S	R34E	H	H-34-19S-34E 1690 FSL 720 FEL	E-34-19S-34E 1990 FSL 4915 FEL	BONE SPRING	15025	15075
30-025-42212	MATADOR PRODUCTION COMPANY	MALLON 27 FEDERAL COM	#001H	Oil	Horizontal	Active	27	T19S	R34E	P	P-27-19S-34E 330 FSL 660 FEL	E-27-19S-34E 2310 FSL 660 FEL	BONE SPRING	18255	20795
30-025-32626	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#002	Oil	Vertical	Active	34	T19S	R34E	A	A-34-19S-34E 660 FSL 660 FEL	A-34-19S-34E 660 FSL 660 FEL	DELAWARE	6312	6312
30-025-32607	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#003	Oil	Vertical	Active	34	T19S	R34E	I	I-34-19S-34E 1980 FSL 660 FEL	I-34-19S-34E 1980 FSL 660 FEL	DELAWARE	6300	6300
30-025-42804	KADL AND GUSSMAN HEYD, LLC	MARLEQUIN 27 22 FEDERAL	#005C	Oil	Horizontal	Cancelled April	27	T19S	R34E	H	H-27-19S-34E 2593 FSL 510 FEL	I-22-19S-34E 2311 FSL 510 FEL	BONE SPRING	15190	10800
30-025-40135	CHIMAREX ENERGY CO. OF COLORADO	MALLON 34 FEDERAL	#019H	Oil	Horizontal	Active	34	T19S	R34E	A	A-34-19S-34E 380 FSL 380 FEL	D-34-19S-34E 760 FSL 4925 FEL	BONE SPRING	15552	10870
30-025-21723	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	34	T19S	R34E	H	H-34-19S-34E 1980 FSL 660 FEL	H-34-19S-34E 1980 FSL 660 FEL	QUEEN	5160	5160
30-025-40086	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#007H	Oil	Horizontal	Active	35	T19S	R34E	D	D-35-19S-34E 585 FSL 390 FSL	A-35-19S-34E 574 FSL 4940 FSL	BONE SPRING	15359	10913
30-025-33046	DEVON ENERGY PRODUCTION COMPANY LP	MESCALERO RIDGE UNIT	#019	Oil	Vertical	Cancelled April	35	T19S	R34E	D	D-35-19S-34E 350 FSL 330 FSL	D-35-19S-34E 350 FSL 330 FSL	DELAWARE	6300	6300
30-025-40084	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005H	Oil	Horizontal	Cancelled April	35	T19S	R34E	L	L-35-19S-34E 1910 FSL 190 FSL	L-35-19S-34E 1980 FSL 510 FEL	BONE SPRING	15249	10990
30-025-33083	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#001	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FSL 660 FSL	D-35-19S-34E 660 FSL 660 FSL	DELAWARE	8830	8830
30-025-32984	BLACK HILLS GAS RESOURCES, INC.	MALLON 35 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1650 FSL 660 FSL	E-35-19S-34E 1650 FSL 660 FSL	DELAWARE	8300	8300
30-025-27899	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#003	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	E	E-26-19S-34E 1980 FSL 660 FSL	E-26-19S-34E 0 FSL 660 FSL	QUEEN	5200	5200
30-025-32985	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#003	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 2310 FSL 660 FSL	L-35-19S-34E 2310 FSL 660 FSL	DELAWARE	8830	8830
30-025-40085	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006H	Oil	Horizontal	Cancelled April	35	T19S	R34E	E	E-35-19S-34E 2310 FSL 330 FSL	H-35-19S-34E 1980 FSL 510 FEL	BONE SPRING	15582	10990
30-025-21367	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#013	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	L	L-35-19S-34E 1980 FSL 990 FSL	L-35-19S-34E 1980 FSL 990 FSL	QUEEN	5200	5200
30-025-21613	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#014	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	D	D-35-19S-34E 660 FSL 990 FSL	D-35-19S-34E 660 FSL 990 FSL	QUEEN	5060	5060
30-025-31266	MERIT ENERGY COMPANY, LLC	MESCALERO RIDGE UNIT	#012	Injection	Vertical	Plugged, Site Released	35	T19S	R34E	E	E-35-19S-34E 1950 FSL 990 FSL	E-35-19S-34E 1980 FSL 990 FSL	QUEEN	5220	5220
30-025-23283	DEVON ENERGY PRODUCTION COMPANY LP	MESCALERO RIDGE UNIT	#007	Injection	Vertical	Plugged, Site Released	26	T19S	R34E	M	M-26-19S-34E 990 FSL 990 FSL	M-26-19S-34E 990 FSL 990 FSL	QUEEN	5071	5071
30-025-22469	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#008	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	L	L-26-19S-34E 1980 FSL 990 FSL	L-26-19S-34E 1980 FSL 990 FSL	QUEEN	5005	5005
30-025-32987	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#005C	Oil	Vertical	Cancelled April	35	T19S	R34E	C	C-35-19S-34E 660 FSL 1980 FSL	C-35-19S-34E 660 FSL 1980 FSL	DELAWARE	8200	8200
30-025-32988	CHIMAREX ENERGY CO. OF COLORADO	MALLON 35 FEDERAL	#006F	Oil	Vertical	Cancelled April	35	T19S	R34E	F	F-35-19S-34E 1720 FSL 1680 FSL	F-35-19S-34E 1720 FSL 1680 FSL	DELAWARE	8200	8200
30-025-21672	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#005	Oil	Vertical	Plugged, Site Released	35	T19S	R34E	F	F-35-19S-34E 1980 FSL 1980 FSL	F-35-19S-34E 0 FSL 1980 FSL	QUEEN	5186	5186
30-025-32909	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	26	T19S	R34E	N	N-26-19S-34E 330 FSL 3030 FSL	N-26-19S-34E 330 FSL 3030 FSL			

VII (4)

Permian Oilfield Partners, LLC.  
 Belated Federal SWD #1  
 637' FSL, 208' FEL  
 Sec. 27, T19S, R34E, Lea Co. NM  
 Lat 32.6257672° N, Lon -103.5401562° W  
 GL 3725', RKB 3755'

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	Eddy
State	NM	NM	NM	NM
Field				
Formation	Delaware	Avalon Upper	3rd Bone Spring Sand	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.  
Beat The Punch Federal SWD #1  
798' FNL, 128' FEL  
Sec. 25, T20S, R32E, Lea Co. NM  
Lat 32.549220° N, Lon -103.711560° W  
GL 3571', RKB 3601'

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**  
**Belated Federal SWD #1**  
**637' FSL & 208' FEL**  
**Sec 27, T19S, R34E**  
**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 M2.2 event recorded 5.6 mi SE of the proposed well in August 2021. 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 0.6 mi (1.0 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 4.1 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 4.3 miles to the NE, the Blackbuck Wildrye Fee SWD #1, SWD-2369, and an active Devonian disposal 5.1 miles to the NNE, the Solaris Wild Cobra 1 State SWD #2, SWD-1525. All three 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:**

Belated Fed SWD rate (BBL/day)	50000
Fasken Quail 16 SWD #9 rate (BBL/day)	1800
Blackbuck Wildrye Fee SWD rate (BBL/day)	25000
Solaris Wild Cobra 1 SWD #2 (BBL/day)	2500
Interval height (ft)	1262
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.00
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14604
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/m3)	1100
Dynamic viscosity (Pa-s)	0.0003
Fluid compressibility (/Pa)	4 e-10
Rock compressibility (/Pa)	1.08 e-09

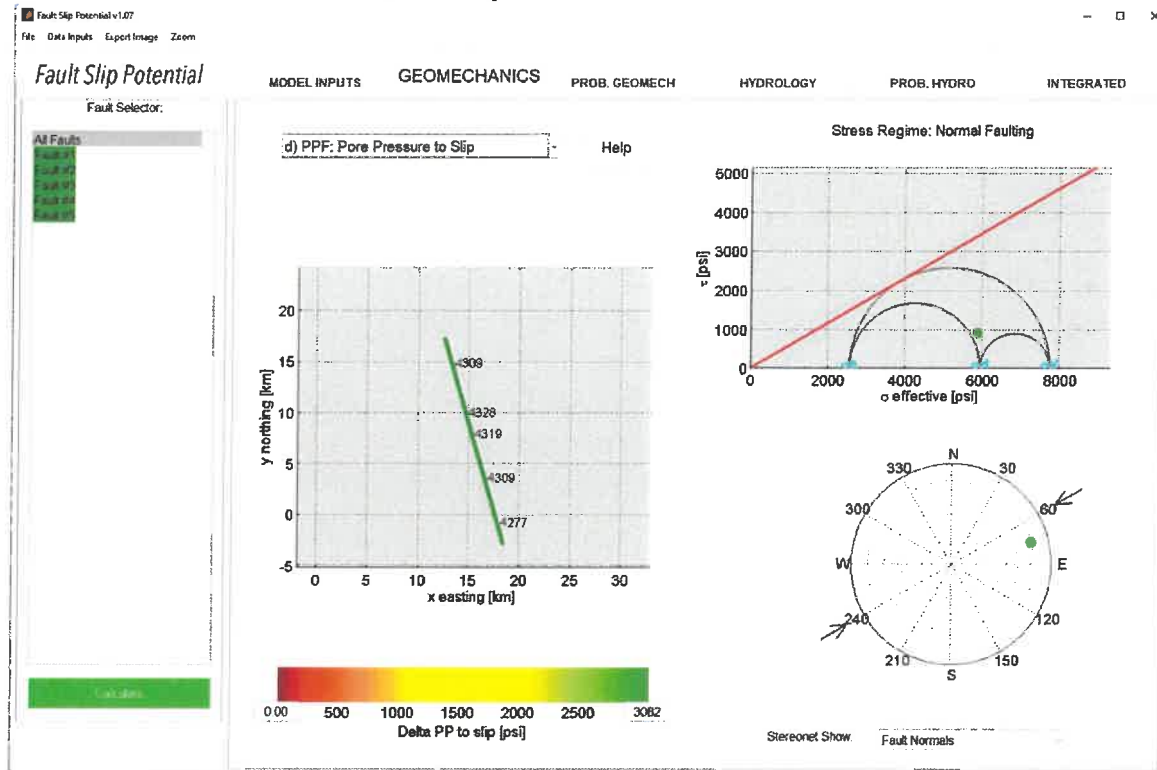
**Note:**

In screenshots below, injection well #1 is the proposed Belated Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Blackbuck Wildrye Fee SWD #1. Injection well #4 is the active Solaris Wild Cobra 1 State SWD #2.

## Exhibit A



## Geomechanics Pore Pressure to Slip



## GeoMechanics Variability

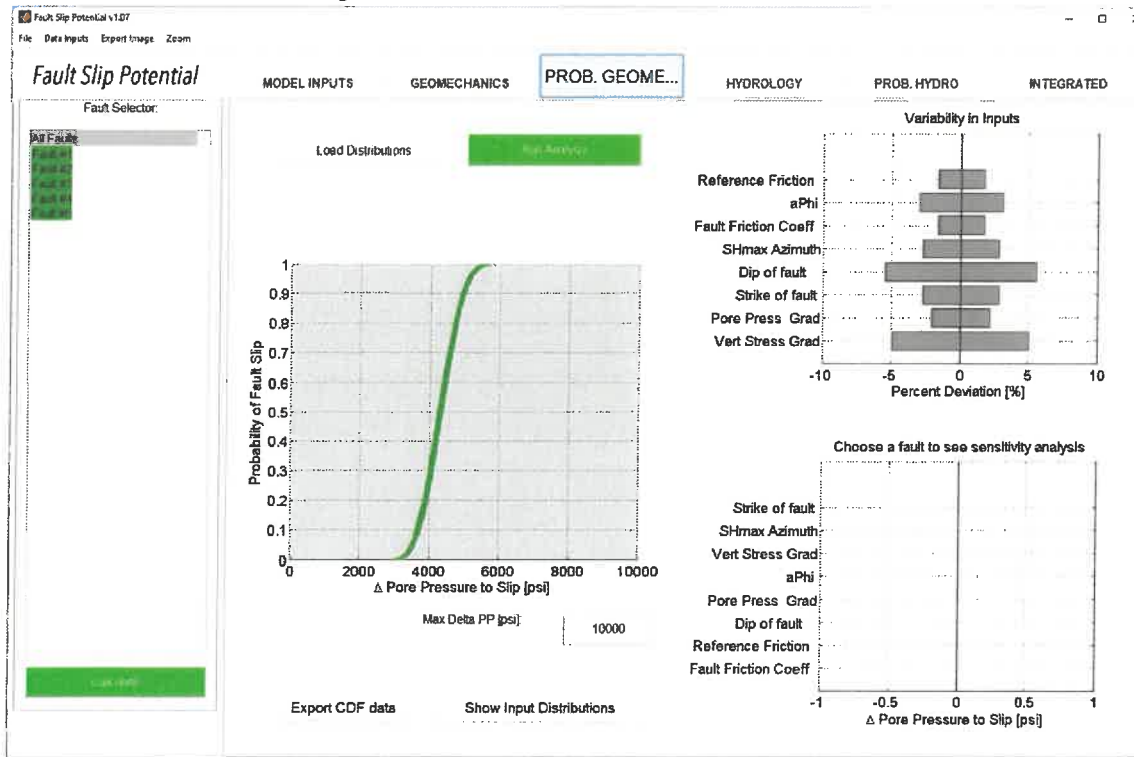
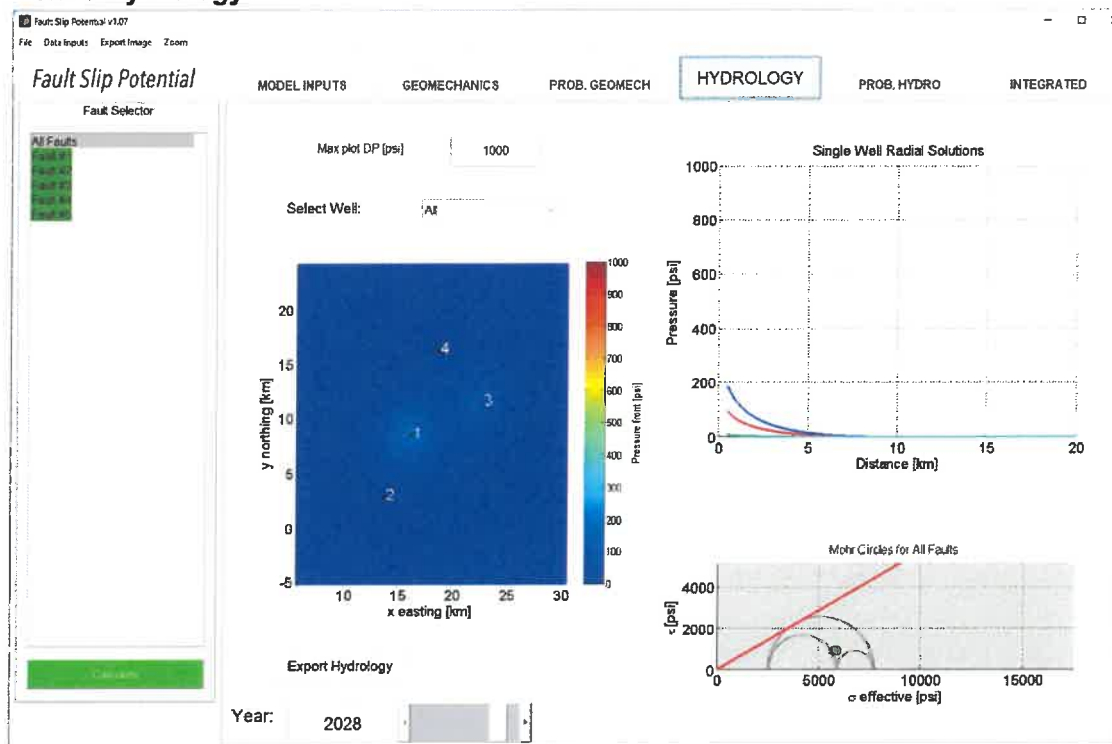
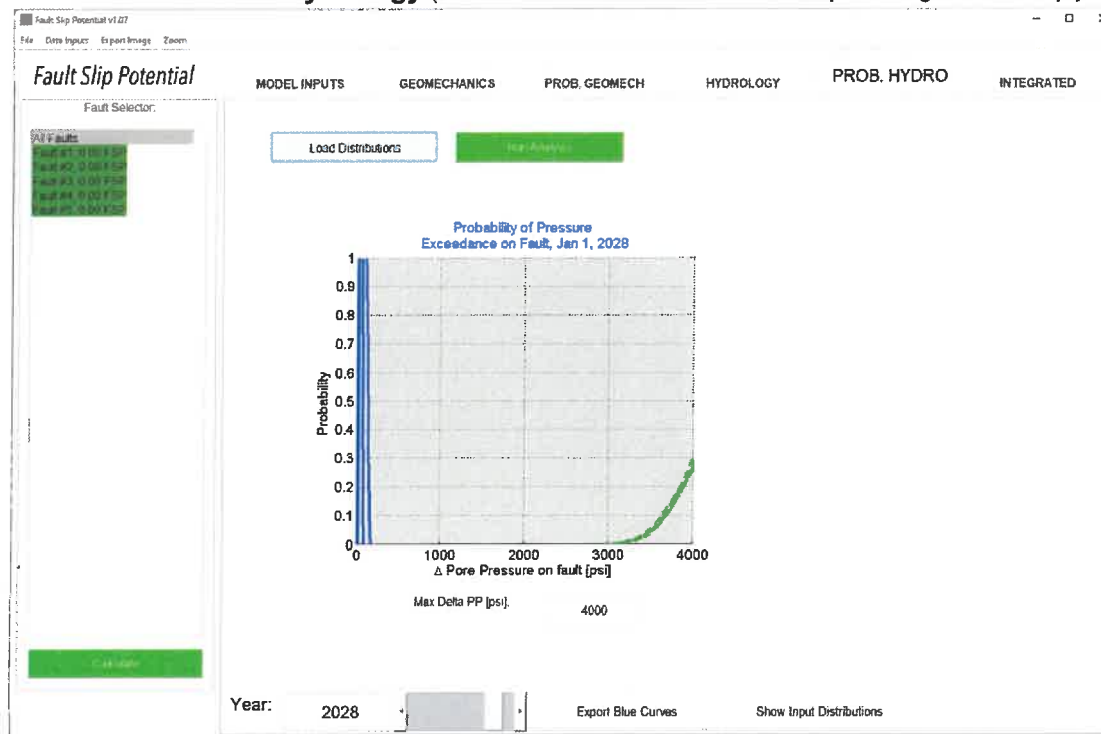


Exhibit A

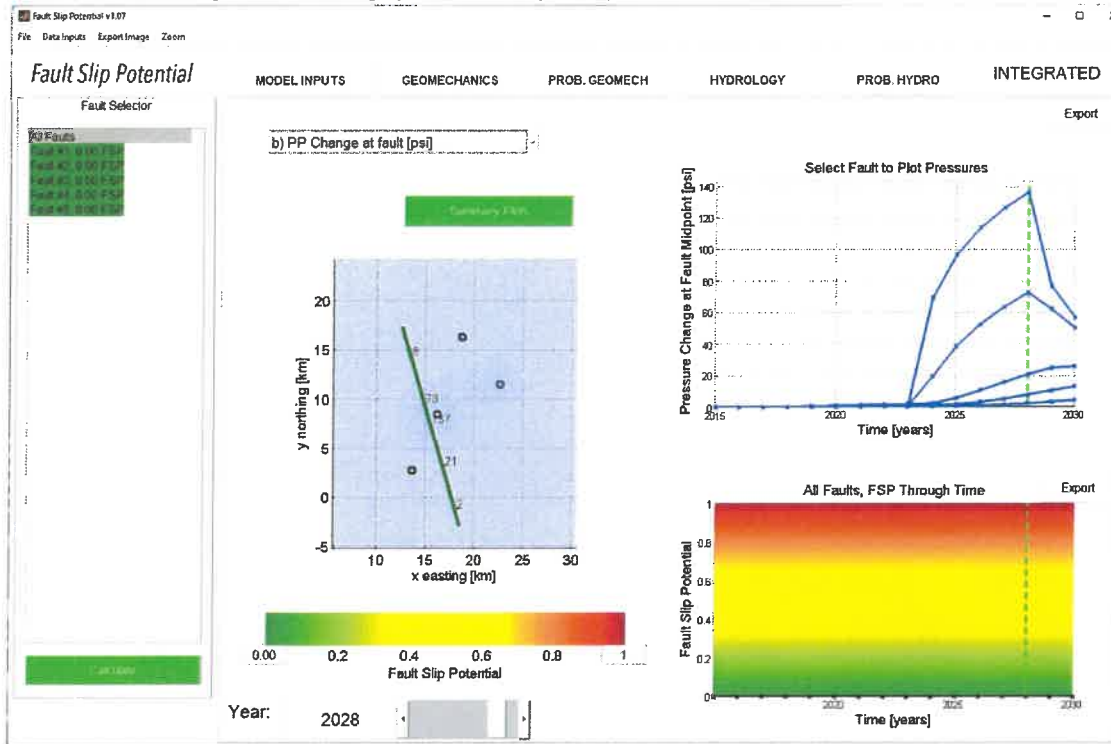
## Year 5 Hydrology



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

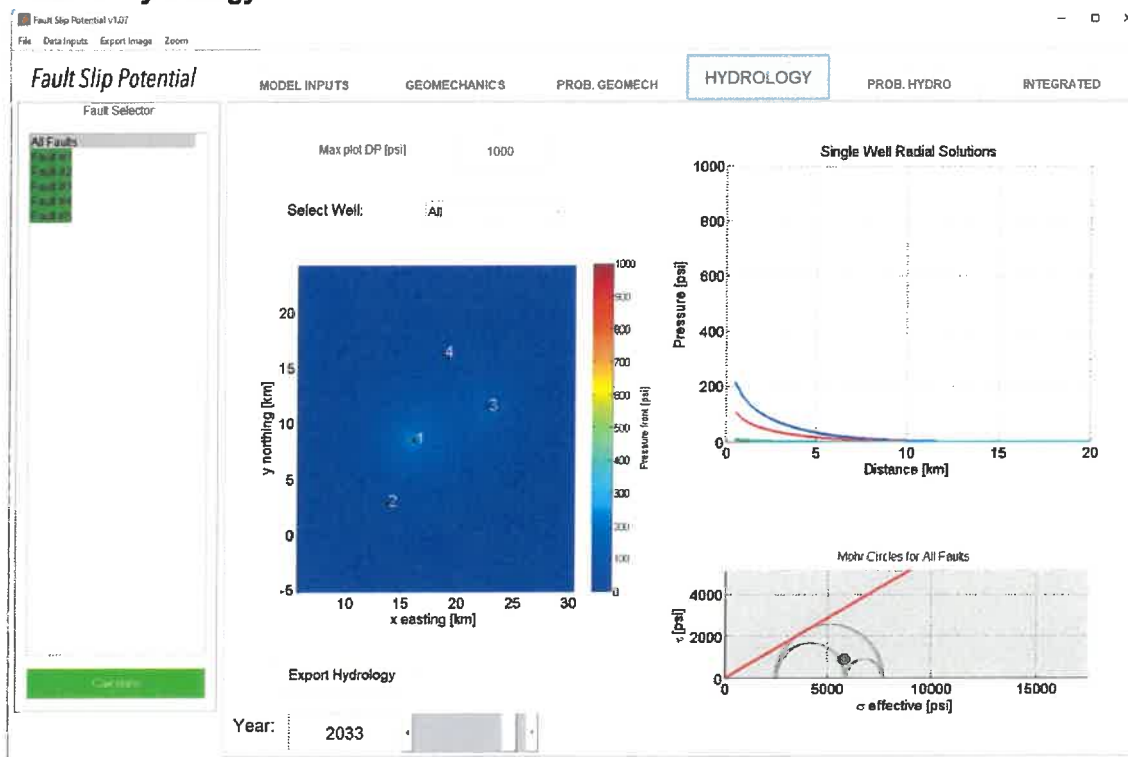


## Year 5 Fault Slip Probability (0% after 5 years)

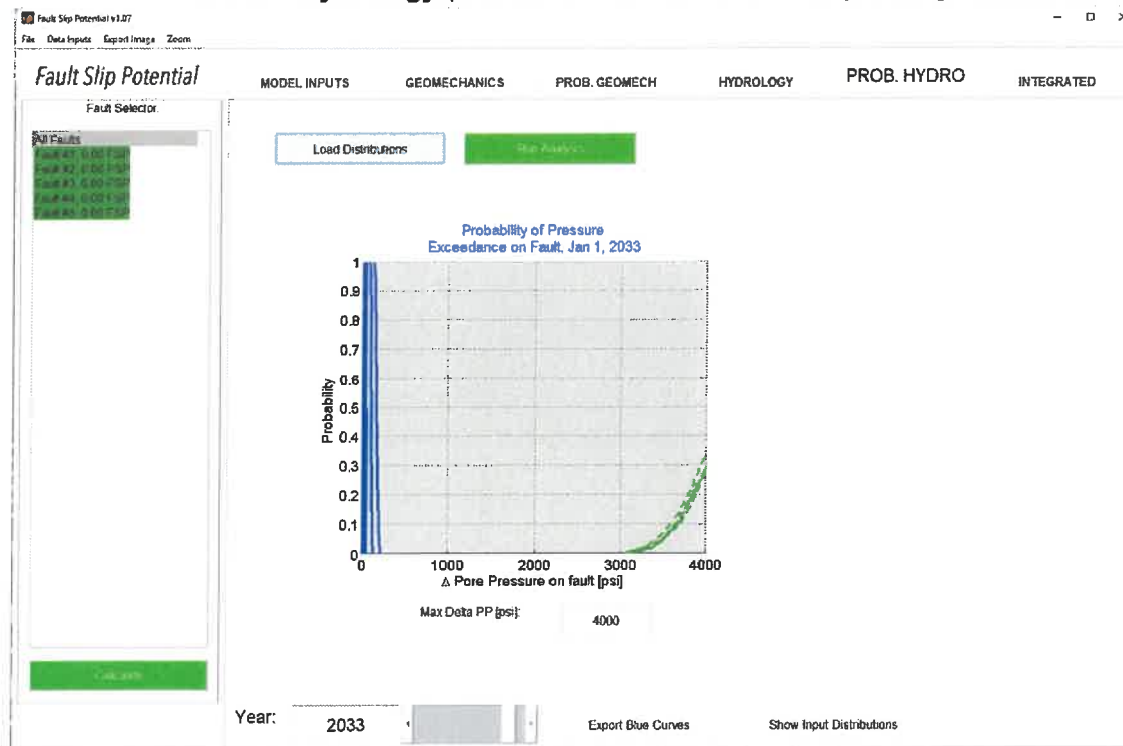


## Exhibit A

## Year 10 Hydrology

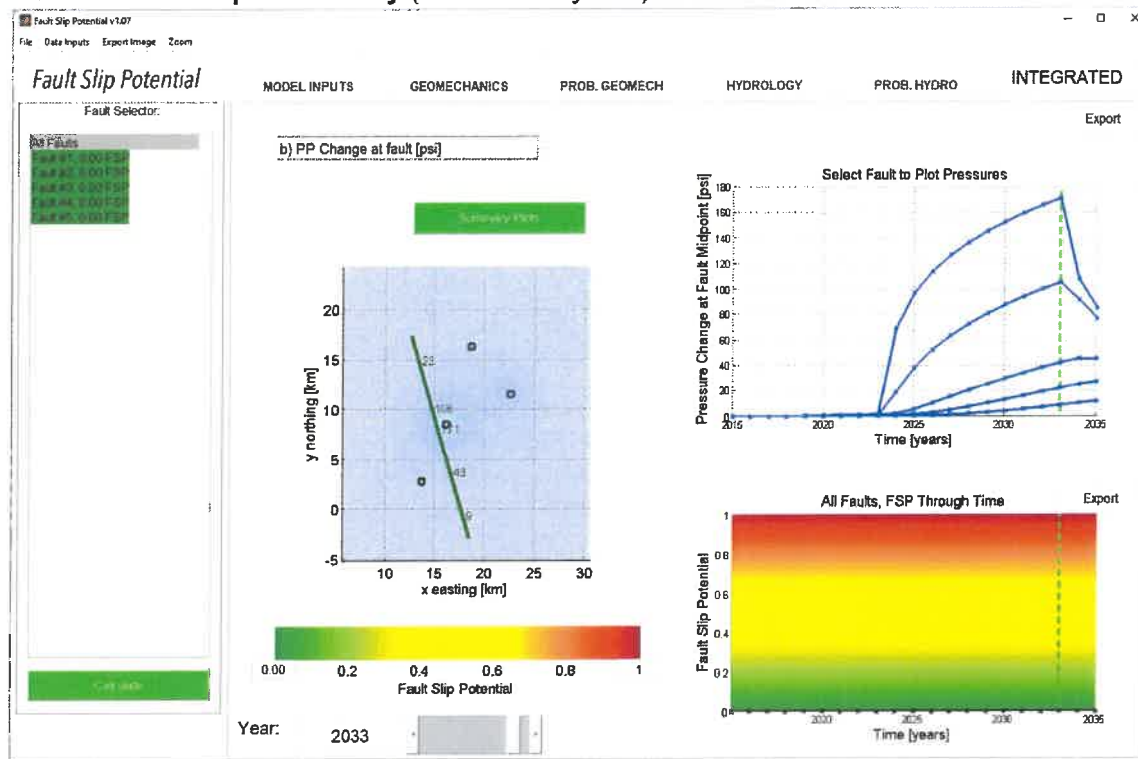


## Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



## Exhibit A

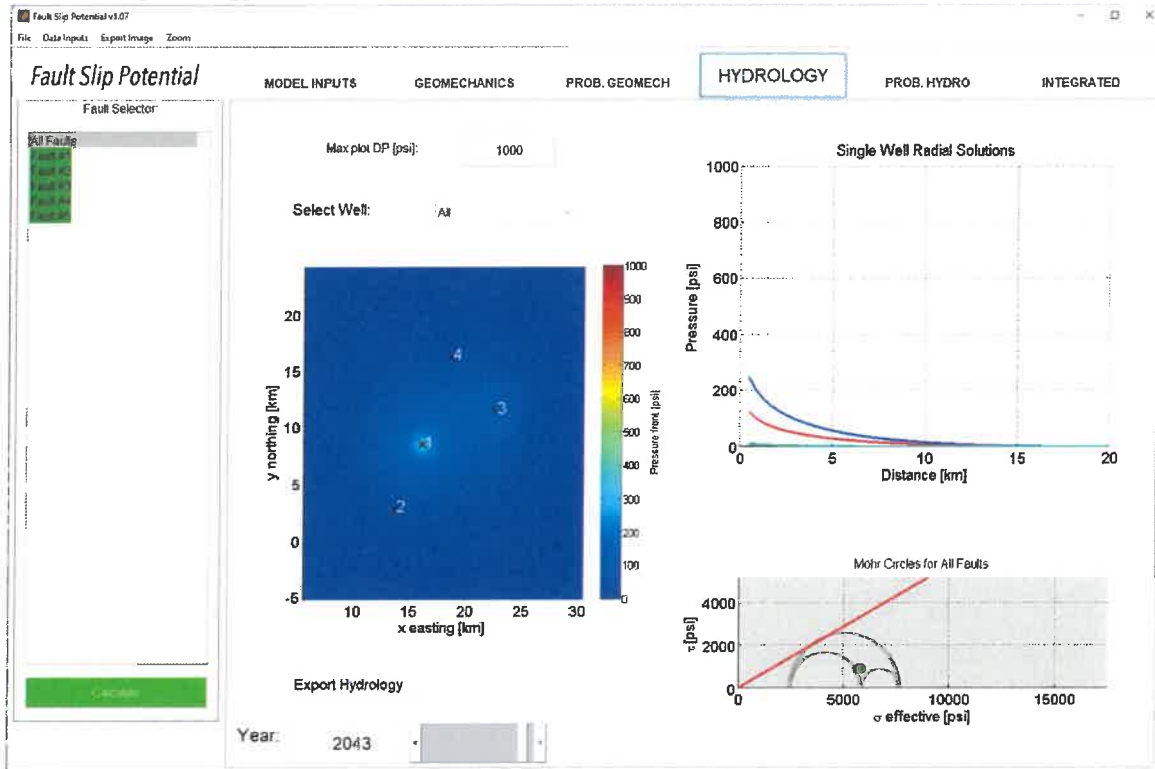
### Year 10 Fault Slip Probability (0% after 10 years)



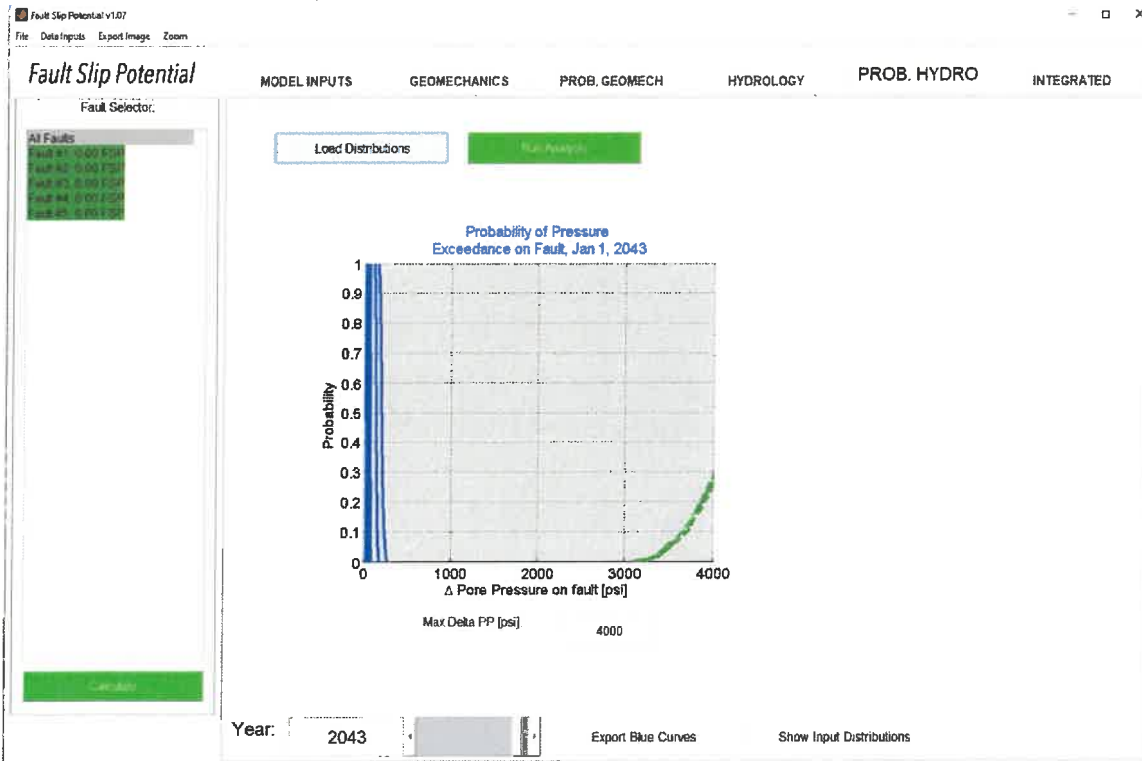
## Exhibit A



## Year 20 Hydrology

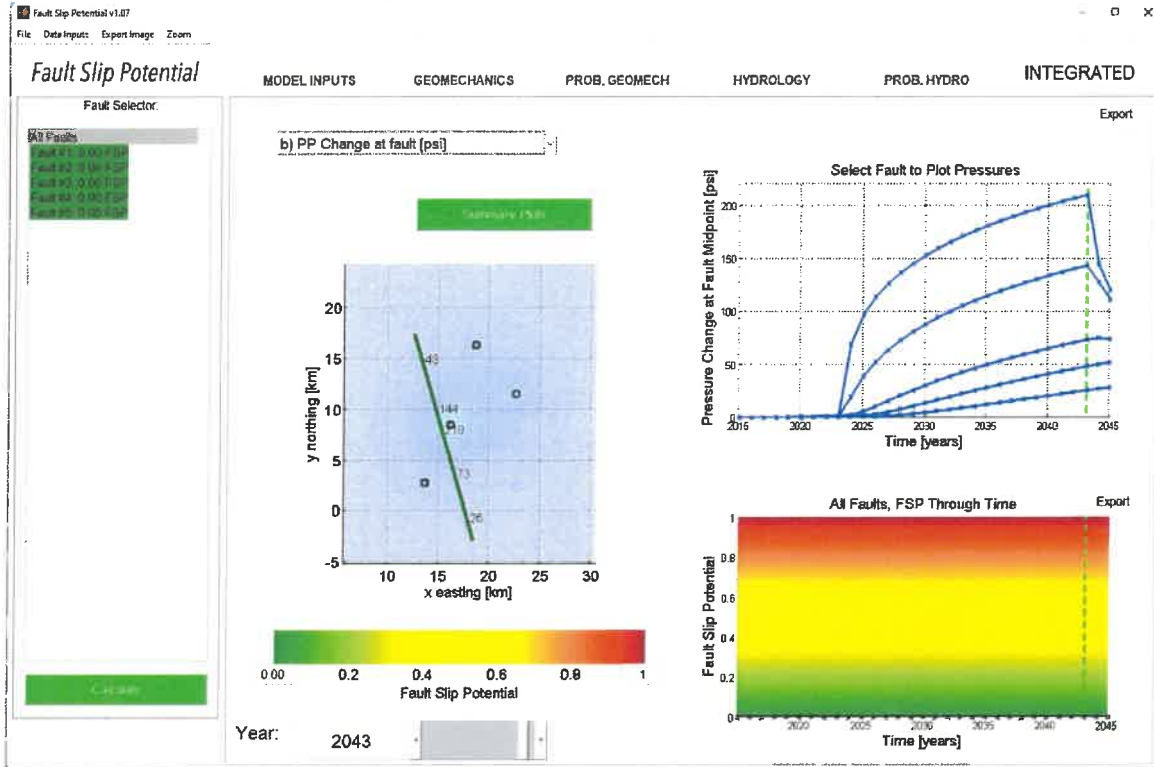


## Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)

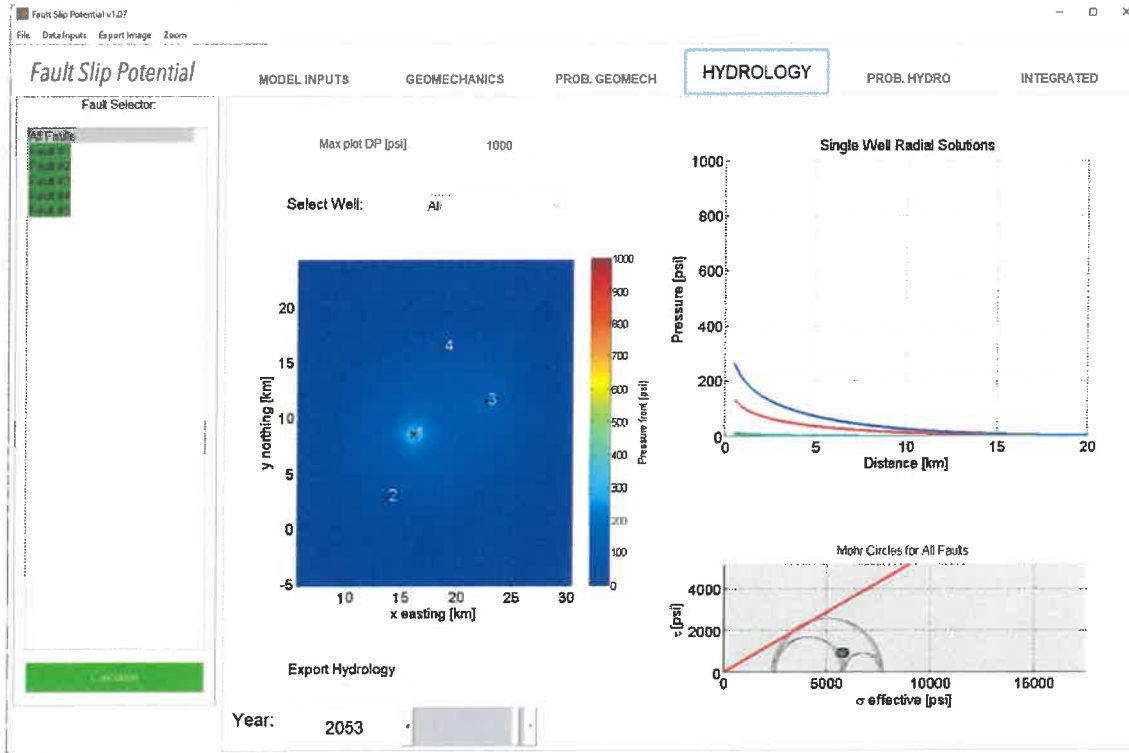


## Exhibit A

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



## Year 30 Hydrology

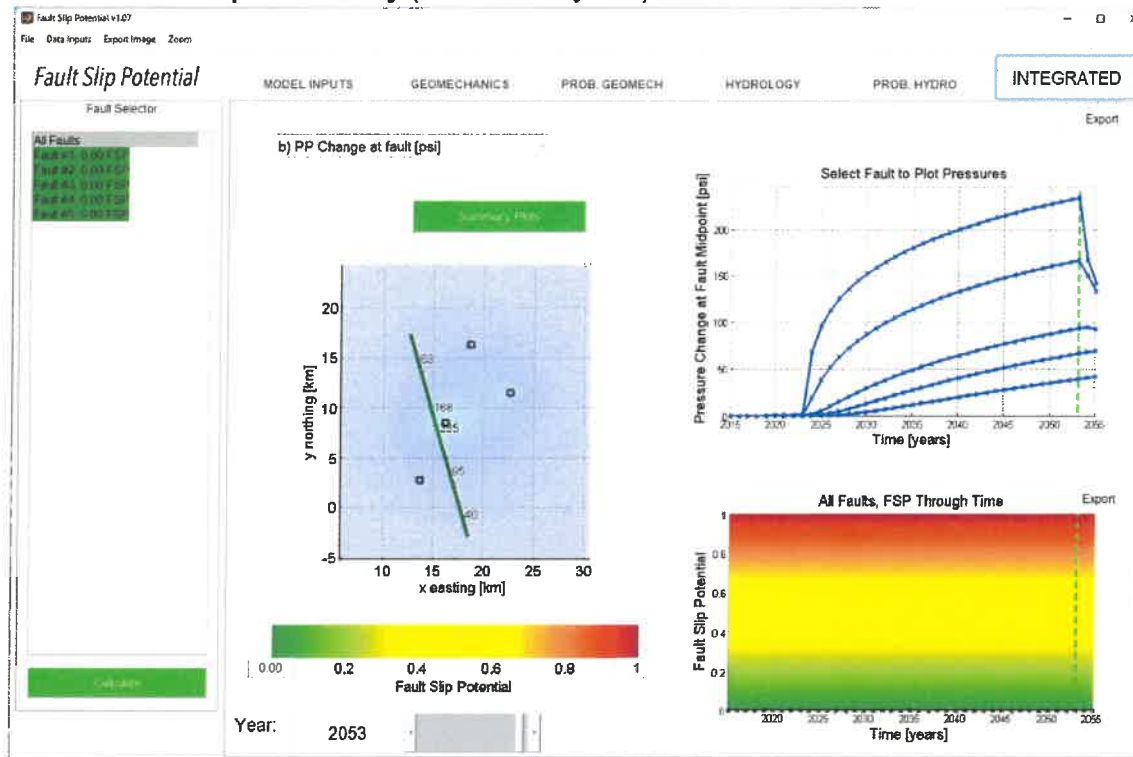


## Year 30 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



## Exhibit A

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



*Greg E. Fisher*

[gfisher@popmidstream.com](mailto:gfisher@popmidstream.com)  
(817) 606-7630

Exhibit A



**Item XII. Affirmative Statement**

Re: C-108 Application for Authorization to Inject  
Permian Oilfield Partners, LLC  
Belated Federal SWD #1  
637' FSL & 208' FEL  
Sec 27, T19S, R34E  
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".

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 00683 POD1</a>	CP	LE		3	3	4	25	19S	34E	639530	3610685*	120	28	92
<a href="#">CP 00806 POD1</a>	CP	LE		4	4	04		19S	34E	635109	3617151*	50		
<a href="#">CP 00811 POD1</a>	CP	LE		4	4	09		19S	34E	635132	3615542*	50		
<a href="#">CP 00875</a>	CP	LE		3	4	3	05	19S	34E	632592	3617013*	200		
<a href="#">CP 01672 POD1</a>	CP	LE		1	3	1	36	19S	34E	638736	3610009	100		
<a href="#">L 04059</a>	L	LE		4	1	12		19S	34E	639146	3616412*	125	60	65
<a href="#">L 04723</a>	L	LE		1	1	1	11	19S	34E	637026	3616880*	145	123	22
<a href="#">L 06731</a>	L	LE		3	2	2	12	19S	34E	639844	3616727*	120	80	40
<a href="#">L 07213</a>	L	LE		4	1	4	31	19S	34E	631700	3609351*	160	110	50
<a href="#">L 10347</a>	L	LE		2	3	03		19S	34E	635909	3617566*	130		
<a href="#">L 10380</a>	L	LE		4	4	4	02	19S	34E	638428	3617102*	153	100	53
<a href="#">L 12103 POD1</a>	L	LE		3	3	4	02	19S	34E	637920	3617173	120		

Average Depth to Water: **83 feet**

Minimum Depth: **28 feet**

Maximum Depth: **123 feet**

Record Count: 12

PLSS Search:

Township: 19S

Range: 34E

\*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 5:57 PM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

## Exhibit A

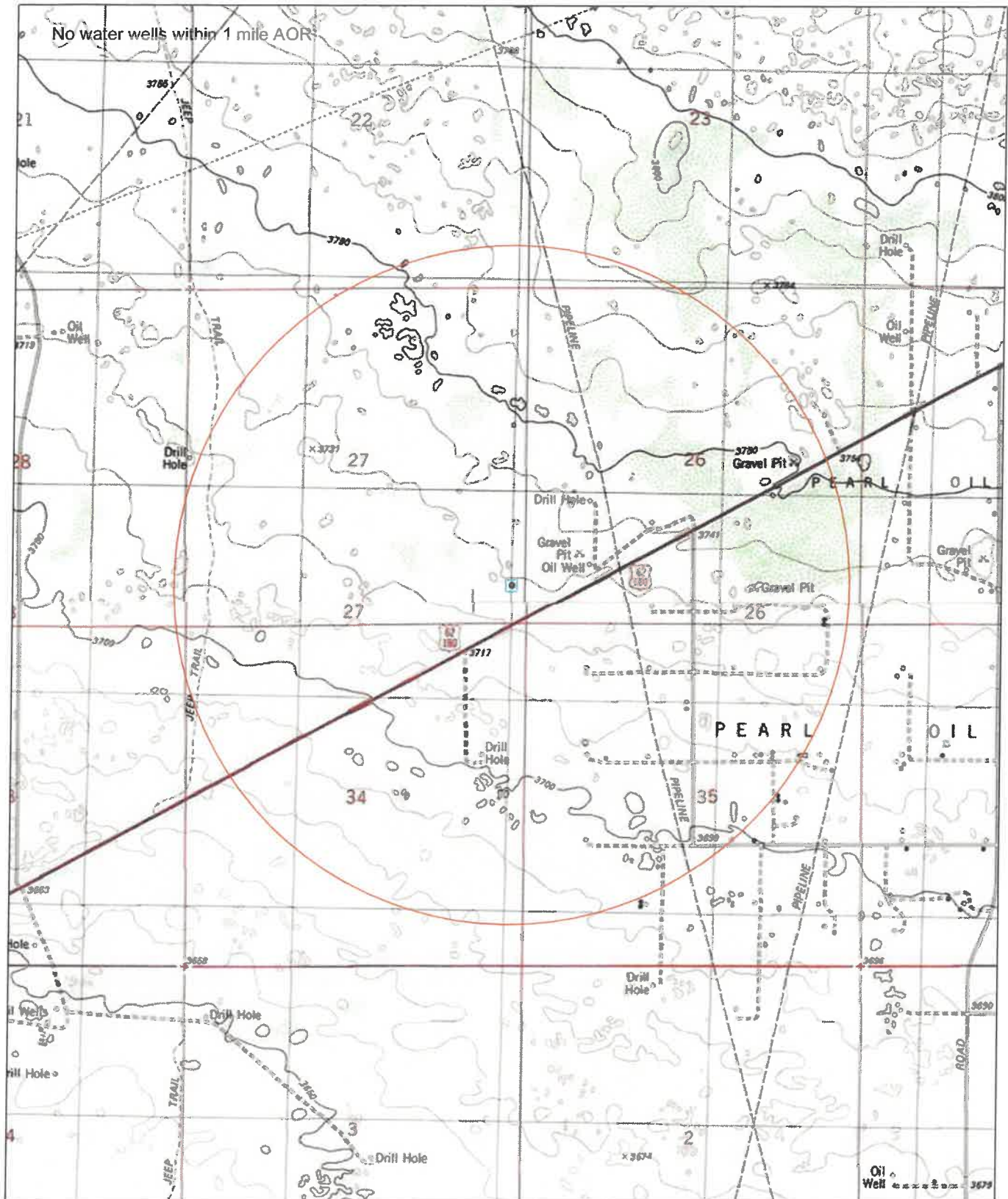
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Released to Imaging: 10/13/2023 7:58:54 AM



XI.

## Water Wells Within 1 Mile - Belated Federal SWD #1



5/23/2023, 7:03:27 PM

Site Boundaries

Copyright © 2013 National Geographic Society, i-cubed,  
U.S. Department of Energy Office of Legacy Management

**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 241747

**CONDITIONS**

Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241	OGRID: 328259
	Action Number: 241747
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

**CONDITIONS**

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

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  
09/28/2023



Firm Mailing Book ID: 253196

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0112 5798 25	Balog Family Trust PO Box 111890 Anchorage AK 99504	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
2	9314 8699 0430 0112 5798 32	Black Hills Gas Resources, Inc. 7001 Mt. Rushmore Rd. Rapid City SD 57702	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
3	9314 8699 0430 0112 5798 49	BP America Production Company 1700 Platte St., Suite 150 Denver CO 80202	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
4	9314 8699 0430 0112 5798 56	Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
5	9314 8699 0430 0112 5798 63	Burlington Resources Oil & Gas LP P.O. Box 2197 Houston TX 77252	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
6	9314 8699 0430 0112 5798 70	BXP Operating, LLC 11757 Katy Fwy, Suite 475 Houston TX 77079	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
7	9314 8699 0430 0112 5798 87	BXP Partners V LP 11757 Katy Fwy, Suite 475 Houston TX 77079	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
8	9314 8699 0430 0112 5798 94	Cargoil & Gas Co LLC 2981 Plaza Azul Santa Fe NM 87505	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
9	9314 8699 0430 0112 5799 00	Chevron USA 6301 Deauville Blvd. Midland TX 79706	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
10	9314 8699 0430 0112 5799 17	Cimarex Energy Co. of Colorado 6001 Deauville Blvd, Ste 300N Midland TX 79706	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
11	9314 8699 0430 0112 5799 24	Cimarex Energy Company 6001 Deauville Blvd, Ste 300N Midland TX 79706	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
12	9314 8699 0430 0112 5799 31	Clarence Hyde Estate 6300 Ridgelea Pl., Suite 1018 Fort Worth TX 76116	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
13	9314 8699 0430 0112 5799 48	Contango Resources, LLC 111 E. 5th Street, Suite 300 Fort Worth TX 76102	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
14	9314 8699 0430 0112 5799 55	Devon Energy Production Company 333 West Sheridan Ave. Oklahoma City OK 73102	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
15	9314 8699 0430 0112 5799 62	EOG Resources, Inc. P.O. Box 2267 Midland TX 79702	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice

Exhibit 4.B



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  
09/28/2023



Firm Mailing Book ID: 253196

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
16	9314 8699 0430 0112 5799 79	Frances W. Hyde Inc. 6300 Ridgelea Pl., Suite 1018 Fort Worth TX 76116	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
17	9314 8699 0430 0112 5799 86	Jack V. Walker Revocable Trust P.O. Box 102256 Anchorage AK 99510	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
18	9314 8699 0430 0112 5799 93	Lenox Mineral Title Holdings Inc. 420 Throckmorton St., Suite 1150 Fort Worth TX 76102	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
19	9314 8699 0430 0112 5800 05	Linn Operating, LLC 600 Travis Street, Ste 1200 Houston TX 77002	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
20	9314 8699 0430 0112 5800 12	Matador Production Company 5400 LBJ Freeway, Ste 1500 Dallas TX 75240	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
21	9314 8699 0430 0112 5800 29	Matador Resources Co. attn: Kyle Perkins 5400 LBJ Freeway, Ste 1500 Dallas TX 75240	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
22	9314 8699 0430 0112 5800 36	Merit Energy Company, LLC 13727 Noel Road, suite 500 Dallas TX 75240	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
23	9314 8699 0430 0112 5800 43	Merit Energy Partners D-111 13727 Noel Road, Suite 1200 Dallas TX 75240	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
24	9314 8699 0430 0112 5800 50	Nadel and Gussman HEYCO, LLC P.O. Box 1936 Roswell NM 88202	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
25	9314 8699 0430 0112 5800 67	New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
26	9314 8699 0430 0112 5800 74	Penroc Oil Corp. P.O. Box 2769 Hobbs NM 88241	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
27	9314 8699 0430 0112 5800 81	Shogoil & Gas Co II LLC P.O. Box 279450 Santa Fe NM 87592	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
28	9314 8699 0430 0112 5800 98	XTO Energy Inc. 22777 Springwoods Village Pkwy, Suite 126 Spring TX 77389	\$2.31	\$4.35	\$2.20	\$0.00	10053.001Belated Notice
Totals:			\$64.68	\$121.80	\$61.60	\$0.00	
			Grand Total:		\$248.08		

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Listed by Sender

Total Number of Pieces  
Received at Post Office

Postmaster:  
Name of receiving employee

Dated:



Transaction Report Details - CertifiedPro.net  
Firm Mail Book ID= 253196  
Generated: 10/12/2023 9:53:20 AM

USPS Article Number	Date Created	Reference Number	Name 1	Name 2	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
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9314869904300112580081	2023-09-28 7:36 AM	10053.001Belated	Shogoi & Gas Co II LLC		Santa Fe	NM	87592	To be Mailed	Return Receipt - Electronic, Certified Mail	
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9314869904300112580036	2023-09-28 7:36 AM	10053.001Belated	Merit Energy Company, LLC		Dallas	TX	75240	To be Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300112580029	2023-09-28 7:36 AM	10053.001Belated	Matador Resources Co.	attn: Kyle Perkins	Dallas	TX	75240	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:00 AM
9314869904300112580012	2023-09-28 7:36 AM	10053.001Belated	Matador Production Company		Dallas	TX	75240	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:00 AM
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9314869904300112579955	2023-09-28 7:36 AM	10053.001Belated	Devon Energy Production Company		Oklahoma City	OK	73102	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 9:38 AM
9314869904300112579948	2023-09-28 7:36 AM	10053.001Belated	Contango Resources, LLC		Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:38 PM
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9314869904300112579870	2023-09-28 7:36 AM	10053.001Belated	BXP Operating, LLC		Houston	TX	77079	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300112579863	2023-09-28 7:36 AM	10053.001Belated	Burlington Resources Oil & Gas LP		Houston	TX	77252	Mailed	Return Receipt - Electronic, Certified Mail	
9314869904300112579856	2023-09-28 7:36 AM	10053.001Belated	Bureau of Land Management		Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	
9314869904300112579849	2023-09-28 7:36 AM	10053.001Belated	BP America Production Company		Denver	CO	80202	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:00 AM
9314869904300112579832	2023-09-28 7:36 AM	10053.001Belated	Black Hills Gas Resources, Inc.		Rapid City	SD	57702	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:22 PM
9314869904300112579825	2023-09-28 7:36 AM	10053.001Belated	Balog Family Trust		Anchorage	AK	99504	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-10 12:17 PM

Exhibit 4.C

EXHIBIT

C

tabbies

# 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  
September 29, 2023  
and ending with the issue dated  
September 29, 2023.



Publisher

Sworn and subscribed to before me this  
29th day of September 2023.



Business Manager



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 publication has been made.

## LEGAL NOTICE September 29, 2023

CASE NO. 23807: Notice to all affected parties, as well as heirs and devisees of: Advance Energy Partners Hat Mesa LLC; Apache Corporation; B&J Operating Inc.; Balog Family Trust; Black Hills Gas Resources, Inc.; Bureau of Land Management; Chesapeake Exploration, LLC; Cimarex Energy Co.; Cimarex Energy Co. of Colorado; COG Operating LLC; Delmar Hudson Lewis Living Trust; Fasken Land & Minerals LTD; Hudson Oil Company of Texas; Hyde Oil & Gas Corp; Jack V. Walker Revocable Trust; Javelina Partners; Lee Wiley Moncrief Trust; Lewis H. Delmar Living Trust; Lincoln Oil and Gas LLC; Lindy's Living Trust; Magnum Hunter Production Inc.; Marathon Oil Co.; Mewbourne Oil Co.; New Mexico State Land Office; Pennzenergy Exploration and Production LLC; Read & Stevens Inc.; Select Agua Libre Midstream, LLC; Zorro Partners LTD; Matador Resources Co. of Application of Permian Oilfield Partners, LLC for approval of a 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 **October 19, 2023** to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/oed/hearing-info/>. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Overdue Federal SWD Well #1 well at a surface location 602' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

CASE NO. 23808: Notice to all affected parties, as well as heirs and devisees of: Balog Family Trust; Black Hills Gas Resources, Inc.; BP America Production Company; Bureau of Land Management; Burlington Resources Oil & Gas LP; BXP Operating, LLC; BXP Partners V LP; Cargill & Gas Co., LLC; Chevron USA; Cimarex Energy Co. of Colorado; Cimarex Energy Company; Clarence Hyde Estate; Contango Resources, LLC; Devon Energy Production Company, LLC; EOG Resources Inc.; Frances W. Hyde Inc.; Jack V. Walker Revocable Trust; Lenox Mineral Title Holdings Inc.; Linn Operating, LLC; Matador Production Company; Matador Resources Co.; Merit Energy Company, LLC; Merit Energy Partners D-III; Nadel and Gussman HEYCO, LLC; New Mexico State Land Office; Penroc Oil Corp.; Shogoli & Gas Co II LLC; XTO Energy, Inc. of Application of Permian Oilfield Partners, LLC for approval of a 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 **October 19, 2023** to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/oed/hearing-info/>. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Belated Federal SWD Well #1 well at a surface location 637' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.  
#00283241

01104570

00283241

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



## Exhibit 4.D