AE Order Number Banner

Application Number: pMSG2319957751

SWD-2547

Permian Oilfield Partners, LLC [328259]

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

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: Just In Time 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

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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

7-5-2023
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: 7-5-2023

E-MAIL ADDRESS: **spuryear@popmidstream.com**

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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 14,594'

   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 2,925 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)
Rustler	1,809	2,275	466
Salado	2,275	3,462	1,187
Delaware	6,084	8,089	2,005
Bone Spring	8,089	10,915	2,826
Wolfcamp	10,915	12,268	1,353
Lwr. Mississippian	13,830	14,454	624
Woodford	14,454	14,594	140
Devonian	14,594	15,518	924
Fusselman (Silurian)	15,518	15,887	369
Montoya (U. Ordovician)	15,887	16,287	400
Simpson (M. Ordovician	16,287	16,787	500

2. Regional shallow fresh water in the Quaternary is known to exist at depths less than 600'. See attached OSE Water Column Depth tables for the region. Depth from the bottom of this USDW to the injection zone is 13,994'. 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 is 1 fresh water well within the proposed well's one-mile area of review, POD L-08941. See attached 1 mile AOR water well map showing the location of this active POD in the AOR, as well as the attached POD information and water sample analysis.

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	3 Pool Name
	97869	SWD; DEVONIAN-SILURIAN

4 Property Code	5 Property Name	6 Well Number
	JUST IN TIME FEDERAL SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
328259	PERMIAN OILFIELD PARTNERS, LLC	3791'

10 Surface Location

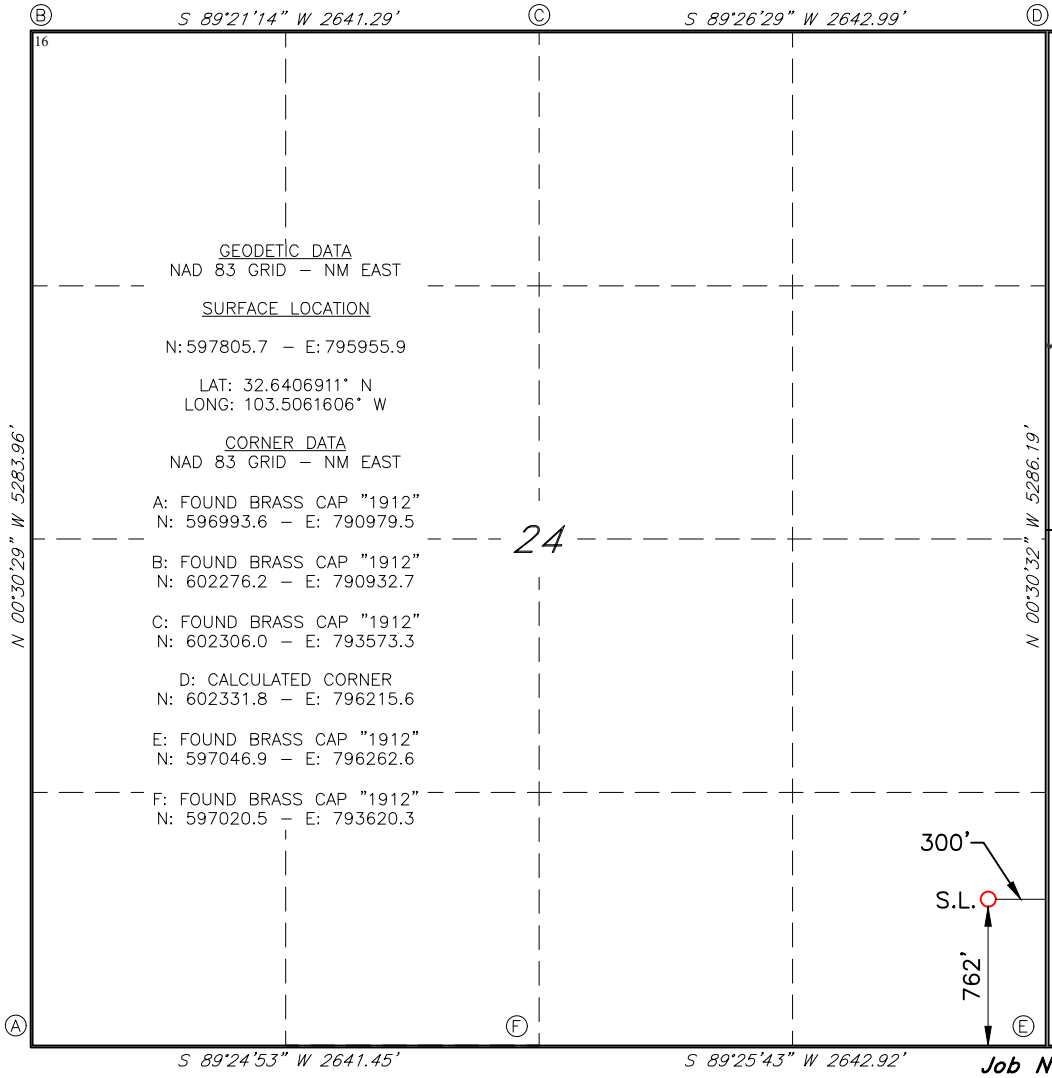
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
P	24	19S	34E		762	SOUTH	300	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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.



17 OPERATOR CERTIFICATION

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.

Signature — Date: 7-6-2023

Gary Fisher
Printed Name

gfisher@popmidstream.com
E-mail Address

18 SURVEYOR CERTIFICATION

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.

05/30/2023
Date of Survey

Signature and Seal of Professional Surveyor:

DALE E. BELL
NEW MEXICO
14400
PROFESSIONAL SURVEYOR
05/31/2023

14400
Certificate Number

Job No.: LS23050492

III (A)

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC.
Just In Time Federal SWD #1
762' FSL, 300' FEL
Sec. 24, T19S, R34E, Lea Co. NM
Lat 32.6406911° N, Lon -103.5061606° W
GL 3791', RKB 3821'

Surface - (Conventional)

Hole Size: 26" **Casing:** 20" - 133# N-80 BTC Casing
Depth Top: Surface
Depth Btm: 1834'
Cement: 3406 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: 6034'
Cement: 2430 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: 10965' **ECP/DV Tool:** 6134'
Cement: 1697 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: 10765'
Depth Btm: 14629'
Cement: 237 sks - Class H + Additives
Cement Top: 10765' - (Circulate & Bond Log)

Intermediate #4 - (Open Hole)

Hole Size: 6.5" **Depth:** 15862'
Inj. Interval: 14629' - 15862' (Open-Hole Completion)

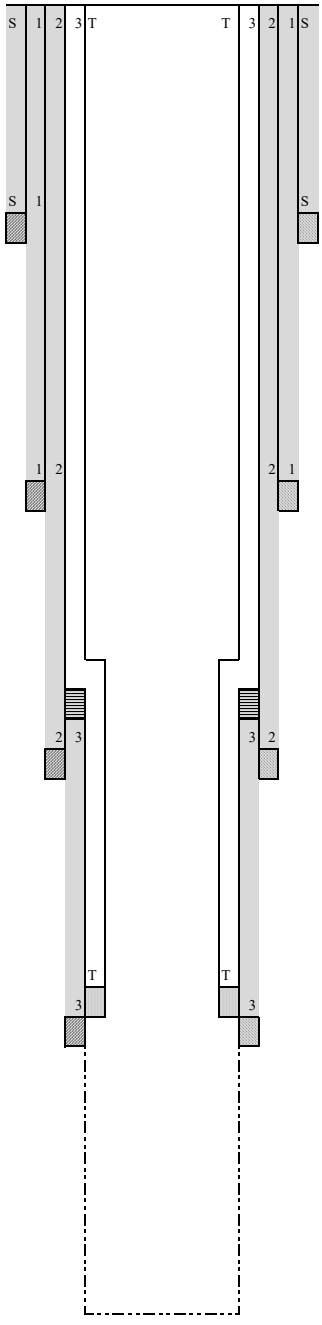
Tubing - (Tapered)

Tubing Depth: 14584' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 10765'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 14594' **Packer:** 5.5" - Perma-Pak or Equivalent (Inconel)
Packer Fluid: 8.4 ppg FW + Additives

III (A)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Just In Time Federal SWD #1
762' FSL, 300' FEL
Sec. 24, T19S, R34E, Lea Co. NM
Lat 32.6406911° N, Lon -103.5061606° W
GL 3791', RKB 3821'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 133# N-80 BTC Casing
Depth Top: Surface
Depth Btm: 1834'
Cement: 3406 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: 6034'
Cement: 2430 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: 10965'
Cement: 1697 sks - Class C + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 6134'

Intermediate #3 - (Liner)
Hole Size: 8.75"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 10765'
Depth Btm: 14629'
Cement: 237 sks - Class H + Additives
Cement Top: 10765' - (Circulate & Bond Log)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 15862'
Inj. Interval: 14629' - 15862' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 14584'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 10765'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 14594'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)
Packer Fluid: 8.4 ppg FW + Additives

XIII.

PERMIAN OILFIELD PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Just In Time Federal SWD #1
762' FSL & 300' FEL
Sec 24, T19S, R34E
Lea County, NM

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

Just In Time Federal SWD #1 - Affected Persons within 1 Mile Area of Review					
Notified Name	**Notifed Address**	**Notified City, State, ZIP Code**	**Shipper**	**Tracking No.**	**Mailing Date**
Armstrong Energy Corp.	P.O. Box 1973	Roswell, NM 88202	USPS	9414811899562232147224	7/11/2023
Balog Family Trust	PO Box 111890	Anchorage, AK 99504	USPS	9414811899562232147200	7/11/2023
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899562232147286	7/11/2023
Cargoil & Gas Co LLC	2981 Plaza Azul	Santa Fe, NM 87505	USPS	9414811899562232147811	7/11/2023
Chevron USA	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899562232147859	7/11/2023
Chisholm Energy Agent Inc	801 Cherry St., Suite 1200	Fort Worth, TX 76102	USPS	9414811899562232147897	7/11/2023
COG Operating LLC	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899562232147842	7/11/2023
D W St. Clair	501 First Natl Bank Bldg	Midland, TX 79701	USPS	9414811899562232147712	7/11/2023
EOG Resources	PO Box 2267	Midland, TX 79702	USPS	9414811899562232147767	7/11/2023
Great Western Drilling Ltd.	PO Box 1659	Midland, TX 79702	USPS	9414811899562232147705	7/11/2023
Jack V Walker Revocable Trust	PO Box 102256	Anchorage, AK 99510	USPS	9414811899562232147781	7/11/2023
Marathon Oil Permian LLC	990 Town and Country Blvd	Houston, TX 77024	USPS	9414811899562232147910	7/11/2023
Mewbourne Oil Co.	P.O. Box 5270	Hobbs, NM 88241	USPS	9414811899562232147903	7/11/2023
Morgan Operating, LLC	P. O. Box 118	Hobbs, NM 88241	USPS	9414811899562232147989	7/11/2023
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899562232147934	7/11/2023
Shogoil & Gas Co II LLC	PO Box 29450	Santa Fe, NM 87592	USPS	9414811899562232147613	7/11/2023
Smith & Marrs Inc.	P.O. Box 863	Kermit, TX 79745	USPS	9414811899562232147620	7/11/2023
St. Clair Energy Corp.	P.O. Box 1392	Midland, TX 79707	USPS	9414811899562232147699	7/11/2023
XTO Energy, Inc.	6401 Holiday Hill Road, Building #5	Midland, TX 79707	USPS	9414811899562232147637	7/11/2023
XTO Holdings LLC	22777 Springwoods Village Pkwy, Suite 126	Spring, TX 77389	USPS	9414811899562232147163	7/11/2023
ZPZ Delaware LLC	2000 Post Oak Blvd	Houston, TX 77056	USPS	9414811899562232199247	7/11/2023

Date: 7/11/2023

Sean Puryear
Permian Oilfield Partners, LLC
spuryear@popmidstream.com

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

ARTICLE NUMBER: 9414 8118 9956 2232 1472 24

ARTICLE ADDRESSED TO:

Armstrong Energy Corp
PO BOX 1973
ROSWELL NM 88202-1973

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

USPS HOBBS, NM 88240 JUL 11 2023

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1472 00

ARTICLE ADDRESSED TO:

Balog Family Trust
PO BOX 111890
ANCHORAGE AK 99511-1890

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1472 86

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1478 11

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1478 59

ARTICLE ADDRESSED TO:

Chevron USA
6301 DEAUVILLE
MIDLAND TX 79706-2964

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1478 97

ARTICLE ADDRESSED TO:

Chisholm Energy Agent Inc.
801 CHERRY ST STE 1200
FORT WORTH TX 76102-6825

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1478 42

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1477 12

ARTICLE ADDRESSED TO:

DW St. Clair
501 FIRST NATIONAL BANK BLDG
MIDLAND TX 79701-0000

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1477 67

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1477 05

ARTICLE ADDRESSED TO:

Great Western Drilling Ltd.
PO BOX 1659
MIDLAND TX 79702-1659

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1477 81

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1479 10

ARTICLE ADDRESSED TO:

Marathon Oil Permian LLC
990 TOWN AND COUNTRY BLVD
HOUSTON TX 77024-2217

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1479 03

ARTICLE ADDRESSED TO:

Mewbourne Oil Co.
PO BOX 5270
HOBBS NM 88241-5270

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1479 89

ARTICLE ADDRESSED TO:

Morgan Operating LLC
PO BOX 118
HOBBS NM 88241-0118

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1479 34

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1476 13

ARTICLE ADDRESSED TO:

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

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1476 20

ARTICLE ADDRESSED TO:

Smith & Marrs Inc.
PO BOX 863
KERMIT TX 79745-0863

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1476 99

ARTICLE ADDRESSED TO:

St. Clair Energy Corp
PO BOX 1392
MIDLAND TX 79702-1392

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 2232 1476 37

ARTICLE ADDRESSED TO:

XTO Energy, Inc.
6401 HOLIDAY HILL RD BLDG 5
MIDLAND TX 79707-2157

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1471 63

ARTICLE ADDRESSED TO:

XTO Holdings LLC
22777 SPRINGWOODS VILLAGE PKWY STE 126
SPRING TX 77389-1425

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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

ARTICLE NUMBER: 9414 8118 9956 2232 1992 47

ARTICLE ADDRESSED TO:

ZPZ Delaware LLC
2000 POST OAK BLVD STE 100
HOUSTON TX 77056-4400

FEES	
Postage Per Piece	$4.510
Certified Fee	4.350
Total Postage & Fees:	8.860

HOBBS, NM 88240 JUL 11 2023 USPS

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.

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 Just In Time Federal SWD #1, and is located 762' FSL & 300' FEL, Unit P, Section 24, Township 19 South, Range 34 East, NMPM, approximately 14 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 14,629 feet to 15,862 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,925 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.
#00278995

Publisher

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

Business Manager

My commission expires
January 29, 2027
(Seal)

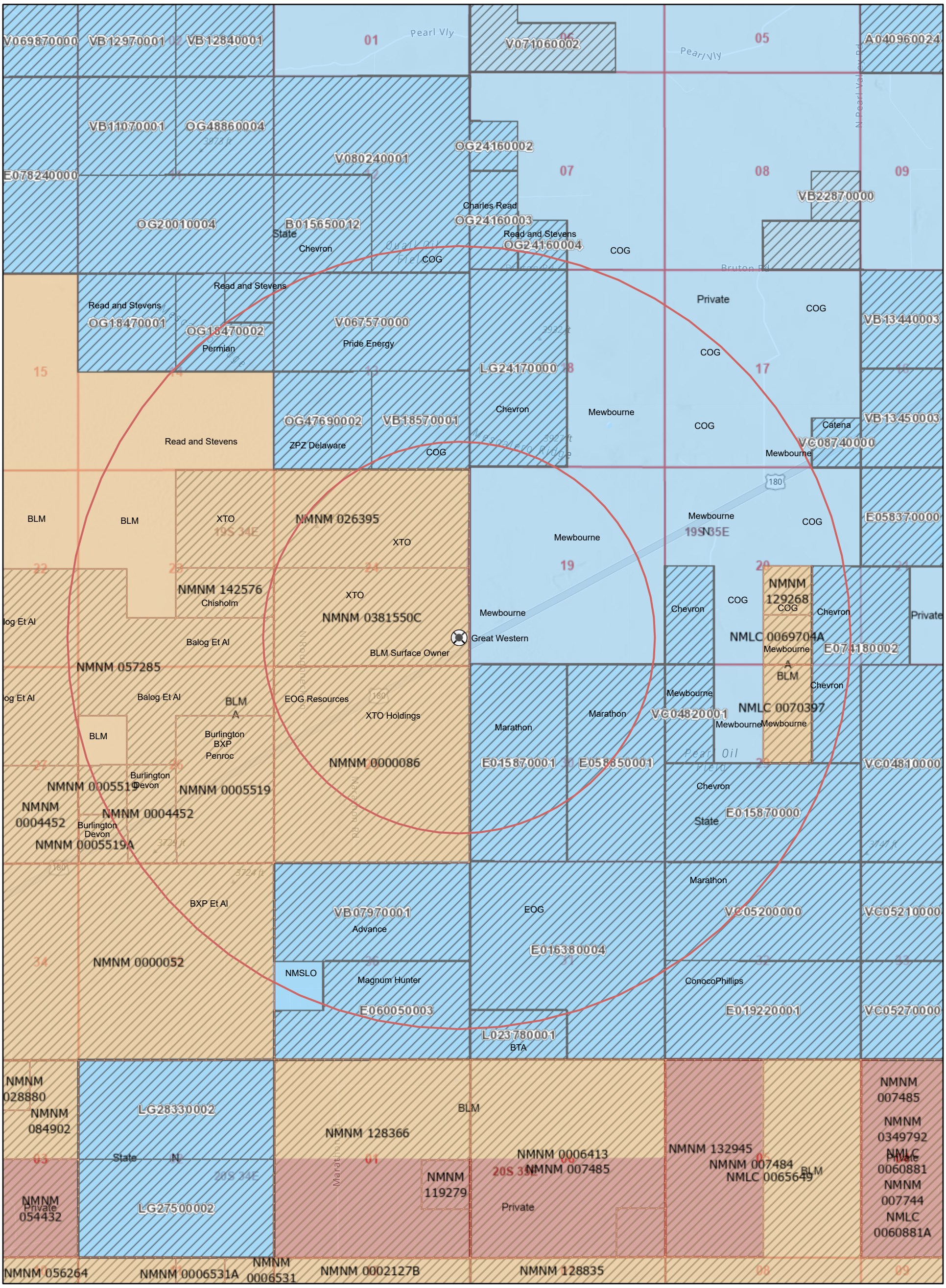
STATE OF NEW MEXICO
NOTARY PUBLIC
GUSSIE RUTH BLACK
COMMISSION # 1087526
COMMISSION EXPIRES 01/29/2027

67115647 00278995

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

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

V (a) Just In Time Federal SWD #1, 1 & 2 Mi AOR, Leases



7/6/2023, 10:49:45 PM

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

V (b)

Just In Time Federal SWD #1, 1 & 2 Mi AOR, Wells

No Delaware injection wells within 1 mile AOR
No Devonian injection wells within 2 mile AOR

7/6/2023, 10:52:10 PM

Override 1
Override 1
Wells - Large Scale
Miscellaneous
Gas, Active
Gas, Cancelled
Gas, Plugged
Injection, Active
Injection, Plugged
Oil, Active
Oil, Cancelled
Oil, New
Oil, Plugged
Oil, Temporarily Abandoned
Salt Water Injection, Active
Salt Water Injection, New
Salt Water Injection, Plugged
Water, 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.

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
Oil Conservation Division of the New Mexico Energy, Minerals and

New Mexico Oil Conservation Division

V (c)

Just In Time 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
30-025-41131	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#001H	Oil	Horizontal	Active	24	T19S	R34E	M	M-24-19S-34E 330 FSL 400 FWL	D-24-19S-34E 4954 FSL 358 FWL	BONE SPRING	15220	10822
30-025-39555	COG OPERATING LLC	TUSK FEDERAL	#002H	Oil	Horizontal	Active	25	T19S	R34E	D	D-25-19S-34E 330 FNL 330 FWL	M-25-19S-34E 4953 FNL 427 FWL	BONE SPRING	15345	10891
30-025-43810	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#005H	Oil	Horizontal	New	24	T19S	R34E	M	M-24-19S-34E 605 FSL 450 FWL	D-24-19S-34E 200 FNL 449 FWL	BONE SPRING	14654	10421
30-025-38351	COG OPERATING LLC	HAWG FEDERAL	#001	Gas	Vertical	Active	25	T19S	R34E	E	E-25-19S-34E 1650 FNL 660 FWL	S-25-19S-34E Lot: E 1650 FNL 660 FWL	BONE SPRING	13740	13740
30-025-02394	ARMSTRONG ENERGY CORP	SUPERIOR FEDERAL	#002	Oil	Vertical	Active	25	T19S	R34E	D	D-25-19S-34E 660 FNL 660 FWL	D-25-19S-34E 660 FNL 660 FWL	QUEEN	5140	5140
30-025-23502	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	24	T19S	R34E	M	M-24-19S-34E 660 FSL 660 FWL	M-24-19S-34E 660 FSL 660 FWL	QUEEN	5105	5105
30-025-21098	ARMSTRONG ENERGY CORP	SUPERIOR FEDERAL	#003	Oil	Vertical	Active	25	T19S	R34E	E	E-25-19S-34E 2130 FNL 760 FWL	E-25-19S-34E 2130 FNL 760 FWL	QUEEN	5150	5150
30-025-24868	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Plugged, Site Released	25	T19S	R34E	C	C-25-19S-34E 330 FNL 1650 FWL	C-25-19S-34E 330 FNL 1650 FWL	SAN ANDRES	6200	6200
30-025-27896	ARMSTRONG ENERGY CORP	GOVERNMENT E	#007	Oil	Vertical	Active	25	T19S	R34E	C	C-25-19S-34E 660 FNL 1980 FWL	C-25-19S-34E 660 FNL 1980 FWL	BONE SPRING	10362	10362
30-025-20889	ARMSTRONG ENERGY CORP	SUPERIOR FEDERAL	#001	Oil	Vertical	Plugged, Site Released	25	T19S	R34E	F	F-25-19S-34E 1780 FNL 1980 FWL	F-25-19S-34E 1780 FNL 1980 FWL	QUEEN	5150	5150
30-025-42709	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#002H	Oil	Horizontal	Active	24	T19S	R34E	N	N-24-19S-34E 440 FSL 2060 FWL	C-24-19S-34E 201 FNL 1898 FWL	BONE SPRING	15271	10834
30-025-43811	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#006H	Oil	Horizontal	Active	24	T19S	R34E	N	N-24-19S-34E 440 FSL 2010 FWL	C-24-19S-34E 194 FNL 1874 FWL	BONE SPRING	14055	9611
30-025-08457	ARMSTRONG ENERGY CORP	SUPERIOR A FEDERAL	#001	Oil	Vertical	Plugged, Site Released	25	T19S	R34E	K	K-25-19S-34E 1980 FSL 1980 FWL	K-25-19S-34E 1980 FSL 1980 FWL	QUEEN	5112	5112
30-025-30839	ARMSTRONG ENERGY CORP	MOBIL 24 FEDERAL	#001	Oil	Vertical	Active	24	T19S	R34E	K	K-24-19S-34E 1650 FSL 2310 FWL	K-24-19S-34E 1650 FSL 2310 FWL	BONE SPRING	10797	10797
30-025-25101	MORGAN OPERATING, INC.	GOVERNMENT E	#005	Oil	Vertical	Active	25	T19S	R34E	G	G-25-19S-34E 1670 FNL 2310 FEL	G-25-19S-34E 1670 FNL 2310 FEL	SAN ANDRES	6200	6200
30-025-28571	ARMSTRONG ENERGY CORP	GOVERNMENT G	#002	Oil	Vertical	Active	24	T19S	R34E	O	O-24-19S-34E 760 FSL 2080 FEL	O-24-19S-34E 760 FSL 2080 FEL	BONE SPRING	10400	10400
30-025-43812	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#007H	Oil	Horizontal	Active	24	T19S	R34E	O	O-24-19S-34E 200 FSL 2050 FEL	B-24-19S-34E 204 FNL 1894 FEL	BONE SPRING	15126	10394
30-025-24867	MORGAN OPERATING, INC.	GOVERNMENT E	#003	Oil	Vertical	Active	25	T19S	R34E	B	B-25-19S-34E 990 FNL 1980 FEL	B-25-19S-34E 990 FNL 1980 FEL	SAN ANDRES	6200	6200
30-025-25218	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#007	Oil	Vertical	Cancelled Apd	25	T19S	R34E	J	J-25-19S-34E 2310 FSL 1980 FEL	J-25-19S-34E 2310 FSL 1980 FEL	SAN ANDRES	6200	6200
30-025-22080	ST CLAIR ENERGY CORP	SUPERIOR FEDERAL	#007	Salt Water Disposal	Vertical	Plugged, Site Released	25	T19S	R34E	G	G-25-19S-34E 1980 FNL 1980 FEL	G-25-19S-34E 1980 FNL 1980 FEL	QUEEN	5154	5154
30-025-42710	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#003H	Oil	Horizontal	Active	24	T19S	R34E	O	O-24-19S-34E 200 FSL 2000 FEL	B-24-19S-34E 195 FNL 1920 FEL	BONE SPRING	15493	10895
30-025-41989	COG OPERATING LLC	SUPER COBRA STATE COM	#002C	Oil	Horizontal	Cancelled Apd	13	T19S	R34E	O	O-13-19S-34E 191 FSL 1880 FEL	B-13-19S-34E 331 FNL 1980 FEL	BONE SPRING	15425	n/a
30-025-24390	ARMSTRONG ENERGY CORP	GOVERNMENT G	#001	Oil	Vertical	Active	24	T19S	R34E	O	O-24-19S-34E 330 FSL 1700 FEL	O-24-19S-34E 330 FSL 1700 FEL	SAN ANDRES	6250	6250
30-025-25123	SMITH & MARRS INC	GOVERNMENT E	#006	Oil	Vertical	Plugged, Site Released	25	T19S	R34E	H	H-25-19S-34E 1800 FNL 990 FEL	H-25-19S-34E 1800 FNL 990 FEL	SAN ANDRES	6200	6200
30-025-25219	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#008	Oil	Vertical	Cancelled Apd	25	T19S	R34E	I	I-25-19S-34E 2310 FSL 990 FEL	I-25-19S-34E 2310 FSL 990 FEL	SAN ANDRES	6200	6200
30-025-24413	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	24	T19S	R34E	H	H-24-19S-34E 1980 FNL 760 FEL	H-24-19S-34E 1980 FNL 760 FEL	BONE SPRING	10350	10350
30-025-24069	MORGAN OPERATING, INC.	GOVERNMENT E	#002	Oil	Vertical	Active	25	T19S	R34E	A	A-25-19S-34E 760 FNL 760 FEL	A-25-19S-34E 760 FNL 760 FEL	BONE SPRING	10350	10350
30-025-42544	COG OPERATING LLC	SUPER COBRA STATE COM	#002C	Oil	Horizontal	Cancelled Apd	13	T19S	R34E	P	P-13-19S-34E 191 FSL 690 FEL	A-13-19S-34E 331 FNL 660 FEL	BONE SPRING	15009	n/a
30-025-22967	D W ST CLAIR	SUPERIOR FEDERAL	#008	Oil	Vertical	Plugged, Site Released	25	T19S	R34E	I	I-25-19S-34E 1980 FSL 660 FEL	I-25-19S-34E 0 FSL 660 FEL	SEVEN RIVERS	5150	5150
30-025-41987	COG OPERATING LLC	SUPER COBRA STATE COM	#001H	Oil	Horizontal	Active	13	T19S	R34E	P	P-13-19S-34E 190 FSL 660 FEL	A-13-19S-34E 341 FNL 668 FEL	BONE SPRING	15298	10738
30-025-02393	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	24	T19S	R34E	A	A-24-19S-34E 660 FNL 660 FEL	A-24-19S-34E 660 FNL 660 FEL	SAN ANDRES	6200	6200
30-025-43813	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#008H	Oil	Horizontal	Cancelled Apd	25	T19S	R34E	A	A-25-19S-34E 292 FNL 538 FEL	A-24-19S-34E 200 FNL 450 FEL	BONE SPRING	14819	9689
30-025-42577	XTO ENERGY, INC	PERLA NEGRA FEDERAL COM	#004H	Oil	Horizontal	Active	25	T19S	R34E	A	A-25-19S-34E 298 FNL 485 FEL	A-25-19S-34E 120 FNL 344 FEL	BONE SPRING	16064	10814
30-025-03169	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	19	T19S	R35E	M	M-19-19S-35E Lot: 4 990 FSL 660 FWL	M-19-19S-35E Lot: 4 990 FSL 660 FWL	BONE SPRING	10367	10367
30-025-30182	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	19	T19S	R35E	L	L-19-19S-35E Lot: 3 1874 FSL 755 FWL	L-19-19S-35E Lot: 3 1874 FSL 755 FWL	SURFACE	60	60
30-025-23987	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	30	T19S	R35E	K	K-30-19S-35E 1980 FSL 1980 FWL	K-30-19S-35E 0 FSL 1980 FWL	BONE SPRING	10405	10405
30-025-46804	MEWBOURNE OIL CO	SANTA VACA 19 18 B2MD STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1380 FWL	D-18-19S-35E Lot: 1 100 FNL 500 FWL	BONE SPRING	20756	10246
30-025-46801	MEWBOURNE OIL CO	HOLSTEIN 19 18 B3OB FEE	#001C	Oil	Horizontal	Never Drilled	19	T19S	R35E	O	O-19-19S-35E 206 FSL 1330 FEL	B-18-19S-35E 100 FNL 2000 FEL	BONE SPRING	21303	n/a
30-025-46802	MEWBOURNE OIL CO	HOLSTEIN 19 18 B3PA FEE	#001C	Oil	Horizontal	Cancelled Apd	19	T19S	R35E	P	P-19-19S-35E 206 FSL 1300 FEL	A-18-19S-35E 100 FNL 660 FEL	BONE SPRING	21277	n/a
30-025-46803	MEWBOURNE OIL CO	SANTA VACA 19 18 B3MD STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1350 FWL	A-19-19S-35E 100 FNL 500 FWL	BONE SPRING	21315	n/a
30-025-49155	MEWBOURNE OIL CO	SANTA VACA 19 18 B3NC STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1410 FWL	C-18-19S-35E 100 FNL 1950 FWL	BONE SPRING	21231	10755
30-025-49154	MEWBOURNE OIL CO	SANTA VACA 19 18 B2NC STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1980 FWL	C-18-19S-35E 100 FNL 1980 FWL	BONE SPRING	20703	10246
30-025-03168	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	19	T19S	R35E	P	P-19-19S-35E 660 FSL 660 FEL	P-19-19S-35E 660 FSL 660 FEL	QUEEN	5185	5185
30-025-50241	MEWBOURNE OIL CO	SANTA VACA 19 18 B2PA FEE	#001H	Oil	Horizontal	New	19	T19S	R35E	P	P-19-19S-35E 205 FSL 1270 FEL	A-19-19S-35E 100 FNL 500 FEL	BONE SPRING	20761	10230
30-025-50242	MEWBOURNE OIL CO	SANTA VACA 19 18 B3OB FEE	#001H	Oil	Horizontal	New	19	T19S	R35E	O	O-19-19S-35E 205 FSL 1360 FEL	B-18-19S-35E 100 FNL 1980 FEL	BONE SPRING	21253	8627
30-025-50324	MEWBOURNE OIL CO	SANTA VACA 19 18 B1OB FEE	#001H	Oil	Horizontal	New	19	T19S	R35E	O	O-19-19S-35E 205 FSL 1320 FEL	B-18-19S-35E 100 FNL 1350 FEL	BONE SPRING	20003	10287
30-025-50325	MEWBOURNE OIL CO	SANTA VACA 19 18 B2OB FEE	#001H	Oil	Horizontal	New	19	T19S	R35E	O	O-19-19S-35E 205 FSL 1340 FEL	B-18-19S-35E 100 FNL 1900 FEL	BONE SPRING	20763	10293
30-025-50326	MEWBOURNE OIL CO	SANTA VACA 19 18 B3PA FEE	#001H	Oil	Horizontal	New	19	T19S	R35E	P	P-19-19S-35E 205 FSL 1300 FEL	A-18-19S-35E 100 FNL 660 FEL	BONE SPRING	21230	10740
30-025-50368	MEWBOURNE OIL CO	SANTA VACA 19 18 B1MD STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1640 FWL	D-19-19S-35E Lot: 1 100 FNL 440 FWL	BONE SPRING	20079	9549
30-025-50487	MEWBOURNE OIL CO	SANTA VACA 19 18 B1NC STATE COM	#001H	Oil	Horizontal	New	19	T19S	R35E	N	N-19-19S-35E 205 FSL 1660 FWL	C-18-19S-35E 100 FNL 2200 FWL	BONE SPRING	20029	9512

VII (4)

Permian Oilfield Partners, LLC.
Just In Time Federal SWD #1
762' FSL, 300' FEL
Sec. 24, T19S, R34E, Lea Co. NM
Lat 32.6406911° N, Lon -103.5061606° W
GL 3791', RKB 3821'

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.
Just In Time Federal SWD #1
762' FSL, 300' FEL
Sec. 24, T19S, R34E, Lea Co. NM
Lat 32.6406911° N, Lon -103.5061606° W
GL 3791', RKB 3821'

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
Just In Time Federal SWD #1
762' FSL & 300' FEL
Sec 24, 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 4.8 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 2.7 mi (4.4 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.

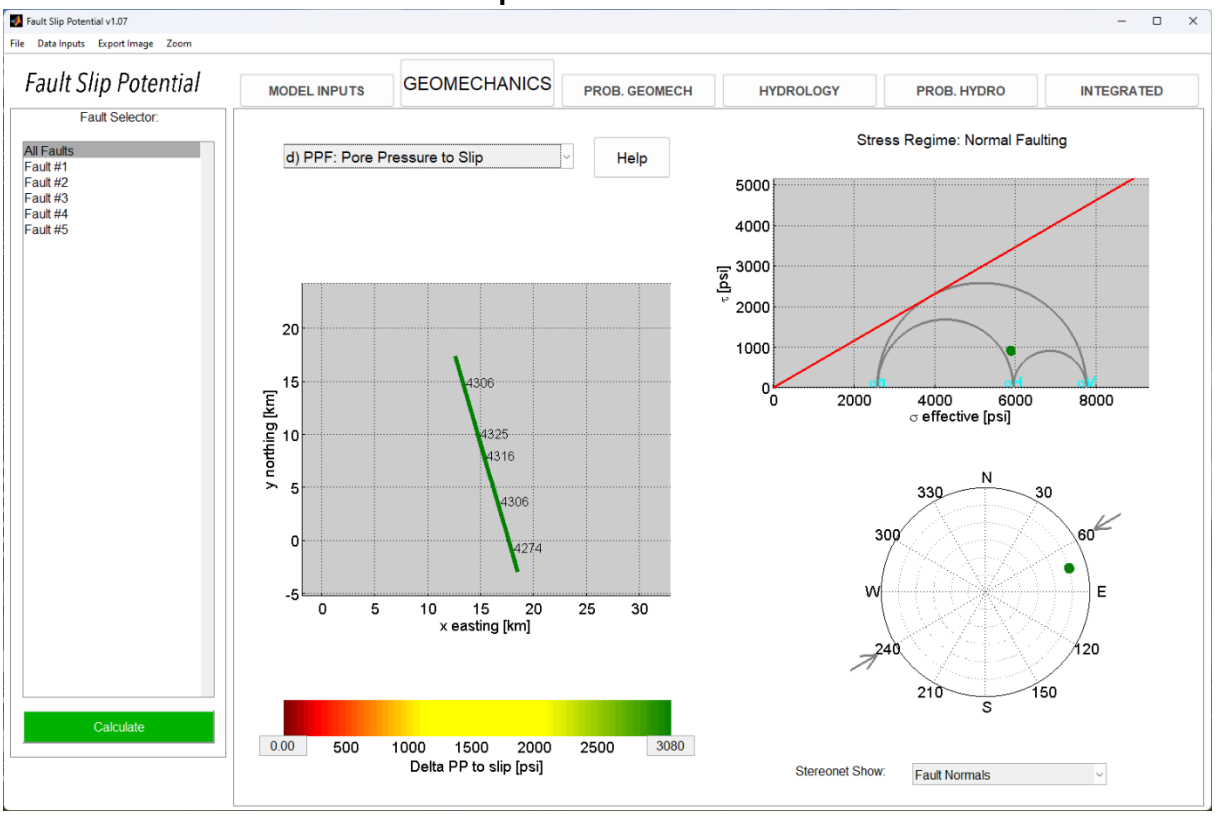
6. As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 2.2 miles away from the nearest active or permitted Devonian disposal well (Blackbuck Wildrye Fee SWD #1, SWD-2369). There is an active Devonian disposal well 3.9 miles to the N, the Solaris Wild Cobra 1 State SWD #2, SWD-1525, as well another active well 5.9 miles to the SW, the Fasken Quail 16 State SWD #9, SWD-1537. 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:

Just In Time 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)	1293
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.00
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14594
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

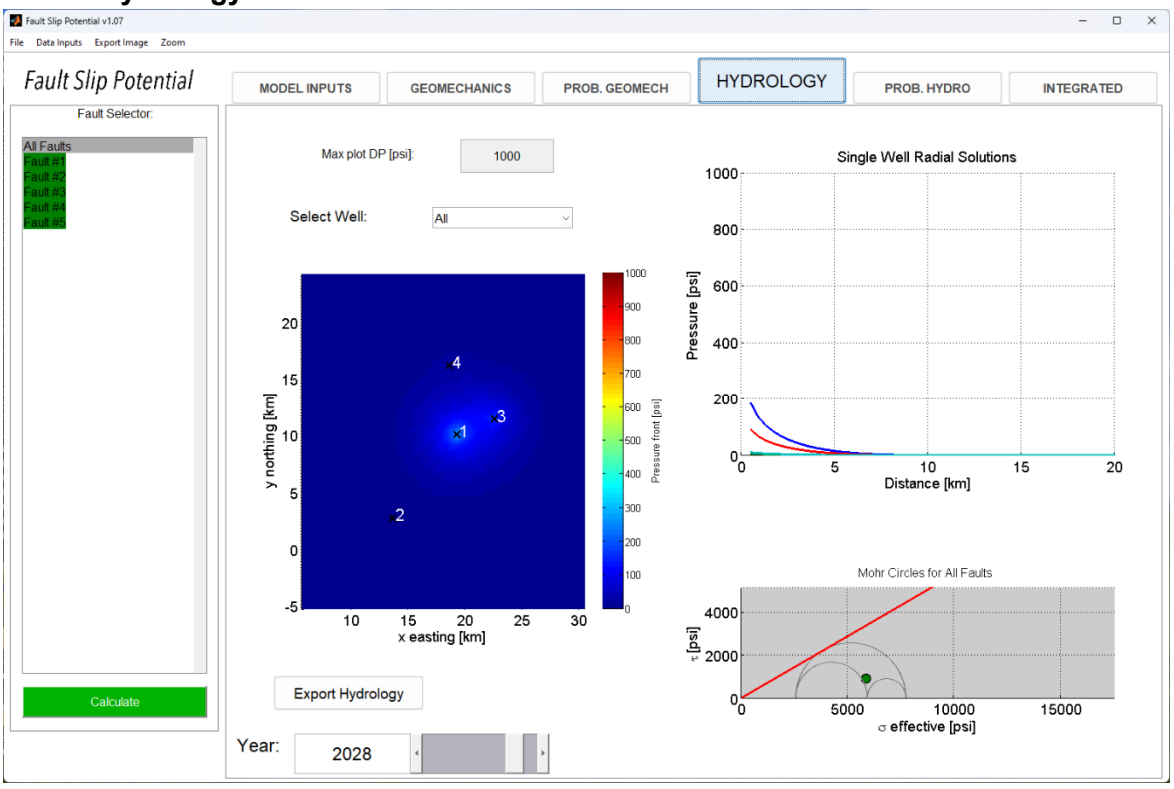
Note:
In screenshots below, injection well #1 is the proposed Just In Time Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Blackbuck Wildrye Fee SWD #1. Injection well #4 is the active Solaris Wild Cobra 1 State SWD #2.

Geomechanics Pore Pressure to Slip

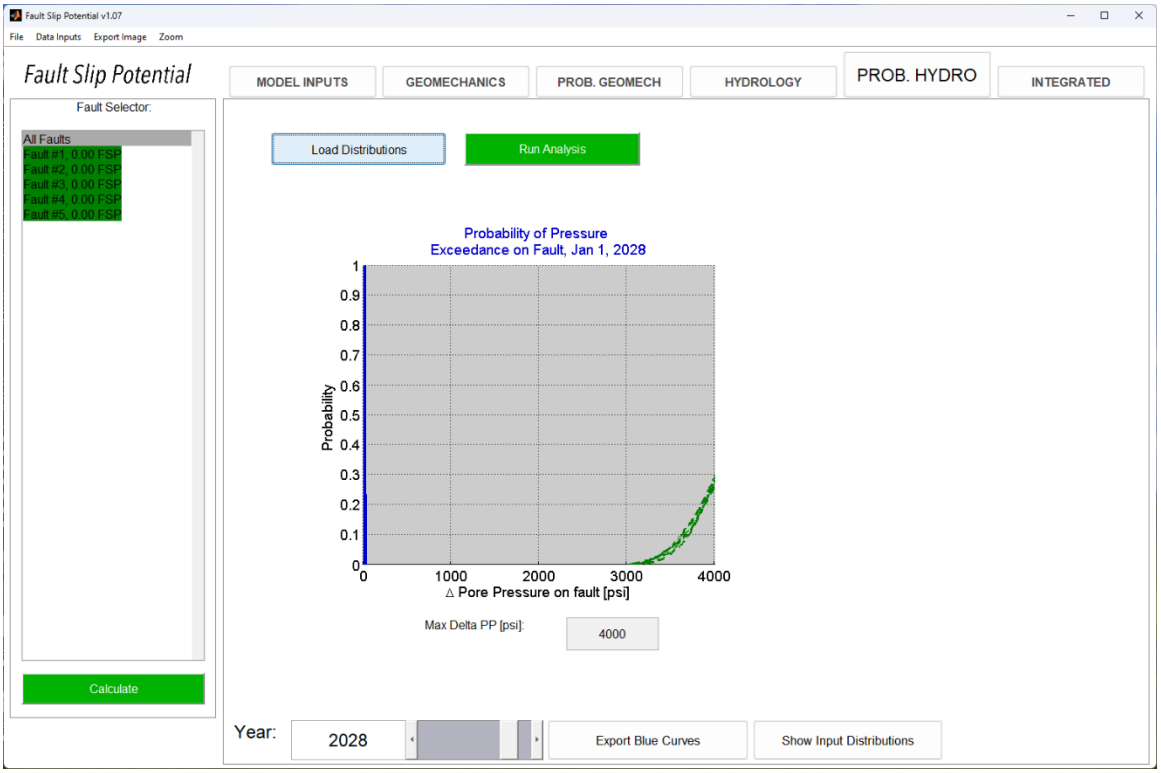


GeoMechanics Variability

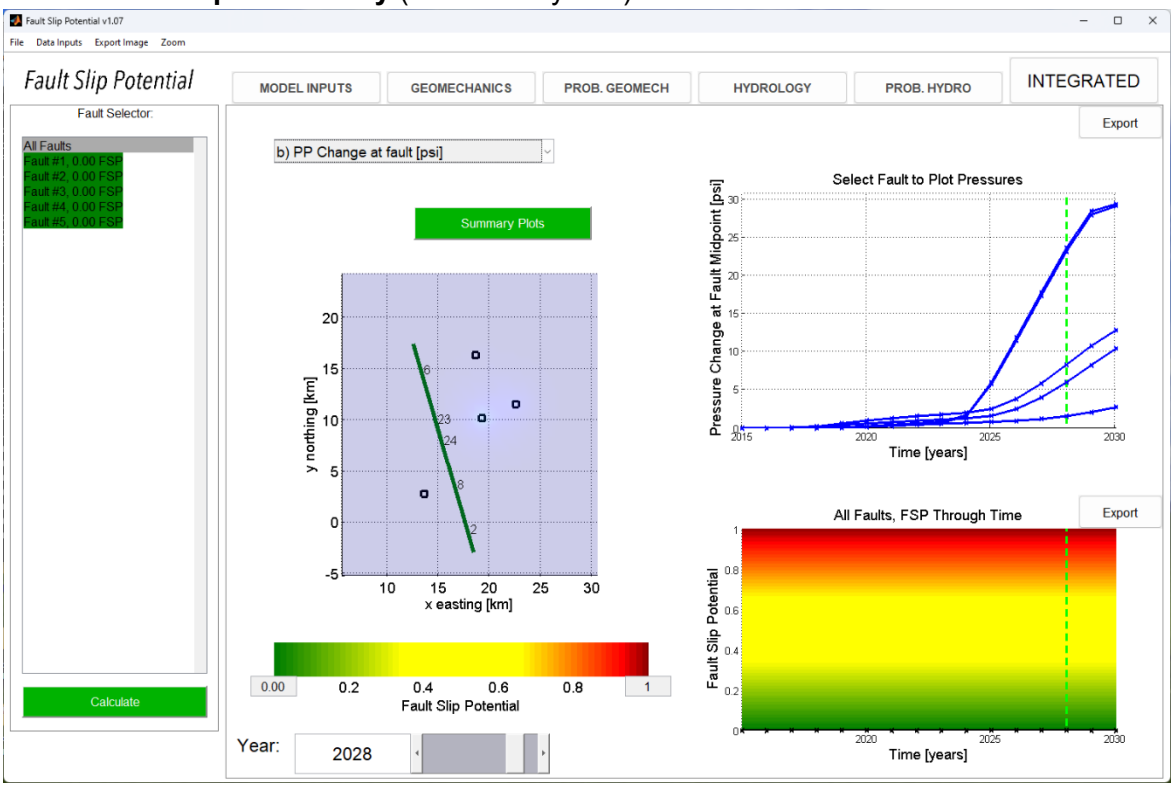
Year 5 Hydrology



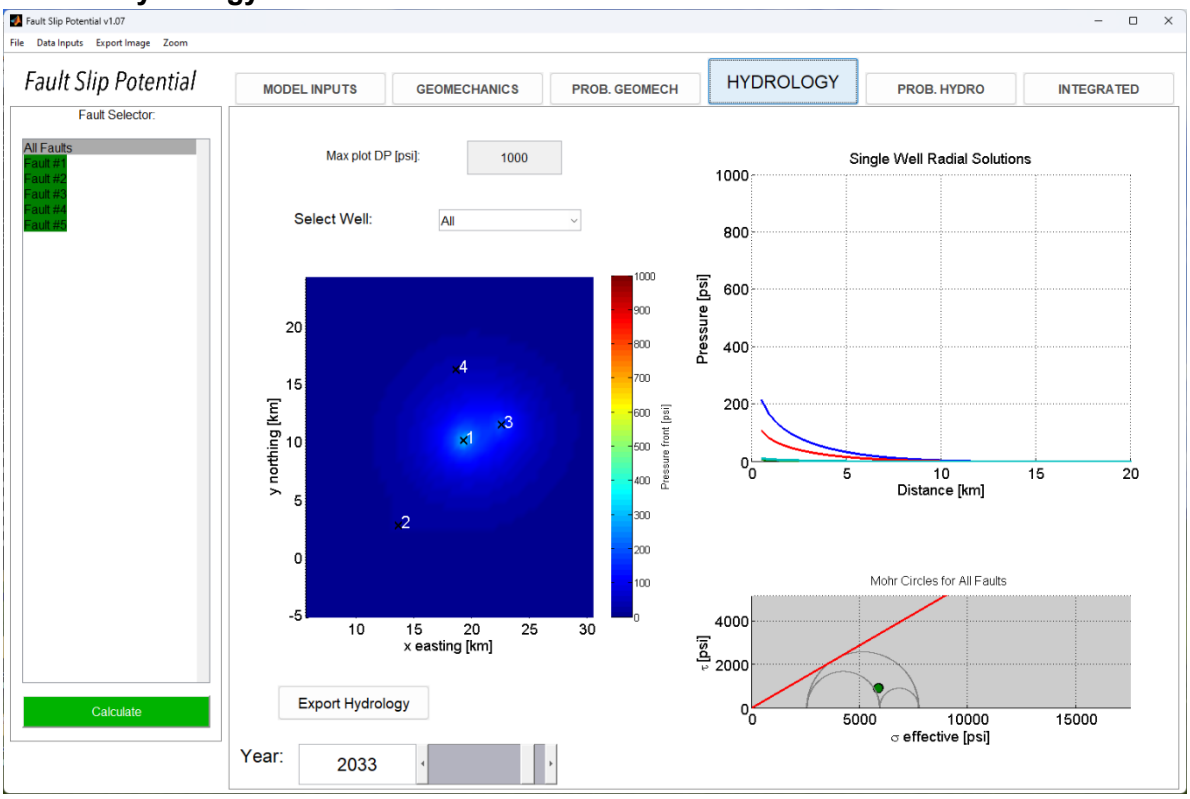
Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



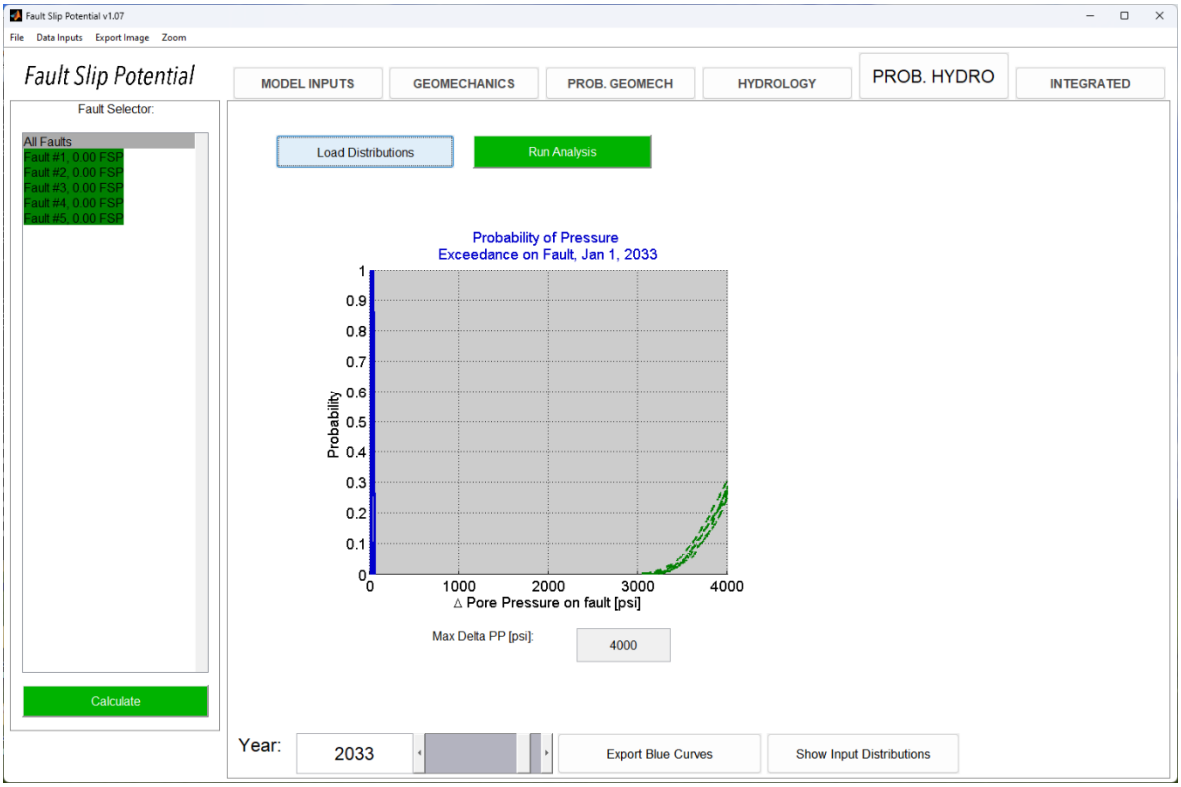
Year 5 Fault Slip Probability (0% after 5 years)



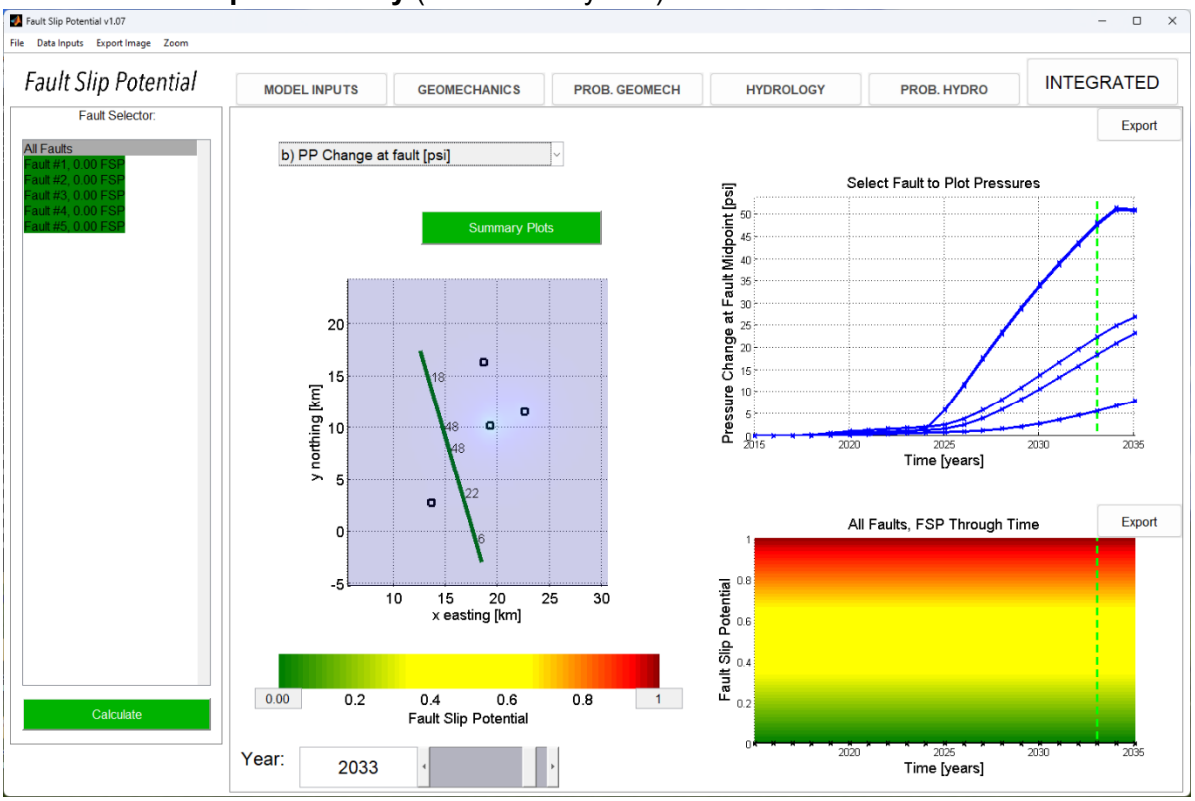
Year 10 Hydrology



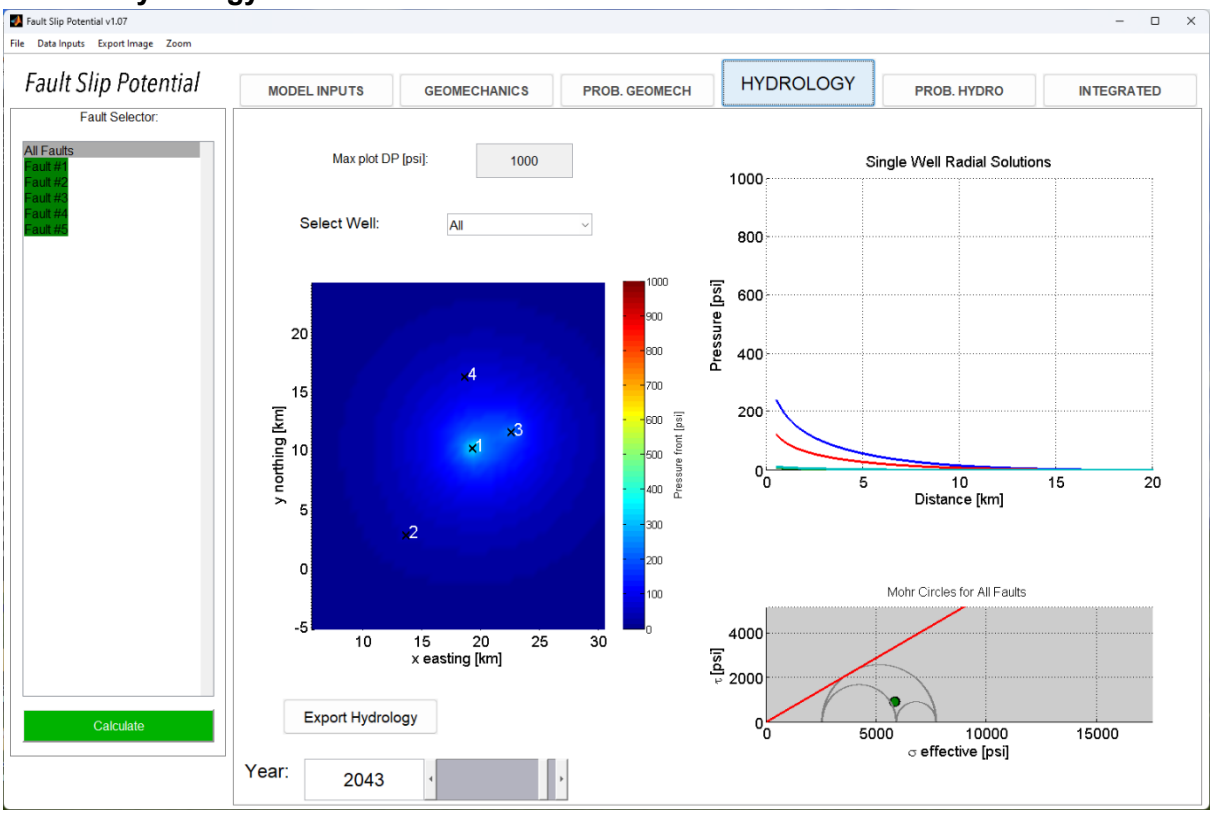
Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



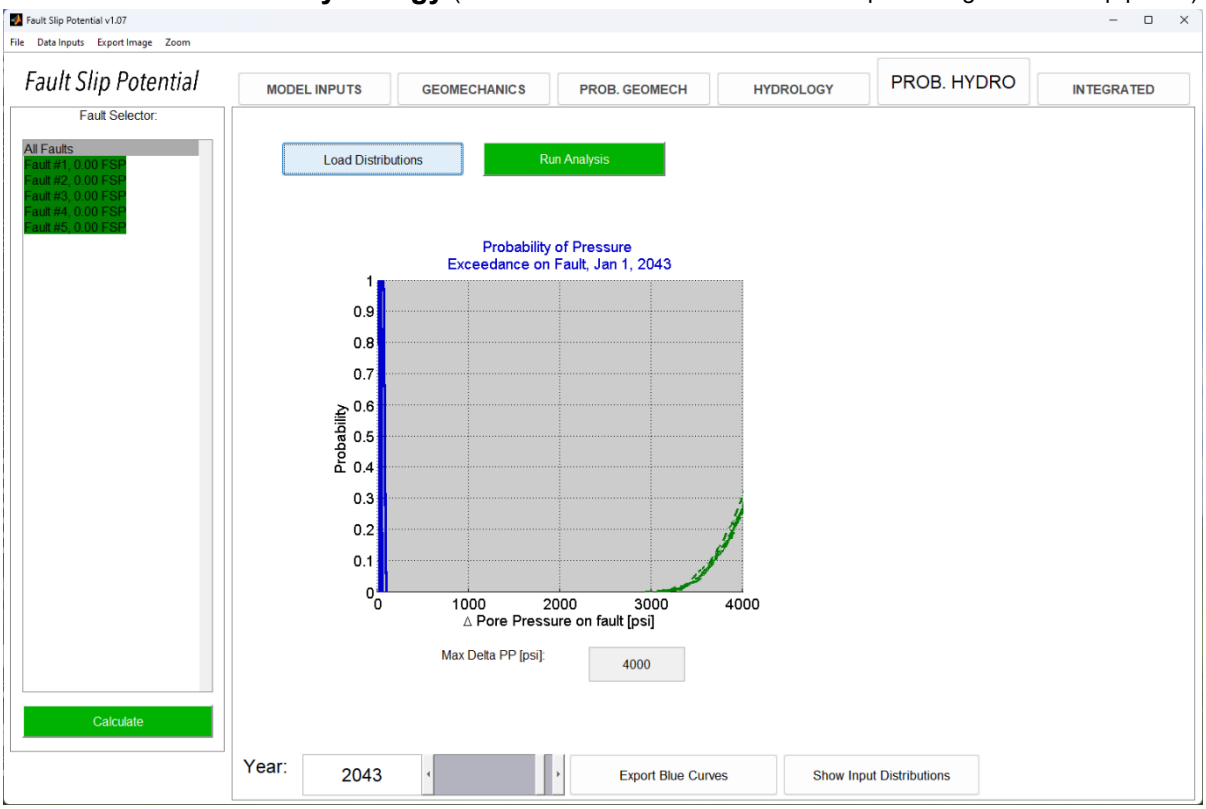
Year 10 Fault Slip Probability (0% after 10 years)



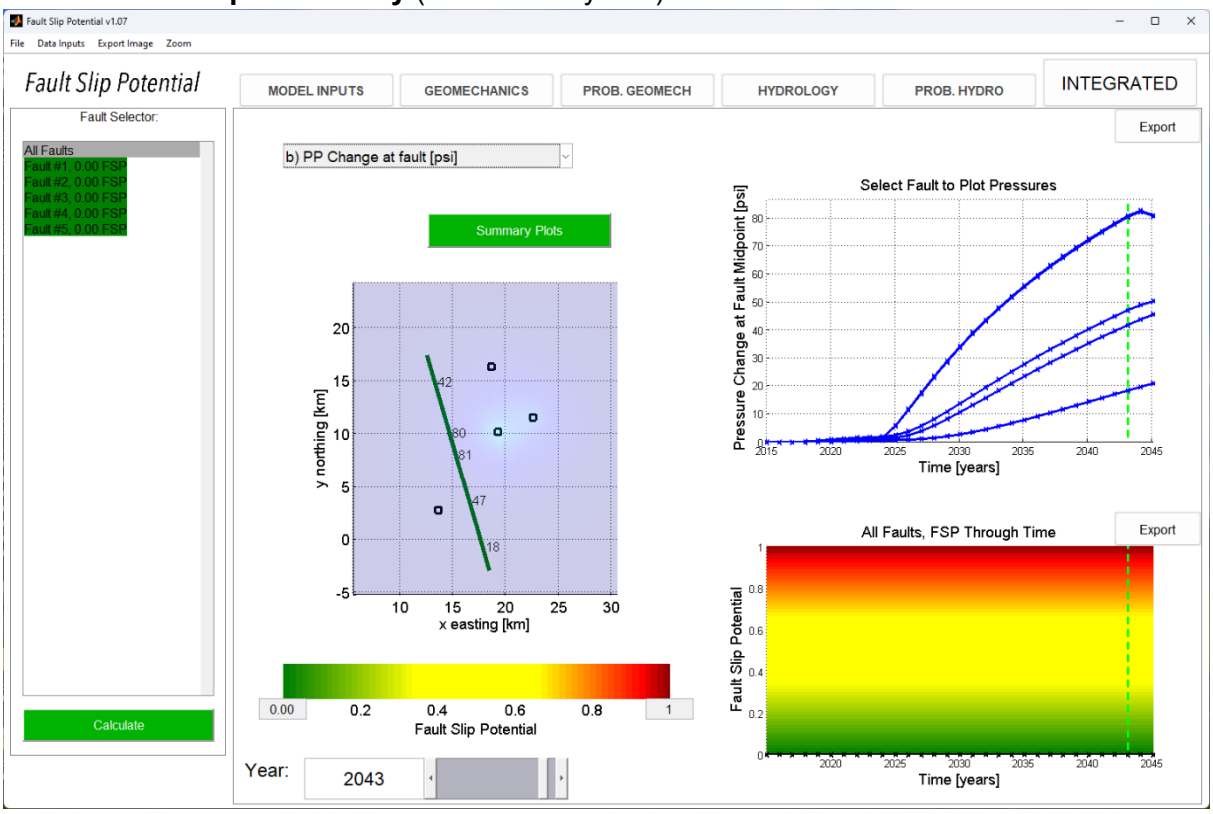
Year 20 Hydrology



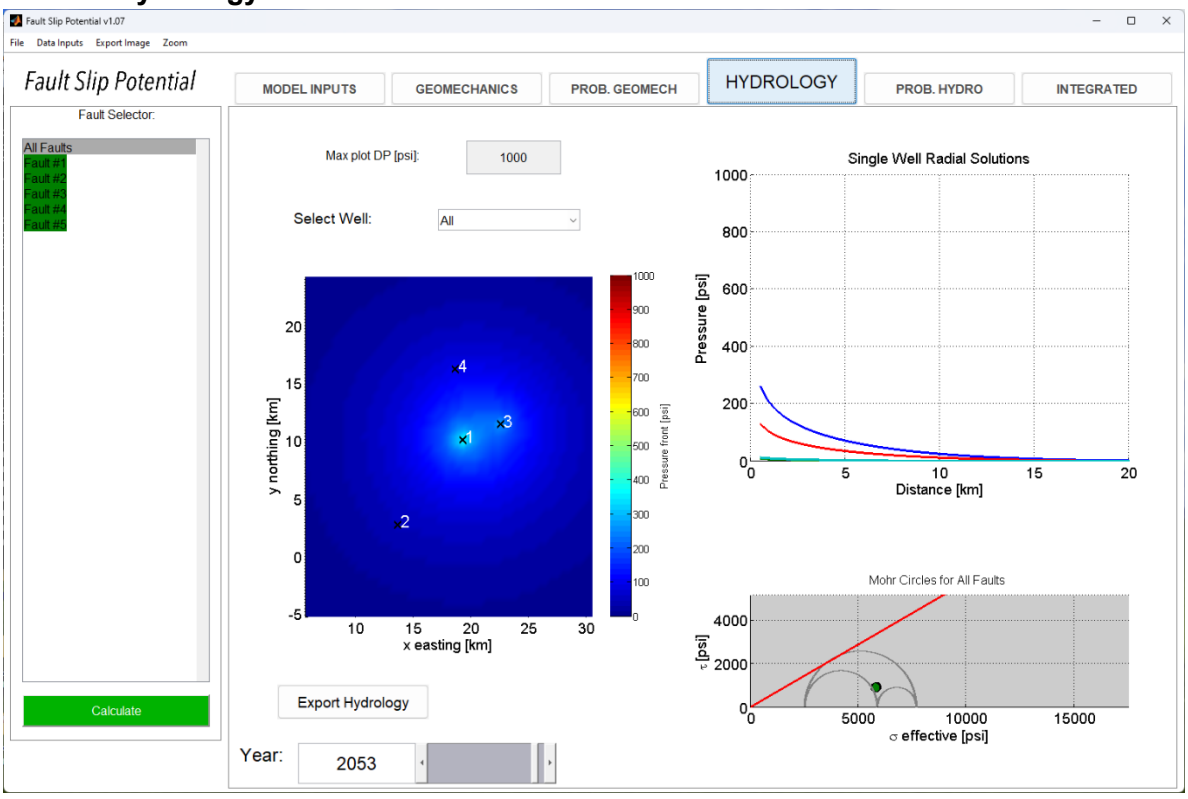
Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



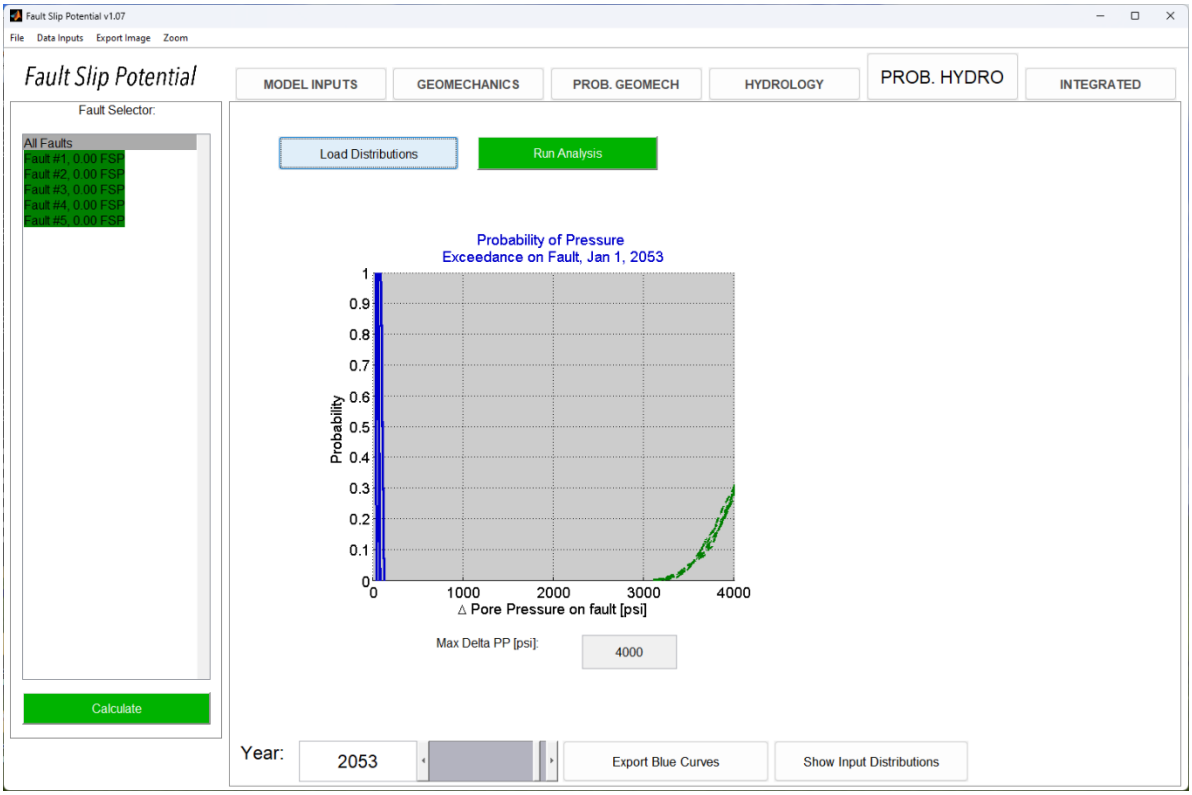
Year 20 Fault Slip Probability (0% after 20 years)



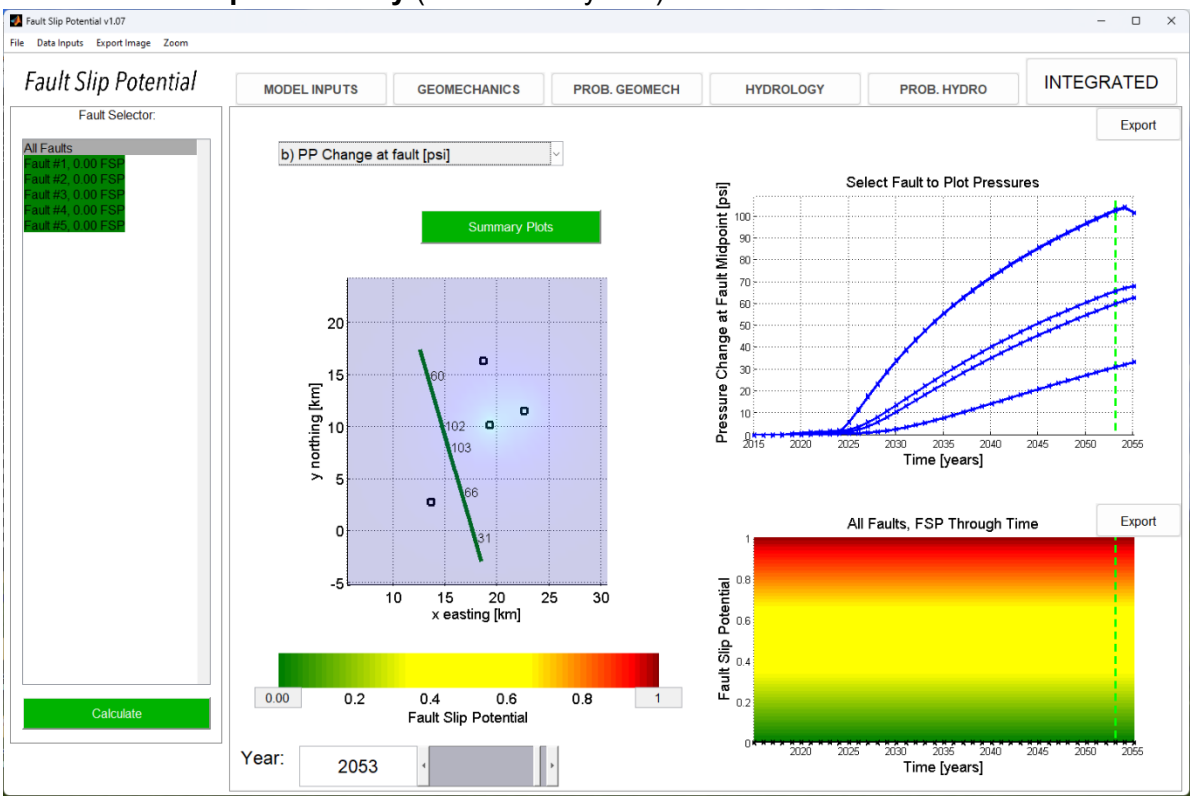
Year 30 Hydrology



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
(817) 606-7630

PERMIAN OILFIELD PARTNERS

Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject
Permian Oilfield Partners, LLC
Just In Time Federal SWD #1
762' FSL & 300' FEL
Sec 24, 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.

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-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
CP 00683 POD1	CP	LE	3	3	4	25	19S	34E	639530	3610685*	120	28	92
CP 00806 POD1	CP	LE		4	4	04	19S	34E	635109	3617151*	50		
CP 00811 POD1	CP	LE		4	4	09	19S	34E	635132	3615542*	50		
CP 00875	CP	LE	3	4	3	05	19S	34E	632592	3617013*	200		
CP 01672 POD1	CP	LE	1	3	1	36	19S	34E	638736	3610009	100		
L 04059	L	LE		4	1	12	19S	34E	639146	3616412*	125	60	65
L 04723	L	LE	1	1	1	11	19S	34E	637026	3616880*	145	123	22
L 06731	L	LE	3	2	2	12	19S	34E	639844	3616727*	120	80	40
L 07213	L	LE	4	1	4	31	19S	34E	631700	3609351*	160	110	50
L 10347	L	LE		2	3	03	19S	34E	635909	3617566*	130		
L 10380	L	LE	4	4	4	02	19S	34E	638428	3617102*	153	100	53
L 12103 POD1	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**

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	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 00493		L	LE	1	2	1	05	19S	35E	642290	3618663	100		
L 01667		L	LE	1	1	4	05	19S	35E	642640	3617799*	103	37	66
L 01755	R	L	LE	2	2	4	24	19S	35E	649766	3613048*	56	20	36
L 01755 POD2		L	LE	4	2	4	24	19S	35E	649766	3612848*	55	20	35
L 01756		L	LE	1	3	4	13	19S	35E	649145	3614253*	56	28	28
L 02250		L	LE	1	3	3	22	19S	35E	645137	3612586*	50	20	30
L 02359		L	LE	3	3	1	01	19S	35E	648277	3618071*	60	28	32
L 03145		L	LE		1	1	07	19S	35E	640347	3616866*	97	45	52
L 03843		L	LE		3	3	22	19S	35E	645238	3612487*	73	27	46
L 03844		L	LE		1	3	22	19S	35E	645232	3612891*	71	27	44
L 03887		L	LE	2	2	4	05	19S	35E	643242	3617804	90	55	35
L 03945		L	LE	3	2	2	01	19S	35E	649481	3618479*	125	70	55
L 04101		L	LE		3	3	22	19S	35E	645238	3612487*	50	35	15
L 04211		L	LE		1	3	06	19S	35E	640337	3617672*	130	60	70
L 04276		L	LE		2	4	08	19S	35E	643168	3616092*	57	18	39
L 04290		L	LE	3	4	1	22	19S	35E	645528	3613198*	45	18	27
L 04563		L	LE	2	2	4	13	19S	35E	649743	3614662*	56	24	32
L 04583		L	LE		4	3	15	19S	35E	645617	3614107*	55	18	37
L 04596		L	LE		2	4	24	19S	35E	649667	3612949*	56	26	30
L 04604		L	LE	2	2	4	24	19S	35E	649766	3613048*	55	22	33
L 04604 S		L	LE	2	2	4	24	19S	35E	649766	3613048*	56	22	34
L 04604 S2		L	LE	2	2	4	24	19S	35E	649766	3613048*	56	22	34
L 04604 S3		L	LE	4	2	4	24	19S	35E	649766	3612848*	56	22	34
L 04604 S4		L	LE	4	2	4	24	19S	35E	649766	3612848*	57	22	35
L 04604 S5		L	LE	2	4	4	24	19S	35E	649772	3612645*	55	22	33
L 04604 S6		L	LE	2	2	4	24	19S	35E	649766	3613048*	57	22	35

***UTM location was derived from PLSS - see Help**

(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-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 04762	L	LE				06	19S	35E	640945	3617872*	175	130	45
L 04763	L	LE	4	1	1	15	19S	35E	645295	3615211*	75	20	55
L 04808	L	LE	3	3	4	10	19S	35E	645895	3615624*	80	53	27
L 05178	L	LE	4	4	2	05	19S	35E	643185	3618063	142	85	57
L 05217	L	LE		2	2	07	19S	35E	641547	3616879*	105	55	50
L 05220	L	LE		1	4	06	19S	35E	641131	3617681*	100	55	45
L 05246	L	LE	3	1	2	07	19S	35E	641043	3616774*	100	60	40
L 05339	L	LE		3	4	04	19S	35E	644358	3617317*	128	83	45
L 05434	L	LE	3	2	2	01	19S	35E	649481	3618479*	150	70	80
L 05434 S	L	LE	4	1	2	01	19S	35E	649277	3618477*	125	70	55
L 06801	L	LE			3	14	19S	35E	647027	3614322*	92		
L 08124	L	LE	4	4	4	25	19S	35E	649795	3610833*	125	58	67
L 08234	L	LE	2	2	3	17	19S	35E	642487	3614566*	120	90	30
L 08234 S	L	LE	4	4	1	18	19S	35E	640871	3614751*	106	60	46
L 08234 S2	L	LE			3	17	19S	35E	642192	3614259*	126	80	46
L 08793	L	LE		1	2	15	19S	35E	646002	3615322*	50	40	10
L 08941	L	LE	2	3	3	19	19S	35E	640510	3612523	600	286	314
L 08973	L	LE	1	3	4	04	19S	35E	644257	3617416*	140	95	45
L 09077	L	LE	2	3	4	04	19S	35E	644457	3617416*	144	95	49
L 09103	L	LE		3	4	04	19S	35E	644358	3617317*	140	70	70
L 09294	L	LE	1	4	4	04	19S	35E	644661	3617420*	150		
L 09347	L	LE	2	2	4	05	19S	35E	643242	3617804*	94	55	39
L 09428	L	LE	3	4	1	05	19S	35E	642231	3617997*	130		
L 09468	L	LE		3	3	15	19S	35E	645214	3614102*	52	28	24
L 09569	L	LE		4	3	17	19S	35E	642394	3614063*	80	30	50
L 09700	L	LE		1	1	14	19S	35E	646808	3615332*	140	27	113
L 10613	L	LE		2	4	05	19S	35E	643143	3617705*	100	100	0
L 11281	L	LE	4	2	4	05	19S	35E	643304	3617707	102		
L 11560	L	LE		4	4	13	19S	35E	649650	3614160*	39	27	12

***UTM location was derived from PLSS - see Help**

(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
L 13384 POD1		L	LE	3	1	1	02	19S	35E	646696	3618522	120		
L 14182 POD1		L	LE	3	3	1	09	19S	35E	643392	3616347	78	25	53
L 14200 POD1		L	LE	2	2	2	05	19S	35E	642952	3618657	180	60	120
L 14200 POD2		L	LE	2	2	2	05	19S	35E	643291	3618631	180	60	120
L 14208 POD1		L	LE	2	2	2	18	19S	35E	641685	3615464	78		
L 14371 POD1		L	LE	1	1	2	05	19S	35E	642616	3618661	172	60	112
L 14477 POD1		L	LE	3	4	3	10	19S	35E	645581	3615575	200		
L 14876 POD1		L	LE	2	1	2	32	19S	35E	643011	3610472	25	0	25
L 14876 POD10		L	LE	2	1	2	32	19S	35E	642998	3610500			
L 14876 POD11		L	LE	2	1	2	32	19S	35E	642990	3610522			
L 14876 POD12		L	LE	2	1	2	32	19S	35E	642974	3610515			
L 14876 POD13		L	LE	2	1	2	32	19S	35E	642987	3610500		18	
L 14876 POD14		L	LE	2	1	2	32	19S	35E	643023	3610529			
L 14876 POD2		L	LE	2	1	2	32	19S	35E	642992	3610483	37	28	9
L 14876 POD3		L	LE	2	1	2	32	19S	35E	643014	3610535	40	0	40
L 14876 POD4		L	LE	2	1	2	32	19S	35E	643016	3610516	25	22	3
L 14876 POD5		L	LE	2	1	2	32	19S	35E	642992	3610517			
L 14876 POD7		L	LE	2	1	2	32	19S	35E	643026	3610515		19	
L 14876 POD8		L	LE	2	1	2	32	19S	35E	642983	3610507			
L 14876 POD9		L	LE	2	1	2	32	19S	35E	643000	3610508			
L 15106 POD1		L	LE	2	1	2	32	19S	35E	643002	3610606	56	21	35
L 15106 POD2		L	LE	1	2	2	32	19S	35E	643119	3610506	55	51	4
L 15106 POD3		L	LE	2	1	2	32	19S	35E	642875	3610512	55	28	27
L 15155 POD1		L	LE	4	3	3	22	19S	35E	645413	3612470	69	35	34
L 15287 POD1		L	LE	3	3	1	01	19S	35E	648213	3618025	120	60	60

Average Depth to Water: **46 feet**

Minimum Depth: **0 feet**

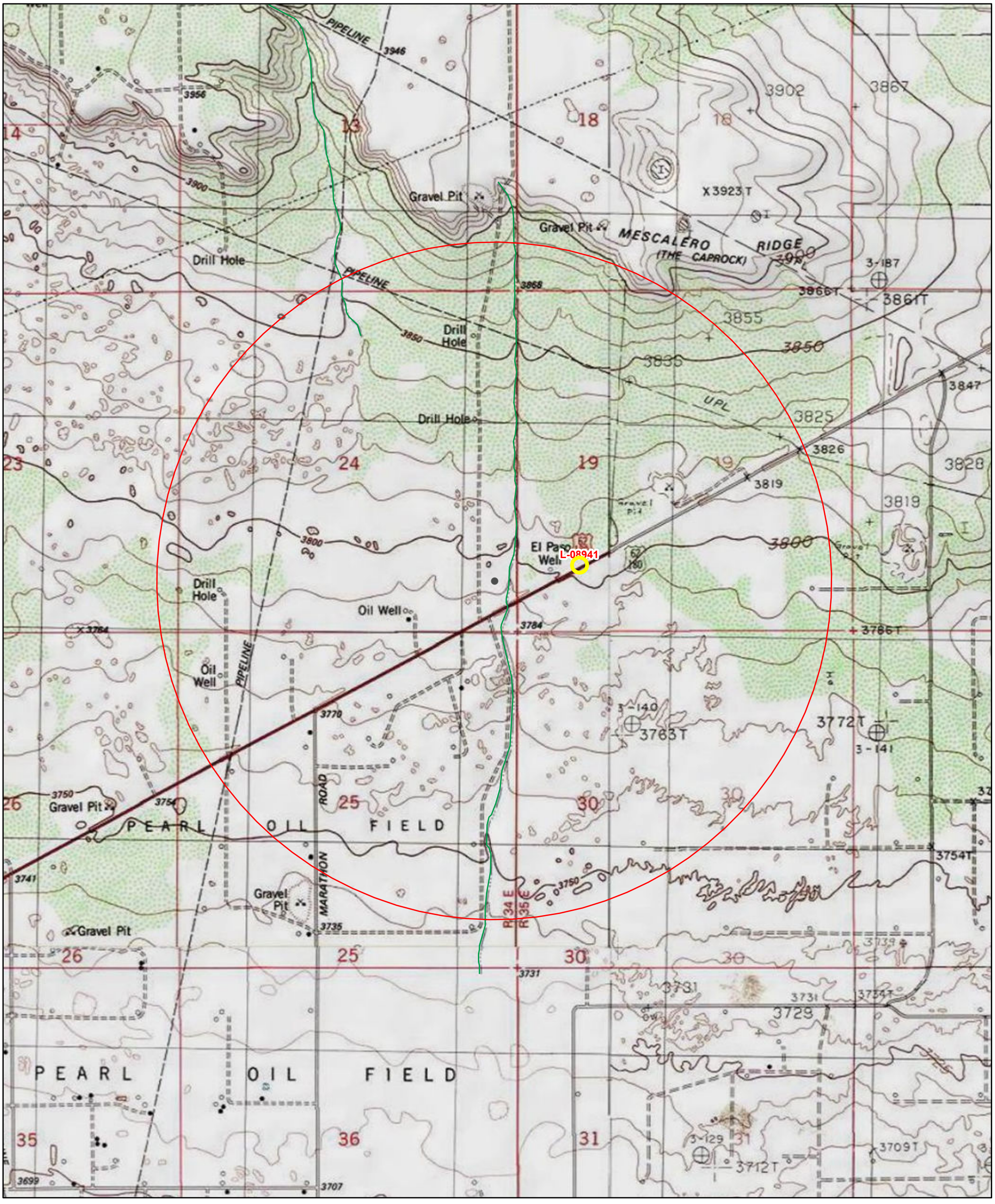
Maximum Depth: **286 feet**

Record Count: 80

PLSS Search:

Township: 19S **Range:** 35E

XI. Water Wells Within 1 Mile - Just In Time Federal SWD #1



5/23/2023, 7:05:58 PM

NHD Flowlines

Stream River

SiteBoundaries

Qty 1 water well within 1 mile AOR, POD #L-08941

1:20,214

0 0.2 0.4 0.8 mi

0 0.3 0.6 1.2 km

Web Generated Map

Map is generated by web users.

XI.

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
NA	L 08941	2	3	3	19	19S	35E	640510	3612523

Driller License: 319 **Driller Company:** NEW MEXICO STATE HIGHWAY DEPT.

Driller Name: LOVELACE

Drill Start Date: 07/08/1982 **Drill Finish Date:** 08/09/1982 **Plug Date:**

Log File Date: 08/30/1982 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 12 GPM

Casing Size: 6.63 **Depth Well:** 600 feet **Depth Water:** 286 feet

Water Bearing Stratifications:	Top	Bottom	Description
	280	295	Sandstone/Gravel/Conglomerate
	510	560	Other/Unknown

Casing Perforations:	Top	Bottom
	510	530
	560	570

Meter Number: 17820 **Meter Make:** TURBINES INC

Meter Serial Number: 08051601 **Meter Multiplier:** 1.0000

Number of Dials: 7 **Meter Type:** Diversion

Unit of Measure: Barrels 42 gal. **Return Flow Percent:**

Usage Multiplier: **Reading Frequency:** Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
03/01/2017	2017	17259	A	ap		0	
12/01/2017	2017	42330	A	ap		3.231	
01/01/2018	2018	42330	A	ap		0	
03/01/2018	2018	50271	A	ap		1.024	
06/01/2018	2018	62582	A	ap		1.587	
07/01/2018	2018	68319	A	ap		0.739	
08/01/2018	2018	69669	A	ap		0.174	
09/01/2018	2018	70515	A	ap		0.109	
11/01/2018	2018	75584	A	ap		0.653	
12/01/2018	2018	78697	A	ap		0.401	

**YTD Meter Amounts:	Year	Amount
	2017	3.231
	2018	4.687

XI.

IMPERATIVE
CHEMICAL PARTNERS

Complete Water Analysis Report

Company	PERMIAN OILFIELD PARTNERS	Report Date	5/24/2023
Location Name	POD L08941	Activity Date	5/24/2023
Site Type	Well	Sample ID	WA-d71e1006
Sample Point	Wellhead		

Sample Analysis

Cations

Sodium	Na^+	6605.85	mg/L
Potassium	K^+	4.79	mg/L
Magnesium	Mg^{2+}	12.17	mg/L
Calcium	Ca^{2+}	35.97	mg/L
Strontium	Sr^{2+}	2.90	mg/L
Barium	Ba^{2+}	0.10	mg/L
Iron	Fe^{2+}	0.03	mg/L
Manganese	Mn^{2+}	0.00	mg/L
Phosphate	PO_4^{3-}	0.00	mg/L
Zinc	Zn^{2-}	0.02	mg/L
Lead	Pb^{2-}	0.00	mg/L
Silicon	Si	16.71	mg/L

Properties

Initial Temperature	70.00	°F
Final Temperature	250.00	°F
Initial Pressure	15.00	psi
Final Pressure	2000.00	psi
pH	7.01	

Dissolved Gases

Aqueous CO_2	40.00	mg/L
Aqueous H_2S	0.00	mg/L

Anions

Chlorides	Cl^-	10,300.00	mg/L
Sulfates	SO_4^{2-}	31.00	mg/L
Bicarbonate	HCO_3^-	122.00	mg/L
Carbonate	CO_3^{2-}	0.00	mg/L

Calculated Values

Specific Gravity (@ 25°C)	1.009	
Total Dissolved Solids (TDS)	17,009.60	mg/L

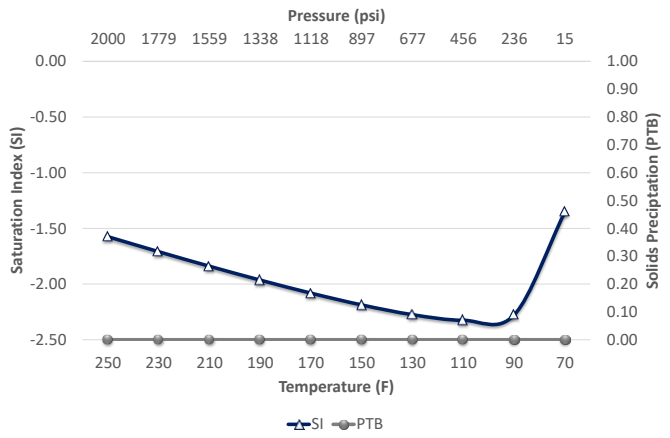
Scale Modeling (Scalesoft Pitzer)

Conditions		Calcite $CaCO_3$		Barite $BaSO_4$		Gypsum $CaSO_4 \cdot H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$	
Temp	*Psi*	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
250	*2000*	-1.57	0.00	-1.81	0.00	-3.15	0.00	-2.55	0.00	-2.29	0.00
230	*1779*	-1.71	0.00	-1.79	0.00	-3.16	0.00	-2.68	0.00	-2.37	0.00
210	*1559*	-1.84	0.00	-1.75	0.00	-3.17	0.00	-2.81	0.00	-2.44	0.00
190	*1338*	-1.96	0.00	-1.71	0.00	-3.18	0.00	-2.94	0.00	-2.51	0.00
170	*1118*	-2.08	0.00	-1.65	0.00	-3.20	0.00	-3.07	0.00	-2.57	0.00
150	*897*	-2.19	0.00	-1.57	0.00	-3.22	0.00	-3.19	0.00	-2.62	0.00
130	*677*	-2.28	0.00	-1.46	0.00	-3.24	0.00	-3.30	0.00	-2.67	0.00
110	*456*	-2.33	0.00	-1.34	0.00	-3.26	0.00	-3.41	0.00	-2.70	0.00
90	*236*	-2.28	0.00	-1.18	0.00	-3.28	0.00	-3.51	0.00	-2.72	0.00
70	*15*	-1.35	0.00	-0.99	0.00	-3.28	0.00	-3.60	0.00	-2.71	0.00

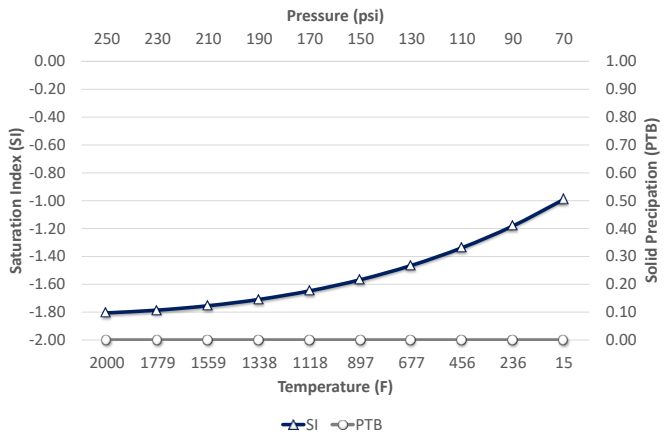
Conditions		Halite NaCl		Siderite $FeCO_3$		Mackinawite FeS		Sphalerite ZnS		Galena PbS	
Temp	*Psi*	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
250	*2000*	-2.98	0.00	-3.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
230	*1779*	-2.99	0.00	-3.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	*1559*	-3.00	0.00	-3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	*1338*	-3.01	0.00	-3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	*1118*	-3.01	0.00	-3.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	*897*	-3.01	0.00	-3.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	*677*	-3.00	0.00	-3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	*456*	-2.99	0.00	-3.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	*236*	-2.97	0.00	-3.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	*15*	-2.94	0.00	-2.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Please note default production volumes of 100 mcfd, 50 bopd, and 50 bwpd were used for modeling calculations.*
**Please note default temperatures and pressures of 250 °F, 50 psi, and 5000 psi were used for modeling calculations.*
SI = Saturation Index
PTB = Pounds per Thousand Barrels
NA = Not Applicable

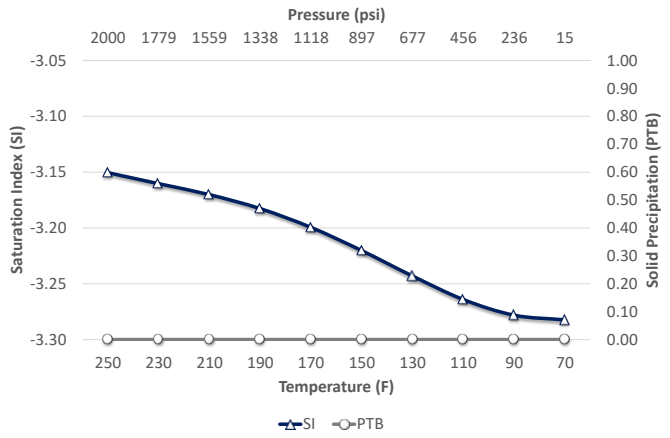
Calcite (CaCO3)



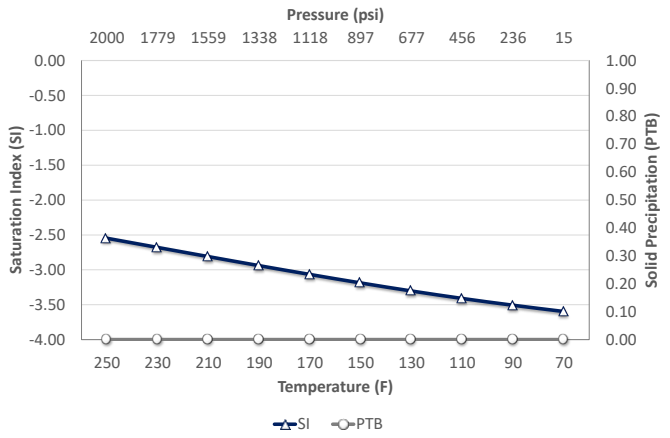
Barite (BaSO4)



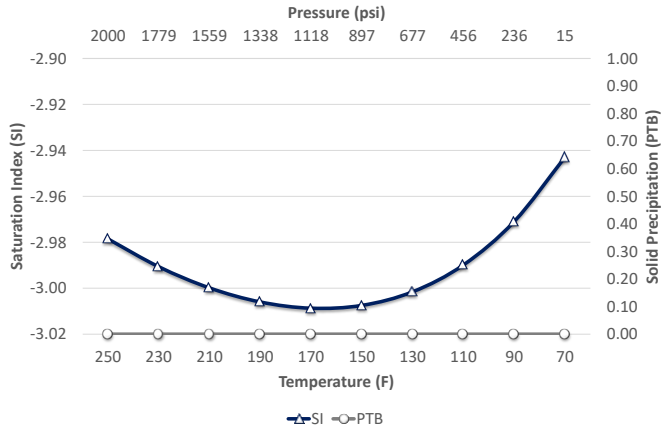
Gypsum (CaSO4-H2O)



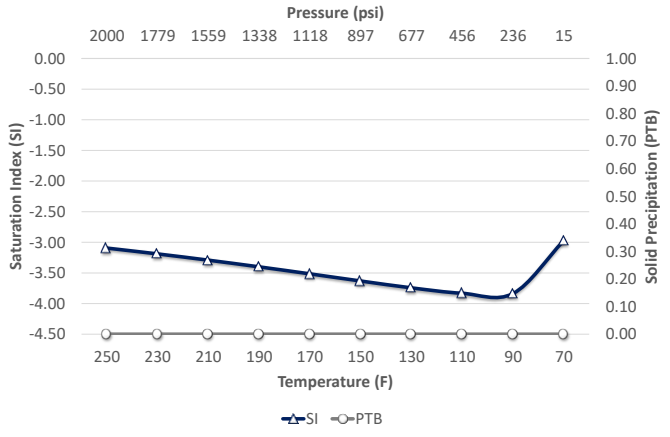
Anhydrite (CaSO4)



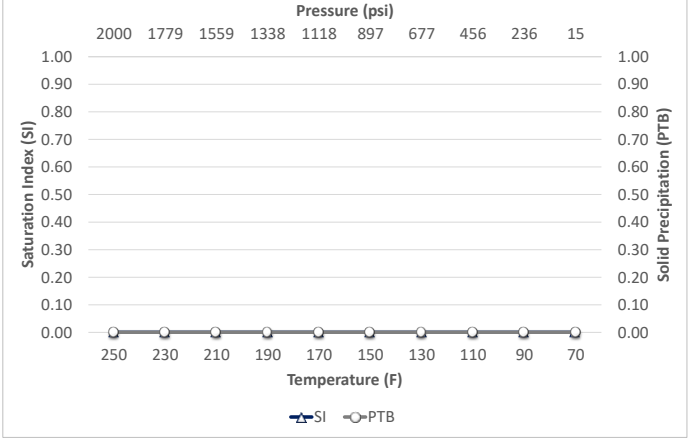
Halite (NaCl)



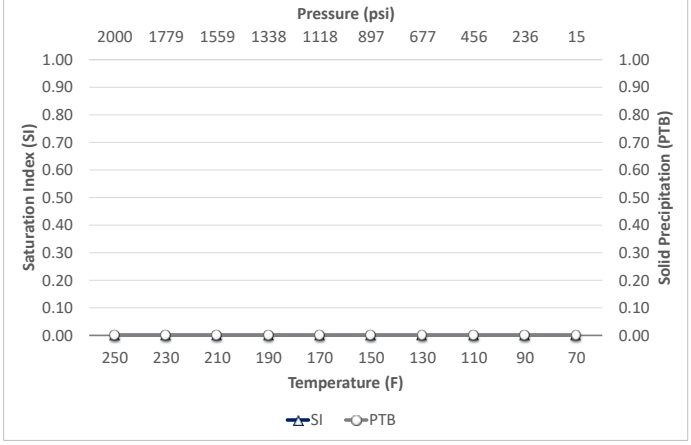
Siderite (FeCO3)



Mackinawite(FeS)



Sphalerite (ZnS)



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

CONDITIONS

Action 241795

CONDITIONS

Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241	OGRID: 328259
	Action Number: 241795
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

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