# 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.	

## **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 Imperative Federal SWD Well #1 well at a surface location 795' from the North line and 2600' from the East line, Unit C, Section 11, Township 20 South, Range 33 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 14,796 feet to 15,868 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 2,959 psi for the well.
- (5) On or about November 5, 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) 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 February 1, 2024; and that after notice and hearing,

the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS

& SISK, P.A.

D-..

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EED@modrall.com

Attorneys for Applicant

CASE NO. \_\_\_\_\_: 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 Imperative SWD Well #1 well at a surface location 795' from the North line and 2600' from the East line, Unit C, Section 11, Township 20 South, Range 33 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 14,796 feet to 15,868 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 22 miles WSW of Monument, New Mexico.

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geologi	ABOVE THIS TABLE FOR OCD CO OIL CONSERV cal & Engineerin rancis Drive, San	'ATION DIVISION g Bureau –	ORDERWATER AT
		RATIVE APPLICAT		
THIS	CHECKLIST IS MANDATORY FOR A REGULATIONS WHICH RI		ATIONS FOR EXCEPTIONS TO E DIVISION LEVEL IN SANTA	
Applicant: Permian Well Name: Imper Pool: SWD; Devonian-	ative Federal SWD #1		API: 30	D Number: 328259 1-025-Pending Code: 97869
SUBMIT ACCUR	PATE AND COMPLETE IN	FORMATION REQU INDICATED BELO		THE TYPE OF APPLICATION
A. Location	ICATION: Check those n – Spacing Unit – Simul NSL NSP	which apply for [A	A] on	SD.
[1] Con [II] Inje [II] Inje  2) NOTIFICATIO  A. Offse  B. Roya  C. Appli  D. Notifi  E. Notifi  F. Surfa  G. For a  H. No no	ction – Disposal – Presson WFX PMX S  N REQUIRED TO: Check to perators or lease how the cation requires publish cation and/or concurred cation and/or concurred to the above, proof contice required	LC PC Cure Increase – Enhand IPI Enhance which applicates whers, revenue oved notice ent approval by Sent approval by But Inchification or position or position or position and incomplete inconstruction or position or position or position approval by But Inchification or position inconstruction or position inconstruction or position inchification	anced Oil Recove COR PPR  y.  vners  LO  LM  ublication is attach	FOR OCD ONLY  Notice Complete  Application Content Complete
administrative understand the	N: I hereby certify that a approval is accurate nat no action will be ta	and complete to ken on this applic	the best of my kno	wledge. I also
N	lote: Statement must be comple	eted by an individual wit	n managerial and/or sup	ervisory capacity.
Sean Puryear  Print or Typo Namo			11-5-2023 Date	
Print or Type Name			817-600-8772	
Semti	m		Phone Number	
Signature			spuryear@popmids e-mail Address	tream.com

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

PHONE: (817) 600-8772

# **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

- 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: Sem Pun DATE: 11-5-2023

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:

#### 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 14,761'

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 2,959 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.

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 assumed, with an average estimated porosity of 5%, based on log data from similar wells in the region.

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.

GEO	GEOLOGY PROGNOSIS									
	<u>TOP</u>	<u>BOTTOM</u>	THICKNESS							
FORMATION	KB TVD (ft)	KB TVD (ft)	(ft)							
Rustler	1,417	1,642	225							
Salt	1,642	3,325	1,683							
Yates	3,325	3,648	323							
Capitan Reef	3,648	5,219	1,571							
Delaware	5,219	8,337	3,118							
Bone Spring	8,337	11,004	2,667							
Wolfcamp	11,004	12,266	1,262							
Mississippi Lm.	14,085	14,595	510							
Woodford	14,595	14,761	166							
Devonian	14,761	15,572	811							
Fusselman (Silurian)	15,572	15,918	346							
Montoya (U. Ordovician)	15,918	16,331	413							
Simpson (M. Ordovician)	16,331	16,782	451							

- 2. Regional shallow fresh water in the Quaternary is known to exist at depths less than <u>850'</u>. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 13,911'. There is a deeper potential USDW in the Capitan Reef formation. Depth from the bottom of this potential USDW to the injection zone is 9,542'. 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 <u>0</u> fresh water wells within the proposed well's one-mile area of review. There are two PODs that have been drilled, but plugged as dry holes, CP-01865 POD 1 & CP-01865-POD2. Water right summary and transaction summary documents from the NMOSE showing the POD statuses as dry hole plugged are attached. See attached 1 mile AOR water well map showing these 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

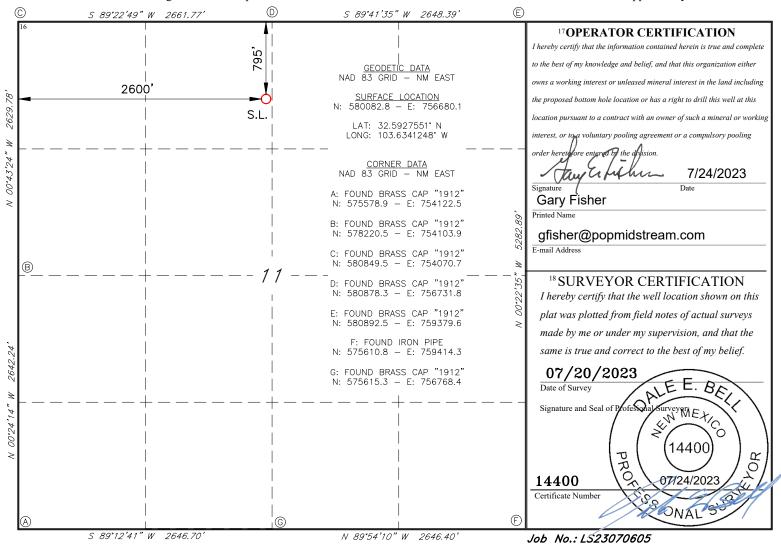
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code <b>97869</b>	<sup>3</sup> Pool Name SWD; DEVONIAN-SILU	JRIAN
<sup>4</sup> Property Code		perty Name E FEDERAL SWD	<sup>6</sup> Well Number <b>1</b>
<sup>7</sup> OGRID NO. <b>328259</b>		erator Name LLD PARTNERS, LLC	<sup>9</sup> Elevation <b>3586</b>
•	10 C	face Location	•

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County		
C	11	20S	33E		795	NORTH	2600	WEST	LEA		
	11 Bottom Hole Location If Different From Surface										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		
12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.											

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



III (A)

## **WELL CONSTRUCTION DATA**

Permian Oilfield Partners, LLC. Imperative Federal SWD #1 795' FNL, 2600' FWL Lot C, Sec. 11, T20S, R33E, Lea Co. NM Lat 32.5927551° N, Lon -103.6341248° W GL 3586', RKB 3616'

### Surface - (Conventional)

**Hole Size:** 26" **Casing:** 20" - 106.5# N-80 BTC Casing

**Depth Top:** Surface **Depth Btm:** 1442'

Cement: 1331 sks - Class C + Additives
Cement Top: Surface - (Circulate)

### Intermediate #1 - (Conventional)

**Hole Size:** 18.5" **Casing:** 16" - 75# J-55 BTC Casing

**Depth Top:** Surface **Depth Btm:** 3598'

Cement: 1096 sks - Class C + Additives
Cement Top: Surface - (Circulate)

## Intermediate #2 - (Conventional)

**Hole Size:** 14.75" **Casing:** 13.375" - 68# HCP-110 FJ Casing

Depth Top: Surface

Depth Btm: 5244' ECP/DV Tool: 3698'

Cement: 785 sks - Class C + Additives

Cement Top: Surface - (Circulate)

#### Intermediate #3 - (Conventional)

**Hole Size:** 12.25" **Casing:** 9.625" - 40# HCL-80 BTC Casing

Depth Top: Surface

**Depth Btm**: 11054' **ECP/**5344'

Cement: 1808 sks - Class C + Additives

Cement Top: Surface - (Circulate)

#### Intermediate #4 - (Liner)

**Hole Size:** 8.5" **Casing:** 7.625" - 39# HCL-80 FJ Casing

**Depth Top:** 10854' **Depth Btm:** 14796'

Cement: 254 sks - Class H + Additives

Cement Top: 10854' - Circulate, then Bond Log

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

Hole Size: 6.5" Depth: 15868'

Inj. Interval: 14796' - 15868' (Open-Hole Completion)

#### **Tubing - (Tapered)**

**Tubing Depth:** 14751' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ

X/O Depth: 10854' Casing (Fiberglass Lined)

X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

Packer Depth: 14761'

Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

Packer Fluid: 8.4 ppg FW + Additives

III (A)

#### WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC. Imperative Federal SWD #1 795' FNL, 2600' FWL Lot C, Sec. 11, T20S, R33E, Lea Co. NM Lat 32.5927551° N, Lon -103.6341248° W GL 3586', RKB 3616'

#### Surface - (Conventional)

Hole Size: 26"

**Casing:** 20" - 106.5# N-80 BTC Casing

**Depth Top:** Surface **Depth Btm:** 1442'

Cement: 1331 sks - Class C + Additives
Cement Top: Surface - (Circulate)

#### Intermediate #1 - (Conventional)

Hole Size: 18.5"

Casing: 16" - 75# J-55 BTC Casing

**Depth Top:** Surface **Depth Btm:** 3598'

**Cement:** 1096 sks - Class C + Additives **Cement Top:** Surface - (Circulate)

#### Intermediate #2 - (Conventional)

Hole Size: 14.75"

Casing: 13.375" - 68# HCP-110 FJ Casing

**Depth Top:** Surface **Depth Btm:** 5244'

Cement: 785 sks - Class C + Additives
Cement Top: Surface - (Circulate)

ECP/DV Tool: 3698'

#### Intermediate #3 - (Conventional)

**Hole Size:** 12.25"

**Casing:** 9.625" - 40# HCL-80 BTC Casing

**Depth Top:** Surface **Depth Btm:** 11054'

Cement: 1808 sks - Class C + Additives

Cement Top: Surface - (Circulate)

ECP/DV Tool: 5344'

#### Intermediate #4 - (Liner)

Hole Size: 8.5"

**Casing:** 7.625" - 39# HCL-80 FJ Casing

**Depth Top:** 10854' **Depth Btm:** 14796'

**Cement:** 254 sks - Class H + Additives **Cement Top:** 10854' - Circulate, then Bond Log

## Intermediate #5 - (Open Hole)

**Hole Size:** 6.5" **Depth:** 15868'

Inj. Interval: 14796' - 15868' (Open-Hole Completion)

#### Tubing - (Tapered)

Tubing Depth: 14751'

Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

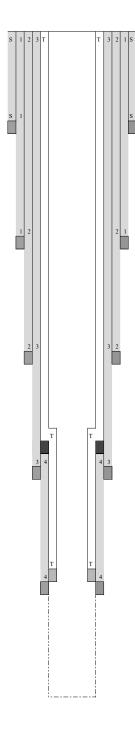
X/O Depth: 10854'

**X/O:** 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)

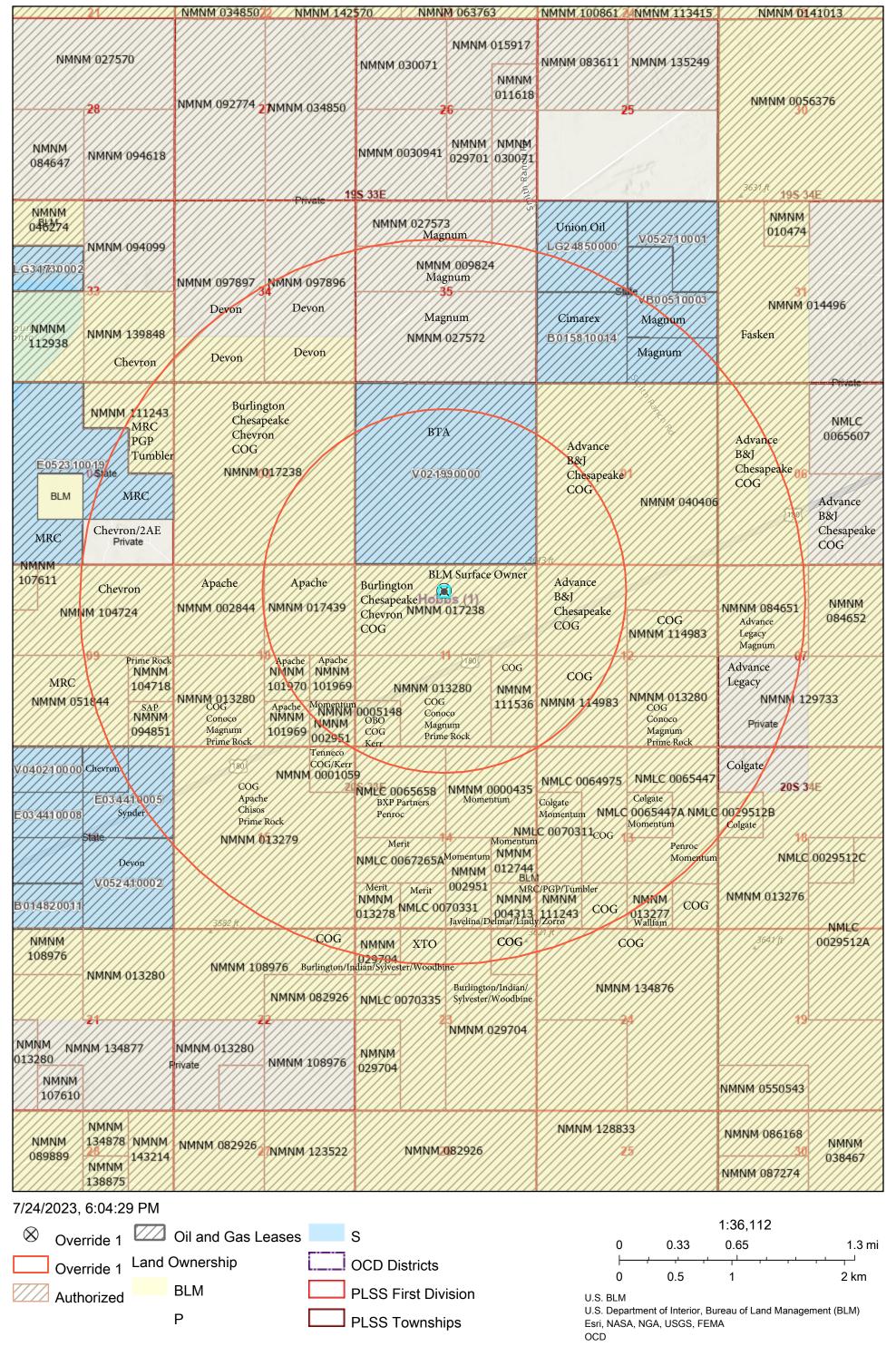
Packer Depth: 14761'

Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

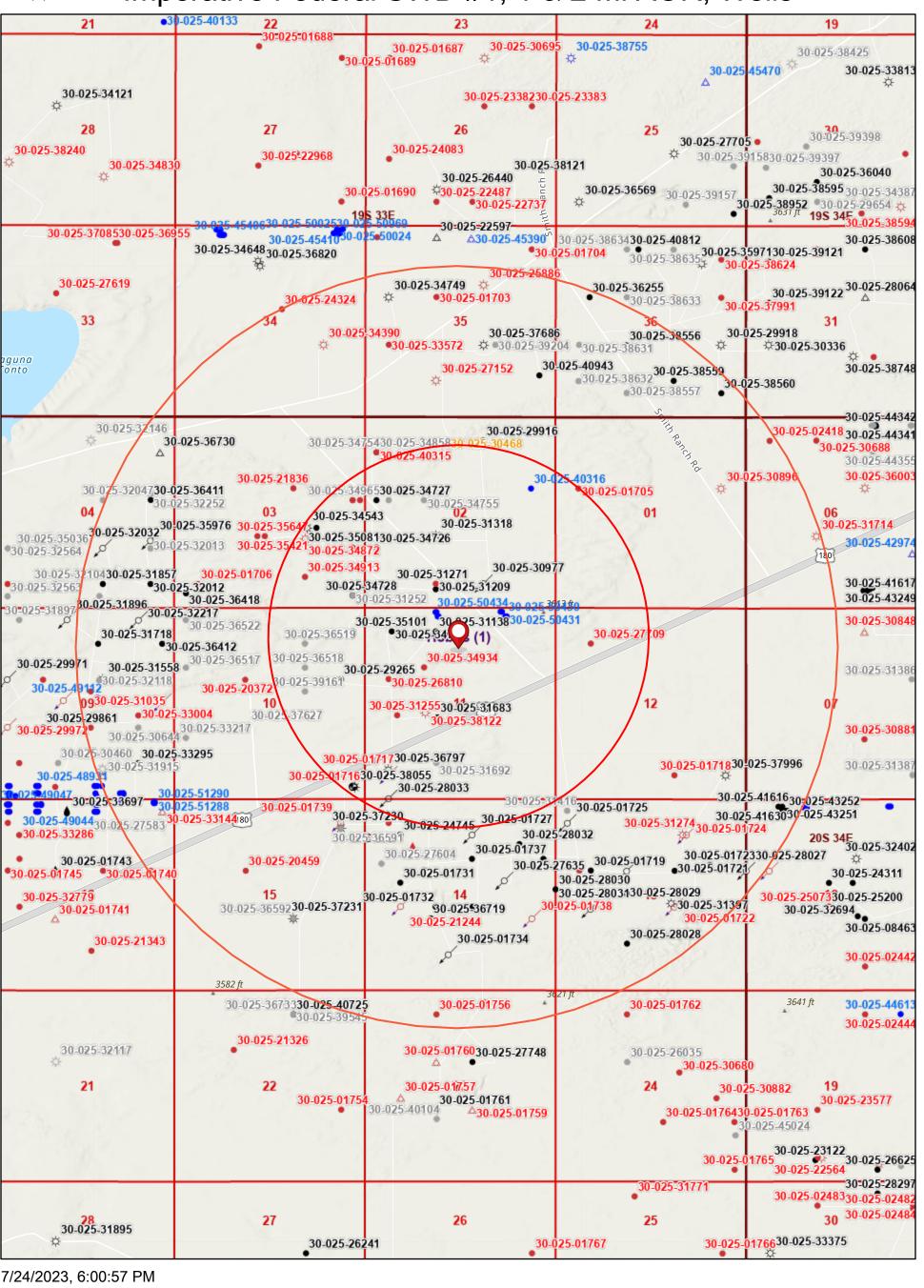
Packer Fluid: 8.4 ppg FW + Additives

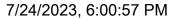


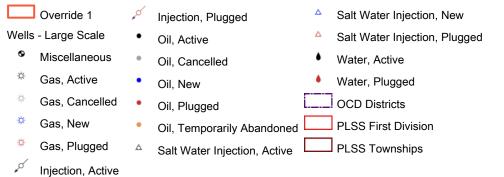
# V (a) Imperative Federal SWD #1, 1 & 2 Mi AOR, Leases

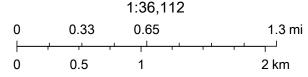


# Imperative Federal SWD #1, 1 & 2 Mi AOR, Wells









Esri, NASA, NGA, USGS, FEMA Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.

# VI.

			Impera	tive Fede	ral SWD #	1 - Wells With	in 1 [	Mile A	rea o	f 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
30-025-34913	NEARBURG PRODUCING CO	PYTHON 3 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	03	T20S	R33E	0	O-03-20S-33E 855 FSL 1650 FEL	O-03-20S-33E 855 FSL 1650 FEL	BONE SPRING	9280	9280
30-025-36518	SHACKELFORD OIL CO	TONTO FEDERAL	#005	Oil	Vertical	Cancelled Apd	10	T20S	R33E	G	G-10-20S-33E 1650 FNL 1650 FEL	G-10-20S-33E 1650 FNL 1650 FEL	DELAWARE	8300	8300
30-025-34872	NEARBURG PRODUCING CO	PYTHON 3 FEDERAL	#001	Gas	Vertical	Plugged, Site Released	03	T20S	R33E	J	J-03-20S-33E 1900 FSL 1650 FEL	J-03-20S-33E 1900 FSL 1650 FEL	DELAWARE	9700	9700
30-025-39161	MURCHISON OIL AND GAS, LLC	TONTO FEDERAL	#008	Oil	Vertical	Cancelled Apd	10	T20S	R33E	G	G-10-20S-33E 2310 FNL 1650 FEL	G-10-20S-33E 2310 FNL 1650 FEL	DELAWARE	8250	8250
30-025-36519	SHACKELFORD OIL CO	TONTO FEDERAL	#006	Oil	Vertical	Cancelled Apd	10	T20S	R33E	В	B-10-20S-33E 990 FNL 1650 FEL	B-10-20S-33E 990 FNL 1650 FEL	DELAWARE	8300	
30-025-34543	EARTHSTONE OPERATING, LLC	VIPER 3 FEDERAL	#001	Gas	Directional	Active	03	T20S	R33E	J	J-03-20S-33E 2200 FSL 1600 FEL	G-03-20S-33E 3067 FSL 2012 FEL	MORROW	13830	13725
30-025-35081	EARTHSTONE OPERATING, LLC	PYTHON 3 FEDERAL	#003	Oil	Directional	Active	03	T20S	R33E	J	J-03-20S-33E 2200 FSL 1330 FEL	G-03-20S-33E 2050 FNL 1758 FEL	DELAWARE	9813	9630
30-025-29265	SHACKELFORD OIL CO	TONTO FEDERAL	#001	Oil	Vertical	Active	10	T20S	R33E	Н	H-10-20S-33E 1980 FNL 660 FEL	H-10-20S-33E 1980 FNL 660 FEL	BONE SPRING	10706	10706
30-025-35101	SHACKELFORD OIL CO	TONTO FEDERAL	#002	Oil	Vertical	Active	10	T20S	R33E	Α	A-10-20S-33E 660 FNL 330 FEL	A-10-20S-33E 660 FNL 330 FEL	DELAWARE	8200	8200
30-025-34935	SHACKELFORD OIL CO	TONTO FEDERAL	#004	Oil	Vertical	Plugged, Site Released	03	T20S	R33E	1	I-03-20S-33E 1650 FSL 330 FEL	I-03-20S-33E 1650 FSL 330 FEL	DELAWARE	9700	9700
30-025-34728	SHACKELFORD OIL CO	TONTO FEDERAL	#003	Oil	Vertical	Active	03	T20S	R33E	P	P-03-20S-33E 330 FSL 330 FEL	P-03-20S-33E 330 FSL 330 FEL	DELAWARE	9570	9570
30-025-35475	NEARBURG PRODUCING CO	PYTHON 3 FEDERAL	#005	Oil	Vertical	Plugged, Site Released	03	T20S	R33E	Н	H-03-20S-33E 2310 FNL 330 FEL	H-03-20S-33E 2310 FNL 330 FEL	BONE SPRING	10033	10033
30-025-31252	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Cancelled Apd	03	T20S	R33E	P	P-03-20S-33E 330 FSL 330 FEL	P-03-20S-33E 330 FSL 330 FEL	BONE SPRING	9750	9750
30-025-38055	CIMAREX ENERGY CO. OF COLORADO	NEW SHERIFF 10 FEDERAL COM	#001	Gas	Directional	Active	10	T20S	R33E	Р	P-10-20S-33E 330 FSL 280 FEL	P-10-20S-33E 705 FSL 707 FEL	PENN	13940	13881
30-025-01716	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Miscellaneous	Vertical	Plugged, Site Released	10	T20S	R33E	P	P-10-20S-33E 330 FSL 330 FEL	P-10-20S-33E 0 FSL 330 FEL	SEVEN RIVERS	3410	3410
30-025-34965	NEARBURG PRODUCING CO	PYTHON 3 FEDERAL	#003H	Oil	Vertical	Cancelled Apd	03	T20S	R33E	Н	H-03-20S-33E 2310 FNL 330 FEL	H-03-20S-33E 2310 FNL 330 FEL	BONE SPRING	9700	9700
30-025-35474	NEARBURG PRODUCING CO	PYTHON 3 FEDERAL	#004	Oil	Vertical	Plugged, Site Released	03	T20S	R33E	Н	H-03-20S-33E 2310 FNL 130 FEL	H-03-20S-33E 1685 FNL 976 FEL	DELAWARE	6905	6905
30-025-34727	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#008	Oil	Vertical	Active	02	T20S	R33E	E	E-02-20S-33E 2310 FNL 330 FWL	E-02-20S-33E 2310 FNL 330 FWL	YATES	9700	9700
30-025-34726	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#007	Oil	Vertical	Active	02	T20S	R33E	L	L-02-20S-33E 1650 FSL 330 FWL	L-02-20S-33E 1650 FSL 330 FWL	DELAWARE	9700	9700
30-025-28033	MOMENTUM OPERATING CO INC	TEAS YATES UNIT	#132	Injection	Vertical	Active	11	T20S	R33E	M	M-11-20S-33E 10 FSL 660 FWL	M-11-20S-33E 10 FSL 660 FWL	YATES	3380	3380
30-025-36797	COG OPERATING LLC	GUNSLINGER 11 FEDERAL COM	#001	Gas	Vertical	Active	11	T20S	R33E	M	M-11-20S-33E 810 FSL 660 FWL	M-11-20S-33E 810 FSL 660 FWL	PENN	13850	13850
30-025-01717	ANADARKO PETROLEUM CORP	TEAS YATES UNIT	#001	Injection	Vertical	Plugged, Site Released	11	T20S	R33E	M	M-11-20S-33E 660 FSL 660 FWL	M-11-20S-33E 0 FSL 660 FWL	YATES	3496	3496
30-025-31319	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#007	Oil	Vertical	Cancelled Apd	02	T20S	R33E	E	E-02-20S-33E 1980 FNL 660 FWL	E-02-20S-33E 1980 FNL 660 FWL	BONE SPRING	9700	9700
30-025-26810	COG OPERATING LLC	SMITH RANCH FEDERAL	#001	Oil	Vertical	Plugged, Site Released	11	T20S	R33E	E	E-11-20S-33E 1980 FNL 660 FWL	E-11-20S-33E 1980 FNL 660 FWL	BONE SPRING	13650	13650
30-025-40128	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#012	Oil	Vertical	Cancelled Apd	02	T20S	R33E	E	E-02-20S-33E 2310 FNL 660 FWL	E-02-20S-33E 2310 FNL 660 FWL	YATES	3700	3700
30-025-31351	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#004	Oil	Vertical	Cancelled Apd	11	T20S	R33E	D	D-11-20S-33E 330 FNL 660 FWL	D-11-20S-33E 330 FNL 660 FWL	BONE SPRING	9750	9750
30-025-34701	EARTHSTONE OPERATING, LLC	ANACONDA 11 FEDERAL	#001	Oil	Vertical	Active	11	T20S	R33E	D	D-11-20S-33E 660 FNL 760 FWL	D-11-20S-33E 660 FNL 760 FWL	DELAWARE	9720	9720
30-025-31271	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#005	Oil	Vertical	Active	02	T20S	R33E	М	M-02-20S-33E 660 FSL 810 FWL	M-02-20S-33E 660 FSL 810 FWL	BONE SPRING	10340	10340
30-025-31255	MERIT ENERGY COMPANY, LLC	SMITH RANCH 11 FEDERAL	#001	Oil	Vertical	Plugged, Site Released	11	T20S	R33E	L	L-11-20S-33E 2310 FSL 900 FWL	L-11-20S-33E 2310 FSL 900 FWL	BONE SPRING	9700	9700
30-025-34755	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#011	Oil	Vertical	Cancelled Apd	02	T20S	R33E	F	F-02-20S-33E 2310 FNL 1650 FWL	F-02-20S-33E 2310 FNL 1650 FWL	DELAWARE	7000	7000
30-025-01730	MOMENTUM OPERATING CO INC	TEAS YATES UNIT	#052	Oil	Vertical	Active	14	T20S	R33E	С	C-14-20S-33E 660 FNL 1650 FWL	C-14-20S-33E 660 FNL 1650 FWL	YATES	3392	3392
30-025-34934	NEARBURG PRODUCING CO	ANACONDA 11 FEDERAL	#002	Oil	Vertical	Plugged, Site Released	11	T20S	R33E	F	F-11-20S-33E 1650 FNL 1650 FWL	F-11-20S-33E 1650 FNL 1650 FWL	BONE SPRING	10450	10450
30-025-31138	COG OPERATING LLC	SMITH RANCH FEDERAL	#002	Oil	Vertical	Active	11	T20S	R33E	С	C-11-20S-33E 660 FNL 1980 FWL	C-11-20S-33E 660 FNL 1980 FWL	BONE SPRING	9746	9746
30-025-01735	BXP OPERATING, LLC	MAHAFFEY ARC FEDERAL	#001	Oil	Vertical	Active	14	T20S	R33E	С	C-14-20S-33E 660 FNL 1980 FWL	C-14-20S-33E 660 FNL 1980 FWL	BONE SPRING	14115	14115
30-025-31692	DEVON ENERGY PRODUCTION COMPANY, LP	SMITH RANCH 11 FEDERAL	#003	Oil	Vertical	Cancelled Apd	11	T20S	R33E	N	N-11-20S-33E 990 FSL 1980 FWL	N-11-20S-33E 990 FSL 1980 FWL	BONE SPRING	10350	10350
30-025-23897	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	02	T20S	R33E	N	N-02-20S-33E 660 FSL 1980 FWL	N-02-20S-33E 660 FSL 1980 FWL	YATES	3562	
30-025-31209	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#004	Oil	Vertical	Active	02	T20S	R33E	N	N-02-20S-33E 510 FSL 1980 FWL	N-02-20S-33E 510 FSL 1980 FWL	BONE SPRING		10297
30-025-31683	BXP OPERATING, LLC	SMITH RANCH 11 FEDERAL	#002	Oil	Vertical	Active	11	T20S	R33E	K	K-11-20S-33E 2250 FSL 2014 FWL	K-11-20S-33E 2250 FSL 2014 FWL	BONE SPRING	9520	
30-025-31318	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#006H	Gas	Horizontal	Active	02	T20S	R33E	K	K-02-20S-33E 1980 FSL 1980 FWL	K-02-20S-33E 1980 FSL 1980 FWL	BONE SPRING		10188
30-025-38122	COG OPERATING LLC	GUNSLINGER 11 FEDERAL COM	#002	Gas	Directional	Plugged, Site Released	11	T20S	R33E	K	K-11-20S-33E 2380 FSL 1675 FWL	J-11-20S-33E 2010 FSL 3322 FWL	PFNN		13913
30-025-30977	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#003	Injection	Vertical	Active	02	T20S	R33E	0	O-02-20S-33E 660 FSL 1980 FEL	O-02-20S-33E 660 FSL 1980 FEL	BONE SPRING	_	13700
30-025-40316	BTA OIL PRODUCERS, LLC	GEM 8705 JV-P	#011H	Oil	Horizontal	New	02	T20S	R33E	Н	H-02-20S-33E 1980 FNL 660 FEL	E-02-20S-33E 2099 FNL 332 FWL	BONE SPRING		10230
30-025-01705	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	01	T20S	R33E	F	E-01-20S-33E 1980 FNL 660 FWL	E-01-20S-33E 1980 FNL 660 FWL	YATES	3684	
30-025-27709	COG OPERATING LLC	EAST SMITH RANCH FEDERAL	#001	Oil	Vertical	Plugged, Site Released	12	T20S	R33E	D	D-12-20S-33E 990 FNL 990 FWL	D-12-20S-33E 990 FNL 990 FWL	BONE SPRING		13700
30-025-48540	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 3BS FEDERAL COM	#007H	Oil	Horizontal	New	11	T20S	R33E	В	B-11-20S-33E 120 FNL 1500 FEL	P-14-20S-33E 100 FSL 400 FEL	BONE SPRING		11054
30-025-48539	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 3BS FEDERAL COM	#013H	Oil	Horizontal	New	11	T20S	R33E	B	B-11-205-33E 120 FNL 1530 FEL	O-14-20S-33E 100 FSL 1775 FEL	BONE SPRING		11136
30-025-50430	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 3B3 FEDERAL COM	#015H	Oil	Horizontal	New	11	T205	R33E	В	B-11-203-33E 120 FNL 1330 FEL	O-14-203-33E 100 F3E 1773 FEE	BONE SPRING	19484	
30-025-50430	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 1BS FEDERAL COM	#005H	Oil	Horizontal	New	11	T20S	R33E	В	B-11-20S-33E 250 FNL 1400 FEL B-11-20S-33E 100 FSL 400 FEL	P-14-20S-33E 101 FSL 1775 FEL	BONE SPRING		9463
30-025-50432	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 1B3 FEDERAL COM	#003H	Oil	Horizontal	New	11	T205	R33E	C	C-11-20S-33E 250 FNL 2030 FWL	M-14-203-33E 101 F3E 400 FEE	BONE SPRING		10340
30-025-50433	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 2BS FEDERAL COM	#004H	Oil	Horizontal	New	11	T203	R33E	C	C-11-20S-33E 250 FNL 2060 FWL	C-11-20S-33E 250 FNL 2060 FWL	BONE SPRING		10350
30-025-50434	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 2BS FEDERAL COM  ANACONDA 11 14 3BS FEDERAL COM	#004H	Oil	Horizontal	New	11	T20S	R33E	C	C-11-20S-33E 230 FNL 2000 FWL	M-14-20S-33E 250 FNL 2080 FWL	BONE SPRING		111115
30-025-50434	EARTHSTONE OPERATING, LLC	ANACONDA 11 14 3BS FEDERAL COM	#001H #002H	Oil	Horizontal	New	11	T20S	R33E	C	C-11-20S-33E 120 FNL 1970 FWL	N-14-205-33E 101 FSL 2130 FWL	BONE SPRING		

VII (4)

Permian Oilfield Partners, LLC. Imperative Federal SWD #1 795' FNL, 2600' FWL Sec. 11, T20S, R33E, Lea Co. NM Lat 32.5927551° N, Lon -103.6341248° W GL 3586', RKB 3616'

	Regional So	ource Water Anal	ysis	
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	0	M	Е
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
рН	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. Imperative Federal SWD #1 795' FNL, 2600' FWL Sec. 11, T20S, R33E, Lea Co. NM Lat 32.5927551° N, Lon -103.6341248° W GL 3586', RKB 3616'

Devonia	an Injection Zone W	ater Analysis	S
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	В	В
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
pН			
TDS_mgL	29011	33414	45778
Chloride_mgL	16000	18570	26440
Bicarbonate_mgL	520	227	1145
Sulfate_mgL	1500	1961	729



# 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 Sub-		Q	Q C	<u> </u>					Depth	Depth	Water
POD Number	Code basin	County	64	16 4	Sec	Tws	Rng	X	Υ	Well	Water	Column
CP 00317	CP	LE	3	4 3	05	20S	33E	623054	3607235* 🌍	680	325	355
CP 00653 POD1	CP	LE		4 4	04	20S	33E	625573	3607367* 🌍	60		
CP 00748 POD1	СР	LE		2	01	20S	33E	630197	3608428* 🌍			
CP 00798 POD1	СР	LE	2	1 1	24	20S	33E	629348	3603892* 🌍	850		
CP 01090 POD1	СР	LE		1 2	31	20S	33E	586045	3608526 🌍			
CP 01865 POD1	СР	LE	4	3 2	02	20S	33E	628390	3608155 🌍	105	0	105
CP 01865 POD2	СР	LE	3	1 3	02	208	33E	627454	3607733 🌍	105	0	105

Average Depth to Water: 108 feet

> Minimum Depth: 0 feet

> Maximum Depth: 325 feet

**Record Count: 7** 

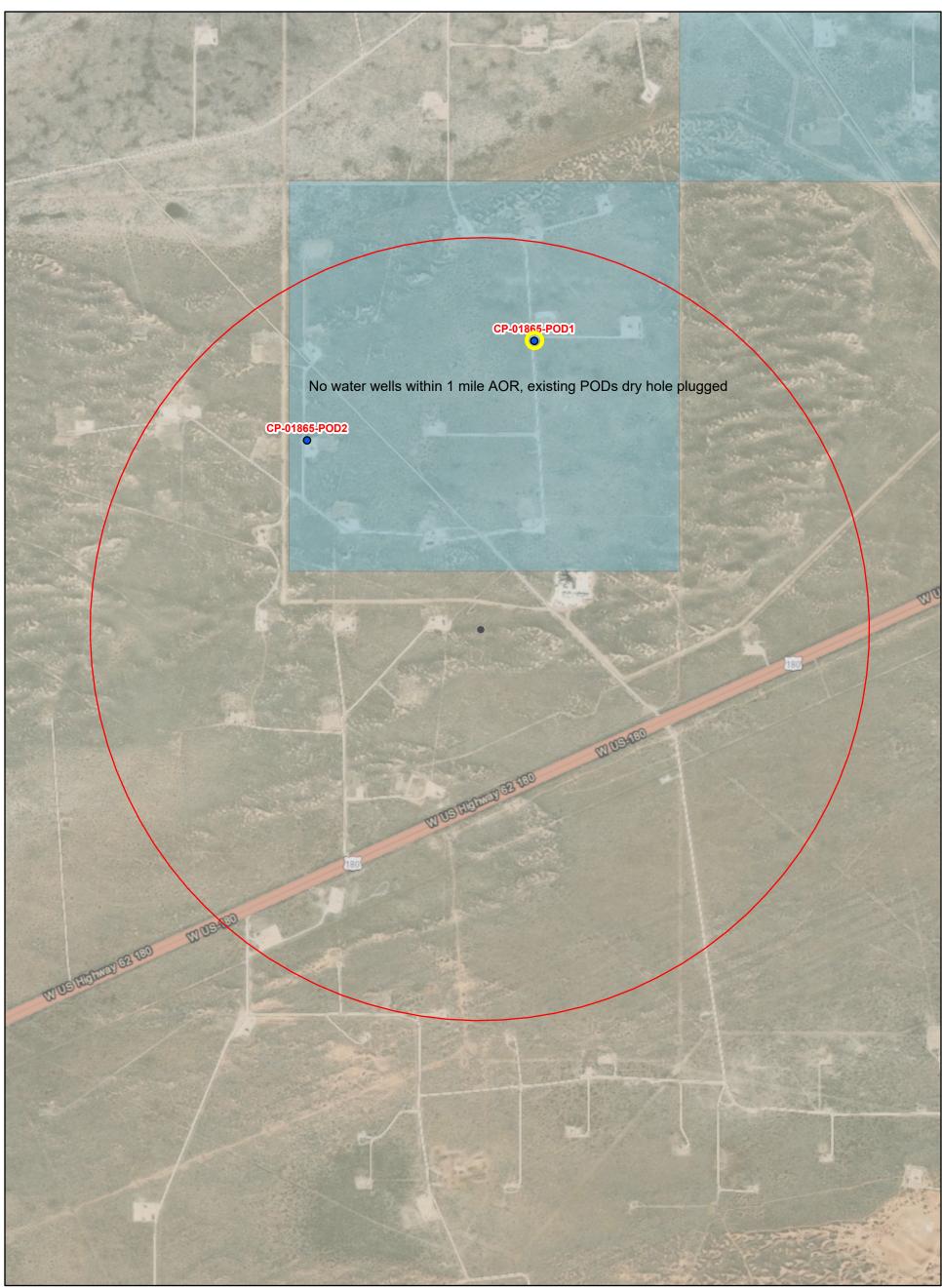
**PLSS Search:** 

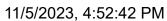
Township: 20S Range: 33E

\*UTM location was derived from PLSS - see Help

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

# Received by OCD: 12/21/2023 5:51:31 PM XI. Imperative Federal SWD #1 Water Wells in 1 Mi AOR





**GIS WATERS PODs** 

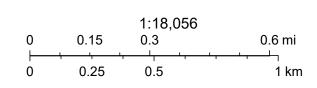
Active

OSE District Boundary New Mexico State Trust Lands

Water Right Regulations

Closure Area

**Both Estates** 



Esri, HERE, iPC Esri, HERE, Garmin, iPC Maxar



# New Mexico Office of the State Engineer

# **Water Right Summary**



WR File Number: CP 01865 Subbasin: CP Cross Reference: -

Primary Purpose: MON MONITORING WELL

Primary Status: PMT PERMIT

Total Acres: Subfile: - Header: -

Total Diversion: 0 Cause/Case: -

Agent: JOHN FARRELL PG

User: BTA OIL PRODUCERS LLC

Contact: BOB HALL

**Documents on File** 

Status From/

Trn# Doc File/Act 1 2 Transaction Desc. To Acres Diversion Consumptive

get 686912 EXPL 2021-02-04 PMT APR CP 01865 POD1-2 T 0 0

**Current Points of Diversion** 

Q Q Q (NAD83 UTM in meters)

POD Number Well Tag Source 6416 4 SecTws Rng X Y Other Location Desc



# New Mexico Office of the State Engineer Transaction Summary

**EXPL** Permit To Explore

Transaction Number: 686912 Transaction Desc: CP 01865 POD1-2 File Date: 01/21/2021

Primary Status: PMT Permit
Secondary Status: APR Approved

Person Assigned: \*\*\*\*\*\*

Agent: JOHN FARRELL PG

User: BTA OIL PRODUCERS LLC

Contact: BOB HALL

Events					
	Date	Туре	Description	Comment	Processed By
get images	01/21/2021	APP	Application Received	*	*****
get images	01/21/2021	TEC	Technical Report	*PLG PLN OPS CP-1865POD1-2	*****
	02/04/2021	FTN	Finalize non-published Trans.		*****
get images	03/19/2021	LGI	Well Log Image	*	*****
	04/06/2021	ARW	WRAB Main File Rm Arch Sect	CP 01865 Archive	d *****
get images	07/22/2021	LOG	Well Log Received	*POD1	*****
	07/22/2021	DRY	Dry well log received		*****
get images	07/22/2021	LOG	Well Log Received	*POD2	*****
	08/26/2021	DRY	Dry well log received		*****
	09/03/2021	QAT	Quality Assurance Completed	DATA	*****
	09/29/2021	QAT	Quality Assurance Completed	IMAGE	*****

# **Water Right Information**

WR File Nbr	Acres	Diversion	Consumptive Purpose of Use
CP 01865	0	0	MON MONITORING WELL
**Point of Diversion	1		
CP 01865 POD1		628390	3608155 🌍
CP 01865 POD2		627454	3607733 🌍

#### Remarks

"APPLICANTS REQUEST TO COMPLETE TWO SOIL BORINGS TO AN APPROXIMATE DEPTH OF 105 FEET WITH THE INTENTION OF PROVING THAT GROUNDWATER DOES NOT EXIST AT SAID DEPTH. A CONTINGENCY PLUGGING PLAN HAS BEEN FILED SIMULTANEOUSLY WITH THIS APPLICATION

#### **Remarks**

THE BORING WILL OCCUR ON STATE TRUST LAND ON LEASE NUMBER GT-2922. PERMIT NUMBER WE-795 HAS BEEN ISSUED BY NMSLO FOR ACCESS TO THE JOB SITE FOR THE BORING **OPERATION"** 

#### **Conditions**

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- No water shall be appropriated and beneficially used under this permit.
- В The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- С The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- The well authorized by this permit shall be plugged completely using the 6 following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable
- The Permittee shall utilize the highest and best technology available to 7 ensure conservation of water to the maximum extent practical.
- Р The well shall be constructed, maintained, and operated to prevent interaquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- Q The State Engineer retains jurisdiction over this permit.
- R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

# **Action of the State Engineer**

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

Approval Code: A - Approved **Action Date:** 02/04/2021 Log Due Date: 02/04/2022

State Engineer: John R. D Antonio,



## Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject

Permian Oilfield Partners, LLC Imperative Federal SWD #1 795' FNL & 2600' FWL Sec 11, T20S, R33E Lea County, NM

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

Gary Fisher Manager

Permian Oilfield Partners, LLC.

Date: 11/5/2023



#### Statement of Notifications

Re: C-108 Application for SWD Well

Permian Oilfield Partners, LLC Imperative Federal SWD #1 795' FNL & 2600' FWL Sec 11, T20S, R33E

Lea County, NM

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

Imperative Fed	leral SWD #1 - Affected F	ersons within 1 Mile Ar	ea of R	eview	
Notified Name	Notifed Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
ADVANCE ENERGY PARTNERS HAT MESA LLC	11490 Westheimer Rd	Houston, TX 77077	USPS	9414811899562694904007	11/7/2023
ANADARKO PETROLEUM (c/o Oxy)	5 Greenway Plaza, Ste 110	Houston, TX 77046	USPS	9414811899562694904090	11/7/2023
APACHE CORPORATION	303 Vet Airpark Ln, Ste 1000	Midland, TX 79705	USPS	9414811899562694904083	11/7/2023
B & J OPERATING INC	PO Box 1478	Pampa, TX 79066	USPS	9414811899562694904410	11/7/2023
BTA OIL PRODUCERS, LLC	104 S Pecos	Midland, TX 79701	USPS	9414811899562694904465	11/7/2023
Bureau Of Land Management	620 E Greene St.	Carlsbad, NM 88220	USPS	9414811899562694904427	11/7/2023
BURLINGTON RESOURCES OIL & GAS (c/o Conoco)	PO Box 2197	Houston, TX 77252	USPS	9414811899562694904496	11/7/2023
BXP OPERATING, LLC	11757 Katy Freeway, Ste 475	Houston, TX 77079	USPS	9414811899562694904489	11/7/2023
BXP PARTNERS V LP	11757 Katy Fwy, Suite 475	Houston, TX 77079	USPS	9414811899562694904434	11/7/2023
CHESAPEAKE EXPLORATION LLC	PO Box 18496	Oklahoma City, OK 73154	USPS	9414811899562694904564	11/7/2023
CHEVRON USA INC	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899562694904526	11/7/2023
CIMAREX ENERGY CO. OF COLORADO	6001 Deauville Blvd, Ste 300N	Midland, TX 79706	USPS	9414811899562694904540	11/7/2023
COG OPERATING LLC	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899562694904533	11/7/2023
CONOCOPHILLIPS CO	PO Box 2197	Houston, TX 77252	USPS	9414811899562694905219	11/7/2023
DEVON ENERGY PRODUCTION COMPANY, LP	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899562694905264	11/7/2023
EARTHSTONE OPERATING, LLC	1400 Woodloch Forest, Ste 300	The Woodlands, TX 77380	USPS	9414811899562694905226	11/7/2023
INTREPID POTASH	707 17th St., Ste 4200	Denver, CO 80202	USPS	9414811899562694905202	11/7/2023
KERR-MCGEE OIL & GAS ONSHORE (c/o Oxy)	5 Greenway Plaza, Ste 110	Houston, TX 77046	USPS	9414811899562694905288	11/7/2023
MAGNUM HUNTER PETRO (c/o COG Oper)	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899562694905851	11/7/2023
MERIT ENERGY COMPANY, LLC	13727 Noel Road, Ste 500	Dallas, TX 75240	USPS	9414811899562694905868	11/7/2023
MOMENTUM OPERATING CO INC	PO Box 2439	Albany, TX 76430	USPS	9414811899562694905820	11/7/2023
MURCHISON OIL AND GAS, LLC	7250 Dallas Parkway, Ste 1400	Plano, TX 75024	USPS	9414811899562694905837	11/7/2023
NEARBURG PRODUCING CO	PO Box 823085	Dallas, TX 75382	USPS	9414811899562694905714	11/7/2023
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899562694905752	11/7/2023
OBO INC	PO Box 22577	Hialeah, FL 79704	USPS	9414811899562694905769	11/7/2023
PENROC OIL CORP	1515 W Calle Sur St	Hobbs, NM 88240	USPS	9414811899562694905721	11/7/2023
PRIME ROCK RESOURCES AGENT CO INC	203 W Wall St #1000	Midland, TX 79701	USPS	9414811899562694905707	11/7/2023
SHACKELFORD OIL CO	11417 W County Rd 33	Midland, TX 79707	USPS	9414811899562694905790	11/7/2023
TENNECO OIL CO (c/o Earthstone)	1400 Woodloch Forest; Ste 300	The Woodlands, TX 77380	USPS	9414811899562694905745	11/7/2023

Sean Puryear

Permian Oilfield Partners, LLC <a href="mailto:spuryear@popmidstream.com">spuryear@popmidstream.com</a>

Released to Imaging: 12/22/2023 9:31:47 AM

ARTICLE NUMBER: 9414 8118 9956 2694 9040 07

ARTICLE ADDRESSED TO:

Advance Energy Ptnrs Hat Mesa LLC 11490 WESTHEIMER RD STE 950 HOUSTON TX 77077-6841

FEES
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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9040 83

ARTICLE ADDRESSED TO:

Apache Corporation 303 VET AIRPARK LN STE 1000 MIDLAND TX 79705-4572

**FEES** 

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



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9044 65

ARTICLE ADDRESSED TO:

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

FEES

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



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9040 90

ARTICLE ADDRESSED TO:

Anadarko Petroleum c/o Oxy USA 5 GREENWAY PLZ STE 110 HOUSTON TX 77046-0521

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$4.510 4.350 8.860 Postmark Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9044 10

ARTICLE ADDRESSED TO:

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

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees.



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9044 27

ARTICLE ADDRESSED TO:

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

FEES

Postage Per Piece Certified Fee Total Postage & Fees:

\$4.510 4.350 8.860

ARTICLE NUMBER: 9414 8118 9956 2694 9044 96

ARTICLE ADDRESSED TO:

Burlington Res c/o ConocoPhillips PO BOX 2197 HOUSTON TX 77252-2197

Postage Per Piece Certified Fee Total Postage & Fees: \$4.510 4.350 8 860



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9044 89

ARTICLE ADDRESSED TO:

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

FEES

Postage Per Piece Certified Fee Total Postage & Fees:



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9044 34

ARTICLE ADDRESSED TO:

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

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



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9045 64

ARTICLE ADDRESSED TO:

Chesapeake Exploration LLC PO BOX 18496 OKLAHOMA CITY OK 73154-0496

Postage Per Piece Certified Fee Total Postage & Fees.

\$4.510 4.350 8.860

. NM 5 Postmark Here MOV -7 2023

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9045 26

ARTICLE ADDRESSED TO:

Chevron USA 6301 DEAUVILLE MIDLAND TX 79706-2964

Postage Per Piece Certified Fee Total Postage & Fees: \$4 510 8.860

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9045 40

ARTICLE ADDRESSED TO:

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

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees:

\$4.510 4.350 8.860

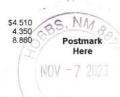
ARTICLE NUMBER: 9414 8118 9956 2694 9045 33

ARTICLE ADDRESSED TO:

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

FEES

Postage Per Piece Certified Fee Total Postage & Fees



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9052 64

ARTICLE ADDRESSED TO:

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

**FEES** 

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

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9052 02

ARTICLE ADDRESSED TO:

Intrepid Potash 707 17TH ST STE 4200 DENVER CO 80202-3432

FEES

Postage Per Piece Certified Fee Total Postage & Fees:



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9052 19

ARTICLE ADDRESSED TO:

ConocoPhillips Company PO BOX 2197 HOUSTON TX 77252-2197

FEES

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

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9052 26

ARTICLE ADDRESSED TO:

Earthstone Operating, LLC 1400 WOODLOCH FRST DR STE 300 THE WOODLANDS TX 77380-1197

FEES

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

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SPS

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9052 88

ARTICLE ADDRESSED TO:

Kerr-McGee Oil & Gas c/o Oxy 5 GREENWAY PLZ STE 110 HOUSTON TX 77046-0521

FEES

Postage Per Piece Certified Fee Total Postage & Fees:

\$4.510 4.350 8.860

ARTICLE NUMBER: 9414 8118 9956 2694 9058 51

ARTICLE ADDRESSED TO:

Magnum Hunter c/o COG Oper 600 W ILLINOIS AVE MIDLAND TX 79701-4882

Postage Per Piece Certified Fee Total Postage & Fees:

4.350 8,860



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2594 9058 68

ARTICLE ADDRESSED TO:

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

Postage Per Piece Certified Fee Total Postage & Fees:



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9058 20

ARTICLE ADDRESSED TO:

Momentum Operating Co PO BOX 2439 ALBANY TX 76430-8020

FFFS

Postage Per Piece Total Postage & Fees \$4.510 4.350 8 860



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9058 37

ARTICLE ADDRESSED TO:

Murchison Oil & Gas, LLC 7250 DALLAS PKWY STE 1400 PLANO TX 75024-5002

**FEES** 

Postage Per Piece Certified Fee
Total Postage & Fees \$4.510 4.350 8.860 Postmark Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9057 14

ARTICLE ADDRESSED TO:

Nearburg Producing Co PO BOX 823085

DALLAS TX 75382-3085

Postage Per Piece Certified Fee Total Postage & Fees:



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9057 52

ARTICLE ADDRESSED TO:

New Mexico State Land Office 310 OLD SANTA FE TRL

SANTA FE NM 87501-2708

FEES

Postage Per Piece Certified Fee Total Postage & Fees: \$4,510 4.350

ARTICLE NUMBER: 9414 8118 9956 2694 9057 69

ARTICLE ADDRESSED TO:

OBO Inc. PO BOX 22577 HIALEAH FL 33002-2577

Postage Per Piece Certified Fee Total Postage & Fees \$4.510 4 350

Postmark Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2594 9057 21

ARTICLE ADDRESSED TO:

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

FEES Postage Per Piece Certified Fee Total Postage & Fees:

\$4.510 4.350 8.860

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9057 07

ARTICLE ADDRESSED TO:

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

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees:

\$4.510 8.860

Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9057 90

ARTICLE ADDRESSED TO:

Shackelford Oil Co 11417 W COUNTY ROAD 33 MIDLAND TX 79707-9027

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

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2694 9057 45

ARTICLE ADDRESSED TO:

Tenneco Oil Co c/o Earthstone Oper 1200 WOODLOCH FOREST, STE 300 THE WOODLANDS TX 77380

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

# Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated July 30, 2023 and ending with the issue dated July 30, 2023.

Publisher

Sworn and subscribed to before me this 30th day of July 2023.

Business Manager

My commission expires

January 29, 2027 (Seal) STATE

NOTARY PUBLIC

OUSSIE 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 publication has been made.

## LEGAL NOTICE July 30, 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 Imperative Federal SWD #1, and is located 795' FNL & 2600' FWL, Unit C, Section 11, Township 20 South, Range 33 East, NMPM, approximately 22 mi WSW of Monument, NM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 14,796 feet to 15,868 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,959 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.

67115647

00281055

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



Attachment to C-108
Permian Oilfield Partners, LLC
Imperative Federal SWD #1
795' FNL & 2600' FWL
Sec 11, T20S, R33E
Lea County, NM

November 5, 2023

#### STATEMENT REGARDING SEISMICITY

Examination of the USGS and NMTSO seismic activity databases shows no historic seismic activity >M2.0 in the area (< 5.64 mile radius, 25 sq. mi.) of the proposed above referenced SWD well. 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 2.6 miles away from the nearest active or permitted Devonian disposal well (Permian TDS Coombes SWD #1, SWD-1996).

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.

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 5.4 mi (8.7 km) to the east.

- 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. Two Permian Oilfield Partners SWD applications were modeled assuming simultaneous injection, the subject of this application, the Imperative Federal SWD #1, and the Vital Federal SWD #1. Interval depth is the lesser of the Imperative & Vital, and interval height is the lesser of the Imperative & Vital.

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	Imperative Federal SWD #1	11-20S-33E	32.5927551	-103.6341248	50,000
Pending	Vital Federal SWD #1	10-20D-34E	32.5813206	-103.6588529	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)	1042
Average Porosity (%)	5
Vert stress gradient (psi/ft)	1.0
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14761
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. Imperative Fed SWD #1

Injection Well #2: Quail 16 State SWD #9

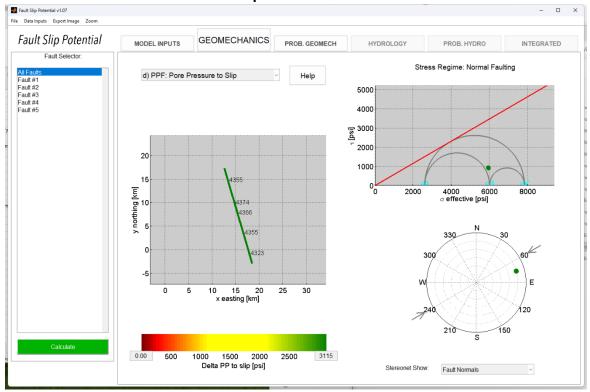
Injection Well #3: Coombes SWD #1

Injection Well #4: Wildrye Fee SWD #1

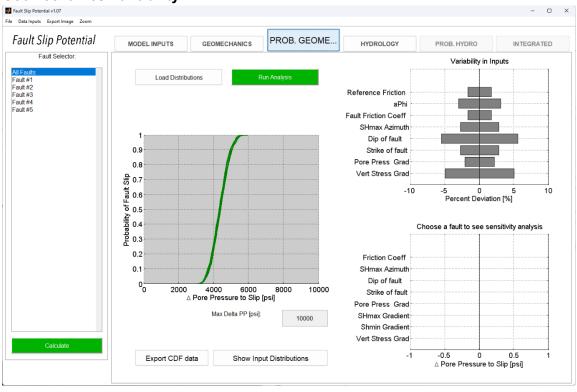
Injection Well #5: Wild Cobra 1 State SWD #2
Injection Well #6: Libby Berry Fee SWD #2

Injection Well #7: Prop. Vital Fed SWD #1

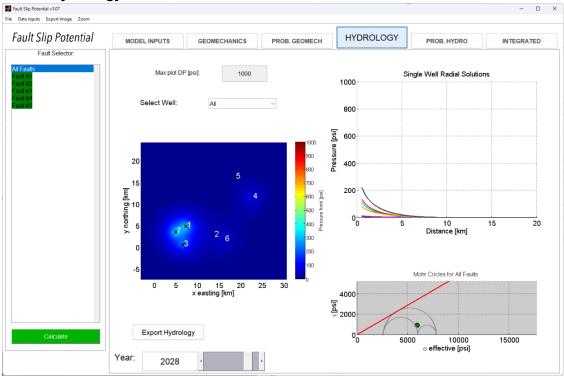




# **GeoMechanics Variability**



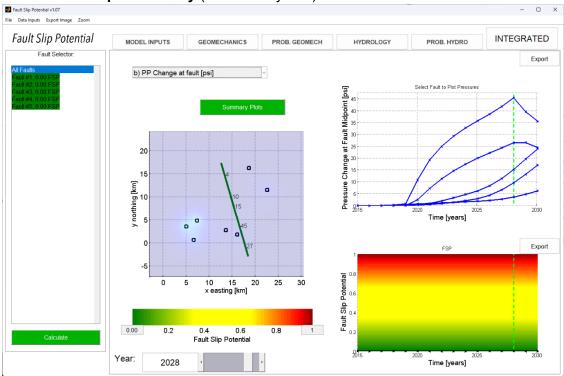
# **Year 5 Hydrology**



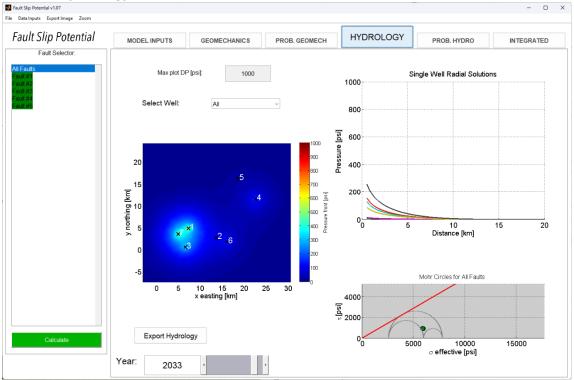
# Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



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

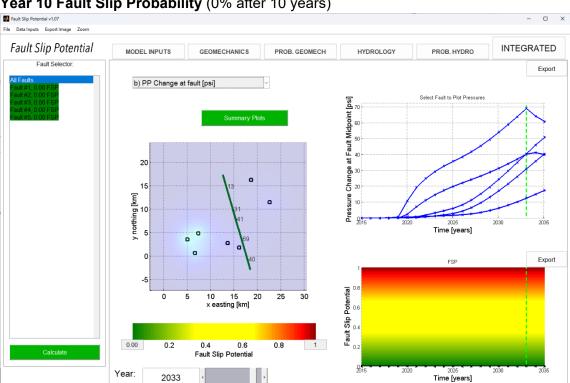


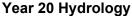


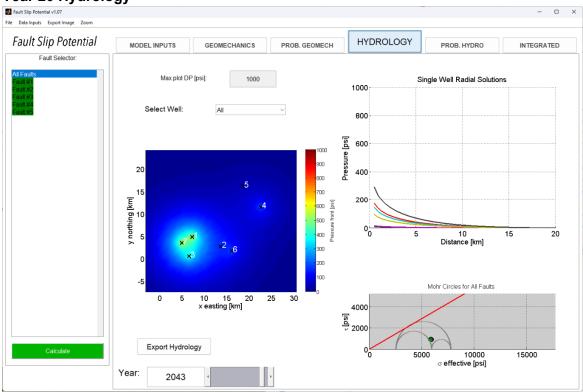


# Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)





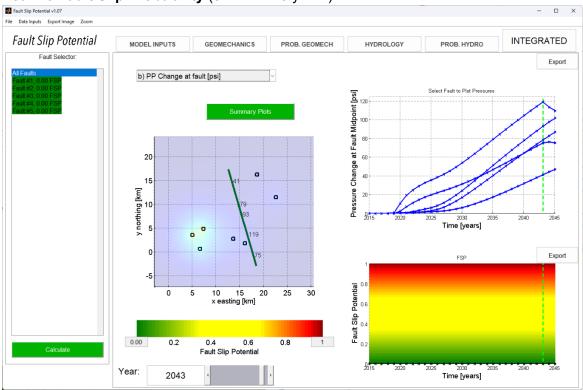




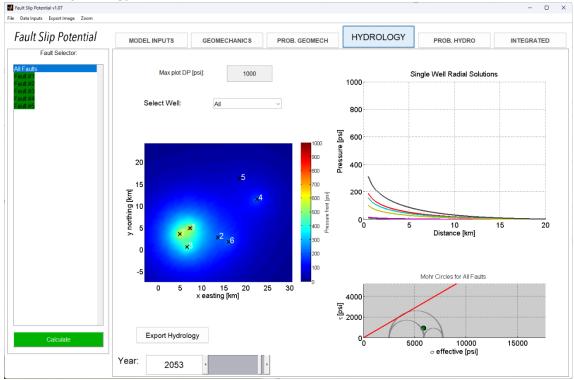
# Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



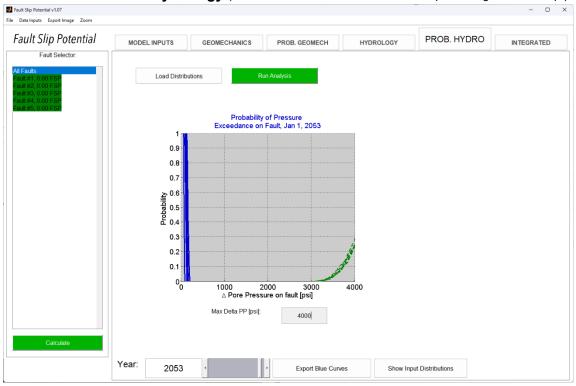
# Year 20 Fault Slip Probability (0% after 20 years)

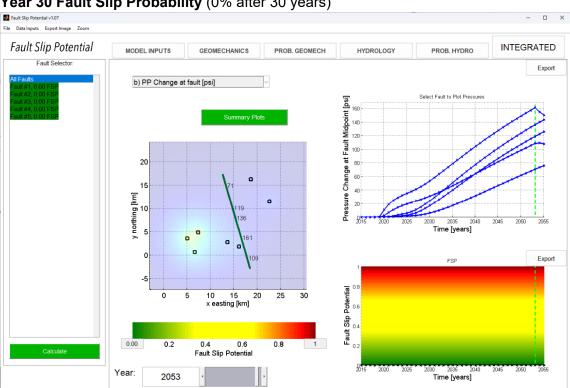






# Year 30 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)





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

gfisher@popmidstream.com

(817) 606-7630