



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

Case No. 23807: Overdue Federal SWD #1

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

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

**CASE NO. 23807
(OVERDUE)**

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Tab 1: Application and C-108

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

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

CASE NO. 23807

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 Overdue Federal SWD Well #1 well at a surface location 602’ from the North line and 298’ from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 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 2,935 psi for the well.

(5) On or about July 11, 2023, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

Exhibit 1

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

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

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

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

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

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

WHEREFORE, Permian requests that this application be set for hearing before an Examiner of the Oil Conservation Division on October 5, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

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

CASE NO. 23807: 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 Overdue Federal SWD Well #1 well at a surface location 602' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

| | | | |
|-----------|-----------|-------|---------|
| 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: Overdue Federal SWD #1 API: 30-025-Pending
 Pool: SWD; Devonian-Silurian Pool Code: 97869

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

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

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

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

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

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

Sean Puryear

Print or Type Name

Signature

7-11-2023
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: 7-11-2023
E-MAIL ADDRESS: **spuryear@popmidstream.com**
- XV. If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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

Side 2

III. WELL DATA

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

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

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

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

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

XIV. PROOF OF NOTICE

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

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

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

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

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

III A: See attached wellbore diagram.

III B:

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

Overlying Potentially Productive Zones:

Delaware, Bone Spring, Wolfcamp, Strawn, Atoka & Morrow Tops all above 14,640'

Underlying Potentially Productive Zones:

None

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

V: See attached Area of Review Analysis.

VI: There is 1 well within the proposed well's area of review that penetrates the Devonian formation, the Pure Federal "C" #1, API #30-025-02417, plugged 5/13/1963. Well plugging report and diagram attached. Note that this well is the subject of UIC order #SWD-1568, expired August 3, 2017.

- 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 2,935 psi.
 4. Disposal sources will be produced waters from surrounding wells in the Delaware, Avalon, Bone Spring and Wolfcamp formations. These formation waters are known to be compatible with Devonian formation water. Representative area produced water analyses were sourced from the NMT Go-Tech website. See attached Fluid Analyses.
 5. Devonian water analyses from the area of review are unavailable. Representative water analyses were sourced from the NMT Go-Tech website. See attached Fluid Analyses.

VIII:

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

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

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

| GEOLOGY PROGNOSIS | | | |
|--------------------------------|-------------|---------------|------------------|
| FORMATION | TOP | BOTTOM | THICKNESS |
| | KB TVD (ft) | KB TVD (ft) | (ft) |
| Rustler | 1,552 | 1,890 | 338 |
| Salado | 1,890 | 3,355 | 1,555 |
| Yates | 3,355 | 3,708 | 353 |
| Capitan Reef | 3,708 | 5,557 | 1,849 |
| Delaware | 5,557 | 8,216 | 2,659 |
| Bone Spring | 8,216 | 10,937 | 2,721 |
| Wolfcamp | 10,937 | 12,199 | 1,262 |
| Lwr. Mississippian | 13,904 | 14,482 | 578 |
| Woodford | 14,482 | 14,640 | 158 |
| Devonian | 14,640 | 15,518 | 878 |
| Fusselman (Silurian) | 15,518 | 15,869 | 351 |
| Montoya (U. Ordovician) | 15,869 | 16,269 | 400 |
| Simpson (M. Ordovician) | 16,269 | 16,744 | 475 |

- Regional shallow fresh water in the Quaternary is known to exist at depths less than 1349'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 13,291'. There is a deeper potential USDW in the Capitan Reef formation. Depth from the bottom of this potential USDW to the injection zone is 9,083'. There is no USDW present below the injection interval.

Exhibit A

- IX:** Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- X:** A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI:** According to the New Mexico Office of the State Engineer, there are 0 fresh water wells within the proposed well's one-mile area of review. See attached 1 mile AOR water well map showing no active PODs in the AOR.
- XII:** Hydrologic affirmative statement attached.
- XIII:** Proof of notice and proof of publication attached.

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

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|------------------------------|--|--|--|--|-----------------------------|
| 1 API Number | | 2 Pool Code 97869 | | 3 Pool Name SWD; DEVONIAN-SILURIAN | |
| 4 Property Code | | 5 Property Name OVERDUE FEDERAL SWD | | | 6 Well Number 1 |
| 7 OGRID NO. 328259 | | 8 Operator Name PERMIAN OILFIELD PARTNERS, LLC | | | 9 Elevation 3643' |

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 |
|---------------|----------|------------|------------|---------|---------------|------------------|---------------|----------------|------------|
| 1 | 5 | 20S | 34E | | 602 | NORTH | 298 | 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.

① N 89°22'38" E 2644.21'

② N 89°30'52" E 2637.58'

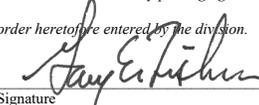
③ S 00°02'58" E 5273.40'

④ S 89°25'39" W 2636.92'

⑤ S 89°29'18" W 2641.84'

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.

 7-5-2023
Signature Date

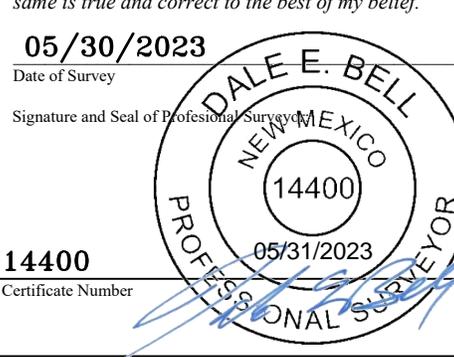
Gary Fisher
Printed Name

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

14400
Certificate Number

LOT 4 LOT 3 LOT 2 LOT 1

GEODETTIC DATA
NAD 83 GRID - NM EAST

SURFACE LOCATION
N: 585676.2 - E: 774932.7
LAT: 32.6077848° N
LONG: 103.5747341° W

CORNER DATA
NAD 83 GRID - NM EAST

A: FOUND BRASS CAP "1912"
N: 580957.2 - E: 769955.7

B: FOUND BRASS CAP "1912"
N: 586229.5 - E: 769951.1

C: FOUND BRASS CAP "1912"
N: 586258.3 - E: 772594.6

D: CALCULATED CORNER
N: 586280.6 - E: 775231.6

E: FOUND BRASS CAP "1912"
N: 583642.4 - E: 775227.1

F: FOUND BRASS CAP "1912"
N: 581007.1 - E: 775233.1

G: FOUND BRASS CAP "1912"
N: 580983.5 - E: 772591.9

602'

S.L. 298'

S 00°05'52" W 2638.76'

S 00°07'52" E 2635.81'

III (A)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 5, T20S, R34E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341° W
 GL 3643', RKB 3673'

Surface - (Conventional)

Hole Size: 26"
 Casing: 20" - 106.5# N-80 BTC Casing
 Depth Top: Surface
 Depth Btm: 1577'
 Cement: 1444 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: 3658'
 Cement: 1119 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: 5582'
 Cement: 827 sks - Class C + Additives
 Cement Top: Surface - (Circulate)
 ECP/DV Tool: 3758'

Intermediate #3 - (Conventional)

Hole Size: 12.25"
 Casing: 9.625" - 40# HCL-80 BTC Casing
 Depth Top: Surface
 Depth Btm: 10987'
 Cement: 1803 sks - Class C + Additives
 Cement Top: Surface - (Circulate)
 ECP/DV Tool: 5682'

Intermediate #4 - (Liner)

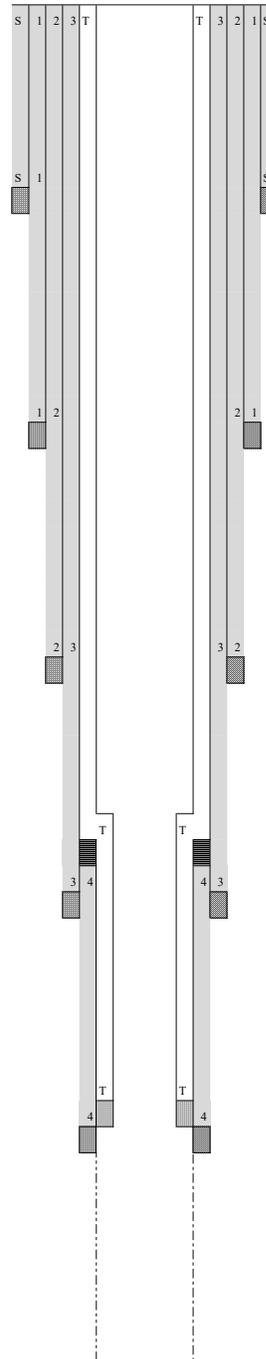
Hole Size: 8.5"
 Casing: 7.625" - 39# HCL-80 FJ Casing"
 Depth Top: 10787'
 Depth Btm: 14675'
 Cement: 250 sks - Class H + Additives
 Cement Top: 10787' - Circulate, then Bond Log when well @ TD

Intermediate #5 - (Open Hole)

Hole Size: 6.5"
 Depth: 15844'
 Inj. Interval: 14675' - 15844' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 14630'
 Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
 X/O Depth: 10787'
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
 Packer Depth: 14640'
 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
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

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

| Overdue Federal SWD #1 - Affected Persons within 1 Mile Area of Review | | | | | |
|--|--------------------------------|--------------------------------|---------|------------------------|--------------|
| Notified Name | Notified Address | Notified City, State, ZIP Code | Shipper | Tracking No. | Mailing Date |
| ADVANCE ENERGY PARTNERS HAT MESA LLC | 11490 Westheimer Rd | Houston, TX 77077 | USPS | 9414811899562232439831 | 7/11/2023 |
| APACHE CORPORATION | 2000 Post Oak Blvd., Suite 100 | Houston, TX 77056 | USPS | 9414811899562232439879 | 7/11/2023 |
| B & J OPERATING INC | PO Box 1478 | Pampa, TX 79066 | USPS | 9414811899562232439718 | 7/11/2023 |
| BALOG FAMILY TRUST | PO Box 111890 | Anchorage, AK 99504 | USPS | 9414811899562232439756 | 7/11/2023 |
| BLACK HILLS GAS RESOURCES, INC. | 7001 Mt Rushmore Rd | Rapid City, SD 57702 | USPS | 9414811899562232439763 | 7/11/2023 |
| Bureau Of Land Management | 620 E Greene St. | Carlsbad, NM 88220 | USPS | 9414811899562232439701 | 7/11/2023 |
| CHESAPEAKE EXPLORATION LLC | 6100 North Western Ave | OKC, OK 73118 | USPS | 9414811899562232439794 | 7/11/2023 |
| CIMAREX ENERGY CO | 6001 Deauville Blvd, Ste 300N | Midland, TX 79706 | USPS | 9414811899562232439749 | 7/11/2023 |
| CIMAREX ENERGY CO. OF COLORADO | 6001 Deauville Blvd, Ste 300N | Midland, TX 79706 | USPS | 9414811899562232439732 | 7/11/2023 |
| COG OPERATING LLC | 600 W Illinois Ave | Midland, TX 79701 | USPS | 9414811899562232439770 | 7/11/2023 |
| DELMAR HUDSON LEWIS LIVING TRUST | PO Box 2546 | Fort Worth, TX 76113 | USPS | 9414811899562232439916 | 7/11/2023 |
| FASKEN LAND & MINERALS LTD | 303 West Wall Ave Ste 1800 | Midland, TX 79701 | USPS | 9414811899562232439954 | 7/11/2023 |
| HUDSON OIL COMPANY OF TEXAS | 616 Texas Street | Fort Worth, TX 76102 | USPS | 9414811899562232439961 | 7/11/2023 |
| HYDE OIL & GAS CORP | 6300 Ridglea Pl # 1018 | Fort Worth, TX 76116 | USPS | 9414811899562232439909 | 7/11/2023 |
| JACK V WALKER REVOCABLE TRUST | PO Box 102256 | Anchorage, AK 99510 | USPS | 9414811899562232439947 | 7/11/2023 |
| JAVELINA PARTNERS | 616 Texas St. | Fort Worth, TX 76102 | USPS | 9414811899562232439985 | 7/11/2023 |
| LEE WILEY MONCRIEF TRUST | PO Box 2546 | Fort Worth, TX 76113 | USPS | 9414811899562232439930 | 7/11/2023 |
| LEWIS H DELMAR LIVING TRUST | 6300 Ridglea Place Suite 1005a | Fort Worth, TX 76116 | USPS | 9414811899562232439657 | 7/11/2023 |
| LINCOLN OIL & GAS LLC | 701 Three Cross | Roswell, NM 88201 | USPS | 9414811899562232439626 | 7/11/2023 |
| LINDY'S LIVING TRUST | 2400 South Hulen, Ste. 302 | Fort Worth, TX 76109 | USPS | 9414811899562232439695 | 7/11/2023 |
| MAGNUM HUNTER PRODUCTION INC | 600 N. Marienfeld, Suite 600 | Midland, TX 79701 | USPS | 9414811899562232439121 | 7/11/2023 |
| MARATHON OIL CO | 990 Town & Country Blvd. | Houston, TX 77024 | USPS | 9414811899562232439145 | 7/11/2023 |
| MEWBOURNE OIL CO | P. O. Box 5270 | Hobbs, NM 88241 | USPS | 9414811899562232439367 | 7/11/2023 |
| New Mexico State Land Office | 310 Old Santa Fe Trail | Santa Fe, NM 87501 | USPS | 9414811899562232439305 | 7/11/2023 |
| PENNZENERGY EXPLORATION AND PRODUCTION LLC | P. O. Box 2967 | Houston, TX 77001 | USPS | 9414811899562232439343 | 7/11/2023 |
| READ & STEVENS INC | 1001 17th Street, Suite 1800 | Denver, CO 80202 | USPS | 9414811899562232439381 | 7/11/2023 |
| SELECT AGUA LIBRE MIDSTREAM, LLC | 12515 Carriage Way | Oklahoma City, OK 73142 | USPS | 9414811899562232439336 | 7/11/2023 |
| ZORRO PARTNERS LTD | 616 Texas St | Fort Worth, TX, 76102 | USPS | 9414811899562232439374 | 7/11/2023 |

Date: 7/11/2023

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

Exhibit A

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4398 31

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4398 79

ARTICLE ADDRESSED TO:

Apache Corporation
2000 POST OAK BLVD STE 100
HOUSTON TX 77056-4400

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 18

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



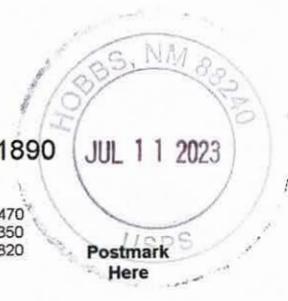
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 56

ARTICLE ADDRESSED TO:

Balog Family Trust
PO BOX 111890
ANCHORAGE AK 99511-1890

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 63

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



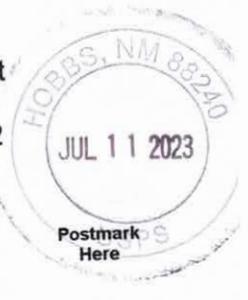
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 01

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 94

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 49

ARTICLE ADDRESSED TO:

Cimarex Energy Co.
600 N MARIENFELD ST STE 600
MIDLAND TX 79701-4405

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 32

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 70

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 16

ARTICLE ADDRESSED TO:

Delmar Hudson Lewis Living Trust
PO BOX 2546
FORT WORTH TX 76113-2546

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 54

ARTICLE ADDRESSED TO:

Fasken Land & Minerals Ltd
303 W WALL ST STE 1800
MIDLAND TX 79701-5106

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 61

ARTICLE ADDRESSED TO:

Hudson Oil Company of TX
616 TEXAS ST
FORT WORTH TX 76102-4696

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 09

ARTICLE ADDRESSED TO:

Hyde Oil & Gas Corp
6300 RIDGLEA PL STE 1018
FORT WORTH TX 76116-5778

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 47

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 85

ARTICLE ADDRESSED TO:

Javelina Partners
616 TEXAS ST
FORT WORTH TX 76102-4696

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 30

ARTICLE ADDRESSED TO:

Lee Wiley Moncrief Trust
PO BOX 2546
FORT WORTH TX 76113-2546

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4396 57

ARTICLE ADDRESSED TO:

Lewis H Delmar Living Trust
6300 RIDGLEA PL STE 1005A
FORT WORTH TX 76116-5763

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4396 26

ARTICLE ADDRESSED TO:

Lincoln Oil & Gas LLC
701 THREE CROSS DR
ROSWELL NM 88201-7831

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4396 95

ARTICLE ADDRESSED TO:

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

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4391 21

ARTICLE ADDRESSED TO:

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

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4391 45

ARTICLE ADDRESSED TO:

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

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 67

ARTICLE ADDRESSED TO:

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

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 05

ARTICLE ADDRESSED TO:

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

FEES

| | |
|-----------------------|---------|
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 43

ARTICLE ADDRESSED TO:

Pennzenergy Exploration & Productio
PO BOX 2967
HOUSTON TX 77252-2967

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 81

ARTICLE ADDRESSED TO:

Read & Stevens Inc.
1001 17TH ST STE 1800
DENVER CO 80202-2058

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 36

ARTICLE ADDRESSED TO:

Select Agua Libre Midstream, LLC
12515 CARRIAGE WAY
OKLAHOMA CITY OK 73142-3326

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 74

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



XIII.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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

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



Publisher

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



Business Manager

My commission expires
January 29, 2027

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

LEGAL NOTICE
May 28, 2023

Permian Oilfield Partners, LLC, PO Box 3329, Hobbs, NM 88241, phone (817)606-7630, attn. Gary Fisher, has filed form C-108 (Application for Authorization for Injection) with the New Mexico Oil Conservation Division seeking approval to drill a commercial salt water disposal well in Lea County, New Mexico. The proposed well is the Overdue Federal SWD #1, and is located 802' FNL & 298' FEL, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, approximately 18 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 14,675 feet to 15,844 feet. The maximum expected injection rate is 50,000 BWPd at a maximum surface injection pressure of 2,935 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.
#00278997

67115647

00278997

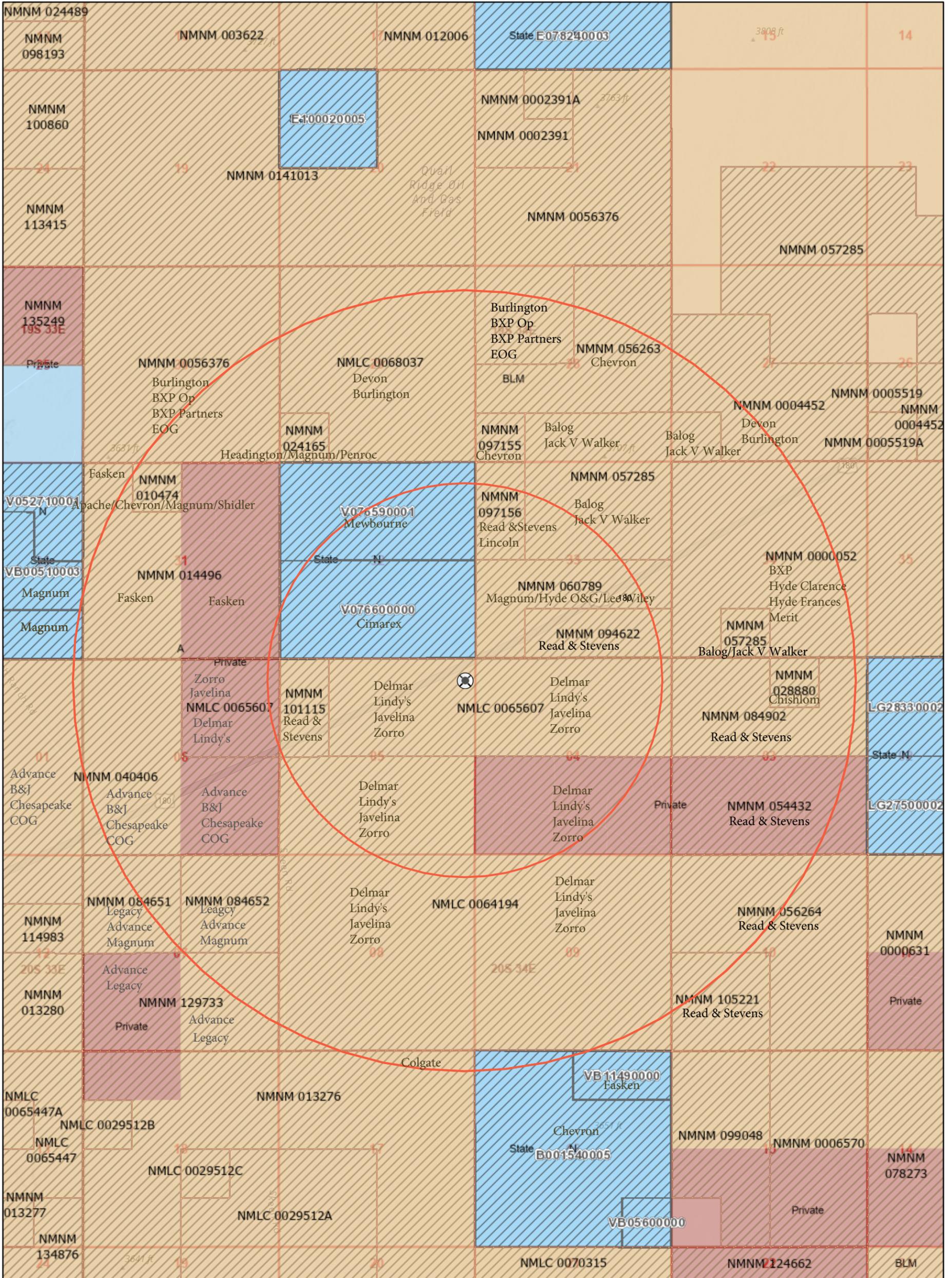
This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

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

Exhibit A

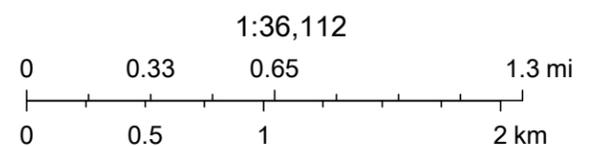
V (a)

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



7/8/2023, 7:47:53 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

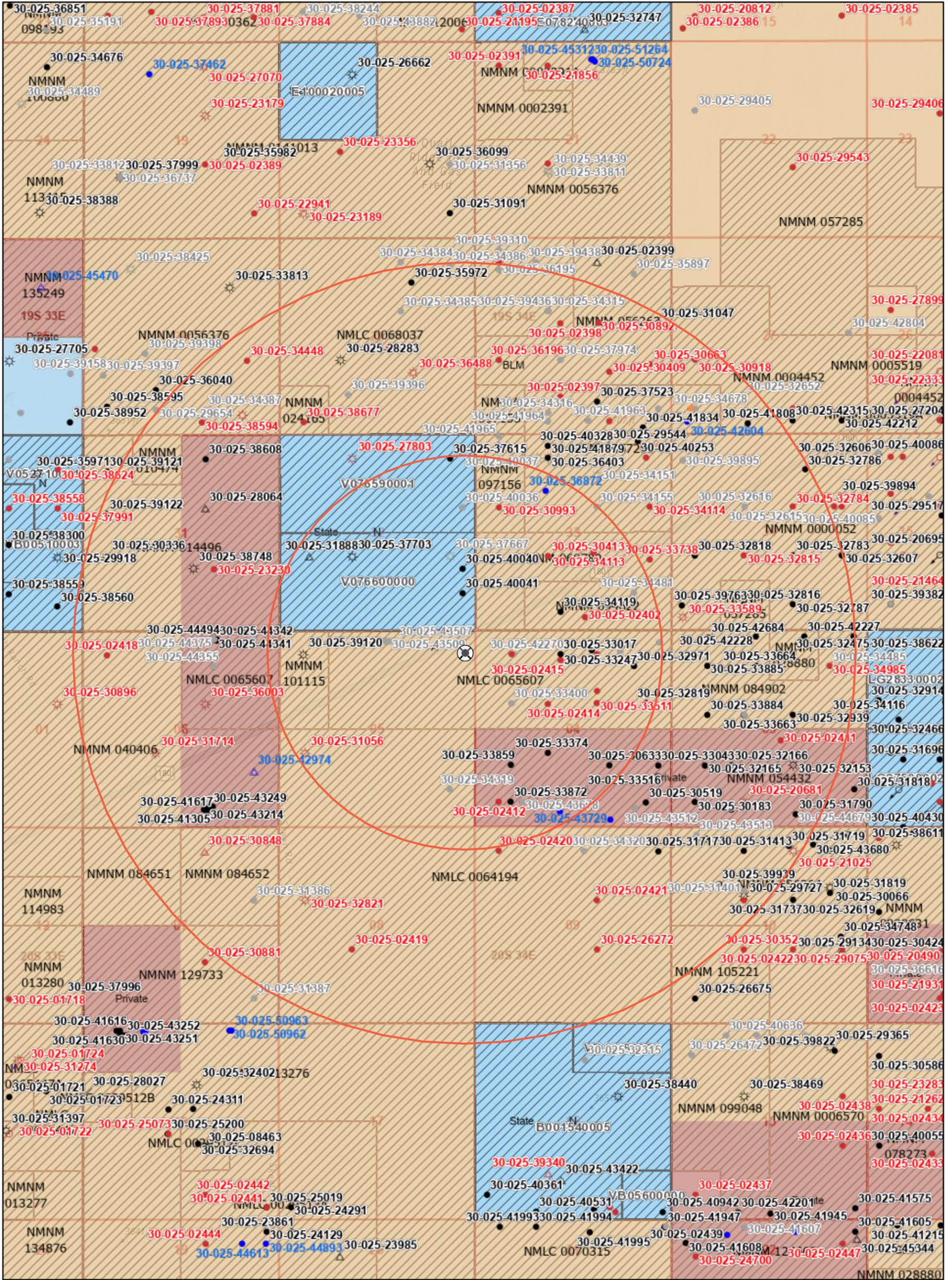


U.S. BLM
 U.S. Department of Interior, Bureau of Land Management (BLM)
 Esri, NASA, NGA, USGS, FEMA
 BLM

New Mexico Oil Conservation Division

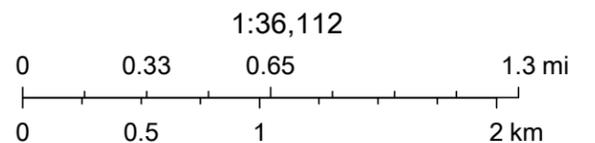
Exhibit A

V (b) Overdue Federal SWD #1, 1 & 2 Mi AOR, Wells



7/8/2023, 7:45:45 PM

- ▭ Override 1
- ⊗ Override 1
- Wells - Large Scale
 - ⊙ 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
- Mineral Ownership
 - 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



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

New Mexico Oil Conservation Division

Exhibit A

V (c)

| Overdue 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 | | |
| 30-025-39120 | READ & STEVENS INC | HIGHWAY 5 FEDERAL COM | #001 | Gas | Vertical | Active | 05 | T20S | R34E | D | D-05-205-34E Lot: 4 | 660 FNL 660 FWL | D-05-205-34E Lot: 4 | 660 FNL 660 FWL | MORROW | 13750 | 13750 | | |
| 30-025-31056 | MARATHON OIL CO | MATADOR 5 FEDERAL | #001 | Gas | Vertical | Plugged, Site Released | 05 | T20S | R34E | L | L-05-205-34E 1980 FSL 710 FWL | M-05-205-34E 1980 FSL 710 FWL | BONE SPRING | 13660 | 13660 | | | | |
| 30-025-31888 | SELECT AGUA LIBRE MIDSTREAM, LLC | RED HAWK 32 STATE | #001 | Salt Water Disposal | Vertical | Active | 32 | T19S | R34E | L | L-32-195-34E 1980 FSL 810 FWL | L-32-195-34E 1980 FSL 810 FWL | BONE SPRING | 13660 | 13660 | | | | |
| 30-025-37703 | MEWBOURNE OIL CO | QUAIL RIDGE 32 STATE | #002 | Gas | Vertical | Active | 32 | T19S | R34E | K | K-32-195-34E 1980 FSL 1980 FWL | K-32-195-34E 1980 FSL 1980 FWL | BONE SPRING | 13682 | 13682 | | | | |
| 30-025-43507 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #001H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2140 FEL | P-05-205-34E 330 FSL 350 FEL | BONE SPRING | 15377 | 10828 | | | |
| 30-025-43509 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2340 FEL | N-05-205-34E 330 FSL 2290 FWL | BONE SPRING | 15106 | 10820 | | | |
| 30-025-43510 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2440 FEL | M-05-205-34E 330 FSL 970 FWL | BONE SPRING | 15426 | 10827 | | | |
| 30-025-43508 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2240 FEL | O-05-205-34E 330 FSL 1670 FEL | BONE SPRING | 15087 | 10824 | | | |
| 30-025-32003 | SELECT AGUA LIBRE MIDSTREAM, LLC | RED HAWK 32 STATE | #002 | Salt Water Disposal | Vertical | Active | 32 | T19S | R34E | J | J-32-195-34E 1980 FSL 1980 FEL | J-32-195-34E 1980 FSL 1980 FEL | MORROW | 13612 | 13612 | | | | |
| 30-025-37615 | MEWBOURNE OIL CO | RED HAWK 32 STATE | #001 | Oil | Vertical | Active | 32 | T19S | R34E | A | A-32-195-34E 660 FNL 660 FEL | A-32-195-34E 660 FNL 660 FEL | BONE SPRING | 13750 | 13750 | | | | |
| 30-025-34319 | READ & STEVENS INC | TRUMAN 5 FEDERAL | #001 | Oil | Vertical | Cancelled Apd | 05 | T20S | R34E | P | P-05-205-34E 990 FSL 660 FEL | P-05-205-34E 990 FSL 660 FEL | DELAWARE | 8400 | 8400 | | | | |
| 30-025-37667 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #001 | Gas | Vertical | Cancelled Apd | 32 | T19S | R34E | I | I-32-195-34E 1980 FSL 660 FEL | I-32-195-34E 1980 FSL 660 FEL | MORROW | 14000 | 14000 | | | | |
| 30-025-40040 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #003 | Oil | Horizontal | Active | 32 | T19S | R34E | I | I-32-195-34E 1650 FSL 330 FEL | L-32-195-34E 1881 FSL 4940 FEL | BONE SPRING | 15407 | 10843 | | | | |
| 30-025-40036 | MEWBOURNE OIL CO | RED HAWK 32 STATE | #003C | Oil | Horizontal | Cancelled Apd | 32 | T19S | R34E | H | H-32-195-34E 1981 FNL 330 FEL | E-32-195-34E 1980 FNL 330 FEL | BONE SPRING | 15190 | n/a | | | | |
| 30-025-40041 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #004 | Oil | Horizontal | Active | 32 | T19S | R34E | P | P-32-195-34E 990 FSL 330 FEL | M-32-195-34E 1980 FNL 4935 FEL | BONE SPRING | 13358 | 8766 | | | | |
| 30-025-02142 | HUDSON OIL COMPANY OF TEXAS | FEDERAL | #002 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 660 FWL | M-04-205-34E 660 FSL 660 FWL | YATES-SEVEN RIVERS | 3703 | 3703 | | | | |
| 30-025-30993 | PENNZENERGY EXPLORATION AND PRODUCTION LLC | CHAPARRAL 33 FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | E | E-33-195-34E 1980 FNL 660 FWL | E-33-195-34E 1980 FNL 660 FWL | BONE SPRING | 10300 | 10300 | | | | |
| 30-025-33872 | READ & STEVENS INC | TRUMAN FEDERAL | #007 | Oil | Vertical | Active | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 990 FWL | M-04-205-34E 660 FSL 990 FWL | DELAWARE | 8370 | 8370 | | | | |
| 30-025-33325 | READ & STEVENS INC | HUDSON FEDERAL | #006 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | D | D-04-205-34E Lot: 4 | 660 FNL 990 FWL | D-04-205-34E Lot: 4 | 660 FNL 990 FWL | DELAWARE | 8330 | 8330 | | |
| 30-025-33859 | READ & STEVENS INC | TRUMAN FEDERAL | #006 | Oil | Vertical | Active | 04 | T20S | R34E | L | L-04-205-34E 1650 FSL 990 FWL | L-04-205-34E 1650 FSL 990 FWL | DELAWARE | 8350 | 8350 | | | | |
| 30-025-33400 | READ & STEVENS INC | HUDSON FEDERAL | #007 | Oil | Vertical | Cancelled Apd | 04 | T20S | R34E | E | E-04-205-34E 1980 FNL 990 FWL | E-04-205-34E 1980 FNL 990 FWL | DELAWARE | 8400 | 8400 | | | | |
| 30-025-42270 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #004C | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | D | D-04-205-34E Lot: 4 | 661 FNL 1040 FWL | M-04-205-34E 330 FSL 970 FWL | BONE SPRING | 15371 | 10884 | | | |
| 30-025-43678 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 1275 FWL | M-09-205-34E 330 FSL 970 FWL | BONE SPRING | 16038 | 10860 | | | | |
| 30-025-36872 | APACHE CORPORATION | SOUTH LUSK 33 FEDERAL | #003 | Oil | Vertical | New | 33 | T19S | R34E | F | F-33-195-32E 1545 FNL 1910 FWL | L-33-195-32E 1350 FSL 990 FWL | MORROW | 12800 | 12800 | | | | |
| 30-025-33665 | READ & STEVENS INC | TRUMAN FEDERAL | #005 | Oil | Vertical | Active | 04 | T20S | R34E | N | N-04-205-34E 990 FSL 1980 FWL | N-04-205-34E 990 FSL 1980 FWL | DELAWARE | 8340 | 8340 | | | | |
| 30-025-02414 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #002 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | F | F-04-205-34E 1994 FNL 1980 FWL | F-04-205-34E 1994 FNL 1980 FWL | YATES-SEVEN RIVERS | 3759 | 3759 | | | | |
| 30-025-30413 | CIMAREX ENERGY CO. OF COLORADO | LEA CHAPARRAL FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | K | K-33-195-34E 1980 FSL 1980 FWL | K-33-195-34E 1980 FSL 1980 FWL | BONE SPRING | 13600 | 13600 | | | | |
| 30-025-33374 | READ & STEVENS INC | TRUMAN FEDERAL | #003 | Oil | Vertical | Active | 04 | T20S | R34E | K | K-04-205-34E 1980 FSL 1980 FWL | K-04-205-34E 1980 FSL 1980 FWL | DELAWARE | 8370 | 8370 | | | | |
| 30-025-43750 | READ & STEVENS INC | NORTH LEA 9 FEDERAL COM | #003H | Oil | Horizontal | New | 04 | T20S | R34E | N | N-04-205-34E 400 FSL 2290 FWL | N-09-205-34E 330 FSL 2290 FWL | BONE SPRING | 16021 | 10931 | | | | |
| 30-025-02415 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #003 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 823 FNL 2310 FWL | C-04-205-34E Lot: 3 | 823 FNL 2310 FWL | YATES-SEVEN RIVERS | 3709 | 3709 | | |
| 30-025-33181 | READ & STEVENS INC | HUDSON FEDERAL | #004 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | F | F-04-205-34E 1650 FNL 2310 FWL | F-04-205-34E 1650 FNL 2310 FWL | DELAWARE | 8350 | 8350 | | | | |
| 30-025-33017 | READ & STEVENS INC | HUDSON FEDERAL | #003 | Oil | Vertical | Active | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 660 FNL 2310 FWL | C-04-205-34E Lot: 3 | 660 FNL 2310 FWL | DELAWARE | 8350 | 8350 | | |
| 30-025-43505 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 395 FNL 2515 FWL | N-04-205-34E 330 FSL 2290 FWL | BONE SPRING | 14941 | 10825 | | | |
| 30-025-34119 | READ & STEVENS INC | PEARL 33 FEDERAL | #001 | Oil | Vertical | Active | 33 | T19S | R34E | N | N-33-195-34E 480 FSL 2310 FWL | N-33-195-34E 480 FSL 2310 FWL | DELAWARE | 10250 | 10250 | | | | |
| 30-025-33516 | READ & STEVENS INC | TRUMAN FEDERAL | #004 | Oil | Vertical | Active | 04 | T20S | R34E | O | O-04-205-34E 990 FSL 2310 FEL | O-04-205-34E 990 FSL 2310 FEL | DELAWARE | 8340 | 8340 | | | | |
| 30-025-02402 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | O | O-33-195-34E 330 FSL 2310 FEL | O-33-195-34E 330 FSL 2310 FEL | YATES-SEVEN RIVERS | 3899 | 3899 | | | | |
| 30-025-34113 | BLACK HILLS GAS RESOURCES, INC. | MALLON 33 FEDERAL | #003 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | J | J-33-195-34E 2080 FSL 2080 FEL | J-33-195-34E 2080 FSL 2080 FEL | BONE SPRING | 7650 | 7650 | | | | |
| 30-025-02413 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #001 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 823 FNL 2103 FEL | B-04-205-34E Lot: 2 | 823 FNL 2103 FEL | YATES-SEVEN RIVERS | 3630 | 3630 | | |
| 30-025-33247 | READ & STEVENS INC | HUDSON FEDERAL | #005 | Oil | Vertical | Active | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 560 FNL 2130 FEL | B-04-205-34E Lot: 2 | 560 FNL 2130 FEL | DELAWARE | 8300 | 8300 | | |
| 30-025-02417 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 660 FNL 1982 FEL | B-04-205-34E Lot: 2 | 660 FNL 1982 FEL | DEVONIAN | 14985 | 14985 | | |
| 30-025-33511 | READ & STEVENS INC | HUDSON FEDERAL | #008 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | G | G-04-205-34E 1980 FNL 1980 FEL | G-04-205-34E 1980 FNL 1980 FEL | DELAWARE | 8288 | 8288 | | | | |
| 30-025-02416 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #004 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | G | G-04-205-34E 1650 FSL 1980 FEL | G-04-205-34E 1650 FSL 1980 FEL | YATES-SEVEN RIVERS | 3781 | 3781 | | | | |
| 30-025-30633 | READ & STEVENS INC | TRUMAN FEDERAL | #002 | Oil | Vertical | Active | 04 | T20S | R34E | J | J-04-205-34E 1650 FSL 1650 FEL | J-04-205-34E 1650 FSL 1650 FEL | DELAWARE | 8285 | 8285 | | | | |
| 30-025-43504 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 570 FNL 1395 FEL | O-04-205-34E 330 FSL 1670 FEL | BONE SPRING | 14792 | 10825 | | | |
| 30-025-32971 | READ & STEVENS INC | HUDSON FEDERAL | #002 | Oil | Vertical | Active | 04 | T20S | R34E | A | A-04-205-34E Lot: 1 | 990 FNL 990 FEL | A-04-205-34E Lot: 1 | 990 FNL 990 FEL | DELAWARE | 8380 | 8380 | | |
| 30-025-34481 | READ & STEVENS INC | PEARL 33 FEDERAL | #002 | Oil | Vertical | Cancelled Apd | 33 | T19S | R34E | P | P-33-195-34E 990 FSL 990 FEL | P-33-195-34E 990 FSL 990 FEL | BONE SPRING | 10400 | 10400 | | | | |
| 30-025-32819 | READ & STEVENS INC | HUDSON FEDERAL | #001 | Oil | Vertical | Active | 04 | T20S | R34E | H | H-04-205-34E 1980 FNL 660 FEL | H-04-205-34E 1980 FNL 660 FEL | DELAWARE | 13750 | 13750 | | | | |
| 30-025-43511 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #001H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | A | A-04-205-34E Lot: 1 | 335 FNL 350 FEL | P-04-205-34E 330 FSL 350 FEL | BONE SPRING | 15030 | 10831 | | | |

VII (4)

Permian Oilfield Partners, LLC.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 11, T20S, R33E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341°
 W GL 3643', RKB 3673'

| 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.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 11, T20S, R33E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341°
 W GL 3643', RKB 3673'

| 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
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM**

June 10, 2023

STATEMENT REGARDING SEISMICITY

Examination of the USGS and NMT 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.

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 1.7 mi (2.7 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 2.7 miles away from the nearest active or permitted Devonian disposal well (Fasken Quail 16 State SWD #9, SWD-1537). There is another permitted Devonian disposal well 5.3 miles to the SW, the Permian TDS, Coombes SWD #1, SWD-1996. Both of these wells are included in the below FSP analysis.
7. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years as per the FSP results screenshots below.

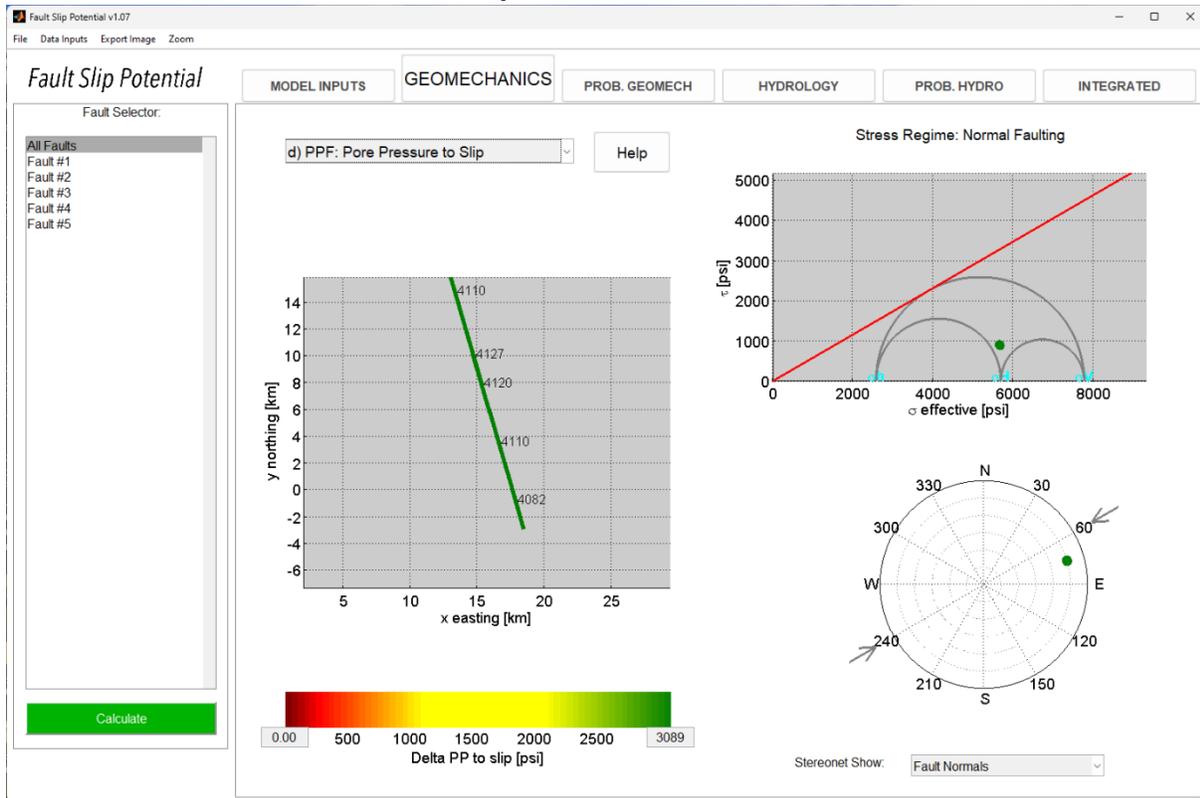
Input assumptions:

| | |
|--|-----------|
| Overdue Fed SWD rate (BBL/day) | 50000 |
| Fasken Quail 16 SWD #9 rate (BBL/day) | 1800 |
| Permian TDS Coombes SWD rate (BBL/day) | 30000 |
| Interval height (ft) | 1229 |
| Average Porosity (%) | 5.4 |
| Vert stress gradient (psi/ft) | 1.00 |
| Hor stress direction (deg N) | 60 |
| Fault dip (deg) | 75 |
| Ref depth (ft) | 14640 |
| 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 Overdue Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Permian TDS Coombes SWD #1.

Geomechanics Pore Pressure to Slip



GeoMechanics Variability

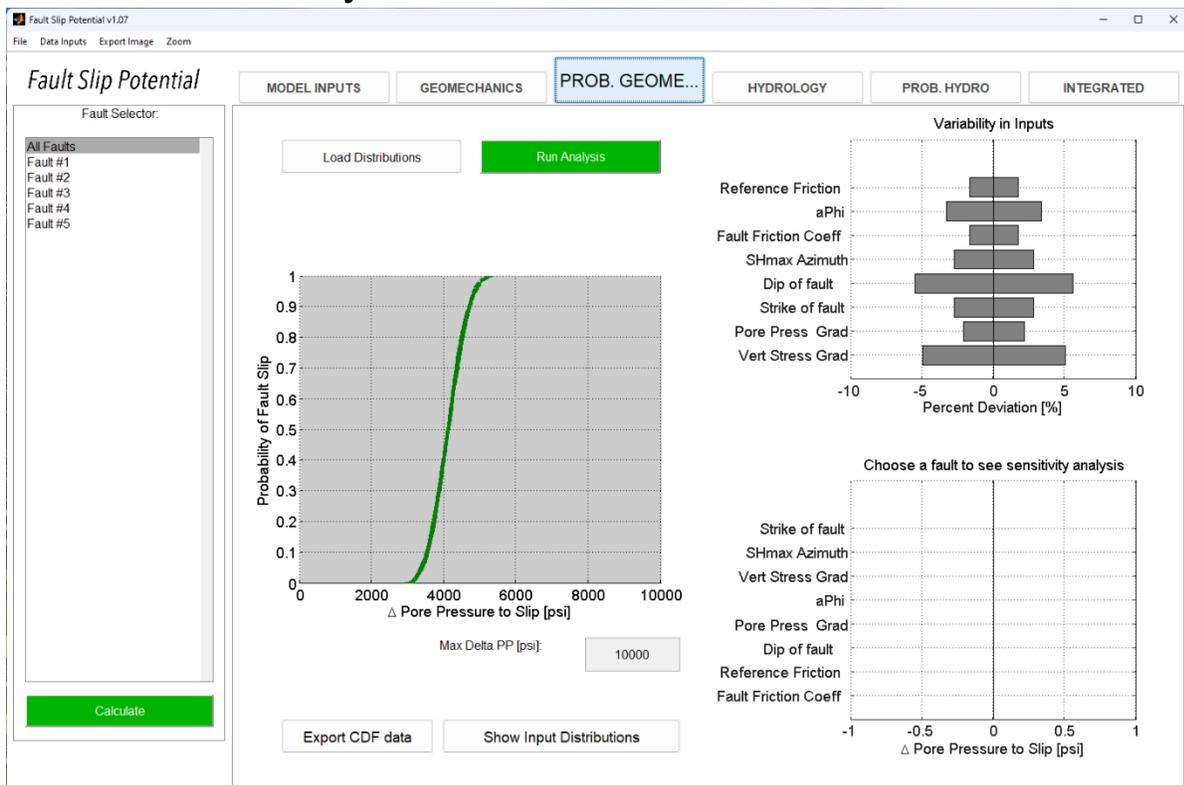
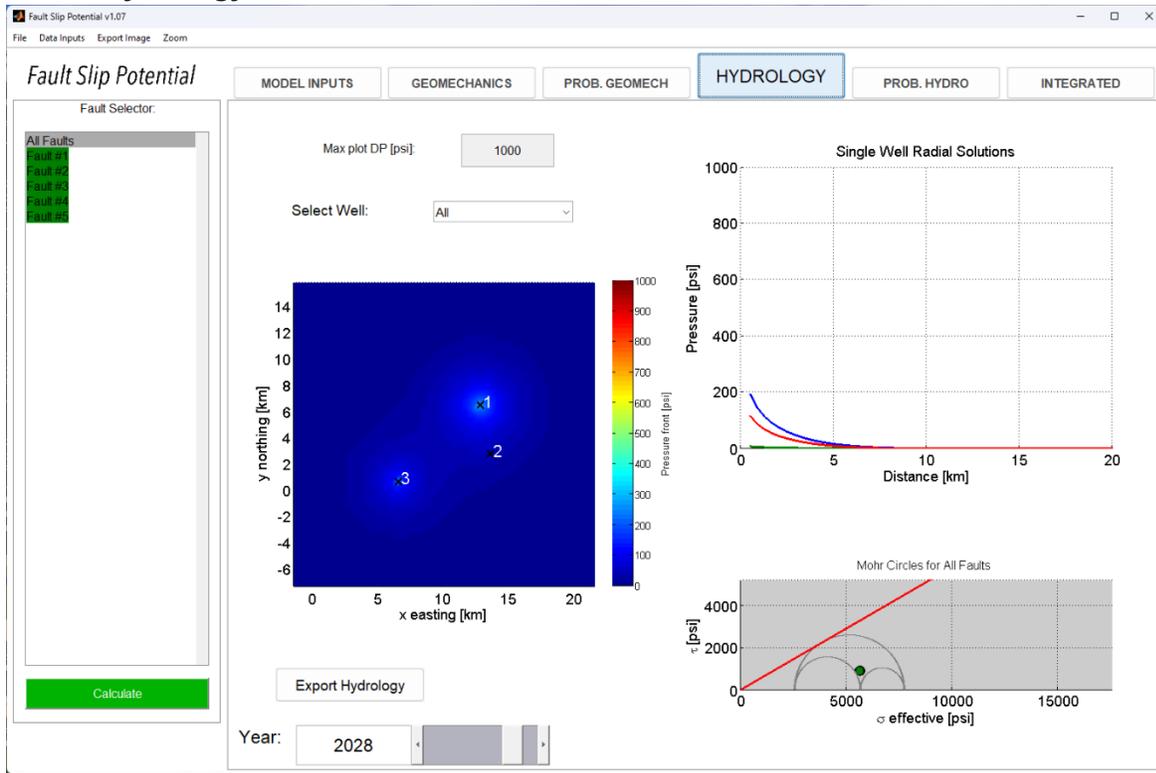


Exhibit A

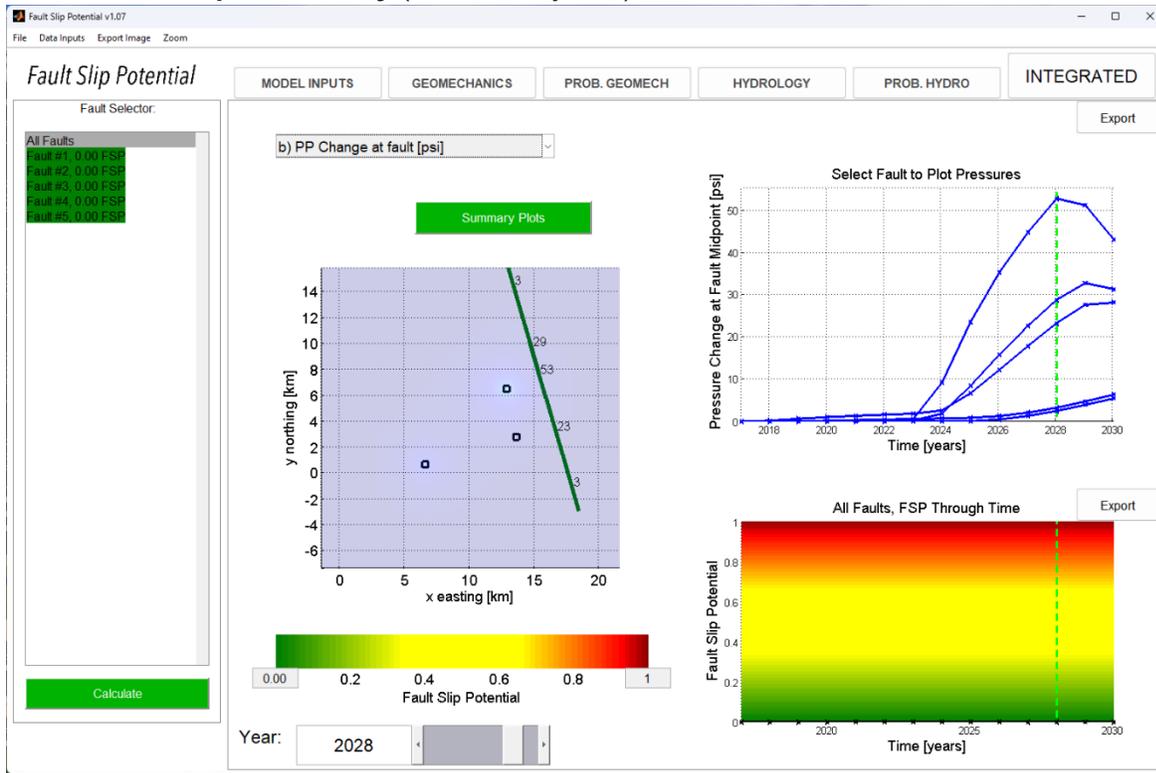
Year 5 Hydrology



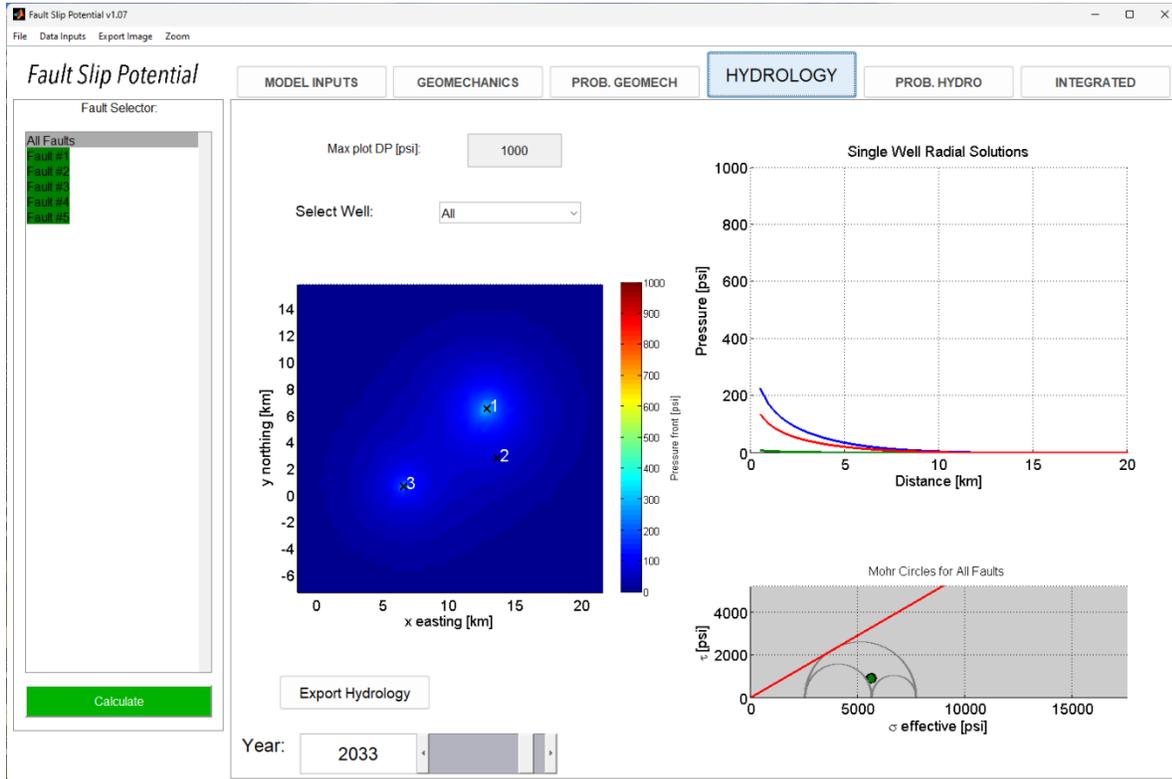
Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



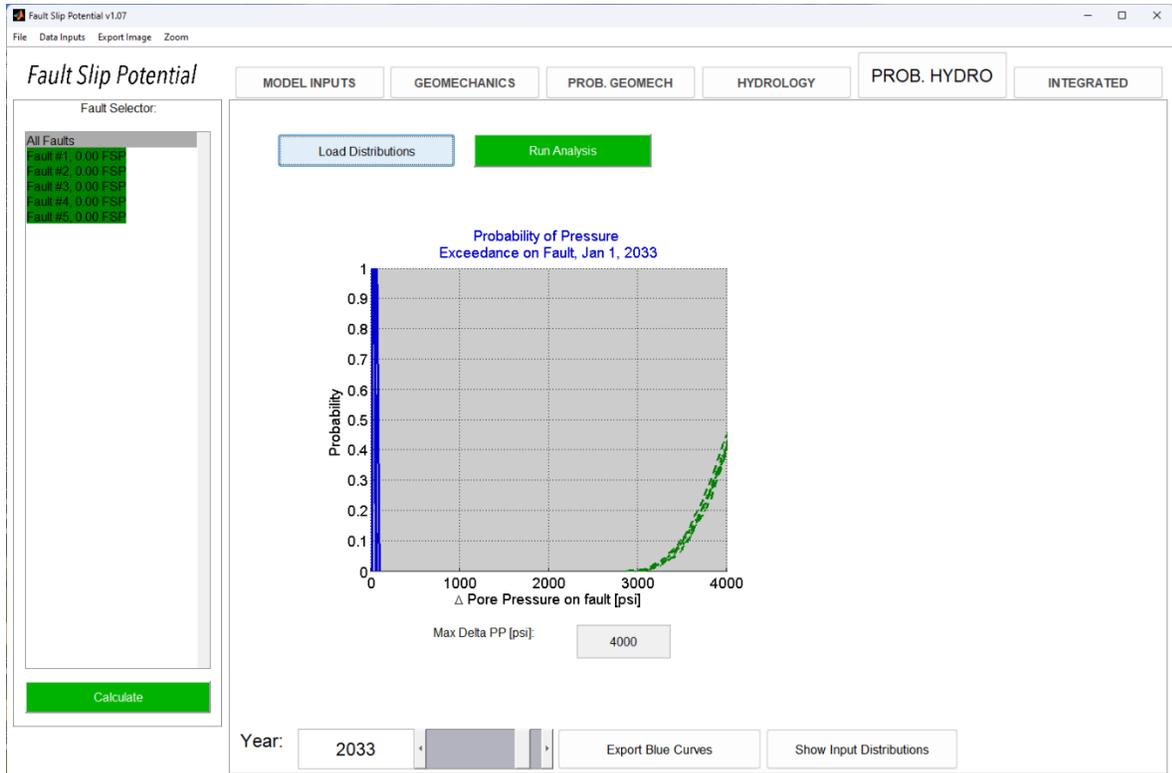
Year 5 Fault Slip Probability (0% after 5 years)



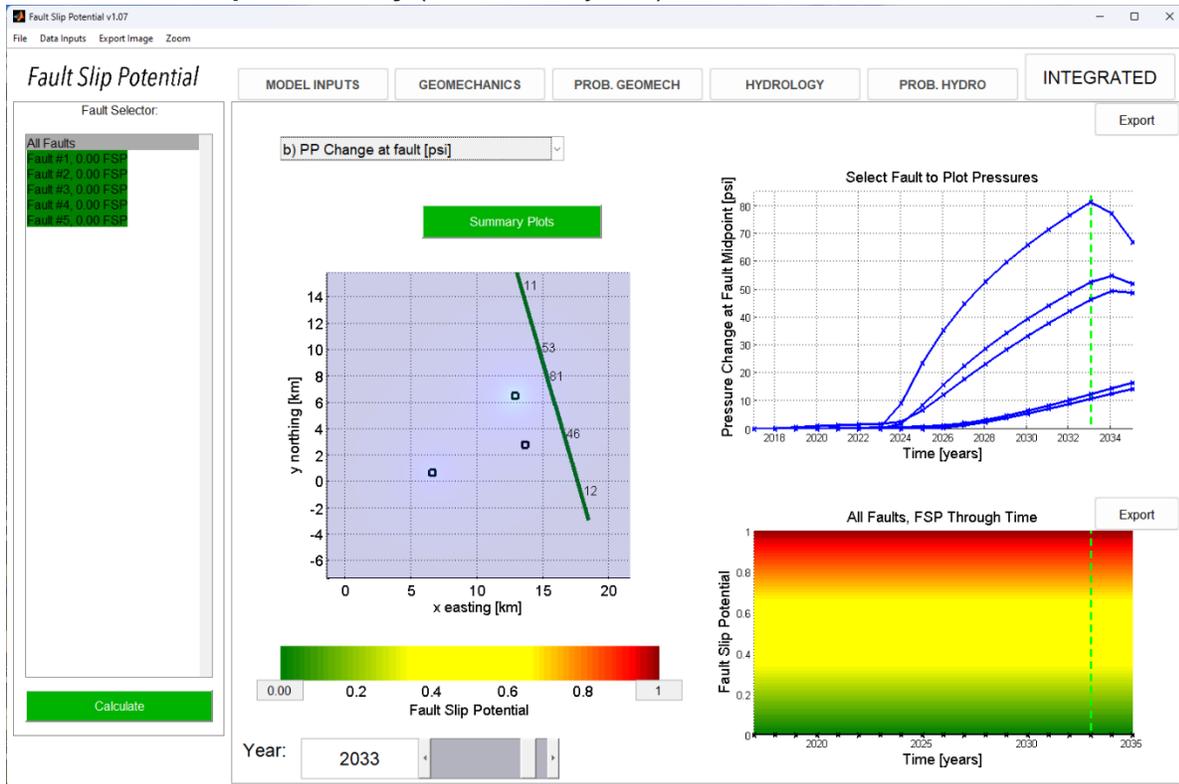
Year 10 Hydrology



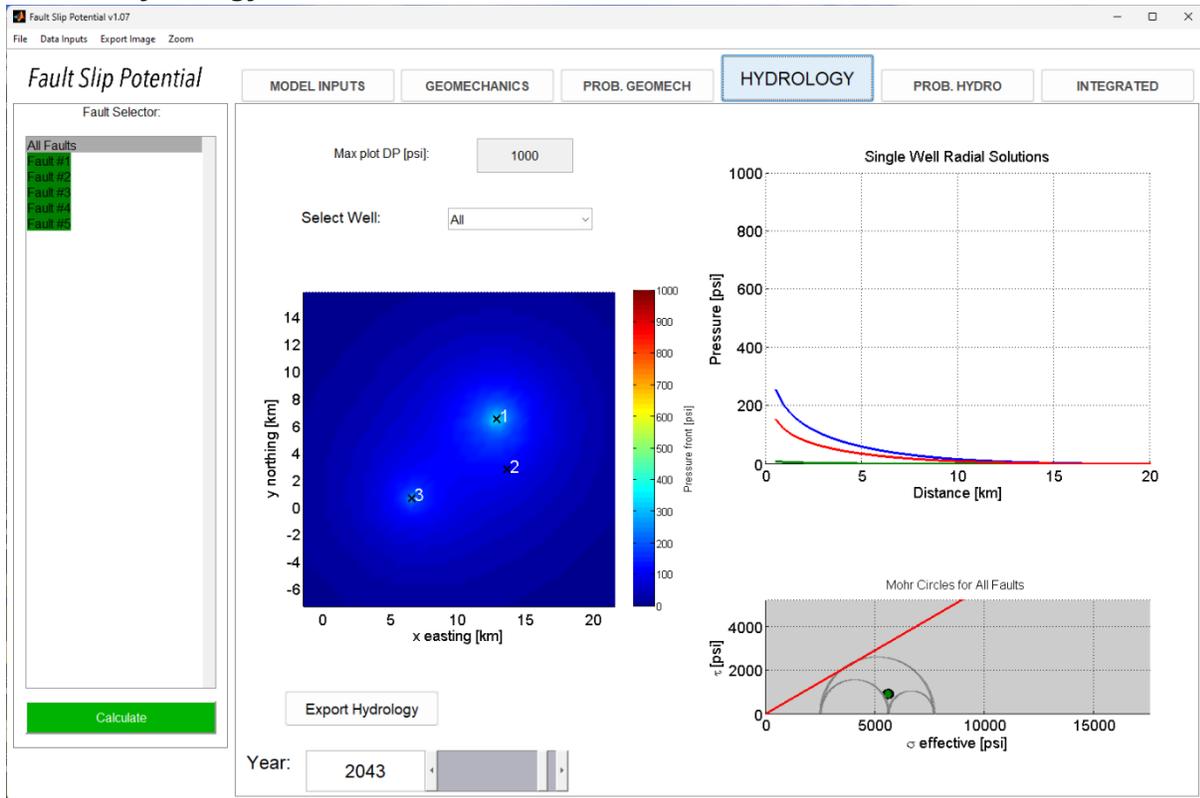
Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



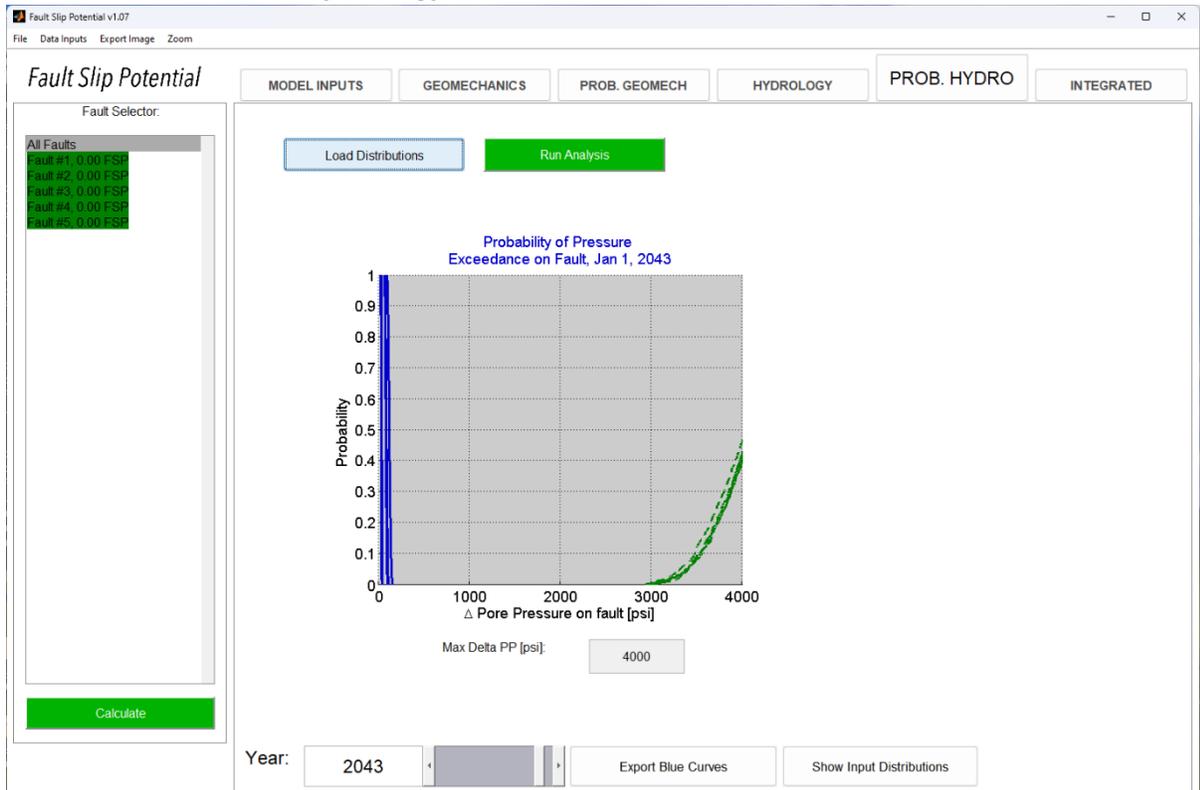
Year 10 Fault Slip Probability (0% after 10 years)



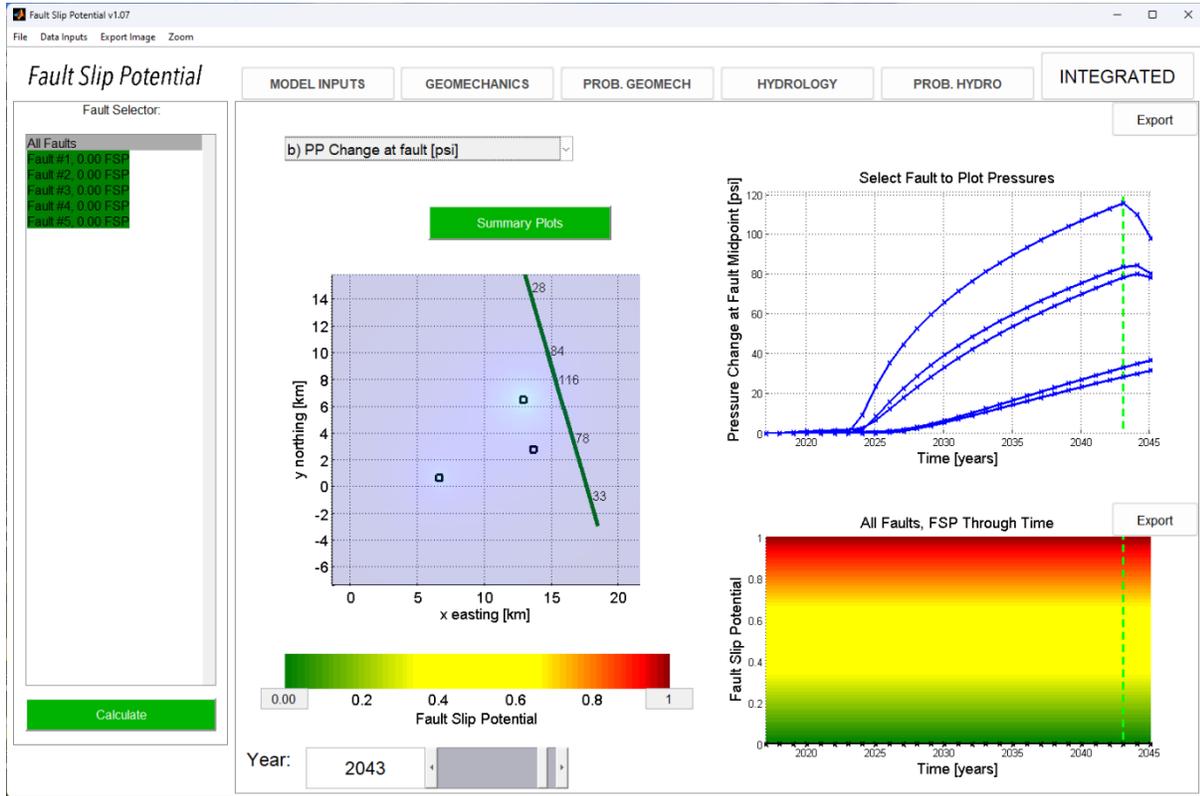
Year 20 Hydrology



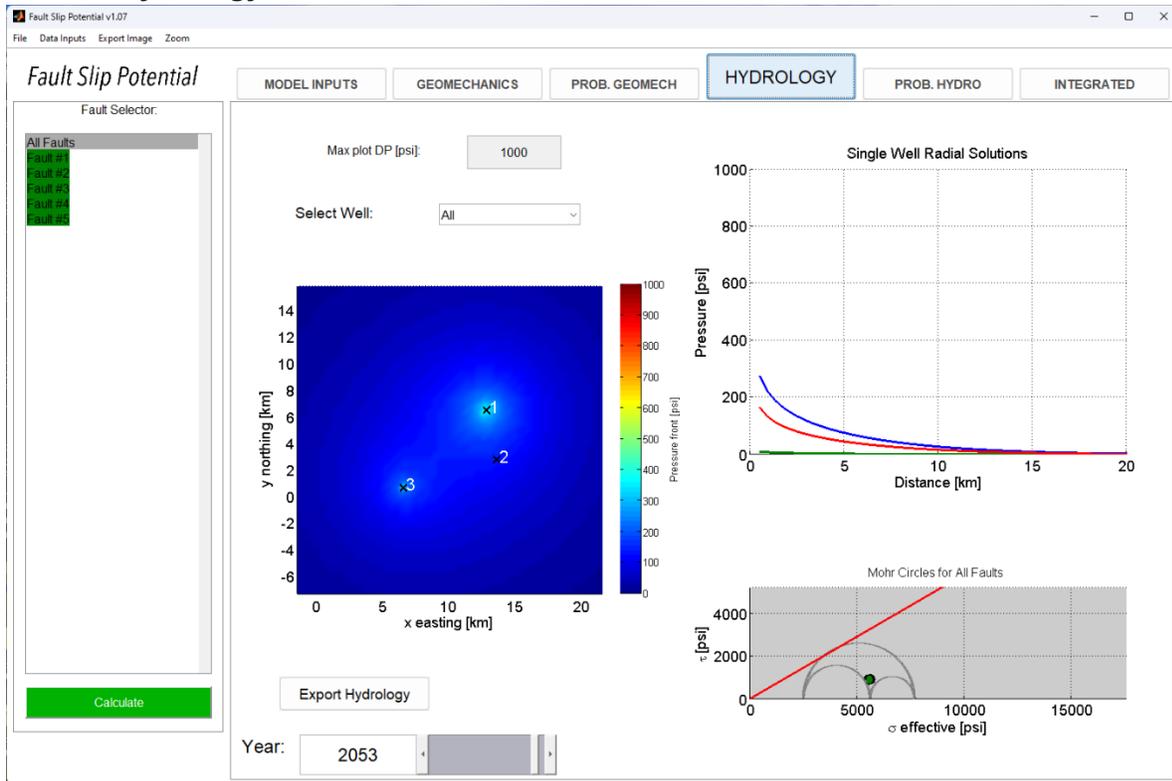
Year 20 Probabilistic Hydrology (note no crossover between blue delta-pressure. & green fault slip press.)



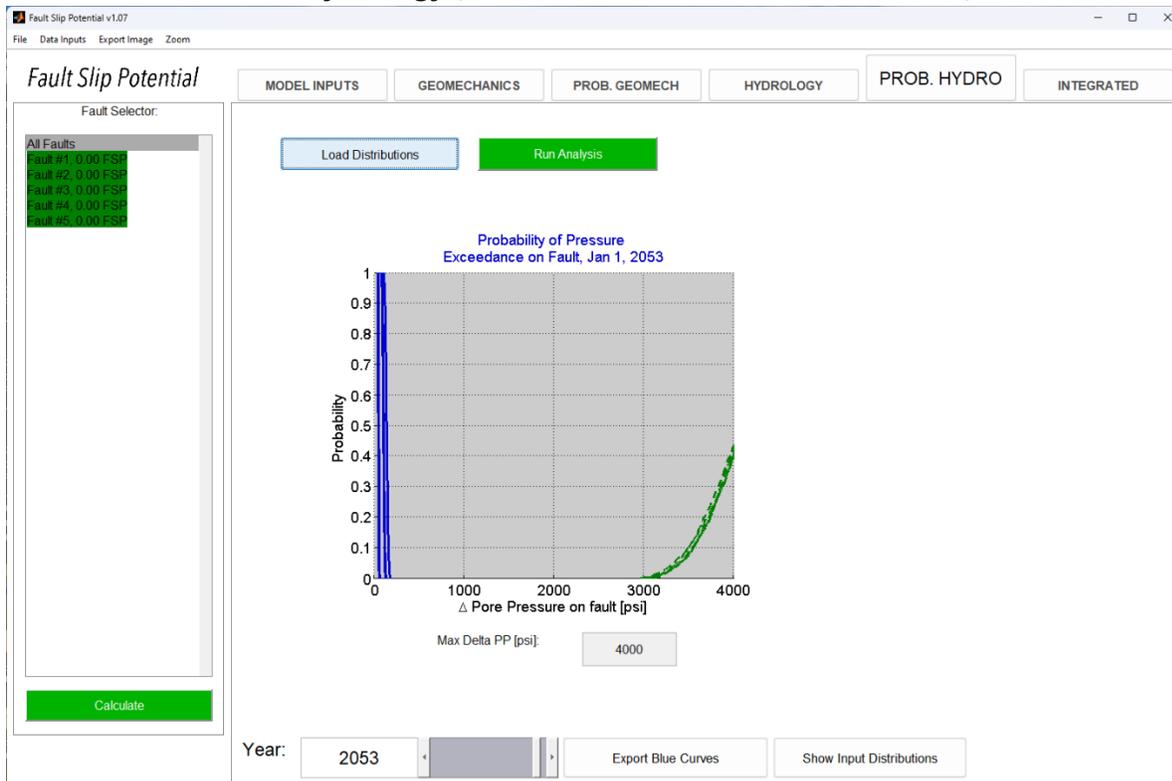
Year 20 Fault Slip Probability (0% after 20 years)



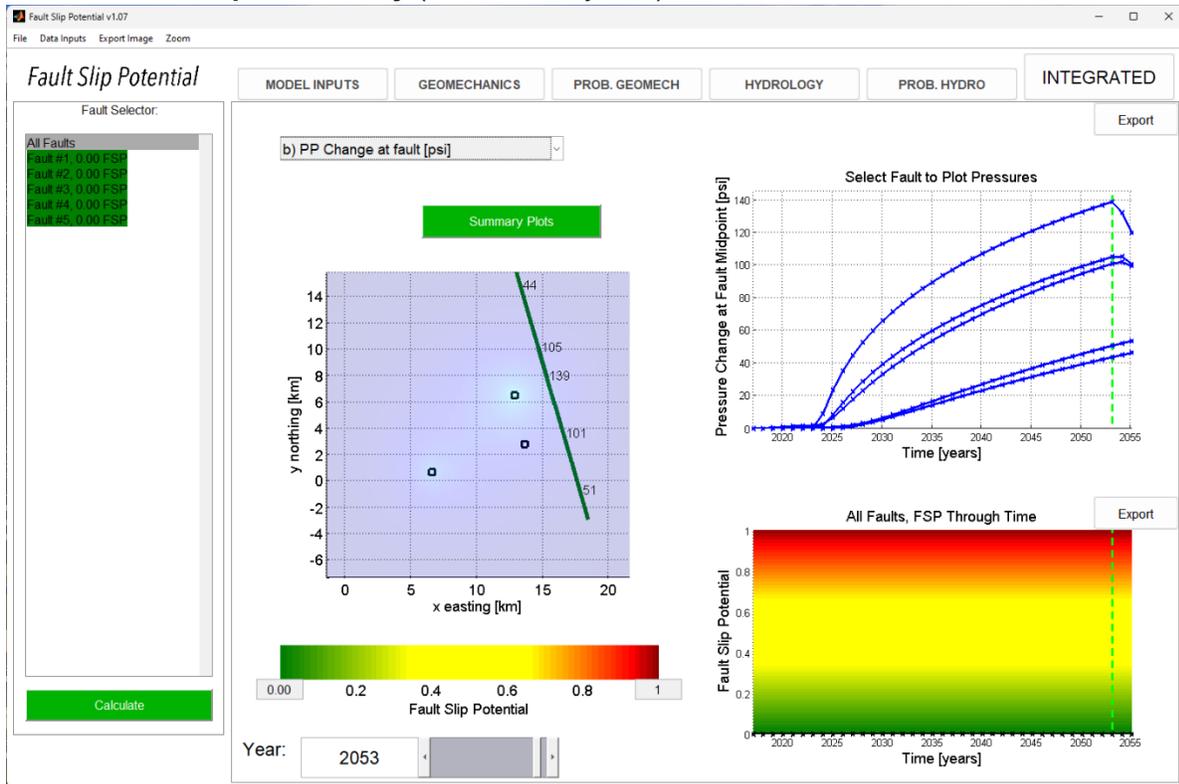
Year 30 Hydrology



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



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



gfisher@popmidstream.com

(817) 606-7630



Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

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

A handwritten signature in black ink, appearing to read "Gary Fisher".

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 7/5/2023

VI.

Form 9-831a
(Feb. 1961)

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

| | | | |
|--|--|---|--|
| | | X | |
| | | | |
| | | | |
| | | | |

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces

Lease No. 065607

Unit B

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15, 19 63

Pure Federal "C"
Well No. 1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

NW NE Sec. 4 20S 14E NMPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 12,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sack plug cement at 4083-3983 and 10 sack cement plug at 20' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer

Exhibit A

Form 9-331a
(Feb. 1961)

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

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces

Lease No. 063607

Unit E

APPROVED
JUL 22 1963
A. H. BROWN
DISTRICT ENGINEER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MAY 23 1963

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 1963

Pure Federal "C"
Well No. #1 is located 660 ft. from N line and 1982 ft. from E line of sec. 4

N7 NE Sec. 4
(1/4 Sec. and Sec. No.) 20S 34E MTM
(Twp.) (Range) (Meridian)
Wildcat Luja New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 12,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sacks plug cement at 4083-3983 and 10 sacks cement plug at 29' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward B. Hudson
Address 302 Carper Building
Artesia, New Mexico
By Ralph L Gray
Title Consulting Engineer

Form 9-381a
(Feb. 1961)

APPROVED 1963 JUL 23

(SUBMIT IN TRIPPLICATE)

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

Land Office LAN CRUCES

Lease No. 065607

Unit 3

| | | |
|--|-------------------------------------|-------------|
| | <input checked="" type="checkbox"/> | JUL 17 1963 |
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

J. L. GORDON
DISTRICT ENGINEER

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 19 63

Pure Federal "C"
Well No. #1 is located 660 ft. from [N] line and 1942 ft. from [E] line of sec. 4

NW NE Sec. 4 203 34E N11M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baber bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892-920 with 2 1/2 hat shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. F3IP - 6875 FFP - 6153.
60 min. ISIP - 6938 IPF - - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,500'. Squeeze below with 150 sacks of sic-set cement. Place cement plugs at 4083-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer.

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

Form 9-331a
(Feb. 1961)

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces
Lease No. 065607
Unit B

| | | | |
|--|--|---|--|
| | | X | |
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 19 63

Well No. 1 is located 660 ft. from N line and 1982 ft. from E line of sec 4

NW NE Sec. 4 20S 34E NMPM
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baker bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892-920 with 2 jet shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. PSIP - 6875 FFP - 6153.
60 min. ISIP - 6938 IFP - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,500'. Squeeze below with 150 sacks of slo-set cement. Place cement plugs at 4083-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer.

APPROVED N. M. O. C. C. COPY

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

Form 9-331a (Feb. 1951)

APR 2 1963

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces

Lease No. 065607

Unit R

E. W. STANDLEY
DISTRICT ENGINEER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APR 2 1963

| | | |
|--|--|---|
| | | X |
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SUNDRY NOTICES AND REPORTS ON WELLS

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

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

April 1, 1963

Well No. #1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

| | | | |
|--|---------------------------------------|-----------------------|---|
| <u>NW NE Sec. 4</u> (¼ Sec. and Sec. No.) | <u>20S</u> (Twp.) | <u>34E</u> (Range) | <u>MPM</u> (Meridian) |
| <u>Wildcat</u> (Field) | <u>Lea</u> (County or Subdivision) | | <u>New Mexico</u> (State or Territory) |

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

It is proposed to re-enter this hole which was plugged and abandoned Aug. 21, 1959. The well was previously known as the Pure Oil Company - Federal "C" #1.

We will drill out all cement plugs above the plug at 13,645'. The Morrow Zone at about 12,890 to 12,920 will then be perforated and tested. If a commercial well is indicated, we will file a final plan to complete well at that time.

RECEIVED
APR 1 1963
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

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

Company William A. & Edward R. Hudson, et al

Address 302 Carper Building

Artesia, New Mexico

By Rayne L Gray

Title Consulting Engineer.

Drilled to 14,985'. Plugged sack from 14,985' to 14,985' cement in open hole from 14,985' to 14,985' cement in open hole and bottom of 7" OD casing to 13,960' to 13,960'.

Perforated 7" casing from 13,741' with 4 shots per foot, attempted to acidize with 500 gals mud acid, packer failed; acidized with 500 gals mud acid with packer set at 13,655', packer leaking. Swabbed lead water. Acidized with 500 gals. mud acid with packer set at 13,646'.

Plugged back in 7" casing from 13,770' to 13,645' with 30 sacks cement, perforated 7" casing from 12,572' to 12,586' with 4 shots per foot. Acidized with 500 gals mud acid.

Plugged and Abandoned: Placed cement plug in 7" casing and over perforations from 12,572' to 12,586' with 12 sacks cement from 12,600' to 12,550'. Shot 7" casing off at 4029', pulled 123 joints, approximately 4000'. Placed cement plug in 7" casing from 6530' to 6470' with 12 sacks cement; from 4220' to 4100' with 24 sacks cement; in 7" and 9-5/8" casing from 4040' to 3940' with 40 sacks; in 9-5/8" casing 20' to surface with 8 sacks cement, with heavy mud between plugs. Welded 1/2" steel plate on top of casing with 4" pipe marker extending 4' above surface.

Form 9-330

Y TO O. C. C.

HOBBS

Bureau No. 42-R355.4. Expires 12-31-60.

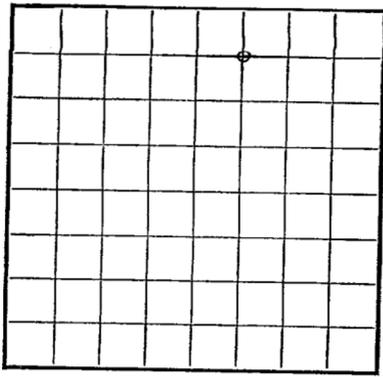
U. S. LAND OFFICE Santa Fe, N. Mex.

HOBBS OFFICE 086 L.C. 065607

LEASE OR PERMIT TO PROSPECT

1959 SEP 22 AM 10:36 UNITED STATES

DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company The Pure Oil Company Address P.O. Box 2107, Fort Worth, Texas
Lessor or Tract Federal "C" Field Wildcat State New Mexico
Well No. 1 Sec. 4 T. 20S R. 34-E Meridian NMPM County Lea
Location 660 ft. [XX] of N. Line and 1982 ft. [XX] of E. Line of Section 4 Elevation 3646' SCF

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Date August 26, 1959 Signed J.L. Suttle Chief Clerk

The summary on this page is for the condition of the well at above date.
Commenced drilling December 27, 1958 Finished drilling July 16, 1959

OIL OR GAS SANDS OR ZONES (Denote gas by G)

No. 1, from 13697' to 13741' G No. 4, from ... to ...
No. 2, from 12572' to 12586' G No. 5, from ... to ...
No. 3, from 3720' to 3850' No. 6, from ... to ...

IMPORTANT WATER SANDS

No. 1, from ... to ... No. 3, from ... to ...
No. 2, from ... to ... No. 4, from ... to ...

CASING RECORD

Table with columns: Size casing, Weight per foot, Threads per inch, Make, Amount, Kind of shoe, Cut and pulled from, Perforated (From-To), Purpose. Includes entries for 13-3/8" and 9-5/8" casings.

MUDDING AND CEMENTING RECORD

Table with columns: Size casing, Where set, Number sacks of cement, Method used, Mud gravity, Amount of mud used. Includes entries for 13-3/8" and 9-5/8" casings.

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set
Adapters—Material Size

SHOOTING RECORD

Table with columns: Size, Shell used, Explosive used, Quantity, Date, Depth shot, Depth cleaned out.

TOOLS USED

Rotary tools were used from 0 feet to 14985 feet, and from ... feet to ... feet
Cable tools were used from ... feet to ... feet, and from ... feet to ... feet

DATES

19... Dry, Plugged & Abandoned August 20, 1959

The production for the first 24 hours was ... barrels of fluid of which ...% was oil; ...% emulsion; ...% water; and ...% sediment. Gravity, °Bé.

If gas well, cu. ft. per 24 hours Gallons gasoline per 1,000 cu. ft. of gas
Rock pressure, lbs. per sq. in.

EMPLOYEES

J. W. Everett, Driller L. S. Strother, Driller
M. Blain, Driller

FORMATION RECORD

Table with columns: FROM-, TO-, TOTAL FEET, FORMATION. Lists geological layers like SCF - Bottom Cellar, Caliche, Red Rock, etc.

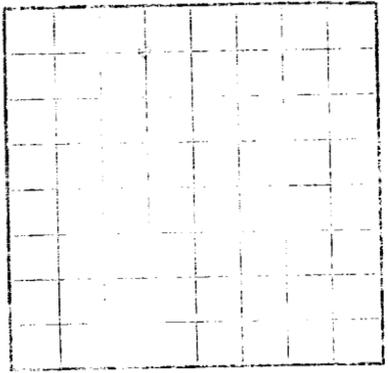
FORMATION RECORD—Continued

10-43004-4

LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES



LOCATE WELL LOCALITY

Form G-550

Company Name: _____
 Location: _____
 State: _____
 County: _____
 Township: _____
 Range: _____
 Section: _____
 Date: _____

The summary on this page is for the condition of the well at above date.
 Commenced drilling _____
 Finished drilling _____

OIL OR GAS SANDS OR ZONES

No. 1, from _____ to _____
 No. 2, from _____ to _____
 No. 3, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____
 No. 2, from _____ to _____

CASING RECORD

| Size | Depth | Weight | Make | Amount | Kind of shoe | Cut and pulled from | Purposes |
|------|-------|--------|------|--------|--------------|---------------------|----------|
| | | | | | | | |

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was changed or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or balling.

MUDDING AND CEMENTING RECORD

| Size | Weight | Number of sacks of cement | Method used | Kind of gravel | Amount of mud used |
|------|--------|---------------------------|-------------|----------------|--------------------|
| | | | | | |

PLUGS AND ADAPTERS

Adapters—Material _____
 Heavy plug—Material _____
 Depth and _____

SHOOTING RECORD

| Size | Shells used | Explosives used | Quantity | Date | Depth shot | Effects observed |
|------|-------------|-----------------|----------|------|------------|------------------|
| | | | | | | |

TOOLS USED

Rotary tools were used from _____ feet to _____ feet and from _____ feet to _____ feet.
 Cable tools were used from _____ feet to _____ feet.

DATES

The production for the first 24 hours was _____ barrels of fluid of which _____ was oil.
 Gravity, _____
 Gallons gasoline per 1,000 cu. ft. of gas _____
 Rock pressure, _____
 If gas well, cu. ft. per 24 hours _____
 Transition, _____

EMPLOYEES

Driller _____
 Driller _____

FORMATION RECORD

| FORMATION | TOTAL FEET | TO | FROM |
|--|------------|------|------|
| Shale | 0 | 0 | 0 |
| Clay | 20 | 20 | 0 |
| Loam | 100 | 100 | 20 |
| Loam & sand | 200 | 200 | 100 |
| Loam & sand & gravel | 300 | 300 | 200 |
| Loam & sand & gravel & shells | 400 | 400 | 300 |
| Loam & sand & gravel & shells & pebbles | 500 | 500 | 400 |
| Loam & sand & gravel & shells & pebbles & coarse shells | 600 | 600 | 500 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles | 700 | 700 | 600 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel | 800 | 800 | 700 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand | 900 | 900 | 800 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam | 1000 | 1000 | 900 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay | 1100 | 1100 | 1000 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale | 1200 | 1200 | 1100 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam | 1300 | 1300 | 1200 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 1400 | 1400 | 1300 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam | 1500 | 1500 | 1400 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 1600 | 1600 | 1500 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 1700 | 1700 | 1600 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 1800 | 1800 | 1700 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 1900 | 1900 | 1800 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2000 | 2000 | 1900 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2100 | 2100 | 2000 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2200 | 2200 | 2100 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2300 | 2300 | 2200 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2400 | 2400 | 2300 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2500 | 2500 | 2400 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2600 | 2600 | 2500 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2700 | 2700 | 2600 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2800 | 2800 | 2700 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 2900 | 2900 | 2800 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3000 | 3000 | 2900 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3100 | 3100 | 3000 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3200 | 3200 | 3100 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3300 | 3300 | 3200 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3400 | 3400 | 3300 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3500 | 3500 | 3400 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3600 | 3600 | 3500 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3700 | 3700 | 3600 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3800 | 3800 | 3700 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 3900 | 3900 | 3800 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4000 | 4000 | 3900 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4100 | 4100 | 4000 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4200 | 4200 | 4100 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4300 | 4300 | 4200 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4400 | 4400 | 4300 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4500 | 4500 | 4400 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4600 | 4600 | 4500 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4700 | 4700 | 4600 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4800 | 4800 | 4700 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 4900 | 4900 | 4800 |
| Loam & sand & gravel & shells & pebbles & coarse shells & coarse pebbles & coarse gravel & coarse sand & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay & coarse shale & coarse loam & coarse clay | 5000 | 5000 | 4900 |

FORMATION RECORD—Continued

DRILL STEM TESTS:

- DST #1: From 10,750' to 10,820', 1" x 5/8" chokes, tool open 3 hours, weak air blow throughout the test. Recovered 840' slightly gas cut mud and 90' very slightly oil and gas cut mud, no formation water. 30 minute initial shut in pressure 95#, flowing pressure initial 164#, final 329#, 1 hour final shut in pressure 400#, hydrostatic pressure 5219#, bottom hole temperature 146 deg.
- DST #2: Pennsylvanian from 12,566' to 12,574', 5/8" bottom hole choke, bottom 2500' drill pipe charged with nitrogen to a pressure of 1000 Psi and adjustable surface choke. opened tool, tool plugged immediately. Pulled out of hole, bled down nitrogen in bottom 2500' drill pipe to 100 psi at which pressure gas showed. Recovered 290' gas cut mud. Hydrostatic pressure 7460#.
- DST #3: From 12,566' to 12,575', 5/8" bottom choke, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with nitrogen to a pressure of 1000 psi. Opened tool, nitrogen to surface in 7 minutes, gas to surface in 60 minutes, tool open 1 hour 15 minutes and packer failed. Measured gas for 15 minutes, maximum rate 1,250 MCF/D and steadily increasing, 3/4" choke, drill pipe pressure 75#. Pulled tool, 1000 psi below nitrogen valve. 5 barrels condensate in drill pipe below valve and estimated 12 barrels gas cut drilling mud below condensate. 30 minute initial shut in pressure 6760#, flowing pressure initial 1380#, final 1600#. Hydrostatic pressure 7260#, bottom hole temperature 230 deg.
- DST #4: From 12,573' to 12,600', 5/8" bottom, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with Nitrogen to a pressure of 1000#, tool open 3 hours, air to surface in 15 minutes, gas to surface in 55 minutes at rate of 490 MCF/D at 70# tubing pressure, 3/4" choke. Recovered 2 barrels condensate, 1-1/2 barrels gas and condensate cut mud, 180' gas and slightly condensate and slightly salty water cut mud below circulating sub. 30 minute initial shut in pressure 6820#, flowing pressure initial 1180#, final 1420#, 1 hour final shut in pressure 6040#, hydrostatic pressure 7260#.
- DST #5: From 13,075' to 13,120', 5/8" x 1" chokes, 3000' nitrogen blanket charged to pressure of 1000 psi. Tool open 2-1/2 hours, no air blow to surface. Waited 1-1/2 hours, closed and reopened tool, waited 1 hour, no air blow to surface. Bled off nitrogen pressure, recovered very small amount of gas after bleeding nitrogen pressure to 0#, 67' of gas cut mud, no oil or water. 30 minute initial shut in pressure 700# increasing, flowing pressure initial 1160#, final 1160#, 1 hour final shut in pressure 3600# increasing. Hydrostatic pressure 7980#, bottom hole temperature 232 deg.
- DST #6: From 13,665' to 13,750', 5/8" x 1/4" chokes, 4200' of nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 1300' gas cut drilling mud, hydrostatic pressure 10,000#, bottom hole temperature 223 deg.
- DST #7: From 13,640' to 13,751' with 5/8" x 1/4" chokes with 4200' nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 630' heavily gas cut mud, hydrostatic pressure 10,000#. Bottom hole temperature 160 - 170 deg.
- DST #8: Attempted test in Mississippian from 14,060' to 14,185', 5/8" x 1" chokes, no water blanket. Plug in circulating sub at 13,980' failed when tool opened, pulled out of hole, left 1-1/4" packer rubbers in hole.
- DST #9: Attempted test in Mississippian from 13,900' to 14,185', packer failed. Recovered 2070' drilling mud, no test.
- DST #10: Mississippian from 13,900' to 14,185', 5/8" x 1" chokes, no water blanket, tool open 4 hours, had strong air blow when tool opened, gas to surface in 8 minutes. First hour flowed at rate of 32,000 cubic feet per day, after 80 minutes, flowed at rate of 25,000 cubic feet per day. At end of 4 hour test rate of 35,500 cubic feet per day. Recovered 532' heavily gas cut drilling mud, no show of oil or formation water. 30 minute initial shut in pressure 6070#, flowing pressure initial 255#, hydrostatic pressure 6275# to 6260#, bottom hole temperature 188 deg.

DRILL STEM TESTS: (Cont'd)

- DST #11: Devonian 14,599' to 14,622', 5/8 x 1" chokes, no water blanket, tool open 3 hours, gas to surface in 34 minutes. After 2 hours gas volume 4 MCF/D, decreased to very weak blow at end of test. Recovered 10 gallons of free oil, gravity 51 deg at 60 deg. and 1900' of heavily gas cut and slightly oil cut mud, no water. 30 minute initial shut in pressure failed to record. Flowing pressure initial 75#, final 925#, 1 hour final shut in pressure 1025# increasing, hydrostatic pressure 7740#, bottom hole temperature 230 deg.
- DST #12: Devonian 14,620' to 14,672', 5/8" x 1" chokes, no water blanket, tool open 3 hours. Had weak air blow immediately, increased slightly and continued through-out test. Recovered 200' of slightly gas cut mud with brackish taste and 1250' of brackish water. 30 minute initial shut in pressure 6210#, flowing pressure initial 170#, final 650#, 2 hour final shut in pressure 6140# stabilized. Hydrostatic pressure 7695# - 7605#, bottom hole temperature 206 deg.
- DST #13: From 14,625' to 14,973', took 30 minute initial shut in pressure, opened tool and packers failed. Pulled test tool. 30-minute initial shut in pressure 6375#, hydrostatic pressure 8180# - 8070#. Reran test tool with Hookwall packer set at 13,900'. Tool open 7 hours, opened tool with good air blow to surface, gas to surface in 30 minutes, maximum rate of 4 MCF/D, decreased to too small to measure at end of test. Pulled test tool, recovered 11,454' of heavily gas cut mud with brackish taste, no water or oil. Flowing pressure initial 430#, final 5830#, 2-1/2 hour final shut in pressure 5940#, hydrostatic pressure 7495# - 7530#.

FEDERAL "C" #1

| FROM | TO | TOTAL FEET | FORMATION | FROM | TO | TOTAL FEET | FORMATION |
|-------|-------|------------|----------------------------|-------|-------|------------|---------------------------|
| 7969 | 8928 | 959 | Lime & shale | 12233 | 12318 | 85 | Lime & chert |
| 8928 | 8942 | 14 | Lime | 12318 | 12411 | 93 | Lime & shale |
| 8942 | 8967 | 25 | Lime, chert & shale | 12411 | 12461 | 50 | Lime, shale & sand |
| 8967 | 9001 | 34 | Lime & chert | 12461 | 12487 | 26 | Lime & shale |
| 9001 | 9209 | 208 | Lime, chert & shale | 12487 | 12558 | 71 | Lime, shale & sand |
| 9209 | 9256 | 47 | Lime & shale | 12558 | 12740 | 182 | Lime & shale |
| 9256 | 9272 | 16 | Lime | 12740 | 12800 | 60 | Lime |
| 9272 | 9289 | 17 | Lime, chert & shale | 12800 | 12812 | 12 | Lime, shale & chert |
| 9289 | 9300 | 11 | Lime & chert | 12812 | 12879 | 67 | Lime & chert |
| 9300 | 9342 | 42 | Lime, shale & chert | 12879 | 12890 | 11 | Lime |
| 9342 | 9354 | 12 | Shale & chert | 12890 | 12942 | 52 | Lime & shale |
| 9354 | 9407 | 53 | Shale, chert & lime | 12942 | 12943 | 1 | Shale |
| 9407 | 9428 | 21 | Shale, sand & chert | 12943 | 12955 | 12 | Lime, shale & sand |
| 9428 | 9562 | 134 | Shale & sand | 12955 | 12964 | 9 | Lime, shale, sand & chert |
| 9562 | 9580 | 18 | Lime, chert & sand & shale | 12964 | 13042 | 78 | Lime, shale & sand |
| 9580 | 9679 | 99 | Shale, sand & chert | 13042 | 13052 | 10 | Lime & shale |
| 9679 | 9696 | 17 | Lime & shale | 13052 | 13079 | 27 | Lime, sand & shale |
| 9696 | 9711 | 15 | Shale, sand & chert | 13079 | 13136 | 57 | Lime, shale & sand |
| 9711 | 9733 | 22 | Shale & sand | 13136 | 13140 | 4 | Sand, lime & chert |
| 9733 | 9757 | 24 | Lime, shale & chert | 13140 | 13163 | 23 | Lime, sand & shale |
| 9757 | 9806 | 49 | Shale, sand & chert | 13163 | 13250 | 87 | Sand & shale |
| 9806 | 9822 | 16 | Lime & shale | 13250 | 13263 | 13 | Shale, sand & lime |
| 9822 | 9856 | 34 | Shale & sand | 13263 | 13308 | 45 | Shale & sand |
| 9856 | 9895 | 39 | Lime & shale | 13308 | 13348 | 40 | Shale |
| 9895 | 9933 | 38 | Shale | 13348 | 13365 | 17 | Shale & lime |
| 9933 | 9961 | 28 | Shale, sand & lime | 13365 | 13389 | 24 | Shale, lime & sand |
| 9961 | 10008 | 47 | Sand & shale | 13389 | 13413 | 24 | Lime, sand & shale |
| 10008 | 10089 | 81 | Sand, shale & lime | 13413 | 13574 | 161 | Lime & shale |
| 10089 | 10103 | 14 | Lime, shale, dolomite | 13574 | 13642 | 68 | Shale |
| 10103 | 10125 | 22 | Lime, sand & shale | 13642 | 13680 | 38 | Shale & lime |
| 10125 | 10137 | 12 | Lime & sand | 13680 | 13700 | 20 | Shale |
| 10137 | 10153 | 16 | Lime, shale, chert & sand | 13700 | 13728 | 28 | Shale & lime |
| 10153 | 10178 | 25 | Lime, sand & shale | 13728 | 13751 | 23 | Shale & sand |
| 10178 | 10200 | 22 | Lime & sand | 13751 | 13800 | 49 | Shale & lime |
| 10200 | 10222 | 22 | Lime, sand, shale & chert | 13800 | 13838 | 38 | Lime & shale |
| 10222 | 10247 | 25 | Lime, shale & chert | 13838 | 13875 | 37 | Lime & chert |
| 10247 | 10305 | 58 | Lime & sand | 13875 | 13887 | 12 | Lime |
| 10305 | 10330 | 25 | Lime, shale & sand | 13887 | 13915 | 28 | Lime & chert |
| 10330 | 10354 | 24 | Lime & sand | 13915 | 13926 | 11 | Lime |
| 10354 | 10365 | 11 | Lime, sand & shale | 13926 | 14271 | 345 | Lime & chert |
| 10365 | 10396 | 31 | Lime & shale | 14271 | 14276 | 5 | Lime |
| 10396 | 10462 | 66 | Lime, shale & sand | 14276 | 14304 | 28 | Lime & chert |
| 10462 | 10483 | 21 | Lime & shale | 14304 | 14310 | 6 | Lime |
| 10483 | 10516 | 33 | Lime, shale & chert | 14310 | 14327 | 17 | Lime & shale |
| 10516 | 10537 | 21 | Lime & shale | 14327 | 14335 | 8 | Lime & chert |
| 10537 | 10617 | 80 | Lime, shale & sand | 14335 | 14339 | 4 | Lime, chert & shale |
| 10617 | 10644 | 27 | Lime & shale | 14339 | 14348 | 9 | Lime & chert |
| 10644 | 10752 | 108 | Lime, shale & sand | 14348 | 14358 | 10 | Lime |
| 10752 | 10820 | 68 | Sand | 14358 | 14367 | 9 | Lime, shale & chert |
| 10820 | 10894 | 74 | Sand, shale & lime | 14367 | 14370 | 3 | Lime & chert |
| 10894 | 10901 | 7 | Shale & lime | 14370 | 14419 | 49 | Lime & shale |
| 10901 | 10947 | 46 | Lime, shale & sand | 14419 | 14438 | 19 | Shale |
| 10947 | 11132 | 185 | Shale | 14438 | 14456 | 18 | Shale & lime |
| 11132 | 11188 | 56 | Shale & lime | 14456 | 14561 | 105 | Shale |
| 11188 | 11198 | 10 | Shale & chert | 14561 | 14574 | 13 | Lime |
| 11198 | 11218 | 20 | Chert | 14574 | 14582 | 8 | Shale |
| 11218 | 11231 | 13 | Shale, chert & sand | 14582 | 14601 | 19 | Shale & Dolomite |
| 11231 | 11298 | 67 | Shale & chert | 14601 | 14622 | 21 | Dolomite |
| 11298 | 11380 | 82 | Shale, lime & chert | 14622 | 14985 | 363 | Lime |
| 11380 | 11409 | 29 | Shale & lime | | 14985 | | Total Depth |
| 11409 | 11453 | 44 | Lime, shale & chert | 14985 | 13645 | -1340 | PBTD |
| 11453 | 11504 | 51 | Shale & lime | | | | |
| 11504 | 11544 | 40 | Shale | | | | |
| 11544 | 11594 | 50 | Shale & lime | | | | |
| 11594 | 11821 | 227 | Shale | | | | |
| 11821 | 11869 | 48 | Shale & lime | | | | |
| 11869 | 11920 | 51 | Shale | | | | |
| 11920 | 12182 | 262 | Shale & lime | | | | |
| 12182 | 12233 | 51 | Lime, shale & chert | | | | |

Exhibit A

DEFLECTION TESTS

| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

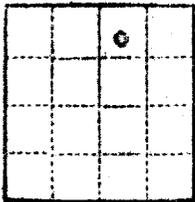
Exhibit A

DEFLECTION TESTS

| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

Budget Bureau No. 42-4568.1
Approval expires 12-31-60.

Form D-981a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe, New Mexico
Lease No. LC 66047
Unit HOBBS OFFICE OCC

1959 AUG 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

August 26 19 59

Federal #00

Well No. 1 is located 660 ft. from (N) line and 1982 ft. from (E) line of sec. 4

NW 1/4, NE 1/4
(Of Sec. and Sec. No.)

T-20-S
(Twp.)

R-3-E
(Range)

106W
(Meridian)

Midland
(Field)

Lee
(County or Subdivision)

New Mexico
(State or Territory)

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

DETAILS OF WORK

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

Spudded 17-1/2" hole 12-27-58, ran 499' of 13-3/8" OD casing, cemented w/ 525 sacks, maximum pressure 250#, had cement returns to surface. 12-1/4" hole complete 1-18-59 at 1262', ran 4801' of 9-5/8" OD casing, cemented w/ 2900 sacks, maximum pressure 600#, had cement returns to surface. Tested casing and cement w/ 1000#, held 30 minutes OK. 18 hours WOC.

8-3/4" hole complete 5-22-59 at 13,915', ran 13,915' of 7" OD casing, cemented w/ 510 sacks, maximum pressure 900#, 36 hours WOC, ran temperature survey, indicated top of cement outside 7" casing at 12,090' from surface. Tested casing and cement w/ 1000# for 30 minutes, held OK.

4-3/4" hole completed 7-16-59 at 11,985', placed cement plug in open hole and bottom of 7" casing 11,985' to 13,828' w/ 100 sacks. Perforated 7" casing 13,697'-13,741' w/ 175 jet shots, treated perfor 13,697'-13,741' w/ 500 gallons mud acid, placed cement plug in 7" casing 13,770'-13,645' w/ 30 sacks. Perforated 7" casing 12,572'-12,586' w/ 56

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

Company The Pure Oil Company

Address Box 671

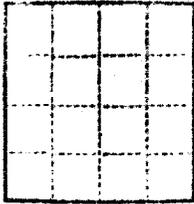
Midland, Texas

By [Signature]
W. E. Townsend
Title Chief Clerk

GPO #12507

Exhibit A

MIN 9-281a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Local Office

Lease No.

NOBBS OFFICE OCC

Unit

NOV 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Federal #C#

19

Well No. 1 is located ft. from N line and ft. from E line of sec.

(Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

(Field)

(County or Subdivision)

(State or Territory)

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

DETAILS OF WORK

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

jet shots, treated perfs 12,572'-12,586' w/ 500 gallon mud acid. Placed cement plug in 7" casing 12,600' to 12,500' with 12 sacks. Shot 7" casing off at 4029', pulled 7" casing, placed cement plug in 7" casing 6530'-5470' w/ 12 sacks, 4220'-4100' w/ 24 sacks, 4040'-3940' w/ 40 sacks, 20' to surface w/ 8 sacks. Welded 1/2" steel plate on top casing with 1" marker extended 4' above surface.

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

Company

Address

By

Title

GPO 8 18 507

RECORDS OFFICE (20)
AUG 26 1959

August 26, 1959

United States Department of the Interior
Geological Survey
Box 1896

Albuquerque, New Mexico

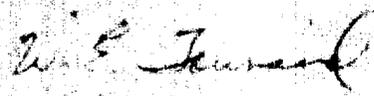
ATTENTION: Mr. T. E. Godfrey, Petroleum Engineer

Dear Sir:

Attached herewith three (3) copies of Form 9-311a "Sundry Notices and Reports on Wells" on The Pure Oil Company's Federal "C" No. 1, Wildcat dry hole drilled in Section 4, Township 20-S, Range 24-S, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY



W. E. Townsend
Chief Clerk

WET:evv

cc: Schaefer
Teague
File
Signal Oil & Gas Co.
Mr. Ray Diemer
801 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Co.
Mr. Wallace
1010 Ft. Worth Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Budget Bureau No. 42-R358.4
Approval expires 12-31-60.

Form 9-831a
(Feb. 1961)

Land Office Santa Fe, N.M.

Lease No. 16-065607

Unit _____

(SUBMIT IN TRIPLICATE)

| | | | |
|--|--|---|--|
| | | 0 | |
| | | | |
| | | | |
| | | | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|---|----------|---|--|
| NOTICE OF INTENTION TO DRILL..... | | SUBSEQUENT REPORT OF WATER SHUT-OFF..... | |
| NOTICE OF INTENTION TO CHANGE PLANS..... | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF..... | | SUBSEQUENT REPORT OF ALTERING CASING..... | |
| NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL..... | | SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR..... | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE..... | | SUBSEQUENT REPORT OF ABANDONMENT..... | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING..... | | SUPPLEMENTARY WELL HISTORY..... | |
| NOTICE OF INTENTION TO ABANDON WELL..... | | | |
| Progress report for DST #1 | X | | |

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

March 20, 1959

Federal "C"

Well No. 1 is located 660 ft. from N line and 1982 ft. from E line of sec. 4

NW/4, NE/4

1-20-S

R-31-E

101PM

(1/4 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

Wilburt

Lee

New Mexico

(Field)

(County or Subdivision)

(State or Territory)

The elevation of the derrick floor above sea level is 3662 ft.

DETAILS OF WORK

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

Drilled 5125' to 11,524' in lime, dolomite, sand, shale and chert.

DST #1 10,750' - 10,820'

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By W. E. Townsend
W. E. Townsend

Title Chief Clerk

GPO 9 18 507

HOURS OFFICE OCC

1959 MAR 20 AM 8:11

March 20, 1959

United States Department of the Interior
Geological Survey
Box 1838
Hobbs, New Mexico

ATTENTION: Mr. T. L. Godfrey, Petroleum Engineer

Dear Sir:

Attaching three copies of Form G-331a "Sundry Notices and Reports on Wells" as our progress report on The Pure Oil Company's Federal "C" Well No. 1, located in Section 1, Township 20-S, Range 11-E, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY

W. E. Townsend
Chief Clerk

WET:esr

cc: Mr. W. F. Schafer
Mr. H. G. Teague
File
Signal Oil & Gas Company
Mr. Ray Diemer
801 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Company
Mr. Wallace
1010 Fort Worth National Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Exhibit A

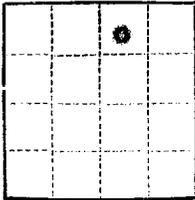
Form 9-331a
(Feb. 1951)

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.

Lease No. 065407

Unit _____



HOOURS OFFICE OCC
**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

1959 JAN 25 AM 7:10

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 23, 1959

Federal #
Well No. 1 is located 660 ft. from N line and 1902 ft. from E line of sec. 4

N/4 NE/4 T-20-S R-34-S W1/4
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Midland Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

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

DETAILS OF WORK

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

Drilled 1068'-5125' in dolomite, sand & lime. Ran electric logs to 1792', ran 1801' of 9-5/8" OD casing w/ casing shoe set at 1801' SCF, float collar at 1738', Rouse two stage IW tool set at 3510', cemented 1st stage thru shoe at 1801' with 300 sacks 75% incoer cement, 25% stratocrete w/ 6% gels added and 200 sacks incoer neat cement. Pumped plug to 1738', maximum and final pressure 600#. Opened IW tool at 3510', 2nd stage cemented w/ 2400 sacks 50-50 incoer-diamix w/ 6% gel added, had cement returns to surface 1 1/2 hours WOC. Tested 9-5/8" casing, control equipment and cement with 1000# for 30 minutes, hold OK.

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By W. E. Townsend

W. E. Townsend

Title Chief Clerk

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

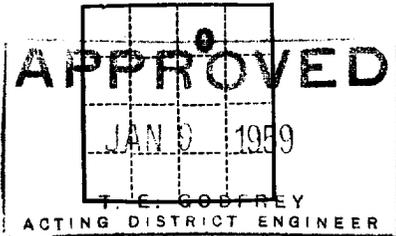
Form 9-331a
(Feb. 1961)

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.

Lease No. L.C. 065607

Unit _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 8, 1959

Federal *C*
Well No. 1 is located 660 ft. from N line and 1902 ft. from W line of sec. h
NE/4 NE/4 T-20-S R-31-E MUM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Midland Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3648 ft.

DETAILS OF WORK

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

Spud 12-1/4" hole 6:30 AM 12-27-58, drilled to 505' in red beds, reamed 12-1/4" hole to 17-1/2" from 0' to 505'. Ran 499' of 13-3/8" OD casing with Guide Shoe set at 499' BCF, three sets centralizers installed. Cemented 13-3/8" casing with 525 sacks Portland Heat Cement. Pumped plug to 468', maximum pressure 250#. Had cement returns to surface, 24 hours WOG. Test 13-3/8" casing, control equipment and cement with 1000#, held 30 minutes OK.

Drilled 505' - 468' red beds, anhydrite, salt, dolomite, lime and sand.

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By [Signature]

Title Chief Clerk

GPO 9 18 507

Form 9-331a
(Feb. 1951)

(SUBMIT IN TRIPLICATE)

Land Office San Antonio, Tex.
Lease No. 06507
Unit _____

Subject to the condition on back of this page

APPROVED
DEC 18 1958
T. E. Godfrey
T. E. GODFREY
ACTING DISTRICT ENGINEER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

November 11, 1958

Federal #
Well No. 1 is located 640 ft. from [N] line and 1982 ft. from [E] line of sec. 4
14/4 14/4 T-20-N 14-36-E 107E
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Illinois Law New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the ground above sea level is 3648 ft. Arrived at by differential levelling from BM 2421-2423 N.M. 9-56, 1920.

DETAILS OF WORK

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

- Casing Program: 420' - 11-3/4" OD 42# 1-40 New Cemented to surface.
- 2570' - 8-5/8" OD 32# 1-35 New Cemented to surface.
- 2230' - 6-5/8" OD 24# 1-35 New
- 2250' - 5 -1/2" OD 20# 1-50 New Cement returned to approximately 13,450' from surface
- 4720' - 5-1/2" OD 20# 1-30 New
- 7260' - 5-1/2" OD 17# 1-40 New

Well will be drilled with rotary tools.
Objective pay: Devonian at approximately 13,450'.

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

Company The Texas Oil Company

Address P. O. Box 2107
Fort Worth 1, Texas

By T. E. Godfrey

Title Act. District Engineer

Exhibit A

Approval is subject to the following condition:

1. That the 5 $\frac{1}{2}$ " casing be cemented with sufficient cement to protect any porous zones below the base of the 8 5/8" casing, as determined by this office from information obtained in drilling of the well.

R 34 E

32 33 34

Pure Signal

State U. S. A. H.A. Peterson

N. 89° 52' E.

80 Ch. Signal

Pure Pure

"C" Signal

5 4 3

S. 0° 18' W. 80.50 Ch. N 0° 10' E.

80.05 Ch. 80.26 Ch. 80.50 Ch.

Hudson & Hudson: Total Lease Ac. 802.4

∅₂ U. S. A. U. S. A.

U. S. A. U. S. A. U. S. A.

Pure Pure

U. S. A. U. S. A. U. S. A.

N. 89° 48' W. Texaco-Seaboard

8 9 10

I, R. R. Reid, Registered Professional Engineer, do hereby certify that the Location^{as} as shown hereon was made by actual measurement upon the ground.

R. R. Reid
Registered Professional Engineer
State of Texas

RECEIVED
DEC 18 1958
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

The Pure Oil Co.
FEDERAL "C" LEASE
802.4 Acres
ON PLAT-SEC. 4, T-20-S- R-34-E, OF THE NEW MEXICO PRINCIPAL MERIDIAN
LEA COUNTY, NEW MEXICO
Scale: 4 inches = One Mile

| | | | |
|---|--|------------|--------------|
| THE PURE OIL CO. TEXAS PRODUCING DIVISION PRODUCTION ENGINEERING DEPT. | DES. SUR. DRN. SWMc. TRD. CHK. | SUBMITTED: | DATE 12-5-58 |
| | | APPROVED: | REVISED |

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

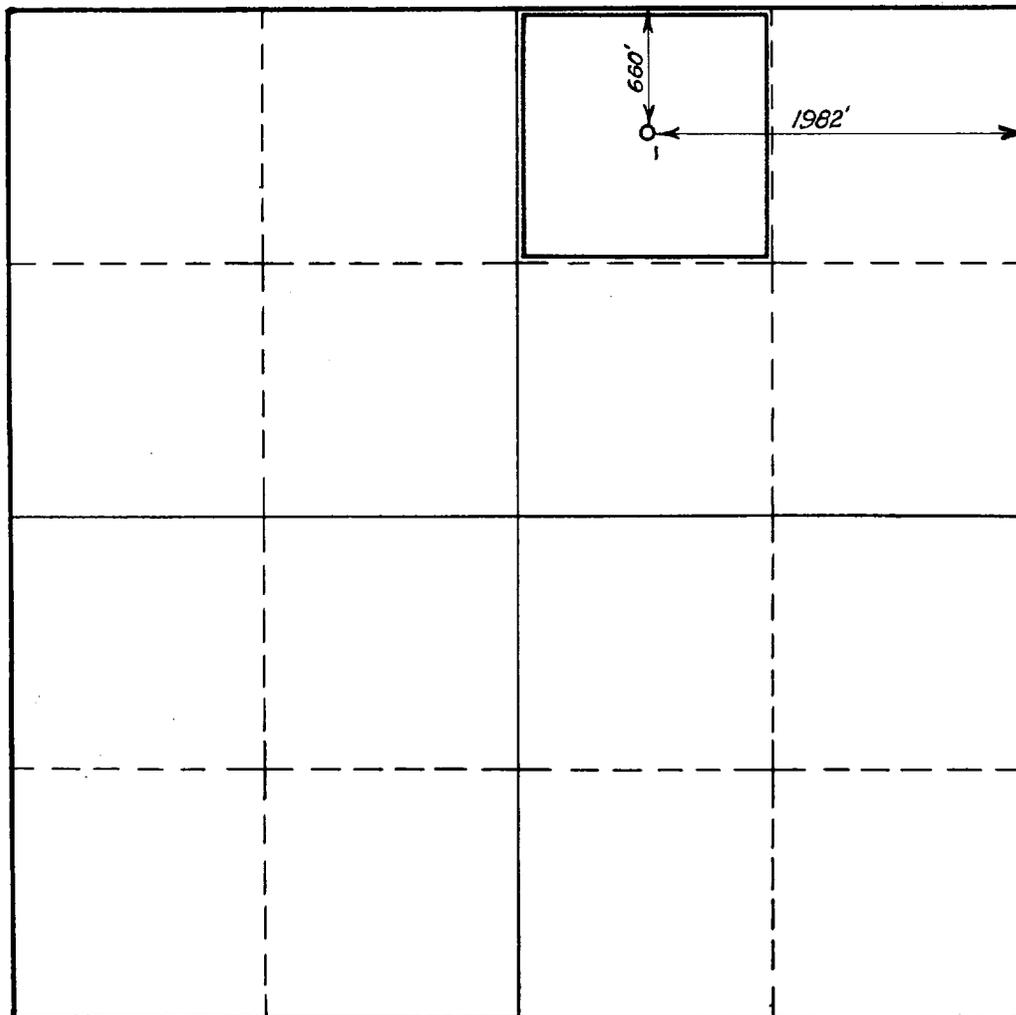
Date December 22, 1958

Operator The Pure Oil Company Lease Federal #00
 Well No. 1 Unit Letter B Section 4 Township 20-S Range 36-E NMPM
 Located 660 Feet From North Line, 1982 Feet From East Line
 County Los G. L. Elevation 3658' Dedicated Acreage 40 Acres
 Name of Producing Formation Devonian Pool wildcat

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes _____ No X.
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____. If answer is "yes," Type of Consolidation Joint Operation
3. If the answer to question two is "no," list all the owners and their respective interests below:

| <u>Owner</u> | <u>Land Description</u> |
|--------------|-------------------------|
| | |
| | |
| | |

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

THE PURE OIL COMPANY

(Operator)

L. L. Melton

(Representative)

Box 2107, Fort Worth 1, Texas

Address

This is to certify that the well location shown on the plat in Section B 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 knowledge and belief.

Date Surveyed 12-3-58

R. A. Reed
Registered Professional Engineer and/or Land Surveyor.

Texas

Certificate No. 5093

INSTRUCTIONS FOR COMPLETION:

1. Operator shall furnish and certify to the information called for in Section A.
2. Operator shall outline the dedicated acreage for both oil and gas wells on the plat in Section B.
3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
4. All distances shown on the plat must be from the outer boundaries of Section.
5. If additional space is needed for listing owners and their respective interests as required in question 3, Section A, please use space below

* "Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1953 Comp.)

Exhibit A

VI.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1568
August 3, 2015

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B, NMAC, Read & Stevens, Inc. (the "operator") seeks an administrative order for its Pure Federal C SWD Well No. 1 located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B, NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objection was received within the required suspense period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Read & Stevens, Inc. (OGRID 18917) is hereby authorized to utilize its Pure Federal C SWD Well No. 1 (API No. 30-025-02417) located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) through an open-hole interval within Devonian or Silurian formations from approximately 14590 feet to approximately 14960 feet. Injection shall occur through internally-coated tubing and a packer set a maximum of 100 feet above the top of the open-hole interval.

This permit is limited as advertised to only the Devonian and Silurian aged rocks and to the depths listed above. It does not permit disposal into deeper formations including the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to that formation.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed in the application and any required modifications of construction as required by the Bureau of Land Management.

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 2 of 3

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2918 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. The Division Director retains the right to require at any time the operator to install and maintain a chart recorder showing casing and tubing pressures during disposal operations.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any disposal well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well

Exhibit A

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 3 of 3

abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



DAVID R. CATANACH
Director

DRC/wvjj

cc: Oil Conservation Division – Hobbs District Office
Bureau of Land Management – Carlsbad Field Office
Administrative Application pWVJ1513562666

VI. **Pure Federal "C" #1 Wellbore Schematic**
API # 30-025-02417
660' FNL & 1982' FEL
Sec. 4, T20S, R34E
Lea Co. NM
 Updated: 07/08/2023

Final P&A Date: 05/15/1963

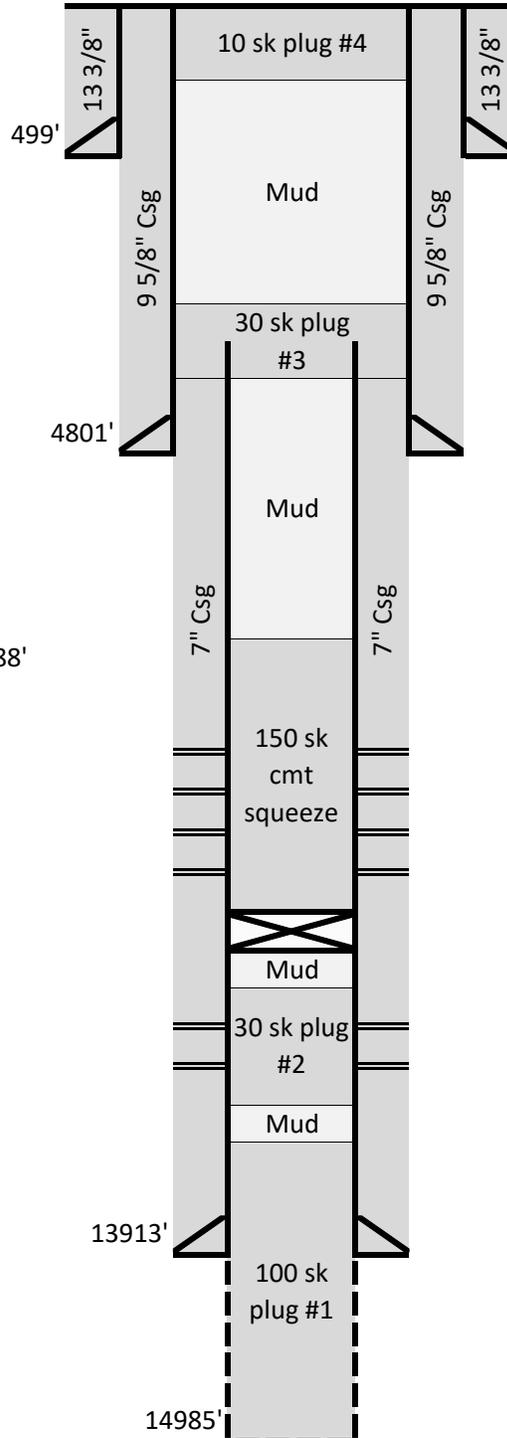
- 13 3/8" Csg Set @ 499' - Cement to Surface
- 9 5/8" Csg Set @ 4801' - Cement to Surface
- 7" Csg Set @ 13913' - TOC @ 12090
- 4 3/4" Open Hole From 13913' - 14985'

- 10 sk cmt plug from surface to 20'
- 12.2# mud from 20' - 3983'
- 30 sk cmnt plug from 3983' - 4083'
- 7" Csg cut off @ 4029'

- 12.2# mud from 4083' - 12490'
- Set pkr @ 12490' & squeeze 150 sk cmt from 12490' - 12988'

- 7" Csg perforated from 12572' - 12572'
- 7" Csg perforated from 12892' - 12920'
- Bridge Plug Set @ 12988'
- 12.2# mud from 12988' - 13645'
- 30 sk cmt plug #2 from 13645' - 13770'
- 7" Csg perforated from 13697' - 13741'
- 12.2# mud from 13770' - 13828'

- 100 sk cmt plug #1 from 13828' - 14985'





New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(In feet)

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

*UTM location was derived from PLSS - see Help

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

Average Depth to Water: **702 feet**

Minimum Depth: **270 feet**

Maximum Depth: **1005 feet**

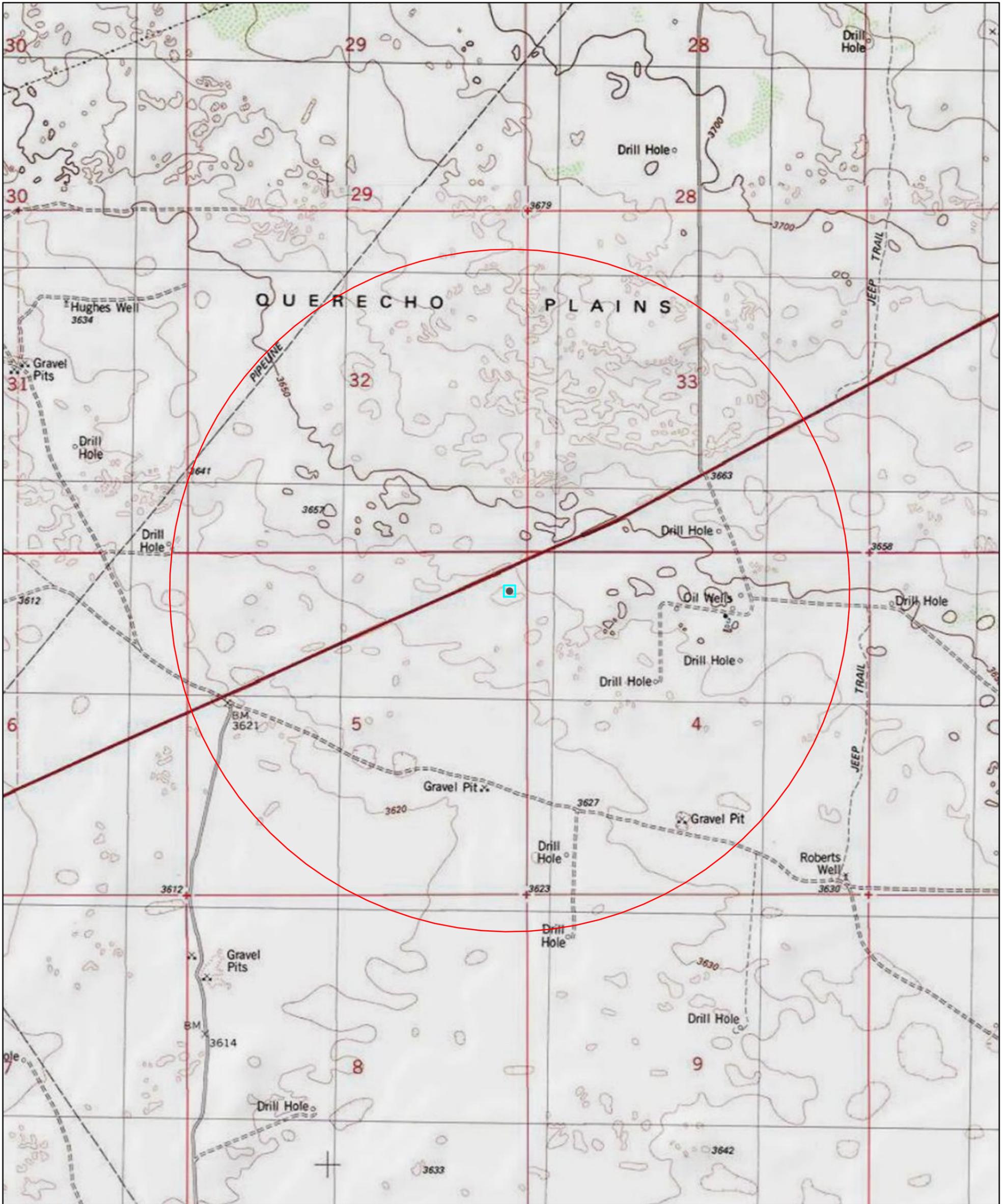
Record Count: 21

PLSS Search:

Township: 20S

Range: 34E

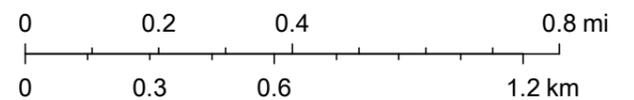
XI. Water Wells Within 1 Mile - Overdue Federal SWD #1



5/23/2023, 6:56:24 PM

 Site Boundaries

1:20,214



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

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS

Action 241804

CONDITIONS

| | |
|---|--|
| Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241 | OGRID: 328259 |
| | Action Number: 241804 |
| | Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO) |

CONDITIONS

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

Tab 2: Direct Written Testimony of Sean Puryear and Exhibits

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

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

**CASE NO. 23807
(OVERDUE)**

DIRECT WRITTEN TESTIMONY OF SEAN PURYEAR

Sean Puryear hereby states and declares as follows:

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

Exhibit 2

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

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

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

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

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

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

12. Permian originally filed this application as an administrative application on July 11, 2023. I submitted the application, which included all of the information required by the Division's form C-108. I did not receive any notifications from the Division that the application was incomplete.

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

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

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

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

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

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

19. **Tab 1** contains the hearing application in Case No. 23807 that Permian filed with the Division. The application includes the C-108 that Permian submitted for administrative approval on July 11, 2023. In preparing for this hearing, I have reviewed the C-108 and did not identify any changes that require amending the C-108 or affect the accuracy of statements in the C-108.

20. In this case, Permian seeks an order from the Division to drill the Overdue Federal SWD Well #1 at a surface location 602’ from the North line and 298’ from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the

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

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

22. Permian’s intent is to commence drilling the Well in January 2024 and to commence injection in April 2024.

23. Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet.

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

25. Permian requests approval of a maximum injection pressure of 2,935 psi for the well, which is consistent with the .2 gradient that the Division follows.

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

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

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

intermediate string will isolate the Capitan Reef section, the third intermediate string will isolate the lower-pressure reservoir rock above the Wolfcamp. The fifth string, which is a liner, will be set to the top of the Devonian and tied back into the 9-5/8 200 feet, and this string will isolate the shales above the Devonian and below the Third Bone Spring.

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

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

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

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

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

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

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

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

37. There is one well that within the Well's AOR that penetrates the Devonian formation, which is the Pure Federal C #1 well. It was plugged in 1963. I have included information related to this well as **Exhibit 2.G**.

38. None of the operators of the wells within the one-mile AOR has objected to Permian's application. Matador does not operate a well within the one-mile AOR.

39. There are two saltwater disposal wells within the AOR but neither of them target the Devonian; their injection zone is the Bone Spring and Morrow.

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

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

42. As part of the administrative application process, I sent notice to affected parties. I followed OCD's regulations, in Rule 19.15.26.8(B), which requires notice to the surface owner and to each leasehold operator, and to any other affected person as that term is defined Rule

19.15.2.7(8). A query of the surface owner, all wellbores, operators, lease holders and mineral owners was run for the 1 mile AOR. Following the guidance of the NMOCD, POP sent notice to the surface owner on which the proposed well is located and all wellbore owners and designated operators within the proposed wells 1 mile area of review.

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

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

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

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

47. Gary Fisher, President of Permian, prepared a seismicity study using publicly available information which found a zero percent chance of induced seismicity. Mr. Fisher’s

written testimony discusses that study in more detail. From Permian's perspective, based on Permian's modeling and the information available to Permian, there is little, if any risk, of fault slip from this Well.

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

49. In an attempt to independently evaluate Matador's asserted seismicity concerns, I reviewed the 3D seismic database library on the Seismic Exchanges website to determine whether 3D seismic information exists near the Well. The closest 3D seismic information available for Permian to purchase is approximately 2.0 miles to the East of the Well. *See Exhibit 2.J.* Given the distance from the Well, it would not have provided any further information regarding faults of concern, if any, near the Well.

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

51. I personally reached out to Matador on a number of occasions to offer to meet with Matador and I asked our counsel to do the same, which she did. While Matador would initially agree to have a conversation with Permian, Matador would never commit to a date to

meet. When Matador suggested a joint meeting with the Division, Permian agreed to pursue that option. Although Permian was clear that it would meet with Matador and the Division any day or time that worked for Matador and the Division, Matador never proposed any dates to meet with the Division.

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

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

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

55. In my opinion, Matador is trying to delay meeting with Permian and has been trying to delay the hearing in this case, which I do not understand. If Matador has concerns with the location of the Well and the potential for induced seismicity, it makes sense to me that

Matador would want to discuss those concerns with Permian and with the Division in a timely fashion and not continue to delay.

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

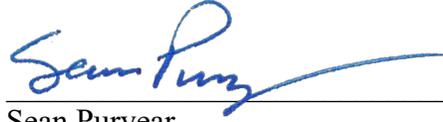
57. In my opinion, the granting of Permian's application is in the interests of conservation and the prevention of waste. The Well will provide much needed capacity for produced water, which will, in turn, support oil and gas operators' ability to produce oil and gas. Conversely, constraints on disposal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

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

[Signature page follows]

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

Dated: October 12, 2023



Sean Puryear

Protested SWD Application

By Matador; received 7/18/2023

Exhibit 2.A

From: [Kyle Perkins](#)
To: [Engineer, OCD, EMNRD](#)
Subject: [EXTERNAL] Matador's Protest of Permian Oilfield's Proposed Overdue Federal SWD #1
Date: Tuesday, July 18, 2023 4:30:25 PM
Attachments: [image001.jpg](#)
[3260_001.pdf](#)

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

Ladies and Gentlemen,

Matador Production Company, MRC Permian Company and MRC Hat Mesa, LLC (successor to Advance Energy Partners Hat Mesa, LLC) hereby protest Permian Oilfield Partners, LLC's proposed Overdue Federal SWD #1, located in Section 5, Township 20 South, Range 34 East, Lea County, NM. A copy of the referenced application is attached for your convenience.

Please advise if this case is set for hearing.

Best regards,

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

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



This message is strictly confidential and is for the sole use of the intended recipient. If you are not the intended recipient of this message, you may not disclose, print, copy, disseminate or otherwise use this message or the information included herein. If you are not the intended recipient, please reply and notify the sender (only) and promptly delete the message.

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

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

Mr. Puryear:

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

Applications that are subjects of this notification:

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

Protest contact information:

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

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

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



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

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

CONDITIONS
 Action 258925

CONDITIONS

| | |
|---|--|
| Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241 | OGRID: 328259 |
| | Action Number: 258925 |
| | Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|-----------|----------------|
| mgebremichael | None | 8/29/2023 |

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 97869 | | 3 Pool Name SWD; DEVONIAN-SILURIAN | |
| 4 Property Code | | 5 Property Name OVERDUE FEDERAL SWD | | | 6 Well Number 1 |
| 7 OGRID NO. 328259 | | 8 Operator Name PERMIAN OILFIELD PARTNERS, LLC | | | 9 Elevation 3643' |

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 |
|---------------|----------|------------|------------|---------|---------------|------------------|---------------|----------------|------------|
| 1 | 5 | 20S | 34E | | 602 | NORTH | 298 | 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.

① N 89°22'38" E 2644.21'

② N 89°30'52" E 2637.58'

③ S 00°02'58" E 5273.40'

④ S 89°25'39" W 2636.92'

⑤ S 89°29'18" W 2641.84'

⑥ S 00°07'52" W 2638.76'

⑦ S 00°07'52" E 2635.81'

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.

Gary Fisher 7-5-2023
Signature Date

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



14400
Certificate Number

05/31/2023

Job No.: LS23050493



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

NOS Detail Report

10/12/2023

NOS ID: 10400093878

Submission Date: 08/15/2023

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

Operator Name: PERMIAN OILFIELD PARTNERS LLC

Well Name: OVERDUE FEDERAL SWD

Well Number: 1

Well Type: INJECTION - DISPOSAL

Well Work Type: Drill

Section 1 - General

NOS ID: 10400093878

Submission Date: 08/15/2023

BLM Office: CARLSBAD

User: Gary Fisher

Title: President

Federal/Indian NOS: FED

Is the first lease penetrated for production Federal or Indian? FED

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential?

Designated Agent? N

NOS Operator: PERMIAN OILFIELD PARTNERS LLC

Operator letter of

Designated Agent Info

Agent Address:

Agent PO Box:

Agent city:

State:

Zip:

Agent Phone:

Agent Internet Address:

Operator Info

Operator Organization Name: PERMIAN OILFIELD PARTNERS LLC

Operator Address: 726 EAST MICHIGAN DRIVE, SUITE 206

Operator PO Box:

Operator City: HOBBS

State: NM

Zip: 88241

Operator Phone: (817)600-8772

Operator Internet Address:

Section 2 - Well Information

Well Name: OVERDUE FEDERAL SWD

Well Number: 1

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: SWD; DEVONIAN-SILURIAN

Pool Name: NULL_POOL_NAME_VALUE

Use Existing Well Pad? N

New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: DIRECTIONAL

Number of Legs: 1

Well Type: INJECTION - DISPOSAL

Describe Well Type:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

Reference Datum: GROUND LEVEL

| Wellbore | NS-Foot | NS Indicator | EW-Foot | EW Indicator | Twsp | Range | Section | Aliquot/Lot/Tract | Latitude | Longitude | County | State | Meridian | Lease Type | Lease Number | Elevation | MD | TVD | Will this well produce from this |
|--------------|---------|--------------|---------|--------------|------|-------|---------|-------------------|------------|--------------|--------|------------|------------|------------|--------------|-----------|-------|-------|----------------------------------|
| SHL Leg #1 | 602 | FNL | 298 | FEL | 20S | 34E | 5 | Lot 1 | 32.6077848 | -103.5747341 | LEA | NEW MEXICO | NEW MEXICO | F | NMLC0065607 | 3643 | 0 | 0 | N |
| KOP Leg #1 | | | | | | | | | | | | | | | | | 0 | 0 | |
| PPP Leg #1-1 | | | | | | | | | | | | | | | | | 0 | 0 | |
| EXIT Leg #1 | | | | | | | | | | | | | | | | | 0 | 0 | |
| BHL Leg #1 | 602 | FNL | 298 | FEL | 20S | 34E | 5 | Lot 1 | 32.6077848 | -103.5747341 | LEA | NEW MEXICO | NEW MEXICO | F | NMLC0065607 | -12201 | 15844 | 15844 | N |

Section 4 - Other

Anticipated Bottom Hole Pressure: 7415

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen sulfide drilling operations plan required? N

Hydrogen sulfide drilling operations plan:

Will existing roads be used? N

Existing Road Map:

Existing Road Purpose:

ROW(s) Exist?

Do the existing roads need to be improved?

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Will new roads be needed?

New Road Map:

New road type:

Access miscellaneous information:

Access Additional Attachment:

Reserve Pit being used? NO

Reserve pit length (ft.):

Reserve pit width (ft.):

Reserve pit depth (ft.):

Reserve pit volume (cu. yd.):

Survey Plat or Map:

C_102__OVERDUE_FEDERAL_SWD__1_20230815105632.pdf

SUPO Additional Information:

Other SUPO

Other Attachment:

General Comments:

NOS

Start Electronic

Task Forwarding

| NOS Initiation | Name | Description |
|--------------------------|-------------|--|
| <input type="checkbox"/> | NOS Process | Click to start a new Notice of Staking |

Operator NOS Worklist

Operator My Running NOS Processes

Operator My Completed NOS Processes

| Operator My Running NOS Processes | | | | | | | Quick Search | Monitor | Refresh |
|-----------------------------------|-------------------------------|------------------------------------|------------|-------------------------|--------------------|--|--------------|---------|---------|
| NOS ID | Operator | Create Date | BLM Office | Well Name/Well Number | Application Status | | | | |
| 1040009388 | | From: mm/dd/yyyy To: mm/dd/yyyy | | | | | | | |
| ✓ 10400093878 | PERMIAN OILFIELD PARTNERS LLC | 2023-08-11 12:04 | Carlsbad | OVERDUE FEDERAL SWD / 1 | Submitted | | | | |
| ✓ 10400093876 | PERMIAN OILFIELD PARTNERS LLC | 2023-08-11 11:41 | Carlsbad | BELATED FEDERAL SWD / 1 | Submitted | | | | |

Exhibit 2.D

III (A)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 5, T20S, R34E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341° W
 GL 3643', RKB 3673'

Surface - (Conventional)

Hole Size: 26"
 Casing: 20" - 106.5# N-80 BTC Casing
 Depth Top: Surface
 Depth Btm: 1577'
 Cement: 1444 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: 3658'
 Cement: 1119 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: 5582'
 Cement: 827 sks - Class C + Additives
 Cement Top: Surface - (Circulate)
 ECP/DV Tool: 3758'

Intermediate #3 - (Conventional)

Hole Size: 12.25"
 Casing: 9.625" - 40# HCL-80 BTC Casing
 Depth Top: Surface
 Depth Btm: 10987'
 Cement: 1803 sks - Class C + Additives
 Cement Top: Surface - (Circulate)
 ECP/DV Tool: 5682'

Intermediate #4 - (Liner)

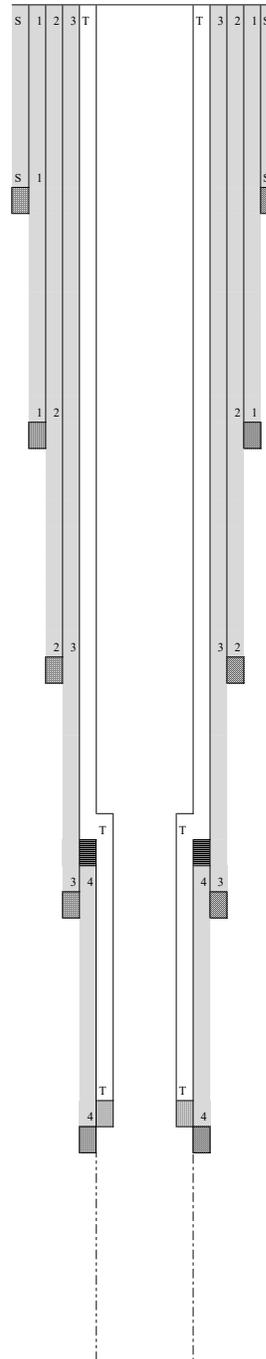
Hole Size: 8.5"
 Casing: 7.625" - 39# HCL-80 FJ Casing"
 Depth Top: 10787'
 Depth Btm: 14675'
 Cement: 250 sks - Class H + Additives
 Cement Top: 10787' - Circulate, then Bond Log when well @ TD

Intermediate #5 - (Open Hole)

Hole Size: 6.5"
 Depth: 15844'
 Inj. Interval: 14675' - 15844' (Open-Hole Completion)

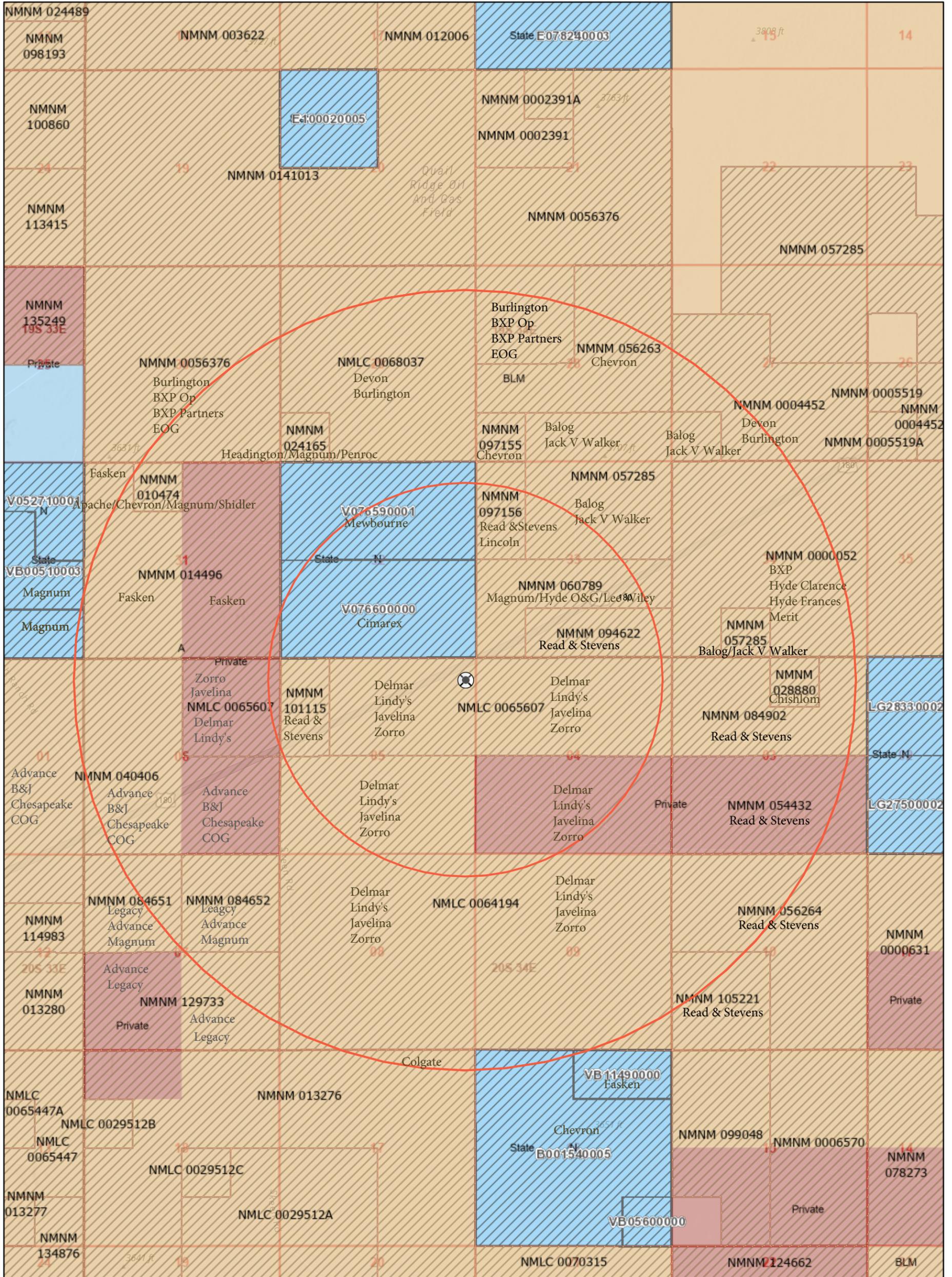
Tubing - (Tapered)

Tubing Depth: 14630'
 Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
 X/O Depth: 10787'
 X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
 Packer Depth: 14640'
 Packer: 5.5" - Perma-Pak or Equivalent (Inconel)
 Packer Fluid: 8.4 ppg FW + Additives



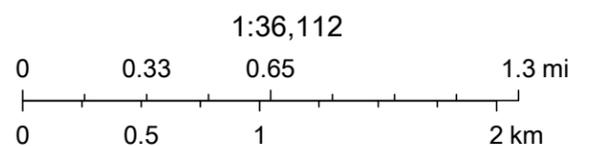
V (a)

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



7/8/2023, 7:47:53 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

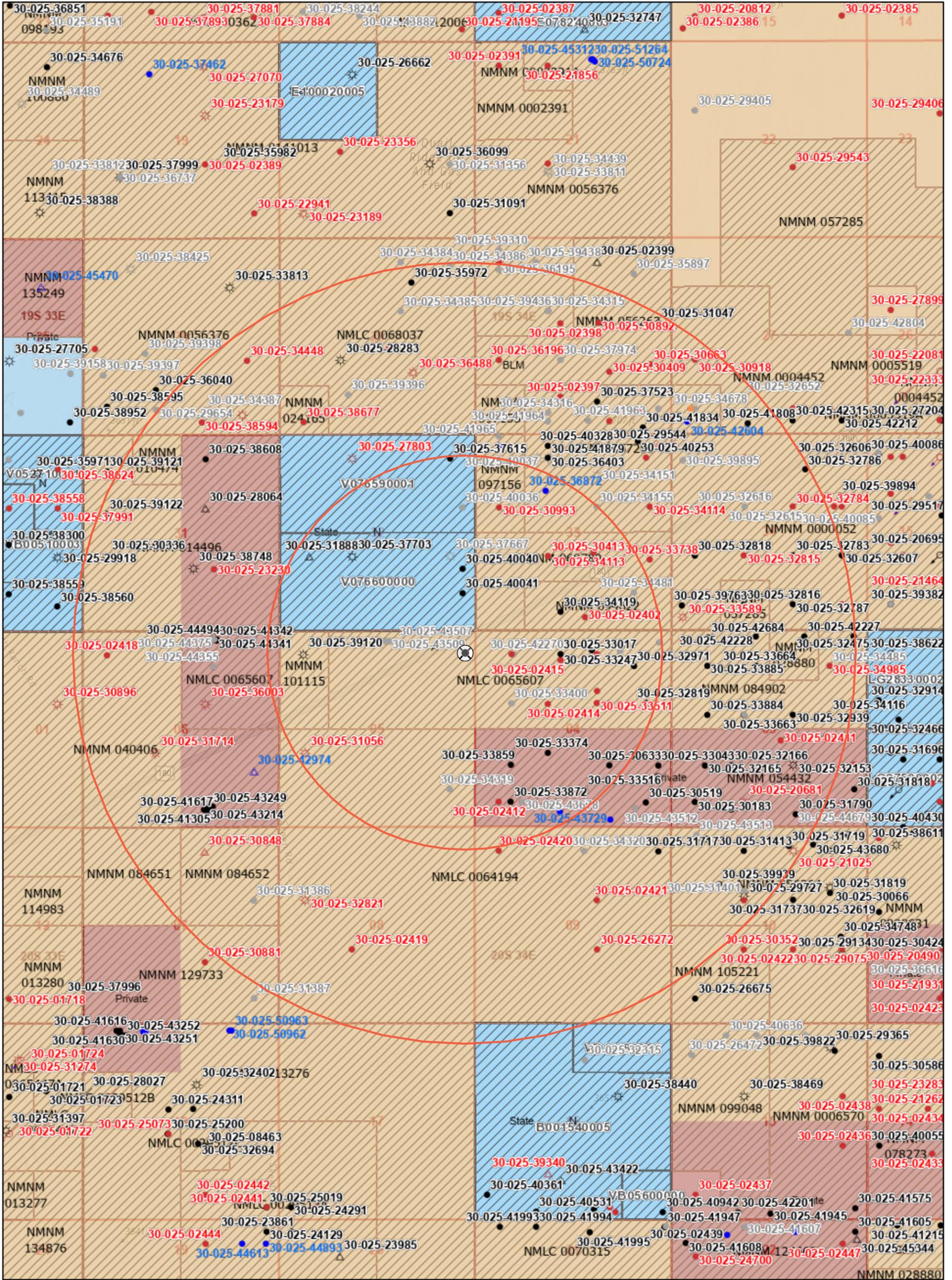


U.S. BLM
 U.S. Department of Interior, Bureau of Land Management (BLM)
 Esri, NASA, NGA, USGS, FEMA
 BLM

New Mexico Oil Conservation Division

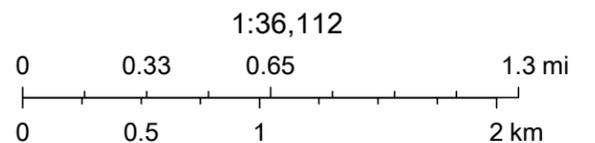
Exhibit 2.F

V (b) Overdue Federal SWD #1, 1 & 2 Mi AOR, Wells



7/8/2023, 7:45:45 PM

- Override 1
- Override 1
- Wells - Large Scale
- * 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
- 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



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)

| Overdue 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 | | |
| 30-025-39120 | READ & STEVENS INC | HIGHWAY 5 FEDERAL COM | #001 | Gas | Vertical | Active | 05 | T20S | R34E | D | D-05-205-34E Lot: 4 | 660 FNL 660 FWL | D-05-205-34E Lot: 4 | 660 FNL 660 FWL | MORROW | 13750 | 13750 | | |
| 30-025-31056 | MARATHON OIL CO | MATADOR 5 FEDERAL | #001 | Gas | Vertical | Plugged, Site Released | 05 | T20S | R34E | L | L-05-205-34E 1980 FSL 710 FWL | M-05-205-34E 1980 FSL 710 FWL | BONE SPRING | 13660 | 13660 | | | | |
| 30-025-31888 | SELECT AGUA LIBRE MIDSTREAM, LLC | RED HAWK 32 STATE | #001 | Salt Water Disposal | Vertical | Active | 32 | T19S | R34E | L | L-32-195-34E 1980 FSL 810 FWL | L-32-195-34E 1980 FSL 810 FWL | BONE SPRING | 13660 | 13660 | | | | |
| 30-025-37703 | MEWBOURNE OIL CO | QUAIL RIDGE 32 STATE | #002 | Gas | Vertical | Active | 32 | T19S | R34E | K | K-32-195-34E 1980 FSL 1980 FWL | K-32-195-34E 1980 FSL 1980 FWL | BONE SPRING | 13682 | 13682 | | | | |
| 30-025-43507 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #001H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2140 FEL | P-05-205-34E 330 FSL 350 FEL | BONE SPRING | 15377 | 10828 | | | |
| 30-025-43509 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2340 FEL | N-05-205-34E 330 FSL 2290 FWL | BONE SPRING | 15106 | 10820 | | | |
| 30-025-43510 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2440 FEL | M-05-205-34E 330 FSL 970 FWL | BONE SPRING | 15426 | 10827 | | | |
| 30-025-43508 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Apd | 05 | T20S | R34E | B | B-05-205-34E Lot: 2 | 280 FNL 2240 FEL | O-05-205-34E 330 FSL 1670 FEL | BONE SPRING | 15087 | 10824 | | | |
| 30-025-32003 | SELECT AGUA LIBRE MIDSTREAM, LLC | RED HAWK 32 STATE | #002 | Salt Water Disposal | Vertical | Active | 32 | T19S | R34E | J | J-32-195-34E 1980 FSL 1980 FEL | J-32-195-34E 1980 FSL 1980 FEL | MORROW | 13612 | 13612 | | | | |
| 30-025-37615 | MEWBOURNE OIL CO | RED HAWK 32 STATE | #001 | Oil | Vertical | Active | 32 | T19S | R34E | A | A-32-195-34E 660 FNL 660 FEL | A-32-195-34E 660 FNL 660 FEL | BONE SPRING | 13750 | 13750 | | | | |
| 30-025-34319 | READ & STEVENS INC | TRUMAN 5 FEDERAL | #001 | Oil | Vertical | Cancelled Apd | 05 | T20S | R34E | P | P-05-205-34E 990 FSL 660 FEL | P-05-205-34E 990 FSL 660 FEL | DELAWARE | 8400 | 8400 | | | | |
| 30-025-37667 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #001 | Gas | Vertical | Cancelled Apd | 32 | T19S | R34E | I | I-32-195-34E 1980 FSL 660 FEL | I-32-195-34E 1980 FSL 660 FEL | MORROW | 14000 | 14000 | | | | |
| 30-025-40040 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #003 | Oil | Horizontal | Active | 32 | T19S | R34E | I | I-32-195-34E 1650 FSL 330 FEL | L-32-195-34E 1881 FSL 4940 FEL | BONE SPRING | 15407 | 10843 | | | | |
| 30-025-40036 | MEWBOURNE OIL CO | RED HAWK 32 STATE | #003C | Oil | Horizontal | Cancelled Apd | 32 | T19S | R34E | H | H-32-195-34E 1981 FNL 330 FEL | E-32-195-34E 1980 FNL 330 FWL | BONE SPRING | 15190 | n/a | | | | |
| 30-025-40041 | CIMAREX ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #004 | Oil | Horizontal | Active | 32 | T19S | R34E | P | P-32-195-34E 990 FSL 330 FEL | M-32-195-34E 1980 FSL 4935 FEL | BONE SPRING | 13358 | 8766 | | | | |
| 30-025-02142 | HUDSON OIL COMPANY OF TEXAS | FEDERAL | #002 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 660 FWL | M-04-205-34E 660 FSL 660 FWL | YATES-SEVEN RIVERS | 3703 | 3703 | | | | |
| 30-025-30993 | PENNZENERGY EXPLORATION AND PRODUCTION LLC | CHAPARRAL 33 FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | E | E-33-195-34E 1980 FNL 660 FWL | E-33-195-34E 1980 FNL 660 FWL | BONE SPRING | 10300 | 10300 | | | | |
| 30-025-33872 | READ & STEVENS INC | TRUMAN FEDERAL | #007 | Oil | Vertical | Active | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 990 FWL | M-04-205-34E 660 FSL 990 FWL | DELAWARE | 8370 | 8370 | | | | |
| 30-025-33325 | READ & STEVENS INC | HUDSON FEDERAL | #006 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | D | D-04-205-34E Lot: 4 | 660 FNL 990 FWL | D-04-205-34E Lot: 4 | 660 FNL 990 FWL | DELAWARE | 8330 | 8330 | | |
| 30-025-33859 | READ & STEVENS INC | TRUMAN FEDERAL | #006 | Oil | Vertical | Active | 04 | T20S | R34E | L | L-04-205-34E 1650 FSL 990 FWL | L-04-205-34E 1650 FSL 990 FWL | DELAWARE | 8350 | 8350 | | | | |
| 30-025-33400 | READ & STEVENS INC | HUDSON FEDERAL | #007 | Oil | Vertical | Cancelled Apd | 04 | T20S | R34E | E | E-04-205-34E 1980 FNL 990 FWL | E-04-205-34E 1980 FNL 990 FWL | DELAWARE | 8400 | 8400 | | | | |
| 30-025-42270 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #004C | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | D | D-04-205-34E Lot: 4 | 661 FNL 1040 FWL | M-04-205-34E 330 FSL 970 FWL | BONE SPRING | 15371 | 10884 | | | |
| 30-025-43678 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | M | M-04-205-34E 660 FSL 1275 FWL | M-09-205-34E 330 FSL 970 FWL | BONE SPRING | 16038 | 10860 | | | | |
| 30-025-36872 | APACHE CORPORATION | SOUTH LUSK 33 FEDERAL | #003 | Oil | Vertical | New | 33 | T19S | R34E | F | F-33-195-32E 1545 FNL 1910 FWL | L-33-195-32E 1350 FSL 990 FWL | MORROW | 12800 | 12800 | | | | |
| 30-025-33665 | READ & STEVENS INC | TRUMAN FEDERAL | #005 | Oil | Vertical | Active | 04 | T20S | R34E | N | N-04-205-34E 990 FSL 1980 FWL | N-04-205-34E 990 FSL 1980 FWL | DELAWARE | 8340 | 8340 | | | | |
| 30-025-02414 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #002 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | F | F-04-205-34E 1994 FNL 1980 FWL | F-04-205-34E 1994 FNL 1980 FWL | YATES-SEVEN RIVERS | 3759 | 3759 | | | | |
| 30-025-30413 | CIMAREX ENERGY CO. OF COLORADO | LEA CHAPARRAL FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | K | K-33-195-34E 1980 FSL 1980 FWL | K-33-195-34E 1980 FSL 1980 FWL | BONE SPRING | 13600 | 13600 | | | | |
| 30-025-33374 | READ & STEVENS INC | TRUMAN FEDERAL | #003 | Oil | Vertical | Active | 04 | T20S | R34E | K | K-04-205-34E 1980 FSL 1980 FWL | K-04-205-34E 1980 FSL 1980 FWL | DELAWARE | 8370 | 8370 | | | | |
| 30-025-43750 | READ & STEVENS INC | NORTH LEA 9 FEDERAL COM | #003H | Oil | Horizontal | New | 04 | T20S | R34E | N | N-04-205-34E 400 FSL 2290 FWL | N-09-205-34E 330 FSL 2290 FWL | BONE SPRING | 16021 | 10931 | | | | |
| 30-025-02415 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #003 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 823 FNL 2310 FWL | C-04-205-34E Lot: 3 | 823 FNL 2310 FWL | YATES-SEVEN RIVERS | 3709 | 3709 | | |
| 30-025-33181 | READ & STEVENS INC | HUDSON FEDERAL | #004 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | F | F-04-205-34E 1650 FNL 2310 FWL | F-04-205-34E 1650 FNL 2310 FWL | DELAWARE | 8350 | 8350 | | | | |
| 30-025-33017 | READ & STEVENS INC | HUDSON FEDERAL | #003 | Oil | Vertical | Active | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 660 FNL 2310 FWL | C-04-205-34E Lot: 3 | 660 FNL 2310 FWL | DELAWARE | 8350 | 8350 | | |
| 30-025-43505 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | C | C-04-205-34E Lot: 3 | 395 FNL 2515 FWL | N-04-205-34E 330 FSL 2290 FWL | BONE SPRING | 14941 | 10825 | | | |
| 30-025-34119 | READ & STEVENS INC | PEARL 33 FEDERAL | #001 | Oil | Vertical | Active | 33 | T19S | R34E | N | N-33-195-34E 480 FSL 2310 FWL | N-33-195-34E 480 FSL 2310 FWL | DELAWARE | 10250 | 10250 | | | | |
| 30-025-33516 | READ & STEVENS INC | TRUMAN FEDERAL | #004 | Oil | Vertical | Active | 04 | T20S | R34E | O | O-04-205-34E 990 FSL 2310 FEL | O-04-205-34E 990 FSL 2310 FEL | DELAWARE | 8340 | 8340 | | | | |
| 30-025-02402 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | O | O-33-195-34E 330 FSL 2310 FEL | O-33-195-34E 330 FSL 2310 FEL | YATES-SEVEN RIVERS | 3899 | 3899 | | | | |
| 30-025-34113 | BLACK HILLS GAS RESOURCES, INC. | MALLON 33 FEDERAL | #003 | Oil | Vertical | Plugged, Site Released | 33 | T19S | R34E | J | J-33-195-34E 2080 FSL 2080 FEL | J-33-195-34E 2080 FSL 2080 FEL | BONE SPRING | 7650 | 7650 | | | | |
| 30-025-02413 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #001 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 823 FNL 2103 FEL | B-04-205-34E Lot: 2 | 823 FNL 2103 FEL | YATES-SEVEN RIVERS | 3630 | 3630 | | |
| 30-025-33247 | READ & STEVENS INC | HUDSON FEDERAL | #005 | Oil | Vertical | Active | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 560 FNL 2130 FEL | B-04-205-34E Lot: 2 | 560 FNL 2130 FEL | DELAWARE | 8300 | 8300 | | |
| 30-025-02417 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 660 FNL 1982 FEL | B-04-205-34E Lot: 2 | 660 FNL 1982 FEL | DEVONIAN | 14985 | 14985 | | |
| 30-025-33511 | READ & STEVENS INC | HUDSON FEDERAL | #008 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | G | G-04-205-34E 1980 FNL 1980 FEL | G-04-205-34E 1980 FNL 1980 FEL | DELAWARE | 8288 | 8288 | | | | |
| 30-025-02416 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #004 | Oil | Vertical | Plugged, Site Released | 04 | T20S | R34E | G | G-04-205-34E 1650 FNL 1980 FEL | G-04-205-34E 1650 FNL 1980 FEL | YATES-SEVEN RIVERS | 3781 | 3781 | | | | |
| 30-025-30633 | READ & STEVENS INC | TRUMAN FEDERAL | #002 | Oil | Vertical | Active | 04 | T20S | R34E | J | J-04-205-34E 1650 FSL 1650 FEL | J-04-205-34E 1650 FSL 1650 FEL | DELAWARE | 8285 | 8285 | | | | |
| 30-025-43504 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | B | B-04-205-34E Lot: 2 | 570 FNL 1395 FEL | O-04-205-34E 330 FSL 1670 FEL | BONE SPRING | 14792 | 10825 | | | |
| 30-025-32971 | READ & STEVENS INC | HUDSON FEDERAL | #002 | Oil | Vertical | Active | 04 | T20S | R34E | A | A-04-205-34E Lot: 1 | 990 FNL 990 FEL | A-04-205-34E Lot: 1 | 990 FNL 990 FEL | DELAWARE | 8380 | 8380 | | |
| 30-025-34481 | READ & STEVENS INC | PEARL 33 FEDERAL | #002 | Oil | Vertical | Cancelled Apd | 33 | T19S | R34E | P | P-33-195-34E 990 FSL 990 FEL | P-33-195-34E 990 FSL 990 FEL | BONE SPRING | 10400 | 10400 | | | | |
| 30-025-32819 | READ & STEVENS INC | HUDSON FEDERAL | #001 | Oil | Vertical | Active | 04 | T20S | R34E | H | H-04-205-34E 1980 FNL 660 FEL | H-04-205-34E 1980 FNL 660 FEL | DELAWARE | 13750 | 13750 | | | | |
| 30-025-43511 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #001H | Oil | Horizontal | Cancelled Apd | 04 | T20S | R34E | A | A-04-205-34E Lot: 1 | 335 FNL 350 FEL | P-04-205-34E 330 FSL 350 FEL | BONE SPRING | 15030 | 10831 | | | |

VI.

Form 9-831a
(Feb. 1961)

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

| | | | |
|--|--|---|--|
| | | X | |
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(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office LA B. CRUCES

Lease No. 065607

Unit B

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15,, 19 63

Pure Federal "C"
Well No. 1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

NW NE Sec. 4 (1/4 Sec. and Sec. No.) 20S (Twp.) 14E (Range) NMPM (Meridian)

Wildcat (Field) Lea (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 12,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sack plug cement at 4083-3983 and 10 sack cement plug at 20' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer

Form 9-331a
(Feb. 1961)

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

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces

Lease No. 063607

Unit E

APPROVED
JUL 22 1963
A. H. BROWN
DISTRICT ENGINEER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MAY 23 1963

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 1963

Pure Federal "C"
Well No. #1 is located 660 ft. from N line and 1982 ft. from E line of sec. 4

N7 NE Sec. 4
(1/4 Sec. and Sec. No.) 20S 34E MTM
(Twp.) (Range) (Meridian)
Wildcat Lua New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 12,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sacks plug cement at 4083-3983 and 10 sacks cement plug at 29' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward B. Hudson
Address 302 Carper Building
Artesia, New Mexico
By Ralph L Gray
Title Consulting Engineer

Form 9-381a
(Feb. 1961)

APPROVED 1963 JUL 23

(SUBMIT IN TRIPPLICATE)

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

Land Office LAN CRUCES

Lease No. 065607

Unit 3

| | | |
|--|-------------------------------------|-------------|
| | <input checked="" type="checkbox"/> | JUL 17 1963 |
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| | | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

J. L. GORDON
DISTRICT ENGINEER

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15,, 19 63

Pure Federal "C"
Well No. #1 is located 660 ft. from [N] line and 1942 ft. from [E] line of sec. 4

NW NE Sec. 4 203 34E N11M
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baber bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892'-920' with 2 1/2" hat shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. F3IP - 6875 FFP - 6153.
60 min. ISIP - 6938 IPF - - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,500'. Squeeze below with 150 sacks of sic-set cement. Place cement plugs at 4083-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer.

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

Form 9-331a
(Feb. 1961)

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces
Lease No. 065607
Unit B

| | | | |
|--|--|---|--|
| | | X | |
| | | | |
| | | | |
| | | | |

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 19 63

Well No. 1 is located 660 ft. from N line and 1982 ft. from E line of sec 4

NW NE Sec. 4 20S 34E NMPM
(¼ Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baker bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892-920 with 2 jet shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. PSIP - 6875 FFP - 6153.
60 min. ISIP - 6938 IFP - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,500'. Squeeze below with 150 sacks of slo-set cement. Place cement plugs at 4083-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer.

APPROVED N. M. O. C. C. COPY

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

Form 9-331a (Feb. 1951)

APR 2 1963

(SUBMIT IN TRIPLICATE)

Land Office Las Cruces

Lease No. 065607

Unit R

E. W. STANDLEY DISTRICT ENGINEER

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

APR 2 1963

| | | | |
|--|--|---|--|
| | | X | |
| | | | |
| | | | |
| | | | |

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

April 1, 1963

Well No. #1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

NW NE Sec. 4 20S 34E MPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

It is proposed to re-enter this hole which was plugged and abandoned Aug. 21, 1959. The well was previously known as the Pure Oil Company - Federal "C" #1.

We will drill out all cement plugs above the plug at 13,645'. The Morrow Zone at about 12,890 to 12,920 will then be perforated and tested. If a commercial well is indicated, we will file a final plan to complete well at that time.

RECEIVED APR 1 1963 U. S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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

Company William A. & Edward R. Hudson, et al

Address 302 Carper Building

Artesia, New Mexico

By Rayne L Gray

Title Consulting Engineer.

Drilled to 14,985'. Plugged back from 14,985' to 14,985' with 78 sacks cement in open hole from 14,985' to 14,985' and bottom of 7" OD casing to 13,960' to 13,960'.

Perforated 7" casing from 13,741' with 4 shots per foot, attempted to acidize with 500 gals mud acid, packer failed; acidized with 500 gals mud acid with packer set at 13,655', packer leaking. Swabbed lead water. Acidized with 500 gals mud acid with packer set at 13,646'.

Plugged back in 7" casing from 13,770' to 13,645' with 30 sacks cement, perforated 7" casing from 12,572' to 12,586' with 4 shots per foot. Acidized with 500 gals mud acid.

Plugged and Abandoned: Placed cement plug in 7" casing and over perforations from 12,572' to 12,586' with 12 sacks cement from 12,600' to 12,550'. Shot 7" casing off at 4029', pulled 123 joints, approximately 4000'. Placed cement plug in 7" casing from 6530' to 6470' with 12 sacks cement; from 4220' to 4100' with 24 sacks cement; in 7" and 9-5/8" casing from 4040' to 3940' with 40 sacks; in 9-5/8" casing 20' to surface with 8 sacks cement, with heavy mud between plugs. Welded 1/2" steel plate on top of casing with 4" pipe marker extending 4' above surface.

ment plugs as follows:
cement in open hole

Form 9-380

TO O. C. C.

HOBBS

Bureau No. 42-R355.4
Ap. expires 12-31-60.

U. S. LAND OFFICE Santa Fe, N. Mex.

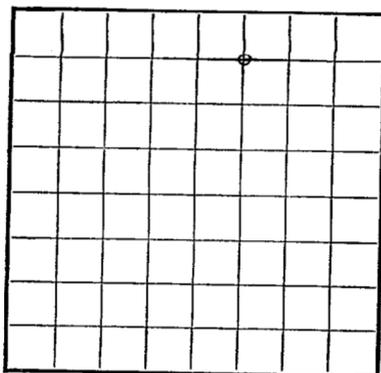
HOBBS OFFICE 080
SERIAL NUMBER LC 065607

LEASE OR PERMIT TO PROSPECT 108507

1958 SEP 22 AM 10:36
UNITED STATES

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SEP 3 1959



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company The Pure Oil Company Address P.O. Box 2107, Fort Worth, Texas
 Lessor or Tract Federal "C" Field Wildcat State New Mexico
 Well No. 1 Sec. 4 T. 20S R. 34-E Meridian NMPM County Lea
 Location 660 ft. [N] of N. Line and 1982 ft. [E] of E. Line of Section 4 Elevation 3646' SCF
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed J. L. Suttle Title Chief Clerk

Date August 26, 1959

The summary on this page is for the condition of the well at above date.

Commenced drilling December 27, 1958 Finished drilling July 16, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 13697' to 13741' G No. 4, from _____ to _____
 No. 2, from 12572' to 12586' G No. 5, from _____ to _____
 No. 3, from 3720' to 3850' No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
 No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

| Size casing | Weight per foot | Threads per inch | Make | Amount | Kind of shoe | Cut and pulled from | Perforated | | Purpose |
|-------------|-----------------|------------------|-------|--------|--------------|---------------------|------------|--------|-----------|
| | | | | | | | From- | To- | |
| 13-3/8" OD | 44 | 8 | Natl. | 13915' | Baker | | 13697' | 13741' | See below |
| 9-5/8" OD | 28 | 8 | Natl. | | | | 12572' | 12586' | |
| 7" OD | 32, 29, 26 | 8R & RT | | | | | | | |

MUDDING AND CEMENTING RECORD

| Size casing | Where set | Number sacks of cement | Method used | Mud gravity | Amount of mud used |
|-------------|-----------|--|-------------|---------------|--|
| 13-3/8" OD | 499' | 525 | Pump & Plug | *sacks cement | neat 1st stage, 2400 cu. ft. |
| 9-5/8" OD | 4801' | 300 cu. ft. 75% cement 25% Stratacrete & 200 * | " " | " " | ft. 50% cement & 50% Dismix 2nd stage. |
| 7" OD | 13913' | 510 | " " | " " | |

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
 Adapters—Material _____ Size _____

SHOOTING RECORD

| Size | Shell used | Explosive used | Quantity | Date | Depth shot | Depth cleaned out |
|------|------------|----------------|----------|------|------------|-------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |

TOOLS USED

Rotary tools were used from 0 feet to 1495 feet, and from _____ feet to _____ feet
 Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

_____ 19____
 Put to producing August 20, 1959
 The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____
 If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
 Rock pressure, lbs. per sq. in. _____

EMPLOYEES

J. W. Svarett, Driller L. S. Strother, Driller
M. Blain, Driller _____, Driller

FORMATION RECORD

| FROM- | TO- | TOTAL FEET | FORMATION |
|-------|------|------------|---------------------|
| 0 | 6 | 6 | SCF - Bottom Cellar |
| 6 | 45 | 39 | Caliche |
| 45 | 320 | 275 | Red Rock |
| 320 | 1023 | 703 | Red Bed |
| 1023 | 1380 | 357 | Red Rock & gypsum |
| 1380 | 1680 | 300 | Redbed |
| 1680 | 2025 | 345 | Anhydrite & gypsum |
| 2025 | 2370 | 345 | Anhydrite & salt |
| 2370 | 2714 | 344 | Anhydrite & gypsum |
| 2714 | 3237 | 523 | Anhydrite & salt |
| 3237 | 3892 | 655 | Anhydrite & lime |
| 3892 | 3944 | 52 | Lime |
| 3944 | 4076 | 132 | Lime & anhydrite |
| 4076 | 4217 | 141 | Lime |
| 4217 | 4234 | 17 | Lime & anhydrite |
| 4234 | 4292 | 58 | Lime |
| 4292 | 4318 | 26 | Lime & anhydrite |
| 4318 | 5710 | 1392 | Lime |
| 5710 | 5780 | 70 | Sand & lime |
| 5780 | 5986 | 206 | Lime |
| 5986 | 5996 | 10 | Sand |
| 5996 | 6190 | 194 | Lime & Sand |
| 6190 | 6265 | 75 | Lime, sand & shale |
| 6265 | 7707 | 1442 | Lime & sand |
| 7707 | 7775 | 68 | Lime |
| 7775 | 7969 | 194 | Lime & sand |

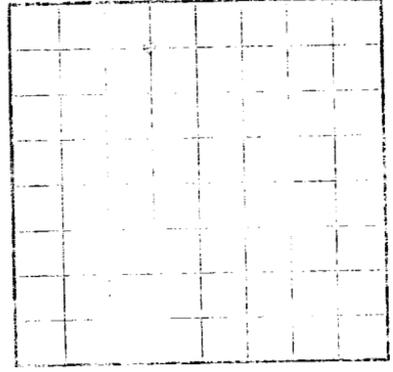
FORMATION RECORD—Continued

16-48004-4

LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES



LOCATE WELL LOCALITY

Form G-550

Company Name: _____
 Location: _____
 State: _____
 County: _____
 Township: _____
 Range: _____
 Section: _____

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.
 Signed: _____
 Date: _____

The summary on this page is for the condition of the well at above date.
 Commenced drilling _____
 Finished drilling _____

OIL OR GAS SANDS OR ZONES
 (Denote gas by G)
 No. 1, from _____ to _____
 No. 2, from _____ to _____
 No. 3, from _____ to _____

IMPORTANT WATER SANDS
 No. 1, from _____ to _____
 No. 2, from _____ to _____

CASING RECORD

| Size casing | Weight per foot | Length | Make | Amount | Kind of shoe | Cut and pulled from | Purposes |
|-------------|-----------------|--------|------|--------|--------------|---------------------|----------|
| | | | | | | | |

HISTORY OF OIL OR GAS WELL
 It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was changed or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or balling.

MUDDING AND CEMENTING RECORD

| Size casing | Weight per foot | Length | Make | Amount | Kind of shoe | Cut and pulled from | Purposes |
|-------------|-----------------|--------|------|--------|--------------|---------------------|----------|
| | | | | | | | |

PLUGS AND ADAPTERS
 Adapter—Material _____
 Having plug—Material _____

SHOOTING RECORD

| Size | Shell used | Explosive used | Quantity | Date | Depth shot | Effects observed |
|------|------------|----------------|----------|------|------------|------------------|
| | | | | | | |

TOOLS USED
 Rotary tools were used from _____ feet to _____ feet and from _____ feet to _____ feet.
 Cable tools were used from _____ feet to _____ feet.

DATES
 The production for the first 24 hours was _____ barrels of fluid of which _____ was oil.
 It gas well, on the first 24 hours _____ gallons gasoline per 1,000 cu. ft. of gas.
 Rock pressure, lbs. per sq. in. _____

EMPLOYEES
 Driller _____
 Driller _____

FORMATION RECORD

| FORMATION | TOTAL FEET | TO | FROM |
|-------------|------------|-------|------|
| Shale | 0 | 0 | 0 |
| Clay shale | 20 | 20 | 0 |
| Red shale | 100 | 100 | 0 |
| Dark shale | 200 | 200 | 0 |
| Light shale | 300 | 300 | 0 |
| Dark shale | 400 | 400 | 0 |
| Light shale | 500 | 500 | 0 |
| Dark shale | 600 | 600 | 0 |
| Light shale | 700 | 700 | 0 |
| Dark shale | 800 | 800 | 0 |
| Light shale | 900 | 900 | 0 |
| Dark shale | 1000 | 1000 | 0 |
| Light shale | 1100 | 1100 | 0 |
| Dark shale | 1200 | 1200 | 0 |
| Light shale | 1300 | 1300 | 0 |
| Dark shale | 1400 | 1400 | 0 |
| Light shale | 1500 | 1500 | 0 |
| Dark shale | 1600 | 1600 | 0 |
| Light shale | 1700 | 1700 | 0 |
| Dark shale | 1800 | 1800 | 0 |
| Light shale | 1900 | 1900 | 0 |
| Dark shale | 2000 | 2000 | 0 |
| Light shale | 2100 | 2100 | 0 |
| Dark shale | 2200 | 2200 | 0 |
| Light shale | 2300 | 2300 | 0 |
| Dark shale | 2400 | 2400 | 0 |
| Light shale | 2500 | 2500 | 0 |
| Dark shale | 2600 | 2600 | 0 |
| Light shale | 2700 | 2700 | 0 |
| Dark shale | 2800 | 2800 | 0 |
| Light shale | 2900 | 2900 | 0 |
| Dark shale | 3000 | 3000 | 0 |
| Light shale | 3100 | 3100 | 0 |
| Dark shale | 3200 | 3200 | 0 |
| Light shale | 3300 | 3300 | 0 |
| Dark shale | 3400 | 3400 | 0 |
| Light shale | 3500 | 3500 | 0 |
| Dark shale | 3600 | 3600 | 0 |
| Light shale | 3700 | 3700 | 0 |
| Dark shale | 3800 | 3800 | 0 |
| Light shale | 3900 | 3900 | 0 |
| Dark shale | 4000 | 4000 | 0 |
| Light shale | 4100 | 4100 | 0 |
| Dark shale | 4200 | 4200 | 0 |
| Light shale | 4300 | 4300 | 0 |
| Dark shale | 4400 | 4400 | 0 |
| Light shale | 4500 | 4500 | 0 |
| Dark shale | 4600 | 4600 | 0 |
| Light shale | 4700 | 4700 | 0 |
| Dark shale | 4800 | 4800 | 0 |
| Light shale | 4900 | 4900 | 0 |
| Dark shale | 5000 | 5000 | 0 |
| Light shale | 5100 | 5100 | 0 |
| Dark shale | 5200 | 5200 | 0 |
| Light shale | 5300 | 5300 | 0 |
| Dark shale | 5400 | 5400 | 0 |
| Light shale | 5500 | 5500 | 0 |
| Dark shale | 5600 | 5600 | 0 |
| Light shale | 5700 | 5700 | 0 |
| Dark shale | 5800 | 5800 | 0 |
| Light shale | 5900 | 5900 | 0 |
| Dark shale | 6000 | 6000 | 0 |
| Light shale | 6100 | 6100 | 0 |
| Dark shale | 6200 | 6200 | 0 |
| Light shale | 6300 | 6300 | 0 |
| Dark shale | 6400 | 6400 | 0 |
| Light shale | 6500 | 6500 | 0 |
| Dark shale | 6600 | 6600 | 0 |
| Light shale | 6700 | 6700 | 0 |
| Dark shale | 6800 | 6800 | 0 |
| Light shale | 6900 | 6900 | 0 |
| Dark shale | 7000 | 7000 | 0 |
| Light shale | 7100 | 7100 | 0 |
| Dark shale | 7200 | 7200 | 0 |
| Light shale | 7300 | 7300 | 0 |
| Dark shale | 7400 | 7400 | 0 |
| Light shale | 7500 | 7500 | 0 |
| Dark shale | 7600 | 7600 | 0 |
| Light shale | 7700 | 7700 | 0 |
| Dark shale | 7800 | 7800 | 0 |
| Light shale | 7900 | 7900 | 0 |
| Dark shale | 8000 | 8000 | 0 |
| Light shale | 8100 | 8100 | 0 |
| Dark shale | 8200 | 8200 | 0 |
| Light shale | 8300 | 8300 | 0 |
| Dark shale | 8400 | 8400 | 0 |
| Light shale | 8500 | 8500 | 0 |
| Dark shale | 8600 | 8600 | 0 |
| Light shale | 8700 | 8700 | 0 |
| Dark shale | 8800 | 8800 | 0 |
| Light shale | 8900 | 8900 | 0 |
| Dark shale | 9000 | 9000 | 0 |
| Light shale | 9100 | 9100 | 0 |
| Dark shale | 9200 | 9200 | 0 |
| Light shale | 9300 | 9300 | 0 |
| Dark shale | 9400 | 9400 | 0 |
| Light shale | 9500 | 9500 | 0 |
| Dark shale | 9600 | 9600 | 0 |
| Light shale | 9700 | 9700 | 0 |
| Dark shale | 9800 | 9800 | 0 |
| Light shale | 9900 | 9900 | 0 |
| Dark shale | 10000 | 10000 | 0 |

DRILL STEM TESTS:

- DST #1: From 10,750' to 10,820', 1" x 5/8" chokes, tool open 3 hours, weak air blow throughout the test. Recovered 840' slightly gas cut mud and 90' very slightly oil and gas cut mud, no formation water. 30 minute initial shut in pressure 95#, flowing pressure initial 164#, final 329#, 1 hour final shut in pressure 400#, hydrostatic pressure 5219#, bottom hole temperature 146 deg.
- DST #2: Pennsylvanian from 12,566' to 12,574', 5/8" bottom hole choke, bottom 2500' drill pipe charged with nitrogen to a pressure of 1000 Psi and adjustable surface choke. opened tool, tool plugged immediately. Pulled out of hole, bled down nitrogen in bottom 2500' drill pipe to 100 psi at which pressure gas showed. Recovered 290' gas cut mud. Hydrostatic pressure 7460#.
- DST #3: From 12,566' to 12,575', 5/8" bottom choke, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with nitrogen to a pressure of 1000 psi. Opened tool, nitrogen to surface in 7 minutes, gas to surface in 60 minutes, tool open 1 hour 15 minutes and packer failed. Measured gas for 15 minutes, maximum rate 1,250 MCF/D and steadily increasing, 3/4" choke, drill pipe pressure 75#. Pulled tool, 1000 psi below nitrogen valve. 5 barrels condensate in drill pipe below valve and estimated 12 barrels gas cut drilling mud below condensate. 30 minute initial shut in pressure 6760#, flowing pressure initial 1380#, final 1600#. Hydrostatic pressure 7260#, bottom hole temperature 230 deg.
- DST #4: From 12,573' to 12,600', 5/8" bottom, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with Nitrogen to a pressure of 1000#, tool open 3 hours, air to surface in 15 minutes, gas to surface in 55 minutes at rate of 490 MCF/D at 70# tubing pressure, 3/4" choke. Recovered 2 barrels condensate, 1-1/2 barrels gas and condensate cut mud, 180' gas and slightly condensate and slightly salty water cut mud below circulating sub. 30 minute initial shut in pressure 6820#, flowing pressure initial 1180#, final 1420#, 1 hour final shut in pressure 6040#, hydrostatic pressure 7260#.
- DST #5: From 13,075' to 13,120', 5/8" x 1" chokes, 3000' nitrogen blanket charged to pressure of 1000 psi. Tool open 2-1/2 hours, no air blow to surface. Waited 1-1/2 hours, closed and reopened tool, waited 1 hour, no air blow to surface. Bled off nitrogen pressure, recovered very small amount of gas after bleeding nitrogen pressure to 0#, 67' of gas cut mud, no oil or water. 30 minute initial shut in pressure 700# increasing, flowing pressure initial 1160#, final 1160#, 1 hour final shut in pressure 3600# increasing. Hydrostatic pressure 7980#, bottom hole temperature 232 deg.
- DST #6: From 13,665' to 13,750', 5/8" x 1/4" chokes, 4200' of nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 1300' gas cut drilling mud, hydrostatic pressure 10,000#, bottom hole temperature 223 deg.
- DST #7: From 13,640' to 13,751' with 5/8" x 1/4" chokes with 4200' nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 630' heavily gas cut mud, hydrostatic pressure 10,000#. Bottom hole temperature 160 - 170 deg.
- DST #8: Attempted test in Mississippian from 14,060' to 14,185', 5/8" x 1" chokes, no water blanket. Plug in circulating sub at 13,980' failed when tool opened, pulled out of hole, left 1-1/4" packer rubbers in hole.
- DST #9: Attempted test in Mississippian from 13,900' to 14,185', packer failed. Recovered 2070' drilling mud, no test.
- DST #10: Mississippian from 13,900' to 14,185', 5/8" x 1" chokes, no water blanket, tool open 4 hours, had strong air blow when tool opened, gas to surface in 8 minutes. First hour flowed at rate of 32,000 cubic feet per day, after 80 minutes, flowed at rate of 25,000 cubic feet per day. At end of 4 hour test rate of 35,500 cubic feet per day. Recovered 532' heavily gas cut drilling mud, no show of oil or formation water. 30 minute initial shut in pressure 6070#, flowing pressure initial 1 hour final shut in pressure 255#, hydrostatic pressure 6275# to 6260#, bottom hole temperature 188 deg.

DRILL STEM TESTS: (Cont'd)

- DST #11: Devonian 14,599' to 14,622', 5/8 x 1" chokes, no water blanket, tool open 3 hours, gas to surface in 34 minutes. After 2 hours gas volume 4 MCF/D, decreased to very weak blow at end of test. Recovered 10 gallons of free oil, gravity 51 deg at 60 deg. and 1900' of heavily gas cut and slightly oil cut mud, no water. 30 minute initial shut in pressure failed to record. Flowing pressure initial 75#, final 925#, 1 hour final shut in pressure 1025# increasing, hydrostatic pressure 7740#, bottom hole temperature 230 deg.
- DST #12: Devonian 14,620' to 14,672', 5/8" x 1" chokes, no water blanket, tool open 3 hours. Had weak air blow immediately, increased slightly and continued through-out test. Recovered 200' of slightly gas cut mud with brackish taste and 1250' of brackish water. 30 minute initial shut in pressure 6210#, flowing pressure initial 170#, final 650#, 2 hour final shut in pressure 6140# stabilized. Hydrostatic pressure 7695# - 7605#, bottom hole temperature 206 deg.
- DST #13: From 14,625' to 14,973', took 30 minute initial shut in pressure, opened tool and packers failed. Pulled test tool. 30-minute initial shut in pressure 6375#, hydrostatic pressure 8180# - 8070#. Reran test tool with Hookwall packer set at 13,900'. Tool open 7 hours, opened tool with good air blow to surface, gas to surface in 30 minutes, maximum rate of 4 MCF/D, decreased to too small to measure at end of test. Pulled test tool, recovered 11,454' of heavily gas cut mud with brackish taste, no water or oil. Flowing pressure initial 430#, final 5830#, 2-1/2 hour final shut in pressure 5940#, hydrostatic pressure 7495# - 7530#.

FEDERAL "C" #1

| FROM | TO | TOTAL FEET | FORMATION | FROM | TO | TOTAL FEET | FORMATION |
|-------|-------|------------|----------------------------|-------|-------|------------|---------------------------|
| 7969 | 8928 | 959 | Lime & shale | 12233 | 12318 | 85 | Lime & chert |
| 8928 | 8942 | 14 | Lime | 12318 | 12411 | 93 | Lime & shale |
| 8942 | 8967 | 25 | Lime, chert & shale | 12411 | 12461 | 50 | Lime, shale & sand |
| 8967 | 9001 | 34 | Lime & chert | 12461 | 12487 | 26 | Lime & shale |
| 9001 | 9209 | 208 | Lime, chert & shale | 12487 | 12558 | 71 | Lime, shale & sand |
| 9209 | 9256 | 47 | Lime & shale | 12558 | 12740 | 182 | Lime & shale |
| 9256 | 9272 | 16 | Lime | 12740 | 12800 | 60 | Lime |
| 9272 | 9289 | 17 | Lime, chert & shale | 12800 | 12812 | 12 | Lime, shale & chert |
| 9289 | 9300 | 11 | Lime & chert | 12812 | 12879 | 67 | Lime & chert |
| 9300 | 9342 | 42 | Lime, shale & chert | 12879 | 12890 | 11 | Lime |
| 9342 | 9354 | 12 | Shale & chert | 12890 | 12942 | 52 | Lime & shale |
| 9354 | 9407 | 53 | Shale, chert & lime | 12942 | 12943 | 1 | Shale |
| 9407 | 9428 | 21 | Shale, sand & chert | 12943 | 12955 | 12 | Lime, shale & sand |
| 9428 | 9562 | 134 | Shale & sand | 12955 | 12964 | 9 | Lime, shale, sand & chert |
| 9562 | 9580 | 18 | Lime, chert & sand & shale | 12964 | 13042 | 78 | Lime, shale & sand |
| 9580 | 9679 | 99 | Shale, sand & chert | 13042 | 13052 | 10 | Lime & shale |
| 9679 | 9696 | 17 | Lime & shale | 13052 | 13079 | 27 | Lime, sand & shale |
| 9696 | 9711 | 15 | Shale, sand & chert | 13079 | 13136 | 57 | Lime, shale & sand |
| 9711 | 9733 | 22 | Shale & sand | 13136 | 13140 | 4 | Sand, lime & chert |
| 9733 | 9757 | 24 | Lime, shale & chert | 13140 | 13163 | 23 | Lime, sand & shale |
| 9757 | 9806 | 49 | Shale, sand & chert | 13163 | 13250 | 87 | Sand & shale |
| 9806 | 9822 | 16 | Lime & shale | 13250 | 13263 | 13 | Shale, sand & lime |
| 9822 | 9856 | 34 | Shale & sand | 13263 | 13308 | 45 | Shale & sand |
| 9856 | 9895 | 39 | Lime & shale | 13308 | 13348 | 40 | Shale |
| 9895 | 9933 | 38 | Shale | 13348 | 13365 | 17 | Shale & lime |
| 9933 | 9961 | 28 | Shale, sand & lime | 13365 | 13389 | 24 | Shale, lime & sand |
| 9961 | 10008 | 47 | Sand & shale | 13389 | 13413 | 24 | Lime, sand & shale |
| 10008 | 10089 | 81 | Sand, shale & lime | 13413 | 13574 | 161 | Lime & shale |
| 10089 | 10103 | 14 | Lime, shale, dolomite | 13574 | 13642 | 68 | Shale |
| 10103 | 10125 | 22 | Lime, sand & shale | 13642 | 13680 | 38 | Shale & lime |
| 10125 | 10137 | 12 | Lime & sand | 13680 | 13700 | 20 | Shale |
| 10137 | 10153 | 16 | Lime, shale, chert & sand | 13700 | 13728 | 28 | Shale & lime |
| 10153 | 10178 | 25 | Lime, sand & shale | 13728 | 13751 | 23 | Shale & sand |
| 10178 | 10200 | 22 | Lime & sand | 13751 | 13800 | 49 | Shale & lime |
| 10200 | 10222 | 22 | Lime, sand, shale & chert | 13800 | 13838 | 38 | Lime & shale |
| 10222 | 10247 | 25 | Lime, shale & chert | 13838 | 13875 | 37 | Lime & chert |
| 10247 | 10305 | 58 | Lime & sand | 13875 | 13887 | 12 | Lime |
| 10305 | 10330 | 25 | Lime, shale & sand | 13887 | 13915 | 28 | Lime & chert |
| 10330 | 10354 | 24 | Lime & sand | 13915 | 13926 | 11 | Lime |
| 10354 | 10365 | 11 | Lime, sand & shale | 13926 | 14271 | 345 | Lime & chert |
| 10365 | 10396 | 31 | Lime & shale | 14271 | 14276 | 5 | Lime |
| 10396 | 10462 | 66 | Lime, shale & sand | 14276 | 14304 | 28 | Lime & chert |
| 10462 | 10483 | 21 | Lime & shale | 14304 | 14310 | 6 | Lime |
| 10483 | 10516 | 33 | Lime, shale & chert | 14310 | 14327 | 17 | Lime & shale |
| 10516 | 10537 | 21 | Lime & shale | 14327 | 14335 | 8 | Lime & chert |
| 10537 | 10617 | 80 | Lime, shale & sand | 14335 | 14339 | 4 | Lime, chert & shale |
| 10617 | 10644 | 27 | Lime & shale | 14339 | 14348 | 9 | Lime & chert |
| 10644 | 10752 | 108 | Lime, shale & sand | 14348 | 14358 | 10 | Lime |
| 10752 | 10820 | 68 | Sand | 14358 | 14367 | 9 | Lime, shale & chert |
| 10820 | 10894 | 74 | Sand, shale & lime | 14367 | 14370 | 3 | Lime & chert |
| 10894 | 10901 | 7 | Shale & lime | 14370 | 14419 | 49 | Lime & shale |
| 10901 | 10947 | 46 | Lime, shale & sand | 14419 | 14438 | 19 | Shale |
| 10947 | 11132 | 185 | Shale | 14438 | 14456 | 18 | Shale & lime |
| 11132 | 11188 | 56 | Shale & lime | 14456 | 14561 | 105 | Shale |
| 11188 | 11198 | 10 | Shale & chert | 14561 | 14574 | 13 | Lime |
| 11198 | 11218 | 20 | Chert | 14574 | 14582 | 8 | Shale |
| 11218 | 11231 | 13 | Shale, chert & sand | 14582 | 14601 | 19 | Shale & Dolomite |
| 11231 | 11298 | 67 | Shale & chert | 14601 | 14622 | 21 | Dolomite |
| 11298 | 11380 | 82 | Shale, lime & chert | 14622 | 14985 | 363 | Lime |
| 11380 | 11409 | 29 | Shale & lime | | 14985 | | Total Depth |
| 11409 | 11453 | 44 | Lime, shale & chert | 14985 | 13645 | -1340 | PBTD |
| 11453 | 11504 | 51 | Shale & lime | | | | |
| 11504 | 11544 | 40 | Shale | | | | |
| 11544 | 11594 | 50 | Shale & lime | | | | |
| 11594 | 11821 | 227 | Shale | | | | |
| 11821 | 11869 | 48 | Shale & lime | | | | |
| 11869 | 11920 | 51 | Shale | | | | |
| 11920 | 12182 | 262 | Shale & lime | | | | |
| 12182 | 12233 | 51 | Lime, shale & chert | | | | |

DEFLECTION TESTS

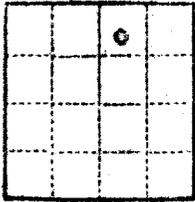
| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

DEFLECTION TESTS

| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

Budget Bureau No. 42-4568.1
Approval expires 12-31-60.

Form D-881a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe, New Mexico
Lease No. LC 66047
Unit HOBBS OFFICE OCC

1959 AUG 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

August 26 19 59

Federal #00

Well No. 2 is located 660 ft. from (N) line and 1982 ft. from (E) line of sec. 4

NW 1/4, NE 1/4
(Of Sec. and Sec. No.)

T-20-S
(Twp.)

R-31-E
(Range)

106PM
(Meridian)

Wildcat
(Field)

Lee
(County or Subdivision)

New Mexico
(State or Territory)

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

DETAILS OF WORK

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

Spudded 17-1/2" hole 12-27-58, ran 499' of 13-3/8" OD casing, cemented w/ 525 sacks, maximum pressure 250#, had cement returns to surface. 12-1/4" hole complete 1-18-59 at 1260', ran 4801' of 9-5/8" OD casing, cemented w/ 2900 sacks, maximum pressure 600#, had cement returns to surface. Tested casing and cement w/ 1000#, held 30 minutes OK. 18 hours WOC.

8-3/4" hole complete 5-22-59 at 13,915', ran 13,915' of 7" OD casing, cemented w/ 510 sacks, maximum pressure 900#, 36 hours WOC, ran temperature survey, indicated top of cement outside 7" casing at 12,090' from surface. Tested casing and cement w/ 1000# for 30 minutes, held OK.

4-3/4" hole completed 7-16-59 at 11,985', placed cement plug in open hole and bottom of 7" casing 11,985' to 13,828' w/ 100 sacks. Perforated 7" casing 13,697'-13,741' w/ 175 jet shots, treated parts 13,697'-13,741' w/ 500 gallons mud acid, placed cement plug in 7" casing 13,770'-13,645' w/ 30 sacks. Perforated 7" casing 12,572'-12,586' w/ 56

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

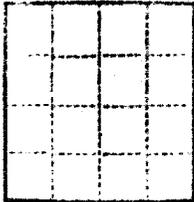
Company The Pure Oil Company

Address Box 671

Midland, Texas

By [Signature]
W. E. Townsend
Chief Clerk

MIN 9-381a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Local Office

Lease No.

NOBBS OFFICE OCC

Unit

NOV 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Federal #C#

19

Well No. 1 is located ft. from N line and ft. from E line of sec.

(Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

(Field)

(County or Subdivision)

(State or Territory)

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

DETAILS OF WORK

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

jet shots, treated perfs 12,572'-12,586' w/ 500 gallon mud acid. Placed cement plug in 7" casing 12,600' to 12,500' with 12 sacks. Shot 7" casing off at 4029', pulled 7" casing, placed cement plug in 7" casing 6530'-5470' w/ 12 sacks, 4220'-4100' w/ 24 sacks, 4040'-3940' w/ 40 sacks, 20' to surface w/ 8 sacks. Welded 1/2" steel plate on top casing with 1" marker extended 4' above surface.

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

Company

Address

By

Title

RECORDS OFFICE (20)
AUG 26 1959

August 26, 1959

United States Department of the Interior
Geological Survey
Box 1896

Albuquerque, New Mexico

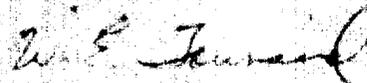
ATTENTION: Mr. T. E. Godfrey, Petroleum Engineer

Dear Sir:

Attached herewith three (3) copies of Form 9-311a "Sundry Notices and Reports on Wells" on The Pure Oil Company's Federal "C" No. 1, Wildcat dry hole drilled in Section 4, Township 20-S, Range 24-S, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY



W. E. Townsend
Chief Clerk

WET:evv

cc: Schaffer
Teague
File
Signal Oil & Gas Co.
Mr. Ray Diemer
801 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Co.
Mr. Wallace
1010 Ft. Worth Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Budget Bureau No. 42-R358.4
Approval expires 12-31-60.

Form 9-831a
(Feb. 1961)

Land Office Santa Fe, N.M.

Lease No. 16-065607

Unit _____

| | | | |
|--|--|---|--|
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(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

| | | | |
|--|----------|--|--|
| NOTICE OF INTENTION TO DRILL | | SUBSEQUENT REPORT OF WATER SHUT-OFF | |
| NOTICE OF INTENTION TO CHANGE PLANS | | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF | | SUBSEQUENT REPORT OF ALTERING CASING | |
| NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL | | SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE | | SUBSEQUENT REPORT OF ABANDONMENT | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING | | SUPPLEMENTARY WELL HISTORY | |
| NOTICE OF INTENTION TO ABANDON WELL Progress report for DST #1 | X | | |

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

March 20, 1959

Federal "C"

Well No. 1 is located 660 ft. from N line and 1982 ft. from E line of sec. 4

NW/4, NE/4

1-20-S

R-31-E

101PM

(1/4 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

Midland

Lee

New Mexico

(Field)

(County or Subdivision)

(State or Territory)

The elevation of the derrick floor above sea level is 3662 ft.

DETAILS OF WORK

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

Drilled 5125' to 11,524' in lime, dolomite, sand, shale and chert.

DST #1 10,750' - 10,820'

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By W. E. Townsend
W. E. Townsend

Title Chief Clerk

HOURS OFFICE OCC

1959 MAR 20 AM 8:11

March 20, 1959

United States Department of the Interior
Geological Survey
Box 1838
Hobbs, New Mexico

ATTENTION: Mr. T. L. Godfrey, Petroleum Engineer

Dear Sir:

Attaching three copies of Form G-331a "Sundry Notices and Reports on Wells" as our progress report on The Pure Oil Company's Federal "C" Well No. 1, located in Section 1, Township 20-S, Range 11-E, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY

W. E. Townsend
Chief Clerk

WET:esr

cc: Mr. W. F. Schafer
Mr. H. G. Teague
File
Signal Oil & Gas Company
Mr. Ray Diemer
801 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Company
Mr. Wallace
1010 Fort Worth National Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

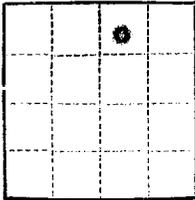
Form 9-331a
(Feb. 1951)

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.

Lease No. 065407

Unit _____



HOOURS OFFICE OCC
**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

1959 JAN 25 AM 7:10

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 23, 1959

Federal # 07
Well No. 1 is located 660 ft. from N line and 1902 ft. from E line of sec. 4

N/4 NE/4 T-20-S R-34-S W1/4
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Midland Lee New Mexico
(Field) (County or Subdivision) (State or Territory)

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

DETAILS OF WORK

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

Drilled 1068'-5125' in dolomite, sand & lime. Ran electric logs to 1792', ran 1801' of 9-5/8" OD casing w/ casing shoe set at 1801' SCF, float collar at 1738', Rouse two stage IW tool set at 3510', cemented 1st stage thru shoe at 1801' with 300 sacks 75% incoer cement, 25% stratocrete w/ 6% gels added and 200 sacks incoer neat cement. Pumped plug to 1738', maximum and final pressure 600#. Opened IW tool at 3510', 2nd stage cemented w/ 2400 sacks 50-50 incoer-diamix w/ 6% gel added, had cement returns to surface 1 1/2 hours WOC. Tested 9-5/8" casing, control equipment and cement with 1000# for 30 minutes, hold OK.

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By W. E. Townsend

Title Chief Clerk

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

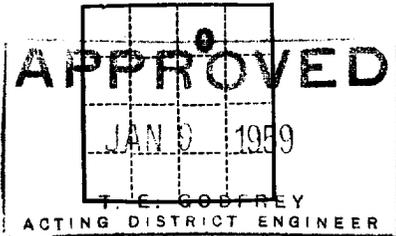
Form 9-331a
(Feb. 1961)

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.

Lease No. L.C. 065607

Unit _____



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 8, 1959

Federal *C*
Well No. 1 is located 660 ft. from N line and 1902 ft. from E line of sec. h
NE/4 NE/4 T-20-S R-31-E MUM
 (1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Lee New Mexican
 (Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3648 ft.

DETAILS OF WORK

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

Spud 12-1/4" hole 6:30 AM 12-27-58, drilled to 505' in red beds, reamed 12-1/4" hole to 17-1/2" from 0' to 505'. Ran 499' of 13-3/8" OD casing with Guide Shoe set at 499' BCF, three sets centralizers installed. Cemented 13-3/8" casing with 525 sacks Portland Heat Cement. Pumped plug to 468', maximum pressure 250#. Had cement returns to surface, 24 hours WOG. Test 13-3/8" casing, control equipment and cement with 1000#, held 30 minutes OK.

Drilled 505' - 468' red beds, anhydrite, salt, dolomite, lime and sand.

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

Company The Pure Oil Company

Address Box 671

Midland, Texas

By [Signature]

Title Chief Clerk

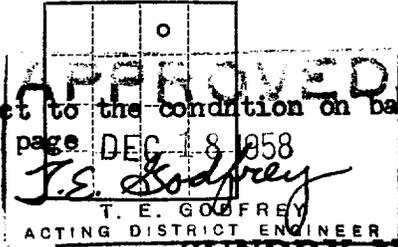
Form 9-331a
(Feb. 1951)

(SUBMIT IN TRIPLICATE)

Land Office San Antonio, Tex.
Lease No. 06507
Unit _____

Subject to the condition on back of this page

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



SUNDRY NOTICES AND REPORTS ON WELLS

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

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

November 11, 1958

Federal # 1
 Well No. 1 is located 640 ft. from [N] line and 1982 ft. from [E] line of sec. 4
14/4 14/4 T-20-N R-36-E 107E
 (1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Illinois Law New Mexico
 (Field) (County or Subdivision) (State or Territory)

The elevation of the ground above sea level is 3648 ft. Arrived at by differential levelling from BM 2421-2425 N.M. 9-56, 1958.
DETAILS OF WORK

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

Casing Program: 420' - 11-3/4" OD 42# 1-40 New Cemented to surface.
2570' - 8-5/8" OD 32# 1-35 New Cemented to surface.
2230' - 6-5/8" OD 24# 1-35 New
2250' - 5 -1/2" OD 20# 1-50 New Cement returned to
4720' - 5-1/2" OD 20# 1-30 New approximately 15,450'
7260' - 5-1/2" OD 17# 1-40 New from surface

Well will be drilled with rotary tools.

Objective log: Deviation at approximately 15,450'.

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

Company The Texas Oil Company

Address P.O. Box 2107

Fort Worth 1, Texas

By T. E. Godfrey

Title Act. District Engineer

Approval is subject to the following condition:

1. That the 5 $\frac{1}{2}$ " casing be cemented with sufficient cement to protect any porous zones below the base of the 8 5/8" casing, as determined by this office from information obtained in drilling of the well.

| | | |
|---------------|--|---------------------------------------|
| 32 | R 34 E 33 Signal U. S. A. N. 89° 52' E. 80 Ch. | 34 |
| Pure State | Signal U. S. A. | H. A. Peterson 11 2 53 U. S. A. |
| 5 | Pure "C" 4 Hudson & Hudson ϕ_2 Total Lease Ac. 802.4 U. S. A. | Signal 3 T 20 S |
| 8 | Pure U. S. A. 9 | Texaco-Seaboard U. S. A. 10 |

I, R. R. Reid, Registered Professional Engineer, do hereby certify that the Location^o as shown hereon was made by actual measurement upon the ground.

Registered Professional Engineer
 State of Texas

RECEIVED
DEC 18 1958
 U. S. GEOLOGICAL SURVEY
 HOBBS, NEW MEXICO

The Pure Oil Co.

FEDERAL "C" LEASE

802.4 Acres
 ON PLAT-SEC. 4, T-20-S- R-34-E, OF THE NEW MEXICO PRINCIPAL MERIDIAN
 LEA COUNTY, NEW MEXICO
 Scale: 4 inches = One Mile

| | | | |
|---|--|------------|--------------|
| THE PURE OIL CO. TEXAS PRODUCING DIVISION PRODUCTION ENGINEERING DEPT. | DES. SUR. DRN. SWMc. TRD. CHK. | SUBMITTED: | DATE 12-5-58 |
| | | APPROVED: | REVISED |

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

Section A.

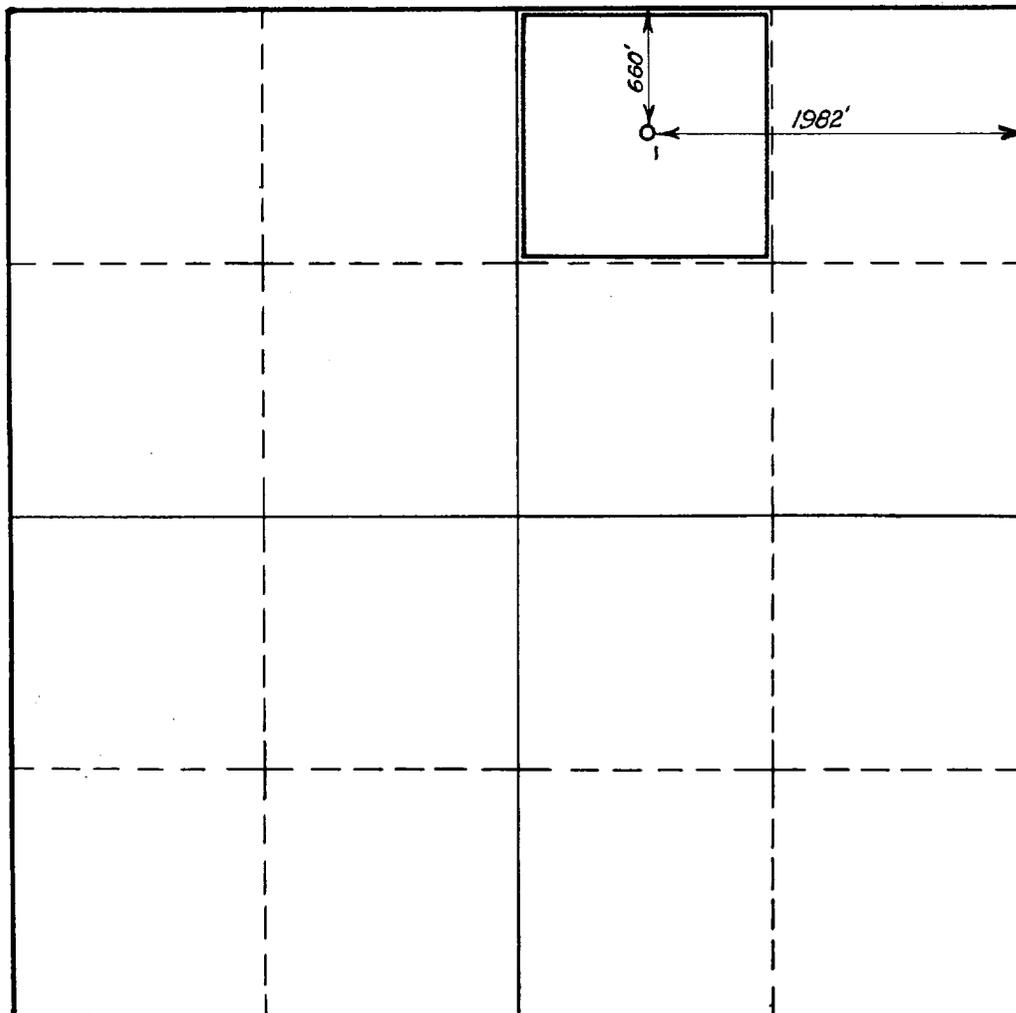
Date December 22, 1958

Operator The Pure Oil Company Lease Federal #00
Well No. 1 Unit Letter B Section 4 Township 20-S Range 36-E NMPM
Located 660 Feet From North Line, 1982 Feet From East Line
County Los G. L. Elevation 3648' Dedicated Acreage 40 Acres
Name of Producing Formation Devonian Pool wildcat

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes _____ No X.
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____. If answer is "yes," Type of Consolidation Joint Operation
3. If the answer to question two is "no," list all the owners and their respective interests below:

| <u>Owner</u> | <u>Land Description</u> |
|--------------|-------------------------|
| | |
| | |
| | |

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

THE PURE OIL COMPANY

(Operator)

L. L. Melton

(Representative)

Box 2107, Fort Worth 1, Texas

Address

This is to certify that the well location shown on the plat in Section B 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 knowledge and belief.

Date Surveyed 12-3-58

R. A. Reed
Registered Professional Engineer and/or Land Surveyor.

Texas

Certificate No. 5093

INSTRUCTIONS FOR COMPLETION:

1. Operator shall furnish and certify to the information called for in Section A.
2. Operator shall outline the dedicated acreage for both oil and gas wells on the plat in Section B.
3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
4. All distances shown on the plat must be from the outer boundaries of Section.
5. If additional space is needed for listing owners and their respective interests as required in question 3, Section A, please use space below

* "Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1953 Comp.)

VI.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1568
August 3, 2015

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, Read & Stevens, Inc. (the "operator") seeks an administrative order for its Pure Federal C SWD Well No. 1 located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objection was received within the required suspense period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Read & Stevens, Inc. (OGRID 18917) is hereby authorized to utilize its Pure Federal C SWD Well No. 1 (API No. 30-025-02417) located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) through an open-hole interval within Devonian or Silurian formations from approximately 14590 feet to approximately 14960 feet. Injection shall occur through internally-coated tubing and a packer set a maximum of 100 feet above the top of the open-hole interval.

This permit is limited as advertised to only the Devonian and Silurian aged rocks and to the depths listed above. It does not permit disposal into deeper formations including the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to that formation.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed in the application and any required modifications of construction as required by the Bureau of Land Management.

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 2 of 3

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2918 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. The Division Director retains the right to require at any time the operator to install and maintain a chart recorder showing casing and tubing pressures during disposal operations.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any disposal well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 3 of 3

abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



DAVID R. CATANACH
Director

DRC/wvjj

cc: Oil Conservation Division – Hobbs District Office
Bureau of Land Management – Carlsbad Field Office
Administrative Application pWVJ1513562666

VI. **Pure Federal "C" #1 Wellbore Schematic**
API # 30-025-02417
660' FNL & 1982' FEL
Sec. 4, T20S, R34E
Lea Co. NM
 Updated: 07/08/2023

Final P&A Date: 05/15/1963

- 13 3/8" Csg Set @ 499' - Cement to Surface
- 9 5/8" Csg Set @ 4801' - Cement to Surface
- 7" Csg Set @ 13913' - TOC @ 12090
- 4 3/4" Open Hole From 13913' - 14985'

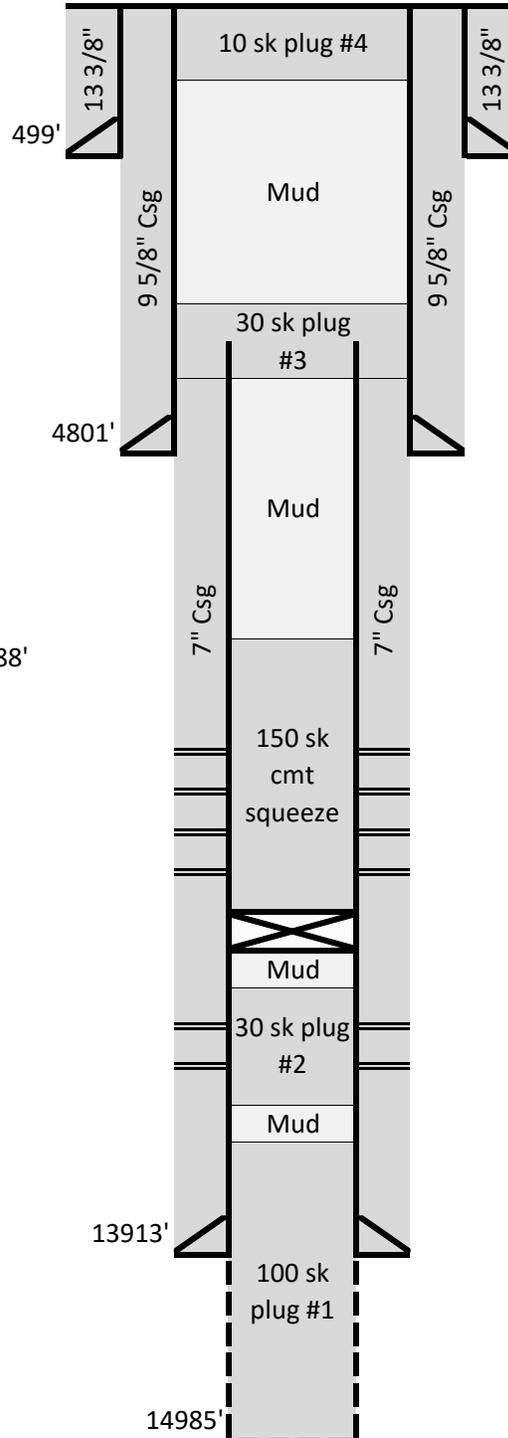
- 10 sk cmt plug from surface to 20'
- 12.2# mud from 20' - 3983'
- 30 sk cmnt plug from 3983' - 4083'
- 7" Csg cut off @ 4029'

- 12.2# mud from 4083' - 12490'
- Set pkr @ 12490' & squeeze 150 sk cmt from 12490' - 12988'

- 7" Csg perforated from 12572' - 12572'
- 7" Csg perforated from 12892' - 12920'

- Bridge Plug Set @ 12988'
- 12.2# mud from 12988' - 13645'
- 30 sk cmt plug #2 from 13645' - 13770'
- 7" Csg perforated from 13697' - 13741'
- 12.2# mud from 13770' - 13828'

- 100 sk cmt plug #1 from 13828' - 14985'





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

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

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

(In feet)

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

*UTM location was derived from PLSS - see Help

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

Average Depth to Water: **702 feet**

Minimum Depth: **270 feet**

Maximum Depth: **1005 feet**

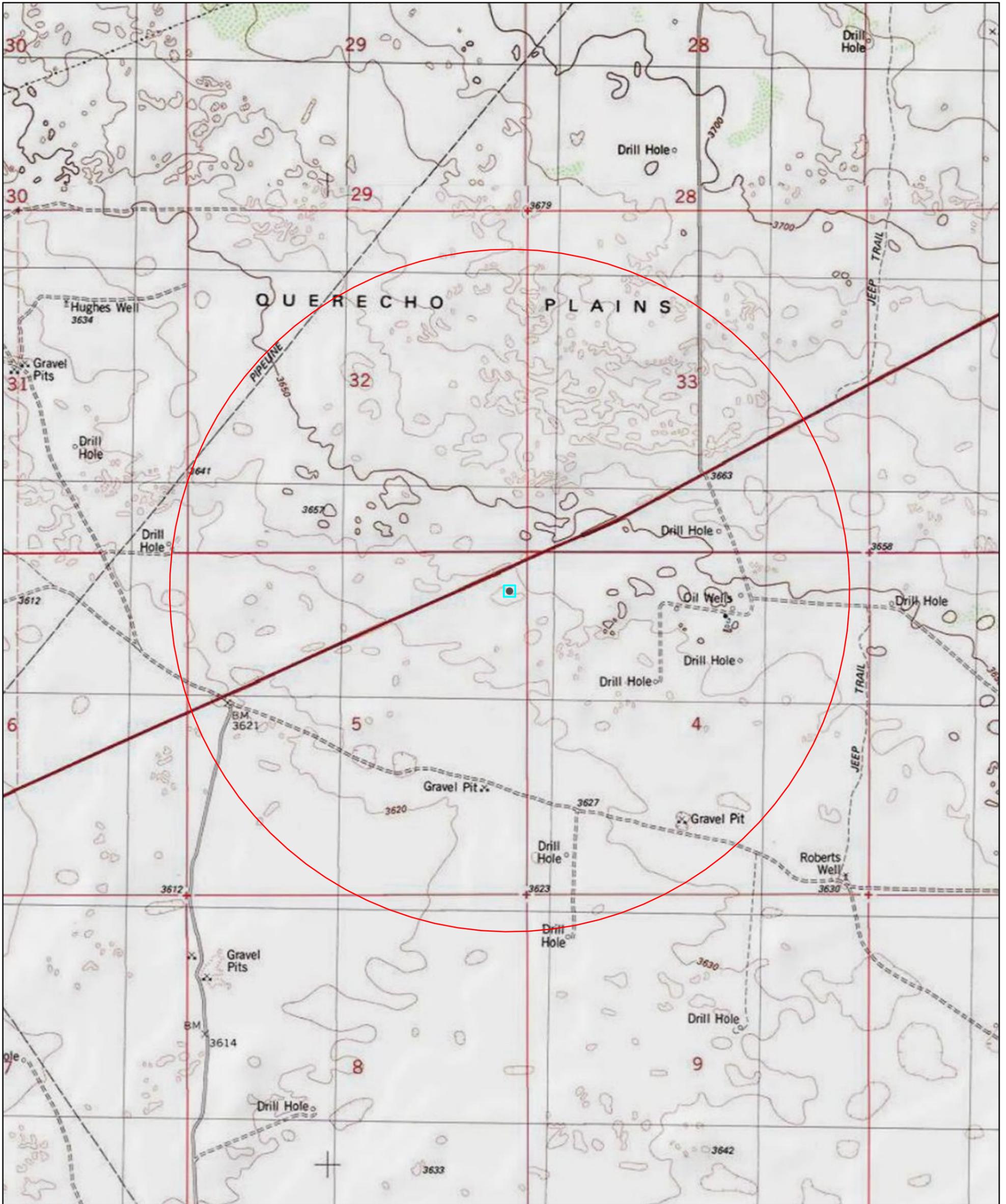
Record Count: 21

PLSS Search:

Township: 20S

Range: 34E

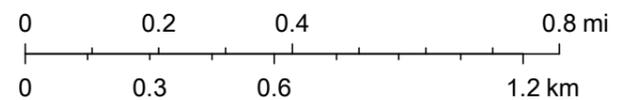
XI. Water Wells Within 1 Mile - Overdue Federal SWD #1



5/23/2023, 6:56:24 PM

 Site Boundaries

1:20,214



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VII (4)

Permian Oilfield Partners, LLC.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 11, T20S, R33E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341°
 W GL 3643', RKB 3673'

| 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.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 11, T20S, R33E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341°
 W GL 3643', RKB 3673'

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

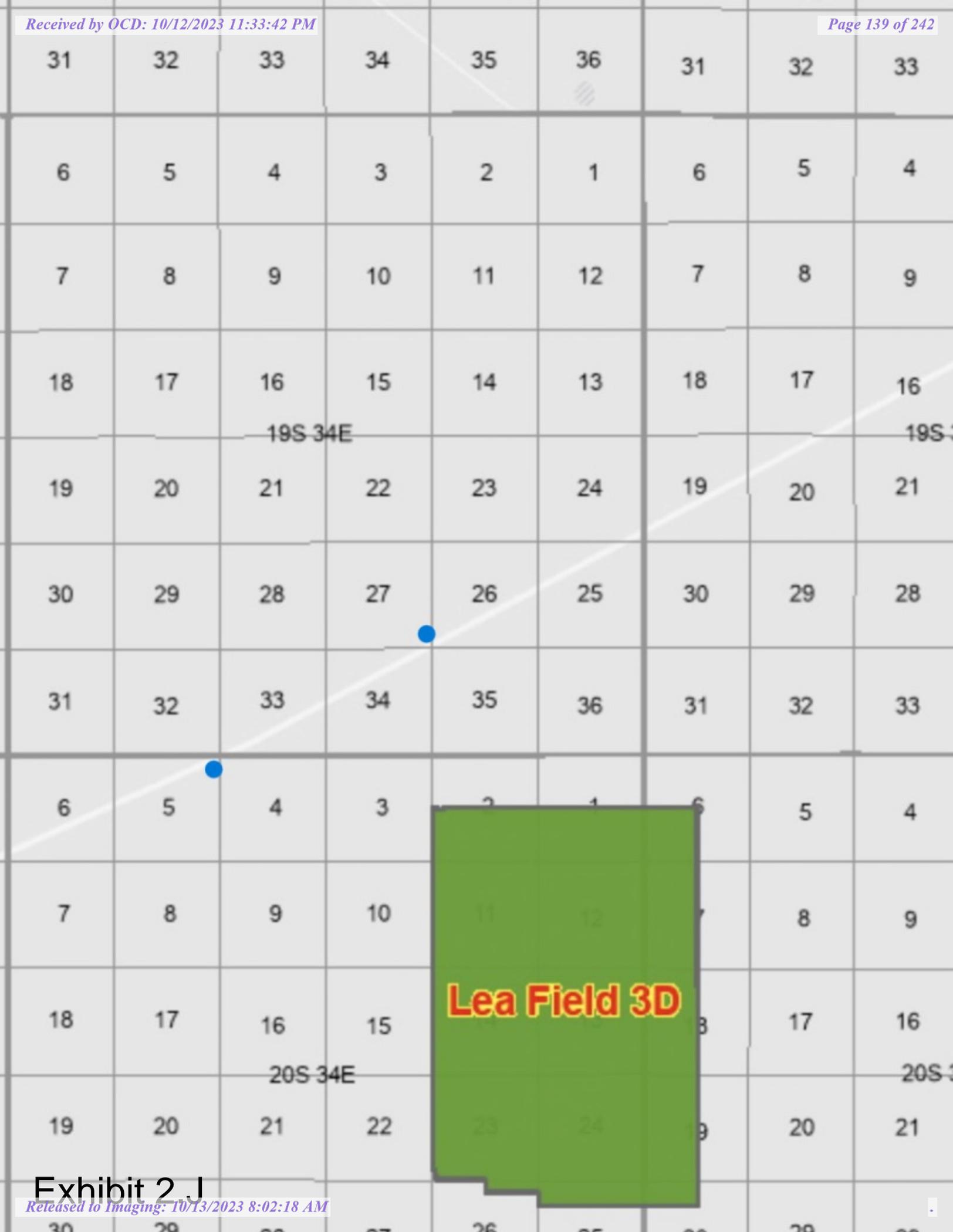


Exhibit 2 J

Tab 3: Direct Written Testimony of Gary Fisher

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

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

**CASE NO. 23807
(OVERDUE)**

DIRECT WRITTEN TESTIMONY OF GARY FISHER

Gary Fisher hereby states and declares as follows:

1. I am over the age of 18, I am the President of Permian Oilfield Partners, LLC (“Permian”), and I have personal knowledge of the matters stated herein.

2. I have worked for Permian since November 2018.

3. I have previously testified before the Oil Conservation Division (“Division”) and my credentials as an expert in geology log analysis and fault slip analysis have been accepted as a matter of record.

4. To briefly reiterate my credentials, I have over 30 years experience in the oil and gas field, including more recently, injection of produced water. I have a degree in mechanical engineering from the University of Southern California. After graduation, I worked for Schlumberger where I did open-hole logging, log analysis, interpretation of geology logs, etc. I was then employed by Numar Corporation (Halliburton) where my responsibilities again included logging and log analysis, geology, and geologic interpretations for customers. After that, I was employed by Core Labs where I was involved in fracture diagnostics, especially as related to hydraulic fracturing and correlation with microseismic. Immediately before joining Permian, I worked for Pioneer Energy Services where I did open-hole log analysis, geology, internal

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

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

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

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

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

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

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

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

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

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

14. Permian proposes to drill the Overdue Federal SWD Well #1 well (the "Well") at a surface location 602' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet.

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

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

17. Second, the thickness of the injection zone is approximately 1,230 feet, which makes it well suited for the volumes and pressure Permian is requesting. The Devonian consists of dolomitic and limestone carbonates & chert and the Silurian consists of Fusselman dolomite.

18. Injection zone porosities are expected to range from 0% to a high of 10%, with the higher ranges being secondary porosity in the form of vugs & fractures due to weathering effects, with occasional interbedded shaly intervals.

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

20. Third, there are very strong upper and lower confining zones. The Woodford Shale is a very strong upper bound. The lower confining zones include the Upper Ordovician Montoya, which is very tight lined. This proposed well will TD above the top of the Montoya, and will not inject fluids into the Montoya itself, in order to provide a sufficient barrier to preclude fluid injection into the Middle Ordovician Simpson, the Lower Ordovician Ellenburger, the Cambrian, and the PreCambrian below. Below the Montoya is the Simpson, which is mostly shale, and will act as an additional barrier to keep injected fluids from penetrating the Cambrian or Bliss or Precambrian rocks.

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

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

23. The Simpson in this area is approximately 475 feet thick.

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

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

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

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

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

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

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

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

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

I also reviewed the USGS Quaternary Fault & Fold database, which shows no quaternary faults in the nearby area.

33. Basement faults are documented in the Snee & Zoback paper, “State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity”, published in the February 2018 issue of the SEG journal, The Leading Edge. I correlated fault data correlated to the publicly available USGS GIS geologic units & structural features database, the NMOCD SWD Applications & Fault Map dated 02/14/2022, to the B3 Insights proprietary faults database, and to fault maps as published in the New Mexico Geological Society Special Publication 13A, “Energy and Mineral Resources of New Mexico: Petroleum Geology,” by R. F. Broadhead, 2017.

34. Based on this desktop review, I concluded the closest known fault is 1.7 miles to the East of the Well. This fault depth is believed to be in the PreCambrian, well below the Devonian-Silurian injection interval, and separated vertically by the presence of the Montoya, Simpson and Ellenburger formations.

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

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

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

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

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

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

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

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

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

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

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

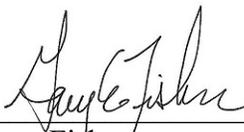
45. In my opinion, the granting of Permian's application is in the interests of conservation and the prevention of waste. The Well will provide much needed capacity for produced water, which will, in turn, support oil and gas operators' ability to produce oil and gas. Conversely, constraints on disposal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

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

[Signature page follows]

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

Dated: October 12, 2023



Gary Fisher

VIII:

- 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 | 1,552 | 1,890 | 338 |
| Salado | 1,890 | 3,355 | 1,555 |
| Yates | 3,355 | 3,708 | 353 |
| Capitan Reef | 3,708 | 5,557 | 1,849 |
| Delaware | 5,557 | 8,216 | 2,659 |
| Bone Spring | 8,216 | 10,937 | 2,721 |
| Wolfcamp | 10,937 | 12,199 | 1,262 |
| Lwr. Mississippian | 13,904 | 14,482 | 578 |
| Woodford | 14,482 | 14,640 | 158 |
| Devonian | 14,640 | 15,518 | 878 |
| Fusselman (Silurian) | 15,518 | 15,869 | 351 |
| Montoya (U. Ordovician) | 15,869 | 16,269 | 400 |
| Simpson (M. Ordovician) | 16,269 | 16,744 | 475 |

- Regional shallow fresh water in the Quaternary is known to exist at depths less than 1349'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 13,291'. There is a deeper potential USDW in the Capitan Reef formation. Depth from the bottom of this potential USDW to the injection zone is 9,083'. There is no USDW present below the injection interval.

Exhibit 3.A



Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

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

A handwritten signature in black ink, appearing to read "Gary Fisher".

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 7/5/2023

Exhibit 3.B



**Attachment to C-108
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM**

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

STATEMENT REGARDING SEISMICITY

Examination of the USGS and NMT 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 2.7 miles away from the nearest active or permitted Devonian disposal well (Fasken Quail 16 State SWD #9, SWD-1537).

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

1. USGS Quaternary Fault & Fold database shows no quaternary faults in the nearby area.
2. Basement faults are documented in the Snee & Zoback paper, "State of stress in the Permian Basin, Texas and New Mexico: Implications for induced seismicity", published in the February 2018 issue of the SEG journal, The Leading Edge, along with a method for determining the probability of fault slip in the area.
3. Fault data was also correlated to the publicly available USGS GIS geologic units & structural features database, the NMOCD SWD Applications & Fault Map dated 02/14/2022, to the B3 Insights proprietary faults database, and to fault maps as published in the New Mexico Geological Society Special Publication 13A, "Energy and Mineral Resources of New Mexico: Petroleum Geology," by R. F. Broadhead, 2017.

Exhibit 3.C

There is one known fault within the area of interest (< 5.64 mile radius, 25 sq. mi.) of the proposed above referenced SWD well, approximately 1.7 mi (2.7 km) to the east.

1. Permian Oilfield Partners ran modeling to check for fault slip assuming that any known faults penetrate the Devonian-Silurian injection zone. Software as discussed in #3 from the Stanford Center for Induced and Triggered Seismicity, "FSP 1.0: A program for probabilistic estimation of fault slip potential resulting from fluid injection", was used to calculate the probability of the fault being stressed so as to create an induced seismic event.
2. Devonian wells as noted in the table below are included in the FSP analysis. Both the Belated Fed SWD application and the Overdue Fed SWD application were modeled assuming simultaneous injection. Interval depth is the lesser of the Belated & Overdue, and interval height is the lesser of the Belated & Overdue.

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

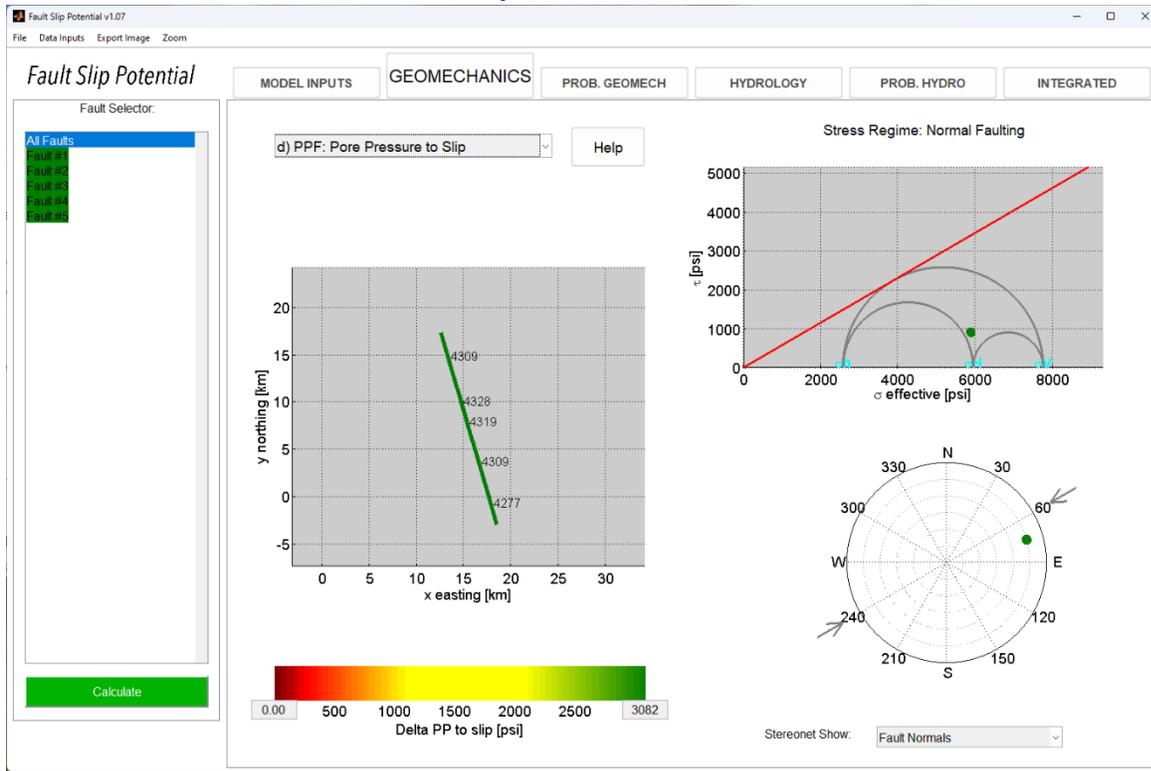
3. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years as per the FSP results screenshots below.

Input assumptions:

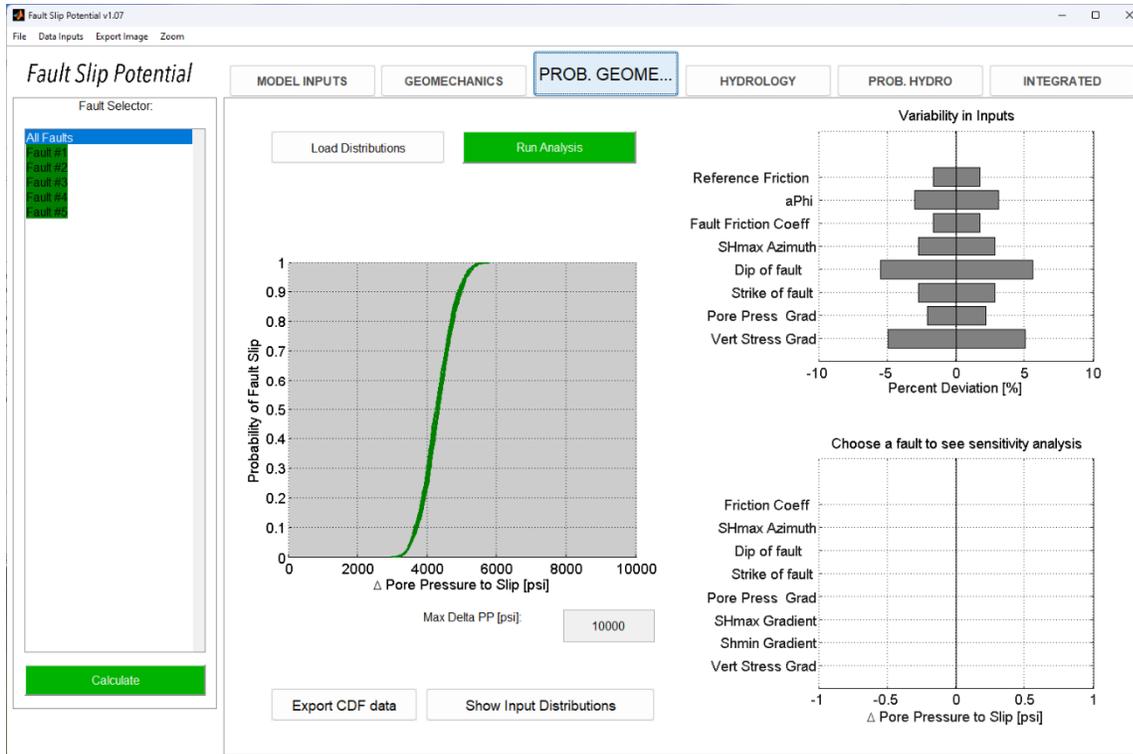
| | |
|-------------------------------------|-----------|
| Interval height (ft) | 1229 |
| Average Porosity (%) | 5.4 |
| Vert stress gradient (psi/ft) | 1.0 |
| Hor stress direction (deg N) | 60 |
| Fault dip (deg) | 75 |
| Ref depth (ft) | 14604 |
| Initial res press gradient (psi/ft) | 0.47 |
| A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

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

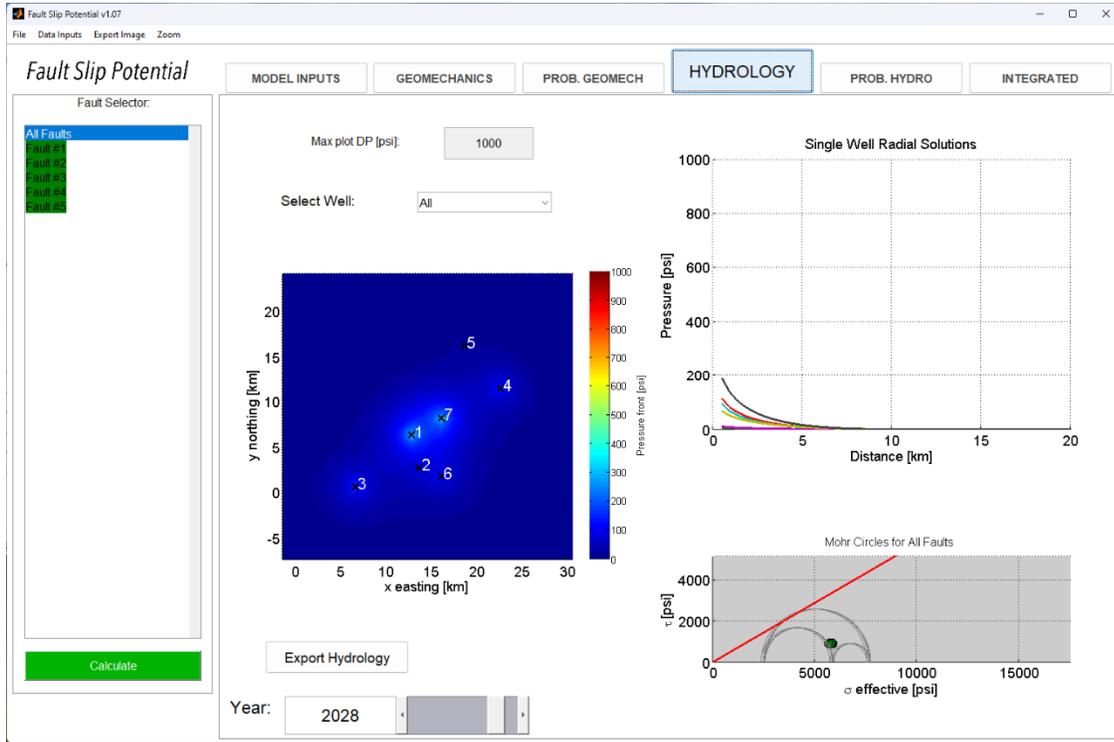
Geomechanics Pore Pressure to Slip



GeoMechanics Variability



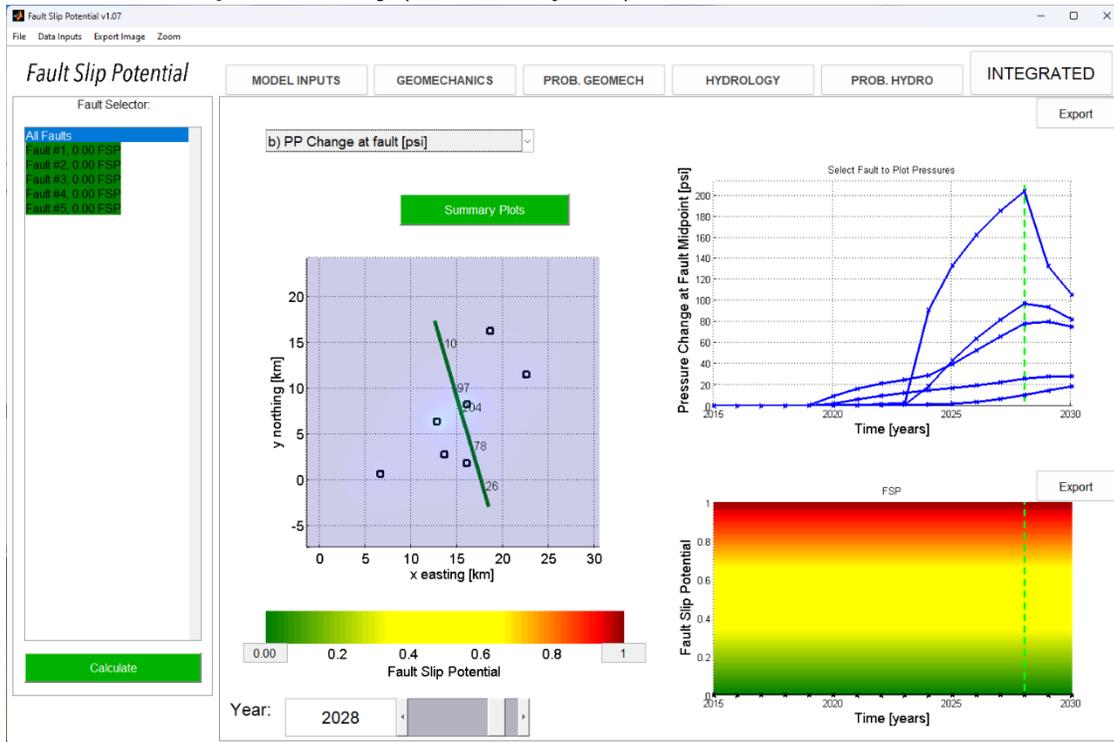
Year 5 Hydrology



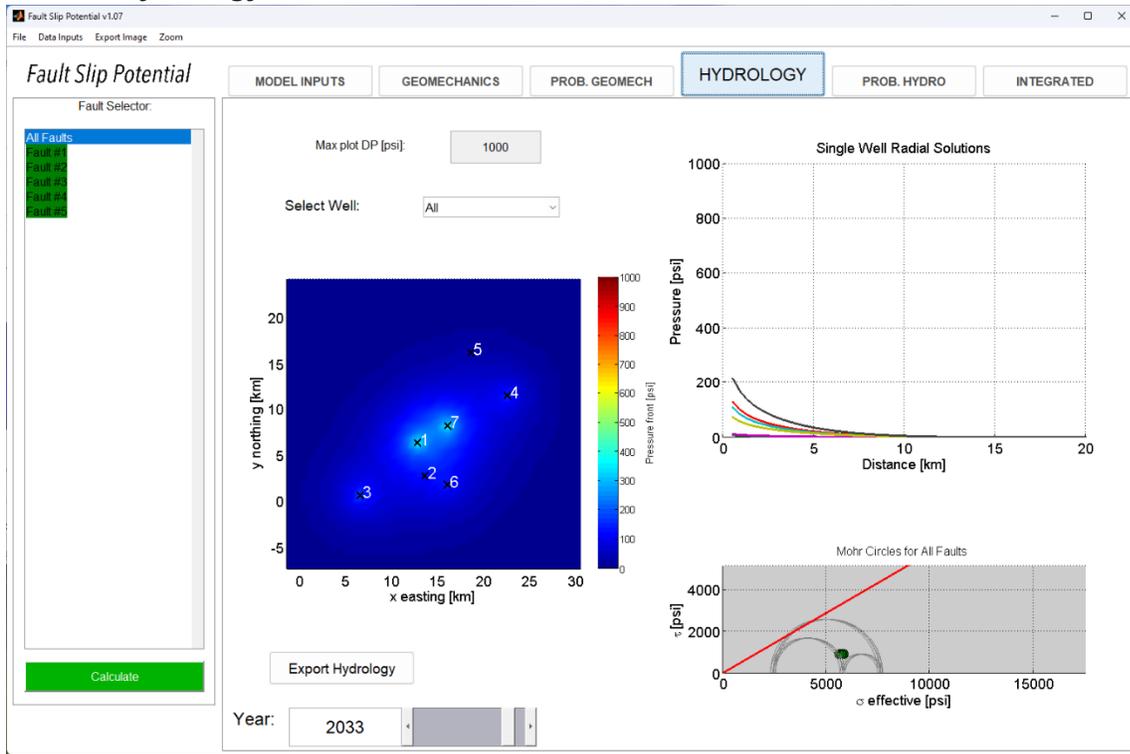
Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



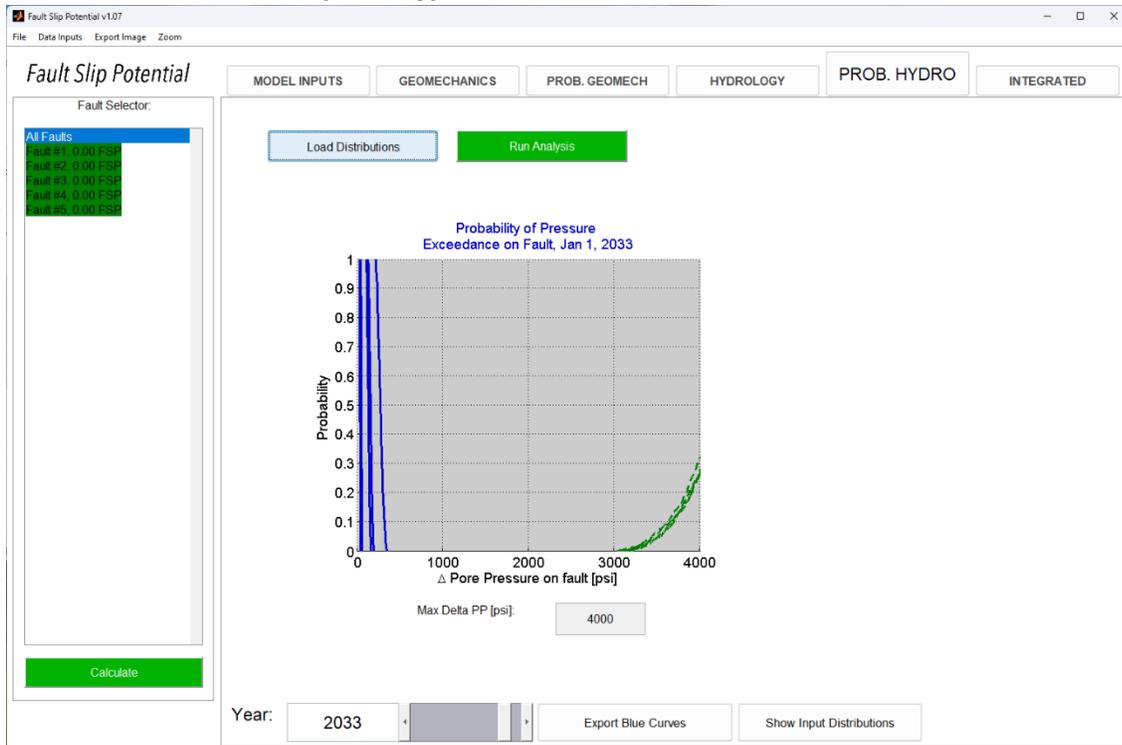
Year 5 Fault Slip Probability (0% after 5 years)



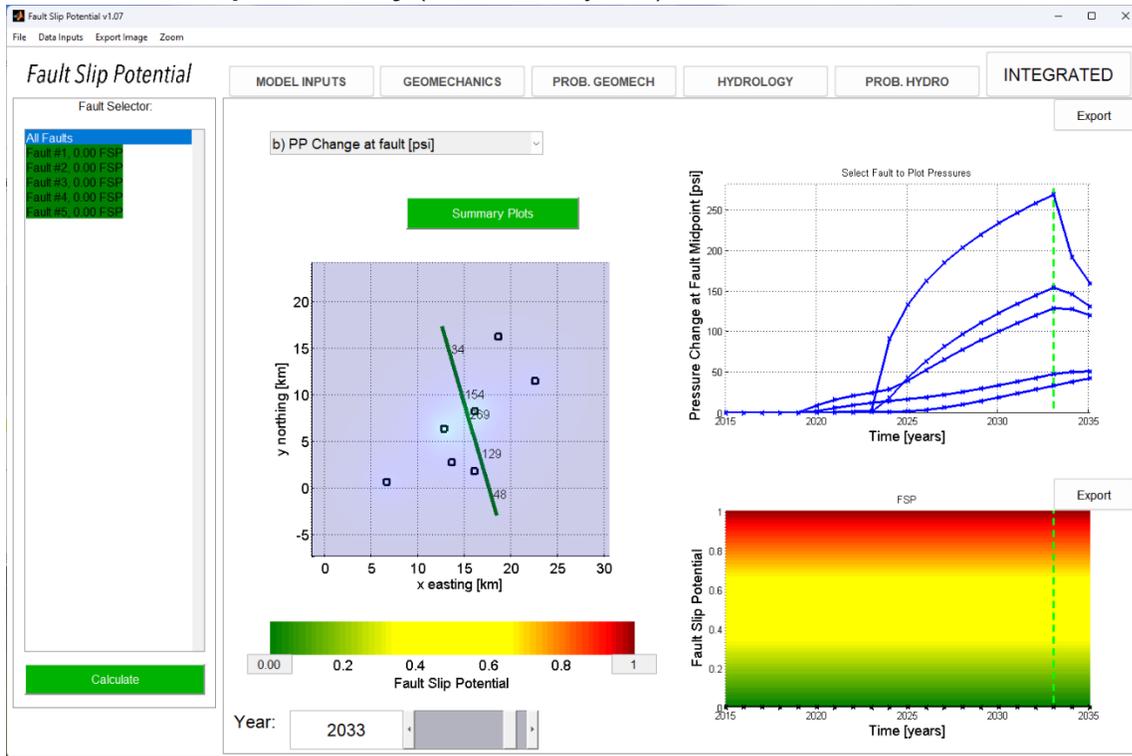
Year 10 Hydrology



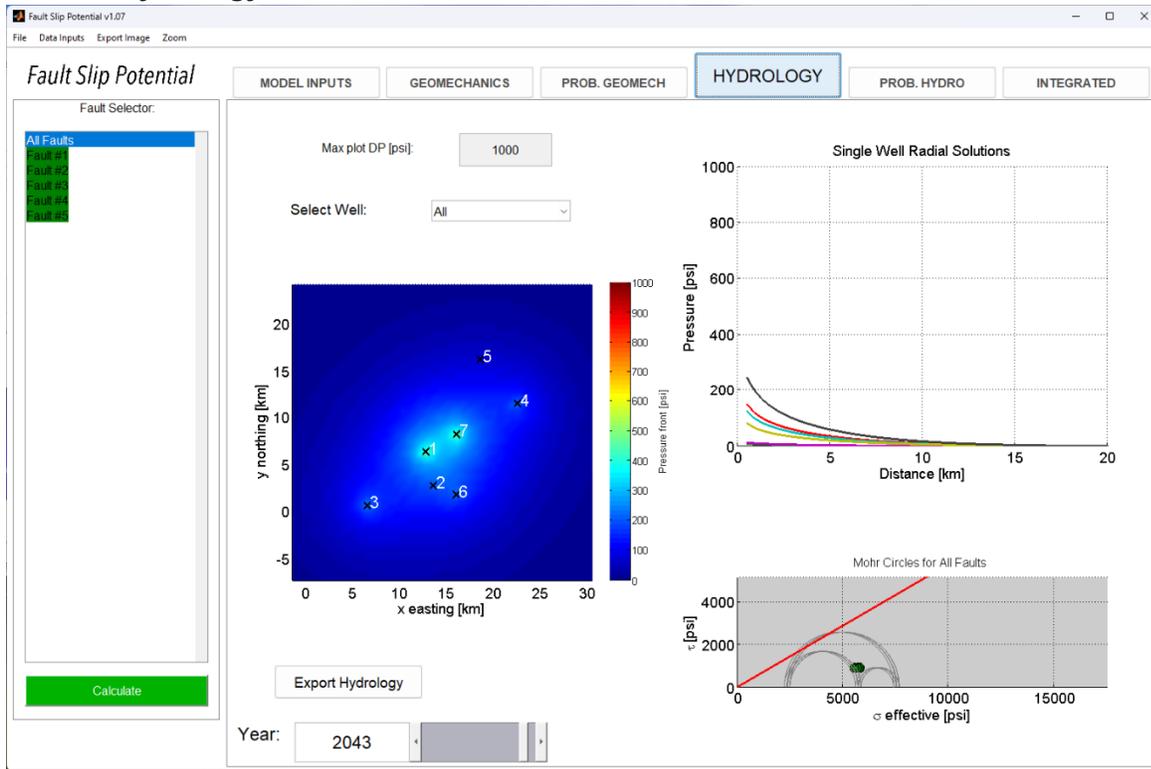
Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



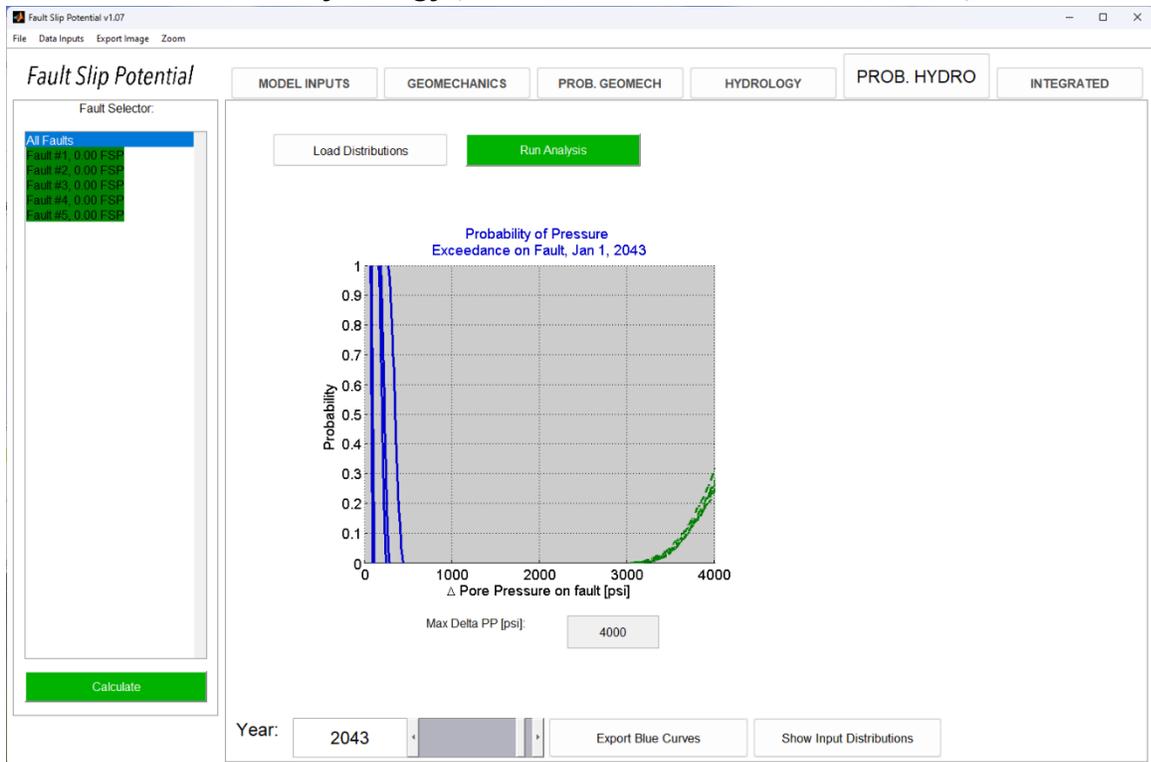
Year 10 Fault Slip Probability (0% after 10 years)



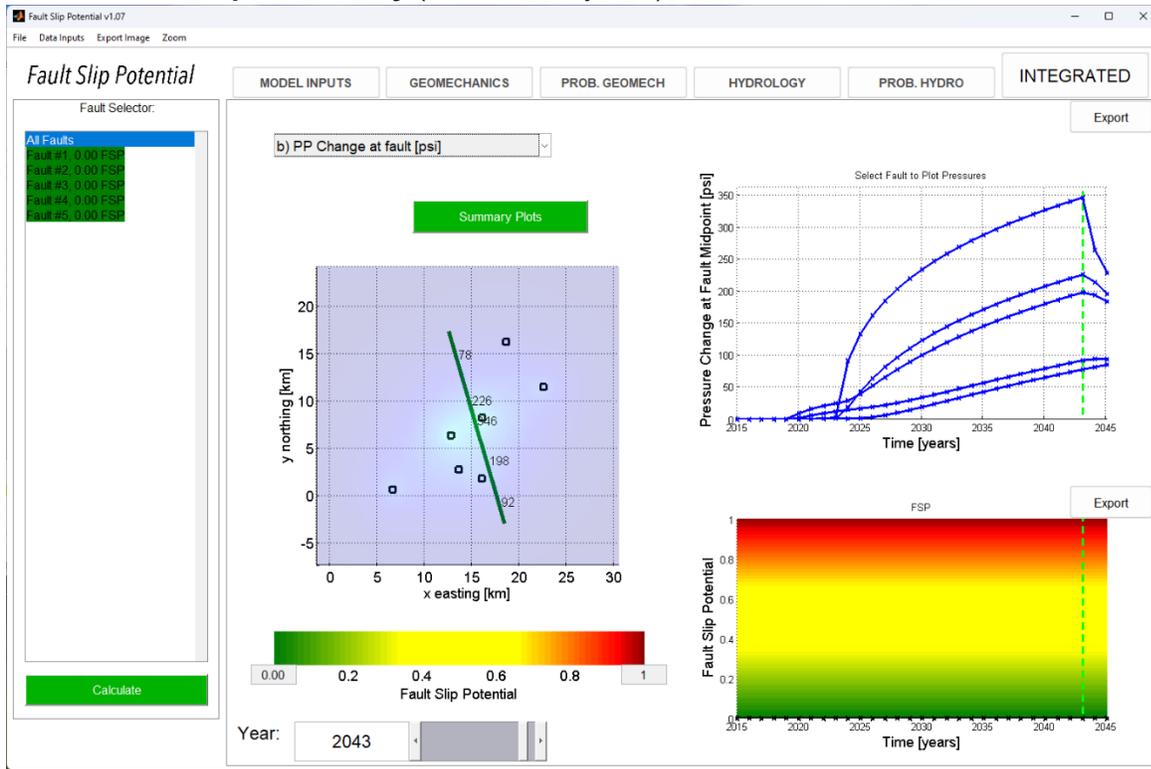
Year 20 Hydrology



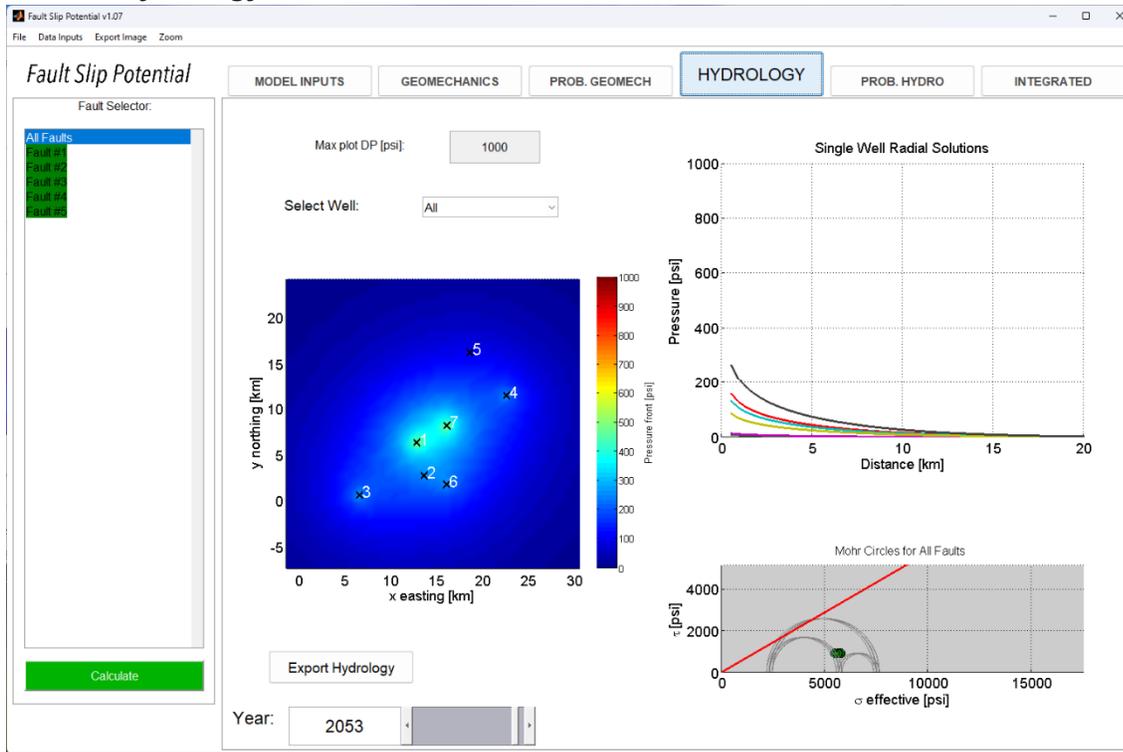
Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



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



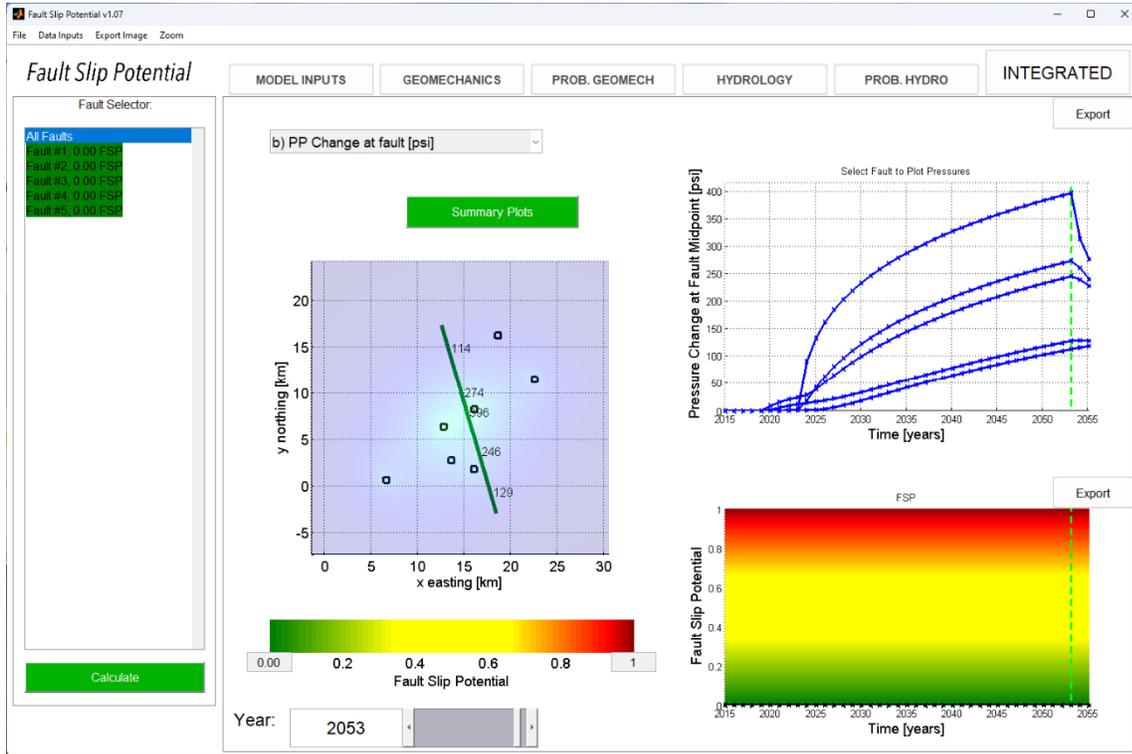
Year 30 Hydrology



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

Tab 4: Notice Materials

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

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

CASE NO. 23807

SELF-AFFIRMED DECLARATION OF DEANA M. BENNETT

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

- 1) The above-referenced Application was provided under notice letter, dated September 28, 2023, and attached hereto, as Exhibit A.
- 2) Exhibit B is the mailing list, which show the notice letters were delivered to the USPS for mailing on September 28, 2023.
- 3) Exhibit C is the certified mailing tracking information, which is automatically complied by CertifiedPro, the software Modrall uses to track the mailings. This shows the names and addresses of the parties to whom notice was sent and proof of delivery.
- 4) Exhibit D is the Affidavit of Publication from the Hobbs News-Sun, confirming that notice of the October 19, 2023 hearing was published on September 29, 2023.
- 5) I attest under penalty of perjury under the laws of the State of New Mexico that the information provided herein is correct and complete to the best of my knowledge and belief.

Dated: October 12, 2023



Deana M. Bennett

Exhibit 4



MODRALL SPERLING

L A W Y E R S

September 28, 2023

Deana M. Bennett
505.848.1834
dmb@modrall.com

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

CASE NO. 23807

TO: AFFECTED PARTIES

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

In Case No. 23807, Permian seeks an order approving disposal into the Silurian-Devonian formation through the Overdue Federal SWD Well #1 well at a surface location 602’ from the North line and 298’ from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

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

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

Modrall Sperring
Roehl Harris & Sisk P.A.

500 Fourth Street NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico 87103-2168

Tel: 505.848.1800
www.modrall.com



Exhibit 4.A

Page 2

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

Sincerely,

A handwritten signature in cursive script that reads "Deana M. Bennett".

Deana M. Bennett

Attorney for Applicant

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

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

CASE NO. 23807

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 Overdue Federal SWD Well #1 well at a surface location 602' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.
- (2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 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 2,935 psi for the well.
- (5) On or about July 11, 2023, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

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

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

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

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

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

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

WHEREFORE, Permian requests that this application be set for hearing before an Examiner of the Oil Conservation Division on October 5, 2023; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

By: Deana M Bennett

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

CASE NO. 23807: 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 Overdue Federal SWD Well #1 well at a surface location 602' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

| | | | |
|-----------|-----------|-------|---------|
| 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: Overdue Federal SWD #1 | API: 30-025-Pending |
| Pool: SWD; Devonian-Silurian | Pool Code: 97869 |

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

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

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

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

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

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

Sean Puryear _____
 Date

Print or Type Name



 Signature

7-11-2023 _____
 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: **7-11-2023**
E-MAIL ADDRESS: **spuryear@popmidstream.com**
- XV. If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

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

Exhibit A

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 14,640'

Underlying Potentially Productive Zones:

None

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

V: See attached Area of Review Analysis.

VI: There is 1 well within the proposed well's area of review that penetrates the Devonian formation, the Pure Federal "C" #1, API #30-025-02417, plugged 5/13/1963. Well plugging report and diagram attached. Note that this well is the subject of UIC order #SWD-1568, expired August 3, 2017.

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 2,935 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.

Exhibit A

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 | 1,552 | 1,890 | 338 |
| Salado | 1,890 | 3,355 | 1,555 |
| Yates | 3,355 | 3,708 | 353 |
| Capitan Reef | 3,708 | 5,557 | 1,849 |
| Delaware | 5,557 | 8,216 | 2,659 |
| Bone Spring | 8,216 | 10,937 | 2,721 |
| Wolfcamp | 10,937 | 12,199 | 1,262 |
| Lwr. Mississippian | 13,904 | 14,482 | 578 |
| Woodford | 14,482 | 14,640 | 158 |
| Devonian | 14,640 | 15,518 | 878 |
| Fusselman (Silurian) | 15,518 | 15,869 | 351 |
| Montoya (U. Ordovician) | 15,869 | 16,269 | 400 |
| Simpson (M. Ordovician) | 16,269 | 16,744 | 475 |

2. Regional shallow fresh water in the Quaternary is known to exist at depths less than 1349'. See attached OSE Water Column Depth table for the region. Depth from the bottom of this USDW to the injection zone is 13,291'. There is a deeper potential USDW in the Capitan Reef formation. Depth from the bottom of this potential USDW to the injection zone is 9,083'. There is no USDW present below the injection interval.

Exhibit A

- IX:** Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- X:** A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI:** According to the New Mexico Office of the State Engineer, there are 0 fresh water wells within the proposed well's one-mile area of review. See attached 1 mile AOR water well map showing no active PODs in the AOR.
- XII:** Hydrologic affirmative statement attached.
- XIII:** Proof of notice and proof of publication attached.

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

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|---|--|---|--|---|--|
| ¹ API Number | | ² Pool Code 97869 | | ³ Pool Name SWD; DEVONIAN-SILURIAN | |
| ⁴ Property Code | | ⁵ Property Name OVERDUE FEDERAL SWD | | | ⁶ Well Number 1 |
| ⁷ OGRID NO. 328259 | | ⁸ Operator Name PERMIAN OILFIELD PARTNERS, LLC | | | ⁹ Elevation 3643' |

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 |
|---------------|----------|------------|------------|---------|---------------|------------------|---------------|----------------|------------|
| 1 | 5 | 20S | 34E | | 602 | NORTH | 298 | 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.

① *N 89°22'38" E 2644.21'* ② *N 89°30'52" E 2637.58'*

③ *N 89°25'39" W 2636.92'* ④ *S 89°29'18" W 2641.84'*

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: *Gary Fisher* Date: 7-5-2023
 Printed Name: Gary Fisher
 E-mail Address: gfisher@popmidstream.com

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.

Date of Survey: **05/30/2023**
 Signature and Seal of Professional Surveyor: *[Signature]*
 Certificate Number: **14400**

Exhibit A

Job No.: LS23050493

III (A)

WELL CONSTRUCTION DATA

**Permian Oilfield Partners, LLC.
Overdue Federal SWD #1
602' FNL, 298' FEL
Sec. 5, T20S, R34E, Lea Co. NM
Lat 32.6077848° N, Lon -103.5747341° W
GL 3643', RKB 3673'**

Surface - (Conventional)

Hole Size: 26" **Casing:** 20" - 106.5# N-80 BTC Casing
Depth Top: Surface
Depth Btm: 1577'
Cement: 1444 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: 3658'
Cement: 1119 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: 5582' **ECP/DV Tool:** 3758'
Cement: 827 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: 10987' **ECP/5682'**
Cement: 1803 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: 10787'
Depth Btm: 14675'
Cement: 250 sks - Class H + Additives
Cement Top: 10787' - Circulate, then Bond Log when well @ TD

Intermediate #5 - (Open Hole)

Hole Size: 6.5" **Depth:** 15844'
Inj. Interval: 14675' - 15844' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 14630' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 10787'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 14640' **Packer:** 5.5" - Perma-Pak or Equivalent (Inconel)
Packer Fluid: 8.4 ppg FW + Additives

Exhibit A

III (A)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Overdue Federal SWD #1
602' FNL, 298' FEL
Sec. 5, T20S, R34E, Lea Co. NM
Lat 32.6077848° N, Lon -103.5747341° W
GL 3643', RKB 3673'

Surface - (Conventional)

Hole Size: 26"
Casing: 20" - 106.5# N-80 BTC Casing
Depth Top: Surface
Depth Btm: 1577'
Cement: 1444 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: 3658'
Cement: 1119 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: 5582'
Cement: 827 sks - Class C + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 3758'

Intermediate #3 - (Conventional)

Hole Size: 12.25"
Casing: 9.625" - 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 10987'
Cement: 1803 sks - Class C + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5682'

Intermediate #4 - (Liner)

Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing"
Depth Top: 10787'
Depth Btm: 14675'
Cement: 250 sks - Class H + Additives
Cement Top: 10787' - Circulate, then Bond Log when well @ TD

Intermediate #5 - (Open Hole)

Hole Size: 6.5"
Depth: 15844'
Inj. Interval: 14675' - 15844' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 14630'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 10787'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 14640'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)
Packer Fluid: 8.4 ppg FW + Additives



Exhibit A

XIII.



PERMIAN OILFIELD
PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

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

| Overdue Federal SWD #1 - Affected Persons within 1 Mile Area of Review | | | | | |
|--|--------------------------------|--------------------------------|---------|------------------------|--------------|
| Notified Name | Notified Address | Notified City, State, ZIP Code | Shipper | Tracking No. | Mailing Date |
| ADVANCE ENERGY PARTNERS HAT MESA LLC | 11490 Westheimer Rd | Houston, TX 77077 | USPS | 9414811899562232439831 | 7/11/2023 |
| APACHE CORPORATION | 2000 Post Oak Blvd., Suite 100 | Houston, TX 77056 | USPS | 9414811899562232439879 | 7/11/2023 |
| B & J OPERATING INC | PO Box 1478 | Pampa, TX 79066 | USPS | 9414811899562232439718 | 7/11/2023 |
| BALOG FAMILY TRUST | PO Box 111890 | Anchorage, AK 99504 | USPS | 9414811899562232439756 | 7/11/2023 |
| BLACK HILLS GAS RESOURCES, INC. | 7001 Mt Rushmore Rd | Rapid City, SD 57702 | USPS | 9414811899562232439763 | 7/11/2023 |
| Bureau Of Land Management | 620 E Greene St. | Carlsbad, NM 88220 | USPS | 9414811899562232439701 | 7/11/2023 |
| CHESAPEAKE EXPLORATION LLC | 6100 North Western Ave | OKC, OK 73118 | USPS | 9414811899562232439794 | 7/11/2023 |
| CIMAREX ENERGY CO | 6001 Deauville Blvd, Ste 300N | Midland, TX 79706 | USPS | 9414811899562232439749 | 7/11/2023 |
| CIMAREX ENERGY CO. OF COLORADO | 6001 Deauville Blvd, Ste 300N | Midland, TX 79706 | USPS | 9414811899562232439732 | 7/11/2023 |
| COG OPERATING LLC | 600 W Illinois Ave | Midland, TX 79701 | USPS | 9414811899562232439770 | 7/11/2023 |
| DELMAR HUDSON LEWIS LIVING TRUST | PO Box 2546 | Fort Worth, TX 76113 | USPS | 9414811899562232439916 | 7/11/2023 |
| FASKEN LAND & MINERALS LTD | 303 West Wall Ave Ste 1800 | Midland, TX 79701 | USPS | 9414811899562232439954 | 7/11/2023 |
| HUDSON OIL COMPANY OF TEXAS | 616 Texas Street | Fort Worth, TX 76102 | USPS | 9414811899562232439961 | 7/11/2023 |
| HYDE OIL & GAS CORP | 6300 Ridglea Pl # 1018 | Fort Worth, TX 76116 | USPS | 9414811899562232439909 | 7/11/2023 |
| JACK V WALKER REVOCABLE TRUST | PO Box 102256 | Anchorage, AK 99510 | USPS | 9414811899562232439947 | 7/11/2023 |
| JAVELINA PARTNERS | 616 Texas St. | Fort Worth, TX 76102 | USPS | 9414811899562232439985 | 7/11/2023 |
| LEE WILEY MONCRIEF TRUST | PO Box 2546 | Fort Worth, TX 76113 | USPS | 9414811899562232439930 | 7/11/2023 |
| LEWIS H DELMAR LIVING TRUST | 6300 Ridglea Place Suite 1005a | Fort Worth, TX 76116 | USPS | 9414811899562232439657 | 7/11/2023 |
| LINCOLN OIL & GAS LLC | 701 Three Cross | Roswell, NM 88201 | USPS | 9414811899562232439626 | 7/11/2023 |
| LINDY'S LIVING TRUST | 2400 South Hulen, Ste. 302 | Fort Worth, TX 76109 | USPS | 9414811899562232439695 | 7/11/2023 |
| MAGNUM HUNTER PRODUCTION INC | 600 N. Marienfeld, Suite 600 | Midland, TX 79701 | USPS | 9414811899562232439121 | 7/11/2023 |
| MARATHON OIL CO | 990 Town & Country Blvd. | Houston, TX 77024 | USPS | 9414811899562232439145 | 7/11/2023 |
| MEWBOURNE OIL CO | P.O. Box 5270 | Hobbs, NM 88241 | USPS | 9414811899562232439367 | 7/11/2023 |
| New Mexico State Land Office | 310 Old Santa Fe Trail | Santa Fe, NM 87501 | USPS | 9414811899562232439305 | 7/11/2023 |
| PENNZENERGY EXPLORATION AND PRODUCTION LLC | P.O. Box 2967 | Houston, TX 77001 | USPS | 9414811899562232439343 | 7/11/2023 |
| READ & STEVENS INC | 1001 17th Street, Suite 1800 | Denver, CO 80202 | USPS | 9414811899562232439381 | 7/11/2023 |
| SELECT AGUA LIBRE MIDSTREAM, LLC | 12515 Carriage Way | Oklahoma City, OK 73142 | USPS | 9414811899562232439336 | 7/11/2023 |
| ZORRO PARTNERS LTD | 616 Texas St | Fort Worth, TX, 76102 | USPS | 9414811899562232439374 | 7/11/2023 |

Date: 7/11/2023

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

Exhibit A

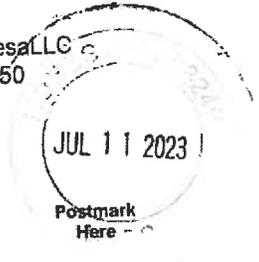
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4398 31

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



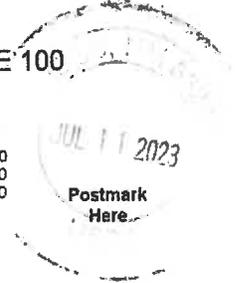
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4398 79

ARTICLE ADDRESSED TO:

Apache Corporation
2000 POST OAK BLVD STE 100
HOUSTON TX 77056-4400

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4397 19

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



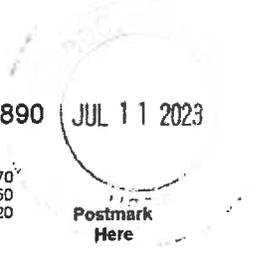
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4397 56

ARTICLE ADDRESSED TO:

Balog Family Trust
PO BOX 111890
ANCHORAGE AK 99511-1890

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



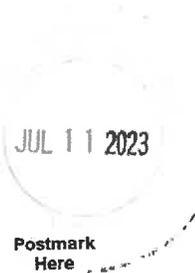
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4397 63

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 0956 2232 4397 01

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 94

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 49

ARTICLE ADDRESSED TO:

Cimarex Energy Co.
600 N MARIENFELD ST STE 600
MIDLAND TX 79701-4405

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



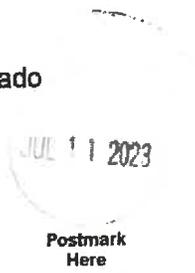
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 32

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4397 70

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



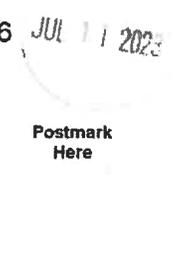
U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 16

ARTICLE ADDRESSED TO:

Delmar Hudson Lewis Living Trust
PO BOX 2546
FORT WORTH TX 76113-2546

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 54

ARTICLE ADDRESSED TO:

Fasken Land & Minerals Ltd
303 W WALL ST STE 1800
MIDLAND TX 79701-5106

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |



U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 81

ARTICLE ADDRESSED TO:

Hudson Oil Company of TX
616 TEXAS ST
FORT WORTH TX 76102-4696 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 09

ARTICLE ADDRESSED TO:

Hyde Oil & Gas Corp
6300 RIDGLEA PL STE 1018
FORT WORTH TX 76116-5778 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 47

ARTICLE ADDRESSED TO:

Jack V Walker Revocable Trust
PO BOX 102256
ANCHORAGE AK 99510-2256 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 85

ARTICLE ADDRESSED TO:

Javelina Partners
616 TEXAS ST
FORT WORTH TX 76102-4696 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 30

ARTICLE ADDRESSED TO:

Lee Wiley Moncrief Trust
PO BOX 2546
FORT WORTH TX 76113-2546 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4399 57

ARTICLE ADDRESSED TO:

Lewis H Delmar Living Trust
6300 RIDGLEA PL STE 1005A
FORT WORTH TX 76116-5763 JUL 11 2023

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4398 26

ARTICLE ADDRESSED TO:

Lincoln Oil & Gas LLC
701 THREE CROSS DR
ROSWELL NM 88201-7831



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

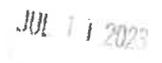
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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4398 95

ARTICLE ADDRESSED TO:

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



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4391 21

ARTICLE ADDRESSED TO:

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



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

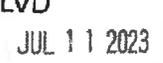
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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4391 43

ARTICLE ADDRESSED TO:

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



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

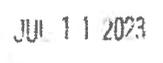
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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 67

ARTICLE ADDRESSED TO:

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



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

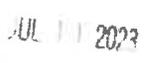
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U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 05

ARTICLE ADDRESSED TO:

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



FEES

Postage Per Piece \$5.470
Certified Fee 4.350
Total Postage & Fees: 9.820

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 43

ARTICLE ADDRESSED TO:

Pennzenergy Exploration & Productio
PO BOX 2967
HOUSTON TX 77252-2967

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

JUL 11 2023

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 81

ARTICLE ADDRESSED TO:

Read & Stevens Inc.
1001 17TH ST STE 1800
DENVER CO 80202-2058

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

JUL 11 2023

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9956 2232 4393 38

ARTICLE ADDRESSED TO:

Select Agua Libre Midstream, LLC
12515 CARRIAGE WAY
OKLAHOMA CITY OK 73142-3326

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

JUL 11 2023

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ARTICLE NUMBER: 9414 8118 9956 2232 4393 74

ARTICLE ADDRESSED TO:

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

| | |
|-----------------------|---------|
| FEES | |
| Postage Per Piece | \$5.470 |
| Certified Fee | 4.350 |
| Total Postage & Fees: | 9.820 |

JUL 11 2023

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XIII.

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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

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

LEGAL NOTICE
May 28, 2023

Permian Oilfield Partners, LLC, PO Box 3329, Hobbs, NM 88241, phone (817)606-7630, attn. Gary Fisher, has filed form C-108 (Application for Authorization for Injection) with the New Mexico Oil Conservation Division seeking approval to drill a commercial salt water disposal well in Lea County, New Mexico. The proposed well is the Overdue Federal SWD #1, and is located 802' FNL & 298' FEL, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, approximately 18 ml 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 14,675 feet to 15,844 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 2,935 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.
#00278997



Publisher

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



Business Manager

My commission expires
January 29, 2027

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

67115647

00278997

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

Exhibit A

V (a)

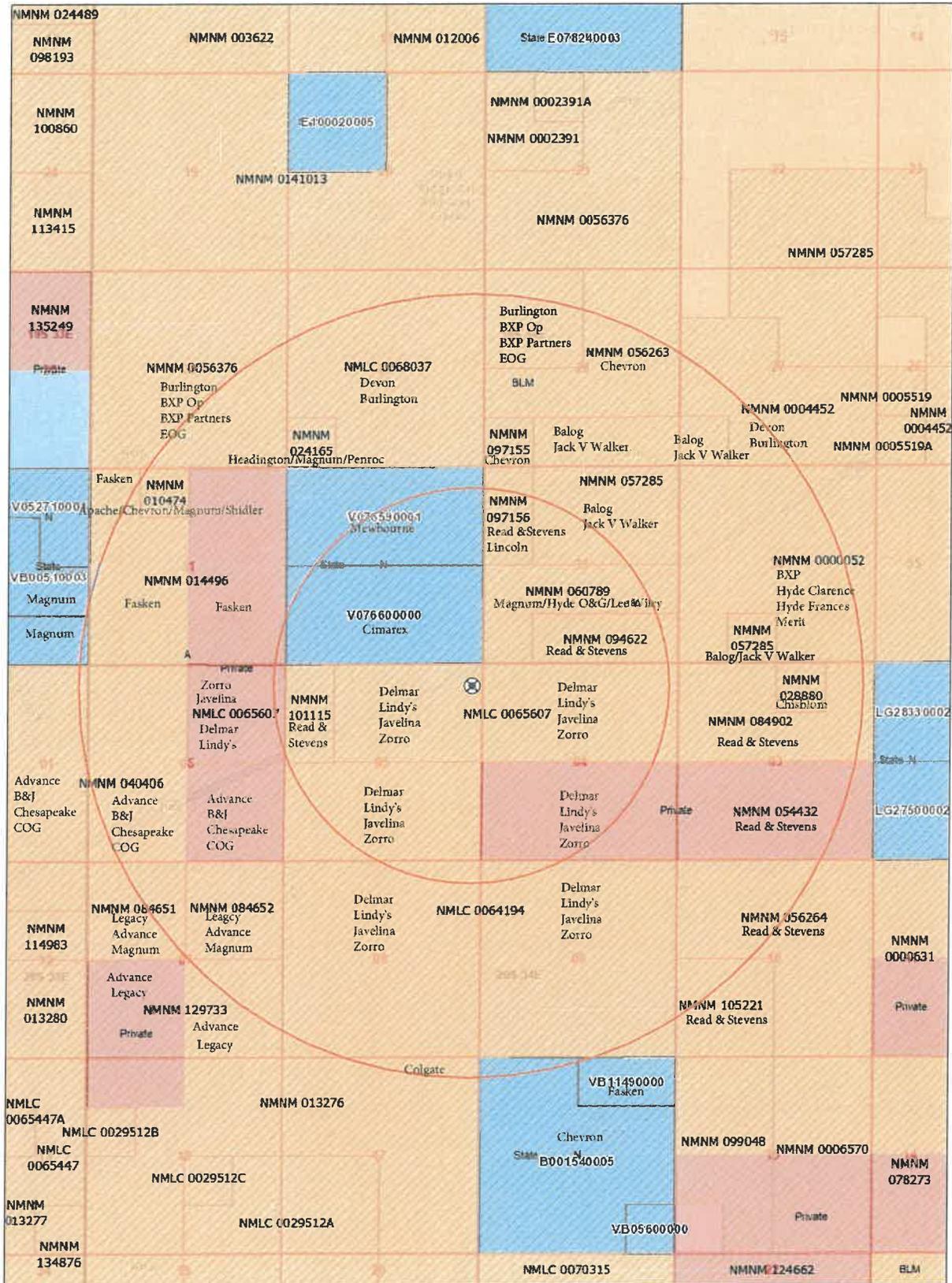
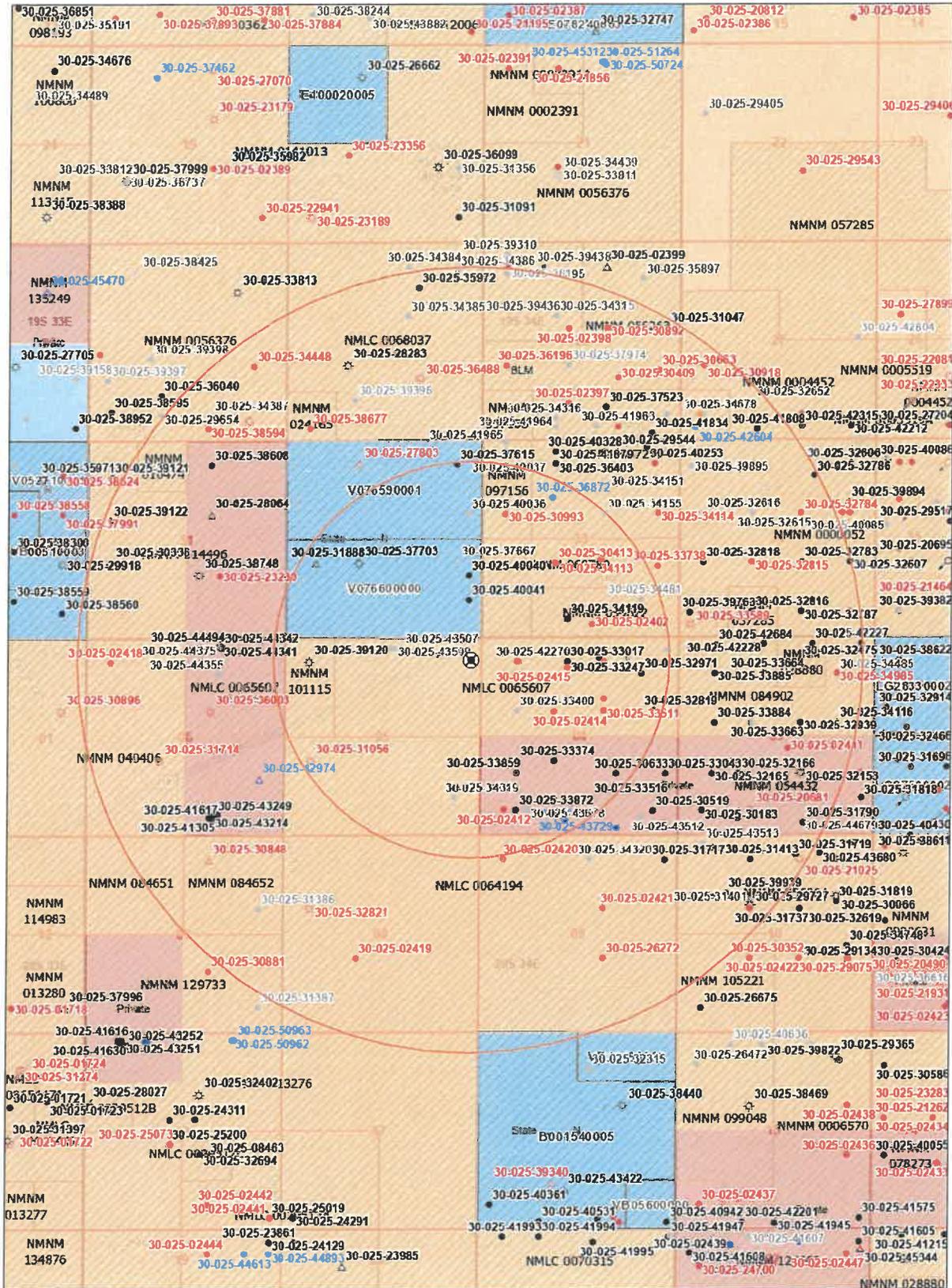


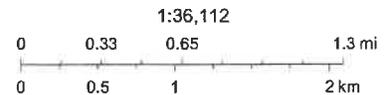
Exhibit A

V (b) Overdue Federal SWD #1, 1 & 2 Mi AOR, Wells



7/8/2023, 7:45:45 PM

- Override 1
- Override 1
- * Wells - Large Scale
- * 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
- 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



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

Received by OCD: 9/5/2023 2:37:30 PM1

Page 23 of 71

V (c)

| Overdue 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 | Thickness | Permit No. | OCD Unit Letter | Surface Location | Bottom-hole Location | Formation | MD |
| 30-025-99120 | READ & STEVENS INC | HIGHWAY 5 FEDERAL COM | #001 | Gas | Vertical | Active | 05 | T205 | R34E | D | D-05-205-34E Lot: 4 660 FNL 660 FWL | D-05-205-34E Lot: 4 660 FNL 660 FWL | MORROW | 13750 13750 |
| 30-025-10556 | READ & STEVENS INC | MARATHON OIL CO | #001 | Gas | Vertical | Plugged, Site Released | 05 | T105 | R34E | L | L-05-205-34E 1980 FSL 710 FWL | M-05-205-34E 1980 FSL 710 FWL | BONE SPRING | 13660 13660 |
| 30-025-91888 | SELECT AQUA LIBRE MIDSTREAM, LLC | RED HAWK 31 STATE | #001 | Salt Water Disposal | Vertical | Active | 32 | T195 | R34E | L | L-32-195-34E 1980 FSL 810 FWL | L-32-195-34E 1980 FSL 810 FWL | BONE SPRING | 13560 13560 |
| 30-025-37763 | MEWBOURNE OIL CO | QUAIL RIDGE 32 STATE | #002 | Gas | Vertical | Active | 32 | T195 | R34E | K | K-32-195-34E 1980 FSL 290 FWL | P-32-195-34E 1980 FSL 1980 FWL | BONE SPRING | 13560 13560 |
| 30-025-43607 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Appl | 05 | T205 | R34E | B | B-05-205-34E Lot: 2 280 FNL 2140 FFL | P-05-205-34E 330 FSL 330 FFL | BONE SPRING | 15377 10828 |
| 30-025-43609 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Appl | 05 | T205 | R34E | B | B-05-205-34E Lot: 2 280 FNL 2140 FFL | M-05-205-34E 330 FSL 2330 FWL | BONE SPRING | 15106 10828 |
| 30-025-43510 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Appl | 05 | T205 | R34E | B | B-05-205-34E Lot: 2 280 FNL 2140 FFL | M-05-205-34E 330 FSL 970 FWL | BONE SPRING | 15426 10827 |
| 30-025-43508 | READ & STEVENS INC | NORTH LEA 5 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Appl | 05 | T205 | R34E | B | B-05-205-34E Lot: 2 280 FNL 2140 FFL | O-05-205-34E 330 FSL 1670 FFL | BONE SPRING | 15580 10824 |
| 30-025-32080 | SELECT AQUA LIBRE MIDSTREAM, LLC | RED HAWK 31 STATE | #002 | Salt Water Disposal | Vertical | Active | 32 | T195 | R34E | J | J-32-195-34E 1980 FSL 1980 FWL | P-32-195-34E 1980 FSL 1980 FFL | MORROW | 13612 13612 |
| 30-025-37615 | MEWBOURNE OIL CO | RED HAWK 31 STATE | #001 | Oil | Vertical | Active | 32 | T195 | R34E | A | A-32-195-34E 660 FSL 660 FFL | P-32-195-34E 660 FSL 660 FFL | BONE SPRING | 13750 13750 |
| 30-025-34319 | READ & STEVENS INC | TRUMAN 5 FEDERAL | #001 | Oil | Vertical | Cancelled Appl | 05 | T205 | R34E | P | P-05-205-34E 990 FSL 660 FFL | P-05-205-34E 990 FSL 660 FFL | DELAWARE | 8400 8400 |
| 30-025-37667 | CHAMBER ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #002 | Gas | Vertical | Cancelled Appl | 32 | T195 | R34E | I | I-32-195-34E 1980 FSL 1980 FFL | L-32-195-34E 1980 FSL 660 FFL | MORROW | 14400 14400 |
| 30-025-40040 | CHAMBER ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #008 | Oil | Horizontal | Active | 32 | T195 | R34E | I | I-32-195-34E 1980 FSL 1980 FFL | L-32-195-34E 1980 FSL 660 FFL | BONE SPRING | 15407 10843 |
| 30-025-40036 | MEWBOURNE OIL CO | RED HAWK 31 STATE | #002C | Oil | Horizontal | Cancelled Appl | 32 | T195 | R34E | H | H-32-195-34E 1980 FSL 330 FFL | E-32-195-34E 1980 FSL 830 FWL | BONE SPRING | 15190 N/A |
| 30-025-40041 | CHAMBER ENERGY CO. OF COLORADO | QUAIL RIDGE 32 STATE | #004 | Oil | Horizontal | Active | 32 | T195 | R34E | P | P-32-195-34E 990 FSL 330 FFL | M-32-195-34E 661 FSL 6335 FFL | BONE SPRING | 13838 8766 |
| 30-025-82432 | HUDSON OIL COMPANY OF TEXAS | FEDERAL | #002 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | M | M-04-205-34E 660 FSL 660 FWL | M-04-205-34E 660 FSL 660 FWL | YATES-SEVEN RIVERS | 3709 3709 |
| 30-025-30993 | PENITENARY EXPLORATION AND PRODUCTION LLC | CHAPARRAL 33 FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T195 | R34E | E | E-33-195-34E 1980 FSL 660 FWL | F-33-195-34E 1980 FSL 660 FWL | BONE SPRING | 10300 10300 |
| 30-025-38974 | READ & STEVENS INC | TRUMAN FEDERAL | #007 | Oil | Vertical | Active | 04 | T205 | R34E | N | N-04-205-34E 660 FSL 990 FWL | M-04-205-34E 660 FSL 990 FWL | DELAWARE | 8370 8370 |
| 30-025-33329 | READ & STEVENS INC | TRUMAN FEDERAL | #006 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | D | D-04-205-34E Lot: 4 660 FNL 990 FWL | D-04-205-34E Lot: 4 660 FNL 990 FWL | DELAWARE | 8330 8330 |
| 30-025-33589 | READ & STEVENS INC | TRUMAN FEDERAL | #008 | Oil | Vertical | Active | 04 | T205 | R34E | L | L-04-205-34E 1650 FSL 990 FWL | L-04-205-34E 1650 FSL 990 FWL | DELAWARE | 8350 8350 |
| 30-025-33400 | READ & STEVENS INC | HUDSON FEDERAL | #007 | Oil | Vertical | Cancelled Appl | 04 | T205 | R34E | E | E-04-205-34E 1980 FSL 990 FWL | L-04-205-34E 1980 FSL 990 FWL | DELAWARE | 8400 8400 |
| 30-025-42270 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #004C | Oil | Horizontal | Cancelled Appl | 04 | T205 | R34E | D | D-04-205-34E Lot: 4 661 FNL 1040 FWL | M-04-205-34E 330 FSL 970 FWL | BONE SPRING | 15374 10884 |
| 30-025-44878 | READ & STEVENS INC | NORTH LEA 9 FEDERAL COM | #004H | Oil | Horizontal | Cancelled Appl | 04 | T205 | R34E | M | M-04-205-34E 660 FSL 1275 FWL | M-04-205-34E 330 FSL 970 FWL | BONE SPRING | 16038 10880 |
| 30-025-36872 | APACHE CORPORATION | SOUTH LUK 33 FEDERAL | #003 | Oil | Vertical | New | 33 | T195 | R34E | F | F-33-195-34E 1545 FNL 1910 FWL | L-33-195-34E 1980 FSL 990 FWL | MORROW | 12800 12800 |
| 30-025-33665 | READ & STEVENS INC | TRUMAN FEDERAL | #005 | Oil | Vertical | Active | 04 | T205 | R34E | M | M-04-205-34E 990 FSL 1980 FWL | M-04-205-34E 990 FSL 1980 FWL | DELAWARE | 8340 8340 |
| 30-025-82434 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #002 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | F | F-04-205-34E 1994 FSL 1980 FWL | F-04-205-34E 1984 FSL 1980 FWL | YATES-SEVEN RIVERS | 3759 3759 |
| 30-025-80413 | CHAMBER ENERGY CO. OF COLORADO | LEA CHAPARRAL FEDERAL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T195 | R34E | K | K-33-195-34E 1980 FSL 1980 FWL | K-33-195-34E 1984 FSL 1980 FWL | BONE SPRING | 13600 13600 |
| 30-025-33774 | READ & STEVENS INC | TRUMAN FEDERAL | #003 | Oil | Vertical | Active | 04 | T205 | R34E | E | E-04-205-34E 1980 FSL 1980 FWL | K-04-205-34E 1980 FSL 1980 FWL | DELAWARE | 8370 8370 |
| 30-025-41750 | READ & STEVENS INC | NORTH LEA 9 FEDERAL COM | #003H | Oil | Horizontal | New | 04 | T205 | R34E | H | H-04-205-34E 400 FSL 2790 FWL | H-04-205-34E 330 FSL 2230 FWL | BONE SPRING | 14021 8400 |
| 30-025-42428 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #004 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | C | C-04-205-34E Lot: 3 823 FNL 2310 FWL | C-04-205-34E Lot: 3 823 FNL 2310 FWL | DELAWARE | 8309 3709 |
| 30-025-35183 | READ & STEVENS INC | HUDSON FEDERAL | #004 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | F | F-04-205-34E 1650 FSL 2310 FWL | F-04-205-34E 1650 FSL 2310 FWL | DELAWARE | 8350 8350 |
| 30-025-38017 | READ & STEVENS INC | HUDSON FEDERAL | #003 | Oil | Vertical | Active | 04 | T205 | R34E | C | C-04-205-34E Lot: 3 660 FNL 2310 FWL | C-04-205-34E Lot: 3 660 FNL 2310 FWL | DELAWARE | 8350 8350 |
| 30-025-43505 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #003H | Oil | Horizontal | Cancelled Appl | 04 | T205 | R34E | C | C-04-205-34E Lot: 3 895 FNL 2515 FWL | M-04-205-34E 330 FSL 2280 FWL | BONE SPRING | 14241 10525 |
| 30-025-34119 | READ & STEVENS INC | PEARL 33 FEDERAL | #001 | Oil | Vertical | Active | 33 | T195 | R34E | N | N-33-195-34E 480 FSL 2310 FWL | M-33-195-34E 480 FSL 2310 FWL | DELAWARE | 10250 10250 |
| 30-025-35516 | READ & STEVENS INC | TRUMAN FEDERAL | #004 | Oil | Vertical | Active | 04 | T205 | R34E | O | O-04-205-34E 990 FSL 2310 FFL | O-04-205-34E 990 FSL 2310 FFL | DELAWARE | 8340 8340 |
| 30-025-82421 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 33 | T195 | R34E | O | O-33-195-34E 330 FSL 2310 FFL | O-33-195-34E 330 FSL 2310 FFL | YATES-SEVEN RIVERS | 3899 3899 |
| 30-025-34113 | BLACK HILLS GAS RESOURCES, INC. | MALLON 33 FEDERAL | #003 | Oil | Vertical | Plugged, Site Released | 33 | T195 | R34E | J | J-33-195-34E 2080 FSL 2080 FFL | L-33-195-34E 2080 FSL 2080 FFL | BONE SPRING | 7950 7950 |
| 30-025-82413 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #001 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | B | B-04-205-34E Lot: 2 823 FNL 2130 FFL | B-04-205-34E Lot: 2 823 FNL 2130 FFL | YATES-SEVEN RIVERS | 3630 3630 |
| 30-025-32477 | READ & STEVENS INC | HUDSON FEDERAL | #005 | Oil | Vertical | Active | 04 | T205 | R34E | B | B-04-205-34E Lot: 2 840 FNL 2130 FFL | B-04-205-34E Lot: 2 840 FNL 2130 FFL | DELAWARE | 8300 8300 |
| 30-025-33511 | PRE-ONGARD WELL OPERATOR | PRE-ONGARD WELL | #001 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | B | B-04-205-34E Lot: 2 660 FNL 1982 FFL | B-04-205-34E Lot: 2 660 FNL 1982 FFL | DELAWARE | 14785 14785 |
| 30-025-33511 | READ & STEVENS INC | HUDSON FEDERAL | #008 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | G | G-04-205-34E 1980 FSL 1980 FFL | G-04-205-34E 1980 FSL 1980 FFL | DELAWARE | 8361 8361 |
| 30-025-82416 | HUDSON OIL COMPANY OF TEXAS | MATLOCK | #004 | Oil | Vertical | Plugged, Site Released | 04 | T205 | R34E | J | J-04-205-34E 1650 FSL 1980 FFL | O-04-205-34E 1650 FSL 1980 FFL | YATES-SEVEN RIVERS | 3781 3781 |
| 30-025-30888 | READ & STEVENS INC | TRUMAN FEDERAL | #002 | Oil | Vertical | Active | 04 | T205 | R34E | G | G-04-205-34E 1650 FSL 1980 FFL | J-04-205-34E 1650 FSL 1980 FFL | DELAWARE | 8285 8285 |
| 30-025-43504 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #002H | Oil | Horizontal | Cancelled Appl | 04 | T205 | R34E | B | B-04-205-34E Lot: 2 570 FNL 1395 FFL | O-04-205-34E Lot: 2 570 FNL 1395 FFL | BONE SPRING | 14791 10825 |
| 30-025-32971 | READ & STEVENS INC | HUDSON FEDERAL | #002 | Oil | Vertical | Active | 04 | T205 | R34E | A | A-04-205-34E Lot: 1 990 FNL 990 FFL | A-04-205-34E Lot: 1 990 FNL 990 FFL | DELAWARE | 8380 8380 |
| 30-025-44481 | READ & STEVENS INC | PEARL 33 FEDERAL | #002 | Oil | Vertical | Cancelled Appl | 33 | T195 | R34E | P | P-33-195-34E 990 FSL 990 FFL | P-33-195-34E 990 FSL 990 FFL | BONE SPRING | 10400 10400 |
| 30-025-38218 | READ & STEVENS INC | HUDSON FEDERAL | #001 | Oil | Vertical | Active | 04 | T205 | R34E | H | H-04-205-34E 1980 FSL 660 FFL | H-04-205-34E 1980 FSL 660 FFL | DELAWARE | 13750 13750 |
| 30-025-43511 | READ & STEVENS INC | NORTH LEA 4 FEDERAL COM | #001H | Oil | Horizontal | Cancelled Appl | 04 | T205 | R34E | A | A-04-205-34E Lot: 1 335 FNL 350 FFL | P-04-205-34E 330 FSL 350 FFL | BONE SPRING | 15080 10831 |

Exhibit A

Released to Imaging: 9/5/2023 4:23:56 PM1

VII (4)

Permian Oilfield Partners, LLC.
 Overdue Federal SWD #1
 602' FNL, 298' FEL
 Sec. 11, T20S, R33E, Lea Co. NM
 Lat 32.6077848° N, Lon -103.5747341°
 W GL 3643', RKB 3673'

| 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 | |

Exhibit A

VII (5)

Permian Oilfield Partners, LLC.
Overdue Federal SWD #1
602' FNL, 298' FEL
Sec. 11, T20S, R33E, Lea Co. NM
Lat 32.6077848° N, Lon -103.5747341°
W GL 3643', RKB 3673'

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

Exhibit A



PERMIAN OILFIELD
PARTNERS

Attachment to C-108
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

June 10, 2023

STATEMENT REGARDING SEISMICITY

Examination of the USGS and NMT 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.

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 1.7 mi (2.7 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

Exhibit A

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 2.7 miles away from the nearest active or permitted Devonian disposal well (Fasken Quail 16 State SWD #9, SWD-1537). There is another permitted Devonian disposal well 5.3 miles to the SW, the Permian TDS, Coombes SWD #1, SWD-1996. Both of these wells are included in the below FSP analysis.
7. The probability of an induced seismic event is calculated to be 0% after 5, 10, 20, & 30 years as per the FSP results screenshots below.

Input assumptions:

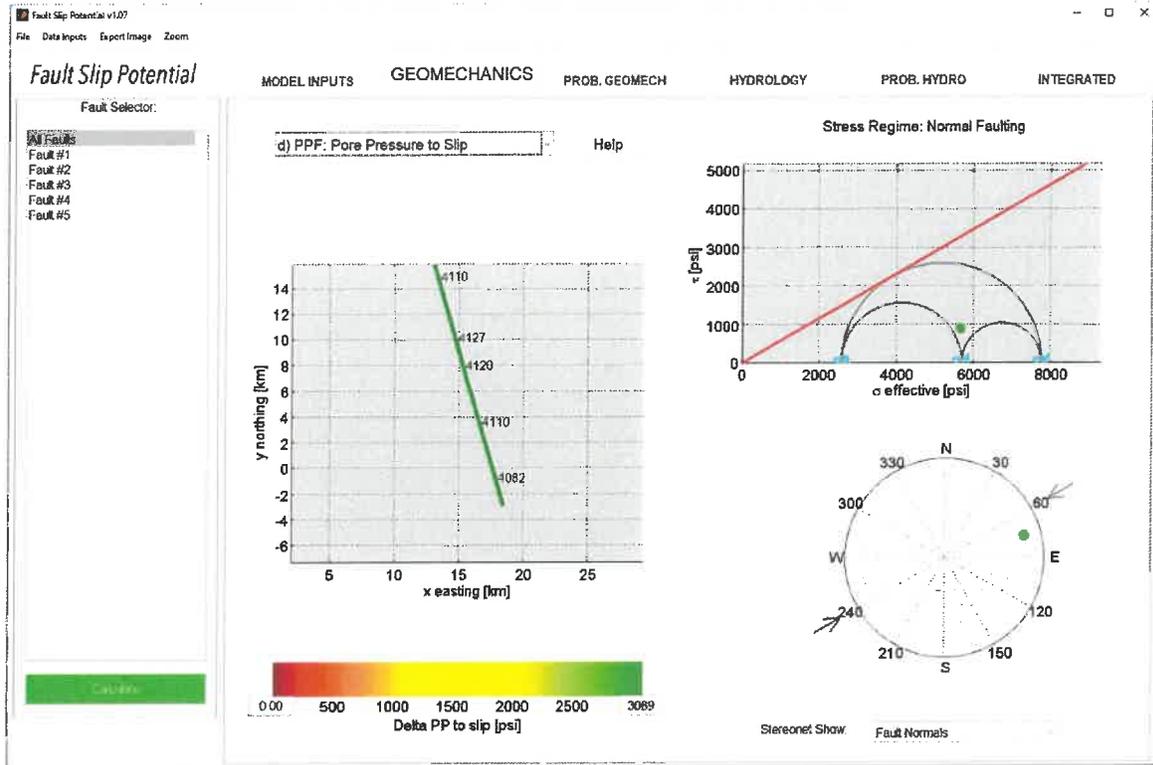
| | |
|--|-----------|
| Overdue Fed SWD rate (BBL/day) | 50000 |
| Fasken Quail 16 SWD #9 rate (BBL/day) | 1800 |
| Permian TDS Coombes SWD rate (BBL/day) | 30000 |
| Interval height (ft) | 1229 |
| Average Porosity (%) | 5.4 |
| Vert stress gradient (psi/ft) | 1.00 |
| Hor stress direction (deg N) | 60 |
| Fault dip (deg) | 75 |
| Ref depth (ft) | 14640 |
| 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 Overdue Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Permian TDS Coombes SWD #1.

Exhibit A

Geomechanics Pore Pressure to Slip



GeoMechanics Variability

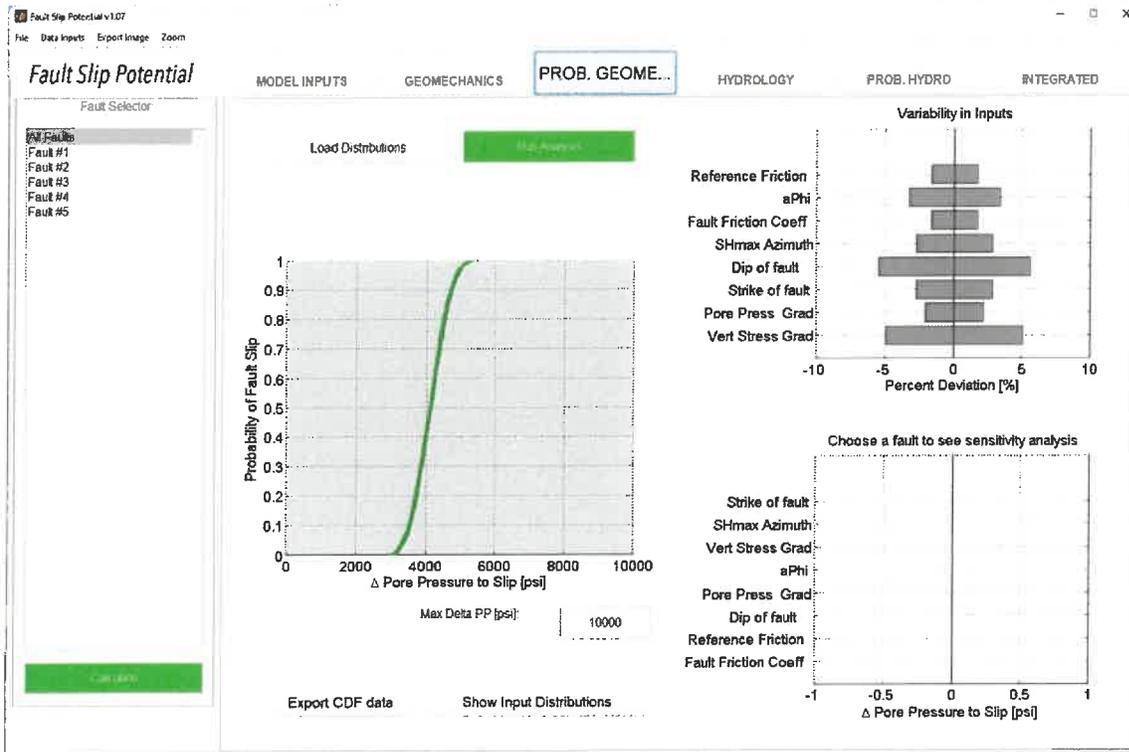
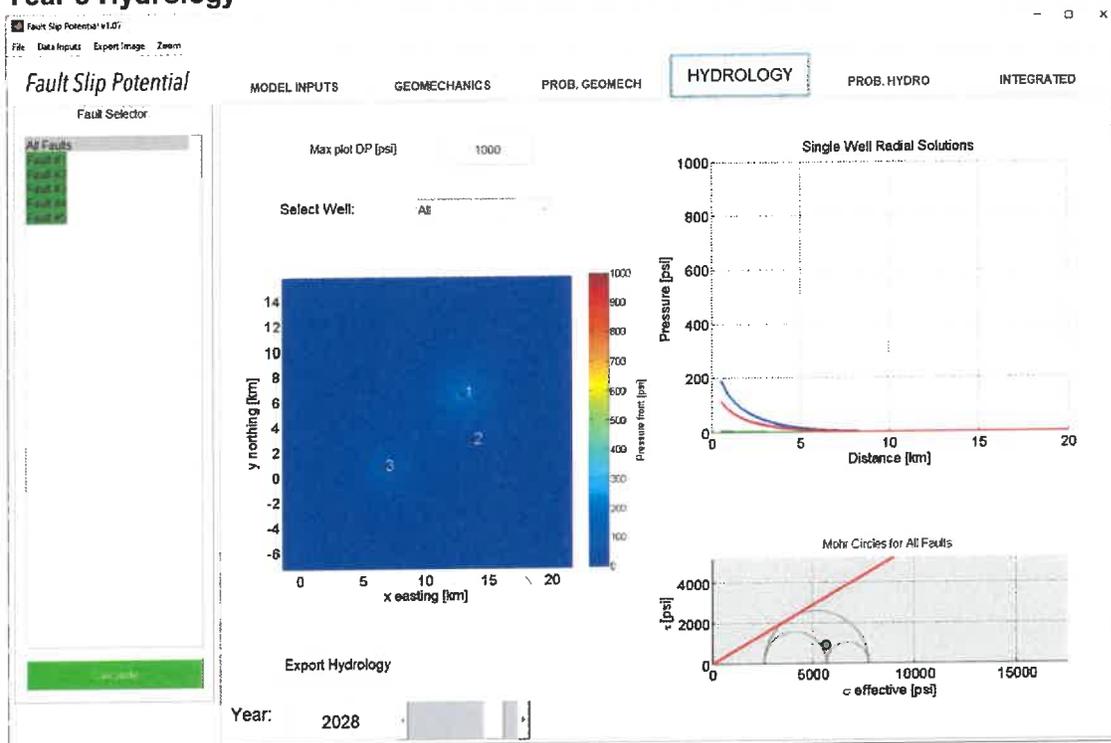


Exhibit A

Year 5 Hydrology



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

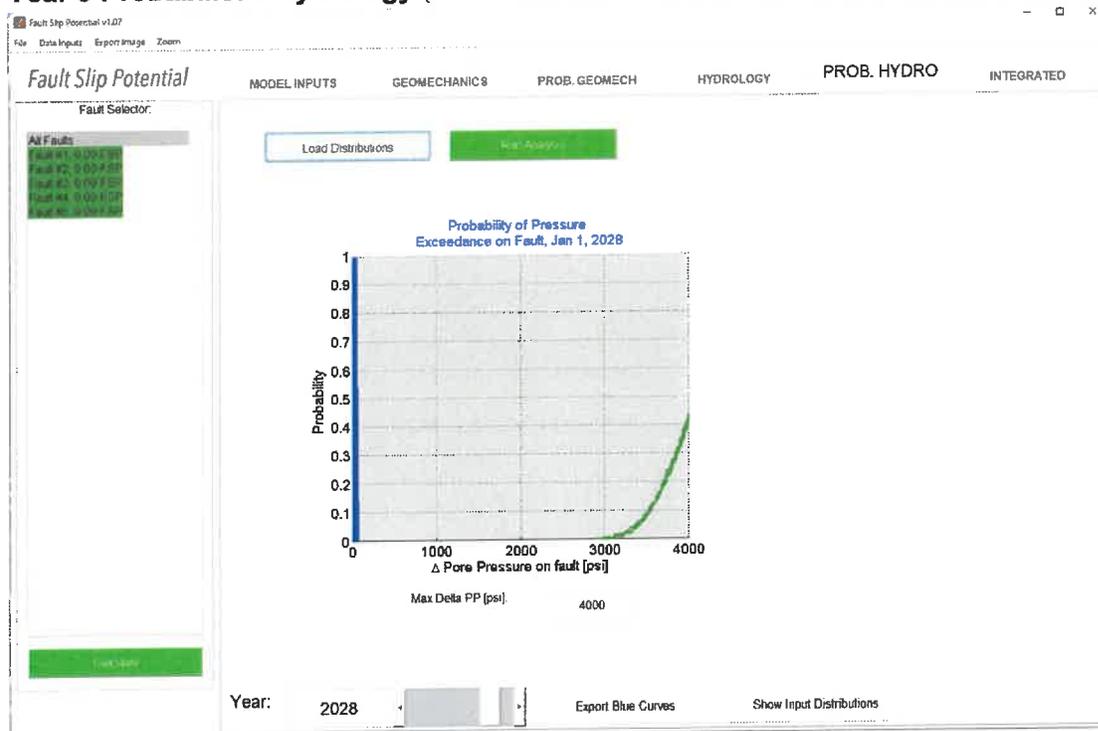


Exhibit A

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

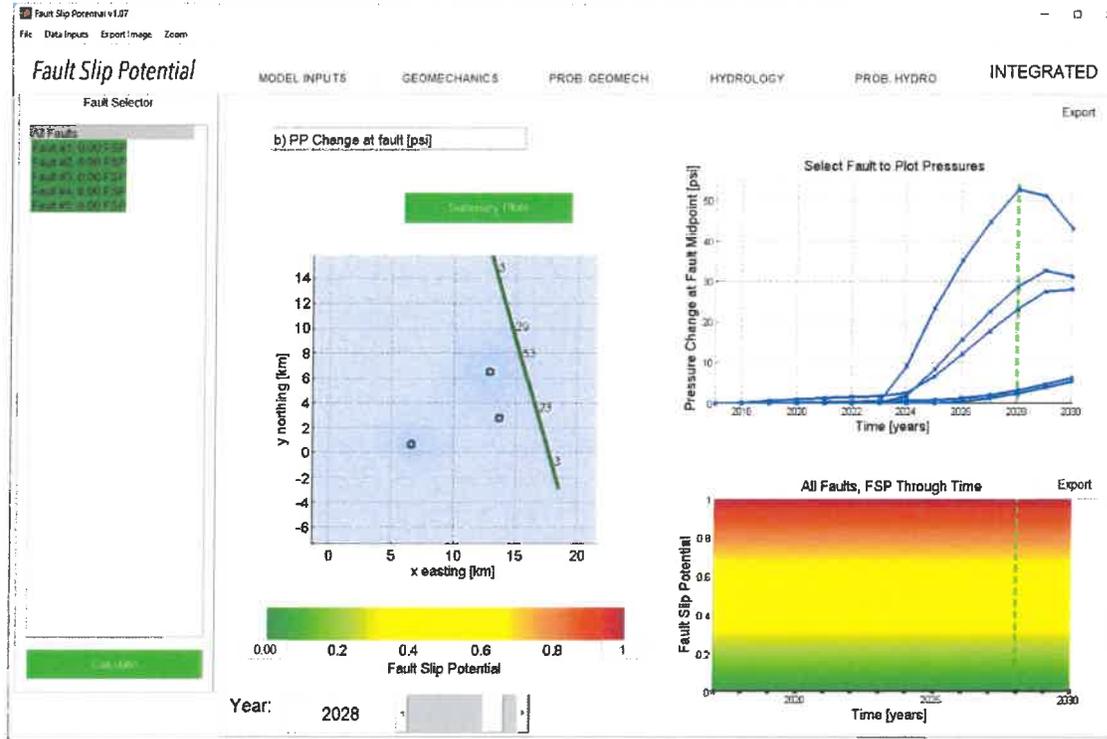
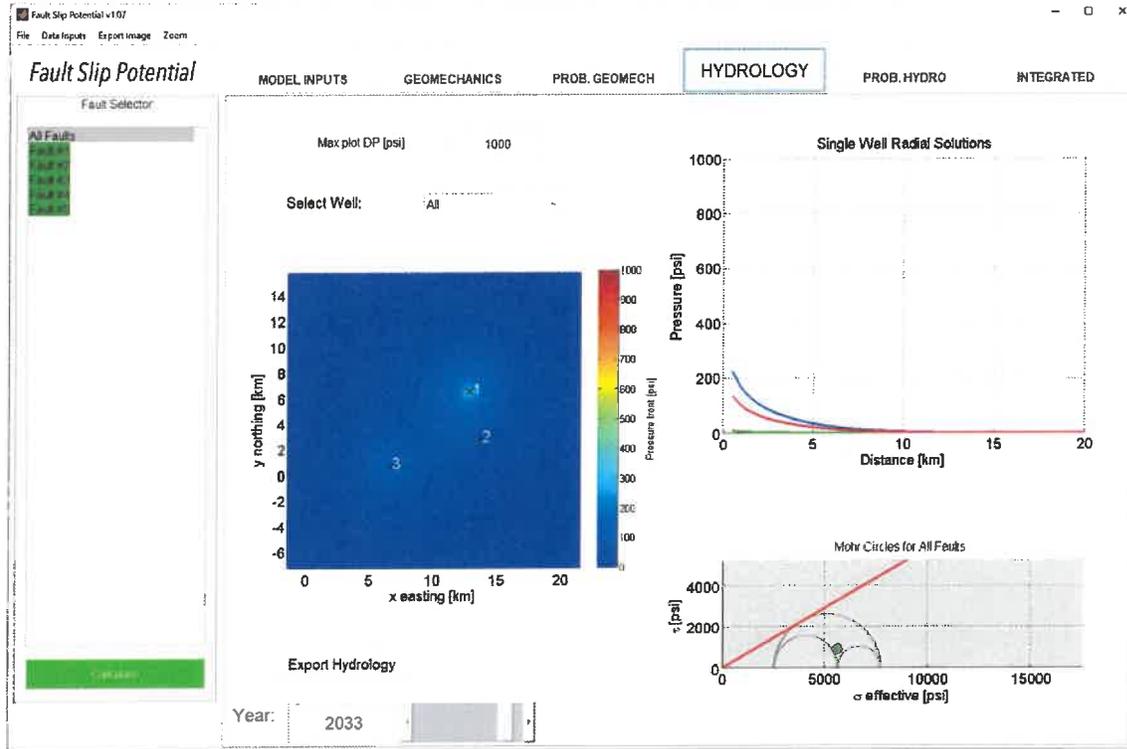


Exhibit A

Year 10 Hydrology



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



Exhibit A

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

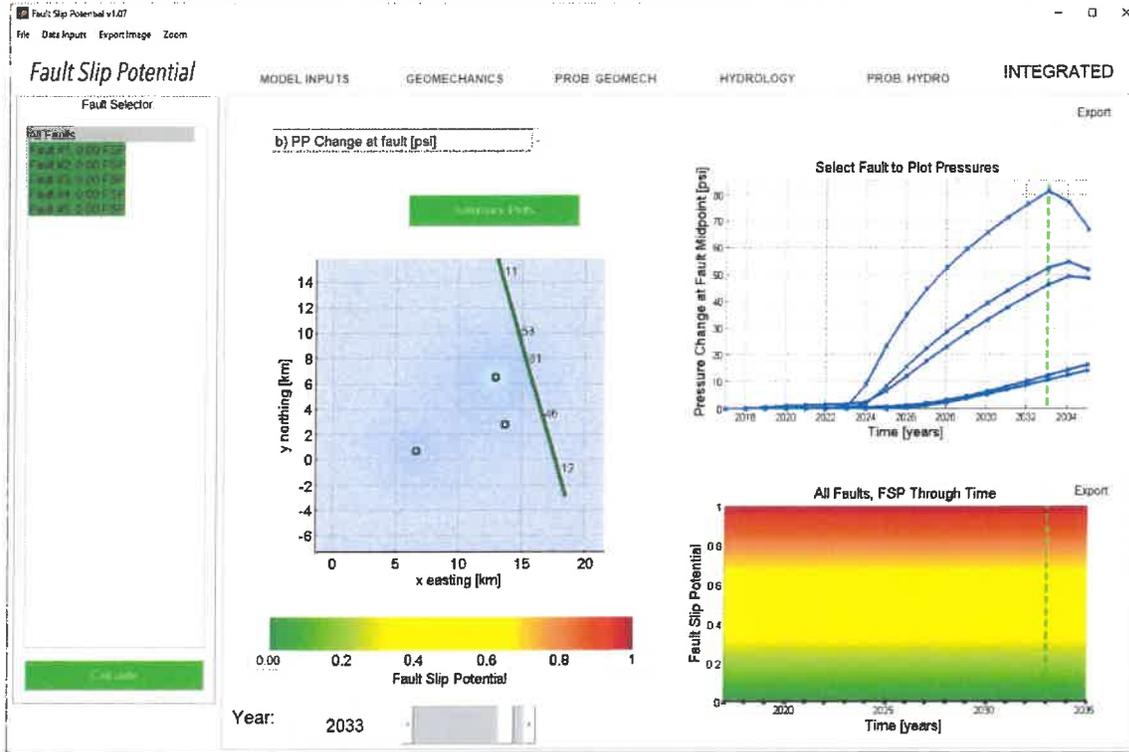
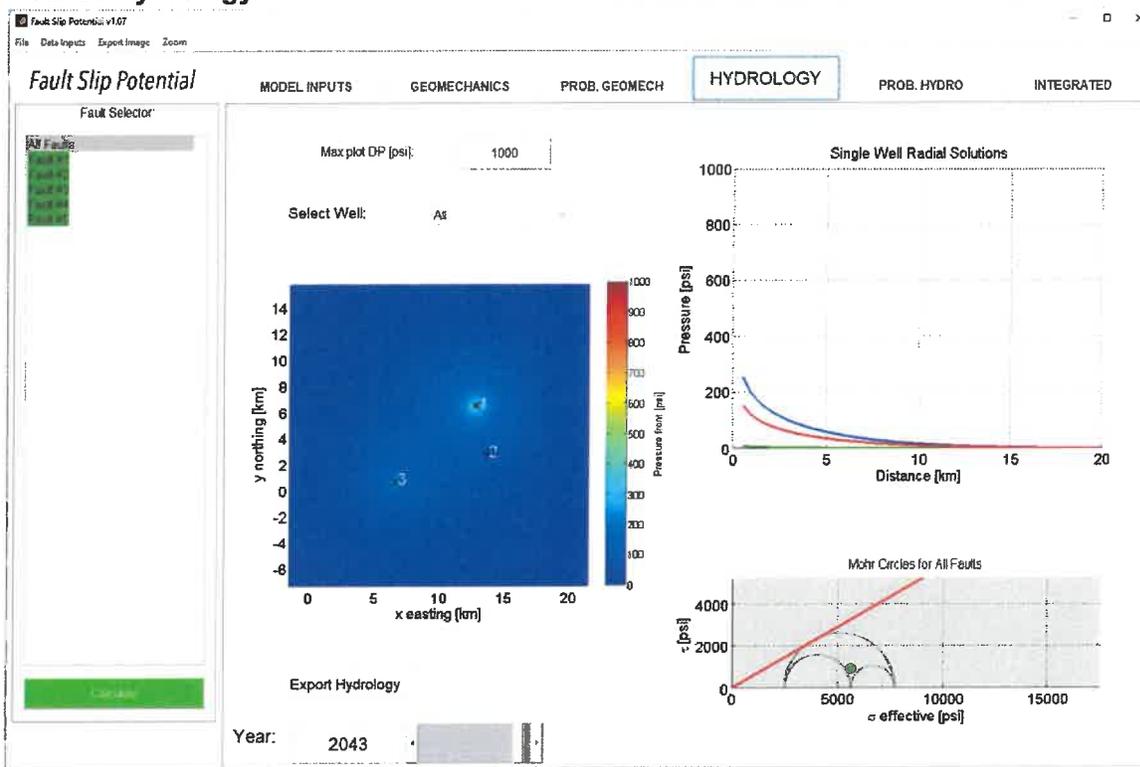


Exhibit A

Year 20 Hydrology



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

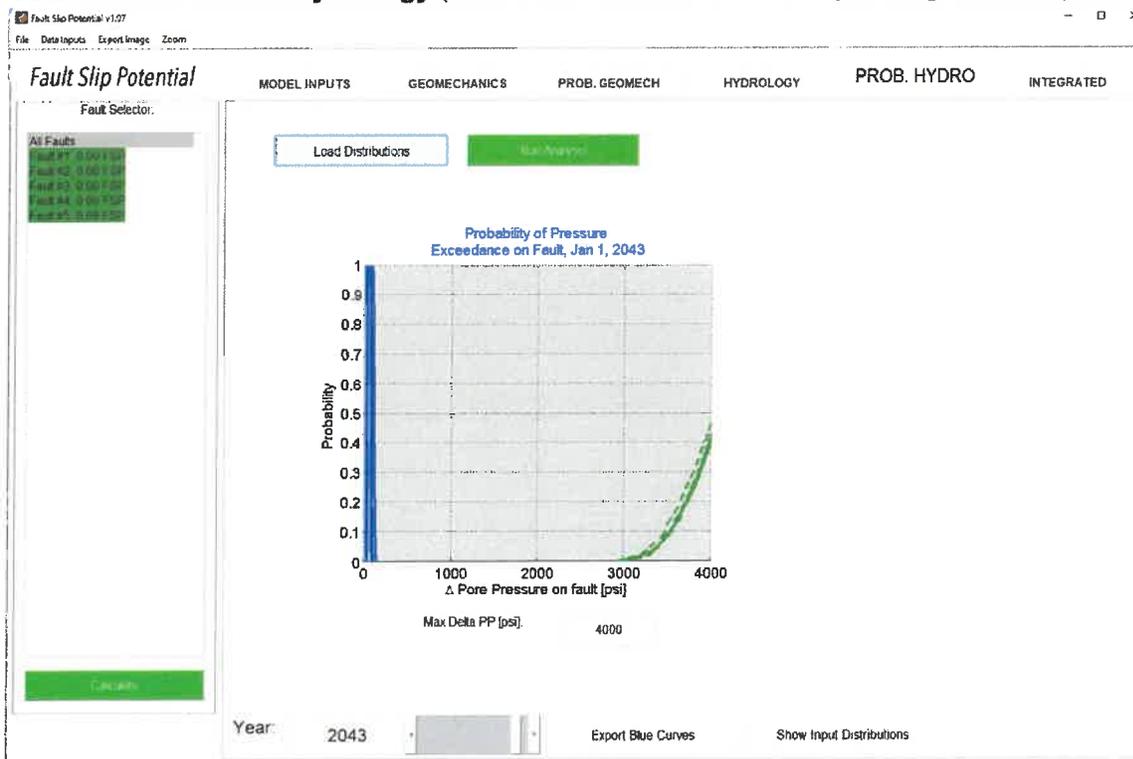
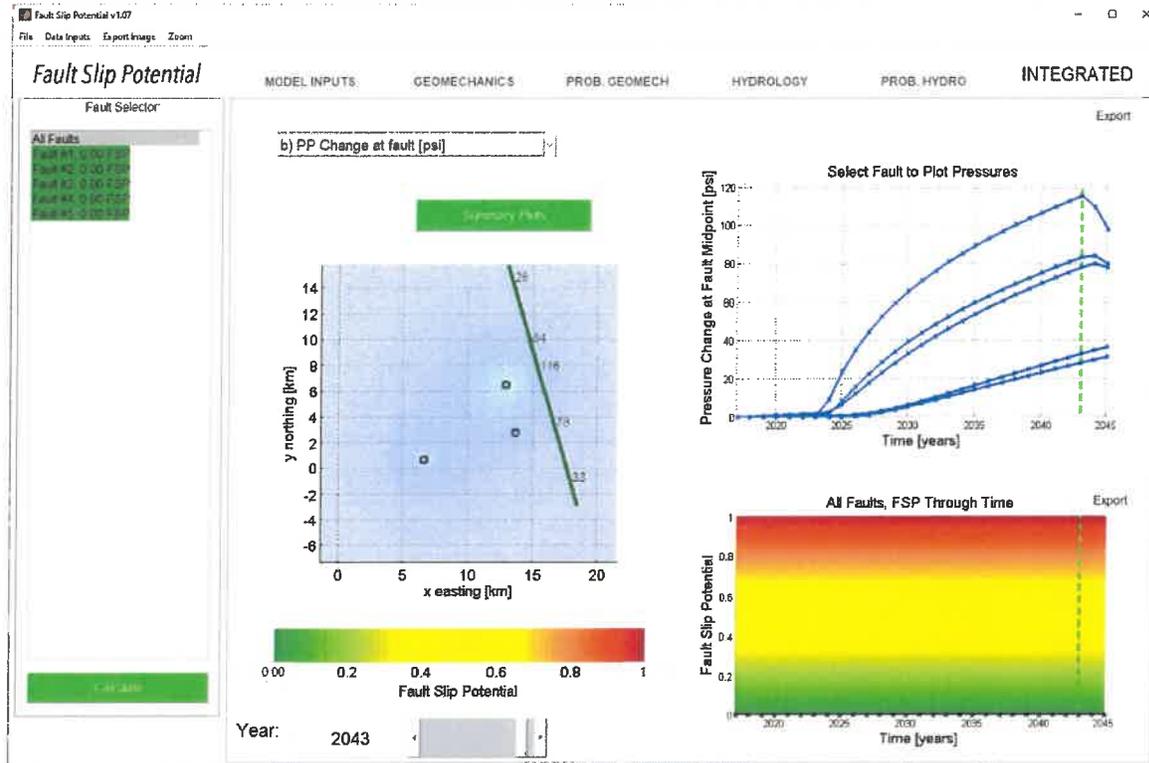
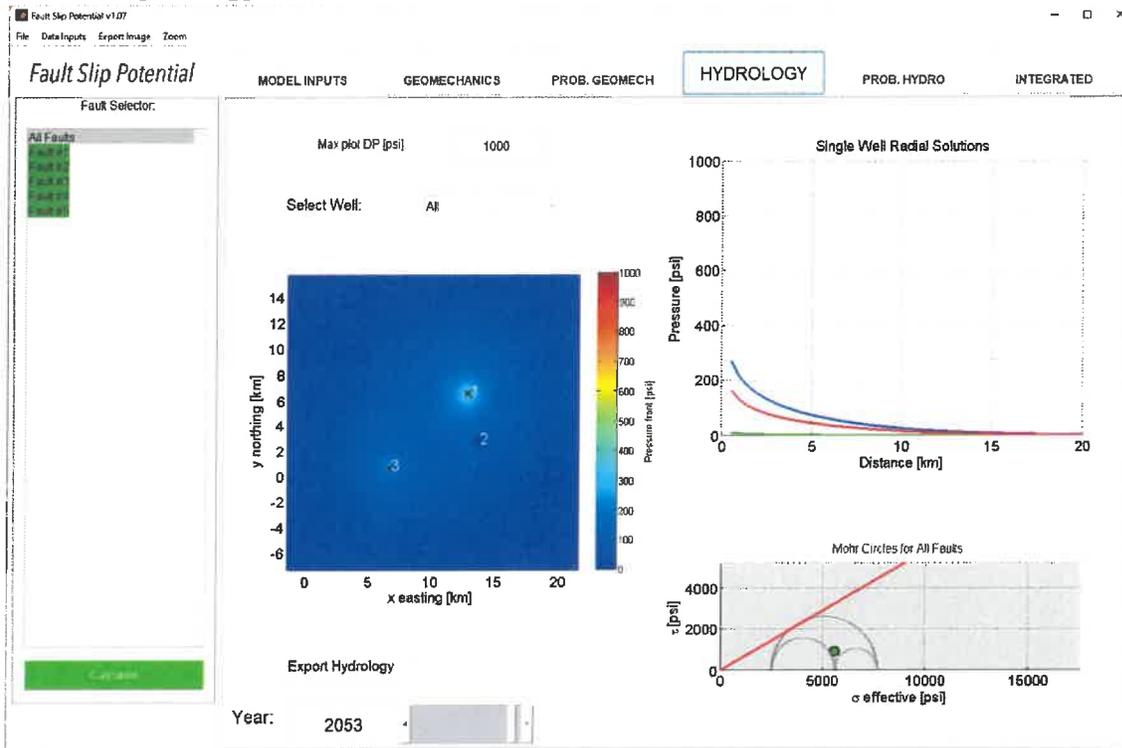


Exhibit A

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



Year 30 Hydrology



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

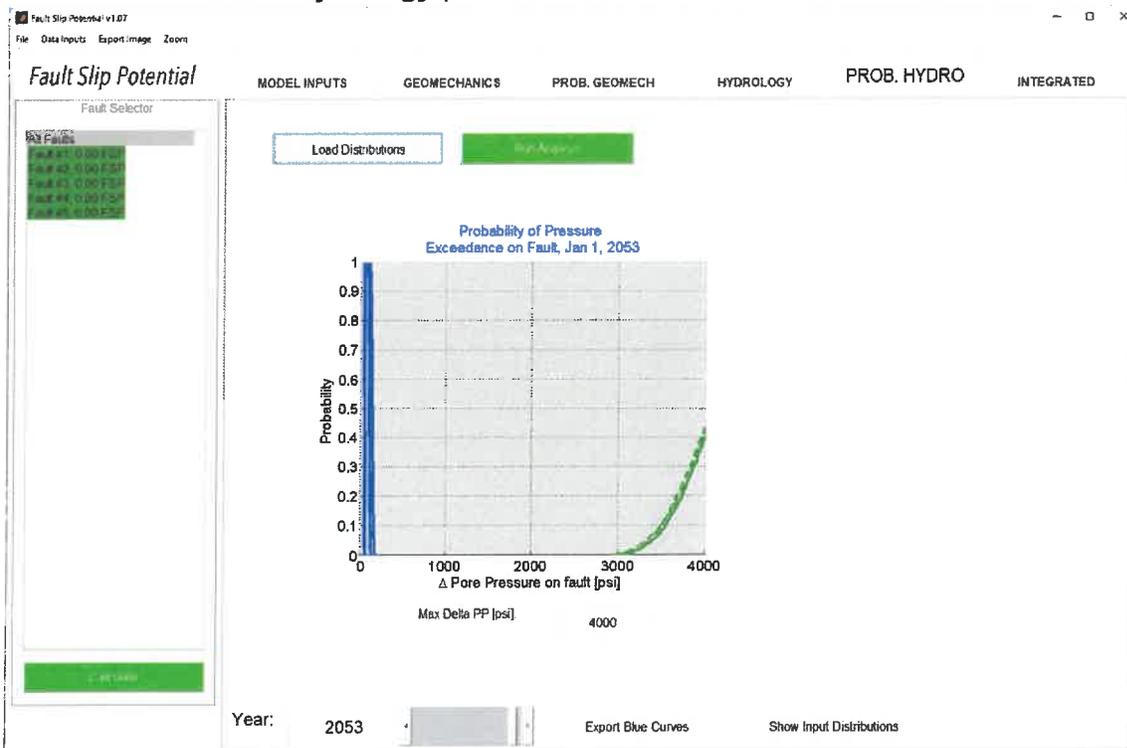
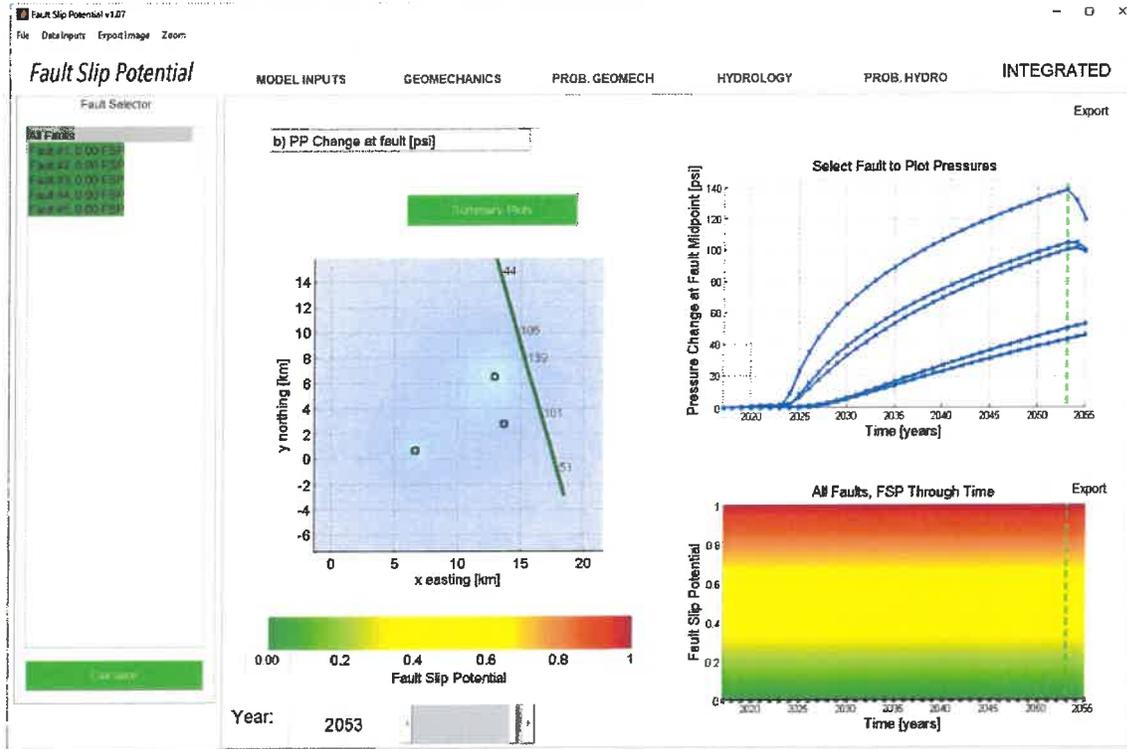


Exhibit A

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



gfisher@popmidstream.com

(817) 606-7630

Exhibit A



Item XII. Affirmative Statement

Re: C-108 Application for Authorization to Inject
Permian Oilfield Partners, LLC
Overdue Federal SWD #1
602' FNL & 298' FEL
Sec 5, T20S, R34E
Lea County, NM

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

A handwritten signature in black ink, appearing to read "Gary Fisher".

Gary Fisher.
Manager
Permian Oilfield Partners, LLC.

Date: 7/5/2023

Exhibit A

VI.

Form 9-821a
(Feb. 1961)

| | | |
|--|--|---|
| | | X |
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| | | |

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Land Office Las Cruces

Lease No. 065607

Unit B

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15,, 1963

Pure Federal "C"
Well No. 1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

SW NE Sec. 4 20S 34E NMPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wildcat Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 12,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sack plug cement at 4083-3983 and 10 sack cement plug at 20' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer

GPO 914974

Exhibit A

Form 9-331a
(Feb. 1961)

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

APPROVED
JUL 22 1963
A. R. SKVIRN
DISTRICT ENGINEER

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces
Lease No. 063607
Unit E

MAY 23 1963

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15, 19 63

Pure Federal "C"
Well No. #1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4
[S]
[W]

N 1/2 Sec. 4 20S 34E N 1/2 M 11
(4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Luja New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

In accordance with verbal approval of Mr. Standley, this well was plugged and abandoned on May 13, 1963, as follows:

Set squeeze packer at 18,490. Squeezed below with 150 sacks of slo-set cement at 4500 psi. Placed 30 sacks plug cement at 4083-3983 and 10 sacks cement plug at 20' to surface. Hole was loaded with 12.2# mud.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building
Artesia, New Mexico

By Ralph L. Gray
Title Consulting Engineer

Form 9-831a
(Feb. 1961)

APPROVED 1963 JUL 23
(SUBMIT IN TRIPLICATE)

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

| | | |
|--|---|-------------|
| | X | JUL 17 1963 |
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| | | |

J. L. GORDON
DISTRICT ENGINEER
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Las Cruces

Lease No. 065607

Unit 3

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

..... May 15,, 19 63

Well No. #1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

NE NE Sec. 4 208 34E NMPM
 (1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Wildcat Lee New Mexico
 (Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3686 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baker bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892-920 with 2 jet shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. F3IP - 6875 FFP - 6153.
 60 min. ISIP - 6938 IPP - - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,300'. Squeeze below with 150 sacks of slo-set cement. Place cement plugs at 4063-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Mexico

By Ralph L Gray

Title Consulting Engineer,

GPO 914974

Exhibit A

Form 9-881a
(Feb. 1961)

| | | |
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| | X | |
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| | | |

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4.
Form Approved.
Land Office Las Cruces
Lease No. 065607
Unit B

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

May 15, 19 63

Well No. 1 is located 660 ft. from [N] line and 1982 ft. from [E] line of sec. 4

NW NE Sec. 4 (1/4 Sec. and Sec. No.) 208 (Twp.) 34E (Range) N19W (Meridian)
Wildcat (Field) Lee (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3646 ft.

DETAILS OF WORK

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

On May 11, 1963, we reached a depth of 13,008' after drilling out all cement plugs and cleaning out junk. A Baker bridge plug was set at 12,988' in 7" casing. The 7" casing was then perforated from 12,892-920 with 2 jet shots per foot. On May 13, ran drill stem test from 12,789'-988'. The well flowed at the rate of 620,000 cu.ft. gas per day plus 96 barrels of salt water per hour on a 6 hour test. Pressures were as follows:

Hydrostatic - - 8380 psi. 60 min. FSIP - 6875 FTP - 6153.
60 min. ISIP - 6938 IFP - - - - 6215

We request approval to plug well as follows (verbal approval was given by Mr. Standley on May 13). Set squeeze packer at about 12,500'. Squeeze below with 150 sacks of sic-set cement. Place cement plugs at 4083-3983 (30 sacks) and 20' to surface (10 sacks). Install 4" marker at surface. Heavy mud between plugs.

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

Company William A. & Edward R. Hudson
Address 302 Carper Building
Artesia, New Mexico
By Ralph L Gray
Title Consulting Engineer.

GPO 914974

APPROVED N. M. O. C. C. COPY

Form 9-381a (Feb. 1961)

APR 2 1963

(SUBMIT IN TRIPLICATE)

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

Land Office **Las Cruces**

Lease No. **063607**

Unit **R**

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| | X | |
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| | | |

F. W. STANDLEY DISTRICT ENGINEER

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

APR 2 1963

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

April 1, 1963

Well No. **Pure Federal "C" #1** is located **660** ft. from **N** line and **1982** ft. from **E** line of sec. **4**

NE NE Sec. 4 (1/4 Sec. and Sec. No.) **20S** (Twp.) **34E** (Range) **N41W** (Meridian)

Wildcat (Field) **Lea** (County or Subdivision) **New Mexico** (State or Territory)

The elevation of the derrick floor above sea level is **3646** ft.

DETAILS OF WORK

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

It is proposed to re-enter this hole which was plugged and abandoned Aug. 21, 1959. The well was previously known as the Pure Oil Company - Federal "C" #1.

We will drill out all cement plugs above the plug at 13,645'. The Morrow Zone at about 12,890 to 12,920 will then be perforated and tested. If a commercial well is indicated, we will file a final plan to complete well at that time.

RECEIVED APR 1 1963 U. S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

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

Company **William A. & Edward R. Hudson, et al**

Address **302 Carper Building Artesia, New Mexico**

By **Ralph L Gray** Title **Consulting Engineer.**

Drilled to 14,985'. Plugged back from 14,985' to 14,985' with 78 sacks cement in open hole from 14,985' to 14,985' and bottom of 7" OD casing to 13,960' to 13,960'.

Perforated 7" casing from 13,646' to 13,741' with 4 shots per foot, attempted to acidize with 500 gals mud acid, packer failed; acidized with 500 gals mud acid with packer set at 13,655', packer leaking. Swabbed lead water. Acidized with 500 gals mud acid with packer set at 13,646'.

Plugged back in 7" casing from 13,770' to 13,645' with 30 sacks cement, perforated 7" casing from 12,572' to 12,586' with 4 shots per foot. Acidized with 500 gals mud acid.

Plugged and Abandoned: Placed cement plug in 7" casing and over perforations from 12,572' to 12,586' with 12 sacks cement from 12,600' to 12,550'. Shot 7" casing off at 4,029', pulled 123 joints, approximately 4,000'. Placed cement plug in 7" casing from 6,530' to 6,470' with 12 sacks cement; from 4,220' to 4,100' with 24 sacks cement; in 7" and 9-5/8" casing from 4,040' to 3,940' with 40 sacks; in 9-5/8" casing 20' to surface with 8 sacks cement, with heavy mud between plugs. Welded 1/2" steel plate on top of casing with 4" pipe marker extending 4' above surface.

Plugged back in 7" casing from 14,985' to 14,985' with 78 sacks cement in open hole

Exhibit A

Form 9-336

Y TO O. G. G.

U. S. LAND OFFICE

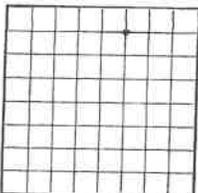
Santa Fe, N. Mex.

HOBBBS OFFICE 000000 LC 065607

LEASOR OR PERMITTEE

1958 SEP 22 AM 10:36

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company The Pure Oil Company Address P.O. Box 2107, Fort Worth, Texas
Lessor or Tract Federal "C" Field Wildcat State New Mexico
Well No. 1 Sec. 4 T. 20S R. 34E Meridian N00W County Lea
Location 660 ft. [N] of N. Line and 1942 ft. [E] of E. Line of Section 4 Elevation 3646 fsc

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Date August 26, 1957 Signed J. L. Suttle Title Chief Clerk

The summary on this page is for the condition of the well as above date.

Commenced drilling December 27, 1958. Finished drilling July 16, 1959

OIL OR GAS SANDS OR ZONES

No. 1, from 13697' to 13741' ft. No. 4, from _____ to _____
No. 2, from 12572' to 12386' ft. No. 5, from _____ to _____
No. 3, from 3720' to 3650' ft. No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Table with columns: Size casing, Weight per foot, Threads per inch, Make, Amount, Kind of steel, Out and pulled from, Perforated, Purpose. Includes entry for HILOKA OIL OR GAS WELL.

MUDDING AND CEMENTING RECORD

Table with columns: Size casing, Where set, Number sacks of cement, Method used, Mud gravity, Amount of mud used. Includes entries for 13-3/8" and 9-5/8" casings.

PLUGS AND ADAPTERS

Heaving plug—Material _____ Length _____ Depth set _____
Adapters—Material _____ Size _____

SHOOTING RECORD

Table with columns: Size, Shell used, Explosive used, Quantity, Date, Depth shot, Depth downed out.

TOOLS USED

Rotary tools were used from 0 feet to 1495 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____
If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES

J. N. Everett Driller Ev. S. Strother Driller
M. Blum Driller _____ Driller

FORMATION RECORD

Table with columns: FROM, TO, TOTAL FEET, FORMATION. Lists geological layers like SCP - Bottom Cellar, Caliche, Red Rock, Red Bed, etc.

FORMATION RECORDED—Continued

DRILL STEM TESTS:

- DST #1: From 10,750' to 10,820', 1" x 5/8" chokes, tool open 3 hours, weak air blow throughout the test. Recovered 840' slightly gas cut mud and 90' very slightly oil and gas cut mud, no formation water. 30 minute initial shut in pressure 95#, flowing pressure initial 164#, final 329#, 1 hour final shut in pressure 400#, hydrostatic pressure 5219#, bottom hole temperature 146 deg.
- DST #2: Pennsylvanian from 12,566' to 12,574', 5/8" bottom hole choke, bottom 2500' drill pipe charged with nitrogen to a pressure of 1000 Psi and adjustable surface choke. opened tool, tool plugged immediately. Pulled out of hole, bled down nitrogen in bottom 2500' drill pipe to 100 psi at which pressure gas showed. Recovered 290' gas cut mud. Hydrostatic pressure 7460#.
- DST #3: From 12,566' to 12,575', 5/8" bottom choke, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with nitrogen to a pressure of 1000 psi. Opened tool, nitrogen to surface in 7 minutes, gas to surface in 60 minutes, tool open 1 hour 15 minutes and packer failed. Measured gas for 15 minutes, maximum rate 1,250 MCF/D and steadily increasing, 3/4" choke, drill pipe pressure 75#. Pulled tool, 1000 psi below nitrogen valve. 5 barrels condensate in drill pipe below valve and estimated 12 barrels gas cut drilling mud below condensate. 30 minute initial shut in pressure 6760#, flowing pressure initial 1380#, final 1600#. Hydrostatic pressure 7260#, bottom hole temperature 230 deg.
- DST #4: From 12,573' to 12,600', 5/8" bottom, 3/4" adjustable surface choke, bottom 2500' of drill pipe charged with Nitrogen to a pressure of 1000#, tool open 3 hours, air to surface in 15 minutes, gas to surface in 55 minutes at rate of 490 MCF/D at 70# tubing pressure, 3/4" choke. Recovered 2 barrels condensate, 1-1/2 barrels gas and condensate cut mud, 180' gas and slightly condensate and slightly salty water cut mud below circulating sub. 30 minute initial shut in pressure 6820#, flowing pressure initial 1180#, final 1420#, 1 hour final shut in pressure 6040#, hydrostatic pressure 7260#.
- DST #5: From 13,075' to 13,120', 5/8" x 1" chokes, 3000' nitrogen blanket charged to pressure of 1000 psi. Tool open 2-1/2 hours, no air blow to surface. Waited 1-1/2 hours, closed and reopened tool, waited 1 hour, no air blow to surface. Bled off nitrogen pressure, recovered very small amount of gas after bleeding nitrogen pressure to 0#, 67' of gas cut mud, no oil or water. 30 minute initial shut in pressure 700# increasing, flowing pressure initial 1160#, final 1160#, 1 hour final shut in pressure 3600# increasing. Hydrostatic pressure 7980#, bottom hole temperature 232 deg.
- DST #6: From 13,665' to 13,750', 5/8" x 1/4" chokes, 4200' of nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 1300' gas cut drilling mud, hydrostatic pressure 10,000#, bottom hole temperature 223 deg.
- DST #7: From 13,640' to 13,751' with 5/8" x 1/4" chokes with 4200' nitrogen blanket charged to 1100 psi. Opened tool and packer failed immediately. Recovered 630' heavily gas cut mud, hydrostatic pressure 10,000#. Bottom hole temperature 160 - 170 deg.
- DST #8: Attempted test in Mississippian from 14,060' to 14,185', 5/8" x 1" chokes, no water blanket. Plug in circulating sub at 13,980' failed when tool opened, pulled out of hole, left 1-1/4" packer rubbers in hole.
- DST #9: Attempted test in Mississippian from 13,900' to 14,185', packer failed. Recovered 2070' drilling mud, no test.
- DST #10: Mississippian from 13,900' to 14,185', 5/8" x 1" chokes, no water blanket, tool open 4 hours, had strong air blow when tool opened, gas to surface in 8 minutes. First hour flowed at rate of 32,000 cubic feet per day, after 80 minutes, flowed at rate of 25,000 cubic feet per day. At end of 4 hour test rate of 35,500 cubic feet per day. Recovered 532' heavily gas cut drilling mud, no show of oil or formation water. 30 minute initial shut in pressure 6070#, flowing pressure initial 255#, 1 hour final shut in pressure 255#, hydrostatic pressure 6275# bottom hole temperature 188 deg.

DRILL STEM TESTS: (Cont'd)

DST #11: Devonian 14,599' to 14,622', 5/8 x 1" chokes, no water blanket, tool open 3 hours, gas to surface in 34 minutes. After 2 hours gas volume 4 MCF/D, decreased to very weak blow at end of test. Recovered 10 gallons of free oil, gravity 51 deg at 60 deg. and 1900' of heavily gas cut and slightly oil cut mud, no water. 30 minute initial shut in pressure failed to record. Flowing pressure initial 75#, final 925#, 1 hour final shut in pressure 1025# increasing, hydrostatic pressure 7740#, bottom hole temperature 230 deg.

DST #12: Devonian 14,620' to 14,672', 5/8" x 1" chokes, no water blanket, tool open 3 hours. Had weak air blow immediately, increased slightly and continued through-out test. Recovered 200' of slightly gas cut mud with brackish taste and 1250' of brackish water. 30 minute initial shut in pressure 6210#, flowing pressure initial 170#, final 650#, 2 hour final shut in pressure 6140# stabilized. Hydrostatic pressure 7695# - 7605#, bottom hole temperature 206 deg.

DST #13: From 14,625' to 14,973', took 30 minute initial shut in pressure, opened tool and packers failed. Pulled test tool. 30-minute initial shut in pressure 6375#, hydrostatic pressure 8180# - 8070#. Reran test tool with Hookwall packer set at 13,900'. Tool open 7 hours, opened tool with good air blow to surface, gas to surface in 30 minutes, maximum rate of 4 MCF/D, decreased to too small to measure at end of test. Pulled test tool, recovered 11,454' of heavily gas cut mud with brackish taste, no water or oil. Flowing pressure initial 430#, final 5830#, 2-1/2 hour final shut in pressure 5940#, hydrostatic pressure 7495# - 7530#.

Exhibit A

FEDERAL "C" #1

| FROM | TO | TOTAL FEET | FORMATION | FROM | TO | TOTAL FEET | FORMATION |
|-------|-------|------------|----------------------------|-------|-------|------------|---------------------------|
| 7969 | 8928 | 959 | Lime & shale | 12233 | 12318 | 85 | Lime & chert |
| 8928 | 8942 | 14 | Lime | 12318 | 12411 | 93 | Lime & shale |
| 8942 | 8967 | 25 | Lime, chert & shale | 12411 | 12461 | 50 | Lime, shale & sand |
| 8967 | 9001 | 34 | Lime & chert | 12461 | 12487 | 26 | Lime & shale |
| 9001 | 9209 | 208 | Lime, chert & shale | 12487 | 12558 | 71 | Lime, shale & sand |
| 9209 | 9296 | 47 | Lime & shale | 12558 | 12740 | 182 | Lime & shale |
| 9296 | 9272 | 16 | Lime | 12740 | 12800 | 60 | Lime |
| 9272 | 9289 | 17 | Lime, chert & shale | 12800 | 12812 | 12 | Lime, shale & chert |
| 9289 | 9300 | 11 | Lime & chert | 12812 | 12879 | 67 | Lime & chert |
| 9300 | 9342 | 42 | Lime, shale & chert | 12879 | 12890 | 11 | Lime |
| 9342 | 9354 | 12 | Shale & chert | 12890 | 12942 | 52 | Lime & shale |
| 9354 | 9407 | 53 | Shale, chert & lime | 12942 | 12943 | 1 | Shale |
| 9407 | 9428 | 21 | Shale, sand & chert | 12943 | 12955 | 12 | Lime, shale & sand |
| 9428 | 9562 | 134 | Shale & sand | 12955 | 12964 | 9 | Lime, shale, sand & chert |
| 9562 | 9580 | 18 | Lime, chert & sand & shale | 12964 | 13042 | 78 | Lime, shale & sand |
| 9580 | 9679 | 99 | Shale, sand & chert | 13042 | 13052 | 10 | Lime & shale |
| 9679 | 9696 | 17 | Lime & shale | 13052 | 13079 | 27 | Lime, sand & shale |
| 9696 | 9711 | 15 | Shale, sand & chert | 13079 | 13136 | 57 | Lime, shale & sand |
| 9711 | 9733 | 22 | Shale & sand | 13136 | 13140 | 4 | Sand, lime & chert |
| 9733 | 9757 | 24 | Lime, shale & chert | 13140 | 13163 | 23 | Lime, sand & shale |
| 9757 | 9806 | 49 | Shale, sand & chert | 13163 | 13250 | 87 | Sand & shale |
| 9806 | 9822 | 16 | Lime & shale | 13250 | 13263 | 13 | Shale, sand & lime |
| 9822 | 9856 | 34 | Shale & sand | 13263 | 13308 | 45 | Shale & sand |
| 9856 | 9895 | 39 | Lime & shale | 13308 | 13348 | 40 | Shale |
| 9895 | 9933 | 38 | Shale | 13348 | 13365 | 17 | Shale & lime |
| 9933 | 9961 | 28 | Shale, sand & lime | 13365 | 13389 | 24 | Shale, lime & sand |
| 9961 | 10008 | 47 | Sand & shale | 13389 | 13413 | 24 | Lime, sand & shale |
| 10008 | 10089 | 81 | Sand, shale & lime | 13413 | 13574 | 161 | Lime & shale |
| 10089 | 10103 | 14 | Lime, shale, dolomite | 13574 | 13642 | 68 | Shale |
| 10103 | 10125 | 22 | Lime, sand & shale | 13642 | 13680 | 38 | Shale & lime |
| 10125 | 10137 | 12 | Lime & sand | 13680 | 13700 | 20 | Shale |
| 10137 | 10153 | 16 | Lime, shale, chert & sand | 13700 | 13728 | 28 | Shale & lime |
| 10153 | 10178 | 25 | Lime, sand & shale | 13728 | 13751 | 23 | Shale & sand |
| 10178 | 10200 | 22 | Lime & sand | 13751 | 13800 | 49 | Shale & lime |
| 10200 | 10222 | 22 | Lime, sand, shale & chert | 13800 | 13838 | 38 | Lime & shale |
| 10222 | 10247 | 25 | Lime, shale & chert | 13838 | 13875 | 37 | Lime & chert |
| 10247 | 10303 | 56 | Lime & sand | 13875 | 13887 | 12 | Lime |
| 10303 | 10330 | 27 | Lime, shale & sand | 13887 | 13915 | 28 | Lime & chert |
| 10330 | 10354 | 24 | Lime & sand | 13915 | 13926 | 11 | Lime |
| 10354 | 10365 | 11 | Lime, sand & shale | 13926 | 14271 | 345 | Lime & chert |
| 10365 | 10396 | 31 | Lime & shale | 14271 | 14276 | 5 | Lime |
| 10396 | 10462 | 66 | Lime, shale & sand | 14276 | 14304 | 28 | Lime & chert |
| 10462 | 10483 | 21 | Lime & shale | 14304 | 14310 | 6 | Lime |
| 10483 | 10516 | 33 | Lime, shale & chert | 14310 | 14327 | 17 | Lime & shale |
| 10516 | 10537 | 21 | Lime & shale | 14327 | 14335 | 8 | Lime & chert |
| 10537 | 10617 | 80 | Lime, shale & sand | 14335 | 14339 | 4 | Lime, chert & shale |
| 10617 | 10644 | 27 | Lime & shale | 14339 | 14348 | 9 | Lime & chert |
| 10644 | 10752 | 108 | Lime, shale & sand | 14348 | 14358 | 10 | Lime |
| 10752 | 10820 | 68 | Sand | 14358 | 14367 | 9 | Lime, shale & chert |
| 10820 | 10894 | 74 | Sand, shale & lime | 14367 | 14370 | 3 | Lime & chert |
| 10894 | 10901 | 7 | Shale & lime | 14370 | 14419 | 49 | Lime & shale |
| 10901 | 10947 | 46 | Lime, shale & sand | 14419 | 14438 | 19 | Shale |
| 10947 | 11132 | 185 | Shale | 14438 | 14456 | 18 | Shale & lime |
| 11132 | 11188 | 56 | Shale & lime | 14456 | 14561 | 105 | Shale |
| 11188 | 11198 | 10 | Shale & chert | 14561 | 14574 | 13 | Lime |
| 11198 | 11218 | 20 | Chert | 14574 | 14582 | 8 | Shale |
| 11218 | 11231 | 13 | Shale, chert & sand | 14582 | 14601 | 19 | Shale & Dolomite |
| 11231 | 11298 | 67 | Shale & chert | 14601 | 14622 | 21 | Dolomite |
| 11298 | 11380 | 82 | Shale, lime & chert | 14622 | 14985 | 363 | Lime |
| 11380 | 11409 | 29 | Shale & lime | | | | Total Depth |
| 11409 | 11453 | 44 | Lime, shale & chert | 14985 | 13645 | -1340 | PSTD |
| 11453 | 11504 | 51 | Shale & lime | | | | |
| 11504 | 11544 | 40 | Shale | | | | |
| 11544 | 11594 | 50 | Shale & lime | | | | |
| 11594 | 11821 | 227 | Shale | | | | |
| 11821 | 11869 | 48 | Shale & lime | | | | |
| 11869 | 11920 | 51 | Shale | | | | |
| 11920 | 12182 | 262 | Shale & lime | | | | |
| 12182 | 12233 | 51 | Lime, shale & chert | | | | |

DEFLECTION TESTS

| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

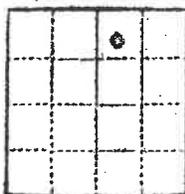
Exhibit A

DEFLECTION TESTS

| <u>FOOTAGE</u> | <u>DEGREES</u> | <u>FOOTAGE</u> | <u>DEGREES</u> |
|----------------|----------------|----------------|----------------|
| 10008 | 1-3/4 | 12405 | 1-3/4 |
| 10125 | 2 | 12461 | 1-1/2 |
| 10245 | 1-1/4 | 12530 | 1-3/4 |
| 10305 | 1 | 12705 | 1 |
| 10355 | 1-1/4 | 12740 | 1-1/2 |
| 10402 | 1 | 12790 | 1-1/2 |
| 10462 | 1-1/2 | 12860 | 1 |
| 10490 | 1-3/4 | 12980 | 1-1/4 |
| 10537 | 1-3/4 | 13063 | 1-1/2 |
| 10617 | 1-1/4 | 13134 | 1-1/4 |
| 10752 | 1-3/4 | 13182 | 1 |
| 10820 | 1-3/4 | 13250 | 1 |
| 10900 | 1-3/4 | 13295 | 1-1/2 |
| 11005 | 1-3/4 | 13348 | 1/4 |
| 11110 | 1-3/4 | 13443 | 1 |
| 11185 | 1-1/4 | 13642 | 1 |
| 11240 | 1-1/4 | 13680 | 1-1/4 |
| 11385 | 1-1/4 | 13813 | 1 |
| 11435 | 1-1/2 | 13858 | 1-1/4 |
| 11485 | 1-3/4 | 14019 | 3/4 |
| 11520 | 1-3/4 | 14137 | 1-1/4 |
| 11664 | 2-1/4 | 14194 | 1-1/2 |
| 11750 | 2 | 14237 | 1-1/4 |
| 11850 | 1-1/2 | 14275 | 1 |
| 11994 | 1-3/4 | 14327 | 1 |
| 12066 | 1-1/4 | 14370 | 1-1/2 |
| 12130 | 1-1/4 | 14406 | 1-1/4 |
| 12157 | 1-1/4 | 14456 | 1-1/4 |
| 12282 | 1-1/4 | 14807 | 1-1/2 |
| 12347 | 1-1/2 | | |

Exhibit A

Form 9-581a
(Feb. 1951)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Budget Bureau No. 42-4285.1
Approval expires 12-31-60.

Lead Office Santa Fe, New Mex.

Case No. LC 965001

Unit HOBBS OFFICE OCC

1959 AUG 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

August 26 19 59

Federal #C#

Well No. 2 is located 660 ft. from N line and 1982 ft. from E line of sec. 4

NW 1/4, NE 1/4
(Of Sec. and 1/4 No.)

T-20-S
(Twp.)

R-34-E
(Range)

DDEP
(Meridian)

Wildcat
(Field)

Lee
(County or Subdivision)

New Mexico
(State or Territory)

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

DETAILS OF WORK

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

Spudded 17-1/2" hole 12-27-58, ran 499' of 13-3/8" CD casing, cemented w/ 525 sacks, maximum pressure 250#, had cement returns to surface. 12-1/4" hole complete 1-18-59 at 1262', ran 4801' of 9-5/8" CD casing, cemented w/ 2900 sacks, maximum pressure 600#, had cement returns to surface. Tested casing and cement w/ 1000#, held 30 minutes Cl. 18 hours WOC.

8-3/4" hole complete 5-22-59 at 13,915', ran 13,915' of 7" CD casing, cemented w/ 510 sacks, maximum pressure 900#, 36 hours WOC, ran temperature survey, indicated top of cement outside 7" casing at 12,090' from surface. Tested casing and cement w/ 1000# for 30 minutes, held OK.

4-3/4" hole completed 7-16-59 at 14,985', placed cement plug in open hole and bottom of 7" casing 14,985' to 13,828' w/ 100 sacks. Perforated 7" casing 13,697'-13,741' w/ 176 jet shots, treated perfs 13,697'-13,741' w/ 500 gallons mud acid, placed cement plug in 7" casing 13,770'-13,645' w/ 30 sacks. Perforated 7" casing 12,572'-12,586' w/ 56

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

Company The Pure Oil Company

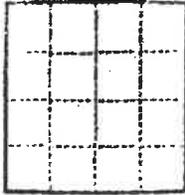
Address Box 671

Midland, TEXAS

By W. E. Townsend
W. E. Townsend
Title Chief Clerk

GPO # 18 507

Form 9-581a
(Feb. 1961)



(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Page 2
Single Form No. 48-1000-1
Approval expires 12-31-60

Office: _____
Lease No. **HOBBBS OFFICE OCC**
Unit: _____

NOV 27 PM 3:43

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Federal #C# _____

Well No. 1 is located _____ ft. from $\begin{matrix} N \\ S \end{matrix}$ line and _____ ft. from $\begin{matrix} E \\ W \end{matrix}$ line of sec. _____

(Field) (County or Subdivision) (State or Territory)

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

DETAILS OF WORK

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

jet shots, treated perms 12,572'-12,586' w/ 500 gallon mud acid. Placed cement plug in 7" casing 12,600' to 12,500' with 12 sacks. Shot 7" casing off at 4029', pulled 7" casing, placed cement plug in 7" casing 6530'-5470' w/ 12 sacks, 4220'-4100' w/ 24 sacks, 4040'-3940' w/ 40 sacks, 20' to surface w/ 8 sacks. Welded 1/2" steel plate on top casing with 1" marker extended 4' above surface.

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

Company _____

Address _____

By _____

Title _____

GPO 6 18 507

Exhibit A

RECEIVED OFFICE 200
AUG 26 1959

August 26, 1959

United States Department of the Interior
Geological Survey
Box 1836

Notes, New Mexico

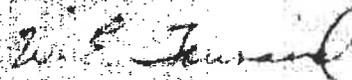
ATTENTION: Mr. T. E. Godfrey, Petroleum Engineer

Dear Sir:

Attached herewith three (3) copies of Form 9-111a "Sandry Notices and Reports on Wells" on The Pure Oil Company's Federal "C" No. 1, wildcat dry hole drilled in Section 4, Township 20-S, Range 31-S, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY



W. E. Townsend
Chief Clerk

NET-aw

cc: Seafair
Teague
File
Signal Oil & Gas Co.
Mr. Ray Diemer
601 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Co.
Mr. Wallace
1010 Ft. Worth Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Exhibit A

Budget Bureau No. 42-B388.4.
Approval expires 12-31-60.

Form 9-881a
(Feb. 1961)

| | | |
|--|--|---|
| | | 0 |
| | | |
| | | |
| | | |

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.
Lease No. 16-065607
Unit _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

| | | |
|---|---|--|
| NOTICE OF INTENTION TO DRILL..... | SUBSEQUENT REPORT OF WATER SHUT-OFF..... | |
| NOTICE OF INTENTION TO CHANGE PLANS..... | SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING..... | |
| NOTICE OF INTENTION TO TEST WATER SHUT-OFF..... | SUBSEQUENT REPORT OF ALTERING CASING..... | |
| NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL..... | SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR..... | |
| NOTICE OF INTENTION TO SHOOT OR ACIDIZE..... | SUBSEQUENT REPORT OF ABANDONMENT..... | |
| NOTICE OF INTENTION TO PULL OR ALTER CASING..... | SUPPLEMENTARY WELL HISTORY..... | |
| NOTICE OF INTENTION TO ABANDON WELL..... | | |
| Progress report for DST #1 <input checked="" type="checkbox"/> | | |

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

March 20, 1959

Federal "C"
Well No. 1 is located 660 ft. from [N] line and 1962 ft. from [E] line of sec. 4
14N/4, 16E/4 14-20-6 R-31-2 101PM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Wilcox Lea New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 3662 ft.

DETAILS OF WORK

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

Drilled 5125' to 11,521' in lime, dolomite, sand, shale and chert.

DST #1 10,750' - 10,800'

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

Company The Pure Oil Company
Address Box 671
Midland, Texas
By W. E. Townsend
Title Chief Clerk

GPO 9 18 507

Exhibit A

HOBBS OFFICE OCC

1959 MAR 23 AM 8:14

March 20, 1959

United States Department of the Interior
Geological Survey
Box 1838
Hobbs, New Mexico

ATTENTION: Mr. T. L. Godfrey, Petroleum Engineer

Dear Sir:

Attaching three copies of Form 9-331a "Sundry Notices and Reports on Wells" as our progress report on The Pure Oil Company's Federal "C" Well No. 1, located in Section 1, Township 20-S, Range 3-E, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMPANY

W. E. Townsend
Chief Clerk

WET:aw

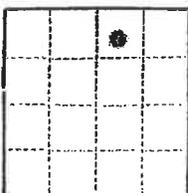
cc: Mr. W. F. Schafer
Mr. H. G. Teague
File
Signal Oil & Gas Company
Mr. Ray Diemer
801 Wilco Bldg.
Midland, Texas
Signal Oil & Gas Company
Mr. Wallace
1010 Fort Worth National Bank Bldg.
Fort Worth 2, Texas
New Mexico Oil Conservation Commission
Box 2045
Hobbs, New Mexico

Exhibit A

Exhibit A

Budget Bureau 42-R358.6
 Approval expires 12-31-55.

Form 9-881a
 (Feb. 1951)



(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.
 Lease No. 065407
 Unit _____

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

1959 JAN 25 AM 7:10

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 23, 1959

Federal # 1
 Well No. 1 is located 660 ft. from N line and 1902 ft. from E line of sec. 4
N 1/4 E 1/4 7-20-S R-11-S SP18
 (1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Midland Lea New Mexico
 (Field) (County or Subdivision) (State or Territory)

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

DETAILS OF WORK

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

Drilled 1660'-5125' in dolomite, sand & lime. Ran electric logs to 1792', ran 1801' of 9-5/8" CD casing w/ casing shoe set at 1801' SCF, float collar at 1738', Rovee two stage DV tool set at 3510', cemented 1st stage thru shoe at 1801' with 300 sacks 75% incore cement, 25% stratocrete w/ 6% galv added and 200 sacks incore most cement. Pumped plug to 1738', maximum and final pressure 600#. Opened DV tool at 3510', 2nd stage cemented w/ 2500 sacks 50-50 incore-dimix w/ 6% gal added, had cement returns to surface 48 hours WOC. Tested 9-5/8" casing, control equipment and cement with 1000' for 30 minutes, hold OK.

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

Company The Pure Oil Company
 Address Box 671
Midland, Texas
 By W. E. Townsend
W. E. Townsend
 Title Chief Clerk

U. S. GOVERNMENT PRINTING OFFICE 16-8487-5

Exhibit A

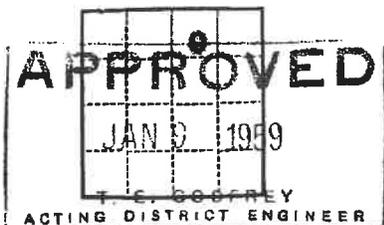
Exhibit A

Budget Bureau No. 42-R386.4
 Approval expires 12-31-60.

Form 9-881a
 (Feb. 1961)

(SUBMIT IN TRIPLICATE)

Land Office Santa Fe, N.M.
 Lease No. L.C. 065607
 Unit _____



UNITED STATES
 DEPARTMENT OF THE INTERIOR
 GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

January 8, 1959

Federal # 0
 Well No. 1 is located 660 ft. from N line and 1902 ft. from W line of sec. 8
NE/4 NE/4 (1/4 Sec. and Sec. No.) T-20-S R-3-E (Twp.) 100N (Meridian)
Wildcat (Field) Lee (County or Subdivision) New Mexico (State or Territory)

The elevation of the derrick floor above sea level is 3668 ft.

DETAILS OF WORK

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

Spud 12-1/4" hole 6:30 AM 12-27-58, drilled to 505' in red beds, reamed 12-1/4" hole to 17-1/2" from 0' to 505'. Ran 499' of 13-3/8" OD casing with Guide Shoe set at 499' BCF, three sets centralisers installed. Cemented 13-3/8" casing with 525 sacks Portland Best Cement. Pumped plug to 468', maximum pressure 250#. Had cement returns to surface, 2 1/2 hours WOC. Test 13-3/8" casing, control equipment and cement with 1800#, held 30 minutes OK.

Drilled 505' - 4068' red beds, anhydrite, salt, dolomite, lime and sand.

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

Company The Pure Oil Company
 Address Box 672
Midland, Texas
 By [Signature]
 Title Chief Clerk

GPO 9 18 507

Form 9-331a
(Feb. 1951)

Budget Bureau 42-R358.3
Approval expires 12-31-55.

(SUBMIT IN TRIPLICATE)

Land Office _____
Lease No. 05507
Unit _____

Subject to the condition on back of this page

APPROVED
DEC 18 1958
T. E. Godfrey
T. E. GODFREY
ACTING DISTRICT ENGINEER

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

December 11, 1958

Federal #0
Well No. 1 is located 460 ft. from [N] line and 1982 ft. from [E] line of sec. 4
34/4 15/4 T-20-6 1-34-2 11474
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
113000 Law New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the ground above sea level is 3660 ft. Arrived at by differential levelling from BM 2001-0515 S.M. 2-56, 1950.

DETAILS OF WORK

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

| | | |
|-----------------|--------------------------------|-----------------------|
| Casing Program: | 400' - 11-3/4" OD 42# 1-40 New | Cemented to surface. |
| | 2570' - 8-3/8" OD 32# 1-35 New | Cemented to surface. |
| | 2250' - 8-3/8" OD 24# 1-35 New | |
| | 2250' - 5-1/2" OD 24# 1-35 New | Cement returned to |
| | 4720' - 5-1/2" OD 20# 1-35 New | approximately 13,450' |
| | 7200' - 5-1/2" OD 17# 1-40 New | from surface |

Well will be drilled with rotary tools.

Objective log: Deviation at approximately 14,250'.

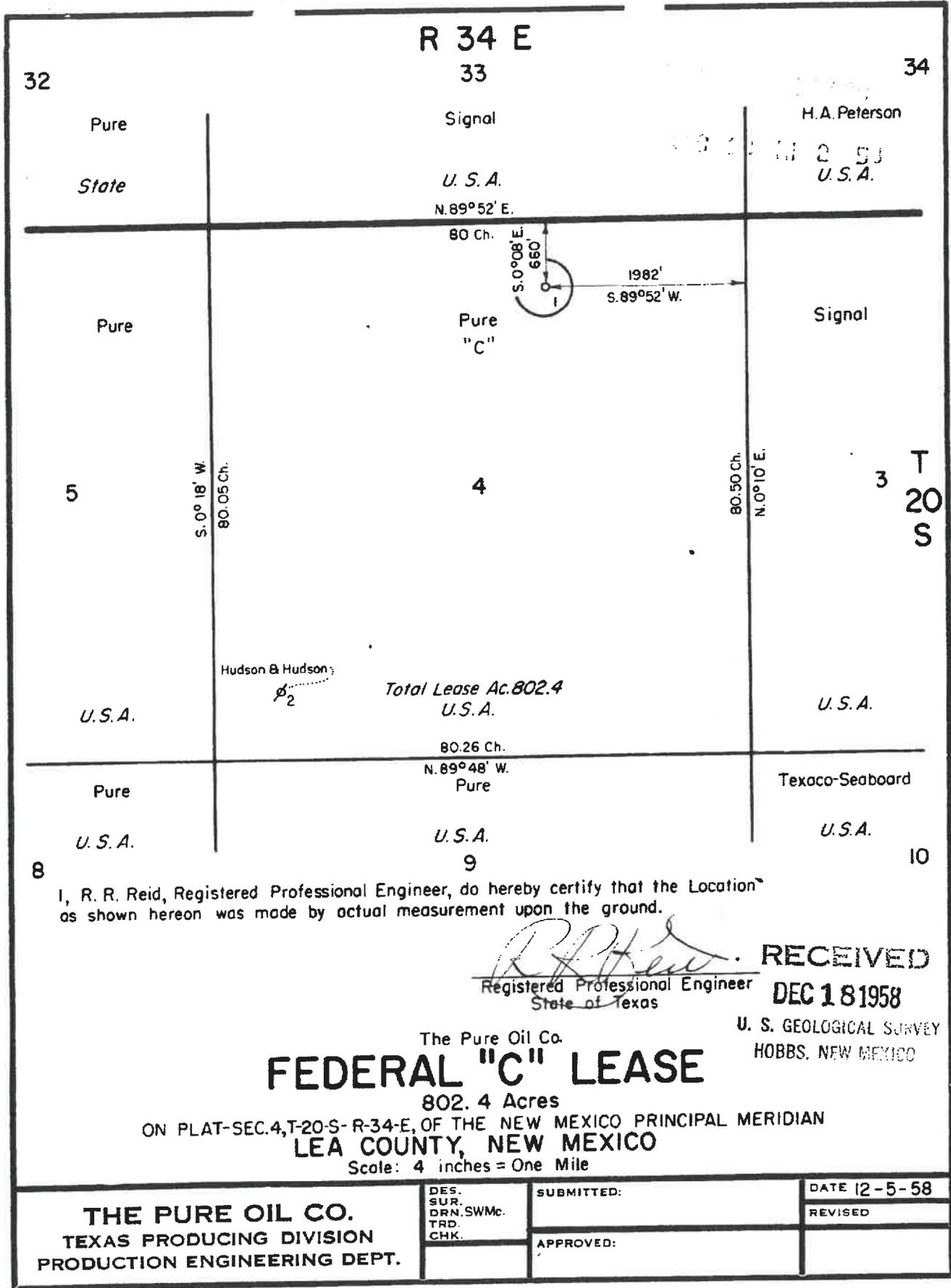
I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company THE TEXAS OIL COMPANY
Address P. O. Box 207
Fort Worth 1, Texas
By *T. L. Goddard*
Title Asst. Division Manager

Approval is subject to the following condition:

1. That the 5 $\frac{1}{2}$ " casing be cemented with sufficient cement to protect any porous zones below the base of the 8 $\frac{5}{8}$ " casing, as determined by this office from information obtained in drilling of the well.

Exhibit A



I, R. R. Reid, Registered Professional Engineer, do hereby certify that the Location as shown hereon was made by actual measurement upon the ground.

R. R. Reid
 Registered Professional Engineer
 State of Texas

RECEIVED
 DEC 18 1958

U. S. GEOLOGICAL SURVEY
 HOBBS, NEW MEXICO

FEDERAL "C" LEASE

802.4 Acres
 ON PLAT-SEC.4,T-20-S-R-34-E, OF THE NEW MEXICO PRINCIPAL MERIDIAN
 LEA COUNTY, NEW MEXICO
 Scale: 4 inches = One Mile

| | | | |
|---|--|------------|--------------|
| THE PURE OIL CO. TEXAS PRODUCING DIVISION PRODUCTION ENGINEERING DEPT. | DES. SUR. DRN. SWMC. TRD. CHK. | SUBMITTED: | DATE 12-5-58 |
| | | APPROVED: | REVISED |

Exhibit A

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date December 22, 1958

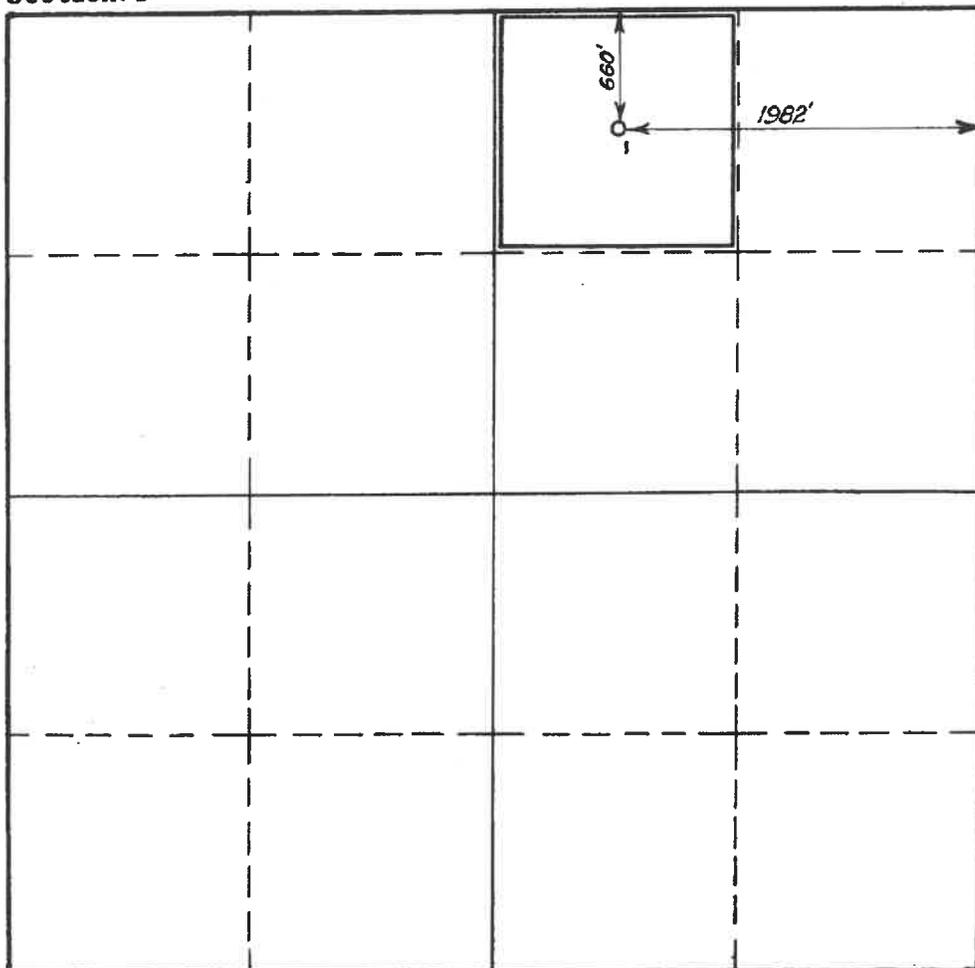
Operator The Pure Oil Company Lease Federal Oil Co.
 Well No. 1 Unit Letter B Section 4 Township 20-S Range 34-E NMPM
 Located 660 Feet From North Line, 1982 Feet From East Line
 County Lee G. L. Elevation 3045' Dedicated Acreage 40 Acres
 Name of Producing Formation Devonian Pool Wildcat

1. Is the Operator the only owner* in the dedicated acreage outlined on the plat below?
Yes _____ No X
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes X No _____. If answer is "yes," Type of Consolidation Joint Operation
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

Land Description

Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

THE PURE OIL COMPANY

(Operator)

L. L. Melnick
(Representative)

Box 2107, Fort Worth 1, Texas
Address

This is to certify that the well location shown on the plat in Section B 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 knowledge and belief.

Date Surveyed 12-3-58

R. A. Davis
Registered Professional Engineer and/or Land Surveyor.

Texas

Certificate No. 9093

Exhibit A

INSTRUCTIONS FOR COMPLETION:

1. Operator shall furnish and certify to the information called for in Section A.
2. Operator shall outline the dedicated acreage for both oil and gas wells on the plat in Section B.
3. A registered professional engineer or land surveyor registered in the State of New Mexico or approved by the Commission shall show on the plat the location of the well and certify this information in the space provided.
4. All distances shown on the plat must be from the outer boundaries of Section.
5. If additional space is needed for listing owners and their respective interests as required in question 3, Section A, please use space below

* "Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1953 Comp.)

Exhibit A

VI.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



Administrative Order SWD-1568
August 3, 2015

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, Read & Stevens, Inc. (the "operator") seeks an administrative order for its Pure Federal C SWD Well No. 1 located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of produced water.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objection was received within the required suspense period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Read & Stevens, Inc. (OGRID 18917) is hereby authorized to utilize its Pure Federal C SWD Well No. 1 (API No. 30-025-02417) located 660 feet from the North line and 1982 feet from the East line, Unit letter B of Section 4, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, for disposal of oil field produced water (UIC Class II only) through an open-hole interval within Devonian or Silurian formations from approximately 14590 feet to approximately 14960 feet. Injection shall occur through internally-coated tubing and a packer set a maximum of 100 feet above the top of the open-hole interval.

This permit is limited as advertised to only the Devonian and Silurian aged rocks and to the depths listed above. It does not permit disposal into deeper formations including the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to that formation.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed in the application and any required modifications of construction as required by the Bureau of Land Management.

Exhibit A

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 2 of 3

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 2918 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. The Division Director retains the right to require at any time the operator to install and maintain a chart recorder showing casing and tubing pressures during disposal operations.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any disposal well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well

Exhibit A

Administrative Order SWD-1568
Read & Stevens, Inc.
August 3, 2015
Page 3 of 3

abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



DAVID R. CATANACH
Director

DRC/wvjj

cc: Oil Conservation Division – Hobbs District Office
Bureau of Land Management – Carlsbad Field Office
Administrative Application pWVJ1513562666

Exhibit A

VI. **Pure Federal "C" #1 Wellbore Schematic**
API # 30-025-02417
660' FNL & 1982' FEL
Sec. 4, T20S, R34E
Lea Co. NM
 Updated: 07/08/2023

Final P&A Date: 05/15/1963

- 13 3/8" Csg Set @ 499' - Cement to Surface
- 9 5/8" Csg Set @ 4801' - Cement to Surface
- 7" Csg Set @ 13913' - TOC @ 12090
- 4 3/4" Open Hole From 13913' - 14985'

- 10 sk cmt plug from surface to 20'
- 12.2# mud from 20' - 3983'
- 30 sk cmnt plug from 3983' - 4083'
- 7" Csg cut off @ 4029'

- 12.2# mud from 4083' - 12490'
- Set pkr @ 12490' & squeeze 150 sk cmt from 12490' - 12988'

- 7" Csg perforated from 12572' - 12572'
- 7" Csg perforated from 12892' - 12920'
- Bridge Plug Set @ 12988'
- 12.2# mud from 12988' - 13645'
- 30 sk cmt plug #2 from 13645' - 13770'
- 7" Csg perforated from 13697' - 13741'
- 12.2# mud from 13770' - 13828'

- 100 sk cmt plug #1 from 13828' - 14985'

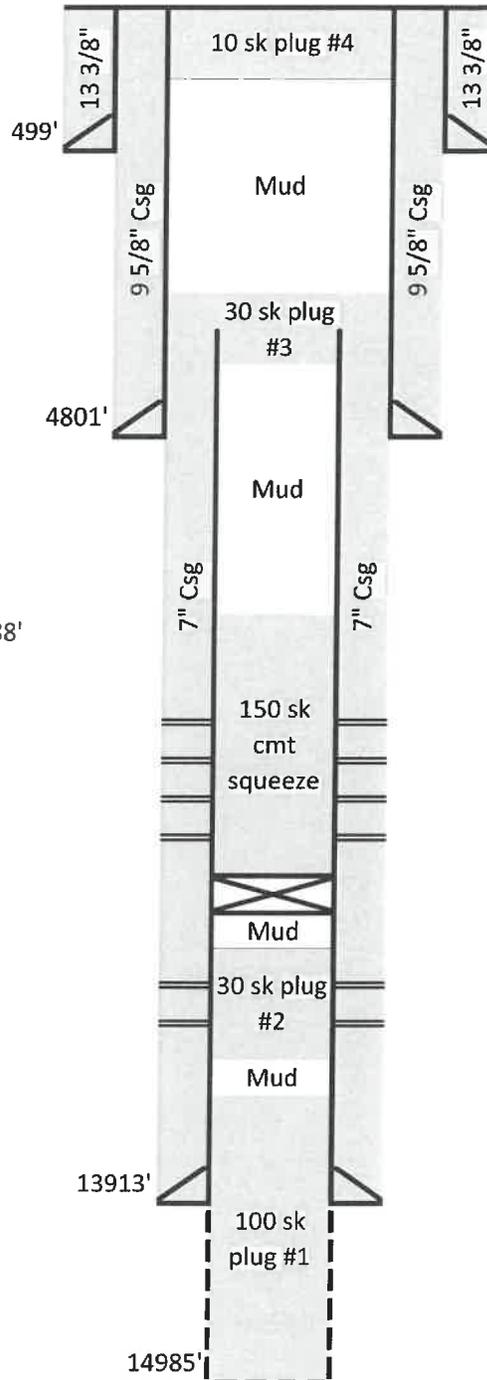


Exhibit A



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

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

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

*UTM location was derived from PLSS - see Help

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

Average Depth to Water: **702 feet**

Minimum Depth: **270 feet**

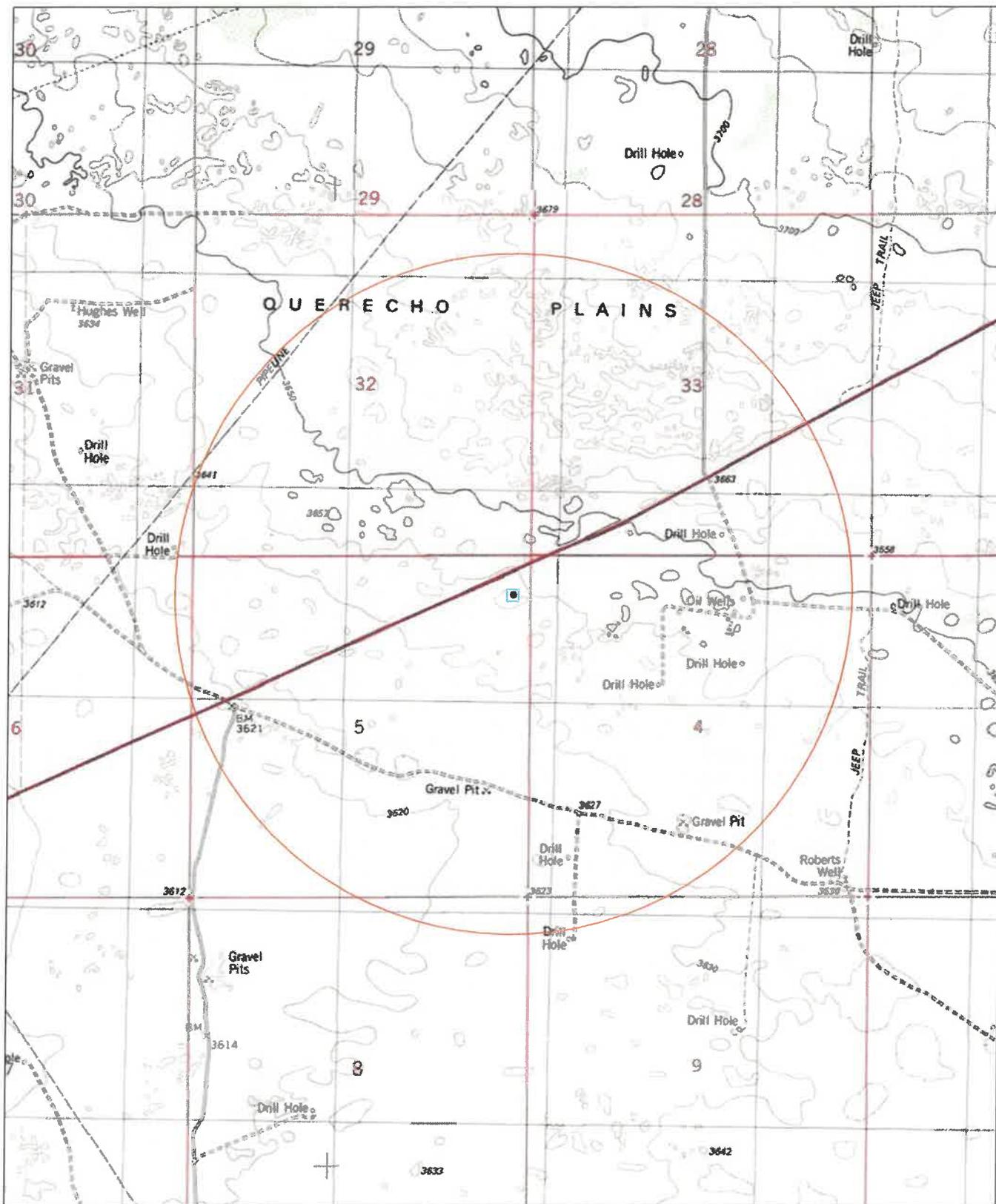
Maximum Depth: **1005 feet**

Record Count: 21

PLSS Search:

Township: 20S Range: 34E

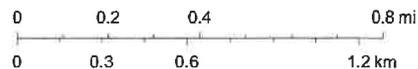
XI. Water Wells Within 1 Mile - Overdue Federal SWD #1



5/23/2023, 6:56:24 PM

 Site Boundaries

1:20,214



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U.S. Department of Energy Office of Legacy Management

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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

CONDITIONS

Action 241804

CONDITIONS

| | |
|---|--|
| Operator: Permian Oilfield Partners, LLC PO Box 3329 Hobbs, NM 88241 | OGRID: 328259 |
| | Action Number: 241804 |
| | Action Type: [[IM-SD] Admin Order Support Doc (ENG) (IM-AAO)] |

CONDITIONS

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

Exhibit A

Released to Imaging: 10/13/2023 8:02:18 AM

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

PS Form 3877

Type of Mailing: CERTIFIED MAIL
09/28/2023



Firm Mailing Book ID: 253198

| Line | USPS Article Number | Name, Street, City, State, Zip | Postage | Service Fee | RR Fee | Rest.Del.Fee | Reference Contents |
|------|-----------------------------|---|---------|-------------|--------|--------------|-------------------------|
| 1 | 9314 8699 0430 0112 5851 16 | Advance Energy Partners Hat Mesa LLC 11490 Westheimer Rd. Houston TX 77077 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 2 | 9314 8699 0430 0112 5851 23 | Apache Corporation 2000 Post Oak Blvd., Suite 100 Houston TX 77056 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 3 | 9314 8699 0430 0112 5851 30 | B&J Operating Inc. P.O. Box 1478 Pampa TX 79066 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 4 | 9314 8699 0430 0112 5851 47 | Balog Family Trust P.O. Box 111890 Anchorage AK 99504 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 5 | 9314 8699 0430 0112 5851 54 | Black Hills Gas Resources, Inc. 70001 Mt. Rushmore Rd. Rapid City SD 57702 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 6 | 9314 8699 0430 0112 5851 61 | Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 7 | 9314 8699 0430 0112 5851 78 | Chesapeake Exploration LLC 6100 North Western Ave. Oklahoma City OK 73118 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 8 | 9314 8699 0430 0112 5851 85 | Cimarex Energy Co. 6001 Deauville Blvd, Ste. 300N Midland TX 79706 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 9 | 9314 8699 0430 0112 5851 92 | Cimarex Energy Co. of Colorado 6001 Deauville Blvd, Ste 300N Midland TX 79706 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 10 | 9314 8699 0430 0112 5852 08 | COG Operating LLC 600 W. Illinois Ave. Midland TX 79701 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 11 | 9314 8699 0430 0112 5852 15 | Delmar Hudson Lewis Living Trust P.O. Box 2546 Fort Worth TX 76113 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 12 | 9314 8699 0430 0112 5852 22 | Fasken Land & minerals LTD 303 West Wall Ave. Ste 1800 Midland TX 79701 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 13 | 9314 8699 0430 0112 5852 39 | Hudson Oil Company of Texas 616 Texas Street Fort Worth TX 76102 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 14 | 9314 8699 0430 0112 5852 46 | Hyde Oil & Gas Corp. 6300 Ridglea Pl #1018 Fort Worth TX 76116 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 15 | 9314 8699 0430 0112 5852 53 | Jack V. Walker Revocable Trust P.O. Box 102256 Anchorage AK 99510 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |

Exhibit 4.B



Received by OCD: 10/12/2023 11:33:42 PM

Page 239 of 242

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

PS Form 3877
 Type of Mailing: CERTIFIED MAIL
 09/28/2023



Firm Mailing Book ID: 253198

| Line | USPS Article Number | Name, Street, City, State, Zip | Postage | Service Fee | RR Fee | Rest.Del.Fee | Reference Contents |
|---------------------|-----------------------------|--|----------------|-----------------|----------------|-----------------|-------------------------|
| 16 | 9314 8699 0430 0112 5852 60 | Javelina Partners 616 Texas St. Forth Worth TX 76102 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 17 | 9314 8699 0430 0112 5852 77 | Lee Wiley Moncrief Trust P.O. Box 2546 Fort Worth TX 76113 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 18 | 9314 8699 0430 0112 5852 84 | Lewis H. Delmar Living trust 6300 Ridglea Place Suite 1005a Fort Worth TX 76116 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 19 | 9314 8699 0430 0112 5852 91 | Lincoln Oil & Gas LLC 701 Three Cross Roswell NM 88201 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 20 | 9314 8699 0430 0112 5853 07 | Lindy's Living Trust 2400 South Hulen, Ste. 302 Fort Worth TX 76109 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 21 | 9314 8699 0430 0112 5853 14 | Magnum Hunter Production Inc. 600 N. Marienfeld, Sutie 600 Midland TX 79701 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 22 | 9314 8699 0430 0112 5853 21 | Marathon Oil Co. 990 Town and Country Blvd. Houston TX 77024 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 23 | 9314 8699 0430 0112 5853 38 | Matador Resources Company c/o Kyle Perkins 5400 LBJ Freeway, Suite 1500 Dallas TX 75240 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 24 | 9314 8699 0430 0112 5853 45 | Mewbourne Oil Co. P.O. Box 5270 Hobbs NM 88241 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 25 | 9314 8699 0430 0112 5853 52 | New Mexico State Land Office 310 Old Sante Fe Trail Santa Fe NM 87501 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 26 | 9314 8699 0430 0112 5853 69 | Pennzenergy Exploration and Production LLC P.O. Box 2967 Houston TX 77001 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 27 | 9314 8699 0430 0112 5853 76 | Read & Stevens Inc. 1001 17th Street, Suite 1800 Denver CO 80202 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 28 | 9314 8699 0430 0112 5853 83 | Select Agua Libre Midstream, LLC 12515 Carriage Way Oklahoma City OK 73142 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| 29 | 9314 8699 0430 0112 5853 90 | Zorro Partners LTD 616 Texas St. Fort Worth TX 76102 | \$3.03 | \$4.35 | \$2.20 | \$0.00 | 10053.001overdue Notice |
| Totals: | | | \$87.87 | \$126.15 | \$63.80 | \$0.00 | |
| Grand Total: | | | | | | \$277.82 | |

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

Transaction Report Details - CertifiedPro.net
 Firm Mail Book ID= 253198
 Generated: 10/12/2023 9:48:48 AM

| USPS Article Number | Date Created | Reference Number | Name 1 | Name 2 | City | State | Zip | Mailing Status | Service Options | Mail Delivery Date |
|------------------------|--------------------|------------------|--|------------------|---------------|-------|-------|----------------|---|---------------------|
| 9314869904300112585390 | 2023-09-28 7:55 AM | 10053.001overdue | Zorro Partners LTD | | Fort Worth | TX | 76102 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585383 | 2023-09-28 7:55 AM | 10053.001overdue | Select Agua Libre Midstream, LLC | | Oklahoma City | OK | 73142 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:00 AM |
| 9314869904300112585376 | 2023-09-28 7:55 AM | 10053.001overdue | Read & Stevens Inc. | | Denver | CO | 80202 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 3:59 PM |
| 9314869904300112585369 | 2023-09-28 7:55 AM | 10053.001overdue | Pennzenergy Exploration and Production LLC | | Houston | TX | 77001 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585352 | 2023-09-28 7:55 AM | 10053.001overdue | New Mexico State Land Office | | Santa Fe | NM | 87501 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:00 AM |
| 9314869904300112585345 | 2023-09-28 7:55 AM | 10053.001overdue | Mewbourne Oil Co. | | Hobbs | NM | 88241 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:00 AM |
| 9314869904300112585338 | 2023-09-28 7:55 AM | 10053.001overdue | Matador Resources Company | c/o Kyle Perkins | Dallas | TX | 75240 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:00 AM |
| 9314869904300112585321 | 2023-09-28 7:55 AM | 10053.001overdue | Marathon Oil Co. | | Houston | TX | 77024 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-04 12:10 PM |
| 9314869904300112585314 | 2023-09-28 7:55 AM | 10053.001overdue | Magnum Hunter Production Inc. | | Midland | TX | 79701 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585307 | 2023-09-28 7:55 AM | 10053.001overdue | Lindy's Living Trust | | Fort Worth | TX | 76109 | To be Returned | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585291 | 2023-09-28 7:55 AM | 10053.001overdue | Lincoln Oil & Gas LLC | | Roswell | NM | 88201 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:44 PM |
| 9314869904300112585284 | 2023-09-28 7:55 AM | 10053.001overdue | Lewis H. Delmar Living trust | | Fort Worth | TX | 76116 | To be Returned | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585277 | 2023-09-28 7:55 AM | 10053.001overdue | Lee Wiley Moncrief Trust | | Fort Worth | TX | 76113 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-05 7:44 AM |
| 9314869904300112585260 | 2023-09-28 7:55 AM | 10053.001overdue | Javelina Partners | | Forth Worth | TX | 76102 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585253 | 2023-09-28 7:55 AM | 10053.001overdue | Jack V. Walker Revocable Trust | | Anchorage | AK | 99510 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 11:02 AM |
| 9314869904300112585246 | 2023-09-28 7:55 AM | 10053.001overdue | Hyda Oil & Gas Corp. | | Fort Worth | TX | 76116 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 12:51 PM |
| 9314869904300112585239 | 2023-09-28 7:55 AM | 10053.001overdue | Hudson Oil Company of Texas | | Fort Worth | TX | 76102 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585222 | 2023-09-28 7:55 AM | 10053.001overdue | Fasken Land & minerals LTD | | Midland | TX | 79701 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585215 | 2023-09-28 7:55 AM | 10053.001overdue | Delmar Hudson Lewis Living Trust | | Fort Worth | TX | 76113 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-05 7:44 AM |
| 9314869904300112585208 | 2023-09-28 7:55 AM | 10053.001overdue | COG Operating LLC | | Midland | TX | 79701 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-03 8:15 AM |
| 9314869904300112585192 | 2023-09-28 7:55 AM | 10053.001overdue | Cimarex Energy Co. of Colorado | | Midland | TX | 79706 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 1:13 PM |
| 9314869904300112585185 | 2023-09-28 7:55 AM | 10053.001overdue | Cimarex Energy Co. | | Midland | TX | 79706 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 1:13 PM |
| 9314869904300112585178 | 2023-09-28 7:55 AM | 10053.001overdue | Chesapeake Exploration LLC | | Oklahoma City | OK | 73118 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-02 6:52 AM |
| 9314869904300112585161 | 2023-09-28 7:55 AM | 10053.001overdue | Bureau of Land Management | | Carlsbad | NM | 88220 | Delivered | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585154 | 2023-09-28 7:55 AM | 10053.001overdue | Black Hills Gas Resources, Inc. | | Rapid City | SD | 57702 | To be Returned | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585147 | 2023-09-28 7:55 AM | 10053.001overdue | Balog Family Trust | | Anchorage | AK | 99504 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-10 12:17 PM |
| 9314869904300112585130 | 2023-09-28 7:55 AM | 10053.001overdue | B&J Operating Inc. | | Pampa | TX | 79066 | Mailed | Return Receipt - Electronic, Certified Mail | |
| 9314869904300112585123 | 2023-09-28 7:55 AM | 10053.001overdue | Apache Corporation | | Houston | TX | 77056 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-04 11:09 AM |
| 9314869904300112585116 | 2023-09-28 7:55 AM | 10053.001overdue | Advance Energy Partners Hat Mesa LLC | | Houston | TX | 77077 | Delivered | Return Receipt - Electronic, Certified Mail | 2023-10-04 4:08 PM |

Exhibit 4.C



Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

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

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

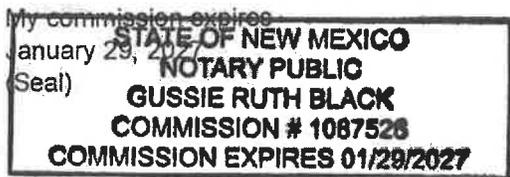


Publisher

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



Business Manager



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

LEGAL NOTICE September 29, 2023

CASE NO. 23807: Notice to all affected parties, as well as heirs and devisees of: Advance Energy Partners Hat Mesa LLC; Apache Corporation; B&J Operating Inc.; Balog Family Trust; Black Hills Gas Resources, Inc.; Bureau of Land Management; Chesapeake Exploration, LLC; Cimarex Energy Co.; Cimarex Energy Co. of Colorado; COG Operating LLC; Delmar Hudson Lewis Living Trust; Fasken Land & Minerals LTD; Hudson Oil Company of Texas; Hyde Oil & Gas Corp; Jack V. Walker Revocable Trust; Javelina Partners; Lee Wiley Moncrief Trust; Lewis H. Delmar Living Trust; Lincoln Oil and Gas LLC; Lindy's Living Trust; Magnum Hunter Production Inc.; Marathon Oil Co.; Mawbourne Oil Co.; New Mexico State Land Office; Pennzenergy Exploration and Production LLC; Reed & Stevens Inc.; Select Agua Libre Midstream, LLC; Zorro Partners LTD; Matador Resources Co. of Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. The State of New Mexico through its Oil Conservation Division hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on October 19, 2023 to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/oed/hearing-info/>. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Overdue Federal SWD Well #1 well at a surface location 802' from the North line and 298' from the East line, Unit A, Section 5, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,675 feet to 15,844 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.

CASE NO. 23808: Notice to all affected parties, as well as heirs and devisees of: Balog Family Trust; Black Hills Gas Resources, Inc.; BP America Production Company; Bureau of Land Management; Burlington Resources Oil & Gas LP; BXP Operating, LLC; BXP Partners V LP; Cargoil & Gas Co., LLC; Chevron USA; Cimarex Energy Co. of Colorado; Cimarex Energy Company; Clarence Hyde Estate; Contango Resources, LLC; Devon Energy Production Company, LLC; EOG Resources Inc.; Frances W. Hyde Inc.; Jack V. Walker Revocable Trust; Lenox Mineral Title Holdings Inc.; Linn Operating, LLC; Matador Production Company; Matador Resources Co.; Merit Energy Company, LLC; Merit Energy Partners D-III; Nadel and Gussman HEYCO, LLC; New Mexico State Land Office; Penroc Oil Corp.; Shogoil & Gas Co II LLC; XTO Energy, Inc. of Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. The State of New Mexico through its Oil Conservation Division hereby gives notice that the Division will conduct a public hearing at 8:15 a.m. on October 19, 2023 to consider this application. Information about accessing the electronic hearing is posted at "OCD NOTICES" at <https://www.emnrd.nm.gov/oed/hearing-info/>. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Related Federal SWD Well #1 well at a surface location 837' from the South line and 208' from the East line, Unit P, Section 27, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 14,639 feet to 15,841 feet. Applicant further requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 18 miles west of Monument, New Mexico.
#00283241

01104570

00283241

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

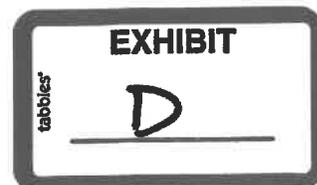


Exhibit 4.D