

# **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.

Rv

Deana M. Bennett

Earl.DeBrine, Jr.

Post Office Box 2168

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Albuquerque, New Mexico 87103-2168

Telephone: 505.848.1800

Deana.Bennett@modrall.com

Earl.DeBrine@modrall.com

Attorneys for Applicant

CASE NO. <u>23807</u>: 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.

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		RATIVE APPLICATIO		
THIS C	CHECKLIST IS MANDATORY FOR AL REGULATIONS WHICH RE	LL ADMINISTRATIVE APPLICATI QUIRE PROCESSING AT THE D		
Applicant: Permian C				D Number: <u>328259</u>
Well Name: Overdu				-025-Pending
Pool: SWD; Devonian-S	ilurian		Pool (	Code: <u>97869</u>
SUBMIT ACCURA	ATE AND COMPLETE INF	FORMATION REQUIRI INDICATED BELOV		THE TYPE OF APPLICATION
A. Location	CATION: Check those  - Spacing Unit – Simult  NSL	aneous Dedication	(PRORATION UNIT)	SD.
[1] Com	ne only for [1] or [11] mingling – Storage – M ]DHC	LC PC OL ure Increase – Enhar	nced Oil Recove	ry
A. Offset B. Royal C. Applic D. Notific	I REQUIRED TO: Check operators or lease holy, overriding royalty overtion requires published ation and/or concurrection and/or concurrection and/or concurrection and/or concurrection.	those which apply. ders wners, revenue own ed notice ent approval by SLC	ers	FOR OCD ONLY  Notice Complete  Application Content Complete
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administrative understand th	N: I hereby certify that approval is accurate at no action will be tall re submitted to the Div	and complete to the ken on this applicati	e best of my kno	wledge. I also
No	ote: Statement must be comple	eted by an individual with m	nanagerial and/or supe	ervisory capacity.
			7-11-2023	
Sean Puryear			Date	
Print or Type Name			817-600-8772	
Semtu			Phone Number	
Jam In	3		_	

Signature

Released to Imaging: 10/13/2023 8:02:18 AM

**Exhibit A** 

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

PHONE: (817) 600-8772

#### APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: **Disposal** 

Application qualifies for administrative approval? Yes

II. OPERATOR: Permian Oilfield Partners, LLC.

> ADDRESS: P.O. Box 3329, Hobbs, NM 88241

**CONTACT PARTY: Sean Puryear** 

- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? No.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. VI. 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
- \*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).
- 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 Purvear

TITLE: Manager SIGNATURE: Sem Ling DATE: 7-11-2023

E-MAIL ADDRESS: spuryear@popmidstream.com

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

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

#### 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:

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						
	<u>TOP</u>	<b>BOTTOM</b>	THICKNESS			
FORMATION	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 <u>1349'</u>. 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.

- **IX:** Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- **X:** A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI: According to the New Mexico Office of the State Engineer, there are <u>0</u> fresh water wells within the proposed well's one-mile area of review. 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 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

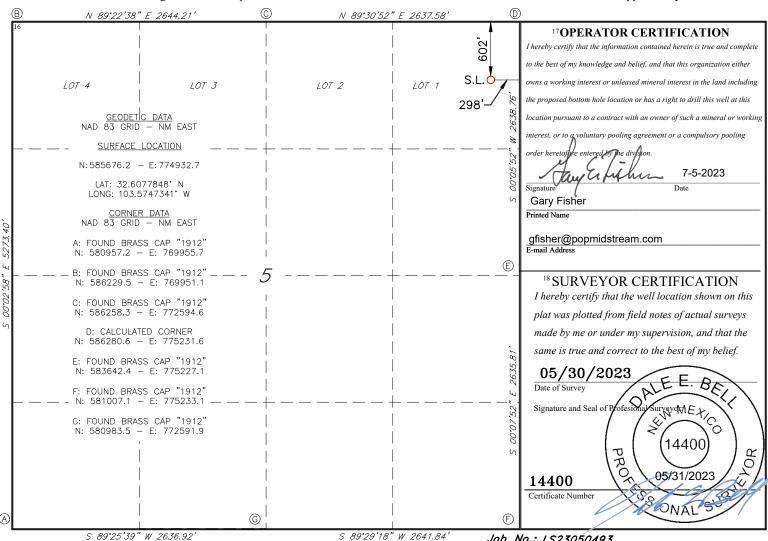
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code <b>97869</b>	SWD;	JRIAN	
4Property Code		OVERDUE FEDERAL SWD			<sup>6</sup> Well Number <b>1</b>
<sup>7</sup> OGRID NO. 328259			erator Name LLD PARTNERS, LL	С	<sup>9</sup> Elevation <b>3643</b> '

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	et from the North/South line		East/West line	County
1	5	20S	34E		602	NORTH	298	EAST	LEA
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 Acre	s 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.



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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

X/O Depth: 10787' Casing (Fiberglass Lined)

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

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:** 

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'

1119 sks - Class C + Additives Cement:

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:

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

Depth Top: Surface Depth Btm:

Cement: 1803 sks - Class C + Additives

Cement Top: Surface - (Circulate)

ECP/DV Tool: 5682'

#### Intermediate #4 - (Liner) 8.5"

Hole Size:

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)

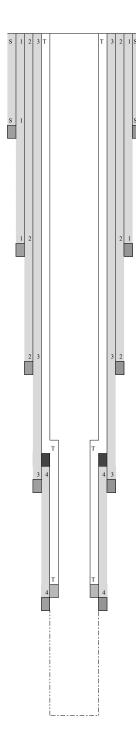
X/O Depth: 10787'

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

Packer Depth: 14640'

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

Packer Fluid: 8.4 ppg FW + Additives





#### 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 Fe	deral SWD #1 - Affected Per	rsons within 1 Mile Area	of Rev	iew	
Notified Name	Notifed Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
ADVANCE ENERGY PARTNERS HAT MESA LLC	11490 Westheimer Rd	Houston, TX 77077	USPS	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

Sean Puryear

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

**Exhibit A** 

Date: 7/11/2023

ARTICLE NUMBER: 9414 8118 9956 2232 4398 31

ARTICLE ADDRESSED TO:

Advance Energy Partners Hat MesaLLC 11490 WESTHEIMER RD STE 950

HOUSTON TX 77077-6841

FEES

Postage Per Piece Certified Fee Total Postage & Fees: \$5.470 4.350 9.820 JUL 1 1 2023 Postmark Here

# 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

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470 9 820

Postmark Here

## 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

Postage Per Piece Certified Fee Total Postage & Fees:



## 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

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470 4.350

Postmark Here

JUL 1 1 2023

# 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 Certified Fee Total Postage & Fees: \$5.470 4.350

Postmark

JUL 1 1 2023

# 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 Certified Fee Total Postage & Fees: \$5,470 4.350 9.820

JUL 1 1 2023

Postmark

ARTICLE NUMBER: 9414 8118 9956 2232 4397 94

ARTICLE ADDRESSED TO:

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

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 9.820

Postmark Here

JUL 1 1 2023

# 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 UL 1 1 2023 MIDLAND TX 79701-4405

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 4.350 9.820

Postmark Here

# 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 JUL 1 1 2023

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees: \$5.470 4 350

Postmark Here

## 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 Certified Fee Total Postage & Fees: \$5,470 4.350 9.820

**Postmark** Here

JUL 1 1 2023

# 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

Postage Per Piece Certified Fee Total Postage & Fees 4.350 9.820

Postmark Here

# 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

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470 4.350 9.820 JUL 1 1 2023

Postmark Here

ARTICLE NUMBER: 9414 8118 9956 2232 4399 61

ARTICLE ADDRESSED TO:

Hudson Oil Company of TX 616 TEXAS ST FORT WORTH TX 76102-4696 UL 1 1 2023

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$5.470 4.350 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

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$5.470 4.350 9.820 JUL 1 1 2023

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

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$5.470 4.350 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

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$5,470 4,350

Postmark Here

# 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
Certified Fee
Total Postage & Fees:

\$5.470 4.350 9.820

Postmark Here

# 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
Certified Fee
Total Postage & Fees:

\$5.470 4.350 9.820

Postmark Here

ARTICLE NUMBER: 9414 8118 9956 2232 4396 26

ARTICLE ADDRESSED TO:

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

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 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

Postage Per Piece Certified Fee Total Postage & Fees:

\$5.470 4.350 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 Certified Fee Total Postage & Fees: \$5.470 4 350 9.820

Postmark Here

# 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 Certified Fee Total Postage & Fees: \$5.470 4.350

Postmark Here

JUL 1 1 2023

# 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

Postage Per Piece Certified Fee Total Postage & Fees:

\$5 470 4.350 9.820

Postmark Here

# 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 Certified Fee Total Postage & Fees:

\$5,470 4.350 9.820 JUL 1 1 2023

Postmark

ARTICLE NUMBER: 9414 8118 9956 2232 4393 43

ARTICLE ADDRESSED TO:

Pennzenergy Exploration & Production PO BOX 2967

HOUSTON TX 77252-2967

FEES

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

Postmark Here

JUL 1 1 2023

# 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 Certified Fee Total Postage & Fees:

\$5.470 4.350 9.820

Postmark Here

# 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 Certified Fee Total Postage & Fees: \$5.470 4.350 9.820

Postmark Here

ark S

# 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<sub>JUL</sub> 1 1 2023

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees:

\$5.470 4.350

Postmark Here XIII.

# **Affidavit of Publication**

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated May 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 # 1087526
COMMISSION EXPIRES 01/29/2027

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

LEGAL NOTICE May 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 saft 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

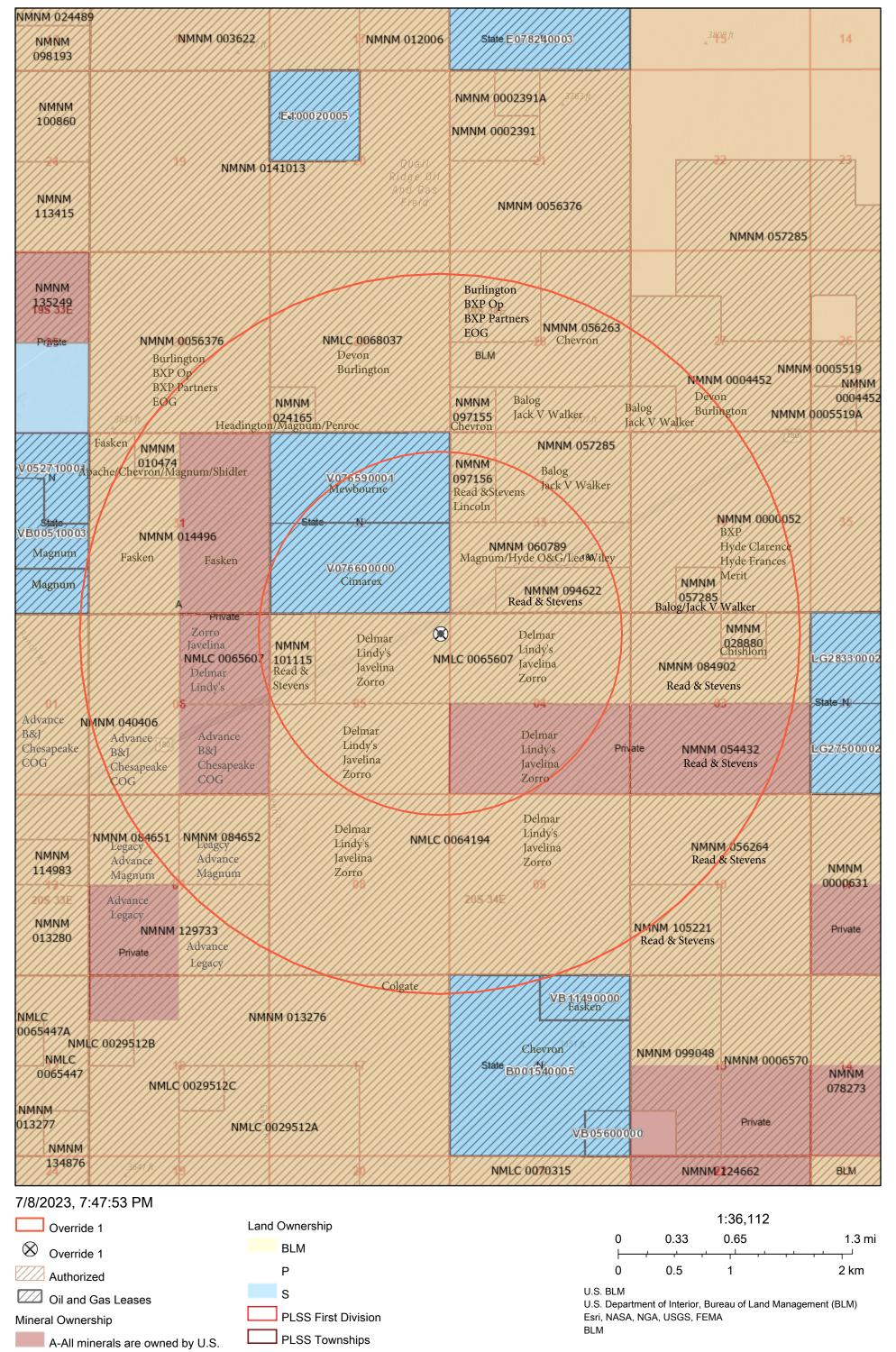
67115647

00278997

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

**Exhibit A** 

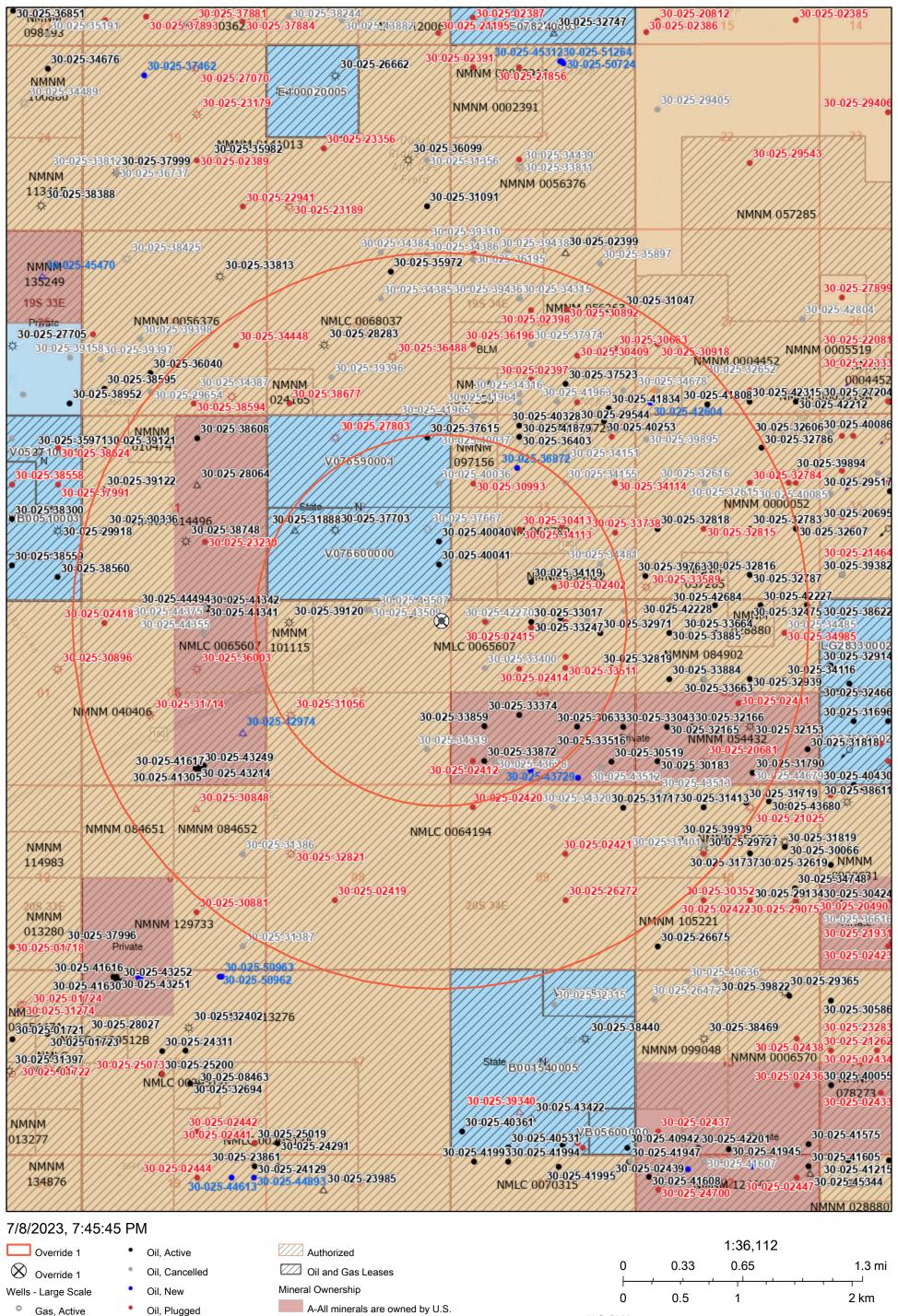
# V (a) Overdue Federal SWD #1, 1 & 2 Mi AOR, Leases



New Mexico Oil Conservation Division

N-No minerals are owned by the U.S.

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



Oil, Plugged Gas, Active N-No minerals are owned by the U.S. Oil, Temporarily Abandoned Gas, Cancelled Gas, Plugged Salt Water Injection, Active BLM Injection, Active Salt Water Injection, New Salt Water Injection, Plugged Injection, Plugged

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

# 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-05-20S-34E Lot: 4 660 FNL 660 FWL	D-05-20S-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-05-20S-34E 1980 FSL 710 FWL	M-05-20S-34E 1980 FSL 710 FWL	BONE SPRING		13660
30-025-31888	SELECT AGUA LIBRE MIDSTREAM, LLC	RED HAWK 32 STATE	#001	Salt Water Disposal	Vertical	Active	32	T19S	R34E	L	L-32-19S-34E 1980 FSL 810 FWL	L-32-19S-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-32-19S-34E 1980 FSL 1980 FWL	K-32-19S-34E 1980 FSL 1980 FWL	BONE SPRING	13687	2 13682
30-025-43507	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#001H	Oil	Horizontal	Cancelled Apd	05	T20S	R34E	В	B-05-20S-34E Lot: 2 280 FNL 2140 FEL	P-05-20S-34E 330 FSL 350 FEL	BONE SPRING	15377	7 10828
30-025-43509	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#003H	Oil	Horizontal	Cancelled Apd	05	T20S	R34E	В	B-05-20S-34E Lot: 2 280 FNL 2340 FEL	N-05-20S-34E 330 FSL 2290 FWL	BONE SPRING	15106	5 10820
30-025-43510	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#004H	Oil	Horizontal	Cancelled Apd	05	T20S	R34E	В	B-05-20S-34E Lot: 2 280 FNL 2440 FEL	M-05-20S-34E 330 FSL 970 FWL	BONE SPRING	15426	5 10827
30-025-43508	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#002H	Oil	Horizontal	Cancelled Apd	05	T20S	R34E	В	B-05-20S-34E Lot: 2 280 FNL 2240 FEL	O-05-20S-34E 330 FSL 1670 FEL	BONE SPRING	15087	7 10824
30-025-32003	SELECT AGUA LIBRE MIDSTREAM, LLC	RED HAWK 32 STATE	#002	Salt Water Disposal	Vertical	Active	32	T19S	R34E	J	J-32-19S-34E 1980 FSL 1980 FEL	J-32-19S-34E 1980 FSL 1980 FEL	MORROW	13617	2 13612
30-025-37615	MEWBOURNE OIL CO	RED HAWK 32 STATE	#001	Oil	Vertical	Active	32	T19S	R34E	Α	A-32-19S-34E 660 FNL 660 FEL	A-32-19S-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-05-20S-34E 990 FSL 660 FEL	P-05-20S-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	1	I-32-19S-34E 1980 FSL 660 FEL	I-32-19S-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	1	I-32-19S-34E 1650 FSL 330 FEL	L-32-19S-34E 1881 FSL 4940 FEL	BONE SPRING	15407	7 10843
30-025-40036	MEWBOURNE OIL CO	RED HAWK 32 STATE	#003C	Oil	Horizontal	Cancelled Apd	32	T19S	R34E	Н	H-32-19S-34E 1981 FNL 330 FEL	E-32-19S-34E 1980 FNL 330 FWL	BONE SPRING	15190	0 n/a
30-025-40041	CIMAREX ENERGY CO. OF COLORADO	QUAIL RIDGE 32 STATE	#004	Oil	Horizontal	Active	32	T19S	R34E	P	P-32-19S-34E 990 FSL 330 FEL	M-32-19S-34E 631 FSL 4935 FEL	BONE SPRING	13358	8766
30-025-02412	HUDSON OIL COMPANY OF TEXAS	FEDERAL	#002	Oil	Vertical	Plugged, Site Released	04	T20S	R34E	M	M-04-20S-34E 660 FSL 660 FWL	M-04-20S-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-33-19S-34E 1980 FNL 660 FWL	E-33-19S-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-04-20S-34E 660 FSL 990 FWL	M-04-20S-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-04-20S-34E Lot: 4 660 FNL 990 FWL	D-04-20S-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-04-20S-34E 1650 FSL 990 FWL	L-04-20S-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-04-20S-34E 1980 FNL 990 FWL	E-04-20S-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-04-20S-34E Lot: 4 661 FNL 1040 FWL	M-04-20S-34E 330 FSL 970 FWL	BONE SPRING	15371	1 10884
30-025-43678	READ & STEVENS INC	NORTH LEA 9 FEDERAL COM	#004H	Oil	Horizontal	Cancelled Apd	04	T20S	R34E	M	M-04-20S-34E 660 FSL 1275 FWL	M-09-20S-34E 330 FSL 970 FWL	BONE SPRING	16038	8 10860
30-025-36872	APACHE CORPORATION	SOUTH LUSK 33 FEDERAL	#003	Oil	Vertical	New	33	T19S	R34E	F	F-33-19S-32E 1545 FNL 1910 FWL	L-33-19S-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-04-20S-34E 990 FSL 1980 FWL	N-04-20S-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-04-20S-34E 1994 FNL 1980 FWL	F-04-20S-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-33-19S-34E 1980 FSL 1980 FWL	K-33-19S-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-04-20S-34E 1980 FSL 1980 FWL	K-04-20S-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-04-20S-34E 400 FSL 2290 FWL	N-09-20S-34E 330 FSL 2290 FWL	BONE SPRING	16021	1 10931
30-025-02415	HUDSON OIL COMPANY OF TEXAS	MATLOCK	#003	Oil	Vertical	Plugged, Site Released	04	T20S	R34E	C	C-04-20S-34E Lot: 3 823 FNL 2310 FWL	C-04-20S-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-04-20S-34E 1650 FNL 2310 FWL	F-04-20S-34E 1650 FNL 2310 FWL	DELAWARE	8350	8350
30-025-33017	READ & STEVENS INC	HUDSON FEDERAL	#003	Oil	Vertical	Active	04	T20S	R34E	С	C-04-20S-34E Lot: 3 660 FNL 2310 FWL	C-04-20S-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	С	C-04-20S-34E Lot: 3 395 FNL 2515 FWL	N-04-20S-34E 330 FSL 2290 FWL	BONE SPRING	14941	1 10825
30-025-34119	READ & STEVENS INC	PEARL 33 FEDERAL	#001	Oil	Vertical	Active	33	T19S	R34E	N	N-33-19S-34E 480 FSL 2310 FWL	N-33-19S-34E 480 FSL 2310 FWL	DELAWARE	10250	10250
30-025-33516	READ & STEVENS INC	TRUMAN FEDERAL	#004	Oil	Vertical	Active	04	T20S	R34E	0	O-04-20S-34E 990 FSL 2310 FEL	O-04-20S-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	0	O-33-19S-34E 330 FSL 2310 FEL	O-33-19S-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-33-19S-34E 2080 FSL 2080 FEL	J-33-19S-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	В	B-04-20S-34E Lot: 2 823 FNL 2103 FEL	B-04-20S-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	В	B-04-20S-34E Lot: 2 560 FNL 2130 FEL	B-04-20S-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	В	B-04-20S-34E Lot: 2 660 FNL 1982 FEL	B-04-20S-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-04-20S-34E 1980 FNL 1980 FEL	G-04-20S-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-04-20S-34E 1650 FNL 1980 FEL	G-04-20S-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-04-20S-34E 1650 FSL 1650 FEL	J-04-20S-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	В	B-04-20S-34E Lot: 2 570 FNL 1395 FEL	O-04-20S-34E 330 FSL 1670 FEL	BONE SPRING	14797	2 10825
30-025-32971	READ & STEVENS INC	HUDSON FEDERAL	#002	Oil	Vertical	Active	04	T20S	R34E	А	A-04-20S-34E Lot: 1 990 FNL 990 FEL	A-04-20S-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	Р	P-33-19S-34E 990 FSL 990 FEL	P-33-19S-34E 990 FSL 990 FEL	BONE SPRING	10400	10400
30-025-32819	READ & STEVENS INC	HUDSON FEDERAL	#001	Oil	Vertical	Active	04	T20S	R34E	Н	H-04-20S-34E 1980 FNL 660 FEL	H-04-20S-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	Α	A-04-20S-34E Lot: 1 335 FNL 350 FEL	P-04-20S-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	О	M	Е				
Ftg NS	990S	330S	330S	1980N				
Ftg EW	870W	1650E	760W	910W				
County	Lea	Eddy	Lea	Eddy				
State	NM	NM	NM	NM				
Field								
Formation	Delaware	Avalon Upper	3rd Bone Spring Sand	Wolfcamp				
pН	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'

Devoi	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	В	В					
Ftg NS	610S	810N	660N					
Ftg EW	660W	1980E	2130E					
County	Eddy	Lea	Lea					
State	NM	NM	NM					
Field								
Formation	Devonian	Devonian	Devonian					
Sample Source	Drill Stem Test	Drill Stem Test	Unknown					
pН								
TDS_mgL	29011	33414	45778					
Chloride_mgL	16000	18570	26440					
Bicarbonate_mgL	520	227	1145					
Sulfate_mgL	1500	1961	729					



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.

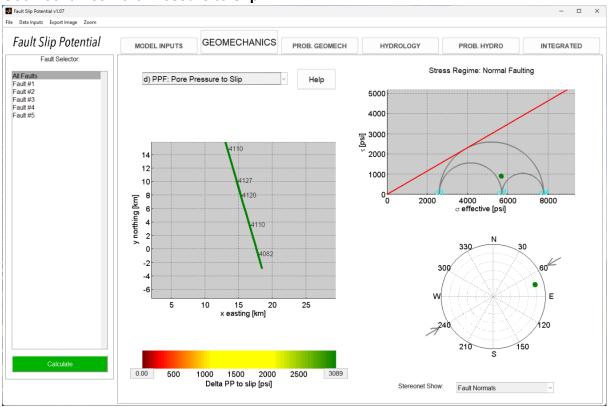
## Input assumptions:

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

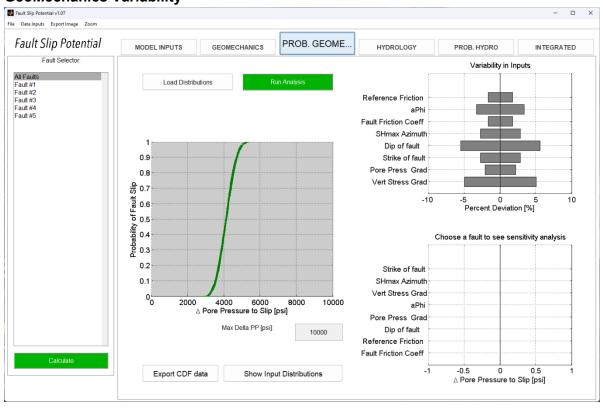
#### Note:

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.

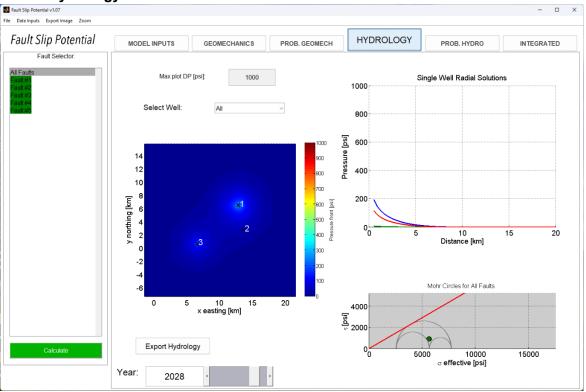
## **Geomechanics Pore Pressure to Slip**



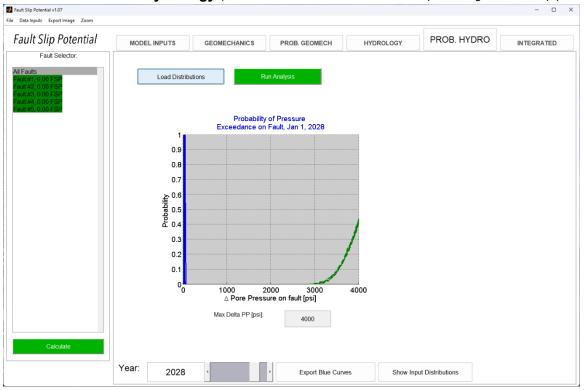
# **GeoMechanics Variability**

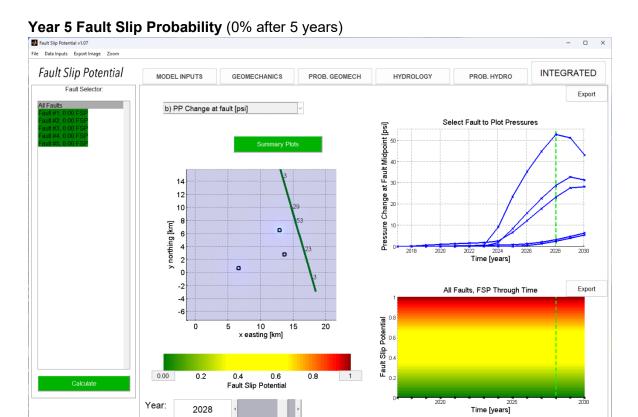


## Year 5 Hydrology

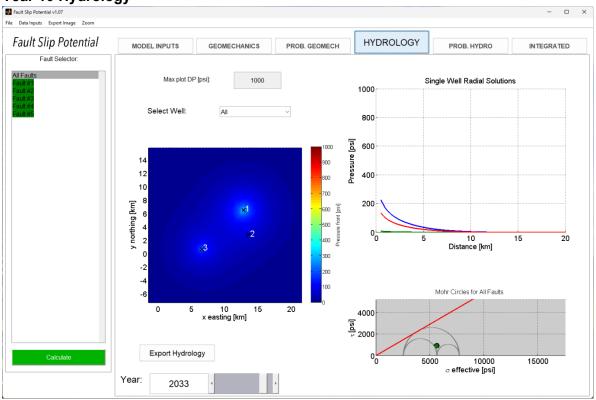


## Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)

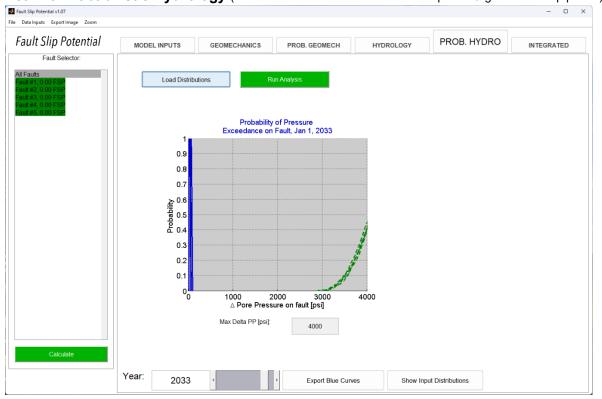


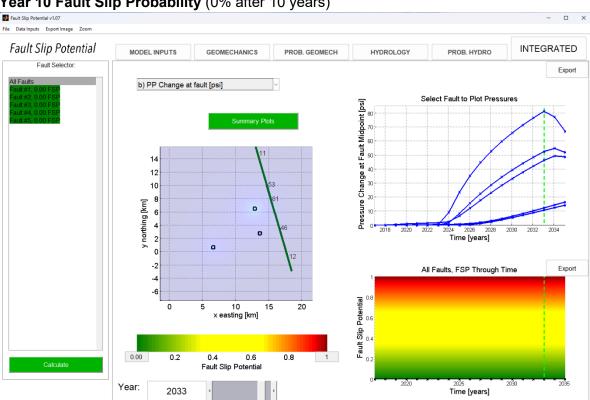


Year 10 Hydrology



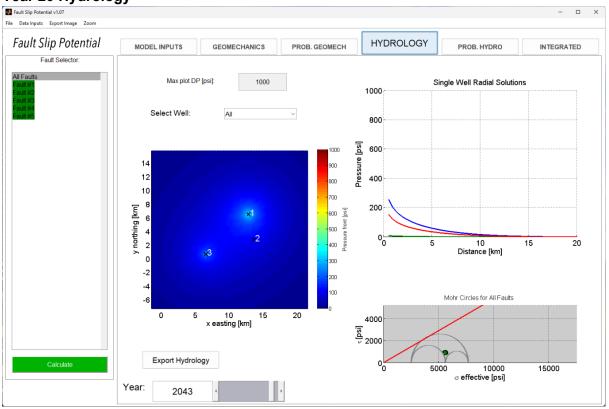
Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



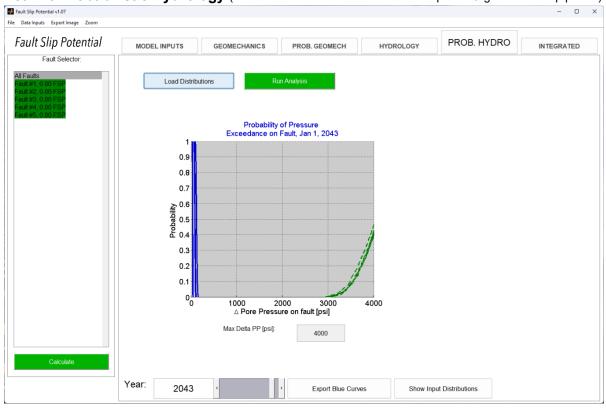


# Year 10 Fault Slip Probability (0% after 10 years)

Year 20 Hydrology



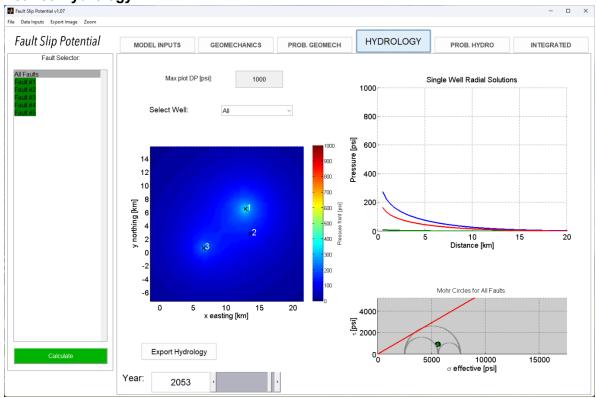
## Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



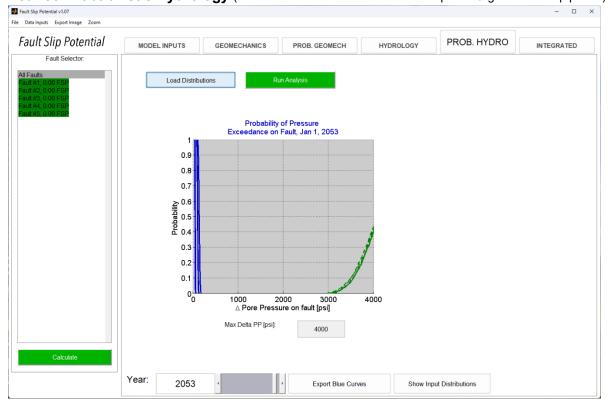
#### □ X Fault Slip Potential INTEGRATED GEOMECHANICS PROB. GEOMECH HYDROLOGY PROB. HYDRO Fault Selector Export b) PP Change at fault [psi] Select Fault to Plot Pressures Pressure Change at Fault Midpoint [psi] 80 -12 10 y northing [km] 0 0 ٥ All Faults, FSP Through Time Export 10 x easting [km] 20 0 0.00 0.2 0.4 0.6 Fault Slip Potential 8.0 Calculate Year: 2043

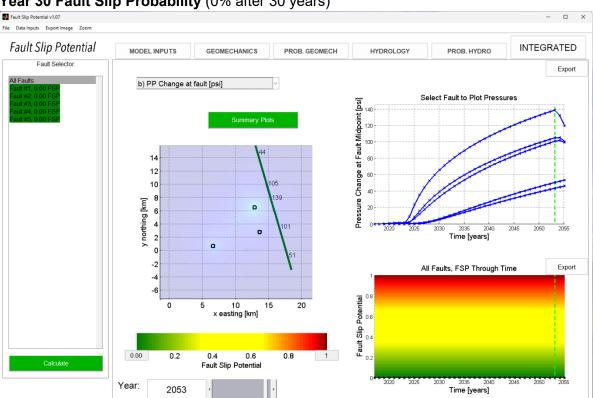
# Year 20 Fault Slip Probability (0% after 20 years)





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





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

gfisher@popmidstream.com

(817) 606-7630



#### 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.

Gary Fisher

Manager

Permian Oilfield Partners, LLC.

Date: 7/5/2023

Form 9-831 a (Feb. 1951)

	X	

## (SUBMIT IN TRIPLICATE)

## Lease No. 065607

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

1.1

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT	-OFF
NOTICE OF INTENTION TO CHANGE		SUBSEQUENT REPORT OF SHOOTING OF	
NOTICE OF INTENTION TO TEST WAT	TER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CA	
NOTICE OF INTENTION TO RE-DRILL	OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING	i I
NOTICE OF INTENTION TO SHOOT OF	i I	SUBSEQUENT REPORT OF ABANDONMEN	1
NOTICE OF INTENTION TO PULL OR	ALTER CASING	SUPPLEMENTARY WELL HISTORY	l l
NOTICE OF INTENTION TO ABANDON	WELL		
(INDICA	ATE ABOVE BY CHECK MARK NATU	RE OF REPORT, NOTICE, OR OTHER DATA	
	<del></del>	May 1	, 19.63
Pure Federal "C"	ted 660 ft from [N	line and 1982 ft. from	Ξ], , , , μ
en 140 is locat	ted usy It. Ifom.	line and 1902 ft. from	line of sec.
No. Sec. and Sec. No.)		(Meridian)	
Wildcat (Field)	(County or Subd	livision) (State	w hiexico or Territory)
			10 mg/m
ne elevation of the derrick	: floor above sea level is	3646_ft.	. 14
	DETAILS	OF WORK	
	DETAILS (	UR WUKK	
ate names of and expected depths to	o objective sands; show sizes, wei ing points, and all other ir	ghts, and lengths of proposed casings; in	ndicate mudding jobs, coment
ate names of and expected depths to	o objective sands; show sizes, wei ing points, and all other in	ghts, and lengths of proposed casings; inportant proposed work)	ndicate mudding jobs, coment
In accorda	nce with verbal ap	prowal of Mr. Standley	
In accorda	nce with verbal ap	prowal of Mr. Standley	
In accordance plugged and abandone	nce with verbal ap d on May 13, 1963,	proval of Mr. Standley as follows:	, this well was
In accordant plugged and abandone Set squees	nce with verbal ap d on May 13, 1963, e packer at 12,490	proval of Mr. Standley as follows: . Squeezed below with	, this well was
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was  150 sacks of  083-3983 and
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with	, this well was  150 sacks of  083-3983 and
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was  150 sacks of  083-3983 and
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was  150 sacks of  083-3983 and
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was  150 sacks of  083-3983 and
In accordance of the secondary of the se	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was  150 sacks of  083-3983 and
In accordance plugged and abandone Set squees alo-set cement at 45 to sack cement plug	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30 at 20° to surface.	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4 Hole was loaded with	, this well was 150 sacks of 083-3983 and 12.2# mud.
In accordance of the second of	nce with verbal ap d on May 13, 1963, e packer at 12,490 00 psi. Placed 30 at 20° to surface.	proval of Mr. Standley as follows: . Squeezed below with sack plug cement at 4	, this well was 150 sacks of 083-3983 and 12.2# mud.
In accordance plugged and abandone Set squees alo-set cement at 45 to sack cement plug	nce with verbal apd on May 13, 1963, see packer at 12,490 00 pai. Placed 30 at 20° to surface.	proval of Mr. Standley as follows:  . Squeezed below with sack plug cement at 4 Hole was loaded with	, this well was 150 sacks of 083-3983 and 12.2# mud.
In accordance plugged and abandone Set squees slo-set cement at 45 to sack cement plug is understand that this plan of work impany	nce with verbal apd on May 13, 1963, see packer at 12,490 00 psi. Placed 30 at 20° to surface.	proval of Mr. Standley as follows:  . Squeezed below with sack plug cement at A Hole was loaded with	this well was 150 sacks of 083-3983 and 12.2# mud.
In accordance plugged and abandone Set squees slo-set cement at 45 to sack cement plug and understand that this plan of work mpany	nce with verbal apd on May 13, 1963, e packer at 12,490 00 psi. Placed 30 at 20 to surface.  must receive approval in writing the Edward R. Ruds or Building.	proval of Mr. Standley as follows:  . Squeezed below with sack plug cement at A Hole was loaded with	this well was 150 sacks of 083-3983 and 12.2# mud.
In accordance plugged and abandone Set squees slo-set cement at 45 to sack cement plug and understand that this plan of work impany	nce with verbal apd on May 13, 1963, see packer at 12,490 00 psi. Placed 30 at 20° to surface.	proval of Mr. Standley as follows:  . Squeezed below with sack plug cement at A Hole was loaded with	this well was  150 sacks of  083-3983 and  12.2# mud.

GPO 914974

APPROVED

APPROVED

### (SUBMIT IN TRIPLICATE)

## UNITED STATES

## DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

16 L 20 M 9

1	Form App	roved.
*	Land Office	las druces
	Lease No	06 <b>36 07</b>
		n

Budget Bureau No. 42-R358.4.

## nistrict 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 ALITER 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 <b>.63</b>
Pure Fuderal "C" Well No. #1 is located	660_ft.	from $\{\begin{matrix} \mathbf{N} \\ \mathbf{S} \end{matrix}\}$ line an	ad 1982 ft. from $\left\{\begin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array}\right\}$ line of s	ec4
NI NE Sec. 4	203	34E	M.P.	
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	
Wildcat		Lua	New Maxico	
(Field)	(Co	unty 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 slowest cament at 4500 psi. Placed 30 sacks plug coment at 4083-3983 and 10 sacks cament plug at 20° to surface. Hole was leaded with 12.2# mud.

Company

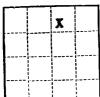
| Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Company | Compa

GPO 914974

GPO 914974

Title Consulting Engineer

Form 9-831 a (Feb. 1951)



# (SUBMIT IN TRIPLICATE)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Form Appr	oved.
Land Office	Las Gruces
Lease No	065607
	Th.

Budget Bureau No. 42-R358.4.

SUNDRY NOTIO	CES ANI	D REPORTS ON WELLS	
		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING ON ACCOUNT.	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR W	ÆLL	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO PULL OR ALTER CASING			
NOTICE OF INTENTION TO ABANDON WELL			
(INDICATE ABOVE BY	CHECK MARK NAT	TURE OF REPORT, NOTICE, OR OTHER DATA)	
		May 15, , 19 63	
Well No. 1 is located 660  Well No. 1 is located 660  WE Sec. 4 20  (1/4 Sec. and Sec. No.) (Tw	<b>S</b> p.) (Ra	line and 1982 ft. from line of sect.  Section line and 1982 ft. from	>
(Field)	(County or St	and the state of t	
The elevation of the derrick floor abo	ove sea level	is 3646 ft.	
The elevation of the derrick hoof ab		5,5	
	DETAILS	5 OF WORK	
con a second expected depths to objective s	ands; show sizes,	weights, and lengths of proposed casings; indicate mudding jobs, coment- er important proposed work)	
		12 And: after drilling out all compan	t
On May 11, 1963, we re	Baker bri	dge plug was set at 12,988' in 7" casing. The second of the 2 let shots per foot. On May 13,	he
ugs and cleaning out june. A	rom 12.892	-920 with 2 jet shots per foot. On May 13,	LWD
casing was then perforated a	R <sup>1</sup> The W	ell flowed at the rate of 620,000 cu.ft. gas	pe:
ill stem test from 12,705 "Sw	er per bou	er on a 6 hour test. Pressures were as follo	W# :
A bigs as pariets or sair and			
Hydrostatic 8380 psi. 60 min. ISIP - 6938	IPP -	. FSIP - 6875 FFP - 6153.	
tandley on May 13). Set squae I slo-set cement. Place cemen	se packer it plugs at	ll as follows (varbal approval was given by M at about 12,500°. Squeese below with 150 se t 4083-3983 (30 sacks) and 20° to surface (10 Heavy mud between plugs. Triting by the Geological Survey before operations may be commenced.	ir. iek <b>s</b> )
Company William A. & Edw	erd R. Hu	dson	
Address 302 Carper Build	ling	Part I may	_
Artenia, New Mex	kico	By Rayh I May	
		Title Consulting Engineer.	

For (I	m 9-	<b>881 a</b> (61)		
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APR 2 1963

(SUBMIT IN TRIPLICATE)

E. W. STANDLEY UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Land Office LAS CTUCAS

Lease No. 065607

Unit D

APR 2 1963

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF WATER SHUT-OFF
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(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

			April 1	, 19 <b>63</b>
Pure Federal "C" Well No. #1 is locate	ed 660 ft.	from $\begin{bmatrix} N \\ \end{bmatrix}$ line an	d 1982 ft. from	line of sec. 4
Ni ME Sec. 4	205	(Range)	(Meridian)	
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)		w Mexico

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 abendoned 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.

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

Artesia, New Mexico

By Rayle I'm

Title Consulting Engineer.

GPO 914974

ment plugs as follows:

Drilled to 14,985'. Flugg. Mack from 14,985' t 78 sacks coment in open holyd l'rom 14,985' to 14, and bottom of 7" OB casing to 1 m 13,960' to 13,

Acidised with 500 gale. Perforated 7" casing from 13.6%; 77' to 13,741' with 4 miots per foot, attempted to acidize with 500 gals mad acid with packer 1.00king. Swebbed load 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.

Shot 7" casing off at with 8 sacks cement, with heavy mud between plugs. Welded 1/2" steel plate on top of 6530' to 6470' with 12 sacks cemerit; from 4220' to 4100' with 24 sacks cement; in 7" 40291, pulled 123 joints, approlimentaly 40001. Flaced cement plug in 7" casing from and 9-5/8" casing from 4040' to 3/940' with 40 sacks; in 9-5/8" casing 20' to surface Plugged and Abandoned: Placec: tement plug in 7" ceaing and over perforetions from 12,572' to 12,586' with 12 sack coment from 12,600' to 12,550'. casing with 4" pips marker extending 4' above surface. Form 9-330

HOBBS Bureau No. 42-R355.4. al expires 12-31-60.

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

1958 SEP STATES : 36

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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		CORRECTLY							·
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Date	Augu	et 26, 195	9	Signed		Market John Market			
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No. 2,	from1	2572!	to 12586	<u> </u>	vo. 5, fr	om	to	0	
No. 3,	from	37201	to	•		om			
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Size	Weight per foot	Threads per	Make Amor		1	A 4 10	Perfor	ated	
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- #/8 On	easons for th	d importance to defect k and its	Hati in 130		. មុខ នេះ គឺ មេ មិន ពេលប្រ ពេលប្រ	ase state to the cosing, is in the casing, a dynamited, give	state fully, date, size	and if any position,	cesing was
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7.00D			•t• & 200 *				2nd st	sgo	
Heaving	g plug—Ma	aterial	FLUC	Length	DAPTE	RS			
Adapte	rs—Materia	al		Size		D	eptn set .		
				OOTING R					
Size	Shell	used I	Explosive used	Quantity	Date	Depth shot	D	epth cleane	d out
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Roc	ek pressure.	lbs. per sa.	in.	Gand	ons gaso	une per 1,000	cu. ft. of	gas	
			1	EMPLOYE	ES				
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, ·- <b>ì</b>	t. Blan		Driller						, Driller
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FORMATION RECERD—Continued

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141

17

58

26

70

206

10

194

75

FOTAL FEES

1392

Lime

Lime

Lime

Lime

Sand

Lime

Lime & anhydrite

Lime & anhydrite

Lime, sand & shale

PORMATION

16-43094-4

Sand & lime

Lime & Sand

Line & sand

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4234

4292

4318

5710

5780

5986

5996

6190

6265

7775

EF 7707

4217

4234

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### DRILL STEM TESTS:

- From 10,750' to 10,820',  $1" \times 5/8"$  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 1-1/2hours, closed and reopened tool, waited I 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.
- From 13,665' to 13,750', 5/8" x 1/4" chokes, 4200' of nitrogen blanket charged DST #6: 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.
- Attempted test in Mississippian from 14,060' to 14,185', 5/8" x 1" chokes, no DST #8: 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 Released to Imaging: 10/13/2023 8:02:18 MMl hour fine 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 throughout 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#.

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10354 10365 11 lime, sand & shale 11,278 11,304 1,4310 6 lime & close 1 10365 10396 31 lime & shale 11,304 1,4310 14,327 17 lime & shale 10462 10463 21 lime & shale 11,327 1,4335 8 lime & chert 10463 10516 33 lime, shale & chert 11,335 14,339 4 lime, chert & shale 10516 10537 21 lime & shale 11,339 14,348 9 lime & chert 10516 10537 10617 80 lime, shale & sand 11,338 11,348 10 lime & chert 10617 10644 10752 10820 68 Sand 10820 10834 10901 7 Shale & lime 10947 11132 185 Shale & lime 10947 11132 185 Shale & lime 10947 11132 185 Shale & lime 11198 11218 10 Shale & chert 11198 11218 10 Shale & chert 1128 11218 11298 67 Shale & chert 11298 11380 82 Shale, chert & sand 11,534 11,534 11,544 11,554 11,				Line & sand	1427	1 14276		
10365 10396 31 Lime & shale 14310 14327 17 Lime & shale 10462 10463 21 Lime & shale 14311 14337 14339 4 Lime & chert 10516 10537 10516 7 21 Lime & shale 14339 14348 9 Lime & chert 10516 10537 10617 80 Lime, shale & sand 1438 14358 10 Lime & chert 10644 10752 1081 Lime, shale & sand 1438 14358 10 Lime & chert 10644 10752 1082 1083 14367 9 Lime, shale & chert 10644 10752 1082 68 Sand 14370 14419 49 Lime & shale 10894 10901 7 Shale & lime 14438 14456 18 Shale & lime 10894 10901 7 Shale & lime 14438 14456 18 Shale & lime 10947 11132 1858 Shale & sand 14456 14561 105 Shale 11138 11138 10 Shale & chert 14582 14501 105 Shale 11138 1128 20 Chert 1128 11231 13 Shale & chert 14582 14501 19 Shale & Dolomite 11298 11360 14409 129 Shale & chert 14601 14622 21 Dolomite 11298 11360 14409 129 Shale & lime 14498 14601 19 Shale & lime 11409 11453 144 40 Shale & lime 11594 11821 48 Shale & lime 11990 11459 11504 40 Shale & lime 11990 11459 11821 11869 11920 51 Shale & lime 11990 11282 1282 12233 51 Lime, shale & chert Evhibit A				Lime, sand & shale				
10396 10462 10483 21 lime & shele 14327 14335 8 lime & chert 10483 10516 33 lime, shale & shele 10397 10516 10537 21 lime & shele 14335 14339 4 lime, chert & shale 10537 10617 80 lime, shale & sand 14348 14358 10 lime & chert 10644 10752 108 lime, shale & sand 14367 14370 3 lime & chert 10644 10752 108 lime, shale & sand 14367 14370 3 lime & chert 10644 10752 10820 68 Sand 14370 14419 49 Shale 10752 10820 68 Sand 14370 14419 14438 19 Shale 10894 10901 7 Shale & lime 14438 14456 18 Shale 10947 11132 185 Shale & lime 14438 14456 18 Shale 2 lime 10947 11132 185 Shale & lime 14561 14574 13 lime 11188 11198 10 Shale & chert 14582 14601 19 Shale & lime 11498 11218 11231 13 Shale & chert 14601 14622 21 Dolomite 11498 1128 11298 67 Shale & chert 14601 14622 21 Dolomite 11409 11409 29 Shale & chert 14985 363 lime 11409 11409 29 Shale & chert 14985 13645 -1340 PBFD 11504 11544 40 Shale & lime 11504 11504 51 Shale & lime 11504 11504 51 Shale & lime 11609 11409 29 Shale & lime 11409 11453 11504 51 Shale & lime 11409 11453 11504 51 Shale & lime 11409 11409 29 Shale & lime 11409 11409 20 Sha				Lime & shale				
10462 10483 10516 33 lime, shale & chert 14335 14339 4 lime, chert & shale 10516 10537 21 lime & shale 14339 14348 9 lime & chert 10537 10617 80 lime, shale & sand 14348 14358 14367 9 lime & chert 10644 10752 108 lime, shale & sand 14367 14370 3 lime & chert 10644 10752 108 lime, shale & sand 14367 14370 3 lime & chert 10752 10820 68 Sand 14370 14419 49 lime & shale 10752 10820 10894 74 Sand, shale & lime 1449 14438 19 Shale 10894 10901 7 Shale & lime 14449 14438 19 Shale 10947 11132 185 Shale & lime 14456 18 Shale & lime 14456 14561 105 Shale 11132 11132 11188 56 Shale & lime 14456 14561 105 Shale 11132 11188 56 Shale & lime 14561 14574 13 lime Shale & lime 11498 11218 11218 12218 20 Chert lime 14601 14622 21 Dolomite 11498 11298 11380 82 Shale, chert & sand 114601 14622 21 Dolomite 11409 11453 144 11594 50 Shale & lime 11498 11504 11544 40 Shale & lime 11498 11504 11544 40 Shale & lime 11594 11821 227 Shale & lime 11869 11820 252 Shale & lime 11869 11920 51 Shale & lime 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 12233 51 lime, shale & chert	10396							Lime & chert
10516 10537 21 Lime & shale 14,338 14,348 10 lime a tolor 10537 10617 80 Lime, shale & sand 14,348 14,358 10 lime, shale & chert 10617 10644 27 Lime & shale & sand 14,367 14,370 3 Lime, shale & chert 10752 10820 68 Sand 14,367 14,470 3 Lime & chert 10820 10894 74 Sand, shale & lime 14,419 14438 19 Shale 10820 10894 74 Shale & lime 14,419 14438 19 Shale 10894 10901 7 Shale & lime 14,456 14,561 105 Shale 10947 11132 1155 Shale 11me 14,561 14,561 14,574 13 Lime 10947 11132 1188 56 Shale & lime 14,574 14,582 8 Shale 11198 11198 10 Shale & chert 14,601 14,622 21 Dolomite 1128 11231 11298 67 Shale & chert 14,601 14,622 21 Dolomite 11298 11380 62 Shale, chert & sand 11,622 14,985 363 Lime 11,504 11,531 14,09 29 Shale & lime 11,504 11,531 11,504 51 Shale & chert 11,504 11,531 11,504 51 Shale & lime 11,504 11,594 50 Shale & lime 11,504 11,504 51 Shale & lime 11,504 51 Shale				lime a shale & chart	1433	5 14339	4	
10537   10617   80   lime, shale & sand   14348   14357   9   lime, shale & chert   10617   10644   27   lime & shale   14367   14370   3   lime & chert   10752   10820   68   Sand   14370   14419   49   lime & shale   10820   10820   10894   10901   7   Shale & lime   14419   14438   19   Shale & lime   10894   10901   7   Shale & lime   14456   14561   105   Shale & lime   14456   14561   105   Shale & lime   14456   14561   105   Shale   11132   11132   11132   11138   56   Shale & lime   14574   13   lime   11128   11128   11128   20   Chert   14581   14601   19   Shale & Dolomite   11281   11281   1231   13   Shale & chert   14601   14622   12   Dolomite   11298   11380   82   Shale & lime   14622   14985   363   lime   11409   11453   144   140   Shale & chert   14985   Total Depth   11504   11544   40   Shale & lime   14985   13645   -1340   PBTD   11821   11869   11821   11869   11920   51   Shale & lime   11920   12182   262   Shale & lime   12281   12233   51   Lime, shale & chert   Exhibit A				Lime & shale	1433	9 14348		
10617 10644 27 11me & sand 14367 14370 3 Lime & chert 10752 10820 68 Sand 14370 14419 49 Lime & shale 10752 10820 68 Sand 14370 14419 49 Lime & shale 10820 10894 74 Sand, shale & lime 14438 19 Shale Shale 10894 10901 7 Shale & lime 14456 14561 105 Shale 10901 10947 11132 185 Shale & sand 1456 14561 105 Shale 1132 11188 56 Shale & lime 14561 14574 13 Lime 11188 11198 10 Shale & chert 14582 14601 19 Shale & Dolomite 11198 11218 20 Chert 14582 14601 19 Shale & Dolomite 11198 11218 11231 13 Shale, chert & sand 114622 14985 363 Lime 11380 11409 29 Shale & chert 14985 Total Depth 11453 11504 11544 40 Shale & lime 11594 11821 1259 Shale & lime 11594 11821 227 Shale & lime 11594 11821 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 12233 51 Lime, shale & chert 5 Chibit A			80	lime, shale & sand	1434	8 14358 8 14367	10	
10644 10752 108 lime, shale & sand 10752 10820 68 Sand 10820 10894 74 Sand, shale & lime 14419 14438 19 Shale 10894 10901 7 Shale & lime 14438 14456 18 Shale & lime 10947 11132 185 Shale & sand 14561 14561 105 Shale 11132 11132 11188 56 Shale & lime 14574 13 Iime 11198 11198 10 Shale & chert 14582 14601 19 Shale & Dolomite 11198 11218 1221 13 Shale, chert & sand 114601 14622 21 Dolomite 11218 11231 11298 67 Shale & chert 14985 363 1ime 11499 11453 11504 11409 29 Shale & lime 11498 11504 11544 40 Shale & lime 11504 11544 40 Shale & lime 11504 11544 40 Shale & lime 11504 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 12233 51 Lime, shale & chert 1190 12182 1223 51 Lime, shale & chert 11920 12182 12233 51 Lime 11920 1223 12233 51 Lime 11920 1223 1223 12233 51 Lime 11920 1223 1223 12233		10644			1435 1435	0 14,707 7 14,370	-	Lime & chert
10752 10820 68 Sand 10820 10894 74 Sand, shale & lime 14438 14438 19 Shale & lime 10894 10901 7 Shale & lime 14438 14456 18 Shale & lime 10901 10947 46 Lime, shale & sand 14456 14561 105 Shale 110947 11132 185 Shale 114561 14574 13 Lime 11132 11188 56 Shale & lime 14574 14582 8 Shale 11188 11198 10 Shale & chert 14582 14601 19 Shale & Dolomite 11198 11218 20 Chert & sand 14522 21 Dolomite 11198 11218 20 Chert & sand 14601 14622 21 Dolomite 11218 11231 11298 67 Shale & chert 14601 14622 14985 363 Lime 11231 11298 1380 82 Shale, lime & chert 14985 Total Depth 11380 11409 29 Shale & lime 11409 11453 44 Lime, shale & chert 14985 13645 -1340 PBTD 11504 11504 51 Shale & lime 11504 11504 50 Shale & lime 11504 11594 50 Shale & lime 11504 11594 50 Shale & lime 11594 11821 227 Shale 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 262 Shale & chert 1290 12182 12233 51 Lime, shale & chert							49	Lime & shale
10894 10901 7 Shale & lime 10947 11132 185 Shale 11132 11188 56 Shale & lime 11188 11198 10 Shale & chert 11198 11218 20 Chert 11128 11231 13 Shale, chert & sand 11231 11298 67 Shale & chert 11298 11380 82 Shale, lime & chert 11380 11409 29 Shale & lime 11453 11453 44 Lime, shale & chert 11504 11544 40 Shale 11504 11594 50 Shale & lime 11594 11821 227 Shale 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11218 11223 51 Lime, shale & chert 11280 11290 51 Shale 11504 11594 50 Shale 11594 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 11920 12182 262 Shale & chert 1294 11821 2233 51 Lime, shale & chert 1295 12182 12233 51 Lime, shale & chert 1296 12182 12233 51 Lime, shale & chert 1297 12182 12233 51 Lime, shale & chert 1298 1290 12182 262 Shale & Lime 1298 1290 12182 262 Shale & Lime 1298 1290 12182 12233 51 Lime, shale & chert 1298 1298 12233 51 Lime, shale & chert 1298 1298 1298 1298 1298 1298 1298 1298				Sand, shale & lime	1441	9 14438	19	
10901 10947 46 Lime, shale & sand 14456 14561 105 Shale 1132 11188 56 Shale & lime 14574 13 Lime 1132 11188 1198 10 Shale & chert 14582 14601 19 Shale & Dolomite 1198 11218 20 Chert 8 sand 114622 21 Dolomite 11218 11231 13 Shale, chert & sand 114622 14985 363 Lime 11298 11380 82 Shale, lime & chert 11498 11409 11453 44 Lime, shale & chert 11498 11504 51 Shale & lime 11504 11504 40 Shale & lime 11504 11504 50 Shale & lime 11504 11504 50 Shale & lime 11504 11504 50 Shale & lime 11504 11821 227 Shale 11821 11869 48 Shale & lime 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 262 Shale & lime 11920 12182 262 Shale & chert 11920 12182 262 Shale & chert 11920 12182 12233 51 Lime, shale & chert 114985 1233 51 Lime, shale & chert 114985 124601 124				Shale & lime				. <u>.</u>
10947 11132 185 Shale 11132 11188 56 Shale & lime 11188 11198 10 Shale & chert 11198 11218 20 Chert 11218 11231 13 Shale, chert & sand 11231 11298 67 Shale & chert 11298 11380 82 Shale, lime & chert 11380 11409 29 Shale & lime 11409 11453 44 Lime, shale & chert 11504 11544 40 Shale 11504 11594 50 Shale & lime 11594 11821 227 Shale 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert 14,574 14,582 8 Shale 14,601 14,622 21 Dolomite 14,602 14,985 363 Lime 14,602 14,985 363 Lime 14,985 Total Depth 14,985 13645 -1340 PBTD		10947	46	_ ·	1445 31.44	0 14501 11471		
11132 11188 1198 10 Shale & chert 14,582 14,601 19 Shale & bolomite 11198 11218 20 Chert 14,601 14,622 21 Dolomite 11218 11231 13 Shale, chert & sand 14,622 14,985 363 lime 11231 11298 67 Shale & chert 14,985 Total Depth 11298 11380 82 Shale, lime & chert 14,985 Total Depth 11380 11409 29 Shale & lime 114,53 11504 51 Shale & lime 11504 11544 40 Shale & chert 14,985 13645 -1340 PBTD 11504 11544 40 Shale & lime 11544 11594 50 Shale & lime 11594 11821 227 Shale 11821 11869 48 Shale & lime 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 11920 12182 262 Shale & chert 14,985 13645 -1340 PBTD	10947	11132			1470 1457	L 14582		Shale .
11188 11198 1218 20 Chert 14601 14622 21 Dolomite 11218 11231 13 Shale, chert & sand 14622 14985 363 lime 11231 11298 67 Shale & chert 11298 11380 82 Shale, lime & chert 11380 11409 29 Shale & lime 11409 11453 44 lime, shale & chert 114985 13645 -1340 PBTD 11453 11504 51 Shale & lime 11504 11544 40 Shale 11504 11594 50 Shale & lime 11594 11821 227 Shale 11621 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert					1458	12 14601	. 19	
11218 11231 13 Shale, chert & sand 14,622 14,985 363 Interest 11231 11298 67 Shale & chert 14,985 Total Depth 11298 11380 82 Shale, lime & chert 14,985 Total Depth 11380 11409 29 Shale & lime 14,985 13645 -1340 PBTD 114,09 114,53 44 Lime, shale & chert 14,985 13645 -1340 PBTD 114,53 11504 51 Shale & lime 11504 11544 40 Shale 11544 11594 50 Shale & lime 11594 11821 227 Shale 11869 11920 51 Shale & lime 11869 11920 51 Shale & lime 11920 12182 262 Shale & lime 51 Lime, shale & chert Evhibit A				Chert	1460	11 14622		•
11231 11298 67 Shale & chert 11298 11380 62 Shale, lime & chert 11380 11409 29 Shale & lime 11409 11453 44 Lime, shale & chert 114985 13645 -1340 PBTD 11453 11504 51 Shale & lime 11504 11544 40 Shale 11594 11821 227 Shale 11821 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 11920 12182 51 Lime, shale & chert  Evhibit A		11231	13	Shale, chert & sand	1462	22 14985	) <b>3</b> 63	i indicated
11298 11380 82 Shale, lime 11380 11409 29 Shale & lime 11409 11453 44 Lime, shale & chert 114985 13645 -1340 PBTD 11453 11504 51 Shale & lime 11504 11544 40 Shale 11594 11821 227 Shale 11821 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert  Evhibit Δ	11231	11298		Shale & chort		14984	5	Total Depth
11409 11453 44 lime, shale & chert 14985 13645 -1340 PBID  11453 11504 51 Shale & lime  11504 11544 40 Shale  11594 11821 227 Shale  11821 11869 48 Shale & lime  11869 11920 51 Shale  11920 12182 262 Shale & lime  12182 12233 51 Lime, shale & chert  Evhibit A	•							
11453 11504 51 Shale & lime 11504 11544 40 Shale 11594 11821 227 Shale 11821 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert  Evhibit Δ				Lime, shale & chert	149	85 13645	5 -1340	) PBTD
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  Evhibit Δ				Shale & lime				
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  Evhibit Δ		11544	40	Shale				
11821 11869 48 Shale & lime 11869 11920 51 Shale 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert  Evhibit Δ	11544			_				
11869 11920 51 Shale 11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert Ενρίβιτ Δ								
11920 12182 262 Shale & lime 12182 12233 51 Lime, shale & chert Ενρίβιτ Δ				Shale				
12182 12233 51 Lime, shale & chert Evhibit A		•		Shale & lime				
Released to Imaging: 10713/2023/8302518/AM EXNIDIT A			53					
	Released to Ima	ging: 10/13/2	2023/830261	814M EXPIDIT A	+			

## DEFLECTION TESTS

FOOTAGE	DEGREES	FOOTAGE	DEGREES
3,0000	3.0/1	30105	2 2/1
10008	1-3/4 2	12405	1-3/4
10125		12461	1-1/2
10245 10305	1-1/4	12530	1-3/4 1
	1-1/4	12705	1-1/2
10355 10402	1 1	12740 12790	1-1/2
10462	1-1/2	12860	1-1/2 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 1
10820	1-3/4	13250	1 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 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	1-1/4 1 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

FOOTAGE	DEGREES	FOOTAGE	DEGREES
10008	1-3/4	12405	1-3/4
10125 10245	2	12461	1-1/2
10305	1-1/4 1	12530	1-3/4
10355		12705	1
10402	1-1/4 1	12740	1-1/2
		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 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	. ,	

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(SUBMIT IN TRIPLICATE)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Budget				ţ
Appror	ai expire	* 12-	31-40.	

Land Office Santa Fe, Hew Mex

IL ON SHOW

HOBBS OFFICE OCC

MOTICE 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	SUSSEQUENT REPORT OF RE-DRILLING OF REPAIR.
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.	
	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	
(INDICATE ABONE BY CHECK MARK NATI	URE OF REPORT, HOTICE, OR OTHER DATA)
	August 26 19 59
Federal *C*	
Well No. 2 is located 660 ft. from	line and 1282 ft. from E line of sec. 4
NW 1/4, NR 1/4 T-20-5 B-34 (K 800, and Suc. No.) (Twp.) (Ran	-L DOK
Wildont Los (Fish) (County or Sub	division) (State or Territory)
The elevation of the derrick floor above sea level i	
	Analone & Lander
	OF WORK
State names of and expected depths to objective sands; show since, we ing points, and all other:	sights, and lengths of proposed easings; Indicate mudding jobs, sement- important proposed work)
ded 17-1/2" hole 12-27-58. ran 499' of	13-3/8% OD casing, cemented w/ 525 sacks.
mum pressure 250%, had cement returns t	13-3/8* Of casing, cemented w/ 525 sacks, o surface. 12-1/4* hole complete 1-18-5
mum pressure 250%, had cement returns to coll, ran h801° of 9-5/8" CD casing, on	o surface. 12-1/4" hole complete 1-18-53 mented w/ 2900 sacks, maximum pressure 60
mum pressure 250%, had cement returns to Sol', ran h801' of 9-5/8" OD casing, ca cement returns to surface. Tested casi	13-3/8" Of casing, comented w/ 525 sacks, o surface. 12-1/4" hole complete 1-18-53 mented w/ 2900 sacks, maximum pressure 60 ng and coment w/ 1000#, held 30 minutes 6
mum pressure 250%, had cement returns to 801°, ran 4801° of 9-5/8" CD casing, catement returns to surface. Tested casiours WCC.	o surface. 12-1/4" hole complete 1-18-33 mented w/ 2900 sacks, maximum pressure 60 ng and cement w/ 1000#, held 30 minutes 0
mum pressure 250%, had cement returns to 801°, ran 4801° of 9-5/8° CD casing, catement returns to surface. Tested casiours WCC.  4° hole complete 5-22-59 at 13,915°, ra	o surface. 12-1/4" hole complete 1-18-33 mented w/ 2900 sacks, maximum pressure 60 mg and cement w/ 1000#, held 30 minutes 0 n 13-215' of 7" OD casing. comented w/ 53
mum pressure 250%, had cement returns to 861°, ran h801° of 9-5/8° CD casing, on cement returns to surface. Tested casiours WOC.  10 hole complete 5-22-59 at 13,915°, rans, maximum pressure 900%, 36 hours WOC.	o surface. 12-1/4" hole complete 1-18-33 mented w/ 2900 sacks, maximum pressure 60 mg and cement w/ 1000#, held 30 minutes on 13,715' of 7" OD casing, comented w/ 53 ran temperature survey, indicated top of
mum pressure 250%, had cement returns to SCL*, ran h801° of 9-5/8" OD casing, carement returns to surface. Tested casiours WOC.  4" hole complete 5-22-59 at 13,915°, rans, maximum pressure 900%, 36 hours WOC.	o surface. 12-1/4" hole complete 1-18-33 mented w/ 2900 sacks, maximum pressure 60 mg and cement w/ 1000#, held 30 minutes 0 n 13-215' of 7" OD casing. comented w/ 53
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## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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NOTICE OF INTENTION NOTICE OF INTENTION NOTICE OF INTENTION NOTICE OF INTENTION	TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT SUBSEQUENT REPORT SUBSEQUENT REPORT	RT OF WATER SHUT-OFF.  RT OF SHOOTING OR ACIDIZIN  RT OF ALTERING CASING.  RT OF RE-DRIELING OR REPAIR  RT OF ABANDOHMENT.  ELL HISTORY.	R
<b>Federal. *C</b> * Well No1	is located ft. from	$\mathbf{a} = \left\{ egin{array}{l} \mathbf{N} \\ \mathbf{S} \end{array} \right\}$ line and		
(34 flee, and flee, 1	No.) (Twp.) (County		(State or Territor	(*)
		ILS OF WORK		
State names of and expensions and expensions treated asing 12,60 asing placed as 4040 = 3940	•	urface w/ 8 sac	mnd said. Place casing off at 4 w/ 12 sacks, 422 cks. Welded 1/2"	d cement; 029', pull 0'-4100' m
State names of and expensions treated casing 12,60 asing placed s, 4040 = 3940	DETA  sted depths to objective sands; show si- ing points, and all perfs 12,5721-12,586* 01 to 12,500' with 12 coment plug in 7° casi w/ 40 sacks, 20' to s	use, weights, and longths and the timportant proposed w/ 500 gallon sacks. Shot 7 ng 6530 -5470 urface w/ 8 sac above surface.	mnd said. Place casing off at 4 w/ 12 sacks, 422 cks. Welded 1/2"	d cement; 029', pull 0'-4100' w steel pla
State names of and expensions treated casing 12,60 asing placed s, 4040 = 3940	DETA  sted depths to objective sands; show si- ing points, and all perfs 12,5721-12,586* 01 to 12,500' with 12 coment plug in 7° casi w/ 40 sacks, 20' to s	use, weights, and longths and the timportant proposed w/ 500 gallon sacks. Shot 7 ng 6530 -5470 urface w/ 8 sac above surface.	mnd acid. Place casing off at he w/ 12 sacks, h22 che. Welded 1/2"	d cement; 029', pull 0'-4100' w steel pla
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August 26, 1959

United States Department of the Interior Geological Survey
Box 18 M

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

Dear Sir:

Attached herewith three (3) copies of Form 9-311a "Sendry Notices and Reports on Wells" on The Pure (il Company's Pederal "C" No. 1, wildowt dry hole drilled in Section & Township 20-5, Range 30-5, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMMANY

W. N. Townsend Chief Clerk

WE THE

beer Schafer

Trague File

Signal Cil & Cas Co.

Mr. Ray Miemer 801 Wilco Bldg.

Midland, Texas

31, ral 011 & Gas 4

Ar. Wallace

1010 Pt. Worth Bldg.

Fort Worth 2:

New Worldon Mil Commission Commission

Dox 2015

Hobbs, New Mexico

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Hamak 90

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

For (I	<b>m 9-</b> Peb. 19	<b>881 a</b> 81)		
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## UNITED STATES DEPARTMENT OF THE INTERIOR 100 GEOLOGICALISURYEY!

Land Office	Santa	Fe,	N.M
Lease No			
Unit		. ~	

## SUNDRY NOTICES AND REPORTS ON WELLS

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

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

					, 19.55.
Federal *C* Well No is located	<b>660</b> ft. f	rom_ $\left\{ egin{smallmatrix} \mathbf{N} \\ \mathbf{S} \end{bmatrix}$ line an	d 1982 ft. fr	$\operatorname{Fom}\left\{egin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array}\right\}$ line of sec.	4
3M/L, NE/L	7-20-5	R-XI-E	MUM		
(¾ Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	Hew Manico	
(Field)	(Cor	unty 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 5125' to 11,524' in lime, dolcaite, sand, shale and obert.
UET #1 10,750' - 10,820'

I understand t	hat this plan of work must receive approval in writing b	y the Geological Survey before operations may be commenced.
Company		
Address		
Addi Coo	Midland, Toxas	By W. E. Tourser
		Title Ctdef Clerk
		1100

HOURS OFFICE OCC

1859 MAR 23 MM 8 1 1 1

### March 20, 1959

United States Department of the Interior Seclapical Survey Box 1838 Robbs, New Mexico

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

Door Sire

Attaching three copies of Form 9-33la "Sundry Notices and Reports on Wells" as our progress report on The Pure Cil Company's Federal "C" Well No. 1, located in Section 4, Tour-ship 20-5, Range 34-8, Lea County, New Nextco.

fours very truly,

THE NAME OUR CONTAIN

H. C. Commond

#### L. Toward

bec: Mr. W. F. Schafer
Mr. H. G. Teague
File
Signal Oil & Gas Company
Mr. Ray Diemer
Sol 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 2015
Hobbs, New Mexico

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Budget Bureau 42-R358.5. Approval expires 12-31-55.

(Feb. 1	Feb. 1951)					
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Land Office	Senta	Fe,	M.H.
Lease No	065607	ŗ	
Unit		~~	

### 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 a test intermediate pipe X	

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

			Acquest 23	, 19 <b>52</b> .
Well No is lo	ocated 660 ft. fr	om. $\binom{N}{2}$ line an	d ft. from $\left\{egin{array}{c} E \\ oldsymbol{ iny} \end{array} ight\}$ line	of sec.
<b>减</b> 人 取人	7-20-6	Red Jos		
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	
X11dost		Lea	New Year	co
(Field)	(Cour	ity or Subdivision)	(State or Territo	
TI	ist for above see	lavel is	f.	

#### 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)

Brilled 1068'-5125' in dolerate, sand & lime. Non electric logs to 1772', ren 1801' of 9-5/8" OD caming w/ coming shoe set at 1801' SOF, float collar at 1738', House two stage IV tool set at 2510', comented let stage thru shoe at 1801' with 300 seeks 75% incor coment, 25% strategrate w/ 66 gals added and 200 seeks incor next cement. Prepad plug to 1738', maximum and final presence 600f. Opened DV tool at 3510', 2nd stage communed w/ 2500 sacks 50-50 incor-dismix w/ 65 gel added, had essent returns to surface 18 hours 100. Tested 9-5/8" casing, control scuipmost and coment with 1000 for 30 strates, held Off.

I understand	that this plan of work must receive	approval in writing by the (	Geological Sur	rvey before operations may be commenced.
Company	The Pere Oil Compan	<b>E</b>		
Address	Best 671	<del>.</del>		
	Hidland, Tomas		Ву	a. E. Lune
		·	Title	Grant Clerk
		U. S. GOVERNMENT PRINTING OFFICE	168437-5	

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**Exhibit A** 

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

(Feb. 1951)						
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(SUBMIT IN TRIPLICATE)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Office	Sents Pe, H.
Loase No.	065607
Unit	

## 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
		SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL		
Spud & set surface cesing	X	

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

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Federal. *C* Well No	1 660 ft. from $\binom{N}{3}$ line a	and 1982. ft. from $\left\{egin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array} ight\}$ line of	sec.
MB/A (3/2 Sec. and Sec. No.)	1-20-5 R-31-5	(Meridian)	
(34 Sec. and Sec. No.)	(Twp.) (Range)		
Wildows	Lea	(State or Territory)	
(Field)	(County or Subdivision)	(State or Territory)	

The elevation of the derrick floor above sea level is 366. 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)

Sped 12-1/h\* hole 6:30 AM 12-27-58, drilled to 505' in red beds, resmed 12-1/h\* hole to 17-1/2" from 0' to 505'. Ran 199' of 13-3/8" OD casing with Ouide Shoe set at 199' SCF, three sets centralizers installed. Commented 13-3/8" easing with 525 sacks Portland Heat Coment. Pumped plug to 168', maximum pressure 250f. Had coment returns to surface, 2h hours WCG. Test 13-3/8" easing, control equipment and coment with 1000f, hald 30 minutes OK.

Drilled 505' - 1:066' red beds, anhydrite, salt, dolumite, 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	Bass 673.				
	Midland, Texas	By a E former			
		Title Order Clark			

U. S. GOVERNMENT PRINTING OFFICE 16-8437-5

Title

Approval is subject to the following condition:

1. That the 5½ casing be comented 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.

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Form C-128
Revised 5/1/57

## NEW MEXICO OIL CONSERVATION COMMITTION ON

Well Location and Acreage Dedication Plat

Section A.	one of a consumer	・ (数: 第元))		*, **	December 22, 1	. <del>956</del>
Opc: a co:	G. L.	Section Line, Elevation	Tor	wnshipFeet From	m Range	NMPN Line Acres
<ol> <li>Is the Operatives</li> <li>If the answer consolidated "yes," Type (</li> </ol>	tor the only own	ner* in the de ne is "no," ha tion agreement n	dicated acreve the interest or otherwi	rests of all	d on the plat b the owners bee No If a	en Inswer is
	<u>Owner</u>		La	nd Description	on	
ection.B				<del></del>		
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## 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 plate 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

<sup>\* &</sup>quot;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

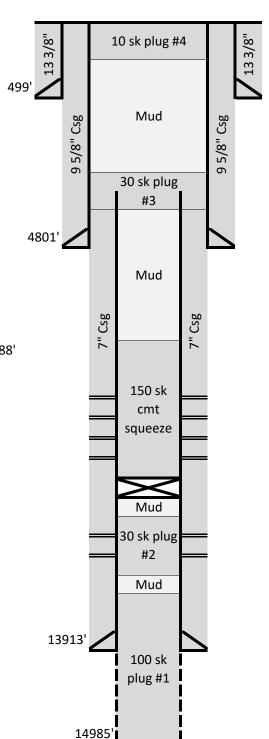
VI.

# 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'



(In feet)



## 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 (quarters are 1=NW 2=NE 3=SW 4=SE)

closed) (quarters are smallest to largest) (NAD83 UTM in meters)

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CP 00655 POD1	СР	LE	3	3 1	14	20S	34E	637294	3605108* 🎒	210		
CP 00656 POD1	СР	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	СР	LE	1	4	24	20S	34E	639740	3603128* 🎒	698	270	428
CP 00750 POD1	СР	LE	3	3 4	07	20S	34E	631639	3605834* 🎒	320		
CP 00799 POD1	СР	LE	4 3	3 4	34	20S	34E	636666	3599364* 🎒	100		
CP 00800 POD1	CP	LE	2 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	СР	LE	4 4	2	34	20S	34E	637037	3600261 🌍	1222	651	571
CP 01330 POD1	CP	LE	4 2	2 1	34	20S	34E	636197	3600483 🌕	1349	684	665
CP 01334 POD1	СР	LE	1 2	2 4	35	20\$	34E	638402	3599879 🌑	1253	733	520
CP 01335 POD1	СР	LE	4 1	4	35	20\$	34E	638205	3599736 🌕	1307	735	572
CP 01352 POD1	СР	LE	3 1	4	34	20\$	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	СР	LE	3 3	3 2	30	20S	34E	631560	3600891 🌑	112		
CP 01867 POD1	СР	LE	1 2	2 4	20	20S	34E	633584	3603189 🌕	200		
CP 01867 POD2	СР	LE	1 2	2 4	20	20S	34E	633513	3603189 🌕	200		
CP 01867 POD3	СР	LE	1 2	2 4	20	20S	34E	633580	3603242 🌕	220		
CP 01867 POD4	СР	LE	1 2	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.

Received by OCD: 10/12/2023 11:33:42 PM

Page 72% f 242

Average Depth to Water: **702 feet** 

Minimum Depth: 270 feet

Maximum Depth: 1005 feet

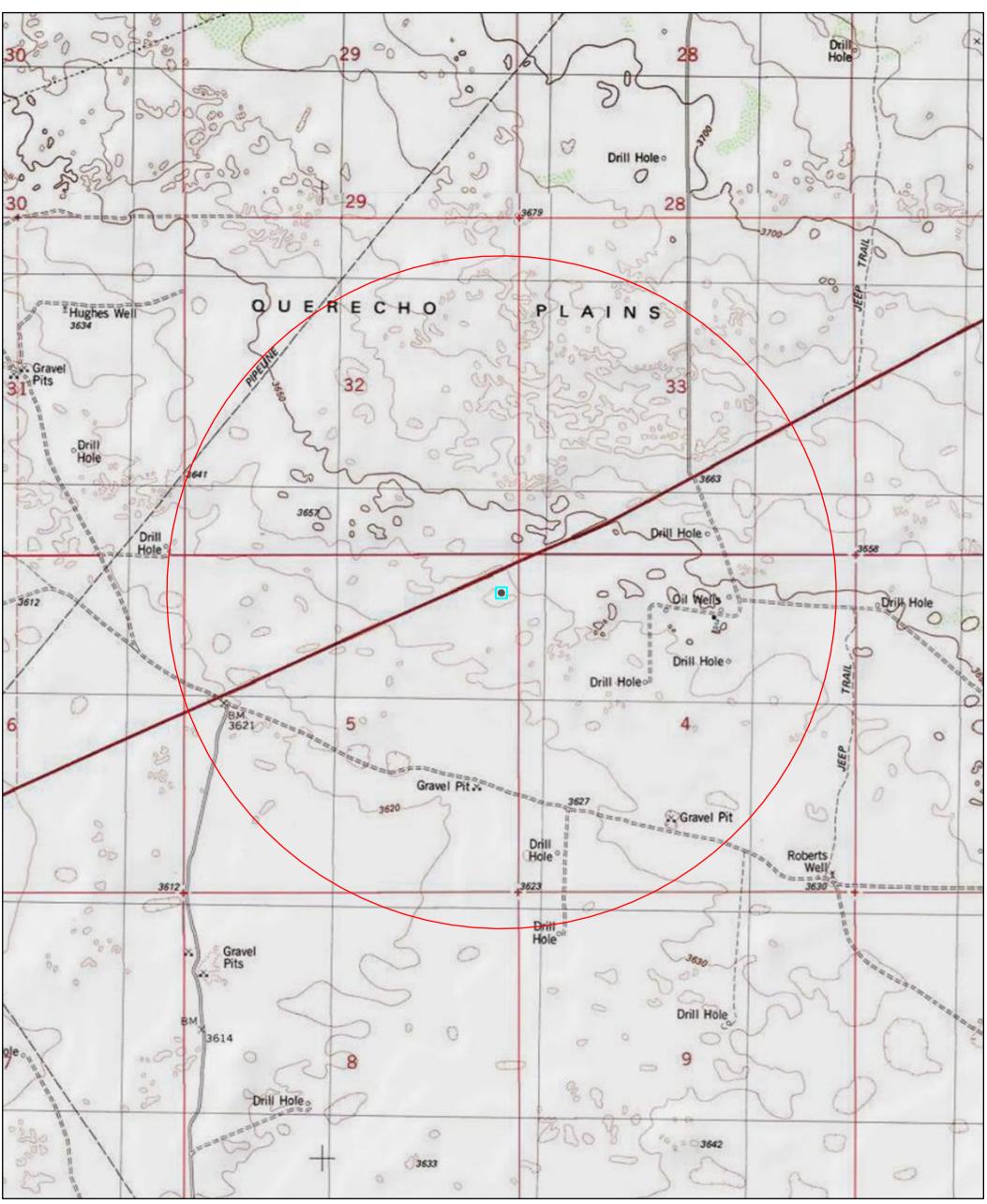
**Record Count: 21** 

PLSS Search:

Township: 20S Range: 34E

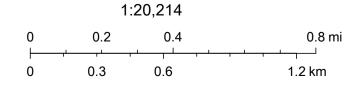
XI.

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



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

SiteBoundaries



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

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

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:	OGRID:
Permian Oilfield Partners, LLC	328259
PO Box 3329	Action Number:
Hobbs, NM 88241	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 2systems manager and engineer, along with several field engineering positions where I was directly involved in the drilling and completion of over 100 horizontal oil and gas wells in southeastern New Mexico.
- 5. As Chief Executive Officer of Permian, my responsibilities include management and oversight of drilling saltwater disposal wells, as well as design and construction of produced water infrastructure.

Exhibit 2

- 6. I have been directly involved in the drilling and completion of 15 saltwater disposal wells, both before I worked with Permian and with Permian.
- 7. My area of responsibility at Permian includes the area of Lea County in New Mexico.
- 8. I am familiar with the application Permian filed in this matter and I am familiar with the saltwater disposal well that is the subject of the application.
- 9. I submit the following information in support of Permian's request for an order approving drilling of a saltwater disposal well in Lea County, New Mexico. I understand that this document, the information contained herein, and the exhibits attached to this document constitute my direct testimony in this case.
- 10. Permian proposes to drill the 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

From: **Kyle Perkins** 

Engineer, OCD, EMNRD To:

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)





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: <u>Sean Puryear</u>

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 though 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			7/18/2023
#1	pMSG2319953455	SWD-2544	//16/2023
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

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:	OGRID:
Permian Oilfield Partners, LLC	328259
PO Box 3329	Action Number:
Hobbs, NM 88241	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	1 API Number 2 Pool Code					<sup>3</sup> Pool Name						
				97869		SWD; DEVONIAN-SILURIAN						
4Property Co	de				5 Property N				(	Well Number		
				OV.	ERDUE FE	DERAL SWD				1		
7 OGRID	NO.				8 Operator 1				<sup>9</sup> Elevation			
32825	9		<b>P</b>	ERMIAN	OILFIELD	PARTNERS,	LLC			3643'		
			<sup>10</sup> Surface Location									
UL or lot no.	Section	Township Range Lot Idn Feet from the North/South line Feet From the East/W								County		
1	5	20S   34E       602   NORTH   298   EAS							ST	LEA		

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.

(	B <i>N 89°22'38"</i>	E 2644.21'	© N 89°30'52	" E 2637.58"	(D)	)
	16				2,	<sup>17</sup> OPERATOR CERTIFICATION
			' 	 	602	I hereby certify that the information contained herein is true and complete
			i I	1	*	to the best of my knowledge and belief, and that this organization either
	LOT 4	LOT 3	LOT 2	LOT 1	S.L.O	owns a working interest or unleased mineral interest in the land including
			 		298'–	the proposed bottom hole location or has a right to drill this well at this
	<u>GEODET</u> NAD 83 GRID		 	 	2632	location pursuant to a contract with an owner of such a mineral or working
	SURFACE	LOCATION	_	<u> </u>	<u>\$</u>	interest, or to a voluntary pooling agreement or a compulsory pooling
	N: 585676.2 -				,55,	order heretofyre entered by the division.
	LAT: 32.60				0.05	Tay Erfelher 7-5-2023
	LONG: 103.5				S 0	Signature Date Gary Fisher
	<u>CORNEF</u> NAD 83 GRID			 		Printed Name
3.40				 		gfisher@popmidstream.com
5273.	A: FOUND BRAS N: 580957.2 -					E-mail Address
₹,	B: FOUND BRAS		5	<del> </del>		1º GLIPLIELIO P. GEPTELGA TIOLI
2,28	N: 586229.5 -	- E: 769951.1	<i>5</i>			<sup>18</sup> SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this
20.00	C: FOUND BRAS N: 586258.3 -					plat was plotted from field notes of actual surveys
Ω	D: CALCULAT	ED CORNER	İ	İ		made by me or under my supervision, and that the
	N: 586280.6 -	- E: 775231.6	İ		,	same is true and correct to the best of my belief.
	E: FOUND BRAS N: 583642.4 -		İ	İ	35.8	
			İ	İ	263	05/30/2023 Date of Survey
ŀ	F: FOUND BRAS — — — - N: 581007.1 -	- E: 775233.1 — — —	- <del> </del>	<u> </u>	· — — — ;;	Date of Survey  Signature and Seal of Profesional Surveyon Ex
	G: FOUND BRAS				17,52	Signature and Sear of Profesional Survey(N)
	N: 580983.5 -	- E: 772591.9			2.00	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (
					S	131 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
						14400 05/31/2023
						Certificate Number
$_{\mathbb{A}}$		(	©		(F)	20NAL ST
٧Į	S 89*25'39"			 " W 2641.84'		lo.: LS23050493



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT NOS Detail Repor

**Submission Date:** 08/15/2023

Title: President

NOS ID: 10400093878

Submission Date: 08/15/2023

Operator Name: PERMIAN OILFIELD PARTNERS LLC

Well Name: OVERDUE FEDERAL SWD

Well Type: INJECTION - DISPOSAL

Well Number: 1

Well Work Type: Drill

Highlighted data reflects the most recent changes

**Show Final Text** 

### **Section 1 - General**

**NOS ID:** 10400093878

**BLM Office: CARLSBAD** 

**User:** Gary Fisher

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

Field/Pool or Exploratory? Field and Pool

Use Existing Well Pad? N

Type of Well Pad: SINGLE WELL

Number:

Well Class: DIRECTIONAL

Well Type: INJECTION - DISPOSAL

**Describe Well Type:** 

Well Number: 1

Well API Number:

Field Name: SWD; DEVONIAN- Pool Name:

**SILURIAN** 

NULL\_POOL\_NAME\_VALUE

**Multiple Well Pad Name:** 

New surface disturbance?

Number of Legs: 1

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	Тwsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
	602	FNL	298	FEL	20\$	34E	5	Lot 1	32.60778 48	- 103.5747 341	LEA	NEW MEXI CO	• • - • •	F		364 3	0	0	N
KOP																	0	0	
Leg						'													
#1					!	l!													
PPP																	0	0	
Leg						'													
#1-1						<u> </u>													
EXIT						'											0	0	
Leg						'													
#1						<u> </u>													
BHL	602	FNL	298	FEL	20S	34E	5	Lot	32.60778		LEA	NEW		F	NMLC0	-	158		N
Leg						'		1	48	103.5747 341		MEXI	CO		065607	122 01	44	44	
#1										341						01			

### **Section 4 - Other**

**Anticipated Bottom Hole Pressure: 7415** 

Anticipated abnormal pressures, temperatures, or potential geologic hazards?  $\ensuremath{\mathsf{N}}$ 

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_102OVERDUE_FEDERAL_SWD1_2023	30815105632.pdf
SUPO Additional Information:	
Other SUPO	
Other Attachment:	
General Comments:	

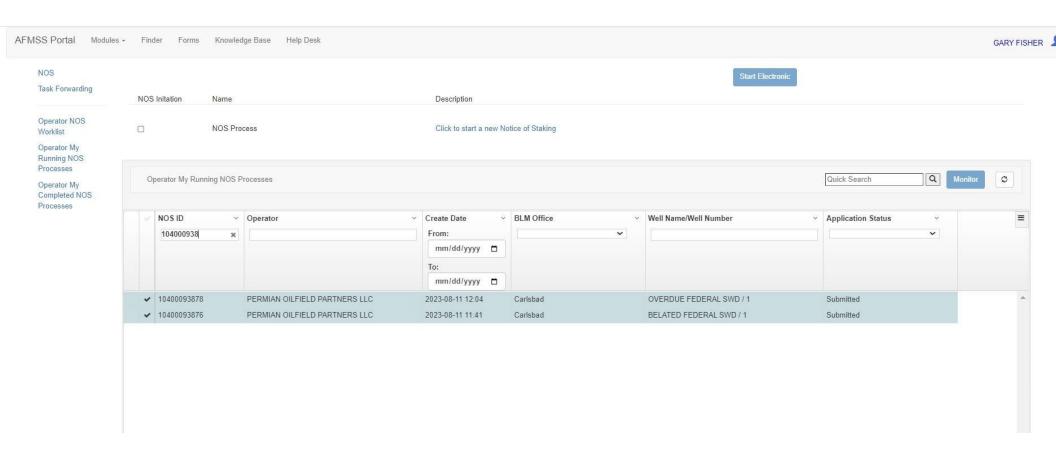


Exhibit 2.D

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)

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

Depth Top: Surface Depth Btm: 1577'

> Cement: 1444 sks - Class C + Additives Cement Top: Surface - (Circulate)

### Intermediate #1 - (Conventional)

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

Depth Top: Surface Depth Btm: 3658'

> Cement: 1119 sks - Class C + Additives Cement Top: Surface - (Circulate)

### Intermediate #2 - (Conventional)

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

Depth Top: Surface

Depth Btm: 5582' ECP/DV Tool: 3758'

Cement: 827 sks - Class C + Additives

Cement Top: Surface - (Circulate)

### Intermediate #3 - (Conventional)

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

Depth Top: Surface

Depth Btm: 10987' ECP/5682'

Cement: 1803 sks - Class C + Additives

Cement Top: Surface - (Circulate)

### Intermediate #4 - (Liner)

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

**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)

Depth: 15844' Hole Size: 6.5"

Inj. Interval: 14675' - 15844' (Open-Hole Completion)

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

Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Tubing Depth: 14630'

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: 5.5" - Perma-Pak or Equivalent (Inconel) Packer Depth: 14640'

Packer Fluid: 8.4 ppg FW + Additives

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)

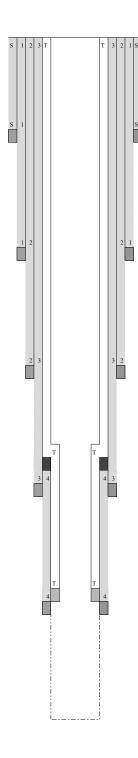
X/O Depth: 10787'

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

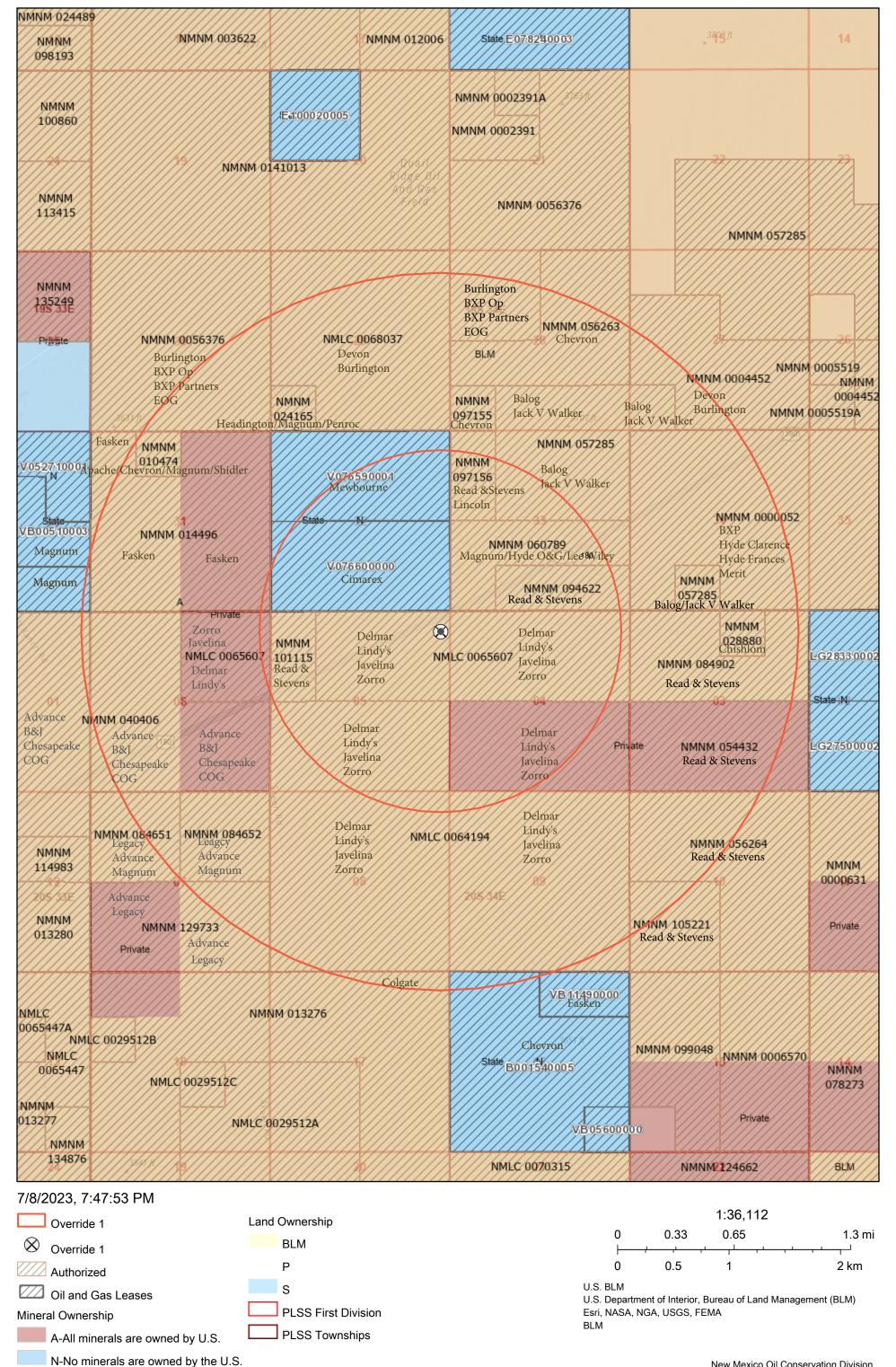
Packer Depth: 14640'

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

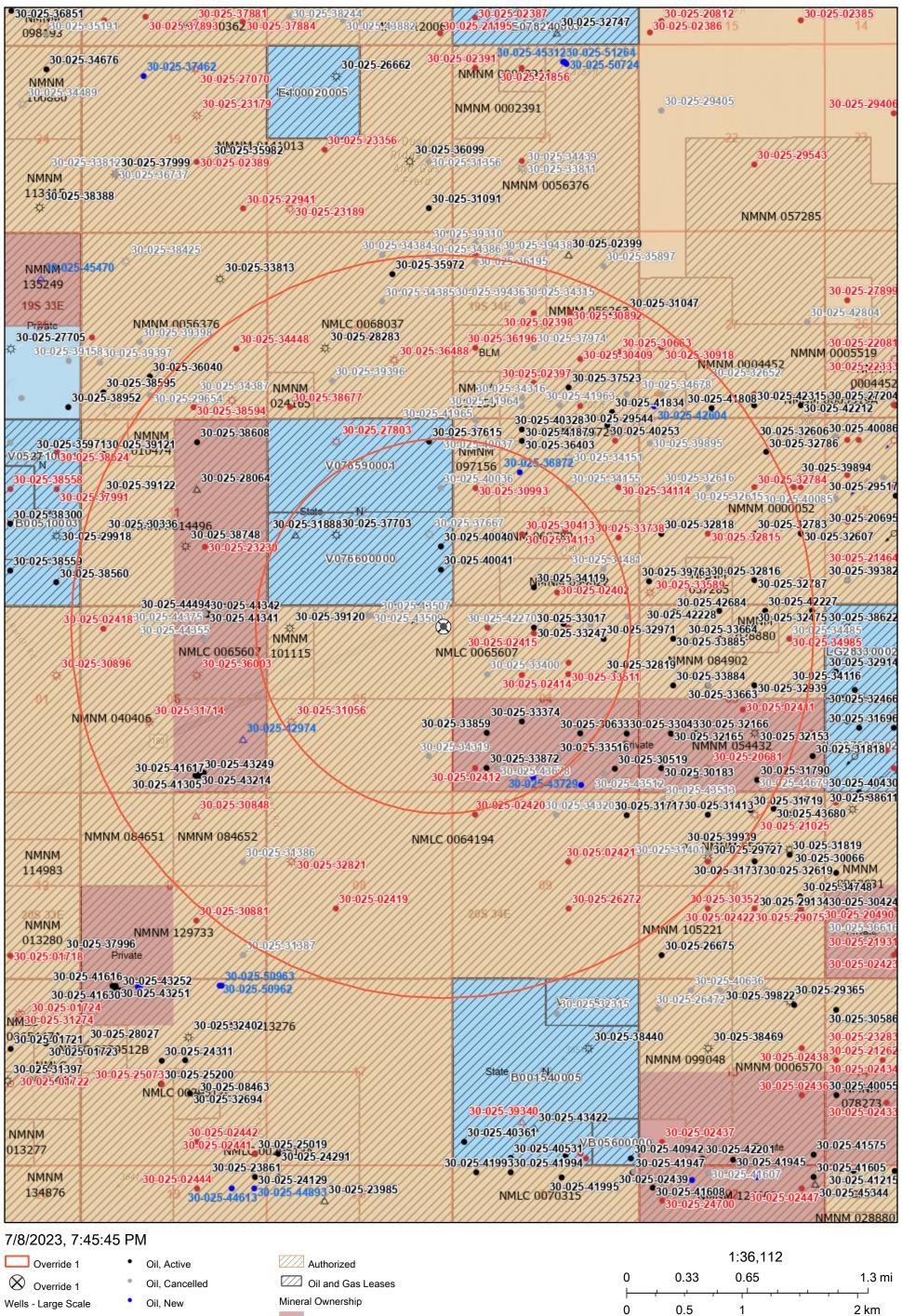
**Packer Fluid:** 8.4 ppg FW + Additives

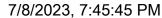


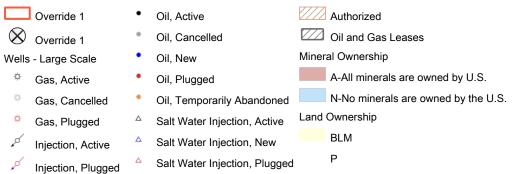
### Overdue Federal SWD #1, 1 & 2 Mi AOR, Leases V (a)

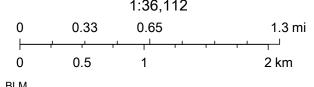


# Overdue Federal SWD #1, 1 & 2 Mi AOR, Wells









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

# V (c)

				Overdue Fe	ederal SW	/D #1 - Wells V	Vithin	1 Mil	e Are	ea of Revie	ew			
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-05-20S-34E Lot: 4 660 FNL 660 FWL	D-05-20S-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-05-20S-34E 1980 FSL 710 FWL	M-05-20S-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-32-19S-34E 1980 FSL 810 FWL	L-32-19S-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-32-19S-34E 1980 FSL 1980 FWL	K-32-19S-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	В	B-05-20S-34E Lot: 2 280 FNL 2140 FEL	P-05-20S-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	В	B-05-20S-34E Lot: 2 280 FNL 2340 FEL	N-05-20S-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	В	B-05-20S-34E Lot: 2 280 FNL 2440 FEL	M-05-20S-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	В	B-05-20S-34E Lot: 2 280 FNL 2240 FEL	O-05-20S-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-32-19S-34E 1980 FSL 1980 FEL	J-32-19S-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-32-19S-34E 660 FNL 660 FEL	A-32-19S-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	Р	P-05-20S-34E 990 FSL 660 FEL	P-05-20S-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	1	I-32-19S-34E 1980 FSL 660 FEL	I-32-19S-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-32-19S-34E 1650 FSL 330 FEL	L-32-19S-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	Н	H-32-19S-34E 1981 FNL 330 FEL	E-32-19S-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	Р	P-32-19S-34E 990 FSL 330 FEL	M-32-19S-34E 631 FSL 4935 FEL	BONE SPRING	13358 8766
30-025-02412	HUDSON OIL COMPANY OF TEXAS	FEDERAL	#002	Oil	Vertical	Plugged, Site Released	04	T20S	R34E	M	M-04-20S-34E 660 FSL 660 FWL	M-04-20S-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-33-19S-34E 1980 FNL 660 FWL	E-33-19S-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-04-20S-34E 660 FSL 990 FWL	M-04-20S-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-04-20S-34E Lot: 4 660 FNL 990 FWL	D-04-20S-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	1	L-04-20S-34E 1650 FSL 990 FWL	L-04-20S-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-04-20S-34E 1980 FNL 990 FWL	E-04-20S-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-04-20S-34E Lot: 4 661 FNL 1040 FWL	M-04-20S-34E 330 FSL 970 FWL	BONE SPRING	15371 10884
30-025-43678	READ & STEVENS INC	NORTH LEA 9 FEDERAL COM	#004H	Oil	Horizontal	Cancelled Apd	04	T20S	R34F	M	M-04-20S-34E 660 FSL 1275 FWL	M-09-20S-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-33-19S-32E 1545 FNL 1910 FWL	L-33-19S-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-04-20S-34E 990 FSL 1980 FWL	N-04-20S-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	R34F	F	F-04-20S-34E 1994 FNL 1980 FWL	F-04-20S-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	. к	K-33-19S-34E 1980 FSL 1980 FWL	K-33-19S-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-04-20S-34E 1980 FSL 1980 FWL	K-04-20S-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-04-20S-34E 400 FSL 2290 FWL	N-09-20S-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-04-20S-34E Lot: 3 823 FNL 2310 FWL	C-04-20S-34E Lot: 3 823 FNL 2310 FWL		3709 3709
30-025-33181	READ & STEVENS INC	HUDSON FEDERAL	#004	Oil	Vertical	Plugged, Site Released	04	T20S	R34E	F	F-04-20S-34E 1650 FNL 2310 FWL	F-04-20S-34E 1650 FNL 2310 FWL	DELAWARE	8350 8350
30-025-33017	READ & STEVENS INC	HUDSON FEDERAL	#003	Oil	Vertical	Active	04	T20S	R34E	Ċ	C-04-20S-34E Lot: 3 660 FNL 2310 FWL	C-04-20S-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-04-20S-34E Lot: 3 395 FNL 2515 FWL	N-04-20S-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-33-19S-34E 480 FSL 2310 FWL	N-33-19S-34E 480 FSL 2310 FWL	DELAWARE	10250 10250
30-025-33516	READ & STEVENS INC	TRUMAN FEDERAL	#004	Oil	Vertical	Active	04	T20S	R34E	0	O-04-20S-34E 990 FSL 2310 FEL	O-04-20S-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	0	O-33-19S-34E 330 FSL 2310 FEL	O-33-19S-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	T195	R34E	1	J-33-19S-34E 2080 FSL 2080 FEL	J-33-19S-34E 2080 FSL 2080 FEL	BONE SPRING	7650 7650
30-025-02413	HUDSON OIL COMPANY OF TEXAS	MATLOCK	#003	Oil	Vertical	Plugged, Site Released	04	T20S	R34E	R R	B-04-20S-34E Lot: 2 823 FNL 2103 FEL	B-04-20S-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	T205	R34E	B	B-04-205-34E Lot: 2 560 FNL 2130 FEL	B-04-20S-34E Lot: 2 560 FNL 2130 FEL	DELAWARE	8300 8300
30-025-02417	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#003	Oil	Vertical	Plugged, Site Released	04	T205	R34E	B	B-04-205-34E Lot: 2 560 FNL 1982 FEL	B-04-20S-34E LOT: 2 660 FNL 1982 FEL	DEVONIAN	14985 14985
30-025-33511	READ & STEVENS INC	HUDSON FEDERAL	#001	Oil	Vertical	Plugged, Site Released	04	T205	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	T205	R34E	G	G-04-20S-34E 1650 FNL 1980 FEL	G-04-20S-34E 1980 FNL 1980 FEL	YATES-SEVEN RIVERS	3781 3781
30-025-02416	READ & STEVENS INC	TRUMAN FEDERAL	#004	Oil	Vertical	Active	04	T20S	R34E	ı	J-04-20S-34E 1650 FNL 1980 FEL	J-04-20S-34E 1650 FSL 1650 FEL	DELAWARE	8285 8285
30-025-43504	READ & STEVENS INC	NORTH LEA 4 FEDERAL COM	#002 #002H	Oil	Horizontal	Cancelled Apd	04	T20S	R34E	B	B-04-20S-34E Lot: 2 570 FNL 1395 FEL	0-04-205-34E 1650 FSL 1650 FEL	BONE SPRING	14792 10825
30-025-33971	READ & STEVENS INC	HUDSON FEDERAL	#002H	Oil	Vertical	Active	04	T20S	R34E	<u>в</u>	A-04-205-34E Lot: 2 5/0 FNL 1395 FEL A-04-205-34E Lot: 1 990 FNL 990 FEL	A-04-20S-34E Lot: 1 990 FNL 990 FEL	DELAWARE	8380 8380
30-025-329/1	READ & STEVENS INC	PEARL 33 FEDERAL	#002	Oil	Vertical	Cancelled Apd	33	T19S	R34E R34E	A P	P-33-19S-34E 101: 1 990 FNL 990 FEL	P-33-19S-34E LOT: 1 990 FNL 990 FEL	BONF SPRING	10400 10400
30-025-34481	READ & STEVENS INC	HUDSON FEDERAL	#002	Oil	Vertical	Active	04	T20S	R34E	H	H-04-20S-34E 1980 FNL 660 FEL	H-04-20S-34E 1980 FNL 660 FEL	DELAWARE	13750 13750
				Oil			_		_					
30-025-43511	READ & STEVENS INC	NORTH LEA 4 FEDERAL COM	#001H	UII	Horizontal	Cancelled Apd	04	T20S	R34E	A	A-04-20S-34E Lot: 1 335 FNL 350 FEL	P-04-20S-34E 330 FSL 350 FEL	BONE SPRING	15030 10831

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### (SUBMIT IN TRIPLICATE)

### UNITED STATES **DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY**

Form Appr	oved.
Land Office	Lea Crucea
Lassa Na	065607

New Mexico (State or Territory)

Budget Bureau No. 42-R358.4.

NOTICE OF INTENTION TO CHANGE PLANS.  NOTICE OF INTENTION TO TEST WATER SHUT-OFF  NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL  NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ALTERING CASING. SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR. SUBSEQUENT REPORT OF ABANDONMENT. SUPPLEMENTARY WELL HISTORY.	X
(INDICATE ABOVE BY CHECK MARK	NATURE OF REPORT, NOTICE, OR OTHER DATA)	

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

Wildcat (County or Subdivision)

### DETAILS OF WORK

cted depths to objective sands; show sizes, weights, and lengths of prop ing 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		<b>09</b>
Address	302 Carper Building	
	Artesia, New Mexico	By Rayh L Gray
***************************************		Title Compulting Engineer

GPO 914974

APPROVED

2 2 1963

### (SUBMIT IN TRIPLICATE)

# UNITED STATES

# DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

1	Form Approved.				
*	Land Office	las druces			
	Lease No	06 36 07			
		m			

Budget Bureau No. 42-R358.4.

# IN STRUCT 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 ALITER CASING	 SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	 

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

			, 19	3
Pure Federal "C" Well No. #1 is located	d660_ ft. fr		and 1982 ft. from $\left\{\begin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array}\right\}$ line of sec. 4	
MI NE Sec. 4	203	34E	MIPM	
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	
Wildcat		Lua	New Maxico	
(Field)	(Con	nty 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, comenting 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 slowest cement at 4500 psi. Placed 30 sacks plug cement at 4083-3983 and 10 sacks cement plug at 20° to surface. Hole was leaded 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	0,46		
	Artesia, New Mexico	By Rayle L may		
•		Title Consulting Engineer.		

Company William A. & Edward R. Hudson

Address 302 Carper Building

Artesia, New Harico

GPO 914974

Title Consulting Engineer

Form 9-831 a (Feb. 1951)

	x	

# (SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Form App	roved.	
Land Office	LAS	Cruces
Lease No		
	12	

Budget Bureau No. 42-R358.4.

		CURSEOUENT RE	PORT OF WATER S	HUT-OFF	
OTICE OF INTENTION TO DRILL		SUBSEQUENT RE	PORT OF SHOOTING	G OR ACIDIZING	
OTICE OF INTENTION TO CHANGE PLA	WS	II.	PORT OF ALTERING	CASING	
OTICE OF INTENTION TO TEST WATER	R SHUT-OFF	11	PORT OF RE-DRILL	ING OR REPAIR	
OTICE OF INTENTION TO RE-DRILL O	R REPAIR WELL	li	PORT OF ABANDON	MENT	
OTICE OF INTENTION TO SHOOT OR	ACIDIZE	SUPPLEMENTAR	WELL HISTORY		
IOTICE OF INTENTION TO PULL OR AL	TER CASING	(			
IOTICE OF INTENTION TO ABANDON W	/ELL				
(INDICATI	E ABOVE BY CHECK MARK	NATURE OF REPORT,	OTICE, OR OTHER I	DATA)	
			May	15,	, 19. <b>63</b>
Pure Federal "C" ell No is locate	ed <u>660</u> ft. from	line and	1982 ft. from	$\mathbf{m} \left\{ \begin{array}{c} \mathbf{E} \\ \mathbf{m} \end{array} \right\}$ line of	S. CEO. CO. 1963 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO. 1964 . CO.
(1/4 Sec. and Sec. No.)	<b>208</b> (Twp.)	Range)	(Meridian)	.4	1 2 2 8
	(County or			iew Mexico	£ 6.
Gilder		0 1 41 -1-10m		(State or Territory)	7 3 3
wildcat (Field)  he elevation of the derrick	floor above sea lev	el is <b>3646</b> ft	ζ		7. 3
tate names of and expected depths to On May 11, 1963 and cleaning out ju	floor above sea lev  DETAI  objective sands; show size ing points, and all of we reached a nk. A Baker by	el is 3646 for LS OF WORK ther important properties of 13 cidge plug week the state of 13 cidge plug week the state of 13 cidge plug week the state of 13 cidge plug week the state of 13 cidge plug week the state of 14 cidg	ths of proposed cases work)  ,008 after	ings; indicate mudd r drilling ( 12,988' in 1	out all cem out all cem out all cem on May 13
he elevation of the derrick	floor above sea lev  DETAI  objective sands; show size ing points, and all of we reached a mk. A Baker be ated from 12,85	LS OF WORK se, weights, and long ther important prop depth of 13 ridge plug w 12-920 with	ths of proposed cases over work)  ,008 after  as set at  2 jet shot  i at the rancour test.	r drilling ( 12,988° in 3 s per foot. te of 620,0	out all cem out all cem out all cem on casing. On May 13 00 cu.ft. s
on May 11, 1963 and cleaning out justing was then perfor laten test from 12,7 plus 96 barrels of sa  Hydrostatic 8380 60 min. ISIP - 6938	floor above sea lev  DETAI  objective sands; show size ing points, and all of  we reached a  nk. A Baker be ated from 12,85  89'-988'. The  It water per he  psi. 60 m:  IFP	el is 3646 for LS OF WORK is, weights, and lengther important properties of 13 ridge plug was 22-920 with well flowed our on a 6 hours. FSIP - 6	ths of proposed cases on the case of the c	r drilling ( 12,988° in 3 s per foot. te of 620,0 Pressures ( FP - 6153.	out all cem out all cem out all cem on May 13 00 cu.ft. g
on May 11, 1963 and cleaning out justing was then perfor latem test from 12,7 plus 96 barrels of sa  Hydrostatic 8380 60 min. ISIP - 6938  We request apprendicy on May 13). Set	floor above sea lev  DETAI  objective sands; show size ing points, and all of  we reached a  nk. A Baker by  ated from 12,85  89'-988'. The  It water per he  psi. 60 m  IFP  roval to plug we  squasse packer  a cement plugs	el is 3646 for LS OF WORK as, weights, and lengther important properties of 13 ridge plug weight with the second s	ths of proposed cases work)  1,008' after  2 jet shote  1 at the rancour test.  1875 F  1215  12,500'. S  3 (30 sacks  between plu	r drilling (12,988' in 12,988' in	out all cem out all cem out all cem out all cem out all cem out all cem out all cem out as followers as given by weith 150 o surface (
tate names of and expected depths to On May 11, 1963 and cleaning out justing was then perford ten test from 12,7 plus 96 berrels of sa Hydrostatic - 8380 60 min. ISIP - 6938 We request apprent of the same of t	floor above sea lev  DETAI  objective sands; show size ing points, and all of we reached a mk. A Baker be ated from 12,8i 89'-988'. The lit water per he level to plug we squease packer at surface.  k must receive approval in	el is 3646 for LS OF WORK is, weights, and lengther important properties of 13 ridge plug with well flowed our on a 6 hin. PSIP - 6 ll as follor at about at 4083-398; Heavy sud	ths of proposed cases work)  1,008' after  2 jet shote  1 at the rancour test.  1875 F  1215  12,500'. S  3 (30 sacks  between plu	r drilling (12,988' in 12,988' in	out all cem out all cem out all cem out all cem out all cem out all cem out all cem out as followers as given by weith 150 o surface (
on May 11, 1963 and cleaning out justing was then perfor latem test from 12,7 plus 96 barrels of sa  Hydrostatic 8380 60 min. ISIP - 6938  We request apprendicy on May 13). Set	floor above sea lev  DETAI  objective sands; show size ing points, and all of  we reached a  nk. A Baker be  ated from 12,85  89'-988'. The  it water per he  psi. 60 m;  IFP  coval to plug we  squass packe;  a cement plugs  er at surface.  k must receive approval in  h Edward R. H	el is 3646 for LS OF WORK is, weights, and lengther important properties of 13 ridge plug with well flowed our on a 6 hin. PSIP - 6 ll as follor at about at 4083-398; Heavy sud	ths of proposed cases work)  .008' after  as set at  2 jet shot  at the rance test.  .875 F  .875 F  .875 S  .	r drilling (12,988' in 12,988' in	out all cem out all cem out all cem out all cem out all cem out all cem out all cem out as followers as given by weith 150 o surface (

(SUBMIT IN TRIPLICATE)

E. W. STANDLEY UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Land Office LAS Crucas

Lease No. 065607

APR 2 1963

4 **M(V2)** 4 (2) (2)

# SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF WATER SHUT-OFF	
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(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

		************	Apri	1 1,	, 19 <b>63</b>
Pure Federal "C" Well No. #1 is locate	d <b>660</b> ft	. from $N$ line ar	nd 1982 ft. from	$n \stackrel{\{E\}}{\longleftarrow}$ line of se	c4
	205	348	SELECT CO.		
(½ Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	New Mexico	
Wildcat		Lea		State or Territory)	
(Field)	(	County or Subdivision)	V	(1986) 01 201110177	

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 abendoned 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.

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

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

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

Address 302 Carper Building

Artesia, New Mexico By

By Staple Linay

Title Consulting Engineer.

went plugs as follows:

Drilled to 14,985'. Flugg. sack from 14,985' to 78 sacks cement in open holed from 14,985' to 14, and bottom of 7" OD casing to 1 m 13,960' to 13, fro

Acidised with 500 gale. acidize with 500 gals mud sold, packer falled; seddised with 500 gals and acid with packer set at 13,655', packer 1 seking. Swabbed load water. Acidized with 500 gals. Perforated 7" casing from 13, 47 to 13,741' with 4 suots per foot, attempted to 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.

Shot 7" casing off at with 8 sacks cement, with heavy mud between plugs. Welded 1/2" steel plate on top of 6530' to 6470' with 12 sacks cement; from 4220' to 4100' with 24 sacks cement; in 7" 40291, pulled 123 joints, approlimentaly 40001. Flaced cement plug in 7" casing from and 9-5/8" casing from 4040' to 3/940' with 40 sacks; in 9-5/8" casing 20' to surface Plugged and Abandoned: Placec: tement plug in 7" deaing and over perforations from 12,572' to 12,586' with 12 sack coment from 12,600' to 12,550'. casing with 4" pips marker extending 4' above surface. Form 9-330

HOBBS

B1 Bureau No. 42-R355.4. Ap. dl expires 12-31-60.

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

LEASE OR PERMIT TO BROSPECT

SEP 3 1959

1958 SEP STATES: 36 DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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FORMATION RECORD—Continued

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U.S. LAND OPPICE SEC. 19, Sec. 1, Sec. LEASE C3 PERMIT TO PROSPECT inited States 35

BENT OF THE INTERIOR

CLOGICAL SURVEY

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FORMATION RECORD—Continued

SMOLD!

Released to Imaging: 10/13/2023 8:02:18/AM

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FORMATION

#### 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 Released to Imaging: 10/13/2023 8:02:18 AM1 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 throughout 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

Page 2.

		TOTAL				TOTAL	
FROM	TO		ORMATION	F. BOX	TO	PEET	PORMATIO"
	9019	959 L	ine & shale	12233	12318	85	Lime & chert
7969 892 <b>8</b>	892 <b>8</b> <b>894</b> 2	14 L	ime	12318	12411	93	Lime & shale
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<del>93</del> 42 9354	<b>9354</b> 94 <b>07</b>		shale, chert & lime	12942	12943	1	Shale
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94.28	9562		Shale & sand	12955	12964	7	chert
9562	9580	18 1	ime, chert & sand &	12964	13042	78	Lime, shale & sand
9580	9679	99	Shale, sand & chert	13042	13052	10	lime & shale lime, sand & shale
9679	9696	17	line & shale	13052	130 <b>79</b> 13136	27 57	Lime, shale & sand
9696	9711		Shale, sand & chert	13079 131 <b>36</b>	13140	4	Sand, Lime & chert
9711	9733		Shale & sand Lime, shale & chert	13140	13163	23	lime, sand & shale
9733	9 <b>757</b> 9 <b>806</b>	49	Shale, sand & chert	13163		87	Sand & shale
9757 9806	9 <b>82</b> 2	16	Lime & shale	13250		13	Shale, sand & lime Shale & sand
9822	9856		Shale & sand	13263 13 <b>308</b>		45 40	Shale
9856	9895	-	<u>Lime &amp; shale</u> Shale	13348	4	17	Shale & lime
9 <b>895</b>	9933 9961		Shale, sand & lime	13365	13389	24	Shale, lime & sand
9933 9961	10008	47	Sand & shale	13389		24	Lime, sand & shale
10008	10089	81	Sand, shale & lime	13413		161 68	Shale
10089	10103	14	lime, shale, dolomite	13574 13642		3 <b>8</b>	Shale & lime
10103	10125	22 12	Lime, sand & shale	13680	-	20	Shale
10 <b>125</b> 10 <b>137</b>	10 <b>137</b> 10 <b>153</b>	16	Lime, shale, chert	13700	13728	28	Shale & lime
10131	101/)		& sand	13728		23 49	Shale & sand Shale & lime
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10247	10305	58	lime & sand	13915 13926		345	lime & chert
10305	10330	25	Lime, shale & sand Lime & sand	1427		75	Lime
10330	10354 10 <b>365</b>	24 11	Lime, sand & shale	14276	14304		lime & chert
10354 10365	10396	31	Lime & shale	1430			Lime Lime & shale
10396	10462	66	Lime, shale & sand		) 14327 7 14335		Lime & chert
10462	10483	21	lime & shale lime, shale & chert	1433	5 14339		lime, chert & shale
10483	10516 10537	33 21	Lime & shale	1433	9 14348	9	
105 <b>16</b> 105 <b>37</b>	10617	80	Lime, shale & sand	1434	B 14358	10	
10617	10644	27	Lime & shale	1435	8 14367 7 143 <b>7</b> 0	9	
10644	10752	108	lime, shale & sand	1437		-	Lime & shale
10752	10820	68 74	Sand, shale & lime	1441	9 14438	19	Shale
10820 10894	10894 10901	7	Shale & lime	1443	8 14456		
10991	10947	46	Lime, shale & sand	1445	6 14561 1 14574	. 105 . 13	
10947	11132	185	Shale	14 <b>70</b> 11.57	1 14574 4 14582	8	Shale
11132	11188	<b>56</b>	Shale & lime Shale & chert	1458	2 14601	. 19	Shale & Dolomite
111 <b>88</b> 11198	11198 11218	10 20	Chert	1460	1 14622	2 21	
11218	11231	13	Shale, chert & sand	1462	2 14985	363	Lime
11231	11298	67	Shale & chert		14985	•	Total Depth
11298	11380	82	Shale, lime & chert Shale & lime				
11380	11409 11453	29 44	lime, shale & chert	1496	35 13645	-1340	) PBTD
1140 <del>9</del> 11453	11504	51	Shale & lime				
11504	11544	40	Shale				
11544	11594	50	Shele & lime				
11.594		227 48	Shale & lime				
11821		40 51	Shale				
118 <b>69</b> 11920		262	Shale & lime				
12182		51					
Palaasad to Im	- ·	2.0.20/22.026.10	0.444				

#### DEFLECTION TESTS

FOOTAGE	DEGREES	FOOTAGE	DEGREES
	,		
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	ı	12790	1-1/2 1
10462	1-1/2	12860	
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 1
10820	1-3/4	13250	
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	
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
11 <b>8</b> 50	1-1/2	14275	1
11994	1-3/4	14327	
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

FOOTAGE	DEGREES	FOOTAGE	DEGREES
10008	1-3/4	32105	2.2/1
10125	2	12405 12461	1-3/4
10245	~ 1-1/4		1-1/2
10305	1	12530 12705	1-3/4 1
10355	1-1/4	12740	1-1/2
10402	1	12790	
10462	1-1/2	12860	1-1/2 1
10490	1-3/4	12980	
10537	1-3/4	13063	1-1/4
10617	1-1/4	13134	1-1/2
10752	1-3/4	13182	1-1/4
10820	1-3/4	13250	1
10900	1-3/4		
11005	1-3/4	13295	1-1/2
11110	1-3/4	13348 13443	1/4
11185	1-1/4	13642	1
11240	1-1/4	13680	
11385	1-1/4	13813	1-1/4 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	1-1/4
11750	2	14237	
11850	1-1/2	14275	1-1/4
11994	1-3/4	14327	1 1
12066	1-1/4		
12130	1-1/4	14370	1-1/2
12157	1-1/4	14406	1-1/4
12282	1-1/4	14456	1-1/4
12347	1-1/4 1-1/2	14807	1-1/2
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(SUBMIT IN TRIPLICATE)

#### UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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NOTICE OF INTENTION TO TEST WATER SHUT-OFF	and the second s
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	BEEQUENT REPORT OF SHOOTING OR ACIDIZING
	BSEQUENT REPORT OF ALTERING CASING.
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.	SSEQUENT REPORT OF RE-DRILLING OR REPAIR.
art il	BSEQUENT REPORT OF ABANDONMENT.
the state of the s	PLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL.	
(INDICATE ABOVE BY CHECK MARK NATURE	OF REPORT, NOTICE, OR OTHER DATA)
	August 26 19 59
Federal #C"	
ell No. $\frac{1}{2}$ is located 660 ft. from $\frac{N}{N}$	line and 1982 ft. from E line of sec. 4
NV 1/k, NE 1/k, T-20-8 B-3k-E (6 Sec. and Suc. No.) (Twp.) (Range)	(Meridian)
Ul 1 dea +	그 그 그 이 이 집에 가는 이 가셨습니?
(Field) (County or Subdivis	lies Hexico (State or Territory)
se elevation of the derrick floor above sea level is	
<b>DETAILS</b> OF	'WORK
nte names of and expected depths to objective sands; show sizes, weight ing points, and all other impe	a, and lengths of proposed surings; Indicate mudding jobs, cornent-
ed 17-1/2" hole 12-27-58, ran 199° of 13- im pressure 250%, had cement returns to a il', ran 1801° of 9-5/8" OD casing, cemer iment returns to surface. Tested casing irs WOC. hole complete 5-22-59 at 13,915°, ran 1 maximum pressure 900%, 36 hours WOC, re	surface. 12-1/4" hole complete 1-18-39 ated w/ 2900 sacks, maximum pressure 600 and cement w/ 1000#, held 30 minutes Classiff of 7" OD casing, comented w/ 510 m temperature survey, indicated top of site. Tested caning and cement s/ 100.%
minutes, held CK.  hole completed 7-16-59 at 11,985, place casing 11,985 to 13,828 w/ 100 sacks.  t shots, treated perfs 13.697:-13.7hl; s	Perforated 7" casing 13,697'-13,741' w
minutes, held CK.  'hole completed 7-16-59 at 11,985', place casing 11,985' to 13.828' w/ 100 sacks.	Perforated 7" casing 13,697:-13,741; w \$\square\$ 500 gallons mud acid, placed cament p reforated 7" casing 12,572!-12,586; w/ 56
minutes, held CK. hole completed 7-16-59 at 11,985, place casing 11,985 to 13,828 w/ 100 sacks. et shots, treated perfs 13,697;-13,741 secsing 13,770;-13,645 w/ 30 sacks. Per i understand that this plan of work must receive approval in writing by	Perforated 7" casing 13,697'-13,711' w v/ 500 gallons mud acid, placed cament properties 7" casing 12,572'-12,586' v/ 56 y the Geological Survey before operations may be commenced.
minutes, held CK.  hole completed 7-16-59 at 11,985, place casing 11,985 to 13,828 w/ 100 sacks. et shots, treated perfs 13,697;-13,741 secsing 13,770;-13,645 w/ 30 sacks. Per	Perforated 7" casing 13,697'-13,711' w v/ 500 gallons mud acid, placed cament properties 7" casing 12,572'-12,586' v/ 56 y the Geological Survey before operations may be commenced.
minutes, held CK.  hole completed 7-16-59 at 11,985, place casing 11,985 to 13,828 w/ 100 sacks. et shots, treated perfs 13,697,-13,741 secsing 13,770,-13,645 w/ 30 sacks. Performance that this plan of work must receive approval in writing by many.  The Pure Oil Company	Perforated 7" casing 13,697'-13,711' w v/ 500 gallons mud acid, placed cament properties 7" casing 12,572'-12,586' v/ 56 y the Geological Survey before operations may be commenced.
minutes, held CK.  hole completed 7-16-59 at 11,985', place casing 11,985' to 13,828' w/ 100 sacks. et shots, treated perfs 13,697'-13,711's casing 13,770'-13,615' w/ 30 sacks. Perfundential that this plan of work must receive approval in writing by impany. The Pure Cil Company.  dress Box 671.	Perforated 7" casing 13,697'-13,711' w v/ 500 gallons mud acid, placed cament properties 7" casing 12,572'-12,586' v/ 56 y the Geological Survey before operations may be commenced.
minutes, held CK.  hole completed 7-16-59 at 11,985', place casing 11,985' to 13,828' w/ 100 sacks. et shots, treated perfs 13,697'-13,711's casing 13,770'-13,615' w/ 30 sacks. Perfundential that this plan of work must receive approval in writing by impany. The Pure Cil Company.  dress Box 671.	Perforated 7" casing 13,697:-13,741's w/ 500 gallons mud acid, placed cament y forated 7" casing 12,572'-12,586' w/ 56 y the Geological Survey before operations may be commenced.
minutes, held CK.  hole completed 7-16-59 at 11,985, place casing 11,985 to 13,828 w/ 100 sacks. et shots, treated perfs 13,697,-13,741 secsing 13,770,-13,645 w/ 30 sacks. Performance that this plan of work must receive approval in writing by many.  The Pure Oil Company	Perforated 7" casing 13,697:-13,711's w/ 500 gallons mud acid, placed cament y forated 7" casing 12,572!-12,586' w/ 56 y the Geological Survey before operations may be commenced.

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#### (SUBMIT IN TRIPLICATE)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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SUBSEQUE	NT REPORT OF	ABANDONMENT	r	
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IK NATURE OF REP	ORT. NOTICE, OR			
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ises, weights, and	engths of prop	papel vantings; li	ndieste muddi	ing jobs, cersen
sacks. Si	10t 7# ca	eing off	at 4029	)', pulle
ing 6530'-5	iu70! w/	12 sacks	- العكوا ،	1100 m/
		MeTaea	. <b>L</b> /2" 31	Reer bras
aladas i da Šījija už		Maria de la composición dela composición dela composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela composición dela	基注和少量(1.4%)	Mary Comme
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	and the second s	and the second second second		
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	or Subdivision) evel is MLS OF WO isse, weights, and ether important; W/ 500 g; Sacks. Si ing 5530 = surfact w/	(Hange) (Hange)  or Subdivision)  evel is ft.  ALS OF WORK  isse, weights, and lengths of pres- subser important proposed west)  w/ 500 gallos mad sacks. Shot 7" ca ing 5530'-51170' w/ surface w/ 8 sacks.  surface surface.	(State or Subdivision)  (State	evel is ft.  AILS OF WORK  Inc., weights, and lengths of proposed continge; indicate model other important proposed work  " w/ 500 gallon and acid. Placed of sacks. Shot 7" casing off at 4025 ing 5530'-5470! w/ 12 sacks, 4220'- surface w/ 8 sacks. Welded 1/2" st

August 26, 1959

United States Department of the Interior Geological Survey
Box 1836

ATTENTION: Mr. T. R. Godfrey, Petroleum Logineer

Dear Sir:

Attached herewith three (3) copies of Form 9-311a "Sendry Notices and Reports on Wells" on The Pure Uil Company's Pederal "C" No. 1, wildowt dry hole drilled in Section & Township 20-5, Range 30-5, Lea County, New Mexico.

Yours very truly,

THE PURE OIL COMMANY

W. E. Townsend Chief Clerk

WE THE

beer Schafer

Trague File

Signal Cil & Gas Co.

Mr. Ray Miemer 801 Wilco Bldg.

Midland, Texas

Si ral Oil & Gas &

ir. wallace

1010 Pt. Worth Bldg.

Fort Worth 2:

New Worldon Mil Commission Commission

30x 2015

Hobbs, New Mext of

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

Form 9-881 a (Feb. 1951)					
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#### (SUBMIT IN TRIPLICATE)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY!

Land Office	Santa	fe,	N.H
Lease No	ic-069	2607	
Unit			

#### SUNDRY NOTICES AND REPORTS ON WELLS

	1	THE PARTY OF WATER CHIEF OFF
NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF
		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
NOTICE OF INTENTION TO CHANGE PLANS		
		SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.
		SUBSEQUENT REPORT OF ABANDONMENT
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		
		SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO PULL OR ALTER CASING		OUT FEMALITAIN COMMENTS
NOTICE OF INTENTION TO ABONDON BELL	I	
NOTICE OF INTENTION TO ABANDON WELL		

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

			No.	reh 20	, 19. <b>59</b>
Federal "C" Well No is located	<b>660</b> ft.	$from_{-}$ $\left\{ \begin{array}{c} N \\ S \end{array} \right\}$ line and	d 1982 ft. fro	ft. from $\left\{egin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array} ight\}$ line of sec.	of sec.
184/L, 185/L	2-20-6	R-Mi-R	POTAL		
(1/2 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	New Heart	
(Field)	(C	ounty or Subdivision)		(State or Territor	у)

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 5125' to 11,52h' in lime, delemite, sand, shale and chert.
DET #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 Pare Oil Company	
•		
Address	Pos 671	
Address	Hidland, Texas	By W. E. Jourson
		Title Chief Clerk
		Title

GPO 918507

HOURS OFFICE OCC

1859 MAR 23 MM 8 1 1 4

#### March 20, 1959

United States Department of the Interior Scalagical Survey Sex 1838 Hobbs, New Mexico

ATTETTION: Nr. T. L. Codfrey, Petroleum Engineer

Dear Sire

Attaching three copies of Form 9-33la "Sundry Notices and Reports on Wells" as our progress report on The Pure Cil Company's Federal "C" Well No. 1, located in Section 4, Tour-ship 20-5, Range Jimes, Lea County, New Nextco.

fours very truly,

THE NAME OUR CONTAIN

H. C. Posnsend Chief Chark

#### L. Toward

bec: Mr. W. F. Schafer
Mr. H. G. Teague
File
Signal Oil & Gas Company
Mr. Ray Diemer
BOL 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 2015
Hobbs, New Mexico

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Budget Bureau 42-R358.5. Approval expires 12-31-55.

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
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Land Office	Sente	Fe,	M.M.
Lease No	06560	7	
Unit			

#### 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 a test intermediate pipe X	

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

			A CHARLES	<i>Ş</i>	., 19 <b>52</b>
Well No. is loca	ted <b>660</b> ft. f	rom. ${N \brack {\bf x}}$ line ar	nd	$\mathbf{a}\left\{egin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array}\right\}$ line of sec.	<u>k</u>
MA EA	7-20-6	7-31-3			
(1/4 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)		
<b>X11dost</b>		1.68		ler harice	
(Field)	(Cor	inty or Subdivision)	(S	State or Territory)	
	a 1	, , ,	c.		

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)

Brilled 1068'-5125' in dolomite, send & lise. Res electric logs to 1792', res 1801' of 9-5/8" OD caming w/ caming shoe set at 1801' SOF, float collar at 1738', House two stage IV tool set at 2510', comented let stage thru shoe at 1801' with 300 secks 75% incor count, 25% strategrate w/ 66 gals added and 200 seeks incornect cament. Pumped plug to 1738', maximum and final pressure 600f. Opened IV tool at 3510', 2nd stage comented w/ 2500 seeks 50-50 incor-dismix w/ 65 gal added, bad coment returns to surface 18 hours 1000. Tested 9-5/8" casing, control equipment and occase with 1000' for 30 minutes, held 0K.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.				
Company	he have Oil Company			
Address	New 671			
	Midland, Toron	By (1. E. Lines		
		Title Carl		
	H & GAVEDNMENT BOINTING	OFFICE 168427-5		

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

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(SUBMIT IN TRIPLICATE)

### UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Offic	. Senta Pe, M.
Louse No.	·C. 065607
Unit	ě

#### SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO CHANGE PLANS	
1	SUBSEQUENT REPORT OF ALTERING CASING
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR
	SUBSEQUENT REPORT OF ABANDONMENT
	SUPPLEMENTARY WELL HISTORY
NOTICE OF INTENTION TO ABANDON WELL	

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

		3 and 7 o	, 17 <b>.39</b>
Federal. *C* Well No	1 660 ft. from $\binom{N}{3}$ line a	and 1982. ft. from $\left\{egin{array}{c} \mathbf{E} \\ \mathbf{W} \end{array} ight\}$ line of	sec.
MB/A (3/2 Sec. and Sec. No.)	1-20-5 R-31-5	(Meridian)	
(34 Sec. and Sec. No.)	(Twp.) (Range)		
Wildows	Lea	(State or Territory)	
(Field)	(County or Subdivision)	(State or Territory)	

The elevation of the derrick floor above sea level is 366. 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)

Speci 12-1/h\* hole 6:30 AM 12-27-58, drilled to 505' in red beds, resmed 12-1/h\* hole to 17-1/2" from 0' to 505'. Ran h99' of 13-3/8" OD casing with Ouide Shoe set at h99' SCF, three sets centralisers installed. Commented 13-3/8" easing with 525 macks Portland Heat Coment. Pumped plug to h68', meximum pressure 250F. Had coment returns to surface, 2h hours WOG. Test 13-3/8" easing, control equipment and coment with 1900F, held 30 minutes OK.

Drilled 505' - 1:066' red beds, anhydrite, salt, dolumite, lime and sand.

I understand	that this plan of work must receive approval in writi	ing by the Geological Survey before operations may be commenced.
Company	The Pure 011 Company	
Address	Page 671	
	Midland, Texas	By W. E. Journe
		Title Chief Clerk
		GPO 918507

	and a	fo,	1
Land Office			
Lease No	06560	<b>7</b> 	
Unit			

#### Form 9-331a (Feb. 1951) (SUBMIT IN TRIPLICATE) UNITED STATES on be DEPARTMENT OF THE INTERIOR Subject to of this page DEC GEOLOGICAL SURVEY,

	NOTICES A	ND REPORTS ON WELLS	5
NOTICE OF INTENTION TO DRILL	<u> </u>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE P	LANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	i
NOTICE OF INTENTION TO TEST WAT	ER 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 OF	R ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR	ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON	WELL		
(iNDICA	TE ABOVE BY CHECK MARK N	NATURE OF REPORT, NOTICE, OR OTHER DATA)	
		incomber 11	. 195
(½ Sec. and Sec. No.)  (Field)		Range) (Meridian) Subdivision) (State or Territory	<del>7</del>
	DETAIL	S OF WORK	
(State names of and expected depths to	o objective sands: show sizes	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	
and the second s	o objective sands: show sizes	S OF WORK	
and the second s	o objective sands: show sizes	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	
and the second s	o objective sands: show sizes	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	udding jobs, cem
230' - 2 230' - 2 230' - 3 230' - 3 230' - 3 230' - 3	o objective sands; show sizes ing points, and all other sands.	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	udding jobs, ceme
# 700gram	o objective sands; show sizes ing points, and all other sands.	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	udding jobs, ceme
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# 700gram	o objective sands; show sizes ing points, and all other sands.	s, weights, and lengths of proposed casings; indicate mucher important proposed work)	udding jobs, ceme
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U. S. GOVERNMENT PRINTING OFFICE 16-8437-5

Approval is subject to the following condition:

1. That the 5½ casing be comented 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.

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Pure	<b>!</b> Signal	1	H.A. Peterson	Ì
ruie			2 54	
State	U. S. <b>A</b> .		2 53 U.S.A.	l
	N. 89° 52' E.			-
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	U. S. A.		U.S.A.	
<i>U. S. A</i> . <b>8</b>	9	•	<del>_</del>	10
I, R. R. Reid, Re as shown hereo ON PI	registered Professional Engineer, do hereby certify that the Local was made by actual measurement upon the ground.  Registered Professional Engineer of Texas  The Pure Oil Co.  FEDERAL "C" LEASE  802. 4 Acres  802. 4 Acres  AT-SEC.4,T-20-S-R-34-E, OF THE NEW MEXICO PRINCIPAL LEA COUNTY, NEW MEXICO  Scale: 4 inches = One Mile	RE  RE  DE  U. S. GE  HOBBS	CEIVE C181958 OLOGICAL SE S. NEW MEXI	JRVEY 00
	RE OIL CO. SUR. DRN.SWMc.		REVISED	
TEXAS PRODUCTION	OUCING DIVISION CHK. APPROVED:			

#### NEW MEXICO OIL CONSERVATION COMMIT ON

COPY THE

#### Well Location and Acreage Dedication Plat

ection A.				D	ate_December	2, 1958
erator The	Pure Cil Company	10.0	Lease	Peditel "C"		
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					•	or Land Survey

#### 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 plate 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

<sup>\* &</sup>quot;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

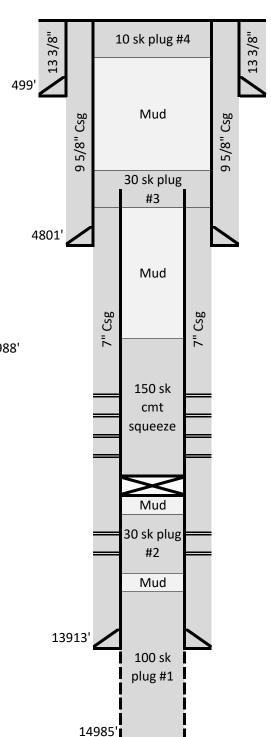
VI.

# 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 (R=POD has been replaced, O=orphaned,

C=the file is (quarters are 1=NW 2=NE 3=SW 4=SE)

water right file.) closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

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CP 00655 POD1	СР	LE	3	1	14	20S	34E	637294	3605108*	210		
CP 00656 POD1	СР	LE	4 4	4	04	20S	34E	635342	3607391* 🎒	225		
CP 00657 POD1	СР	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	СР	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	СР	LE	3 1	1	25	20S	34E	638755	3602250 🎒	370		
CP 01288 POD1	СР	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	20\$	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

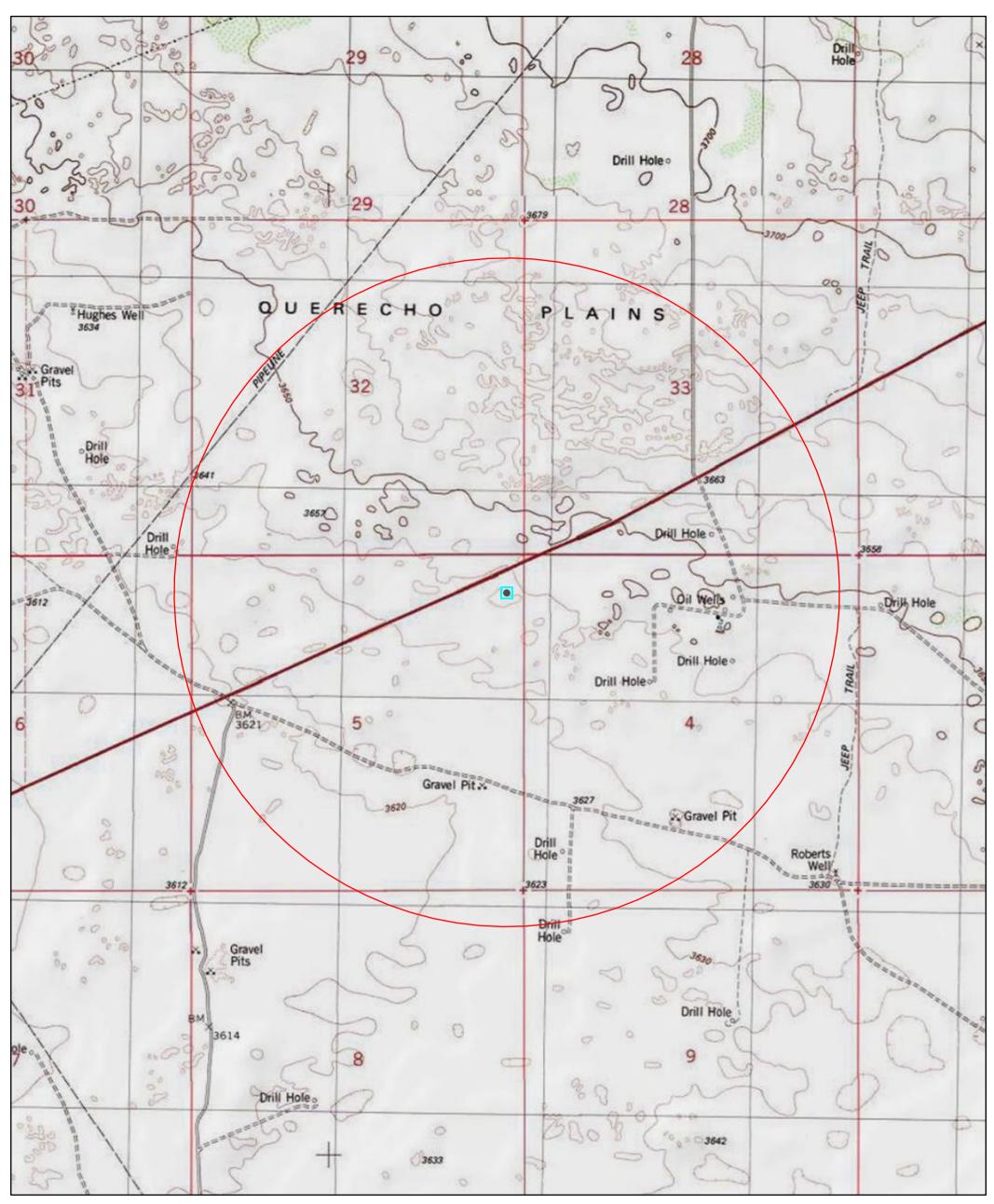
Record Count: 21

PLSS Search:

Township: 20S Range: 34E

XI.

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



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

SiteBoundaries

1:20,214 0 0.2 0.4 0.8 mi 0 0.3 0.6 1.2 km

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

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	0	M	Е				
Ftg NS	990S	330S	330S	1980N				
Ftg EW	870W	1650E	760W	910W				
County	Lea	Eddy	Lea	Eddy				
State	NM	NM	NM	NM				
Field								
Formation	Delaware	Avalon Upper	3rd Bone Spring Sand	Wolfcamp				
pН	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	В	В					
Ftg NS	610S	810N	660N					
Ftg EW	660W	1980E	2130E					
County	Eddy	Lea	Lea					
State	NM	NM	NM					
Field								
Formation	Devonian	Devonian	Devonian					
Sample Source	Drill Stem Test	Drill Stem Test	Unknown					
pН								
TDS_mgL	29011	33414	45778					
Chloride_mgL	16000	18570	26440					
Bicarbonate_mgL	520	227	1145					
Sulfate_mgL	1500	1961	729					

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# 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:

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							
	<u>TOP</u>	<b>BOTTOM</b>	THICKNESS				
FORMATION	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 <u>1349'</u>. 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.



#### 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.

Gary Fisher Manager

Permian Oilfield Partners, LLC.

Date: 7/5/2023



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.

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.

- 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.

<b>UIC Order</b>	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:

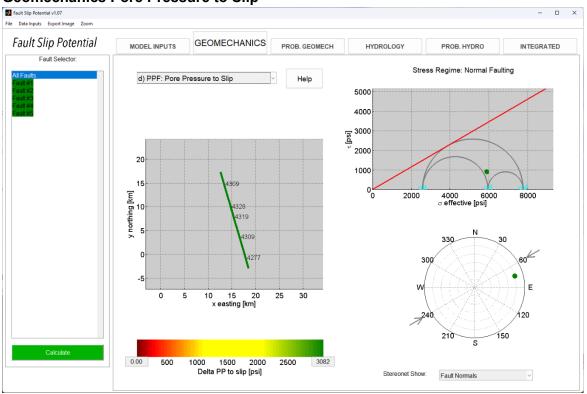
Interval height (ft)	1229
Average Porosity (%)	5.4
Vert stress gradient (psi/ft)	1.0
Hor stress direction (deg N)	60
Fault dip (deg)	75
Ref depth (ft)	14604
Initial res press gradient (psi/ft)	0.47
A phi	0.65
Friction coefficient	0.58
Weighted Average perm (mD)	20
Fluid density (kg/m3)	1100
Dynamic viscosity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

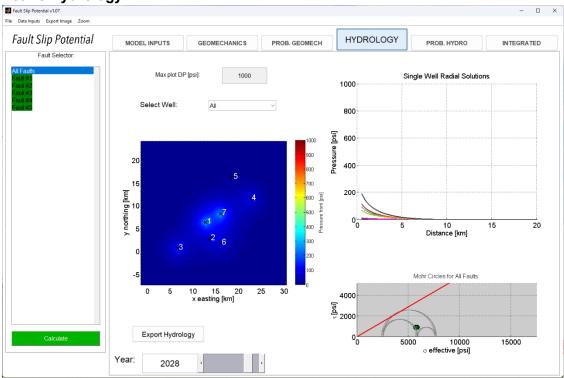
# **Geomechanics Pore Pressure to Slip**



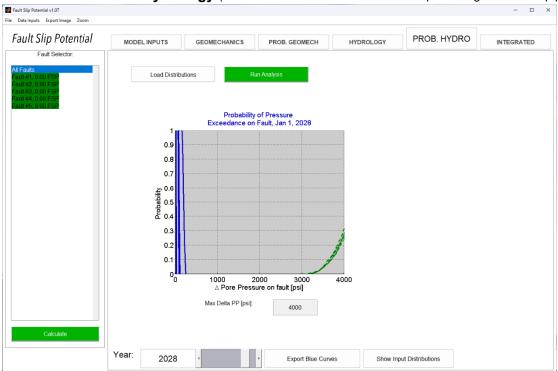
## **GeoMechanics Variability**



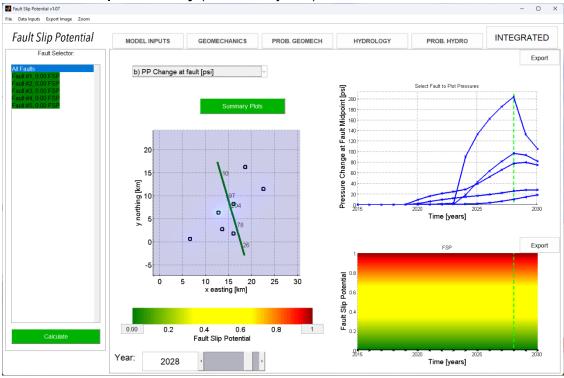
## **Year 5 Hydrology**

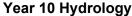


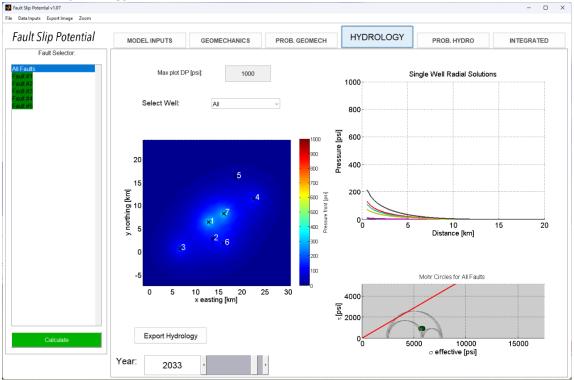
## Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



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



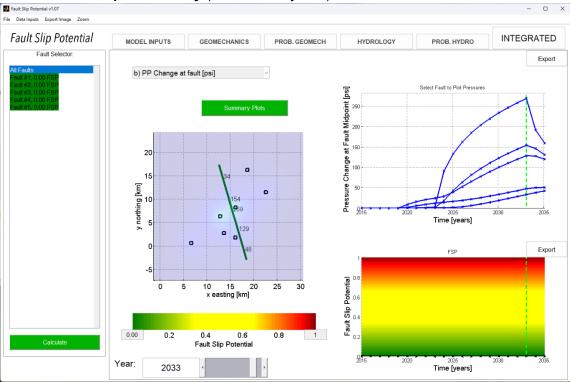


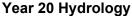


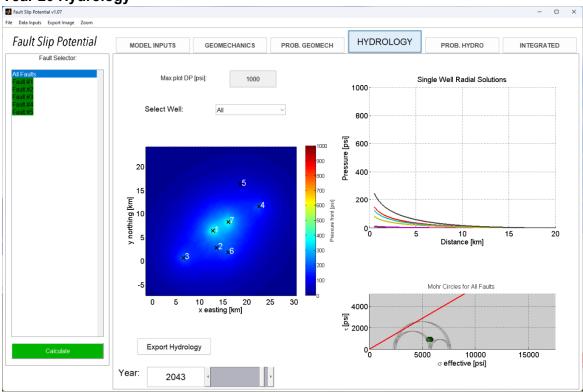
# Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



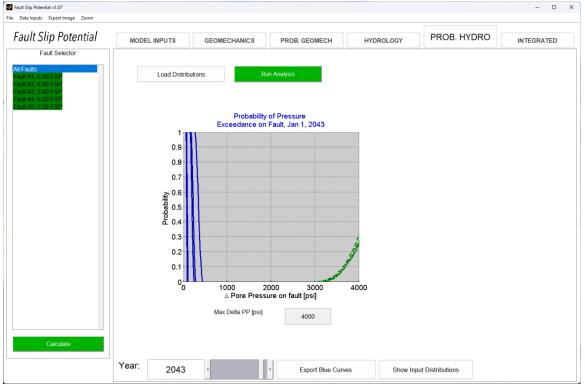
# Year 10 Fault Slip Probability (0% after 10 years)



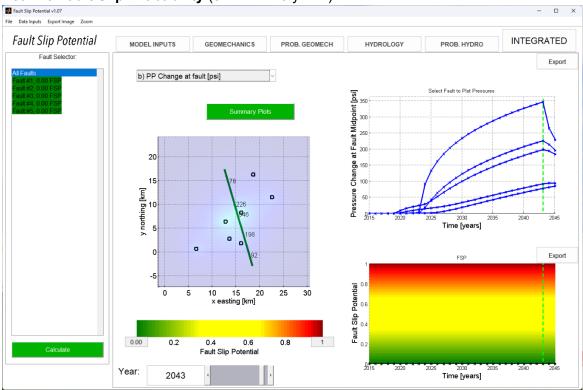


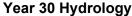


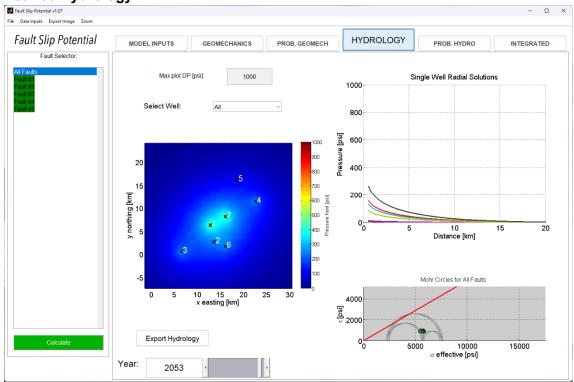
# Year 20 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)



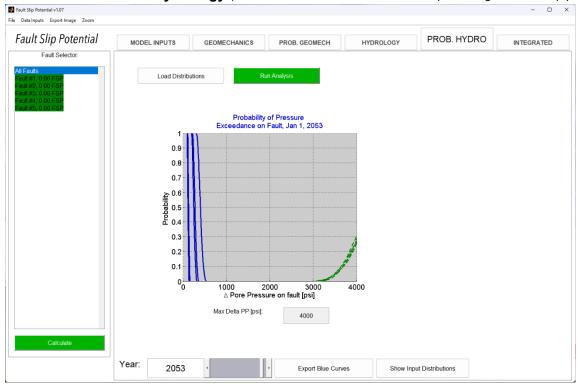
# Year 20 Fault Slip Probability (0% after 20 years)

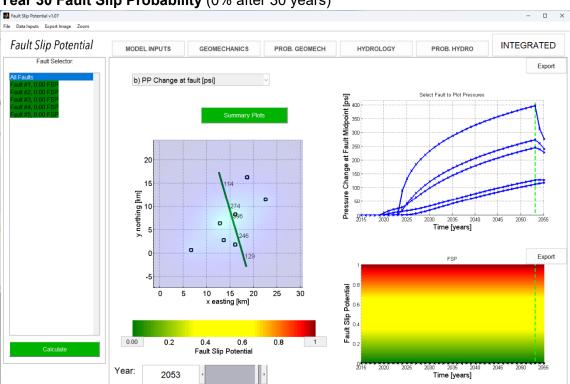






## Year 30 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)





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

gfisher@popmidstream.com

(817) 606-7630

**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:

- The above-referenced Application was provided under notice letter, dated September 28,
   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

Deena 4 Bennett



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** 

**FXHIBIT** 

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: <a href="https://www.emnrd.nm.gov/ocd/hearing-info/">https://www.emnrd.nm.gov/ocd/hearing-info/</a>. This hearing is subject to continuance by the Division to a subsequent docket date.

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

Modrall Sperling Roehl Harris & Sisk P.A.

500 Fourth Street NW Suite 1000 Albuquerque, New Mexico 87102

PO Box 2168 Albuquerque, New Mexico 87103-2168

Tel: 505.848.1800 www.modrall.com

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, Defina 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.

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- (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.

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

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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 D	DIVISION USE ONLY	
	- Geolog	CO OIL CONSERV gical & Engineering Francis Drive, Sant	<b>ATION DIVISION</b> g Bureau –	
	ADMINIST	RATIVE APPLICATI	ON CHECKLIST	
THIS C	HECKLIST IS MANDATORY FOR REGULATIONS WHICH	ALL ADMINISTRATIVE APPLIC. REQUIRE PROCESSING AT THE		
Applicant: Permian O				Number: <u>328259</u>
Well Name: Overdue				025-Pending
Pool: SWD; Devonian-Si	lurian		Pool C	ode: 97869
SUBMIT ACCURA	TE AND COMPLETE IN	NFORMATION REQUI		HE TYPE OF APPLICATION
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3) CERTIFICATION: administrative of understand the	ice required  I hereby certify that approval is accurate at no action will be to submitted to the Di	and <b>complete</b> to the ken on this applica	ne best of my know	vledge. I also
Not	e: Statement must be compl	eted by an individual with	managerial and/or supe	rvisory capacity.
			# *	
Sean Puryear			7-11-2023 Date	
Print or Type Name				
			817-600-8772	
Sem Fin	3		Phone Number	
Signature			spuryear@popmidstr e-mail Address	eam.com

Exhibit A

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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 Purvear
SIGNATURE: Sean Fung

TITLE: Manager

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

#### 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.

Exhibit A

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							
	TOP	BOTTOM	THICKNESS (ft)				
FORMATION	KB TVD (ft)	KB TVD (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.

- IX: Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.
- X: A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.
- XI: According to the New Mexico Office of the State Engineer, there are <u>0</u> fresh water wells within the proposed well's one-mile area of review. 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

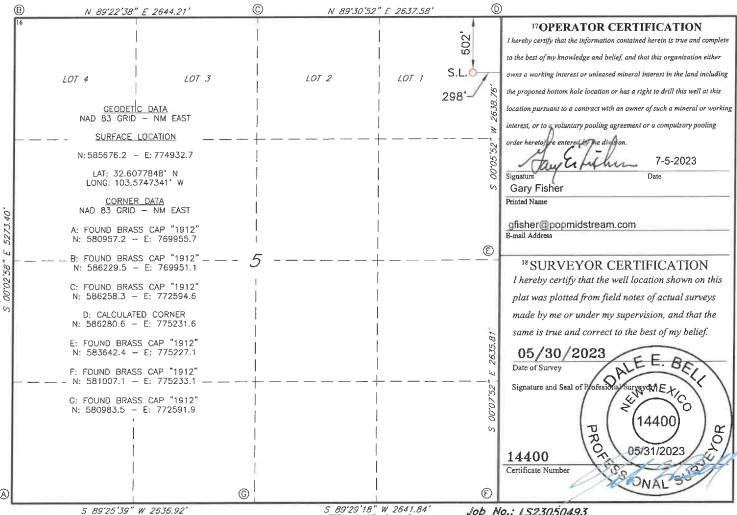
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION DLAT

		YY	اط طاطانا	OCATIO	N AND AC	REAGE DEDIC				
<sup>1</sup> API Number <sup>2</sup> Pool				<sup>2</sup> Pool Code		<sup>3</sup> Pool Name				
				97869		SWD; DEVONIAN-SILURIAN				
4Property Code					5 Property Name				6 Well Number	
-				OVERDUE FEDERAL SWD						1
7 OGRID 1	10.				8 Operator 1	Vame				vation
32825	9		P	ERMIAN	OILFIELD	OILFIELD PARTNERS, LLC 3643'				643'
					10 Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/Wes	County	
1	5	20S	34E		602	NORTH	298	EAS	T	LEA
		ħ//	11 ]	Bottom H	ole Location	If Different Fr	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	t line	County
2 Dedicated Acres	13 Joint	or Infill 14 Co	onsolidation	Code 15 C	Order No.					
		1								

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.



Released to Imaging: 9/5/2023 4:23:56 PM1

s 89°29'18" w 2641.84 Exhibit A

Job No.: LS23050493

Page 11 of 71

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" Depth Top: Surface Casing: 13.375" - 68# HCP-110 FJ Casing

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

X/O Depth: 10787'

Casing (Fiberglass Lined)

X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined) Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

Packer Depth: 14640'

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:

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

Depth Top: Surface 1577 Depth Btm:

Cement: 1444 sks - Class C + Additives Cement Top: Surface - (Circulate)

#### Intermediate #1 - (Conventional)

Hole Size:

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

Surface Depth Top: Depth Btm: 36581

1119 sks - Class C + Additives Cement: Cement Top: Surface - (Circulate)

#### Intermediate #2 - (Conventional)

Hole Size: 14.75"

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

Depth Top: Surface Depth Btm: 5582'

827 sks - Class C + Additives Cement:

Cement Top: Surface - (Circulate)

ECP/DV Tool: 3758'

#### Intermediate #3 - (Conventional)

Hole Size: 12.25"

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

Surface Depth Top: Depth Btm: 10987

Cement: 1803 sks - Class C + Additives

Cement Top: Surface - (Circulate)

ECP/DV Tool: 5682'

#### Intermediate #4 - (Liner)

Hole Size:

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

10787 Depth Top: 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'

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

Packer Depth: 14640'

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

Packer Fluid: 8.4 ppg FW + Additives





#### 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:

Notified Name	Notifed Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
ADVANCE ENERGY PARTNERS HAT MESA LLC	11490 Westheimer Rd	Houston, TX 77077	USPS	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
NNZENERGY 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

Sean Puryear

Permian Oilfield Partners, LLC spuryear@popmidstream.com

Date: 7/11/2023

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9955 2232 4398 31

ARTICLE ADDRESSED TO:

Advance Energy Partners Hat MesaLLG 2 11490 WESTHEIMER RD STE 950 HOUSTON TX 77077-6841

FEES
Postage Per Piece
Certified Fee
Total Postage & Fees:

\$5.470 4,350 9.820 JUL 1 1 2023 | Postmark Here -

# 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
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Certified Fee
Total Postage & Fees:

\$5,470 4,350 9,820 Postmark Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 8414 8118 8956 2232 4397 18

ARTICLE ADDRESSED TO:

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

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Postage Per Piece
Certified Fee
Total Postage & Fees:



# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9958 2232 4397 56

ARTICLE ADDRESSED TO:

Balog Family Trust PO BOX 111890 ANCHORAGE AK 99511-1890

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Total Postage & Fees:

\$5.470° 4.350 9.820 JUL 11 2023
Postmark

# 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
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Certified Fee
Total Postage & Fees:

\$5.470 4.350 9.820 JUL 1 1 2023

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# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 9118 9956 2232 4397 01

ARTICLE ADDRESSED TO:

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

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Certified Fee
Total Postage & Fees:

\$5,470 4,350 9,820



ARTICLE NUMBER: 9414 8118 9956 2232 4397 94

ARTICLE ADDRESSED TO:

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

Postage Per Piece Certified Fee Total Postage & Fees:

\$5.470

Postmark Here

JUL 1 1 2023

### 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 UL 1 1 2023 MIDLAND TX 79701-4405

Postage Per Piece Certified Fee

Total Postage & Fees:

\$5.470 4.350 9.820

**Postmark** Here

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

ARTICLE NUMBER: 9414 8118 9958 2232 4397 32

ARTICLE ADDRESSED TO:

Cimarex Energy Co. of Colorado 6001 DEAUVILLE STE 300N MIDLAND TX 79706-2671 JUL 1 1 2023

FEES Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 4.350 9.820

**Postmark** Here

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

ARTICLE NUMBER: 0414 8118 8955 2232 4397 70

**ARTICLE ADDRESSED TO:** 

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

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

\$5,470 4.350 9.820

**Postmark** Here

JUL 1 1 2023

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

ARTICLE NUMBER: 9414 8118 9956 2232 4399 18

ARTICLE ADDRESSED TO:

**Delmar Hudson Lewis Living Trust** PO BOX 2546 FORT WORTH TX 76113-2546 JUL 1 1 2023

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470 9.820

**Postmark** Here

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

ARTICLE NUMBER: 9414 8118 9958 2232 4399 54

**ARTICLE ADDRESSED TO:** 

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

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

\$5,470

**Postmark** Here

1000

Exhibit A

ARTICLE NUMBER: 9414 8118 9956 2232 4399 61

ARTICLE ADDRESSED TO:

Hudson Oil Company of TX 616 TEXAS ST FORT WORTH TX 76102-4696 UL 1 1 2023

Postage Per Piece Certified Fee Total Postage & Fees:

4 350 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 1 2023

Postage Per Piece Certified Fee Total Postage & Fees: 4.350

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## 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

Postage Per Piece Certified Fee Total Postage & Fees. \$5,470 4.350 9.820

**Postmark** Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 9118 9956 2232 4399 85

ARTICLE ADDRESSED TO:

Javelina Partners 616 TEXAS ST

JUL 1 1 2023

FORT WORTH TX 76102-4696

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

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

ARTICLE NUMBER: 9414 \$118 9956 2232 4399 30

ARTICLE ADDRESSED TO:

Lee Wiley Moncrief Trust PO BOX 2546 FORT WORTH TX 76113-2546 2023

Postage Per Piece Certified Fee Total Postage & Fees: 4.350. 9.820

Postmark Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 8956 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 Certified Fee Total Postage & Fees:

4.350

Postmark Here

ARTICLE NUMBER: 9414 8119 9956 2232 4396 26

ARTICLE ADDRESSED TO:

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

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



Here

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

ARTICLE NUMBER: 0414 \$118 9958 2232 4395 95

ARTICLE ADDRESSED TO:

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

JUL 1 1 2023

Postage Per Piece Certified Fee Total Postage & Fees:

4,350 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 111 1 1 2023

Postage Per Piece Certified Fee Total Postage & Fees: \$5.470 4.350 9,820

**Postmark** Here

# 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 JUL 1 1 2023

FEES

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470 4.350 9.820

Postmark Here

#### 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

JHL 1 1 2023

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees: \$5,470

**Postmark** Here

U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 9414 8118 9958 2232 4393 05

ARTICLE ADDRESSED TO:

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

UL 1 2023

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 4.350 9.820

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ARTICLE NUMBER: 9414 8118 9956 2232 4393 43

ARTICLE ADDRESSED TO:

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

JUL 1 1 2023

Postage Per Piece Certified Fee Total Postage & Fees:

4.350 9.820

Postmark Here

# U.S. Postal Service Certified Mail Receipt

ARTICLE NUMBER: 0414 8118 9956 2232 4393 81

ARTICLE ADDRESSED TO:

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

JUL 1 1 2023

FEES

Postage Per Piece Certified Fee Total Postage & Fees:

4,350

**Postmark** Here

## 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**8

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470

**Postmark** 

# 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<sub>JUL</sub> 1 1 2023

**FEES** 

Postage Per Piece Certified Fee Total Postage & Fees:

\$5,470 4,350

Postmark Here

XIII.

#### **Affidavit of Publication**

STATE OF NEW MEXICO COUNTY OF LEA

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

> Beginning with the issue dated May 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 # 1087525
COMMISSION EXPIRES 01/29/2027

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

#### LEGAL NOTICE May 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 602' 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

67115647

00278997

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

Exhibit A

Released to Imaging: 9/5/2023 4:23:56 PM1 Released to Imaging: 10/13/2023 8:02:18 AM V (a)

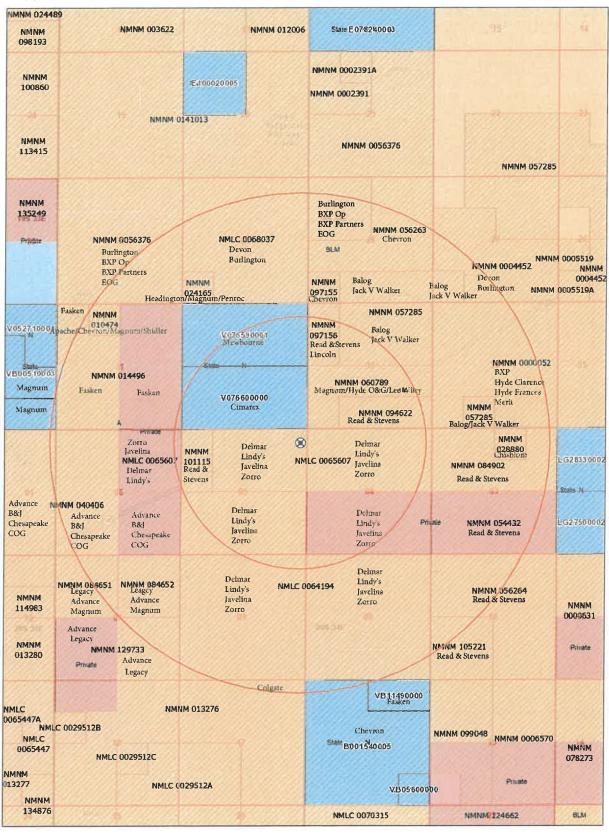
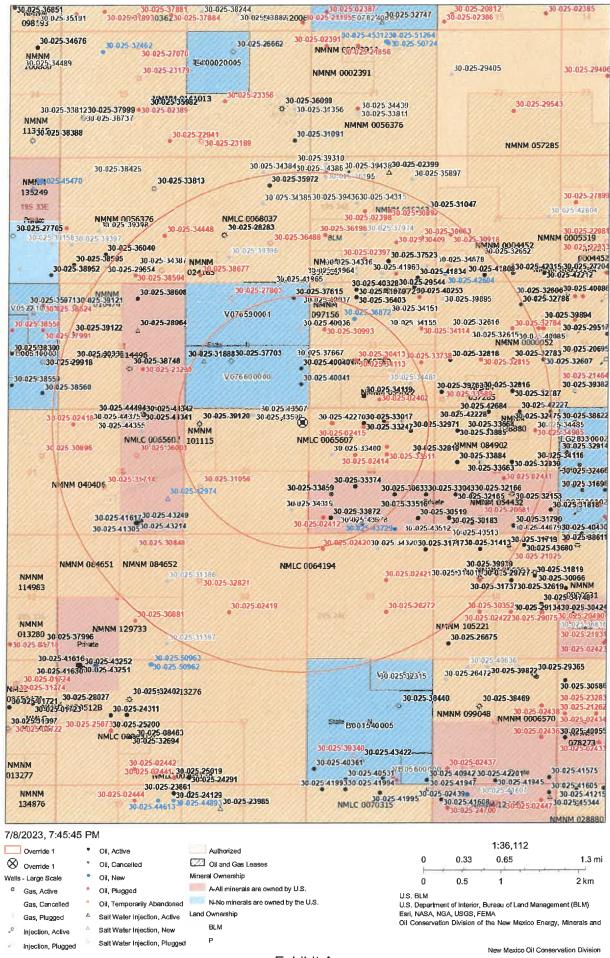


Exhibit A

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



Received by OCD: 9/5/2023 2:37:30 PM1

Page 22 of 71

#### V (c)

		145 951	*******	AMAN W.	Well Direction	Well Startus	Empire	Towns	Rager	OCD Unit Letter	Surface Location	Bottomhole Location	Formation	MD
API Humber	Current Operator	Well Name	Well Number	Wall Type Gas	Vertical	Active	05	7206	R34E	D D	D-05-205-34E Lot: 4 660 FML 660 FWL	D-05-205-34E Lat: 4 660 FNL 660 FWL	MORROW	13750 1
30-025-99120	READ & STEVENS INC	HIGHWAY 5 FEDERAL COM	8001		Vertical	Pluggett Site Released		Taos	R34E	- 1	L-05-205-34E 1980 FSL 710 PWL	M-05-205-34E 1980 FSL 710 FWL	BONE SPRING	13660 1
30-025-31056	MARATHON OIL CO	MATADOR S FEDERAL	#001	Gas Salt Water Donnel	Vertical	Active	32	T195	R34E	i	1-32-195-34E 1980 FSL 810 FWL	1-32-195-34E 1980 PSL 810 PWL	BONE SPRING	13660 1
30-025-31888	SELECT AGUA LIBRE MIDSTREAM, U.C.	RED HAWK 32 STATE	8001		Vertical	Active	32	T195	R34E	K	K-92-195-34E 1980 FSL 1980 FWL	K-32-195-34F 1980 FSL 1980 FWL	BONE SPRING	13682 1
30-025-37703	MEWBOURNE OIL CO	QUAIL RIDGE 32 STATE	#002	Gas	Horizontal	Cancelled Aust	06	T205	R34E	В	B-05-205-34E Lot: 2 280 FNL 2140 FEL	P-05-205-34E 330 FSL 350 FEL	BONE SPRING	15377 1
30-025-43507	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#001H	Oil			05	T205	R34E	8	B-05-205-34E Lot: 2 280 FNL 2340 FEL	N-05-205-34E 330 FSL 2290 FWL	BONE SPRING	15106 1
30-025-43509	READ & STEVENS INC	NORTH LEA 5 FEDERAL COM	#003H	Oil	Horizontal	Cancelled April	05	T205	R34E	8	B-05-205-34E Lot: 2 280 FNL 2440 FEL	M-05-205-34E 330 FSL 970 FWI.	BONE SPRING	15426 1
30-025-43510	READ & STEVENS INC	NORTH LEAS FEDERAL COM	MOOAH	Oil	Herizontal	Cancelled April	05	T205	R34E	8	B-05-205-94E Lot: 2 280 FNL 2240 FEL	O-05-205-34E 330 PSL 1670 FEL	BONE SPRING	15087 1
30-025-43508	READ & STEVENS INC	NORTH LEAS FEDERAL COM	HOOSH	Oil	Horizontal	Cancelled April	32	T195	R34E	ů	1-32-195-34E 1980 PSL 1980 PEL	J-32-195-34E 1980 FSL 1980 FEL	MORROW	13612 1
30-025-32003	SELECT AGUA LIBRE MIOSTREAM, LLC	RED HAWK 32 STATE	8002	Saft Water Disposal	Vertical		32	T195	RSAE	A	A-32-195-34E 660 FNL 660 FFL	A-32-195-34E 660 FNL 660 FEL	BONE SPRING	13750 1
30-025-37615	MEWBOURNE OIL CO	RED HAWK 32 STATE	BO01	O#	Vertical	Active	05	T205	R34E	P	P-05-205-94E 990 PSL 660 FEL	P-05-205-34E 990 PSL 660 FEL	DELAWARE	B400 8
30-025-34319	READ & STEVENS INC	TRUMAN 5 FEDERAL	#001	Os	Vertical	Cancelled Apri		7195	R34E	- 1	1-32-195-34E 1980 FSL 660 FEL	1-32-195-34E 1980 FSL 660 FEL	MORROW	14000 1
30-025-37667	CIMAREX ENERGY CO. OF COLORADO	QUAIL RIDGE 32 STATE	#001	Gas	Vertical	Cancelled April	32	T195	R34E	1	1-32-195-34E 1850 PSL 330 FEL	L-32-195-34E 1881 FSL 4940 FEL	BONE SPRING	15407 1
30-025-40040	CIMAREX ENERGY CO. OF COLORADO	QUAIL RIDGE 32 STATE	BOOM	Oil	Horizontal	Active	32	T195	R34E	н	H-32-195-34E 1981 FNL 330 FEL	F-32-195-34E 1980 PVL 330 FWL	BONE SPRING	15190
30-025-40036	MEWBOURNE OIL CO	RED HAWK 32 STATE	1003C	Oil	Hortzontal	Cancelled April				P	P-32-195-34E 990 FSL 330 FEL	M-32-195-34E 681 FSL 4935 FEL	BONE SPRING	13358 8
80-025-40041	CHMAREX ENERGY CO. OF COLORADO	QUAIL RIDGE 32 STATE	8004	Oil	Horizontal	Active	32	T195	R34E	M	M-04-205-34E 660 PSL 660 PML	M-04-205-34E 660 FSL 660 FWL	YATES-SEVEN RIVERS	
30-025-02412	HUDSON OIL COMPANY OF TEXAS	FEDERAL	H002	Oil	Vertical	Pluggmd Site Released		T205	R34E	E	E-33-195-34E 1980 FNL 660 FWL	E-33-195-34E 1980 FNI, 660 FWI.	BONE SPRING	10300 1
30-025-30993	PENNTENERGY EXPLORATION AND PRODUCTION LLC	CHAPARRAL 33 FEDERAL	#001	Oli	Vertical	Huged, Site Released	33	T195				M-04-205-34E 660 PSL 990 PWI.	DELAWARE	8970 B
30-025-33872	READ & STEVENS INC	TRUMAN FEDERAL	#007	Oil Oil	Vertical	Active	04	T205	R34E	M	M-04-205-84E 660 PSL 990 PWL	D-04-205-34E Lot: 4 660 FNL 990 FWL	DELAWARE	8330 8
30-025-83325	READ & STEVENSING	HUDSON FEDERAL	8006	O4	Vertical	Pluggest Site Released	D4	T 205	R34E	D	D-04-205-34E Lat: 4 560 FML 990 FWL	L-04-205-34E 1850 PSL 990 FWL	DELAWARE	8350 8
30-025-33859	READ & STEVENS INC	TRUMAN FEDERAL	H005	03	Vertical	Active	0.4	T205	R34E	ı	1-D4-205-34E 1650 FSL 990 PWL	E-04-205-34E 1980 FNL 990 FWL	DELAWARE	8400 8
30-025-33400	READ & STEVENS INC	HUDSON FEDERAL	8007	Di	Vertical	Cancelled April	04	T205	IL34E	2	E-04-205-34E 1980 FNL 990 FWL	M-04-205-34E 330 FSL 970 FWL	BONE SPRING	15371 1
80-025-42270	READ & STEVENS INC	NORTH LEA 4 PEDERAL COM	#004C	Oit	Harizontal	Cancelled Apd	04	T205	R34£	0	D-04-205-34E Lat: 4 661 FNL 1040 FWL		BONE SPRING	16038 1
30-025-43578	READ & STEVENS INC	NORTH LEA 9 FEDERAL COM	8004H	Ofi	Horizontal	Cancelled Apd	DA	T205	R34E	м	M-04-205-34E 660 PSL 1275 PWL	M-09-205-34E 330 FSL 970 FWL		12800 1
30-025-36872	APACHE CORPORATION	SOUTH LUSK 33 FEDERAL	8003	Dii	Vertical	New	33	T195	R34E	- 6	F-33-195-32E 1545 FNL 1920 FWL	L-33-195-32E 1350 FSL 990 FWL	MORROW	8340 E
80-025-33665	READ & STEVENS INC	TRUMAN FEDERAL	#005	Oll	Vertical	Active	04	T205	R34E	H	N-04-705-34E 990 FSL 1980 FWA	N-04-205-34E 990 FSL 1980 FWL	YATES-SEVEN RIVERS	
30-025-02414	HUDSON DIL COMPANY OF TEXAS	MATLDCX	#002	Oil	Vertical	Pluggmt Site Released	D4	1205	R34E	£	F-04-205-34E 1994 FNL 1980 FWL	F-04-205-34E 1994 FNL 1980 FWL		13600 1
30-025-30413	CIMAREX ENERGY CO. OF COLORADO	LEA CHAPARRAL FEDERAL	#001	Dil	Vertical	Muggett Site Released	33	T195	R34E	K	K-33-195-34E 1980 FSL 1980 FWL	K-33-195-34E 1980 FSI. 1980 PWI.	BONE SPRING	8370 8
30-025-33374	READ & STEVENS INC	TRUMAN FEDERAL	#003	Oil	Vertical	Active	- 04	7205	R34E	K	K-04-205-34E 1980 FSL 1980 PWL	K-04-205-34E 1980 PSL 1980 PWL	DELAWARE	
30-025-43750	READ & STEVENS INC	NORTH LEA 9 FEDERAL COM	#003H	Off	Horizontal	New	04	T205	R34E	N	N-04-205-34E 400 PSL 2290 PWL	N-09-205-34E 330 FSL 2290 FWL	BONESPRING	16021 3
30-025-02435	HUDSON DIL COMPANY OF TEXAS	MATLOCK	8003	Dil	Vertical	Plugged, Site Released	D4	1205	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	
30-025-33181	READ & STEVENS INC	HUDSON FEDERAL	#004	Oil	Vertical	Plugged Site Released		T2.05	R34E	,	F-04-205-34E 1650 FML 2310 FWL	F-04-205-34E 1650 FNL 2310 FWL	DELAWARE	8350 8
30-025-33017	READ & STEVENS INC	HUDSON FEDERAL	0003	Oll	Vertical	Active	04	7205	R34E	c	C-04-205-34E Lot: 3 660 FN1 2310 FWL	C-04-205-34E Lot: 3 660 FN1, 2310 FW1	DELAWARE	8350 E
30-025-43505	READ & STEVENS INC	NORTH LEA 4 FEDERAL COM	MOOSH	Off	Hortzontal	Cancelled #pd	04	7205	R34E		C-04-205-34E Lot: 3 395 PN1 2515 FWL	N-04-205-34E 330 FSL 2290 FWL	BONESPRING	14941 1
30-025-34119	READ & STEVENS INC	PEARL 33 FEDERAL	#001	Oil	Vertical	Active	33	7195	R34E	N	N-33-195-346 480 FSL 2310 FWL	N-33-195-34E 480 FSL 2310 FWL	DELAWARE	10250 1
30-025-33516	READ & STEVENS INC	TRUMAN FEDERAL	R004	DB DB	Vertical	Active	94	T205	R34E	0	O-04-205-34E 990 PSL 2310 FEL	O-04-205-34E 990 FSL 2310 FEL	DELAWARE	B340 I
30-025-02402	PRE-ONGARD WELL OPERATOR	PRE-DNGARD WELL	#001	Oil	Vertical	Plugged, Site Released	33	1195	R34E	0	O-33-195-34E 330 FSL 2810 FEL	0-33-295-34E 330 FSL 2310 FEL	YATES-SEVEN RIVERS	
30-025-34113	BLACK HILLS GAS RESOURCES, INC.	MALLON 33 FEDERAL	#003	Oil	Ventical	Phaged Ste Released	93	T195	R34E		1-33-195-34€ 2080 F5L 2080 F€L	J-33-195-34E 2080 FSL 2080 FEL	BONE SPRING	7650 7
30-025-02413	HUDSON OIL COMPANY OF TEXAS	MATLOCK	#001	Dit .	Vertical	Pluggend, Site Released	04	T205	R34E	8	8-04-209-34E Lat: 2 823 FNL 2103 FEL	B-04-205-34E Lot: 2 823 FNL 2103 FEL	YATES-SEVEN RIVERS	
30-025-33247	READ & STEVENS INC	HUOSON FEDERAL	#005	OS	Vertical	Active	04	T205	R34E	8	8-04-205-34E Lot: 2 560 FML 2130 FEL	8-04-205-34E Lot: 2 560 FNL 2130 FEL	DELAWARE	8300 B
30-025-02417	PRE-ONGARD WELL OPERATOR	PRE-ONGARO WELL	#001	Off	Vertical	Pluggmit Site Released	04	7205	R34E	8	8-04-205-34E Lot: 2 660 FML 1982 FEL	B-04-205-34E Lot: 2 660 FNL 1982 FEL	DEVONIAN	14985 1
30-025-33511	READ & STEVENS INC	HUDSON FEDERAL	#006	OB	Vertical	Phagent Site Released	04	T205	R34E	G	G-04-205-34E 1980 FNL 1980 FEL	G-04-205-34E 1980 FWL 1980 FEL	DELAWARE	8358 8
RD-025-02416	KUDSON OIL COMPANY OF TEXAS	MATLOCK	9004	Off	Vertical	Plugget, Site Released	- 84	T205	R34E	G	G-04-205-34E 1650 FNL 1980 FEL	G-04-205-34E 1650 FNL 1980 FEL	YATES-SEVEN RIVERS	3781 3
BD-025-30638	READ & STEVENS INC	TRUMAN FEDERAL	#002	Of	Vertical	Active	04	T205	A34E	3	J-04-205-34E 1650 PSL 1650 FEL	J-04-205-34E 1650 FSL 1650 FEL	DELAWARE	8285 8
30-025-43504	READ & STEVENS INC	NORTH LEA 4 FEDERAL COM	8002H	OII	Horizontal	Cancelled Apd	04	T205	R34E	8	B-04-205-34E Lot: 2 570 FNL 1395 FEL	D-04-205-34E 330 FSL 1670 FEL	BONE SPRING	14792 1
30-025-33971	READ & STEVENS INC	HUDSON FEDERAL	#002	OR	Vertical	Active	04	T205	R34E	A	A-04-205-34E Lot: 1 990 FNL 990 FEL	A-04-205-34E Lot: 1 990 FNL 990 FEL	DELAWARE	8380 8
80-025-34481	READ & STEVENS INC	PEARL 33 FEDERAL	#962	Off	Vertical	Cancelled Aird	33	T195	R34E	P	P-33-195-34E 990 FSI, 990 FEL	P-33-195-34E 990 FSL 990 FEL	BONE SPRING	20400 1
30-025-37819	READ & STEVENS INC	HUDSON FEDERAL	8001	Oll	Vertical	Active	04	T205	R34E	н	H-04-205-34E 1980 FNL 660 FEL	H-04-205-34E 1980 FNL 660 FEL	DELAWARE	13750 1
0-025-62619	READ & STEVENSING	NORTH LEA 4 FEDERAL COM	9001H	Oil	Horizontal	Cancelled April	04	T205	R34E	Α	A-04-205-34E Lot: 1 335 FNL 350 FEL	P-04-205-34E 330 PSL 350 FEL	BONE SPRING	25030 1

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Exhibit A

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 #00			
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	258	19S	20S			
Range	34E	29E	34E	29E			
Unit	M	0	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			
pН	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'

<b>Devonian Injection Zone Water Analysis</b>						
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	198	208	20S			
Range	29E	34E	34E			
Unit	M	В	В			
Ftg NS	610S	810N	660N			
Ftg EW	660W	1980E	2130E			
County	Eddy	Lea	Lea			
State	NM	NM	NM			
Field						
Formation	Devonian	Devonian	Devonian			
Sample Source	Drill Stem Test	Drill Stem Test	Unknown			
pН						
TDS_mgL	29011	33414	45778			
Chloride_mgL	16000	18570	26440			
Bicarbonate_mgL	520	227	1145			
Sulfate mgL	1500	1961	729			



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.

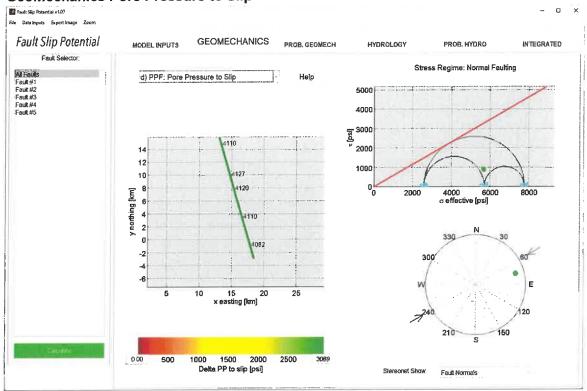
#### Input assumptions:

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

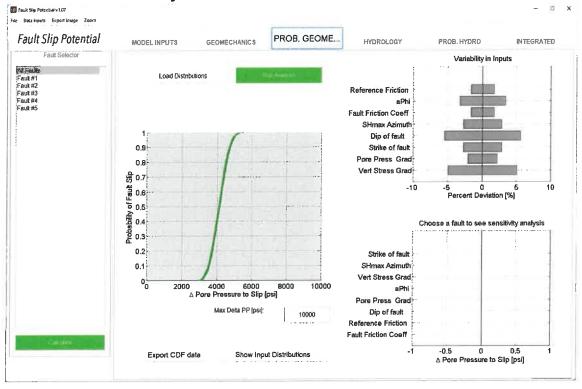
#### Note:

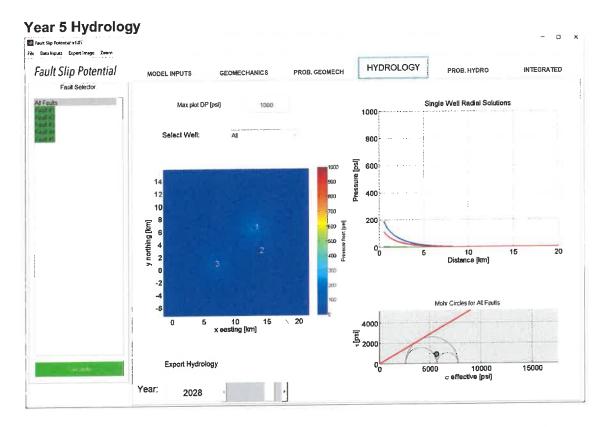
In screenshots below, injection well #1 is the proposed Overdue Federal SWD #1. Injection well #2 is the active Fasken Quail 16 State SWD #9. Injection well #3 is the permitted Permian TDS Coombes SWD #1.





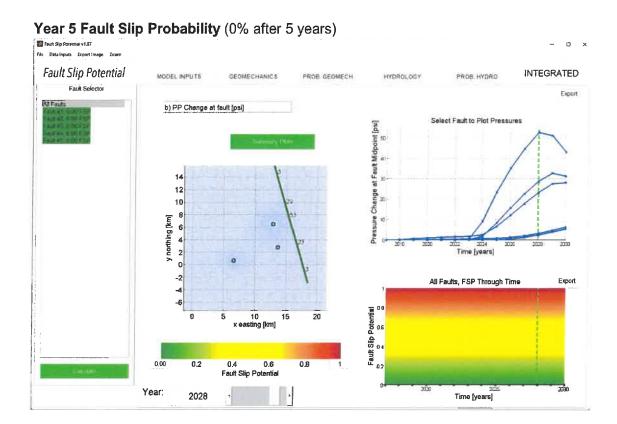
#### **GeoMechanics Variability**

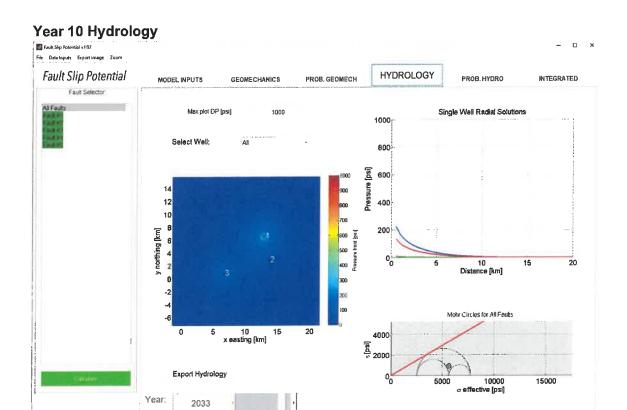




Year 5 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)

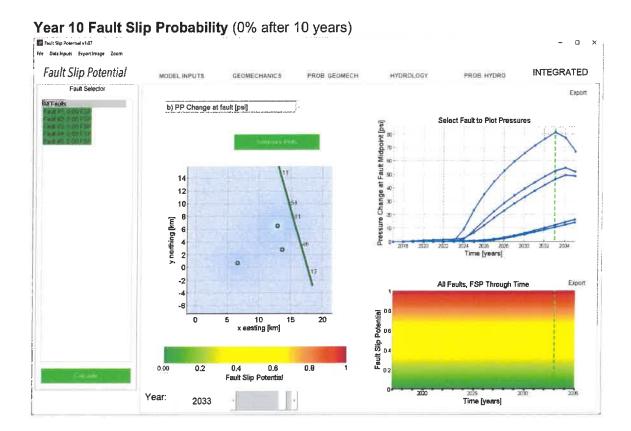


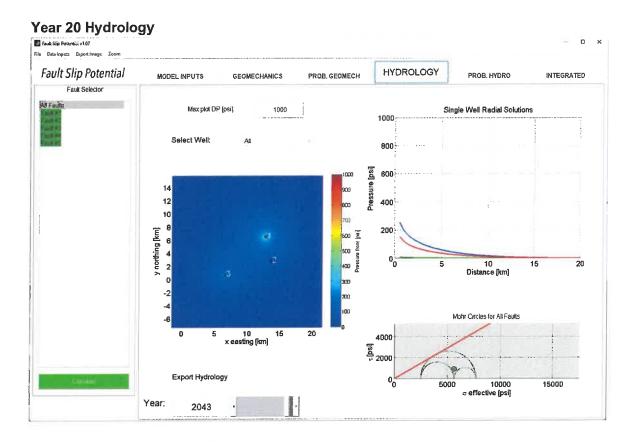


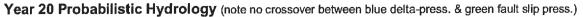


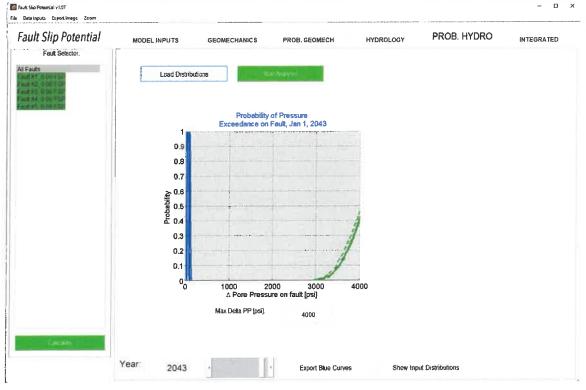
#### Year 10 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)

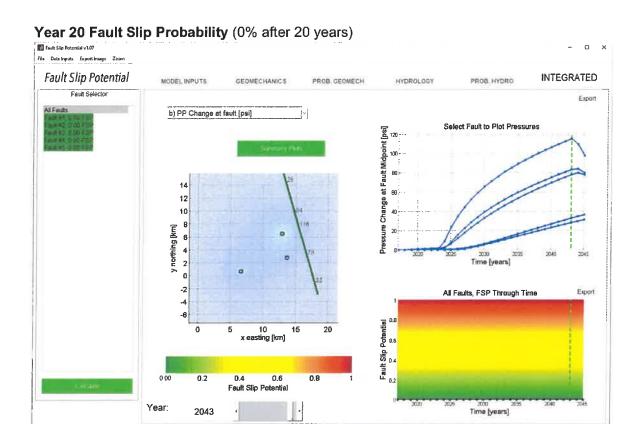


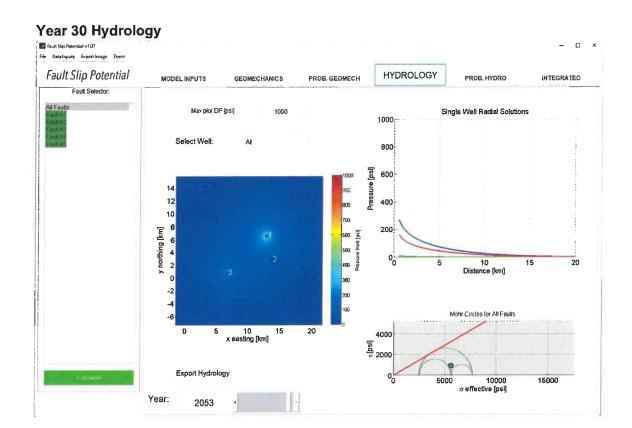






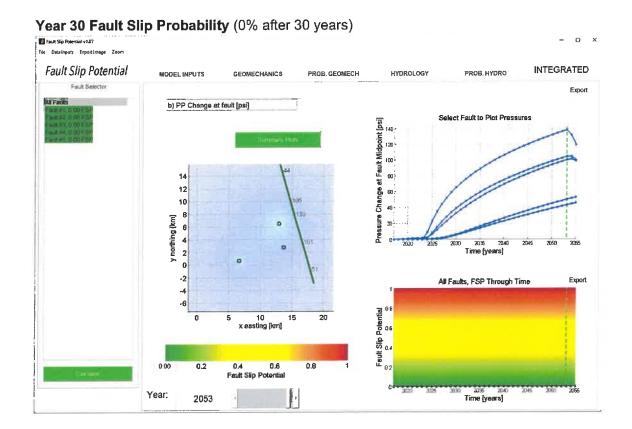






Year 30 Probabilistic Hydrology (note no crossover between blue delta-press. & green fault slip press.)





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.

Gary Fisher Manager

Permian Oilfield Partners, LLC.

Date: 7/5/2023

2017 7 日 4

Form 9-881a (Feb. 1951)

#### (SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

r orm Approved.			
Land Office	Las Cruces		
Lease No	065607		
l I—ta	n		

Budget Bureau No. 42-R358.4.

#### SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.  NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING
	URE OF REPORT, NOTICE, OR OTHER DATA)

		+=	<u>1</u> 2	Ay. 15,	, 19.63
Pure Federal "C" Well No1 is located	660 ft. fr	om. N line	and 1982 ft. (	from $\{E\}$ line of	sec. 4
(34 Sec. and Sec. No.)	20S	(Range)	Meridian)		
Wildcat (Field)	(Coun	ty or Subdivision)		Hew Mexico (State or Territory)	<u> </u>

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 langths of proposed casings; indicate mudding jobs, comenting 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 squeese packer at 12,490. Squeesed 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. Hele 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. Rudson	
Address 302 Carper Building	
Artesia, New Mexico	By Starph & may
***************************************	Title Consulting Engineer.

GPO 914974

Exhibit A

Received by OCD: 9/5/2023 2:37:30 PM1

(Feb. 1981)

(SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Budget Bureau No. 42-R358.4. Form Approved.					
Land Office	las gruces				
Lease No	06 56 07				
Unit	E				

A SHOW ENGINEER OF THE STRICT 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 ALIER 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 Faderal "C" Well No#1 is locate	d \$60 ft. f	rom N	and 1982 ft. from $\{E\}$ line of	sec
MY ME Sec. 4	203	391	MAPM	
(34 Sec. and Sec. No.)	(Twp.)	(Range)	(Meridian)	
Wildcat		Lua	Non Marico	*****
(Field)	(Cor	unty or Subdivision)	(State or Territory)	

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

0

#### **DETAILS OF WORK**

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

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

Set squeeze packer at 18,490. Squeezed below with 150 sacks of slowest coment at 4500 pei. Placed 30 sacks plug coment at 4083-3983 and 10 sacks coment plug at 20° to surface. Hole was leaded with 12.2% and.

I understand	that this plan of work must receive approval in writing l	by the Geological Survey before operations may be commenced.
Company	Ulliam A. & Edward R. Hudson	
Address	302 Carper Building	0,48
	Artesia, New Muxico	By Rayl Lmay
******		Title Consulting Engineer.

GPO 914974

	·	and with the same	•	Form App	roved,	
Form 9-881a (Feb. 1981)	PPRO, ED	(SUBMIT IN TRIPLICATE	n if of	Land Office	LAS CTHES	a.
	1 7 1963	. 61	<i>'</i> )	Lease No	065607	
		UNITED STATES		Unit		
	L. GORDO DE	PARTMENT OF THE IN	ERIOR	W. 3		
-AC P	NA DISTRICT ENGINE	PARTMENT OF THE LY		•	. Die	
		13 JUL (2) M		•	•	

# SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO CHARGE. DAY OF THE NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.	SUBSEQUENT REPORT OF WATER SHUT-OFF.  SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.  SUBSEQUENT REPORT OF ALTERING CASING.  SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.  SUBSEQUENT REPORT OF ABANDONMENT.  SUPPLEMENTARY WELL HISTORY.
---	---

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

		*******	M	ay 15.	, 19_93
Pure Federal "C" Well No is located	660 ft.	from [N] line a	nd 1982 ft. fr	rom E line of	sec4
W Sec. 4 (% Sec. and Sec. No.)		(Range)	(Meridian)	Mene Marrice (State or Territory)	
(Field)	(C	county or Subdivision)			

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, comenting 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 list shots per foot. On May 13, randrill 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:

Rydrostatic - - 8380 psi. 60 min. FSIP - 6875 FFP - 6153. 60 min. ISIP - 6938 IFF - - - - 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 coment. Place coment 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. Busses	, , , , , , , , , , , , , , , , , , ,
Address 302 Carper Building	Paul Y B
Artesia, May Maxico	By Starph L may
	Title Consulting Engineer.

GPO 914974

Form 9-881 a (Feb. 1981) (SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Form Approved.							
LAS	Cruces						
065	507						
B							
	1,48 065						

Budget Bureau No. 42-R358.4.

SUNDRY NOTICES	AND REPORTS ON WELLS
	SUBSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF INTENTION TO DRILL	
NOTICE OF INTENTION TO CHANGE PLANS	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	THE PARTY OF PERSON
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	
NOTICE OF INTENTION TO PULL OR ALTER CASING	
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 seq. 74 (Range) (Meridian)
saft don't	Les Hew Hexico
(Field) (Oo	unity or Bubdivision)
7" casing was then perforated from a drill stem test from 12,789'-988'. day plus 96 barrels of salt water pe	Ine and 1982 ft. from E line of seq. 14  (Range) (Meridian)  Lea (Meridian)  Lea (State or Territory)  a level is 3646 ft.  CTAILS OF WORK  The waights, and lengths of proposed casings; indicate mudding jobs, comented all other important proposed work)  d a depth of 13,008 after drilling out all cement is bridge plug was set at 12,988 in 7" casing. The 2,892-920 with 2 jet shots per foot. On May 13, ran The well flowed at the rate of 626,000 cu.ft. gas per hour on a 6 hour test. Pressures were as follows:
60 min. ISIP - 6938	PP 6215
Standley on May 13). Set squass por of slo-set cement. Place cement plu	ag well as follows (verbal approval was given by Mr. acker at about 12,500°. Squaese below with 150 sacks as 4083-3983 (30 sacks) and 20° to surface (10 to . Heavy sud between plugs.  Ovalin writing by the Geological Survey before operations may be commenced.
Company William A. & Edward I	R. Hudeon
Address 302 Carper Building  Artesia, New Nexico	- When I I was
	I ILIC
	GPO 914974

N. M. O.	JVC	1: J.				
(SUBMIT	1963	5) 24	APR		9-881 a . 1951)	Form (Fe
UNIT	NDLEY	STAI	F. W.	X		
DENERS	CINEER	r en	DISTRIC			- 1

(SUBMIT IN TRIPLICATE)

DLEY UNITED STATES

CHIEFARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

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

Land Office	LAS Crucas
Lease No	063607
Unit	

APR 2 1961

# SUNDRY NOTICES AND REPORTS ON WELLS

		- 1	SUBSEQUENT REPORT OF WATER SHUT-OFF	
Ī	NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHOT STATES	- 1
		- 1	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.	1
۱	NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT THE STATE OF STATE	
Į	****	- 1	SUBSCOREM VELOUS OF THE PROPERTY.	_
1	NOTICE OF INTENTION TO TEST WATER SHOT-OF		SUBSEQUENT REPORT OF ALTERING CASING	}
١	NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL	- 4	SUBSECUENT REPORT OF	
		- 4	SUBSEQUENT REPORT OF ABANDONMENT	
1	NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUPPLEMENTARY WELL HISTORY	
١	TO PULL OF ALTER CASING		SUPPLEMENTARY WELL HISTORI	
1	NOTICE OF INTENTION TO FOLL ON NETER STATE	- 1		
1	NOTICE OF INTENTION TO ABANDON WELL			
l	Re-enter plugged hole	X		
П			12227	

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

		***********	April 1,
Pure Federal "C" Well No. #1 is located	660 ft.	from N line	and 1962 ft. from E line of sec.
G Sec. and Sec. No.) Wildcat (Field)	(Twp.)	(Range) Lea Dunty or Subdivision)	(Meridian)  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 Gil 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 tone.

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

Actesia, New Maxico

Title Consulting Engineer.

GPO 914974

ment plugs as follows: sessint in open hole

Orilled to 14,985'. Flugg. mak from 14,985' to 14,78 aacks coment in open holed from 14,985' to 14 and bottom of 7" OD casing to 1 m 13,960' to 13,

Perforated 7" casing from 13,6% 7" to 13,741' with 4 sucts per foot, attempted to acidise with 500 gals mud acids, packer failed; seaddased with 500 gals mad acid with packer set at 13,655', packer 1 seading. Swebbed load water. Acidised with 500 gals. and acid with packer set at 13,646'.

Acidized with 500 gals mud acid. Plugged back in 7" caming from 13,770° to 13,645° with 30 sacks cenent, perforated 7" caming from 12,572° to 12,586° with 4 shots per fost. Acidized hith 500 gale mod and

Shot 7" casing off at with 8 sacks cement, with heavy and between plugs. Welded 1/2" steel plate on top of 40291, pulled 123 joints, apprilmentely 40001. Placed cement plug in 7" casing from 65301 to 64701 with 12 sacks cement; from 42201 to 41001 with 24 sacks cement; in 7" and 9-5/8" easing from 4040' to 7,940' with 40 eache; in 9-5/8" chaing 20' to surface Plugged and Abandoned: Placed tement plug in 7" ceaing and over perforations from 12,572; to 12,586; with 12 sac to cement from 12,600; to 12,500. casing with 4" pipe marker extending 4' above surface.

From \$-200    HOBBS   S. Face Course Sealer Pr. p.	ceived by OCD: 9/3.	/2023 2537 <i>1</i> 31	IPMI J	-Y TO	0,0,0	į.				Page
HORSE OFF SELECTION - LO COSSOL  LOCATE WILL CORRECTLY  LOCATE WILL	Form 9-5	99					E A	D. Bureau D. Warpire	No. 43-RAM.	L
DEPARTMENT OF THE INTERIOR GEOLOGICAL SUPPLY  Company — The Park S. S. Despany LOG OF OIL OR GAS WELL  LOCATE WILL CONNECTLY  Company — The Park S. S. Despany Lever or Trace — Pedersh — Pedersh —				HOP			אוושפט חבריי	S. LAND	PPTON SAL	nta Po, H.
DEPARTMENT OF THE INTERIOR GEOLOGICAL SUPPLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  LOCATE WILL COMMETTLY  The information given herewith is a complete and correct record of the well said and ward does therewone of an an and a bedermined dream all will allow records  The summany on this page is for the condition of the well as before date.  Commented drilling histories T. 1, 10.59. Finished drilling — ANJ. 16. 11.59  OH. CARLO SANDE OR ZONYES  COMMENTED GRIPTING THE WILL SAND			++1				T. Mark Cochit	MASTI OF P	BER _L.C	06561
DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY  LOG OF OIL OR GAS WELL  LOCATE WILL COUNTED.  LOCATE WILL COUNTE						195	SEP 22 A	io : 3	**************************************	107
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Lecution 450. ft. [2] of . E. Line and 1982ft. [22] of . E. Line and 1982ft. [22] of . E. Line and 1982ft. [22] of . E. Line and 1982ft. [23] of . E. Line and 1982ft. [23] of . E. Line and 1982ft. [23] of . E. Line and 1982ft. [23] of . E. Line and 1982ft. [23] of . E. Line of . Section . Elevation . Mol. 2 . Line of . Section				DA DT			P O Boy 2	707 P.		h B
Well No. 1. Sec. A. T. 259. R. R. Maridian MST.  Location 500. R. 200 d. L. Limo and 1988 Limo of Sections. A. Elevation Methods are incompletely and correct record of the well and all world does thereon so for as can be determined from all available rooms.  Signal	Lessor or	Tract	ederel "C"	******************	***********	Addres	lid ldest	- F	. Man	My IWANS
Location 2007. [15] of . M. Line and 19821. [16] of . M. Line of . Methods A	Well No.	1 Se	c4 T. <b>29</b> \$	R.34-1	Meridian .	MOO	<b>1</b> 0	····· Dia	Loa.	
The information given herewith is a complete and correct record of the well and all work done thereon for any area to determined from all available records.  Signed	Location	660 ft. S	of Line	and 194	2ft. W	of	Line of	lon A	Elev	ation 36461
Date August 26. 1979  The summary on this page is for the condition of the well at above date.  Commenced drilling Beamster 27. 10.58. Finished drilling All 15. 10.59  Oll Coff Cal S ANDS CHE COPES  (Denote yes by 67)  No. 1, from 1,2697: to 1,2741. J. No. 4, from to	The i	nformation	given herewith	is a com	nlate and	correct	t record of the	well and	all work	done thereon
Date August & 26, 1979 The summary on this page is for the condition of the well at above date.  Commenced drilling Incomber 27 1058. Finished drilling Asly 16 19. 72  Ott. OR GAS SANDS ON ZONES  (Druce gas by o)  No. 1, from 12572' to 12582' 9. 0. 5, from to to 100. 100. 100. 100. 100. 100. 100.	-O lai as t	an ne decen	amen from an	avauable	records.		V .	/ .		
Commenced drillingBeambar 2710.58 _ Funished drillingBhly 1610.5910.50							/ Title			
OIL OR GAS SANDS OR ZONES  (Prote pas by 0)  No. 1, from 126771 to 12752 9 No. 5, from to	The s	unmary on	this page is for	the cond	lition of th	as well	at above date.			•
No. 1, from   13697! to   17741!   No. 4, from   to   No. 2, from   12572! to   12586!   9 No. 5, from   to   No. 3, from   12572! to   12586!   9 No. 5, from   to   No. 3, from   to   No. 4, from   to   No. 1, from   to   No. 3, from   to   No. 1, from   to   No. 2, from   to   No. 3, from   to   No. 2, from   to   No. 2, from   to   No. 4, from   to   No. 4, from   to   No. 4, from   to   No. 4, from   to   No. 4, from   to   No. 4, from   to   No. 2, from   to   No. 4, from   to   No. 2, from   to   No. 4, from   to   No.	Commenc	ed drilling						مل برا		, 1959.
No. 1, from12572_! to12586_! 9 No. 5, from			•	HL OR			R ZONES			
No. 3, from 17201 to 3892! No. 6, from to DIPOPERTANT WATER SANDS  No. 1, from to No. 4, from to No. 4, from to No. 2, from to No. 2, from to No. 4, from to No. 2, from to No. 2, from to No. 4, from to No. 2, from to No. 2, from to No. 4, from to No. 2, from to No. 2, from to No. 4, from to No. 2, from to No. 2, from to No. 4, from to No. 2, from to	No. 1, from	n13697	! to	13741	Q	No. 4.	from	t	0	
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No. 2, from to No. 4, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 6,	No. 3, from	3720						t	0	*****
No. 2, from to CASING RECORD  CASING RECORD  CASING RECORD  CASING RECORD  No. 4, from to Casing price of the casing the	No. 1 from									
CASING RECORD    Description   Tortical and   Description										
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TOOLS USED   Heaving plug   Material   Short was   Size   State   St	Stor We carried to the	ight Three	de per Make	Armerin	E Ford of	Tebas I	Out and name			
MUDDING AND CEMENTING RECORD    Minds	a shote, if ph	Failinge on BE	awe put into con	or water	100	, वास द	nt used, position,	Will Learning	To-	t ar balling.
MUDDING AND CEMENTING RECORD    Minds	9-9/8-00 6"9	erealest topon	s and its remain.	II ipq	E	men I	de in the ensing,	the date	ar! if an	coning way
MUDDING AND CEMENTING RECORD    State	71.00 32,	0, A IN	HIS MALL	TORY C	E OIT O	R GA	S WELL.	136971		See below
Tools user   Notes and   Not	~~~~						,,,,,,,,			
Tools user   Notes and   Not			MUDI	DING AN	ND CEMI	ENTIN	G RECORD	************		
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#### DRILL STEAM 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 placed to Imaging 9/52023 423-56 PM; 1 hour fine x shull in pressure 255#, hydrostatic pressure 6275#

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#### 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 throughout 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#.

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10617	10644	27	lime & shale	14367	14367	3	Line & chert
10644	10752	108		14370	14419	49	Line & shale
10752	10 <b>820</b> 10894	68 74		14419	14438	19	Shale
10820 10894	10991	7	Shale & lime	14438		18	Shale & lime
10901	10947	46	lime, shale & sand	24456		105	Limo
10947	11132	185		14561 14574		_	Shale
11132	11186	56 30		14,582		19	Shale & Dolomite
11188	11198	10 20		14601	14622		Dolomite
11198 11218	11231	13	Shale, chert & sand	14622	14985	363	1.1 mo
11231	11298	67	Shale & chert		14985		Total Depth
11298	11380	82					
11380	11409	29 44	المستنبق فالباها والما	1498	13645	-1340	PBTD
11409 11453	11453 11504	51					
11504	11544	40	Shale				
11544	11594	50	. =				
11.594	11821	227					
11621	11869	48 51					
11869	11920 12182	262	Shale & 11mm				
11920 12182	12233	5]	Lime, shale & chert				
			Exhibit A				

#### DEFLECTION TESTS

FOOTAGE	DEGREES	FOOTAGE	DEGREES
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	ī ,
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	
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

FOOTAGE	DEGREES	FOOTAGE	DEGREES
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	ī
10900	1-3/4	13295	1-1/2
11005	1-3/4	13348	1/4
11110	1-3/4	13443	1/4
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		

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(SUBMIT IN TRIPLICATE)

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Budget Burma No. 42-4283.4. Approval expire 12-31-60.

Land Office SEATE FE, Hey MEX

IC 065601

HOBBS OFFICE OCC

	PRODUCTION 10 STREET,		SURSEQUENT REPORT OF WATER SHUT-OFF
NOTICE OF S	NTENTION TO CHANGE PLAN	18	SUBSEQUENT REPORT OF SHOOTING OR ACIDEZING.
NOTICE OF I	NYENTION TO TEST WATER	SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING.
	NIENTION TO RE-DRUL OR		
1		· ·	BUBSEQUENT REPORT OF ABANDONMENT.
1	NTENTION TO PULL OR ALTI		X SUPPLEMENTARY WILL HISTORY
1	NTENTION TO ABANDON WER		
CORNER MARKET	The section of the se	- Anna - Andrewson - production - production and the	IK NATURE OF REPORT, NOTICE, OR OTHER DATA)
	(manual d'a		
х:		The state of	August 26 19 59
Feder	al aca	1 No.	qualification companies accommendation and accommendation accommendation and accommendation accomme
	NB 1/46 h and Sin No.)		(Range)  See Hearing  or Subdivision)  (State or Territory)
PR 8			
I ha almost			A. 自分的符件 1
Time clearn	ion of the derrick ho	oor above sea le	rvel isft.
TINC CLEAST	ion of the derrick ho		
Strin name d Cod 17-1,	and espected depths to obj	DETA  lective sands; show at fing points, and sill (8, ran 1991	ILS OF WORK  m. wights, and lengths of proposed unders; Indicate mudding jobs, mount- other important proposed work  of 13-3/8* © casing, comented w/ 525 sacks.
ded 17-1, man press 801, man cement recours 800.  In hole of maximum outside minute of casing jet shots	/2" hole 12-27-5 sure 250%, had on h801' of 9-5/8 sturns to surface complete 5-22-59 in pressure 900% is 7" casing at 18 is, held CK. tompleted 7-16-5 ll, 985' to 13,80%, trested perfs	DETA  18, ran 1991  emant return  10 casing,  at 13,915',  36 hours  12,090' from  9 at 11,985'  28' s/ 100 s  13,697'-13,	ILS OF WORK  me, weights, and lengths of proposed surjuges; Indicate mudding jobs, servent- other important proposed work?
ded 17-1, man press 801. ran cement re curs WOC. h hole of maxim of cutaic 30 minute in hole of casing jet shote casing	/2" hole 12-27-5 sure 250%, had on 1801' of 9-5/8 sturns to surface complete 5-22-59 ma pressure 900% is 7" casing at 18, held CK. completed 7-16-5 11, 985' to 13,8 13,770'-13,615' d that the plan of work man	DETA  Incline cannot show it for points, and will  8, ran k99* emant return  10 casing, 12 casing, 13,915*, 14 13,915*, 15 hours  12,090* from  12,090* from  12,090* from  13,697*=13, 14/30 sacks  14 ressire appropriation	of 13-3/8" CD casing, comented w/ 525 sacks, so to surface. 12-1/4" hole complete 1-18-3; comented w/ 2900 sacks, maximum pressure 60 rasing and coment w/ 1000%, held 30 minutes 0 ran 13,215' of 7" CD casing, comented w/ 53,000, ran temperature survey, indicated top of surface. Tested caning and coment w/ 1000%, placed coment plug in open hole and bottom scheme. Perforated 7" casing 13,697'-13,741' 741' w/ 500 gallons mud acid, placed coment. Perforated 7" casing 12,572'-12,586' w/ 5 reviting by the Geological Europy before operations may be commoned.
ded 17-1, man press 801. ran cement re curs WOC. h hole of maxim of cutaic 30 minute in hole of casing jet shote casing	/2" hole 12-27-5 sure 250%, had on 1801' of 9-5/8 sturns to surface complete 5-22-59 ma pressure 900% is 7" casing at 18, held CK. completed 7-16-5 11, 985' to 13,8 13,770'-13,615' d that the plan of work man	DETA  Incline cannot show it for points, and will  8, ran k99* emant return  10 casing, 12 casing, 13,915*, 14 13,915*, 15 hours  12,090* from  12,090* from  12,090* from  13,697*=13, 14/30 sacks  14 ressire appropriation	of 13-3/8* CD casing, comented w/ 525 sacks, to surface. 12-1/4" hole complete 1-18-5; comented w/ 2900 sacks, maximum pressure 60 ran 13,215' of 7" CD casing, comented w/ 526 sacks, ran 13,215' of 7" CD casing, comented w/ 526, ran temperature survey, indicated top of 52172000. Tested caning and coment w/ 527212000.  placed coment plug in open hole and bottom acks. Perforated 7" casing 13,697'-13,741' 741' w/ 500 gallons mud acid, placed coment. Perforated 7" casing 12,572'-12,586' w/ 5
ded 17-1, man press 801. ran cement re curs WOC. N hole of maxima of cutaio casing icasing icasing icasing	/2" hole 12-27-5 sure 250%, had on 1801' of 9-5/8 sturns to surface complete 5-22-59 ma pressure 900% is 7" casing at 18, held CK. completed 7-16-5 11, 985' to 13,8 13,770'-13,615' d that the plan of work man	DETA  Incline cannot show it for points, and will  8, ran k99* emant return  10 casing, 12 casing, 13,915*, 14 13,915*, 15 hours  12,090* from  12,090* from  12,090* from  13,697*=13, 14/30 sacks  14 ressire appropriation	of 13-3/8" CD casing, comented w/ 525 sacks, so to surface. 12-1/4" hole complete 1-18-3; comented w/ 2900 sacks, maximum pressure 60 rasing and coment w/ 1000%, held 30 minutes 0 ran 13,215' of 7" CD casing, comented w/ 53,000, ran temperature survey, indicated top of surface. Tested caning and coment w/ 1000%, placed coment plug in open hole and bottom scheme. Perforated 7" casing 13,697'-13,741' 741' w/ 500 gallons mud acid, placed coment. Perforated 7" casing 12,572'-12,586' w/ 5 reviting by the Geological Europy before operations may be commoned.

Exhibit A

Received by OCD: 9/5/2023 2:37:30 PM1

(Feb. 1961)

(SUBMIT IN TRIPLICATE)

#### UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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GPO \$ 18 807

NOTICE OF INTENTION			SUBSEQUENT REPORT	OF MATER SHUT-OFF. OF SHOOTING OR ACI OF ALTERING CASING	DIZING
NOTICE OF INTENTION	TO RE-DRILL OR HEP	AIR WELL	SUBSEQUENT REPORT	OF RE-DIRELING OR I	EPAIR
HOTICE OF INTENTION HOTICE OF INTENTION HOTICE OF INTENTION	TO PULL OR ALTER C	ASING	SUPPLEMENTARY WELL	L HISTORY	
Less The Park Control	(INDICATE ABOV	E BY CHECK MARK NA	TURE OF REPORT, NOTICE		
Federal *C*	£	-			
Well No. 1	is located	ft. from	N line and	ft. from	line of sec.
	- 1	2.	( <b>3</b> )	(w)	
(34 See. sond Sec. )	4 5 B	(Tup.) (No		(midba)	
(Field)	بجوهات المستانية المتابية الرابية	(County or 8	abdivistor)	(State or T	uvilory)
I he elevation of the	ie deliter noor				
State asmes of and exped	ted deptins to objection	DETAILS re sander above sizes, g points, and all athe	OF WORK weights, and lengths of g	•	
shots, treated casing 12,600 asing placed	perfs 12,570 to 12,500 cenent plug	DETAILS TY sounds; show vices, or points, and all othe 2'w12,586' w ' with 12 sa in 7" casing	of WORK  reights and lengths of g  / 500 gallon w  cks. Shot 7*  6530'-5170'	nd seid. Placed off a 12 sacks,	t 4029', puil
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cenent plug	DETAILS or souds; show close, g points, and all othe 2'=12,586' w ' with 12 sa in 7" casing 4 20' to sur	of WORK  / 500 gallor a  cks. Shot 7*  6530'-5170'  face w/ 8 sack	nd seid. Placed off a 12 sacks,	t 4029', puil
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cement plug	DETAILS or souds; show close, g points, and all othe 2'=12,586' w ' with 12 sa in 7" casing 4 20' to sur	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	nd seid. Placed off a 12 sacks,	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
shets, treated a casing 12,600 asing placed as bolio = 39h0	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
shots, treated asing, placed asing, placed asing, placed asing with the casing with	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla
The elevation of the clevation of the cl	perfs 12,570 to 12,500 cement plug	DETAILS remain show slow, and all state 2'-12,586' w ' with 12 sa in 7" casing , 20' to sur xtended 4' all	of WORK  wights and lengths of a famoustant proposed in famous Short 78 6530'-51170' w face w/ 8 sack bove surface.	end soid. Placed in the second of a language in the second	aced cament; t 4029; pull 4220; 4100; a /2" steel pla

Received by OCD: 9/5/2023 2:37:30 PM1 藩 Page 52 of 71

> Geological Survey Box 1836

Bear Sir:

Attached herewith three (3) corder of Form 9-330a "Sandry Notices and Reports on dells" on The Pure Uil Company's Pederal "C" No. 1, wildcat dry hole drilled in Section & Township 20-5, Easte M-5, Lea County, New Maxico.

Yours very truly,

THE PURE OIL COMMIN

beer Schare

Trague

File

Signal (il & Gas Co.

Mr. Ray Diemer

601 Wilco Pldge

Midland, Texas

ir. wallace

1010 Pt. Warth

Fort Worth 21

New Walco All 1

Houbs, New M

Budget Bureau No. 42-R358.4.

For (1	m 8- Peb. 19	<b>881 a</b> 81)		
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#### (SUBMIT IN TRIPLICATE)

# UNITED STATES DEPARTMENT OF THE INTERIOR 1003 GEOLOGICAL SURVEY!

White or b	1100 14-04-00	•
Land Office San	44 16	N.H.
Lease No.	069607	
Unit		

		DEPARTMEN				
		ISIN GEOLG	Deicki artisa	EM		
				ODTO OI	M WEIIC	
	SUNDRY N	NOTICES A	ND REP	ORIS OF	A AETTO	
LIGHTER OF INT	TENTION TO DRILL		SUBSEQUENT	F REPORT OF WATE	R SHUT-OFF	
	TENTION TO CHANGE PLA				TING OR ACIDIZING	
	TENTION TO TEST WATER				RING CASING	
	FENTION TO RE-DRILL OF				RILLING OR REPAIR	
NOTICE OF INT	TENTION TO SHOOT OR A	CIDIZE			DONMENT	
NOTICE OF INT	TENTION TO PULL OR ALT	TER CASING	SUPPLEMENT	TARY WELL HISTOR	Y	
I NAMED OF INT	TENTION TO ABANDON W	FIL	X			
		ABOVE BY CHECK MAR	K NATURE OF REPOR	et, NOTICE, OR OTH	ER DATA)	
	(				Seron 20	, 19 59
						1/
Federal *	C* 1	d	n N line an	d 1982 ft. f	$\operatorname{rom}\left\{ egin{array}{c} \mathbf{E} \\ \mathbf{d} \end{array} \right\}$ line of	sec.
Well No.		Pagoas R	[3]	1217H	{₩}}	
W/L, 185/	and Sec. No.)	(Twp.)	(Range)	(Meridian)		
Wilden t	\$114 Debt. 140.)	Les			Hear Marcle	
	(Field)	(County	or Subdivision)		(State or Territory)	
The elevation	on of the derrick f			. ft.		
		DETA	ILS OF WOI	RK		
(State names of	and expected depths to c	bjective sands; show a	izas, weights, and le other important pr	ingths of proposed (	casings; indicate muc	iding jobs, coment
Drilled S	125' to 11,58	fig. Ter frame of	OTOBOLES SE	HES BURNE	CTAIL CENES. A.D.	
mark 650 to		00.1				
UST #1 1	10,750' - 10,8	85				
	d that this plan of work		in watsing by the G	enlogical Survey be	fore operations may b	se commenced.
[ understand	d that this plan of work	1. Company	it writing by the			
Company						
4.11	Box 671					
Address			-	,.)	E 7	
	Hidland, To	rac .	_	By (e).	Co Louin	serd
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			-	Title	*** A***	
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*******			-	1 1tle		GPO 918507

Exhibit A

HOMBS OFFICE GCC

1559 MAR 23 M 8:14

March 20, 1959

United States Department of the Interior Sectorical Survey Box 1836 Hobbs, New Memico

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

Deer Sirt

Attaching three copies of Form 2-311a "Sundry Notices and Reports on Hells" as our progress report on The Pure Cil Company's Federal "C" Hell No. 1, located in Section 1, Tourstip 20-6, Range X.-8, Lea County, New Nazico.

Yours very truly,

THE PURE OIL CONTAIN

H. E. Rosmand Chief Cherk

Total

hr. W. F. Schafer

Mr. H. G. Teague

File

Signal Oil & Gas Company

Mr. Ray Diemer

801 Wileo 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 2015

Hobbs, New Mexico

Budget Bureau 42-R358.5. Approyal expires 12-31-55.

Feb. 1	<b>881</b> a 951)		
		*****	

(SUBMIT IN TRIPLICATE)

HOURS OF FICE WHITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office	Secte	Fe,	H.M
Lease No	06560	7	
Unit			

	1959 JA	N SS Weddel	AL SURVEY			
	SUNDRY I	NOTICES AN	D REPOR	RTS ON V	VELLS	
NOTICE OF	F INTENTION TO DRILL		SUBSEQUENT REP	ORT OF WATER SHUT	-OFF	
NOTICE OF	INTENTION TO CHANGE PLA	vs	SUBSEQUENT REP	ORT OF SHOOTING O	R ACIDIZING	
NOTICE OF	FINTENTION TO TEST WATER	SHUT-OFF.	SUBSEQUENT REP	ORT OF ALTERING CA	SING	
NOTICE OF	INTENTION TO RE-DRILL OR	REPAIR WELL	SUBSEQUENT REPO	ORT OF RE-DRILLING	OR REPAIR	
	FINTENTION TO SHOOT OR A			ORT OF ABANDONMEN		
NOTICE OF	FINTENTION TO PULL OR ALT FINTENTION TO ABANDON WE	ш	SUPPLEMENTARY	WELL HISTORY		
		ABOVE BY CHECK MARK NAT	URE OF REPORT, NO	TICE, OR OTHER DATA	)	
				Jennary 2.	:	. 19 <b>59</b>
Well No.	is located	660 ft. from.	line and	<b>532</b> ft. from {	$\left\{\begin{array}{c} \mathbf{E} \\ \mathbf{z} \end{array}\right\}$ line of sec.	Ł
Mil.	WA.	7-20-8 7-	1 S-1			
04	Sec. and Sec. No.)	(Twp.) (Ran	ge)	(Meridian)		
allde	(Field)	(County or Eut	diridan)	/Gtate	or Territory)	
The eleva	tion of the derrick flo		sft. OF WORK			
State names	of and expected depths to ob	jective sands; show sizes, we	ights, and lengths	of proposed casings;	ndicate mudding jo	bs, cement-
		ing points, and all other	imperta <b>nt proposed</b>	work)		
Rosseo 300 se seet e tool s	two stage IV too loke TN imoor on meent. Pumped p & 3510, 2nd sta	ing w/ coming at 1 set at 3510' ment, 25% attracts ing to 1738', ma ge communited w/ 2 surface his hours	one set at l conessed la erute u/ di crisum and i 200 seeks 5 1400, Test	SCA SCA, 1 A stage thr gold ached land present 0-50 income ad 9-5/8° o	iost celler shoe at id and 200 sec	at 1735', Ol with des incom second DV gel adde
	and that this plan of work my				•	
Address	New SQ					~"·
	Bidland, Ton	LINE .	By	10.8.	- Kienowa	

U. S. GOVERNMENT PRINTING OFFICE 16-8437-5

N. J. Townsend

Title .....

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

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Pederal "C"

(SUBMIT IN TRIPLICATE)

#### UNITED STATES: DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Office	e, A.
Lease No. C. 065607	
Unit	

#### CHANDRY NOTICES AND DEPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF ALTERING CASING
Spend & set serface essing	ARK NAT	TURE OF REPORT, NOTICE, OR OTHER DATA)

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

(Field) (County or Subdivision)

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, cement-ing points, and all other important proposed work)

Sped 12-1/h" hole 6:30 AM 12-27-58, drilled to 505° in red beds, resend 12-1/h" hole to 17-1/2" from 0° to 505°. Ran h99° of 13-3/8" OD easing with Ouide Shoe set at h99° ECF, three sets contralisers installed. Commented 13-3/8" coming with 525 sacks Portland Nost Coment. Pumped plug to 1661, meximum pressure 2500. Had coment returns to surface, 21 hours NOC. Test 13-3/8" sasing, control equipment and coment with 18000, held 30 minutes OK.

Drilled 505 - 1:068 red bads, ambydrite, salt, delcuite, lime and sand,

		by the Geological Survey before operations may be commenced.
Company	The Pure Cil Campany	
Address	Page 673	
	Midland, Turas	By W. E. Journe
		Title Chief Clerk
		GPO 9 18 507

turks fo, and, (SUBMIT IN TRIPLICATE) UNITED STATES Unit

# Subje of this

EPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

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> </u>	

	(INDICAT	E ABOVE BY CHECK	MARK NATURE OF RE	PORT. NOTICE, OR OTHER DATA)	
				incustor 11	1958
Well No.	is locate	ed <b>660</b> ft. 1	from N line	and 1982 ft. from E lin	e of sec. 🐁
34/4	113/L	1-20-6	*-36-8	aver 4	
#113mm	ield)	(Twp.)	(Range) unty or Subdivision)	(Meridian)	Cory)
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U. S. GOVERNMENT PRINTING OFFICE 16-8437-5

Title at the same

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Approval is subject to the following condition:

1. That the 5½n casing be comented with sufficient cement to protect any porous zones below the base of the 8 5/8n casing, as determined by this office from information obtained in drilling of the well.

32	R 34 E	34
		H.A. Peterson
Pure	Signal	
E Cána	U. S. A.	0 1 1 2 53 U.S.A.
State	N. 89° 52' E.	
Pure	80 Ch. wi 1982 S.89°57 Pure "C"	
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<i>U.S.A.</i>	Hudson & Hudson;  ### Total Lease Ac.802.4  U.S.A.  80.26 Ch.  N. 89°48' W.  Pure	U. S. A.  Texaco-Seaboard
Pure	T die	1
U. S. A.	U.S.A.	<i>U.S.A.</i>
as shown hereo	pistered Professional Engineer, do hereby certify that it was made by actual measurement upon the ground Registered Profession State of Jexas  The Pure Oil Co.  FEDERAL "C" LEAS 802. 4 Acres  AT-SEC.4,T-20-S- R-34-E, OF THE NEW MEXICO PRICE COUNTY, NEW MEXICO PRICE COUNTY, NEW MEXICO	RECEIVED  RECEIVED  DEC 181958  U. S. GEOLOGICAL SURVEY  HOBBS, NEW MEXICO  RINCIPAL MERIDIAN
	Scale: 4 inches = One Mile	
THE PIL	RE OIL CO.	DATE 12-5-58
TEXAS PROD	UCING DIVISION CHK. APPROVED:	

Page 229 of 242
Page 62 of 31
Form C-128
Revised 5/1/57

#### NEW MEXICO OIL CONSERVATION COMMITTED IN

Well Location and Acreage Dedication Plat

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Unit Letter Feet From G. L.	Section Line,	Town	ship F Feet From icated Acreage	ange N
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Owner		Land	Description	
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1		1		sentative)
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			well locat plat in Se from field surveys ma my supervi same is tr	certify that the ion shown on the ction B was plot notes of actual de by me or under sion and that the ue and correct to my knowledge as
1		]		red 12-3-58
	Unit Letter Feet From G. L.  ing Formation rator the only own No wer to question on ed by communitizat e of Consolidation wer to question tw	Unit Letter Section Feet From Line, G. L. Elevation ing Formation rator the only owner* in the deleter to question one is "no," have deleter to question two is "no," li	Unit Letter Section Town Feet From Line,  G. L. Elevation Ded ing Formation Poor rator the only owner* in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Ded ing Formation Poor rator the only owner* in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Town Were to question one is "no," have the interese of Consolidation Poor rator the only owner in the dedicated acrea No Section Town The provided Head of the poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the only owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the dedicated acrea No Section Poor rator the owner in the ow	Unit Letter Section Township Reet From Line Feet From One Line Feet From Pool Pool Pool Pool Pool Pool Pool Po

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#### 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 plate 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

Exhibit A

<sup>\* &</sup>quot;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.

1220 South St. Francis Drive | Santa Ne, New Mexico 87505 Released to Imaging: 9/5/2023 4:23:56 PM © 476-3440 • Fax (505) 476-3462 • email: www.emnrd.state.nm.us/ocd

Released to Imaging: 10/13/2023 8:02:18 AM

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:

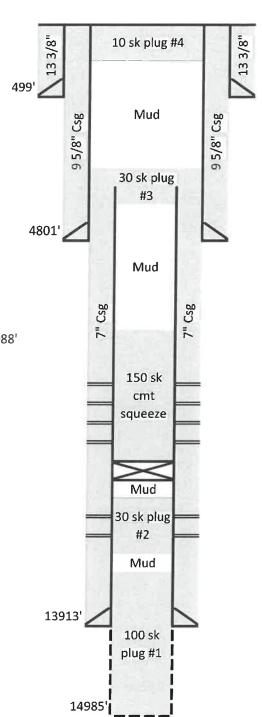
Oil Conservation Division – Hobbs District Office Bureau of Land Management – Carlsbad Field Office Administrative Application pWVJ1513562666 VI.

# 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)

eters) (In feet)

water right file.)	ciosea)	(quai	ter	Sa	ie:	Siliai	iest ic	iargest)	(NADOS	O I Wi III III eters)		(III leet)	
	POD												
POD Number	Sub- Code basin	County		Q			Two	Pna	х	Y		Depth Water (	
CP 00654 POD1	CP CP	LE	04				20S		640103	3605947*	60	Water	Joidini
CP 00655 POD1	СР	LE		3	1	14	208	34E	637294	3605108*	210		
CP 00656 POD1	СР	LE	4	4	4	04	208	34E	635342	3607391*	225		
CP 00657 POD1	СР	LE		3	3	17	208	34E	632465	3604239*	165		
CP 00665	CP	LE		1	4	24	208	34E	639740	3603128*	698	270	428
CP 00750 POD1	СР	LE		3	4	07	20S	34E	631639	3605834*	320		
CP 00799 POD1	СР	LE	4	3	4	34	20S	34E	636666	3599364*	100		
CP 00800 POD1	СР	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	205	34E	637134	3600204	1255	758	497
CP 01289 POD1	CP	LE	4	4	2	34	208	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	208	34E	638402	3599879 🌑	1253	733	520
CP 01335 POD1	CP	LE	4	1	4	35	208	34E	638205	3599736	1307	735	572
CP 01352 POD1	СР	LE	3	1	4	34	20S	34E	636559	3599716	1270	785	485
CP 01389 POD1	СР	LE	1	1	1	34	208	34E	635726	3600733 🌑	1250	1005	245
CP 01860 POD1	СР	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	СР	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	СР	LE	1	2	4	20	205	34E	633513	3603245	220		

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.

<sup>\*</sup>UTM location was derived from PLSS - see Help

Received by OCD: 10/12/2023 11:33:42 PM Received by OCD: 9/5/2023 2:37:30 PM1 Page 236 of 242
Page 69 of 71

Average Depth to Water: 702 feet

Minimum Depth: 270 feet

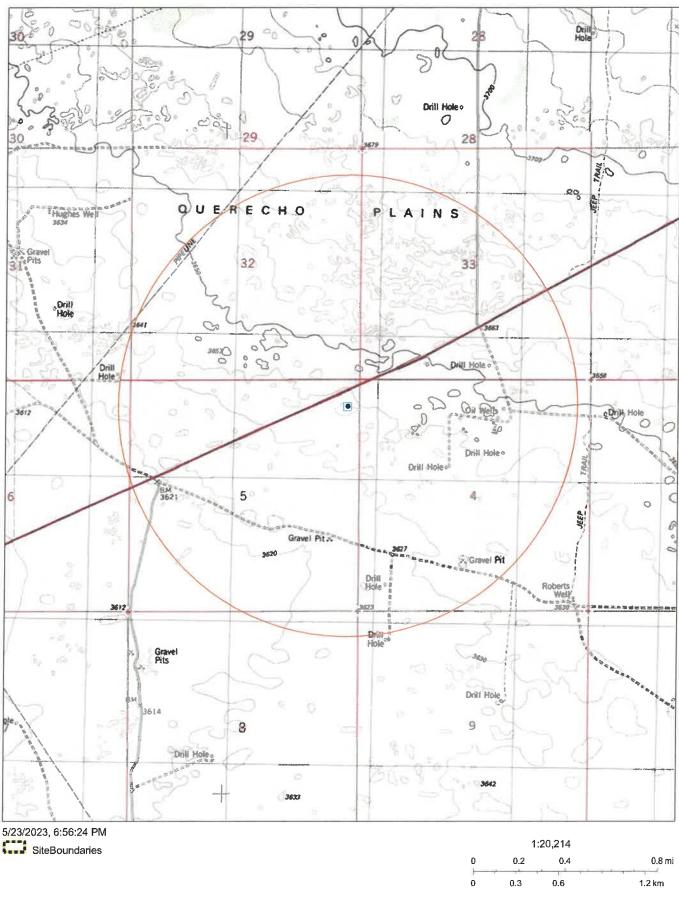
Maximum Depth: 1005 feet

Record Count: 21

PLSS Search:

Township: 20S Range: 34E

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



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Action 241804

CONDITIONS

<u>District I</u> 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

Operator: Permian Oilfield Partners, LLC	OGRID: 328259
PO Box 3329 Hobbs, NM 88241	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

#### **PS Form 3877**

## Type of Mailing: CERTIFIED MAIL 09/28/2023

SEP 28 2023

Firm Mailing Book ID: 253198

				14			Reference
Line	<b>USPS Article Number</b>	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue Notice
14	9314 8699 0430 0112 5852 46		\$3.03	\$4.35	\$2.20	\$0.00	10053.001 overdue Notice
15	9314 8699 0430 0112 5852 53		\$3.03	\$4.35	\$2.20	\$0.00	10053.001 overdue



Pag Pag 2023 Walz CertifiedPro. no. 44

#### **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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue Notice
21	9314 8699 0430 0112 5853 14			\$3.03	\$4.35	\$2.20	\$0.00	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	10053.001 overdue 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	<u> </u>		\$3.03	\$4.35	\$2.20	\$0.00	10053.001overdue Notice
			Totals:	\$87.87	\$126.15	\$63.80	\$0.00	
					Gran	d 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

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314869904300112585338	2023-09-28 7:55 AM	10053.001overdue	Matador Resources Company	c/o Kyle Perkins	Dallas	TX	75240	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-03 12:00 AN 2023-10-02 12:00 AN
314869904300112585321	2023-09-28 7:55 AM	10053.001overdue	Marathon Oil Co.		Houston	TX	77024	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 12:00 AM 2023-10-04 12:10 PM
314869904300112585314	2023-09-28 7:55 AM	10053.001overdue	Magnum Hunter Production Inc.		Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail	2023-10-04 12:10 PN
314869904300112585307	2023-09-28 7:55 AM	10053.001overdue	Lindy's Living Trust		Fort Worth	TX	76109	To be Returned	Return Receipt - Electronic, Certified Mail	
314869904300112585291	2023-09-28 7:55 AM	10053.001overdue	Lincoln Oil & Gas LLC		Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	2022 10 02 12 44 04
314869904300112585284	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	2023-10-02 12:44 PM
314869904300112585277	2023-09-28 7:55 AM	10053.001overdue	Lee Wiley Moncrief Trust		Fort Worth	TX	76113	Delivered	Return Receipt - Electronic, Certified Mail	2022 42 05 7 44 44
314869904300112585260	2023-09-28 7:55 AM	10053.001overdue	Javelina Partners		Forth Worth	TX	76102	Mailed	Return Receipt - Electronic, Certified Mail	2023-10-05 7:44 AM
314869904300112585253	2023-09-28 7:55 AM	10053.001overdue	Jack V. Walker Revocable Trust		Anchorage	AK	99510	Delivered		
314869904300112585246	2023-09-28 7:55 AM	10053.001overdue	Hyde Oil & Gas Corp.		Fort Worth	TX	76116	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 11:02 AN
314869904300112585239	2023-09-28 7:55 AM	10053.001overdue	Hudson Oil Company of Texas		Fort Worth	TX	76102	Mailed	Return Receipt - Electronic, Certified Mail	2023-10-02 12:51 PM
314869904300112585222	2023-09-28 7:55 AM	10053.001overdue	Fasken Land & minerals LTD		Midland	TX	79701	Mailed	Return Receipt - Electronic, Certified Mail	
314869904300112585215	2023-09-28 7:55 AM	10053.001overdue	Delmar Hudson Lewis Living Trust		Fort Worth	TX	76113	Delivered	Return Receipt - Electronic, Certified Mail	
314869904300112585208	2023-09-28 7:55 AM	10053.001overdue			Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-05 7:44 AM
314869904300112585192	2023-09-28 7:55 AM	10053.001overdue			Midland	TX	79701		Return Receipt - Electronic, Certified Mail	2023-10-03 8:15 AM
314869904300112585185	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
314869904300112585178	2023-09-28 7:55 AM	10053.001overdue	Chesapeake Exploration LLC		Oklahoma City			Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 1:13 PM
314869904300112585161	2023-09-28 7:55 AM	10053.001overdue	Bureau of Land Management		Carlsbad	OK NM	73118	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-02 6:52 AM
314869904300112585154	2023-09-28 7:55 AM	10053.001overdue	Black Hills Gas Resources, Inc.				88220	Delivered	Return Receipt - Electronic, Certified Mail	
314869904300112585147	2023-09-28 7:55 AM	10053.001overdue	Balog Family Trust		Rapid City	SD	57702	To be Returned	Return Receipt - Electronic, Certified Mail	
314869904300112585130	2023-09-28 7:55 AM	10053.001overdue	= :		Anchorage	AK	99504	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-10 12:17 PM
314869904300112585123	2023-09-28 7:55 AM	10053.001overdue	Apache Corporation		Pampa	TX	79066	Mailed	Return Receipt - Electronic, Certified Mail	
314869904300112585116	2023-09-28 7:55 AM	10053.001overdue	Advance Energy Partners Hat Mesa LLC		Houston	TX	77056	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-04 11:09 AN
	AND AND AND AND AND AND AND AND AND AND	10000.0010461006	Advance chargy rattners mat iviesa LLC		Houston	TX	77077	Delivered	Return Receipt - Electronic, Certified Mail	2023-10-04 4:08 PM

EXHIBIT

Cappies

#### **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** 

OF NEW MEXICO anuary 25 **NOTARY PUBLIC** Seal) GUSSIE RUTH BLACK **COMMISSION # 1087528** COMMISSION EXPIRES 01/29/2027

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

#### LEGAL NOTICE 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.; Baiog Family Trust; Black Hills Gas Resources, Inc.; Bureau of Land Menagement; Chesapeake Exploration, LLC; Cimerex Energy Co.; Cimerex Energy Co. of Colorado; COG Operating LLC; Delmar Hudsen Lewis Living Trust; Fasken Land & Minerals LTD; Hudson Oll Company of Texas; Hyde Oll & Gas Cop; Jack V. Walker Revocable Trust; Laveline Partners; Lee Wiley Moncrief Trust; Lewis H. Delmar Living Trust; Lincoln Oll and Gas LLC; Lindy's Living Trust; Magnum Hunter Production Inc.; Marathon Oll Co.; Mewbourne Oll Co.; New Mexico State Land Office; Pennzenergy Exploration and Production LLC; Read & Stevens Inc.; Select Agua Libre Midstream, LLC; Zorro Partners LTD; Matador Resources Co. of Application of Permian Olifield 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 <a href="https://www.emnrd.nm.gov/ocd/hearing-Info/">https://www.emnrd.nm.gov/ocd/hearing-Info/</a>. 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 bbis per day. Sald area is located approximately 18 miles west of Monument, New Mexico.

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

**EXHIBIT** 

Exhibit 4.D