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

PERMIAN OILFIELD PARTNERS, LLC EXHIBITS
JUNE 13, 2019 HEARING

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

CASE NO. 20571
(BULLSEYE FEDERAL)

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

CASE NO. 20572
(CARPET BOMB)

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

CASE NO. 20573
(JDAM FEDERAL)

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

CASE NO. 20574
(VORTEX)

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

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

CASE NO. 21021

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 Bullseye Federal SWD Well #1 well at a surface location 1,318 feet from the North line and 250 feet from the East line of Section 6, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,453' to 18,880'.

(3) Permian further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian anticipates using an average injection pressure of 2,000 psi for this well and it requests approval of a maximum injection pressure of 3,491 psi for the well.

(5) On or about April 26, 2019, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

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

(7) The New Mexico State Land Office submitted a protest with respect to Permian's administrative application. Permian discussed the State Land Office's protest with the State Land Office. The State Land Office requested that Permian submit an application for hearing before a Division Examiner for this matter.

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

(9) A proposed C-108 for the subject well is attached hereto in Attachment A.

(10) 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 June 13, 2019; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

By: _____

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500 Fourth Street NW, Suite 1000
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Attorneys for Applicant

CASE NO. _____: Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Bullseye Federal SWD Well #1 well at a surface location 1318 feet from the North line and 250 feet from the East line of Section 6, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,453' to 18,880'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 24.2 miles West of Jal, New Mexico.

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Permian Oilfield Partners, LLC. **OGRID Number:** 328259
Well Name: Bullseye Federal SWD #1 **API:** 30-025-Pending
Pool: SWD; Devonian-Silurian **Pool Code:** 97869

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

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ■ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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

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

Sean Puryear
Print or Type Name

Date

(817) 600-8772
Phone Number

Signature

spuryear@pqpmidstream.com
e-mail Address

EXHIBIT A

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 1220, Stephenville, TX. 76401**

CONTACT PARTY: **Sean Puryear** PHONE: **(817) 600-8772**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Sean Puryear** TITLE: **Manager**

SIGNATURE: DATE: 4-24-2019

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

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

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

Side 2

III. WELL DATA

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

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

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

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

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

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

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

Additional Data

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 15,092'

   Underlying Potentially Productive Zones:
   None

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC.
Bullseye Federal SWD #1
1318' FNL, 250' FEL
Sec. 6, T25S, R33E, Lea Co. NM
Lat 32.1632607° N, Lon 103.6036389° W
GL 3478', RKB 3508'

Surface - (Conventional)

Hole Size: 26" Casing: 20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top: Surface
Depth Btm: 1465'
Cement: 1007 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size: 17.5" Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 4935'
Cement: 1682 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size: 12.25" Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12129' ECP/DV Tool: 5035'
Cement: 2390 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)

Intermediate #3 - (Liner)

Hole Size: 8.5" Casing: 7.625" - 59# HCL-80 FJ Casing
Depth Top: 11929'
Depth Btm: 17459'
Cement: 261 sks - Lite Class C (60:40:0) + Additives
Cement Top: 11929' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size: 6.5" Depth: 18580'
Inj. Interval: 17455' - 18580' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 17408' Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 11929'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17418' Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Bullseye Federal SWD #1
1318' FNL, 280' FEL
Sec. 6, T25S, R33E, Lea Co. NM
Lat 32.1631607° N, Lon 103.6936389° W
GL 3478', RKB 3508'

Surface - (Conventional)

Hole Size:	26"
Casing:	20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	1465'
Cement:	1007 sks - Class C + Additives
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	17.5"
Casing:	13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	4935'
Cement:	1682 sks - Lite Class C (50:50:10) + Additives
Cement Top:	Surface - (Circulate)

Intermediate #2 - (Conventional)

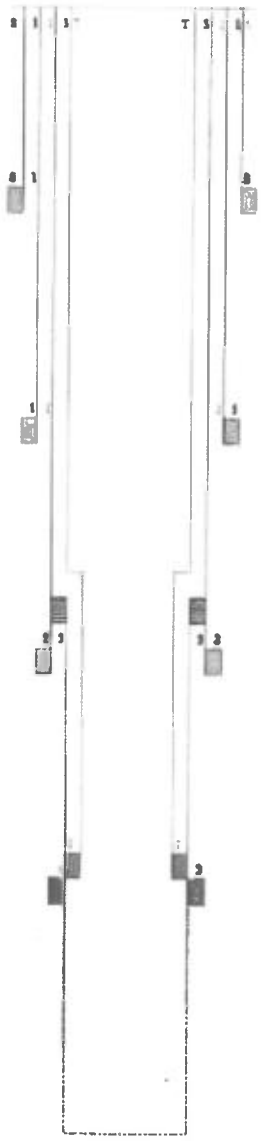
Hole Size:	12.25"
Casing:	9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top:	Surface
Depth Btm:	12129'
Cement:	2090 sks - Lite Class C (60:40:0) + Additives
Cement Top:	Surface - (Circulate)
ECP/DV Tool:	5035'

Intermediate #3 - (Liner)

Hole Size:	8.5"
Casing:	7.625" - 39# HCL-80 FJ Casing
Depth Top:	11929'
Depth Btm:	17453'
Cement:	261 sks - Lite Class C (60:40:0) + Additives
Cement Top:	11929' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size:	6.5"
Depth:	18880'
Inj. Interval:	17453' - 18880' (Open-Hole Completion)



Tubing - (Tapered)

Tubing Depth: 17408'

Tubing:	7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth:	11929'
X/O:	7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth:	17418'
Packer:	5.5" - Perma-Pak or Equivalent (Inconel)

VI: There are no wells within the proposed wells area of review that penetrate the Devonian Formation.

VII:

1. The average injected volume anticipated is 40,000 BWPD
   The maximum injected volume anticipated is 50,000 BWPD

2. Injection will be through a closed system

3. The average injection pressure anticipated is 2,000 psi
   The proposed maximum injection pressure is 3,491 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 Go-Tech's website and are listed below.

WELL NAME	FIGHTING OKRA 18 FEDERAL COM #001H	SALADO DRAW 6 FEDERAL #001H	RATTLESNAKE 13 12 FEDERAL COM #001H	SNAPPING 2 STATE #014H
api	3002540382	3002541293	3002540912	3001542688
latitude	32.0435333	32.0657196	32.0369568	32.06555986
longitude	-103.5164566	-103.5146942	-103.416214	-103.7413815
section	18	6	13	2
township	26S	26S	26S	26S
range	34E	34E	34E	31E
unit	E	M	P	P
ftgns	2590N	200S	330S	250S
ftgew	330W	875W	330E	330E
county	Lea	Lea	Lea	EDDY
state	NM	NM	NM	NM
formation	AVALON UPPER	BONE SPRING 3RD SAND	DELAWARE-BRUSHY CANYON	WOLFCAMP
sampledate	42046	41850	41850	42284
ph	8	6.6	6.2	7.3
tds_mgL	201455.9	99401.9	243517.1	81366.4
resistivity_ohm_cm	0.032	0.064	0.026	0.1004
sodium_mgL	66908.6	34493.3	73409.8	26319.4
calcium_mgL	9313	3295	15800	2687.4
iron_mgL	10	0.4	18.8	26.1
magnesium_mgL	1603	396.8	2869	326.7
manganese_mgL	1.6	0.37	3.12	
chloride_mgL	121072.7	59986.5	149966.2	50281.2
bicarbonate_mgL	1024.8	109.8	48.8	
sulfate_mgL	940	710	560	399.7
co2_mgL	1950	70	200	100

5. Devonian water analysis from the area of review is unavailable. Representative area water analyses were sourced from Go-Tech's website and are listed below.

WELL NAME	ANTELOPE RIDGE UNIT #003	BELL LAKE UNIT #006
api	3002521082	3002508483
latitude	32.2593155	32.3282585
longitude	-103.4610748	-103.507103
sec	34	6
township	23S	23S
range	34E	34E
unit	K	O
ftgns	1980S	660S
ftgew	1650W	1980E
county	LEA	LEA
state	NM	NM
field	ANTELOPE RIDGE	BELL LAKE NORTH
formation	DEVONIAN	DEVONIAN
samplesource	UNKNOWN	HEATER TREATER
ph	6.9	7
tds_mgL	80187	71078
chloride_mgL	42200	47900
bicarbonate_mgL	500	476
sulfate_mgL	1000	900

VIII: Injection Zone Geology

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 carbonates & chert, followed by the Upper Silurian dolomites, and the Lower 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 8%, 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 migrations to USDW's, 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.

Permian Oilfield Partners, LLC.
Bullseye Federal SWD #1
1318' FNL, 250' FEL
Sec. 6, T25S, R33E, Lea Co. NM
Lat 32.1632607° N, Lon 103.6036389° W
GL 3478', RKB 3508'

GEOLOGY PROGNOSIS			
FORMATION	TOP KB TVD (ft)	BOTTOM KB TVD (ft)	THICKNESS (ft)
Salt	1,440	4,758	3,318
Delaware	4,910	9,086	4,176
Bone Spring	9,086	12,079	2,993
Wolfcamp	12,079	13,185	1,106
Lwr. Mississippian	16,751	17,208	457
Woodford	17,208	17,418	210
Devonian	17,418	18,295	877
Fusselman (Silurian)	18,295	18,905	610
Montoya (U. Ordovician)	18,905	19,554	649
Simpson (M. Ordovician	19,554	20,126	572

2. According to the New Mexico Office of the State Engineer, there is 1 fresh water well within the proposed well's one-mile area of review indicating the presence of freshwater at depths less than 150'. Regionally, shallow fresh water is known to exist at depths less than 750'. There is one well in the region that shows fresh water to 1533', which is deeper than the estimated top of salt, but does not show TD, leading us to suspect that there may be a recording error in the well data, where well TD and depth of water were recorded incorrectly. Casing design on this well includes surface casing to a depth of 1465', which may be excessive, but will ensure ground water protection. There are no underground sources of fresh water present below the injection interval.

IX: Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.

X: A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.

XI: According to the New Mexico Office of the State Engineer, there is 1 fresh water well within the proposed well's one-mile area of review. Attempts were made to sample the below listed well but the well was capped off.

Well Name	Formation Name	Depth Top	Depth Bottom	Thickness	Status
C 02312	None Given	60'	150'	90'	Capped

XII: Hydrologic affirmative statement attached.

XIII: Proof of notice and proof of publication attached.

PERMIAN OILFIELD PARTNERS

Item XII. Affirmative Statement

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Bullseye Federal SWD #1
Sec. 6, Twp. 25S, Rge. 33E
1318' FNL, 250' FEL
Lea County, NM

Permian Oilfield Partners, LLC. has 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.

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 4/24/2019

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-	97869	SWD; DEVONIAN-SILURIAN

4 Property Code	5 Property Name	6 Well Number
	BULLSEYE FEDERAL SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
328259	PERMIAN OILFIELD PARTNERS LLC	3478'

10 Surface Location

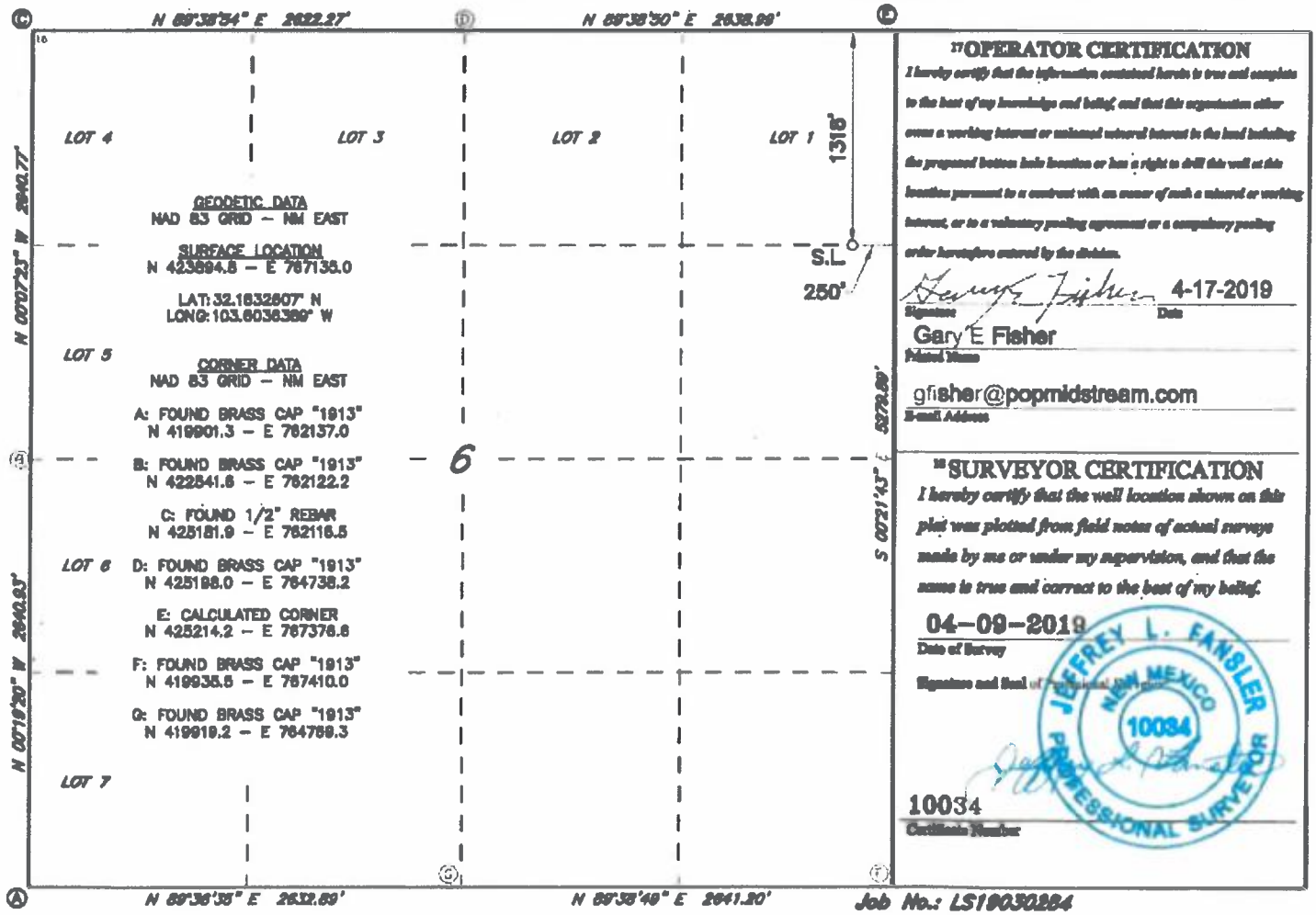
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
1	6	25S	33E		1318	NORTH	250	EAST	LEA

11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Gary E Fisher 4-17-2019
Signature Date

Gary E Fisher
Printed Name

gfisher@popmidstream.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

04-09-2019
Date of Survey

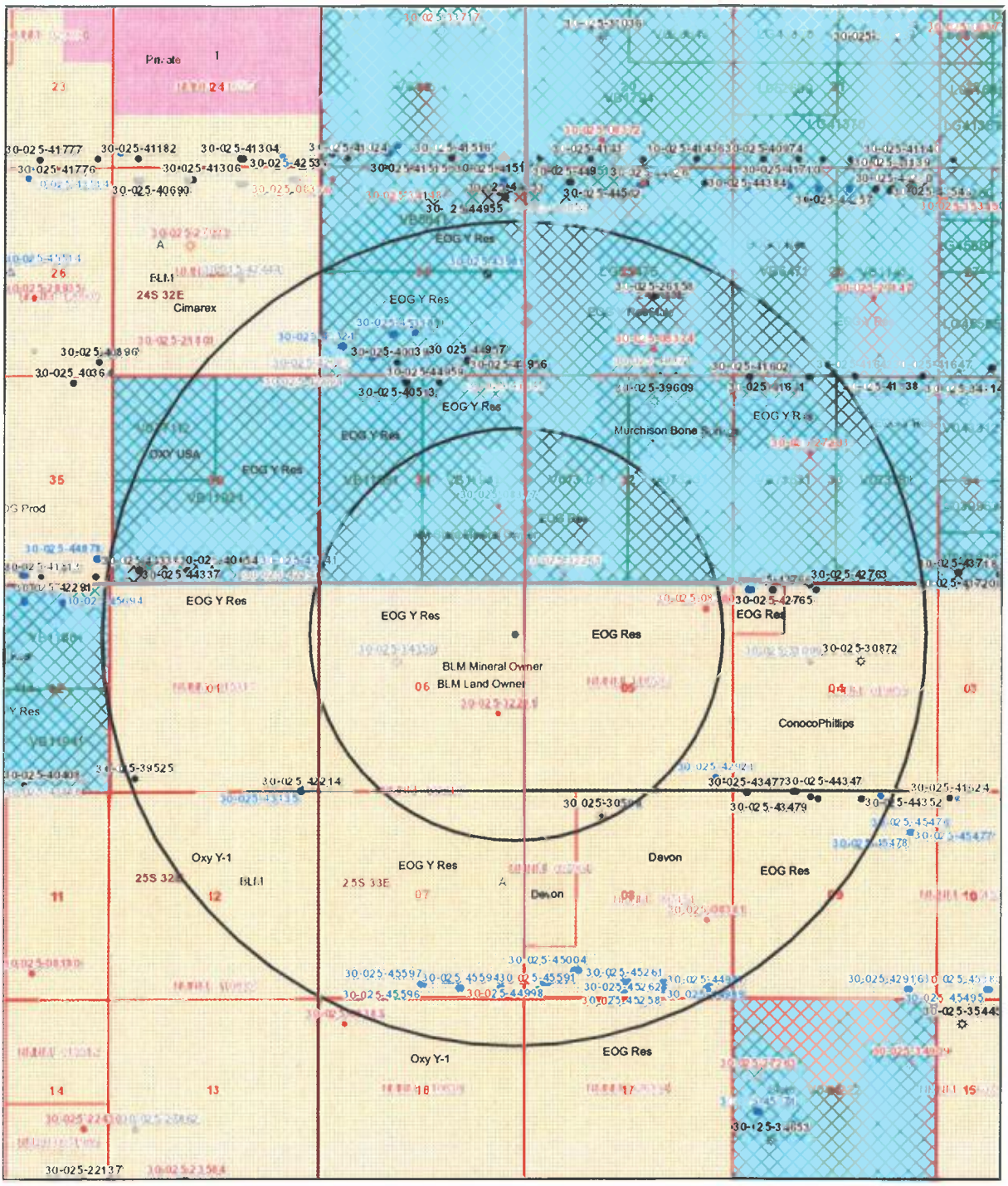
Signature and Seal of Professional Surveyor

JEFFREY L. EANSLER
NEW MEXICO
10034
PROFESSIONAL SURVEYOR

10034
Certificate Number

Job No.: LS19030284

1 & 2 Mile AOR, Bullseye Federal SWD #1



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1:36,112

0 0.35 0.7 1.4 mi

0 0.5 1 2 km

- Override 1

Well Locations - Small Scale
- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2, Plugged
- CO2, Temporarily Abandoned

- Gas Active
- Gas, Cancelled, Never Drilled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New

- Oil, Plugged
- Oil, Temporarily Abondoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water InjectionTemporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged
- Water, Temporarily Abandoned
- PLSS First Division

U.S. BLM

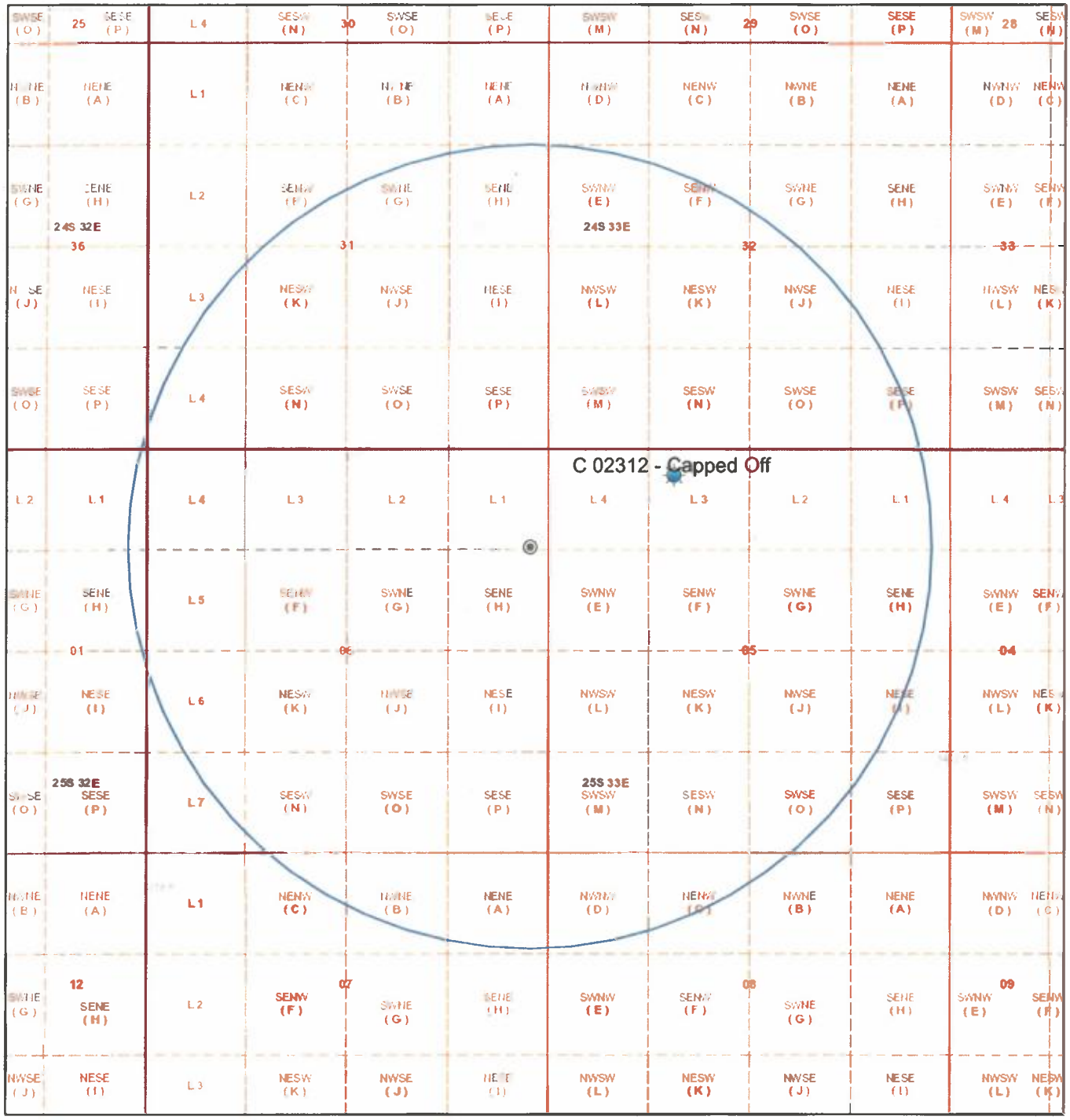
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),

New Mexico Oil Conservation Division

Bullseye 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
30-025-08377	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	31	T24S	R33E	I	I-31-24S-33E 1980 FSL 660 FEL	I-31-24S-33E 1980 FSL 660 FEL	DELAWARE	5130	5130
30-025-08380	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	05	T25S	R33E	A	A-05-25S-33E Lot 1 660 FNL 660 FEL	A-05-25S-33E Lot 1 660 FNL 660 FEL	DELAWARE	5193	5193
30-025-30599	DEVON ENERGY PRODUCTION COMPANY, LP	FLAGLER FEDERAL	#001	Gas	Vertical	Active	08	T25S	R33E	C	C-08-25S-33E 660 FNL 1980 FWL	C-08-25S-33E 660 FNL 1980 FWL	WOLFCAMP	16135	16135
30-025-32231	SANTA FE ENERGY OPERATING PARTNERS L P	COHO 6 FEDERAL	#001	Oil	Vertical	Plugged, Site Released	06	T25S	R33E	I	I-06-25S-33E 1980 FSL 660 FEL	I-06-25S-33E 1980 FSL 660 FEL	BONE SPRING	9200	9200
30-025-32261	EOG Y RESOURCES, INC.	YARN ANY STATE	#001	Oil	Vertical	Cancelled Apd	32	T24S	R33E	M	M-32-24S-33E 330 FSL 990 FWL	M-32-24S-33E 330 FSL 990 FWL	BONE SPRING	9400	9400
30-025-34350	DEVON ENERGY PRODUCTION CO.	GILA 6 FEDERAL	#001	Gas	Vertical	Cancelled Apd	06	T25S	R33E	F	F-06-25S-33E 1980 FNL 1980 FWL	F-06-25S-33E 1980 FNL 1980 FWL	MORROW	16000	16000

Bullseye Federal SWD #1 - Water Wells within 1 Mile AOR



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Override 1

Points

Override 1

Override 2

PLSS First Division

PLSS Second Division

PLSS Townships

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

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

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02308		CUB	LE	1	3	1	10	24S	33E	634953	3567364*	40	20	20
C 02309		CUB	LE	2	2	2	25	24S	33E	639638	3562994*	60	30	30
C 02310		CUB	LE	2	3	2	33	24S	33E	634437	3560918*	120	70	50
C 02311		CUB	LE	2	3	2	33	24S	33E	634437	3560918*	120	70	50
C 02430		CUB	LE	3	3	3	16	24S	33E	633377	3564732*	643	415	228
C 02431		CUB	LE	4	4	4	17	24S	33E	633175	3564728*	525	415	110
C 02432		CUB	LE	4	4	4	17	24S	33E	633175	3564728*	640	415	225
C 02563		CUB	LE	1	4	2	33	24S	33E	634639	3560923*	120		
C 02564		CUB	LE	2	4	2	33	24S	33E	634839	3560923*	120		
C 02890		C	LE		2	4	29	24S	33E	633114	3562012*	500		
C 03565 POD3		CUB	LE		3	4	08	24S	33E	632763	3566546		1533	
C 03591 POD1		CUB	LE	2	1	4	05	24S	33E	632731	3568518			
C 03600 POD1		CUB	LE	2	2	1	26	24S	33E	637275	3563023			
C 03600 POD2		CUB	LE	4	4	1	25	24S	33E	638824	3562329			
C 03600 POD3		CUB	LE	3	4	2	26	24S	33E	637784	3562340			
C 03600 POD4		CUB	LE	3	3	1	26	24S	33E	636617	3562293			
C 03600 POD5		CUB	LE	3	2	4	26	24S	33E	637857	3562020			
C 03600 POD6		CUB	LE	3	1	4	26	24S	33E	637383	3562026			
C 03600 POD7		CUB	LE	3	1	3	26	24S	33E	636726	3561968			
C 03601 POD1		CUB	LE	4	4	2	23	24S	33E	638124	3563937			
C 03601 POD2		CUB	LE	3	2	4	23	24S	33E	637846	3563588			
C 03601 POD3		CUB	LE	1	3	3	24	24S	33E	638142	3563413			
C 03601 POD4		CUB	LE	3	3	3	24	24S	33E	638162	3561375			
C 03601 POD5		CUB	LE	2	4	4	23	24S	33E	637988	3563334			
C 03601 POD6		CUB	LE	1	4	4	23	24S	33E	637834	3563338			
C 03601 POD7		CUB	LE	4	4	4	23	24S	33E	637946	3563170			
C 03602 POD2		CUB	LE	4	4	1	25	24S	33E	638824	3562329			
C 03603 POD1		CUB	LE	3	2	2	35	24S	33E	637805	3561225			
C 03603 POD2		CUB	LE	3	1	2	35	24S	33E	637384	3561167			
C 03603 POD3		CUB	LE	4	1	1	35	24S	33E	636890	3561092			
C 03603 POD4		CUB	LE	3	2	4	35	24S	33E	637789	3560461			
C 03603 POD5		CUB	LE	3	3	2	35	24S	33E	636745	3560767			
C 03603 POD6		CUB	LE	3	1	3	35	24S	33E	636749	3560447			

C 03662 POD1	C	LE	3	1	2	23	24S	33E	637342	3564428	550	110	440
C 03666 POD1	C	LE	2	3	4	13	24S	33E	639132	3565078	650	390	260
C 03679 POD1	C	ED	1	4	2	14	24S	33E	603567	3581547	700	575	125
C 03917 POD1	C	LE	4	1	3	13	24S	33E	638374	3565212	600	420	180
C 04014 POD2	CUB	LE	4	4	2	01	24S	33E	639656	3568917	95	81	14
C 04014 POD3	CUB	LE	2	4	2	01	24S	33E	639497	3569007	95	87	8
C 04014 POD4	CUB	LE	3	4	2	01	24S	33E	639295	3568859	96	86	10
C 04014 POD5	CUB	LE	1	4	2	01	24S	33E	639284	3569086	95	85	10

Average Depth to Water: 300 feet

Minimum Depth: 20 feet

Maximum Depth: 1533 feet

Record Count: 41

PLSS Search:

Township: 24S Range: 33E

*UTM location was derived from PLSS - see Help

4/20/19 12:13 PM WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02270		CUB	LE	1	1	2	27	26S	33E	636063	3543722	150	125	25
C 02273		CUB	LE		1	2	21	26S	33E	634549	3545134*	160	120	40
C 02285 POD1		CUB	LE	1	4	4	03	26S	33E	636613	3548855	220	220	0
C 02286		CUB	LE	3	4	4	03	26S	33E	636470	3548714	220	175	45
C 02287		C	LE	3	4	4	03	26S	33E	636427	3548708	220		
C 02288		CUB	LE	4	4	4	03	26S	33E	636646	3548758	220	180	40
C 02289		CUB	LE	4	4	4	03	26S	33E	636612	3548675*	200	160	40
C 02290		CUB	LE	4	4	4	03	26S	33E	636538	3548770	200	160	40
C 02293		CUB	LE	2	2	1	14	26S	33E	637501	3546975	200	135	65
C 02294		CUB	LE	4	4	3	11	26S	33E	637465	3547003	200	145	55
C 02295		CUB	LE	2	2	4	12	26S	33E	639850	3547710*	250	200	50
C 03577 POD1		CUB	LE	3	3	3	22	26S	33E	636010	3543771	750	110	640
C 03596 POD1		C	LE	3	3	4	22	26S	33E	636017	3543756	225		

Average Depth to Water: 157 feet

Minimum Depth: 110 feet

Maximum Depth: 220 feet

Record Count: 13

PLSS Search:

Township: 26S Range: 33E

*UTM location was derived from PLSS - see Help

4/20/19 12:08 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Twn	Rng	(NAD83 UTM in meters) X	Y
	C 02312	1	2	1	05	25S	33E	632241	3559687*

Driller License:		**Driller Company:**			
Driller Name:	UNKNOWN				
Drill Start Date:	01/01/0948	**Drill Finish Date:**	06/30/1948	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	20 GPM
Casing Size:	6.38	**Depth Well:**	150 feet	**Depth Water:**	90 feet

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

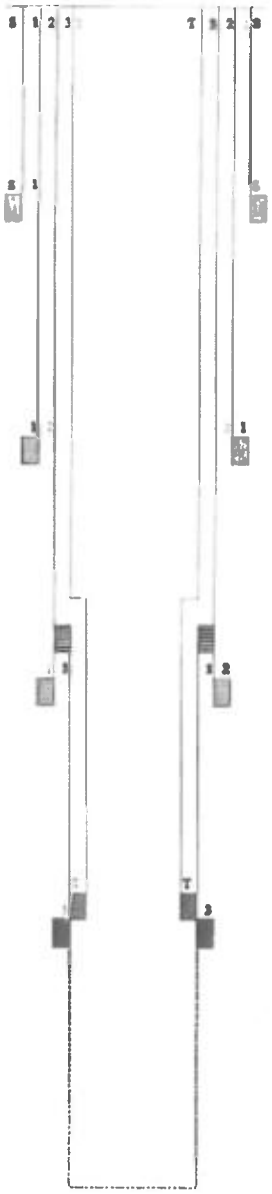
21

Plugging Risk Assessment

Permian Oilfield Partners, LLC.
Bullseye Federal SWD #1
SL: 1318' FNL & 250' FEL
Sec 6, T25S, R33E
Lea County, New Mexico

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Bullseye Federal SWD #1
1318' FNL, 250' FEL
Sec. 6, T25S, R33E, Lea Co. NM
Lat 32.1632607° N, Lon 103.6036389° W
GL 3478', RKB 3506'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top: Surface
Depth Btm: 1465'
Cement: 1007 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 4935'
Cement: 1682 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)
Hole Size: 12.25"
Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12129'
Cement: 2090 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5035'

Intermediate #3 - (Liner)
Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 11929'
Depth Btm: 17453'
Cement: 261 sks - Lite Class C (60:40:0) + Additives
Cement Top: 11929' - (Volumetric)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 18880'
Inj. Interval: 17453' - 18880' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 17408'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 11929'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17418'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

7" UFJ Tubing Inside of 9 ⅝" 40# Casing

Bowen Series 150 Releasing and Circulation Overshots
Maximum Catch Size 5⅞" to 7⅜" Inclusive

Maximum Catch Size (Spiral)		6⅝	6¾	7	7⅜
Maximum Catch Size (Basket)		5⅞	6⅛	6⅝	6⅝
Overshot O.D.		8⅝	7⅝	8⅛	8⅝
Type		F.S.	S.H.	S.H.	S.H.
Complete Assembly	Part No.	C-3032	C-5222	9217	C-5354
(Dressed Spiral Parts)	Weight	280	243	251	260
Replacement Parts					
Top Sub	Part No.	A-3833	A-5223	9218	A-5355
Bowl	Part No.	B-3834	B-5224	9219	B-5356
Packer	Part No.	A-1814	B-5225	9224	B-5357
Spiral Grapple	Part No.	N-84	B-5227	9222	B-5359
Spiral Grapple Control	Part No.	M-89	A-5228	9223	B-5360
Standard Guide	Part No.	A-1818	A-5229	9226	A-5361
Basket Parts					
Basket Grapple	Part No.	N-84	B-5227	9222	B-5359
Basket Grapple Control	Part No.	M-89	A-5228	9223	B-5360
Mill Control Packer	Part No.	A-1814-R	B-5225-R	9224-R	B-5357-R

A 6.375" O.D. Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

7" 26# FJ Casing Inside 9.625" 40# BTC Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.840	9 5/8	40.0	L-80	BTC	Casing	9.625	10.625	8.835	8.679	-	-	-	-
	7	26.0	HCP-110	FJ	Casing	7.000	7.000	6.276	6.151	28.500	6.080	5.940	5.815

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

5 ½" UFJ Tubing Inside of 7 ⅝" 39# Casing

Seri 150 Oversh s

Tools are listed in order of maximum catch size.

The following table shows only a partial listing of available NOV Downhole Bowen® overshots.

NOTE: Nitralloy Grapples are available upon request.

Maximum Catch Size (Inches)								
Maximum Catch Size (Inches)								
Overshot O.D.		5¾	5¾	5¾	5¾	5¾	6¾	6¾
Type		F.S.	S.H.	S.H.	S.F.S.	S.H.	F.S.	S.H.
Complete Assembly	Part No.	5000	5000	C-5150	5075	C-5171	C-4825	5022
(Recommended Optional Parts)	Weight	130	130	135	135	140	102	153
Replacement Parts								
Top Sub	Part No.	5007	5009	A-5150	5075	A-5172	B-4829	5020
Bowl	Part No.	5008	5760	B-5170	5077	B-5173	B-4827	5017
Packer	Part No.	169	1140	B-2150	5114	L-5030	L-4505	5019
Spiral Grapple	Part No.	165	1135	B-5201	5112	B-4350	M-1671	5519
Spiral Grapple Control	Part No.	166	1137	B-5202	5113	B-4370	M-1672	5520
Standard Guide	Part No.	167	1143	B-2200	5121	B-4371	L-1074	5021
Basket Parts								
Basket Grapple	Part No.	165	1135	B-5201	5112	B-4350	M-1671	5519
Basket Grapple Control	Part No.	166	1137	B-5202	5113	B-4370	M-1672	5520
Mill Control Packer	Part No.	169-R	1140-R	B-2150-R	5114-R	L-5030-R	M-4305	L-5019-R

A (6.625" turned down to 6.500" O.D.) Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

5.5" 17# FJ Casing Inside 7.625" 39# FJ Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Nom I.D. (in)	Lined Drift (in)
0.500	7 5/8	39.0	HCL-80	FJ	Casing	7.625	7.625	6.625	6.500	-	-	-	-
	5 1/2	17.0	HCL-80	FJ	Casing	5.500	5.500	4.892	4.767	18.500	4.520	4.400	4.275

*Bold indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

Abandonment Procedure

If the tubing cannot be recovered and the well is to be abandoned.

- The operator will ensure that all geologic formations are properly isolated.

1. Confirm the I.D. of the injection tubing is free from obstructions.
2. Run in hole with wireline set profile plug.
3. Set plug inside of packer assembly.
   (Plug will allow cement to fill the I.D. of the injection tubing and the tubing to casing annulus)
4. Run in hole with wireline conveyed perforating guns and perforate the tubing immediately above the packer.
5. Trip in hole with an overshot, spear, cement retainer or isolation tool that will provide a work string-to- injection tubing seal.
6. Engage the fish with sealing tool.
7. Confirm circulation down the tubing and up the tubing-to-casing annulus.
8. Cement the work string, injection tubing, injection tubing-to-casing annulus and work string-to-casing annulus to surface.
9. Confirm the entirety of the wellbore is cemented to surface and all zones are isolated.
10. ND wellhead and install permanent capping flange.

PERMIAN OILFIELD PARTNERS

Attachment to C-108
Permian Oilfield Partners, LLC
Bullseye Federal SWD #1
Sec. 6, Twp. 25S, Rge. 33E
1318' FNL, 250' FEL
Lea County, NM

April 16, 2019

STATEMENT REGARDING SEISMICITY

Examination of the USGS and TexNet seismic activity databases has shown minimal historic seismic activity in the area (< 30 miles) of our proposed above referenced SWD well as follows:

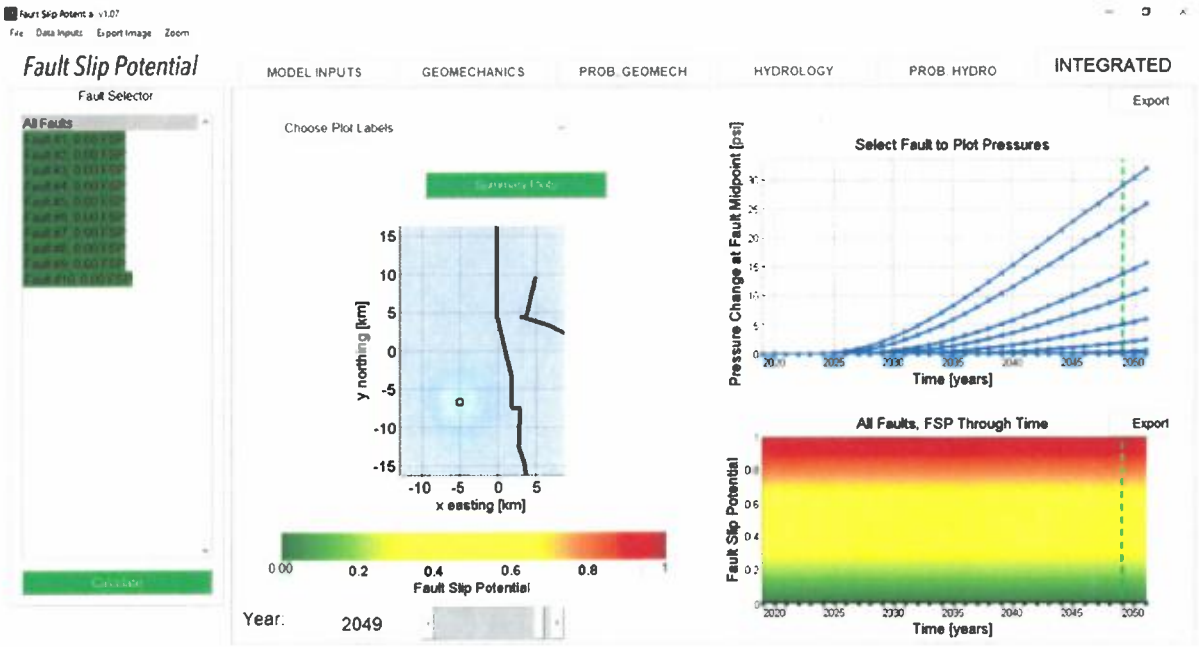
1. M2.9, 1984-12-09, 7.73 miles away @ 21.08 deg heading
2. M3.1, 2012-03-18, 18.80 miles away @ 296.07 deg heading
3. M3.3, 2001-06-02, 29.73 miles away @ 65.81 deg heading

Permian Oilfield Partners does not own any 2D or 3D seismic data in the area of this proposed SWD well. Our 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. Based on offset well log data, we have not interpreted any faults in the immediate area.
3. A basement PreCambrian fault is 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.
4. Even though we do not propose to inject into the PreCambrian, Permian Oilfield Partners ran modeling to check for fault slip assuming the improbable occurrence of a total downhole well failure that would allow 100% of injected fluids to enter the PreCambrian. 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 PreCambrian fault being stressed so as to create an induced seismic event, with the following assumptions:
    a. Full proposed capacity of 50,000 BBL/day for 30 years

b. 12.5 mD average permeability, 3% average porosity, .75 psi/ft frac gradient, .45 psi/ft hydrostatic gradient
c. A-phi=0.60 & Max Horizontal Stress direction 75 deg NW, as per Snee, Zoback paper noted above.

5. The probability of an induced seismic event in the PreCambrian is calculated to be 0% after 30 years as per the FSP results screenshot below.
6. The analysis below assumes an improbable well failure through the Montoya and Simpson zones, into the PreCambrian. When the injected fluids stay in the Devonian-Silurian zone as per design, there will be very low probability of fault slip, since there are no known nearby faults within the Devonian-Silurian.



As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 4.03 miles away from the nearest active or permitted Devonian disposal well.

gfisher@popmidstream.com
(817) 606-7630

PERMIAN OILFIELD PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Bullseye Federal SWD #1
Sec. 6, Twp. 25S, Rge. 33E
1318' FNL, 250' FEL
Lea County, NM

Permian Oilfield Partners, LLC has mailed notifications to offset operators, mineral owners, lessees and the surface owner as per the following list:

Bullseye Federal SWD #1 - Affected Persons within 1 Mile Area of Review					
Notified Name	Notified Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
Devon Energy Production Company, LP	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899561827918133	4/26/2019
Santa Fe Energy Operating Partners LP	1616 S Voss Ste 600	Houston TX 77057	USPS	9414811899561827917686	4/26/2019
EOG Y Resources Inc.	104 S 4th St	Artesia NM 88210	USPS	9414811899561827918553	4/26/2019
Bureau Of Land Management	620 E Greene St	Carlsbad NM 88220	USPS	9414811899561827918645	4/26/2019
New Mexico State Land Office	2827 N Del Paso St Suite 117	Hobbs NM 88240	USPS	9414811899561827917761	4/26/2019
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe NM 87501	USPS	9414811899561827917891	4/26/2019
EOG Resources Inc	P.O. Box 2267	Midland TX 79702	USPS	9414811899561827918072	4/26/2019
EOG A Resources Inc	105 South 4th Street	Artesia NM 88210-2123	USPS	9414811899561827918348	4/26/2019
EOG M Resources Inc	PO BOX 840	Artesia NM 88211	USPS	9414811899561827918058	4/26/2019
Oxy Y-1 Company	5 Greenway Plaza	Houston TX 77046	USPS	9414811899561827917952	4/26/2019
Merced Glendale LLC	601 Carlson Parkway Suite 200	Minnetonka MN 55305	USPS	9414811899561827918546	4/26/2019
R&R Royalty Ltd.	500 N. Shoreline Boulevard Suite 322	Corpus Christi TX 78401-0819	USPS	9414811899561827917983	4/26/2019
Murchison Bone Spring Drlg Prod. LLC	814 San Jacinto Boulevard Suite 303	Austin TX 78701	USPS	9414811899561827917242	4/26/2019

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

Date: 4-26-2019

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Todd Bailey, Editor 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
April 25, 2019
and ending with the issue dated
April 25, 2019.

Editor

Sworn and subscribed to before me this
25th day of April 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
QUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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

LEGALS

LEGAL NOTICE
APRIL 25, 2019

Newspaper Publication Notice

Permian Oilfield Partners, LLC, PO Box 1220, Stephenville, TX 76401, phone (817)606-7650, attention 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 well name is the Bullseye Federal SWD #1, and is located 1318' FNL & 250' FEL, Unit Letter A, Section 6, Township 25 South, Range 33 East, NMPM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 17,453 feet to 18,650 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 8,461 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.
#34082

67115647 00227380

GARY FISHER
PERMIAN OILFIELD PARTNERS, LLC
PO BOX 1220
STEPHENVILLE , TX 76401

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

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

CASE NO. 20571
(BULLSEYE FEDERAL)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative Permian Oilfield Partners, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was sent under a notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 11th day of June, 2019 by Deana M. Bennett.

OFFICIAL SEAL
Karlene Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02/27/2021

Notary Public

My commission expires: 02/27/2021

EXHIBIT
B

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
05/23/2019

Firm Mailing Book ID: 167805

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0059 5179 66	Devon Energy Production Company, LP 333 West Sheridan Ave. Oklahoma City OK 73102	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
2	9314 8699 0430 0059 5179 73	Santa Fe Energy Operating Partners LP 16165 S Voss Ste 600 Houston TX 77057	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
3	9314 8699 0430 0059 5179 80	EOG Y Resources, Inc. 104 South 4th Street Artesia NM 88210	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
4	9314 8699 0430 0059 5179 97	Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
5	9314 8699 0430 0059 5180 00	New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
6	9314 8699 0430 0059 5180 17	EOG Resources Inc. 104 South 4th Street Artesia NM 88210	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
7	9314 8699 0430 0059 5180 24	EOG A Resources Inc. 104 South 4th Street Artesia NM 88210	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
8	9314 8699 0430 0059 5180 31	EOG M Resources Inc. 104 South 4th Street Artesia NM 88210	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
9	9314 8699 0430 0059 5180 48	Oxy Y-1 Company 5 Greenway Plaza Houston TX 77046	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
10	9314 8699 0430 0059 5180 55	Merced Glendale LLC 501 Carlson Parkway, Suite 200 Minnetonka MN 55305	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
11	9314 8699 0430 0059 5180 62	R&R Royalty Ltd. 500 N. Shoreline Boulevard, Suite 322 Corpus Christi TX 78401	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
12	9314 8699 0430 0059 5180 79	Murchison Bone Springs Drig Prog. 1, LLC 814 San Jacinto Boulevard, Suite 303 Austin TX 78701	$0.65	$3.50	$1.60	$0.00	10053 Bullseye Notice
		Totals:	**$7.80**	**$42.00**	**$19.20**	**$0.00**	
					Grand Total:	**$69.00**	

MAY 23 2019

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
12			

2

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 167805
Generated: 6/11/2019 9:33:24 AM

USPS Article Number	Date Created	Reference Number	Name 1	Address	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300059518079	2019-05-23 1:00 PM	10053 Bullseye	Murchison Bone Springs Drlg Prog. 1, LLC	814 San Jacinto Boulevard, Suite 303	Austin	TX	78701	To be R	Return Receipt - Electronic, Certified Mail	
9314869904300059518062	2019-05-23 1:00 PM	10053 Bullseye	R&R Royalty Ltd.	500 N. Shoreline Boulevard, Suite 322	Corpus Christi	TX	78401	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518055	2019-05-23 1:00 PM	10053 Bullseye	Merced Glendale LLC	501 Carlson Parkway, Suite 200	Minnetonka	MN	55305	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518048	2019-05-23 1:00 PM	10053 Bullseye	Oxy Y-1 Company	5 Greenway Plaza	Houston	TX	77046	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518031	2019-05-23 1:00 PM	10053 Bullseye	EOG M Resources Inc.	104 South 4th Street	Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518024	2019-05-23 1:00 PM	10053 Bullseye	EOG A Resources Inc.	104 South 4th Street	Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518017	2019-05-23 1:00 PM	10053 Bullseye	EOG Resources Inc.	104 South 4th Street	Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059518000	2019-05-23 1:00 PM	10053 Bullseye	New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059517997	2019-05-23 1:00 PM	10053 Bullseye	Bureau of Land Management	620 E. Greene St.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059517980	2019-05-23 1:00 PM	10053 Bullseye	EOG Y Resources, Inc.	104 South 4th Street	Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059517973	2019-05-23 1:00 PM	10053 Bullseye	Santa Fe Energy Operating Partners LP	16165 S Voss Ste 600	Houston	TX	77057	To be Returned	Return Receipt - Electronic, Certified Mail	
9314869904300059517966	2019-05-23 1:00 PM	10053 Bullseye	Devon Energy Production Company, LP	333 West Sheridan Ave.	Oklahoma City	OK	73102	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019

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 31, 2019
and ending with the issue dated
May 31, 2019.

Publisher

Sworn and subscribed to before me this
31st day of May 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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 31, 2019

CASE NO. 20571: Notice to all affected parties, as well as the heirs and devisees of Devon Energy Production Company LP, Santa Fe Energy Operating Partners LP, EOG Y Resources, Inc., Bureau of Land Management, New Mexico State Land Office, EOG Resources, Inc., EOG A Resources Inc., EOG M Resources Inc., Oxy Y-1 Company, Merced Glendale LLC, R&R Royalty Ltd., Murchison Bone Springs Drlg Prog. 1 LLC, of Permian Oilfield Partners, LLC's application to approve 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 June 13, 2019, to consider this application. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Bullseye Federal SWD Well #1 well at a surface location 1318 feet from the North line and 250 feet from the East line of Section 6, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,453' to 18,680'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 24.2 miles West of Jal, New Mexico.
#33218

01104570 00228956

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

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

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

CASE NO. 20572

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 Carpet Bomb Federal SWD Well #1 well at a surface location 1,492 feet from the North line and 250 feet from the West line of Section 12, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,615' to 19,006'.

(3) Permian further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian anticipates using an average injection pressure of 2,000 psi for this well and it requests approval of a maximum injection pressure of 3,523 psi for the well.

EXHIBIT
A

(5) On or about April 26, 2019, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

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

(7) The New Mexico State Land Office submitted a protest with respect to Permian's administrative application. Permian discussed the State Land Office's protest with the State Land Office. The State Land Office requested that Permian submit an application for hearing before a Division Examiner for this matter.

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

(9) A proposed C-108 for the subject well is attached hereto in Attachment A.

(10) 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 June 13 2019; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

By: _____

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

2

CASE NO. _____: Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Carpet Bomb Federal SWD Well #1 well at a surface location 1492 feet from the North line and 250 feet from the West line of Section 12, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,615' to 19,006'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.1 miles west northwest of Jal, New Mexico.

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Permian Oilfield Partners, LLC **OGRID Number:** 328259
Well Name: Carpet Bomb Federal SWD #1 **API:** 30-025-Pending
Pool: SWD; Devonian-Silurian **Pool Code:** 97869

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

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ■ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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

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

Sean Puryear
Print or Type Name

Date

(817) 600-8772
Phone Number

Signature

spuryear@pqpmidstream.com
e-mail Address

EXHIBIT A

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 1220, Stephenville, TX. 76401**

CONTACT PARTY: **Sean Puryear** PHONE: **(817) 600-8772**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Sean Puryear** TITLE: **Manager**

SIGNATURE: Sean Puryear DATE: 4-24-2019

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.

Additional Data

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 15,336'

   Underlying Potentially Productive Zones:
   None

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC.
Carpet Bomb Federal SWD #1
1492' FNL, 250' FWL
Sec. 12, T25S, R33E, Lea Co. NM
Lat 32.1482167° N, Lon 103.5338054° W
GL 3398', RKB 3428'

Surface - (Conventional)

Hole Size: 26" **Casing:** 20" - 94# H-40 STC Casing
Depth Top: Surface
Depth Btm: 1011'
Cement: 660 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size: 17.5" **Casing:** 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5085'
Cement: 1669 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size: 12.25" **Casing:** 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12285' **ECP/DV Tool:** 5185'
Cement: 2123 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)

Intermediate #3 - (Liner)

Hole Size: 8.5" **Casing:** 7.625" - 39# HCL-80 FJ Casing
Depth Top: 12085'
Depth Btm: 17615'
Cement: 261 sks - Lite Class C (60:40:0) + Additives
Cement Top: 12085' - (Volumetric)

Intermediate #4 - (Open Hole)

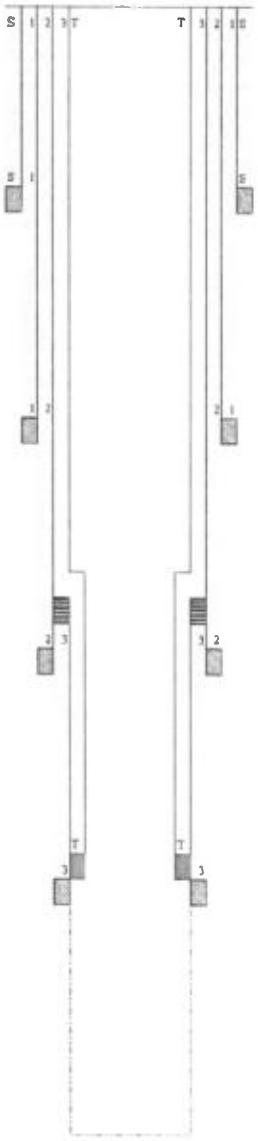
Hole Size: 6.5" **Depth:** 19006'
Inj. Interval: 17615' - 19006' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 17570' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 12085'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17580' **Packer:** 5.5" - Perma-Pak or Equivalent (Inconel)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Carpet Bomb Federal SWD #1
1492' FNL, 250' FWL
Sec. 12, T25S, R33E, Lea Co. NM
Lat 32.1482167° N, Lon 103.5338054° W
GL 3398', RKB 3428'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 STC Casing
Depth Top: Surface
Depth Btm: 1011'
Cement: 660 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5085'
Cement: 1669 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)
Hole Size: 12.25"
Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12285'
Cement: 2123 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5185'

Intermediate #3 - (Liner)
Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 12085'
Depth Btm: 17615'
Cement: 261 sks - Lite Class C (60:40:0) + Additives
Cement Top: 12085' - (Volumetric)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 19006'
Inj. Interval: 17615' - 19006' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 17570'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 12085'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17580'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

VI: There are no wells within the proposed wells area of review that penetrate the Devonian Formation.

VII:

1. The average injected volume anticipated is 40,000 BWPD
   The maximum injected volume anticipated is 50,000 BWPD

2. Injection will be through a closed system

3. The average injection pressure anticipated is 2,000 psi
   The proposed maximum injection pressure is 3,523 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 Go-Tech's website and are listed below.

WELL NAME	FIGHTING OKRA 18 FEDERAL COM #001H	SALADO DRAW 6 FEDERAL #001H	RATTLESNAKE 13 12 FEDERAL COM #001H	SNAPPING 2 STATE #014H
api	3002540382	3002541293	3002540912	3001542688
latitude	32.0435333	32.0657196	32.0369568	32.06555986
longitude	-103.5164566	-103.5146942	-103.416214	-103.7413815
section	18	6	13	2
township	26S	26S	26S	26S
range	34E	34E	34E	31E
unit	E	M	P	P
ftgns	2590N	200S	330S	250S
ftgew	330W	875W	330E	330E
county	Lea	Lea	Lea	EDDY
state	NM	NM	NM	NM
formation	AVALON UPPER	BONE SPRING 3RD SAND	DELAWARE-BRUSHY CANYON	WOLFCAMP
sampledate	42046	41850	41850	42284
ph	8	6.6	6.2	7.3
tds_mgL	201455.9	99401.9	243517.1	81366.4
resistivity_ohm_cm	0.032	0.064	0.026	0.1004
sodium_mgL	66908.6	34493.3	73409.8	26319.4
calcium_mgL	9313	3295	15800	2687.4
iron_mgL	10	0.4	18.8	26.1
magnesium_mgL	1603	396.8	2869	326.7
manganese_mgL	1.6	0.37	3.12	
chloride_mgL	121072.7	59986.5	149966.2	50281.2
bicarbonate_mgL	1024.8	109.8	48.8	
sulfate_mgL	940	710	560	399.7
co2_mgL	1950	70	200	100

5. Devonian water analysis from the area of review is unavailable. Representative area water analyses were sourced from Go-Tech's website and are listed below.

WELL NAME	ANTELOPE RIDGE UNIT #003	BELL LAKE UNIT #006
api	3002521082	3002508483
latitude	32.2593155	32.3282585
longitude	-103.4610748	-103.507103
sec	34	6
township	23S	23S
range	34E	34E
unit	K	O
ftgns	1980S	660S
ftgew	1650W	1980E
county	LEA	LEA
state	NM	NM
field	ANTELOPE RIDGE	BELL LAKE NORTH
formation	DEVONIAN	DEVONIAN
samplesource	UNKNOWN	HEATER TREATER
ph	6.9	7
tds_mgL	80187	71078
chloride_mgL	42200	47900
bicarbonate_mgL	500	476
sulfate_mgL	1000	900

VIII: Injection Zone Geology

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 carbonates & chert, followed by the Upper Silurian dolomites, and the Lower 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 8%, 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 migrations to USDW's, 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.

Permian Oilfield Partners, LLC.
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GL 3398', RKB 3428'

GEOLOGY PROGNOSIS			
FORMATION	**TOP** KB TVD (ft)	**BOTTOM** KB TVD (ft)	**THICKNESS** (ft)
Salt	1.347	4.790	3.443
Delaware	5.060	9.125	4.065
Bone Spring	9.125	12.235	3.110
Wolfcamp	12.235	13.200	965
Lwr. Mississippian	17.039	17.382	343
Woodford	17.382	17.580	198
Devonian	17.580	18.355	775
Fusselman (Silurian)	18.355	19.031	676
Montoya (U. Ordovician)	19.031	19.509	478
Simpson (M. Ordovician	19.509	20.203	694

2. According to the New Mexico Office of the State Engineer, there is 1 fresh water well within the proposed well's one-mile area of review indicating the presence of freshwater at depths less than 185'. Regionally, shallow fresh water is known to exist at depths less than 625'. There are no underground sources of fresh water present below the injection interval.

IX: Formation chemical stimulation with 40,000 gals of 15% Hydrochloric Acid is planned after well completion.

X: A compensated neutron/gamma ray log will be run from surface to TD upon well completion. All logs will be submitted to the NMOCD upon completion.

XI: According to the New Mexico Office of the State Engineer, there is 1 fresh water well within the proposed well's one-mile area of review. Attempts were made to sample the below listed well but well is located inside a secured crude oil tank battery with no public access.

Well Name	Formation Name	Depth Top	Depth Bottom	Thickness	Status
C 02373 CLW317846	None Given	185'	625'	440'	**No Access**

XII: Hydrologic affirmative statement attached.

XIII: Proof of notice and proof of publication attached.

PERMIAN OILFIELD
PARTNERS

Item XII. Affirmative Statement

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Carpet Bomb Federal SWD #1
Sec. 12, Twp. 25S, Rge. 33E
1492' FNL, 250' FWL
Lea County, NM

Permian Oilfield Partners, LLC. has 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.

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 4/24/2019

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-	97869	SWD; DEVONIAN-SILURIAN

4 Property Code	5 Property Name	6 Well Number
	CARPET BOMB FEDERAL SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
328259	PERMIAN OILFIELD PARTNERS, LLC	3398'

10 Surface Location

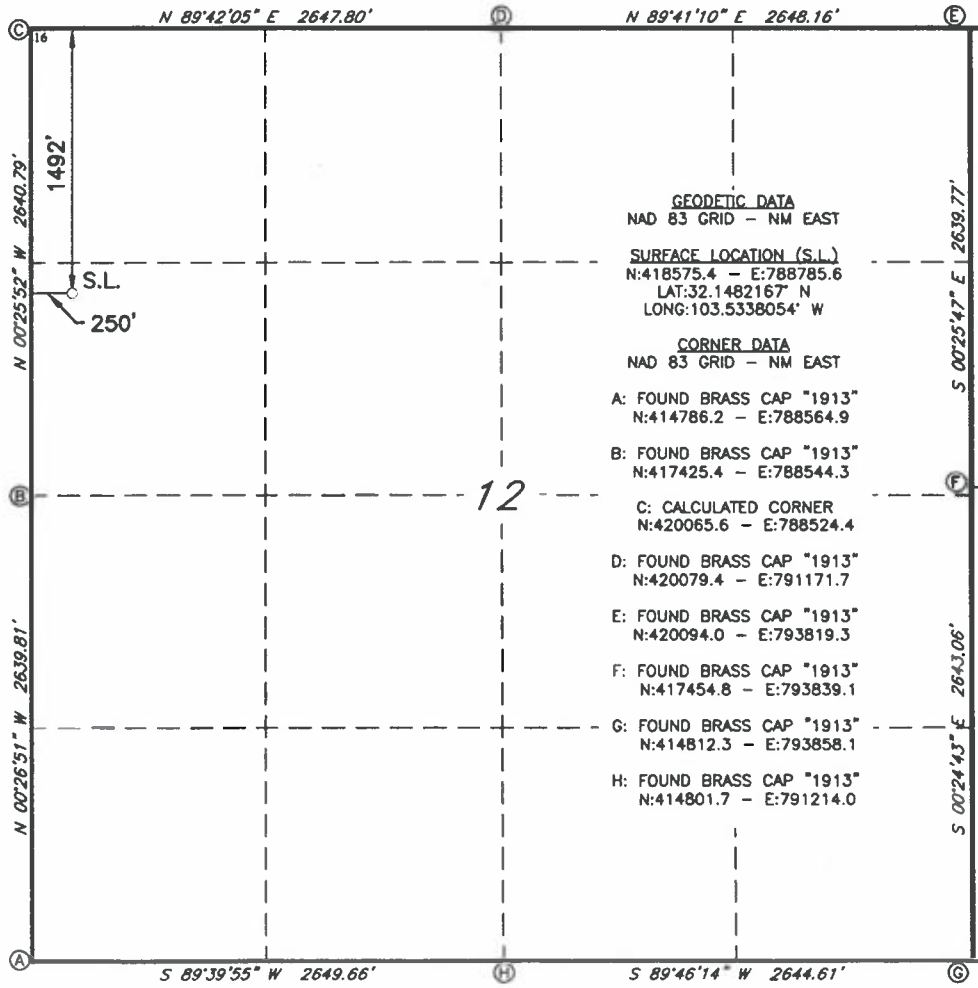
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
E	12	25S	33E		1492	NORTH	250	WEST	LEA

11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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



GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (S.L.)
N:418575.4 – E:788785.6
LAT:32.1482167° N
LONG:103.5338054° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1913"
N:414786.2 – E:788564.9

B: FOUND BRASS CAP "1913"
N:417425.4 – E:788544.3

C: CALCULATED CORNER
N:420065.6 – E:788524.4

D: FOUND BRASS CAP "1913"
N:420079.4 – E:791171.7

E: FOUND BRASS CAP "1913"
N:420094.0 – E:793819.3

F: FOUND BRASS CAP "1913"
N:417454.8 – E:793839.1

G: FOUND BRASS CAP "1913"
N:414812.3 – E:793858.1

H: FOUND BRASS CAP "1913"
N:414801.7 – E:791214.0

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 4-17-2019

Gary E Fisher
Printed Name

gfisher@popmidstream.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

4-10-19
Date of Survey

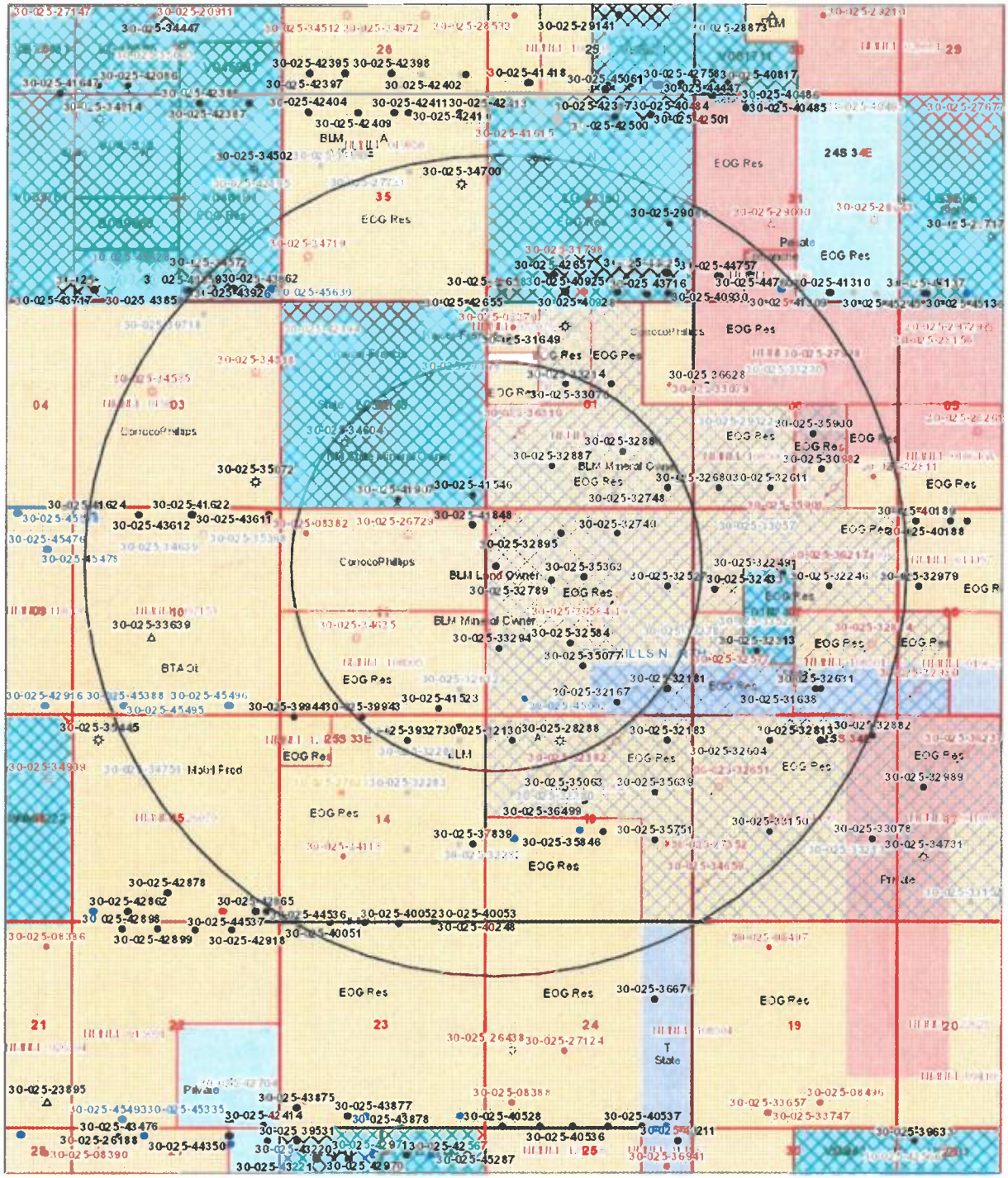
Signature and Seal of Professional Surveyor

JEFFREY L. FANSLER
NEW MEXICO
10034
PROFESSIONAL SURVEYOR

10034
Certificate Number

Job No.: LS19030282

1 & 2 Mile AOR, Carpet Bomb Federal SWD #1



4/20/2019, 8:15:09 PM

1:36,112

Override 1

Well Locations - Small Scale
- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2, Plugged
- CO2, Temporarily Abandoned

- Gas, Active
- Gas, Cancelled New Drilled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water InjectionTemporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged
- Water, Temporarily Abandoned
- PLSS First Division

US BLM

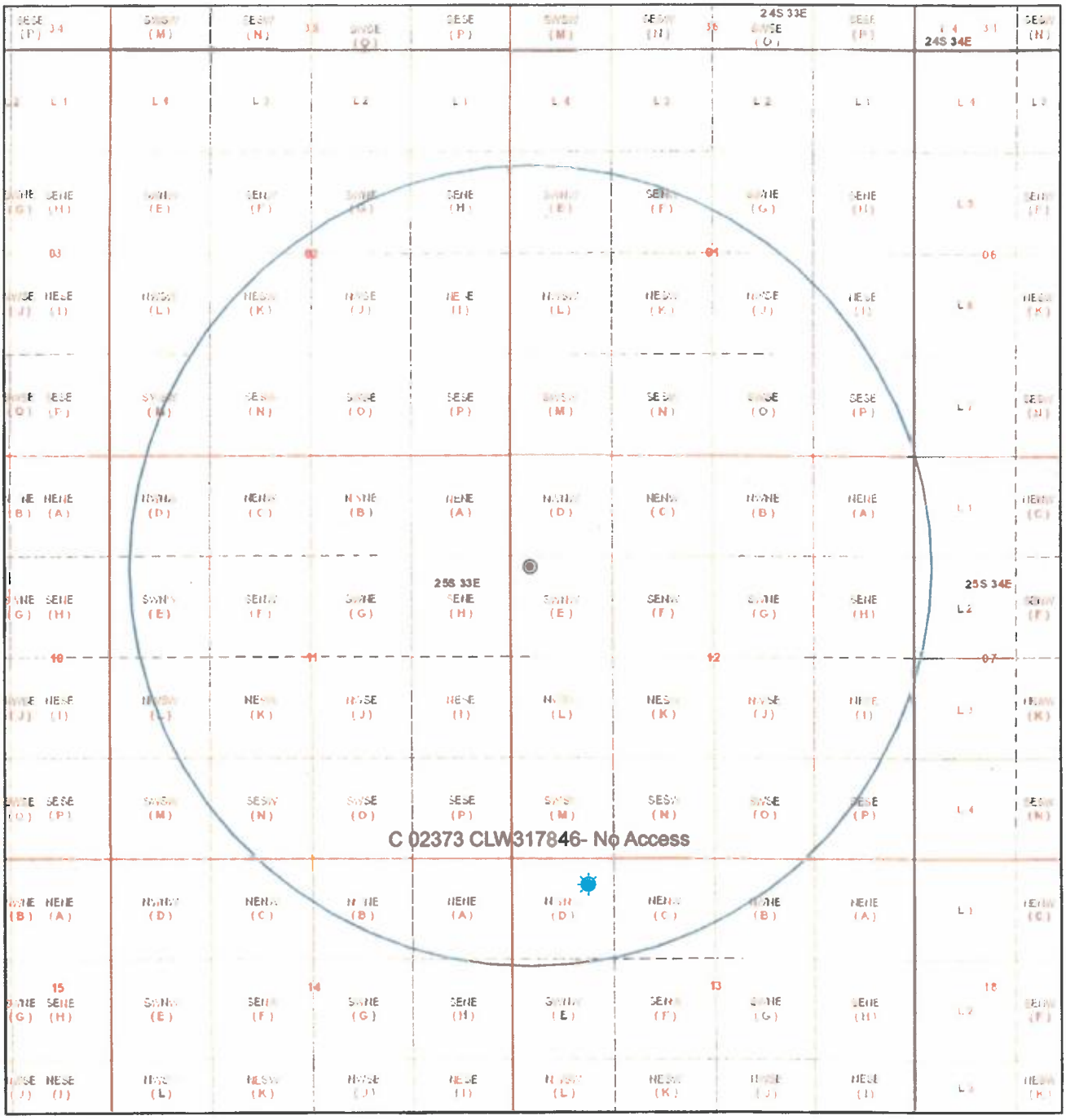
Sources: Esri, HERE, Garmin, intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),

New Mexico Oil Conservation Division

Carpet Bomb 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
30-025-08382	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	11	T25S	R33E	D	D-11-25S-33E 660 FNL 660 FWL	D-11-25S-33E 660 FNL 660 FWL	DELAWARE	5296	5296
30-025-26729	CHEVRON MIDCONTINENT, L.P.	BELL LAKE 11 FEDERAL	#001	Gas	Vertical	Plugged, Site Released	11	T25S	R33E	B	B-11-25S-33E 660 FNL 1980 FEL	B-11-25S-33E 660 FNL 1980 FEL	MORROW	15930	15930
30-025-27178	CHEVRON MIDCONTINENT, L.P.	BELL LAKE 2 STATE	#001	Gas	Vertical	Plugged, Not Released	02	T25S	R33E	H	H-02-25S-33E 1980 FNL 660 FEL	H-02-25S-33E 1980 FNL 660 FEL	MORROW	15810	15810
30-025-28288	EOG RESOURCES INC	RED HILLS NORTH UNIT	#301	Gas	Vertical	Active	13	T25S	R33E	C	C-13-25S-33E 660 FNL 1880 FWL	C-13-25S-33E 660 FNL 1880 FWL	BONE SPRING	15935	15935
30-025-32050	EOG RESOURCES INC	RED HILLS NORTH UNIT	#201	Oil	Vertical	Active	12	T25S	R33E	N	N-12-25S-33E 660 FSL 1980 FWL	N-12-25S-33E 660 FSL 1980 FWL	BONE SPRING	13245	13900
30-025-32130	EOG RESOURCES INC	RED HILLS NORTH UNIT	#304	Oil	Vertical	Active	13	T25S	R33E	D	D-13-25S-33E 660 FNL 660 FWL	D-13-25S-33E 660 FNL 660 FWL	BONE SPRING	12600	12600
30-025-32167	EOG RESOURCES INC	RED HILLS NORTH UNIT	#202	Oil	Vertical	Active	12	T25S	R33E	O	O-12-25S-33E 330 FSL 1980 FEL	O-12-25S-33E 330 FSL 1980 FEL	BONE SPRING	12600	12600
30-025-32281	EOG RESOURCES INC	VACA 14 FEDERAL	#002	Oil	Vertical	Cancelled Apd	14	T25S	R33E	A	A-14-25S-33E 660 FNL 660 FEL	A-14-25S-33E 660 FNL 660 FEL	BONE SPRING	12650	12650
30-025-32527	EOG RESOURCES INC	RED HILLS NORTH UNIT	#206	Oil	Vertical	Active	12	T25S	R33E	H	H-12-25S-33E 1980 FNL 660 FEL	H-12-25S-33E 1980 FNL 660 FEL	BONE SPRING	12600	12600
30-025-32584	EOG RESOURCES INC	RED HILLS NORTH UNIT	#207	Oil	Vertical	Active	12	T25S	R33E	K	K-12-25S-33E 1830 FSL 2130 FWL	K-12-25S-33E 1830 FSL 2130 FWL	BONE SPRING	12600	12600
30-025-32612	EOG RESOURCES INC	HALLWOOD 11 FEDERAL	#001	Oil	Vertical	Cancelled Apd	11	T25S	R33E	P	P-11-25S-33E 660 FSL 660 FEL	P-11-25S-33E 660 FSL 660 FEL	BONE SPRING	12600	12600
30-025-32740	EOG RESOURCES INC	RED HILLS NORTH UNIT	#208	Oil	Vertical	Active	12	T25S	R33E	B	B-12-25S-33E 660 FNL 1980 FEL	B-12-25S-33E 660 FNL 1980 FEL	BONE SPRING	12600	12600
30-025-32748	EOG RESOURCES INC	RED HILLS NORTH UNIT	#102	Oil	Vertical	Active	01	T25S	R33E	P	P-01-25S-33E 510 FSL 660 FEL	P-01-25S-33E 510 FSL 660 FEL	BONE SPRING	12500	12500
30-025-32785	EOG RESOURCES INC	RED HILLS NORTH UNIT	#209	Oil	Vertical	Active	12	T25S	R33E	F	F-12-25S-33E 1830 FNL 1650 FWL	F-12-25S-33E 1830 FNL 1650 FWL	BONE SPRING	12540	12540
30-025-32822	EOG RESOURCES INC	HALLWOOD 11 FEDERAL	#002	Oil	Vertical	Cancelled Apd	11	T25S	R33E	I	I-11-25S-33E 1980 FSL 510 FEL	I-11-25S-33E 1980 FSL 510 FEL	BONE SPRING	12600	12600
30-025-32886	EOG RESOURCES INC	RED HILLS NORTH UNIT	#103	Oil	Vertical	Active	01	T25S	R33E	J	J-01-25S-33E 1430 FSL 1830 FEL	J-01-25S-33E 1430 FSL 1830 FEL	BONE SPRING	12550	12550
30-025-32887	EOG RESOURCES INC	RED HILLS NORTH UNIT	#104	Oil	Vertical	Active	01	T25S	R33E	N	N-01-25S-33E 1060 FSL 1650 FWL	N-01-25S-33E 1060 FSL 1650 FWL	BONE SPRING	12500	12500
30-025-32895	EOG RESOURCES INC	RED HILLS NORTH UNIT	#210	Oil	Vertical	Active	12	T25S	R33E	C	C-12-25S-33E 660 FNL 1880 FWL	C-12-25S-33E 660 FNL 1880 FWL	BONE SPRING	12550	12550
30-025-33214	EOG RESOURCES INC	RED HILLS NORTH UNIT	#107	Oil	Vertical	Active	01	T25S	R33E	F	F-01-25S-33E 2130 FNL 1980 FWL	F-01-25S-33E 2130 FNL 1980 FWL	BONE SPRING	12550	12550
30-025-33278	EOG RESOURCES INC	HALLWOOD 12 FEDERAL	#004	Oil	Vertical	Cancelled Apd	12	T25S	R33E	I	I-12-25S-33E 1880 FSL 330 FEL	I-12-25S-33E 1880 FSL 330 FEL	BONE SPRING	12600	12600
30-025-33294	EOG RESOURCES INC	RED HILLS NORTH UNIT	#205	Oil	Vertical	Active	12	T25S	R33E	L	L-12-25S-33E 1700 FSL 331 FWL	L-12-25S-33E 1700 FSL 331 FWL	BONE SPRING	12550	12550
30-025-34604	EOG RESOURCES INC	TRISTE DRAW 2 STATE	#001	Gas	Vertical	Active	02	T25S	R33E	K	K-02-25S-33E 1650 FSL 1650 FWL	K-02-25S-33E 1650 FSL 1650 FWL	WOLFCAMP	13870	13870
30-025-34635	EOG RESOURCES INC	TRISTE DRAW 11 FEDERAL	#001	Gas	Vertical	Plugged, Site Released	11	T25S	R33E	K	K-11-25S-33E 1980 FSL 1980 FWL	K-11-25S-33E 1980 FSL 1980 FWL	WOLFCAMP	13900	13900
30-025-35077	EOG RESOURCES INC	RED HILLS NORTH UNIT	#211H	Oil	Horizontal	Active	12	T25S	R33E	N	N-12-25S-33E 1250 FSL 2449 FWL	L-07-25S-34E Lot: 3 2390 FSL 508 FWL	BONE SPRING	16229	12259
30-025-35363	EOG RESOURCES INC	RED HILLS NORTH UNIT	#212H	Oil	Horizontal	Active	12	T25S	R33E	F	F-12-25S-33E 1750 FNL 2475 FWL	C-07-25S-34E 202 FNL 2189 FWL	BONE SPRING	17382	12285
30-025-36310	EOG RESOURCES INC	RED HILLS NORTH UNIT	#106H	Injection	Horizontal	Plugged, Site Released	01	T25S	R33E	L	L-01-25S-33E 2000 FSL 900 FWL	L-06-25S-34E Lot: 6 2272 FSL 872 FWL	BONE SPRING	16925	12276
30-025-36584	EOG RESOURCES INC	RED HILLS NORTH UNIT	#213	Injection	Horizontal	Plugged, Site Released	12	T25S	R33E	G	G-12-25S-33E 2213 FNL 1920 FEL	L-12-25S-33E 2859 FNL 4899 FEL	BONE SPRING	15185	12263
30-025-39327	EOG RESOURCES INC	VACA 14 FEDERAL	#003	Oil	Horizontal	Active	14	T25S	R33E	B	B-14-25S-33E 660 FNL 1980 FEL	O-14-25S-33E 581 FSL 1936 FEL	BONE SPRING	13200	9487
30-025-39892	EOG RESOURCES INC	VACA 14 FEDERAL	#004H	Oil	Horizontal	Active	14	T25S	R33E	A	A-14-25S-33E 330 FNL 660 FEL	P-14-25S-33E 4922 FNL 405 FEL	BONE SPRING	13800	9470
30-025-39943	EOG RESOURCES INC	VACA 14 FEDERAL	#006H	Oil	Horizontal	Active	14	T25S	R33E	C	C-14-25S-33E 50 FNL 2130 FWL	N-14-25S-33E 252 FSL 2026 FWL	BONE SPRING	14150	9445
30-025-41523	EOG RESOURCES INC	VACA 11 FEDERAL	#002H	Oil	Horizontal	Active	11	T25S	R33E	P	P-11-25S-33E 170 FSL 1200 FEL	P-14-25S-33E 230 FSL 1148 FEL	BONE SPRING	15675	10710
30-025-41546	EOG RESOURCES INC	RED HILLS 2 25 33	#001H	Oil	Horizontal	Active	02	T25S	R33E	P	P-02-25S-33E 330 FSL 340 FEL	A-02-25S-33E Lot: 1 404 FNL 375 FEL	BONE SPRING	13941	9491
30-025-41848	EOG RESOURCES INC	RED HILLS 11 25 33 FEDERAL COM	#001H	Oil	Horizontal	Active	11	T25S	R33E	A	A-11-25S-33E 430 FNL 340 FEL	P-11-25S-33E 332 FSL 323 FEL	BONE SPRING	13806	9529
30-025-41907	EOG RESOURCES INC	RED HILLS 2 25 33	#003H	Oil	Horizontal	Active	02	T25S	R33E	O	O-02-25S-33E 215 FSL 2260 FEL	B-02-25S-33E Lot: 2 284 FNL 2253 FEL	BONE SPRING	14105	9440
30-025-42887	EOG RESOURCES INC	VACA 11 FEDERAL	#403H	Oil	Horizontal	New	11	T25S	R33E	O	O-11-25S-33E 240 FSL 2500 FEL	O-14-25S-33E 230 FSL 2070 FEL	BONE SPRING	15561	10500
30-025-42888	EOG RESOURCES INC	VACA 11 FEDERAL	#404H	Oil	Horizontal	New	11	T25S	R33E	O	O-11-25S-33E 240 FSL 2530 FEL	N-14-25S-33E 230 FSL 2560 FWL	BONE SPRING	15447	10500
30-025-45002	DEVON ENERGY PRODUCTION COMPANY, LP	FLAGLER R FEDERAL	#016H	Oil	Horizontal	New	08	T25S	R33E	O	O-08-25S-33E 380 FSL 1740 FEL	B-08-25S-33E 330 FNL 1880 FEL	BONE SPRING	15420	10900

Carpet Bomb Federal SWD #1 - Water Wells within 1 Mile AOR



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Override 1

Points

Override 1

Override 2

PLSS First Division

PLSS Second Division

PLSS Townships

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map http://nm-emnrd.maps.arcgis.com/apps/webappviewer/ New Mexico Oil Conservation Division

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02312		CUB	LE	1	2	1	05	25S	33E	632241	3559687*	150	90	60
C 02313		CUB	LE	2	3	3	26	25S	33E	636971	3552098*	150	110	40
C 02373 CLW317846	O	CUB	LE	2	1	1	13	25S	33E	638518	3556544*	625	185	440
C 02373 S		CUB	LE	1	2	1	13	25S	33E	638721	3556549*	625	185	440

Average Depth to Water: **142 feet**

Minimum Depth: **90 feet**

Maximum Depth: **185 feet**

Record Count: 4

PLSS Search:

Township: 25S Range: 33E

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

4/20/19 12:57 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

PERMIAN OILFIELD
PARTNERS

Attachment to C-108
Permian Oilfield Partners, LLC
Carpet Bomb Federal SWD #1
Sec. 12, Twp. 25S, Rge. 33E
1492' FNL, 250' FWL
Lea County, NM

April 17, 2019

STATEMENT REGARDING SEISMICITY

Examination of the USGS and TexNet seismic activity databases has shown minimal historic seismic activity in the area (< 30 miles) of our proposed above referenced SWD well as follows:

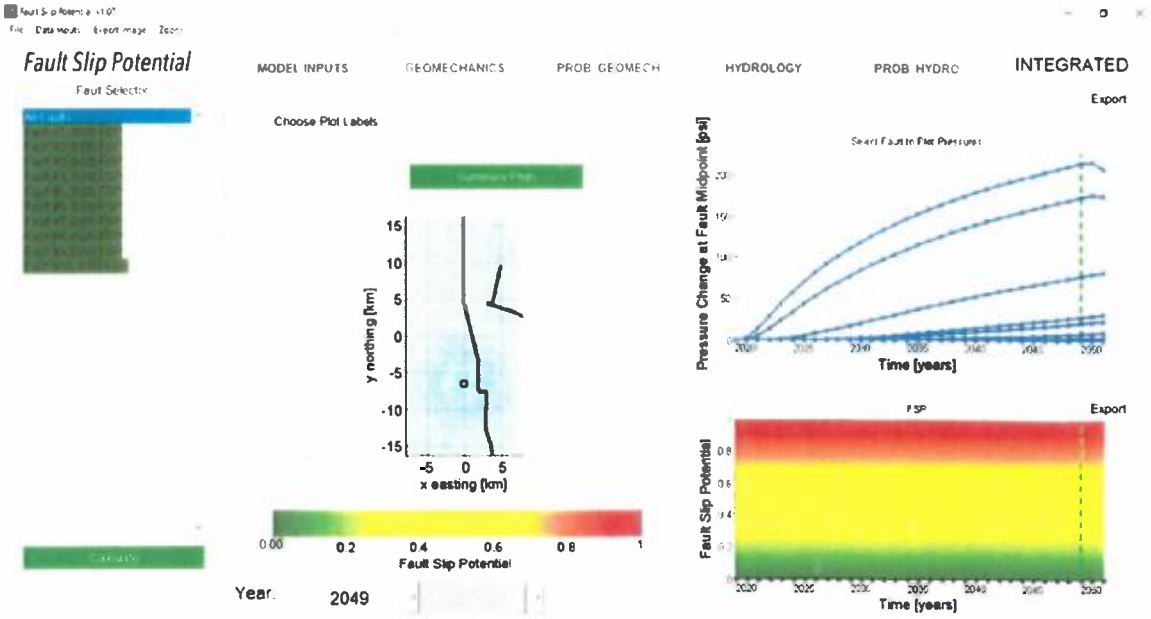
1. M2.9, 1984-12-09, 8.27 miles away @ 351.05 deg heading
2. M3.3, 2001-06-02, 26.45 miles away @ 60.43 deg heading
3. M4.6, 1992-01-02, 28.49 miles away @ 62.57 deg heading
4. M3.1, 2012-03-18, 22.93 miles away @ 293.92 deg heading

Permian Oilfield Partners does not own any 2D or 3D seismic data in the area of this proposed SWD well. Our 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. Based on offset well log data, we have not interpreted any faults in the immediate area.
3. Basement PreCambrian 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.
4. Even though we do not propose to inject into the PreCambrian, Permian Oilfield Partners ran modeling to check for fault slip assuming the improbable occurrence of a total downhole well failure that would allow 100% of injected fluids to enter the PreCambrian. 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 PreCambrian fault being stressed so as to create an induced seismic event, with the following assumptions:
    a. Full proposed capacity of 50,000 BBL/day for 30 years

b. 12.5 mD average permeability, 3% average porosity, .75 psi/ft frac gradient, .45 psi/ft hydrostatic gradient
c. A-phi=0.60 & Max Horizontal Stress direction 75 deg NW, as per Snee, Zoback paper noted above.

5. The probability of an induced seismic event in the PreCambrian is calculated to be 0% after 30 years as per the FSP results screenshot below. At its closest point, the well is approximately 2km away from this fault, but due to the direction of maximum horizontal stress, the localized probability of an induced seismic event still remains less than 5%, even in the unlikely case of a catastrophic well failure that could see 225 psi localized pressure on the fault.
6. The analysis below assumes an improbable well failure through the Montoya and Simpson zones, into the PreCambrian. When the injected fluids stay in the Devonian-Silurian zone as per design, there will be very low probability of fault slip, since there are no known nearby faults within the Devonian-Silurian.



As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located approximately 3.36 miles away from the nearest active or permitted Devonian disposal well.

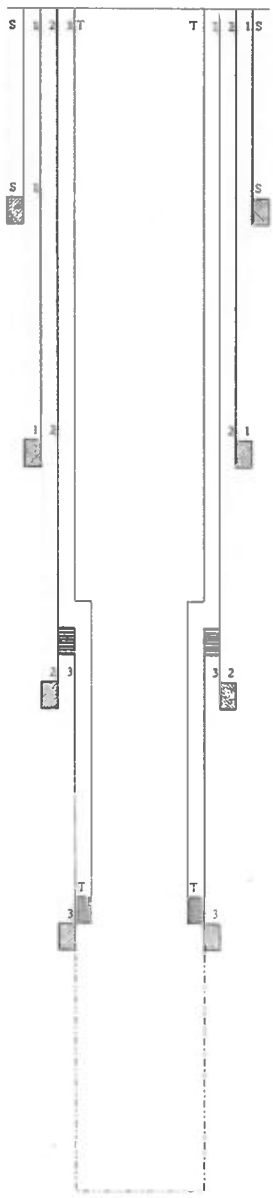
gfisher@popmidstream.com
(817) 606-7630

Plugging Risk Assessment

Permian Oilfield Partners, LLC.
Carpet Bomb Federal SWD #1
SL: 1492' FNL & 250' FWL
Sec 12, T25S, R33E
Lea County, New Mexico

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Carpet Bomb Federal SWD #1
1492' FNL, 250' FWL
Sec. 12, T25S, R33E, Lea Co. NM
Lat 32.1482167° N, Lon 103.5338054° W
GL 3398', RKB 3428'



Surface - (Conventional)

Hole Size:	26"
Casing:	20" - 94# H-40 STC Casing
Depth Top:	Surface
Depth Btm:	1011'
Cement:	660 sks - Class C + Additives
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	17.5"
Casing:	13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	5085'
Cement:	1669 sks - Lite Class C (50:50:10) + Additives
Cement Top:	Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size:	12.25"
Casing:	9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top:	Surface
Depth Btm:	12285'
Cement:	2123 sks - Lite Class C (60:40:0) + Additives
Cement Top:	Surface - (Circulate)
ECP/DV Tool:	5185'

Intermediate #3 - (Liner)

Hole Size:	8.5"
Casing:	7.625" - 39# HCL-80 FJ Casing
Depth Top:	12085'
Depth Btm:	17615'
Cement:	261 sks - Lite Class C (60:40:0) + Additives
Cement Top:	12085' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size:	6.5"
Depth:	19006'
Inj. Interval:	17615' - 19006' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth:	17570'
Tubing:	7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth:	12085'
X/O:	7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth:	17580'
Packer:	5.5" - Perma-Pak or Equivalent (Inconel)

7" UFJ Tubing Inside of 9 5/8" 40# Casing

Bowen Series 150 Releasing and Circulation Overshots

Maximum Catch Size 6¾" to 7¼" Inclusive

Maximum Catch Size (Spiral)		6¾	6¾	7	7¼
Maximum Catch Size (Basket)		5¾	6¼	6¾	6¾
Overshot O.D.		8¾	7¾	8¼	8¾
Type		FS	S-F	S-F	S-F
Complete Assembly	Part No.	C-3032	C-5222	9217	C-5354
(Dressed Spiral Parts)	Weight	260	243	251	260
Replacement Parts					
Top Sub	Part No.	A-3033	A-5223	9218	A-5355
Bowl	Part No.	B-3034	B-5224	9219	B-5356
Packer	Part No.	A-1814	B-5225	9224	B-5357
Spiral Grapple	Part No.	N-64	B-5227	9222	B-5359
Spiral Grapple Control	Part No.	M-89	A-5226	9223	B-5360
Standard Guide	Part No.	A-1816	A-5220	9226	A-5361
Basket Parts					
Basket Grapple	Part No.	N-64	B-5227	9222	B-5359
Basket Grapple Control	Part No.	M-89	A-5226	9223	B-5360
Mill Control Packer	Part No.	A-1814-R	B-5225-R	9224-R	B-5357-R

A 6.375" O.D. Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

7" 26# FJ Casing Inside 9.625" 40# BTC Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.840	9 5/8	40.0	L-80	BTC	Casing	9.625	10.625	8.835	8.679	-	-	-	-
	7	26.0	HCP-110	FJ	Casing	7.000	7.000	6.276	6.151	28.500	6.080	5.940	5.815

*Red indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- If fishing neck is clean

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

5 ½" UFJ Tubing Inside of 7 ⅝" 39# Casing

Tools are listed in order of maximum catch size

The following table shows only a partial listing of available NOV Downhole Bowen® overshots

NOTE: Nitralloy Grapples are available upon request.

Bowen Series 150 Releasing and Circulation Overshots

Maximum Catch Size (Spiral)		4¼	4¾	4¾	4¾	5	5	5½
Maximum Catch Size (Basket)		3⅞	4⅛	4⅜	4⅜	4⅝	4⅝	4⅞
Overshot O.D.		5¾	5⅞	5⅞	5¾	5⅞	6¼	6¼
Type		FS	S.H.	S.H.	S.H.S	S.H.	FS	S.H.
Complete Assembly	Part No.	5696	5698	C-5163	8975	C-5171	C-4625	6825
(Dressed Spiral Parts)	Weight	130	130	132	138	140	192	185
Replacement Parts								
Top Sub	Part No.	5697	5699	A-5169	8976	A-5172	B-4626	6826
Bowl	Part No.	5698	5700	B-5170	8977	B-5173	B-4627	6827
Packer	Part No.	186	1140	B-2199	6114	L-5650	L-4505	6816
Spiral Grapple	Part No.	185	1135	B-2201	6112	B-4389	M-1071	6819
Spiral Grapple Control	Part No.	186	1137	B-2202	6113	B-4370	M-1072	6820
Standard Guide	Part No.	187	1143	B-2203	6121	B-4371	L-1074	6821
Basket Parts								
Basket Grapple	Part No.	185	1135	B-2201	6112	B-4389	M-1071	6819
Basket Grapple Control	Part No.	186	1137	B-2202	6113	B-4370	M-1072	6820
Mill Control Packer	Part No.	186-R	1140-R	B-2199-R	6114-R	L-5650-R	M-4505	L-6816-R

A (6.625" turned down to **6.500"** O.D.) Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

5.5" 17# FJ Casing Inside 7.625" 39# FJ Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.500	7 5/8	39.0	HCL-80	FJ	Casing	7.625	7.625	6.625	6.500	-	-	-	-
	*5 1/2	17.0	HCL-80	FJ	Casing	5.500	5.500	4.892	4.767	18.500	4.520	4.400	4.275

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

Abandonment Procedure

If the tubing cannot be recovered and the well is to be abandoned.

- The operator will ensure that all geologic formations are properly isolated.

1. Confirm the I.D. of the injection tubing is free from obstructions.
2. Run in hole with wireline set profile plug.
3. Set plug inside of packer assembly.
   (Plug will allow cement to fill the I.D. of the injection tubing and the tubing to casing annulus)
4. Run in hole with wireline conveyed perforating guns and perforate the tubing immediately above the packer.
5. Trip in hole with an overshot, spear, cement retainer or isolation tool that will provide a work string-to- injection tubing seal.
6. Engage the fish with sealing tool.
7. Confirm circulation down the tubing and up the tubing-to-casing annulus.
8. Cement the work string, injection tubing, injection tubing-to-casing annulus and work string-to-casing annulus to surface.
9. Confirm the entirety of the wellbore is cemented to surface and all zones are isolated.
10. ND wellhead and install permanent capping flange.

PERMIAN OILFIELD PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Carpet Bomb Federal SWD #1
Sec. 12, Twp. 25S, Rge. 33E
1492' FNL, 250' FWL
Lea County, NM

Permian Oilfield Partners, LLC has mailed notifications to offset operators, mineral owners, lessees and the surface owner as per the following list:

Carpet Bomb Federal SWD #1 - Affected Persons within 1 Mile Area of Review

Notified Name	Notified Address	Notified City, State, ZIP Code	Shippe	Tracking No.	Mailing Date
Chevron Midcontinent, LP	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899561824272306	4/26/2019
EOG Resources Inc	P.O. Box 2267	Midland, TX 79702	USPS	9414811899561824272092	4/26/2019
Devon Energy Production Company, LP	333 West Sheridan Ave.	Oklahoma City, OK 73102	USPS	9414811899561824272009	4/26/2019
Bureau O' Land Management	620 E Greene St	Carlsbad, NM 88220	USPS	9414811899561824272368	4/26/2019
New Mexico State Land Office	2827 N Dal Paso St Suite 117	Hobbs, NM 88240	USPS	9414811899561824272078	4/26/2019
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899561824272030	4/26/2019
Kaiser-Francis Oil Co	6733 S Yale Ave	Tulsa, OK 74136	USPS	9414811899561824272085	4/26/2019
ConocoPhillips Company	P.O.Box 2197 Office EC3-10-W285	Houston, TX 77252	USPS	9414811899561824272344	4/26/2019
BLM Roswell FO	2909 W 2nd St	Roswell, NM 88201	USPS	9414811899561824272351	4/26/2019

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

Date: 4-26-2019

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

ARTICLE NUMBER: 9414 8118 9956 1824 2723 06

ARTICLE ADDRESSED TO:

Chevron Midcontinent, LP
6301 Deauville
Midland TX 79706-2964

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2720 92

ARTICLE ADDRESSED TO:

EOG Resources, Inc.
PO Box 2267
Midland TX 79702-2267

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2720 09

ARTICLE ADDRESSED TO:

Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City OK 73102-5010

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2723 68

ARTICLE ADDRESSED TO:

Bureau of Land Management
620 E Greene St
Carlsbad NM 88220-6292

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2720 78

ARTICLE ADDRESSED TO:

New Mexico State Land Office
2827 N Dal Paso St. Suite 117
Hobbs NM 88240-2062

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2720 30

ARTICLE ADDRESSED TO:

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe NM 87501-2708

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2720 85

ARTICLE ADDRESSED TO:

Kaiser-Francis Oil Co
6733 S. Yale Ave
Tulsa OK 74136-3330

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2723 44

ARTICLE ADDRESSED TO:

ConocoPhillips Company
PO Box 2197
Houston TX 77252-2197

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

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

ARTICLE NUMBER: 9414 8118 9956 1824 2723 51

ARTICLE ADDRESSED TO:

BLM Roswell FO
2909 W. 2nd Street
Roswell NM 88201-1287

FEES	
Postage Per Piece	$3.05
Certified Fee	3.50
Total Postage & Fees	6.55

Postmark Here

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Todd Bailey, Editor 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
April 25, 2019
and ending with the issue dated
April 25, 2019.

Editor

Sworn and subscribed to before me this 25th day of April 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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
APRIL 25, 2019

Newspaper Publication Notice

Permian Oilfield Partners, LLC, PO Box 1220, Stephenville, TX 76401, phone (817)606-7630, attention 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 well name is the Carpet Bomb Federal SWD #1, and is located 1492' FNL & 250' FWL, Unit Letter E, Section 12, Township 25 South, Range 33 East, NMPM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 17,615 feet to 19,006 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 3,523 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.
#34063

67115647 00227381

GARY FISHER
PERMIAN OILFIELD PARTNERS, LLC
PO BOX 1220
STEPHENVILLE , TX 76401

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

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

CASE NO. 20572
(CARPET BOMB)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative Permian Oilfield Partners, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was sent under a notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 11th day of June, 2019 by Deana M. Bennett.

OFFICIAL SEAL
Karlena Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02/27/2021

Notary Public

My commission expires: _____

EXHIBIT
B

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
05/23/2019

Firm Mailing Book ID: 167807

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0059 5194 58	Chevron Midcontinent, LP 6301 Deauville Blvd Midland TX 79706	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
2	9314 8699 0430 0059 5194 65	EOG Resources, Inc. 104 South 4th St. Artesia NM 88210	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
3	9314 8699 0430 0059 5194 72	Devon Energy Production Company, LP 333 West Sheridan Av.e Oklahoma City OK 73102	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
4	9314 8699 0430 0059 5194 89	Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
5	9314 8699 0430 0059 5194 96	New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
6	9314 8699 0430 0059 5195 02	Kaiser-Francis Oil Co. 6733 S. Yale Ave. Tulsa OK 74136	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
7	9314 8699 0430 0059 5195 19	ConocoPhillips Company P.O. Box 2197 Houston TX 77252	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
8	9314 8699 0430 0059 5195 26	BLM Roswell 2909 W. 2nd St. Roswell NM 88201	$0.65	$3.50	$1.60	$0.00	10053.0001 Carpet Notice
		Totals:	$5.20	$28.00	$12.80	$0.00	
					Grand Total:	$46.00	

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
8			

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 167807
Generated: 6/11/2019 9:47:39 AM

USPS Article Number	Date Created	Reference Number	Name 1	Address	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300059519526	2019-0 3 1:19 PM	10053.0001 Carpet	BLM Roswell	2909 W. 2nd St.	Roswell	NM	88201	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519519	2019-05-23 1:19 PM	10053.0001 Carpet	ConocoPhillips Company	P.O. Box 2197	Houston	TX	77252	Delivered	Return Receipt - Electronic, Certified Mail	05-29-2019
9314869904300059519502	2019-05-23 1:19 PM	10053.0001 Carpet	Kaiser-Francis Oil Co.	6733 S. Yale Ave.	Tulsa	OK	74136	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519496	2019-05-23 1:19 PM	10053.0001 Carpet	New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519489	2019-05-23 1:19 PM	10053.0001 Carpet	Bureau of Land Management	620 E. Greene St.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519472	2019-05-23 1:19 PM	10053.0001 Carpet	Devon Energy Production Company, LP	333 West Sheridan Av.e	Oklahoma City	OK	73102	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519465	2019-05-23 1:19 PM	10053.0001 Carpet	EOG Resources, Inc.	104 South 4th St.	Artesia	NM	88210	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059519458	2019-05-23 1:19 PM	10053.0001 Carpet	Chevron Midcontinent, LP	6301 Deauville Blvd	Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019

W

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 31, 2019
and ending with the issue dated
May 31, 2019.

Publisher

Sworn and subscribed to before me this
31st day of May 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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

LEGALS

LEGAL NOTICE
MAY 31, 2019

CASE NO. 20572: Notice to all affected parties, as well as the heirs and devisees of Chevron Midcontinent, LP, EOG Resources, Inc., Devon Energy Production Company, LP, Bureau of Land Management, New Mexico State Land Office, Kaiser-Francis Oil Co., ConocoPhillips Company, BLM Roswell of Permian Oilfield Partners, LLC's application to approve 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 June 13, 2019, to consider this application. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Carpet Bomb Federal SWD Well #1 well at a surface location 1492 feet from the North line and 250 feet from the West line of Section 12, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,615' to 19,006'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.1 miles west northwest of Jal, New Mexico.
#34213

01104570 00228897

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

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

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

CASE NO. 20273

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 JDAM Federal SWD Well #1 well at a surface location 2027 feet from the South line and 250 feet from the East line of Section 23, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well.

(2) Permian seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,573' to 19,043'.

(3) Permian further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian anticipates using an average injection pressure of 2,000 psi for this well and it requests approval of a maximum injection pressure of 3,515 psi for the well.

EXHIBIT
tabbies
A

(5) On or about April 26, 2019, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

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

(7) The New Mexico State Land Office submitted a protest with respect to Permian's administrative application. Permian discussed the State Land Office's protest with the State Land Office. The State Land Office requested that Permian submit an application for hearing before a Division Examiner for this matter.

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

(9) A proposed C-108 for the subject well is attached hereto in Attachment A.

(10) 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 June 13, 2019; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

By: _____

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

2

CASE NO. ____: Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the JDAM Federal SWD Well #1 well at a surface location 2027 feet from the South line and 250 feet from the East line of Section 23, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,573' to 19,043'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.0 miles West of Jal, New Mexico.

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Permian Oilfield Partners, LLC. **OGRID Number:** 328259
Well Name: JDAM Federal SWD #1 **API:** 30-025-Pending
Pool: SWD; Devonian-Silurian **Pool Code:** 97869

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

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐NSL ☐NSP(PROJECT AREA) ☐NSP(PRORATION UNIT) ☐SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐DHC ☐CTB ☐PLC ☐PC ☐OLS ☐OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐WFX ☐PMX ■SWD ☐IPI ☐EOR ☐PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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

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

Sean Puryear
Print or Type Name

Signature

Date

(817) 600-8772
Phone Number

spuryear@popmidstream.com
e-mail Address

EXHIBIT A

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 1220, Stephenville, TX. 76401**

CONTACT PARTY: **Sean Puryear** PHONE: **(817) 600-8772**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Sean Puryear** TITLE: **Manager**

SIGNATURE:  DATE: 4-25-2019

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.

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.

Additional Data

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 15,423'

   Underlying Potentially Productive Zones:
   None

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC.
JDAM Federal SWD #1
2027' FSL, 250' FEL
Sec. 23, T25S, R33E, Lea Co. NM
Lat 32.1143369° N, Lon 103.5354068° W
GL 3338', RKB 3368'

Surface - (Conventional)

Hole Size: 26" **Casing:** 20" - 94# H-40 STC Casing
Depth Top: Surface
Depth Btm: 970'
Cement: 629 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size: 17.5" **Casing:** 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5086'
Cement: 1664 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size: 12.25" **Casing:** 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12815' **ECP/DV Tool:** 5186'
Cement: 2126 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)

Intermediate #3 - (Liner)

Hole Size: 8.5" **Casing:** 7.625" - 39# HCL-80 FJ Casing
Depth Top: 12115'
Depth Btm: 17573'
Cement: 260 sks - Lite Class C (60:40:0) + Additives
Cement Top: 12115' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size: 6.5" **Depth:** 19049'
Inj. Interval: 17573' - 19049' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 17528' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 12115'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17538' **Packer:** 5.5" - Perma-Pak or Equivalent (Inconel)

WELLBORE SCHEMATIC

Permian Offield Partners, LLC.
JDAM Federal SWD #1
2027' FSL, 250' FEL
Sec. 23, T26S, R33E, Lea Co. NM
Lat 32.1143369° N, Lon 103.5354068° W
GL 3338', RKB 3368'

Surface - (Conventional)

Hole Size:	26"
Casing:	20" - 94# H-40 STC Casing
Depth Top:	Surface
Depth Btm:	870'
Cement:	629 sks - Class C + Additives
Cement Top:	Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size:	17.5"
Casing:	13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top:	Surface
Depth Btm:	5086'
Cement:	1664 sks - Lite Class C (50:50:10) + Additives
Cement Top:	Surface - (Circulate)

Intermediate #2 - (Conventional)

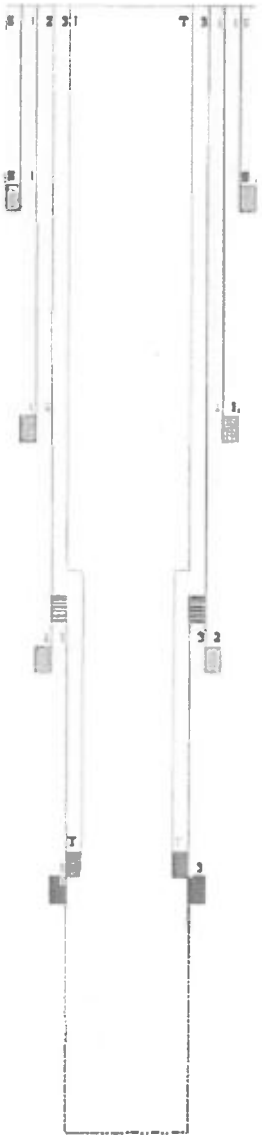
Hole Size:	12.25"
Casing:	9.625" - 40# L-80 & 40# HCL-80 STC Casing
Depth Top:	Surface
Depth Btm:	12315'
Cement:	2126 sks - Lite Class C (60:40:0) + Additives
Cement Top:	Surface - (Circulate)
ECP/DV Tool:	5186'

Intermediate #3 - (Liner)

Hole Size:	8.5"
Casing:	7.625" - 39# HCL-80 FJ Casing
Depth Top:	12115'
Depth Btm:	17573'
Cement:	260 sks - Lite Class C (60:40:0) + Additives
Cement Top:	12115' - (Volumetric)

Intermediate #4 - (Open Hole)

Hole Size:	6.5"
Depth:	19043'
Inj. Interval:	17573' - 19043' (Open-Hole Completion)



Tubing - (Tapered)

Tubing Depth:	17528'
Tubing:	7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth:	12115'
X/O:	7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth:	17538'
Packer:	5.5" - Perma-Pak or Equivalent (Inconel)

VI: There are no wells within the proposed wells area of review that penetrate the Devonian Formation.

VII:

1. The average injected volume anticipated is 40,000 BWPD
   The maximum injected volume anticipated is 50,000 BWPD

2. Injection will be through a closed system

3. The average injection pressure anticipated is 2,000 psi
   The proposed maximum injection pressure is 3,515 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 Go-Tech's website and are listed below.

WELL NAME	FIGHTING OKRA 18 FEDERAL COM #001H	SALADO DRAW 6 FEDERAL #001H	RATTLESNAKE 13 12 FEDERAL COM #001H	SNAPPING 2 STATE #014H
api	3002540382	3002541293	3002540912	3001542688
latitude	32.0435333	32.0657196	32.0369568	32.06555986
longitude	-103.5164566	-103.5146942	-103.416214	-103.7413815
section	18	6	13	2
township	26S	26S	26S	26S
range	34E	34E	34E	31E
unit	E	M	P	P
ftgns	2590N	200S	330S	250S
ftgew	330W	875W	330E	330E
county	Lea	Lea	Lea	EDDY
state	NM	NM	NM	NM
formation	AVALON UPPER	BONE SPRING 3RD SAND	DELAWARE-BRUSHY CANYON	WOLFCAMP
sampledate	42046	41850	41850	42284
ph	8	6.6	6.2	7.3
tds_mgL	201455.9	99401.9	243517.1	81366.4
resistivity_ohm_cm	0.032	0.064	0.026	0.1004
sodium_mgL	66908.6	34493.3	73409.8	26319.4
calcium_mgL	9313	3295	15800	2687.4
iron_mgL	10	0.4	18.8	26.1
magnesium_mgL	1603	396.8	2869	326.7
manganese_mgL	1.6	0.37	3.12	
chloride_mgL	121072.7	59986.5	149966.2	50281.2
bicarbonate_mgL	1024.8	109.8	48.8	
sulfate_mgL	940	710	560	399.7
co2_mgL	1950	70	200	100

5. Devonian water analysis from the area of review is unavailable. Representative area water analyses were sourced from Go-Tech's website and are listed below.

WELL NAME	ANTELOPE RIDGE UNIT #003	BELL LAKE UNIT #006
api	3002521082	3002508483
latitude	32.2593155	32.3282585
longitude	-103.4610748	-103.507103
sec	34	6
township	23S	23S
range	34E	34E
unit	K	O
ftgns	1980S	660S
ftgew	1650W	1980E
county	LEA	LEA
state	NM	NM
field	ANTELOPE RIDGE	BELL LAKE NORTH
formation	DEVONIAN	DEVONIAN
samplesource	UNKNOWN	HEATER TREATER
ph	6.9	7
tds_mgL	80187	71078
chloride_mgL	42200	47900
bicarbonate_mgL	500	476
sulfate_mgL	1000	900

VIII: Injection Zone Geology

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 carbonates & chert, followed by the Upper Silurian dolomites, and the Lower 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 8%, 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 migrations to USDW's, 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.

Permian Oilfield Partners, LLC.
JDAM Federal SWD #1
2027' FSL, 250' FEL
Sec. 23, T25S, R33E, Lea Co. NM
Lat 32.1143369° N, Lon 103.5354068° W
GL 3338', RKB 3368'

GEOLOGY PROGNOSIS			
FORMATION	TOP KB TVD (ft)	BOTTOM KB TVD (ft)	THICKNESS (ft)
Salt	1,260	4,818	3,558
Delaware	5,061	9,220	4,159
Bone Spring	9,220	12,265	3,045
Wolfcamp	12,265	13,322	1,057
Lwr. Mississippian	16,967	17,338	371
Woodford	17,338	17,538	200
Devonian	17,538	18,453	915
Fusselman (Silurian)	18,453	19,068	615
Montoya (U. Ordovician)	19,068	19,811	743
Simpson (M. Ordovician	19,811	20,368	557

2. According to the New Mexico Office of the State Engineer and field exploration, there are NO fresh water wells drilled within the proposed well's one-mile area of review. Regionally, shallow fresh water is known to exist at depths less than 625'. There are no underground sources of fresh water 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 and field exploration, there are NO fresh water wells drilled within the proposed well's one-mile area of review.

XII: Hydrologic affirmative statement attached.

XIII: Proof of notice and proof of publication attached.

PERMIAN OILFIELD PARTNERS

Item XII. Affirmative Statement

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
JDAM Federal SWD #1
Sec. 23, Twp. 25S, Rge. 33E
2027' FSL, 250' FEL
Lea County, NM

Permian Oilfield Partners, LLC. has 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.

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 4/25/2019

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-	97869	SWD; DEVONIAN-SILURIAN

4 Property Code	5 Property Name	6 Well Number
	JDAM FEDERAL SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
328259	PERMIAN OILFIELD PARTNERS, LLC	3338'

10 Surface Location

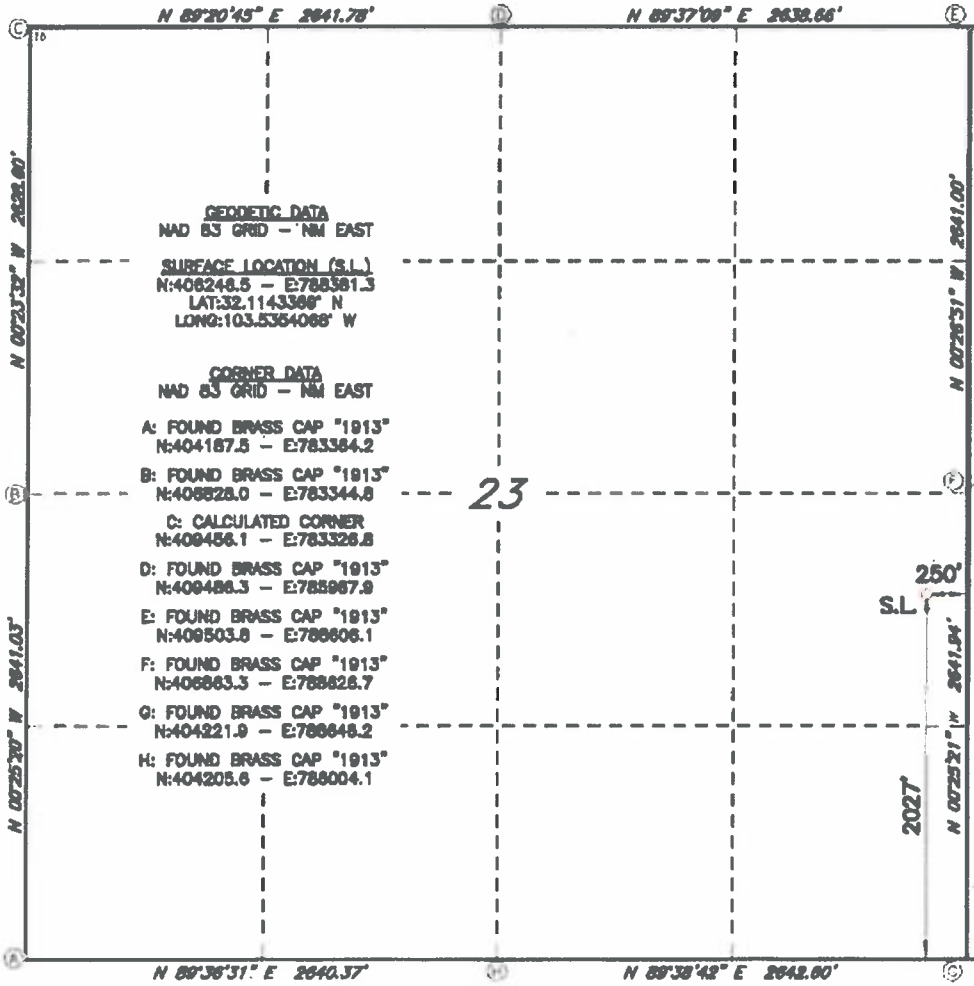
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
I	23	25S	33E		2027	SOUTH	250	EAST	LEA

11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 4-17-2019

Gary E Fisher
Printed Name

gfisher@popmidstream.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

3-30-19
Date of Survey

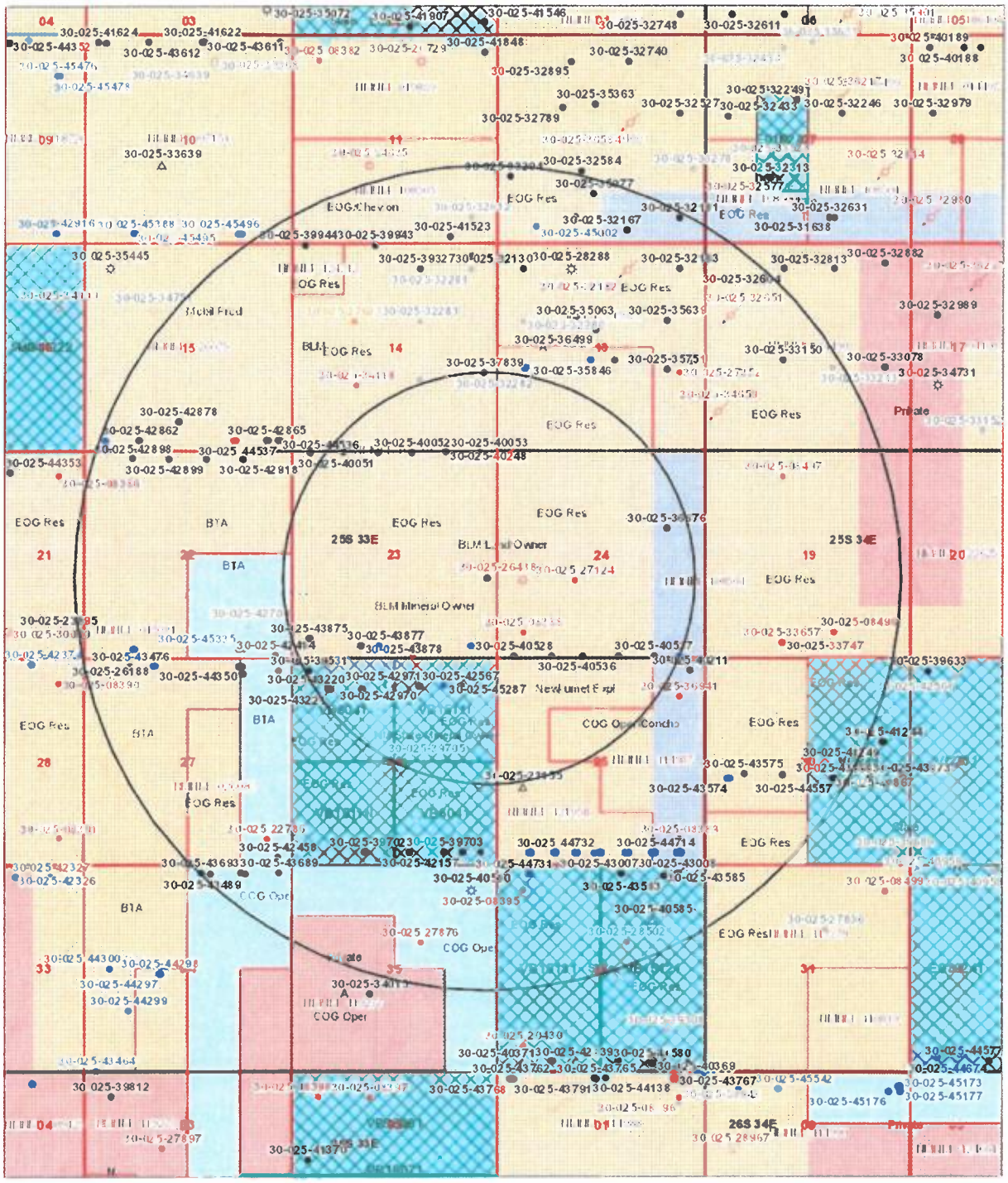
Signature and Seal of Professional Surveyor

JEFFREY L. FANSLER
NEW MEXICO
10034
PROFESSIONAL SURVEYOR

10034
Certificate Number

Job No.: LS190302281R

1 & 2 Mile AOR, JDAM Federal SWD #1



4/2/2019, 5:24:11 PM

Override 1

Well Locations - Small Scale
- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2, Plugged
- CO2, Temporarily Abandoned

- Gas, Active
- Gas, Cancelled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New

- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water Injection Temporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged
- Water, Temporarily Abandoned
- PLSS First Division

1:36,112

0 0.35 0.7 1.4 mi
0 0.5 1 2 km

US BLM
Sources: Esri, HERE, Garmin, intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),

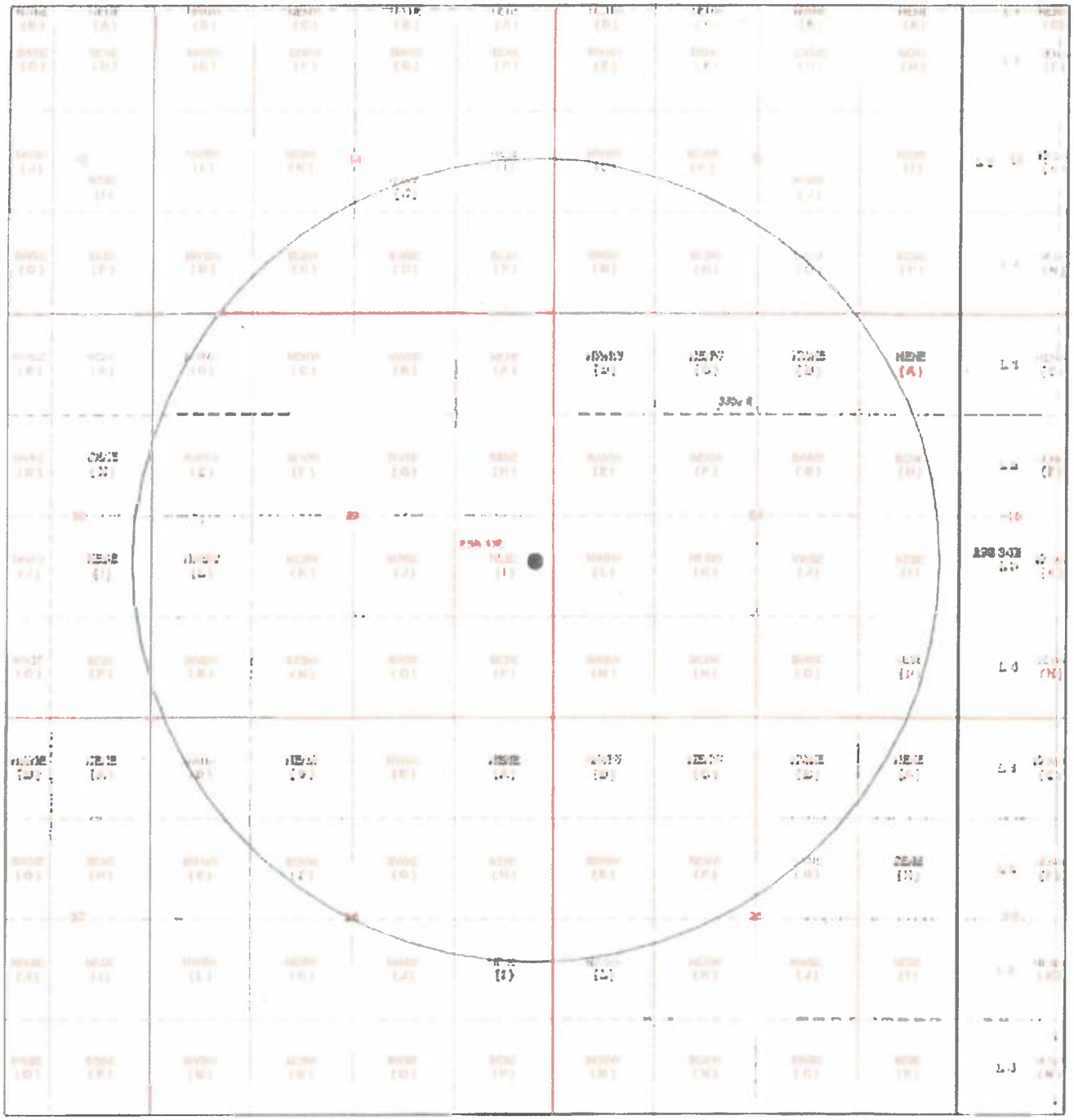
New Mexico Oil Conservation Division

BLM OCD Oil and Gas Map, http://nm-emnrd.maps.arcgis.com/apps/webappviewer/ New Mexico Oil Conservation Division

JDAM 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
30-025-08387	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	23	T25S	R33E	M	M-23-25S-33E 660 FSL 660 FWL	M-23-25S-33E 660 FSL 660 FWL	DELAWARE	5159	5159
30-025-08388	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	24	T25S	R33E	M	M-24-25S-33E 660 FSL 660 FWL	M-24-25S-33E 660 FSL 660 FWL	DELAWARE	5244	5244
30-025-26438	EOG RESOURCES INC	ANDRIKOPOULOS	#001	Gas	Vertical	Plugged, Site Released	24	T25S	R33E	L	L-24-25S-33E 1980 FSL 660 FWL	L-24-25S-33E 1980 FSL 660 FWL	MORROW	15800	15800
30-025-27124	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#002	Oil	Vertical	Plugged, Site Released	24	T25S	R33E	K	K-24-25S-33E 1980 FSL 1980 FWL	K-24-25S-33E 1980 FSL 1980 FWL	DELAWARE	5300	5300
30-025-32282	EOG RESOURCES INC	VACA 14 FEDERAL	#003I	Oil	Vertical	Cancelled Apd	14	T25S	R33E	I	I-14-25S-33E 1980 FSL 660 FEL	I-14-25S-33E 1980 FSL 660 FEL	BONE SPRING	12650	12650
30-025-36676	EOG RESOURCES INC	VACA 24 FEDERAL	#001H	Oil	Horizontal	Active	24	T25S	R33E	H	H-24-25S-33E 1980 FNL 990 FEL	C-19-25S-34E 1271 FNL 1437 FWL	BONE SPRING	14607	12248
30-025-37839	EOG RESOURCES INC	VACA 14 FEDERAL	#002H	Oil	Horizontal	Active	14	T25S	R33E	I	I-14-25S-33E 1980 FSL 330 FEL	K-13-25S-33E 2231 FSL 2431 FWL	BONE SPRING	14756	12299
30-025-39531	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#001H	Oil	Horizontal	Active	26	T25S	R33E	D	D-26-25S-33E 330 FNL 430 FWL	M-26-25S-33E 435 FSL 452 FWL	BONE SPRING	13690	9416
30-025-39705	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#006	Salt Water Disposal	Vertical	Plugged, Not Released	26	T25S	R33E	G	G-26-25S-33E 2620 FNL 1810 FEL	G-26-25S-33E 2620 FNL 1810 FEL	BELL CANYON-CHERRY CANYON	11000	11000
30-025-40051	EOG RESOURCES INC	CABALLO 23 FEDERAL	#002H	Oil	Horizontal	Active	23	T25S	R33E	C	C-23-25S-33E 50 FNL 2200 FWL	N-23-25S-33E 4911 FNL 2221 FWL	BONE SPRING	14110	9456
30-025-40052	EOG RESOURCES INC	CABALLO 23 FEDERAL	#003H	Oil	Horizontal	Active	23	T25S	R33E	B	B-23-25S-33E 58 FNL 2200 FEL	O-23-25S-33E 4920 FNL 2203 FEL	BONE SPRING	14045	9440
30-025-40053	EOG RESOURCES INC	CABALLO 23 FEDERAL	#004H	Oil	Horizontal	Active	23	T25S	R33E	A	A-23-25S-33E 50 FNL 440 FEL	P-23-25S-33E 4925 FNL 421 FEL	BONE SPRING	14080	9449
30-025-40247	EOG RESOURCES INC	CABALLO 23 FEDERAL	#005H	Oil	Horizontal	Active	23	T25S	R33E	D	D-23-25S-33E 40 FNL 1295 FWL	N-23-25S-33E 379 FSL 1342 FWL	BONE SPRING	14025	9438
30-025-40248	EOG RESOURCES INC	CABALLO 23 FEDERAL	#006H	Oil	Horizontal	Active	23	T25S	R33E	A	A-23-25S-33E 20 FNL 1310 FEL	P-23-25S-33E 4921 FNL 1276 FEL	BONE SPRING	14123	9485
30-025-40528	EOG RESOURCES INC	VACA 24 FEDERAL COM	#002H	Oil	Horizontal	Active	24	T25S	R33E	M	M-24-25S-33E 50 FSL 430 FWL	L-13-25S-33E 2409 FSL 463 FWL	BONE SPRING	16947	9428
30-025-40529	EOG RESOURCES INC	VACA 24 FEDERAL COM	#004H	Oil	Horizontal	Active	24	T25S	R33E	N	N-24-25S-33E 50 FSL 2190 FWL	K-13-25S-33E 7688 FSL 2126 FWL	BONE SPRING	16900	9424
30-025-40530	EOG RESOURCES INC	VACA 24 FEDERAL COM	#003H	Oil	Horizontal	Active	24	T25S	R33E	N	N-24-25S-33E 50 FSL 1390 FWL	L-13-25S-33E 7683 FSL 1263 FWL	BONE SPRING	16900	9426
30-025-40536	EOG RESOURCES INC	VACA 24 FEDERAL COM	#005H	Oil	Horizontal	Active	24	T25S	R33E	O	O-24-25S-33E 50 FSL 2190 FEL	J-13-25S-33E 2003 FSL 2220 FEL	BONE SPRING	16480	9458
30-025-40537	EOG RESOURCES INC	VACA 24 FEDERAL COM	#006H	Oil	Horizontal	Active	24	T25S	R33E	P	P-24-25S-33E 50 FSL 1310 FEL	I-13-25S-33E 2305 FSL 1375 FEL	BONE SPRING	16707	9456
30-025-40538	EOG RESOURCES INC	VACA 24 FEDERAL COM	#007H	Oil	Horizontal	New	24	T25S	R33E	P	P-24-25S-33E 50 FSL 660 FEL	I-13-25S-33E 2310 FSL 430 FEL	BONE SPRING	16760	9450
30-025-42567	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#702H	Oil	Horizontal	Active	26	T25S	R33E	A	A-26-25S-33E 722 FNL 957 FEL	P-26-25S-33E 235 FSL 1012 FEL	WOLFCAMP	17275	12530
30-025-42568	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#701H	Oil	Horizontal	Active	26	T25S	R33E	A	A-26-25S-33E 721 FNL 927 FEL	P-26-25S-33E 268 FSL 333 FEL	WOLFCAMP	17218	12473
30-025-42970	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#703H	Oil	Horizontal	Active	26	T25S	R33E	B	B-26-25S-33E 721 FNL 1985 FEL	O-26-25S-33E 228 FSL 1787 FEL	WOLFCAMP	17336	12447
30-025-42971	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#704H	Oil	Horizontal	Active	26	T25S	R33E	B	B-26-25S-33E 721 FNL 2015 FEL	O-26-25S-33E 230 FSL 2555 FEL	WOLFCAMP	17355	12493
30-025-43218	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#705H	Oil	Horizontal	Active	26	T25S	R33E	C	C-26-25S-33E 807 FNL 1806 FWL	N-26-25S-33E 230 FSL 2084 FWL	WOLFCAMP	17480	12508
30-025-43219	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#706H	Oil	Horizontal	Active	26	T25S	R33E	C	C-26-25S-33E 807 FNL 1776 FWL	N-26-25S-33E 230 FSL 1499 FWL	WOLFCAMP	17423	12417
30-025-43220	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#707H	Oil	Horizontal	Active	26	T25S	R33E	D	D-26-25S-33E 806 FNL 979 FWL	M-26-25S-33E 259 FSL 924 FWL	WOLFCAMP	17421	12484
30-025-43221	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#708H	Oil	Horizontal	Active	26	T25S	R33E	D	D-26-25S-33E 806 FNL 949 FWL	M-26-25S-33E 230 FSL 330 FWL	WOLFCAMP	17264	12405
30-025-43850	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#601C	Oil	Horizontal	Cancelled Apd	26	T25S	R33E	B	B-26-25S-33E 714 FNL 1328 FEL	P-26-25S-33E 231 FSL 664 FEL	BONE SPRING	17131	12280
30-025-43851	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#602C	Oil	Horizontal	Cancelled Apd	26	T25S	R33E	C	C-26-25S-33E 715 FNL 2518 FWL	O-26-25S-33E 231 FSL 2136 FEL	BONE SPRING	17120	12272
30-025-43852	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#603H	Oil	Horizontal	New	26	T25S	R33E	C	C-26-25S-33E 714 FNL 2448 FWL	N-26-25S-33E 230 FSL 1820 FWL	BONE SPRING	17083	12234
30-025-43853	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#709H	Oil	Horizontal	New	26	T25S	R33E	B	B-26-25S-33E 713 FNL 1363 FEL	P-26-25S-33E 230 FSL 1254 FEL	WOLFCAMP	17297	12472
30-025-43854	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#710H	Oil	Horizontal	New	26	T25S	R33E	C	C-26-25S-33E 714 FNL 2483 FWL	N-26-25S-33E 230 FSL 2412 FWL	WOLFCAMP	17289	12465
30-025-43875	EOG RESOURCES INC	CABALLO 23 FEDERAL	#701H	Oil	Horizontal	Active	23	T25S	R33E	M	M-23-25S-33E 494 FSL 426 FWL	L-14-25S-33E 2396 FSL 355 FWL	WOLFCAMP	19904	12405
30-025-43876	EOG RESOURCES INC	CABALLO 23 FEDERAL	#702H	Oil	Horizontal	Active	23	T25S	R33E	M	M-23-25S-33E 494 FSL 461 FWL	L-14-25S-33E 1027 FSL 667 FWL	WOLFCAMP	18389	12340
30-025-43877	EOG RESOURCES INC	CABALLO 23 FEDERAL	#703H	Oil	Horizontal	Active	23	T25S	R33E	N	N-23-25S-33E 300 FSL 1755 FWL	L-14-25S-33E 2390 FSL 1207 FWL	WOLFCAMP	19939	12422
30-025-43878	EOG RESOURCES INC	CABALLO 23 FEDERAL	#704H	Oil	Horizontal	Active	23	T25S	R33E	N	N-23-25S-33E 300 FSL 1790 FWL	K-14-25S-33E 2410 FSL 1796 FWL	WOLFCAMP	19757	12341
30-025-45287	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#503H	Oil	Horizontal	Active	26	T25S	R33E	B	B-26-25S-33E 713 FNL 1328 FEL	O-26-25S-33E 100 FSL 2480 FEL	BONE SPRING	15830	10888
30-025-45288	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#504H	Oil	Horizontal	Active	26	T25S	R33E	C	C-26-25S-33E 714 FNL 2518 FWL	N-26-25S-33E 117 FSL 1901 FWL	BONE SPRING	15768	10873
30-025-45584	EOG RESOURCES INC	CABALLO 23 FEDERAL	#705H	Oil	Horizontal	New	23	T25S	R33E	N	N-23-25S-33E 300 FSL 2231 FWL	K-14-25S-33E 2541 FSL 2430 FWL	WOLFCAMP	20030	12461
30-025-45585	EOG RESOURCES INC	CABALLO 23 FEDERAL	#706H	Oil	Horizontal	New	23	T25S	R33E	N	N-23-25S-33E 300 FSL 2264 FWL	J-14-25S-33E 2541 FSL 2220 FEL	WOLFCAMP	20043	12461
30-025-45586	EOG RESOURCES INC	CABALLO 23 FEDERAL	#707H	Oil	Horizontal	New	23	T25S	R33E	O	O-23-25S-33E 300 FSL 2098 FEL	J-14-25S-33E 2541 FSL 2130 FEL	WOLFCAMP	20031	12461
30-025-45587	EOG RESOURCES INC	CABALLO 23 FEDERAL	#708H	Oil	Horizontal	New	23	T25S	R33E	O	O-23-25S-33E 300 FSL 2065 FEL	J-14-25S-33E 2541 FSL 1690 FEL	WOLFCAMP	20040	12461
30-025-45588	EOG RESOURCES INC	CABALLO 23 FEDERAL	#709H	Oil	Horizontal	New	23	T25S	R33E	O	O-23-25S-33E 300 FSL 2032 FEL	J-14-25S-33E 2541 FSL 1590 FEL	WOLFCAMP	20059	12453
30-025-45589	EOG RESOURCES INC	CABALLO 23 FEDERAL	#710H	Oil	Horizontal	New	23	T25S	R33E	P	P-23-25S-33E 300 FSL 639 FEL	I-14-25S-33E 2541 FSL 960 FEL	WOLFCAMP	20026	12453
30-025-45623	EOG RESOURCES INC	CABALLO 23 FEDERAL	#711H	Oil	Horizontal	New	23	T25S	R33E	P	P-23-25S-33E 300 FSL 606 FEL	I-14-25S-33E 2541 FSL 330 FEL	WOLFCAMP	20029	12453
30-025-45755	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#505H	Oil	Horizontal	New	26	T25S	R33E	D	D-26-25S-33E 720 FNL 950 FWL	M-26-25S-33E 100 FSL 1020 FWL	BONE SPRING	15738	10817
30-025-45756	EOG RESOURCES INC	LOMAS ROJAS 26 STATE COM	#506H	Oil	Horizontal	New	26	T25S	R33E	D	D-26-25S-33E 753 FNL 950 FWL	M-26-25S-33E 100 FSL 330 FWL	BONE SPRING	15760	10804

JDAM Federal SWD #1 - Water Wells within 1 Mile AOR



4/17/2019, 11:01:52 AM

Override 1

Override 1

PLSS First Division

PLSS Second Division

PLSS Township

1:18,058

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/: New Mexico Oil Conservation Division

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02312		CUB	LE	1	2	1	05	25S	33E	632241	3559687*	150	90	60
C 02313		CUB	LE	2	3	3	26	25S	33E	636971	3552098*	150	110	40
C 02373 CLW317846	O	CUB	LE	2	1	1	13	25S	33E	638518	3556544*	625	185	440
C 02373 S		CUB	LE	1	2	1	13	25S	33E	638721	3556549*	625	185	440

Average Depth to Water: 142 feet
Minimum Depth: 90 feet
Maximum Depth: 185 feet

Record Count: 4

PLSS Search:

Township: 25S Range: 33E

*UTM location was derived from PLSS - see Help

4/22/19 6:48 PM

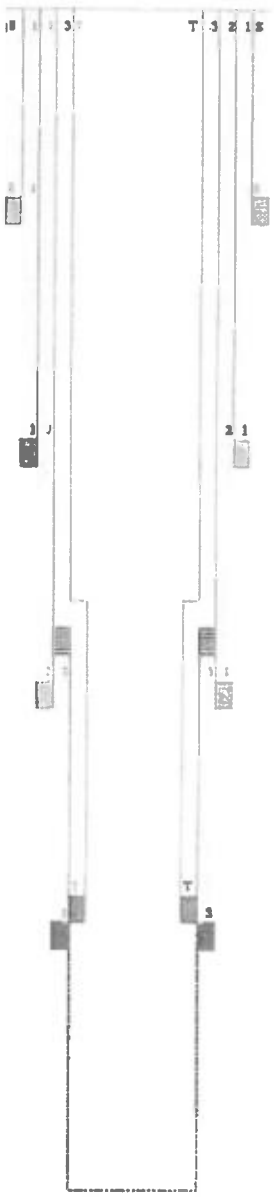
WATER COLUMN/ AVERAGE DEPTH TO WATER

Plugging Risk Assessment

Permian Oilfield Partners, LLC.
JDAM Federal SWD #1
SL: 2027' FSL & 250' FEL
Sec 23, T25S, R33E
Lea County, New Mexico

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
JDAM Federal SWD #1
2027' FSL, 250' FEL
Sec. 23, T25S, R33E, Lea Co. NM
Lat 32.1143369° N, Lon 103.5354068° W
GL 3338', RKB 3368'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 STC Casing
Depth Top: Surface
Depth Btm: 970'
Cement: 629 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5086'
Cement: 1664 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)
Hole Size: 12.25"
Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12315'
Cement: 2126 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5186'

Intermediate #3 - (Liner)
Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 12115'
Depth Btm: 17573'
Cement: 260 sks - Lite Class C (60:40:0) + Additives
Cement Top: 12115' - (Volumetric)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 19043'
Inj. Interval: 17573' - 19043' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 17528'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 12115'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 17538'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

7" UFJ Tubing Inside of 9 5/8" 40# Casing

Bowen Series 150 Releasing and Circulation Overshots

Maximum Catch Size (Spiral)		5½	6⅝	7	7⅝
Maximum Catch Size (Basket)		5⅜	6⅜	6⅝	6⅞
Overshot O.D.		6⅝	7⅝	8⅛	8⅝
Type		F.S.	S.H.	S.H.	S.H.
Complete Assembly	Part No.	C-3032	C-5222	8217	C-5354
(Dressed Spiral Parts)	Weight	269	243	251	269
Replacement Parts					
Top Sub	Part No.	A-3033	A-5223	8218	A-5355
Bowl	Part No.	B-3034	B-5224	8219	B-5356
Packer	Part No.	A-1614	B-5225	8224	B-3357
Spiral Grapple	Part No.	M-84	B-5227	8222	B-5359
Spiral Grapple Control	Part No.	M-89	A-5228	8223	B-5360
Standard Guide	Part No.	A-1618	A-5229	8226	A-5361
Basket Parts					
Basket Grapple	Part No.	M-84	B-5227	8222	B-5359
Basket Grapple Control	Part No.	M-89	A-5228	8223	B-5360
Mill Control Packer	Part No.	A-1614-R	B-5225-R	8224-R	B-3357-R

A 6.375" O.D. Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

7" 26# FJ Casing Inside 9.625" 40# BTC Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Have I.D. (in)	Lined Drift (in)
0.840	9 5/8	40.0	L-80	BTC	Casing	9.625	10.625	8.835	8.679	-	-	-	-
	7	26.0	HCP-110	FJ	Casing	7.000	7.000	6.276	6.151	28.500	6.080	5.940	5.815

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

5 ½" UFJ Tubing Inside of 7 ⅝" 39# Casing

Tools are listed in order of maximum catch size.

The following table shows only a partial listing of available NOV Downhole Bowen® overshots.

NOTE: Nitralloy Grapples are available upon request.

Bowen Series 150 Releasing and Circulation Overshots
Maximum Catch Size [illegible] Inclusive

Maximum Catch Size (Spiral)		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maximum Catch Size (Basket)		3⅝	4⅛	4½	4½	4½	[illegible]	4⅝
Overshot O.D.		5¾	5¾	5⅞	5¾	5⅞	6⅝	6⅝
Type		F.S.	S.H.	S.H.	S.F.S.	S.H.	F.S.	S.H.
Complete Assembly	Part No.	8960	5898	C-5168	8975	C-5171	C-4825	8975
(Dressed Spiral Parts)	Weight	130	130	133	138	146	162	165
Replacement Parts								
Top Sub	Part No.	5897	5899	A-5169	8976	A-5172	B-4826	8828
Bowl	Part No.	5898	5780	B-5170	8977	B-5173	B-4827	8817
Packer	Part No.	169	1140	B-2199	8114	L-5930	L-4505	8818
Spiral Grapple	Part No.	165	1135	B-2201	8112	B-4369	M-1671	8819
Spiral Grapple Control	Part No.	166	1137	B-2202	8113	B-4370	M-1672	8820
Standard Guide	Part No.	167	1148	B-2203	8121	B-4371	L-1074	8821
Basket Parts								
Basket Grapple	Part No.	165	1135	B-2201	8112	B-4369	M-1671	8819
Basket Grapple Control	Part No.	166	1137	B-2202	8113	B-4370	M-1672	8820
Mill Control Packer	Part No.	169-R	1140-R	B-2199-R	8114-R	L-5930-R	M-4305	L-8818-R

A (6.625" turned down to 6.500" O.D.) Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

5.5" 17# FJ Casing Inside 7.625" 39# FJ Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.500	7 5/8	39.0	HCL-80	FJ	Casing	7.625	7.625	6.625	6.500	-	-	-	-
	5 1/2	17.0	HCL-80	FJ	Casing	5.500	5.500	4.892	4.767	18.500	4.520	4.400	4.275

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

Abandonment Procedure

If the tubing cannot be recovered and the well is to be abandoned.

- The operator will ensure that all geologic formations are properly isolated.

1. Confirm the I.D. of the injection tubing is free from obstructions.
2. Run in hole with wireline set profile plug.
3. Set plug inside of packer assembly.
   (Plug will allow cement to fill the I.D. of the injection tubing and the tubing to casing annulus)
4. Run in hole with wireline conveyed perforating guns and perforate the tubing immediately above the packer.
5. Trip in hole with an overshot, spear, cement retainer or isolation tool that will provide a work string-to- injection tubing seal.
6. Engage the fish with sealing tool.
7. Confirm circulation down the tubing and up the tubing-to-casing annulus.
8. Cement the work string, injection tubing, injection tubing-to-casing annulus and work string-to-casing annulus to surface.
9. Confirm the entirety of the wellbore is cemented to surface and all zones are isolated.
10. ND wellhead and install permanent capping flange.

PERMIAN OILFIELD PARTNERS

Attachment to C-108
Permian Oilfield Partners, LLC
JDAM Federal SWD #1
Sec. 23, Twp. 25S, Rge. 33E
2027' FSL, 250' FEL
Lea County, NM

April 16, 2019

STATEMENT REGARDING SEISMICITY

Examination of the USGS and TexNet seismic activity databases has shown minimal historic seismic activity in the area (< 30 miles) of our proposed above referenced SWD well as follows:

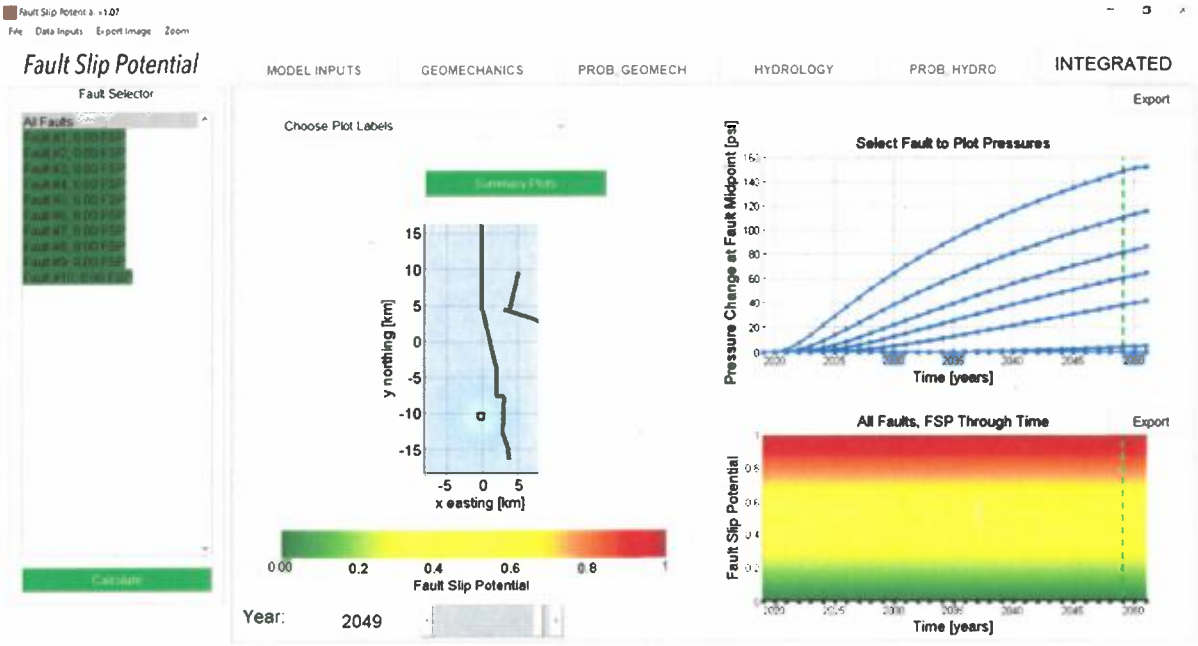
1. M2.9, 1984-12-09, 10.62 miles away @ 353.47 deg heading
2. M3.3, 2001-06-02, 27.74 miles away @ 56.18 deg heading
3. M4.6, 1992-01-02, 29.81 miles away @ 58.43 deg heading
4. M3.1, 2012-03-18, 23.90 miles away @ 299.17 deg heading

Permian Oilfield Partners does not own any 2D or 3D seismic data in the area of this proposed SWD well. Our 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. Based on offset well log data, we have not interpreted any faults in the immediate area.
3. A basement PreCambrian fault is 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.
4. Even though we do not propose to inject into the PreCambrian, Permian Oilfield Partners ran modeling to check for fault slip assuming the improbable occurrence of a total downhole well failure that would allow 100% of injected fluids to enter the PreCambrian. 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 PreCambrian fault being stressed so as to create an induced seismic event, with the following assumptions:
    a. Full proposed capacity of 50,000 BBL/day for 30 years

b. 12.5 mD average permeability, 3% average porosity, .75 psi/ft frac gradient, .45 psi/ft hydrostatic gradient
c. A-phi=0.60 & Max Horizontal Stress direction 75 deg NW, as per Snee, Zoback paper noted above.

5. The probability of an induced seismic event in the PreCambrian is calculated to be 0% after 30 years as per the FSP results screenshot below. At the fault location closest to the wellbore, fault slip potential remains below 5% even where there is potential to see localized 150 psi pressure change.
6. The analysis below assumes an improbable well failure through the Montoya and Simpson zones, into the PreCambrian. When the injected fluids stay in the Devonian-Silurian zone as per design, there will be very low probability of fault slip, since there are no known nearby faults within the Devonian-Silurian.



As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 2.07 miles away from the nearest active or permitted Devonian disposal well.

gfisher@popmidstream.com
(817) 606-7630

PERMIAN OILFIELD PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
JDAM Federal SWD #1
Sec. 23, Twp. 25S, Rge. 33E
2027' FSL, 250' FEL
Lea County, NM

Permian Oilfield Partners, LLC has mailed notifications to offset operators, mineral owners, lessees and the surface owner as per the following list:

JDAM Federal SWD #1 - Affected Persons within 1 Mile Area of Review

Notified Name	Mailed Address	Mailed City, state, ZIP Code	Shipper	Tracking No.	Mailing Date
EOG Resources Inc	P.O. Box 2267	Midland, TX 79702	USPS	9414811899561828025182	4/26/2019
Bureau Of Land Management	620 E Greene St	Carlsbad, NM 88220	USPS	9414811899561828025946	4/26/2019
New Mexico State Land Office	2827 N Dal Paso St Suite 117	Hobbs, NM 88240	USPS	9414811899561828025007	4/26/2019
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899561828025380	4/26/2019
BTA Oil Producers, LLC	104 S Pecos St	Midland, TX 79701	USPS	9414811899561828025762	4/26/2019
Newkumet Exploration Inc.	500 W Texas Ave # 1410	Midland, TX 79701	USPS	9414811899561828025403	4/26/2019
Concho Resources, Inc.	550 W Texas Ave, Suite 1300	Midland, TX 79701	USPS	9414811899561828025670	4/26/2019
COG Operating LLC	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899561828025618	4/26/2019

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

Date: 4-26-2019

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
April 23, 2019
and ending with the issue dated
April 23, 2019.

Daniel Russell
Publisher

Sworn and subscribed to before me this
23rd day of April 2019.

Gussie Black
Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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
April 23, 2019

Permian Oilfield Partners LLC - PO Box 1220 Stephenville, TX 76401 phone: (512) 606-7830, attention: Gary Fisher, has filed form C-108 (Application for Authorization for Injection) with the New Mexico Oil Conservation Division seeking approval for drill & complete salt water disposal well in Lea County, New Mexico. The well name is the JDAM Federal SWD #1, and is located 2027' FSL & 250' FEL, Unit Letter I, Section 23, Township 25 South, Range 34 East, NMPM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 19,975 feet to 19,043 feet. The maximum expected injection rate is 60,000 BWPD at the maximum surface injection pressure of 3,615 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. #34053

67115647 00227335

GARY FISHER
PERMIAN OILFIELD PARTNERS, LLC
PO BOX 1220
STEPHENVILLE , TX 76401

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

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

CASE NO. 20573
(JDAM FEDERAL)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative Permian Oilfield Partners, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was sent under a notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 11th day of June, 2019 by Deana M. Bennett.

OFFICIAL SEAL
Karlene Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02/27/2021

Notary Public

My commission expires: _____

EXHIBIT
B

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
05/23/2019

Firm Mailing Book ID: 167758

10053 0001

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0059 5045 15	EOG Resources, Inc. P.O. Box 2267 Midland TX 79702	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
2	9314 8699 0430 0059 5045 22	Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
3	9314 8699 0430 0059 5045 39	New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
4	9314 8699 0430 0059 5045 46	BTA Oil Producers, LLC 104 S Pecos St. Midland TX 79701	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
5	9314 8699 0430 0059 5045 53	Newkumet Exploration, Inc. 500 W. Texas Ave #1410 Midland TX 79701	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
6	9314 8699 0430 0059 5045 60	Concho Resources, Inc. 550 W. Texas Ave, Suite 1300 Midland TX 79701	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
7	9314 8699 0430 0059 5045 77	COG Operating LLC 600 W. Illinois Ave Midland TX 79701	$0.65	$3.50	$1.60	$0.00	10053 JDAM Notice
		Totals:	$4.55	$24.50	$11.20	$0.00	
					Grand Total:	$40.25	

List Number of Pieces Listed by Sender	Total Number of Pieces Received at Post Office	Postmaster: Name of receiving employee	Dated:
7			

2

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 167758
Generated: 6/11/2019 9:57:40 AM

USPS Article Number	Date Created	Reference Number	Name 1	Address	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300059504577	2019-05-23 10:24 AM	10053 JDAM	COG Operating LLC	600 W. Illinois Ave	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059504560	2019-05-23 10:24 AM	10053 JDAM	Concho Resources, Inc.	550 W. Texas Ave, Suite 1300	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-29-2019
9314869904300059504553	2019-05-23 10:24 AM	10053 JDAM	Newkumet Exploration, Inc.	500 W. Texas Ave #1410	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059504546	2019-05-23 10:24 AM	10053 JDAM	BTA Oil Producers, LLC	104 S Pecos St.	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059504539	2019-05-23 10:24 AM	10053 JDAM	New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059504522	2019-05-23 10:24 AM	10053 JDAM	Bureau of Land Management	620 E. Greene St.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059504515	2019-05-23 10:24 AM	10053 JDAM	EOG Resources, Inc.	P.O. Box 2267	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	05-30-2019

3

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 31, 2019
and ending with the issue dated
May 31, 2019.

Publisher

Sworn and subscribed to before me this
31st day of May 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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 LEGAL

LEGAL NOTICE
MAY 31, 2019

CASE NO. 20573: Notice to all affected parties, as well as the heirs and devisees of EOG Resources Inc., Bureau of Land Management, New Mexico State Land Office, BTA Oil Producers, LLC, Newkumet Exploration, Inc., Concho Resources, Inc., COG Operating LLC of Permian Oilfield Partners, LLC's application to approve 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 June 13, 2019, to consider this application. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the JDAM Federal SWD Well #1 well at a surface location 2027 feet from the South line and 250 feet from the East line of Section 23, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico for the purpose of operating a produced water disposal well. Applicant seeks authority to inject produced water into the Silurian-Devonian formation at a depth of approximately 17,573' to 19,043'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.0 miles West of Jal, New Mexico.
#34214

01104570 00228945

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

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

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

CASE NO. 20574

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 Vortex Federal SWD Well #1 well at a surface location 1,151 feet from the North line and 337 feet from the East line of Section 1, Township 24 South, Range 32 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 16,619' to 18,427'.

(3) Permian further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) Permian anticipates using an average injection pressure of 2,000 psi for this well and it requests approval of a maximum injection pressure of 3,324 psi for the well.

EXHIBIT
A
tabbies

(5) On or about April 26, 2019, Permian filed an administrative application with the Division seeking administrative approval of the subject well for produced water disposal.

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

(7) The New Mexico State Land Office submitted a protest with respect to Permian's administrative application. Permian discussed the State Land Office's protest with the State Land Office. The State Land Office requested that Permian submit an application for hearing before a Division Examiner for this matter.

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

(9) A proposed C-108 for the subject well is attached hereto in Attachment A.

(10) 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 June 13 2019; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

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

By: _____

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

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CASE NO. ____: Application of Permian Oilfield Partners, LLC for approval of a salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Vortex Federal SWD Well #1 well at a surface location 1,151 feet from the North line and 337 feet from the East line of Section 1, Township 24 South, Range 32 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 16,619' to 18,427'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.1 miles west northwest of Jal, New Mexico.

Revised March 23, 2017

RECEIVED:	REVIEWER:	TYPE:	APP NO:

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Permian Oilfield Partners, LLC **OGRID Number:** 328259
Well Name: Vortex Federal SWD #1 **API:** 30-025-Pending
Pool: SWD; Devonian-Silurian **Pool Code:** 97869

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

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐NSL ☐NSP(PROJECT AREA) ☐NSP(PRORATION UNIT) ☐SD

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐DHC ☐CTB ☐PLC ☐PC ☐OLS ☐OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐PMX ■SWD ☐IPI ☐ EOR ☐PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

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

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

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

Sean Puryear
Print or Type Name

Date

(817) 600-8772
Phone Number

Signature

spuryear@popmidstream.com
e-mail Address

EXHIBIT A

4

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 1220, Stephenville, TX. 76401**

CONTACT PARTY: **Sean Puryear** PHONE: **(817) 600-8772**

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

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

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: **Sean Puryear** TITLE: **Manager**

SIGNATURE: Sean Puryear DATE: 4-26-2019

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.

Additional Data

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 14,806'

   Underlying Potentially Productive Zones:
   None

WELL CONSTRUCTION DATA

Permian Oilfield Partners, LLC.
Vortex Federal SWD #1
1151' FNL, 337' FEL
Sec. 1, T24S, R32E, Lea Co. NM
Lat 32.2508126° N, Lon 103.6208660° W
GL 3636', RKB 3666'

Surface - (Conventional)

Hole Size: 26" **Casing:** 20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top: Surface
Depth Btm: 1160'
Cement: 774 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)

Hole Size: 17.5" **Casing:** 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5059'
Cement: 1680 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)

Hole Size: 12.25" **Casing:** 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12198' **ECP/DV Tool:** 5159'
Cement: 2110 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)

Intermediate #3 - (Liner)

Hole Size: 8.5" **Casing:** 7.625" - 39# HCL-80 FJ Casing
Depth Top: 11998'
Depth Btm: 16619'
Cement: 238 sks - Lite Class C (60:40:0) + Additives
Cement Top: 11998' - (Volumetric)

Intermediate #4 - (Open Hole)

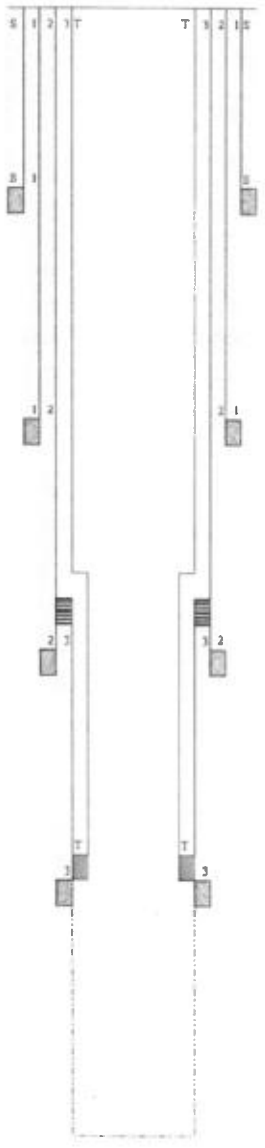
Hole Size: 6.5" **Depth:** 18427'
Inj. Interval: 16619' - 18427' (Open-Hole Completion)

Tubing - (Tapered)

Tubing Depth: 16574' **Tubing:** 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 11998'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 16584' **Packer:** 5.5" - Perma-Pak or Equivalent (Inconel)

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Vortex Federal SWD #1
1151' FNL, 337' FEL
Sec. 1, T24S, R32E, Lea Co. NM
Lat 32.2508126° N, Lon 103.6208660° W
GL 3636', RKB 3666'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top: Surface
Depth Btm: 1160'
Cement: 774 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5059'
Cement: 1680 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)
Hole Size: 12.25"
Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12198'
Cement: 2110 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5159'

Intermediate #3 - (Liner)
Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 11998'
Depth Btm: 16619'
Cement: 238 sks - Lite Class C (60:40:0) + Additives
Cement Top: 11998' - (Volumetric)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 18427'
Inj. Interval: 16619' - 18427' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 16574'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 11998'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 16584'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

VI: There is one well within the proposed injection wells 1 mile area of review that penetrates the Devonian Formation. The well name is the Brinninstool Deep Unit #1, API # 30-025-21081. The previous well operator (Bettis, Boyle & Stovall) plugged the well and released it to the NMOCD in 1989. Please see attached well documentation at end of application.

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 3,324 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 Go-Tech's website and are listed below.

WELL NAME	FIGHTING OKRA 18 FEDERAL COM #001H	SALADO DRAW 6 FEDERAL #001H	RATTLESNAKE 13 12 FEDERAL COM #001H	SNAPPING 2 STATE #014H
api	3002540382	3002541293	3002540912	3001542688
latitude	32.0435333	32.0657196	32.0369568	32.06555986
longitude	-103.5164566	-103.5146942	-103.416214	-103.7413815
section	18	6	13	2
township	26S	26S	26S	26S
range	34E	34E	34E	31E
unit	E	M	P	P
ftgns	2590N	200S	330S	250S
ftgew	330W	875W	330E	330E
county	Lea	Lea	Lea	EDDY
state	NM	NM	NM	NM
formation	AVALON UPPER	BONE SPRING 3RD SAND	DELAWARE-BRUSHY CANYON	WOLFCAMP
sampledate	42046	41850	41850	42284
ph	8	6.6	6.2	7.3
tds_mgL	201455.9	99401.9	243517.1	81366.4
resistivity_ohm_cm	0.032	0.064	0.026	0.1004
sodium_mgL	66908.6	34493.3	73409.8	26319.4
calcium_mgL	9313	3295	15800	2687.4
iron_mgL	10	0.4	18.8	26.1
magnesium_mgL	1603	396.8	2869	326.7
manganese_mgL	1.6	0.37	3.12	
chloride_mgL	121072.7	59986.5	149966.2	50281.2
bicarbonate_mgL	1024.8	109.8	48.8	
sulfate_mgL	940	710	560	399.7
co2_mgL	1950	70	200	100

5. Devonian water analysis from the area of review is unavailable. Representative area water analyses were sourced from Go-Tech's website and are listed below.

WELL NAME	ANTELOPE RIDGE UNIT #003	BELL LAKE UNIT #006
api	3002521082	3002508483
latitude	32.2593155	32.3282585
longitude	-103.4610748	-103.507103
sec	34	6
township	23S	23S
range	34E	34E
unit	K	O
ftgns	1980S	660S
ftgew	1650W	1980E
county	LEA	LEA
state	NM	NM
field	ANTELOPE RIDGE	BELL LAKE NORTH
formation	DEVONIAN	DEVONIAN
samplesource	UNKNOWN	HEATER TREATER
ph	6.9	7
tds_mgL	80187	71078
chloride_mgL	42200	47900
bicarbonate_mgL	500	476
sulfate_mgL	1000	900

VIII: Injection Zone Geology

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 carbonates & chert, followed by the Upper Silurian dolomites, and the Lower 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 8%, 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 migrations to USDW's, 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.

Permian Oilfield Partners, LLC.
Vortex Federal SWD #1
1151' FNL, 337' FEL
Sec. 1, T24S, R32E, Lea Co. NM
Lat 32.2508126° N, Lon 103.6208660° W
GL 3636', RKB 3666'

GEOLOGY PROGNOSIS			
FORMATION	**TOP** KB TVD (ft)	**BOTTOM** KB TVD (ft)	**THICKNESS** (ft)
Salt	1.587	4.921	3.334
Delaware	5.034	8.994	3.960
Bone Spring	8.994	12.148	3.154
Wolfcamp	12.148	13.142	994
Lwr. Mississippian	16.037	16.370	333
Woodford	16.370	16.584	214
Devonian	16.584	17.617	1.033
Fusselman (Silurian)	17.617	18.452	835
Montoya (U. Ordovician)	18.452	18.918	466
Simpson (M. Ordovician	18.918	19.768	850

2. According to the New Mexico Office of the State Engineer and field exploration, there are NO fresh water wells drilled within the proposed well's one-mile area of review. Regionally, shallow fresh water is known to exist at depths less than 600'. There are no underground sources of fresh water 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 and field exploration, there are NO fresh water wells drilled within the proposed well's one-mile area of review.

XII: Hydrologic affirmative statement attached.

XIII: Proof of notice and proof of publication attached.

PERMIAN OILFIELD
PARTNERS

Item XII. Affirmative Statement

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Vortex Federal SWD #1
Sec. 1, Twp. 24S, Rge. 32E
1151' FNL, 337' FEL
Lea County, NM

Permian Oilfield Partners, LLC. has 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.

Gary Fisher
Manager
Permian Oilfield Partners, LLC.

Date: 4/24/2019

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-	97869	SWD; DEVONIAN-SILURIAN

4 Property Code	5 Property Name	6 Well Number
	VORTEX FEDERAL SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
328259	PERMIAN OILFIELD PARTNERS LLC	3636'

10 Surface Location

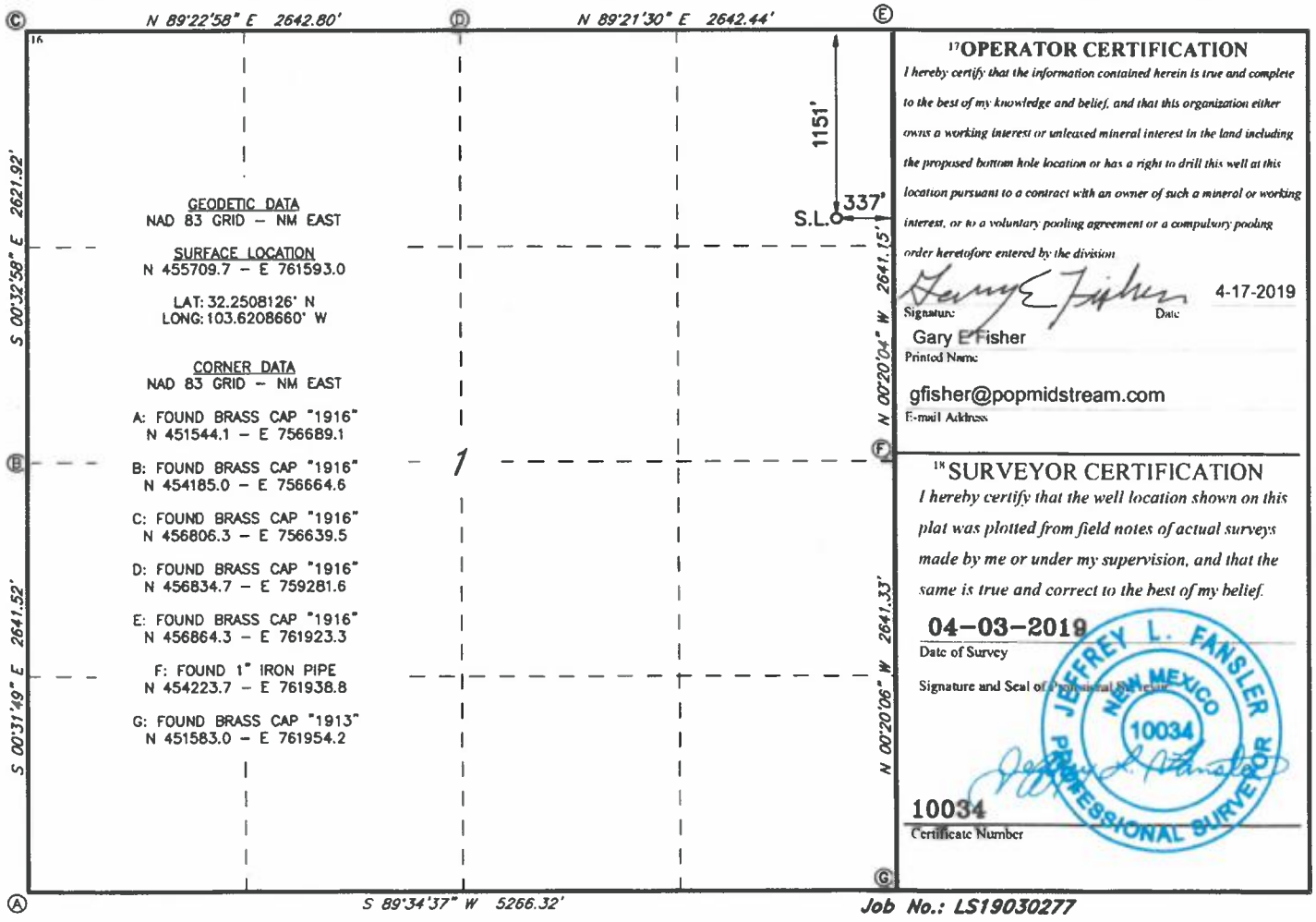
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
1	1	24S	32E		1151	NORTH	337	EAST	LEA

11 Bottom Hole Location If Different From Surface

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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 4-17-2019

Gary E Fisher
Printed Name

gfisher@popmidstream.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

04-03-2019
Date of Survey

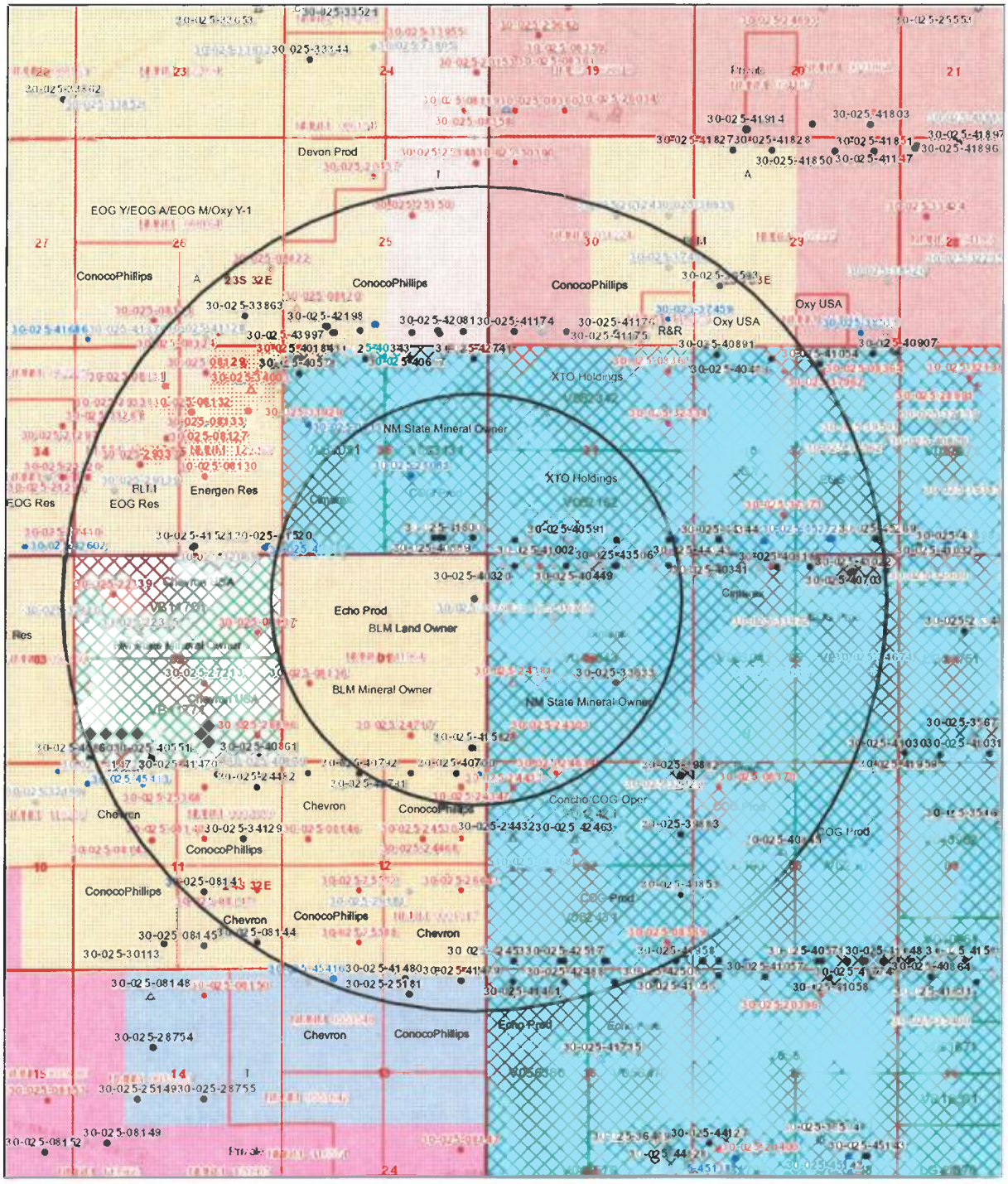
Signature and Seal of Professional Surveyor

JEFFREY L. FANSLER
NEW MEXICO
10034
PROFESSIONAL SURVEYOR

10034
Certificate Number

Job No.: LS19030277

1 & 2 Mile AOR, Vortex Federal SWD #1



4/21/2019, 9:36:46 PM

1:36,112

0 0.35 0.7 1.4 mi

0 0.5 1 2 km

Override 1

Well Locations - Small Scale
- Active
- New
- Plugged
- Cancelled
- Temporarily Abandoned

Well Locations - Large Scale
- Miscellaneous
- CO2 Active
- CO2 Cancelled
- CO2 New
- CO2, Plugged
- CO2, Temporarily Abandoned
- Gas Active
- Gas, Cancelled, Never Drilled
- Gas, New
- Gas, Plugged
- Gas, Temporarily Abandoned
- Injection, Active
- Injection, Cancelled
- Injection, New
- Injection, Plugged
- Injection, Temporarily Abandoned
- Oil, Active
- Oil, Cancelled
- Oil, New
- Oil, Plugged
- Oil, Temporarily Abondoned
- Salt Water Injection, Active
- Salt Water Injection, Cancelled
- Salt Water Injection, New
- Salt Water Injection, Plugged
- Salt Water InjectionTemporarily Abandoned
- Water, Active
- Water, Cancelled
- Water, New
- Water, Plugged
- Water, Temporarily Abandoned
- PLSS First Division

U.S. BLM
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong).

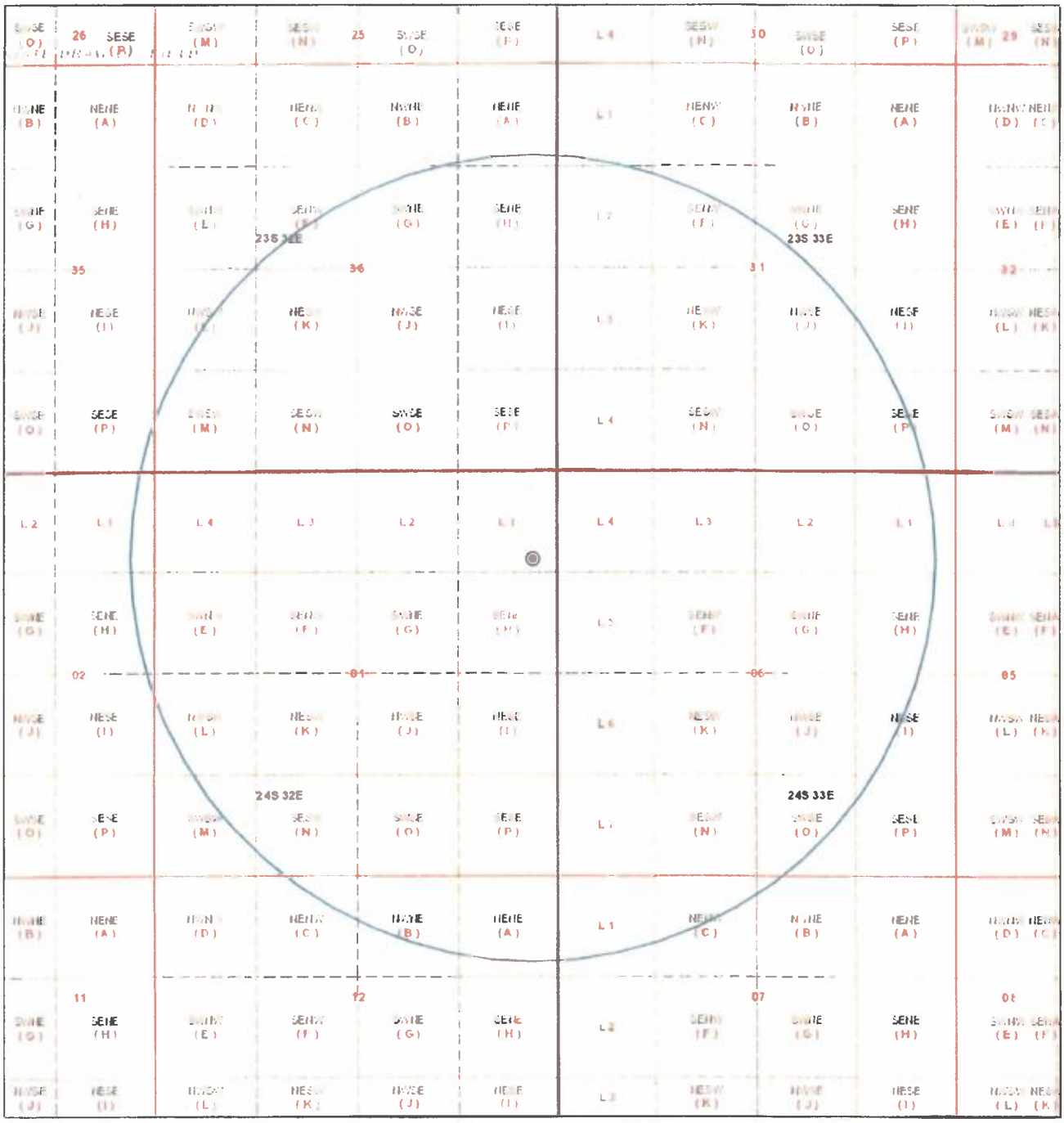
New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/: New Mexico Oil Conservation Division

Vortex 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
30-015-44292	OXY USA INC	PALLADIUM MDP1 7 6 FEDERAL COM	#003H	Oil	Horizontal	Plugged, Site Released	18	T24S	R31E	C	C-18-24S-31E 169 FNL 2255 FWL	C-06-24S-31E Lot 3 180 FNL 2200 FWL	BONE SPRING	20130	10038
30-025-08136	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	01	T24S	R32E	L	L-01-24S-32E 1980 FSL 660 FWL	L-01-24S-32E 1980 FSL 660 FWL	DELAWARE	5091	5091
30-025-21081	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	36	T23S	R32E	J	J-36-23S-32E 1980 FSL 1980 FEL	J-36-23S-32E 1980 FSL 1980 FEL	DEVONIAN	17649	17649
30-025-24303	ADAMS OIL & GAS PRODUCERS	GULF NW STATE	#001	Oil	Vertical	Plugged, Site Released	06	T24S	R33E	M	M-06-24S-33E Lot 7 660 FSL 660 FWL	M-06-24S-33E Lot 7 660 FSL 660 FWL	DELAWARE	5160	5160
30-025-24347	TAHOE ENERGY INC	STATE O	#001	Oil	Vertical	Plugged, Site Released	07	T24S	R33E	D	D-07-24S-33E Lot 1 660 FNL 660 FWL	D-07-24S-33E Lot 1 660 FNL 660 FWL	DELAWARE	5204	5204
30-025-24383	TAHOE ENERGY INC	GULF NW STATE	#002	Salt Water Disposal	Vertical	Plugged, Site Released	06	T24S	R33E	L	L-06-24S-33E Lot 6 1980 FSL 660 FWL	L-06-24S-33E Lot 6 1980 FSL 660 FWL	DELAWARE	5170	5170
30-025-24411	UNION OIL CO OF CALIFORNIA	NEWMAN FEDERAL	#001	Oil	Vertical	Plugged, Site Released	01	T24S	R32E	P	P-01-24S-32E 330 FSL 330 FEL	P-01-24S-32E 330 FSL 330 FEL	DELAWARE	5025	5025
30-025-24433	PRIMAL ENERGY CORPORATION	WIMBERLY	#002	Oil	Vertical	Plugged, Site Released	12	T24S	R32E	A	A-12-24S-32E 660 FNL 660 FEL	A-12-24S-32E 660 FNL 660 FEL	DELAWARE	5038	5038
30-025-24634	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	07	T24S	R33E	C	C-07-24S-33E 330 FNL 1750 FWL	C-07-24S-33E 330 FNL 1750 FWL	DELAWARE	5121	5121
30-025-24717	PRE-ONGARD WELL OPERATOR	PRE-ONGARD WELL	#001	Oil	Vertical	Plugged, Site Released	01	T24S	R32E	O	O-01-24S-32E 660 FSL 1980 FEL	O-01-24S-32E 0 FSL 1980 FEL	DELAWARE	5117	5117
30-025-33633	CIMAREX ENERGY CO.	TRES EQUIS STATE	#001	Oil	Vertical	Active	06	T24S	R33E	J	J-06-24S-33E 1980 FSL 1980 FEL	J-06-24S-33E 1980 FSL 1980 FEL	BONE SPRING	12500	12500
30-025-36702	POGO PRODUCING CO	TRIPLE X 31 STATE	#001	Oil	Vertical	Cancelled Apd	31	T23S	R33E	N	N-31-23S-33E 333 FSL 1983 FWL	N-31-23S-33E 333 FSL 1983 FWL	DELAWARE	5300	5300
30-025-36731	OXY USA INC	TRIPLE X 6 STATE	#001	Oil	Vertical	Plugged, Not Released	06	T24S	R33E	D	D-06-24S-33E Lot 4 330 FNL 1310 FWL	D-06-24S-33E Lot 4 330 FNL 1310 FWL	BONE SPRING	9200	9200
30-025-36764	POGO PRODUCING CO	TRIPLE X 31 STATE	#002	Oil	Vertical	Cancelled Apd	31	T23S	R33E	M	M-31-23S-33E Lot 4 330 FSL 990 FWL	M-31-23S-33E Lot 4 330 FSL 990 FWL	DELAWARE	5300	5300
30-025-36765	POGO PRODUCING CO	TRIPLE X 6 STATE	#002	Oil	Vertical	Cancelled Apd	06	T24S	R33E	B	B-06-24S-33E Lot 2 330 FNL 2600 FEL	B-06-24S-33E Lot 2 330 FNL 2600 FEL	DELAWARE	5300	5300
30-025-36766	POGO PRODUCING CO	TRIPLE X 6 STATE	#003	Oil	Vertical	Cancelled Apd	06	T24S	R33E	F	F-06-24S-33E 1650 FNL 1650 FWL	F-06-24S-33E 1650 FNL 1650 FWL	DELAWARE	5300	5300
30-025-36767	POGO PRODUCING CO	TRIPLE X 6 STATE	#004	Oil	Vertical	Cancelled Apd	06	T24S	R33E	D	D-06-24S-33E Lot 4 660 FNL 330 FWL	D-06-24S-33E Lot 4 660 FNL 330 FWL	DELAWARE	5300	5300
30-025-36768	POGO PRODUCING CO	TRIPLE X 6 STATE	#005	Oil	Vertical	Cancelled Apd	06	T24S	R33E	E	E-06-24S-33E Lot 5 1650 FNL 330 FWL	E-06-24S-33E Lot 5 1650 FNL 330 FWL	DELAWARE	5300	5300
30-025-40183	CIMAREX ENERGY CO.	TRES EQUIS STATE	#002	Oil	Horizontal	Active	06	T24S	R33E	C	C-06-24S-33E Lot 3 330 FNL 1980 FWL	N-06-24S-33E 4941 FNL 2031 FWL	BONE SPRING	15523	11184
30-025-40320	CIMAREX ENERGY CO.	TRES EQUIS STATE	#003H	Oil	Horizontal	Active	06	T24S	R33E	D	D-06-24S-33E Lot 4 330 FNL 660 FWL	M-06-24S-33E Lot 7 330 FSL 660 FWL	BONE SPRING	15421	11141
30-025-40341	CIMAREX ENERGY CO.	TRES EQUIS STATE	#004H	Oil	Horizontal	Active	06	T24S	R33E	A	A-06-24S-33E Lot 1 330 FNL 660 FEL	P-06-24S-33E 4940 FNL 598 FEL	BONE SPRING	15568	11160
30-025-40449	CIMAREX ENERGY CO.	TRES EQUIS STATE	#005	Oil	Horizontal	Active	06	T24S	R33E	B	B-06-24S-33E Lot 2 330 FNL 1980 FEL	O-06-24S-33E 342 FSL 2284 FEL	BONE SPRING	15517	11159
30-025-40509	CIMAREX ENERGY CO.	TRES EQUIS STATE	#006C	Oil	Vertical	Cancelled Apd	06	T24S	R33E	D	D-06-24S-33E Lot 4 331 FNL 375 FWL	M-06-24S-33E Lot 7 331 FSL 375 FWL	BONE SPRING	13958	9575
30-025-40590	XTO ENERGY, INC	MIS AMIGOS STATE	#001H	Oil	Horizontal	Active	31	T23S	R33E	O	O-31-23S-33E 330 FSL 1979 FEL	B-31-23S-33E 328 FNL 2016 FEL	BONE SPRING	15450	11094
30-025-40591	XTO ENERGY, INC	ESTANCIA SED	#001H	Oil	Horizontal	Active	31	T23S	R33E	N	N-31-23S-33E 330 FSL 1980 FWL	C-31-23S-33E 330 FNL 1978 FWL	BONE SPRING	15510	11052
30-025-40658	CIMAREX ENERGY CO.	TRES EQUIS STATE	#008C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	C	C-06-24S-33E Lot 3 331 FNL 1650 FWL	N-06-24S-33E 331 FSL 1650 FWL	BONE SPRING	13916	9575
30-025-40659	CIMAREX ENERGY CO.	TRES EQUIS STATE	#009C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	C	C-06-24S-33E Lot 3 331 FNL 2310 FWL	N-06-24S-33E 331 FSL 2310 FWL	BONE SPRING	13916	9575
30-025-40660	CIMAREX ENERGY CO.	TRES EQUIS STATE	#010C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	B	B-06-24S-33E Lot 2 331 FNL 2310 FEL	O-06-24S-33E 331 FSL 2310 FEL	BONE SPRING	13915	9575
30-025-40661	CIMAREX ENERGY CO.	TRES EQUIS STATE	#011C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	B	B-06-24S-33E Lot 2 331 FNL 1650 FEL	O-06-24S-33E 331 FSL 1650 FEL	BONE SPRING	13915	9575
30-025-40662	CIMAREX ENERGY CO.	TRES EQUIS STATE	#012C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	A	A-06-24S-33E Lot 1 331 FNL 990 FEL	P-06-24S-33E 331 FSL 376 FEL	BONE SPRING	13914	9575
30-025-40663	CIMAREX ENERGY CO.	TRES EQUIS STATE	#013C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	A	A-06-24S-33E Lot 1 331 FNL 375 FEL	P-06-24S-33E 331 FSL 375 FEL	BONE SPRING	13913	9575
30-025-40674	CIMAREX ENERGY CO	TRES EQUIS STATE	#007C	Oil	Horizontal	Cancelled Apd	06	T24S	R33E	D	D-06-24S-33E Lot 4 331 FNL 990 FWL	M-06-24S-33E Lot 7 331 FSL 990 FWL	BONE SPRING	13917	9575
30-025-40688	COG PRODUCTION, LLC	QUESO STATE	#001H	Oil	Horizontal	Active	36	T23S	R32E	O	O-36-23S-32E 180 FSL 2260 FEL	B-36-23S-32E 332 FNL 2258 FEL	BONE SPRING	15507	10912
30-025-40689	COG PRODUCTION, LLC	QUESO STATE	#002H	Oil	Horizontal	Active	36	T23S	R32E	P	P-36-23S-32E 373 FSL 380 FEL	A-36-23S-32E 4931 FSL 463 FEL	BONE SPRING	15277	10910
30-025-40700	CIMAREX ENERGY CO	DOS EQUIS 12 FEDERAL COM	#001	Oil	Horizontal	Active	12	T24S	R32E	A	A-12-24S-32E 330 FNL 810 FEL	P-12-24S-32E 330 FSL 660 FEL	BONE SPRING	15399	11085
30-025-40791	CIMAREX ENERGY CO	DOS EQUIS 12 FEDERAL COM	#002H	Oil	Horizontal	Active	12	T24S	R32E	B	B-12-24S-32E 330 FNL 1980 FEL	O-12-24S-32E 4935 FNL 1923 FEL	BONE SPRING	15399	11027
30-025-41002	XTO ENERGY, INC	ESTANCIA SED	#002H	Oil	Horizontal	Active	31	T23S	R33E	M	M-31-23S-33E Lot 4 330 FSL 660 FWL	D-31-23S-33E Lot 1 331 FNL 620 FWL	BONE SPRING	15403	11011
30-025-41003	XTO ENERGY, INC	MIS AMIGOS STATE	#002H	Oil	Horizontal	Active	31	T23S	R33E	P	P-31-23S-33E 330 FSL 660 FEL	A-31-23S-33E 330 FNL 734 FEL	BONE SPRING	35525	11083
30-025-41587	OXY USA INC	J KEATS 1 24 32	#040H	Oil	Horizontal	Active	01	T24S	R32E	P	P-01-24S-32E 330 FSL 400 FEL	A-01-24S-32E Lot 1 351 FNL 408 FEL	BONE SPRING	15474	11035
30-025-41800	COG PRODUCTION, LLC	QUESO STATE	#005H	Oil	Horizontal	Active	36	T23S	R32E	P	P-36-23S-32E 400 FSL 1160 FEL	A-36-23S-32E 366 FNL 1028 FEL	BONE SPRING	14134	9822
30-025-42006	COG PRODUCTION, LLC	QUESO STATE	#003H	Oil	Horizontal	Active	36	T23S	R32E	P	P-36-23S-32E 400 FSL 1260 FEL	A-36-23S-32E 330 FNL 1292 FEL	BONE SPRING	15330	10989
30-025-43141	COG PRODUCTION, LLC	QUESO STATE	#008H	Oil	Horizontal	Active	36	T23S	R32E	O	O-36-23S-32E 400 FSL 1390 FEL	B-36-23S-32E 250 FNL 1358 FEL	BONE SPRING	13837	9445
30-025-43506	CIMAREX ENERGY CO.	TRES EQUIS STATE	#006H	Oil	Horizontal	Active	06	T24S	R33E	B	B-06-24S-33E Lot 2 300 FNL 2020 FEL	O-06-24S-33E 330 FSL 1369 FEL	BONE SPRING	15742	10952
30-025-45415	CIMAREX ENERGY CO.	DOS EQUIS 12 FEDERAL COM	#007H	Oil	Horizontal	New	12	T24S	R32E	A	A-12-24S-32E 330 FNL 200 FEL	P-12-24S-32E 330 FNL 200 FEL	BONE SPRING	15290	10800

Vortex Federal SWD #1 - Water Wells within 1 Mile AOR



4/17/2019, 11:39:57 AM

Override 1

Override 1

PLSS First Division

PLSS Second Division

PLSS Townships

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map: http://nm-emnrd.maps.arcgis.com/apps/webappviewer/... New Mexico Oil Conservation Division

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twp	Rng	X	Y	Depth Well	Depth Water	Water Column
C 01932		C	ED		3	1	12	24S	32E	628633	3567188*	492		
C 02350		CUB	ED		4	3	10	24S	32E	625826	3566333*	60		
C 03527 POD1		C	LE	1	2	3	03	24S	32E	625770	3568487	500		
C 03528 POD1		C	LE	1	1	2	15	24S	32E	626040	3566129	541		
C 03530 POD1		C	LE	3	4	3	07	24S	32E	620886	3566156	550		
C 03555 POD1		C	LE	2	2	1	05	24S	32E	622709	3569231	600	380	220

Average Depth to Water: **380 feet**

Minimum Depth: **380 feet**

Maximum Depth: **380 feet**

Record Count: 6

PLSS Search:

Township: 24S Range: 32E

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

4/23/19 8:21 AM

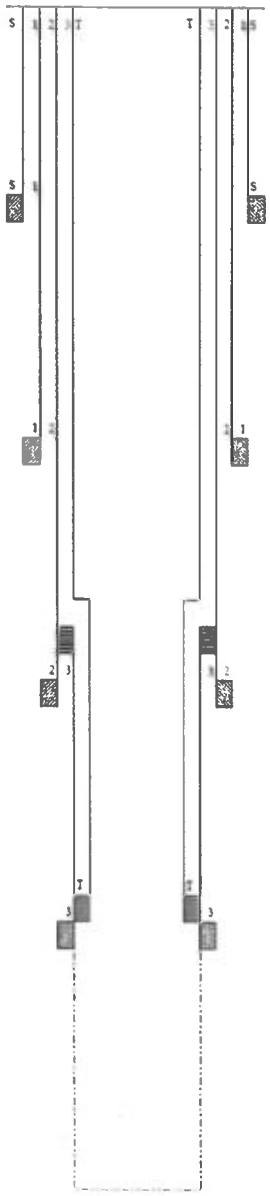
WATER COLUMN/ AVERAGE DEPTH TO WATER

Plugging Risk Assessment

Permian Oilfield Partners, LLC.
Vortex Federal SWD #1
SL: 1151' FNL & 337' FEL
Sec 1, T24S, R32E
Lea County, New Mexico

WELLBORE SCHEMATIC

Permian Oilfield Partners, LLC.
Vortex Federal SWD #1
1151' FNL, 337' FEL
Sec. 1, T24S, R32E, Lea Co. NM
Lat 32.2508126° N, Lon 103.6208660° W
GL 3636', RKB 3666'



Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 & 106.5# J-55 STC Casing
Depth Top: Surface
Depth Btm: 1160'
Cement: 774 sks - Class C + Additives
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 54.5# J-55 & 61# J-55 STC Casing
Depth Top: Surface
Depth Btm: 5059'
Cement: 1680 sks - Lite Class C (50:50:10) + Additives
Cement Top: Surface - (Circulate)

Intermediate #2 - (Conventional)
Hole Size: 12.25"
Casing: 9.625" - 40# L-80 & 40# HCL-80 BTC Casing
Depth Top: Surface
Depth Btm: 12198'
Cement: 2110 sks - Lite Class C (60:40:0) + Additives
Cement Top: Surface - (Circulate)
ECP/DV Tool: 5159'

Intermediate #3 - (Liner)
Hole Size: 8.5"
Casing: 7.625" - 39# HCL-80 FJ Casing
Depth Top: 11998'
Depth Btm: 16619'
Cement: 238 sks - Lite Class C (60:40:0) + Additives
Cement Top: 11998' - (Volumetric)

Intermediate #4 - (Open Hole)
Hole Size: 6.5"
Depth: 18427'
Inj. Interval: 16619' - 18427' (Open-Hole Completion)

Tubing - (Tapered)
Tubing Depth: 16574'
Tubing: 7" - 26# HCP-110 FJ Casing & 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
X/O Depth: 11998'
X/O: 7" 26# HCP-110 FJ Casing - X - 5.5" 17# HCL-80 FJ Casing (Fiberglass Lined)
Packer Depth: 16584'
Packer: 5.5" - Perma-Pak or Equivalent (Inconel)

7" UFJ Tubing Inside of 9 5/8" 40# Casing

Bowen Series 150 Releasing and Circulation Overshots

Maximum Catch Size 6⅝" to 7⅛" Inclusive

Maximum Catch Size (Spiral)		6⅝	6¾	7	7⅛
Maximum Catch Size (Basket)		5⅞	6⅛	6¾	6¾
Overshot O.D.		6¼	7⅛	8⅛	8⅛
Type		F-S	S-H	S-H	S-H
Complete Assembly	Part No.	G-3032	G-5222	9217	G-5354
(Dressed Spiral Parts)	Weight	260	243	251	260
Replacement Parts					
Top Sub	Part No.	A-3033	A-5223	9218	A-5355
Bowl	Part No.	B-3034	B-5224	9219	B-5356
Packer	Part No.	A-1814	B-5225	9224	B-5357
Spiral Grapple	Part No.	N-84	B-5227	9222	B-5359
Spiral Grapple Control	Part No.	M-89	A-5226	9223	B-5360
Standard Guide	Part No.	A-1816	A-5229	9226	A-5361
Basket Parts					
Basket Grapple	Part No.	N-84	B-5227	9222	B-5359
Basket Grapple Control	Part No.	M-89	A-5226	9223	B-5360
Mill Control Packer	Part No.	A-1814-R	B-5225-R	9224-R	B-5357-R

A 6.375" O.D. Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

7" 26# FJ Casing Inside 9.625" 40# BTC Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.840	9 5/8	40.0	L-80	BTC	Casing	9.625	10.625	8.835	8.679	-	-	-	-
	7	26.0	HCP-110	FJ	Casing	7.000	7.000	6.276	6.151	28.500	6.080	5.940	5.815

*Read Indentical Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside **diameter cutting tool may be used.**

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

5 ½" UFJ Tubing Inside of 7 ⅝" 39# Casing

Tools are listed in order of maximum catch size

The following table shows only a partial listing of available NOV Downhole Bowen® overshots

NOTE: Nitralloy Grapples are available upon request.

Bowen Series 150 Releasing and Circulation Overshots

Maximum Catch Size 4⅛" to 5½" inclusive

Maximum Catch Size (Spiral)		4⅛	4¼	4⅜	4½	5	5	5½
Maximum Catch Size (Basket)		3¹⁵⁄₁₆	4⅛	4¼	4⅜	4½	4⅝	4⅞
Overshot O.D.		5¹⁄₁₆	5¼	5⅜	5½	5⅞	6⅛	6⅜
Type		F.S	S.H.	S.H.	S.F.S	S.H.	F.S	S.H.
Complete Assembly	Part No.	5696	5698	C-5183	8675	C-5171	C-4525	8625
(Dressed Spiral Parts)	Weight	130	130	132	135	140	192	185
Replacement Parts								
Top Sub	Part No.	5697	5699	A-5169	8676	A-5172	B-4526	8626
Bowl	Part No.	5698	5700	B-5170	8677	B-5173	B-4527	8617
Packer	Part No.	169	1140	B-2199	6114	C-5950	C-4505	6618
Spiral Grapple	Part No.	165	1135	B-2201	6112	B-4369	M-1071	6619
Spiral Grapple Control	Part No.	166	1137	B-2202	6113	B-4370	M-1072	6620
Standard Guide	Part No.	167	1143	B-2203	6121	B-4371	C-1074	6621
Basket Parts								
Basket Grapple	Part No.	165	1135	B-2201	6112	B-4369	M-1071	6619
Basket Grapple Control	Part No.	166	1137	B-2202	6113	B-4370	M-1072	6620
Mill Control Packer	Part No.	162-R	1140-R	B-2199-R	6114-R	C-5950-R	M-4505	C-6518-R

A (6.625" turned down to **6.500"** O.D.) Bowen Series 150 Overshot will be used to perform this overshot operation. Details on the overshot are listed above. Casing to tubing clearance dimensions are listed below.

5.5" 17# FJ Casing Inside 7.625" 39# FJ Casing

Clearance (in)	Pipe Size (in)	Weight lb/ft	Grade	Conn.	Type	Body O.D. (in)	Coupling O.D. (in)	I.D. (in)	Drift (in)	Lined Wt. lb/ft	Lined I.D. (in)	Flare I.D. (in)	Lined Drift (in)
0.500	7 5/8	39.0	HCL-80	FJ	Casing	7.625	7.625	6.625	6.500	-	-	-	-
	5 1/2	17.0	HCL-80	FJ	Casing	5.500	5.500	4.892	4.767	18.500	4.520	4.400	4.275

*Red Indicates Tubing

Fishing Procedure

Overshot Fishing Procedure

In the Event of a Connection Break

- **If fishing neck is clean**

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.
5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

In the Event of a Body Break

- If fishing neck is clean

1. Trip in hole with overshot and engage fish.
2. Pick up 2 points over neutral weight.
3. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
4. Once released from packer, trip out of hole with fish.

- **If dressing fishing neck is required**

1. Trip in hole with mill and dress fishing neck to allow for overshot to engage tubing.
2. Trip out of hole with mill.
3. Trip in hole with overshot and engage fish.
4. Pick up 2 points over neutral weight.

5. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
6. Once released from packer, trip out of hole with fish.

A skirted mill may be substituted for a standard mill to ensure pipe stabilization and the casing is not damaged while milling

Spear Fishing Procedure

If an overshot cannot be used to retrieve the fish, a spear may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with spear sized to engage the I.D. of the tubing.
6. Engage the tubing with spear.
7. Pick up 2 points over neutral weight.
8. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
9. Once released from packer, trip out of hole with fish.

Inside Diameter Cutting Tool Fishing Procedure

If an overshot is required but a mill cannot be used to dress off a fishing neck, an inside diameter cutting tool may be used.

- Due to the use of insert lined tubing, the composite liner must be removed from the tubing before engaging the fish with a spear.

1. Trip in hole with spear sized to engage the I.D. of the insert liner.
2. Engage the insert liner inside the tubing with spear.
3. Pull the insert liner out of the tubing.
4. Trip out of hole with insert liner.
5. Trip in hole with inside diameter cutting tool and cut the tubing below the damaged fishing neck.
6. Trip out hole with cutting tool.
7. Trip in hole with spear sized to engage the I.D. of the tubing.
8. Engage the previously cut tubing segment with spear.
9. Trip out hole with cut tubing segment and spear.
10. Trip in hole with overshot and engage fish.
11. Pick up 2 points over neutral weight.
12. Turn pipe 10-15 turns to the right to release the seal assembly from the packer.
13. Once released from packer, trip out of hole with fish.

Abandonment Procedure

If the tubing cannot be recovered and the well is to be abandoned.

- The operator will ensure that all geologic formations are properly isolated.

1. Confirm the I.D. of the injection tubing is free from obstructions.
2. Run in hole with wireline set profile plug.
3. Set plug inside of packer assembly.
   (Plug will allow cement to fill the I.D. of the injection tubing and the tubing to casing annulus)
4. Run in hole with wireline conveyed perforating guns and perforate the tubing immediately above the packer.
5. Trip in hole with an overshot, spear, cement retainer or isolation tool that will provide a work string-to- injection tubing seal.
6. Engage the fish with sealing tool.
7. Confirm circulation down the tubing and up the tubing-to-casing annulus.
8. Cement the work string, injection tubing, injection tubing-to-casing annulus and work string-to-casing annulus to surface.
9. Confirm the entirety of the wellbore is cemented to surface and all zones are isolated.
10. ND wellhead and install permanent capping flange.

PERMIAN OILFIELD
PARTNERS

Attachment to C-108
Permian Oilfield Partners, LLC
Vortex Federal SWD #1
Sec. 1, Twp. 24S, Rge. 32E
1151' FNL, 337' FEL
Lea County, NM

April 17, 2019

STATEMENT REGARDING SEISMICITY

Examination of the USGS and TexNet seismic activity databases has shown minimal historic seismic activity in the area (< 30 miles) of our proposed above referenced SWD well as follows:

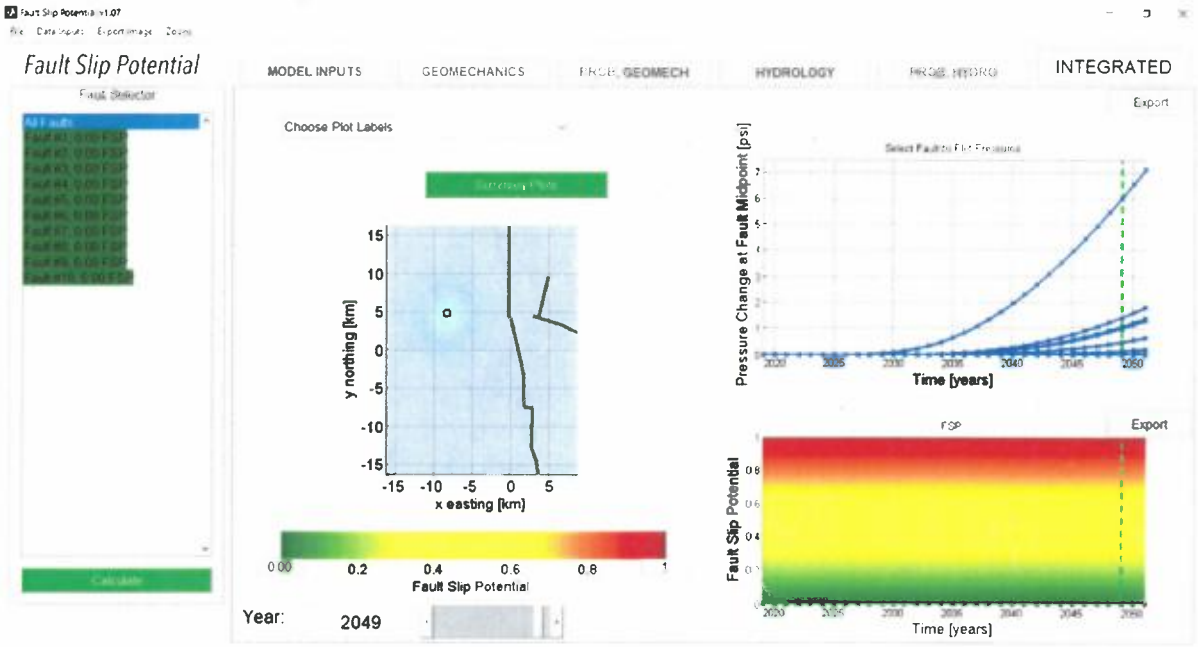
1. M2.9, 1984-12-09, 13.03 miles away @ 345.83 deg heading
2. M3.3, 2001-06-02, 27.29 miles away @ 50.43 deg heading
3. M4.6, 1992-01-02, 29.26 miles away @ 53.10 deg heading
4. M2.6, 2017-05-03, 28.06 miles away @ 89.96 deg heading
5. M3.1, 2012-03-18, 26.68 miles away @ 301.08 deg heading

Permian Oilfield Partners does not own any 2D or 3D seismic data in the area of this proposed SWD well. Our 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. Based on offset well log data, we have not interpreted any faults in the immediate area.
3. Basement PreCambrian 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.
4. Even though we do not propose to inject into the PreCambrian, Permian Oilfield Partners ran modeling to check for fault slip assuming the improbable occurrence of a total downhole well failure that would allow 100% of injected fluids to enter the PreCambrian. 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 PreCambrian fault being stressed so as to create an induced seismic event, with the following assumptions:

a. Full proposed capacity of 50,000 BBL/day for 30 years
b. 12.5 mD average permeability, 3% average porosity, .75 psi/ft frac gradient, .45 psi/ft hydrostatic gradient
c. A-phi=0.60 & Max Horizontal Stress direction 75 deg NW, as per Snee, Zoback paper noted above.

5. The probability of an induced seismic event in the PreCambrian is calculated to be 0% after 30 years as per the FSP results screenshot below. At its closest point, the well is approximately 1km away from this fault, but due to the direction of maximum horizontal stress, the localized probability of an induced seismic event still remains about 10%, even in the unlikely case of a catastrophic well failure that could see high localized pressure on the fault.
6. The analysis below assumes an improbable well failure through the Montoya and Simpson zones, into the PreCambrian. When the injected fluids stay in the Devonian-Silurian zone as per design, there will be very low probability of fault slip, since there are no known nearby faults within the Devonian-Silurian.



As per NM OCD requirements (injection well to injection well spacing minimum of 1.5 miles), this proposed above referenced SWD well is located 2.35 miles away from the nearest active or permitted Devonian disposal well.

gfisher@popmidstream.com
(817) 606-7630

Section VI. Plugged Devonian, Brinninstool #1

WELLBORE SCHEMATIC

Updated: 4/25/2019 - Sean Puryear
Permian Oilfield Partners, LLC

API # 30-025-21081
Brinninstool #1
1980' FSL, 1980' FEL
Sec. 16, T23S, R32E, Lea Co. NM
Lat 32.259449° N, Lon 103.626187° W
GL 3662', RKB 3689'

Spud Date: 03/23/1964, Initial Plugging Date: 01/26/1965, Final Plugging Date: 07/10/1989

Surface - (Conventional)
Hole Size: 26"
Casing: 20" - 94# H-40 STC Casing
Depth Top: Surface
Depth Btm: 725'
Cement: 1100 sks
Cement Top: Surface - (Circulate)

Intermediate #1 - (Conventional)
Hole Size: 17.5"
Casing: 13.375" - 68# N-80 & 72# N-80 BTC Casing
Depth Top: Surface
Depth Btm: 5038'
Cement: 4460 sks
Cement Top: 105' - (Temp Survey Verified & Topped Out to Surface)
ECP/DV Tool: 3577'

Intermediate #2 - (Conventional)
Hole Size: 12.5"
Casing: 10.75" - 60.7# P-110 & 65.7# P-110 Hydril Casing
Depth Top: Surface
Depth Btm: 12712'
Cement: 2400 sks
Cement Top: 7895' - (Temp Survey Verified)
* 10 3/4" Casing Cut-Off & Pulled at 2600' (1965)

Intermediate #3 - (Liner)
Hole Size: 9.5"
Casing: 7 5/8" 39# Liner
Depth Top: 12,283'
Depth Btm: 16,820'
Cement: 1350 sks
Cement Top: 16,820'
* Plugged Back to 15,700' with 250 sks Trinity Inferno Cement
* 7 5/8" Liner Top @ 12283'
* 7 5/8" Scab Liner Set @ 8106'
* 7 5/8" Casing Cut-Off & Pulled at 6025' (1989)

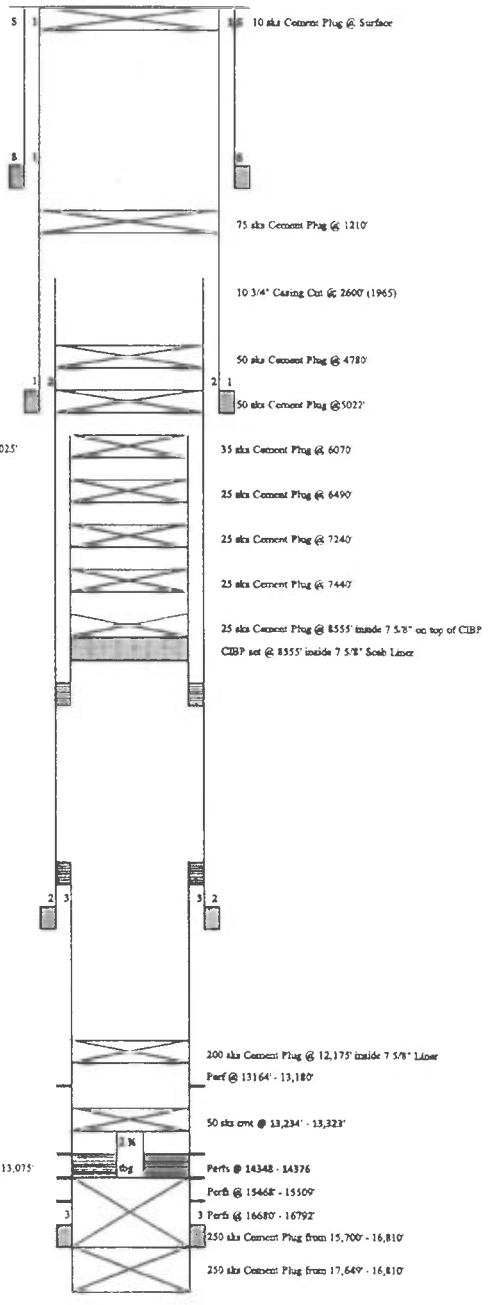
Open Hole
Hole Size: 6.5"
Depth: 17649'
* Plugged Back to 16,810' with 250 sks Trinity Inferno Cement

Work History
SPUD: 03/23/1954 - Drilled by Pure Oil Co

INITIAL PLUGGING: 03/01/1965 - Plugged by Pure Oil Co. - See Attached Plugging Report

RE-ENTRY: 02/1987 - Bettis, Boyle & Stovall - Ran in, Drilled Out Plugs, Set 7 5/8" Scab Liner @ 8106'
RIH & Set 2 7/8" Packer @ 13,075' Perforated @ 14,348 - 14,376, Cut 2 7/8" tbg @ 13,296',
Set 50 sks cmt plug across top of cut tubing, Perforate 13,164' - 13,180', RIH & set Baker Lok-set packer @ 13,075

FINAL PLUGGING: 07/10/1989 - Bettis, Boyle & Stovall - See Attached Plugging Report



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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
Box 1980, Hobbs, NM 88240

DISTRICT II
.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No. V-746

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: Brinninstool

1. Type of Well: OIL WELL [ ] GAS WELL [X] OTHER

2. Name of Operator: Bettis, Boyle and Stovall

8. Well No. 1

3. Address of Operator: P. O. Box 1240, Graham, Texas 76046

9. Pool name or Wildcat: Wildcat

4. Well Location
Unit Letter J : 1980 Feet From The South Line and 1980 Feet From The East Line

Section 16 Township 23-S Range 32-E NMPM Lea County

10. Elevation (*Show whether DF, RKB, RT, GR, etc.*) 3662.5' GR, 3689' RKB

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[XX]
PULL OR ALTER CASING	[ ]			CASING TEST AND CEMENT JOB	[ ]		
OTHER:	[ ]			OTHER:			[ ]

12. Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

Plugging operations began on May 24, 1989, and were completed on June 12, 1989.
Set 25 sack plug at 13,180', WOC, tagged plug at 13,074'. Circulated hole with 9.5#/gallon mud. Set 50 sack plug at 8850', tagged plug at 8754'. SI overnight. On May 31, 1989 bled off gas for 2 minutes, both plugs leaking. Drilled out both plugs to 13,010', circulated hole with 10#/gallon brine. Spotted 200 sack plug from 13,010' to 12,175'. Set CIBP at 8555' with 25 sacks cement on top.
Jet-cut 7-5/8" casing at 6025' and pulled 142 joints (5714') of casing.
On June 9, 1989 continued to set cement plugs: 25 sacks at 7440', 25 sacks at 7240', 25 sacks at 6490', and 35 sacks at 6070'. Shut down for weekend.
Continued on June 12, 1989 setting cement plugs: 50 sacks at 5022', 50 sacks at 4780', 75 sacks at 1210', and 10 sack plug at surface with dry hole marker.
The anchors were cut-off and location cleaned up on June 12, 1989.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Kim Tyson TITLE Production Asst. DATE 9/5/89

TYPE OR PRINT NAME TELEPHONE NO.

(This space for State Use)

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

PURE OIL COMPANY
INITIAL PLUGGING: 03/01/1965

Dual Induction-Laterolog, and Microlog-Caliper surveys. Set HOWCO SVBC tool at 16,800', cemented through tool with 250 sacks cement, final pressure 3800#. Tested casing with 2500 psi, held OK. Tested casing with 14.3# mud in hole to 2000#, held 30 minutes OK.
16,810' PBTD. Perforated 7-5/8" OD Liner in Mississippian Lime, 16,680'-16,685', 16,694'-16,706', 16,716'-16,720', 16,787'-16,758', and 16,787'-16,792' with 2 shots per foot (total 33', 66 shots). Swabbed trace of gas, no formation fluid. Reset HOWCO RTTS tool at 16,602' (was 16,544'), squeezed Mississippian perforations, 16,680' to 16,792' with 250 sacks cement, maximum pressure 5000#, minimum 3800#. After SQZ, pressured up on plug to 7650 psi, held OK. Set HOWCO BC Bridge Plug at 15,700'.
15,700' PBTD. Set HOWCO RTTS tool at 15,372'. Perforated 7-5/8" OD Liner, in Pennsylvanian formation, 15,468'-15,468', 15,491'-15,495', and 15,498'-15,509' with 2 shots per foot (total 35', 70 shots). Well open to air 8-1/2 hours, no blow. Swabbed load water, trace of gas. Swabbed down to 10,000', well started flowing. 9-1/2 hours flowed to pit, 3/4" and 5/8" chokes, mud and slightly salty water. Flowed 30 minutes on 1/4" choke, FTP 600 psi, rate of 850 MCF/D. Acidized Pennsylvanian perforations, 15,468' to 15,509' with 2000 gallons 7-1/2% mud acid. Swabbed to pit, flowing by heads, tubing pressure 130 psi to 0 psi. Flowed through separator, 3/4" choke, average rate of gas 725 MCF/D, average oil water 5.5 barrels per hour, water increased and gas decreased after acid job. Squeezed perforations, 15,468' to 15,509' with 250 sacks cement. Reset packer at 15,420', tested packer and casing with 1500 psi, held OK. Tested perforations 15,468' to 15,509' with 7500 psi, held 30 minutes OK. Tagged top of cement inside 7-5/8" OD Liner at 15,224'. Pumped in 14.5# mud, spotted cement plug in 10-3/4" OD Casing at 9,027' with 125 sacks (15.2# slurry) salt water class "A" cement. **Shot 10-3/4" OD Casing at 7,660'**, attempted to pull casing, unable to pull. **Shot 10-3/4" OD Casing at 7,750'**, unable to pull casing. **Placed cement plug 7,950' to 7,650' with 150 sacks cement, 14.5# mud placed between plugs. Shot 10-3/4" OD Casing at 6,770'**, unable to pulling casing. Placed cement plug 6,850' to 6,650' with 100 sacks cement, 14.5# mud placed between plugs. **Shot 10-3/4" OD Casing at 5,954'**, unable to pull casing. Placed cement plug 6000' to 5,800' with 100 sacks cement, 14.5# mud placed between plugs. **Shot 10-3/4" OD Casing at 4,899'**, unable to pull casing. Placed cement plug 4,950' to 4,750' with 100 sacks cement, 14.5# mud placed between plugs. **Shot 10-3/4" OD Casing at 2,600', recovered approximately 2600' of casing.** Placed cement plug in top of 10-3/4" OD Casing and inside 13-3/8" OD Casing from 2750' to 2350' with 200 sacks cement, 14.5# mud placed between plugs in 10-3/4" OD Casing and bottom of 13-3/8" OD Casing. Placed cement plug in 13-3/8" OD Casing from 100' to surface with 125 sacks cement, 14.5# mud placed between plugs. Welded 1/4" steel plate on top of casinghead with 4" diameter marker extending 4 feet above ground. Plugging witnessed by New Mexico Oil Conservation Commission representative.

PERMIAN OILFIELD
PARTNERS

Statement of Notifications

Re: C-108 Application for SWD Well
Permian Oilfield Partners, LLC
Vortex Federal SWD #1
Sec. 1, Twp. 24S, Rge. 32E
1151' FNL, 337' FEL
Lea County, NM

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

Vortex Federal SWD #1 - Affected Persons within 1 Mile Area of Review

Notified Name	Notifed Address	Notified City, State, ZIP Code	Shipper	Tracking No.	Mailing Date
Oxy USA Inc	P.O. Box 4294	Houston, TX 77210-4294	USPS	9414811899561820014016	4/27/2019
Cimarex Energy Co.	600 N. Marienfeld Street Suite 600	Midland, TX 79701	USPS	9414811899561820014313	4/27/2019
POGO Producing Co	P.O. Box 10340	Midland, TX 79702	USPS	9414811899561820014061	4/27/2019
XTO Energy, Inc	6401 Holiday Hill Road Building #5	Midland, TX 79707	USPS	9414811899561820014023	4/27/2019
COG Production, LLC	P.O. Box 2064	Midland, TX 79702	USPS	9414811899561820014320	4/27/2019
Bureau Of Land Management	620 E Greene St	Carlsbad, NM 88220	USPS	9414811899561820014184	4/27/2019
New Mexico State Land Office	2827 N Dal Paso St Suite 117	Hobbs, NM 88240	USPS	9414811899561820014375	4/27/2019
New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe, NM 87501	USPS	9414811899561820014337	4/27/2019
Energen Resources Corporation	605 R Arrington Jr. Blvd North	Birmingham, AL 35203-2707	USPS	9414811899561820014382	4/27/2019
Chevron U S A Inc	6301 Deauville Blvd	Midland, TX 79706	USPS	9414811899561820014177	4/27/2019
Echo Production Inc	616 5th St	Graham, TX 76450	USPS	9414811899561820014344	4/27/2019
ConocoPhillips Company	P.O.Box 2197 Office EC3-10-W285	Houston, TX 77252	USPS	9414811899561820014399	4/27/2019
Concho Oil & Gas LLC	550 West Texas Avenue Suite 100	Midland, TX 79701	USPS	9414811899561820014306	4/27/2019
XTO Holdings, LLC	810 Houston St	Fort Worth, TX 76102	USPS	9414811899561820014009	4/27/2019
COG Operating LLC	600 W Illinois Ave	Midland, TX 79701	USPS	9414811899561820014351	4/27/2019

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

Date: 4-27-2019

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
April 23, 2019
and ending with the issue dated
April 23, 2019.

Publisher

Sworn and subscribed to before me this 23rd day of April 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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

LEGALS

LEGAL NOTICE
April 23, 2019

Permian Oilfield Partners, LLC, PO Box 1220, Stephenville, TX 76401, phone (817)606-7630, attention 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 well name is the Vortex Federal SWD #1, and is located 1151' FNL & 337' FEL, Unit Letter A, Section 1, Township 24 South, Range 32 East, NMPM. The well will dispose of water produced from nearby oil and gas wells into the Devonian formation from a depth of 16,619 feet to 18,427 feet. The maximum expected injection rate is 50,000 BWPD at a maximum surface injection pressure of 3,324 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.
#34061

67115647 00227339

GARY FISHER
PERMIAN OILFIELD PARTNERS, LLC
PO BOX 1220
STEPHENVILLE , TX 76401

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

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

CASE NO. 20574
(VORTEX)

AFFIDAVIT

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

Deana M. Bennett, attorney in fact and authorized representative Permian Oilfield Partners, LLC, the Applicant herein, being first duly sworn, upon oath, states that the above-referenced Application was sent under a notice letter and that proof of receipt is attached hereto.

Deana M. Bennett

SUBSCRIBED AND SWORN to before me this 11th day of June, 2019 by Deana M. Bennett.

OFFICIAL SEAL
Karlene Schuman
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 02/27/2021

Notary Public

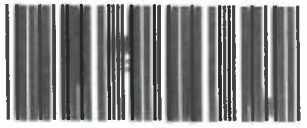
My commission expires: _____

EXHIBIT
B

Karlene Schuman
Modrall Sperling Roehl Harris & Sisk P.A.
500 Fourth Street, Suite 1000
Albuquerque NM 87102

PS Form 3877

Type of Mailing: CERTIFIED MAIL
05/23/2019



Firm Mailing Book ID: 167764

10053.0001

Line	USPS Article Number	Name, Street, City, State, Zip	Postage	Service Fee	RR Fee	Rest.Del.Fee	Reference Contents
1	9314 8699 0430 0059 5060 90	Oxy USA, Inc. P.O. Box 4294 Houston TX 77210	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
2	9314 8699 0430 0059 5061 06	Cimarex Energy Co. 600 N. Marienfeld Street, Suite 600 Midland TX 79701	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
3	9314 8699 0430 0059 5061 13	POGO Producing Co. P.O. Box 10340 Midland TX 79702	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
4	9314 8699 0430 0059 5061 20	XTO Energy, Inc. 6401 Holiday Hill Road Building #5 Midland TX 79707	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
5	9314 8699 0430 0059 5061 37	COG Production, LLC P.O. Box 2064 Midland TX 79702	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
6	9314 8699 0430 0059 5061 44	Bureau of Land Management 620 E. Greene St. Carlsbad NM 88220	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
7	9314 8699 0430 0059 5061 51	New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe NM 87501	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
8	9314 8699 0430 0059 5061 68	Energen Resources Corporation 605 R. Arringrton Jr. Blvd North Birmingham AL 35203	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
9	9314 8699 0430 0059 5061 75	Chevron USA Inc. 6301 Deauville Blvd Midland TX 79706	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
10	9314 8699 0430 0059 5061 82	Echo Production Inc. 616 5th St. Graham TX 76450	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
11	9314 8699 0430 0059 5061 99	ConocoPhillips Company P.O. Box 2197 Houston TX 77252	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
12	9314 8699 0430 0059 5062 05	Concho Oil & Gas LLC 550 West Texas Avenue, Suite 100 Midland TX 79701	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
13	9314 8699 0430 0059 5062 12	XTO Holdings, LLC 810 Houston St. Fort Worth TX 76102	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
14	9314 8699 0430 0059 5062 29	COG Operating LLC 600 W. Illinois Ave. Midland TX 79701	$1.15	$3.50	$1.60	$0.00	10053.0001 Vortex Notice
		Totals:	$16.10	$49.00	$22.40	$0.00	
					Grand Total:	$87.50	

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List Number of Pieces Listed by Sender 14

Total Number of Pieces Received at Post Office

Postmaster: Name of receiving employee

Dated:

Transaction Report Details - CertifiedPro.net
Firm Mail Book ID= 167764
Generated: 6/11/2019 9:11:37 AM

USPS Article Number	Date Created	Reference Number	Name 1	Address	City	State	Zip	Mailing Status	Service Options	Mail Delivery Date
9314869904300059506229	2019-05-23 10:38 AM	10053.0001 Vortex	COG Operating LLC	600 W. Illinois Ave.	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506212	2019-05-23 10:38 AM	10053.0001 Vortex	XTO Holdings, LLC	810 Houston St.	Fort Worth	TX	76102	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506205	2019-05-23 10:38 AM	10053.0001 Vortex	Concho Oil & Gas LLC	550 West Texas Avenue, Suite 100	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506199	2019-05-23 10:38 AM	10053.0001 Vortex	ConocoPhillips Company	P.O. Box 2197	Houston	TX	77252	Delivered	Return Receipt - Electronic, Certified Mail	06-05-2019
9314869904300059506182	2019-05-23 10:38 AM	10053.0001 Vortex	Echo Production Inc.	616 5th St.	Graham	TX	76450	Delivered	Return Receipt - Electronic, Certified Mail	05-29-2019
9314869904300059506175	2019-05-23 10:38 AM	10053.0001 Vortex	Chevron USA Inc.	6301 Deauville Blvd	Midland	TX	79706	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506168	2019-05-23 10:38 AM	10053.0001 Vortex	Energen Resources Corporation	605 R. Arringrton Jr. Blvd North	Birmingham	AL	35203	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506151	2019-05-23 10:38 AM	10053.0001 Vortex	New Mexico State Land Office	310 Old Santa Fe Trail	Santa Fe	NM	87501	Delivered	Return Receipt - Electronic, Certified Mail	05-24-2019
9314869904300059506144	2019-05-23 10:38 AM	10053.0001 Vortex	Bureau of Land Management	620 E. Greene St.	Carlsbad	NM	88220	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506137	2019-05-23 10:38 AM	10053.0001 Vortex	COG Production, LLC	P.O. Box 2064	Midland	TX	79702	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506120	2019-05-23 10:38 AM	10053.0001 Vortex	XTO Energy, Inc.	6401 Holiday Hill Road Building #5	Midland	TX	79707	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506113	2019-05-23 10:38 AM	10053.0001 Vortex	POGO Producing Co.	P.O. Box 10340	Midland	TX	79702	Undelivered	Return Receipt - Electronic, Certified Mail	
9314869904300059506106	2019-05-23 10:38 AM	10053.0001 Vortex	Cimarex Energy Co.	600 N. Marienfeld Street, Suite 600	Midland	TX	79701	Delivered	Return Receipt - Electronic, Certified Mail	05-28-2019
9314869904300059506090	2019-05-23 10:38 AM	10053.0001 Vortex	Oxy USA, Inc.	P.O. Box 4294	Houston	TX	77210	Delivered	Return Receipt - Electronic, Certified Mail	06-06-2019

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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 31, 2019
and ending with the issue dated
May 31, 2019.

Publisher

Sworn and subscribed to before me this
31st day of May 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

OFFICIAL SEAL
GUSSIE BLACK
Notary Public
State of New Mexico
My Commission Expires 1-29-23

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 31, 2019

CASE NO. 20574: Notice to all affected parties, as well as the heirs and devisees of Oxy USA, Inc., Cimarex Energy Co., POGO Producing Co., XTO Energy, Inc., COG Production, LLC, Bureau of Land Management, New Mexico State Land Office, Energen Resources Corporation, Chevron USA Inc., Echo Production Inc., ConocoPhillips Company, Concho Oil & Gas LLC, XTO Holdings, LLC, COG Operating LLC of Permian Oilfield Partners, LLC application to approve 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 June 13, 2019, to consider this application. Applicant seeks an order approving disposal into the Silurian-Devonian formation through the Vortex Federal SWD Well #1 well at a surface location 1,151 feet from the North line and 337 feet from the East line of Section 1, Township 24 South, Range 32 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 18,619' to 18,427'. Applicant further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 20.1 miles west northwest of Jal, New Mexico.
#34217

01104570 00228946

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