

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

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

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

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

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

Form C-101
August 1, 2011
Permit 347756

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address PERMIAN TDS, LLC P.O. Box 788 Lovington, NM 88260		2. OGRID Number 306958
4. Property Code 329817		3. API Number 30-025-51869
5. Property Name ATHENA 28 SWD		6. Well No. 001

7. Surface Location

UL - Lot E	Section 28	Township 20S	Range 34E	Lot Idn E	Feet From 2198	N/S Line N	Feet From 350	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot E	Section 28	Township 20S	Range 34E	Lot Idn E	Feet From 2198	N/S Line N	Feet From 350	E/W Line W	County Lea
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9. Pool Information

SWD;DEVONIAN-SILURIAN	97869
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3695
16. Multiple N	17. Proposed Depth 16250	18. Formation Silurian	19. Contractor	20. Spud Date 9/25/2023
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	26	20	94	1550	2100	0
Int1	17.5	13.375	68	3950	1750	0
Int2	12.25	9.625	53.5	12000	3400	0
Prod	8.5	7.625	39	14950	450	11700

Casing/Cement Program: Additional Comments

Any changes to casing program will first seek NMOCD approval prior to implementation.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	10000	10000	Shaffer / Equivalent

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.	OIL CONSERVATION DIVISION
Signature:	
Printed Name: Electronically filed by Patrick B McMahan	Approved By: Paul F Kautz
Title: Regulatory Manager	Title: Geologist
Email Address: pbm@heidellaw.com	Approved Date: 8/21/2023
Date: 8/17/2023	Phone: 575-399-5031
	Expiration Date: 8/21/2025
	Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
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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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Permian TDS, LLC P.O. Box 788 Lovington, NM 88260		² OGRID Number 306958	
		³ API Number 30-025-45324	
⁴ Property Code	⁵ Property Name Athena 28 SWD	⁶ Well No. 1	

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	28	20S	34E		2198	North	350	West	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name SWD; Devonian - Silurian	Pool Code 97869
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Additional Well Information

UIC Permit: SWD-1707

¹¹ Work Type N	¹² Well Type S	¹³ Cable/Rotary R	¹⁴ Lease Type Fee	¹⁵ Ground Level Elevation 3,695
¹⁶ Multiple N	¹⁷ Proposed Depth 16,250'	¹⁸ Formation Devonian - Silurian	¹⁹ Contractor TBD	²⁰ Spud Date Upon Approval
Depth to Ground water Ranges from 81.97' (UGS 323109103323801) to 143.72' (USGS 323345103351101)		Distance from nearest fresh water well 3740' CP-1262		Distance to nearest surface water 7.05-miles northwest

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94.0 lb/ft	1,550'	2,100	Surface
Intermediate 1	17.5"	13.375"	68.0 lb/ft	3,950'	1,750	Surface
Intermediate 2	12.25"	9.625"	53.5 lb/ft	12,000'	3,400	Surface
Liner	8.5"	7.625"	39.0 lb/ft	11,700' - 14,950'	450	TOL

Casing/Cement Program: Additional Comments

Open Hole completion from 14,950' - 16,250' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Shaffer or equivalent

<p>²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> , if applicable. Signature: <i>Oliver Seekins</i></p> <p>Printed name: Oliver Seekins</p> <p>Title: Consultant</p> <p>E-mail Address: oseekins@all-llc.com</p> <p>Date: 8.14.23</p>	<p>OIL CONSERVATION DIVISION</p> <p>Approved By:</p> <hr/> <p>Title:</p> <p>Approved Date: _____ Expiration Date: _____</p> <p>Conditions of Approval Attached</p>
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HOBBS OCD

NOV 01 2018

DISTRICT I
1185 S. FRANCIS DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

RECEIVED

Revised October 12, 2010
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-45324	Pool Code 97869	Pool Name SWD; Devonian-Silurian
Property Code (TBD)	Property Name ATHENA 28 SWD	Well Number 1
OGRID No. 371643	Operator Name PERMIAN TDS, LLC.	Elevation 3694.9'

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	28	20-S	34-E		2198	NORTH	350	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No.			
						SWD-1707			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>2198'</p> <p>350' S.L.</p> <p>1/16 CORNER Y=11817723.0 N X=2079741.6 E</p> <p>1/16 CORNER Y=11817784.6 N X=2085036.1 E</p> <p>W 1/4 CORNER Y=11816399.1 N X=2079759.6 E</p> <p>NAD 83 SURFACE LOCATION Y=11816853.452 N X=2080103.466 E LAT.=32.545348' N LONG.=103.572712' W</p> <p>E 1/4 CORNER Y=11816456.4 N X=2085053.6 E</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Ben Stone</i> Signature 11/01/18 Date</p> <p>Ben Stone Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>OCTOBER 09, 2017 Date Surveyed</p> <p>Signature & Seal of Professional Surveyor <i>Donald A. Shapiro</i></p> <p>ATHENA 28 SWD</p> <p>Certificate No. DONALD A. SHAPIRO 16606</p>

Permian TDS, LLC
Athena 28 SWD Well No. I
2198' FNL & 350' FWL
Section 28, Twp 20-S, Rng 34-E
Lea County, New Mexico

Well Program - New Drill

Objective: Drill new well for commercial salt water disposal Into the Devonian, Silurian and Fusselman (mudlogging and e-logging to determine final depths) per SWD-(pending).

I. Geologic Information – Devonian – Silurian Formations

The Devonian, Silurian and Fusselman all consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the subject formations in the area. Depth control data was inferred from deep wells to the north, south and east. If the base of Devonian and top of Silurian and/or Ordovician rocks come in as expected the well will only be drilled deep enough for adequate logging rathole.

Estimated Formation Tops:

B/Fresh Water	300
B/Salt	3065
Delaware Lamar	3255
Delaware Sand	5705
Bone Spring	7075
Wolfcamp	10265
Strawn	12635
Atoka	12835
Morrow	13310
Mississippian	14220
Woodford Shale	14770
Devonian	14955
TD Silurian*	16250
Fusselman	16500
Ellenburger	20000

*Please see narrative portion of drilling/pipe specs for TD options.

2. Drilling Procedure

- a. MIRU drilling rig and associated equipment. Set up H₂S wind direction indicators; brief all personnel on Emergency Evacuation Routes.
- b. All contractors conduct safety meetings prior to their current task. All equipment inspected daily. Repair / replace as required.
- c. Well spud operations commence.
- d. Mud logger monitoring returns: cuttings & waste hauled to specified facility. (Sundance, Lea County)
- e. After surface casing set/drilled; if H₂S levels >20 ppm detected, implement H₂S Plan accordingly. (e.g., cease operations, shut in well, employ H₂S safety trailer & personnel safety devices, install flare line, etc. - refer to plan.)
- f. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if.

Well Program - New Drill (cont.)

required. The operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
 g. Sundry forms filed as needed - casing, cement, etc. - operations continue to completion.

3. **Casing program** - Casing designed as follows:

STRING	HOLESZ	DEPTH	CSGSZ	COND	WT/GRD	CLLPS/BRS	TNSN
						<i>Minimum Safety Factors</i>	
Surface	26.0"	0-1,550'	20.0"	New	94.0 lb. J/K-55 ST&C	1.125/1.1	1.8
Intermediate	17.5"	0-3,950'	13.375"	New	68.0 lb. HCL-80 BT&C	1.125/1.1	1.8
Production	12.25"	0-12,000'	9.675"	New	53.5 lb. Q-125 LT&C	1.125/1.1	1.8
Liner*	8.5"	11,700'-14,950'	7.625"	New	39.0 lb. P-110 FJ	1.125/1.1	1.8
Open hole*	6.5" hole	14,950'-16,250'	OH	n/a	n/a	n/a	n/a

Notes:

On both Intermediate casing strings, the cement will be designed to circulate to surface. Both strings will have cement bond logs run (radial, CET or equivalent) to surface.

While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.

* Based on mudlogging and e-logs, the 7-5/8" casing shoe is expected to be set at 14,950'. TD is expected to be 16,250' as determined by logging and suitable porosity has been exposed. Sundry notice will document such events and a C-105 completion report filed within 60 days.

4. **Cementing Program:**

Surface - LEAD Slurry: 1,500 sacks of Class C containing 4% gel + 2% CaCl₂ + .4 pps defoamer + .125 pps cello flake + 3 pps Koal Seal. Weight 13.7 ppg, yield 1.68 ft³/sack; TAIL Slurry: 800 sacks of Class C Neat containing 2% CaCl₂. Weight 14.8 ppg, yield 1.34 ft³/sack; 100% excess, circulate to surface.

Intermediate - LEAD Slurry: 1,400 sacks of Class C containing 4% gel + .4 pps defoamer + .125 pps cello flake + 5% NaCl. Weight 13.2 ppg, yield 1.83 ft³/sack; TAIL Slurry: 350 sacks of Class C Neat. Weight 14.8 ppg, yield 1.32 ft³/sack; 50% excess, circulate to surface.

Production - Stage 1 LEAD Slurry: 1,600 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 400 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 25% excess. DV TOOL ~5800'; Stage 2 LEAD Slurry: 700 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 700 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 35% excess. circulate to surface.

Liner - Slurry: 450 sacks of 50/50 POZ Class H containing .3% retarder + .7% fluid loss additive + .2% dispersant + .4 pps defoamer + .1% Anti-Settling agent. Weight 15.2 ppg, yield 1.32 ft³/sack. 35% excess; TOC calculated@ Top of liner 11,700'.

Well Program - New Drill (cont.)

5. **Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD Rules and Regulations and API RP 53, Section 17. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5000 psi. The NMOCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. Test shall be conducted at:

- a. Installation;
- b. after equipment or configuration changes;
- c. at 30 days from any previous test, and;
- d. anytime operations warrant, such as well conditions

6. **Mud Program & Monitoring** - Mud will be balanced for all operations as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	yp	FL	Ph
0-1,550'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,550' – 5,725'	Brine Water	9.8-10.2	28-32	NC	NC	NC	10.0
5,725' - 12,000'	FW/Gel	8.7-9.0	28-32	NC	NC	NC	9.5-10.5
12,000'-14,950'	XCD Brine Mud	11.0	45-48	20	10	<5	9.5-10.5
14,950'-16,250'	FW Mud	8.4-8.6	28-30	NC	NC	NC	9.5-10.5

Mud and all cuttings monitored w/ cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H2S, mud shall be adjusted appropriately by weight and H2S scavengers.

7. **Auxiliary Well Control and Monitoring** - Hydraulic remote BOP operation, mudlogging to monitor returns.

8. **H₂S Safety** - This well and related facilities are not expected to have H2S releases. However, there may be H2S in the area. There are no private residences or public facilities in the area, but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H2S levels greater than 10 ppm are detected or suspected, the H2S Contingency Plan will be implemented at the appropriate level.

H2S Safety - There is a low risk of H2S in this area. The operator will comply with the provisions of NMAC 19.15.1 I and BLM Onshore Oil and Gas Order #6.

- a) Monitoring - all personnel will wear monitoring devices.
- b) Warning Sign - a highly visible H2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
- c) Wind Detection - two (2) wind direction socks will be placed on location.
- d) Communications - will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
- e) Alarms - will be located at the rig floor, circulating pump / reverse unit area and the flare line. and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.

Well Program - New Drill (cont.)

- f) Mud program - If H₂S levels require, proper mud weight, safe drilling practices and H₂S scavengers will minimize potential hazards.
- g) Metallurgy- all tubulars, pressure control equipment, flowlines, valves, manifolds, and related equipment will be rated for H₂S service if required.

The Permian TDS, LLC H₂S Contingency Plan will be implemented if levels greater than 10ppm H₂S are detected.

9. Logging, Coring and Testing – Permian TDS, LLC expects to run:

- a. Mud logging through the interval will ensure the target interval remains Devonian and Silurian.
- b. CBL (Radial, CET or equivalent) on both intermediate casing strings.
- c. Standard porosity log suite from TD to approximately 14,000'.
- d. No coring or drill tests will be conducted. (The well may potentially be step-rate tested in the future if additional injection pressures are required.)

10. Potential Hazards - No abnormal pressures or temperatures are expected.

No loss of circulation is expected to occur except for drilling into the target disposal zone. All personnel will be familiar with the safe operation of the equipment being used to drill this well.

The maximum anticipated bottom-hole pressure is 8900 psi, and the maximum anticipated bottom-hole temperature is 200° F.

11. **Waste Management** - All drill cuttings and other wastes associated with, and drilling operations will be transported to the Lea County Sundance facility (or alternate), permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

12. **Anticipated Start Date** - Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take six to seven weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, and subject to the availability of the drilling contractor, the anticipated start date is:

November 15, 2023

13. **Configure for Salt Water Disposal** - Subsequent to SWD permit approval from OCD and prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per BLM and OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily maximum volume is 30,000 bpd and average of 20,000 bpd at a maximum surface injection pressure of 2,900 psi (0.2 psi/ft to uppermost injection interval, i.e., casing shoe). If satisfactory disposals rates cannot be achieved at default pressure of .2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psi below parting pressure.

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

ORDER

GRANTING UIC PERMIT SWD-1707

Permian TDS, LLC (“Applicant”) filed an Application for Authorization to Inject (Form C-108) (“Application”) with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (“OCD”) to inject produced water at the Applicant’s Athena 28 SWD Well No. 1 (“Well”), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control (“UIC”) well.
2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.
3. No person filed a protest on the Application.
4. The Well will inject produced water into the Devonian and Silurian formation(s).
5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.
6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 0.74 mile(s) of the Well.
7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.
8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.
9. Applicant is in compliance with 19.15.5.9 NMAC.
10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.
2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.
3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD- 1707 for Well Athena 28 SWD Well No. 1.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



DYLAN M FUGE
DIRECTOR (ACTING)
DMF/ mgm

Date: 2/7/2023

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

UIC CLASS II PERMIT SWD- 1707

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC

OGRID No.: 371643

Well name: Athena 28 SWD Well No. 1

Surface location: 2198 feet from the North line and 350 from the West line,
Unit E of Section 28, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico

Bottom hole location (if different):

Type of completion: Open hole

Type of injection: Commercial

Injection fluid: Salt Water Disposal

Injection interval: 14500'-16250'

Injection interval thickness (feet):1750

Confining layer(s): Woodford formation (Upper) and Montoya formation (Lower)

Prohibited injection interval(s): *Ellenburger formation (lower Ordovician) or
lost circulation intervals directly on top and obviously connected to this formation.*

Liner, tubing, and packer set: Internally coated 5.5 inch tubing and packer set within 100 feet of
the injection interval

Maximum daily injection rate: will be dictated by the maximum surface injection pressure 2900
psi.

Maximum surface injection pressure: 2900 psi.

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

UIC CLASS II PERMIT SWD- 1707

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, (“Act”) and its implementing regulations, 19.15.1 *et seq.* NMAC, (“Rules”) and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division (“OCD”) issues this Permit to Heidel, Samberson, Cox & McMahon, LLC (“Permittee”) to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A (“Well”). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the “operator” of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water (“USDW”) if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill (“APD”) pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

- a. Inspect the Well and associated facilities;
- b. Have access to and copy any record required by this Permit;
- c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
- d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

- a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. **Monthly Reports.** Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application, or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or

an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

- i. The Permit contains a material mistake;
- ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;
- iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;
- iv. The Well's operation may affect the water quality of fresh water;
- v. Injected fluid is escaping from the approved injection interval;
- vi. Injection may be caused or contributed to seismic activity:
or
- vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications.** OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

- i. Non-substantive changes such as correction of typographical errors;

- ii. Requirements for more frequent monitoring or reporting.
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit.
- iv. Amendments to the plugging and abandonment plan.
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well.
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions: no special conditions.

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

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

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

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

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

CONDITIONS

Action 191185

CONDITIONS

Operator: PERMIAN TDS, LLC P.O. Box 788 Lovington, NM 88260	OGRID: 306958
	Action Number: 191185
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	Document created to save signed order in imaging website.	2/27/2023

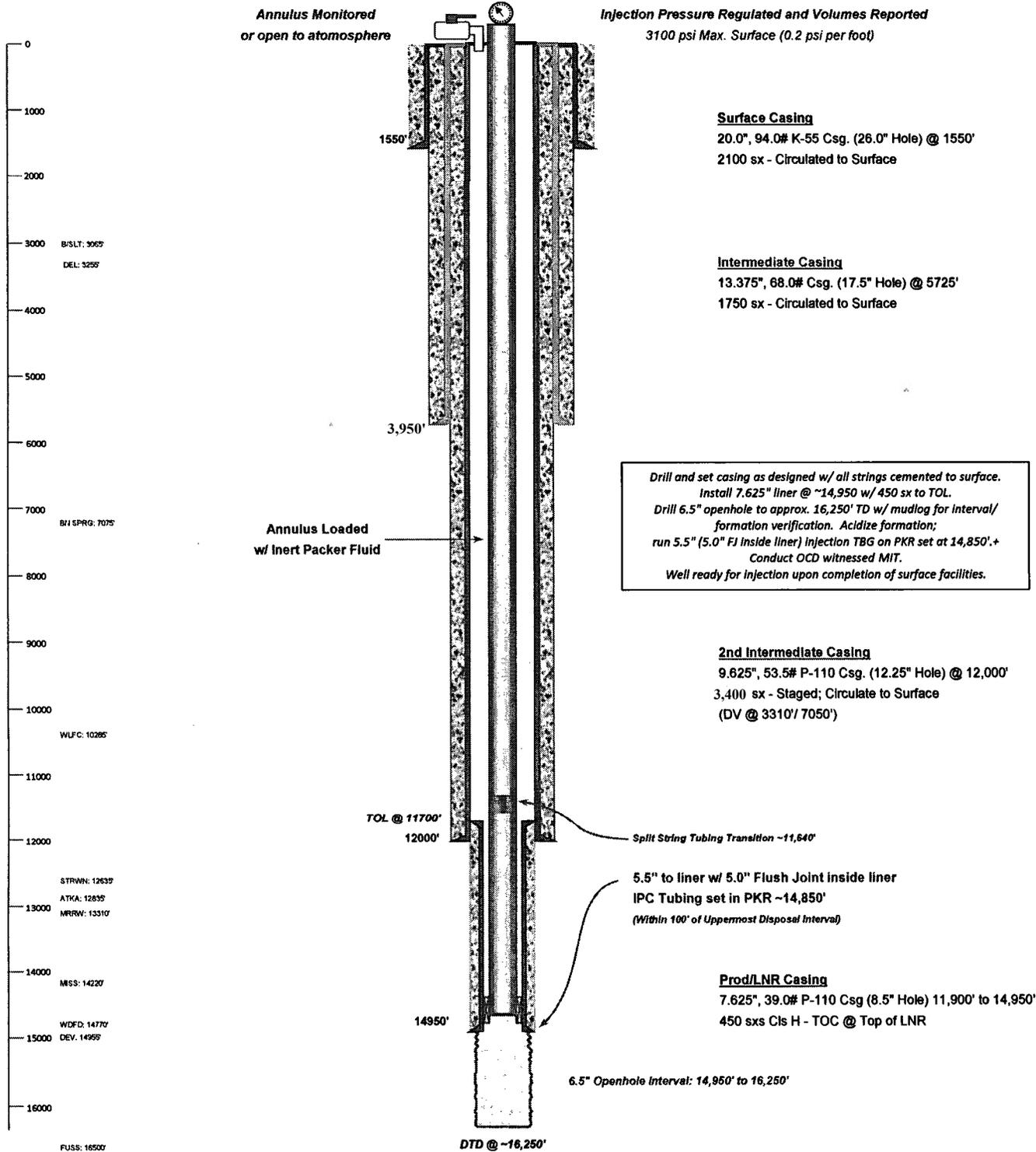
WELL SCHEMATIC - PROPOSED
Athena 28 SWD Well No.1

API 30-025-xxxxx

2198' FNL & 350' FWL, SEC. 28-T20S-R34E
 LEA COUNTY, NEW MEXICO

SWD; Devonian-Silurian (97869)

Spud Date: 11/15/2018
 SWD Config Dt: 1/03/2019



Corrected Version



Drawn by: Ben Stone, Rvd'd 11/27/2017

District I
 1625 N. French Dr., Hobbs, NM 88240
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 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form APD Conditions

Permit 347756

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: PERMIAN TDS, LLC [306958] P.O. Box 788 Lovington, NM 88260	API Number: 30-025-51869
	Well: ATHENA 28 SWD #001

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File a Deviation Survey with the C-105
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	CEMENT MUST CIRCULATE ON ALL STRINGS
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
pkautz	In addition to the requirements of the APD, operator shall complete the conditions contained in the UIC permit including logging (CBL for liner; mud logging, etc.), well testing, and reporting as stipulated.

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Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-101
Revised July 18, 2013

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Permian TDS, LLC P.O. Box 788 Lovington, NM 88260		² OGRID Number 306958
		³ API Number 30-025-45324
⁴ Property Code	⁵ Property Name Athena 28 SWD	⁶ Well No. 1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	28	20S	34E		2198	North	350	West	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name SWD; Devonian - Silurian	Pool Code 97869
---------------------------------------	--------------------

Additional Well Information

UIC Permit: SWD-1707

¹¹ Work Type N	¹² Well Type S	¹³ Cable/Rotary R	¹⁴ Lease Type Fee	¹⁵ Ground Level Elevation 3,695
¹⁶ Multiple N	¹⁷ Proposed Depth 16,250'	¹⁸ Formation Devonian - Silurian	¹⁹ Contractor TBD	²⁰ Spud Date Upon Approval
Depth to Ground water Ranges from 81.97' (UGS 323109103323801) to 143.72' (USGS 323345103351101)		Distance from nearest fresh water well 3740' CP-1262		Distance to nearest surface water 7.05-miles northwest

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94.0 lb/ft	1,550'	2,100	Surface
Intermediate 1	17.5"	13.375"	68.0 lb/ft	3,950'	1,750	Surface
Intermediate 2	12.25"	9.625"	53.5 lb/ft	12,000'	3,400	Surface
Liner	8.5"	7.625"	39.0 lb/ft	11,700' - 14,950'	450	TOL

Casing/Cement Program: Additional Comments

Open Hole completion from 14,950' - 16,250' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Shaffer or equivalent

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> , if applicable. Signature: <i>Oliver Seekins</i>	OIL CONSERVATION DIVISION	
	Approved By:	
Printed name: Oliver Seekins	Title:	
Title: Consultant	Approved Date:	Expiration Date:
E-mail Address: oseekins@all-llc.com		
Date: 8.14.23	Phone: 918-382-7581	Conditions of Approval Attached

HOBBS OCD

NOV 01 2018

DISTRICT I
11885 S. ST. FRANCIS DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

RECEIVED

Form C-102
Revised October 12, 2010
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-45324	Pool Code 97869	Pool Name SWD; Devonian-Silurian
Property Code (TBD)	Property Name ATHENA 28 SWD	Well Number 1
OGRID No. 371643	Operator Name PERMIAN TDS, LLC.	Elevation 3694.9'

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	28	20-S	34-E		2198	NORTH	350	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or Infill	Consolidation Code	Order No. SWD-1707						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>2198'</p> <p>350' S.L.</p> <p>1/16 CORNER Y=11817723.0 N X=2079741.6 E</p> <p>1/16 CORNER Y=11817784.6 N X=2085036.1 E</p> <p>W 1/4 CORNER Y=11816399.1 N X=2079759.6 E</p> <p>NAD 83 SURFACE LOCATION Y=11816853.452 N X=2080103.466 E LAT.=32.545348' N LONG.=103.572712' W</p> <p>E 1/4 CORNER Y=11816456.4 N X=2085053.6 E</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Ben Stone</i> Signature 11/01/18 Date</p> <p>Ben Stone Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>OCTOBER 09, 2017 Date Surveyed</p> <p>Signature & Seal of Professional Surveyor <i>Donald A. Shapiro</i></p> <p>ATHENA 28 SWD</p> <p>Certificate No. DONALD A. SHAPIRO 16606</p>

Permian TDS, LLC
Athena 28 SWD Well No. I
2198' FNL & 350' FWL
Section 28, Twp 20-S, Rng 34-E
Lea County, New Mexico

Well Program - New Drill

Objective: Drill new well for commercial salt water disposal Into the Devonian, Silurian and Fusselman (mudlogging and e-logging to determine final depths) per SWD-(pending).

I. Geologic Information – Devonian – Silurian Formations

The Devonian, Silurian and Fusselman all consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the subject formations in the area. Depth control data was inferred from deep wells to the north, south and east. If the base of Devonian and top of Silurian and/or Ordovician rocks come in as expected the well will only be drilled deep enough for adequate logging rathole.

Estimated Formation Tops:

B/Fresh Water	300
B/Salt	3065
Delaware Lamar	3255
Delaware Sand	5705
Bone Spring	7075
Wolfcamp	10265
Strawn	12635
Atoka	12835
Morrow	13310
Mississippian	14220
Woodford Shale	14770
Devonian	14955
TD Silurian*	16250
Fusselman	16500
Ellenburger	20000

*Please see narrative portion of drilling/pipe specs for TD options.

2. Drilling Procedure

- a. MIRU drilling rig and associated equipment. Set up H₂S wind direction indicators; brief all personnel on Emergency Evacuation Routes.
- b. All contractors conduct safety meetings prior to their current task. All equipment inspected daily. Repair / replace as required.
- c. Well spud operations commence.
- d. Mud logger monitoring returns: cuttings & waste hauled to specified facility. (Sundance, Lea County)
- e. After surface casing set/drilled; if H₂S levels >20 ppm detected, implement H₂S Plan accordingly. (e.g., cease operations, shut in well, employ H₂S safety trailer & personnel safety devices, install flare line, etc. - refer to plan.)
- f. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if.

Well Program - New Drill (cont.)

required. The operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
g. Sundry forms filed as needed - casing, cement, etc. - operations continue to completion.

3. **Casing program** - Casing designed as follows:

STRING	HOLESZ	DEPTH	CSGSZ	COND	WT/GRD	CLLPS/BRS	TNSN
						<i>Minimum Safety Factors</i>	
Surface	26.0"	0-1,550'	20.0"	New	94.0 lb. J/K-55 ST&C	1.125/1.1	1.8
Intermediate	17.5"	0-3,950'	13.375"	New	68.0 lb. HCL-80 BT&C	1.125/1.1	1.8
Production	12.25"	0-12,000'	9.675"	New	53.5 lb. Q-125 LT&C	1.125/1.1	1.8
Liner*	8.5"	11,700'-14,950'	7.625"	New	39.0 lb. P-110 FJ	1.125/1.1	1.8
Open hole*	6.5" hole	14,950'-16,250'	OH	n/a	n/a	n/a	n/a

Notes:

On both Intermediate casing strings, the cement will be designed to circulate to surface. Both strings will have cement bond logs run (radial, CET or equivalent) to surface.

While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.

* Based on mudlogging and e-logs, the 7-5/8" casing shoe is expected to be set at 14,950'. TD is expected to be 16,250' as determined by logging and suitable porosity has been exposed. Sundry notice will document such events and a C-105 completion report filed within 60 days.

4. **Cementing Program:**

Surface - LEAD Slurry: 1,500 sacks of Class C containing 4% gel + 2% CaCl₂ + .4 pps defoamer + .125 pps cello flake + 3 pps Koal Seal. Weight 13.7 ppg, yield 1.68 ft³/sack; TAIL Slurry: 800 sacks of Class C Neat containing 2% CaCl₂. Weight 14.8 ppg, yield 1.34 ft³/sack; 100% excess, circulate to surface.

Intermediate - LEAD Slurry: 1,400 sacks of Class C containing 4% gel + .4 pps defoamer + .125 pps cello flake + 5% NaCl. Weight 13.2 ppg, yield 1.83 ft³/sack; TAIL Slurry: 350 sacks of Class C Neat. Weight 14.8 ppg, yield 1.32 ft³/sack; 50% excess, circulate to surface.

Production - Stage 1 LEAD Slurry: 1,600 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 400 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 25% excess. DV TOOL ~5800'; Stage 2 LEAD Slurry: 700 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 700 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 35% excess. circulate to surface.

Liner - Slurry: 450 sacks of 50/50 POZ Class H containing .3% retarder + .7% fluid loss additive + .2% dispersant + .4 pps defoamer + .1% Anti-Settling agent. Weight 15.2 ppg, yield 1.32 ft³/sack. 35% excess; TOC calculated@ Top of liner 11,700'.

Well Program - New Drill (cont.)

5. **Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD Rules and Regulations and API RP 53, Section 17. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5000 psi. The NMOCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. Test shall be conducted at:

- a. Installation;
- b. after equipment or configuration changes;
- c. at 30 days from any previous test, and;
- d. anytime operations warrant, such as well conditions

6. **Mud Program & Monitoring** - Mud will be balanced for all operations as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	yp	FL	Ph
0-1,550'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,550' – 5,725'	Brine Water	9.8-10.2	28-32	NC	NC	NC	10.0
5,725' - 12,000'	FW/Gel	8.7-9.0	28-32	NC	NC	NC	9.5-10.5
12,000'-14,950'	XCD Brine Mud	11.0	45-48	20	10	<5	9.5-10.5
14,950'-16,250'	FW Mud	8.4-8.6	28-30	NC	NC	NC	9.5-10.5

Mud and all cuttings monitored w/ cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H2S, mud shall be adjusted appropriately by weight and H2S scavengers.

7. **Auxiliary Well Control and Monitoring** - Hydraulic remote BOP operation, mudlogging to monitor returns.

8. **H₂S Safety** - This well and related facilities are not expected to have H2S releases. However, there may be H2S in the area. There are no private residences or public facilities in the area, but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H2S levels greater than 10 ppm are detected or suspected, the H2S Contingency Plan will be implemented at the appropriate level.

H2S Safety - There is a low risk of H2S in this area. The operator will comply with the provisions of NMAC 19.15.1 I and BLM Onshore Oil and Gas Order #6.

- a) Monitoring - all personnel will wear monitoring devices.
- b) Warning Sign - a highly visible H2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
- c) Wind Detection - two (2) wind direction socks will be placed on location.
- d) Communications - will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
- e) Alarms - will be located at the rig floor, circulating pump / reverse unit area and the flare line. and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.

Well Program - New Drill (cont.)

- f) Mud program - If H2S levels require, proper mud weight, safe drilling practices and H2S scavengers will minimize potential hazards.
- g) Metallurgy- all tubulars, pressure control equipment, flowlines, valves, manifolds, and related equipment will be rated for H2S service if required.

The Permian TDS, LLC H2S Contingency Plan will be implemented if levels greater than 10ppm H2S are detected.

9. Logging, Coring and Testing – Permian TDS, LLC expects to run:

- a. Mud logging through the interval will ensure the target interval remains Devonian and Silurian.
- b. CBL (Radial, CET or equivalent) on both intermediate casing strings.
- c. Standard porosity log suite from TD to approximately 14,000'.
- d. No coring or drill tests will be conducted. (The well may potentially be step-rate tested in the future if additional injection pressures are required.)

10. Potential Hazards - No abnormal pressures or temperatures are expected.

No loss of circulation is expected to occur except for drilling into the target disposal zone. All personnel will be familiar with the safe operation of the equipment being used to drill this well.

The maximum anticipated bottom-hole pressure is 8900 psi, and the maximum anticipated bottom-hole temperature is 200° F.

11. **Waste Management** - All drill cuttings and other wastes associated with, and drilling operations will be transported to the Lea County Sundance facility (or alternate), permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

12. **Anticipated Start Date** - Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take six to seven weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, and subject to the availability of the drilling contractor, the anticipated start date is:

November 15, 2023

13. **Configure for Salt Water Disposal** - Subsequent to SWD permit approval from OCD and prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per BLM and OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily maximum volume is 30,000 bpd and average of 20,000 bpd at a maximum surface injection pressure of 2,900 psi (0.2 psi/ft to uppermost injection interval, i.e., casing shoe). If satisfactory disposals rates cannot be achieved at default pressure of .2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psi below parting pressure.

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

ORDER

GRANTING UIC PERMIT SWD-1707

Permian TDS, LLC (“Applicant”) filed an Application for Authorization to Inject (Form C-108) (“Application”) with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (“OCD”) to inject produced water at the Applicant’s Athena 28 SWD Well No. 1 (“Well”), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control (“UIC”) well.
2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.
3. No person filed a protest on the Application.
4. The Well will inject produced water into the Devonian and Silurian formation(s).
5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.
6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 0.74 mile(s) of the Well.
7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.
8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.
9. Applicant is in compliance with 19.15.5.9 NMAC.
10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.
2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.
3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD- 1707 for Well Athena 28 SWD Well No. 1.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



DYLAN M FUGE
DIRECTOR (ACTING)
DMF/ mgm

Date: 2/7/2023

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

UIC CLASS II PERMIT SWD- 1707

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC

OGRID No.: 371643

Well name: Athena 28 SWD Well No. 1

Surface location: 2198 feet from the North line and 350 from the West line,
Unit E of Section 28, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico

Bottom hole location (if different):

Type of completion: Open hole

Type of injection: Commercial

Injection fluid: Salt Water Disposal

Injection interval: 14500'-16250'

Injection interval thickness (feet):1750

Confining layer(s): Woodford formation (Upper) and Montoya formation (Lower)

Prohibited injection interval(s): *Ellenburger formation (lower Ordovician) or
lost circulation intervals directly on top and obviously connected to this formation.*

Liner, tubing, and packer set: Internally coated 5.5 inch tubing and packer set within 100 feet of
the injection interval

Maximum daily injection rate: will be dictated by the maximum surface injection pressure 2900
psi.

Maximum surface injection pressure: 2900 psi.

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

UIC CLASS II PERMIT SWD- 1707

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, (“Act”) and its implementing regulations, 19.15.1 *et seq.* NMAC, (“Rules”) and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division (“OCD”) issues this Permit to Heidel, Samberson, Cox & McMahon, LLC (“Permittee”) to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A (“Well”). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the “operator” of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water (“USDW”) if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill (“APD”) pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

- a. Inspect the Well and associated facilities;
- b. Have access to and copy any record required by this Permit;
- c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
- d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

- a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. **Monthly Reports.** Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application, or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or

an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

- i. The Permit contains a material mistake;
- ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;
- iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;
- iv. The Well's operation may affect the water quality of fresh water;
- v. Injected fluid is escaping from the approved injection interval;
- vi. Injection may be caused or contributed to seismic activity:
or
- vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications.** OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

- i. Non-substantive changes such as correction of typographical errors;

- ii. Requirements for more frequent monitoring or reporting.
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit.
- iv. Amendments to the plugging and abandonment plan.
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well.
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions: no special conditions.

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

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

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

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

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

CONDITIONS

Action 191185

CONDITIONS

Operator: PERMIAN TDS, LLC P.O. Box 788 Lovington, NM 88260	OGRID: 306958
	Action Number: 191185
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	Document created to save signed order in imaging website.	2/27/2023

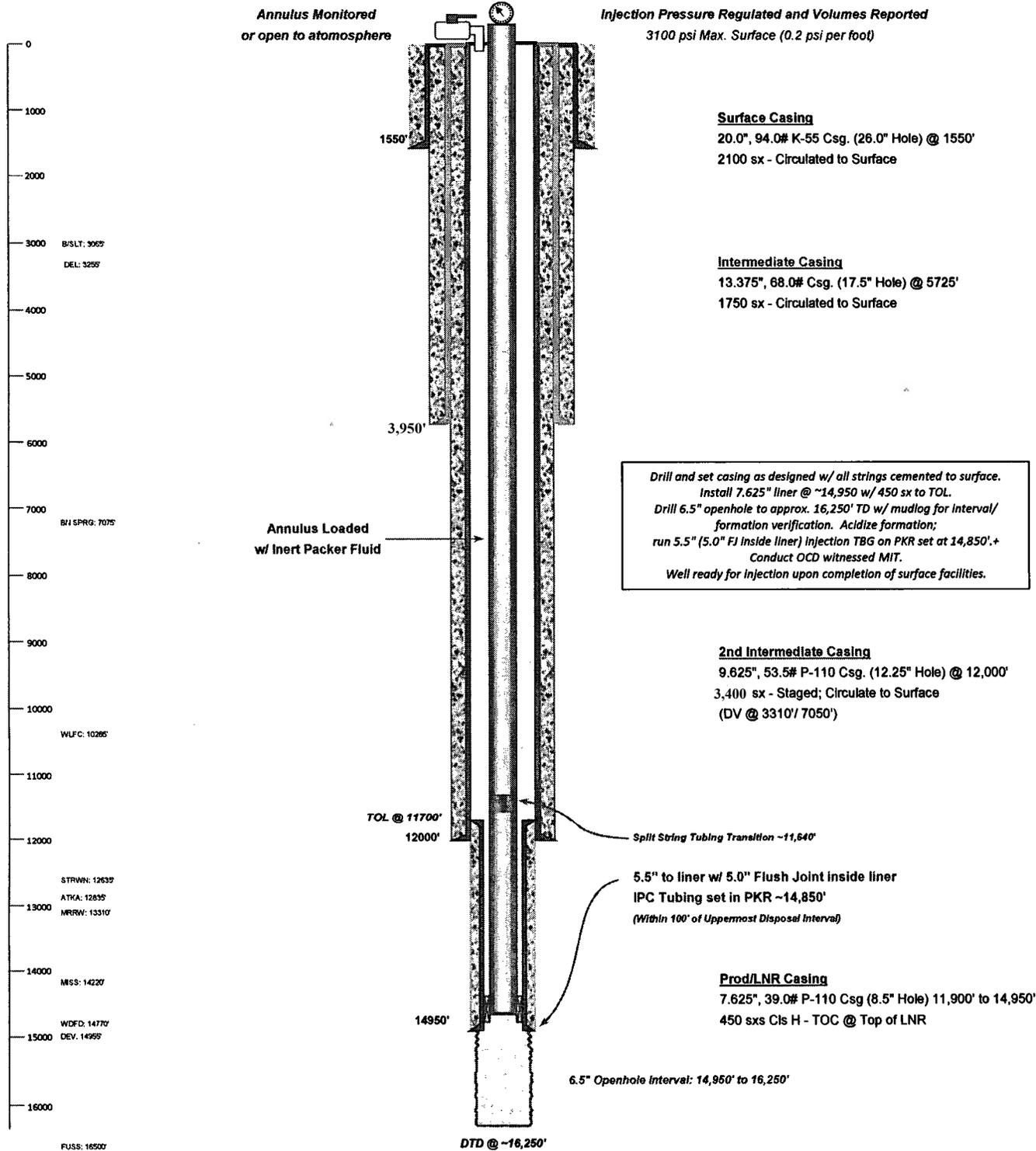
WELL SCHEMATIC - PROPOSED Athena 28 SWD Well No.1

API 30-025-xxxxx

2198' FNL & 350' FWL, SEC. 28-T20S-R34E
LEA COUNTY, NEW MEXICO

SWD; Devonian-Silurian (97869)

Spud Date: 11/15/2018
SWD Config Dt: 1/03/2019



Corrected Version



Drawn by: Ben Stone, Rvd'd 11/27/2017

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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Permian TDS, LLC P.O. Box 788 Lovington, NM 88260		² OGRID Number 306958
		³ API Number 30-025-45324
⁴ Property Code	⁵ Property Name Athena 28 SWD	⁶ Well No. 1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
E	28	20S	34E		2198	North	350	West	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name SWD; Devonian - Silurian	Pool Code 97869
---------------------------------------	--------------------

Additional Well Information

UIC Permit: SWD-1707

¹¹ Work Type N	¹² Well Type S	¹³ Cable/Rotary R	¹⁴ Lease Type Fee	¹⁵ Ground Level Elevation 3,695
¹⁶ Multiple N	¹⁷ Proposed Depth 16,250'	¹⁸ Formation Devonian - Silurian	¹⁹ Contractor TBD	²⁰ Spud Date Upon Approval
Depth to Ground water Ranges from 81.97' (UGS 323109103323801) to 143.72' (USGS 323345103351101)		Distance from nearest fresh water well 3740' CP-1262		Distance to nearest surface water 7.05-miles northwest

We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	94.0 lb/ft	1,550'	2,100	Surface
Intermediate 1	17.5"	13.375"	68.0 lb/ft	3,950'	1,750	Surface
Intermediate 2	12.25"	9.625"	53.5 lb/ft	12,000'	3,400	Surface
Liner	8.5"	7.625"	39.0 lb/ft	11,700' - 14,950'	450	TOL

Casing/Cement Program: Additional Comments

Open Hole completion from 14,950' - 16,250' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Shaffer or equivalent

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/>, if applicable. Signature: <i>Oliver Seekins</i>	OIL CONSERVATION DIVISION	
	Approved By:	
Printed name: Oliver Seekins	Title:	
Title: Consultant	Approved Date:	Expiration Date:
E-mail Address: oseekins@all-llc.com		
Date: 8.14.23	Phone: 918-382-7581	Conditions of Approval Attached

HOBBS OCD

NOV 01 2018

DISTRICT I
11885 S. ST. FRANCIS DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

RECEIVED

Revised October 12, 2010
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-025-45324	Pool Code 97869	Pool Name SWD; Devonian-Silurian
Property Code (TBD)	Property Name ATHENA 28 SWD	Well Number 1
OGRID No. 371643	Operator Name PERMIAN TDS, LLC.	Elevation 3694.9'

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	28	20-S	34-E		2198	NORTH	350	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill		Consolidation Code		Order No. <i>SWD-1707</i>			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>2198'</p> <p>350' S.L.</p> <p>1/16 CORNER Y=11817723.0 N X=2079741.6 E</p> <p>1/16 CORNER Y=11817784.6 N X=2085036.1 E</p> <p>W 1/4 CORNER Y=11816399.1 N X=2079759.6 E</p> <p>NAD 83 SURFACE LOCATION Y=11816853.452 N X=2080103.466 E LAT.=32.545348' N LONG.=103.572712' W</p> <p>E 1/4 CORNER Y=11816456.4 N X=2085053.6 E</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Ben Stone</i> Signature 11/01/18 Date</p> <p>Ben Stone Printed Name</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>OCTOBER 09, 2017 Date Surveyed</p> <p>Signature & Seal of Professional Surveyor <i>Donald A. Shapiro</i></p> <p>ATHENA 28 SWD</p> <p>Certificate No. DONALD A. SHAPIRO 16606</p>

Permian TDS, LLC
Athena 28 SWD Well No. I
2198' FNL & 350' FWL
Section 28, Twp 20-S, Rng 34-E
Lea County, New Mexico

Well Program - New Drill

Objective: Drill new well for commercial salt water disposal Into the Devonian, Silurian and Fusselman (mudlogging and e-logging to determine final depths) per SWD-(pending).

I. Geologic Information – Devonian – Silurian Formations

The Devonian, Silurian and Fusselman all consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the subject formations in the area. Depth control data was inferred from deep wells to the north, south and east. If the base of Devonian and top of Silurian and/or Ordovician rocks come in as expected the well will only be drilled deep enough for adequate logging rathole.

Estimated Formation Tops:

B/Fresh Water	300
B/Salt	3065
Delaware Lamar	3255
Delaware Sand	5705
Bone Spring	7075
Wolfcamp	10265
Strawn	12635
Atoka	12835
Morrow	13310
Mississippian	14220
Woodford Shale	14770
Devonian	14955
TD Silurian*	16250
Fusselman	16500
Ellenburger	20000

*Please see narrative portion of drilling/pipe specs for TD options.

2. Drilling Procedure

- a. MIRU drilling rig and associated equipment. Set up H₂S wind direction indicators; brief all personnel on Emergency Evacuation Routes.
- b. All contractors conduct safety meetings prior to their current task. All equipment inspected daily. Repair / replace as required.
- c. Well spud operations commence.
- d. Mud logger monitoring returns: cuttings & waste hauled to specified facility. (Sundance, Lea County)
- e. After surface casing set/drilled; if H₂S levels >20 ppm detected, implement H₂S Plan accordingly. (e.g., cease operations, shut in well, employ H₂S safety trailer & personnel safety devices, install flare line, etc. - refer to plan.)
- f. Spills contained & cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify OCD within 24 hours. Remediation started ASAP if.

Well Program - New Drill (cont.)

required. The operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
 g. Sundry forms filed as needed - casing, cement, etc. - operations continue to completion.

3. **Casing program** - Casing designed as follows:

STRING	HOLESZ	DEPTH	CSGSZ	COND	WT/GRD	CLLPS/BRS	TNSN
						<i>Minimum Safety Factors</i>	
Surface	26.0"	0-1,550'	20.0"	New	94.0 lb. J/K-55 ST&C	1.125/1.1	1.8
Intermediate	17.5"	0-3,950'	13.375"	New	68.0 lb. HCL-80 BT&C	1.125/1.1	1.8
Production	12.25"	0-12,000'	9.675"	New	53.5 lb. Q-125 LT&C	1.125/1.1	1.8
Liner*	8.5"	11,700'-14,950'	7.625"	New	39.0 lb. P-110 FJ	1.125/1.1	1.8
Open hole*	6.5" hole	14,950'-16,250'	OH	n/a	n/a	n/a	n/a

Notes:

On both Intermediate casing strings, the cement will be designed to circulate to surface. Both strings will have cement bond logs run (radial, CET or equivalent) to surface.

While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.

* Based on mudlogging and e-logs, the 7-5/8" casing shoe is expected to be set at 14,950'. TD is expected to be 16,250' as determined by logging and suitable porosity has been exposed. Sundry notice will document such events and a C-105 completion report filed within 60 days.

4. **Cementing Program:**

Surface - LEAD Slurry: 1,500 sacks of Class C containing 4% gel + 2% CaCl₂ + .4 pps defoamer + .125 pps cello flake + 3 pps Koal Seal. Weight 13.7 ppg, yield 1.68 ft³/sack; TAIL Slurry: 800 sacks of Class C Neat containing 2% CaCl₂. Weight 14.8 ppg, yield 1.34 ft³/sack; 100% excess, circulate to surface.

Intermediate - LEAD Slurry: 1,400 sacks of Class C containing 4% gel + .4 pps defoamer + .125 pps cello flake + 5% NaCl. Weight 13.2 ppg, yield 1.83 ft³/sack; TAIL Slurry: 350 sacks of Class C Neat. Weight 14.8 ppg, yield 1.32 ft³/sack; 50% excess, circulate to surface.

Production - Stage 1 LEAD Slurry: 1,600 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 400 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 25% excess. DV TOOL ~5800'; Stage 2 LEAD Slurry: 700 sacks of 50/50 POZ containing 10% gel + .4 pps defoamer + .125 pps cello flake + 1 pps Koal Seal + 5% NaCl. Weight 11.9 ppg, yield 2.473 ft³/sack; TAIL Slurry: 700 sacks of Class H containing 2% retarder + .2 pps defoamer. Weight 15.6 ppg, yield 1.18 ft³/sack; 35% excess. circulate to surface.

Liner - Slurry: 450 sacks of 50/50 POZ Class H containing .3% retarder + .7% fluid loss additive + .2% dispersant + .4 pps defoamer + .1% Anti-Settling agent. Weight 15.2 ppg, yield 1.32 ft³/sack. 35% excess; TOC calculated@ Top of liner 11,700'.

Well Program - New Drill (cont.)

5. **Pressure Control** - BOP diagram is attached to this application. All BOP and related equipment shall comply with well control requirements as described NMOCD Rules and Regulations and API RP 53, Section 17. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5000 psi. The NMOCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup or J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. Test shall be conducted at:

- a. Installation;
- b. after equipment or configuration changes;
- c. at 30 days from any previous test, and;
- d. anytime operations warrant, such as well conditions

6. **Mud Program & Monitoring** - Mud will be balanced for all operations as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	yp	FL	Ph
0-1,550'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,550' – 5,725'	Brine Water	9.8-10.2	28-32	NC	NC	NC	10.0
5,725' - 12,000'	FW/Gel	8.7-9.0	28-32	NC	NC	NC	9.5-10.5
12,000'-14,950'	XCD Brine Mud	11.0	45-48	20	10	<5	9.5-10.5
14,950'-16,250'	FW Mud	8.4-8.6	28-30	NC	NC	NC	9.5-10.5

Mud and all cuttings monitored w/ cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H2S, mud shall be adjusted appropriately by weight and H2S scavengers.

7. **Auxiliary Well Control and Monitoring** - Hydraulic remote BOP operation, mudlogging to monitor returns.

8. **H₂S Safety** - This well and related facilities are not expected to have H2S releases. However, there may be H2S in the area. There are no private residences or public facilities in the area, but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H2S levels greater than 10 ppm are detected or suspected, the H2S Contingency Plan will be implemented at the appropriate level.

H2S Safety - There is a low risk of H2S in this area. The operator will comply with the provisions of NMAC 19.15.1 I and BLM Onshore Oil and Gas Order #6.

- a) Monitoring - all personnel will wear monitoring devices.
- b) Warning Sign - a highly visible H2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
- c) Wind Detection - two (2) wind direction socks will be placed on location.
- d) Communications - will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
- e) Alarms - will be located at the rig floor, circulating pump / reverse unit area and the flare line. and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.

Well Program - New Drill (cont.)

- f) Mud program - If H2S levels require, proper mud weight, safe drilling practices and H2S scavengers will minimize potential hazards.
- g) Metallurgy- all tubulars, pressure control equipment, flowlines, valves, manifolds, and related equipment will be rated for H2S service if required.

The Permian TDS, LLC H2S Contingency Plan will be implemented if levels greater than 10ppm H2S are detected.

9. Logging, Coring and Testing – Permian TDS, LLC expects to run:

- a. Mud logging through the interval will ensure the target interval remains Devonian and Silurian.
- b. CBL (Radial, CET or equivalent) on both intermediate casing strings.
- c. Standard porosity log suite from TD to approximately 14,000'.
- d. No coring or drill tests will be conducted. (The well may potentially be step-rate tested in the future if additional injection pressures are required.)

10. Potential Hazards - No abnormal pressures or temperatures are expected.

No loss of circulation is expected to occur except for drilling into the target disposal zone. All personnel will be familiar with the safe operation of the equipment being used to drill this well.

The maximum anticipated bottom-hole pressure is 8900 psi, and the maximum anticipated bottom-hole temperature is 200° F.

11. **Waste Management** - All drill cuttings and other wastes associated with, and drilling operations will be transported to the Lea County Sundance facility (or alternate), permitted by the Environmental Bureau of the New Mexico Oil Conservation Division.

12. **Anticipated Start Date** - Upon approval of all permits for SWD, operations would begin within 30 days. Completion of the well operations will take six to seven weeks. Installation of the tank battery, berms, plumbing and other and associated equipment would be occurring during the same interval. In any event, it is not expected for the construction phase of the project to last more than 60 days, depending on availability of contractors and equipment. At the time of this submittal, and subject to the availability of the drilling contractor, the anticipated start date is:

November 15, 2023

13. **Configure for Salt Water Disposal** - Subsequent to SWD permit approval from OCD and prior to commencing any work, an NOI sundry(ies) will be submitted to configure the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure test per BLM and OCD test procedures. (Notify NMOCD 24 hours prior.) The casing/tubing annulus will be monitored for communication with injection fluid or loss of casing integrity. Anticipated daily maximum volume is 30,000 bpd and average of 20,000 bpd at a maximum surface injection pressure of 2,900 psi (0.2 psi/ft to uppermost injection interval, i.e., casing shoe). If satisfactory disposals rates cannot be achieved at default pressure of .2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psi below parting pressure.

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

ORDER

GRANTING UIC PERMIT SWD-1707

Permian TDS, LLC (“Applicant”) filed an Application for Authorization to Inject (Form C-108) (“Application”) with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division (“OCD”) to inject produced water at the Applicant’s Athena 28 SWD Well No. 1 (“Well”), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control (“UIC”) well.
2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.
3. No person filed a protest on the Application.
4. The Well will inject produced water into the Devonian and Silurian formation(s).
5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.
6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 0.74 mile(s) of the Well.
7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.
8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.
9. Applicant is in compliance with 19.15.5.9 NMAC.
10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.
2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.
3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD- 1707 for Well Athena 28 SWD Well No. 1.

**STATE OF NEW MEXICO
OIL CONSERVATION DIVISION**



DYLAN M FUGE
DIRECTOR (ACTING)
DMF/ mgm

Date: 2/7/2023

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

UIC CLASS II PERMIT SWD- 1707

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC

OGRID No.: 371643

Well name: Athena 28 SWD Well No. 1

Surface location: 2198 feet from the North line and 350 from the West line,
Unit E of Section 28, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico

Bottom hole location (if different):

Type of completion: Open hole

Type of injection: Commercial

Injection fluid: Salt Water Disposal

Injection interval: 14500'-16250'

Injection interval thickness (feet):1750

Confining layer(s): Woodford formation (Upper) and Montoya formation (Lower)

Prohibited injection interval(s): *Ellenburger formation (lower Ordovician) or
lost circulation intervals directly on top and obviously connected to this formation.*

Liner, tubing, and packer set: Internally coated 5.5 inch tubing and packer set within 100 feet of
the injection interval

Maximum daily injection rate: will be dictated by the maximum surface injection pressure 2900
psi.

Maximum surface injection pressure: 2900 psi.

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

UIC CLASS II PERMIT SWD- 1707

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, (“Act”) and its implementing regulations, 19.15.1 *et seq.* NMAC, (“Rules”) and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division (“OCD”) issues this Permit to Heidel, Samberson, Cox & McMahon, LLC (“Permittee”) to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A (“Well”). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the “operator” of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water (“USDW”) if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill (“APD”) pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

- a. Inspect the Well and associated facilities;
- b. Have access to and copy any record required by this Permit;
- c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and
- d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

- a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site, that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. **Monthly Reports.** Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application, or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or

an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

- i. The Permit contains a material mistake;
- ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;
- iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;
- iv. The Well's operation may affect the water quality of fresh water;
- v. Injected fluid is escaping from the approved injection interval;
- vi. Injection may be caused or contributed to seismic activity:
or
- vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications.** OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

- i. Non-substantive changes such as correction of typographical errors;

- ii. Requirements for more frequent monitoring or reporting.
- iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit.
- iv. Amendments to the plugging and abandonment plan.
- v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well.
- vi. Corrections of the actual injection interval if within the approved formation; or
- vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions: no special conditions.

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

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

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

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

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

CONDITIONS

Action 191185

CONDITIONS

Operator: PERMIAN TDS, LLC P.O. Box 788 Lovington, NM 88260	OGRID: 306958
	Action Number: 191185
	Action Type: [C-103] NOI General Sundry (C-103X)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	Document created to save signed order in imaging website.	2/27/2023

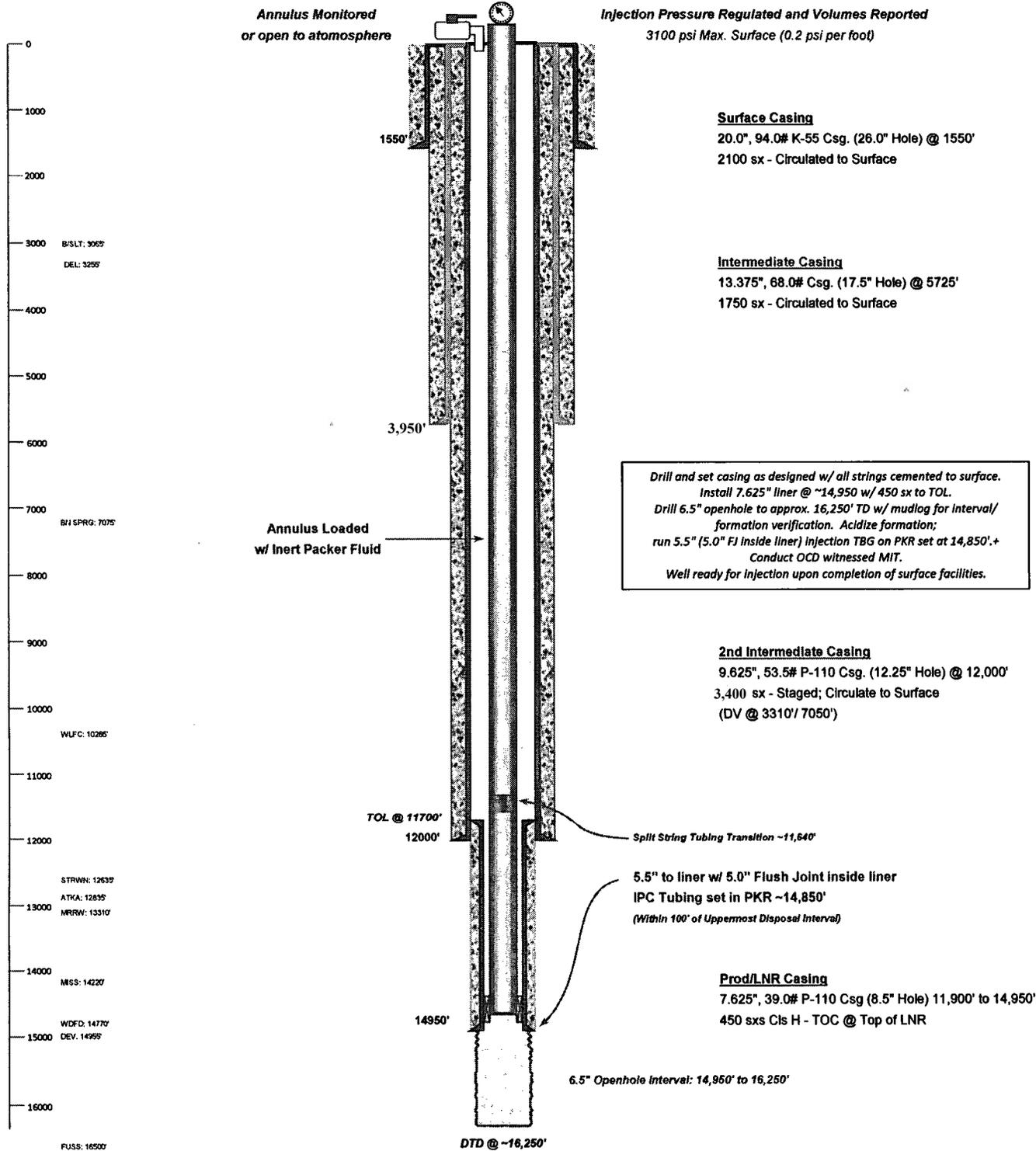
WELL SCHEMATIC - PROPOSED Athena 28 SWD Well No.1

API 30-025-xxxxx

2198' FNL & 350' FWL, SEC. 28-T20S-R34E
LEA COUNTY, NEW MEXICO

SWD; Devonian-Silurian (97869)

Spud Date: 11/15/2018
SWD Config Dt: 1/03/2019



Corrected Version



Drawn by: Ben Stone, Rvd'd 11/27/2017