

# AE Order Number Banner

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**Application Number: pMSG2521939573**

**IPI-552**

**PRODUCTION WASTE SOLUTIONS LLC [371912]**

Submit a Copy To Appropriate District  
Office  
District I – (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II – (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III – (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV – (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.	30-015-27346
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name <u>Sand Point State</u>	
8. Well Number	1
9. OGRID Number	371912
10. Pool name or Wildcat SWD; Delaware (96100)	
4. Well Location Unit Letter <u>K</u> : <u>2673</u> feet from the <u>North</u> line and <u>1650</u> feet from the <u>West</u> line Section <u>2</u> Township <u>21-S</u> Range <u>28-E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3324' GL	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
 DOWNHOLE COMMINGLE ☐  
 CLOSED-LOOP SYSTEM ☐  
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
 COMMENCE DRILLING OPNS. ☐ P AND A ☐  
 CASING/CEMENT JOB ☐  
 OTHER: Step Rate Test ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Production Waste Solutions, LLC is submitting a full report which is the result of analyzing the recent SRT performed on this well. Subsequent to the SRT, the MIT data was submitted separately and previously but a copy of that chart is also included in this package.

Please note that the NMOCD was notified at the district level and notification to Santa Fe engineering office also. Notification was done a week before, 2 days and then 24 hours prior. PWS was expecting a representative to show up to witness the test as well as the SRT which was scheduled for 8:30 am. At 9:30 am, the test was performed without a witness.

The request is for an increase of injection pressure to 1050 psi, which is 50 psi below the indicated test pressure of 1100 psi.

[Workover]  
Spud Date:

4/24/2025 - MIRU

Rig Release Date:

4/24/2025 - RDMO

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

SIGNATURE  TITLE Agent for Production Waste Solutions DATE 5/06/2025

Type or print name Ben Stone E-mail address: ben@sosconsulting.us PHONE: 936-367-5950

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

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7. Lease Name or Unit Agreement Name Sand Point State SWD	
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11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3324' GL	

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TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐  
CLOSED-LOOP SYSTEM ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/CEMENT JOB ☐  
OTHER: Step Rate Test ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Production Waste Solutions, LLC is submitting a full report which is the result of analyzing the recent SRT performed on this well. Subsequent to the SRT, the MIT data was submitted separately and previously but a copy of that chart is also included in this package.

Please note that the NMOCD was notified at the district level and notification to Santa Fe engineering office also. Notification was done a week before, 2 days and then 24 hours prior. PWS was expecting a representative to show up to witness the test as well as the SRT which was scheduled for 8:30 am. At 9:30 am, the test was performed without a witness.

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[Workover]  
Spud Date:

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Rig Release Date:

4/24/2025 - RDMO

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

SIGNATURE  TITLE Agent for Production Waste Solutions DATE 5/06/2025

Type or print name Ben Stone E-mail address: ben@sosconsulting.us PHONE: 936-367-5950

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):





May 6, 2025

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Attn: Mr. Phillip Goetze, Engineering Bureau

*Re: Request of Production Waste Solutions, LLC for an injection pressure increase on its Sand Point State No.1 SWD (API No.30-015-27346) located in Section 2, Township 21 South, Range 28 East, NMPM, Eddy County, New Mexico.*

Dear Mr. Goetze,

Production Wastes Solutions (PWS) acquired this SWD from Judah Oil Company and has operated it ever since. In late 2023 and 2024, the SWD performance declined even after a workover designed and conducted to thoroughly clean out any fill and open up the zone in an attempt to regain rates closer to past performance. In 2023, the well was acidized with 3000 gallons of 15% HCl at 2.5 bpm @ 850 psi. In 2024, the well was cleaned out (bailer and bull dog tool) from 3664 feet to 4475 feet, leaving 64 feet of rathole.

PWS submitted a notice of intent sundry report which was approved by OCD on April 17, 2025. The step rate was performed the following week although, due to oversized equipment, execution was not as expected. They were however, able to extend the steps and acquire ample data. Other than a higher than expected starting rate, the test went smoothly with no equipment issues and an adequate supply of water was on hand. All steps were completed with pressures below maximum and a 100% rate was achieved. The BHP indicates a break around 2640 psi which equates to 1100 psi surface injection pressure.

I was also able to glean some comparable data from other DMG SWD completions in the vicinity. The results of those historical step-rate tests help to support the assessment and analysis of this test.

***Based on the results of the step-rate test, we hereby request that maximum permitted surface injection pressure may safely be increased to 1050 psi (~0.29 psi/ ft. gradient).*** PWS fully understands that this SWD will still be limited to the 1500 bwpd max rate as specified in SWD-1451.

I respectfully request that the approval of this injection pressure increase proceed swiftly and if you require additional information or have **any questions about the analysis or presentation, please do not hesitate to call or email me so we can discuss.**

Best regards,

A handwritten signature in blue ink, appearing to read "Ben Stone".

Ben Stone, Partner  
SOS Consulting, LLC  
Agent for Production Waste Solutions, LLC

Cc: Project file

## PRODUCTION WASTE SOLUTIONS

### **Sand Point State SWD #1**

30-015-27346

K-2-21S-28E

Eddy County, New Mexico



### **Overview & History**

Judah Oil, LLC permitted the well for SWD by administrative order SWD-1451, dated November 25, 2013. Originally drilled as a Tecolote state lease oil well by Energex Company in 1993, the well was briefly acquired by NGX Company and produced until August 2006. The well was then acquired by Judah Oil in 2006, and in mid-2011, Judah performed a workover to repair some damaged casing. This was accomplished and the well was returned to production until March 2013 and renamed the Sand Point State #1. In late 2013, the well was again worked over in anticipation of C-108 submission and approval. As noted above, approval was granted shortly after the workover. However, SWD injection did not commence until August 2014. The permitted interval in the Bell Canyon and Cherry Canyon [DMG] formations is 3530 feet to 4416 feet has proved to be a good performer and for several years would frequently obtain maximum permitted rates of 1500 bwpd at the permitted surface pressure of 706 psi/ft (standard 0.2 gradient). The well has been in regular use since originally configured for SWD with daily average rates running from ~500 bwpd to ~1500 bwpd and has been at or just below required pressure.

As part of a larger well package, MNA Enterprises acquired the SWD in 2020, but the transaction was reversed after just a few months. In November 2021, Production Wastes Solutions (PWS) acquired the SWD and has operated it since. In late 2023 and 2024, the SWD performance declined even after a workover designed and conducted to thoroughly clean out any fill and open up the zone in an attempt to regain rates closer to past performance. In 2023, the well was acidized with 3000 gallons of 15% HCl at 2.5 bpm @ 850 psi. In 2024, the well was cleaned out (bailer and bull dog tool) from 3664 feet to 4475 feet, leaving 64 feet of rathole. Additionally, PWS had worked with OCD district office personnel and received verbal approval to increase the tubing size. PWS personnel were not instructed to make a formal request to OCD however, a C-103 subsequent sundry (Action ID 206967, attached) was approved and documented the new tubing size to 3.5 inches. The new tubing was installed with the packer reset at 3489 feet during the workover from March to April, 2023.

PWS determined that as an asset for area operations, a recovery of performance in this SWD's capacity would be essential to maintain the well's viability. A NOI sundry was submitted to outline the new step-rate test which would be performed by industry guidelines to acquire suitable SRT data so that an increase in pressure could be obtained thereby preserving operations. OCD approved the sundry on April 17, 2025. PWS moved to coordinate field operations to perform the test and a bottomhole pressure gauge was installed on April 22<sup>nd</sup>, around noon. Disposal operations ceased and the well was shut-in for 48+ hours of static observation.

Just prior to the SRT, a successful 30-minute mechanical integrity test was conducted. Upon satisfactory conclusion of the MIT, the step-rate test commenced and is documented in the following charts and data.

***Based on the results of step-rate test (including ISIP of 900 psi), Production Waste Solutions hereby requests an increase in maximum surface injection pressure of 1050 psi (50 psi below indicated pressure). This will allow for some overhead if the well continues to load up.***

**Per SWD-1451, PWS will NOT inject over the max rate of 1500 bwpd.**

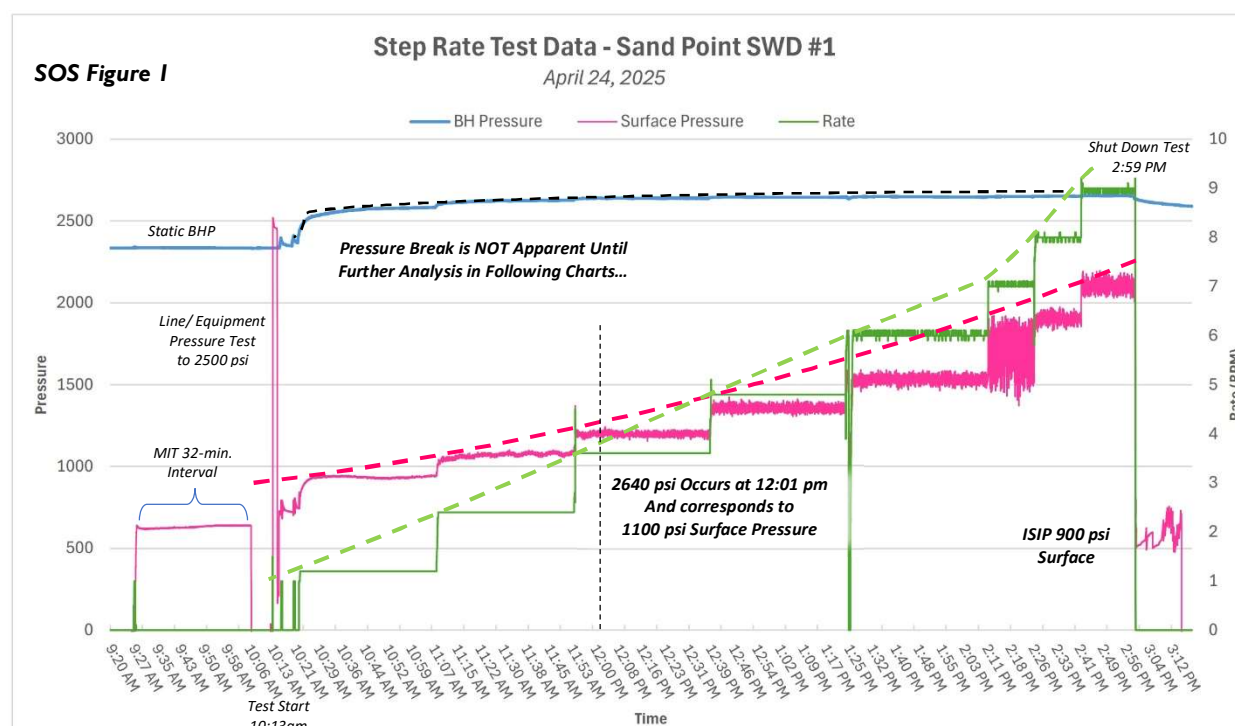
A copy of the NOI sundry (which includes the wellbore diagram), the original permit, MIT chart and sundry and other supporting documents are included in this package.

### SRT Operational Details

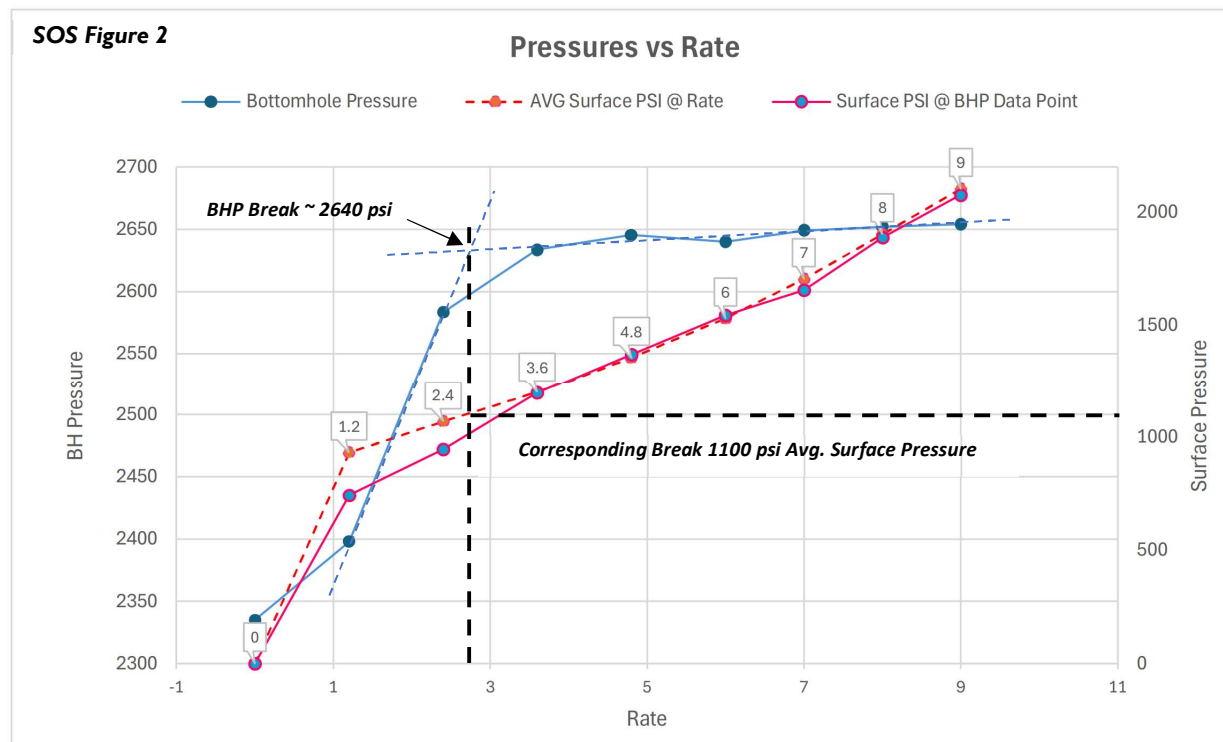
Renegade Wireline installed the bottom hole pressure gauge conveyed by slickline 48 hours prior to the test. 3 frac tanks 1200 were placed to provide ample water for the duration of the test. Big E Service provided pump trucks and equipment to control and monitor the job. The well caught pressure quickly and the oversized pumps were not able to stabilize the intended rate. Since the well pressure was already at normal injection pressure, the decision was made to accommodate the intent of the test by extending the rate steps. The initial rate was stabilized at 1.2 bpm or approximately 13 percent of the 100 percent rate of 9 bpm. Rate steps followed accordingly.

Start Time/ Duration	Rate	Percent of Max	Avg. Step Pressure
10:13 am	0.0	0%	757
10:22 am/ 9 min	1.2	13%	931
11:09 am/ 47 mins.	2.4	26%	1069
11:53 am/ 44 mins.	3.6	40%	1199
12:40 pm/ 47 mins.	4.8	53%	1357
1:24 pm/ 44 mins.	6.0	67%	1531
2:16 pm/ 52 mins.	7.0	78%	1705
2:33 pm/ 17 mins.	8.0	89%	1903
2:46 pm/ 13 mins.	9.0	100%	2103
2:59 pm	END	0	900 ISIP

The test ran for approximately 4.5 hours and just over 1200 barrels were pumped away. ISIP was 900 psi, 15 minutes was 873 psi.

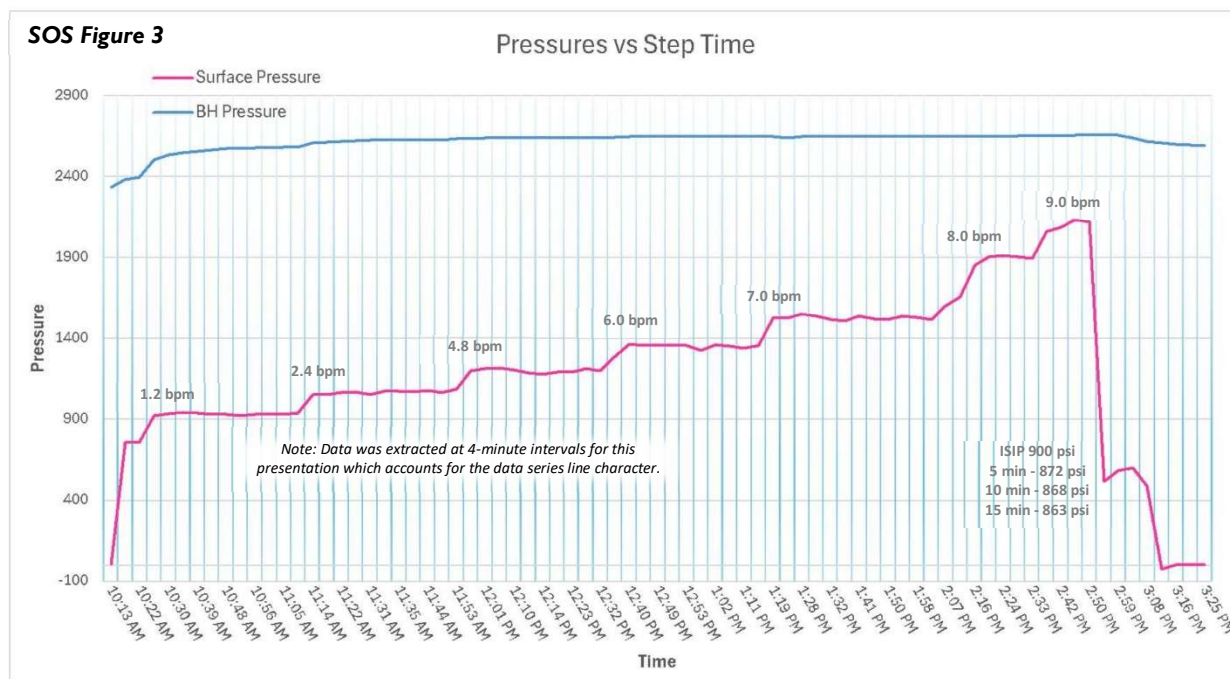


It is the consensus of PWS field and service company personnel that the formation is likely to be substantially sealed with viscous and heavy waste materials after years of injection. Casual observation of the standard scale charts (*SOS Figure 1*) indicates no obvious break of bottomhole or surface pressure. Based on the bottomhole pressure data, it is not believed that the formation is being fracked – this interpretation is based on the following chart (*SOS Figure 2*) where resolution is increased by selecting the mid-point BHP data point for each step in the rates...

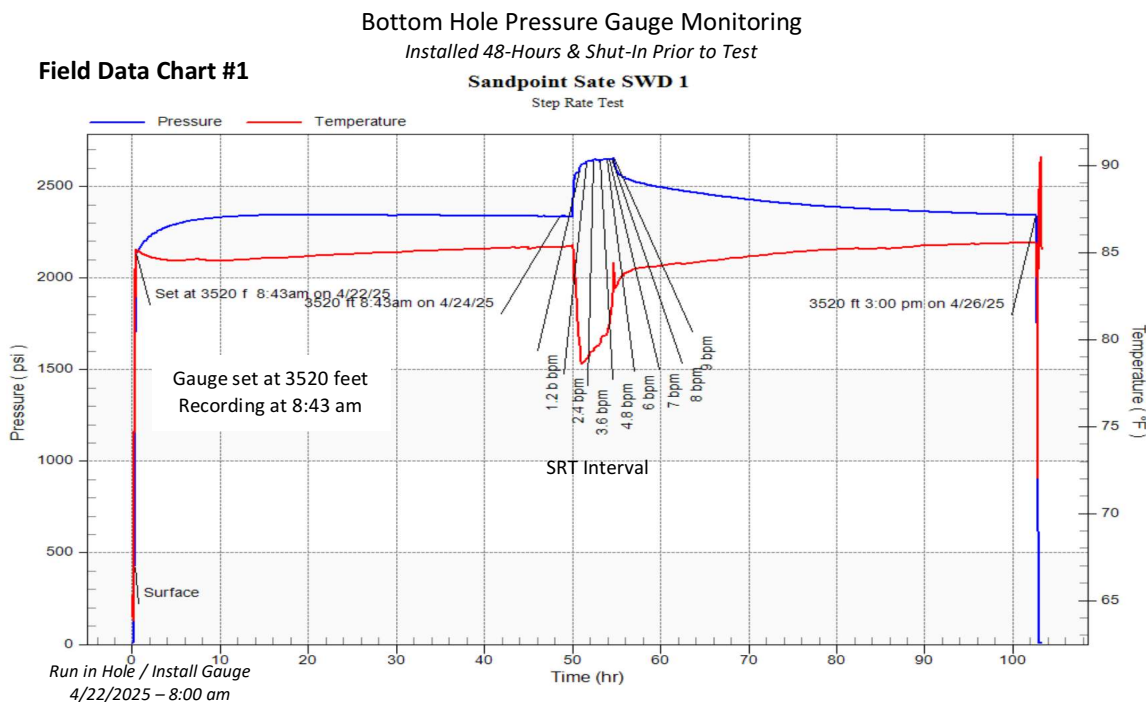


SOS Consulting further analyzed the data and charted the results. The pressure break shown in the bottomhole curve below is slight and not seen on the standard scale on the previous chart (*SOS Figure 1*). Also, Renegade identified this break in its chart presentation as the only significant indication of some downhole change in pressure shown in Field Data Chart #3 (BHP gauge was set @ 3520 feet).

In **SOS Figure 3** (*next page*), data elements for bottomhole and surface pressures were extracted at approximate 4- minute intervals to see if this resolution would provide any additional insight. It did not but does give an overview of the duration of the job. The fewer data elements yielded a somewhat jagged curve that is shown previously as rapid variation in line consistency. No conclusions were drawn from this chart other than a pretty standard, long duration pumping job into a well.



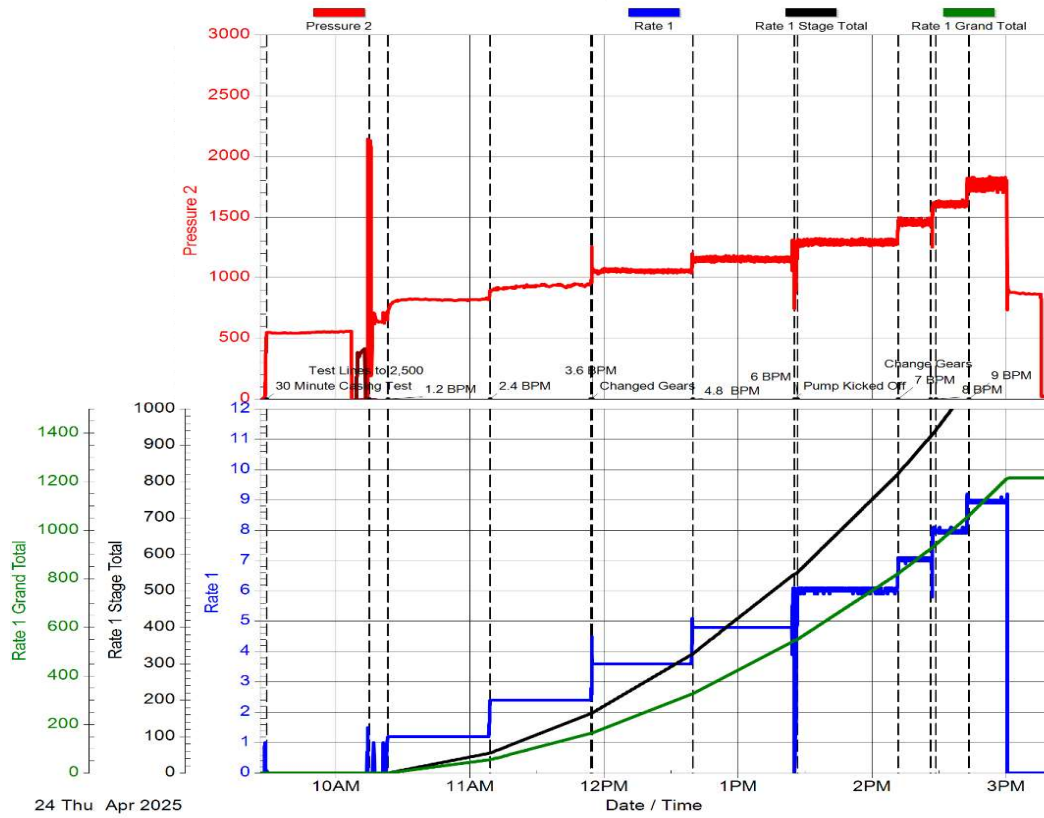
The chart below, **Field Data Chart #1** is a view of the full recording of the bottomhole pressure gauge from the time it was set, until withdrawn. Temperature is also presented (standard w/ BHP gauge) but does not add to the analysis and only shows the downhole temperature cooling as the job commenced and gradually warming throughout. The variance was not significant enough to impact pipe and/or pressures as recorded.



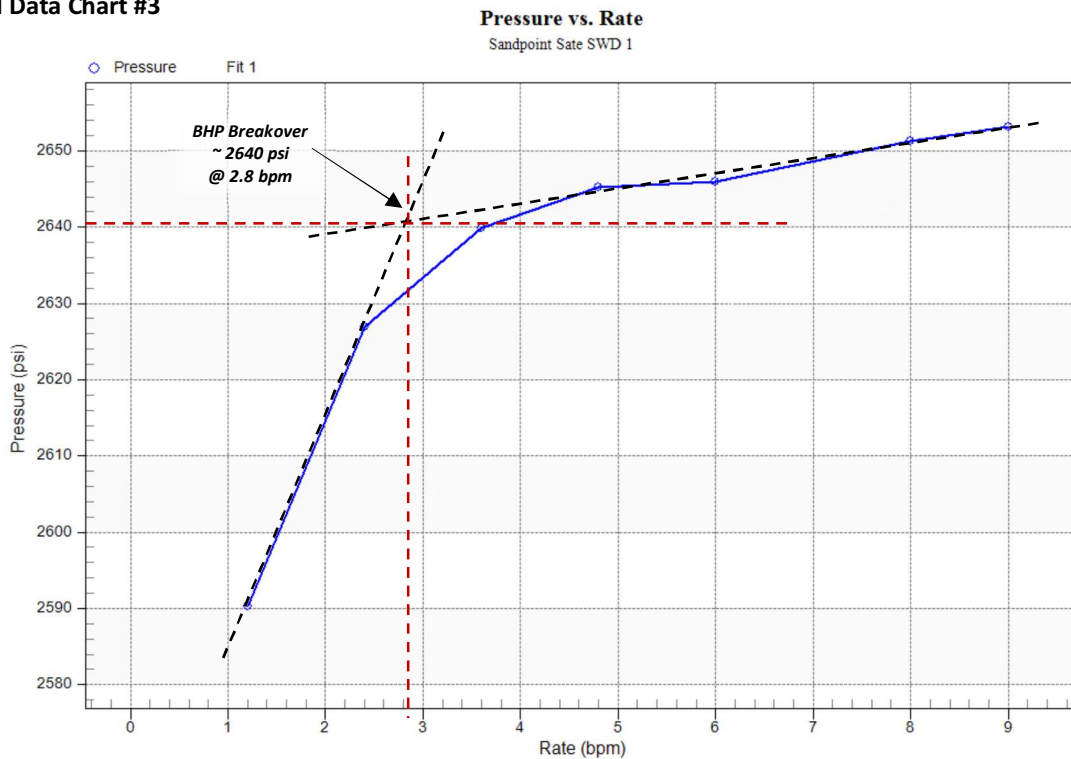


**Field Data Chart #2** below is the standard recording chart from Big E Services. It does include stage and job volume totals. The data for pressure and rate shown were used to generate the SOS figures for more complete analysis.

**Field Data Chart #2**



**Field Data Chart #3**



**PRODUCTION WASTE SOLUTIONS****Sand Point State SWD #1****30-015-27346****K-2-21S-28E****Eddy County, New Mexico****Regional DMG SWD Pressure Information**

Several SWDs permitted for Delaware Mountain Group disposal wells are shown in the table below with pertinent data. Production Waste Solutions understands the sensitivity of the issues and area concerns with disposal. These data are provided in support of its request for an injection pressure increase on its Sand Point SWD. With whatever pressure increase is granted, PWS understands that under the authority of SWD-1451, the well is still limited to a maximum daily rate of 1500 bwpd.

The purpose of the selected group is to provide SRT evidence of other step-rate test data conducted on SWD with similar permitted depth, as all completions are into some level of DMG zones.

The data obtained by the recent SRT performed by Production Waste Solutions appears to be very much in line with previous increases approved by OCD engineering staff.

<b>SWD</b>	<b>Permit</b>	<b>API</b>	<b>Location</b>	<b>Proximity</b>	<b>Formation</b>	<b>Interval</b>	<b>Orig.Press.</b>	<b>IPI</b>	<b>Frac psi?</b>	<b>Status</b>
BOPCO - Golden Lane	PMX-208	30-015-27283	C-17-21S-29E	3.6 miles SE	Delaware (Cherry Canyon)	4208'-4224'	842 psi	IPI-386; 1150 psi	1287 psi	P&A
POCO Resources – Nix Fed SWD #5	SWD-752	30-015-29196	M-27-21S-28E	4.8 miles SW	Cherry Canyon	2605'-2820'	521 psi	IPI-124 900 psi	1010 psi	Active
XTO Permian Op. – Big Eddy #56	R-5693	30-015-22222	G-35-21S-28E	4.4 miles S	Delaware	3310'-3375'	1300 psi	Orig. by SRT Hearing Ord.	NR	Active
Owl SWD Oper. – Burton Flats SWD #1	SWD-497	30-015-24921	G-1-21S-27E	3.3 miles NW	Delaware	3410'-5385'	682 psi	IPI 9/9/1997 1850 psi	1900 psi	Active



	Date:	Time:
Truck Called:	4/24/2025	4:00am
Arrived at location:	4/24/2025	8:00am
Start Job:	4/24/2025	9:28am
Finish Job:	4/24/2025	3:15pm
Leave Location:	4/24/2025	3:45pm

## Job Log

Customer Name:		Production Waste Solutions		Ticket Number:		25000540	
P.O. BOX 61193		Lease Name:		Sand Point			
MIDLAND, TEXAS 79711		Well #:		SWD 1		Supervisor: Nathan Hernandez	
OFFICE # 432-617-0114		Type of Job:		Step Rate		County: New Mexico	
FAX #432-339-0140		Date:		4/24/2025		CUSTOMER REPRESENTATIVE: Jimmy Dorman	
Tubing Size:		Casing size:		Tbg Capacity:			
Tubing weight:		Casing weight:		Top Perf:		On Form:	
Tubing bbl/Inft		Casing bbl/Inft:		Bottom Perf:			
Packer depth:		Annulus:		SPOT ACID			
End of Tbg:		Total Depth:		H2O BEHIND:			
Top Perf:		Open Hole:		Annular Capacity:			
Bottom Perf:		Liner Size:		Maximum:		2,000 Psi	
Holes in Csg:		FLUSH:		TITRAIT:		15.1 %	
Max psi: 1,798		Min psi: 725		Avg psi: 1,097		Max rate: 9	
				Avg rate: 3.9		ISIP 900	

ad to recover **1,214 BBLS** **872** 5 min **868** 10 min **863** 15 min

### Acid Systems

Acid System:	Big E ProAcid A3	Gallons				
Diverter:	N/A	Balls	N/A	Coarse Rock Salt	N/A	Arrive on Loc: 8:00am Held Safety Meeting: 8:00am

Injection Rate:			Job Pressures		Job Log Remarks:
Time	Rate:	Bbls in	Tbg psi.	Csg psi	
9:28am	1				Open Wel Pressure Up Casing To 550 PSI
9:30am		.3		550	Shut Down Hold For 30 Minutes
9:40am				550	10 Minute
9:50am				550	20 Minute
10:00am				550	30 Minute
10:13am			2,500		Test Lines To 2,500
10:22am	1.2		725	0	Open Wel Start Pumping
10:23am	1.2	1	761	0	Hold 1.2 BPM For 45 Minutes
10:33am	1.2	12.2	825	0	Rate&Pressure
10:43am	1.2	25	814	0	Rate&Pressure
10:53am	1.2	37	812	0	Rate&Pressure
11:03am	1.2	48	816	0	Rate&Pressure
11:08am	1.2	54	818	0	Bring Rate Up To 2.4 BPM
11:09am	2.4	56	890	0	Hold 2.4 BPM For 45 Minutes
11:19am	2.4	80	925	0	Rate&Pressure
11:29am	2.4	103	926	0	Rate&Pressure
11:39am	2.4	127	939	0	Rate&Pressure
11:49am	2.4	152	944	0	Rate&Pressure
11:54am	2.4	163	956	0	Bring Rate Up To 3.6 BPM
11:54am	3.6	166	1,049	0	Hold 3.6 BPM For 45 Minutes
SERVICE REPRESENTATIVE: Signature Please			CUSTOMER REPRESENTATIVE: Signature Please		
Nathan Hernandez			X		





Ticket Number:

25000540

**Customer:** Production Waste Solutions

Date 4/25/2025

Lease: **Sand Point**Well: SWD 1

Job Type: **Step Rate**

[illegible]

\* .0242

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State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-015-22601	
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7. Lease Name or Unit Agreement Name Sand Point State SWD	
8. Well Number 1	
9. OGRID Number 371912	
10. Pool name or Wildcat SWD; Delaware (96100)	
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> SWD 2. Name of Operator PRODUCTION WASTE SOLUTIONS, LLC 3. Address of Operator 146 Commerce Dr., Andrews, TX 79714 4. Well Location Unit Letter K : 2673 feet from the North line and 1650 feet from the West line Section 2 Township 21-S Range 28-E NMPM County Eddy 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3324' GL	

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Production Waste Solutions, LLC is requesting to perform a step rate test to determine if injection pressure can be raised without fracturing the formation.

Please find proposed procedure and other documentation attached for your review

[Workover]  
 Spud Date:

~4/08/2025 - MIRU

Rig Release Date:

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

SIGNATURE  TITLE Agent for Production Waste Solutions DATE 4/04/2025

Type or print name Ben Stone E-mail address: ben@sosconsulting.us PHONE: 936-367-5950

**For State Use Only**

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

**PRODUCTION WASTE SOLUTIONS****Sand Point State SWD #1**

30-015-27346

K-2-21S-28E

Eddy County, New Mexico

**Objective**

Perform a step-rate test on the Sand Point State SWD #1 to establish whether an injection pressure can be justified without fracturing the formation. Approximately 45-minute steps considering average permeability in the Upper Delaware (Bell Canyon and Cherry Canyon) is ~9 to 15md. (Generally 3 to 15md and locally as high as 20md as trending downward in the Cherry Canyon portion.)

- Estimated BHP bomb set date – 4/07/2025
- Estimated Well SI date - 4/09/2025
- Estimated SRT date - 4/11/2025 (~48 hours after well is shut in)
- Pressure Bomb retrieval date – 4/14/2025

**Wellbore: Casing, Tubing, Perforations** (Refer to the attached wellbore diagram)

- 5.5" 15.5# cgs @ 6285' w/ 200 sx Poz Mix (TOC @ 2200' TS)
- 2.875" DuoLine Tubing w/ Packer set @ 3489'
- Bell and Cherry Canyon [Upper DMG] Perfs: 3530'-60', 3732'-46', 3768'-80', 3890'-3902', 3925'-38', 3990'-4006', 4076'-96', 4275'-88', 4396'-4412'
- CIBP @ 4550' w/ cmt cap tagged @ 4480'
- All wellhead valves, flanges and connections rated @ 3000 WVP.

**Overview of Test Operations**

Production Waste Solutions is committed to a safe working environment for all personnel. A safety meeting will be held prior to commencing each operation in order to clarify objectives, roles and responsibilities, identify all potential risks and hazards and conduct operations that are safe and environmentally sound. Meetings will be documented in daily operational reports.

**Perform Safety Check and Meeting**

Recheck all pump lines, valves and connected equipment (transducers, gauges, etc.) from pump trucks to wellhead. Conduct safety meeting prior to rigging up equipment on location. Discuss the job procedure and goals with all personnel on location. Document the safety meeting on the daily report. Make note of all potential risks and hazards including weather and wind direction. Identify emergency routes, meet-up/ safety areas, evacuation methods and vehicles. Make note of any new or inexperienced personnel on location and engage to ensure their understanding and cooperation and to ensure proper Personal Protective Equipment (PPE) is used during the job. Minimums are hard hats, steel toes, safety glasses, H<sub>2</sub>S monitors, and FR certified clothing as required. Designate an upwind smoking area off location and minimum of 100' from any potential hydrocarbon source.

**Preparation**

1. Set 2 - 500 bbl Frac tanks on location and begin filling with produced water from the facility. Do not use fresh water or produced water (recycled OK). Load hole completely. Stay attached to water tanks at the facility so water can be used at the end of the test if needed.
2. Wellhead is rated to 3,000 psi. Ensure all wellhead valves meet or exceed 3K.

**72 hours before SRT**

3. Notify OCD representative SRT is planned – date and time to occur. Note: MIT will be conducted just prior to the SRT. **Ensure chart recorder (w/ current calibration) is on location.**
4. Ensure well is static or on vacuum; MIRU slickline truck and crane, utilize lubricator/ pack-off for well control.
  - Run in hole with BHP bomb and set at ~3,520' from surface on top of the F profile nipple. Note: Ensure bomb is rated to 10k psi or greater and can collect 1 million data points and set to collect data 1 count per second; ~11.5 days of data collection in case of delay.

**48 hours before SRT**

5. Shut in well and isolate injection line. Ensure that NO injection can occur prior to test.

**Step Rate Test Procedure**

6. Ensure pumps will produce 9 bpm at 5000 psi. Excepting pressure test, max pressure limit for the job is 3000 psi. RU pump and manifold both frac tanks together. Run dual 2" injection lines.
  - a) RU an injection line and pressure transmitter to the production casing-tubing annulus and pressure up to 500 psi and preform an MIT. (Service company must save and export this data to an appropriate filename; clear data and prepare for SRT data collection.)
  - b) Install pressure transmitters on the tubing (not the discharge of the pump), and on the production casing.
  - c) A turbine meter must be used to measure injection rate.
  - d) Rig both injection lines up to the tubing.
7. Close bottom master valve and open all other valves and test iron and wellhead to 5000 psi.
8. Open lower master valve and **begin step rate test**. Follow schedule exactly (see below). DO NOT stop injection and DO NOT alter schedule. Steps need to be exactly at prescribed rates and for exactly 45 minutes UNLESS breakdown is observed and 2 more steps passed that are not in the schedule.
  - a) If this is the case and there is pressure headroom, divide the remaining pressure rating of the wellhead by number of remaining steps needed to get to 3 and add 1 – target a starting pressure for those remaining step instead of rate.

**Example:** Stage 6 break is observed at 2500 psi and wellhead is rated to 3000 psi.  $3000 - 2500 = 500$  psi. 2 more stages needed, add one.  $500/3 = 166$  psi. Stage 7 should be started at 2666 psi and stage 8 started at the end of stage 7 pressure plus 166 psi. Rate is to be held steady through the remainder of the stage. Stage length is to be the same as the previous stages.

- b) If there is no more pressure headroom available, hold the rate steady for the amount of time equivalent to running the extra number of stages - document in stage notes.

**Example:** If breakdown is observed on stage 6, and the ending pressure of stage 6 is 2950 psi and wellhead is rated to 3000 psi, keep the same rate of stage 6 for stage 7 and 8.

Step Rate Test					
Step	Time Start (mins)	Time End (mins)	Rate (BPM)	Stage Volume (Bbl)	Cumulative Volume (Bbl)
1	0	45	0.3	14	13.5
2	45	90	0.6	27	40.5
3	90	135	1.2	54	94.5
4	135	180	2.4	108	202.5
5	180	225	3.6	162	364.5
6	225	270	4.8	216	580.5
7	270	315	6.0	270	850.5

9. RD pump and iron.
10. MIRU Slickline unit (crane if required).
11. RIH to 3,520' to retrieve the BHP Bomb. **Send all data w/ charts to PWS engineer.**

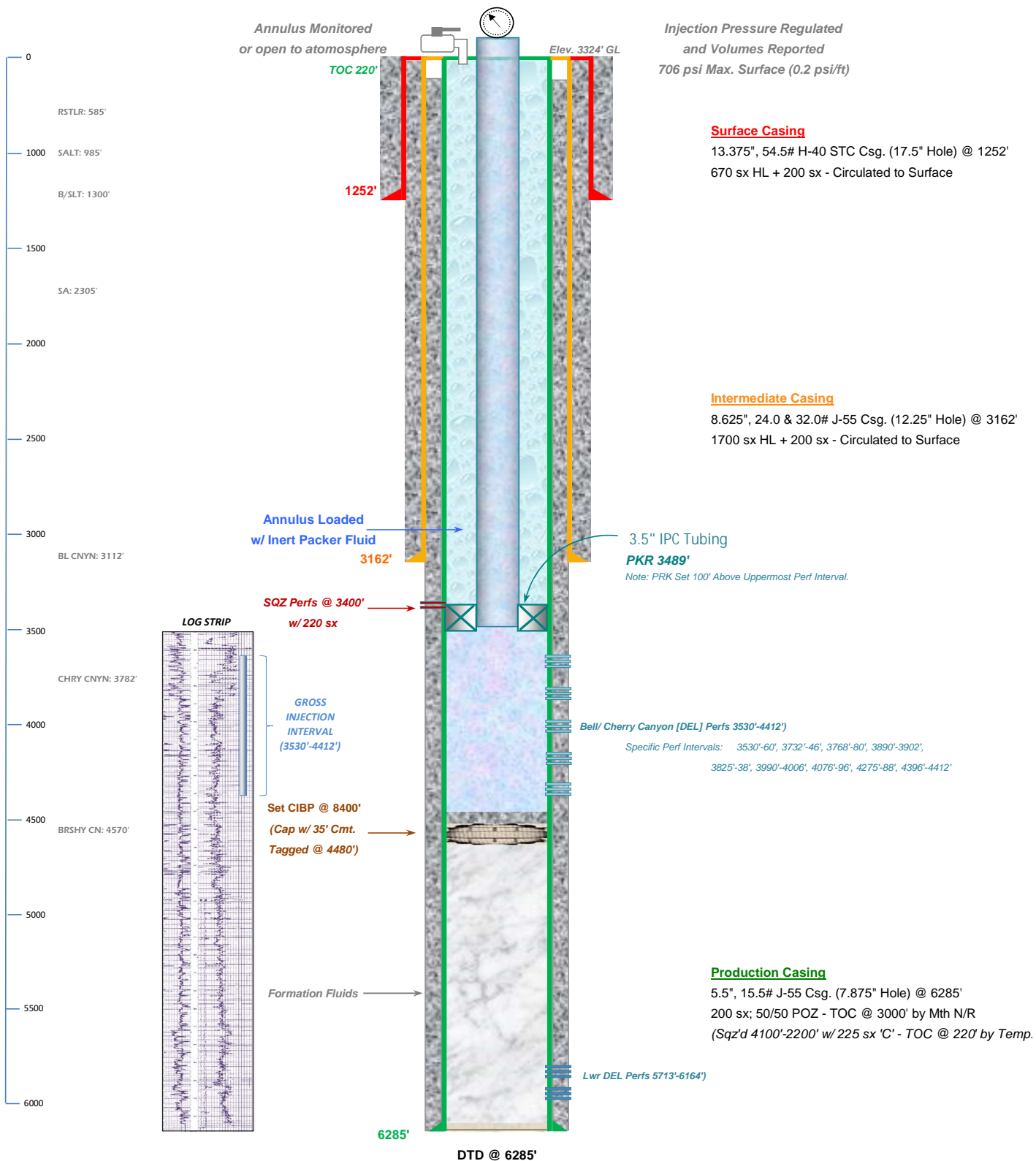
#### **Conclusion and Results of SRT**

12. Successful test data will be analyzed, assembled with all charts and supporting data and submitted to the NMOCD on a subsequent sundry (C-103Z) to request increase in injection pressure if warranted.



# WELL SCHEMATIC - CURRENT Sand Point State SWD #1

API 30-015-27346

2673' FNL & 1650' FWL, SEC. 2-T21S-R28E  
EDDY COUNTY, NEW MEXICOOCD Order SWD-1451  
SWD; Delaware (96100)Spud Date: 5/04/1993  
Config SWD Dt: 12/10/201Injection Pressure Regulated  
and Volumes Reported  
706 psi Max. Surface (0.2 psi/ft)**Surface Casing**13.375", 54.5# H-40 STC Csg. (17.5" Hole) @ 1252'  
670 sx HL + 200 sx - Circulated to Surface**Intermediate Casing**8.625", 24.0 & 32.0# J-55 Csg. (12.25" Hole) @ 3162'  
1700 sx HL + 200 sx - Circulated to Surface

Drawn by: Ben Stone, 4/03/2025





State of New Mexico  
Energy, Minerals and Natural Resources Department

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**Susana Martinez**  
Governor

**David Martin**  
Cabinet Secretary-Designate

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

**Jami Bailey, Division Director**  
Oil Conservation Division



Administrative Order SWD-1451  
November 25, 2013

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of 19.15.26.8B, NMAC, Judah Oil, LLC (the "operator") seeks an administrative order for re-entry into the Sand Point State Well No. 1 (formerly the Tecolote State Well No. 1) with a location of 2673 feet from the North line and 1650 feet from the West line, Lot number 11 of Section 2, Township 21 South, Range 28 East, NMPM, Eddy County, New Mexico, for produced water disposal purposes.

**THE DIVISION DIRECTOR FINDS THAT:**

The application has been duly filed under the provisions of 19.15.26.8B, NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified. An objection by BOPCO L.P. was received within the prescribed waiting period. The operator and BOPCO L.P. negotiated a resolution by modifying the application in the following manner: reducing the injection interval to shallower than 4500 feet and limiting the maximum daily injection rate. The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.

**IT IS THEREFORE ORDERED THAT:**

The applicant, Judah Oil, LLC (OGRID 245872), is hereby authorized to utilize its re-entry into the Sand Point State Well No. 1 (API 30-015-27346) with a location of 2673 feet from the North line and 1650 feet from the West line, Lot number 11 of Section 2, Township 21 South, Range 28 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) into the Delaware Mountain Group (Bell Canyon and Cherry Canyon formations) through perforations from approximately 3530 feet to 4416 feet. Injection will occur through internally-coated tubing and a packer set within 100 feet of the permitted interval.

Per the agreement with BOPCO for approval of the application, the operator shall be limited to a **maximum injection rate of 1500 barrels of water per day** (BOWPD). Failure to comply with the injection rate will result in suspension of injection operations and the authority to dispose will terminate *ipso facto*.

Additionally prior to commencing injection, the operator will install a cast-iron bridge plug (or equivalent) with a cement cap that is to be located within 200 feet of the deepest perforation at 4416 feet.

Administrative Order SWD-1451  
Judah Oil LLC  
November 25, 2013  
Page 2 of 3

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IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application.

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

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

The wellhead injection pressure on the well shall be limited to **no more than 706 psig**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

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

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

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

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



Administrative Order SWD-1451  
Judah Oil LLC  
November 25, 2013  
Page 3 of 3

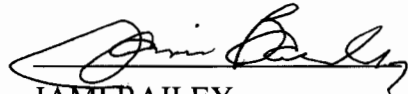
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The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

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

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

  
JAMI BAILEY  
Director

JB/prg

cc: Oil Conservation Division – Artesia District Office  
State Land Office – Oil, Gas, and Minerals Division

Submit a Copy To Appropriate District  
Office  
District I – (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II – (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III – (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV – (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised July 18, 2013

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.	30-015-27346
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name <b>Sand Point State</b>	
8. Well Number	1
9. OGRID Number	371912
10. Pool name or Wildcat SWD; Delaware	96100
4. Well Location Unit Letter <u>K</u> : <u>2,673</u> feet from the <u>North</u> line and <u>1,650</u> feet from the <u>West</u> line Section <u>2</u> Township <u>21S</u> Range <u>28E</u> NMPM County <u>Eddy</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <u>3,324'</u>	

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
 DOWNHOLE COMMINGLE ☐  
 CLOSED-LOOP SYSTEM ☐  
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☒ ALTERING CASING ☒  
 COMMENCE DRILLING OPNS. ☐ P AND A ☐  
 CASING/CEMENT JOB ☐  
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

3/20/23: MIRU Sure Energy Rig #3, set lay dn machine & pipe racks, WO P&P, SDFD.  
 3/21/23: RU P&P, kill tbg with 30 bbls 14.6# mud, NDWH, NUBOP, Release pkr, csg kick off pump 35 bbls 14.6# mud still 500#, WO mud, kill csg with 65 bbls 14.6# mud, SI SDFD.  
 3/22/23: TOOHH with 107 jts of 2 7/8" Duo-line tbg, TIH with 4 3/4"DB, CV, 1 jt, CV, SJ, 30 jts 2 7/8" WS, BDT, 4' perf sub, tag at 3664', work & bale to 4475', baler quit, TOOHH with tbg & tools, rec 17 jts full of heavy sludge, SI SDFD.  
 3/23/23: TIH with tbg & BDT, clean out to 4475', TOOHH with tbg to BDT, SI SDFD.  
 3/24/23: finish TOOHH with 32 jts full of heavy sludge, SI SDFD.  
 3/27/23: TIH with tbg & BDT, clean out to 4475', work & bale, TOOHH with 32 jts of tbg, SI SDFD.  
 3/28/23: Finish TOOHH with tbg & tools, 10 jts full of heavy sludge, TIH with 110 jts, circ mud out, SI SDFD WO 3 1/2" tbg & gov ok.  
 3/29/23: Roll mud to wait on gov ok, SI SDFD.  
 4/3/23: try to kill well with 65 bbls 14.6# mud still have 400#, SI SDFD.  
 4/4/23: WO mud, kill well with 65 bbls 14.6# mud, SI SDFD.  
 4/5/23: TOOHH with WS laying dn, move ws from racks, unload & tally 107 jts 3 1/2" 9.30# N-80 IPC tbg, TIH with 2 7/8" X 5 1/2" AS1X NC pkr, 2 7/8" X 3 1/2" SS XO, 107 jts 3 1/2" IPC tbg, NDBOP, set pkr at 3489' with 18,000# dn wt, NUWH, pretest csg to 500# for 30 min ok, clean & jet pit, SI SDFD.  
 4/6/23: test csg with NM gov OCD to 535# for 32 min on chart & ok, RDMO, clean up, Left well SI & ready for service.

Spud Date:

Rig Release Date:

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

SIGNATURE Elizabeth Valenzuela TITLE Regulatory Technician DATE 04/12/2023

Type or print name Elizabeth Valenzuela E-mail address: evalenzuela@oeswd.com PHONE: 806-658-7832

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

Sand Point State Well No. 1: Tubing Workover Report:

12/16/21: MIRU Totem UW, kill tbg with 25 bbls of 13# mud, NDWH, NUBOP, try to release pkr but dragging not release, SI SDFD, WO Vacuum truck.

12/17/21: RU Hydrostatic Tbg testers, get off on/off tool, kill csg with 70 bbls 13# mud, would not hold, wo mud, finish killing csg with 40 bbls 13# mud, tbg kick off, kill with 10 bbls 13# mud, get back on on/off, release pkr, TOOH testing tbg to 2500#, no bad tbg, RD Testers, SI SDFD

12/18/21: get tbg ready to run back, test pkr and ok, rebuild pkr & on/off, SDFD

12/19/21: inspect WH Flange, Hanger nipple show threads corroded, get with composite lining and find new nipple & ring gasket, SDFD

12/20/21: RU GP Duoline field tech, TIH with 2 7/8" x 5 1/2" AS1X NC Pkr, 2 7/8" on/off tool SS with 1.87 profile nipple, 107 jts of 2 7/8" 6.5# J-55 Duoline tbg, NU Stripper head, Flush csg with 180 bbls FW Pkr fluid, set pkr at 3489' with 30,000# tension, Tbg kick off to 250#, SI SDFD, WO mud

12/21/21: kill tbg with 15 bbls 14# mud, NDBOP, NUWH, pressure test csg to 550# for 30 min ok, flush tbg with 30 bbls pkr fluid, flow back mud to vacuum truck 110 bbls and quit flowing, pump 10 bbls pkr fluid and tbg 850# flow back 6 bbls pkr fluid and quit flowing, RDMO, move out rig and equipment, SI SDFD

12/22/21: RU Big E Acid trucks and acidize with 500 gals of mud flush, 3000 gals of 90/10 15% HCL, 10% Xylene, 90% acid, flush with 20 bbls 2% KCL fluid, let sit 30 min and flush with 95 bbls 2% KCL water, RD Big E, SI SDFD

12/23/21: TP-860#, CP-0, put pump on, TP-675-780#, CP-0, tbg pressure too high, waiting till tbg pressure below 706# to MIT

1/5/22: conducted successful MIT with 580# pressure for 32 min

State of New Mexico  
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham  
Governor

Sarah Cottrell Propst  
Cabinet Secretary

Todd E. Leahy, JD, PhD  
Deputy Secretary

Adrienne Sandoval, Division Director  
Oil Conservation Division



Date: 1-5-2022

API# 30-015-27346

A **Mechanical Integrity Test (M.I.T.)** was performed on, Well sand point state #001

     M.I.T. is **successful**, the original chart has been retained by the Operator on site. Send a **legible** scan of the chart with an attached **Original C-103 Form** indicating reason for the test, via post mail to District NMOCD field office. A scanned image will appear online via NMOCD website, [www.emnrd.state.nm.us/ocd/OCDOnline.htm](http://www.emnrd.state.nm.us/ocd/OCDOnline.htm) 7 to 10 days after postdating.

     M.I.T. is **unsuccessful**, the original chart is returned to the Operator. Repairs will be made; Operator is to schedule for a re-test within a 90-day period. If this is a test of a repaired well currently in non-compliance, all dates and requirements of the original are still in effect.  
**No expectation of extension should be construed because of this test.**

     M.I.T. for **Temporary Abandonment**, shall include a detailed description on **Form C-103**, including the location of the CIBP and any other tubular goods in the well including the Operator's request for TA status timeline.

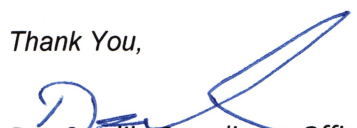
X M.I.T. is **successful**, after the secondary request of a scheduled M.I.T. is performed. Therefore, Operator has within a 30-day period from the M.I.T. to submit a current C-103 along with a legible scan of the Chart, including a detailed description of the repair(s). **Only after receipt of the C-103 will the non-compliance be closed.**

     M.I.T. is **successful**, Initial of an injection well, you must submit a **form C-103** to NMOCD within 30 days. A **C-103 form** must include a detailed description of the work performed on this well including the position of the packer, tubing Information, the date of first Injection, the tubing pressure and Injection volume.

Please contact me for verification to ensure documentation requirements are in place prior to injection process.

**If I can be of additional assistance, please feel free to contact me at (575) 626-0836**

Thank You,

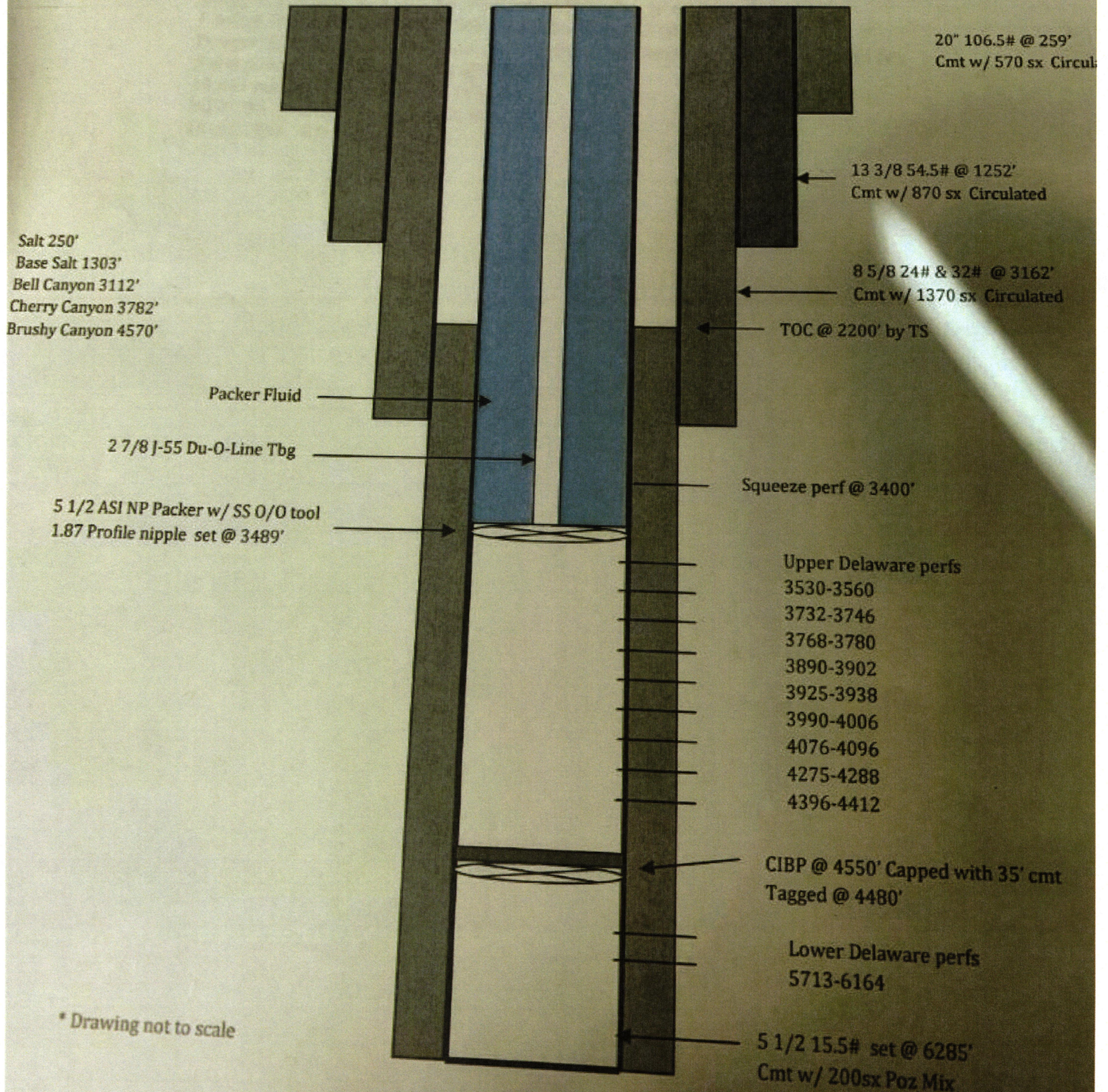
  
Dan Smolik, Compliance Officer  
EMNRD-O.C.D.  
District II – Artesia, NM





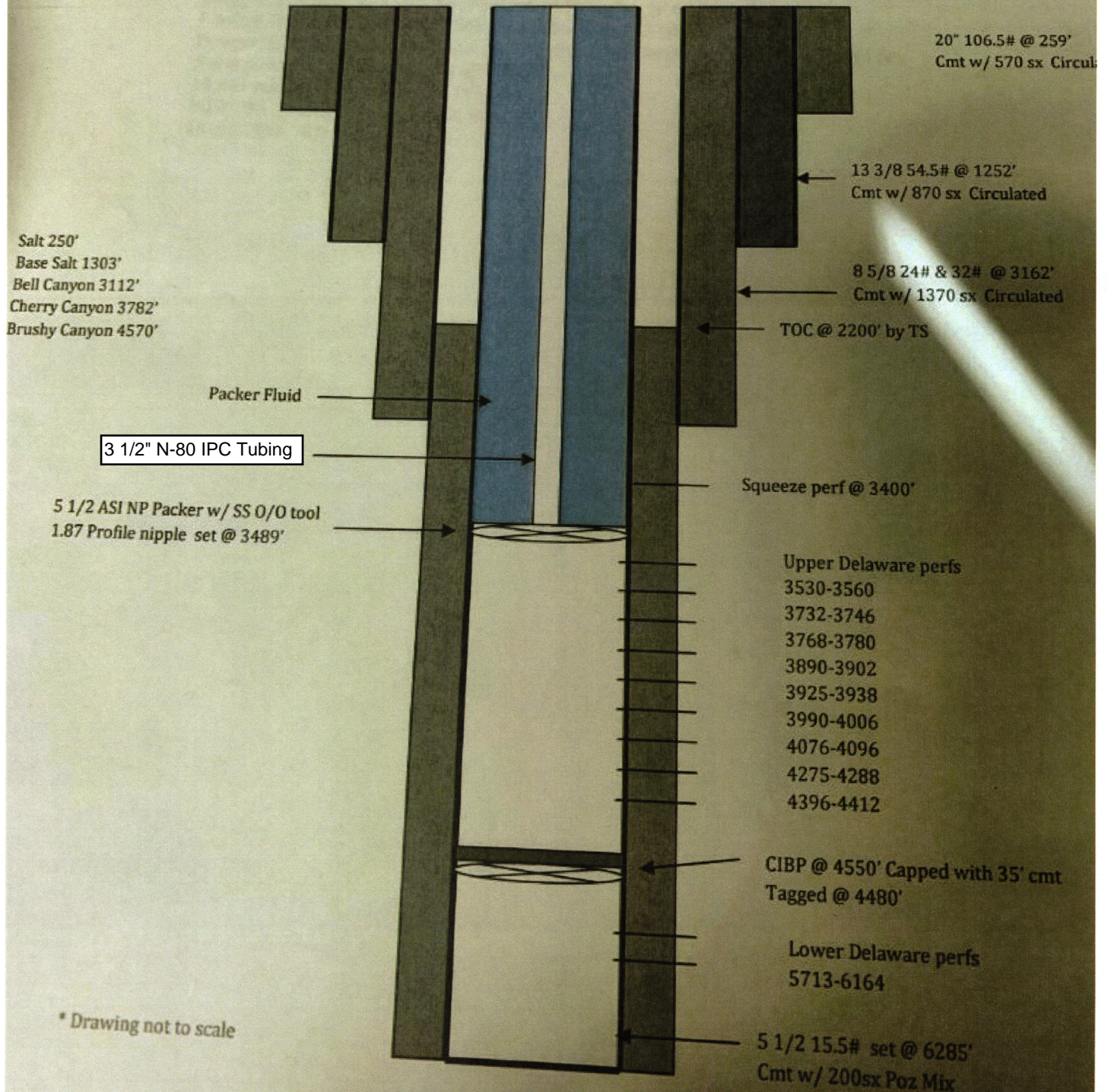


Judah Oil, LLC  
 Sandpoint State #1 SWD  
 API #30-015-27346  
 UL-K, Sec 2, T-21-S, R-28-E  
 Eddy County, NM  
 Spudded 5/4/1993  
 Recompleted as SWD-11/21/2013





Judah Oil, LLC  
 Sandpoint State #1 SWD  
 API #30-015-27346  
 UL-K, Sec 2, T-21-S, R-28-E  
 Eddy County, NM  
 Spudded 5/4/1993  
 Recompleted as SWD-11/21/2013





Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 493226

CONDITIONS

Operator: PRODUCTION WASTE SOLUTIONS LLC 1101 SE Mustang Dr Andrews, TX 79714	OGRID: 371912
	Action Number: 493226
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	None	8/7/2025