

<b>Well Name:</b> SAND 18 FEDERAL	<b>Well Location:</b> T23S / R32E / SEC 18 / SENE / 32.306171 / -103.706855	<b>County or Parish/State:</b> LEA / NM
<b>Well Number:</b> 1	<b>Type of Well:</b> INJECTION - ENHANCED RECOVERY	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM0559539	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3002525017	<b>Well Status:</b> Water Disposal Well Shut In	<b>Operator:</b> DEVON ENERGY PRODUCTION COMPANY LP

**Notice of Intent**

**Sundry ID:** 2743203

**Type of Submission:** Notice of Intent

**Type of Action:** Workover Operations

**Date Sundry Submitted:** 07/27/2023

**Time Sundry Submitted:** 02:01

**Date proposed operation will begin:** 07/27/2023

**Procedure Description:** NOI for Repair The Sand 18 Federal 1 SWD, which is the only DVN owned SWD that supports produced water disposal in the Todd area, recently presented with pressure on the annulus. Pressure diagnostic testing appeared to indicate a leak in the tubing to the annulus, with either the internally plastic-coated tubing or AS1-X retrievable packer assembly being suspect. Devon has been strategically replacing injection strings with an upgraded tubing design as well integrity is found compromised across the fields to provide improved corrosion and erosion resistance. Devon plans to mobilize a workover rig to the Sand 18 Fed 1 SWD once approval to proceed is granted to pull the failed injection tubing and packer, perform a mechanical cleanout, run bit/scrapper, make a full gauge dummy run, run a casing inspection log, pressure test casing with RBP/packer, wireline set a new permanent packer, and install new IPC tubing with a ratch latch seal assembly to restore well integrity. Devon also requests an outside diameter tubing size changing to 4 inch from 3 ½ inch, the latter being stipulated in Order SWD -20944. The proposed change to 4 inch OD injection tubing will not affect the permitted maximum injection rate, permitted maximum surface injection pressure, AOR, nor any other permit conditions. The increase in tubing size would strictly reduce pipe friction pressure. Additionally, this would allow our pumps to run in the manufacturer-recommended pump curve preventing damage to the equipment reducing potential environmental impact. As an added measure to remain within the conditions of the permit, maximum injection rate and maximum surface injection pressure controls are programmed into the control logic to prevent exceeding the permitted parameters. Standard fishing/spear tools will allow the tubing to be extracted, if necessary.

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US Well Number: 3002525017

Well Status: Water Disposal Well Shut In

Operator: DEVON ENERGY PRODUCTION COMPANY LP

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

NOI\_\_Sand\_18\_Fed\_1\_Repair\_Procedure\_Rev2\_1\_20230727140113.pdf

Conditions of Approval

Specialist Review

Workover\_or\_Vertical\_Deepen\_COA\_20230804221621.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CHELSEY GREEN

Signed on: JUL 27, 2023 02:00 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City State: OK

Phone: (405) 228-8595

Email address: Chelsey.Green@dvn.com

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

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**BLM Point of Contact**

BLM POC Name: JONATHON W SHEPARD

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752345972

BLM POC Email Address: jshepard@blm.gov

Disposition: Approved

Disposition Date: 08/04/2023

Signature: Jonathon Shepard

CONFIDENTIAL



## Sand 18 Federal 1 SWD - General Repair Procedure

6/8/2023

**Well Name:** Sand 18 Fed 1 SWD **API:** 30-025-25017  
**Location:** 1,980' FNL, 660' FEL, Sec. 18-T23S-R32E **County:** Lea, NM

**Current Well Status:** Plan to mobilize a workover rig after approval is granted to proceed.

**Objective:** Pull old 3-1/2" IPC tubing and AS1-X retrievable packer. Perform mechanical clean out, run bit and scraper, make full gauge dummy run, run casing inspection log, and pressure test casing with RBP/test packer. Install new Inconel 925 corrosion resistant alloy permanent packer and anchor latch seal assembly and 4" flush joint IPC tubing. Schedule and perform official MIT with NMOCD.

1. MIRU workover rig and all related equipment.
2. Record SITP and SICP. Bleed down any pressure that may be present on tubing or casing to tank, recording whether gas or fluid and volume recovered, if any. Monitor for H2S when blowing down.
3. Install BPV in tubing hanger.
4. ND production tree.
5. Install lift sub with TIW valve.
6. NU 7-1/16" 5K BOPE.
7. Retrieve BPV and install 2-way check.
8. Test BOPE to 5,000 psi.
9. Retrieve 2-way check.
10. Release packer per tool supervisor's recommendation. Fluid may U-tube up casing.
11. LD and inspect all the following injection tubing assembly currently in the hole:
  - Tubing hanger. **Send hanger in for inspection.**
  - ~16,596' of 3-1/2" IPC tubing
  - On/Off Tool and AS1-X packer/tail pipe assembly. **Send on/off tool and packer/tail pipe assembly in for inspection.**
12. Drift and tally 2-7/8" 7.90# P110 PH6 work string.
13. TIH with 4-5/8" tricone bit, XO, drill collars, XO, 2-7/8" PH6 tubing, XO, bumper sub, oil jar, XO, landing nipple, XO, and remaining 2-7/8" PH6 tubing.
14. Tag top of fill and rig up stripper rubber and swivel.
15. Break circulation by reverse circulating and begin washing through fill.
16. Attempt to make hole to PBTD @ 18,000'.
17. Circulate bottoms up and TOH SB 2-7/8" PH6 tubing in derrick and LD tools.
18. TIH with 4-5/8" tricone bit and 5-1/2" casing scraper on 2-7/8" PH6 tubing to 16,700' (5-1/2" casing shoe depth).
19. TOH SB 2-7/8" PH6 tubing and LD bit and scraper.
20. Flush casing with 10 ppg brine.
21. TIH with 4-5/8" smooth OD shoe with cutrite on leading edges, XO, drill collars, XO, 2-7/8" PH-6 tubing, XO, bumper sub, oil jar, XO, landing nipple, XO, and remaining 2-7/8" PH-6 tubing.
22. TIH to 16,700' reaming through any tight spots as necessary.
23. TOH SB 2-7/8" PH-6 tubing and LD tools.
24. Flush casing with 10 ppg brine.
25. MIRU SLB WL.
26. TIH with SLB-recommended GR/JB and CCL to correlate wireline depth to casing tally.
27. TIH with USIT tools to 16,700' and log to surface.
28. RDMO SLB WL.
29. TIH with tandem 5-1/2" RBP/packer on 2-7/8" PH-6 tubing to 16,690' (10' above 5-1/2" EOC @ 16,700').

**Sand 18 Federal 1 SWD - General Repair Procedure**

6/8/2023

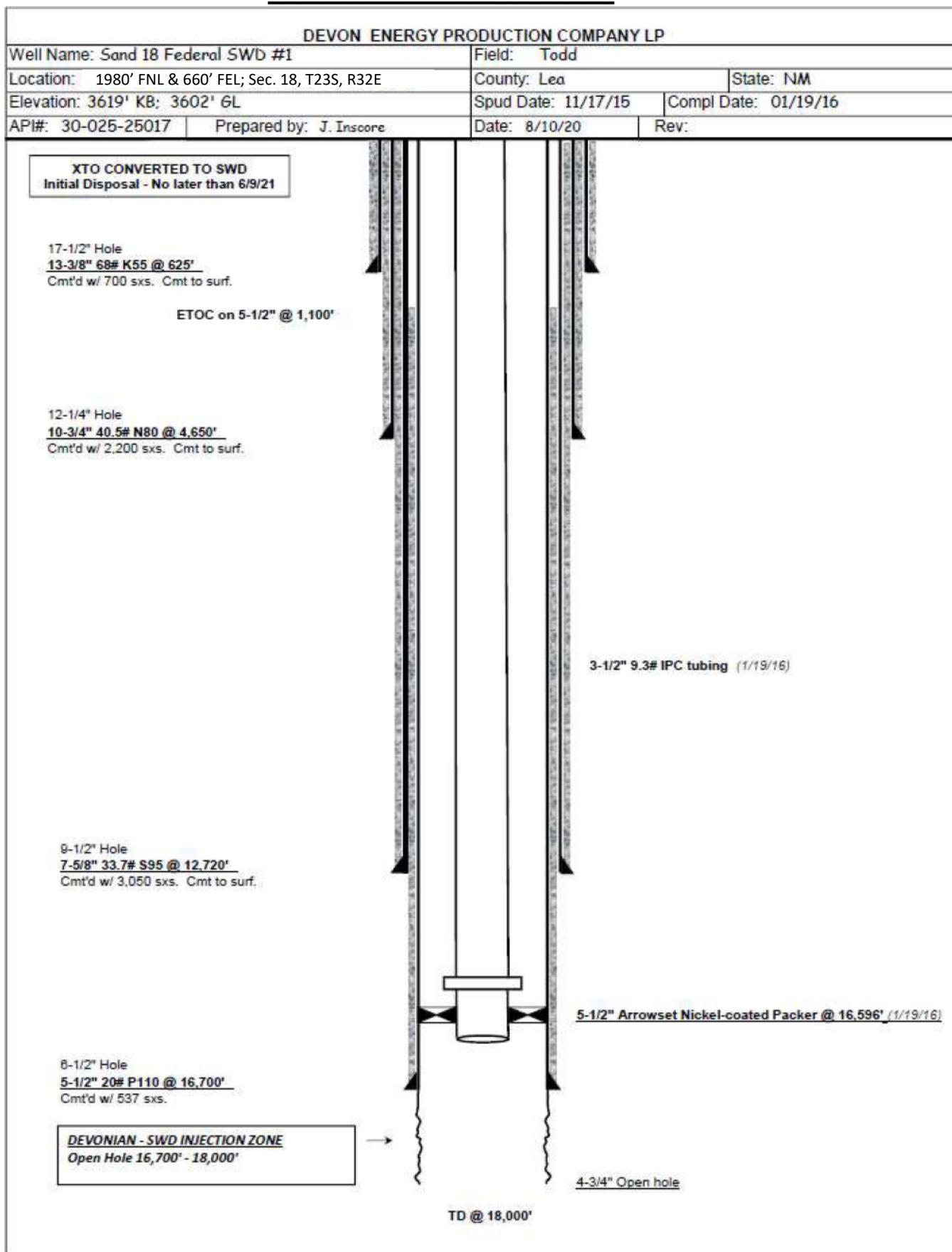
30. Set RBP.
31. PUH 5'-10' and set packer.
32. Pressure test down tubing against RBP to 1,000 psi for 10 min to ensure set and holding pressure with no leak off. Record results in WellView. Bleed down to zero.
33. Pressure test down backside against packer to 1,000 psi for 30 min to test casing integrity. Record results in WellView. Bleed down to zero.
34. Unseat packer, latch onto RBP, unseat RBP, and TOH LD 2-7/8" PH-6 tubing and tandem RBP/packer.
35. MIRU WL and prep to install new 5-1/2" Halliburton TWA Inconel 925 permanent packer system.
36. Ensure Halliburton service tech is present and oversees proper running protocol is followed for making up, running, and setting the new permanent packer on WL.
37. TIH with Halliburton-recommended GR/JB to setting depth.
38. TIH with the new permanent packer on WL per Halliburton recommendation and set.
39. TOH and RDMO WL.
40. Load 4" 11.35# P-110 EZGO IPC 1850-AR tubing onto racks and clean/tally.
  - Set of 4" 11.35# P-110 EZGO IPC 1850-AR pups ready to go (2', 4', 6', 8', 10', 12') for spacing out
41. Ensure Petrosmith service tech is present and oversees proper running protocol is followed for making up and running all flush joint IPC injection tubing.
42. RU casing crew and torque turn services.
43. MU and TIH all the following injection tubing assembly:
  - 2-7/8" Versa-Latch seal assembly with X profile seating nipple
  - 4" EZGO box by 2-7/8" VamTop pin XO
  - ~396 joints of 4" 11.35# P-110 EZGO IPC 1850-AR tubing
  - 4-1/2" LT&C pin by 4" EZGO pin XO
  - Tubing Hanger
44. Sting into packer per Halliburton recommendation with seal assembly and perform preliminary MIT on annulus to 1,000 psi for 30 min and record in WellView.
45. Sting out of packer per Halliburton recommendation.
46. Space out in order to sting back into packer.
47. Circulate inhibited 10 ppg brine packer fluid with biocide.
48. Land tubing hanger per Halliburton recommendation. Engineer to communicate TubeMove calculations with recommended compression.
49. Install BPV in tubing hanger.
50. ND 7-1/16" 5K BOPE.
51. RD casing crew.
52. NU new injection tree and test void to 5,000 psi.
53. Retrieve BPV.
54. Perform preliminary MIT on annulus to 500 psi for 30 min and record.
55. RDMO workover rig and all related equipment.
56. Secure well.
57. Notify and set up NMOCD for official MIT with chart recorder.



# Sand 18 Federal 1 SWD - General Repair Procedure

6/8/2023

## CURRENT WELLBORE DIAGRAM

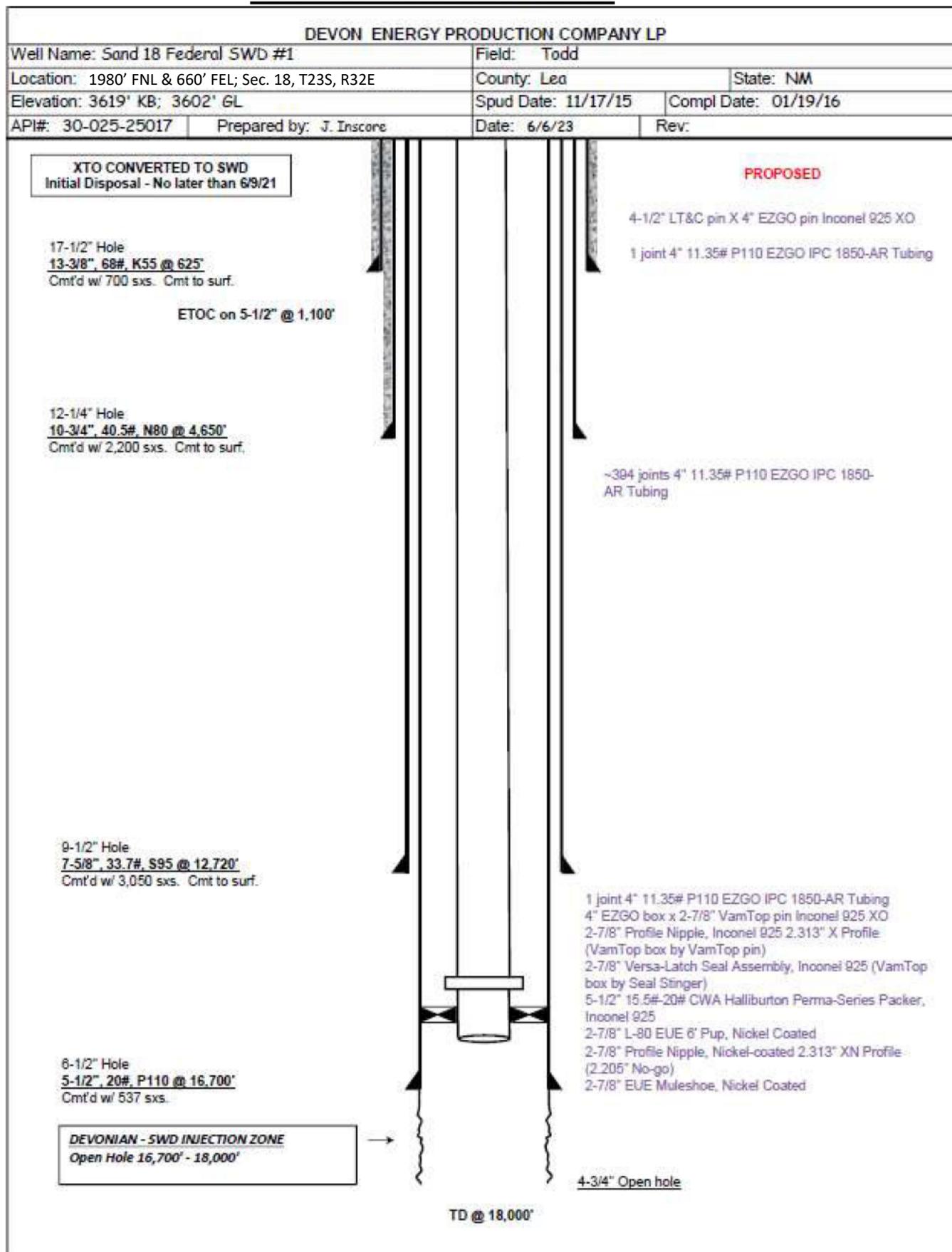




**Sand 18 Federal 1 SWD - General Repair Procedure**

6/8/2023

**PROPOSED WELLBORE DIAGRAM**



## BUREAU OF LAND MANAGEMENT

Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972

### Conditions of Approval for Workover/Deepening of a Well

1. Notification: Contact the appropriate BLM office at least 24 hours prior to the commencing of any operations. For wells in Eddy County, call 575-361-2822. For wells in Lea County, call 575-689-5981
2. Blowout Preventers: A blowout preventer (BOP), as appropriate, shall be installed before commencing any operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,100 feet, a 3M system for a well not deeper than 13,600 feet, or a 5M system for a well not deeper than 22,700 feet (all depths are for measured well depth).
3. Cement: Notify BLM if cement fails to circulate.
4. Subsequent Reporting: Within 30 days after work is completed, file a Subsequent Report (Form 3160-5) to BLM. The report should give in detail the manner in which the work was carried out. Show date work was completed. If producing a new zone, submit a Completion Report (Form 3160-4) with the Subsequent Report.
5. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.
6. If well location is within the Timing Limitation Stipulation Area for Lesser Prairie-Chicken: From March 1<sup>st</sup> through June 15<sup>th</sup> annually, activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted.

**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 248703

**CONDITIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 248703
	Action Type: [C-103] NOI Workover (C-103G)

**CONDITIONS**

Created By	Condition	Condition Date
mgebremichael	The condition of approval is that the well doesn't exceed the permitted maximum surface injection pressure. Pressure limiting devices should be installed and functional to make sure that no pressure exceedance occurred. Please report pressure routinely in C-115.	9/19/2023