

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. 30-015-42356
5. Indicate Type of Lease STATE [X] FEE [ ]
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name Cottonwood 2 State SWD
8. Well Number 1
9. OGRID Number 371643
10. Pool name or Wildcat SWD; Devonian
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3298' GR

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)
1. Type of Well: Oil Well [ ] Gas Well [X] Other SWD
2. Name of Operator Solaris Water Midstream, LLC
3. Address of Operator 907 Tradewinds Blvd., Suite B, Midland, TX 79705
4. Well Location Unit Letter O : 400' feet from the South line and 1400' feet from the East line
Section 2 Township 26S Range 26E NMPM County Eddy
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3298' GR

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: Workover [X]
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.

Solaris would like to give notice of intent for a remedial workover on the above captioned well to repair a suspected tubing leak. The plan is to rig up a pulling unit with hydraulic BOPs and pull the existing tubing leaving the existing permanent packer in place. The tubing string will be inspected for damage with any damaged joints being replaced with new tubing. The tubing string will be re-ran and latched onto the existing packer. A new MIT will be called out and performed after the workover to ensure wellbore integrity.

Spud Date:

[Empty box for Spud Date]

Rig Release Date:

[Empty box for Rig Release Date]

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

SIGNATURE [Signature] TITLE Regulatory Specialist DATE 7/19/22

Type or print name Whitney McKee E-mail address: whitney.mckee@solariswater.com PHONE: 432-203-9020

For State Use Only

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

# Well Repair Procedure

Cottonwood 2 State SWD #1 (30-015-42356)  
Devonian Disposal  
Sec. 2, T26S-R26E, Eddy County, NM



**Current Status:** Well is currently shut-in, in prep for workover of suspected tubing leak. Casing pressure is currently matching tubing pressure within about ~200 psi (casing higher) and follows tubing pressure quite closely. Injection fluid is an estimated 9.2-9.4 ppg in the tubing with an estimated 8.4 ppg fresh water packer fluid in the tubing annulus. Currently there is 10,543' (253 jts) of 4-1/2", 11.6#, P-110, BTC GRE Lining (NOV) and 2,647' (81 jts) of 3-1/2", 10.0#, L-80, EUE Special Clearance Couplings with a permanent Halliburton TWS 5-1/2" x 3" packer in the hole set at 13,205' (top).

**Plan Summary:** MIRU pulling unit; ND tree, NU BOPE; kill well and pull tubing string; run new tubing string; flange up well and return to injection. **Note that the NMOCD in Artesia (575-748-1283) must be given 48 hours notice prior to performing workover and 48 hrs notice prior to performing MIT.**

## Workover Prep:

1. Test and or install location anchors.
2. Have 4-1/2" BTC landing joint on location.
3. Ensure TIW and all necessary XOs are on location ready for use.
4. Ensure all costs are captured within the morning report in WellView.
  - If no cost is available put a best guess.
  - Ensure tax is added to each ticket unless it already specifically has it included.

## Workover Details:

5. MIRU TBD pulling unit with reverse unit pump package and set one (1) working frac tank plus one (1) trash fluid frac tank. Keep one tank empty in case CaCl kill fluid is needed. Fill reverse unit pit with 10.0 ppg brine water. **Have either a 4-1/2", BTC TIW valve, or a 2-7/8", 8rd TIW valve with 4-1/2" BTC x 2-7/8" 8rd crossover, available on location.**
6. Review pulling unit standard operating procedures and **conduct pre-job safety meeting.** Discuss overall procedure, ND/NU procedure, muster points, and tripping procedures. Document same within WellView morning report.
7. Set BPV in tubing hanger to isolate wellbore.
8. ND injection tree and NU 4-1/16" 3M Hydraulic BOP with 4-1/2" pipe rams and blind rams.
  - Send tree and tubing hanger to AFS for inspection and repair as needed. Backup tubing hanger available at AFS if needed.

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Sec. 2, T26S-R26E, Eddy County, NM



- Test blind rams against BPV using reverse unit.
  - Pipe rams will not be able to be tested due to tubing hanger in tubing head bowl.
  - Document everything on morning report within WellView
9. RU wireline unit and gauge ring.
- Run gauge ring sized just larger than 2.313" XN blanking plug through to end of tail pipe.
  - Run blanking plug and set 2.313" XN blanking plug at base of packer assembly.
  - POOH with wireline tools.
10. Perform flow check for 15 min and document results in wellview.
11. As necessary, RU hoses to annulus and tubing to bleed down and pressure.
- Bleed off tubing pressure to 0 psi to trash frac tank.
  - Well should u-tube due to leak in tubing.
    - If leak is insufficiently big to u-tube effectively, proceed with procedure and unlatch from packer.
12. RU casing crew and prep to pull 10,543' (253 jts) of 4-1/2", 11.6#, P-110, BTC GRE Lining (NOV) and 2,647' (81 jts) of 3-1/2", 10.0#, L-80, EUE Special Clearance Couplings tubing.
- Ensure TIW valve is on rig floor, in open position, and ready to pick up if needed.
  - Run out lock down pins in wellhead.
  - Install BTC landing joint.
13. Pick up on tubing string with an **estimated neutral weight (based on calculated weight) of 151k lbs.**
14. Unscrew from packer and space out tubing by getting to neutral weight, pulling 1-2k lbs and rotating to the right to unthread from the packer. Shut pipe rams.
- Allow well to complete u-tube up tubing if not already complete.
15. Shut pipe rams and install TIW on tubing. Perform positive pressure test to 1,500 psi for 30 min to test packer and casing integrity. Use reverse unit for test.
16. LD tubing hanger and landing joint. Inspect current tubing hanger for damage or seal damage. A backup tubing hanger and pin x pin will be on location from AFE if needed.

# Well Repair Procedure

Cottonwood 2 State SWD #1 (30-015-42356)  
Devonian Disposal  
Sec. 2, T26S-R26E, Eddy County, NM



- Keep hole full with BW while coming out with tubing to ensure we have additional barrier.
  - Inspect tubing on way out of hole with intent to re-run as much tubing as possible.
17. Once out of hole shut blind rams and return Latch tool to **Halliburton** for inspection and refurb.
18. Complete hauling pulled tubing string to NOV for inspection and repair (what can't be re-ran).
- **The goal is to re-run as much tubing as possible.**
19. Haul needed replacement footage of 4-1/2", 11.6#, HCP-110, BTC, TK Liner tubing from NOV yard and 3-1/2", 10.0#, L-80, EUE Special Clearance Couplings tubing from Petrosmith to location. NOV will bring a selection of pup joints for our use and we will pay for whichever ones we use.
20. MU Latch Seal Assembly, 3-1/2" EUE Box x 2-7/8" EUE Box XO, followed by 3-1/2", 10.0#, L-80, EUE Special Clearance Couplings tubing from Petrosmith followed by XO 4-1/2" BTC Box x 3-1/2" EUE Pin followed by 4-1/2", 11.6#, HCP-110, BTC, TK Liner tubing from NOV. 4-1/2" BTC Pin x Pin will be on top followed by hanger.
- Ensure one full joint is directly beneath mandrel hanger with any pup joints beneath that.
  - **In order to ensure accurate well file information, strap and caliper all tubing and downhole equipment.**
21. Once at depth, PU 4-1/2" BTC landing joint (provided by Retief at Lone Star) and space out such that no less than 35-40k will be placed on packer. Do not go more than 45k down on packer due to buckling concerns of 4-1/2" and 3-1/2" tubing.
22. **Ensure kill truck is on location for H-5/MIT test with a 1,000 psi test wheel and 1,000 psi spring and NMOCD is given at least a 48 hour notice for same. NMOCD in Artesia (575-748-1283).**
23. Close 4-1/2" pipe rams and test tubing annulus using reverse unit to 750 psi for 10 min. If bleed off occurs, check all surface equipment and re-test. Notify Midland Engineer if test fails a second time.
24. Bleed off pressure and open pipe rams. Un-sting from packer with Latching Seal Assembly leaving packer with blanking plug still set in place. Prep to reverse circulate packer fluid.
- Mix packer fluid in 2% KCl as per manufacturer recommendation to make 300 bbls of packer fluid in water trucks. Annular volume is 212.2 bbls.

**Well Repair Procedure**  
**Cottonwood 2 State SWD #1 (30-015-42356)**  
**Devonian Disposal**  
**Sec. 2, T26S-R26E, Eddy County, NM**



25. RU reverse unit to BOP or wing valve on tubing head. Close pipe rams on 4-1/2" tubing. Reverse circulate most of the 300 bbls 8.5 ppg KCl packer fluid to ensure good coverage across annulus.
  - **Leave a few bbls of packer fluid to top off annulus after job is complete.**
26. Using landing joint, slack off on string to latch onto packer. Continue to slack off landing tubing hanger in tubing head with all available string weight and 35k – 40k lbs down on packer.
27. **Ensure NMOCD in Artesia has been notified 48 hrs in advance of intent to perform H-5/MIT at 575-748-1283.** Lock down tubing hanger and test the 7" x 4-1/2" annulus to 600 psi for 35 minutes. Chart the test on a **1,000 psi test wheel**. If bleed off occurs, check all surface equipment and re-test. Notify Midland Engineer if test fails a second time.
28. Bleed off well pressure and install BPV. ND BOP and RDMO well service unit.
29. Install injection tree and remove BPV.
30. Release all rental equipment. MU injection piping.
31. Return well to injection.

Date: March 25, 2021

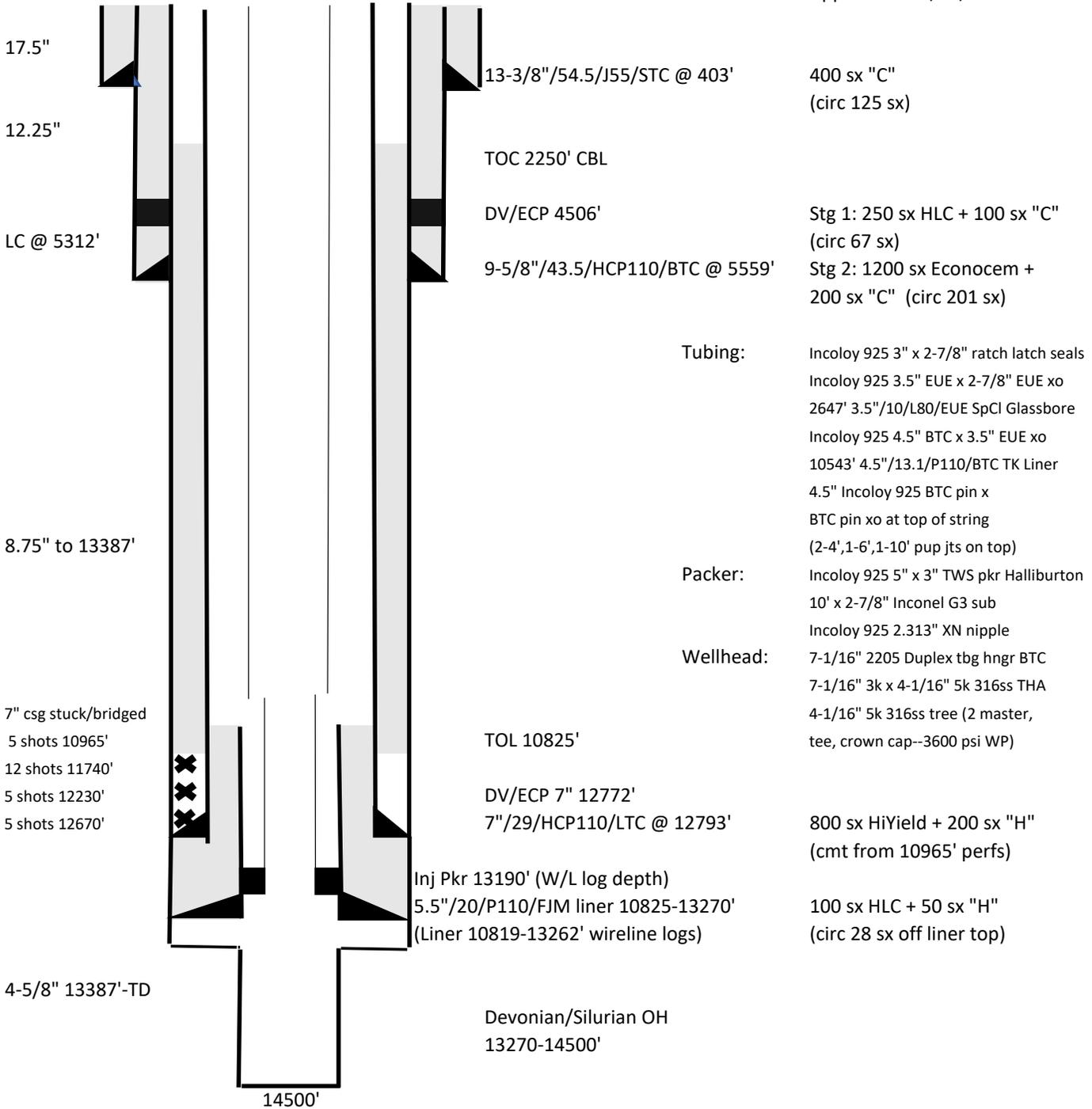
Submitted by: Christopher Giese - Drilling Engineer

**\*\*Please note: this procedure is only intended as an accompaniment to the AFE and will not be considered as the final well work procedure\*\***

400' FSL, 1400' FEL  
 O-2-26s-26e  
 Eddy, NM  
 30-015-42356

Zero: 27' agl  
 KB elev: 3325.8'  
 GL elev: 3298.8'

C108 SWD-1473  
 Max Press 2620 psi  
 Permit 13100-14600'  
 Actual 13270-14500'  
 Approved 4/10/2014



Jan 2015: Went into service.

Mar 2019: Repair WO tbg/pkr leak. New tbg and new CRA perm pkr run.

Pumped 4000 g solvent soak + 40000 g 15% HCL + 15000 g 2500ppm ClO2 4 stgs.

kbcollins

19-May-19



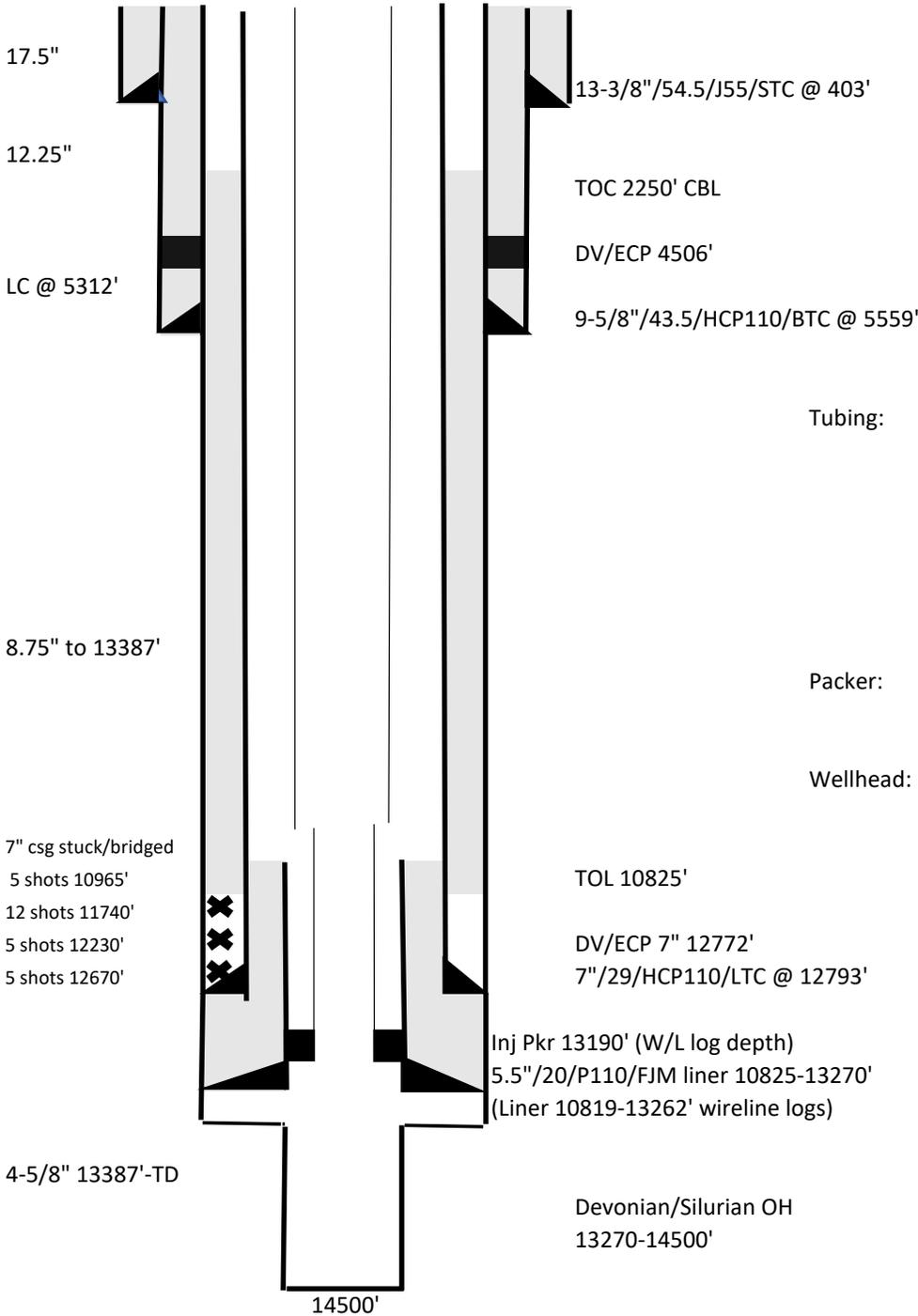
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400' FSL, 1400' FEL  
O-2-26s-26e  
Eddy, NM  
30-015-42356

Zero: 27' agl  
KB elev: 3325.8'  
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C108 SWD-1473  
Max Press 2620 psi  
Permit 13100-14600'  
Actual 13270-14500'  
Approved 4/10/2014



400 sx "C"  
(circ 125 sx)  
  
Stg 1: 250 sx HLC + 100 sx "C"  
(circ 67 sx)  
Stg 2: 1200 sx Econocem +  
200 sx "C" (circ 201 sx)

**Tubing:** Incoloy 925 3" x 2-7/8" ratch latch seals  
Incoloy 925 3.5" EUE x 2-7/8" EUE xo  
2647' 3.5"/10/L80/EZGO FJ3 SWD  
Incoloy 925 4.5" BTC x 3.5" EZGO FJ3 SWD x  
10543' 4.5"/13.1/P110/BTC TK Liner  
4.5" Incoloy 925 BTC pin x  
BTC pin xo at top of string  
(2-4', 1-6', 1-10' pup jts on top)  
**Packer:** Incoloy 925 5" x 3" TWS pkr Halliburton  
10' x 2-7/8" Inconel G3 sub  
Incoloy 925 2.313" XN nipple  
**Wellhead:** 7-1/16" 2205 Duplex tbg hngr BTC  
7-1/16" 3k x 4-1/16" 5k 316ss THA  
4-1/16" 5k 316ss tree (2 master,  
tee, crown cap--3600 psi WP)

800 sx HiYield + 200 sx "H"  
(cmt from 10965' perfs)  
  
100 sx HLC + 50 sx "H"  
(circ 28 sx off liner top)

Jan 2015: Went into service.  
Mar 2019: Repair WO tbg/pkr leak. New tbg and new CRA perm pkr run.  
Pumped 4000 g solvent soak + 40000 g 15% HCL + 15000 g 2500ppm ClO2 4 stgs.  
July 2022: Proposed Repair WO tbg leak.

cgiese 18-Jul-22

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

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 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 127040

**CONDITIONS**

Operator: SOLARIS WATER MIDSTREAM, LLC 907 Tradewinds Blvd, Suite B Midland, TX 79706	OGRID: 371643
	Action Number: 127040
	Action Type: [C-103] NOI Workover (C-103G)

**CONDITIONS**

Created By	Condition	Condition Date
drose	None	8/15/2022