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District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
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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.	30-015-44422
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Trove Energy 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.) 2,966' 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 ☐ Other SWD

2. Name of Operator
Solaris Water Midstream, LLC

3. Address of Operator
9651 Katy Freeway, Suite 400, Houston, TX 77024

4. Well Location

Unit Letter N : 944 feet from the South line and 2508 feet from the West line
Section 13 Township 24 S Range 28 E NMPM County Eddy

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: Acid Job ☒

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.

6/26/2024: Acidize OH 14,100' to 15,200' (Packer at 14,236') with 40,000 gal 20% HCL, additives & 9,000# rock salt for diversion.

Spud Date: 01/24/2019

Rig Release Date: 03/11/2019

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

SIGNATURE Lauren N. Bean TITLE Sr. Engineering Tech DATE 06/24/2024

Type or print name Lauren N. Bean E-mail address: lauren.bean@ariswater.com PHONE: 281-732-8785

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):



Procedure: Acid Treatment with Rock Salt Diversion Trove SWD #1

Date: 6/19/2024
Well: Trove SWD # 1
Engineer: Jason Rubin

Well Information:

API #: 30-015-44422
Surface Location: 944' FSL & 2508' FWL, Sec. 13, T24S, R28E
Injection Casing: 7-5/8" 39 # ICY-110 Hydril 513, ID: 6.625"
Injection Tubing 1: 5-1/2" 20 # P-110, EZGO HTGT (W/ IPC Coating), ID: 4.758", 0 to 8,525'
Injection Tubing 2: 5" 21.4 # P-110, EZGO HTGT (W/ IPC Coating), ID: 4.106", 8,525' to 14,236'
Packer: 14,236 FT
TD/BHST: 15,335 FT/ 262 F (From Berry OH Log)
TOC: Cemented to Surface
Formation Name: Devonian
Permit Pressure: 2,820 psi

Introduction:

This program presents the proposed steps for performing a rock salt acid job on the Trove SWD #1.

The objectives of this program are:

- Pump 40,000 gallons of 20% HCL with inhibitor across the open hole interval at approximately 14 to 15 BPM
- Divert acid by using 9000 pounds of rock salt
- Over flush acid to bottom of open hole with approximately 19,906 gallons of fresh water (150 bbl over flush). Let the well sit for a minimum of 12 hours following treatment to allow rock salt to dissolve and let acid sit in the formation.



Procedure: Acid Treatment with Rock Salt Diversion Trove SWD #1

Job Prep:

1. Verify max pressure to be used for the job. This will be the LOWEST value of the following and DE-RATED to 80% of the listed pressure rating.
 - a. Injection tree working pressure rating = 5,000 PSI
 - b. Tubing burst pressure (5.5") = 12,640 PSI
 - c. Surface pressure equipment rating = 3,000 PSI
 - d. Isolating valve pressure rating = 5,000 PSI
 - e. **MASIP = 2,790 PSI**

Verified by Aris Personnel Onsite? _____

2. Ensure the proper companion flange for the top of the tree is available to match up to the connection for the pump truck lines.
3. Set portable containment for acid tanks. MIRU 4 lined acid tanks, 3 for mixing acid, 1 for a bleedoff tank (**Do not manifold together**), 2 freshwater tanks, and 1 10# brine tank.
 - a. **(Make sure tanks are clearly labeled to avoid possible cross contamination.)**
4. Bring 2 trucks filled with 200 bbls of 10# brine water and place into brine tanks. Bring 13 trucks filled with 1360 bbls of fresh water. Fill 3 of the lined acid tanks with 360 bbls of fresh water spread evenly among the 3 tanks. Place approximately 500 bbls of freshwater into each freshwater tank.
5. Ensure the area around wellhead is clear of obstacles that would impede access to the injection tree for pump trucks, frac tanks, vac trucks, and any hard lines necessary for job.
6. Ensure the acid company brings an in-line pop-off for their injection line.
 - a. Set pressure release to the lower of the max job pressure as recommended by acid company or the lowest MAOP equipment in the system. **Set popoff at 2,900 PSI based on minimum working pressure rating defined in step 1.**
7. Prior to performing the scope, ARIS Superintendent must sign off on the scope provided by the vendor. The pre-job checklist is to be completed/signed by ARIS on-site representative and the vendor on-site supervisor.



Procedure: Acid Treatment with Rock Salt Diversion Trove SWD #1

8. **Conduct pre-job safety meeting.** Discuss overall procedure, ND/NU procedure, muster points, acid safety, nearest hospital, and anything else that may be a hazard before, during, or after.
9. **Chemical showers (provided by Cudd) are required for all acid stimulation jobs**

Acid Job Procedure:

10. Stop injecting into the well 3 hours prior to adjusting any valves at the wellhead.
11. Acid company will arrive on location between 5 and 6 am the day of the job to mix down 42,250 gallons of acid in lined tanks according to specifications.
12. Close master valve on the wellhead. Make sure the wing valve is closed. Bleed off excess pressure by removing PT sensor from top cap of injection tree. Take care not to damage the sensor or wiring.
13. Install companion flange to top flange of injection tree "T" with appropriate connection for pump truck hard lines. **(Backup flanged is needed on location in the event primary flange leaks)**
14. Isolate H-Pumps and as much surface piping as possible. Typically, this would be at the wing valve on the injection tree which isolates all surface equipment.
 - a. Any surface equipment that will be exposed to job pressure must be considered in step #1 of this procedure.
 - b. If surface piping has already been isolated, proceed directly to step 13.
15. **Open casing valve (tubing annulus)** and leave it open for the entirety of the job. If a breach of the tubing or packer occurs, pressure will automatically be released via this valve. Install piping to ensure flow is directed into the cellar in the event of a breach.
 - a. Ensure no one is standing near or in front of this valve during the job as a large amount of pressure could be released at any time should a failure occur!
16. With master valve still closed, MIRU pump trucks, acid trucks, and all other related equipment. Connect the bleedoff line to an empty lined frac tank.
17. Before pumping fluid, make sure the wing valve is closed and all valves have been properly locked and tagged out.



Procedure: Acid Treatment with Rock Salt Diversion Trove SWD #1

18. Prime up/Pressure test lines as recommended by the acid company. This pressure should be 10% ABOVE the max pressure for the job.
19. Set digital kick-outs on pump truck to maximum job pressure **of 2,790 PSI**
20. Open master valve, pump acid job per schedule as shown in figure 1 located in the appendix.
21. After over flushing the wellbore with fresh water (per the pump schedule), shut down the pumps. Write down the ISIP and 5 minute shut in pressures, then close the valve.
22. Shut-in well and release pressure from all surface lines and equipment.
23. **Shut casing valve.**
24. RDMO all pump trucks and equipment for acid job. Neutralize any acid remaining in lined tanks with soda ash (provided by acid company). Utilize a vacuum truck to dispose of waste at company authorized by Aris. Ensure all other frac tanks are emptied prior to removal from location.
25. Remove top companion flange and re-install PT sensor. Reconnect all facility piping.
26. Ensure all broken connections are re-torqued properly.
27. Let the well sit for 12 hours to give the rock salt adequate time to dissolve and to let the acid spend in the formation.
28. Return well to injection taking care to watch for leaks around injection tree.

Appendix:

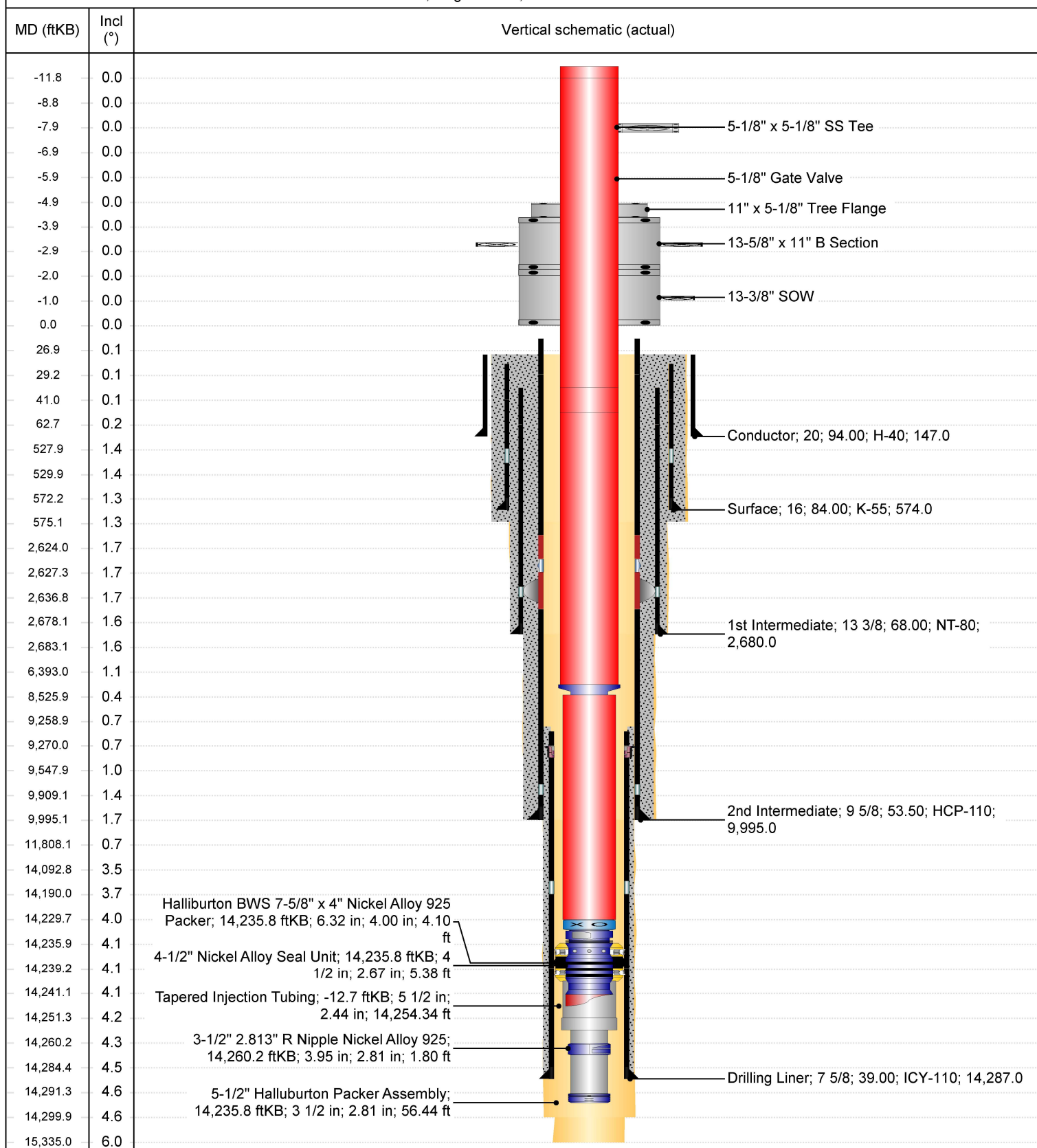
Figure 1 – Pump Schedule
Figure 2 – Wellhead Diagram
Figure 3 – Wellbore Schematic

Aris Representative Signature

Solaris Water Midstream**Downhole Well Profile - WBD****Well Name: Trove SWD #1****API: 30-015-44422**

API/UWI 30-015-44422	Surface Legal Location 944' FSL & 2508' FWL, Sec. 13, T24S, R28E	Well Configuration Type Vertical	County Eddy	State/Province New Mexico
Original KB Elevation (ft) 2,993.00	KB-Tubing Head Distance (ft)	Spud Date 1/24/2019 07:30	Rig Release Date 3/11/2019 03:00	PBTD (All) (ftKB)
Total Depth All (TVD) (ftKB)				

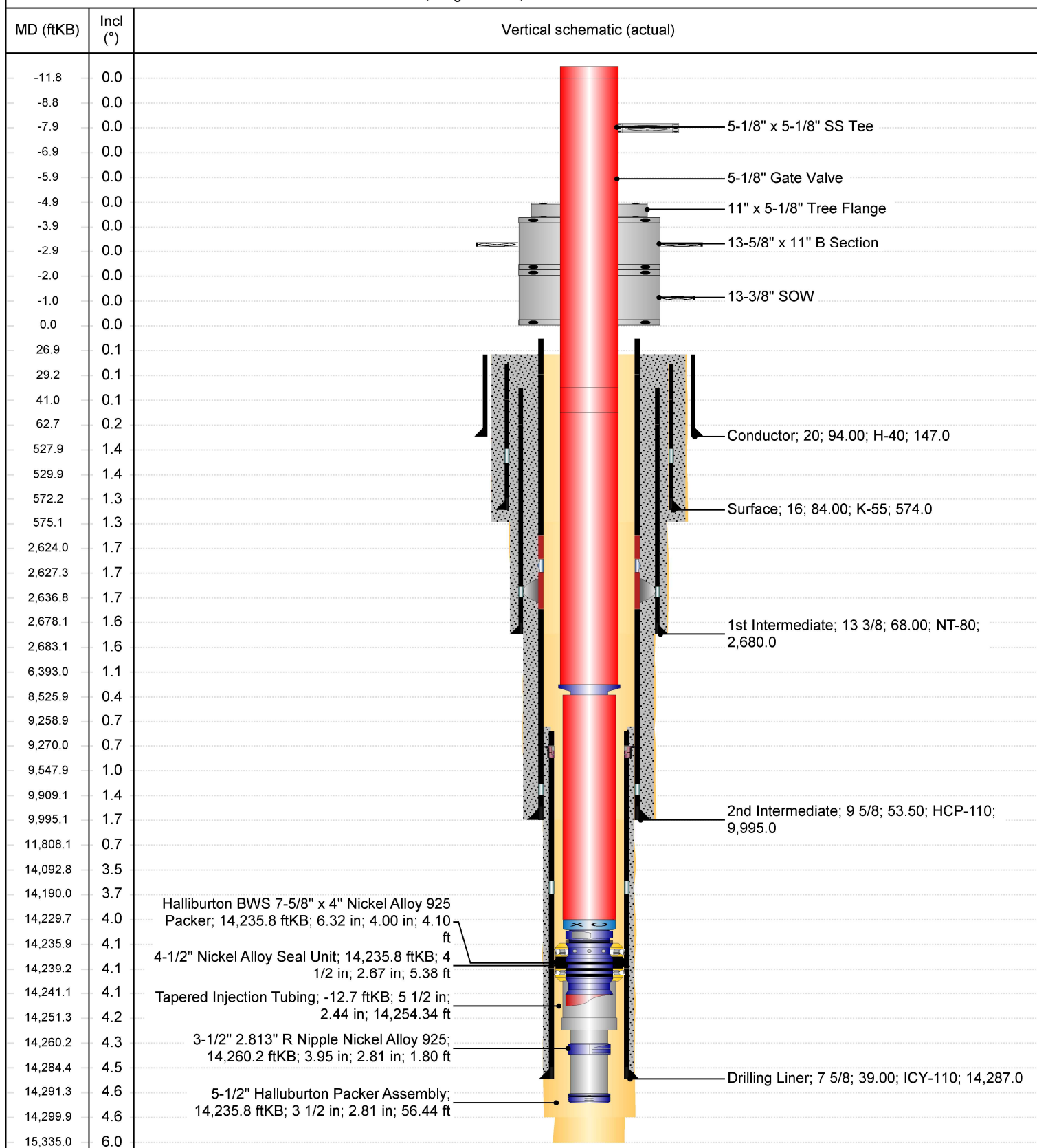
Vertical, Original Hole, 3/20/2019 2:09:49 PM



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Vertical, Original Hole, 3/20/2019 2:09:49 PM



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

CONDITIONS

Action 356891

CONDITIONS

Operator: SOLARIS WATER MIDSTREAM, LLC 9651 Katy Fwy Houston, TX 77024	OGRID: 371643
	Action Number: 356891
	Action Type: [C-103] NOI Workover (C-103G)

CONDITIONS

Created By	Condition	Condition Date
mgebremichael	The acid work shall be confined to the matrix and not formation-bound acid work that could result in a fracture of the cap rock.	6/24/2024