

API# 05-123-07125  
Rig/ Sup Bohler/Eisenach  
Job Type Re-entry P&A  
AFE# TBD



Month of August 2024  
Location: NSW 25 8N61W

## Olsen #1

### Well Info

- Surface: 8-5/8" 24# @ 135'. Cement: Surface
- Production: 7290' Open hole, assumed 7-7/8"
- KB: 09'. Last W/O 11/12/1969 (P&A dryhole)
- Using 20% excess cement for all open hole plugs

### Procedure

\*\* Verdad will be using a closed-loop recirculating returns system consisting of shaker tank, mud tank, cuttings bin, and a utility tank to divert fluid to for solids to settle out, fluid for disposal, etc.\*\*

1. File Form 42 2 days prior for P&A ops, notify COGCC field engineer of ops commencing
2. Familiarize all personnel with allowed access to location and areas allowed to be disturbed
3. Secure permission to access area and identify prospective well locations via satellite and survey data
4. Verify well location and excavate well
5. Once permission to begin work is secure, excavate area around well to sufficient size for safe access of casing, verify casing size, cut off cap, weld on slip collar w/ wellhead and riser, set cellar ring and back-fill
6. MIRU WO rig and beam, BOP, accumulator, rig pump, shaker tank, rig tank, 9.5ppg water-based mud, pipe float, 3-1/8" collars, 2-7/8" EUE work string, power swivel
7. Rig up tubing tools, NU BHA and function test
8. Make up BHA consisting of: 2-7/8 EUE string, 2x 3-1/8" drill collars, float, and 6-3/4" roller-cone bit
9. RIH and drill out previous cement plugs from 0-35' and estimated TOC 85' – 135'
10. Wash or ream in 7-7/8" open hole to 6,360'
11. Circulate and condition hole
12. TOOH and laydown BHA
13. RIH w/ 4-3/4" Tricone mill, XO, string float to 6,360'. Circulate and condition hole, if circulation is not established, contact engineer
14. MIRU cementers and pump 75 sks of Class G, 15.8 ppg, 1.15 yield cement from 6,356' – 6,156' to isolate the Niobrara Formation and lower hole. Displace and POOH through cement and release cementers, if circulation is maintained, no tag is needed
15. POOH to 4,210', circulate and condition hole. RU cementers and pump 110 sks of Class G, 15.8 ppg, 1.15 yield cement from 4,210' – 3,910' to isolate the Upper Pierre Formation. Displace and POOH through cement and release cementers, ensure that EOT is a minimum 100' above cement top before WOC
16. WOC 4 hours or otherwise advised by cementers and tag cement. If not tagged at or above 4,110', contact engineer. May require additional cement



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17. POOH to 1,650', circulate and condition hole. **Prior to placing the Fox Hills Aquifer plug, verify that all fluid (liquid and gas) migration has been eliminated. If evidence of fluid migration or pressure remains, contact engineer to verify with the COGCC for an update to plugging orders. If no fluid migration, RU cementers and pump 110 sks of Class G, 15.8 ppg, 1.15 yield cement from 1,650' – 1,350' to isolate the Fox Hills Aquifer. Displace and POOH through cement and release cementers, ensure that EOT is a minimum 100' above cement top before WOC**
18. WOC 4 hours or otherwise advised by cementers and tag cement. If not tagged at or above 1,550', contact engineer. May require additional cement
19. POOH to 185', circulate and condition hole.
20. RU cementers and pump cement until returns taken to surface, 60 sks of Class G, 15.8 ppg, 1.15 yield cement estimated. Once good returns taken, displace, SD cement, and POOH. Top off as necessary
21. RDMO cementers, rig, and supporting equipment. Tidy location and prep for reclamation
22. After 5 days, verify TOC is within 5' of surface. Top off if needed. Excavate cellar ring and wellhead, cut off casing 6' below ground level and weld on cap with full legal description welded onto plate. Back fill hole
23. Reclaim location
24. Submit Form 6 Subsequent and Form 42 for completion of COA