

Proposed Procedure to Run Liner

Ziegler A #2

2320' FNL & 330' FWL

2-8N-54W

Logan County, CO, Yenter Field

API #: 05-075-06132

40.69551, -103.3898

1. MIRU WSU
2. Unload & tally 4-1/2" 11.6# P110 FL4S liner
3. POOH w/ rods & tbgs.
4. RU hydrotester & PU 4-3/4" bit & scraper for 5-1/2" 15.50#. Test tbgs in hole to 6500#
5. Tag btm & circulate hole clean
 - a. Sand volume to cover perfs TBD based on tag depth
6. POOH & LD bit/scraper
7. Dump sand to cover perfs
8. Run 4-1/2" liner as follows (btm to top):
 - a. Shoe joint – cut-off pin & mule shoe
 - b. Run remaining csg as needed to set btm of liner @ +/- 5100'
 - c. Make-up and running procedures for FL4S attached
9. RU cement equipment & orbit/ball valve on 4-1/2". Break circulation & pump the following slurry:

| | | |
|-----------|----------------------|---------------------|
| Class | A | |
| Weight | 14.0 | lb/gal |
| Yield | 1.54 | ft ³ /sk |
| Mix Water | 7.8 | gal/sk |
| Total Vol | 85 | sx |
| Additives | Retarder (as needed) | |

10. Shut valve on 4-1/2" & WOC overnight
11. Dress wellhead as necessary to accommodate 4-1/2" liner
12. PU 3-3/4" bit & TIH. Wash down to PBTD & TOOH
13. RIH w/ 2-3/8" production tubing. Plan to set EOT @ +/- 5100, TAC 5 jts above pump bbl
14. RIH w/ plunger & rods. Space out & hang on. Load tbgs & test.
15. RDMO WSU.