



Recommended Procedure

Plug and Abandonment

Operator: Ward Petroleum
Well name: Amend #1
Legal: SWSW, Section 30, Township 1 South, Range 66 West
Location: Adams County, Colorado
API: 05-001-07215
Surface: 8-5/8" 24# at 210' **Hole size:** 12-1/4" **TOC:** Surface
Production: No casing, open hole drilled to 8,310', abandoned due to dry hole
PBTD: 0' (Filled wellbore with drilling mud to 210', 15 sxs at 210', and 10 sxs at surface)
TD: 8,310'

Procedure is based off of approved procedure discussed with Diana Burn, COGCC

1. Conduct pre-job safety meeting and complete daily JSA
2. Prior to MIRU, check rig anchors and blow down/kill well if necessary
3. Dig out around wellhead and check surface annulus for pressure
(If present call Marshall Hall #970-449-4634 and Craig Owen #970-646-3933 for orders)
4. MIRU P&A equipment, Dig out casing, Establish wellhead
5. RU power swivel, PU 7-7/8" drill bit and drill collars, NUBOP, NU Washington head
6. Drill out cement at surface
7. TIH and drill out cement at 210'
8. TIH and drill to 3,000', RD power swivel, TOH, Stand back 3,000', LD bit and collars
9. TIH to 3,000', Establish circulation to surface
10. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
(50 sxs is 170' in 7-7/8", TOC: 2,830')
11. TOH and LD to 1,500'
12. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
(50 sxs is 170' in 7-7/8", TOC: 1,330')
13. TOH and LD to 1,224' (50' below bottom of Fox Hills)
14. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
(50 sxs is 170' in 7-7/8", TOC: 1,054')
15. TOH and LD to 604' (50' below bottom of Lower Arapahoe)
16. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
(50 sxs is 170' in 7-7/8", TOC: 434')
17. TOH and LD to 370' (50' below surface casing shoe)
18. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
(15 sxs is 51' in 7-7/8", 35 sxs is 112' in 8-5/8", TOC: 208')
19. TOH, WOC 4 hours, TIH and tag TOC at 270' or higher
20. TOH and LD to 30', Establish circulation to surface
21. Circulate 10 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to surface
22. TOH and LD tubing, RDMO
23. Dig up wellhead and cut off 3' below restored ground level, top off if necessary
24. Weld on cap with ID plate, backfill, clean location, P&A complete