



## Recommended Procedure

## Plug and Abandonment

**Operator:** HRM Resources LLC  
**Well name:** Alissa #1  
**Legal:** NWSE, Section 5, Township 6 North, Range 60 West  
**Location:** Morgan County, Colorado  
**API:** 05-087-08013  
**Surface:** 8-5/8" 24# at 226'      **Hole size:** 12-1/4"      **TOC:** Surface  
**Production:** 4.5" 10.5 & 11.6# at 6,735'      **Hole size:** 7-7/8"      **TOC:** 2237'  
Cemented casing leaks from 2,084-2,090'      **TOC:** 692' (CBL)  
**Tubing:** 2-3/8" at 6,680'  
**Perforations:** 6,688'-6,698' (D Sand)  
**PBTD:** 6,743'  
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1. Conduct pre-job safety meeting and complete daily JSA
2. Prior to MIRU, check rig anchors and blow down well if necessary
3. Dig out around wellhead and check surface annulus for pressure  
(If present call Terry Pape #970-768-5700 and Craig Owen #970-646-3933 for orders)
4. MIRU P&A equipment, ND wellhead, NU BOP
5. TOH and tally 6,000' to derrick, LD remaining tubing
6. RU wireline, TIH 4-1/2" 11.6# gauge ring/junk basket to 6,638', TOH
7. TIH 4-1/2" 11.6# CIBP to 6,638' and set, TOH
8. TIH and cement dump bail 2 sacks of 15.8# class G neat 1.15 cu.ft./sack yield cement on top, TOH  
(2 sxs is 25' inside 4-1/2" casing, TOC: 6,613')
9. TIH tubing to 6,270'
10. Roll hole with 93 bbl water
11. Pressure test casing to 500psi for 15 minutes  
(If test fails call Terry Pape and Craig Owen for orders)
12. Pump 25 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement balance plug to isolate Niobrara
13. TOH, LD to 1,470'
14. Pump 10 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement balance plug below Fox Hills  
(10 sxs is 102' inside 4-1/2" casing, TOC: 1,342')
15. TOH, LD to 930'
16. Pump 30 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement balance plug below Lower Arapahoe  
(10 sxs is 128' inside 4-1/2" casing, TOC: 802')
17. TOH, LD to 591'
18. Pump 30 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement balance plug below Upper Arapahoe  
(10 sxs is 128' inside 4-1/2" casing, TOC: 463')
19. TOH, LD tubing
20. RU wireline, TIH and perforate casing at 276', TOH, RD wireline
21. ND BOP, NU wellhead
22. Establish circulation down casing and up annulus to surface
23. Circulate 90 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to surface
24. RDMO
25. Dig up wellhead and cut off 3' below restored ground level, top off if necessary
26. Weld on cap with ID plate, backfill, clean location