



Recommended Procedure

Plug and Abandonment

Operator:	Utah Gas Corporation		
Well name:	Cathedral Federal D-26		
Legal:	NWNW, Section 26, Township 3 South, Range 101 West		
GPS:	39.76327, -108.70383		
Location:	Rio Blanco County, Colorado		
API:	05-103-08344		
Surface:	8-5/8" 24# at 164'	Hole size: 11-1/2"	TOC: Surface
Casing:	4-1/2" 10.5# at 4,079'	Hole size: 7-7/8"	TOC: 3,397'
Stage Tool:	4-1/2" DV at 1,256' cemented with 40 sxs of Howcolite		TOC: 1,000'
Tubing:	2-1/16" 3.25# at 3,957' (1 joint of 2-3/8" 4.7# on top)		
Perforations:	3,684' – 3,780' & 3,843' - 3,952' (Mancos)		
TD:	4,110'		
KB:	10'		

*** Procedure based off of operator provided wellbore diagram, NOT an approved procedure***

1. Ensure that COGCC/BLM have been notified 48 hours prior to rig up
2. Conduct pre-job safety meetings, complete daily JSAs/equipment inspections
3. Prior to MIRU, check rig anchors and record initial shut-in pressures on tubing and casing
4. Dig out around wellhead and check surface annulus for pressure and record
5. MIRU P&A equipment, blow down well/kill if necessary, NDWH, NUBOP
6. TOH and tally tubing to derrick, LD BHA
 - a. Inspect tubing for holes/damaged threads/collars, LD any bad tubing
7. PU 4-1/2" 10.5# bit and casing scraper, TIH to 3,634', TOH
8. PU 4-1/2" 10.5# casing sized CIBP, TIH and set at 3,634'
9. Circulate wellbore clean, pressure test casing to 1,000 psi for 30 minutes
 - a. If pressure test fails, call for orders
10. Pump 25 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement on top of CIBP
 - a. 25 sxs is 321' in 5-1/2" 15.5# casing, TOC: 3,313' (above annular TOC)
11. TOH and LD to 1,306' (50' below DV tool)
12. Pump 25 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to cover DV tool and annular TOC
 - a. 25 sxs is 321' in 4-1/2" 10.5# casing, TOC: 935' (65' above DV annular TOC)
13. TOH and LD tubing
14. RU wireline, TIH and perforate casing at 214' (50' below surface casing shoe at 164'), TOH, RD wireline
15. Establish circulation via perforations at 214'
16. Circulate 68 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to surface
 - a. 17 sxs is 218' in 4-1/2" 10.5#, Cased TOC: Surface
 - b. 8 sxs is 54' in 4-1/2" x 7-7/8" annulus
 - c. 43 sxs is 167' in 4-1/2" x 8-5/8" annulus, Annular TOC: Surface
17. RDMO, dig out and cut off wellhead 4' below ground level, verify cement at surface, top off if necessary
18. Weld info plate onto casing
19. Backfill pit, clean location, P&A complete

This procedure may be revised based on COGCC Conditions of Approval. All cement volumes use 10% per 1000' of depth, both inside and outside per Colorado Regulations. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield. Water spacers shall be used both ahead of and behind balanced plug cement slurry to minimize cement contamination by any wellbore fluids that are incompatible with the cement slurry.