



Recommended Procedure

Plug and Abandonment

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|--------------------|---|---------------------------|---------------------------------|
| Operator: | Prospect Energy, LLC | | |
| Well Name: | Muddy Sandstone Unit #30-1 | | |
| Legal: | NESW, Section 30, Township 8 North, Range 68 West | | |
| GPS: | 40.630517, -105.04893 | | |
| Location: | Larimer County, Colorado | | |
| API: | 05-069-06071 | | |
| Surface: | 8-5/8" 24# at 471' | Hole size: 13-1/4" | TOC: Surface |
| Production: | 5-1/2" 14# at 4,613' | Hole size: 8-3/4" | TOC: 3,218' (calculated) |
| Open Hole: | 4,613' – 4,650' | | |
| TD: | 4,650' | | |
| Note: | Deepest water well within 1 mile radius 350' | | |

Procedure based off operator provided procedure. H2S is present in well

1. Conduct pre-job safety meeting and complete daily JSA
2. Confirm that bradenhead test has been performed
3. Prior to MIRU, check rig anchors and record initial shut-in pressures on tubing and casing
4. Blow down well/kill if necessary
5. Dig out around wellhead and check surface annulus for pressure and record
(If pressure is present call Cam Gracey #970-567-6871 and Craig Owen #970-646-3933 for orders)
6. MIRU P&A equipment, NDWH, NUBOP, Load and circulate wellbore clean
7. TOH and tally 3,200' of tubing to derrick if present
8. RU wireline, TIH 5-1/2" 14# JC/GR to 4,570', TOH
9. PU 5-1/2" 14#, 10K, CIBP, TIH and set at 4,570', TOH
10. TIH and CDB 2 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement on top, TOH
(2 sxs is 16' in 5-1/2", TOC: 4,554')
11. Pressure test casing to 500 psi for 5 minutes
(If test fails call Cam Gracey and Craig Owen for orders)

Note: If casing pressure test fails (step 10) additional steps/services required by the COGCC/BLM are not included in this bid and will be billed per our 2016 Time and Material Price Schedule.

12. RU casing equipment, unland casing, stretch and determine freepoint
13. TIH and cut casing at 3,150', TOH, RD wireline
14. TOH and LD casing, RD casing equipment
15. TIH to 3,200' (50' inside casing stub), establish circulation
16. Pump 50 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement to cover casing stub
(6 sxs is 50' in 5-1/2", 44 sxs is 149' in 7-7/8", TOC: 3,001')
17. TOH and LD tubing to 550', establish circulation to surface
18. Circulate 230 sxs of 15.8# class G neat 1.15 cu.ft./sack yield cement
19. TOH and LD tubing, RDMO, dig out and cut off wellhead, verify cement at surface, top off if necessary
20. Weld info plate onto casing, backfill pit, clean location, P&A complete