

PLUG AND ABANDONMENT PROCEDURE

February 17, 2015

Bondad 33-10 #23

Ignacio Blanco Mesaverde
1450' FSL and 1070' FEL, Section 15, T33N, R10W
La Plata County, Colorado / API 05-067-05459
Lat: 37.10028 / Lat:-107.91607

Note: All cement volumes use 10% per 1000' of depth, both inside and outside; or use 100% excess outside casing, 50' excess inside casing and 50' excess for a casing annulus, whichever is greater.
The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be ASTM Type III, mixed at 15.8 ppg with a 1.15 cf/sx yield.

1. Install and test rig anchors. Comply with all COGD, BLM and Williams safety rules and regulations. Prepare a lined waste fluid pit. Conduct safety meeting for all personnel on location. MOL and RU daylight pulling unit. NU relief line and blow well down; kill with water as necessary.
2. Rods: Yes ☐, No ☒, Unknown ☐.
Tubing: Yes ☒, No ☐, Unknown ☐, Size 1-1/4", Length 5205'.
Packer: Yes ☐, No ☒, Unknown ☐, Type ☐.
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.
3. **Plug #1 (Mesaverde perforations and top, 5140' – 4924')**: Round trip 4.5" gauge ring or mill to 5140'. RIH and set a CR at 5140'. Pressure test tubing to 1000 PSI. Attempt to pressure test casing to 800 PSI. If casing does not test then spot or tag subsequent plugs. Mix 21 sxs Class B cement and spot a balanced plug inside casing to cover the Mesaverde interval. PUH to 3214'.
4. **Plug #2 (7-5/8" casing shoe, and Pictured Cliffs top, 3214' – 2708')**: Mix 90 sxs Class B cement and spot a plug inside the casing to cover the 7-5/8" casing shoe and Pictured Cliffs top. PUH.
5. **Plug #3 (Fruitland top, 2335' – 2235')**: Mix 29 sxs Class B cement and spot a plug inside the casing to cover the Fruitland top. PUH.
6. **Plug #4 (Kirtland and Ojo Alamo tops, 1984' – 1730')**: Mix 59 sxs Class B cement and spot a plug inside the casing to cover through the Ojo Alamo top. TOH.
7. **Plug #5 (Surface, 100' – 0')**: Perforate 3 squeeze holes at 100'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 85 sxs Class B cement and pump down the 4.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
8. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. Cut off anchors and clean up location. Restore location per BLM stipulations.