

Hill Ranch 26-11-2

Location: 1,401' FSL & 2,120' FWL, Section 26, T34S, R67W, Las Animas, CO
API: 05-071-09206
Open Perfs: Vermejo Coal – 1,965.5'- 2,254'

PLUG AND ABANDONMENT PROCEDURE

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

1. Install and test location rig anchors. MIRU pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. TOH and LD rods and rotor. ND wellhead and NU BOP. Function test BOP. TOH with tubing and LD BHA.
2. Round trip a 4-3/4" bit to 1,920'.
3. **Plug #1 (Vermejo Coal, 1,920' – 1,820')**: TIH and set a 5-1/2" CIBP at 1,920'. Load casing with water and circulate well clean. Pressure test casing to 1000#. If the casing does not test, then spot or tag subsequent plugs as necessary. Mix cement and pump 17 sxs Class B cement above CIBP to cover the Vermejo Coal top. PUH to 531'.
4. **Plug #2 (Casing Shoe, 531' – 431')**: Mix and spot 17 sxs Class B cement to cover the casing shoe. TOH.
5. **Plug #3 (Raton Coal, 90' – Surface)**: Perforate 3 squeeze holes at 90'. Establish circulation to surface. Mix and pump approximately 33 sxs cement down the 5-1/2" casing until good cement returns at surface. Shut well in and WOC.
6. ND BOP and cut off casing below surface casing flange. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

Tops:

Casing shoe	481'
Vermejo Coal	1,945'