

PLUG AND ABANDONMENT PROCEDURE

November 16, 2023

Southern Ute FC 33-11 #1-5

Ignacio Blanco Field

1060' FSL, 1185' FWL, Section 1, T33N, R11W,

La Plata County, Colorado

API 05-067-09012

All cement volumes use 10% excess per 1000 foot of depth or 100% excess outside pipe and 50' excess inside pipe, whichever is greater. The stabilizing wellbore fluid will be 8.3 ppg, and Corrosion Inhibitor 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.

1. This project will use an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.
2. Comply with regulatory and Operator safety regulations as applicable. MOL and RU daylight 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. ND wellhead and NU BOP. Function test BOP.

NOTE: This well has had BH press issues – has built up to 20 psi on the past.

CBL was run in 2006 from DV tool to surface– poor bond due to failure of DV tool to close – cement filled up casing below the DV tool and had to drill out. No need to run an additional CBL.

Break out the Wheeled Rod guides from the rod string so that they can be re-built and re-used.

3. Remove all rods and tubing from well.
4. RIH and set 5-1/2" CIBP at 3665'. TOOH and LD setting tool.
5. Pressure test casing to 600#. If casing test does not pass, plugs will need to be WOC and tagged until a casing test passes.
6. **Plug #1 (Fruitland Perforations and Pictured Cliffs Interval and top, 3665' – 3226')**: RIH with tubing, Mix and pump 50 sxs Class G cement above CIBP to isolate the Fruitland Perforations and PC interval and top.
7. RIH and perforate casing at 2950' above DV tool @ 2967', test for ROI.
8. **Plug #2 (Fruitland Interval and Top and DV tool, 3024' – 2850')**: Mix and pump 58 sxs Class G cement, 27 sxs inside and squeeze 31 sxs out perms to isolate Fruitland interval and top and failed DV tool.

9. TIH and perforate casing @ 1422', test for ROI. Set CR @ 1372'.
10. **Plug #3 (Ojo Alamo Interval and Top, 1422' - 1272')**: Mix and squeeze 69 sxs Class G cement, 23 sxs inside and 46 sxs outside to isolate Ojo Alamo interval and top.
11. **Plug #4 (Surface shoe and Surface, 468' – Surface)**: Perforate squeeze holes at 468'. Establish injection rate and circulation out bradenhead. Mix and pump 149 sxs Class G cement down 7" casing and circulate good cement to surface out all annuli. SI well and WOC.
12. ND cementing valves and cut off wellhead. Test and record if gas is present. Fill annuli with cement as necessary. Wait 5 days to install P&A marker. Return to location. Test and record if gas is present. Confirm with Red Willow Engineer to install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL.