

## PLUG AND ABANDONMENT PROCEDURE

November 22, 2022

### Sutton #1A

Ignacio Blanco Mesaverde  
1590' FNL, 1120' FEL, Section 32, T34N, R9W,  
La Plata County, Colorado  
API 05-067-06404

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 Type II/V, mixed at 15.0 ppg with a 1.29 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.
3. **Plug #1 (Mesaverde interval, and top, 4872' – 4772')**: RIH and set 4.5" CIBP/CR at 4872'. *Attempt to pressure test casing to 500#. If casing does not test then spot or tag subsequent plugs as appropriate.* Mix and pump 11 sxs Type II/V cement above CR to isolate the Mesaverde interval. TOH and LD setting tool.
4. **Plug #2 (7" shoe, 4.5" liner top, 3456' – 3235')**: Perforate squeeze holes @ 3456'. Establish injection rate. Set CR @ 3406'. Mix and pump approximately 55 sxs Type II/V cement; squeeze 19 outside and leave 36 inside casing to isolate shoe and liner top. TOH and LD setting tool.
5. **Plug #3 (Pictured Cliffs and Fruitland interval, 3131' – 2665')**: Mix and pump 90 sxs Type II/V cement inside casing to isolate the PC and Fruitland tops. PUH.
6. **Plug #4 (Kirtland and Ojo Alamo interval, 2550' – 2290')**: Mix and pump 54 sxs Type II/V cement inside casing to isolate the Kirtland and Ojo Alamo tops. TOH.
7. **Plug #5 (9-5/8" Surface casing shoe and Surface, 277' - Surface)**: Perforate squeeze holes at 277'. Establish injection. Mix and pump 86 sxs Type II/V cement down 4.5" casing and circulate good cement to surface out annulus. SI well and WOC.
8. 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.

