San Juan 27-5 Unit #108

Basin Dakota
SE Section 15, T-27-N, R-5-W
Rio Arriba Co., New Mexico

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.

- Install and test location rig anchors. Prepare blow pit. Comply to all NMOCD, BLM, and Burlington regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line. Blow down well and kill with water as necessary. ND wellhead and NU BOP. Test BOP.
- 2. POH and tally 237 joints 2-3/8", 4.7#, J-55 tubing (7526'); visually inspect the tubing. If necessary, PU 2-3/8" workstring.
- 3. Plug #1 (Dakota and Graneros, 7562' 7462'): RIH with open ended tubing and tag existing CIBP at 7562'. Load casing with water and establish rate into casing leaks. Mix 12 sx Class B cement and spot a balanced plug on top of CIBP to 7462'. POH.
- 4. Plug #2 (Gallup top, 6370' 6270'): Perforate 3 HSC squeeze hole at 6370'. PU 4-1/2" cement retainer and RIH; set at 6320'. Establish a rate into squeeze holes. Mix 51 sx Class B cement, squeeze 39 sx cement outside 4-1/2" casing and leave 12 sx cement inside casing to cover Gallup top. POH to 5214'.
- 5. Plug #3 (Mesaverde top, 5214' 5114') Mix 12 sx Class B cement and spot a balanced plug inside casing to cover Mesaverde top. POH to 3500'.
- 6. Plug #4 (Pictured Cliffs, Fruitland, Kirtland and Ojo Alamo tops, 3500' 2751'): Mix 61 sx Class B cement and spot a balanced plug inside casing to cover Ojo Alamo top. POH to 2000' and WOC. RIH and tag cement.
- 7. Plug #5 (Nacimiento top, 1650' 1550'): Perforate 3 HSC squeeze holes at 1650'. Establish rate into squeeze holes if casing tested. PU 4-1/2" cement retainer and RIH; set at 1600'. Establish rate into squeeze holes. Mix 64 sx Class B cement, squeeze 52 sx cement outside 4-1/2" casing and leave 12 sx cement inside casing to cover Nacimiento top. POH and LD tubing and setting tool.
- 8. Plug #6 (Surface): Perforate 3 HSC squeeze holes at 387'. Establish circulation out bradenhead valve. Mix and pump approximately 138 sx Class B cement down 4-1/2" casing, circulate good cement out bradenhead valve. Shut in well and WOC.
- 9. ND BOP and cut off wellhead below surface casing flange. Install P&A marker to comply with regulations. RD, MOL, cut off anchors, and restore location.

Operations Engineer

Approval:

Production Superintendent