San Juan 27-5 Unit #156

Tapacito Pictured Cliffs 1840' FNL & 1600' FEL, Section 22, T27N, R5W Rio Arriba County, New Mexico Lat: 36 - 33.65022'\Long: 107 - 20.49318' P&A Procedure 11/22/99

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.

- 1. Install and test location rig anchors. Prepare blow pit. Comply with all NMOCD, BLM, and Burlington safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line and blow down well; kill with water as necessary. ND wellhead and NU BOP and stripping head. Test BOP.
- 2. Tally and prepare a 1-1/4" tubing workstring. Round trip a 2-7/8" gauge ring to 3310'.
- 3. Plug #1. (Pictured Cliffs perforations, Fruitland, Kirtland and Ojo Alamo tops, 3310' 2660'): Set a 2-7/8" wireline CIBP at 3310'. TIH with open ended tubing and tag CIBP. Load well and circulate clean. Mix 20 sxs Class B cement (in two 10-sx stages) and spot balanced plug above the CIBP to isolate the PC perforations and cover through the Ojo Alamo top. PUH with tubing and WOC. Tag cement. TOC must be at or above 2660'. Pressure test casing to 500#. If casing does not pressure test, then spot or tag subsequent plugs as appropriate. TOH and stand back tubing.
- 4. Plug #2 (Nacimiento top, 1605' 1505'): Perforate 2 squeeze holes at 1605'. Set a 2-7/8" wireline cement retainer at 1555'. TIH with tubing and sting into the retainer. Establish rate into squeeze holes under the retainer. Mix 40 sxs Class B cement, squeeze 35 sxs cement outside 2-7/8" casing and leave 5 sxs cement inside casing to cover Nacimiento top. TOH and LD tubing.
- 5. Plug #3 (8-5/8" casing shoe, 178' Surface): Perforate 2 squeeze holes at 178'. Establish rate with water out bradenhead valve. Mix and pump approximately 60 sxs Class B cement down casing and circulate good cement out bradenhead valve. Shut well in and WOC.

6. ND BOP and cut off casing below surface. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

Approval:

Operations Engineer:

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