

PLUG & ABANDONMENT PROCEDURE

3-31-95

Hammond #1
So. Blanco Pictured Cliffs
NE Section 34, T-27-N, R-8-W
San Juan County, 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.

1. Install and test location rig anchors. Prepare blow pit. Comply to all NMOCD, BLM, and Conoco safety regulations.
2. 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.
3. POH and tally 73 joints 1-1/4" tubing (2304'). Visually inspect, if necessary LD and PU 2" tubing workstring. PU 4-1/2" casing scraper or wireline gauge ring and round trip to 2260'.
4. **Plug #1 (Pictured Cliffs perforations and Fruitland top, 2328' - 2010'):** PU 4-1/2" cement retainer and RIH; set at 2260'. Pressure test tubing to 1000#. Establish rate into Pictured Cliffs perms. Mix and pump 34 sxs Class B cement, squeeze 11 sxs cement below retainer from 2328' to 2255' over Pictured Cliffs perms and leave 23 sxs above retainer to 2010' to cover Fruitland top. POH with tubing and LD setting tool. Pressure test casing to 500#.
5. **Plug #2 (Kirtland and Ojo Alamo tops, 1686' - 1502'):** Perforate 4 squeeze holes at 1602'. Establish rate into squeeze holes. If rate is established into squeeze holes, then RIH with open ended tubing to 1686'. Mix and spot 42 sxs Class B cement inside 4-1/2" casing; POH to 800' with tubing, fill casing with water and then squeeze 24 sxs cement outside casing and leave 18 sxs cement inside casing at 1502'. Shut in well and WOC; RIH and tag cement.
If rate cannot be established into squeeze holes at 1602', then RIH with open ended tubing to 1686'. Mix 18 sxs Class B cement and spot a balanced plug from 1686' to 1502' inside 4-1/2" casing to cover Kirtland and Ojo Alamo tops. POH with tubing. PT casing to 500#.
6. **Plug #3 (Nacimiento, 868' - 768'):** Perforate 4 squeeze holes at 868'. Establish rate into squeeze holes if casing tested. PU 4-1/2" cement retainer and RIH; set at 818', pressure test tubing to 1000#, establish rate into Nacimiento squeeze holes. Mix 35 sxs Class B cement and squeeze 23 sxs cement outside 4-1/2" casing from 868' to 768' and leave 12 sxs cement inside casing to cover Nacimiento top. POH and LD tubing and setting tool.
7. **Plug #4 (Surface):** Perforate 2 squeeze holes at 154'. Establish circulation out bradenhead valve. Mix and pump approximately 44 sxs Class B cement from 154' to surface, circulate good cement out bradenhead valve. Shut in well and WOC.
8. ND BOP and cut off wellhead below surface casing. Install P&A marker with cement to comply with regulations. RD, MOL, cut off anchors, and restore location.

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95 MAY 22 PM 2:56

070 FARMINGTON, NM

Today's Date: 3/31/95

Spud: 5/1/70

Completed: 6/15/70

Hammond #1

Proposed P&A

South Blanco Pictured Cliffs

NE Section 34, T-27-N, R-8-W, San Juan County, NM

12-1/4" hole

Nacimiento @ 818'

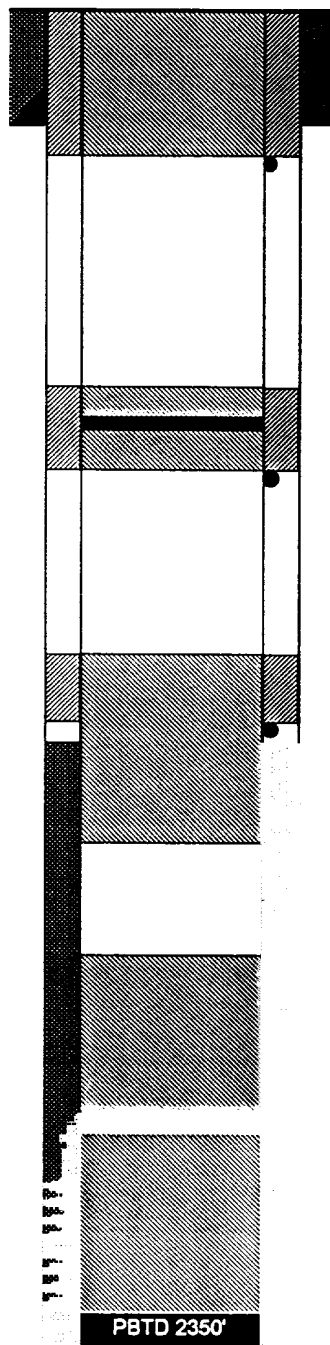
Ojo Alamo @ 1552'

Kirtland @ 1636'

Fruitland @ 2060'

Pictured Cliffs @ 2305'

6-3/4" Hole



8-5/8" 24# J-55 Csg set @ 104'
Cmt w/85 sxs (Circulated to Surface)

Perf @ 154'

Plug #4 154' - Surf with
44 sxs Class B cement.

Cement Retainer @ 818'

Perf @ 868'

Plug #3 868' - 768' with
35 sxs cement, 23 sxs
outside and 12 sxs inside.

Perf @ 1602'

Top of Cmt @ 1583'
(Calc, 75%)

Plug #2 1686' - 1502' with
42 sxs cement, 24 sxs
outside and 18 sxs inside.

Cement Retainer @ 2260'

Pictured Cliffs Perforations:
2310' - 18', 2320' - 28'

4-1/2" 9.5# K-55 set @ 2385'
Cmt w/ 149 cf

TD 2385'