REMEDIAL CEMENTING PROCEDURE

DANGLADE NO. 2 660' FSL & 660' FEL SECTION 13, T-22-S, R-37-E LEA COUNTY, NEW MEXICO

December 17, 1979

Well Data

Elevation: TD: PBTD: Casing:

Tubing: Perfs: 3331' GL, 3342' KB (11'AGL) 6960' 5690'(CIBP) 13 3/8" - 36# @ 303' 8 5/8 " - 32# @ 2832' 5 1/2" - 15# @ 6770', E.T.C. 4572' 2 3/8" Tbg. (177 JTS) No. Pkr. 5435-5620' (4 SPF) Blinebry, Drinkard & Tubb Perfs. 6070-6740' squeezed w/400 sx. cement.

Note: NMOCD supervisor must be notified at least 24 hours prior to commencement of operations.

Procedure

- MIRUPU. Kill well w/2% KCl water containing 1 gal/100C Morlfo II. Install BOP. POH w/tubing.
- GIH w/RBP, Pkr and tubing. Set RBP @ 5375'. Test RBP to 1500 psi. Spot 2 sx sand RBP. Test csg to 1000 psi. If csg does not hold, procede w/step 10. Otherwise procede w/step 3.
- 3. RU CRC Western. Perforate 4 holes @ 3100' w/ CRC Western Posi Jet 4" carrier gun (standard 19 gm charge, TTP 13.40", E.H.-0.48"),
- 4. GIH w/cmt retainer and tubing. Set RET @ 3050',
- 5. RU Halliburton. Mix and pump Class "C" cement until cement circulates. Close casing valve and squeeze last 20 sx (+) cement. Displace cmt w/2% KCl water, leaving + 2 bbls cmt in tubing. Pull out of retainer, reverse excess cmt out of tubing, POH w/tubing. WOC 24 hours. (If cmt does not circulate, RU CRC Western and run temperature survey after POH w/tubing to determine cmt top. Further steps to cement casing will be determined by results of temperature survey). Note: While pumping cement, hold 1000 psi on tubing-casing annulus; hold tubing pressure to 500 psi over pump-in pressure, not to exceed 3000 psi.