ARCO PERMIAN SOUTH EAST NEW MEXICO ASSET GROUP CONDITION OF HOLE & RECOMPLETION PROCEDURE

DATE: December 01, 1998

FIELD: Eumont LOCATION: 660' FWL & 800' FSL (M)

SEC. 31, T-19S, R-37E Lea County, New Mexico

LSE/UNIT: J. R. Phillips "A" WELL NO. 9

CONDITION OF HOLE:

ETD or TOTAL DEPTH: 9,650' PBTD: 9,610' K.B. DATUM IS 3587'

G.L. DATUM IS 3575'

CASING RECORD: 13-7/8" @ 560' w/550 sx cmt (TOC @ surface - circulated)

9-5/8" (a) 3,645' w/1500 sx cmt (TOC (a) surface - circulated)

5-1/2" @ 9,650' w/1440 cmt (TOC @ 2,720' by TS. - DV Tool @ 6514')

(in 1993 shot holes @ 2,710' and sqz. 600 sx. cmt. to surface)

PERFORATIONS: 2418'-37' (35 holes)

2940'-3445' (36 holes) CIBP @ 2930'

9442'-9603' CIBP @ 9435' w/35' cmt on top, CIBP @ 6500' w/35' cmt on top

PROCEDURE:

- 1. Using caution, check well for pressure and install BOP.
- 2. RIH w/2-7/8" tbg & Cement Retainer to ±2400'. Set retainer and establish pump-in rate into perforations. Cement squeeze perforations (2,418'-37') w/100 sx. Class C cmt. Sting out of retainer and reverse circulate cement from tbg.
- 3. RIH w/bit, scraper, and drill collars on 2-7/8" tbg. DO cement and clean casing to ±2500' and test casing to 500 psi. If squeeze test is good continue to DO cement and clean casing to ±3500' and POH.
- 4. RIH w/2-7/8" tbg & Cement Retainer to ±2920'. Set retainer and establish pump-in rate into perforations. Cement squeeze perforations (2,940'-3,445') w/100 sx. Class C cmt. Sting out of retainer and reverse circulate cement from tbg.
- 5. RIH w/bit, scraper, and drill collars on 2-7/8" tbg. DO cements and test casing to 500 psi. Clean casing to CIBP & cmt. @ ±6465'. Drill out plug and clean casing to ±6800' and POH.