PAULINE ALB ST. 6
32-23S-31E
REENTRY TO TEST BONE SPRING AND DELAWARE
CASING RUNNING AND CEMENTING PROCEDURE
6-30-92

OBJECTIVE: Tie back 7" casing at 6183' and cement it from approx. 6200' to 3800'.

PROCEDURE:

1. Remove DH marker and weld casing spool (9-5/8" SO x 9" 3000 psi) onto 9-5/8" casing. NU 9" 3000 psi WP hydraulic double ram BOP with 2-7/8" pipe rams and blind rams and an annular preventer and/or rotating head. Drill out the following plugs using 8-1/2" bit:

   a) surface plug est. from surface to 50'.
   b) 35 sx. plug est. from 589' to 698'.
   c) Test casing and BOP to 1500 psi.
   d) 15 sx. plug est. from 4034' to CIBP at 4080'.
   e) CIBP at 4080'.
   f) 35 sx. plug est. from 4080' to 4103'.

2. Mix 8.7 to 9.0 ppg salt gel/starch/polymer mud (1500 bbls) and RU shale shaker. Don't overviscosify or run fluid loss too low in mud. Keep pH of mud in 10 to 11 range. RIH with 8-1/2" bit and drill out the following plugs:

   a) 35 sx. est. 6150' to 7" stub at 6183'.

   Note: If necessary to stop and circulate gas and/or weight up mud, try to keep pipe moving at all times by reciprocating and/or rotating.

3. TOOH with 8-1/2" bit. TIH with 6" bit/mill and clean out inside the top of the casing stub. Drill out the 25 sx. plug est. from 6757' to 6922' and clean the 7" casing out to plug at approx. 8880'.

4. Dress off top, outside and inside of stub for the tie back. When stub ready for tie back, circulate and condition mud and TOOH keeping hole full at all times.

5. Change rams to 7" casing rams. RU casing crew and run 7" casing as follows:

   a) Casing patch
      7" casing to surface as follows:

0-5400'	7"/23ppf/J55/LTC
5400-6183'	7"/26ppf/J55/LTC

   Air weight = 144,558 lbs.
   Buoyed wt. = 124,695 lbs. (9 ppg fluid, .8626 BF)