REMEDIAL CEMENTING PROCEDURE
BOYD NO. 1
2310' FN & EL, SEC. 23, T-22-S, R-37-E
DRINKARD FIELD
LEA COUNTY, NEW MEXICO

August 7, 1975

Page Two

6. Run tubing and tie into retainer. Squeeze lowermost casing leak (type and amount of cement will depend on extent and location of leak). Pull out of retainer and reverse out excess cement. Pull tubing.

7. (a) If upper leak is in communication with surface, run drillable cement retainer on tubing and set above upper leak. After establishing circulation through the free pipe, pump sufficient amount of Class "C" cement containing .6% Halad-22 and 6# salt/sk. to bring cement up to 3100' outside the 5 1/2" pipe. Pull out of retainer, reverse out excess cement, and pull tubing.

   (b) If upper leak is not in communication with surface, RU GO International; perforate free pipe at 3100' with 4 SPF using a 4" OD casing gun loaded with 19 gm. Burrless Densi-Jet charges (.52" holes). Run drillable cement retainer on wireline and set retainer between upper casing leak and perforations at 3100'. After establishing circulation through the free pipe, pump sufficient amount of Class "C" containing .6% Halad-22 and 6# salt/sk. to bring cement to 3100' outside the 5 1/2" pipe. Pull tubing out of retainer and above perforations at 3100', reverse out excess cement and pull tubing.

8. WOC 24 hours. 8-12 hours after pumping cement, RU Cardinal and run a temperature log from 2500' to the retainer. After WOC 24 hours, test perforations at 3100' (if such were needed) to 1000 psi and if perforations won't hold, contact Midland Engineering for squeeze procedure.

9. RU reverse equipment. GIH w/bit and DC's on tubing and drill out retainer and cement. Test recemented casing to 1000 psi. If recemented casing won't hold 1000 psi, contact Midland Engineering.

10. Run tubing with RBP retrieving tool. Reverse sand off of RBP, displace drilling and workover fluids with 2% KCl water containing 1 gal./1000 gals. Morflo II, and pull RBP.

11. Run tubing, swab well to flow, and place on production.

MLS:cs
cc: West Area
    C. Engleman