

REMEDIAL CEMENTING PROCEDURE
BOYD NO. 3
660' FN & EL, SEC. 23, T-22-S, R-37-E
DRINKARD FIELD
LEA COUNTY, NEW MEXICO

August 7, 1975

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- (2) Follow the Class "C" with 50 sx. Class "H" containing 6# salt/sk. (Water Req.: 4.3 - 5.2 gals./sk., Slurry Wt.: 17.1 - 16.2 ppg, Yield: 1.06 - 1.18 cu.ft./sk., Thickening time: 2-3 hours).
 - (3) After the 200 sx. of Class "C" is put away (into the perforations), close in 5 1/2" - 8 5/8" annulus and squeeze the last 50 sx. (Class "H") to 500 psi over pump-in pressure, not exceeding 3000 psi, holding 500 psi on 2 3/8" tubing - 5 1/2" casing annulus while squeezing. If squeeze pressure is not attained, put away (into the perforations) 45 sx. of Class "H" (245 sx. total). Do not exceed 1 hour pumping time.
 - (4) Pull out of retainer and reverse out excess cement. Pull tubing.
 - (5) WOC 24 hours. 8-12 hours after pumping cement, RU Worth Well and run a temperature log from 2500' down to retainer. Relay results to Midland Engineering and NMOCC.
 - (6) *Continue with Step 8.*
- 7A. (1) Pull tubing and perforate free pipe at 3100'-01' with 2 SPF using a 4" OD casing gun loaded with 4-20 gm. "Big Hole-Burr Free" charges (.75" holes). RD Dresser.
- (2) Run tubing, tie into retainer, and establish circulation through the free pipe. Cement free pipe with 200 sx. Class "C" containing .6% Halad-22 (or equivalent) and 6# salt/sk. (same cement as in Step 7). Pump 195 sx. through perforations at 3800'-01'. Do not exceed 1 hour pumping time. If circulation through free pipe cannot be established, contact Midland Engineering for alternate squeeze procedure.
 - (3) Pull tubing out of retainer and above upper perforations, reverse out excess cement, and pull tubing.
 - (4) WOC 24 hours. 8-12 hours after cement is pumped, RU Worth Well and run a temperature survey from 2500' to the retainer. Relay results to Midland Engineering and NMOCC.
 - (5) After WOC 24 hours, test perforations at 3100'-01' to 1000 psi. If perforations won't hold 1000 psi, contact Midland Engineering for squeeze procedure.
 - (6) *Continue with Step 8.*
8. RU reverse equipment. GIH with bit and DC's on tubing and drill out retainer and cement. Test cemented perforations to 1000 psi. If cemented perforations won't hold 1000 psi, contact Midland Engineering.