

## REPORT ON RESULT OF TEST OF CASING SHUT-OFF

The top of cement behind 5 1/2" casing was found @ 1970' per temperature survey. In order to raise level of cement behind casing, it was perforated w/one 1/2" hole @ 1900'. Cemented w/500 sacks of 2% HOWCO gel bulk cement. Pumped plug to 1830' Job completed @ 11:40 p.m.

On May 20, 1949, tested 5 1/2" casing above cement plug w/1100# pressure after waiting forty-eight hours - OK. Drilled plug from 1830' to 1900'. Tested 5 1/2" casing and perforation w/1200# and mud circulated through 9 5/8" casing. Pumped test plug down 5 1/2" casing. Plug stopped 1152'. Attempted to pick up casing to determine if same was parted. Pulled 40,000# but casing did not come. Cemented by Halliburton w/300 sacks common Portland bulk cement. Pumped plug to 1116'. Job completed @ 11 p.m.

After waiting forty-eight hours, the 5 1/2" casing was tested with 1200# pressure applied for 30 minutes and no leak was found. The plug was drilled @ 1116' and the casing and cement were tested. The test revealed that the 5 1/2" casing was still leaking.

Ran 5 1/2" Baker magnesium alloy, type model K cement retainer, set @ 1104'. Cemented w/100 sacks common Portland sack cement. Could not obtain pressure on drill pipe in 2 1/2 hours. Cleared casing w/water. Let set six hours and re-cemented w/100 sacks common Portland sack cement, pressured to 2800#. Let set 10 minutes and unscrewed from retainer. Picked up 6' and backwashed approximately 3 sacks cement. Job completed @ 5:30 a.m.

After waiting forty-eight hours the 5 1/2" casing was tested with 1200# pressure applied for 30 minutes - found OK. The plug and retainer was drilled from 1104' to 1160' and the casing and cement were re-tested with 1200# pressure applied for 30 minutes. Leak was found to have been repaired and crew proceeded to drill lower plug from 2730' to 2930'.

After plug was drilled the casing and cement were tested with 1200# pressure applied for 30 minutes and no leak was observed. After approval of Mr. Yarbrough, State Oil & Gas Inspector, preparations are being made to drill ahead and complete the well.