

Attachment - C-103

Gulf Oil Corporation - J. R. Phillips Well No. 1-B, 31-19-37

Repaired leak in 5-1/2" casing as follows:

1. Set bridge plug at 3747'.
2. Ran HRC tool. Found bottom hole between 1608-1624', top hole between 50-80'.
3. Set Howco cement retainer at 1557' and pumped 575 sacks 4% Gel cement below retainer and circulated to surface out 5-1/2" - 7-5/8" annulus. Circulated an estimated 25 sacks.
4. Connected to 10-3/4" - 7-5/8" annulus and pumped 145 sacks 4% Gel cement by staging. Final pressure was 250 psi.
5. After waiting on cement for 55 hours, pressured 10-3/4" and 7-5/8" bradenhead with 500# for 30 minutes. There was no drop in pressure.
6. Drilled out cement and retainer and pressured 5-1/2" casing to 500# for 30 minutes. There was no drop in pressure.
7. Drilled out bridge plug at 3747'.
8. Ran 2-3/8" tubing with hookwall packer at 3718' and loaded annulus with aquajel mud.
9. Returned well to production.