

Attachment - C-103

Gulf Oil Corporation - B. V. Culp No. 4-G, 19-19S-37E

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

1. Pulled tubing.
2. Ran 5-1/2" Baker magnesium bridge plug set at 3725'.
3. Ran HRC tool. Found top hole between 531' and 563'. Bottom hole between 1547' and 1579'.
4. Ran 5-1/2" Howes DM cement retainer set at 1606'.
5. Pumped 537 sacks 4% Gel below retainer. Circulated estimated 25 sacks out 7-5/8" bradenhead. Pumped 50 sacks 4% Gel down 10-3/4" casing.
6. Waited on cement.
7. Ran bit to 1606'. Pressured 5-1/2" casing. Pressure dropped from 500# to 200# in 3 seconds.
8. Drilled to 1780'.
9. Perforated 5-1/2" casing at 1650' with 2, 1/2" Jet holes. Perforated 5-1/2" casing at 1325' with 2, 1/2" Jet Holes.
10. Set DM cement retainer at 1247'.
11. Pumped 275 sacks 4% Gel below retainer.
12. Waited on cement.
13. Tested 5-1/2" casing with 500# for 30 minutes. No drop in pressure.
14. Drilled out cement and retainer. Tested 5-1/2" casing with 500# for 30 minutes. No drop in pressure. Drilled out bridge plug.
15. Returned well to production.