

Attachment - C-103

Gulf Oil Corporation - A. L. Christmas "C" No. 1-D, 18-22-37

Plugged back and recompleted as an oil well in the Arrow Pool as follows:

1. Pulled tubing.
2. Ran Gamma Ray Neutron survey.
3. Dumped 40 gallons Hydromite. Plugged back from 3030' to 3694'.
4. Ran tubing, rods and pump. Pumped 3 bbls oil, 200 bbls water in 24 hours.
5. Pulled rods, pump and tubing. Dumped 18 gallons Hydromite. Plugged back to 3675'. Reran tubing, rods and pump. Pumped 1 bbls oil, 132 bbls water in 24 hours.
6. Pulled rods, pump and tubing. Ran 5-1/2" Baker Model K cast iron cement retainer on wire line set at 3638'. Ran tubing with stinger nose sub and latched into retainer. Attempted to cement formation from 3675-3644' with 500 sacks Neat cement. Staged last 15 sacks. Waited 5 minutes, opened valve. Well took 1 bbl water on vacuum. Unseated nose sub and casing went on vacuum. Pulled tubing. WOC.
7. Reran tubing with Baker stinger nose sub and engaged in retainer. Tested with 500# for 30 minutes. No drop. Cemented open hole below retainer with 105 sacks cement in 7 stages. Maximum pressure 2000#. Reversed out 50 sacks cement. Pulled tubing. Plugged back depth 3638'. WOC.
8. Perforated 5-1/2" casing from 3636-3615' with 4, 1/2" Jet Holes per foot. Ran tubing set at 3627', 5-1/2" Lane Wells TOP packer at 3585'. Treated perforations from 3636-3615' with 500 gallons 15% NE acid. Inj rate 4 gals. per min. Treated same perforations with 5000 gallons Petrofrac with 1# sand per gallon. Injection rate 8 bbls per min.
9. Ran tubing set at 3600'. Well kicked off. Recovered all load oil. Flowed 41 bbls oil, no water thru 2-3/8" tubing, 1" choke, in 24 hours. Gas volume 318.1 MCF. GOR 7759.