

Plugged back, perforated 7" casing and acid treated as follows:

1. Pulled tubing, rods and pump. Ran steel line measurement to top of plug at 5685'.
2. Ran 2-3/8" tubing with 6-1/4" bit and drilled Hydromite from 5685-5705'. Pulled tubing and bit. Plugged back from 5705-5684' with 9 sacks Sulphite resistant cement. Ran 2-3/8" tubing, rods and pump.
3. Pulled tubing, rods and pump. Ran 2-3/8" tubing with 6-1/4" bit and drilled cement from 5685-5705'. Pulled tubing and bit.
4. Ran 2-3/8" tubing with 7" cement retainer at 5641'. Squeeze cemented thru perforations in 7" casing from 5665-5705' with 250 sacks sulphate resistant cement. Maximum Pressure 2000#. WOX.
5. Ran 2-3/8" tubing with 6-1/4" bit and drilled cement and retainer from 5641-5675'. Pulled tubing and bit. Perforated 7" casing from 5662-5674' with 4, 1/2" jet holes per foot.
6. Ran 118 joints 2-3/8" tubing with 7" hookwall packer at 5621' and hydraulic holddown at 5619'. Swabbed dry. Washed in 7" casing from 5662-5674' with 500 gallons mud acid. Swabbed dry. Treated formation thru perforations in 7" casing from 5662-5674' with 1000 gallons 15% NE acid. Injection rate 21 gallons per minute. Swabbed dry.
7. Treated formation thru perforations in 7" casing from 5662-5674' with 3000 gallons 15% NE acid. Injection rate 200 gallons per minute. Swabbed.
8. Pulled tubing, packer and holddown. Ran 64 joints 2-3/8" tubing set at 2022'. Ran rods and pump and returned well to production.

