Subsequent Report of Operations
Southland Royalty Company
Gulf Federal AM Com
NW¼, NW¼, Section 20, T-25-S, R-35-E,
Lea County, New Mexico
Oil and Gas Lease NM 0450818

Drilled 6-1/2" hole 17,916'-20,066'. Set Baker Cast Iron Bridge Plug at 16,400' in 7-5/8" liner. Set Halliburton Cast Iron Cement Retainer at 16,380'. Spotted 35 sacks cement 16,200'-16,380'. Found leak in 10-3/4" casing at DV cementing tool at 9,008', squeezed with 640 sacks.

Perforated 15,910'-15,942' (Morrow), treated with 1000 gallons mud acid, 200 gallons isopropyl alcohol and 10,000 gallons brine water. No oil or water flow, gas volume too small to measure. Set Halliburton Cement Retainer at 15,110', spotted 40 sacks cement 14,910'-15,110'.

Perforated 14,710'-14,760' (Atoka), treated with 1500 gallons mud acid and 5000 gallons 15% acid, no oil, gas or water recovery. Set Halliburton Cement Retainer at 14,609', squeezed 59 sacks cement into formation, 22 sacks cement in casing 14,609'-14,760', and 19 sacks cement in casing 14,500'-14,609'.

Perforated Lower Wolfcamp 14,233'-14,379', treated with 500 gallons Formic Acid and 10,000 gallons 15% acid. Flowed gas at rate of 977 MCFPD. Set bridge plug at 14,200'.

Perforated Middle Wolfcamp 13,752'-14,138', treated with 17,000 gallons 15% acid. Flowed gas at rate of 1165 MCFPD. Set bridge plug at 13,715'.

Perforated Upper Wolfcamp 13,466'-13,524', treated with 7500 gallons 15% acid, 2500 gallons 7½% acid and 6000 gallons Formic Acid. Flowed 250 MCFGPD, 100 BOPD and 2 BWPD.

Drilled out bridge plugs at 13,715' and 14,200'.

Set Otis type "WA" 7-5/8" x 3-1/2" packer at 13,407'. Ran 2-7/8" tubing to 13,428', set into packer at 13,407'.

Treated all Wolfcamp perforations 13,466'-14,379' with 20,000 gallons 7½% acid, 60,000 gallons Formic Acid and 40,000 gallons 3% acid on 3-26-1968. Bulk of acid water load recovered 3-28-1968.

Initial potential on 3-31-1968. Flowed 213 barrels 49° API oil, 82 barrels acid water and 1374 MCF gas in 24 hours on 1/4" choke.

Dec 5 11 04 AM '20