

THE FRONTIER REFINING COMPANY
4040 E. Louisiana Avenue
Denver, Colorado 80222

Lease Designation and Serial
Number: SF 078872A
BOLACK 4 ~~XXXX~~
Sec. 28, T27N, R11W, San
Juan, New Mexico

4. Released RTTS packer, pulled tubing and packer. Ran HOWCO Magnesium bridge plug on bottom of RTTS packer, set B.P. at 6260' KB, tested tubing to 2600 psi, held OK, tested B.P. to 1500 psi, held OK.
5. Pulled 2-3/8" tubing to set RTTS packer at 4695' KB, held 1500 psi OK below packer. Reset packer at 4321' KB, held 1500 psi, OK below packer.
Reset packer at 4196' KB, would not hold 1500 psi, below packer, pump in casing leak or leaks at 5 B/M, 1100 psi, pressure increase on annulus, indicating communication between leaks below and above packer at 4196' KB. Reset packer at 3630' KB, inject below packer at 6 B/M at 1200 psi. Annulus hold 1500 psi with slight bleed-off, B.O.P. leaking. Reset packer at 3440' KB, inject below packer at 6 B/M at 1200 psi, annulus hold 1500 psi with slight bleed-off, B.O.P. leaking.
6. RTTS packer set at 3440' KB. Cement squeeze 4 1/2" casing with 250 sx. Class C Cement, with 6/10 of 1% HALAD 9, 2% CaCl. Maximum squeeze pressure 2200 psi, displaced cement to calculated depth of 3697' KB. End squeeze at 6:00 A.M., Shut in at surface to 8:15 A.M. 11-19-65.
7. Released pressure at surface, no flow back, released packer, pulled tubing and packer. W.O.C. to 5:00 A.M. 11-20-65. Rigged up gas lines.
8. Picked up 3-7/8" bit and Baker casing scraper on 2-3/8" tubing. Tagged top of cement at 3389' KB. Drilled cement as follows:

Firm cement:	3389' - 3680'
Bridges and stringers:	3680' - 3800'
Very hard cement:	3800' - 4244'

(trip for new bit at 3951')
Ran bit to 4363', casing clear.
Pressure tested casing to 1150 psi, held OK, pulled tubing, bit, and casing scraper. Installed new bit, ran 2-3/8" tubing, jetting and blowing casing with gas.
9. Jetting and blowing casing clear of water down to 4464', hit cement again at 4464'. Drilled hard cement 4464'-4474', stringers 4474'-4489'. Filled casing with water again and tested 1,000 psi, 20 minutes, held OK.
10. Jetting and blowing water and mud out of casing to first B.P. at 6260'. Drilled B.P., cleaned casing to 6300'. Trip for new bit. Drilled bridge plug at 6350', cleaned casing to 6595' KB. Well now making Dakota gas.
11. Pulled tubing and bit, ran 206 joints 2-3/8" tubing with pin collar and pump out plug. Landed tubing, blew out plug, hooked up wellhead.