

Jicarilla 70-15

May 27, 1982

Day #14. Operation: Rigging up to log with Schlumberger Well Services. 7450' TD. 24 hour footage is 116'. Dakota Formation. Rotary 50 rpm. 35,000 weight on bit. Drilling rate 12' per hour. Pump liner size is 5 1/2 x 15. Pressure 1,000#. 55 strokes per minute. Mud vis is 75. WT is 9.5. WL is 7.8. LCM 12%. Bit #5. 7 7/8" - FP62. 242' 27 hours.

9 3/4 hours - drilling
1/4 hour - RS - Operate BOP
1 hour - circulate at TD a lost circulation.
6 hours - polled 16 stands and mixed mud. Tripped back to bottom.
1 3/4 hours - circulate and condition mud, with full returns.
1/2 hour - Short trip
4 1/4 hours - Strap out of hole
1/2 hour - Rig up to log with Schlumberger.

May 28, 1982

Day #15. Operation: Running 4 1/2" casing. 7450' FTD. 7 hours - log with Schlumberger
1 1/4 hours - run in 30 stands. Plug bit.
3 hours - trip out of hole
3 hours - trip in hole. Break circulation.
2 hours - circulate.
5 1/2 hours - laid down drill pipe and drill collars.
2 1/4 hours - rig up casing crew. Run 2150' of 4 1/2" casing.

Ran 172 jts. 4 1/2" 11.6# to 7442' KB, with shoe on bottom 7442' KB and float collar @ 7398.5' KB, centralizers @ 7420', 7335', 7291', 7203', 7116', 7029', 6734', 6343', 6115' and 3001'.

Cement baskets 7049' - 6493' - 5996' - 3113'. Short joint @ 6102'. DV Tool 3064'. Pipe in hole at 8:15. Started circulating. Halliburton started cementing process at 8:45. First stage pumped 730 sxs of 50-50 Posmix, 2% gel, 6 1/4# Gilsonite, and 6# salt per sack. Plug down at 10:10. Dropped bomb to close off DV Tool. Opened D V Tool. Circulated for 3 hours. Pumped in 405 sxs of 65-35 Posmix, 12% gel, and 6 1/4# Gilsonite per sack, followed by 50 sxs Class B regular cement. Plug down at 1:35. Circulated 5 bbls. to surface. WORT.

June 16, 1982

Moved in Spartan Well Service. Drilled out D. V. Tool @ 3104', (previously reported at 3064' when pipe was set). Cleaned well out to plug back depth of 7399'. Spotted 250 gallons 7 1/2% Hcl over Dakota "D" interval. Blue Jet set up and ran correlation log, and perforated the Dakota "D" zone interval from 7286-7350 with 4 shots per foot at the following depths: 7295', 7328', 7338', 7334', 7336, 7338', 7347' and 7349'.

June 17, 1982

COOH with perf. gun, and broke formation down with Nasco pumping unit. Pumped in 20 bbls. Kcl water. Formation broke at 1400 psig. Established 31 BPM rate. Dropped 60 balls. Balled off. Released pressure. WIH with ball catcher, and retrieved 60 balls. Frac'd with slick water, (2½# FR-2 per thousand gals. water) clay stabilizers and adamite. Pumped in 16,000 gal pad. Pumped in 48,000# 20-40 sand, along with 2030 barrels of slick water. ISIP 1800# - after 15 min. 1500# min. rate 24 - Max. rate 30 BPM. Max press 3600# - Min. 2700#. Set Halliburton drillable bridge plug at 7220'. Tested B. P. to 4000 psig. WIHWT and spotted 250 gallons over Greenhorn and Dakota "A" sand. COOH with tbg. and WIH with perf. gun and perforated the Dakota "A" zone (interval 7148-7190) at the following per foot intervals: 7148', 7160', 7162', 7164', 7169' and 7172'. Each foot interval shot with 4 holes, using deep penetration bullets with diameter of .32 inch. These same shots were used on the "D" zone described above. COOH with perf. gun. WBIH with perf. gun and shot the Greenhorn interval (7065-7124') with one shot per foot at 7064', 7099, 7105, 7108', 7111', and 7119'. COOH W/P/G. Went back in hole with perforating gun, and shot the Dakota "A" interval, (7148-7180) at the following depths: 7148', 7159', 7161', 7163', 7168', and 7171' with 4 shots per foot. Hooked up NASCO to frac both the Greenhorn and Dakota "A". Broke down formations. Pumped in 50 bbls. Hcl water to break down formation. Formation broke at 2200#, with max. rate of 40 bbls. per min. Dropped 60 balls, 3 second spacing. Balled off completely. Released pressure. Went in with ball catcher, and picked up balls. COOH and frac'd zones with 56,000# of 20-40 Ottawa sand, and 2782 bbls. of slick water. (2½# FR-2 per thousand gals. water) with clay stabilizers and adamite. Min. rate 28 BPM - Max 34 BPM. Max pressure 3600 psig - Min. 2780 psig. Instant SIP. 1900 psig. After 15 min 1700 psig. WIH with bridge plug and set at 7050'. Tested BP to 4000 psig. Came up hole to lower Mancus zone, sometimes called Tocito, Sanastee, Toldillo, etc. to test. Ran tbg. in, and spotted 250 gallons acid over perfs, (7050-6700). COHWT and went in with perf. gun to perf the interval from 6800-6875. Shot the following depths: 6815', 6860', 6862', 6864', 6869', and 6872, with 4 shots at each interval or depth. COOH WPG, and hooked up nitrogen and water pumps.

June 18, 1982

Pumped in 70,000 SCF of nitrogen, 11 bbls. slick water. Broke formation at 2800 psig. Dropped 40 balls. Partial ball off. Flowed nitrogen and water to surface. Had blow of gas and some oil to surface within 55 minutes. Hooked up to frac with slick water, and sand. Pumped in 16000 gals. pad. Started sand (20-40) at 1/2# per gallon. Sanded off after 8000 gallons and 4000# sd. Max. pressure reached 3900 psig, with 1 bbl. per minute

rate. Shut in. Flowed pressure off. Well flowing by heads. Mostly water. Some gas and oil. Died after 4 hours. WIHWT and bit. Drilled out BPs at 7050' and 7220'. Cleaned hole of all sand. COOHWT and bit. Went back in with tubing, and seating nipple, and landed at 7267' KB. Flanged up well head.

- June 19, 1982 Swabbing well till 12:00 P. M. Mostly water. Oil improving. Fluid level about 600' from surface. Shut down to move and hook up tanks.
- June 20, 1982 Swabbing well. Gas and oil increasing. Pulled about 10 barrels oil and 100 barrels water. Shut down completion rig to get swabbing unit on tomorrow.
- June 21, 1982 Swabbing Unit, (Silver Star), moved on well. Had 400# on csg. and 100 on tbg. Swabbed all day. No bbls water. 10 bbls. oil.
- June 22, 1982 Swabbing csg. P. 900# - Tbg. 250#. 190 bbls. water. 50 bbls. oil. Fluid level about 1,200 feet from surface.
- June 23, 1982 Swabbing csg. pressure 1,100# - Tbg. 450#. Well flowing by head. Est. 220 bbls. water. Gauged 50 bbls. oil.