

9-09-90 7" casing at 2940'; open hole 2940-3137'.

Circulating hole for bit trip. Mud weight 10.3 ppg, viscosity 55 sec.

Mill on fish and formation 3117-3124'. Made 7' in 6 hours. Returns 85% coal, 10% shale and siltstone, and 5% metal.

Mill from 3124-3127'. Returns 85% coal, shale and siltstone, 15% metal.

Mill from 3127-3128'; cumulative mill hours - 16.

Circulate hole and POOH. Mill is worn on all surfaces, 5/8" out of gauge.

Pick up super mill #2, TIH, break circulation at 3100'.

Ream hole from 3100-3128'. mill from 3128-3137'. Returns 100% coal, shale and siltstone.

Work pipe 3103-3137', no torque or drag.

9-10-90 7" casing at 2940'; open hole 2940-3137'.

Circulating and working pipe at TD with 3 BPM water through 1 blooie line. Have 15' flare. Returns light 1/8" coal in clear water.

POOH with super mill #2, mill in gauge, lay down mill and fishing tools.

Pick up new Smith 6-1/4" FDTL bit, SN #KT5110 (jets: 20-20-20), bit sub, float sub, one 4-3/4" drill collar, N nipple (1.875" ID), nine 4-3/4" drill collars (306.66' overall length). TIH with 3-1/2" drill pipe, wash from 3117-3124', ream from 3124-3137'; work pipe from 3118-3137'; no torque or drag.

Displace 10.4 ppg mud with water.

Circulate and work pipe at TD with 5 BPM water through 1 blooie line. Returns heavy 1/2" and smaller coal, shale and siltstone in muddy water.

Circulate and work pipe at TD reducing pump rate 1/2 Bbl every hour. Returns light to moderate 1/8" and smaller coal (98%), in clear water.

9-11-90 7" casing at 2940'; open hole 2940-3137'.

Circulating and working pipe with 2 MM air and 5 BPM water, no torque or drag. Returns light 1/16" and smaller coal (98%) in clear water. 20' flare from both blooie lines.

Circulate and work pipe at TD with 3 BPM water, reducing pump rate 1/2 Bbl every hour. Returns light to moderate 1/8" and less coal (98%), shale and siltstone in gray water.

Circulate and work pipe at TD, increase pump rate from 1 to 5 BPM, bring 1 MM air on line. Returns heavy 1/2" and smaller coal (98%), shale and siltstone in gray water.

Circulate and work pipe at TD with 1 MM air reducing pump rate 1/2 Bbl every 2 hours.

Bring second compressor on line, increase pump rate to 5 BPM.

9-12-90 7" casing at 2940'; open hole 2940-3137'.

Working past junk at 3112'.

Circulate and work pipe at TD with 2 MM air and 5 BPM water, reducing pump rate 1/2 Bbl hourly. Returns light 1/16" coal and fines in clear to cloudy water.

Pull up to 7" casing at 2940', gauge well through 2" line: 1/4, 1/2, 3/4, and 1 hr - 45 psi, 5099 MCFD (all gauges mist).

TIH, tag fill at 3102'. Wash back to TD with 4 MM air and 5 BPM water, unloading heavy 1/4" to 1/8" coal and fines in black water and mud. Junk in hole at 3102'.

Circulate and work to TD with 5 BPM water. Tight hole 35' off bottom. Returns light coal and powder in muddy water. Work past junk at 3102-3112', hole fell in, pull up to 3054'.

Circulate and work pipe from 3054-3083'. Returns very heavy 1/2" to 1/4" coal and powder in black water.

Work past junk at 3102-3112' with 5 BPM water. Returns very heavy 1/4" and smaller coal in black water.