

8-21-90 7" casing at 2940'; open hole 2940-3278'.

Circulating and working pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly.

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Short trip to gauge through 2" pitot: 1/4 hr - 46 psi; 5190 MCFD; 1/2 hr - 54 psi, 5906; 3/4 and 1 hr - 55 psi, 5995 MCFD (all gauges most).

Shut in for pressure build up: 1/4 hr - 1040 psi; 1/2 hr - 1200; 3/4 hr - 1300; 1 hr - 1340 psi.

Blow well down. Choke manifold 40 psi. Open blooie lines. Flow 1 hr - 5 gal. in 19 sec. = 541 BWD.

TIH and tag fill at 3080'.

Clean out 3080-3121' with 2 MM air and 2 BPM water. Returns heavy coal (98%), shale and siltstone in black water with floating coal.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light 1/8" coal, shale and siltstone in gray water on sweeps; otherwise clear water.

8-22-90 7" casing at 2940'; open hole 2940-3278'.

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Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light 1/8" coal (98%) in clear water; gray water on sweeps.

Short trip to 7" casing to gauge well through 2" pitot: 1/4 hr - 40 psi, 4653 MCFD (mist); 1/2 hr - 65 psi, 6989 (mist); 3/4 and 1 hr - 75 psi, 7783 MCFD (heavy mist).

TIH, had fill at 3080' (198' off bottom). Clean out to TD with 2 MM air and 2 BPM water. Returns heavy 1/8" coal (98%) and floating coal in black water. High torque and sticky from 3080-3130'; 3130-3140' tight spot.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light to moderate 1/8" coal in gray water on sweeps.

(Cont'd)

8-22-90 Hole fell in, pull 7 jts drill pipe.

Clean out from 3080' to TD. Returns heavy coal, shale and siltstone in black water; tight spot 3130-3140'.

Circulate and work pipe at TD with 2 MM air and 1 BPM water. Returns light to moderate 1/8" coal in gray water

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Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light to moderate 1/8" and less coal (98%), shale and siltstone in gray water on sweeps.

Short trip to run 2" pitot gauge: 1/4 hr - 58 psi, 6264 MCFD; 1/2 hr - 68 psi, 7158; 3/4 and 1 hr - 76 psi, 7874 MCFD (all gauges mist).

TIH, tight spot 3130-3140'; 16' fill on bottom. Clean out with water and air.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, shale and siltstone in gray water on sweeps.

8-24-90 7" casing at 2940'; open hole 2940-3278'.

Cleaning out from 3184-3215' with air and water.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light 1/8" coal in clear water.

Made short trip to 7" to gauge well: 1/4 hr - 74 psi, 7695 MCFD; 1/2 hr - 80 psi, 8232; 3/4 hr - 86 psi, 8769; 1 hr - 88 psi, 8948 MCFD (all gauges mist).

TIH, had bridge at 3095-3105'; had 10' fill at TD.

Circulate and work pipe at TD with 2 MM air and 1 BPM water with 15 Bbl water sweeps hourly. Returns light 1/8" coal in clear water.

Hole sloughed, hole sticky and unloaded heavy coal in black water.