anound a column

Completion Report

Northeast Blanco Unit No. 479R - Basin Fruitland Coal

LOCATION: 100' FNL, 590' FWL

Section 20, T30N, R7W

Rio Arriba County, New Mexico

9-21-93 Day 14 - present operation: TIH.

NU BOP and blooie lines. Test blind rams and 7" csg to 1500 psi. Repair leak. Retest to 1500 psi for 30 minutes - OK.

Unload DC and DP out of baskets and tally. PU 6-1/4" STC FDT bit, Serial #KW3472 (jets: 14-16-blank) with side nozzle. TIH with DC and DP. Run twelve 4-3/4" DC.

Replace HCR valve. Pressure test pipe rams, HCR valve, an manifold. Repair leaks. Retest to 1500 psi for 30 minutes - OK.

PU power swivel, could not rotate pipe. TOH, LD 6 DC. TIH.

9-22-93 Day 15 - present operation: rotating and reciprocating with 1500 SCFPM air and 10 BPH water. Returns light 1/8" coal and coal dust.

TIH with 6-1/4" bit, run six 4-3/4" DC. PU power swivel, break circulation. Rotate pipe and set torque on swivel.

Drill out plugs and insert float and 20' of cement. WO backhoe and water (blow pit would not drain back to reserve pit). Dig out ditch with backhoe and put in culvert for water test. Haul water to rig.

Finish drilling shoe jt to 3845'. Drill formation to TD at 4034' MD (3237' TVD).

50'

Intervals: 3868-70' 2 1 3 ' 3880-83' 1' 3884-85' 3890-03' 13' 4 ' 3904-08' 3933-38' 51 3958-59' 1' 3982-90' 8 1 3 1 3996-991 4000-02' 21 8 1 4009-17'

Total:

Unload hole with air. Rotate and reciprocate well with 1500 SCFPM air and 10 BPH water. Returns light 1/8" coal and coal dust.

9-23-93 Day 16 - present operation: rotating and reciprocating with 1500 SCFPM air and 10 BPH water.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/8" coal, light to moderate coal dust.

2" pitot test: 15 and 30 min. - 514 MCFD; 45 and 60 min. - 539 MCFD.

2 hour shut-in: ISIP - 14 oz. 15 min. - 85 psi; 30 min. - 135; 45 min. - 167; 60 min. - 220; 75 min. - 290; 90 min. - 340; 105 min. - 398; 120 min. - 465 psi.

Surge well with 465 psi and let blow half hour natural. 6-8' flare.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/8" coal and coal dust.

9-24-93 Day 17 - present operation: Trip in hole after gauge.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/8" coal and coal powder, moderate coal on sweeps.

LD 6 jts drill pipe, pitot and pressure test well.

2" pitot test: 15 min. - 1626 MCFD; 30, 45 and 60 min. - 1520 MCFD.

2 hour shut-in: ISIP - 50 psi, 15 min. - 350 psi; 30 min. - 500; 45 min. - 560; 60 min. - 600; 75 min. - 610; 90 min. - 625; 105 min. - 640; 120 min. - 660 psi.

Surge well with 660 psi, TIH, had 6' fill.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, coal fines and powder (98% coal)

Pull into 7" casing, surge well twice with 1000 psi air, TIH, had 8' fill.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, coal fines and powder (98% coal).

Pull into 7" casing for Pitot test.

2" pitot test: 15 min. - 1065 MCFD; 30 and 45 min. - 1150 MCFD; 60 min. - 1065 MCFD. Gauges wet.

TIH, had 25' fill and 15' - 18' flare.

9-25-93 Day 18 - present operation: Trip to TD

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl with water sweeps hourly. Returns light 1/8" coal, fines and powder, moderate coal on sweeps.

Pull into 7" casing, run natural build-up and surge well, surge every 2 hours at 650 psi for 10 hours.

TIH, had 25' fill.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate 1/8" coal, fines and powder with moderate coal on sweeps.

Pull into 7", run pitot test: 15 min. - 1756 MCFD; 30 min. - 2863 MCFD; 45 and 60 min. - 3221 MCFD.

9-26-93 Day 19 - present operation: TIH after pitot test, had 9' fill.

TIH had 11' fill.

Rotate and reciprocate with 1500 SCFPM with 10 BPH water and 10 Bbl water sweeps hourly. Returns moderate 1/8" coal, fines and powder (98% coal). Moderate coal on sweeps.

Pull into 7" casing. Surge well with natural build-up (650 psi) every 2 hours for total of 6 times.

TIH, had 22 feet fill.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate to heavy 1/8" coal, fines and powder with moderate coal on sweeps.

Pull into 7". Run Pitot test: 15 min. - 3311 MCFD; 30, 45 and 60 min. - 3758 MCFD. TIH.

9-27-93 Day 20 - Present operations: Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, fines and powder.

Pull into 7" casing, surge well with natural buildup (650 psi) 5 times.

Last three surges brought up large amount of coal powder. TIH.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, fines and powder. Returns on sweeps moderate 1/8" coal and powder.

Pull into 7" casing for Pitot test: 15 min. - 2953 MCFD; 30, 45 and 60 min. - 4653 MCFD.

TIH, had 11' fill.

9-28-93 Day 21 - Present operations: Rotate and reciprocate with 1500 SCFPM air and 10 BPH water.

Rotate and reciprocate well with 1500 SCFPM air, 10 BPH water and 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, fines and powder (99% coal). Returns light on sweeps.

Estimated water 275 BPD.

Pull into 7" casing, run natural pressure build up (660 psi) and surge well eight times.

Last four surges - returns were coal powder and mist.

TIH, had 13' fill.

Rotate and reciprocate with 1500 SCFPM air, 10 BPH water and 10 Bbl water sweeps hourly. Returns moderate 1/8" coal, fines and large amount of powder. Returns light to moderate on sweeps.

Pull into 7" casing for Pitot test: 15 min. - 3758 MCFD; 30 min. - 4653 MCFD; 45 and 60 min. - 5548 MCFD.

TIH had 4' fill.

Rotate and reciprocate with 1500 SCFPM air, 10 BPH water and 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, fines and powder. Returns moderate on sweeps.

9-29-83 Day 22 - Present operations: Rotate and reciprocate with 1500 SCFPM air and 10 BPH water.

Rotate and Reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" coal, fines and powder (99% coal). Moderate 1/8" coal and powder on sweeps.

Pull into 7" casing, run natural pressure build-up to 660 psi and surge well 8 times.

Last 4 surges brought up coal powder. TIH.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate 1/16" to 1/8" coal, fines and powder.

Hole caved in, pipe stuck for one hour. Work pipe free. Pump 10 Bbl water sweeps, recovered large amount of coal powder.

Pull into to casing to run Pitot test: 15 min. - 4653 MCFD; 30, 45, and 60 min. - 6442 MCFD.

TIH, no fill.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/16" coal, fines and dust.

9-30-93 Day 23 - Present operations: Rotate and reciprocate well with 2100 SCFPM air and water.

Rotate and reciprocate well with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/16" to 1/8" coal, fines and powder.

Pull into 7" casing. Natural buildup and surge well with 660 psi each 1-1/2 hours. Surge well 7 times making coal powder on each surge.

TIH.

Rotate and reciprocate with 1500 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate to heavy 1/4" to 1/16" coal, fines and powder. Heavy coal on sweeps.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy 1/8" to 1/16" coal, fines and powder. Heavy coal fines and powder on sweeps.

10-1-93 Day 24 - Present operations: Shut in for natural buildup.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light to moderate 1/8" to 1/16" coal, fines and powder. Light on sweeps.

Pull up in 7" casing. Pitot test 2": 15 min. - 6889 MCFD; 30, 45 and 60 min. - 7158 MCFD.

Close HCR valve. Surge with natural buildup, 660 psi. Surge each 1-1/2 hours. Seven surges, each surge bringing coal dust to surface.

TIH. 5' of fill.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate 1/8" to 1/16" coal, fines and powder. Moderate to light on sweeps.

Pull up in 7" casing. Pitot test 2": 15 min. - 5548 MCFD; 30, 45 and 60 min. - 7784 MCFD.

Shut in for natural buildup.

10-2-93 Day 25 - Present operation: natural buildup and surge well with 660 psi.

Natural build up and surge well with 660 psi each 1-1/2 hours - 9 surges. Bringing coal dust to surface with each surge. TIH, had 22' fill.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy coal dust and coal fines. Well cleaned up to moderate to light 1/8" to 1/16" coal, coal fines and coal dust. Moderate to light coal on sweeps.

Pull up into casing. Pitot test 2": 15 min. - 7337 MCFD; 30, 45 and 60 min. - 8232 MCFD (all gauges wet).

10-3-93 Day 26 - Present operation: surging well with natural build up.

Finish pitot test and shut in well. Natural build up and surge well with 660 psi - 9 surges.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy to light 1/8" to 1/16" coal, coal dust and coal fines. For 3 hours had heavy coal. Hole tight and sticky. Heavy to moderate coal on sweeps.

Pull up into casing. Pitot test 2": 15, 30, 45 and 60 min. - 8232 MCFD (all gauges wet).

10-4-93 Day 27 - Present operation: rotating and reciprocating.

Natural build up and surge well with 660 psi - 4 surges.

Pitot test 2": 15 min. - 120 psi, 11811 MCFD (wet); 30, 45 and 60 min. - 115 psi, 11363 MCFD (dry). NOTE: previous pitot readings were faulty due to defective gauge.

TIH, hit 22' fill.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy coal and coal dust. Hole tight and sticky. Stuck pipe for 2 hours. Work pipe free. Hole unloaded large amounts of 1/4" to 1/16" coal, coal fines and coal dust. Heavy to moderate coal on sweeps.

10-5-93 Day 28 - Present operation: rotating and reciprocating with air and water.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy to moderate coal, coal fines and coal dust. Well making large amounts of coal fines and coal dust on sweeps. Hole very tight and sticky.

Pull up into casing. Pitot test 2": 15 min. - 5995 MCFD; 30, 45 and 60 min. - 7784 MCFD (all light mist).

TIH, had 22' fill. Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns heavy to moderate 1/4" to 1/16" coal, coal fines and coal dust. Well making large amounts of coal fines and coal dust on sweeps.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns moderate to light 1/16" coal, coal fines and coal dust. Well cleaned up, light on sweeps.

10-6-93 Day 29 - present operation: RU Cudd.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/16" coal, coal fines and coal dust. Light on sweeps.

Pull up into casing. Pitot test 2": 15 min. - 7337 MCFD; 30, 45 and 60 min. - 9127 MCFD (all dry).

TIH, had 4' fill.

Rotate and reciprocate with 2100 SCFPM air and 10 BPH water with 10 Bbl water sweeps hourly. Returns light 1/16" coal, coal fines and coal dust. Light on sweeps. Wellbore clean.

Set swivel back and pull 7 jts 3-1/2" DP and LD. RU Cudd Pressure Control.

10-7-93 Day 30 - present operation: RD snubbing stack.

RU snubbing unit. RU basket and related equipment. Test for leaks. Snub out 30 jts 3-1/2" DP. Change rams from 3-1/2" to 4-3/4". RU to LD DC.

Pull out and snub 6 DC and LD. Change rams from 4-3/4" to 2-7/8". RU power tongs, slips, and elevators to run 2-7/8" tbg. PU and snub 124 jts (3827.85') 2-7/8" 6.9# J-55 EUE 8rd tbg.

PU donut and snub in. Land tbg at 3840.85' and 2.25" ID F nipple at 3808.38' (both footages are MD with 13' KB).

Donut would not seal. Pull and check gasket on donut.

Found coal fines on donut, no visible damage to gasket. Reset donut and lock in. No leaks.

RD snubbing stack.

10-8-93 Day 31 - present operation: rig released.

RD Cudd Pressure Control. ND BOPs and blooie lines. NU master valves. Drop ball and pump check out with water and air with 800 psi. Shut in well.

Clean pits and release rig at 6:00 p.m.