

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

WELL API NO.	30-045-27488
5. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name	Northeast Blanco Unit
8. Well No.	410
9. Pool name or Wildcat	Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	
2. Name of Operator Blackwood & Nichols Co., Ltd.	
3. Address of Operator P. O. Box 1237, Durango, Colorado 81302	
4. Well Location Unit Letter <u>K</u> : <u>1545</u> Feet From The <u>South</u> Line and <u>1710</u> Feet From The <u>West</u> Line Section <u>9</u> Township <u>31N</u> Range <u>7W</u> NMPM San Juan County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 6655' GL	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: Completion <input checked="" type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

See Addendum for a full description of the tight open hole "stress relieve" type coal operation.

RECEIVED
AUG 22 1990
OIL CON. DIV
DIST. 3

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE R. W. Williams TITLE Administrative Manager DATE 8/20/90
TYPE OR PRINT NAME R. W. Williams TELEPHONE NO. 503-247-0928

(This space for State Use)

APPROVED BY Original Signed by FRANK T. CHAVEZ SUPERVISOR DISTRICT # 3 DATE AUG 23 1990

CONDITIONS OF APPROVAL, IF ANY:

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Drilling Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

**LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico**

01-12-90 Drilling at 443'; 80' per hour.

Move in and rig up Walters Rig No. 5. Spud surface hole at 11:15 a.m., 1-11-90, with bit no. 1, 12-1/4" Hughes Tool Co. OSC1G (jets: 12-12-blank) and spud mud; all WOB, 120 RPM, pump 1000 psi. Drilled to 321' in 3-1/4 hours. Survey: 1 at 321'.

Run 7 jts (300.95') 9-5/8" 36# J-55 casing, set at 313'; wooden plug at 283'. Cement with 250 sx (295 cf) Class B neat with 2% CaCl₂ and 1/4 #/sk cellophane flake. Circulation throughout. Displace with 21 Bbls water. Circulate 14 Bbls cement to surface. Plug down at 5:18 p.m., 1-11-90. WOC 12 hours.

TIH. Pressure test 9-5/8" casing and BOP to 1000 psi - held OK. Made 122' in 3/4 hours drilling with bit no. 2, 8-3/4" Reed HP52A (jets: 14-14-blank), all WOB, 100 RPM, pump 1000 psi. (CN)

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Drilling Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

1-13-90 Drilling at 2310'; 55' per hour.

Made 443' in 23 hours drilling with bit no. 2, water and polymer. 48,000# WOB, 70 RPM, 1100 psi pump pressure; mud weight 8.4+. Surveys: 1/4 at 840'; 1/2 at 1335'; and 1/2 at 1836'. (CN)

1-14-90 Running 7" casing.

Drilled to 7" casing point of 3189'. Made 2310' in 19 hours drilling with bit no. 2. 48,000# WOB, 70 RPM, and 1200 psi pump pressure. Surveys: 1/2 at 2333'; 1/4 at 2835'.

1-15-90 Rig released.

Run 74 jts (3174.08') 7" 23# J-55 casing, set at 3186'; insert float at 3143'. Cement with 450 sx (747 cf) Class B 65/35 with 6% gel, .6% FL19, and 1/4 #/sk celloflake. Tail in with 125 sx (147.5 cf) Class B neat with 1/4 #/sk celloflake. Good circulation throughout. Displace with 124.5 Bbls water. Circulate 30 Bbls cement. Plug down at 9:45 a.m., 1-14-90. Plug did not bump. Float held.

Set 50,000# on slips. Rig released to move to NEBU No. 484 at 12:00 p.m., 1-14-90. (CN)

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-10-90 Adjusting rig brakes.

Move on and rig up Big A Rig #25 on 3-9-90. Pressure test 7" casing and BOPs to 2000 psig for 30 minutes - held OK. Strapped drill pipe and collars.

Picked up 6-1/4" Smith FDT bit, KM 5504, bottom hole drill collar, float sub, F nipple, 10 4-3/4" drill collars, one joint 3-1/2" drill pipe, F nipple; total 353.98'. TTH while picking up 3-1/2" drill pipe.

Tagged cement at 2981'; preparing rig brakes before picking up power swivel.

3-11-90 7" casing at 3186'.

Drilling Fruitland formation at 3456'.

Repaired rig brakes; picked up power swivel and pressure tested 3-1/2" BOP rams and all valves to 2000 psig - OK.

Drilled cement from 2981' to the insert float at 3143'; drilled rubber plug at 2986'. Drilled guide shoe at 3186'.

Drilled Fruitland formation from 3186' to 3456' with 100 RPM, 8000# WOB, 7 BPM water at 700 psig. Made 270' in 17 hours drilling.

3-12-90 7" casing at 3186'; open hole TD at 3540'.

Circulate hole with air and water; well making 20' gas flare.

Drilled Fruitland formation from 3456' to 3540' with water in 6 hours; circulated up samples near TD. Open hole TD at 3540'. Circulated hole with 7 BPM water; returns light coal and clear water. Well making 20' gas flare.

Circulated at TD while working pipe with 7 BPM decreasing to 2 BPM water; returns light coal. Added 1.0 MM air with 5 BPM water; returns light, 3/8" minus coal, 75%, and 25% shale and siltstone.

Fruitland formation coal intervals: 3222-3224 (2'), 3232-3233 (1'), 3266-3268 (2'), 3270-3276 (6)', 3294-3297 (3'), 3354-3367 (13'), 3388-3390 (2'), 3409-3412 (3'), 3510-3511 (1'), 3537-3538.5 (1.5) for a total of 34.5'. Upper Pictured Cliffs (tongue) at 3432' and the Main PC at 3539'.

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-13-90 7" casing at 3186'; open hole 3186' to 3540'.

Finish shut in test #1.

Work pipe at TD with 1 MM air and 3.5 down to 2 BPM water. Returns light 3/8" and less coal (95%) with siltstone and shale in clear water, no hole problems.

Work pipe at TD with 2 MM air and 2 BPM water @ 450 psi. Returns moderate to light 1/2" and less coal (80%) with siltstone and shale in clear water. No hole problems, 20' flare.

Work pipe at TD with 2 MM air and 5 Bbl water sweeps every 15 minutes @ 400 psi. Returns moderate 1/2" and less coal (90%), siltstone and shale in black water.

Work pipe at TD with 2 MM air and 10 Bbl water sweeps every 30 minutes @ 400 psi. Returns same as above, no hole problems, flare increasing.

Work pipe at TD with 2 MM air and 10 Bbl water sweeps every hour @ 400 psi. Returns same as above, no hole problems.

Pull into 7" casing for 1 hour pitot test #1 and shut in test #1. 2" pitot: 1/4 hr - 1443 MCFD; 1/2, 3/4, and 1 hr - 1374 MCFD (dry). Shut in test: 1/4 hr - 290 psi; 1/2 hr - 610; 3/4 hr - 840; 1 hr - 950 psi.

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Section 9, T31N, R7W
San Juan County, New Mexico

3-14-90 7" casing at 3186'; open hole 3186' to 3540'.

Working pipe at TD with 2 MM air and 3 BPM water.

RIH to TD, 16' fill. Work pipe at TD with 2 MM air and 2 to 10 Bbl sweeps @ 400 psi. Returns moderate 3/8" and less coal (90%), shale and siltstone in black water. Ran 10 Bbl water sweeps every hour.

Hole sloughed, pipe sticky, start 2 BPM water with 2 MM air. Returns heavy 3/8" and less coal (90%), shale and siltstone in black water for 15 minutes, then light coal and clear water.

Work pipe at TD with 2 MM air and 5 Bbl water sweeps every 15 minutes until torque increased, then circulated with 2 MM air and 3 BPM water. Returns heavy 3/8" and less coal (90-95%), shale and siltstone in black water. Standpipe pressure 300 psi with 3 BPM water, on sweeps pressure dropped to 250 psi then hole sloughed. Flare appears to be increasing. Produced water last 24 hours = 100 Bbls. Estimated gas production - 1.5 MMCFD.

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LOCATION: 1545' FSL, 1710' FWL
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3-15-90 7" casing at 3186'; open hole 3186' to 3540'.

Surging well.

Work pipe at TD with 2 MM air and 5 Bbl water sweeps every 15 minutes, then 5 Bbl water sweeps every 30 minutes. Returns light 1/4" and less coal (90%), shale and siltstone in black water. No hole problems.

Work pipe at TD with 2 MM air. Ran 10 Bbl water sweeps every hour, no hole problems.

Pull into 7" casing for 2" pitot test #2: 1/4, 1/2, 3/4, and 1 hr - 8.5 psi, 1808 MCFD, dry.

RIH, hit bridge at 3420'; rotated through, had 5' fill on bottom.

Work pipe at TD with 2 MM air and 5 Bbl water sweeps every hour. Returns moderate to light 1/4" and less coal (95%), shale and siltstone in black water. Hole unloaded thick coal fines in water.

Pull into 7" casing for 2" pitot test #3 and build up test #2. Pitot test: 1/4 hr - 8 psi, 1756 MCFD; 1/2 hr - 10 psi, 1948; 3/4 hr - 9.5 psi, 1917; 1 hr - 9 psi, 1865 MCFD, all gauges dry. Shut in: 1/4 hr - 490 psi; 1/2 hr - 780; 3/4 hr - 910; 1 hr - 1010 psi. Bucket gauge on water production was 86 BPD. Surge well.

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-16-90 7" casing at 3186'; open hole 3186' to 3540'.

Working pipe at 3336' with 5 BPM water. Moderate to heavy coal, 1/8" to 1/2" in black water.

Work pipe, try to get back to bottom, stuck at 3368'. Shut in backside, pipe came free, pulled up to 3336'.

Rotate and bleed well down slowly from 680 psi to 20 psi and open blooie line. Clean out with 7 BPM water from 3336' - 3368', heavy 3/4" and less coal diminishing to light 1/8" and less in gray water.

Clean out from 3368' to TD, light to moderate 1/4" coal.

Work pipe at TD with 1 MM air decreasing water from 7 BPM to 3 BPM in half Bbl increments.

Work pipe at TD with 2 MM air and 6 BPM decreasing to 2 BPM water, light coal fines in returns.

Work pipe at TD with 2 MM air and 5 Bbl sweeps every 15 minutes, black water returns on sweeps.

Work pipe at TD with 2 MM air and 5 Bbl sweeps every 30 minutes, black to gray water on returns with occasional small pieces of coal.

Short trip to 7", RIH, had 20' fill. Started to clean out, hole fell in, lost circulation. Pump pressure went to 1150 psi, laid down 8 jts drill pipe, bit at 3305'.

Clean out from 3305-3336' with water only. Returns heavy 3/4" coal in black water becoming light in gray water.

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-17-90 7" casing at 3186'; open hole 3186' to 3540'.

Working pipe at TD with 1 MM air and 5 BPM water. Returns light coal fines, no torque, no drag.

Circulate and clean out 3336-3368' with 3 BPM water only. Heavy coal, 1/4" (98%) in black water, shale and siltstone.

Clean out from 3368' to TD with 6 BPM water. Light to moderate coal (98%), shale and siltstone.

Stuck pipe. Shut in, build pressure to 320 psi, pipe came free, laid down 7 jts drill pipe, bit at 3336'.

Bleed off pressure through choke, open one blooie line, clean out 3336-3368' with 6 BPM water. Returns heavy 1/2" coal and black water.

Clean out 3336' to TD with 1 MM air and 6 BPM water, light 1/4" coal and less in black water.

Work pipe at TD with 1 MM air and 5 BPM water, going to 2 MM and 6 BPM water. Returns light coal fines, no torque, no drag.

Hole became sticky, laid down 7 jts drill pipe, stuck pipe at 3320'. Shut in well, build pressure to 1050 psi, had 5' of free travel in pipe, appeared to have large piece of shale moving up and down hole with drill string.

Work pipe up to 3282', pipe came free, bleed pressure down through choke manifold.

Clean out with 1 MM air and 5 BPM water from 3283' to TD, heavy 1/2" and less coal and siltstone 3305-3368', then light coal fines 3368' to TD.

3-18-90 7" casing at 3186'; open hole 3186' to 3540'.

Liner stuck at 3465', no pipe movement, no circulation.

Work pipe at TD with 1 MM air and 5 BPM water, very light coal fines in gray water.

Short trip to 7", RIH, had 3' fill. POOH. Rig up to run 5-1/2" liner.

Pick up shoe and 11 jts 5-1/2" casing, Baker liner hanger (415.00'), TIH, tag at 3503'.

Pick up swivel, circulate with 600 psi, lost rotation and 26,000# string weight. Shut in well, build casing pressure to 340 psi, work pipe 3458-3489', pipe was free, rotating and circulating. Circulate and rotate liner down to 3514' with 200 psi back pressure.

Circulate and rotate pipe at 3514', made 3-4" of hole in 2 hours.

Pull liner up to 3492', pipe stuck, work pipe up to 3465', unable to move pipe, no rotation or circulation.

3-19-90 7" casing at 3186'; open hole 3186' to 3540'.

TIH with fishing tools and drill collars.

Attempt to free pipe at 3465', pressure up annulus with 700 psi air, pipe would not move, transfer 130 Bbls drilling mud from Mackey yard to mud pit, mud on location at 1:00 p.m.

Condition mud and build volume.

Back off liner and displace hole with 10.2 ppg mud.

POOH, lay down Baker setting tool, Pick up spear, crossover, bumper sub, jars, and 4-3/4" drill collars.

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-20-90 7" casing at 3186'; open hole 3186' to 3540'.

POOH to change out jars.

Pick up 6 drill collars (total 10) and accelerator jar. TIH with drill pipe, circulate at 3045', tag fish at 3064', catch 23# casing below liner hanger.

Jar on fish 6 hours until jars failed, release spear, circulate, took 72 Bbls to fill hole. Mix mud to build volume.

Fill hole and circulate - took 3-1/2 Bbls to fill hole.

POOH, lay down jars, pick up new set of jars, change out grapple on spear from 4.67" to 4.95" to catch liner mandrel.

Circulate hole, took 14 Bbls to fill hole. Jar on fish, jars hit at 60,000# for 30 minutes then dropped to 20,000#. Release spear from fish. POOH.

Lost 90 Bbls mud to formation. Mud weight now 9.8 ppg, viscosity 54 sec. (JB/AR)

Est. daily cost:	\$ 10,445	Daily mud:	\$ 2,888
Est. cumulative cost:	\$103,691	Cum. mud:	\$11,031

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Completion Report

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-21-90 7" casing at 3186'; open hole 3186' to 3540'.

Picking up spear, 4.695", to catch 5-1/2" 23#.

POOH, lay down jars and accelerator. Pick up new jars and accelerator.

Wait on 5-1/2" grapple for spear.

Run spear with 5-1/2" grapple, tag fish, pick up 10,000# over string weight and pull free. Pick up power swivel, try to catch fish, no torque, no drag. POOH, recover tie-back sleeve from hanger.

Wait on mill. Pick up flat bottom mill and junk sub, TIH.

Mill 24" off top of liner hanger, circulate clean. POOH, lay down mill and junk sub.

Mud weight 9.8 ppg, viscosity 54 sec. Lost 32 Bbls in last 24 hours, cumulative loss - 121.5 Bbls. (JB/AR)

Est. daily cost:	\$ 12,285	Daily mud:	\$ 300
Est. cumulative cost:	\$115,976	Cum. mud:	\$11,331

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-22-90 7" casing at 3186'; open hole 3186' to 3540'.

Circulating and mixing mud.

Pick up spear with 4.691" grapple. TIH and catch fish.

Jar on fish. Moved liner down hole 10'. Had 5' of free travel. Broke weight indicator while working pipe.

Wait on weight indicator and install. Well started flowing back. Shut-in well. Casing built to 900 psi.

Jar on fish. Casing pressure slowly dropped to 700 psi. Pipe moving 18' with 20,000# drag up and down. Stripper rubber blew out. Shut-in well with 3-1/2" rams.

Replace stripper rubber.

Jar on fish. Lost free movement in fish. Top of fish at 3065'.

Release spear. Fill hole and circulate with 9.8 ppg mud in. Mud weight out 8.8 ppg. Well kicking.

Mix mud and circulate. Raise mud to 10.1 ppg. Viscosity 66 seconds.

Est. daily cost: \$ 8,185 Daily mud: \$ 1,905

Est. cumulative cost: \$124,161 Cum. mud: \$13,236

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-23-90 7" casing at 3186'; open hole 3186' to 3540'.

Jarring on 5-1/2" liner.

Changed out BOP rams and installed 1 set of 4-3/4". TOH with 3-1/2" drill pipe and spear. Laid down spear.

Picked up 6-1/4" flat bottom mill, junk basket, and TIH. Milled 3-1/2" of liner hanger and 5-1/2" casing liner. Circulated hole clean. TOH, hung up at 1821' and two more times. Found large pieces of liner in junk basket. Lost 109 Bbls of mud while TOH.

Laid down mill and picked up 4.691" spear, new jars, and accelerator. TIH and caught liner.

Jarred on liner for 6 hours, no movement; 120,000# up and 20,000# down. Top of liner at 3065', bottom at 3478'.

Cumulative mud lost - 230 Bbls. (JB/WFC)

Est. daily cost:	\$ 15,075	Daily mud:	\$ 2,303
Est. cumulative cost:	\$139,236	Cum. mud:	\$15,539

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3-24-90 7" casing at 3186'; open hole 3186' to 3540'.

Mixing mud, attempted to release spear, waiting on fishing tools.

Continued jarring on liner for 6 more hours; no movement. Attempted to release spear - unable to get free. Picked up swivel to hold torque while attempting to release spear. Continued jarring to release, gained one foot of travel in liner.

Pumped 150 bbls of water down drill pipe, no returns. Release torque. Continued jarring to get spear free and gained a total of 3 feet of travel. Mixing mud and waiting for fishing tools. Plan to do a string shot above the float. (MLS/WFC)

Est. daily cost:	\$ 16,552	Daily mud:	\$ 2,382
Est. cumulative cost:	\$155,788	Cum. mud:	\$17,921

3-25-90 7" casing at 3186'; open hole 3186' to 3540'.

Mixing mud and wait on Homco fishing tools and wireline truck.

Load drill pipe with mud; no circulation. Checked annulus and filled with mud - Weight-10.2 ppg, Vis-78 sec. Rigged up Homco wireline truck and backed off with a string shot above the float.

Rigged up power swivel and circulated hole. TOH with accelerator and 9 4-3/4" drill collars; laid down 9th drill collar. Left in hole: 5-1/2" liner, spear, bumper sub, change over, jars, change over, 1 drill collar, string float and F nipple.

Picked up Homco reversing tool and TIH. Caught fish and backed off. TOH and laid down F nipple. Made another run with the reversing tool and laid down the string float, 10th drill collar, and jars.

Left in hole: 5-1/2" liner, spear, bumper sub, and change over; top of fish at 3044'. Laid down and released Homco fishing tools. (MLS/WFC)

Est. daily cost:	\$ 26,489	Daily mud:	\$ 5,404
Est. cumulative cost:	\$182,227	Cum. mud:	\$23,325

3-26-90 7" casing at 3186'; open hole 3186' to 3540'.

Milling on 5-1/2" liner at 3067'

Waited on Dotco fishing tools and then correct overshot. Mixed mud and slipped drilling line.

TIH with 5-3/4" X 4-3/4" overshot and fishing assembly. Found top of fish at 3053'. Circulated hole and conditioned mud. Caught fish and rigged up Wireline Specialties to do string shot in spear.

Pulled 120,000# on fish with 2,500# torque in drill pipe and did a string shot - no success. Pulled 150,000# with 3,000# torque and did second string shot - came free. TOH and laid down change over sub, bumper sub, change over sub and the "no go" part of the spear.

Left the spear grapple and center spiral in the top of the 5-1/2" liner. Ran wireline sinker bars to 3069' (WL) and set down on the spear grapple in the liner.

Picked up 6-1/4" concave bottom mill and bumper sub and TIH. Circulated hole and started milling on fish at 3066'. Made 12 inches in 4 hours. (MLS/WFC)

Est. daily cost:	\$ 13,310	Daily mud:	\$ 787
Est. cumulative cost:	\$195,587	Cum. mud:	\$24,112

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
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3-27-90 7" casing at 3186'; open hole 3186' to 3540'.

TIH with new 6-1/4" concave mill.

Mill on top of liner, 9,000# - 10,000# wt., 2000#.
Torque, mixing mud to raise viscosity.

Trip for mill change, mill was 80% used up. TIH with new
6-1/4" concave mill. Tag top of liner at 3067'.

Mill on liner. 9000#-10000# wt., 2500# torque.
Viscosity dropped 77 seconds to 51 seconds in less than
1 hour. Getting heavy metal shavings across shaker.
Light to moderate coal dust returns. Mill 12" in 14
hours. Total depth 3068'.

Work on swivel.

TOOH with mill. Mill was 60% used had 1 large piece of
metal in junk basket.

TIH with new concave mill.

Mud weight 10.2 ppg. Viscosity 82 seconds. (MLS/AR)

Est. daily cost:	\$ 12,139	Daily mud:	\$ 1,219
Est. cumulative cost:	\$207,726	Cum. mud:	\$25,331

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LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-28-90 7" casing at 3186'; open hole 3186' to 3540'.

Rig down wireline.

RIH with new 6-1/4" concave mill. Pick up swivel. Tag top of liner at 3068'. Mill with 6000# to 10000# wt. on mill. 60 RPM. Milled 5' to 3073'.

POOH. Rig up wireline. Run 6-1/4" impression block on one joint of 2-3/8" tubing on wireline to 655'. Block would not fall. POOH. Added second joint of tubing for weight. Run impression block to 2844', block stopped. POOH. Impression block was marked on sides. Collar locator had several pieces of metal stuck to it.

Wait on magnet.

Ran 4-3/4" magnet to 1000'. POOH. Clean off metal. Ran magnet on wireline to 3073' 5 times, each time recovering metal from millings. (MLS/AR)

Est. daily cost:	\$ 10,648	Daily mud:	\$ 600
Est. cumulative cost:	\$218,374	Cum. mud:	\$25,931

BLACKWOOD & NICHOLS CO., LTD.

P.O. BOX 1237

DURANGO, COLORADO 81302-1237

(303) 247-0728

Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-29-90 7" casing at 3186'; open hole 3186' to 3540'.

Circulate behind liner at 3141'.

Rig down wireline. Pick up Baker setting tool with pack-off and TIH.

Tag to of liner at 3073'. Pick up 1' and circulate. Recovered metal cutting with magnet.

Set pack-off in top of liner. Tried to circulate liner. Pressure to 800 psi. No returns. Shut down pump pressure dropped to 400 psi. Pull out of liner and circulate above liner.

POOH. Lay down setting tool with pack-off.

Pick up 4 jts. of 2-7/8" tubing to run on bottom of drill pipe to push remains of spear down liner. Moved junk down liner from 3076' to 3146'. Could not push down any further.

POOH. Lay down 2-7/8" tubing.

Rig up Wireline Specialties. Run gauge ring to 3146'. Run cast iron bridge plug to 3142'. Perforate 4 hole in 5-1/2" liner at 3141'. Rig down wireline.

Pick up Baker setting tool with pack-off and TIH.

Circulate 1' above liner top. Set seals in top of liner. Circulate behind liner at 7 BPM at 1200 psi. Getting metal cuttings in return. (MLS/AR)

Est. daily cost:	\$ 20,026	Daily mud:	\$ 400
Est. cumulative cost:	\$238,400	Cum. mud:	\$26,331

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-30-90 7" casing at 3186'; open hole 3186' to 3540'.

POOH with taper tap.

Circulate behind liner at 3141'. 7 BPM, 1200 psi.

POOH. Pick up spear with 4.691" grapple and TIH. Catch liner. Jar up and down with no movement. Release spear. POOH. Lay down fishing tools.

Change out 5-1/2" rams to 2-7/8". Pick up Smith 4-1/2" bit, SN #R49593 bit sub, crossover, 4 jts. of 2-7/8" tubing. TIH with 3-1/2" drill pipe. Strap in, tag top of liner at 3071'. Bridge plug at 3139'.

Drill out bridge plug and circulate clean. POOH. Lay down bit and subs. Pick up taper tap and TIH. Pick up swivel and screw in fish. POOH. (JB/AR)

Est. daily cost:	\$ 10,102	Daily mud:	\$ 613
Est. cumulative cost:	\$248,502	Cum. mud:	\$26,944

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

3-31-90 7" casing at 3186'; open hole 3186' to 3540'.

Milling on perf plugs.

Finish POOH, recover bottom section of cast iron bridge plug. TIH with taper tap.

POOH, recover entire spear. Lay down and load out fishing tools. Recover 38" long x 3/4" wide x 1/16" thick metal strip from BOP.

TIH with drill pipe and drill collars. Lay down drill pipe and drill collars. Rig up to pick up 2-7/8" tubing. Pick up junk mill, bit sub, F nipple, and 2-7/8" tubing. Tag top of liner at 3071' and top of plugs at 3181'.

Mill on plugs with 85 RPM, 1000 psi, and 5-1/2 BPM.
(JB/AR)

Est. daily cost:	\$ 9,245	Daily mud:	\$ 600
Est. cumulative cost:	\$257,747	Cum. mud:	\$27,544

4-01-90 7" casing at 3186'; open hole 3186' to 3540'.

Circulating at TD with 6 BPM mud @ 600 psi; coal and coal fines in returns.

Mill on plugs with cutrite mill. POOH, change out cutrite mill for 4-1/2" sawtooth mill.

TIH. Mill remaining plugs, insert float, and 5-1/2" shoe.

Clean out open hole from shoe at 3464' to 3510' with 3000# WOB, 1000# torque.

POOH, lay down mill, pick up 4-1/2" bit. TIH. Clean out from 3508' to TD at 3541'; small coal in returns.

(Cont'd)

4-01-90 Circulate at TD with 6 BPM @ 1400 psi; large coal in returns, reducing to 1/2" and less. coal. (JB/AR)

Est. daily cost: \$ 7,270 Daily mud: \$ 1,108
Est. cumulative cost: \$265,017 Cum. mud: \$28,652

4-02-90 7" casing at 3186'; open hole 3186' to 3540'.

Circulating at TD with 5 BPM and 400 psi.

Circulate at TD with 6 BPM mud @ 1400 psi; 1/2" and less coal in returns, returns cleared up to clear water.

POOH. Rig up Howco logging. Run Gamma ray, TMD, Pulsed Neutron Log, TD to 2300'. Perf three coal zones. Rig down wireline.

TIH with 2-3/8" tubing with expendable check on bottom, pick up swivel.

Displace mud with water. Circulate at TD with 4 BPM water @ 400 psi; mud-colored water back, very little gas. Total mud lost during fishing operations - 520 Bbls.

Liner Summary:

Open Hole TD -	3540'	Perforations (8 HPF;
Shoe -	3466'	pre-drilled, 0.625" ID):
Top of liner -	3071'	3180-3219'
Overlap -	115'	3258-3337'
		3444-3464'

Wireline Perfs (4 SPF;
0.55" ID):
3360-3373'
3392-3394'
3416-3419'

On 3-17-90 ran 11 jts (404.79') 5-1/2" 23# N-80 Kawasaki with Brown liner hanger. Ran 1-1/2 jt plugged; 3 full-plugged jts; 1 half-blank jt; 6 full blank jts. Unable to get to bottom, unable to pull out of hole. Fishing operations milled off hanger and 10' of 5-1/2" casing. (JB/AR)

Est. daily cost: \$ 9,245 Daily mud: \$ 878
Est. cumulative cost: \$289,973 Cum. mud: \$29,530

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Completion Report

Northeast Blanco Unit No. 410 - Basin Fruitland Coal

LOCATION: 1545' FSL, 1710' FWL
Section 9, T31N, R7W
San Juan County, New Mexico

REVISED

4-03-90 7" casing at 3186'; open hole 3186' to 3540'.

Rigging down.

Circulate at TD with 4 BPM water; water and mud in returns, very little gas.

Circulate at TD with 1 MM air and 4 BPM water @ 450 psi; returns water and gas.

Lay down 5 jts tubing, land tubing in donut. Nipple down BOP, nipple up tree, pump off expendable check.

Flow well, rig down to move. Pitot test: 1/4 hr - 7 oz; 1/2 hr - 8 oz; 3/4 hr - 9 oz; 1 hr - 10.5 oz; 1-1/4 hrs - 12 oz; 1-1/2 hrs - 12.5 oz., 539 MCFD.

Well gauged 1865 MCFD (wet, after one hour, 2" pitot) on 3-15-90 before the hole was mudded up to fish. Estimated water production - 86 BPD.

Run 110 (3410.05') jts 2-3/8" 4.7# J-55 EUE tubing (not FBNAU), land at 3423'; top of F nipple at 3388'.

Est. daily cost: \$ 29,086 Daily mud: \$ 0
Est. cumulative cost: \$319,059 Cum. mud: \$29,530

4-04-90 Rig down to move rig. Rig released at 10:00 a.m.,
4-03-90. (JB/AR)

Estimated daily cost: \$ 1,628
Estimated cumulative cost: \$320,687

Drilling cost: \$ 92,132

Estimated total cost: \$411,191