

submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Sundry Notices and Reports on Wells

2001 APR -3 PM 2:59

1. Type of Well  
Oil

2. Name of Operator  
San Juan Coal Company, BHP Coal New Mexico

3. Address & Phone No. of Operator  
PO Box 561, Waterflow, NM 87421

Location of Well, Footage, Sec., T, R, M  
660' FSL and 660' FEL, Section 34, T-30-N, R-15-W,

5. Lease Number  
NM-078108

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
NM Federal K #4

9. API Well No.  
30-045- 08954

10. Field and Pool  
Undesignated

11. County & State  
San Juan County, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment

Type of Action

☒ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other -

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

BHP New Mexico re-entered this abandoned well and re-plugged the wellbore from 659' to the surface per the attached plugged and abandonment report.

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] Title Tech. Serv. Coordinator Date 3/27/01

(This space for Federal or State Office use)

APPROVED BY \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

CONDITION OF APPROVAL, if any:

RECEIVED

APR 11 2001

OFFICE

NM/OCD

**A-PLUS WELL SERVICE, INC.**  
P.O. BOX 1979  
Farmington, New Mexico 87499  
505-325-2627 \* fax: 505-325-211

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San Juan Coal Company, BHP New Mexico  
**Federal K #4**  
660' FSL and 660' FEL, Section 34, T-30-N, R-15-W  
San Juan County, NM  
Lease No. NM-078108

March 12, 2001

Page 1 of 3

**Plug & Abandonment Report**

**Cementing Summary:**

**Surface Plug #A** with 48 sxs Type II cement with 18% salt (for expansion) pumped down the 8-5/8" casing from surface until good cement circulated to surface outside the 8-5/8" casing.

**Surface Plug #B** with tubing at 185', with total of 99 sxs Type II cement with 18% salt (for expansion): first spot 79 sxs to fill the 8-5/8" casing from 185' to surface; then TOH with tubing; and finally pump an additional 20 sxs down into the 8-5/8" casing, circulate cement on the outside of the 8-5/8" casing.

**Surface Plug #C** with 28 sxs Type II cement with 18% salt pumped down the 8-5/8" casing to circulate cement out through holes in ground away from the wellhead.

**Plug #1** with IBP at 659', spot 50 sxs Type II cement with 18% salt in open-hole from 659' to 509'.

**Plug #2** with 151 sxs Type II cement with 18% salt in the open-hole from 553' to surface.

**Plug #3** with 68 sxs Type II cement with 18% salt in open-hole and 8-5/8" surface casing from 190' to surface, circulate good cement out casing valve.

**Plugging Summary:**

**02-21** Drive to BHP gate and clear safety inspection for Unit #25, #45, #59 and #152. Drive to well site with escort. Held pre-job Safety Meeting for Federal K #4. Dig out existing marker and cement. Cut off culvert and exposed 8-5/8" casing. Weld to stub a 36" piece to 8-5/8" casing with collar on top. Dig pit for waste fluid.

**02-23** Road rig and equipment to BHP security gate. Have vehicles inspected by mine security. Rig and equipment escorted to location. Held Safety Meeting. Spot rig and equipment. SDFD.

**02-26** Safety Meeting. RU rig. Install casing head and companion flange on 8-5/8" casing. NU 9" BOP and test BOP. PU 7-7/8" bit, bit sub and a 3-1/8" drill collar. RU drilling equipment and circulate well with fresh water. Start drilling cement at surface down to 10'. Add one more drill collar and then PU 2-7/8" tubing workstring and wash down to 8-5/8" casing shoe at 167'. At 239' lost circulation to the surface, then regained. Observed some returns outside the 8-5/8" casing at the surface. Since the casing shoe, drilling wood, paper and other junk. Drilled out to 252' and then circulated well clean. Pulled bit into 8-5/8" casing and SI well. SDFN.

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San Juan Coal Company, BHP New Mexico

March 12, 2001

**Federal K #4**

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660' FSL and 660' FEL, Section 34, T-30-N, R-15-W

San Juan County, NM

**Plug & Abandonment Report**

Lease No. NM-078108

**Plugging Summary Continued:**

- 02-27** Safety Meeting. TIH with 2-7/8" tubing and tag fill at 234'. Establish circulation and drill/wash down to 244'. Returns outside 8-5/8" increasing and extending away from the wellhead due to cobbles in the ground. Decided to cement the surface casing to control returns. TOH with tubing and BHA. Surface Plug #A with 48 sxs Type II cement with 18% salt (for expansion) pumped down the 8-5/8" casing from surface until good cement circulated to surface outside the 8-5/8" casing. Displace cement with wiper plug and fresh water to 25'. Note that cement circulated to surface before reaching the 8-5/8" casing shoe at 167' due to hole(s) in the casing. Opened up well and TIH with tubing to push wiper plug from 25' (casing leak) to bottom. Surface Plug #B with tubing at 185', with total of 99 sxs Type II cement with 18% salt (for expansion): first spot 79 sxs to fill the 8-5/8" casing from 185' to surface; then TOH with tubing; and finally pump an additional 20 sxs down into the 8-5/8" casing, circulate cement on the outside of the 8-5/8" casing. SI well and WOC.
- 02-28** Safety Meeting. Open up well. PU BHA and TIH. Tag cement at 6'. Drill out good cement to 184'. Circulate well clean. Observed water still coming out of ground about 6' from the wellhead. Pull up bit to inside 8-5/8" casing. Shut in well. SDFD.
- 03-01** Safety Meeting. Fill mud pit with fresh water and mix 40 sxs gel and 3 sxs soda ash in pit. Install shale shaker on mud pit. PU power swivel and circulate hole conventionally. Tag at 184'. Start drilling with 7-7/8" bit and mud. Most of the returns coming up around outside of 8-5/8" casing away from the wellhead. Lost 52 bbls mud from steel pit. Drill out to 224'. Decided to cement surface casing again. LD tubing and collars. Pump 3 bbls fresh water down casing to circulate clean water out through holes in ground away from the wellhead (indicated holes in casing are shallow). Surface Plug #C with 28 sxs Type II cement with 18% salt pumped down the 8-5/8" casing to circulate cement out through holes in ground away from the wellhead. Shut in well and WOC. SDFD.
- 03-02** Safety Meeting. Open up well. TIH with 7-7/8" bit, bit sub and 2 3-1/8" drill collars. Tag cement at 10' and drill good cement to 25'. Continue to TIH with 2-7/8" tubing to 155' and circulate hole clean. Mix 20 sxs mud and 1 sx soda ash in mud pit and circulate well. Install a 3" return line from wellhead to steel pit. L. Woormer with BHP and S. Mason with BLM, approved to reduce bit to 4-3/4" bit instead of 7-7/8". TOH and LD 7-7/8" bit. PU and TIH with 4-3/4" bit, new bit sub, 2 3-1/8" drill collars and 2-7/8" tubing. Tag at 224'. Circulate hole with mud. Drill out to 285' and wash down to 527'. Circulate hole clean. Pull up hole to 155'. Shut in well. SDFD.

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March 12, 2001

**Federal K #4**

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660'FSL and 660' FEL, Section 34, T-30-N, R-15-W

San Juan County, NM

**Plug & Abandonment Report**

Lease No. NM-078108

**Plugging Summary Continued:**

- 03-05** Safety Meeting. TIH with tubing to 340'. PU power swivel and circulate hole clean with mud. Drill/wash down from 340' to 542'. Continue to wash down to 686'. Circulate hole clean. TOH with tubing and LD BHA. TIH with DHS inflatable bridge plug to 659'; tight spots at 186', 380', and 415'. Attempt to inflate bridge plug with water; pressured up to 1500#. IBP would not hold. TOH with IBP and found external packer element split. TIH with tubing, then TOH with tubing. Mix mud in steel pit, 1 soda ash and 13 sxs gel. Decided to increase bit size to avoid tight spots with IBP. TIH with 6-1/4" bit and BHA. Tag at 185'. Ream and wash out to 433'. PUH to 155'. Shut in well. SDFD.
- 03-06** Safety Meeting. TIH with 6-1/4" bit to 412'. Wash and ream out to 686'. Circulate hole clean. TOH with 6-1/4" bit. TIH with DHS inflatable bridge plug to 665' and attempt to set with 300# water. Made several attempts to set IBP, unable to plug. TOH with IBP. Wait on Southwest Geophysical to run caliper log. RU Southwest Geophysical and run caliper log from 683' to surface. Found hole to be greater than 8.4" from 683' to surface, larger than IFB will expand to. RD Southwest Geophysical. Shut in well. SDFD.
- 03-07** Safety Meeting. TIH with 6-1/4" bit to 691' to make sure hole stable. TOH. TIH with Baker IFB (5-5/8" OD, expandable to 11") to 659'. Pumped on IBP in 250# pressure increments (250, 500, 750#) to set for 10 min each. Released from IBP and it is set OK. Plug #1 with IBP at 659', spot 50 sxs Type II cement with 18% salt in open-hole from 659' to 509'. TOH with tubing. Shut in well. SDFD.
- 03-08** Safety Meeting. Wait on Southwest Geophysical. RU SG and run deviation log from 506' to surface, RD. TIH with 2-7/8" tubing and tag TOC at 555'. Plug #2 with 151 sxs Type II cement with 18% salt in the open-hole from 553' to surface. TOH with tubing. Shut in well and WOC for 4 hours. Open up well and TIH with 2-7/8" tubing. Tag cement at 190'. Plug #3 with 68 sxs Type II cement with 18% salt in open-hole and 8-5/8" surface casing from 190' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut in well and WOC. ND stripper head from 9" BOP. ND companion flange. Drain and clean out mud pit. Shut in well. SDFD.
- 03-09** Safety Meeting. Open up well, found cement down 8' in 8-5/8" casing. ND BOP and companion flanges. RD and MOL. J. Ruybalid, BLM, was on location.
- 03-16** Cut off 8-5/8" casing below ground level. Installed P&A marker with 15 sxs cement. Removed fence, back filled pit and cleaned up location with backhoe.