to

Conditions of Approval (if any)

Deputy Oil & Gas Inspector.

District #3

DATE SEP 2 1 2010

#### PLUG AND ABANDONMENT PROCEDURE

June 25, 2010

#### Blackhills 16 #2

Basin Fruitland Coal
700' FSL and 1850' FWL, Section 16, T26N, R13W
San Juan County, New Mexico / API 30-045-31103
Lat: \_\_\_\_\_ / Lat: \_\_\_\_\_\_

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 15.6 ppg with a 1.18 cf/sx yield.

1. This project requires a NMOCD C-144 CLEZ Closed-Loop System Permit for the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up.

2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.

3. Rods: Yes\_\_\_\_, No\_\_\_, Unknown\_\_\_\_, Size\_\_\_\_2.375"\_, Length \_\_1433'\_\_. Packer: Yes\_\_\_\_, No\_\_\_\_, Unknown\_\_\_\_, Type\_\_\_\_. If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.

- 4. Plug #1 (Pictured Cliffs top, Fruitland perforations and Fruitland top, 1286' 1057'): PU and TIH with 4.5" cement retainer, set at 1286'. Pressure test tubing to 1000 PSI. Pressure test casing to 800 PSI. If casing does not test, then spot or tag subsequent plug as appropriate. Mix and pump 22 sxs Class B cement above CR to isolate the Pictured Cliffs interval and cover the Fruitland top. PUH.
- 5. Plug #2 (Kirtland top and Surface Casing shoe, 350' to Surface): Connect the pump line to the bradenhead valve and attempt to pressure test the BH annulus to 300 PSI; note the volume to load. If the BH annulus holds pressure, then establish circulation out casing valve with water. Mix approximately 30 sxs Class B cement and spot a balanced plug inside the casing from 350' to surface, circulate good cement out casing valve. TOH and LD tubing. Shut well in and WOC. If the BH annulus does not test, then perforate at the appropriate depth and attempt to circulate cement to surface filling the 4.5" casing and the BH annulus to surface. Shut well in and WOC.
- 6. ND BOP and cut off casing below surface casing flange. Install P&A marker with cement to comply with regulations. RD, move off location, cut off anchors and restore location.

## Blackhills 16 #2 Proposed P&A

Basin Fruitland Coal

700' FSL, 1850' FWL, Section 16, T-26-N, R-13-W, San Juan County, NM / API #30-045-31103

Lat \_\_\_\_\_\_ / Long \_\_\_\_\_\_

Today's Date: 6/25/10

Spud: 8/2/02

Completed: 2/18/03

Elevation: 6256' GL

6261' KB

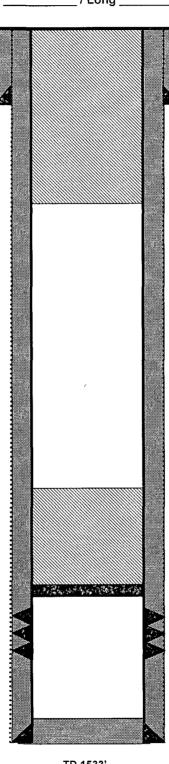
8.75" hole

Kirtland @ 300' \*est

Fruitland @ 1107' \*est

Pictured Cliffs @ 1400'

6.25" hole



TD 1533' PBTD 1450'

TOC @ Surface, circulated 4 bbls per Sundry

7" 20#, J-55 Casing set @ 170' Cement with 60 sxs (Circulated to Surface)

> Plug #2: 350' - 0' Class B cement, 30 sxs

> Plug #1: 1286' - 1057' Class B cement, 22 sxs

Set CR @ 1286'

Fruitland Perforations: 1336' – 1386'

4.5",10.5#, J-55 Casing set @ 1521' Cement with 200 sxs (293 cf) Circulate 4 bbls of cement to surface

### Blackhills 16 #2

# Current

**Basin Fruitland Coal** 

700' FSL, 1850' FWL, Section 16, T-26-N, R-13-W, San Juan County, NM / API #30-045-31103

Lat \_\_\_\_\_\_ / Long \_\_\_\_\_\_

TOC @ Surface, circulated Today's Date: 6/25/10 4 bbls per Sundry Spud: 8/2/02 Completed: 2/18/03 7" 20#, J-55 Casing set @ 170' Cement with 60 sxs (Circulated to Surface) 8.75" hole Elevation: 6256' GL 6261' KB Kirtland @ 300' \*est 2.375" tubing at 1433' (45 jts, SN @ 1395') Fruitland @ 1107' \*est Pictured Cliffs @ 1400' Fruitland Perforations: 1336' - 1386' 4.5",10.5#, J-55 Casing set @ 1521' Cement with 200 sxs (293 cf) Circulate 4 bbls of cement to surface 6.25" hole

> TD 1533' PBTD 1450'