



## PLUG AND ABANDONMENT PROCEDURE

February 19, 2016

### Jicarilla 30-03-34 #2

East Blanco PC /Cabresto Canyon; Tertiary  
440' FNL, 440' FEL, Section 34, T30N, R3W, Rio Arriba County, NM  
API 30-039-26101 / Long: \_\_\_\_\_ / 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. 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.
2. Rods: Yes   X  , No \_\_\_\_\_, Unknown \_\_\_\_\_.  
Tubing: Yes   X  , No \_\_\_\_\_, Unknown \_\_\_\_\_, Size   2-3/8"  , Length   3675'  .  
Packer: Yes \_\_\_\_\_, No \_\_\_\_\_, Unknown \_\_\_\_\_, Type \_\_\_\_\_.  
If this well has rods or a packer, then modify the work sequence in step #2 as appropriate.
3. **Plug #1 (Pictured Cliffs interval, Fruitland, Kirtland and Ojo Alamo tops, 3678' – 3084')**: TIH with open ended tubing to 3678'. Mix and pump 85 sxs Class B cement (100% excess over Pictured Cliffs perforations) and spot a plug to isolate the PC interval and top, Fruitland, Kirtland and Ojo Alamo tops. PUH and WOC. TIH and tag TOC 50' higher than Ojo Alamo top. If tag is low spot additional cement as required. TOH.
4. **Plug #2 (Nacimiento perforations and top, 2512' – 2012')**: Round trip 5.5" scraper or gauge ring to 2512'. TIH and set 5.5" CR or CIBP at 2512'. Attempt to pressure test casing to 800 psi. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 63 sxs Class B cement and spot a balanced plug inside casing above CR or CIBP to isolate the Nacimiento top. PUH.
5. **Plug #3 (8-5/8" Surface casing shoe, 257' - Surface)**: Attempt to pressure test the bradenhead 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 35 sxs cement and spot a balanced plug from 257' 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 casing from 257' and the annulus from the squeeze holes to surface. Shut in well and WOC.
6. ND BOP and cut off wellhead below surface casing flange. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location per BLM stipulations.

# Jicarilla 30-03-34 #2

## Proposed P&A

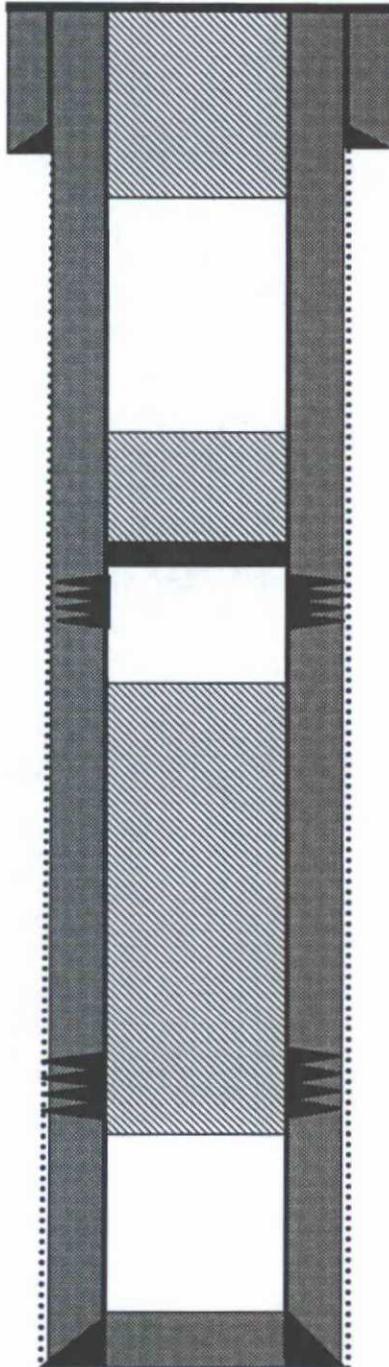
East Blanco PC/ Cabresto Canyon Tertiary

440' FNL & 440' FEL, Section 34, T-30-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26101

Today's Date: 2/19/16  
Spud: 12/6/99  
PC Comp: 12/12/99  
CCT Comp: 1/15/00  
Elevation: 7189' GI  
7201' KB

12-1/4" Hole



TOC circulated to surface

8-5/8" 24#, K-55 Casing set @ 207'  
Cement with 130 sxs, circulated to surface

Plug #3: 257' - 0'  
Class B cement, 35 sxs

Plug #2: 2512' - 2012'  
Class B cement, 63 sxs

Set CR @ 2512'

Nacimiento Perforations:  
2562' - 2714'

Plug #1: 3678' - 3084'  
Class B cement, 85 sxs

Nacimiento @ 2062'

Ojo Alamo @ 3134'

Kirtland @ 3365'

Fruitland @ 3520'

Pictured Cliffs @ 3618'

Pictured Cliffs Perforations:  
3618' - 3628'

7-7/8" Hole

5.5" 15.5# J-55 Casing @ 3875'  
Cement with 825 sxs, Circulated 82 sx to  
surface.

3920' TD  
3802' PBD

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## Current

East Blanco PC/ Cabresto Canyon Tertiary

440' FNL & 440' FEL, Section 34, T-30-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26101

Today's Date: 2/19/16  
Spud: 12/6/99  
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Elevation: 7189' GI  
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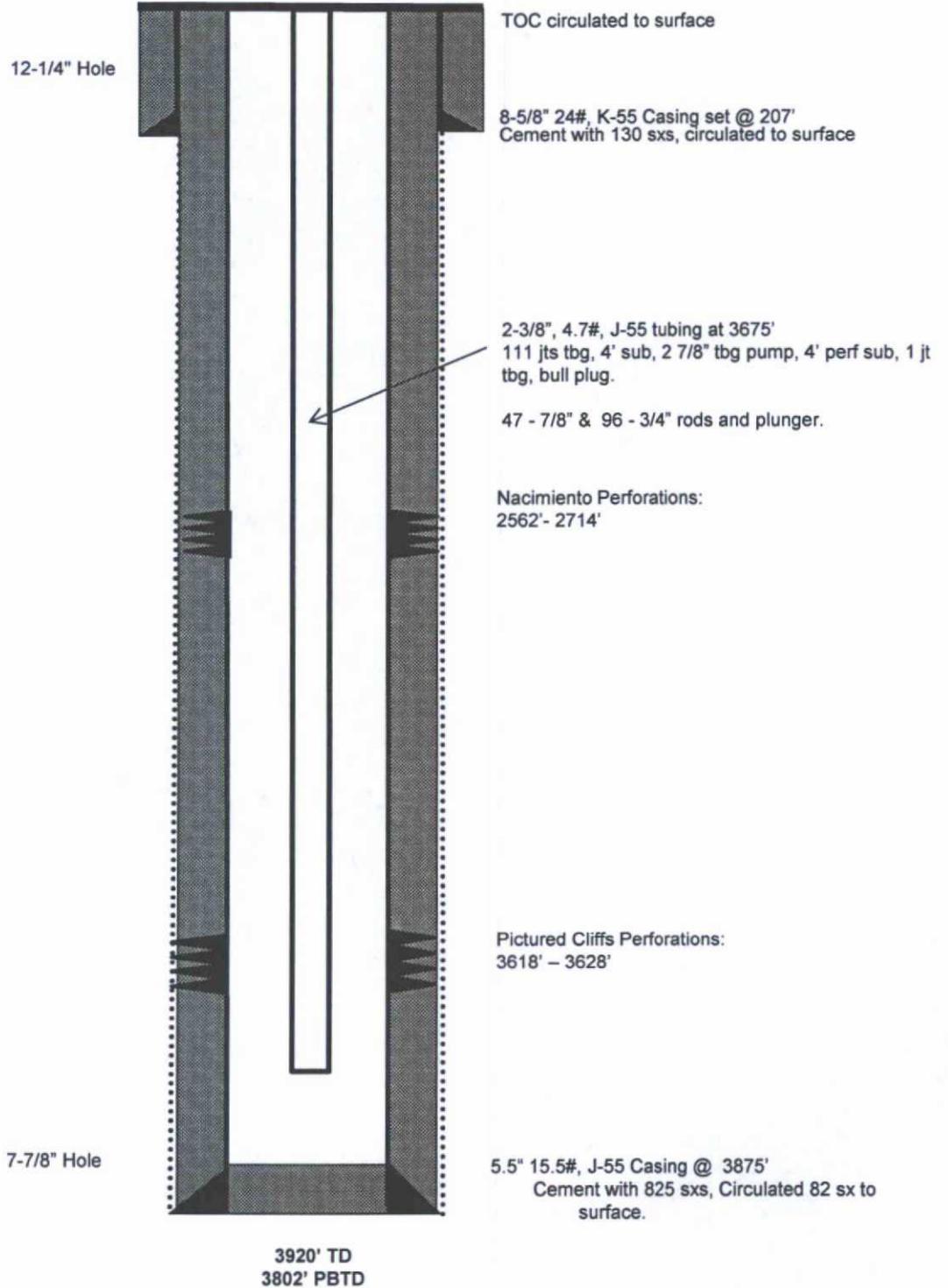
Nacimiento @ 2062'

Ojo Alamo @ 3134'

Kirtland @ 3365'

Fruitland @ 3520'

Pictured Cliffs @ 3618'



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: Jicarilla 30-03-34 #2

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - a) Bring the top of plug #2 to 1897 ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 1947 ft. Adjust cement volume accordingly.

***High to Very High concentrations of H<sub>2</sub>S (187 ppm – 1,731 ppm GSV) have been reported in wells which produce gas from the San Jose, Nacimiento and Ojo Alamo fms. within a 1 mile radius of this location. It is imperative that H<sub>2</sub>S monitoring and safety equipment be on location during P&A operations at this well site.***

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.