



## PLUG AND ABANDONMENT PROCEDURE

May 7, 2015

### Jicarilla 29-03-2 #1

East Blanco PC /Cabresto Canyon; Tertiary  
2000' FNL, 1700' FWL, Section 2, T29N, R3W, Rio Arriba County, NM  
API 30-039-26031 / 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 , No \_\_\_\_\_, Unknown \_\_\_\_\_.  
Tubing: Yes , No \_\_\_\_\_, Unknown \_\_\_\_\_, Size 2-3/8", Length 3810'  
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 tops & Ojo Alamo interval, 3624' – 3152')**: Round trip 5.5" csg scraper to 3624' or as deep as possible. TIH and set 5.5" CR or CIBP at 3624'. Pressure test tubing to 1000#. Mix 70 sxs Class B cement (30% excess due to long plug) and spot a plug to isolated the Pictured Cliffs, Fruitland and Kirtland tops & through the Ojo Alamo interval. PUH and WOC. TIH and tag TOC 50' higher than Ojo Alamo top. If tag is low spot additional cement as required. TOH.  

**See CoA**
4. **Plug #2 (Nacimiento top, 2218' – 2118')**: Mix 17 sxs Class B cement and spot a balanced plug inside the casing to isolate the Nacimiento top. TOH.
5. **Plug #3 (San Jose perforations, 1560' – 1460')**: TIH and set 5.5" CR at 1560'. Attempt to pressure test casing to 800#. If casing does not test then spot or tag subsequent plugs as appropriate. Mix 17 sxs Class B cement and spot a balanced plug inside casing above CR to isolate the San Jose interval. PUH.
6. **Plug #5 (8-5/8" Surface casing shoe, 303' - 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 40 sxs cement and spot a balanced plug from 303' 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 303' and the annulus from the squeeze holes to surface. Shut in well and WOC.
7. 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 29-03-2 #1

## Current

East Blanco PC/ Cabresto Canyon Tertiary

2000' FNL & 1700' FWL, Section 2, T-29-N, R-3-W, Rio Arriba County, NM

Long: \_\_\_\_\_ / Lat: \_\_\_\_\_ / API 30-039-26031

Today's Date: 5/7/15  
Spud: 1/20/00  
Comp: 7/27/00  
Elevation: 7207' GI  
7219' KB

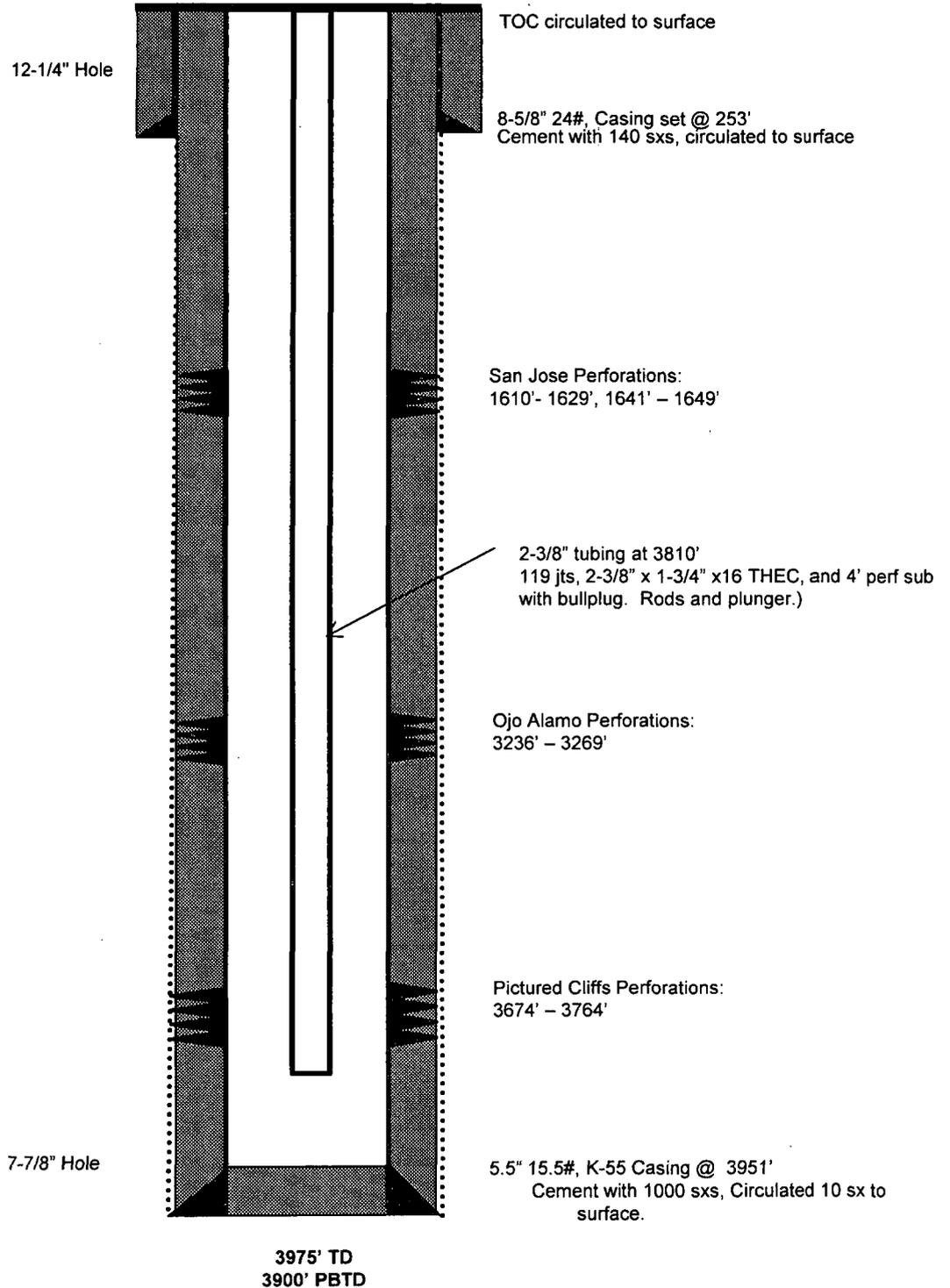
Nacimiento @ 2168'

Ojo Alamo @ 3202'

Kirtland @ 3443'

Fruitland @ 3560'

Pictured Cliffs @ 3673'





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 29-03-02 #1

CONDITIONS OF APPROVAL

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Leases."
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 1975 ft. to cover the Nacimiento top. Adjust cement volume accordingly.

Note: Operator reports low concentrations of H<sub>2</sub>S at this location (46 ppm GSV). Also, low to high concentrations of H<sub>2</sub>S (2-187 ppm GSV) have been reported in wells 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 the plugging operations at this wellsite.

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.