#### PLUG AND ABANDONMENT PROCEDURE

April 30, 2018

### **New Mexico State #3**

Nageezi-Gallup

1650' FNL,	1650' FEL,	Section 32, T	24N, R8W,	San Juan	County, N	New Mexico
	API 30-0	45-25010 / Lo	ng	_ /		

0 All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing Note: wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield. 1. This project will use 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\_X\_, No\_\_\_\_, Unknown\_\_\_.
Tubing: Yes\_X\_, No\_\_\_\_, Unknown\_\_\_\_, Size\_\_\_\_2-3/8"\_\_\_, Length\_\_5616'\_\_\_. Packer: Yes\_\_\_\_, No\_X\_, Unknown\_\_\_\_, Type\_\_\_\_\_ surface or a CBL log was not previously run. This procedure is prepared with the

- 1. NOTE: BLM requires a CBL log to be run on all wells where the cement did not circulate to understanding that it may be modified based on the TOC from the CBL.
- 2. Plug #1 (Gallup perforations and top, 5227' 5127'): R/T 5.5" gauge ring or mill to 5227'. RIH and set 5.5" CR at 5227'. Pressure test tubing to 1000#. Circulate hole clean. Attempt to pressure test casing to 800#. If casing does not test then spot or tag subsequent plugs as necessary. If casing does not test then mix and pump 25 sxs Class G cement and spot a balanced plug inside casing to isolate the Gallup perforations and top. PUH and WOC; tag and top off cement if necessary.

If casing tests then spot 18 sxs Class G cement. PUH.

3. Plug #2 (Mancos top, 4470' - 4370'): If casing did not test then mix and pump 25 sxs Class G cement and spot a plug inside casing to isolate the Mancos top. PUH and WOC; tag and top off cement if necessary.

If casing tested then spot 18 sxs Class G cement and spot a balanced plug. PUH.

4. Plug #3 (Mesaverde top, 3366' – 3266'): If casing did not test then mix and pump 25 sxs Class G cement and spot a plug inside casing to isolate the Mesaverde top. PUH and WOC; tag and top off cement if necessary.

If casing tested then spot 18 sxs Class G cement and spot a balanced plug. PUH.

2725 - 2425

- 5. Plug #4 (Chacra top, <del>2611'</del> 2511'): Mix and pump 18 sxs Class G cement and spot a balanced plug inside casing to cover the Chacra top. PUH.
- 6. Plug #5 (Pictured Cliffs and Frutiland tops, 1886' 1654'): Mix and pump 34 sxs Class G cement and spot a balanced plug inside casing to cover through the Fruitland tops. TOH.
- 7. Plug #6 (Kirtland and Ojo Alamo tops, 1333' 1085'): Mix and pump 36 sxs Class G cement and spot a balanced plug inside casing to cover through the Ojo Alamo top. PUH.
- 8. Plug #7 (8-5/8" Surface casing shoe and Surface, 350' Surface): Perforate 4 squeeze holes at 350'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 108 sxs Class G cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
- ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A
  marker to comply with regulations. Record GPS coordinate for P&A marker on tower report.
  Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM
  stipulations

# New Mexico State #3

### Current

### Nageezi-Gallup

Today's Date: 4/30/18 1650' FNL, 1650' FEL, Section 32, T-24-N, R-8-W, San Juan County, NM Spud: 5/11/81 Lat: \_\_\_\_\_N / Lat: \_\_\_\_\_ W, API #30-045-25010 Completion: 7/7/81 Elevation: 7010' GR 7022'KB 12.25" hole 8.625", 23#, Casing set @ 300' Cement with 275 sxs, circulate to surface Per completion record of history CBL run 6/17/81. TOC 470'. Ojo Alamo @ 1135' Kirtland @ 1283' 2-3/8" tubing @ 5616' with rods and pump Fruitland @ 1704' Pictured Cliffs @ 1836' Chacra @ 2561' DV Tool @ 4570' Stage 2: Cemented with 850 sxs, lost circulation when drop plug; Mesaverde @ 3316' Mancos @ 4420' Gallup @ 5272' Gallup Perforations: 5277' - 5654' 5.5" 14#, casing set @ 5703' Stage 1: Cemented with 300 sxs, circulated 7-7/8" Hole

> TD 5700' PBTD 5663'

## **New Mexico State #3**

# Proposed P&A Nageezi-Gallup

Today's Date: 4/30/18

1650' FNL, 1650' FEL, Section 32, T-24-N, R-8-W, San Juan County, NM

Spud: 5/11/81 Completion: 7/7/81

Lat: \_\_\_\_\_N / Lat: \_\_\_\_\_ W, API #30-045-25010

Elevation: 7010' GR

7022'KB

12.25" hole

Class G cement, 108 sxs

Plug #7: 350' - 0'

8.625", 23#, Casing set @ 300' Cement with 275 sxs, circulate to surface

> Per completion record of history CBL run 6/17/81. TOC 470'.

> > Plug #6: 1333' ~ 1085' Class G cement, 36 sxs

> > Plug #5: 1886' - 1654' Class G cement, 34 sxs

Plug #4: 2611' - 2511' Class G cement, 18 sxs

Plug #3: 3366' - 3266' Class G cement, 25 sxs (excess cement due to note on slow casing leak from 3480' to 3811' (2013)

Plug #2: 4470' - 4370" Class G cement, 18 sxs

DV Tool @ 4570' Stage 2: Cemented with 850 sxs, lost circulation when drop plug;

Set CR @ 5227'

Plug #1: 5227' - 5127' Class G cement, 18 sxs

Gallup Perforations: 5277' - 5654'

5.5" 14#, casing set @ 5703' Stage 1: Cemented with 300 sxs, circulated

Ojo Alamo @ 1135'

Kirtland @ 1283'

Fruitland @ 1704'

Pictured Cliffs @ 1836'

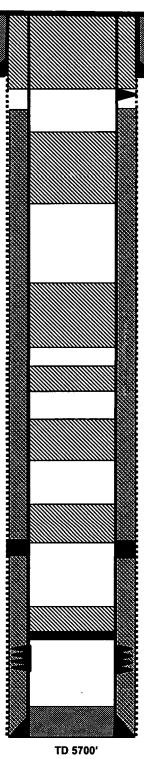
Chacra @ 2561'

Mesaverde @ 3316'

Mancos @ 4420'

Gallup @ 5272'

7-7/8" Hole



**PBTD 5663'**