

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
SEP 16 1996

Sundry Notices and Reports on Wells

1. Type of Well  
GAS

2. Name of Operator

**MERIDIAN OIL**

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

790' FSL, 1850' FEL, Sec. 4, T-27-N, R-11-W, NMPM

C

5. Lease Number

NM-048567

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number

Frontier E #1

9. API Well No.

30-045-13045

10. Field and Pool

Kutz Gal/Basin DK

11. County and State

San Juan Co, 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

It is intended to plug and abandon the subject well according to the attached procedure and wellbore diagram.

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OIL CON. DIV.  
BUREAU

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

Signed Deane W. Spencer (KLM2) Title Regulatory Administrator Date 9/16/96

(This space for Federal or State Office use)

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

CONDITION OF APPROVAL, if any:

A P E D

SEP 17 1996  
/s/ Deane W. Spencer

ENCLOSURE

## PLUG & ABANDONMENT PROCEDURE

### FRONTIER E #1

Gallup / Dakota

21784 / 21783

790' FSL, 1850' FEL

Unit O, Sec. 4, T27N, R11W, San Juan County

Long./Lat.: 108.005661 - 36.599030

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.

1. Install and test location rig anchors. Prepare blow pit. Comply to all NMOCD, BLM, and BROG safety regulations.
2. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. NU relief line. Blow down well and kill with water as necessary. ND wellhead and NU BOP. Test BOP.
3. Pull and tally 2-3/8" tubing (set @ 3897'). PU 180' of 1-1/4" IJ tubing, crossover, and 2-3/8" workstring. RIH to 6100' or as deep as possible.
4. **Plug #1 (Dakota isolation, and Gallup perforations, 6100' - 5504')**: Pump 30 bbls. water in tubing. Mix approximately 167 sxs Class B cement (50% excess, long plug) and spot a plug inside the 7" casing to cover the Dakota tubing stub, Gallup perms and Gallup tubing stub. POH and WOC. RIH and tag cement.
5. **Plug #2 (Mesaverde top, 3616' - 3516')**: Perforate 3 HSC squeeze holes at 3616' and 3516'. PU 7" cement retainer, RIH and set at 3566'. Establish rate into squeeze holes and attempt to circulate above retainer to surface. Mix and pump 64 sxs Class B cement; squeeze 26 sxs cement outside 7" casing and leave 38 sxs cement inside casing to cover Mesaverde top and upper squeeze holes. POOH to 3000' and reverse circulate tubing clean. PUH to 2000' and WOC. RIH and tag plug.
6. **Plug #3 (Pictured Cliffs and Fruitland tops, 2018' - 1724')**: POOH to 2018'. Mix 65 sxs Class B cement and spot a balanced plug inside casing to cover Fruitland top. POH with tubing.
9. **Plug #4 (Kirtland and Ojo Alamo tops, 1000' - 807')**: PT casing to 1000 psi. Perforate 3 HSC squeeze holes at 1000'. Establish rate into squeeze holes if casing tested. PU 7" cement retainer and RIH, set at 950'. Sting out and pressure test casing to 1000 psi. Sting into retainer and establish rate into squeeze holes. Mix 95 sxs Class B cement, squeeze 49 sxs cement outside 7" casing and leave 46 sxs cement inside casing to cover Kirtland and Ojo Alamo tops. POH and LD tubing and setting tool.
10. **Plug #5 (Surface, 278' - Surface)**: Perforate 3 HSC squeeze holes at 278'. Establish circulation out bradenhead valve. Mix and pump approximately 96 sxs Class B cement down 7" casing, circulate good cement out bradenhead valve. Shut in well and WOC.
11. ND BOP and cut off wellhead below surface casing. Install P&A marker to comply with regulations. RD, MOL, cut off anchors, and restore location.

Recommended:  9/13/96

Operations Engineer

Approval: \_\_\_\_\_

Production Superintendent

Contacts: Operations Engineer

Kevin Midkiff

326-9807

564-1653 (Pager)

# Frontier E #1

Current 9/5/96

Spud: 05-23-60  
Completed: 06-09-60  
Workovers: 4/16/95 - Attempt packer repair, failed. Chemical cut Gp & Dk tbg., POH. Left approx. 44' Gp tbg. & 497' Dk tbg. in hold. Found numerous holes in casing from 3965'-4400'. SD. Release rig w/plans to plug well.  
Elev. 6179' GL  
6191' KB

Gallup (DPNO 21784)  
Dakota (DPNO 21783)

790' FSL, 1850' FEL,  
Unit O, Sec. 4, T-27-N, R-11-W, San Juan County, NM  
Long./Lat.: 108.005661 - 36.599030

Logs: E. Perf record, Sonic, TS, Microlog,  
Radioactive Log.

12-1/4" Hole

Ojo Alamo @ 857'

Kirtland @ 950'

Fruitland @ 1774'

Pictured Cliffs @ 1968'

Mesa Verde @ 3566'

Cliffhouse @ 3572'

Menefee @ 3606'

Point Lookout @ 4423'

Gallup @ 5554'

Dakota tbg. cut @ 6000'  
2-3/8", 4.7#, J55, IJ, EUE set @ 6497'  
w/Parallel String Anchor (Baker Model 699) set in tbg. @ 6014'

Dakota @ 6544'

8-3/4" Hole

PBTD 6703'

TD 6753'

9-5/8" 36# J55, Csg set @ 228'  
Cmt. w/ 200 sxs Neat w/ 2% CaCl2  
Circulate to surface

TOC @ 1550' (C-Log)

Model J Stage Tool @ 2207'

2-3/8" EUE tbg. set @ 3897'

Holes in casing from 3965' - 4400'

TOC @ 4830' (C-Log)

Gallup tbg. cut @ 5976'  
2-3/8", 4.7#, J55, IJ, EUE set @ 6014'  
Latching sub set in String Anchor (Baker Model 699) @ 6014'  
Gallup perms @ 5897' - 5919' - 2 SPF  
Frac'd w/51,240 gl. oil, 50,000# 10/20 sd.  
Perfs @ 5968' - 5993' w/2 SPF  
Frac'd w/29,568 gl. oil, 20,000# 10/20 sd.  
Re-frac'd w/46,452 gl. oil, 40,000# 10/20 sd.

Model D Packer @ 6480'

Dakota perms @ 6545' - 6587' w/4 spf  
Frac'd w/46,620 gl. oil, 50,000# 20/40 sd.

7", 23#, J55 & N80 csg set @ 6746',  
1st Stage: 200 sxs 1:1 Poz w/ Gilsonite  
2nd Stage: 100 sxs Neat

# Frontier E #1

## Proposed P & A

Gallup (DPNO 21784)

Dakota (DPNO 21783)

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 Elev. 6179' GL  
 6191' KB  
 Logs: IE, Perf record, Sonic, TS, Microlog, Radioactive Log

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 2-3/8", 4.7#, J55, IJ, EUE set @ 6497'  
 w/ Parallel String Anchor (Baker Model 599) set in tbg. @ 6014'

Dakota @ 6544'

12-1/4" Hole

8-3/4" Hole

PBTD 6703'

TD 6753'

9-5/8" 36# J55, Csg set @ 229'  
 Cmt. w/ 200 sxs Neat w/ 2% CaCl<sub>2</sub>  
 Circulate to surface

Plug #5: 278' - Surface

Perf @ 278'

Cmt. w/96 sxs Class B

Plug #4: 1000' - 807'

Perf @ 1000'; CR @ 950'; 95 sxs Class B

Cmt. w/49 sxs inside, 46 sxs outside

TOC @ 1550' (C-Log)

Plug #3: 2018' - 1724'

Cmt. w/65sxs Class B

Model J Stage Tool @ 2207'

Plug #2: 3616' - 3516'

Perf @ 3616'; and 3516'; CR @ 3566'; 64 sxs Class B

Cmt. w/38sxs inside, 26 sxs outside

Holes in casing from 3965' - 4400'

TOC @ 4830' (C-Log)

Gallup tbg. cut @ 5976'

2-3/8", 4.7#, J55, IJ, EUE set @ 6014'

Latching sub set in String Anchor (Baker Model 699) @ 6014'

Gallup perms @ 5897' - 5919' - 2 SPF

Frac'd w/51,240 gl. oil, 50,000# 10/20 sd.

Perfs @ 5968' - 5993' w/2 SPF

Frac'd w/29,568 gl. oil, 20,000# 10/20 sd.

Re-frac'd w/46,452 gl. oil, 40,000# 10/20 sd.

Plug #1: 6100' - 5504'

Cmt. w/167 sxs Class B (50% excess)

Model D Packer @ 6480'

Dakota perms @ 6545' - 6587' w/4 spf

Frac'd w/46,620 gl. oil, 50,000# 20/40 sd

7", 23#, J55 & N80 csg set @ 6746'

1st Stage: 200 sxs 1:1 Poz w/ Gilsonite

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