

submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
BLM

Sundry Notices and Reports on Wells

93 JUN 11 PM 3:35

1. Type of Well  
GAS

5. Lease Number

070 FARMINGTON, NM

6. If Indian, All. or  
Tribe Name

2. Name of Operator  
MERIDIAN OIL

7. Unit Agreement Name

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499 (505) 326-9700

8. Well Name & Number  
Klein #26E

9. API Well No.

4. Location of Well, Footage, Sec., T, R, M  
790' FSL, 1750' FEL Sec. 33, T-26-N, R-6-W, NMPM

10. Field and Pool  
Basin Dk/Blanco MV

11. County and State  
Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

☒ Notice of Intent

☒ Abandonment

☒ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Subsequent Report

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Final Abandonment

☐ Casing Repair

☐ Water Shut off

☐ Altering Casing

☐ Conversion to Injection

☐ Other -

13. Describe Proposed or Completed Operations

Due to fish left in hole, it is intended to plug and abandon this well per the attached procedure and wellbore diagram. All plugs inside pipe will have 50% excess cement.

Verbal approval for this work was received from S. Mason at 10:30 am on 6-4-93.

RECEIVED  
JUN 24 1993  
OIL CON. DIV.  
DIST. 3

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

Signed [Signature] Title Regulatory Affairs Date 6/11/93

(This space for Federal or State Office use)

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

CONDITION OF APPROVAL, if any:

APPROVED  
JUN 28 1993  
DISTRICT MANAGER

NMOCD

### **Detailed Abandonment Discussion:**

Drake Rig # 22 moved on and started workover operations on May 25, 1993. The 2-3/8" tubing was pulled, a gauge ring run, and a wireline set-tubing retrievable bridge plug was set at 5410' above the Dakota perforations. The hole was then loaded with water, the bridge plug pressure tested to 3800 psi, and the 4-1/2" casing pressure tested to 3800 psi for 10 minutes. A cement bond log indicated top of cement to be at 4845'. The first stage, Lower Point Lookout, perforations were shot from 5304' to 5166'. The perforations were then broken down with hydrochloric acid and balls down the casing. A final ball-off rate of 0.75 BPM @ 3800 psi indicated only 2 holes of the total 28 remained open. A junk basket recovered 18 balls with 14 hits. The treesaver was nipped up to the wellhead, and the Lower Point Lookout was foam stimulated with 168,500# 20/40 sand, 63,000 gal 30# linear gel, and 2.8 MMSCF nitrogen at 35 barrels-per-minute (BPM) and 3200 psi. The stimulation was performed as designed. The shut-in pressure upon completion of the stimulation remained at 1200 psi.

A second wireline set-tubing retrievable bridge plug was set 5150'. The casing and bridge plug were then pressure tested. As the pressure test approached 3600 psi, there was a distinct break in pressure to 1600 psi. Rate was established down casing at 1 BPM and 2800 psi. There was a possibility at this time that the bridge plug may have failed. A packer was tripped-in-hole and sand was tagged 50' above the retrievable bridge plug. The bridge plug was pressure tested to 2500 psi and held pressure. The casing, however would not hold pressure. The casing leak was located at 4570', within the Meneffe Interval of the Mesaverde, above the top of cement. The packer was set at 4236', a rate of 1.5 BPM @ 1200 psi was established. Thirty-one and one-half (31.5) barrels of cement were pumped below the packer and hesitated in 15 minute one-half barrel stages to 2500 psi, displacement was calculated to be below packer. The cement was allowed to set for four (4) hours, then the packer was released, but would not come up hole. A freepoint/chemical cutter was run down tubing through the packer and six (6') feet below without tagging cement. The tubing was then chemical cut at 4228' and tripped out of the hole.

For the next nine (9) days, various milling, cutting, & jarring trips failed to remove the packer. On day twelve (12) of workover operations, the casing failed to hold pressure. This failure indicated that the fishing & cutting operations had gone outside of the 4-1/2" casing.

Since the two (2) retrievable bridge plugs would have to be pulled out of the hole past this rupture, and the repaired casing withstand a potential 2000 psi flowing pressure from the prior foam stimulation, the decision to plug and abandon the wellbore was made. Each of the bridge plugs had been pressure tested in excess of any foreseeable pressure.

The attached abandonment procedure was verbally approved by Steve Mason of the Farmington Bureau of Land Management (BLM) office at 10:30am on June 4, 1993. BLM representative Leonard Bixler was on location during plug & abandonment operations.

**Klein # 26E  
T26NR06WSec33UnitO  
Dakota/Mesaverde Immediate  
Plug & Abandonment**

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This is an ammended procedure to the prior submitted. Due to problems encountered in the workover, it has become necessary to plug & abandon the wellbore. This procedure is submitted as an appropriate plug & abandonment of this wellbore given its current status. BLM approval is required before abandonment can occur. The BLM phone number is 327-5344. The NMOCD phone number is 334-6178. All Cement will be Class 'B' 15.6 ppg w/ appropriate additives.

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1. Ensure Contact & Approval of all appropriate governmental agencies. VERBAL APPROVAL OBTAINED @ 10:30am per Steve Mason BLM. 6-4-93
2. TOOH with current work string. Document material currently in wellbore.
3. Plug # 1. PU 4-1/2" cement retainer. TIH on 2-3/8". Set retainer @ 4100'. Test casing to 500psi. Establish & record rate below retainer. Mix & pump 64 sxs Class 'B' cement (100% Excess) below retainer. Unsting & pump 2 sxs cement on top of retainer. This will cover the packer area for 100' inside & outside of pipe from 4236' to 4075'. Reverse out & TOOH.
4. RU wireline. Run GR-CBL-CCL from current PBTD to surface. Note DV tool @ 3066'. Ensure cement coverage is behind pipe across Pictured Cliffs (2862' Top), Fruitland (2654' Top), and Ojo Alamo (2150' Top). Ensure cement coverage behind pipe is 50' above and below these above mentioned formations. Contact Production Engineering for squeeze procedure if the above cement coverage is not sufficient.
5. Plug # 2. Spot 15.5 bbls 9.0 ppg 50 visc mud inside pipe from 4075' to 3100'. PU and reverse out with water. LD unneeded jts.
6. Plug # 3. Spot 38 sxs Class 'B' 15.6 ppg cement w/ 2% CaCl inside casing. This will bring cement coverage inside & outside pipe from 3100' to 2600', coverage of Pictured Cliffs & Fruitland. PU and reverse out with water. LD unneeded jts.
7. Plug # 4. Spot 5 bbls 9.0 ppg 50 visc mud inside pipe from 2600' to 2300'. PU and reverse out with water. LD unneeded jts.
8. Plug # 5. Spot 16 sxs Class 'B' 15.6 ppg cement w/ 2% CaCl inside casing. This will bring cement coverage inside & outside pipe from 2300' to 2100', coverage of the Ojo Alamo. PU and reverse out with water. LD unneeded jts.
9. Plug # 6. Spot 24 bbls 9.0 ppg 50 visc mud inside pipe from 2100' to 580'. PU and reverse out with water. TOOH & LD unneeded jts.
10. RU wireline. Perforate 2 - 0.50" squeeze holes @ 580' (This will cover Nacimiento). RD wireline.
11. Plug # 7. PU 4-1/2" cement retainer. TIH on 2-3/8". Set retainer @ 530'. Test casing to 500 psi. Establish & record rate below retainer. Mix & pump 24 sxs below retainer(100% Excess). Unsting & pump 4 sxs cement on top of retainer. This will place a 100' plug inside & outside pipe across the Nacimiento from 580' to 480'. Pull up.
12. Plug # 8. Continue to place 15.5 sxs Class 'B' 15.6 ppg cement inside pipe from 480' to 275'. Reverse out. TOOH & LD remaining tubing.

13. RU wireline. Perforate 2 - 0.50" squeeze holes @ 275' (50' below surface casing shoe). RD wireline.
14. Plug # 9. Establish rate down casing and out bradenhead. Mix & circulate 131 sxs Class 'B' 15.6 ppg cement w/ 2% CaCl (50% Excess) down casing and out bradenhead. This will place cement inside & outside to surface.
15. Cut off WH below casinghead. Install dry hole marker per governmental regulations.
16. RD & move to next location.

Approved:

\_\_\_\_\_  
J. A. Howieson  
Drilling Superintendent

Engineering T. E. Mullins

BLM  
NMOCD

326-9546-W  
325-9361-H  
327-5344  
334-6178

**Klein # 26E**  
**T26NR06W330**  
Dakota/Mesaverde Immediate  
Plug & Abandonment

