

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
1800' FSL, 1635' FWL Sec. 31, T-28-N, R-1-W, NMPM

5. Lease Number
NM-0764

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Knauff #4

9. API Well No.
30-045-

10. Field and Pool
Fulcher Kutz PC

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 recomplate this wellbore to the Basin Fruitland Coal
according to the attached procedure and wellbore diagrams.

RECEIVED

AUG - 6 1993

OIL CON. DIV.
DIST. 3

CO. 100-100-1 NM

8/2/93 2:19:32

RECEIVED
BEM

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

Signed [Signature] (KAS) Title Regulatory Affairs Date 8/2/93

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

APPROVED

AUG 03 1993

DISTRICT MANAGER

NM(CD)

KNAUFF #4

CURRENT

FULCHER & UTZ PICTURED CLIFFS

UNIT K, SECTION 31, T28N, R10W, SAN JUAN, NM

DATE COMPLETED: 12/17/55

8-5/8" 27.0# CSG SET @ 102'
CIRC. CMT TO SURFACE

1" 1.7# TBG SET @ 1831'

PICTURED CLIFFS @ 1828'

5-1/2" 14# CSG SET @ 1826'
TOC @ 1443' (75%)

OPEN HOLE FRACED @ 1826'-1840'

TD 1839'

KNAUFF #4

PROPOSED

FULCHER K JTZ PICTURED CLIFFS

UNIT K, SECTION : 1, T28N, R10W, SAN JUAN, NM

DATE COMPLETED: 12/17/55

8-5/8" 27.0# CSG SET @ 102'
CIRC. CMT TO SURFACE

2-3/8" TBG SET @ 1810'

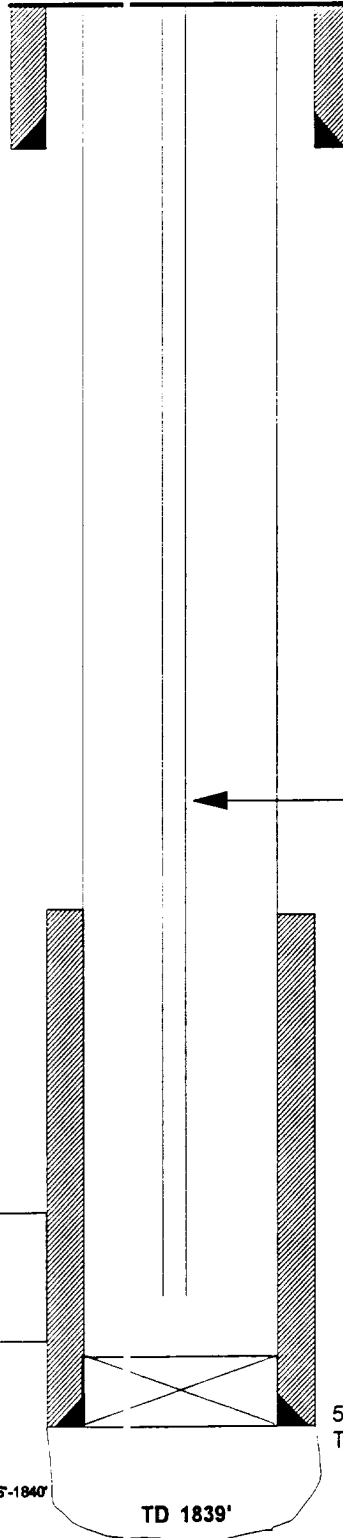
1645'
FTC PERFS:
1824'

PICTURED CLIFFS @ 1828'

5-1/2" 14# CSG SET @ 1826'
TOC @ 1443' (75%)

OPEN HOLE FRACED @ 1826'-1840'

TD 1839'



Knaiff # 4
Recommend Completion Procedure
Unit K Section 31 T28N R10W

NOTE: FRUITLAND COAL DEPTHS ARE ESTIMATED FROM THE ATTACHED "TYPE" LOG.
ADJUST ALL ASSOCIATED DEPTHS WHEN LOGS ARE RUN.

1. Test rig anchors and repair if necessary. Install 1-400 bbl frac tank on location and fill with 2% KCl water. Filter all water to 25 microns.
2. MOL and RU. Comply to all NMOCD, EILM and MOI rules & regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
3. TOOH w/ 1831' of 1" tbg.
4. TIH w/ 4-3/4" bit and 5-1/2" 14# casing scraper on 2-3/8" tbg and clean out to TD of 1839'. TOOH.
5. RU wireline and run CCL-GR-CNL from TD (1839') to surface. Determine depth of casing shoe and correlate formation depths to existing "type" log.
6. After casing shoe depth is determined wireline set 5-1/2" CIBP as close to the bottom of the Fruitland coal as csg shoe will allow approx (1825').
7. Load hole w/ 2% KCl water. Run CBL. If CBL appears inadequate, re-run log with 1000 psi surface pressure. If bond still appears unacceptable, contact production engineering. Send copy of CBL to production engineering.
8. Pressure Test csg to 1000 psi. If pressure test fails, locate holes and contact Production Engineering.
9. RU wireline and perf the approximate coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (Production Engineering will choose the exact perms from the compensated neutron density log).

1801'-1824'
(Depths approximated from "TYPE" log)

*****LOWER COAL*****

10. TIH w/ 3-1/2" 9.3# N-80 FJ frac string and set fullbore pkr @ 1650'. Load backside w/ 2% KCl water.
11. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat lower coal according to attached schedule w/ 70Q foam at 20 BPM with 60,000 lbs of 20/40 mesh Arizona sand. Flush with 605 gals gel. Estimated treating pressure is 1525 psi. **MAXIMUM PRESSURE IS LIMITED TO 4000 PSI!** Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight **only**.

Knauff # 4
Recommend Completion Procedure
Unit K Section 31 T28N R10W
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12. SI well for 3 hours for gel break.
13. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
14. Re-fill 400 bbl frac tank with 2% KCl water and filter to 25 microns.
15. When well ceases to flow, TOOH w/ pkr and frac string. TIH w/ 2-3/8" tbg and csg scraper and CO hole to 1750'. TOOH. TIH w/ 2-3/8" tbg and set 5-1/2" RBP @ 1700'. TOOH.
16. RU wireline and perf the approximate coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (Production Engineering will choose the exact perms from the compensated neutron density log).

1645-1654'
(Depths approximated from "TYPE" log)

*****UPPER COAL*****

17. TIH w/ frac string and set pkr @ 1690'. Pressure test BP to 3000 psi surface pressure.
18. Release pkr, PU to 1500', load backside and set pkr @ approx 1500'.
19. RU treatment company for frac. Hold safety meeting with all personnel. Pressure test surface lines to 5000 psi. Fracture treat upper coal according to attached schedule w/ 70Q foam at 30 BPM with 50,000 lbs of 20/40 mesh Arizona sand. Flush with 550 gals 2% KCl water. Estimated treating pressure is 1850 psi. **MAXIMUM PRESSURE IS LIMITED TO 4000 PSI!** Monitor backside and braden head pressures during frac. Monitor bottomhole and surface treating pressure, rate, foam quality and sand concentration with computer van. Frac during daylight only.
20. SI well for 3 hours for gel break.
21. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
22. When well ceases to flow, TOOH w/ pkr and frac string. TIH w/ 2-3/8" tbg and 4-3/4" bit and clean out upper zone until sand flow stops. Take Pitot gauge before releasing BP. Release RBP set @ 1700'. TOOH. TIH & clean out lower coal to PBD(1825') until sand flow stops. TOOH.

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Recommend Completion Procedure
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23. TIH w/ 2-3/8" tbg w/ standard seating nipple: one jt off bottom and pump off plug on bottom and land tbg string @ 1810'.
24. ND BOP and NU independent wellhead. Pump off plug. Take final Pitot gauge. Rig down & release rig.

Approve:

J. A. Howieson

VENDORS:

Wireline:

Schlumberger

325-5006

Fracturing:

HOWCO

325-3575

KAS:kas