

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

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
1400' FNL, 830' FEL Sec. 27, T-27-N, R-10-W, NMPM

5. Lease Number

SF-077951A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Frost #6

9. API Well No.

10. Field and Pool
Basin Ft Coal

11. County and State
San Juan 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 - stimulate Fruitland

13. Describe Proposed or Completed Operations

It is intended to repair the casing and stimulate the Fruitland Coal in this well per the attached procedure and wellbore diagram.

RECEIVED
SEP 17 1993
OIL CON.
DIST. 2

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

Signed [Signature] (SD) Title Regulatory Affairs Date 9/8/93

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

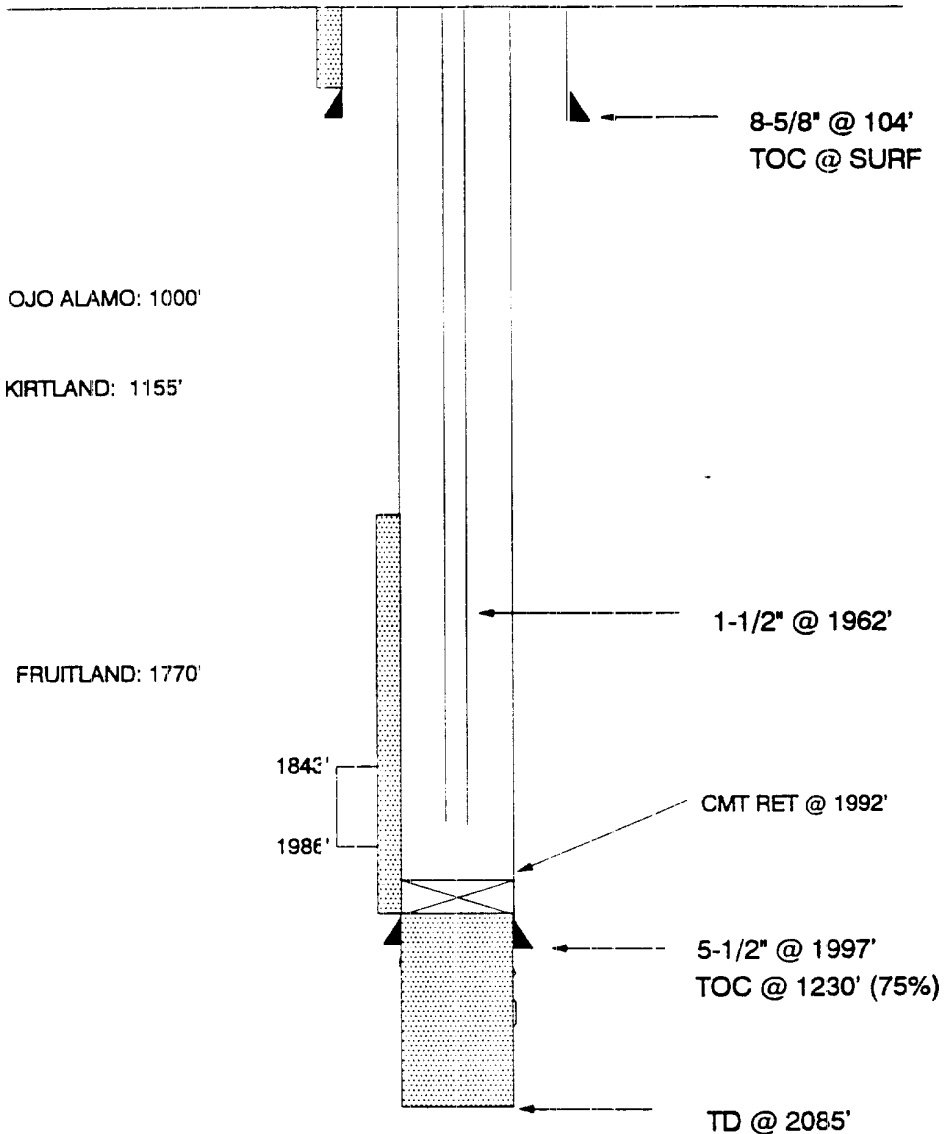
APPROVED

SEP 13 1993

DISTRICT MANAGER

NMOOD

CURRENT/PROPOSED
FROST # 6
NE/4 SECTION 27 T27N R10W
SAN JUAN COUNTY, NEW MEXICO



Frost # 6
Recommend Completion Procedure
NE/4 Section 27 T27N R10W

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, BLM and MOI rules & regulations. Hold safety meeting. ND wellhead. NU BOP. Test operation of rams. NU two relief lines.
3. TOOH w/ 1962' of 1-1/2" tbg, tally & inspect. PU 2-3/8" workstring.
4. TIH w/ 4-3/4" bit and 5-1/2" casing scraper on 2-3/8" tbg and clean out to PBTD of 1992'. TOOH. RIH and set 5-1/2" RBP @ 1800'. Load hole w/ water. RU wireline and dump 2 sxs sand on RBP. TOOH.
5. Pressure test csg to 500 psi to assure that holes exist in csg. TIH w/ workstring and pkr and pressure test under pkr to determine depth of deepest hole. TOOH.
6. RU wireline and run CBL-CCL-GR from PBTD (1800') to 150'. Run MTT-Calliper csg inspection log from PBTD to 150'. Send copy of CBL and MTT logs to production engineering.
7. PU and install csg spear. PU 5-1/2" csg to release csg slips. RU wireline and run "Free-Point". Determine csg Free-Point. Run chemical cutter through spear and cut casing at depth to be determined from MTT-Caliper log and "Free-Point".
8. Condition and circulate hole clean with mud. TOOH w/ 5-1/2" casing.
9. PU skirted mill. RIH and polish off top of 5-1/2" csg. TOOH.
10. RIH w/ new 5-1/2" csg w/ "Bowen Lead Seal" casing patch and tie into existing csg in well. Set seal. Pressure test csg and patch to 500 psi. When csg holds, set csg in slips and cut off top of csg.
11. TIH w/ retrieving head on 2-3/8" tbg and clean out to RBP. Release RBP set @ 1800' and TOOH.

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

12. RU wireline and perf the following coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (correlate depths to neutron density log).

1958-1966'
1982-1991'

Total: 17 feet: 68 holes

13. TIH w/ 3-1/2" 9.3# N-80 FJ frac string and set fullbore pkr between 1890' - 1930'. Load backside w/ 2% KCl water.

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Recommend Completion Procedure
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14. 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 30 BPM with 60,000 lbs of 20/40 mesh Arizona sand. Tag sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 16 bbls gel. Estimated treating pressure is 2000 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.
15. SI well for 3 hours for gel break.
16. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
17. Re-fill 400 bbl frac tank with 2% KCl water and filter to 25 microns.
18. When well ceases to flow, TOOH w/ pkr and frac string. TIH w/ 2-3/8" tbg and csg scraper to 1920'. TOOH. TIH and set 5-1/2" RBP @ 1895'.

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

19. RU wireline and perf the following coal interval w/ 4" HSC w/ 9.8 gram charges @ 4 SPF (correlate depths to neutron density log).

1842-1858'
1862-1866'

Total: 20 feet: 80 holes

20. TIH w/ frac string and set pkr @ 1893'. Pressure test BP to 3000 psi surface pressure.
21. Release pkr, PU to 1700', load backside and set pkr @ approx 1700'.
22. 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 60,000 lbs of 20/40 mesh Arizona sand. Tag sand with 0.4 mCi/1000# Ir-192 tracer. Flush with 15 bbls gel. Estimated treating pressure is 2100 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.
23. SI well for 3 hours for gel break.
24. After gel break, open well through choke manifold & monitor flow. Flow @ 20 bbls/hr, or less if sand is observed.
25. When well ceases to flow, TOOH w/ pkr and frac string. TIH w/ retrieving head on 2-3/8" tbg and clean out upper zone until sand flow stops. Take Pitot gauge before releasing BP. Release RBP set @ 1895' and TOOH.

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Recommend Completion Procedure
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26. TIH w/ 2-3/8" tbg and 4-3/4" bit and CO to PBTD. TOCH.
27. Run After-Frac-Gamma-Ray log from PBTD (1992') - Cjo Alamo depth of 1000'.
28. TIH w/ 1962' of 1-1/2" tbg w/ standard seating nipple one jt off bottom and pump-off plug on bottom. Land tbg string.
29. ND BOP and NU independent wellhead. Pump off plug. Take final Pitot gauge. Rig down & release rig.

Approve: _____

J. A. Howieson

VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	Western	327-6222
RA Tagging:	Protechnics	326-7133
Casing Patch:	Oil Field Rentals	327-4421
Chemical Cut:	Wireline Specialties	327-7141

KAS:kas

Pertinent Data Sheet - Frost #6

Location: 1400' FNL, 830 FEL, Section 27, T27N, R10W, San Juan County, New Mexico

Field: Basin Fruitland Coal

Elevation: 6226' GL

TD: 2085'

PBTD: 1992'

Completed: 4-19-53

DP #: 50881B - FTC

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Top/Cement</u>
12"	8 5/8"	32.0# 8-RD	104'	80 cf	Surface/Circ
7 7/8"	5 1/2"	17.0# 8-RD	1997'	150 cf	1230' (75%)

Tubing Record:

<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
1 1/2"	2.9#	1962'

Formation Tops:

Ojo Alamo:	1000'
Kirtland:	1155'
Fruitland:	1770'

Logging Record: GR-Computer Neutrons

Stimulation:

9/88: Perf'd: 1843', 1844', 1845', 1847', 1848', 1851', 1853', 1854',
1858', 1865', 1875', 1932', 1961', 1963', 1964', 1985',
1986.

Brkdn: Acid ball off with 600 gals 15% HCL and 36 balls. Recovered 28 balls.
Set cement retainer @ 1992'. Pump 23 sxs below retainer.

Workover History:

9/88: Perf'd and broke down as above.

Production History: 389 MMCF cumulative production with latest production
rate at 158 MCF/D.

Transporter: EPNG

