

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

- | | |
|--|---|
| <p>1. Type of Well
GAS</p> <p>2. Name of Operator
MERIDIAN OIL</p> <p>3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <p>4. Location of Well, Footage, Sec., T, R, M
790'FSL, 990'FEL, Sec.1, T-26-N, R-8-W, NMPM</p> | <p>5. Lease Number
SF-078622</p> <p>6. If Indian, All. or
Tribe Name</p> <p>7. Unit Agreement Name</p> <p>8. Well Name & Number
Luthy #1</p> <p>9. API Well No.
30-045-05992</p> <p>10. Field and Pool
Basin Fruitland Coal</p> <p>11. County and State
San Juan Co, NM</p> |
|--|---|

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

Type of Submission	Type of Action	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

It is intended to frac the existing Fruitland Coal well as per the attached procedure and wellbore diagram.

RECEIVED
NOV - 3 1994
OIL CON. DIV.
DIST. 3

OCT 21 PM 3:55
OCT 21 PM 3:55
OCT 21 PM 3:55

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

Signed *[Signature]* (MP1) Title Regulatory Affairs Date 10/21/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

NMOCB

APPROVED

OCT 21 1994

DISTRICT MANAGER

Luthy #1 FRTC
FRTC FRAC
P 1 26 8
Lat-Long: 36.510254-107.628510

LOWER FRTC:

1. Comply to all NMOCD, BLM, & MOI rules & regulations. MOL and RU completion rig. NU 6" 900 series BOP with flow tee and stripping head. NU blooie line and 2-7/8" relief line.
2. Spot and fill 3 - 400 bbl. frac tanks with 1% KCL water. Filter all water to 25 microns. On 1st stg, two tanks are for gel & one tank for breakdown water & flush. Usable gel water required for frac is 493 bbls.
3. Lower 1-1/2" tbg to check for fill. C.O. to PBTD2117' if necessary w/air mist. TOH.
4. Perf additional FRTC using w/2 spf @ 2109'-2104', 2100'-2088', 2006'-1999'. Total 48 holes. Perforate using 4" hollow steel carrier guns loaded w/Owen HSC-4000-302 19 gm. charges phased at 180 degrees & 2 spf. Avg. perf dia.= 0.45". Average penetration is 18" in Berea.
5. TIH w/7" pkr on 3-1/2" 9.3# P-110 w/shaved collars (4.25" O.D. 2.992" I.D.) rental frac string & set @ 2050'. Load backside w/1% KCL water. Breakdown & attempt to balloff lower FRTC perforations w/2500 gal. 15% HCL acid & 105-7/8" 1.3 sp gr RCN perf balls. Max pressure is 4500 psi. (1gal/1000 corrosion inhibitor). Lower pkr to 2112' to knock off perf balls. Reset pkr @ 2050'.
6. Monitor & record backside (open perfs) during frac. Fracture treat lower FRTC down frac string with 69,000 gals. of 70 quality foam using 30# gel as the base fluid & 130,000# 20/40 Arizona sand. Pump at 55 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Flush w/1% KCL water. Max. pressure is 6000 psi and estimated treating pressure is 3660 psi. Frac string friction @ 55 BPM is 2050 psi. Treat per the following schedule:

<u>Stage</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	20,000	6,000	----
1.0 ppg	10,000	3,000	10,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	20,000	6,000	60,000
4.0 ppg	5,000	1,500	20,000
5.0 ppg	4,000	1,200	20,000
Flush	(0)	(749)	-----
Totals	69,000	20,700	130,000#

LUTHY #1 - FRTC FRAC
Page 2

Shut well in after frac for six hours to allow gel to break.
Treat frac fluid with the following additives per 1000 gallons:

- * 30# LGC8 (Gel)
- * 3.0 gal. AQF2 (Non-ionic Surfactant)
- * 1.0# Gvw3 (Enzyme Breaker)
- * 1.0# B-5 (Breaker)

7. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible. TOH w/pkr & frac string.
8. Set 7" ret BP @ 2050' on wireline & top w/1 sx sand.
9. Fill 2 - 400 bbl. frac tanks with 1% KCL water. Filter all water to 25 microns. One tank is for gel & one tank for breakdown water. Usable gel water required for frac is 241 bbls.

UPPER FRTC:

10. TIH w/7" pkr & 3-1/2" 9.3# P-110 w/shaved collars (4.25" O.D. 2.99" I.D.) rental frac string & set @ 1800'. W/ 500 psi on backside, breakdown & attempt to balloff upper FRTC perforations w/2000 gal. 15% HCL acid & 50-7/8" 1.3 sp gr RCN perf balls. Max pressure is 4500 psi. (1 gal/1000 corrosion inhibitor). Lower pkr to 2040' to knock off perf balls. Reset pkr @ 1900'.
11. Fracture treat upper FRTC down frac string with 37,000 gals. of 70 quality foam using 30# gel as the base fluid & 60,000# 20/40 Arizona sand. Pump at 45 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, & sand concentration with computer van. Sand to be tagged with 0.4 mCi/1000# Ir-192 tracer. Flush w/foam. Max. pressure is 6000 psi and estimated treating pressure is 3360 psi. Pipe friction is 1425 psi @ 45 BPM. Treat per the following schedule:

Stage	Foam Vol. (Gals.)	Gel Vol. (Gals.)	Sand Vol. (lbs.)
Pad	8,000	2,400	----
1.0 ppg	5,000	1,500	5,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	5,000	1,500	15,000
4.0 ppg	5,000	1,500	20,000
Flush	(690)	(207)	
Totals	33,000	9,900#	60,000#

Shut well in after frac for six hours to allow the gel to break.
Treat frac fluid with the following additives per 1000 gallons:

- * 30# LGC8 (Gel)
- * 3.0 gal. AQF2 (Non-ionic Surfactant)
- * 1.0# Gvw3 (Enzyme Breaker)
- * 1.0# B-5 (Breaker)

LUTHY #1 - FRTC FRAC

Page 3

12. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. Take pitot gauges when possible. TOH w/pkr & frac string.
13. TIH w/ret head on 1-1/2" tbg & C.O. w/air/mist to ret BP @ 2050'. Take pitot gauges when possible. When well is sufficiently clean, and a sustained gas gauge has been taken, retrieve BP @ 2050' & TOH.
14. TIH w/notched collar on 1-1/2" tbg & C.O. to 2117'. Monitor gas and water returns and take pitot gauges when possible.
15. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 2117'-1700'.
16. TIH with 1-1/2" tbg with standard seating nipple one joint off bottom and again cleanout to 2117'. When wellbore is sufficiently clean, land tbg at 2050'KB. Take final water and gas samples & rates.
17. Replace any bad valves on wellhead. ND BOP and NU wellhead & tree. Rig down & release rig.

Approve: _____

PJB
Pat Bent

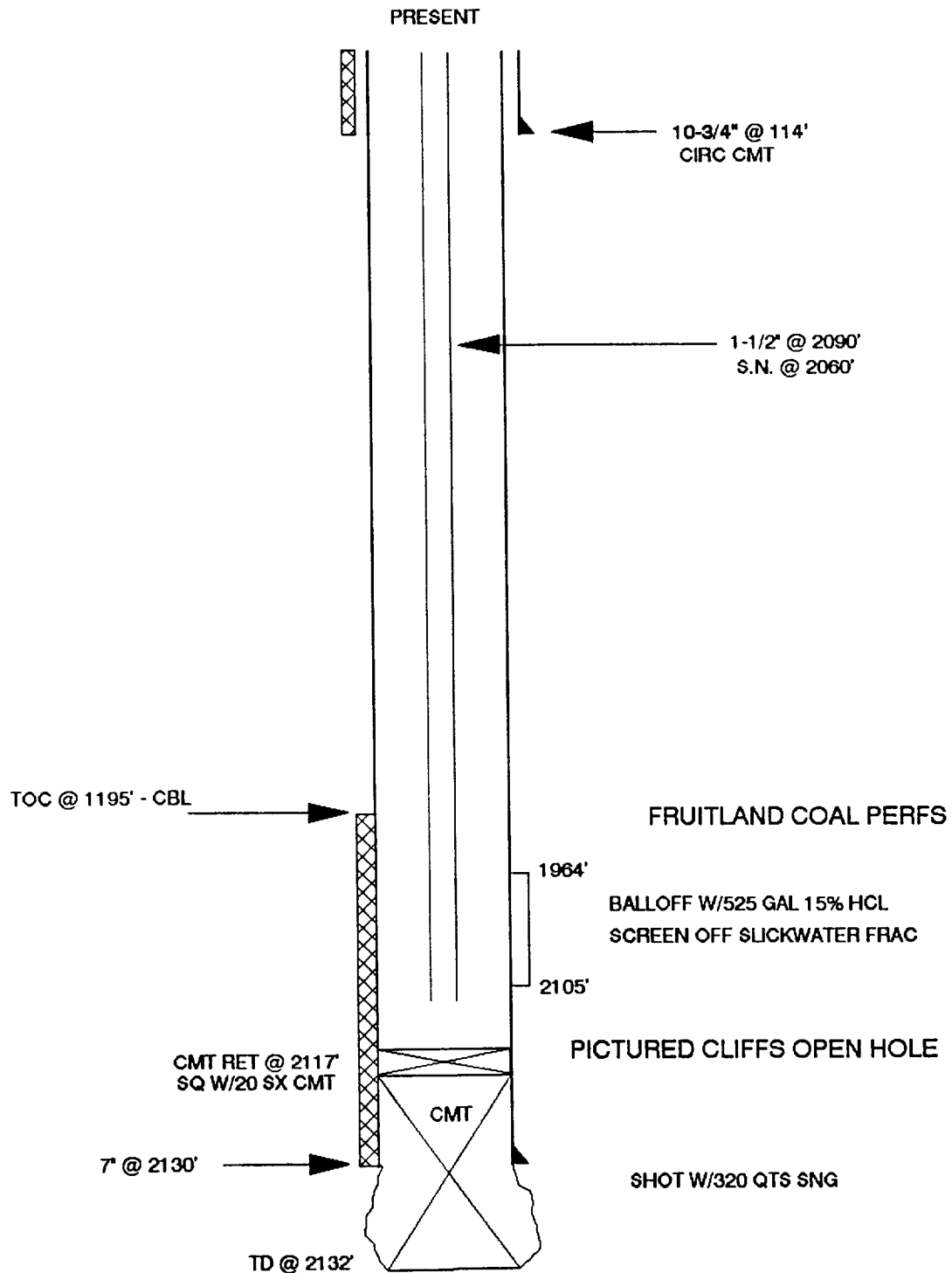
VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	Western	327-6222
RA Tagging:	Pro-Technics	326-7133

PMP

LUTHY #1 FRTC

UNIT P SECTION 1 T26N R8W
SAN JUAN COUNTY, NEW MEXICO



Pertinent Data Sheet - LUTHY #1 FRTC

Location: 790' FSL 990' FEL SEC. 1 T26N R08W, SAN JUAN COUNTY, N.M.

Field: Basin Fruitland Coal

Elevation: 6096' **TD:** 2132'
10' KB **PBTD:** 2117'

Prop#: 012601903

Lease: Federal SF-078622

DP#: 48436B

GWI: 100.0%

NRI: 82.50%

Completed: 6-23-52

Recompleted: 9-12-88

Initial Potential:

PC: AOF = 362 MCF/D, SICP=876 psi
FRTC: Pitot= 30 MCF/D

Casing Record:

<u>Hole Size</u>	<u>Csq. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Top/Cmt</u>
10-3/4"	10-3/4"	40# SMLS	114'	98 sx	Circ. Cmt
8-3/4"	7"	20# N/A	2130'	90 sx	1195' - CBL

Tubing Record: 1-1/2" 2.9# J-55 2100' 66 Jts
S.N. @ 2060'

Formation Tops:

Ojo Alamo	1382'
Kirtland	1400'
Fruitland	1870'
Pictured Cliffs	2110'

Logging Record: CBL (88), CNL (88)

Stimulation: Open hole (2130'-2215') Shot w/320 qts SNG.

Workover History: 9-12-88: Set Cmt Ret @ 2117' & sq w/20 sx cmt. Perfed FRTC @ 1964', 85', 2000', 02', 04', 31', 67', 88', 91', 93', 95', 97', 99', 2105' w/1 spf. Balled off perfs w/525 gal 15% acid. Slick water frac screened off as sand hit perfs. (May have reperfed)?? 10-21-92: Swabbed well in. 4-1-93: Swabbed well in.

Production History: PC cumulative = 236 MMCF @ 1176 BTU. FRTC 1st delivered 11-7-88. Tbg = 3 psi. Csg = 417 psi. Brad = 0 psi. Line = 100 psi. A 1" line runs to warer tank for rancher, no pressure, but flows a stream about 1/4" in diameter.

Pipeline: EPNG

PMP