

submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

RECEIVED

93 MAY 25 AM 5:14

1. Type of Well  
Gas

070 FARMINGTON, NM

Lease Number  
SF-080673

Indian, All. or  
Tribe Name

2. Name of Operator  
MERIDIAN OIL

7. Unit Agreement  
San Juan 27-4 Unit

3. Address & Phone Number of Operator  
P. O. Box 4289, Farmington, NM 87499 (505) 326-9700

8. Well Name & Number  
S J 27-4 Unit #15  
9. API Well No.

4. Location of Well, Footage, Section, T, T, M  
798' FNL, 1654' FEL, Section 6, T-27-N, R-04-W

10. Field and Pool  
Blanco Mesaverde  
11. County and State  
Rio Arriba, NM

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 perforate and fracture stimulate the Menefee, Cliffhouse, and Lewis intervals of the Mesaverde per the attached pertinent data sheet, procedure, and wellbore diagram.

RECEIVED

AUG - 5 1993

OIL CON. DIV  
DIST. 3

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

Signed [Signature] (KS) Title Regulatory Affairs Date 5/21/93

APPROVED

DISTRICT MANAGER

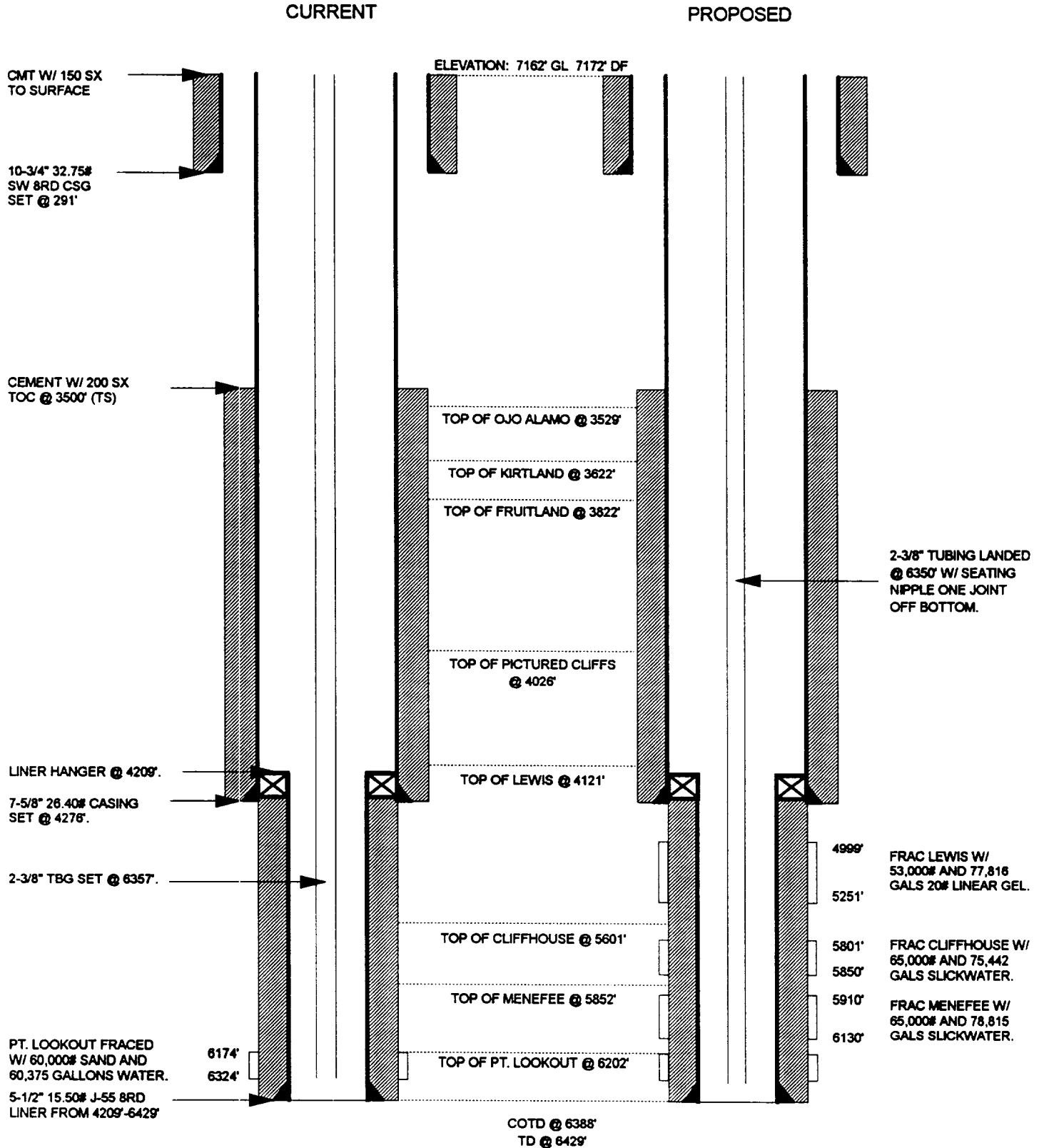
(This space for Federal or State Office use)

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

CONDITION OF APPROVAL, if any: \_\_\_\_\_

**San Juan 27-4 Unit #15  
NE/4 Section 6, T-27-N, R-04-W  
Rio Arriba County, New Mexico**

**Wellbore Schematic**



**San Juan 27-4 Unit #15  
NE/4 Section 6, T-27-N, R-04-W  
Recommended Recompletion Procedure  
Mesaverde Pay-Add Pilot**

Note: Notify BLM (326-6201) and NMOCD (327-5344) 24 hours before rig activity.

1. Inspect location. Test location rig anchors and repair if necessary. Install 1 X 400 bbl rig tank and fill with water. Install 6 X 400 bbl tanks and fill with 2,064 bbls of usable water.
2. Hold safety meeting. MIRU. Place fire and safety equipment in strategic locations. Comply with all MOI, BLM, and NMOCD rules and regulations. NU relief line and blooie line to laydown flow tank. Obtain and record all wellhead pressures.
3. Blow down tubing. If tubing will not blow down, kill well with water.
4. TOOH with 6357' of 2-3/8", 4.7# 8rd tubing. Visually inspect tubing and replace any bad joints.
5. TIH with 5-1/2", 15.50# casing scraper and 2-3/8" tubing. Make scraper run down to 6160'. TOOH.
6. RU wireline. Set 5-1/2", 15.50# cast-iron drillable bridge plug @ 6150' on wireline above Point Lookout perforations. RD wireline.
7. TIH with 3-1/2", 9.30# N-80 workstring and 5-1/2" Baker Retrievalmatic packer. Set packer @ 4300'. Load well with water.
8. Pressure test bridge plug, tubing, and packer to 3800 psi for 15 minutes. Load tubing - casing annulus and pressure test to 1000 psi for 15 minutes. If pressure test fails, TIH with tubing and packer and locate holes in casing. Record each hole depth, injection rate, and pressure bleed off rate. Contact production engineering and a casing repair will be submitted. TOOH.
9. RU wireline. Run GR-CBL-CCL in 5-1/2" liner from bridge plug @ 6150' to 4209' (top of Liner Hanger) and from 3600' to TOC in 7-5/8" casing (TOC was located @ 3500' with Temperature Survey). Evaluate GR-CBL-CCL and send copy to production engineering.

**Menefee Stimulation:**

10. Perforate the following Menefee intervals with 3-3/8" Select-Fire HSC and 14 gram Owen 3375-302 charges (Dp = 0.34", Penetration = 21.26"). RD wireline.

5910'	5945'	5949'
6003'	6011'	6012'
6014'	6016'	6021'
6023'	6025'	6031'
6070'	6072'	6074'
6076'	6080'	6082'
6119'	6121'	6124'
6128'	6130'	

Total: 23 holes.

11. TIH with 3-1/2" workstring and packer. Set packer @ 4300'. Install TIW valve on top of tubing for acid job.

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Mesaverde Pay-Add Pilot**

12. RU stimulation company and prepare to breakdown perforations. **Maximum treating pressure during acid job is 3800 psi.** Pump 2300 gallons of 7-1/2% HCl @ 4 bbl/min. Add 1/1000 gallons Clay-Sta XP clay control agent, 4/1000 gallons HI-FLO-4 silt suspender, 2/1000 gallons HAI-85M corrosion inhibitor, 10/1000 gallons FEIA, and 50#/1000 gallons FE-2 iron sequestering agents to the acid. Drop a total of 46 7/8" diameter and 1.1 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job.
13. Release packer. Run packer down to 6140' and knock balls off perforations with packer. Pull up in well and reset packer @ 4300'.
14. RU stimulation company and prepare to fracture stimulate well. Hold safety meeting. Pressure test surface lines to 6000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). **Maximum treating pressure during frac job is 5000 psi.** Fracture well according to attached procedure. After completion of frac job, unseat packer and TOOH.

**Cliff House Stimulation:**

15. Refill tanks with 1,976 bbls of usable water for Cliffhouse stimulation.
16. RU wireline. Set 5-1/2", 15.50# retrievable bridge plug @ 5870' on wireline above Menefee perforations.
17. TIH with 3-1/2" workstring and packer. Set packer and 4300'. Load well with water and pressure test bridge plug, tubing, and packer to 3800 psi for 15 minutes. TOOH.
18. Perforate the following Cliffhouse intervals with 3-3/8" HSC and 14 gram Owen 3375-302 charges (Dp = 0.34", Penetration = 21.26") @ 2 SPF and 120 degree phasing. RD wireline.

5801' - 5808' (7')

5818' - 5821' (3')

5833' - 5835' (2')

5847' - 5850' (3')

Total: 30 holes.

19. TIH with 3-1/2" workstring and packer. Set packer @ 4300'. Install TIW valve on top of tubing for acid job.
20. RU stimulation company and prepare to breakdown perforations. **Maximum treating pressure during acid job is 3800 psi.** Pump 3000 gallons of 7-1/2% HCl @ 4 bbl/min. Add 1/1000 gallons Clay-Sta XP clay control agent, 4/1000 gallons HI-FLO-4 silt suspender, 2/1000 gallons HAI-85M corrosion inhibitor, 10/1000 gallons FEIA, and 50#/1000 gallons FE-2 iron sequestering agents to the acid. Drop a total of 60 7/8" diameter and 1.1 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job.
21. Release packer. Run packer down to 5860' and knock balls off perforations with packer. Pull up in well and reset packer @ 4300'.
22. RU stimulation company and prepare to fracture stimulate well. Hold safety meeting. Pressure test surface lines to 6000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). **Maximum treating pressure during frac job is 5000**

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**psi.** Fracture well according to attached procedure. After completion of frac job, unseat packer and TOOH.

**Lewis Stimulation:**

23. Refill tanks with 2,038 bbls of usable 2% KCl water for Lewis stimulation.
24. RU wireline. Set 5-1/2", 15.50# retrievable bridge plug @ 5271' on wireline above Cliffhouse perforations.
25. TIH with 3-1/2" workstring and packer. Set packer @ 4300'. Load well with water and pressure test bridge plug, tubing, and packer to 3800 psi for 15 minutes. TOOH.
26. Perforate the following Lewis intervals with 3-3/8" Select-Fire HSC and 14 gram Owen 3375-302 charges (Dp = 0.34", Penetration = 21.26"). RD wireline.

4999'	5001'	5007'
5009'	5012'	5033'
5035'	5042'	5052'
5060'	5067'	5092'
5096'	5180'	5190'
5192'	5194'	5196'
5198'	5202'	5238'
5240'	5251'	

Total: 23 holes.

27. TIH with 3-1/2" workstring and packer. Set packer @ 4300'. Install TIW valve on top of tubing for acid job.
28. RU stimulation company and prepare to breakdown perforations. **Maximum treating pressure during acid job is 3800 psi.** Pump 2300 gallons of 7-1/2% HCl @ 4 bbl/min. Add 1/1000 gallons Clay-Sta XP clay control agent, 4/1000 gallons HI-FLO-4 silt suspender, 2/1000 gallons HAI-85M corrosion inhibitor, 10/1000 gallons FEIA, and 50#/1000 gallons FE-2 iron sequestering agents to the acid. Drop a total of 46 7/8" diameter and 1.1 specific gravity RCN ball sealers spaced evenly throughout the job. Record injection rate and all breakdown pressures throughout job.
29. Release packer. Run packer down to 5261' and knock balls off perforations with packer. Pull up in well and reset packer @ 4300'.
30. RU stimulation company and prepare to fracture stimulate well. Hold safety meeting. Pressure test surface lines to 6000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). **Maximum treating pressure during frac job is 5000 psi.** Fracture well according to attached procedure. After completion of frac job, unseat packer and TOOH.
31. Flow well to pit until pressures and flow back rates allow. TIH with 2-3/8" tubing and retrieving head. Clean out down to retrievable bridge plug with air. Shut off the air, pull up tubing, and allow the well to flow naturally, if possible. When the gas rate drops due to sand or water fill, make a trip to the bridge plug with air. Continue this cycle until sand and water production are minimal. Obtain pitot gauge up annulus on a 2" line. Record pitot gauge for the Lewis formation only.

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32. Clean out to retrievable bridge plug with air. Latch on to retrievable bridge plug above Cliffhouse perforations. Release bridge plug while pumping water down annulus, if necessary. TOOH and lay down retrievable bridge plug.
33. Flow well to pit until pressures and flow back rates allow. TIH with 2-3/8" tubing and retrieving head. Clean out down to retrievable bridge plug with air. Shut off the air, pull up tubing, and allow the well to flow naturally, if possible. When the gas rate drops due to sand or water fill, make a trip to the bridge plug with air. Continue this cycle until sand and water production are minimal. Obtain pitot gauge up annulus on a 2" line. Record pitot gauge for the Lewis and Cliffhouse formations.
34. Clean out to retrievable bridge plug with air. Latch on to retrievable bridge plug above Menefee perforations. Release bridge plug while pumping water down annulus, if necessary. TOOH and lay down retrievable bridge plug.
35. Flow well to pit on choke until pressures and flow back rates allow. TIH with 2-3/8" tubing and 4-3/4" drill bit. Clean out down to retrievable bridge plug with air. Shut off the air, pull up tubing, and allow the well to flow naturally, if possible. When the gas rate drops due to sand or water fill, make a trip to the bridge plug with air. Continue this cycle until sand and water production are minimal. Obtain pitot gauge up annulus on a 2" line. Record pitot gauge for the Lewis, Cliffhouse, and Menefee formations.
36. Drill out cast-iron bridge plug above Point Lookout perforations. Continue cleaning out to COTD (6388') with drill bit and air until returns are clean. TOOH.
37. RU wireline. Run after-frac gamma ray log from 6200' to 4900'. RD wireline.
38. TIH with expendable check valve, one joint of 2-3/8" tubing, seating nipple, and 2-3/8" production tubing. Cleanout with air and land tubing around 6350'. Obtain final pitot gauge. ND BOP's, NU WH. Pump off expendable check valve. RD and MOL. Return well to production.

Approve: \_\_\_\_\_  
J. A. Howieson

Vendors:

Wireline Services: ..... Basin (327-5244)  
Stimulation: ..... Western (327-6222)

Production Engineer:

Kurt A. Shipley ..... Office (326-9524)  
..... Home (325-9361)