State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

API # (assigned by OCD)
30-045-20736

5. **Lease Number**

6. **State Oil&Gas Lease #**
E-292-15

2. **Name of Operator**
MERIDIAN OIL

7. **Lease Name/Unit Name**
State Com

8. **Well No.**
1Y

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

9. **Pool Name or Wildcat**
Blanco Mesaverde

4. **Location of Well, Footage, Sec., T, R, M**
1060'FNL, 1060'FEL, Sec.2, T-29-N, R-8-W, NMPM, San Juan County

10. **Elevation:** 6288 GR

Type of Submission	**Type of Action**	
_X_ Notice of Intent	___ Abandonment	___ Change of Plans
	___ Recompletion	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	_X_ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other - Pay add	

13. Describe Proposed or Completed Operations

It is intended to add pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram. Any casing leaks will be repaired.

RECEIVED
AUG 29 1996
OIL CON. DIV.
DIST. 3

SIGNATURE [signature] (SBD6) Regulatory Administrator August 27, 1996

(This space for State Use)

Approved by [signature] **Title** DEPUTY OIL & GAS INSPECTOR, DIST. #3 **Date** AUG 29 1996

STATE COM #1Y

Meridian Oil, Inc.
Blanco Mesaverde
Unit A-Sec 2-T29N -R08W
Lat: 36° 45' 28"
Long: 107° 38' 21"

CAPITAL WORKOVER PROCEDURE

- Comply with all BLM, NMOCD, & MOI rules & regulations.
- **Always Hold Safety Meetings.** Place fire and safety equipment in strategic locations.
- 2-7/8" N-80 Buttress Frac String (5300' +/- required).
- Twenty (20) joints 2-3/8" 4.7# EUE N-80 tubing and six (6) 3-1/8" drill collars on location
- 11 frac tanks to be spotted and filled with 2% KCl water.
- Use drill gas for all operations.

This well is a 1996 obligatory well in which the Mesaverde production will be reestablished by cleaning out and repairing the casing initially. After the casing is repaired the well will be returned to production and tested on compression for 90-120 days. Once a base production profile has been reestablished a Menefee pay add will be performed. The well was drilled and completed in 1971. The original stimulation consisted of a two 50,000# fracs in the Point Lookout and Cliff House intervals only. The well has been inactive since 1991. The EUR indicated by the P/Z graph for this well shows considerable potential exists if production can be reestablished and optimized. Cumulative Mesaverde production is 2,618 MMCF/ 2.3 MBO. It is expected that a leak exists in the Intermediate (7-5/8") or the tubing is plugged.

Casing Repair/Workover:

Prior to rig arriving, the location is to be cleared, blue staked, and anchors installed and tested.

1. MIRU. Record and report SI pressures on tubing, casing, & bradenhead. Lay blowdown line. Blow down casing & tubing. Kill well w/ 2% KCl down tubing. ND WH, NU BOP.

2. TOOH, rabbit, & strap 168 joints 2-3/8" tubing (from 5266', tally attached). Visually inspect tubing, note any scale in tubing. Replace any damaged joints. Utilize tubing for 2-3/8" workstring.

3. PU 3 7/8" bit, casing scraper, float, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring TIH & clean out to **4800'**. TOOH

4. On 2-3/8" 4.7# J-55 EUE workstring TIH & set **4-1/2" CIBP @ 4750'** +/-, load hole w/ 2% KCl water. TOOH

5. Pressure test entire casing string to 1000 psi for 10 minutes monitoring intermediate casing and bradenhead. If PT does not hold, RU wireline, run GR-CBL-CCL from 4750' to surface under as much pressure as possible (up to 1000 psi surface pressure).

6. PU 7-5/8" packer on 2 3/8" workstring, TIH and isolate and identify casing leaks. Consult engineering in designing squeeze procedure. Complete all squeeze cementing operations. WOC recommended time. Drill out cement. Pressure test to 1000 psi. If casing integrity still not

sound, identify leaks, & engineering will recommend squeeze procedure & modify work as necessary.

7. When squeeze cementing & casing repair is complete, PU 3 7/8" bit, float, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring drill out CIBP @ 4750'. Clean out to PBTD @ **5466'**. TOOH, lay down drill collars and bit, RIH w/ 174 jts. of 2-3/8" tbg. Land tubing @5400'. ND BOP NU WH. Return well to production. Produce well for 90-120 days. SI well & perform 21 day build-up test prior to Menefee pay add.

Menefee PayAdd/Stimulation:

1. MIRU. Record and report SI pressures on tubing, casing, & bradenhead. Lay blowdown line. Blow down casing & tubing. Kill well w/ 2% KCl down tubing. ND WH, NU BOP.

2. TOOH, rabbit, & strap 174 joints 2-3/8" tubing (from 5400'). Visually inspect tubing, note any scale in tubing. Replace any damaged joints.

3. PU 3-7/8" bit and casing scraper, float, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring. Clean out to 5368' +/-. TOOH with bit & collars.

4. RU TIH & wireline set **4-1/2" CIBP @ 5260'** +/-.

5. TIH w/ 4-1/2" FB PKR on 2-3/8" tbg to **CIBP @ 5260'**. Load hole w/ 20 bbls 2% Kcl. Set PKR above CIBP, PT CIBP to 3800 psi. Spot 250 gallons inhibited 15% HCl acid across Menefee @ 5240'. TOOH.

6. RU wireline under packoff. RIH w/ GR-CCL log from 5260' to 3800'. Correlate logs, perforate Menefee top-down in acid @ the following depths with 3 1/8" HSC gun w/ 12.0g charges (0.30" hole,) 1 SPF @ 120 degree phasing.

4970' - 4976'	**6 ft**	**6 holes**
5031' - 5058'	**27 ft**	**27 holes**
5218' - 5220'	**2 ft**	**2 holes**
5222' - 5226'	**4 ft**	**4 holes**
5232' - 5242'	**10 ft**	**10 holes**

(49 total holes , 272' of interval)

7. PU 4-1/2" FB PKR, 1.81" profile nipple, 4 jts of 2-3/8" 4.7# N-80 tubing, 2-3/8" x 2-7/8" buttress changeover, 2.25" profile nipple, and 2-7/8" 8.7# N-80 buttress frac string. Set PKR @ 4900' +\- (perfs f/ 4970' - 5242'). **NOTE: (Perfs in Backside 4790' - 4890')**

8. RU stimulation company. Pressure test surface lines to 7500 psi. **Max surface treating pressure = 6500 psi. Max static surface pressure = 3800 psi.** Prepare to break down Menefee w/ 500 gals inhibited 15% HCl acid and 98 7/8" 1.3 s.g. ball sealers. Attempt to achieve 20 BPM on breakdown, go higher if possible. Release pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. TOOH.

STATE COM #1Y
Meridian Oil Inc.
08/23/96

9. PU 4-1/2" packer system on 2-7/8" tbg. Zone isolation system will cover existing Cliffhouse perforations f/ 4790'- 4890'. Upper packer to be set @ 4770' +/-, lower packer @ 4904' +/-, with 5 jts (+/- 134') of 2-3/8" 4.7# N-80 tbg in between packers. Run 4 jts 2-3/8" tbg above top packer, change over to 2-7/8".

10. RU stimulation company. Pressure test surface lines to 7500 psi. **Maximum STP = 6500 psi. Max static surface pressure = 3800 psi.** Hold 500 psi on annulus. Fracture stimulate the Menefee w/ 80,000# 20/40 Arizona sand in 2% KCl slickwater w/30% N2 (no foamer) to aid flowback Sand will be traced with Ir-192. See attached frac schedule for details. *(5 frac tanks needed)* Rig down frac company, flow well back on 1/4" choke as needed to release packer.

11. Release PKR & TOOH standing back 2-7/8" N-80 tubing. Change out rams to 2-3/8".

12. RU wireline under packoff. Make 4-1/2" gauge ring run to 4800'. Set **4-1/2" CIBP @ 4750' +/-**. RD wireline.

Lewis Stimulation:

1. TIH w/ 4-1/2" FB PKR on 2-3/8" 4.7# J-55 tubing and test CIBP to 3800 psi. Spot 700 gallons inhibited 10% Acetic acid at 4730' across Lewis. TOOH.

2. RU wireline under packoff. Perforate Lewis top-down in acid @ the following with a 3-1/8" Select Fire gun w/ 12.0g charges (0.30" hole), 1 SPF. Engineering may modify perforations based upon bond character.

3842' - 3848'	**6 ft**	**6 holes**
3866' - 3870'	**4 ft**	**4 holes**
4066' - 4072'	**4 ft**	**4 holes**
4584' - 4590'	**6 ft**	**6 holes**
4672' - 4676'	**4 ft**	**4 holes**
4706' - 4709'	**3 ft**	**3 holes**
4724' - 4726'	**2 ft**	**2 holes**

(29 total holes , 884' of interval)

3. PU 4-1/2" FB PKR, 1.81" profile nipple, 4 joints 2-3/8" 4.7# N-80 tubing, 2-3/8" x 2-7/8" buttress changeover, 2.25" profile nipple, and 2-7/8" 8.7# N-80 Buttress frac string. Set PKR 100' above top Lewis perforation. Hold 500 psi on annulus during acid job.

4. RU stimulation company. Pressure test surface lines to 7500 psi. **Max STP = 6500 psi. Max static surface pressure = 3800 psi.** Prepare to break down Lewis w/400 gallons inhibited 10% Acetic acid and 60 7/8" 1.3 s.g. ball sealers. Attempt to achieve 20 BPM on breakdown, go higher if possible. Release pressure, RD stimulation company. Release PKR & TIH knocking balls below bottom perforation. Pull up and reset PKR.

5. RU stimulation company. Pressure test surface lines to 7500 psi. **Maximum STP = 6500 psi. Max static surface pressure = 3800 psi.** Hold 500 psi on annulus. Fracture stimulate the Lewis w/ 75,000# 20/40 Arizona sand in a 20# linear gel w/70Q N2 foam. Sand will be traced

with Ir-192. See attached frac schedule for details. *(4 frac tanks needed)* Rig down frac company, flow well back on 1/4" choke as needed to release packer.

7. Release PKR & TOOH laying down 2-7/8" N-80 tubing. Change out rams to 2-3/8".

8. TIH w/ 3-7/8" bit, float, six (6) 3-1/8" drill collars, on 2-3/8" tubing, CO to **CIBP @4750. Obtain Lewis pitot gauge.** Drill CIBP @4750. **TIH** w/ 3-7/8" bit, float, six (6) 3-1/8" drill collars, on 2-3/8" tubing, CO to **CIBP @ 5260.** Drill CIBP, CO to PBTD @ 5466'. Clean up to +/- 5 BPH and trace to no sand. Obtain final MV pitot gauge. TOOH.

9. RU wireline under packoff. Run afterfrac across the Mesa Verde interval. RD wireline.

10. Prepare to run production tubing string as follows for Mesaverde: expendable check, one joint 2-3/8" tubing, 1.81" 'Seating' nipple, and remaining tubing. Rabbit tubing while TIH. Land tubing @ 5400'.

11. ND BOP, NU WH. Pump off expendable check and flow well up tubing obtain Mesaverde production gauge. RD & release rig to next location.

Concur: J.D. Davis for T.D. Stice
Northeast Basin Team Leader

Approved: R.B. 8/24/96
Drilling Superintendent

SBD

Recommended Vendors:

STATE COM #1Y
Meridian Oil Inc.
08/23/96

Stimulation	Depends on Rig	
Cased Hole Services		325-3545
Engineering	S. B. Daves	564-1627-pager 326-9736-work 327-6843-home
	T. D. Stice	326-8036-pager 326-9812-work 327-7164-home
Frac Consultants	Mark Byars	327-8470-pager 320-0349-mobile 327-0096-home
	Mike Martinez	599-7429-pager 860-7518-mobile 326-4861-home

Meridian Oil
8/22/96:DLC

PERTINENT DATA SHEET
STATE COM #1Y

Location: 1060' FNL, 1060' FEL
Unit A, Section 2, T29N, R8W
San Juan County, New Mexico

Field: Blanco Mesaverde

Spud Date: 01-30-71

Completion Date: 02-25-71

Elevation: 6288' GR
LAT: 36° 45' 28"
LONG: 107° 38' 21"
DP#: 72100
GWI: 87.5%
NRI: 76.5625%
TD: 5500'
PBTD: 5466'

Casing Record:

Hole Size	Casing Size	Weight & Grade	Depth Set	Sxs Cmt	Cement Top
12-3/4"	10-3/4"	32.75#	335'	300 (354 ft3)	surface
9-7/8"	7-5/8"	26.40#	3498'	460 (543 ft3)	2835' (TS)
6-3/4"	4-1/2"	11.6#	5499'	240 (283 ft3)	see W/O History

Tubing Record:

Tubing Size	Weight & Grade	Depth Set	BHA
2-3/8"	4.7#	5266'	

Formation Tops:

Ojo Alamo	2010'	Pictured Cliffs	3065'	Point Lookout	5270'
Kirtland	2170'	Cliffhouse	4790'	Mancos	5375'
Fruitland	2780'	Menefee	4860'		

Logging Record:
Gamma & Induction log

Stimulation:
Stage I Perfs: 5272-94', 5308-12', 5358-68', w/2 SPF, 1400 bbls water, 30,000# sand, 20,000# 10/20 sand
Stage II Perfs: 4790-94', 4802-22', 4832-36', 4882-90', w/2 SPF, 1380 bbls water, 30,000# 20/40 sand
20,000# 10/20 sand

Workover History:
1 Liner top @ 3362'. Liner top squeez'd w/200 sxs of class "A", 2% gel,12-1/2# gilsonite, 2% CaCl. Tested to 2000 psi. Held OK.
2 Perf'd 2 holes @ 4900'. Squeez'd w/ 175 sxs class "A", 12-1/2# gilsonite, 2% CaCl. Tested to 3000 psi. Held OK.

Production History:

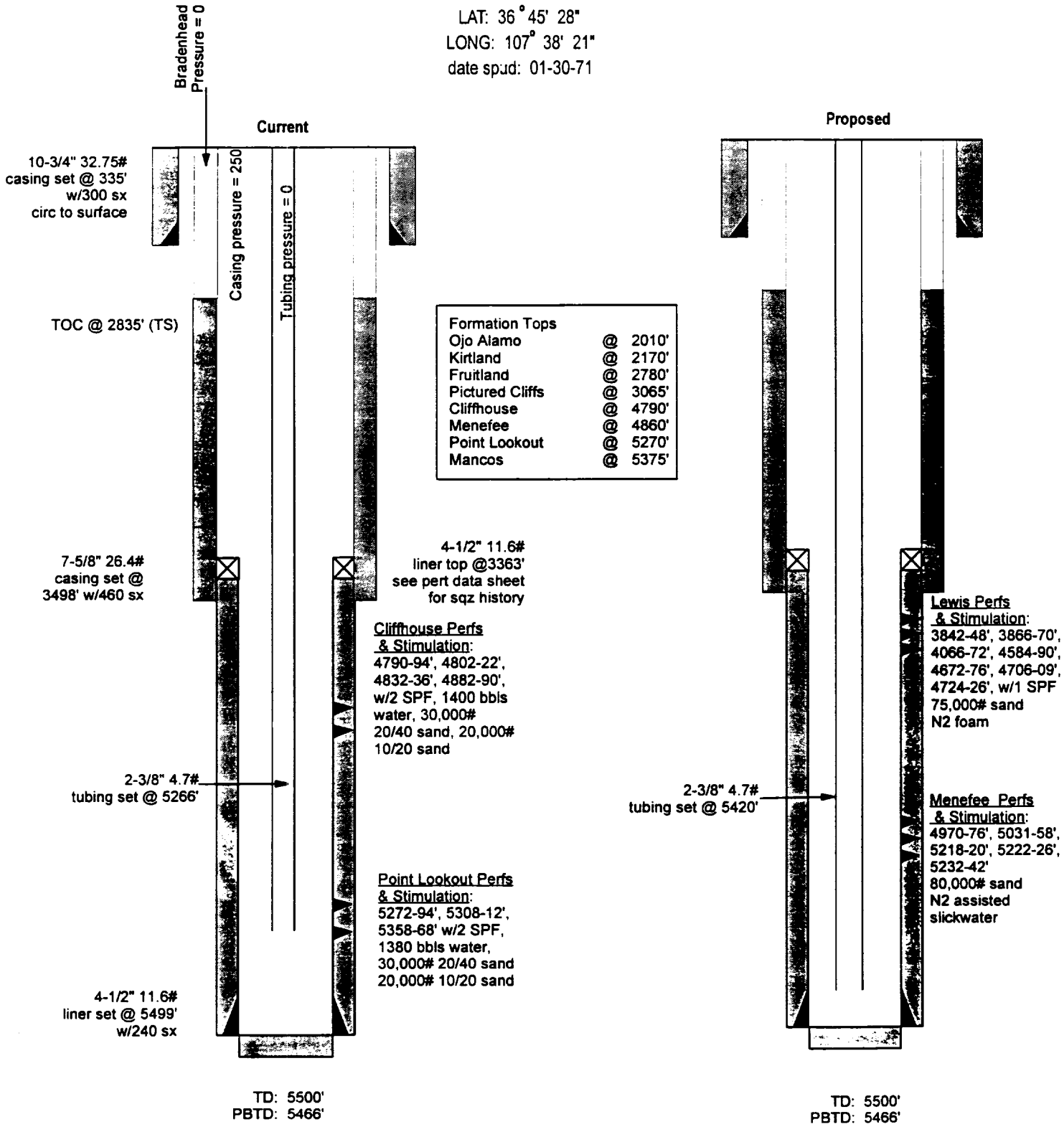
Latest Deliverability	-0- MCFD	-0- BOPD	
Initial Deliverability	2633 MCFD	ISITP: 738	ISICP: 738
Cums:	2618 MMCF	2336 BO	

Transporter:
Oil/Condensate: Giant Gas: El Paso

8/22/96 2:15 PM

State Com #1Y

Blanco Mesaverde
Unit A, Section 2, T29N, R8W
San Juan County, NM
Elevation: 6288' GR
LAT: 36° 45' 28"
LONG: 107° 38' 21"
date spud: 01-30-71



Meridian Oil Inc.
08/01/96: dla