

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

Sundry Notices and Reports on Wells

<p>1. Type of Well GAS</p> <hr/> <p>2. Name of Operator MERIDIAN OIL</p> <hr/> <p>3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <hr/> <p>4. Location of Well, Footage, Sec., T, R, M 1550' FSL, 1500' FWL, Sec. 36, T-30-N, R-8-W, NMPM, San Juan County</p>	<p>API # (assigned by OCD) 30-045-08964</p> <p>5. Lease Number</p> <p>6. State Oil&Gas Lease # E-1193-3</p> <p>7. Lease Name/Unit Name EPNG <i>D. Com D</i></p> <p>8. Well No. 5</p> <p>9. Pool Name or Wildcat Blanco Mesaverde</p> <p>10. Elevation: 6201 GR</p>
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Type of Submission

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

Type of Action

<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
<input checked="" 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 - 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 *Penny Shadwick* (SBD6) Regulatory Administrator August 27, 1996

(This space for State Use)

Approved by *Johnny Robinson* Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date AUG 29 1996

E. P. N. G. COM D #5

Meridian Oil, Inc.

Blanco Mesaverde

Unit K-Sec36-T30N -R08W

Lat: 36° 45' 55"

Long: 107° 37' 50"

CAPITAL WORKOVER PROCEDURE

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- 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
 - 7 frac tanks to be spotted and filled with 2% KCl water.
 - Use drill gas for all operations.
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This well is a 1996 obligatory well in which the Mesaverde production will be reestablished by cleaning out and repairing the casing initially. Once this is completed 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 1956. The original stimulation consisted of a single-stage sand-water frac in the Point Lookout and Cliff House intervals only. The well has been inactive since 1990. 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 4,074 MMCF/ 7.2 MBO. It is expected that a leak exists between the Intermediate (7 5/8") and production (5 1/2") casing

Casing Repair/Workover:

Prior to rig arriving, the location 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 172 joints 2-3/8" tubing (from 5378', tally attached). Visually inspect tubing, note any scale in tubing. Replace any damaged joints. Utilize tubing for 2-3/8" workstring.
3. PU 4 3/4" 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 5-1/2" CIBP @ 4700' +/-, load hole w/ 2% KCl water. TOOH
5. Pressure test entire casing string to 1000 psi for 10 minutes. **Latest Bradenhead test indicates leak on intermediate casing.** If PT does not hold, RU wireline, run GR-CBL-CCL from 4700' to surface under as much pressure as possible (up to 1000 psi surface pressure). Consult engineering in designing squeeze procedure.
6. PU 5 1/2" packer on 2 3/8" workstring, TIH and isolate and identify casing leaks. 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.

8. When squeeze cementing & casing repair is complete, PU 4-3/4" bit, float, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring drill out drill out CIBP @ 4700'. Clean out to PBTD @ 5409'. TOOH, lay down drill collars and bit, RIH w/ 172 jts. of 2-3/8" tbg. Land tubing @5378'. 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 172 joints 2-3/8" tubing (from 5378', tally attached). Visually inspect tubing, note any scale in tubing. Replace any damaged joints.
3. PU 4-3/4" bit and casing scraper, float, six (6) 3-1/8" drill collars & 2-3/8" 4.7# J-55 EUE workstring. Clean out w/ gas to 5350' +/- . Load hole w/ 20 bbls 2% Kcl. TOOH with bit & collars.
4. RU TIH & wireline set CIBP @ 5160' +/- RIH w/ GR-CCL log from 5160' to 3160'.
5. TIH w/ 5-1/2" FB PKR on 2-3/8" tbg to CIBP @ 5160'. Set PKR above CIBP, PT CIBP to 3400 psi. Spot 250 gallons inhibited 15% HCl acid across Menefee @ 5140'. TOOH.
6. RU wireline under packoff. Perforate Menefee top-down in acid @ the following depths with 4" HSC gun w/ 19g charges (0.43" hole), 1 SPF @ 120 degree phasing.

4944' - 4954'	10 ft	10 holes
4980' - 4994'	14 ft	14 holes
5054' - 5058'	4 ft	4 holes
5128' - 5132'	4 ft	4 holes

(32 total holes , 188' of interval)


7. PU 5-1/2" 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 @ 4860' +/- (perfs f/ 4942' - 5132'). NOTE: (Perfs in backside from 4734' to 4842')
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 64 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.
9. PU 5-1/2" packer system on 2-7/8" tbg. Zone isolation system will cover existing Cliffhouse perforations f/ 4734'- 4842'. **Upper packer to be set @ 4700' +/-, lower packer @ 4860' +/-, with 6 jts (+/- 160') 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".
11. 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

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stimulate the Menefee w/ 75,000# 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.

12. Release PKR & TOOH laying down 2-7/8" N-80 tubing. Change out rams to 2-3/8".
13. TIH w/ 4-3/4" bit on 2-3/8" tubing and clean out to CIBP @ 5160' +/- . Drill CIBP, CO to PBTD @ 5409' +/- . Clean up to +/- 5 BPH and trace to no sand. Obtain final MV pitot gauge. TOOH.
14. RU wireline under packoff. Run afterfrac across the Mesa Verde interval. RD wireline.
15. 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 @ 5378'.
16. ND BOP, NU WH. Pump off expendable check and flow well up tubing obtain Mesaverde production gauge. RD & release rig to next location.

Concur:


S.B. Daves for T.D. Stice
Northeast Basin Team Leader

Approved:

Drilling Superintendent

SBD



Recommended Vendors:

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Recommended Vendors:

Stimulation Cased Hole Services	Depends on Rig	325-3545
Engineering	S.B. Daves	564-1627-pager 326-9736-work 326-5228-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

PERTINENT DATA SHEET

EPNG COM D #5

Location: 1550' FSL, 1500' FEL
Unit K, Section 36, T30N, R8W
San Juan County, New Mexico

Field: Blanco Mesaverde

Spud Date: 11-08-56

Completion Date: 12-12-56

Elevation: 6201' GR
LAT: 36° 45' 55"
LONG: 107° 37' 50"
DP#: 49745A
GW: 75.605%
NRI: 64.449%
TD: 5435'
PBTD: 5409'

Casing Record:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>	<u>Sxs Cmt</u>	<u>Cement Top</u>
	10-3/4"	32.75#, ARMCO SPIRAL WELD	162'	150 (177 FT3)	surface
	7-5/8"	26.4#, J-55	3113'	300 (360 FT3)	1555' (TS)
	5-1/2"	15.5#, J-55	5430'	300 (360 FT3)	2790' (TS)

Tubing Record:

<u>Tubing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>	<u>BHA</u>
2-3/8"	4.7#, J-55	5378'	

Formation Tops:

Ojo Alamo	1970'	Pictured Cliffs	3015'	Menefee	4847'
Kirtland	2094'	Lewis	3162'	Point Lookout	5165'
Fruitland	2696'	Cliffhouse	4740'	Mancos	5365'

Logging Record:

Gamma Ray, Neutron, Tracer, Temp Survey

Stimulation:

Perfs: 4734-4750', 4770-4784', 4796-4816', 4828-4842', 5166-5180', 5194-5206', 5226-5238', 5263-5280'
5310-5324' (4 SPF) -- Frac'd w/70,000# sand & 94,600 gal water

Workover History:

07-31-80: MIRU. Killed well & installed BOP. Pulled tubing & laid down. Ran 172 jts class A 2-3/8" EUE (53.68.16'). Set @ 5378.16'

Production History:

Latest Deliverability	-0- MCFD	-0- BOPD	
Initial Deliverability	8048 MCFD AOF	ISITP: 1020	ISICP: 1039
Cums:	4073 MMCF	7153 BO	
Bradenhead pressure = 0 psi	Production casing = 346 psi		
Intermediate casing = 348 psi	Tubing pressure = 350 psi		

Transporter:

Oil/Condensate: Giant

Gas: El Paso

8/23/96 12:44 PM

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Rio Arriba County, NM
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LONG: 107° 37' 50"
date spud: 11-08-56

