submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
SF-078508

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
MERIDIAN OIL

8. **Well Name & Number**
Nordhaus #3A

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

9. **API Well No.**

4. **Location of Well, Footage, Sec., T, R, M**
1450'FSL, 895'FEL Sec.11, T-31-N, R-9-W, NMPM

10. **Field and Pool**
Blanco Mesa Verde

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		
_x_ Notice of Intent	___ Abandonment	___ Change of Plans	
	___ Recompletion	___ New Construction	
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing	
	___ Casing Repair	___ Water Shut off	
___ Final Abandonment	___ Altering Casing	___ Conversion to Injectio	
	_x_ Other - pay add		

13. **Describe Proposed or Completed Operations**

It is intended to perforate and stimulate the Menefee and Lewis intervals and add to the existing Mesa Verde formation per the attached procedure.

RECEIVED
JAN 26 1994
OIL CON. DIV.
DIST. 3

RECEIVED
BLM
94 JAN 19 AM 8:07
070 FARMINGTON, NM

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

Signed Peggy Bradfield (REH) Title Regulatory Affairs Date 1/18/94

(This space for Federal or State Office use)
APPROVED BY _____ Title _____ Date _____
CONDITION OF APPROVAL, if any:

APPROVED
JAN 20 1994
DISTRICT MANAGER

NMOCD

Pertinent Data Sheet - Nordhaus #3A

Location: 1450' FSL, 895' FEL, Section 11, T-31-N R-9-W, San Juan County, NM

Field: Blanco Mesaverde

Elevation: 6095' GL

TD: 5515'
PBTD: 5476'

Completion Date: 9/3/75 (original)
11/4/83 (workover)

DP Number: 32280A

Initial Potential: 1439 MCF/D (original)
2515 MCF/D (workover)

Casing Record:

Hole Size	Casing Size	Weight & Grade	Depth Set	Cement	Top/Cement
15"	10-3/4"	30.0# X-42 T&C	229' KB	225 sx	Surface
8-3/4"	7"	23.0# K-55	3139' KB	415 sx	Surface
6-1/4"	4-1/2" liner	10.5# H-40	2996'-5515' KB	310 sx	4050' (CBL)

7" Float collar @ 3098'
4-1/2" Float collar @ 5482'

Tubing Record:

Tubing Size	Weight & Grade	Depth Set
2-3/8"	4.7# J-55 8rd	5276' KB (170 jts) SN @ 5276'
5/8" rods	210, 3-6', 1-1'	5276'

Formation Tops:

Farmington	1992'	Cliffhouse	4889'
Fruitland	2593'	Menefee	4947'
Pictured Cliffs	2888'	Pt. Lookout	5262'

Logging Record: IES, Density, CBL, Correlation

Stimulation: Perf Cliffhouse @ 4907'-4941' w/60,000# 20/40 sand and 60,000# gal. water.
Perf Pt. Lookout @ 5270'-5470' w/60,000# sand and 60,000# gal. water.

Workover History: 10-18-83 Pulled original tbg, perfed 2 sqz holes @ 4525' and sqzd w/118 cf cmt. Resqzd w/59 cf cmt. **Perf Upper MV @ 4565'-4684' w/67,500# sand in slick water. Sqzd off perfs w/148 cf cmt. Landed 2-3/8" tbg, SN on top of bottom jt.**

Production History:

Initial Deliverability	150 MCFD	40 BOPD
Latest Deliverability	80 MCFD	30 BOPD

Transporter: EPNG

NORDHAUS #3A
SE/4, Section 11, T31N, R09W
San Juan Basin, NM
Menefee/Lewis Pay Add

☎ Contact BLM and NMOCD prior to performing work on this well ☎
Comply with all BLM, NMOCD, and MOI rules and regulations.

Note: Pump and Rods must be removed by Production Ops. or WO Rig prior to R/C.

1. Test location rig anchors and repair if necessary. Blow down tubing. MIRU. NU BOP, blooie line, and relief line. ***Call for 2300' of slimhole 2-7/8", 3100' of 4-1/2" (5000 psi pressure rating) tapered fracstring, and 5 jts of MOI 2-3/8" workstring.***

2. Install 8 X 400 bbl tanks and fill with 2% KCl water for fracture stimulation. Add 5 #'s biocide/tank before filling. Place fire and safety equipment in strategic locations.

3. Pressure test BOP for 15 minutes. TOOH with 170 jts. of 2-3/8" tubing. Visually inspect and replace any bad joints. TIH with 3-7/8" bit and 4-1/2"-10.5# casing scraper on 2-3/8" tbg/workstring and clean out to PBTD @ 5476'. TOOH.

4. RU wireline. Set Drillable BP above Cliffhouse @ 4800'. Spot approximately 10' of sand on top of RBP w/wireline bailer.

5. PU 4-1/2" packer on 2-3/8" and TIH to 4700' and set. Pressure test upper casing to 600 psi for 15 minutes*. Pressure test BP to 3000 psi for 15 minutes. TOOH.
**If pressure test fails, prepare to locate holes and repair casing. Contact production engineering and a casing repair procedure will be discussed.*

6. RU wireline. Perforate 4 sqz. holes @ 4000' in 4-1/2" liner. PU 4-1/2" cmt retainer on 2-3/8" workstring and set @ 3950'. Establish rate into perfs and sqz w/100 sks "H" and additives. PU and reverse out. TOOH.

7. PU 3-7/8" bit, collars, and 2-3/8" workstring and TIH. Drill out cmt and retainer and push junk to BP. Close pipe rams and pressure test sqz to 1000 psi for 15 min. TOOH.

8. Run GR-CBL-CCL in 4-1/2" liner from RBP to 2996' (liner top). Evaluate GR-CBL-CCL and run copy to office.

9. PU 4-1/2" pkr on workstring and TIH. Set pkr @ 3800' and pressure test csg to 3000 psi for 15 min. TOOH.

10. PU 3-7/8" bit, collars, and 2-3/8" workstring and TIH. Drill out BP @ 4800' clean out to PBTD. TOOH.

11. RU wireline. Set RBP above Point Lookout @ 5200'. Spot approximately 10' of sand on top of RBP w/wireline bailer.

12. PU 4-1/2" packer on 2-3/8" and TIH to 5100' and set.. Pressure test BP to 3000 psi for 15 minutes. TOOH.

13. RU wireline. Perforate the following Menefee interval, with a 3-1/8" HSC, @ 4 SPF (90 degrees phasing).

    4990'-5140' 40' net zone Exact perf interval to be determined prior to perforating.

    Total: approximately 160 holes

14. TIH with 2-7/8" by 4-1/2" (enough 3-1/2" +100' for liner top to top perf) tapered fracstring and 5-1/2" packer. Set packer @ 4970' (above Menefee, below Cliffhouse) and prepare to breakdown perforations.

15. RU stimulation company. Breakdown* and balloff w/ 1200 gallons of 7-1/2% HCl @ 4 bbl/min. with 1gal/1000 gal clay control, 4/1000 silt suspender, 1/1000 inhibitor and 5/1000 sequestering agent. Drop a total of 300 7/8" RCN ball sealers spaced evenly throughout the job w/ 5 ball slugs every 10 balls dropped. Record injection rate and all breakdown pressures throughout job.

16. Release packer, TIH and knock off ball sealers to top of sand on RBP @ 5200'. TOOH w/ packer to 4970' and set. Prepare to fracture stimulate the well.

17. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3000 psi. Fracture stimulate well w/ 30 # XL Gel according to attached procedure.

18. Slowly flow back well until returns diminish. Release packer and TOOH.

19. RU wireline. Set RBP above Cliffhouse @ 4300'. Spot approximately 10' of sand on top of RBP w/wireline bailer.

20. TIH w/ 4-1/2" packer on workstring and set @ 4200'. Pressure test BP to 3000 psi for 15 minutes. Release packer, and spot 500 gallons of 7-1/2% HCL. TOOH.

21. RU wireline. Perforate the following Lewis interval, with a 3-1/8" @ 4 SPF (90 degree phasing).

    3800'-4200'
    30 - 120 holes, depending on perf density.

    Note: perforation intervals and perforation type are subject to change.

22. TIH with 2-7/8" by 4-1/2" (1300' of 3-1/2") tapered fracstring and 5-1/2" packer. Set packer @ 3700' and prepare to breakdown perforations.

23. RU stimulation company. Breakdown* and balloff w/ 1200 gallons of 7-1/2% HCl @ 4 bbl/min. with 1gal/1000 gal clay control, 4/1000 silt suspender, 1/1000 inhibitor and 5/1000 sequestering agent. Drop a total of (2X # of perforations) 7/8" RCN ball sealers spaced evenly throughout the job w/ 5 ball slugs every 10 balls dropped. Record injection rate and all breakdown pressures throughout job.

24. Release packer, TIH and knock off ball sealers to top of sand on RBP. TOOH w/ packer to 3700' and set. Prepare to fracture stimulate the well.

25. RU stimulation company. Hold safety meeting. Pressure test surface lines to 4000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3000 psi. Fracture stimulate well w/ 50 Q Foamed gel according to attached procedure.

26. Slowly flow back well until returns diminish. Release packer and LD fracstring.

27. TIH w/notched collar on 2-3/8" workstring and reverse out to upper RBP until sand returns are clean and water production is minimal. **Obtain pitot gauge.** TOOH with workstring.

28. TIH with retrieving head on 2-3/8" workstring and reverse out to bridge plug. **Obtain pitot gauge.** Retrieve bridge plug. TOOH.

29. TIH w/notched collar on 2-3/8" workstring and reverse out to lower RBP until sand returns are clean and water production is minimal. **Obtain pitot gauge.** TOOH with workstring.

30. TIH with retrieving head on 2-3/8" workstring and reverse out to bridge plug. **Obtain pitot gauge.** Retrieve bridge plug

31. TIH with 2-3/8" production tubing and SN one joint off bottom of string. CO to PBTD @ 5476'. When fluid production becomes negligible, land tubing at 5276'. **Obtain final pitot gauge. Call for transport to remove oil from pit and send to MOI storage facility.**

32. ND BOP. NU wellhead. RDMO. Notify Production Ops. (Cliff Brock - 9818) that well is ready for pump and rods. Engineering will contact also.

J. A. Howieson

Vendors:

Packer Rental & Bridge Plugs:	To be determined later.
Wireline Services:	To be determined later.
Stimulation:	To be determined later.

DBJ
JAS/jas

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