

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

2. Name of Operator
MERIDIAN OIL

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

4. Location of Well, Footage, Sec., T, R, M
933'FSL, 931'FWL Sec.18, T-30-N, R-8-W, NMPM

5. Lease Number
SF-078596
NM-09717

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Howell C #4

9. API Well No.

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	
<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 Injectio
	<input checked="" type="checkbox"/> 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
FEB 1 1994
OIL CON. DIV.
DIST. 2

RECEIVED
BLM
94 JAN 19 AM 8:09
070 FARMINGTON, NM

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

Signed [Signature] (REH) Title Regulatory Affairs Date 1/18/94

(This space for Federal or State Office use)

APPROVED BY _____ Title _____

CONDITION OF APPROVAL, if any:

APPROVED
Date

JAN 24 1994

DISTRICT MANAGER

NMOCD

Pertinent Data Sheet - Howell C #4

Location: 933' FSL, 931' FWL, Section 18, T-30-N R-8-W, San Juan County, NM

Field: Blanco Mesaverde

Elevation: 6332' GL

TD: 5366'
PBTD: 5350'

Completion Date: 12/17/57

DP Number: 49961A

Initial Potential: 15319 MCF/D

Casing Record:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Top/Cement</u>
12-1/4"	10-3/4"	32.75# S.W.	173'	150 sx	Surface
9-7/8"	7-5/8"	26.4# J-55	3348'	250 sx	1725' (TS)
6-3/4"	5-1/2" liner	15.5# J-55	3256'-5360'	300 sx	3415' (TS)

Tubing Record:

<u>Tubing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>
2-3/8"	4.7# J-55 8rd	5313' (167 jts)

Formation Tops:

Ojo Alamo	1832'	Cliffhouse	4781'
Kirtland	2021'	Menefee	4889'
Fruitland	2740'	Pt. Lookout	5263'
Pictured Cliffs	3080'	Mancos	5363'
Lewis	3168'		

Logging Record: ES, GRL, Induction, ML, Temperature Survey

Stimulation: Frac Pt. Lookout @ 5262'-5340' w/66,000# gal. water and 60,000# sand.
Frac Cliffhouse @ 4788'-4880' w/68,880 gal. water and 60,000# sand.

Workover History: 8-17-61 Cleanout - fishing for unknown. Milled up fish. Put well back on production.

Production History:

Initial Deliverability	5081 MCFD	3 BOPD
Latest Deliverability	100 MCFD	1 BOPD

Transporter: EPNG

HOWELL C #4
SW/4, Section 18, T30N, R08W
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.

1. Test location rig anchors and repair if necessary. Blow down tubing. MIRU. NU BOP, blooie line, and relief line. ***Call for 2100' of slimhole 2-7/8", 3400' of 4-1/2" (5000 psi pressure rating) tapered fracstring, and 5 jts of 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 167 jts. of 2-3/8" tubing. Visually inspect and replace any bad joints. TIH with 4-3/4" bit and 5-1/2"-15.5# casing scraper on 2-3/8" tbg/workstring and clean out to PBTD @ 5350'. TOOH.
4. RU wireline. Set RBP above Point Lookout @ 5200'. Spot approximately 10' of sand on top of RBP w/wireline bailer.
5. PU 5-1/2" packer on 2-3/8" and TIH to 4700' and set. Pressure test upper casing to 600 psi for 15 minutes*. Release packer and TIH to 5100' and set. Pressure test BP to 3800 psi for 15 minutes. Release packer and spot 200 gallons of 7-1/2% HCL across perf zone. TOOH. ****If pressure test fails, do not spot acid and prepare to locate holes and repair casing. Contact production engineering and a casing repair procedure will be discussed.***
6. RU wireline. Perforate the following Menefee interval, with a 3-1/8" HSC, @ 4 SPF (90 degrees phasing).

4950'-5200' 40' net zone Exact perf interval to be determined prior to perforating.

Total: approximately 160 holes
7. TIH with 3-1/2" by 4-1/2" (enough 3-1/2" +100' for liner top to top perf) tapered fracstring and 5-1/2" packer. Set packer @ 4920' (above Menefee, below Cliffhouse) and prepare to breakdown perforations.
8. 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.
9. Release packer, TIH and knock off ball sealers to top of sand on RBP. TOOH w/ packer to 4730' and set. Prepare to fracture stimulate the well.

10. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3800 psi. Fracture stimulate well w/ 30 # XL Gel according to attached procedure.
11. Slowly flow back well until returns diminish. Release packer and TOOH.
12. RU wireline. Set RBP above Cliffhouse @ 4700'. Spot approximately 10' of sand on top of RBP w/wireline bailer.
13. TIH w/ 5-1/2" packer on workstring and set @ 4600'. Pressure test BP to 3800 psi for 15 minutes. Release packer, and spot 500 gallons of 7-1/2% HCL. TOOH.
14. RU wireline. Perforate the following Lewis interval, with a 3-1/8" @ 4 SPF (90 degree phasing).

3815'-4710'

30 - 120 holes, depending on perf density.

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

15. TIH with 3-1/2" by 4-1/2" (1600' of 3-1/2") tapered fracstring and 5-1/2" packer. Set packer @ 3700' and prepare to breakdown perforations.
16. 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.
18. 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.
19. RU stimulation company. Hold safety meeting. Pressure test surface lines to 5000 psi (1000 psi over maximum allowable treating pressure but no greater than working pressure of surface lines). Maximum treating pressure is 3800 psi. Fracture stimulate well w/ 50 Q Foamed gel according to attached procedure.
20. Slowly flow back well until returns diminish. Release packer and LD fracstring.
21. 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.
22. TIH with retrieving head on 2-3/8" workstring and reverse out to bridge plug. **Obtain pitot gauge.** Retrieve bridge plug. TOOH.

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Menefee/Lewis Pay Add
HOWELL C #4

23. 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.
24. TIH with retrieving head on 2-3/8" workstring and reverse out to bridge plug. **Obtain pitot gauge.** Retrieve bridge plug.
25. TIH with 2-3/8" production tubing and SN one joint off bottom of string. CO to PBTD @ 5350'. When fluid production becomes negligible, land tubing at 5340' (Note: one more joint than original tbg depth). **Obtain final pitot gauge.**
26. ND BOP. NU wellhead. RDMO.

J. A. Howieson

Vendors:

Packer Rental & Bridge Plugs:
Wireline Services:
Stimulation:

To be determined later.
To be determined later.
To be determined later.

DBJ
JAS/jas 

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