

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 NM-012719
2. Name of Operator MERIDIAN OIL	6. If Indian, All. or Tribe Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	7. Unit Agreement Name
4. Location of Well, Footage, Sec., T, R, M 990'FSL, 990'FWL Sec.6, T-30-N, R-8-W, NMPM	8. Well Name & Number Howell G #2
	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"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other - pay add
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Conversion to Injectio

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 [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
JAN 20 1994
DISTRICT MANAGER

NMOCD

Pertinent Data Sheet - Howell G #2

Location: 990' FSL, 990' FWL, Section 6, T-30-N R-8-W, San Juan County, NM

Field: Blanco Mesaverde

Elevation: 6034' GL

TD: 5268'

PBD: 5260'

Completion Date: 11/30/57

DP Number: 49959A

Initial Potential: 19560 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>
12-1/2"	10-3/4"	32.75# S.W.	174'	150 sx	Surface
9-7/8"	7-5/8"	26.4# J-55 8rd	3104'	250 sx	1650' (TS)
6-3/4"	5-1/2" liner	15.5# J-55 8rd	3043'-5266'	300 sx	3220' (TS)

Tubing Record:

<u>Tubing Size</u>	<u>Weight & Grade</u>	<u>Depth Set</u>
2-3/8"	4.7# J-55 8rd	5219' (164 jts)

Formation Tops:

Ojo Alamo	2002'	Cliffhouse	4585'
Kirtland	2097'	Menefee	4695'
Fruitland	2455'	Pt. Lookout	5062'
Pictured Cliffs	2809'	Mancos	5252'
Lewis	2889'		

Logging Record: ES, GRL, Induction, Temperature Survey

Stimulation: Frac Pt. Lookout @ 5064'-5250' w/61,100 gal. water and 60,800# sand.
Frac Cliffhouse @ 4584'-4696' w/40,900 gal. water and 40,000# sand.

Workover History: 11/25/57 Squeezed liner top with 100 sxs neat to 3000 psi.

Production History:

Initial Deliverability	4890 MCFD	1 BOPD
Latest Deliverability	400 MCFD	1 BOPD

Transporter: EPNG

**HOWELL G #2
SW/4, Section 06, 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 3-1/2" and 3200' of 4-1/2" rented tapered fracstring, and 5 jts of MOI 2-3/8" tubing.***
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 164 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 @ 5260'. TOOH.
4. RU wireline. Set RBP above Point Lookout @ 5000'. Spot approximately 10' of sand on top of RBP w/wireline bailer(***check for fluid level when GIH and load as needed prior to running logs**). Run GR-CBL-CCL in 5-1/2" liner from RBP to TOC @ approximately 3043' (liner top). Evaluate GR-CBL-CCL and run copy to office to evaluate. ****Note: Fluid level may not be high enough to establish cement top, due to open perforations.***
5. PU 5-1/2" packer on 2-3/8" and TIH to 4500' and set. Pressure test upper casing to 600 psi for 15 minutes*. Release packer and TIH to 4900' 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).

4770'-5000' 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 @ 4730' (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 @ 4500'. Spot approximately 10' of sand on top of RBP w/wireline bailer.
13. TIH w/ 5-1/2" packer on workstring and set @ 4400'. 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).

3600'-4400'
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 @ 3500' 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 3500' 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.
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 @ 5260'. When fluid production becomes negligible, land tubing at 5250' (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:	To be determined later.
Wireline Services:	To be determined later.
Stimulation:	To be determined later.

DBJ
JAS/jas 

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