

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

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

1075' FNL, 1100' FWL, Sec. 23, T-30-N, R-8-W, NMPM

5. Lease Number
SF-078385A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Howell L #1A

9. API Well No.
30-045-21661

10. Field and Pool
Blanco Mesaverde

11. County and State
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

Type of Action

☐ Abandonment ☐ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut off
☐ Altering Casing ☐ Conversion to Injection
☒ Other - Pay Add

13. Describe Proposed or Completed Operations

It is intended to add Lewis pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram.

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

Signed Duane W. Spencer Title Regulatory Administrator Date 1/15/99
vkh

(This space for Federal or State Office use)

APPROVED BY /s/ Duane W. Spencer Title _____ Date FEB - 1 1999
CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOC

Howell L # 1A
Burlington Resources Oil & Gas
Lewis Payadd
Unit D - Sec 23 - T30N - R08W
Lat: 36° 48.07'
Long: 107° 38.97'

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- Comply with all BLM, NMOCD, & BR rules & regulations.
 - **Hold Safety Meetings.** Place fire safety equipment in strategic locations.
 - Spot and fill 6 frac tanks with 2% KCl water.
 - Use drill gas for all operations.
 - **(2) 4-1/2" CIBP** required for 4-1/2" 10.5# K-55 pipe.
 - (1) 4-1/2" Model 'EA' Retrieivomatic Packer
 - 3400' 3-1/2" 9.3# N-80 Frac string
 - 2 jts 2-7/8" 6.5# N-80 tubing *Bottom*
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The well is completed in the Blanco Mesaverde (CH/MN/PL) and is currently producing 266 MCFD. Cumulative production is 2862 MMCF with remaining reserves of 1231 MMCF. The Lewis will be stimulated in two stages with a 70 Quality foam, 25# linear gel frac and 100K# sand for each stage. Foam is to be used to limit fluid damage to the Lewis and aide in flowback. The flowback choke schedule is to be used to ensure that proppant remains in the fractures.

NOTE: Cliffhouse/Menefee perms open 4654' – 5111'
Point Lookout perms open 5192' - 5522'

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Blow down casing and tubing. Kill well w/ 2% KCl. ND WH, NU BOP.
2. TOOH with 2-3/8" 4.7# J-55 tubing from 5495' (177 joints, SN @ 5459') and LD. Visually inspect tubing, replacing any bad joints.
3. RU wireline unit. Run 4-1/2" gauge ring to 4560'. Wireline set 4-1/2" CIBP at 4550' to isolate the open Mesaverde perms. POOH. TIH w/2-3/8" tbg and 4-1/2" pkr, set at 4530', pressure test to 3000 psi. Spot 500 gal 15% HCl and load hole with 2% KCl. TOOH. Test to 1000 psi from surface.
4. RU wireline unit. Run CBL from 4540' to 3170'. POOH. Send logs in to B. Goodwin for evaluation. *gentling*

Lewis (First Stage):

5. RU wireline under packoff. Perforate first stage at the following depths with select fire HSC gun using Owen 3125-302T 10g charges (0.29" hole, 16.64" penetration), 1 SPF @ 180 degree phasing.

4155', 4165', 4175', 4185', 4205', 4210', 4235', 4250', 4265', 4280',
4295', 4315', 4325', 4345', 4355', 4365', 4395', 4405', 4415', 4425',
4450', 4460', 4485', 4500' (24 total holes, 345' gross interval)

6. TIH with 4-1/2" pkr on 2-3/8" tbg set at 4000'.
7. RU stimulation company. Test surface lines to 4800 psi. **Max surface pressure = 3950 psi at 5 BPM. Max static pressure = 3800 psi.** Break down first stage w/ 1000 gallons 15% HCl and 50 7/8" 1.3 SG ball sealers. Release pressure, RD stimulation company. Lower pkr to 4510' to knock off perf balls. TOOH.
8. TIH with 4-1/2" pkr on 2 jts 2-7/8" 6.5# N80 tbg and 3-1/2" 9.3# N80 frac string. Set pkr at 3200'. RU flowback equipment so that flowback can commence within 30 min after shutdown.
9. RU stimulation company. Test surface lines to 6000 psi. **Max surface pressure = 5000 psi at 40 BPM.** Fracture stimulate the first stage w/ 100,000# 20/40 Arizona sand in 70 Quality foam with 25# Linear gel at 40 BPM. (Estimated pressure drop due to friction in the wellbore is 3394 psi at 40 BPM.) See attached frac schedule for details. Frac will be tagged with radioactive tracers (0.4 mCi Ir-192, 0.3 mCi Sb-124, and 0.3 mCi Sc-46). (2 frac tanks needed)
10. Shut well in after frac and record ISIP. RD stimulation company. Install flowback line above frac valve. Commence flowback within 30 min after shutdown. Open well to pit, starting with a 10/64" choke. If minimal sand is being produced, change to a larger choke size (16/64"). If choke plugs off, shut well in and remove obstruction from choke and return to flowback. Continue increasing choke size and cleaning well up until fluid returns are low enough to allow the start of the second stage. Take pitot gauges when possible.
11. RD flowback equipment. TOOH.
12. RU Wireline unit. Wireline set 4-1/2" CIBP at 4140'. POOH. RD wireline unit.

Lewis (Second Stage):

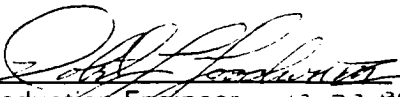
13. Under packoff, perforate second stage Lewis at the following depths with select fire HSC gun using Owen 3125-302T 10g charges (0.29" hole, 16.64" penetration), 1 SPF @ 180 degree phasing.

3745', 3760', 3778', 3805', 3815', 3825', 3835', 3930', 3940', 3955',
3965', 4025', 4035', 4045', 4055', 4075', 4080', 4085', 4090', 4095',
4100', 4105' (22 total holes, 360' gross interval)
14. TIH with 4-1/2" pkr on 2-3/8" tbg set at 4130'. Pressure test CIBP to 3000 psi. Release and reset pkr to 3600'.

15. RU stimulation company. Test surface lines to 4350 psi. **Max surface pressure = 3350 psi at 5 BPM. Max static pressure = 3000 psi.** Break down second stage w/ 1000 gallons 15% HCL and 50 7/8" 1.3 s.g. ball sealers. Release pressure, RD stimulation company. Lower pkr to 4110' to knock off perf balls. TOOH.
16. TIH with 4-1/2" pkr on 2 jts 2-7/8" 6.5# N80 tbg and 3-1/2" 9.3# N80 frac string. Set pkr at 3200'. RU flowback equipment so that flowback can commence within 30 min after shutdown.
17. RU stimulation company. Test surface lines to 6000 psi. **Max surface pressure = 5000 psi.** Fracture stimulate the second stage w/ 100,000# 20/40 Arizona sand in 70 Quality foam with 25# Linear gel at 40 BPM. (Estimated pressure drop due to friction in the wellbore is 3091 psi at 40 BPM.) See attached frac schedule for details. Frac will be tagged with radioactive tracers (0.4 mCi Ir-192, 0.3 mCi Sb-124, and 0.3 mCi Sc-46). *(2 frac tanks needed)*
18. Shut well in after frac and record ISIP. RD stimulation company. Install flowback line above frac valve. Commence flowback within 30 min after shutdown. Open well to pit, starting with a 10/64" choke. If minimal sand is being produced, change to a larger choke size (16/64"). If choke plugs off, shut well in and remove obstruction from choke and return to flowback. Continue increasing choke size and cleaning well up until fluid returns are negligible. Take pitot gauges when possible.
19. RD flowback equipment. TOOH.
20. TIH w/3-7/8" bit on 2-3/8" tbg and clean out to CIBP at 4140'. Pull above perfs and obtain pitot gauge for the upper Lewis. Drill out CIBP (minimum mist rate of 12 BPH).
21. Clean out to CIBP at 4550'. Pull above perfs and obtain pitot a gauge for the entire Lewis interval. Drill up CIBP (minimum mist rate of 12 BPH), clean out to PBDT (5528'). Clean up to minimal water and trace to no sand. Obtain combined pitot gauge.
22. Prepare to run production tubing string as follows: expendable check, one joint 2-3/8" tubing, 1.78" seating nipple, and remaining tubing. Land tubing @ 5495'.
23. ND BOP's, NU single tubing hanger wellhead. Pump off expendable check. Obtain final pitot up tubing. If well will not flow on it's own, make swab run to seating nipple. If swab run is not necessary, run a broach on slickline to ensure that the tubing is clear. RD and MOL. Return well to production.
24. After frac log will be run after the rig is released.

Howell L # 1A
Burlington Resources Oil & Gas
12/28/98

Recommend:


Production Engineer 12-28-98

Approved:

Basin Opportunities Team Leader

Approved:


Drilling Superintendent

Vendors:

Wireline	Black Warrior	326-6669
Stimulation	Halliburton	324-3500
RA Tagging	Pro-Technics	326-7133

Production Engineer: **Bobby Goodwin**
326-9713-work
564-7096-pager
599-0992-home

Howell L #1A

Blanco Mesaverde Payadd

Unit D, Section 23, T30N, R08W

San Juan County, NM

Elevation: 6148' GL

LAT: 36 48.07'

LONG: 107 38.97'

date spud: 02-12-75

