UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells	. 	
	5.	Lease Number SF-078578A
1. Type of Well GAS	6.	If Indian, All. or Tribe Name
2. Name of Operator	7.	Unit Agreement Name
BURLINGTON RESOURCES OIL & GAS COMPANY		
 Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700 Location of Well, Footage, Sec., T, R, M 1800' FNL, 930' FWL, Sec. 21, T-30-N, R-8-W, NMPM 		Well Name & Number Howell K #1A API Well No. 30-045-21720 Field and Pool Blanco Mesaverde County and State San Juan Co, NM
Subsequent Report Plugging Back Casing Repair Final Abandonment Altering Casing X Other - Pay Add	Lon Change of Pla New Construct Non-Routine H	ans Lion Fracturing
13. Describe Proposed or Completed Operations It is intended to add Lewis pay to the Mesaverde if well according to the attached procedure and the attached procedur	vellbore diagra	ne subject am.
Signed Signed Title Regulatory Adm:		e 1/15/99 vkh
(This space for Federal or State Office use) APPROVED BY Title CONDITION OF APPROVAL, if any:	Date	1/29/99

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.



Howell K # 1A

Burlington Resources Oil & Gas Lewis Payadd Unit E - Sec 21 - T30N - R08W

Lat: 36° 47.94′ Long: 107° 41.19′

- Comply with all BLM, NMOCD, & BR rules & regulations.
- Hold Safety Meetings. Place fire safety equipment in strategic locations.
- Spot and fill 4 frac tanks with 2% KCl water.
- Use drill gas for all operations.
- (1) 4-1/2" CIBP required for 4-1/2" 10.5# K-55 pipe.
- (1) 4-1/2" Model 'EA' Retreivamatic Packer
- 3000' 3-1/2" 9.3# N-80 Frac string
- 4 its 2-7/8" 6.5# N-80 tubing Butters

The well is completed in the Blanco Mesaverde (CH/MN/PL) and is currently producing 233 MCFD. Cumulative production is 2747 MMCF with remaining reserves of 781 MMCF. The Lewis will be stimulated in one stage with a 70 Quality foam, 25# linear gel frac and 200K# sand. 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 perfs open 4253' - 4654' Point Lookout perfs open 4822' - 5090'

- 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 **5065**' (**170** joints, F-nipple @ **5032**') and LD. Visually inspect tubing, replacing any bad joints.
- 3. RÜ wireline unit. Run 4-1/2" gauge ring to 4090'. Wireline set 4-1/2" CIBP at 4080' to isolate the open Mesaverde perfs. POOH. TIH w/2-3/8" tbg and 4-1/2" pkr, set at 4070', pressure test to 3000 psi. Spot 500 gal 15% HCl and load hole with 2% KCl. TOOH. Test to 1000 psi from surface. With hole loaded and 1000 psi, run CBL from 4050' to 2700'. Send logs to B. Goodwin.
- 4. Under packoff, perforate 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.

3395', 3425', 3440', 3455', 3535', 3545', 3640', 3647', 3655', 3685', 3690', 3700', 3748', 3765', 3775', 3780', 3805', 3840', 3850', 3895', 3915', 3920', 3998', 4015', 4025'

(25 total holes, 630' gross interval)

- 5. TIH with 4-1/2" pkr on 2-3/8" tbg set at 3250'.
- 6. RU stimulation company. Test surface lines to 4300 psi. Max surface pressure = 3300 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 4040' to knock off perf balls. TOOH.
- 7. TIH with 4-1/2" pkr on 4 jts 2-7/8" 6.5# N80 tbg and 3-1/2" 9.3# N80 frac string. Set pkr at 2750'. RU flowback equipment so that flowback can commence within 30 min after shutdown.
- 8. RU stimulation company. Test surface lines to 6000 psi. Max surface pressure = 5000 psi at 40 BPM. Fracture stimulate the second stage w/ 200,000# 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 2873 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). (4 frac tanks needed)
- 9. 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.
- 10. RD flowback equipment. TOOH.
- 11. TIH w/3-7/8" bit on 2-3/8" tbg and clean out to CIBP at 4080'. Pull above perfs and obtain pitot gauge for the Lewis. Drill out CIBP (minimum mist rate of 12 BPH).
- 12. Clean out to PBTD (5136'). Clean up to minimal water and trace to no sand. Obtain combined pitot gauge.
- 13. 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 @ 5065'.
- 14. 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.

15. After frac log will be run after the rig is released.

Recommend:

Production Engineer

2-29-38

Approved:

Basin Opportunities Team Leader

Approved:

Drilling Superintendent

Vendors:

Wireline Black Warrior 326-6669
Stimulation Dowell 325-5096
RA Tagging Pro-Technics 326-7133

Production Engineer: Bobby Goodwin

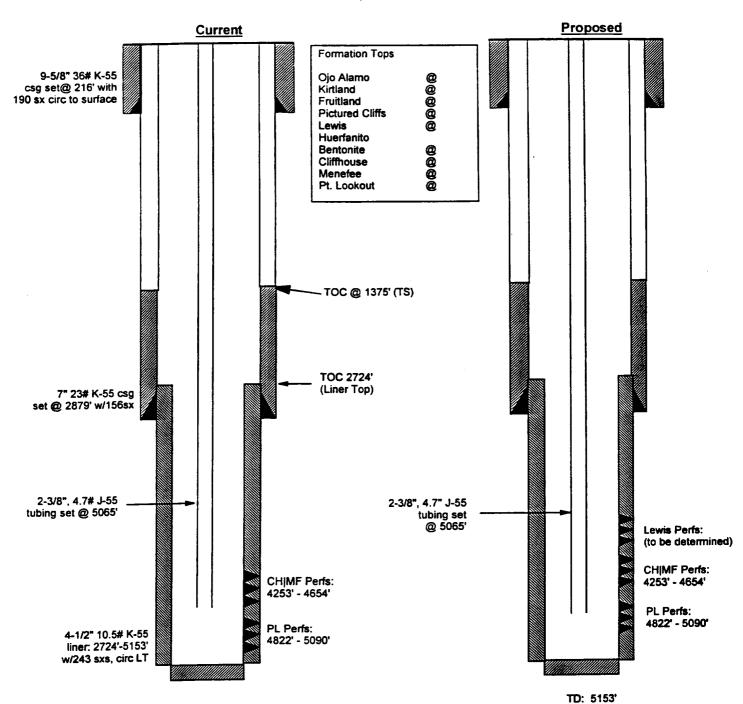
326-9713-work 564-7096-pager 599-0992-home

Howell K #1A

Blanco Mesaverde Payadd

Unit E, Section 21, T30N, R08W San Juan County, NM Elevation: 5857' GL

> LAT: 36 47.94' LONG: 107 41.19' date spud: 05-27-75



PBTD: 5136'

TD: 5153' PBTD: 5136'