## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notic	ces and Reports on Wells	/	
1. Type of Well GAS		5. 6.	Lease Number SF-078385 If Indian, All. or Tribe Name
2. Name of Operator			Unit Agreement Name
RESOURCES OIL &	GAS COMPANY	3 - 3 Km	<b>&gt;Well Name &amp; Number</b> Howell L #2A
PO Box 4289, Farmington, NM  4. Location of Well, Footage, Se	87499 (505) 326-9700 c., T, R, M	10.	API Well No. 30-045-21767 Field and Pool
985' FSL, 1755' FEL, Sec. 25,	T-30-N, R-8-W, NMPM	11.	Blanco Mesaverde County and State San Juan Co, NM
12. CHECK APPROPRIATE BOX TO IND	ICATE NATURE OF NOTICE,	REPORT, OTHER	DATA
Type of Submission	Type of Acti	on	
$_{ m X}_{ m }$ Notice of Intent	Abandonment Recompletion	Change of Pla New Construct	
Subsequent Report	Plugging Back	Non-Routine I	Fracturing
Final Abandonment	Casing Repair Altering Casing	Water Shut of Conversion to	
I I I I I I I I I I I I I I I I I	X Other - Pay Add		J
13. Describe Proposed or Compl	eted Operations		
It is intended to add Lewi		formation of the cellbore diagra	he subject am.
I hereby certify that the  Signed Mahnus  (This space for Federal or State APPROVED BY SPENCE CONDITION OF APPROVAL, if any	Title Regulatory Admi		e 1/15/99 vkh
COMBITTON OF AFFROVAL, II ally.			

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 L # 2A

Burlington Resources Oil & Gas Lewis Payadd Unit O - Sec 25 - T30N - R08W

Lat: 36° 46.70′ Long: 107° 37.44′

- 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 4% 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
- 3200' 3-1/2" 9.3# N-80 Frac string
- 4 its 2-7/8" 6.5# N-80 tubing 524 ress

The well is completed in the Blanco Mesaverde (CH/MN/PL) and is currently producing 243 MCFD. Cumulative production is 2455 MMCF with remaining reserves of 1045 MMCF. The Lewis will be stimulated in one stage with a 70 Quality foam, ClearFRAC and 200K#. 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 4748' – 5070' Point Lookout perfs open 5182' - 5482'

- 1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Blow down casing and tubing. Kill well w/ 2% KCI. ND WH, NU BOP.
- 2. TOOH with 2-3/8" 4.7# J-55 tubing from **5465**' (**176** joints, SN @ **5432**') and LD. Visually inspect tubing, replacing any bad joints.
- 3. RU wireline unit. Run 4-1/2" gauge ring to 4470'. Wireline set 4-1/2" CIBP at 4460' to isolate the open Mesaverde perfs. POOH. TIH w/2-3/8" tbg and 4-1/2" pkr, set at 4440', 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 4440' to liner top @ 3196'. Send logs in to B. Goodwin.
- 4. RU wireline under packoff. Perforate 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.

3775', 3825', 3835', 3905', 3925', 3940', 3955', 4020', 4035', 4070', 4085', 4105', 4153', 4175', 4205', 4240', 4265', 4370', 4350', 4370', 4400' (21 total holes, 625' gross interval)

- 5. TIH with 4-1/2" pkr on 2-3/8" tbg set at 3600'.
- 6. RU stimulation company. Test surface lines to 4500 psi. Max surface pressure = 3350 psi at 5 BPM. Max static pressure = 3000 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 4410' 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 3250'. 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 first stage w/ 200,000# 20/40 Arizona sand in 70 Quality foam with ClearFRAC at 40 BPM. (Estimated pressure drop due to friction in the wellbore is 3768 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 low enough to allow the start of the second stage. 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 4460'. Pull above perfs and obtain pitot gauge for the Lewis.
- 12. Drill up CIBP (minimum mist rate of 12 BPH), clean out to PBTD (5533'). 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 @ 5465'.
- 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 rig moves off location.

Recommend:

Production Engineer

Howell L # 2A Burlington Resources Oil & Gas 01/04/99

Approvea:			
	Basin Opportunities	Team	Leader

Approved: PUR

Drilling Superintendent

Vendors:

WirelineBlack Warrior326-6669StimulationDowell325-5096RA TaggingPro-Technics326-7133

Production Engineer: Bobby Goodwin

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

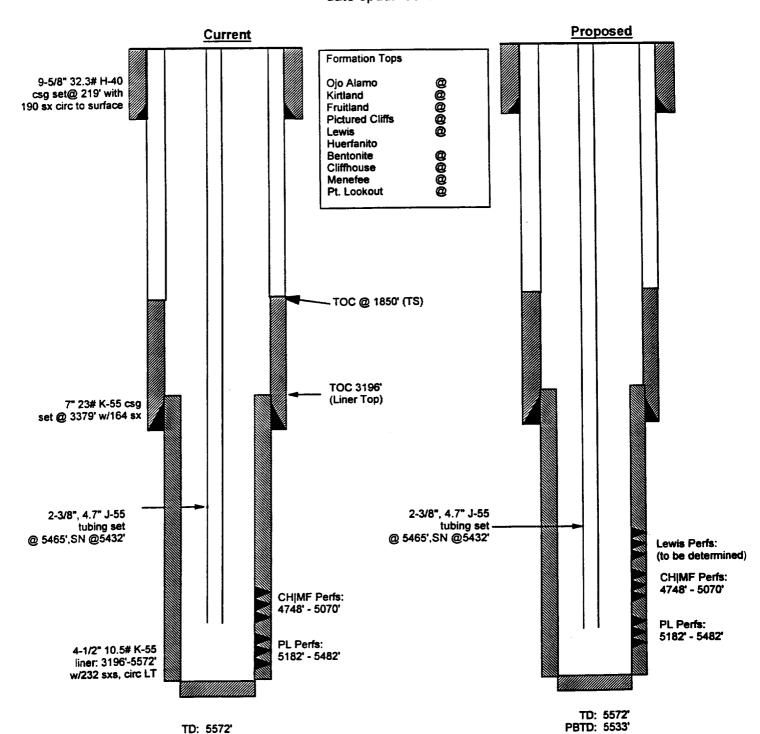
## Howell L #2A

Blanco Mesaverde Payadd

Unit O, Section 25, T30N, R08W San Juan County, NM

Elevation: 6145' GL LAT: 36 46.70' LONG: 107 37.44'

date spud: 03-12-76



PBTD: 5533'