### UNITED STATES

# DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

		5.	Lease Number
1. Type of Well GAS		6.	SF-078424 If Indian, All. o Tribe Name
2. Name of Operator			Unit Agreement Na San Juan 29-7 Uni
BURLINGTON RESOURCES OIL	E GAS COMPANY	1940 - T	
3. Address & Phone No. of Operat	(0)山 以京 (2) Sor	ь 1574 4 <b>8</b> 9. — А	Well Name & Numbe San Juan 29-7 U#5
PO Box 4289, Farmington, NM		9.	<b>API Well No.</b> 30-039-07574
4. Location of Well, Footage, Se 1520'FSL 970'FWL, Sec.21, T-2			Field and Pool Blanco Mesaverde County and State Rio Arriba Co, NM
12. CHECK APPROPRIATE BOX TO INI		RT, OTHER	DATA
Type of Submission _X_ Notice of Intent	Type of Action  Abandonment Cha Recompletion New	nge of Pla Construct	
Subsequent Report		-Routine E er Shut of	Fracturing f
Final Abandonment	Altering Casing Con	version to	Injection
	_X_ Other -		
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#### San Juan 29-7 Unit #51

Lewis/Menefee Pay Add Procedure Unit L, Section 21, T29N, R07W Lat: 36°-42.5043'/Long: 107°-34.89624'

The well is currently completed in the Cliffhouse and Point Lookout. It is intended to add the Lewis and Menefee intervals to this existing Mesaverde producer. The Menefee will be sand fracture stimulated in a single stage using 58,500 lbs 20/40 sand in a 30 lb linear gel, while the Lewis will be completed in a single stage with 200,000 lbs 20/40 sand in a 70Q 20lb linear gel.

- 1. Inspect location and test rig anchors. Comply with all NMOCD, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location 6000', 2-3/8" workstring, 9 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, 5600', 3-1/2" frac string and 6-400 bbl frac tanks.
- 2. MIRU. Fill 400 bbl tanks with 2% KCL water. Run fluid tests on water. Filter water based upon stimulation company water analysis. Record and report SI pressures on tubing, casing and bradenhead. Lay blowdown line. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
- 3. TOOH with 1-1/2", J-55, EUE Mesaverde production string set at 5858'. Visually inspect tubing, note and report any corrosion and/or scale in/on tubing. Replace bad joints as needed.
- 4. PU and RIH with a 4-3/4" bit, 5-1/2" (15.5 lb/ft) casing scraper on the 2-3/8" workstring hauled to location. Clean out to PBTD (~5885') with air/mist. TOOH.
- 5. TIH with 5-1/2" tubing set RBP on 2-3/8" workstring. Set RBP at 5320'. Release from RBP and fill casing with 2% KCL. TOOH.
- 6. RU logging company. Run GR-CBL-CCL from PBTD to 4000'. Evaluate CBL. Good cement bond must exist from PBTD to 4200' to continue with the Lewis portion of the procedure.
- 7. TIH with 5-1/2" RBP retrieving head on 2-3/8" workstring. Latch on to RBP at 5320'. Release RBP and allow pressures to equalize. TOH with RBP.

#### MENEFEE:

TIH with 5-1/2" CIBP, packer on 2-3/8" tubing. Set CIBP at 5770'. Release from CIBP. PUH and set packer just above CIBP and pressure test to 3600 psi. Bleed off pressure. Release packer and PUH to 5760'. Spot 250 gals 15% HCL across the Menefee perforation interval of 5516 to 5757'. TOOH.

All acid on this well to contain the following additives per 1000 gals.

2 gal	HAI-81M	Corrosion inhibitor
5 gal	FE-1A	Iron Control
5 gal	FE-2A	Iron Control
1 gal	SSO-21	Surfactant
1 gai	ClaSta XP	Clay control

9. NU wireline. Correlate openhole Lane Wells Radioactivity Log to GR-CBL-CCL. Perforate Menefee as follows using select fire HSC guns loaded with Owens HSC-3125 302T 10 gram charges set at **2 SPF** (Av. perf diameter - 0.30", Av. pen. -16.64" in concrete).

5516', 5518', 5520', 5530', 5588', 5613', 5654', 5656', 5659', 5737', 5739', 5741', 5755', 5757' (28 holes total)

ND wireline company.

- 10. TIH with 5-1/2" bottom Baker C-cup straddle packer, 6 jts 2-7/8" N-80 tubing, 5-1/2" top straddle packer, 3 joints 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, and remaining 3-1/2", frac string. Set bottom packer at ~5470' and top packer ~5290' (Cliffhouse perfs 5340-5450').
- 11. RU stimulation company. Pressure test surface lines to 7500 psi. Monitor annulus for communication. Establish an injection rate into perfs with 2% KCL water observing a maximum pressure of 6500 psi. Once pressure has broken back and stabilized, continue to breakdown Menefee perforations with 1000 gals 15% HCL at the maximum rate pressures will allow. Use the same additives as in Step 8.
- 12. Maximum surface treating pressure is 6500 psi. Monitor annulus during stimulation. Fracture stimulate Menefee with 58,500 lbs 20/40 Arizona sand in 35,000 gals 30 lb linear gel at 50 BPM. Average surface treating pressure will be 3,987 psi. Total estimated tubing and perforation friction will be 4,173 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (Ibs)
Pad	5,000	
1.0 ppg	6,500	6,500
2.0 ppg	16,250	32,500
3.0 ppg	6,500	19,500
Flush (top perf)	1,983	
Totals	36,233	58,500

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing. Record ISIP, 5 minute, 10 minute and 15 minute SIP. RD stimulation company.

- 13. Open well through a positive choke or choke manifold. Monitor flow. Flow at 20 BPH or less, if sand is observed.
- 14. When pressures allow, release packers and TOOH. Stand back 3-1/2" frac string, 3-1/2" X 2-7/8" N-80 crossover, and 2-7/8" N-80 tubing. LD top 5-1/2" straddle packer, 2-7/8" N-80 tubing and bottom 5-1/2" straddle packer.

#### LEWIS:

15. TIH with 5-1/2" CIBP, packer on 2-3/8" tubing. Set CIBP at 5300'. Release from CIBP. PUH and set packer just above CIBP and pressure test to 3600 psi. Bleed off pressure. Release packer and PUH with packer to 5100'. Spot 800 gals 15% HCL across the Lewis perforation interval of 4300 to 5100'. Use the same additives as in Step 8. TOOH.

- 16. Contact Jennifer L. Dobson at 599-4026 (work), 564-3244 (home) or 324-2461 (pager) for actual perforation depths. Lewis perforations will be picked off the GR-CBL-CCL.
  - Due to questionable cement bond across the Lewis perforation interval, a CNL or TDT log will not be run. Any annular gas would mask the true interpretation of the CNL or TDT log.
- 17. NU wireline. Perforate Lewis with 25 holes using select fire HSC guns loaded with Owens HSC-3125 302T 10 gram charges (Av. perf diameter 0.29", Av. pen. -16.64" in concrete). ND wireline company.
- 18. TIH with 5-1/2" packer, 3 joints 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover. and remaining 3-1/2", frac string. Set packer at 4200'.
- 19. Pressure test surface lines to 7500 psi. Hold tailgate safety meeting. Establish an injection rate into perfs with 2% KCL water observing a maximum pressure of 6500 psi. Once pressure has broken back and stabilized, shut pumps down and obtain an ISIP. Continue to breakdown Lewis perforations with 1000 gals 15% HCL. Drop 50 RCN 7/8" 1.3 specific gravity balls evenly spaced. Attempt to ball off to 3600 psi surface pressure. Use the same additives as in Step 9.
- 20. ND stimulation company. Release packer. Lower packer to PBTD to knock balls off perforations. PUH and re-set packer at 4200'. If squeeze work was necessary, set packer at top of good cement.
- 21. **Maximum surface treating pressure is 6500 psi.** Fracture stimulate the Lewis with 200,000 lbs 20/40 Arizona sand in 2173 bbls 70Q 20 lb linear gel at **40 BPM**. Average surface treating pressure will be 5,984 psi. Perforation and casing friction is estimated to be 4,511 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (Ibs)
Pad	15,000	4,500	168.3	
1.0 ppg	12,000	3,600	134.5	12,000
2.0 ppg	21,000	6,300	235.2	42.000
3.0 ppg	27,333	8,200	305.9	82,000
4.0 ppg	16,000	4,800	179.0	64.000
Flush (100' above top perf)	1,501	450	16.9	0
Totals	92,835	27,850	1,040	200,000

Cut rate throughout flush as pressure allows. Record ISIP, 5 minute, 10 minute and 15 minute SIP. RD stimulation company.

- 22. Flow well back after 30 minutes to 1 hour through a choke manifold. 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.
- When pressures allow, release packer and TOOH. LD 3-1/2" frac string, 3-1/2" X 2-7/8" N-80 crossover, 2-7/8" N-80 frac string and packer.

- 25. TIH with 4-3/4" bit on 2-3/8" workstring and clean out to CIBP at 5300'. Monitor gas and water returns when applicable. **Take a Lewis pitot gauge**. Drill out CIBP at 5300' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.
- 26. Clean out to CIBP at 5770'. Blow well throughout Lewis, Cliffhouse and Menefee. Monitor gas. water and sand returns when applicable. **Take a**Lewis/Cliffhouse/Menefee pitot gauge. Drill out CIBP at 5770' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.
- 27. Continue to CO to PBTD with air. Blow well at PBTD to check water rates. If needed, continue to blow well for clean up. When water rates are below 5 BPH and there is no sand production, TOOH. LD 2-3/8" workstring.
- 28. TIH with an expendable check, one 1-1/2" joint, standard SN and remaining 1-1/2" tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. **Obtain final Lewis/Cliffhouse/Menefee/Point Lookout pitot gauge.** Land tubing at 5858'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended: J. Nobson

Production Engineer

Approved:

Drilling Superintendent

Approved

Team Leader

Contact:

Jennifer Dobson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

## San Juan 29-7 Unit #51

Unit L, Section 21, T29N, R7W Rio Arriba County, NM

Lat: 36° - 42.5043'/Long: 107° - 34.89624'

#### **Current Schematic**

#### **Proposed Schematic**

