submitted in lieu of Form 3160-5

UNITED STATES

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

RECEIVED
BLM
99 MAR -4 PM 2:23
070 FARMINGTON, NM

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

5. **Lease Number**
SF-079493-A

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**
San Juan 27-5 Unit

2. **Name of Operator**
BURLINGTON RESOURCES **OIL & GAS COMPANY**

RECEIVED
MAR 15 1999
OIL CON. DIV.
DIST. 3

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

8. **Well Name & Number**
San Juan 27-5 U#27

9. **API Well No.**
30-039-06875

4. **Location of Well, Footage, Sec., T, R, M**
990'FSL 890'FWL, Sec.26, T-27-N, R-5-W, NMPM

10. **Field and Pool**
Blanco MV/Tapacito PC

11. **County and State**
Rio Arriba Co, NM

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

Type of Submission	Type of Action		
_X_ Notice of Intent	___ Abandonment	___ Change of Plans	
	___ Recompletion	___ New Construction	
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing	
	___ Casing Repair	___ Water Shut off	
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection	
	_X_ Other -		

13. **Describe Proposed or Completed Operations**

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

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

Signed [signature] (JLD) Title Regulatory Administrator Date 3/2/99
TLW

(This space for Federal or State Office use)
APPROVED BY Chip Hanaden Title Acting Team Lead Date 3/12/99
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.

San Juan 27-5 Unit #27

Lewis/Cliffhouse/Menefee Pay Add Procedure
Unit M, Section 26, T27N, R05W
Lat: 36°- 32.41974'/Long: 107°– 19.97496'

This well is currently completed in the Pictured Cliffs and Point Lookout intervals. It is intended to add the Lewis, Cliffhouse, and Menefee intervals and consequently commingle the Pictured Cliffs and Mesaverde production. The Cliffhouse and Menefee will be sand fracture stimulated in a single stage using 100,000 lbs 20/40 sand in slickwater, 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 3 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, 5400', 3-1/2" frac string and 10-400 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. **Pictured Cliffs side of this dual producer has no production string.** ND WH and NU BOP, offset spool, and offset rams 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. Unset Baker Model 'EGJ' production packer at 3570' using a straight pull. TOOH with 2-3/8", 4.7 lb/ft EUE Mesaverde production string set at 5433'. Visually inspect tubing, note and report any 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" tubing. Clean out to float collar at 5670' with air/mist. **Blow well at PBTD to check sand production rates. Make sure well is not making sand before TOOH.** TOOH.

5. TIH with 5-1/2" CIBP and packer on 2-3/8" tubing. Set CIBP at ~5370'. Release from CIBP and fill casing with approximately 200 bbls 2% KCL. Set packer just above CIBP. Pressure test CIBP to 3600 psi. Bleed off pressure. Release packer and PUH to 5340'. NU stimulation company. Spot 10 bbls 15% HCL across Cliffhouse and Menefee perf interval (4959-5332'). ND stimulation company. 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 gal	ClaSta XP	Clay control

6. NU wireline company and their logging tools. Run GR-CBL-CCL from PBTD to 3400'. Evaluate CBL. Tie into liner top at 3448' for correlation. Good cement bond must exist from PBTD to 3750' to continue with the Lewis portion of the procedure.

CLIFFHOUSE\MENEFEE:

7. NU wireline company's perforating guns. Correlate openhole log to GR-CBL-CCL. Perforate Cliffhouse and Menefee as follows using select fire HSC guns loaded with

Owens HSC-3125 302T 10 gram charges set at **1 SPF** (Av. perf diameter - 0.30", Av. pen. -16.64" in concrete).

4959', 4962', 4964', 4970', 4972', 4974', 5006', 5008', 5034', 5036', 5057', 5058', 5062', 5063', 5066', 5067', 5068', 5121', 5122', 5130', 5131', 5199', 5200', 5207', 5214', 5215', 5289', 5290', 5292', 5298', 5300', 5301', 5327', 5331', 5332' (35 holes total)

ND wireline company.

8. 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 ~4750'.

9. RU stimulation company. Pressure test surface lines to 7500 psi. Monitor annulus for indications of flow during the job. Breakdown Cliffhouse and Menefee perforations with 25 bbls 15% HCL. Drop 70 RCN 7/8" 1.3 specific gravity perf balls evenly spaced throughout job. Attempt to balloff to 3600 psi. Use same additives as in Step #5.

10. ND stimulation company. Bleed off pressure and release packer. Lower packer to 5340' to knock off perf balls. Reset packer at 4850'.

11. NU stimulation company. **Maximum surface treating pressure is 6500 psi.** Monitor annulus for indications of flow during the job. Fracture stimulate Cliffhouse and Menefee with 100,000 lbs 20/40 Arizona sand in 2,738 bbls slickwater at **50 BPM.** Average surface treating pressure will be 3,398 psi. **If injection pressures allow, adjust sand schedule to increase 2.0 ppg stage.** Total estimated tubing and perforation friction will be 3,311 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	15,000	
0.5 ppg	30,000	15,000
1.0 ppg	45,000	45,000
1.5 ppg	20,000	30,000
2.0 ppg	5,000	10,000
Flush (top perf)	1,767	
Totals	**116,767**	**100,000**

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.

12. Open well through a positive choke or choke manifold. Monitor flow. Flow at 20 BPH or less, if sand is observed. When pressures allow, release packer 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 5-1/2" packer.

LEWIS:

13. NU wireline. Set 5-1/2" CIBP at 4800'.

14. Perforate Lewis with 30 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) set at 1 SPF.

3884', 3886', 3888', 3960', 3962', 4128', 4130', 4162', 4164', 4302', 4304', 4306', 4308', 4336', 4338', 4440', 4442', 4444', 4456', 4458', 4460', 4496', 4498', 4568', 4570', 4628', 4632', 4676', 4678', 4680' (30 holes total)

ND wireline company.

15. 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 just above CIBP at 4800'. Pressure test CIBP to 3600 psi. Bleed off pressure and release packer. PUH with packer to 4690'. NU stimulation company. Spot 20 bbls 15% HCL across Lewis perforation interval (3884-4680'). Use the same additives as in Step #5. ND stimulation company. Continue to PUH and set packer at 3650'. If squeeze work was necessary, adjust acid spot volume and set packer at top of good cement.

16. NU stimulation company. Pressure test surface lines to 7500 psi. Hold tailgate safety meeting. Monitor annulus for indications of flow during the job. Establish an injection rate into perfs with 2% KCL water. Once pressure has broken back and stabilized, shut pumps down and obtain an ISIP. Continue to breakdown Lewis perforations with 25 bbls 15% HCL. Drop 60 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 #5.

17. ND stimulation company. Release packer. Lower packer to 4690' to knock balls off perforations. PUH and re-set packer at 3750'. If squeeze work was necessary, set packer at top of good cement.

18. NU stiumlation company. **Maximum surface treating pressure is 6500 psi.** Monitor annulus for indications of flow during the job. Fracture stimulate the Lewis with 200,000 lbs 20/40 Arizona sand in 2173 bbls 70Q 20 lb linear gel at **50 BPM**. **Tag sand with 3 radioactive isotopes.** Average surface treating pressure will be 6,368 psi. Perforation and tubing friction is estimated to be 5,025 psi. Treat per the following schedule:

Stage	Downhole Foam Volume (gals)	Clean Gel Volume (gals)	N2 Volume (MSCF)	Sand Volume (lbs)
Pad	15,000	4,500	157.3	---
1.0 ppg	12,000	3,600	125.7	12,000
2.0 ppg	21,000	6,300	219.8	42,000
3.0 ppg	27,333	8,200	285.9	82,000
4.0 ppg	16,000	4,800	167.3	64,000
Flush (100' above top perf)	1,337	401	14.0	0
Totals	**92,670**	**27,801**	**970**	**200,000**

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

19. 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.

20. 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.

21. TIH with 4-3/4" bit on 2-3/8" workstring and clean out to CIBP at 4800'. Monitor gas and water returns when applicable. **Take a "dirty" Pictured Cliffs/Lewis pitot gauge**. Drill out CIBP at 4800' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.

22. Clean out to CIBP at 5370'. Blow well throughout Lewis, Cliffhouse, and Menefee. Monitor gas, water and sand returns when applicable. **Take a "dirty" Pictured Cliffs/Lewis/Cliffhouse/Menefee pitot gauge.** Drill out CIBP at 5370' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.

23. Continue to CO to PBTD (5670') with air. Blow well at PBTD to check water rates. If needed, continue to blow well for clean up. When water rates are below 3 BPH and sand production is minimal, TOOH.

24. TIH with 1750' 2-3/8" tailpipe, 5-1/2" packer and 2-3/8" tubing. Set packer at 3800' (Within 100' of top Mesaverde perforation at 3884'). Run Mesaverde only 3 hour production test through separator using a back pressure of 150 psi. This is necessary for determining Lewis/Cliffhouse/Menefee pay add contribution for determining accurate commingling allocations. Release packer and TOOH.

25. TIH with an expendable check, one 2-3/8" joint, standard SN and remaining 2-3/8" tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. **Obtain final Pictured Cliffs/Lewis/Cliffhouse/Menefee/Point Lookout pitot gauge.** Land tubing at 5584'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

26. RU Pro-Technics. Run After-Frac log across Lewis (3884-4680'). RD Pro-Technics.

Recommended: _____
Production Engineer

Approved: _____ 1/13/99
Drilling Superintendent

Approved: _____ 1/8/99
Team Leader

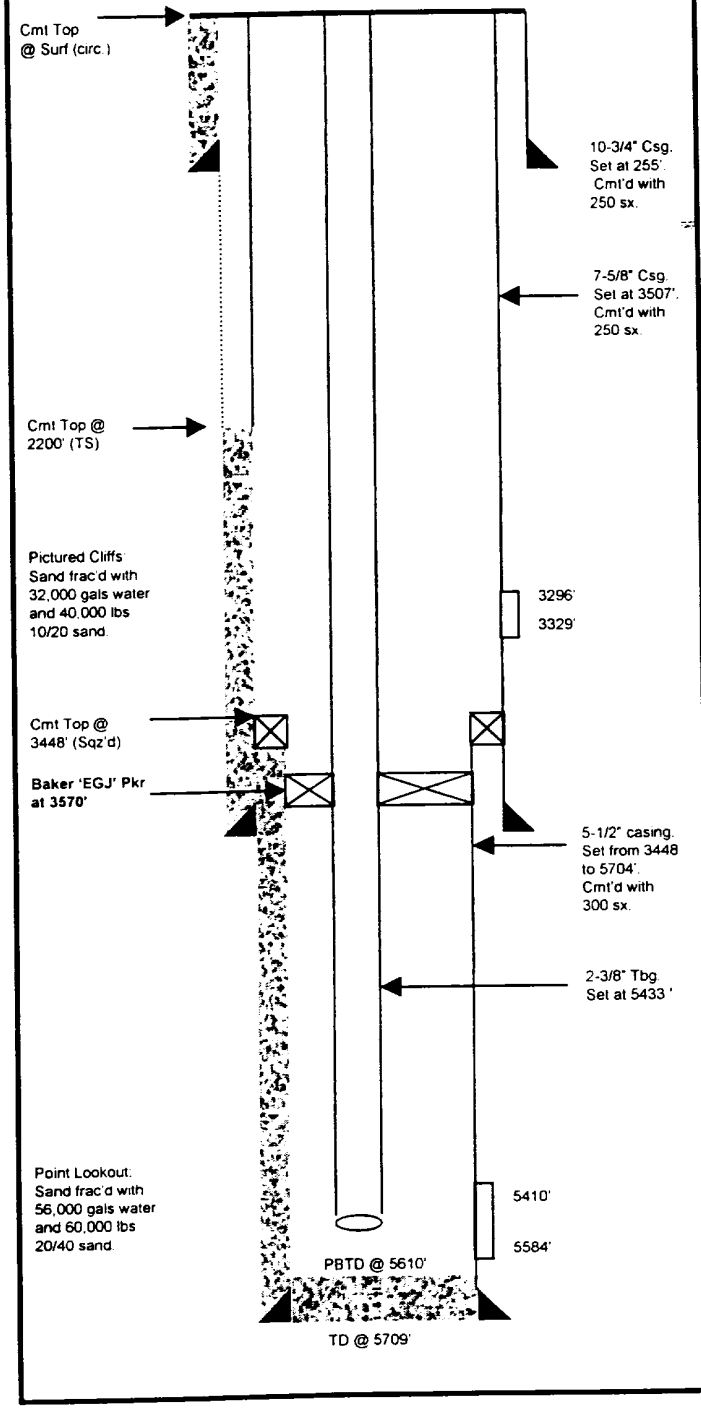
Contact:

Jennifer Dobson	599-4026 (work)	564-3244 (home)	324-2461 (pager)

San Juan 27-5 Unit #27

Unit M, Section 26, T27N, R5W
Rio Arriba County, NM
Lat: 36° - 32.41974'/Long: 107° - 19.97496'

Current Schematic



Proposed Schematic