

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

Sundry Notices and Reports on Wells

99 MAR -4 PM 2:21

1. Type of Well
GAS

070 FARMINGTON, NM

5. Lease Number
SF-079392
6. If Indian, All. or
Tribe Name

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

7. Unit Agreement Name
San Juan 27-5 Unit

3. Address & Phone No. of Operator

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

RECEIVED
MAR 15 1999

Well Name & Number
San Juan 27-5 U#19

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

990' FSL 1750' FWL, Sec.20, T-27-N, R-5-W, NMPM

OIL CON. DIV
DIST. 3

API Well No.
30-039-06961

10. Field and Pool
Blanco Mesaverde
11. County and State
Rio Arriba 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 -

13. Describe Proposed or Completed Operations

It is intended to add 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 Chip Hassade (JLD) Title Regulatory Administrator Date 3/2/99
TLW

(This space for Federal or State Office use)

APPROVED BY Chip Hassade 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.

3

NMOCD

✓

San Juan 27-5 Unit #19
Lewis/Menefee Pay Add Procedure
Unit N, Section 20, T27N, R05W
Lat: 36°- 33.28032'/Long: 107° – 23.07036'

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 7 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, 5000', 3-1/2" frac string and 5-400 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 2-3/8", 4.7 lb/ft, J-55 Mesaverde production string set at 5634'. 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" tubing. Clean out to PBTD (~5650') with air/mist. TOOH.
5. TIH with 5-1/2" tubing set RBP on 2-3/8" workstring. Set RBP at ~5040'. Release from RBP and fill casing with approximately 200 bbls 2% KCL. TOOH.
6. RU logging company. Run GR-CBL-CCL from PBTD to 3400'. Evaluate CBL. Good cement bond must exist from PBTD to 3800' 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 5040'. Release RBP and allow pressures to equalize. TOH with RBP.

MENEFEE:

8. TIH with 5-1/2" CIBP, packer on 2-3/8" tubing. Set CIBP at 5460'. Release from CIBP. PUH and set packer just above CIBP and pressure test to 3600 psi. Bleed off pressure. Release packer and PUH to 5440'. Spot 7 bbls 15% HCL across the Menefee perforation interval of 5202 to 5430'. 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

9. NU wireline. Correlate openhole 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 1 SPF (Av. perf diameter - 0.30", Av. pen. -16.64" in concrete).

5202', 5203', 5204', 5210', 5212', 5216', 5227', 5228', 5232', 5234', 5235', 5236', 5256', 5258', 5260', 5290', 5292', 5340', 5342', 5363', 5365', 5382', 5384', 5390', 5392', 5400', 5401', 5424', 5426', 5430' (30 holes total)

ND wireline company.

10. TIH with 5-1/2" bottom Baker C-cup straddle packer, 4 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 ~5150' and top packer ~5030' (Cliffhouse perfs 5060-5128').
11. RU stimulation company. Pressure test surface lines to 7500 psi. Apply 500 psi to annulus. Monitor annulus for communication. Establish an injection rate into perfs with 2% KCL water. Once pressure has broken back and stabilized, continue to breakdown Menefee perforations with 25 bbls 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 3,814 psi. Total estimated tubing and perforation friction will be 3,989 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
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)	1,907	
Totals	36,157	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. RU wireline company. RIH with 5-1/2" CIBP. Set CIBP at 4900'.

16. NU perforating guns. 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.

3934', 3936', 3938', 3974', 3976', 3978', 4140', 4142', 4164', 4166', 4168', 4338', 4340', 4342', 4344', 4346', 4474', 4476', 4478', 4480', 4482', 4530', 4532', 4534', 4600', 4602', 4604', 4712', 4714', 4716' (30 holes total)

RD wireline company.

17. 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. Pressure test CIBP to 3600 psi. Bleed off pressure. Release packer and PUH to 4720'. NU stimulation company. Spot 19 bbls 15% HCL across Lewis perf interval (3934-4716'). Use the same additives as in Step #8. ND stimulation company. Continue to PUH and set packer at 3750'. If squeeze work was necessary for the Lewis completion, adjust the acid spot volume and packer setting depth as required.
18. NU stimulation company. Pressure test surface lines to 7500 psi. Hold tailgate safety meeting. 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 #8. ND stimulation company.
19. Release packer. Lower packer to 4720' to knock balls off perforations. PUH and re-set packer at 3800'. If squeeze work was necessary, set packer at top of good cement.
20. NU stimulation company. **Maximum surface treating pressure is 6500 psi.** Apply 500 psi to annulus. Monitor annulus pressure throughout stimulation. Fracture stimulate the Lewis with 200,000 lbs 20/40 Arizona sand in 2173 bbls 70Q 20 lb linear gel at **45 BPM. Tag sand with 3 radioactive isotopes.** Average surface treating pressure will be 6,446 psi. Perforation and tubing friction is estimated to be 5,090 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	158.8	---
1.0 ppg	12,000	3,600	126.9	12,000
2.0 ppg	21,000	6,300	221.9	42,000
3.0 ppg	27,333	8,200	288.6	82,000
4.0 ppg	16,000	4,800	168.8	64,000
Flush (100' above top perf)	1,355	407	14.3	0
Totals	92,689	27,807	979	200,000

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


21. 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.

22. 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.
23. TIH with 4-3/4" bit on 2-3/8" workstring and clean out to CIBP at 4900'. Monitor gas and water returns when applicable. **Take a "dirty" Lewis pitot gauge.** Drill out CIBP at 4900' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.
24. Clean out to CIBP at 5460'. Blow well throughout Lewis, Cliffhouse and Menefee. Monitor gas, water and sand returns when applicable. **Take a "dirty" Lewis/Cliffhouse/Menefee pitot gauge.** Drill out CIBP at 5460' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.
25. Continue to CO to PBDT with air. Blow well at PBDT to check water rates. If needed, continue to blow well for clean up. When water rates are below 3 BPH and there is no sand production, 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 PBDT again, if necessary. **Obtain final Lewis/Cliffhouse/Menefee/Point Lookout pitot gauge.** Land tubing at 5628'. 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 (3934-4716'). RD Pro-Technics.

Recommended: 
Production Engineer

Approved: 
Drilling Superintendent

Approved: 
Team Leader

Contact:

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

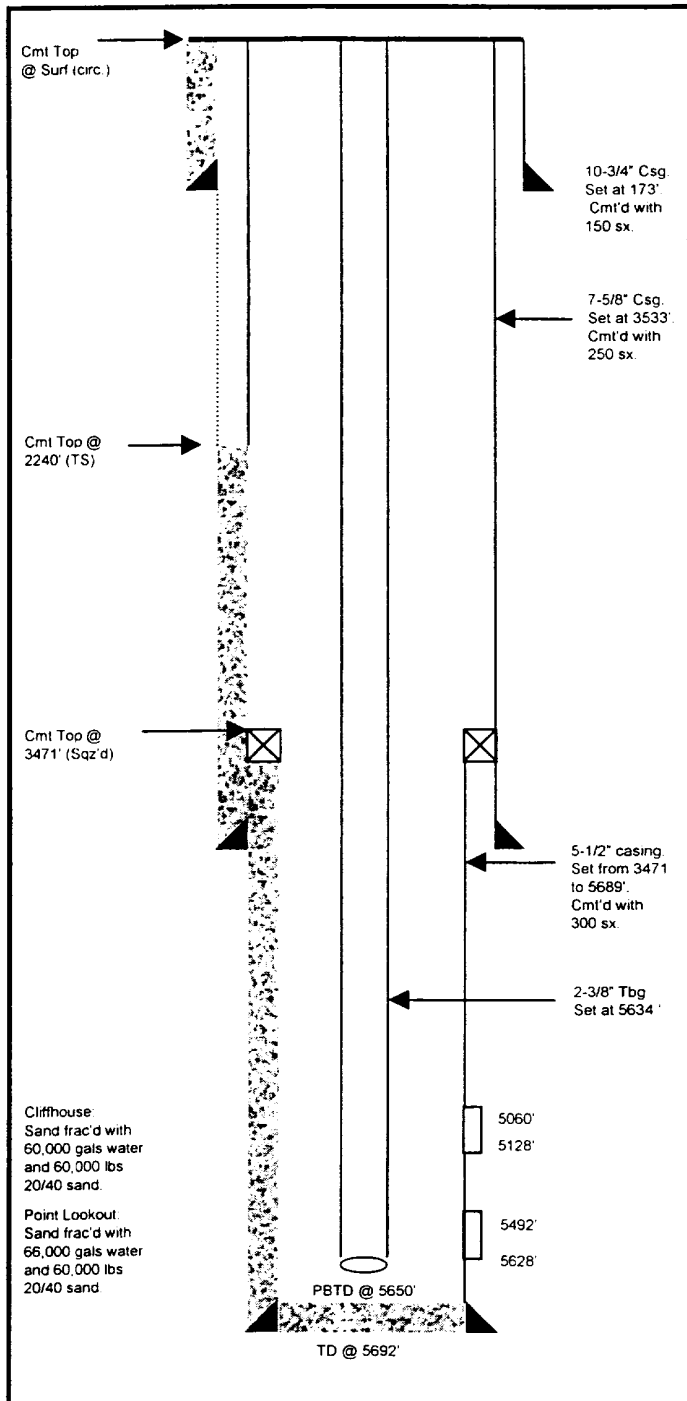
San Juan 27-5 Unit #19

Unit N, Section 20, T27N, R5W

Rio Arriba County, NM

Lat: 36° - 33.28032'/Long: 107° - 23.07036'

Current Schematic



Proposed Schematic

