

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

1. Type of Well
GAS

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

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

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

810' FSL, 690' FWL, Sec. 7, T-27-N, R-4-W, NMPM

5. Lease Number
SF-080673

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
San Juan 27-4 Unit

San Juan 27-4 U #31

9. API Well No.
30-039-60066

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 - Pay add

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.

RECEIVED
JAN - 2 1998

OIL CON. DIV.
DIST. 3

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

Signed [Signature] (JLDOpps) Title Regulatory Administrator Date 12/7/97

(This space for Federal or State Office use)

APPROVED BY AS/ Duane W. Spencer Title _____

Date DEC 23 1997

CONDITION OF APPROVAL, if any:

San Juan 27-4 Unit #31
Menefee/Point Lookout Pay Add Procedure
Unit M, Section 7, T27N, R4W
Lat: 36° - 34.93194'/Long: 107° - 17.8656'

The well is currently completed in the Cliffhouse and the upper Point Lookout with a production rate of 80 MCFD and remaining reserves of 545 MMCF. It is intended to add the Menefee and lower Point Lookout to the existing Mesaverde producer. The Menefee and Point Lookout will be sand fracture stimulated in a two stages using a total of 120,000 gals 30 lb linear gel and 180,000 lbs 20/40 sand.

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 a new or inspected 5900', 2-3/8" tubing string, 6 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, 5900', 2-7/8" N-80 frac string with shaved collars and 5-400 bbl frac tanks
2. MIRU. Fill one 400 bbl tank with 2% KCL water. Record and report SI pressures on tubing, casing and oradenhead. 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 1-1/4", 2.4 lb/ft J-55 Mesaverde production string set at 5716' and LD. Send string in to be inspected and salvaged, if possible. Visually inspect tubing, note and report any scale in/on tubing.
4. PU and RIH with a 3-7/8" bit, 4-1/2" (10.5 lb/ft) casing scraper on the 2-3/8" tubing string hauled to location. Clean out to PBTD with air. TOOH.
5. Load hole with 22 bbls (~1350') 2% KCL water. MIRU logging company. Run GR-CBL-CCL from PBTD til out of water. Evaluate CBL. Good cement bond must exist from 5700 to 5400' to continue with procedure.

Point Lookout:

6. RIH with 2-3/8" tubing open ended. Spot 120 gals 15% HCL across the Point Lookout perforation interval of 5780 to 5860'. 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

7. RU wireline. Perforate Point Lookout as follows 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). Be sure to perforate from top down.

5780', 5782', 5816', 5834', 5838', 5844', 5860' (7 holes total)

RDMO wireline company.

8. Fill 5 - 400 bbl frac tanks with 2% KCL water. Filter all water to 25 microns if brought from sources with known solids contamination. Filtration is not necessary for city water. Four tanks are for gel and one tank is for breakdown and flush.
9. TIH with 4-1/2" packer, tubing tester, 6 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, and remaining 2-7/8", N-80 frac string with shaved collars. Set packer at 5540'. Close tubing tester and test frac string to 6000 psi.
10. RU stimulation company. Pressure test surface lines to 4800 psi. Monitor backside for communication. Breakdown and attempt to balloff Point Lookout perforations with 1500 gals 15% HCL and 60 RCN 7/8" 1.3 specific gravity perf balls to 3800 psi. Lower packer to 5870' to knock off perf balls. Reset packer at 5640'.
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 |
11. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 6000 psi. **Maximum surface treating pressure is 5000 psi.** Monitor backside during stimulation. Fracture stimulate Point Lookout with 90,000 lbs 20/40 Arizona sand in 60,000 gals 30 lb linear gel at **30 BPM. Tag sand with 3 radioactive tracers.** Average surface treating pressure will be 4200 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	15,000	
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	10,000	30,000
Flush (slickwater)	1,400	
Totals	61,400	90,000

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

Frac with the following additives per 1000 gals frac fluid. **Gel will be mixed on the fly.**

*	7.5 gal	LGC-8	Gel
*	1 gal	SSO-21	Surfactant
*	0.18 lb	BE-6	Biocide
*	0.4 lb	SP	Oxidizing Breaker
*	0.2 lb	GBW-3	Enzyme Breaker

RDMO stimulation company.

13. Open well through choke manifold and monitor flow. Flow at 20 BPH or less, if sand is observed. **Take pitot gauges when possible.** When pressures allow, release packer and TOOH.
14. RU wireline. Run a gauge ring to 5720' to insure a CIBP can be set at 5710'. RD wireline. If fill is present above 5710', TIH with 3-7/8" bit on 2-3/8" workstring and CO.

15. TIH with 4-1/2" CIBP, packer and 2-3/8" tubing. Set CIBP at 5710'. PUH with packer and set just above CIBP and pressure test to 3800 psi. Release packer and PUH to 5684'. Spot 170 gals 15% across Menefee perforation interval 5465 to 5684'. TOH.

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

16. RU wireline. Perforate Menefee as follows 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). Be sure to perforate from top down.

**5465', 5474', 5477', 5483', 5488', 5512', 5524', 5526', 5528', 5590', 5596',
5598', 5600', 5661', 5662', 5663', 5666', 5667', 5682', 5684' (20 holes total)**

RDMO wireline company.

17. Fill 5 - 400 bbl frac tanks with 2% KCL water. Filter all water to 25 microns if brought from sources with known solids contamination. Filtration is not necessary for city water. Four tanks are for gel and one tank is for breakdown and flush.

18. TIH with 4-1/2" packer, tubing tester, 6 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, and remaining 2-7/8", N-80 frac string with shaved collars. Set packer at 5410'. Close tubing tester and test frac string to 6000 psi.

19. RU stimulation company. Pressure test surface lines to 4800 psi. Monitor backside for communication. Breakdown and attempt to balloff Menefee perforations with 1500 gals 15% HCL and 40 RCN 7/8" 1.3 specific gravity perf balls to 3800 psi. Lower packer to 5690' to knock off perf balls. Reset packer at 5410'.

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

20. RU stimulation company. Hold a tailgate safety meeting. Pressure test surface treating lines to 6000 psi. **Maximum surface treating pressure is 5000 psi.** Monitor backside during stimulation. Fracture stimulate Menefee with 90,000 lbs 20/40 Arizona sand in 60,000 gals 30 lb linear gel at **30 BPM. Tag sand with 3 radioactive tracers.** Average surface treating pressure will be 4500 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	15,000	
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	10,000	30,000
Flush (slickwater)	1,300	
Totals	61,300	90,000

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

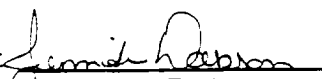
Frac with the following additives per 1000 gals frac fluid. **Gel will be mixed on the fly.**

* 7.5 gal	LGC-8	Gel
* 1 gal	SSO-21	Surfactant
* 0.18 lb	BE-6	Biocide
* 0.4 lb	SP	Oxidizing Breaker
* 0.2 lb	GBW-3	Enzyme Breaker

RDMO stimulation company.

21. Open well through choke manifold and monitor flow. Flow at 20 BPH or less, if sand is observed. **Take pitot gauges when possible.** When pressures allow, release packer and TOOH. LD packer, 2-3/8" tubing, 2-3/8" X 2-7/8" crossover and 2-7/8" N-80 frac string with shaved collars.
22. RIH with 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 5710'. Monitor gas and water returns when applicable. Drill up CIBP. CO to PBTB with air.
23. When wellbore is sufficiently clean, TOH and RU Pro-Technics. Run an After-Frac log from PBTB to 5350'. RD Pro-Technics.
24. RU Blue Jet. Run Perforation Efficiency log from 5870-5460'. RD Blue Jet.
25. Squeeze to cover Ojo Alamo as necessary.
26. 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 PBTB again, if necessary. Land tubing at 5860'. Pump off expendable check. ND BOP. NU WH. RDMO. Contact Production Operations for well tie-in.


Recommended:


Production Engineer

Approved:


Drilling Superintendent

Approved:

 11/10/97
Team Leader

Contact:

Jennifer Dotson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

San Juan 27-4 Unit #31
Pertinent Data Sheet
Lat: 36° - 34.93194'/Long: 107° - 17.8656'

General Well Information:

Location: 810 FSL, 690 FWL, Unit M, Section 7, T27N, R4W, Rio Arriba County, NM

Federal Lease #: SF 080673
Property #: 007972305

DP #: 50483A
GWI/NRI: 84.66/69.97

Current Field: Blanco Mesaverde
Spud: 7/11/61
GL Elevation: 6703'
TD: 5941'

Completed: 8/16/61
DF Elevation: 6713'
PBSD: 5941'

Casing Record:

Hole Size	Csg Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
13-3/4"	9-5/8"	32.3 lb/ft	J-55	176'	170	Circ. to Sur.
8-3/4"	7"	20 lb/ft	J-55	3820'	120	3070' (est.)
6-1/4"	4-1/2"	9.5 lb/ft	J-55	3744-5810'	200	3744' (TS)
		11.6 lb/ft	J-55	5810-5941'		

Tubing Record:

Tubing Size	Weight	Grade	Depth Set	Number of Jts
1-1/4"	2.4 lb/ft	J-55	5716'	167

Formation Tops:

Ojo Alamo: 2970'	Lewis: 3668'	Menefee: 5300'
Pictured Cliffs: 3609'	Cliff House: 5243'	Point Lookout: 5567'

Logging Record:

Schlumberger Electrical Log (7/16/61), Induction Log (7/20/61) and Gamma Ray Log (7/20/61).

Completion:

Point Lookout was perforated at 5740-52' (2 SPF) and the Cliffhouse was perforated at 5362-68', 5351-57', 5321-27' and 5305-11' (6 SPF) in 300 gals 7-1/2% HCL. Both intervals were then fracture stimulated it with 67,600 gals water and 60,000 lbs sand at 53 BPM and 2000 psi.

Workover History:

None.

Production History:

Well was is currently making 80 MCFD from the Mesaverde. Current Mesaverde EUR: 1,814 MMCF
Mesaverde Cum: 1,267 MMCF.

Pipeline:

Williams Field Service

San Juan 27-4 Unit #31

Unit M, Section 7, T27N, R4W
 Lat: 36°- 34.93194'/Long: 107°- 17.8656'
 Rio Arriba County, NM

Current Schematic

Current Schematic

