# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices an	nd Reports	on WelA်န်	CÉIVÉD			_
1. Type of Well GAS		99 MAR :	BLM -8 PM 1:3 MINGTON, N	3 s	ease Number-080670 f Indian,	
2. Name of Operator					nit Agree an Juan 2'	
BURLINGTON RESOURCES OIL & GAS O	COMPANY	DE	(CE)	1997) 940	ell Name	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499		-9700 (0)[	fan fan Sjoar -	S 9. A 3	an Juan 2° PI Well No 0-039-069	7-4 U#21 o. 37
4. Location of Well, Footage, Sec., T, 850'FNL 1800'FEL, Sec.30, T-27-N, R				В 11. <b>С</b>	ield and l lanco MV/' ounty and io Arriba	Tapacito P. State
12. CHECK APPROPRIATE BOX TO INDICATE	NATURE OF 1	NOTICE, 1	REPORT, OT	HER DA	ATA	
<del></del>	<b>Type</b> Abandonment Recompletion		on Change of New Const:			
Subsequent Report F	Plugging Bad	ck	Non-Routin	ne Fra		
Final Abandonment A	Casing Repa: Altering Cas Other -		Water Shut Conversion		Injection	
13. Describe Proposed or Completed C	Operations					_
It is intended to add pay to the Pictured Cliffs and Mesa according to the attached	verde forma	tion of	the subjec	t wel		
(This space for Federal or State Office	Title Requi	latory Ad		or Dat	te 1/21/99 TLW	- )
APPROVED BY /S/ Duane W. Spencer CONDITION OF APPROVAL, if any:	_Title	······································	<b>Da</b> te		* 4 U.S.y	-
Title 15 U.S.C. Section 1001, makes it a crime for any person k United States any false, fictitious or fraudulent statements or	knowingly and wills r representations a	fully to make as to any matt	to any department er within its ju	or agen	cy of the	

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## San Juan 27-4 Unit #21

Cliffhouse/Menefee Pay Add Procedure
Unit B, Section 30, T27N, R4W

Lat: 36° - 32.94066'/ Long: 107° - 17.29062'

The well is currently completed in the Pictured Cliffs and Point Lookout intervals. It is intended to add the Cliffhouse and Menefee to the existing Mesaverde producer and commingle the Pictured Cliffs/Mesaverde production. The pay add will be sand fracture stimulated in a single stage using a total of 117,000 gals slickwater and 100,000 lbs 20/40 sand.

- 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, 6000' 3-1/2" N-80 frac string and 9, 400 bbl frac tanks
- MIRU. Fill 400 bbl tanks w/ 3# biocide/tank & 2% KCL water. Put one load of fresh water in each tank before adding 20% concentrated KCL water. Run fluid tests on water. Filter water based upon stimulation company solids 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, 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. TOOH with 1-1/4", 2.4 lb/ft EUE Pictured Cliffs production string set at 3880' and LD. Rotate 2-3/8", 4.7 lb/ft EUE tubing to the right a minimum of 10-12 rotations to release Model 'N' seal assembly. Sting out of 7-5/8" Baker Model 'N' production packer with 2-3/8" Mesaverde production string set at 6098'. TOOH. Visually inspect tubing, note and report any scale in/on tubing. Replace bad joints as needed. TIH with packer mill and plucker. Mill over 7-5/8" Baker Model 'N' packer at 3913' and pluck packer. TOOH with packer.
- 4. PU and RIH with a 4-3/4" bit and 5-1/2" (15.5 lb/ft) casing scraper on the 2-3/8" tubing. Clean out to PBTD (~6134') with air. Blow well at PBTD to check sand production rates. Make sure well is not making sand before TOOH. TOOH.
- 5. RIH with 5-1/2" CIBP, packer on 2-3/8" tubing. Set CIBP at 5970'. Release from CIBP. Load hole with ~50 bbls 2% KCL water. Set packer just above CIBP. Pressure test CIBP to 3600 psi. Bleed off pressure. Release packer and PUH to 5930'. Spot 12 bbls 15% HCL across Cliffhouse/Menefee perforations (5491-5925'). 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. Run GR-CBL-CCL from PBTD til out of water. Evaluate CBL. Top of good cement must be above 5300' to continue with procedure. Tie into liner top at 3932' for correlation.
- 8. RU wireline. Perforate Cliffhouse and 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).

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5491', 5502', 5503', 5505', 5528', 5532', 5564', 5566', 5571', 5572', 5574', 5577', 5592', 5593', 5594', 5596', 5597', 5598', 5740', 5742', 5759', 5800', 5802', 5849', 5850', 5892', 5893', 5897', 5919', 5925' (30 holes total)
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RDMO wireline company.

- 9. TIH with 5-1/2" packer, 3 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, and remaining 3-1/2" N-80 frac string. Set packer at 5300'.
- 10. RU stimulation company. Hold tailgate safety meeting. Pressure test surface lines to 7500 psi. Monitor pressure on annulus. Breakdown Cliffhouse and Menefee perforations with 25 bbls 15% HCL. Drop 60 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. Bleed off pressure and release packer. Lower packer to 5930' to knock off perf balls. Reset packer at 5350'.
- 11. Maximum surface treating pressure is 6500 psi. Monitor annulus for indication of flow during the job. Fracture stimulate the Cliffhouse and Menefee with 100,000 lbs 20/40 Arizona sand in 2738 bbls slickwater at 50 BPM. Average surface treating pressure will be 4,127 psi. Estimated tubing and perforation friction will be 4,030 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 (100' above top perf)	1,982	
Totals	56,982	100,000

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

- 12. Open well through choke manifold and monitor flow. Flow at 20 BPH or less, if sand is observed. When pressures allow, release packer and TOOH. LD 3-1/2" frac string, 3-1/2" X 2-7/8" crossover, 2-7/8" N-80 tubing, and 5-1/2" packer.
- 13. TIH with 4-3/4" bit on 2-3/8" tubing and clean out to CIBP at 5970'. Alternate between natural flow and blow stages for cleanup. Monitor gas and water returns when applicable. Take a "dirty" Pictured Cliffs/Cliffhouse/Menefee pitot gauge. Drill out CIBP at 5970' when sand returns allow. Use a 10-12 BPH mist rate while drilling CIBP.
- 14. Continue to CO to PBTD at 6134'. Alternate between natural flow and blow periods at PBTD. When water rates are less than 3 BPH, obtain a Pictured Cliffs/Cliffhouse/Menefee/Point Lookout pitot gauge. TOOH.
- 15. TIH with 5-1/2" packer and 2-3/8" tubing. Set packer at 5400' (Within 100' of top Mesaverde perforation at 5491'). Run Mesaverde only 3 hour production test through separator using a back pressure of 150 psi. This is necessary for determining

Cliffhouse/Menefee pay add contribution and correct commingling allocations. Release packer and TOOH.

15. TIH with an expendable check, one joint 2-3/8" tubing, standard SN and remaining 2-3/8" tubing string. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. Land tubing at 6098'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended:

Production Engineer

Approved:

Drilling Superintendent

Approved:

Team Leade

Jennifer Dobson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

## San Juan 27-4 Unit #21

Unit B, Section 30, T27N, R4W Rio Arriba County, NM

Lat: 36° - 32.94066'/Long: 107° - 17.29062'

### **Current Schematic**

### **Proposed Schematic**

