# UNITED STATES

# DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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Sundry Not	tices and Reports on Wells		
	97 DEC - 8 PM 1: 55	5.	
1. Type of Well GAS	070 F11 2./C11, NM1	6.	SF-079192 If Indian, All. or Tribe Name
		7.	Unit Agreement Name
2. Name of Operator			
RESOURCES <sup>N</sup> OU.			
oil	& GAS COMPANY	8.	San Juan 28-6 Unit Well Name & Number
3. Address & Phone No. of Opera	ator	ο.	San Juan 28-6 U #1
PO Box 4289, Farmington, NM		9.	API Well No.
			30-039-07426
4. Location of Well, Footage, S		10.	Field and Pool
1500'FNL, 1650'FEL, Sec. 17,	T-28-N, R-6-W, NMPM		Blanco Mesaverde
		11.	County and State Rio Arriba Co, NM
			NIO AIIIDA CO, NA
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( 1 / 🛪 . •	e foregoing is true and correct.	inistra	<u>ator</u> Date 12/7/97
(This space for Federal or State APPROVED BY MINISTER OF APPROVAL, if any:		ate [	DEC   0 1997



# San Juan 28-6 Unit #1

Menefee Pay Add Procedure Unit G, Section 17, T28N, R6W

Lat: 36°-39.86022'/Long: 107°-29.19342'

The well is currently completed in the Cliffhouse and Point Lookout with a production rate of 300 MCFD and remaining reserves of 1,942 MMCF. It is intended to add the Menefee to the existing Mesaverde producer. The pay add will be sand fracture stimulated in a single stage using a total of 60,000 gals 30 lb linear gel and 90,000 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 5 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, 5800', 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 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 bloole line and 2-7/8" relief line. Redress production wellhead as needed.
- 3. TOOH with 2-3/8" Mesaverde production string set at 5976'. Visually inspect tubing, note and report any scale in/on tubing. Replace bad joints as needed.
- 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. Clean out to PBTD (~6030') with air. TOOH.
- 5. RU wireline. RIH and set CIBP at 5790'. RD wireline.
- 6. Load hole with 19 bbls (~1200') 2% KCL water. MIRU logging company. Run GR-CBL-CCL from PBTD til out of water. Evaluate CBL. Good cement bond must exist from PBTD to 5400' to continue with procedure.
- 7. RIH with 4-1/2" packer on 2-3/8" tubing. Set packer just above CIBP and pressure test to 3800 psi. Release packer and PUH to 5726'. Spot 170 gals 15% HCL across the Menefee perforation interval of 5530 to 5726'. TOOH.

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

2 gai	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

8. 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.

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5530', 5533', 5536', 5558', 5562', 5564', 5566', 5568', 5573', 5574', 5630', 5632', 5634', 5636', 5638', 5640', 5642', 5646', 5676', 5686', 5688', 5724', 5726' (23 holes total)
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RDMO wireline company.

- 9. Fill all 5 400 bbl frac tanks with 2% KCL water. Filter all water to 25 microns if brought from sources with known solids contimination. Filtration is not necessary for city water. Four tanks are for gel and one tank is for breakdown and flush.
- 10. TIH with 4-1/2" packer, tubing tester. 5 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 5470'. Close tubing tester and test frac string to 6000 psi.
- 11. 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 200% excess RCN 7/8" 1.3 specific gravity perf balls to 3800 psi. Lower packer to 5730' to knock off perf balls. Reset packer at 5470'.

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

12. 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	Sand Volume	
	(gals)	(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)	1,350		
Totals	61,350	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. LD packer, 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" crossover and 2-7/8" N-80 tubing with shaved collars.

- 14. RIH with 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 5790'. Monitor gas and water returns when applicable. Drill up CIBP. CO to PBTD with air.
- 15. When wellbore is sufficiently clean, TOH and RU Pro-Technics. Run After-Frac log from 5800-5400'. RD Pro-Technics.
- 16. RU Blue Jet. Run a Perforation Efficiency log from 5730-5520'. RD Blue Jet.
- 17. 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. Land tubing at 5970'. Pump off expendable check. ND BOP. NU WH. RDMO. Contact Production Operations for well tie-in.

Recommended:

roduction Engineer

Approved:

Drilling Superintenden

Approved:

Team Leader

Contact:

Jennifer Dobson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

# San Juan 28-6 Unit #1 Pertinent Data Sheet

Lat: 36°-39.86022 min./Long: 107°-29.19342 min

# General Well Information:

Location:

1500 FNL, 1650 FEL, Unit G, Section 17, T28N, R6W, Rio Arriba County, NM

Federal Lease #:

SF 079192

DP #:

51854A

Property #:

007973200

GWI/NRI:

37.19/29.32

Current Field:

Blanco Mesaverde

Spud:

6/3/53

Completed:

9/1/53 6795

GL Elevation: TD:

6782 6048

KB Elevation: PBTD:

6030'

## Casing Record:

Hole Size	Csg Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
	13-3/8"	54.5 lb/ft	J-55	218'	250	Circ. to Sur.
8-3/4"	7"	23 lb/ft	J-55	832'	300	3400' (est.)
		20 lb/ft	J-55	832-2102'		
		23 lb/ft	J-55	2102-5314'		
6-1/4"	4-1/2"	10.5 lb/ft	J-55	6048'	125	4300' (TS)

## **Tubing Record:**

Tubing Size	Weight	Grade	Depth Set	Number of Jts
2-3/8"	4.7 lb/ft	J-55	5975	194
Norris SN			5976'	

# Formation Tops:

Pictured Cliffs:

3649'

Menefee:

5465'

Cliffhouse:

5298'

Point Lookout:

5788'

# Logging Record:

Schlumberger Electrical (7/2/53), Gamma Ray (8/20/53), Induction Log (8/20/53) and Schlumberger Compensated Formation Density (7/23/70).

## Completion:

Completed well as a Mesaverde open hole producer. Shot the open hole from 5376-5908' with 1560 qts SNG. AOF: 4640 MCFD SICP: 1057 psi.

#### Workover History:

In July 1970, this well was sidetracked at 5333'. Drilled to a total depth of 6048' and set 4-1/2" casing.

Perforated the Point Lookout at 5820-32', 5848-60', 5870-74', 5900-12', 5941-47' and 5964-70' with 12 SPZ. Fracture stimulated this interval with 70,000 lbs 20/40 sand and 70,000 gals water. Dropped 60 balls for diversion.

Perforated the Cliffhouse at 5384-88' and 5400-08' with 16 SPZ. Fracture stimulated this interval with 30,000 lbs 20/40 sand and 31,920 gals water. Dropped 16 balls for diversion. AOF: 6119 MCFD

#### **Production History:**

Well was is currently making 300 MCFD from the Mesaverde. Current Mesaverde EUR: 6,428 MMCF Mesaverde Remaining Reserves: 1,942 MMCF.

# Pipeline:

Williams Field Service

# San Juan 28-6 Unit #1

Unit G, Section 17, T28N, R6W Lat: 36°- 39.86022'/Long: 107°- 29.19342' Rio Arriba County, NM

#### **Current Schematic**

# **Proposed Schematic**

