UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sundry Notices and Re	eports on Wells	
1. Type of Well GAS	070 FASALINGTON, NM DECEIVE	Lease Number SF - 079491 If Indian, All. or Tribe Name
2. Name of Operator	MAR 2 0 1938	Unit Agreement Name San Juan 27-5 Unit
RESOURCES OIL & GAS COMP. 3. Address & Phone No. of Operator	BIENC 왕 8.	Well Name & Number San Juan 27-5 Unit
PO Box 4289, Farmington, NM 87499 (50) 4. Location of Well, Footage, Sec., T, R, 1090' FSL, 825' FWL, Sec. 1, T-27-N, I	M 10. R-5-W, NMPM	API Well No. 30-039-08114 Field and Pool Blanco MV/Basin DK County and State Rio Arriba Co, NM
X Recor Subsequent Report — Plugo — Casir	Type of Action donment Change of Plange	ans tion Fracturing ff
It is intended to recomplete the sub- according to the attached pr will then be down-hole commi	bject well in the Mesaverde : cocedure and wellbore diagram	n. The well
Signed Manual Title I	Regulatory Administrator Date VKO se)	
CONDITION OF APPROVAL, if any:		1000

#100

Cistrict I PO 80x 1980. Hopps, NM 88241-1980

District II PO Drawer CO. Antesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION ECEIVED PO Box 2088 Santa Fe, NM 87504-2088 SLM

Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

SS MAR 13 PH 1: 32 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AND ACREAGE DEDICATION AMM	
'ART Number 'Pool Code	
1001 0000	
30-039-08114 72319/71599 Blanco Mesaverde/Basin Dakota	
Property Code Property Name 7454 SAN WAN 27-5 UNIT	Well Number
7454 SAN JUAN 27-5 UNIT	100
'OGRID No. *Operator Name	*Elevation
14538 BURLINGTON RESOURCES OIL & GAS COMPANY	7431 ·
¹⁰ Surface Location	Control
UL or lot no. Section Township Range Lot Ion Feet from the North/South line Feet from the East/West line	RIO
M 1 27N 5W 1090 SOUTH 825 WEST	ARRIBA
¹¹ Bottom Hole Location If Different From Surface	
UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line	County
Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.	
V-W/320.28	
K-S/320	
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN C	ONSOLIDATE
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION	
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of resurveyed, prepared / I hereby certify that the informe rom a plat dated 8-03-66 /	my knowledge and bei
y David O. Vilven.	
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ON CONC DIVO Signature Peggy Bradfie	
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DIST: 3 Peggy Bradile Printed Name	<u> 1 u </u>
Regulatory Ad	minictra
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March 12, 199	Q
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San Juan 27-5 Unit #100

Mesaverde Recompletion Procedure
Unit M. Section 1, T27N, R5W
Lat: 36° - 35.89602'/Long: 107° - 18.92304'

It is intended to recomplete the Mesaverde and commingle it with the Dakota. The Mesaverde interval will be sand fracture stimulated in two stages, Point Lookout/Lower Menefee and Cliffhouse/Upper Menefee, 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 3 jts 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" N-80 crossover, 6600', 3-1/2" N-80 frac string and 10, 400 bbl frac tanks
- 2. MIRU. 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" Dakota production string set at ± 8631'. Replace bad joints as necessary. Visually inspect tubing, note and report any scale in tubing. If an excessive amount of scale is found in/on tubing, contact Jennifer Dobson at 599-4026 to see if a Dakota acid wash is needed.
- 4. PU and RIH with a 4-3/4" bit, 5-1/2" (15.5 lb/ft) casing scraper on 2-3/8" tubing. Clean out to 6700' with air. TOOH.
- 5. RU wireline. RIH and set RBP at 6700'. RD wireline. Top RBP with 1 sack of sand down casing. Allow sand to settle.
- Load hole with 2% KCL water. MIRU logging company. Run GR-CBL-CCL from PBTD to top of cement. Evaluate CBL. Top of good cement must be above 5900' to continue.
- 7. PU and RIH with 5-1/2" packer on 2-3/8" tubing. Set packer just above RBP. Pressure test RBP to 3600 psi. Pressure test annulus to 1000 psi. Release packer and PUH to 6588'.

Lower Menefee & Point Lookout:

8. Spot 250 gals of 15% HCL across Lower Menefee and Point Lookout perf interval from 6385' to 6588'. 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
_		

9. RU wireline. Perforate Lower Menefee and 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 (25 holes total).

6385', 6387', 6391', 6393', 6413', 6414', 6467', 6468', 6474', 6476', 6483', 6485', 6489' 6496', 6498', 6500', 6502', 6525', 6552', 6554', 6566', 6567', 6574', 6576', 6588'

RDMO wireline company.

- Fill all ten 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. Eight tanks (four per frac stage) are for gel and two tanks (one per frac stage) are for breakdown and flush.
- 11. TIH with 5-1/2" packer, tubing tester, 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 6180'. Pressure test surface lines to 7500 psi. Close tubing tester and test frac string to 6500 psi.
- 12. RU stimulation company. Hold 500 psi on annulus. Breakdown and attempt to balloff Lower Menefee and Point Lookout perforations with 1500 gals 15% HCL and 100% excess RCN 7/8" 1.3 specific gravity perf balls to 3600 psi. Use same additives as in Step 8. Lower packer to 6590' to knock off perf balls. Reset packer at 6280'.
- 13. RU stimulation company. Hold a tailgate safety meeting. Maximum surface treating pressure is 6500 psi. Hold 500 psi on annulus, behind packer, and monitor during the job. Fracture stimulate Lower Menefee and Point Lookout with 90,000 lbs 20/40 Arizona sand in 60,000 gals 30 lb linear gel at 30 BPM. Sand is to be tagged with 3 radioactive tracers. Average surface treating pressure will be 4100 psi. Estimated tubing friction pressure will be 2576 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (Ibs)
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)	2,380	
Totals	62,380	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.

15 11	JIIO VYILLIG AGGIL	1400 por 1000 go	
*	7.5 gal	LGC-8	Gel
•	1 gai	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.

- 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.
- 15. RU wireline. Run a gauge ring to 6370' to insure a RBP can be set at 6360'. RD wireline. If fill is above 6360', TIH with 3-7/8" bit on 2-3/8" workstring and CO.

Cliffhouse & Upper Menefee:

- 16. PU and RIH with 5-1/2" RBP, packer and 2-3/8" workstring. Set RBP at 6360'. Set packer just above RBP and pressure test to 3600 psi. Release packer and PUH to 6310'.
- 17. Spot 350 gals 15% HCL across Cliffhouse and Upper Menefee perf interval from 6041' to 6310'. TOOH.

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

2 gal	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

- 18. Top RBP with 1 sack of sand down casing. Allow sand to settle.
- 19. RU wireline. Perforate Cliffhouse and Upper 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 (24 holes total).

6041', 6043', 6056', 6058', 6060', 6062', 6081', 6083', 6093', 6102', 6104', 6187', 6189', 6216', 6218', 6220', 6222', 6237', 6252', 6300', 6302', 6304', 6306', 6310'

RDMO wireline company.

- 20. Be sure there is enough water in four tanks for gel and one tank for breakdown and flush.
- 21. TIH with 5-1/2" packer, tubing tester, 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 5850'. Pressure test surface lines to 7500 psi. Close tubing tester and pressure test frac string to 6500 psi.
- 22. RU stimulation company. Hold 500 psi on annulus. Breakdown and attempt to balloff Cliffhouse and Upper Menefee perforations with 1500 gals 15% HCL and 100% excess RCN 7/8" 1.3 specific gravity perf balls to 3600 psi. Use same additives as in Step 17. Lower packer to 6320' to knock off perf balls. Reset packer at 5950'.
- 23. RU stimulation company. Hold a tailgate safety meeting. Maximum surface treating pressure is 6500 psi. Hold 500 psi on annulus behind packer and monitor during the job. Fracture stimulate the Cliffhouse and Upper Menefee with 90,000 lbs 20/40 Arizona sand in 60,000 gals 30 lb linear gel at 30 BPM. Sand is to be tagged with 3 radioactive tracers. Average treating pressure will be approximately 3900 psi. Estimated tubing friction pressure will be 2442 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	2,250	
Totals	62,250	90,000

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

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

RDMO stimulation company.

- 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, 2-7/8" N-80 tubing, 2-7/8" X 3-1/2" crossover and 3-1/2" N-80 tubing.
- 25. Run a junk basket to recover as many balls as possible. TIH with 5-1/2" RBP retrieving head on 2-3/8" tubing and circulate sand off RBP at 6360'. Monitor gas and water returns. **Take pitot gauges when possible.** When well is sufficiently clean, retrieve RBP at 6360' and TOOH.
- 26. Run a junk basket to recover as many balls as possible. TIH with 5-1/2" RBP retrieving head on 2-3/8" tubing and circulate sand off RBP used to isolate Dakota at 6700'. **Take pitot gauges when possible.** When well is sufficiently clean, run Mesaverde only production test through separator using a back pressure of 250 psi. This is necessary for NMOCD commingling regulations. When test is complete, retrieve RBP at 6700' and TOOH.
- 27. RU Pro-Technics. Run After-Frac log from 6650-6000'. RD Pro-Technics.
- 28. TIH with 3-1/4" bit. CO CIBP remains and Dakota perfs to PBTD (~8692') with air. TOOH.
- 29. 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 8664'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended: Approved: Drilling Superintendent

Approved: Drilling Superintendent

Approved: Team | eader

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

San Juan 27-5 Unit #100 Pertinent Data Sheet

Lat: 36° - 35.89602'/Long: 107° - 18.92304'

General Well Information:

Location: 1090 FSL, 825 FWL. Unit M. Section 1, T27N, R5W, Rio Arriba County, NM.

Federal Lease #:

SF 079491

DP #:

TBA

Property #:

007972700

GWI/NRI:

67.46/49.02

Current Field:

Basin Dakota

Spud:

10/29/66

Completed:

12/8/66 7433'

GL Elevation: TD:

7431' 8749' KB Elevation: PBTD:

86921

Casing Record:

Hole Size	Csq Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
15"	10-3/4"	32.75 lb/ft	H-40	330'	240 sx	Surf. (circ.)
9-7/8"	7-5/8"	26.4 lb/ft	J-55	0-4577	165 sx	4300' (TS)
6-3/4"	5-1/2"	15.5 lb/ft 17 lb/ft	J-55 J - 55	0-7674' 7674-8432'	295 sx	4300' (TS)
4-3/4"	4"	11.6 lb/ft	J-55	8329-8749'	100 sx	8329' (est.)

Tubing Record:

Tubing Size	Weight	Grade	Depth Set	Number of Jts
2-3/8"	4.7 lb/ft	J-55	8630'	272
SN			8631'	1

Formation Tops:

8384' Greenhorn: 3510' Pictured Cliffs: 4303' Ojo Alamo: 8447' Graneros Dakota: Cliffhouse: 5968' Kirtland: 3850" 8592' Point Lookout: 6466' Main Dakota: 4042' Fruitland:

Logging Record:

Schlumberger Induction/Electrical Log (11/3/66 & 11/13/66), Gamma Ray (11/9/66) and Compensated Formation Density Log (11/9/66 & 11/13/66)

Completion:

Perforated the Dakota at 8487-8491', 8504-8508', 8594-8602' and 8648-8664' in 250 gals 7-1/2% HCL. Fracture stimulated the entire zone with 46,000 lbs sand and 46,250 gals water containing at 40 BPM and 3500 psi.

Workover History: None performed since original completion.

Production History:

Currently producing from the Dakota at 70 MCFD. The well will be commingled provided producing pressures are adequate.

Pipeline: Williams Field Service

San Juan 27-5 Unit #100

Unit M, Section 1, T27N, R5W Lat: 36°-35.89602'/ Long: 107°-18.92304' Rio Arriba County, NM

Current Schematic

Proposed Schematic

