submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

98 JUL 15 PM 12:25

070 FARMINGTON NM

RECEIVED
JUL 24 1998
OIL CON. DIV.
DIST. 3

1. **Type of Well**
GAS

5. **Lease Number**
SF-079363

6. **If Indian, All. or Tribe Name**

7. **Unit Agreement Name**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

San Juan 28-6 Unit

8. **Well Name & Number**
San Juan 28-6 U #158

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **API Well No.**
30-039-20390

4. **Location of Well, Footage, Sec., T, R, M**
1460'FNL, 1840'FEL, Sec.11, T-27-N, R-6-W, NMPM

10. **Field and Pool**
Blanco MV/Basin DK

11. **County and State**
Rio Arriba Co, NM

12. **CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA**

Type of Submission	**Type of Action**	
_X_ Notice of Intent	___ Abandonment	___ Change of Plans
	_X_ Recompletion	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	___ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other - Commingle	

13. **Describe Proposed or Completed Operations**

It is intended to recomplete the subject well to the Mesaverde formation according to the attached procedure and wellbore diagram. After recompletion, the well will be down hole commingled. A down hole commingle application will be made.

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

Signed Peggy Bradfield (JLDOpps) Title Regulatory Administrator Date 7/14/98
no

(This space for Federal or State Office use)
APPROVED BY /S/ Duane W. Spencer Title _____ Date JUL 21 1998
CONDITION OF APPROVAL, if any:

NMOCD

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, 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
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

98 JUL 15 PM 12:25 ☐ AMENDED REPORT

070 FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹API Number	²Pool Code	³Pool Name
30-039-20390	72319/71599	Blanco Mesaverde/Basin Dakota

⁴Property Code	⁵Property Name	⁶Well Number
7462	SAN JUAN 28-6 UNIT	158

⁷OGRID No.	⁸Operator Name	⁹Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6648'

¹⁰ Surface Location

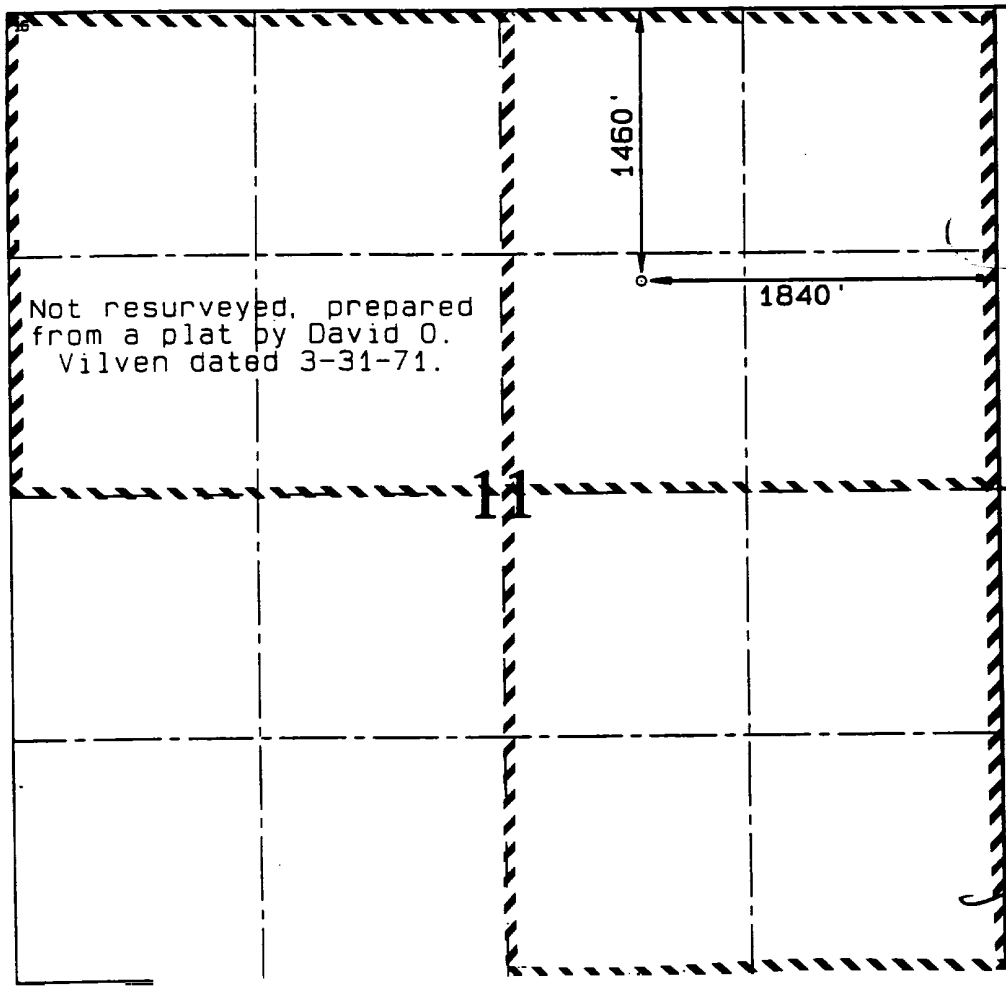
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	11	27N	6W		1460	NORTH	1840	EAST	RIO ARRIBA

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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
MV-E/320 DK-N/320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Peggy Bradfield
Printed Name

Regulatory Administrato
Title

7-14-98
Date

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JULY 13, 1998
Date of Survey

Signature and Seal of Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857
Certificate Number

San Juan 28-6 Unit #158

Mesaverde Recompletion Procedure
Unit G, Section 11, T27N, R6W
Lat: 36° – 35.50872'/Long: 107° – 25.9863'

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 a 7900', 2-3/8" workstring, 3 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, 5900', 2-7/8" N-80 buttress frac string and 11, 400 bbl frac tanks

2. MIRU. Record and report SI pressures on tubing, casing and bradenhead. Lay blowdown line. Fill tanks with 2% KCL water. 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 1-1/2" Dakota production string set at ± 7819' and stand back. Replace bad joints as necessary. Visually inspect tubing, note and report any scale in/on tubing. If an appreciable amount of scale is noticed, contact Jennifer Dobson at 599-4026 to determine if a Dakota acid wash is needed.

4. PU and RIH with a 3-7/8" bit, 4-1/2" (11.6 lb/ft) casing scraper on 2-3/8" workstring hauled to location. Clean out to PBTD with air. TOOH.

5. RU wireline. RIH and set CIBP at 5900'. RD wireline.

6. Load hole with 2% KCL water. MIRU wireline company. Run GR-CBL-CCL from PBTD to top of cement with 1000 psi surface pressure. Evaluate CBL. Top of good cement must be above 5000' to continue.

7. Perforate Lower Menefee and Point Lookout as follows using select fire HSC guns loaded with 12 gram Owens 306T jet charges (Av. perf diameter - 0.30", Av. pen. –17.48" in concrete).

   5458', 5466', 5472', 5476', 5512', 5544', 5604', 5608', 5612', 5618', 5628', 5638', 5640', 5646', 5654', 5666', 5682', 5686', 5694', 5714', 5718', 5738', 5758', 5765', 5783', 5802' (26 holes total)

   RDMO wireline company.

8. PU and RIH with 4-1/2" packer, 3 joints 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover and 2-7/8" N-80 buttress frac string. Set packer just above CIBP. Pressure test CIBP to 3600 psi. Release packer and PUH to 5810'.

Lower Menefee/Point Lookout:

9. Spot 270 gals of 15% HCL across Lower Menefee/Point Lookout perf interval from 5458 to 5802'. PUH and set packer at 5250'.

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

10. Be sure enough water is on location. Eight tanks (four per frac stage) are for gel and two tanks (one per frac stage) are for breakdown and flush.

11. RU stimulation company. Pressure test surface lines to 6500 psi. Establish an injection rate and pressure into perforations with water. Proceed to breakdown and attempt to balloff Lower Menefee and Point Lookout perforations with 1500 gals 15% HCL and 32 RCN 7/8" 1.3 specific gravity perf balls to 3600 psi. Evenly space balls throughout job. Use same additives as in Step 8. Lower packer to 5820' to knock off perf balls. Reset packer at 5350'.

12. RU stimulation company. Hold a tailgate safety meeting. **Maximum surface treating pressure is 5500 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 **35 BPM**. If pressures allow, increase injection rate. Average surface treating pressure will be 4500 psi. Estimated tubing friction pressure will be 4047 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)	1,340	
Totals	**61,306**	**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. When pressures allow, release packer and TOOH.

14. RU wireline. Set CIBP at 5420'. RD wireline. If unable to set CIBP due to fill, TIH with a notched collar on 2-3/8" workstring and CO.

Cliffhouse & Upper Menefee:

15. RU wireline. Perforate Cliffhouse and Upper Menefee as follows using select fire HSC guns loaded with 12 gram Owens 306T jet charges (Av. perf diameter - 0.30", Av. pen. – 17.48" in concrete).

5068', 5070', 5076', 5086', 5092', 5108', 5110', 5122', 5124', 5143', 5169', 5178', 5180', 5182', 5214', 5220', 5228', 5292', 5296', 5324', 5326', 5336', 5351', 5364', 5379', 5384' (26 holes total)

RDMO wireline company.

16. PU and RIH with 4-1/2" packer, 3 joints 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover and 2-7/8" N-80 buttress frac string. Set packer just above CIBP. Pressure test CIBP to 3600 psi. Release packer and PUH to 5390'.

17. Spot 250 gals 15% HCL across Cliffhouse and Upper Menefee perf interval from 5068' to 5384'. PUH and set packer at 4850'.

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

18. Be sure there is enough water in four tanks for gel and one tank for breakdown and flush.

19. RU stimulation company. Pressure test surface lines to 6500 psi. Establish an injection rate and pressure into perforations with water. Proceed to breakdown and attempt to balloff Cliffhouse and Upper Menefee perforations with 1500 gals 15% HCL and 32 RCN 7/8" 1.3 specific gravity perf balls to 3600 psi. Evenly space balls throughout job. Use same additives as in Step 17. Lower packer to 5400' to knock off perf balls. Reset packer at 4950'.

20. 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 **35 BPM**. If pressures allow, increase injection rate. Average treating pressure will be approximately 4200 psi. Estimated tubing friction pressure will be 3745 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	1,216	
Totals	**61,216**	**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. 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.

22. TIH with 3-7/8" bit on 2-3/8" workstring. Alternate blow and natural flow stages to clean up the Cliffhouse and Upper Menefee. Monitor gas and water returns. **Take pitot gauges when possible.** When well is sufficiently clean, drill up CIBP at 5420'.

23. Continue to alternate blow and natural flow stages to clean up the Cliffhouse, Menefee and Point Lookout intervals. **Take pitot gauges when possible.** When well is sufficiently clean, run Mesaverde only 3 hour production test through separator using a back pressure of 275 psi. This is necessary for NMOCD commingling regulations. When test is complete, drill out CIBP at 5900' and chase to PBTD. TOOH.

24. TIH with an expendable check, one 1-1/2" joint, standard SN and remaining 1-1/2" tubing. Rabbit tubing while running in hole. CO with air/mist to PBTD again, if necessary. Land tubing at 7830'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended: _____
Production Engineer

Approved: _____ 6/20/98
Drilling Superintendent

Approved: _____ 6/9/98
Team Leader

VENDORS:

Wireline:	Basin	327-5244
Stimulation:	Halliburton	325-3575
RA Tag:	Pro-Technics	326-7133

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

San Juan 28-6 Unit #158
Pertinent Data Sheet
Lat: 36° – 35.50872'/Long: 107° – 25.9863'

General Well Information:

Location:	1460' FNL, 1840' FEL, Unit G, Section 11, T27N, R6W, Rio Arriba County, NM.		
Federal Lease #:	SF-079363	DP #:	52419A - DK TBA - MV
Property #:	007970300- DK 007973200- MV	GWI/NRI:	56.56/46.14 - DK 34.14/27.69 - MV
Current Field:	Basin Dakota		
Spud:	7/3/71	Completed:	7/22/71
GL Elevation:	6648'	KB Elevation:	6649'
TD:	7863'	PBTD:	7849'

Casing Record:

Hole Size	Csg Size	Weight	Grade	Depth Set	Cmt Vol	Cmt Top
13-3/4"	9-5/8"	32.3 lb/ft	H-40	205'	190 sx	Circ. to sur.
8-3/4"	7"	20 lb/ft	K-55	3707'	130 sx	2700' (TS)
6-1/4"	4-1/2"	10.5 lb/ft 11.6 lb/ft	K-55 J-55	0-6462' 6462-7862'	325 sx	3890' (TS)

Tubing Record:

Tubing Size	Weight	Grade	Depth Set	Number of Jts
1-1/2"	2.9 lb/ft	J-55	7786'	242
SN			7787'	1
1-1/2"	2.9 lb/ft	J-55	7819'	1

Formation Tops:

Mesaverde:	5064'	Gallup:	6294'	Graneros:	7576'
Point Lookout:	5575'	Greenhorn:	7514'	Dakota:	7704'

Logging Record:
Schlumberger Formation Density Log (7/11/71), Schlumberger Induction Log (7/11/71)

Completion:
Perforated the Dakota at 7640-7652', 7662-68', 7703-09', 7734-46', 7772-78', 7790-96' and 7818-30' (18 SPZ) in 300 gals 7-1/2% HCL. Frac'd the entire zone with 64,134 gals water and 64,000 lbs 40/60 sand at 28 BPM and 3300 psi. Dropped 18 bakss after 16,000 lbs of sand and then after each additional 8,000 lbs for a total of 6 ball drops. Saw good ball action, but no ball off.

Workover History:

None.

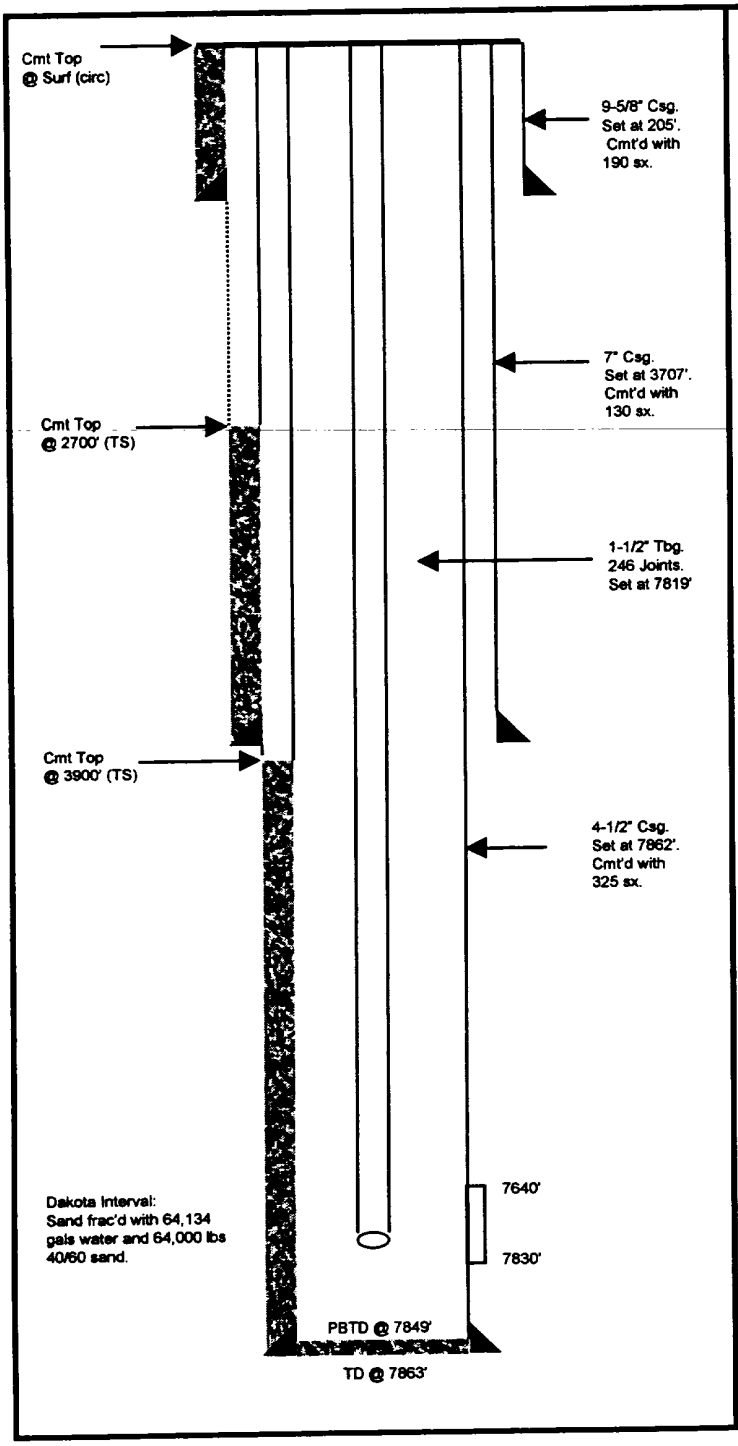
Production History:
Currently the Dakota produces approximately 70 MCFD.

Pipeline: Williams Field Service – Trunk L

San Juan 28-6 Unit #158

Unit G, Section 11, T27N, R6W
Lat: 36°- 35.50872'/ Long: 107°-25.9863'
Rio Arriba County, NM

Current Schematic



Proposed Schematic