

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. 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
790' FSL, 1845' FEL
Latitude 36° 38.5, Longitude 107° 26.0

5. Lease Number
NM-02804
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name
San Juan 28-6 Unit

8. Farm or Lease Name
San Juan 28-6 Unit

9. Well Number
138M

10. Field, Pool, Wildcat
Blanco MV/Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)
Sec. 23, T-28-N, R-6-W
API # 30-039-26252

12. County
Rio Arriba

13. State
NM

14. Distance in Miles from Nearest Town
32 miles from Blanco

15. Distance from Proposed Location to Nearest Property or Lease Line
790'

16. Acres in Lease

17. Acres Assigned to Well
320 E/2

18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease
800'

19. Proposed ~~Procedural~~ review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6522' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: *Deputy Cole*
Regulatory/Compliance Administrator

Date 10-20-99

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Charlie Beecham

TITLE _____

DATE FEB - 4 2000

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or presentations as to any matter within its jurisdiction.

NMOCD

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

P.O. 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

150 070 -2 CM 1:2 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039- <i>26252</i>	² Pool Code 72319/71599	³ Pool Name Blanco Mesaverde/Basin Dakota
⁴ Property Code 7462	⁵ Property Name SAN JUAN 28-6 UNIT	⁶ Well Number 138M
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 6522'

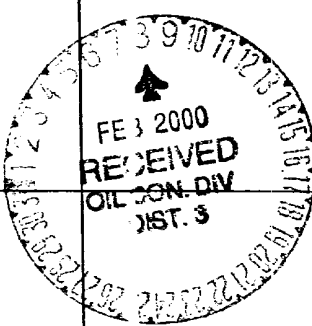

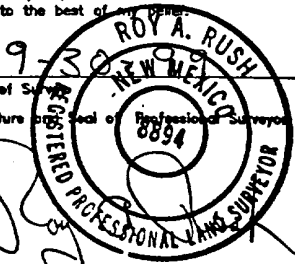
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	23	28-N	6-W		790	SOUTH	1845	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 E/320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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

<div>16</div> <div></div> <div>23</div> <div>FD. U.S.G.L.O. BC. 1914</div>	<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div> <div> Signature Peggy Cole Printed Name Regulatory Administrator Title 10-20-99 Date</div>
<div>18</div> <div></div> <div>2635.8' (M)</div> <div>1845'</div> <div>790'</div> <div>LAT. = 36° 38.5' N. LONG. = 107° 26.0' W.</div> <div>FD. U.S.G.L.O. BC. 1914</div> <div>89-55-32 W</div> <div>2641.7' (M)</div> <div>FD. U.S.G.L.O. BC. 1914</div>	<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>9-30-99 Date of Survey Signature of Professional Surveyor 8894 Certificate Number</div>

OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #138M
Location: 790' FSL, 1845' FEL, Sec 23, T-28-N, R-6-W
Rio Arriba County, NM
Latitude 36° 38.5, Longitude 107° 26.0
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6522' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2618'	
Ojo Alamo	2618'	2745'	aquifer
Kirtland	2745'	2946'	gas
Fruitland	2946'	3333'	gas
Pictured Cliffs	3333'	3481'	gas
Lewis	3481'	3964'	gas
Intermediate TD	3581'		
Mesa Verde	3964'	4294'	gas
Chacra	4294'	5019'	gas
Massive Cliff House	5019'	5174'	gas
Menefee	5174'	5509'	gas
Massive Point Lookout	5509'	6027'	gas
Mancos	6027'	6726'	gas
Gallup	6726'	7474'	gas
Greenhorn	7474'	7543'	gas
Graneros	7543'	7583'	gas
Dakota	7583'		gas
TD (4 1/2" liner)	7814'		

Logging Program:

Cased hole - CBL-CCL-GR - TD to surface

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3581'	LSND	8.4-9.0	30-60	no control
3581- 7814'	Gas	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

Casing Program (as listed, the equivalent, or better):

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3581'	7"	20.0#	J-55
6 1/4"	3481' - 7814'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 7814' 2 3/8" 4.7# J-55

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).
After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1).
After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead -

9 5/8" x 7" x 2 3/8" x 3000 psi tree assembly.

General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing:

9 5/8" surface casing - cement with 159 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing -

Lead w/327 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel (1077 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 2846'. First stage: cement with w/164 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 0.5 pps Cellophane. Second stage: 292 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 10 pps Gilsonite (1077 cu.ft., 100% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 2745'. Two turbolating centralizers at the base of the Ojo Alamo at 2745'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 490 sx 50/50 Class "H" Poz with 2% gel, 0.25# flocele/sx, 5# gilsonite/sx, 0.2% retardant and 0.4% fluid loss additive (623 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

BURLINGTON RESOURCES OIL & GAS COMPANY

SAN JUAN 28-6 UNIT No. 138M

SE/4 SECTION 23, T-28-N, R-6-W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO

790' FSL 1845' FEL

