

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL ✓	5. Lease Number SF-080669 Unit Reporting Number DK-8910010540 MV-891001054A
1b. Type of Well GAS ✓	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 27-4 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-4 Unit 9. Well Number 16M
4. Location of Well 2545' ENL, 2255' FWL Latitude 36° 34.4, Longitude 107° 16.5	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) F Sec. 17, T-27-N, R-4-W API # 30-039-26379
14. Distance in Miles from Nearest Town 16 miles from Gobernador	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 2255'	17. Acres Assigned to Well 320 W/2
16. Acres in Lease	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 2000'	
19. Proposed Depth 8050' ✓ <small>2000' to 8050' depth interval is 100' and 8050' to 8100' depth interval is 50' and appeal pursuant to 40 CFR 3165.4.</small>	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6804' GR ✓	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	24. Authorized by: <u>[Signature]</u> Regulatory/Compliance Administrator
	DATE <u>2-19-00</u>

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Jim Lovato

TITLE _____

DATE MAY 22 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.

6/2
JL

CTP

NSL K1

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

Form C-10
Revised February 21, 1999
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26379		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 7452	*Property Name SAN JUAN 27-4 UNIT		*Well Number 16M
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6804'

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
F	17	27N	4W		2545	NORTH	2255	WEST	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 MV-W/320 DK-W/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

16	5256.24'	17	5280.00'
USA SF-080669	2545'	RECEIVED MAY 2000 OIL CON. DIV DIST. 3	5280.00'
2255'	16M	NSL Dakota	5260.20'
5280.00'	FEE		

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 Cole
Printed Name: Peggy Cole
Title: Regulatory Administrator
Date: 2-19-00

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

NOVEMBER 17, 1999
Date of Survey

Signature and Seal of Surveyor: NEALE C. EDWARDS
6857
Certificate Number: 6857

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #16M
Location: 2545' FNL, 2255' FWL, Sec 17, T-27-N, R-4-W
Rio Arriba County, NM
Latitude 36° 34.4, Longitude 107° 16.5
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6804' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3057'	
Ojo Alamo	3057'	3164'	aquifer
Kirtland	3164'	3303'	gas
Fruitland	3303'	3640'	gas
Pictured Cliffs	3640'	3759'	gas
Lewis	3759'	4214'	gas
Intermediate TD	3859'		
Mesa Verde	4214'	4640'	gas
Chacra	4640'	5436'	gas
Massive Cliff House	5436'	5496'	gas
Menefee	5496'	5811'	gas
Massive Point Lookout	5811'	6360'	gas
Mancos	6360'	6998'	gas
Gallup	6998'	7785'	gas
Greenhorn	7785'	7845'	gas
Graneros	7845'	7875'	gas
Dakota	7875'		gas
TD	8050'		

Logging Program:

Cased hole - CBL-CCL-GR - TD to surface
Cores - none

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- 3859'	LSND	8.4-9.0	30-60	no control
3859- 8050'	Air/N2	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' - 3859'	7"	20.0#	J-55
6 1/4"	3759' - 8050' —	4 1/2"	10.5#	K-55

Tubing Program:

0' -8050' — 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.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

Special Drilling Operations (Gas/Mist Drilling):

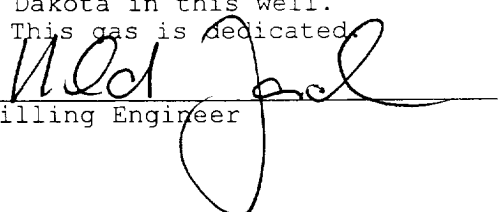
The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

Additional Information:

- The Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	300 psi
Pictured Cliffs	600 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half of Section 17 is dedicated to the Mesaverde and the Dakota in this well.
- This gas is dedicated.


Drilling Engineer

2/17/2000
Date