

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 NMSF-079383 Unit Reporting Number MV-8910005380 DK-8910005380B	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 30-6 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 30-6 Unit 9. Well Number 96B	
4. Location of Well 2515' FNL, 180' FEL <i>SENE</i> Latitude 36° 47.0, Longitude 107° 31.9	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) <i>H</i> Sec. 26, T-30-N, R-7-W API # 30-039- <i>27011</i>	
14. Distance in Miles from Nearest Town 13 miles from Gobernador	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 180'	17. Acres Assigned to Well 320 E/2	
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 600'	
19. Proposed Depth 7686'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6254' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached	This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4	
24. Authorized by: <i>Regulatory/Compliance Supervisor</i>	Date <i>5-9-02</i>	

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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

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

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	'Pool Code	'Pool Name
30-039- 27011	72319/71599	Blanco Mesaverde/Basin Dakota
'Property Code	'Property Name	'Well Number
7469	SAN JUAN 30-6 UNIT	96B
'OGRID No.	'Operator Name	'Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY LP	6254'

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
H	26	30N	7W		2515	NORTH	180	EAST	RIO ARRIBA

¹¹Bottom Hole Location If Different From Surface

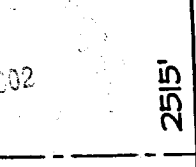
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

¹² Dedicated Acres
MV-E/320
DK-E/320

¹³ Joint or Infill¹⁴ 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 data-bbox="279 1181 513 1347"> <p>15</p> <p>5281.32'</p> <p>5280.00'</p> <p>26</p> <p>2460'</p> <p>USA SF-079383</p> <p>2515'</p> <p>LAT: 36°47.0'N LONG: 107°31.9'W</p> <p>125'</p> <p>180'</p> <p>5280.00'</p> <p>5278.68'</p> </div>	<div data-bbox="513 1181 708 1347"> <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Peggy Cole</i></p> <p>Signature</p> <p>Peggy Cole</p> <p>Printed Name</p> <p>Regulatory Supervisor</p> <p>Title</p> <p>4-10-02</p> <p>Date</p> </div>
	<div data-bbox="708 1181 902 1347"> <p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Survey Date: JANUARY 16, 2002</p> <p>Signature and Seal of Professional Surveyor</p> </div>
	<div data-bbox="902 1181 1096 1347">  </div>
	<div data-bbox="1096 1181 1421 1347"> <p><i>Jason C. Edwards</i></p> <p>Jason C. Edwards</p> <p>Certificate Number 15269</p> </div>

NEW BLM
R.O.W.

OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #96B
2515' FNL, 180' FEL, Section 26, T-30-N, R-7-W
Rio Arriba County, New Mexico
Latitude 36° 47.0, Longitude 107° 31.9
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6254' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2141'	
Ojo Alamo	2141'	2361'	aquifer
Kirtland	2361'	2771'	gas
Fruitland	2771'	3171'	
Pictured Cliffs	3171'	3366'	gas
Lewis	3366'	3881'	gas
Intermediate TD	3466'		
Huerfanito Bentonite	3881'	4196'	gas
Chacra	4196'	5011'	gas
Cliff House	5011'	5046'	
Menefee	5046'	5376'	gas
Point Lookout	5376'	5726'	gas
Mancos	5726'	6616'	gas
Gallup	6616'	7376'	gas
Greenhorn	7376'	7426'	gas
Graneros	7426'	7566'	gas
Dakota	7566'		gas
TD	7686'		

Logging Program:

Mud logs - none
Open hole - AIT, CNL-CDL - TD to intermediate casing
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- 3466'	LSND	8.4-9.0	30-60	no control
3466- 7686'	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' - 3466'	7"	20.0#	J-55
6 1/4"	3366' - 7686'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 7686'

BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 3000 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" 3000 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, 3000 psi minimum choke manifold (Reference Figure #2).

Completion Operations -

7 1/16" 3000 psi double gate BOP stack (Reference Figure #3). 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 134 sx Type III cement with 2% calcium chloride, 0.25 pps Celloflake (189 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/309 sx Premium Lite cement with 3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS. Tail w/90 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss (781 cu.ft. of slurry, 50% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar 2671'. First stage: cement with w/26 sx Premium Lite cmt w/3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS. Tailed w/90 sx Type III cmt w/1% calcium chloride, 0.25 pps Flocele, 0.2% fluid loss. Second stage: 283 sx Premium Lite cmt w/3% calcium chloride, 0.25 pps Flocele, 5 pps LCM-1, 0.4% fluid loss, 0.4% SMS (781 cu.ft., 50% 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 2361'. Two turbolating centralizers at the base of the Ojo Alamo at 2361'. 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 313 sx Premium Lite cmt w/0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss (620 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 float shoe.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

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 Mesaverde and Dakota 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 east half of Section 26 is dedicated to the Mesaverde and the Dakota in this well.
- This gas is dedicated.

Brennan D. Short
Drilling Engineer

4/15/02
Date