

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-079049B Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator BURLINGTON RESOURCES Oil & Gas Company	Unit Agreement Name San Juan 28-6 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87401 (505) 326-9700	6. Farm or Lease Name San Juan 28-6 Unit 9. Well Number 33B
4. Location of Well 2195' FNL, 530' FWL Latitude 36° 37.2, Longitude 107° 28.8	10. Field, Pool, Wildcat Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 33, T-28-N, R-6-W API # 30-039-26296
14. Distance in Miles from Nearest Town 52 miles from Blanco	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 530'	
16. Acres in Lease	17. Acres Assigned to Well 325.59 W/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 2400'	
19. Proposed Depth 5821'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6465' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"
24. Authorized by: <u><i>Regan Cole</i></u> Regulatory/Compliance Administrator	<u>10-27-99</u> Date

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Charlie Beecham

TITLE _____

DATE MAR 1 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.

chc

NMCO

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-26296	² Pool Code 72319	³ Pool Name Blanco Mesaverde
⁴ Property Code 7462	⁵ Property Name SAN JUAN 28-6 UNIT	⁶ Well Number 33B
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 6465'

¹⁰ Surface Location

UL or lot no. E	Section 33	Township 28-N	Range 6-W	Lot Idn	Feet from the 2195	North/South line NORTH	Feet from the 530	East/West line WEST	County RIO ARRIBA
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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
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¹² Dedicated Acres W/325.59	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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

⁶ FD. U.S.G.L.O. BC. 1914	S 89-56-18 E 2637.8' (M)	FD. U.S.G.L.O. BC. 1914	S 89-56-47 E	FD. U.S.G.L.O. BC. 1914	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature <u>Peggy Cole</u> Printed Name Regulatory Administrator Title Date <u>10-27-99</u>
2195'					
530'	SF-079049-B				
LAT. = 36° 37.2' N. LONG. = 107° 28.8' W.					
		33			
	NMSF-079051				
					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. Date of Survey <u>9-30-99</u> Signature and Title of Professional Surveyor 8894 Certificate Number

OPERATIONS PLAN

Well Name: San Juan 28-6 Unit #33B
Surface Location: 2195' FNL, 530' FWL, Section 33, T-28-N, R-6-W
Rio Arriba County, New Mexico
Latitude 36° 37.2, Longitude 107° 28.8
Formation: Blanco Mesa Verde
Elevation: 6465' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2447'	aquifer
Ojo Alamo	2447'	2583'	aquifer
Kirtland	2583'	2831'	gas
Intermediate TD	2683'		
Fruitland	2831'	3222'	gas
Pictured Cliffs	3222'	3365'	gas
Lewis	3365'	3780'	gas
Mesa Verde	3780'	4149'	gas
Chacra	4149'	4865'	gas
Massive Cliff House	4865'	4996'	gas
Menefee	4996'	5421'	gas
Point Lookout	5421'		gas
Total Depth	5821'		

Logging Program:

Cased hole Gamma Ray, Cement bond - surface to TD
Mud Logs/Coring/DST - none

Mud Program:

<u>Interval- MD</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 320'	Spud	8.4-9.0	40-50	no control
320- 2683'	LSND	8.4-9.0	30-60	no control
2683- 5821'	Air/Mist	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>Measured Depth</u>	<u>Csg Size</u>	<u>Weight</u>	<u>Grade</u>
12 1/4"	0' - 320'	9 5/8"	32.3#	H-40
8 3/4"	0' - 2683'	7"	20.0#	J-55
6 1/4"	2583' - 5821'	4 1/2"	10.5#	J-55

Tubing Program: 0' - 5821' 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.

BOP Specifications, Wellhead and Tests (cont'd):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 2000 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 drill crew.
- All BOP tests & 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 255 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (301 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/234 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% gel, 2% calcium chloride, 7# gilsonite/sx and 0.5# flocele/sx (807 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 to determine TOC. Test casing to 1500 psi for 30 minutes.

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 2583'. Two turbolating centralizers at the base of the Ojo Alamo at 2583'. 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 circulate liner top. Pump 366 sx 50/50 Class "B" Poz w/1/4# flocele/sx, 2% gel, 0.1% retardant, 5# gilsonite/sx and 0.4% fluid loss additive (465 cu.ft., 40% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

- 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 (Air/Mist Drilling):

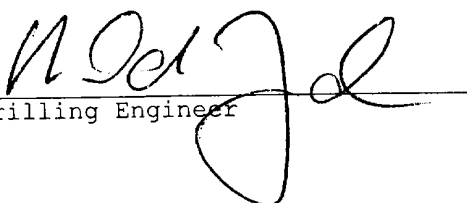
The following equipment will be operational while gas/mist drilling:

- 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.
- 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:

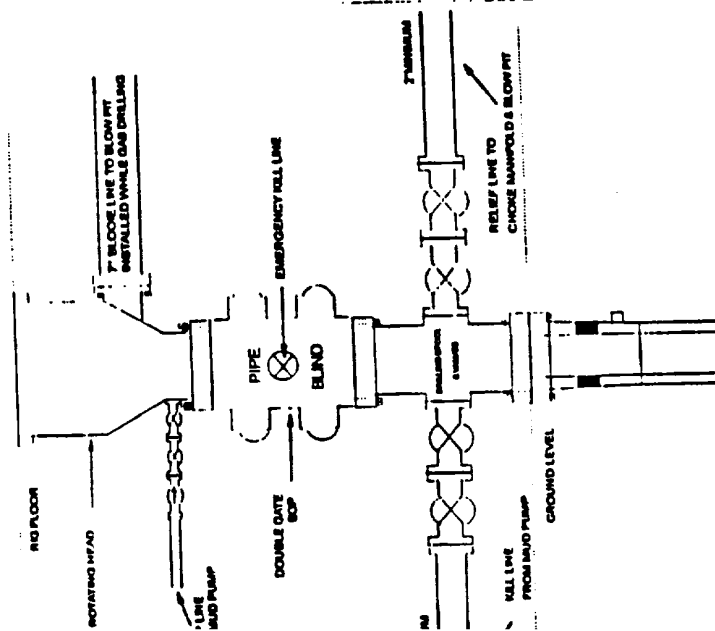
- The Mesa Verde formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	800 psi
Pictured Cliffs	800 psi
Mesa Verde	700 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The west half of Section 33 is dedicated to the Mesa Verde.
- This gas is dedicated.


Drilling Engineer

10/28/99
Date

BOP Configuration 2M psi System

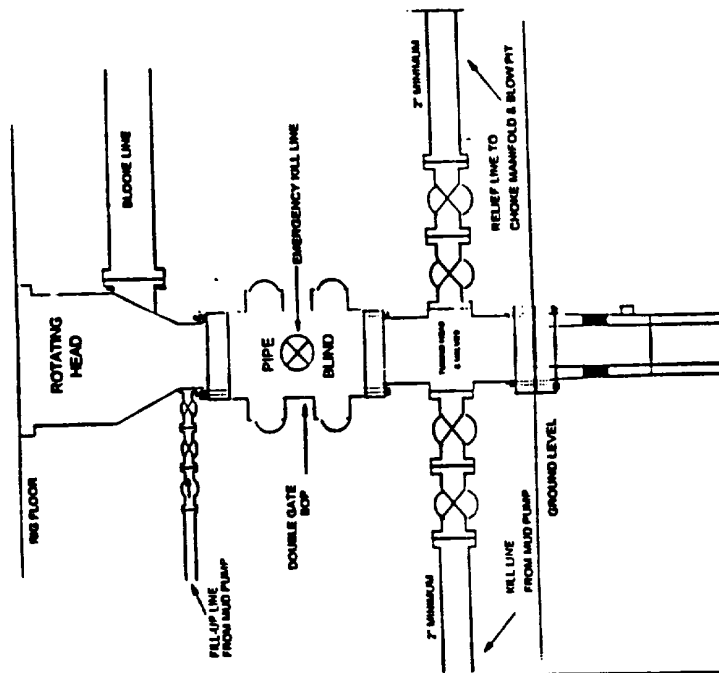


Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffner Type 58 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure or better.

FIGURE #1

BURLINGTON RESOURCES

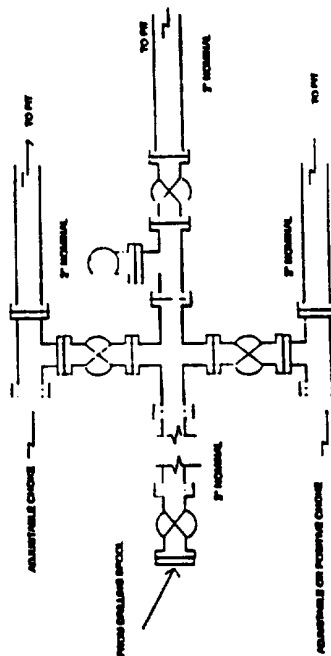
BOP Configuration 2M psi System



Minimum BOP Installation for Completion operations. 7 1/16" Bore (6" Nominal), 2,000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams

FIGURE #2

Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth.
2" minimum, 2000psi working pressure equipment with two chokes.

Figure #3

BURLINGTON RESOURCES OIL & GAS COMPANY

SAN JUAN 28-6 UNIT No. 33B

NW/4 SECTION 33, T-28-N, R-6-W, N.M.P.M.

RIO ARriba COUNTY, NEW MEXICO

2195' FNL 530' FWL

