

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 079002
1b. Type of Well GAS	Unit Reporting Number
2. Operator BURLINGTON RESOURCES Oil & Gas Company	6. If Indian, All. or Tribe
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	7. Unit Agreement Name San Juan 30-6 Unit
4. Location of Well 1190' FNL, 790' FWL Latitude 36° 49.9, Longitude 107° 29.5	8. Farm or Lease Name San Juan 30-6 Unit
	9. Well Number 33B
	10. Field, Pool, Wildcat Blanco MV/Basin DK
	11. Sec., Twn, Rge, Mer. (NMPM) Sec. 8, T-30-N, R-6-W API # 30-039-26429
14. Distance in Miles from Nearest Town 50 miles from Blanco	12. County Rio Arriba
	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 790'	
16. Acres in Lease	17. Acres Assigned to Well 320 W/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 700'	
19. Proposed Depth 7850'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6282' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u><i>Regan Cole</i></u> Regulatory/Compliance Supervisor	Date <u>1-5-00</u>

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY MJ

TITLE _____

DATE 12-5-00

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.

NMOC

submitted in lieu of Form 3160-5

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

20 OCT -5 10:56

1. Type of Well
GAS

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9788

4. Location of Well, Footage, Sec., T, R, M

1190' FNL, 790' FWL, Sec. 8, T-30-N, R-6-W, NMPM

5. Lease Number
SF-079049B

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

San Juan 30-6 Unit
8. Well Name & Number
San Juan 30-6 U #33B
9. API Well No.
30-039-26429
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

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

Type of Action

☐ Abandonment ☒ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut off
☒ Altering Casing ☐ Conversion to Injection
☐ Other -

13. Describe Proposed or Completed Operations

It is intended to alter the approved casing and cement program of the subject well.

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200- 3466'	LSND	8.4-9.0	30-60	no control
3466- 7850'	Gas	n/a	n/a	n/a

Casing Program:

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
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"	0' - 7850'	4 1/2"	10.5#	J-55

Tubing Program:

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
0' - 7850'		2 3/8"	4.70#	EUE

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).

7" intermediate casing - Lead w/317 sx Class "B" w/3% sodium metasilicate, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel (1042 cu.ft. of slurry, 100% excess to circulate to surface.)

7" intermediate casing alternative two stage - Stage collar at 2801'. 1st stage: cement with w/234 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 0.5 pps Cellophane. 2nd stage: 251 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 10 pps Gilsonite (1042 cu.ft., 100% excess to circulate to surface).

4 1/2" Production Liner - Lead with 438 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 (636 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap).

Wellhead:

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

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

Signed Nancy Olterman for Title Regulatory Supervisor Date 10/5/00
no

(This space for Federal or State Office use)

APPROVED BY _____ Title _____ Date _____

CONDITION OF APPROVAL, if any:

MMOCD

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

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-26429	² Pool Code 72319771599	³ Pool Name Blanco Mesaverde/Basin Dakota
⁴ Property Code 7469	⁵ Property Name SAN JUAN 30-6 UNIT	⁶ Well Number 33B
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	⁹ Elevation 6282'

¹⁰ Surface Location

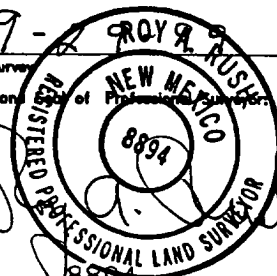
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	8	30-N	6-W		1190	NORTH	790	WEST	RIO ARRIBA

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 W/320	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

¹⁶ CALC'D. CORNER 2840.0' 790' LAT. = 36° 49.9' N. LONG. = 107° 29.5' W. USA SF-0790475 FD. U.S.G.L.O. BC. 1914	N 89-55 E (R)		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 <u>Peggy Cole</u> Title <u>Regulatory Supervisor</u> Date <u>7-5-00</u>
N 00-00-40 E USA NM-03403 2638.32' (M) FD. U.S.G.L.O. BC. 1914	8		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>7-5-00</u> Signature and Seal of Professional Land Surveyor  Certificate Number
N 89-54-37 E 2633.02' FD. U.S.G.L.O. BC. 1914			

OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #33B
Location: 1190' FNL, 790' FWL, Sec 8, T-30-N, R-6-W
Rio Arriba County, NM
Latitude 36° 49.9, Longitude 107° 29.5
Formation: Blanco Mesaverde/Basin Dakota
Elevation: 6282' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2348'	
Ojo Alamo	2348'	2409'	aquifer
Kirtland	2409'	2901'	gas
Fruitland	2901'	3252'	gas
Pictured Cliffs	3252'	3366'	gas
Lewis	3366'	3952'	gas
Intermediate TD	3466'		
Mesa Verde	3952'	4343'	gas
Chacra	4343'	5158'	gas
Massive Cliff House	5158'	5191'	gas
Menefee	5191'	5633'	gas
Massive Point Lookout	5633'	6393'	gas
Mancos	6393'	6654'	gas
Gallup	6654'	7479'	gas
Greenhorn	7479'	7536'	gas
Graneros	7536'	7636'	gas
Dakota	7636'		gas
TD	7850'		

Logging Program:

Cased hole - CBL-CCL-GR - TD to surface
Open hole - IEL-GR, CNL-CDL - TD to intermediate casing
Cores - none
Mud log - 7000' to TD

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- 7850'	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>Csq. Size</u>	<u>Wt.</u>	<u>Grade</u>
14 3/4"	0' - 200'	11 3/4"	42.0#	H-40
10 5/8"	0' - 3466'	8 5/8"	32.0#	K-55
7 7/8"	3366' - 7850'	5 1/2"	15.5#	K-55

Tubing Program:

0' -6393'	1 1/2"	2.90#	J-55
0' -7850'	1 1/2"	2.76#	J-55

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 3000 psi for 15 minutes.

Wellhead -

11 3/4" x 8 5/8" x 1 1/2" x 1 1/2" 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:

11 3/4" surface casing - cement with 221 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (260 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.

8 5/8" intermediate casing -

Lead w/429 sx Class "B" w/6% gel, 2% calcium chloride, 5# gilsonite/sx and 1/4# flocele/sx. Tail w/98 sx Class "B" w/2% sodium metasilicate, 2% calcium chloride, 5# Gilsonite/sx, 1/4# flocele/sx (1456 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.

8 5/8" intermediate casing alternative two stage: Stage collar at 2801'. First stage: cement with w/163 sx Class "B" w/2% sodium metasilicate, 2% calcium chloride, 5# Gilsonite/sx, 1/4# Flocele. Second stage: 392 sx Class "B" with 6% gel, 2% calcium chloride, 1/4# Cellophane/sx, 5# Gilsonite/sx (1456 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 2409'. Two turbolating centralizers at the base of the Ojo Alamo at 2409'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

5 1/2" Production Liner -

Cement to cover minimum of 100' of 5 1/2" x 8 5/8" overlap. Lead with 676 sx 50/50 Class "B" Poz with 2.75% gel, 0.25# flocele/sx, 5# gilsonite/sx, 0.2% fluid loss additive (1088 cu.ft.), 40% excess to cement 5 1/2" x 8 5/8" overlap). WOC a minimum of 18 hrs prior to completing.

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

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 5 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 5 1/2" x 8 5/8" casing strings. After completion of the well, a 5 1/2" retrievable bridge plug will be set below the top of cement in the 5 1/2" x 8 5/8" overlap. The 5 1/2" casing will then be backed off above the top of cement in the 5 1/2" x 8 5/8" overlap and laid down. The 5 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):

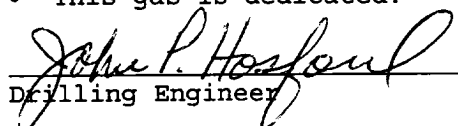
The following equipment will be operational while gas/mist drilling:

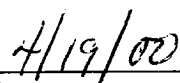
- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite 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 dualled.
- 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 8 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.


Drilling Engineer


Date