

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 NM-029146 Unit Reporting Number
1b. Type of Well GAS	6. If Indian, All. or Tribe
2. Operator <b>BURLINGTON RESOURCES</b> Oil & Gas Company	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 9. Well Number 20B
4. Location of Well 1170' FSL, 660' FWL  Latitude 36° 40.7, Longitude 107° 45.5	10. Field, Pool, Wildcat Otero Chacra/ Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) M Sec. 35, T-29-N, R-9-W API # 30-045- 30 87 8
14. Distance in Miles from Nearest Town 6.6 miles from Blanco	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 660'	
16. Acres in Lease	17. Acres Assigned to Well Cha - <del>357-28</del> say 4153.07 MV/DK - 306.10W/2
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 1300'	
19. Proposed Depth 6716'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 5804' 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 Supervisor	Date <u>9-20-01</u>

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY /s/ David J. Mankiewicz

TITLE \_\_\_\_\_

DATE SEP 11 2002

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 II  
811 South First, Artesia, N.M. 88210

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

## OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

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

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045- 30878		2 Pool Code 82329/72319/71599		3 Pool Name Otero Chacra/Blanco Mesaverde/Basin Dakota	
4 Property Code 7451		5 Property Name SAN JUAN			6 Well Number 20B
7 OGRID No. 14538		8 Operator Name BURLINGTON RESOURCES OIL AND GAS, INC.			9 Elevation 5804'

### <sup>10</sup> Surface Location

Surface Location									
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	29-N	9-W		1170'	SOUTH	660'	WEST	SAN JUAN

<sup>11</sup> 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
13 Dedicated Acres			13 Joint or Infill		14 Consolidation Code		15 Order No.		
MV-W/306.10 153.97									
DK-W/306.10 Cha-157-28									

DK-W/306.10 Cha-157-28

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

360

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 14

LOT 15

LOT 16

NM-029146

NM-029146

FD 3 1/2" B.L.M. BC 1951

FD 3 1/2" G.L.O. BC

FD 3 1/2" G.L.O. BC

N 03-22-08 E 2573.08' (M)

660'

1170'

117'

637'

LAT: 36°40.7' N.  
LONG: 107°45.5' W.

N 89-59-46 E

## 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 \_\_\_\_\_  
Regulatory Supervisor  
Title \_\_\_\_\_  
Date 8-20-01

## 18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this map 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.

S-21-01  
 Date of Survey \_\_\_\_\_  
 Signature and Title of Professional Surveyor: \_\_\_\_\_  
 8894  
 8894  
 Certificate Number \_\_\_\_\_

# BURLINGTON RESOURCES OIL & GAS, INC.

## SAN JUAN #20B

SW/4 SEC. 35, T-29-N, R-9-W, N.M.P.M.

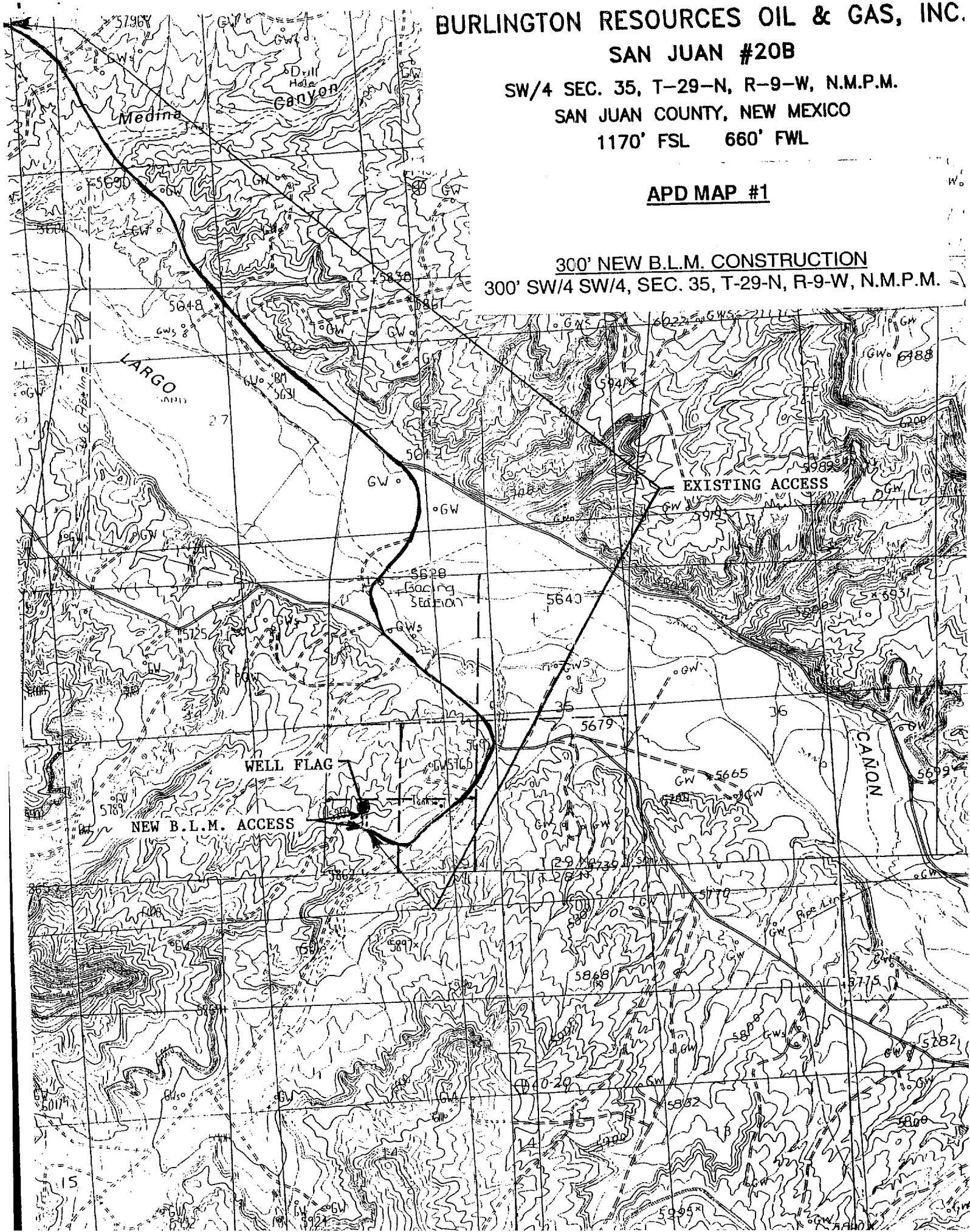
SAN JUAN COUNTY, NEW MEXICO

1170' FSL 660' FWL

### APD MAP #1

300' NEW B.L.M. CONSTRUCTION

300' SW/4 SW/4, SEC. 35, T-29-N, R-9-W, N.M.P.M.



## OPERATIONS PLAN

**Well Name:** San Juan #20B  
**Location:** 1170' FSL, 660' FWL, Section 35, T-29-N, R-9-W  
San Juan County, New Mexico  
Latitude 36° 40.7, Longitude 107° 45.5  
**Formation:** Otero Chacra/Blanco Mesa Verde/Basin Dakota  
**Elevation:** 5804'' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1091'	
Ojo Alamo	1091'	1266'	aquifer
Kirtland	1266'	1694'	
Fruitland	1694'	2191'	gas
Pictured Cliffs	2191'	2301'	gas
Lewis	2301'	2776'	gas
Intermediate TD	2401'		
Huerfano Bentonite	2776'	3141'	gas
Chacra	3141'	3846'	gas
Massive Cliff House	3846'	3866'	gas
Menefee	3866'	4466'	gas
Point Lookout	4466'	4826'	gas
Mancos	4826'	5631'	gas
Gallup	5631'	6391'	gas
Greenhorn	6391'	6461'	gas
Graneros	6461'	6521'	gas
Dakota	6521'		gas
TD	6716'		

### Logging Program:

Mud logs - none  
Open hole - none  
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- 2401'	LSND	8.4-9.0	30-60	no control
2401- 6716'	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' - 2401'	7"	20.0#	J-55
6 1/4"	2301' - 6716'	4 1/2"	10.5#	K-55

### Tubing Program:

0' - 6716'      2 3/8"      4.7#      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 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# floccle/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/235 sx 50/50 Class "G" TXI Liteweight cement with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite and 0.5 pps Celloflake. Tail w/90 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps Gilsonite, 0.25 pps Celloflake (721 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.

See attached alternative intermediate lead slurry.

7" intermediate casing alternative two stage: Stage collar 1594'. First stage: cement with w/190 sx Class "G" 50/50 poz w/2% gel, 2% calcium chloride, 5 pps gilsonite, 0.25 pps Celloflake. Second stage: 186 sx 50/50 Class "G"/TXI Liteweight with 2% calcium chloride, 2.5% sodium metasilicate, 10 pps Gilsonite, 0.25 pps Celloflake (721 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 1266'. Two turbolating centralizers at the base of the Ojo Alamo at 1266'. 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 440 sx 50/50 Class "G" Poz with 5% gel, 0.25 pps Celloflake, 5 pps Gilsonite (634 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.