

FORM 3160-1  
(July 1992)SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)FORM APPROVED  
OMB NO. 1004-0136  
Expires February 28, 1995UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

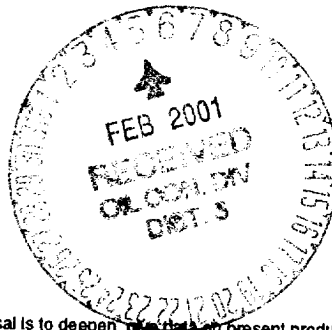
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> - DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NMSI 078147	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> - OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR BURLINGTON RESOURCES OIL & GAS 3401 EAST 30TH FARMINGTON, NM 87402		7. UNIT AGREEMENT NAME	
3. ADDRESS AND TELEPHONE NO. PEGGY COLE REPORT AUTHORIZER PHONE: 505.326.9727 EXT: FAX: 505.326.9563 EMAIL: pbradfield@br-inc.com		8. FARM OR LEASE NAME, WELL NO. DALSANT 1B	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At Surface 1610FSL AND 1835FEL NWSE SEC 24 T32N R12W At proposed prod. zone		9. API WELL NO. 30-045-30547	
14. DISTANCE IN MILES AND DIRECTION FROM THE NEAREST TOWN OR POST OFFICE 13.7 MILES FROM LAPLATA, NM		10. FIELD AND POOL, OR WILDCAT BLANCO MV/BASIN DK -	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drg. unit line, if any) 1610		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SECTION 24 T32N R12W MERIDIAN NMP	
16. NO. ACRES IN LEASE 320.00		12. COUNTY OR PARISH SAN JUAN	
17. NO. OF ACRES ASSIGNED TO THIS WELL		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE FT. 858		19. PROPOSED DEPTH 7800 MD / TVD -	
20. ROTARY OR CABI TOOLS ROTARY		21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6535 GL	
22. APPROX. DATE WORK WILL START*			

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. ELECTRONIC SUBMISSION #1817 VERIFIED BY THE BLM WELL INFORMATION SYSTEM FOR BURLINGTON RESOURCES OIL & GAS SENT TO THE FARMINGTON FIELD OFFICE		
SIGNED: PEGGY COLE	TITLE: REPORT AUTHORIZER	DATE: 12/12/2000

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY: /s/ Jim Lovato TITLE: \_\_\_\_\_ DATE: FEB - 1 2001

\*See Instructions On Reverse Side

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 representations as to any matter within its jurisdiction.

NMS008

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

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

DISTRICT II  
P.O. Drower DD, Artesia, N.M. B8211-0719

OIL CONSERVATION DIVISION

DISTRICT III  
1000 Rio Brozos Rd., Aztec, N.M. 87410

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

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

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-30547		<sup>2</sup> Pool Code 72319/71599	<sup>3</sup> Pool Name Blanco Mesaverde/Basin Dakota
<sup>4</sup> Property Code 18508	<sup>5</sup> Property Name DALSANT		<sup>6</sup> Well Number 1B
<sup>7</sup> UGRID No. 14538	<sup>8</sup> Operator Name BURLINGTON OIL AND GAS, INC.		<sup>9</sup> Elevation 6535'

<sup>10</sup> Surface Location

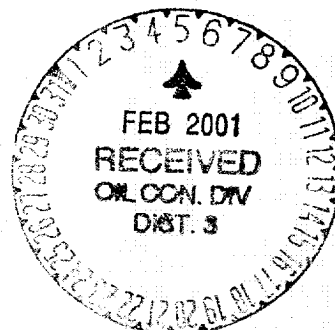
UL or lot no.	Section	Township	Range	Lot	Feet from the	North/South line	Feet from the	East/West line	County
J	24	32-N	12-W		1610'	SOUTH	1835'	EAST	SAN JUAN

## "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		13 Joint or Infill			14 Consolidation Code		15 Order No.		
MV/DK: E/320									

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.

<p>16</p>	<p>17</p> <p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p>	<p style="text-align: center;">1</p> <p style="text-align: center;">DALSANT, F. J.</p> <p>USA SF-078147</p> <p>USA SF-078147</p> <p>FD 3 1/2" BC B.L.M. 1952</p>
<p>24</p>	<p>18</p> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plot 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 style="text-align: center;">Signature</p> <p style="text-align: center;">Peggy Cole</p> <p style="text-align: center;">Printed Name</p> <p style="text-align: center;">Regulatory Supervisor</p> <p style="text-align: center;">Title</p> <p style="text-align: center;">Date 2-8-01</p>
<p>1510'</p> <p>FD 3 1/2" BC B.L.M. 1952</p>	<p style="text-align: center;">BALL, EDWARD H ET UX</p> <p style="text-align: center;">LAT. 36°58.1'N LONG. 108°02.7'W</p> <p style="text-align: center;">1830</p> <p style="text-align: center;">BALL, WABEL INEZ</p> <p style="text-align: center;">N 87-40-33 W 2622.60'</p> <p style="text-align: center;">FD 3 1/2" BC B.L.M. 1952</p>	<p style="text-align: center;">Date of Survey</p> <p style="text-align: center;">Signature and Seal of Professional Surveyor</p> <p style="text-align: center;">Certificate Number 8894</p>



# BURLINGTON OIL AND GAS, INC.

## DALSANT 1B

SEC. 24, T-32-N, R-12-W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

1610' FSL, 1835' FEL

ADOBE DOWNS RANCH

NEW MEXICO-COL

7.5 MINUTE SERIES (TO

4358 II SE  
(HERTON MESA)

762

762 CEDAR HILL

765

LA PLATA CO

450 000 FEET

274 SAN JUAN CO

8

### APD MAP #1

400' NEW BLM CONSTRUCTION

400' NW/SE SEC.24, T-32-N, R-12-W, N.M.P.M.

300' NEW FEE CONSTRUCTION

300' NE/SE SEC.24, T-32-N, R-12-W, N.M.P.M.



## OPERATIONS PLAN

**Well Name:** Dalsant #1B  
**Location:** 1610' FSL, 1835' FEL, Sec 24, T-32-N, R-12-W  
San Juan County, NM  
Latitude 36° 58.1, Longitude 108° 02.7  
**Formation:** Blanco Mesa Verde/Basin Dakota  
**Elevation:** 6535' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1097'	
Ojo Alamo	1097'	1147'	aquifer
Kirtland	1147'	2422'	gas
Fruitland	2422'	3087'	gas
Pictured Cliffs	3087'	3227'	gas
Lewis	3227'	3767'	gas
<b>Intermediate TD</b>	<b>3327'</b>		
Mesa Verde	3767'	4232'	gas
Chacra	4232'	4852'	gas
Massive Cliff House	4852'	4982'	gas
Menefee	4982'	5367'	gas
Massive Point Lookout	5367'	5747'	gas
Mancos	5747'	6769'	gas
Gallup	6769'	7456'	gas
Greenhorn	7456'	7517'	gas
Graneros	7517'	7581'	gas
Dakota	7581'		gas
<b>TD</b>	<b>7800'</b>		

**Logging Program:**

Cased hole - GR/CBL - 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- 3327'	LSND	8.4-9.0	30-60	no control
3327- 7800'	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' - 3327'	7"	20.0#	J-55
6 1/4"	0' - 7800'	4 1/2"	10.5#	K-55

**Tubing Program:**

0' - 7800'      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.

**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 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# flocele/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/300 sx Class "G" w/3% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps flocele, 5 pps gilsonite (1001 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.

7" intermediate casing alternative two stage: Stage collar at 2322'. First stage: cement with 236 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps flocele, 5 pps gilsonite. Second stage: 237 sx Class "G" w/3% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# flocele/sx (1001 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 1147'. Two turbolating centralizers at the base of the Ojo Alamo at 1147'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

## 4 1/2" Production Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 456 sx 50/50 Class "G" Poz with 5% gel, 0.25# flocele/sx, 5# gilsonite/sx, 0.1% retardant and 0.25% fluid loss additive (657 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

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

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 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 east half of Section 24 is dedicated to the Mesaverde and Dakota in this well.
- This gas is dedicated.

  
Drilling Engineer

10/24/00  
Date