

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-03385 Unit Reporting Number	
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 138	
4. Location of Well 1780' FSL, 930' FEL Latitude 36° 48.6, Longitude 107° 29.9	10. Field, Pool, Wildcat Basin Dakota 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 18, T-30-N, R-6-W API # 30-039-26507	
14. Distance in Miles from Nearest Town 11 miles from Navajo Dam Post Office	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 930'		
16. Acres in Lease	17. Acres Assigned to Well 320 E/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 75'		
19. Proposed Depth 8025'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6428'- 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 ENVIRONMENTAL REQUIREMENTS	
24. Authorized by: <u>Jeanne Cole</u> Regulatory/Compliance Supervisor	<u>7-28-00</u> Date	

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Jim Lovato

TITLE Team Lead, Petroleum Management DATE 7/6

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.

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO 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- 26507		² Pool Code 71599 -	³ Pool Name Basin Dakota
⁴ Property Code 7469	⁵ Property Name SAN JUAN 30-6 UNIT		⁶ Well Number 138
⁷ GRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		⁹ Elevation 6428

¹⁰ Surface Location

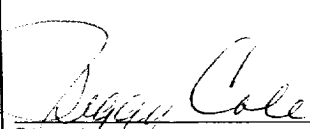
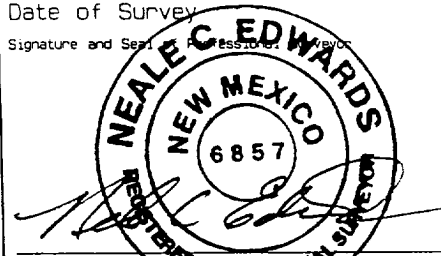
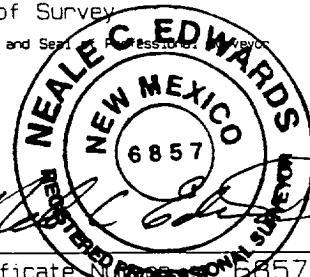
U. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	18	30N	6W		1780	SOUTH	930	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres E/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

<div><div>16</div><div><div>5273.40'</div><div>5280.00'</div><div>5277.36'</div><div>18</div><div>LAT: 36°48.6'N LONG: 107°29.9'W</div><div>930'</div><div>1780'</div></div></div>	<div><div><div>17 OPERATOR CERTIFICATION</div><div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</div><div><div></div><div>Signature</div><div>Peggy Cole</div><div>Printed Name</div><div>Regulatory Supervisor</div><div>Title</div><div>7-28-00</div><div>Date</div></div></div></div>
	<div><div><div>18 SURVEYOR CERTIFICATION</div><div>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.</div><div>JULY 12, 2000</div><div>Date of Survey</div><div><div></div><div>Signature and Seal</div><div></div><div>Certificate</div></div></div></div>

OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #138
Location: 1780' FSL, 930' FEL, Sec 18, T-30-N, R-6-W
Rio Arriba County, NM
Latitude 36° 48.6, Longitude 107° 29.9
Formation: Basin Dakota
Elevation: 6428' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2402'	
Ojo Alamo	2402'	2603'	aquifer
Kirtland	2603'	3203'	gas
Fruitland	3203'	3390'	gas
Pictured Cliffs	3390'	3587'	gas
Lewis	3587'	3917'	gas
Intermediate TD	3687'		
Mesa Verde	3917'	4327'	gas
Chacra	4327'	5167'	gas
Massive Cliff House	5167'	5227'	gas
Menefee	5227'	5592'	gas
Massive Point Lookout	5592'	5853'	gas
Mancos	5853'	6986'	gas
Gallup	6986'	7574'	gas
Greenhorn	7574'	7630'	gas
Graneros	7630'	7764'	gas
Dakota	7764'	7976'	gas
Morrison	7976'		
TD	8025' ~		

Logging Program:

Cased hole - CBL-CCL-GR - TD to surface
Open hole - IEL-GR, CNL-CDL, CMR - TD to intermediate casing
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- 3687'	LSND	8.4-9.0	30-60	no control
3687- 8025'	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>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3687'	7"	20.0#	J-55
6 1/4"	3587' - 8025'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 8025' 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# 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/330 sx Class "B" w/6% gel, 2% calcium chloride, 5# gilsonite/sx and 1/4# flocele/sx. Tail w/70 sx Class "B" w/2% sodium metasilicate, 1/4# flocele/sx, 5# gilsonite/sx, (1109 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 3103'. First stage: cement with w/103 sx Class "B" w/2% sodium metasilicate, 2% calcium chloride, 5# gilsonite/sx, 1/4# Flocele. Second stage: 311 sx Class "B" with 6% gel, 2% calcium chloride, 5# gilsonite/sx, 1/4 pps Cellophane (1109 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 2603'. Two turbolating centralizers at the base of the Ojo Alamo at 2603'. 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 452 sx 50/50 Class "B" Poz with 4% gel, 0.25# flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive, 0.3% dispersant, 0.25% retardant (638 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 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):

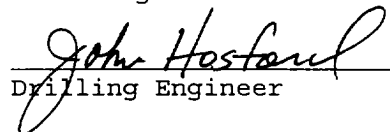
The following equipment will be operational while gas/mist drilling:

- 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 formation will be completed.
- 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 18 is dedicated to the Dakota in this well.
- This gas is dedicated.


Drilling Engineer

5/30/00
Date

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 30-6 UNIT #138

1780' FSL & 930' FEL, SECTION 18, T30N, R6W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO

APD MAP #1

NO NEW CONSTRUCTION
NE/SE SECTION 18, T30N, R6W

