

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-080674 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 27-4 Unit
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name San Juan 27-4 Unit 9. Well Number 142B
4. Location of Well 160' FSL, 2000' FEL Latitude 36° 33.1, Longitude 107° 45.3	10. Field, Pool, Wildcat Blanco Mesaverde — 11. Sec., Twn, Rge, Mer. (NMPM) 0 Sec. 21, T-27-N, R-4-W API # 30-039-26456
14. Distance in Miles from Nearest Town 18 miles from Gobernador	12. County Rio Arriba — 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 160'	17. Acres Assigned to Well 320 E/2
16. Acres in Lease	
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1500'	
19. Proposed Depth 6263' —	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6836' 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>James Cole</i></u> Regulatory/Compliance Supervisor	<u>5-3-00</u> Date

PERMIT NO. _____

APPROVAL DATE _____

APPROVED BY /s/ Jim Lovato

TITLE _____

DATE OCT 30 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.

NMOC

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

OIL CONSERVATION DIVISION

PO Box 2088
Santa Fe, NM 87504-2088

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number	*Pool Code	*Pool Name
30-039-26456	72319 -	Blanco Mesaverde -
*Property Code	*Property Name	*Well Number
7452	SAN JUAN 27-4 UNIT	142B
*OGRID No.	*Operator Name	*Elevation
14538	BURLINGTON RESOURCES OIL & GAS COMPANY	6836 -

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
0	21	27N	4W		160	SOUTH	2000	EAST	RIO ARRIBA

11	Bottom Hole Location If Different From Surface	Feet from the	Feet from the
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11 Bottom Hole Location in Different Areas									
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.			
E/320									

ALL INTERESTS HAVE BEEN CONSOLIDATED

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

OR A NON STANDARD UNIT AND

16

5258.22'

5280.00'

21

5270.76'

160'

2000'

142

142

142

NOV 2000
RECEIVED
OIL CORP. DIV.
DIST. 3

680674

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 Peggy Cole

Title Regulatory Supervisor

Date 5-3-00

18 SURVEYOR CERTIFICATION

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.

OCTOBER 12, 1999

Date of Survey

Signature and Seal of Registered Professional Surveyor

NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

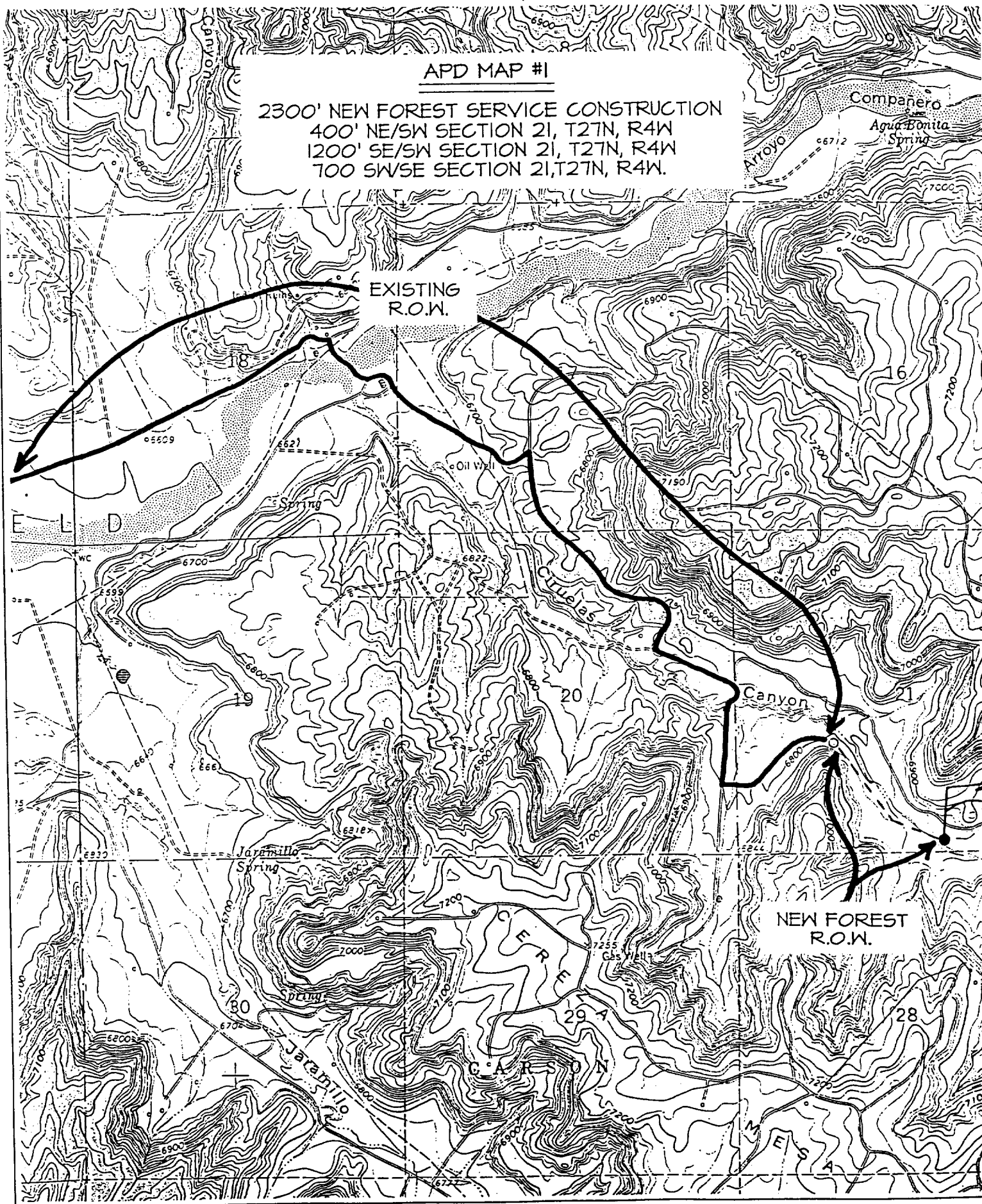
Certificate Number 6857

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-4 UNIT # 142B

160' FSL & 2000' FEL, SECTION 21, T27N, R4W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO

APD MAP #1

2300' NEW FOREST SERVICE CONSTRUCTION
400' NE/SW SECTION 21, T27N, R4W
1200' SE/SW SECTION 21, T27N, R4W
700' SWSE SECTION 21, T27N, R4W.



OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #142B
Location: 160'FSL, 2000'FEL, Section 21, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 33.1, Longitude 107° 15.3
Formation: Blanco Mesa Verde
Elevation: 6836'GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3116'	
Ojo Alamo	3116'	3230'	aquifer
Kirtland	3230'	3355'	
Fruitland	3355'	3699'	gas
Pictured Cliffs	3699'	3793'	gas
Lewis	3793'	4198'	gas
Intermediate TD	3893'		
Huerfano Bentonite	4198'	4658'	gas
Chacra	4658'	5448'	gas
Massive Cliff House	5448'	5528'	gas
Menefee	5528'	5863'	gas
Point Lookout	5863'		gas
Total Depth	6263'		

Logging Program:

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

Mud Program:

<u>Interval- MD</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- 3893'	LSND	8.4-9.0	30-60	no control
3893- 6263' ✓	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>Csq Size</u>	<u>Weight</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3893'	7"	20.0#	J-55
6 1/4"	3793' - 6263' ✓	4 1/2"	10.5#	J-55

Tubing Program: 0' -6263' 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 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 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/359 sx Class "B" w/3% sodium metasilicate, 5# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/6% gel, 2% calcium chloride, 5# gilsonite/sx and 0.25# flocele/sx (1171 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.

7" intermediate casing alternative two stage: Stage collar at 3255'. First stage: cement with 66 sx Class "B" 50/50 poz w/2% gel, 7 pps Gilsonite, 1% calcium chloride, 0.5 pps Cellophane. Second stage: 336 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 7 pps Gilsonite (1171 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 3230'. Two turbolating centralizers at the base of the Ojo Alamo at 3230'. 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 280 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 (355 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):

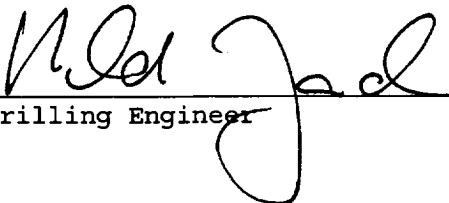
The following equipment will be operational while gas/mist drilling:

- 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	300 psi
Pictured Cliffs	600 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 east half of Section 21 is dedicated to the Mesa Verde.
- This gas is dedicated.


Drilling Engineer

5/16/2000
Date