

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
DRILL

1b. Type of Well
GAS

2. Operator
BURLINGTON RESOURCES Oil & Gas Company

3. Address & Phone No. of Operator
PO Box 4289, Farmington, NM 87499
(505) 326-9700

4. Location of Well
2570' FSL, 2460' FEL
Latitude 36° 33.5, Longitude 107° 13.2

5. Lease Number
SF-080672
Unit Reporting Number
891001054A

6. If Indian, All. or Tribe

7. Unit Agreement Name
San Juan 27-4 Unit

8. Farm or Lease Name
San Juan 27-4 Unit

9. Well Number
109B

10. Field, Pool, Wildcat
Blanco Mesaverde

11. Sec., Twn, Rge, Mer. (NMPM)
Sec. 23, T-27-N, R-4-W
API # 30-039- 26615

12. County
Rio Arriba

13. State
NM

14. Distance in Miles from Nearest Town
20 miles from Gobernador

15. Distance from Proposed Location to Nearest Property or Lease Line
2460'

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
1400'

19. Proposed Depth
6370'

20. Rotary or Cable Tools
Rotary

21. Elevations (DF, FT, GR, Etc.)
6958' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program
See Operations Plan attached

24. Authorized by: [Signature]
Regulatory/Compliance Supervisor

Date 11-14-00

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

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

OIL CONSERVATION DIVISION

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

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

PO 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

*API Number 30-039- 26615		*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 7452	*Property Name SAN JUAN 27-4 UNIT		*Well Number 109B
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 6958'

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
J	23	27N	4W		2570	SOUTH	2460	EAST	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 MV-E/320		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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 Reissued Well was originally shown as the San Juan 27-4 Unit #109A	5278.02'		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> Regulatory Supervisor Title <u>11-14-00</u> Date
	5280.00'		
5280.00'		5280.00'	
5269.44'		6857	

LAT: 36°33.5'N
LONG: 107°13.2'W

23

2570'

2460'

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.

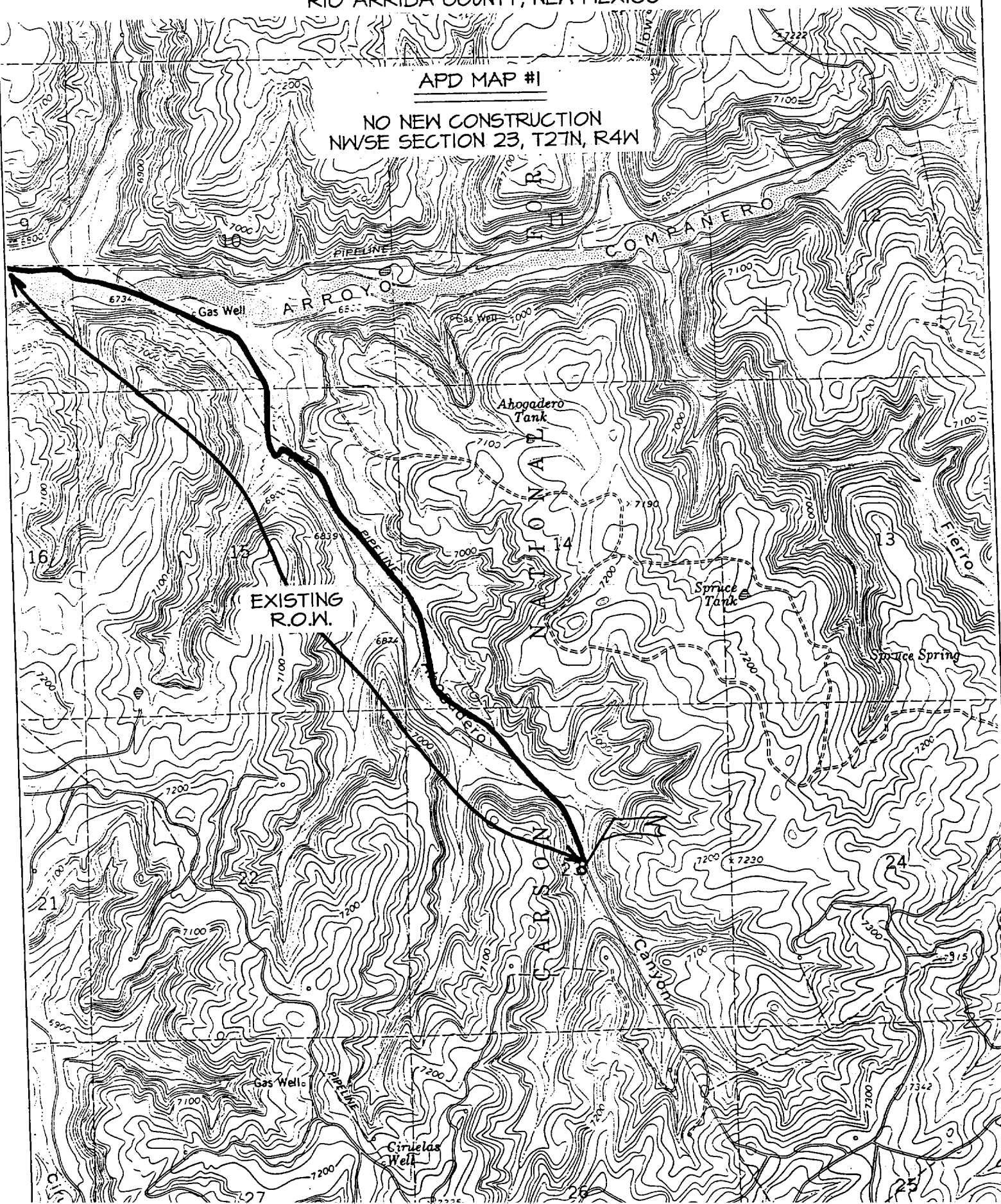
OCTOBER 4, 2000
Date of Survey
Signature and Seal of Professional Surveyor
NEALE C. EDWARDS
NEW MEXICO
6857
Certificate Number 6857

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-4 UNIT #109B

2570' FSL & 2460' FEL, SECTION 23, T27N, R4W, N.M.P.M.
RIO ARRIBA COUNTY, NEW MEXICO

APD MAP #1

NO NEW CONSTRUCTION
NW/SE SECTION 23, T27N, R4W



OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #109B
Location: 2570' FSL, 2460' FEL, Section 23, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 33.5, Longitude 107° 13.2
Formation: Blanco Mesa Verde
Elevation: 6958' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3241'	
Ojo Alamo	3241'	3402'	aquifer
Kirtland	3402'	3490'	
Fruitland	3490'	3811'	gas
Pictured Cliffs	3811'	3911'	gas
Lewis	3911'	4335'	gas
Intermediate TD	4161'		
Huerfanito Bentonite	4335'	4789'	gas
Chacra	4789'	5590'	gas
Massive Cliff House	5590'	5668'	gas
Menefee	5668'	5970'	gas
Point Lookout	5970'		gas
Total Depth	6370'		

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- 4161'	LSND	8.4-9.0	30-60	no control
4161- 6370'	Air/Mist/N2*	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

*Nitrogen might be used in conjunction with or instead of air to prevent a down hole fire.

Casing Program (as listed, the equivalent, or better):

<u>Hole Size</u>	<u>Measured Depth</u>	<u>Csg Size</u>	<u>Weight</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4000'	7"	20.0#	J-55
8 3/4"	4000' - 4161'	7"	23.0#	N-80
6 1/4"	4061' - 6370'	4 1/2"	10.5#	J-55

Tubing Program: 0' -6370' 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 "H" 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/440 sx 50/50 Class "G"/Trinity Light w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 0.5# flocele/sx. Tail w/90 sx 50/50 Class "G" Poz w/2% gel, 2% calcium chloride, 5# gilsonite/sx, 0.1% antifoam and 0.25# flocele/sx (1252 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 3390'. First stage: cement with 181 sx Class "G" 50/50 poz w/2% gel, 5 pps Gilsonite, 2% calcium chloride, 0.25 pps Flocele, 0.1% antifoam. Second stage: 395 sx Class "G"/Trinity Light with 2.5% sodium metasilicate, 2% calcium chloride, 1/2 pps Flocele, 10 pps Gilsonite (1252 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 3402'. Two turbolating centralizers at the base of the Ojo Alamo at 3402'. 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 232 sx 50/50 Class "G" Poz w/1/4# flocele/sx, 4.5% gel, 0.1% retardant, 5# gilsonite/sx, 0.25% fluid loss additive (332 cu.ft., 40% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.