

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-079527 Unit Reporting Number 891001054A
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 135A
4. Location of Well 955' FSL, 870' FEL Latitude 36° 31.5, Longitude 107° 11.8	10. Field, Pool, Wildcat Blanco Mesaverde 11. Sec., Twn, Rge, Mer. (NMPM) P Sec. 36, T-27-N, R-4-W API # 30-039-26592
14. Distance in Miles from Nearest Town 26 miles from Gobernador	12. County Rio Arriba 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 870'	
16. Acres in Lease	17. Acres Assigned to Well 320 E/2
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 75'	
19. Proposed Depth 6563' —	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 7241' GR	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See Operations Plan attached	
24. Authorized by: <u>Patty Call</u> Regulatory/Compliance Supervisor	Date <u>11-14-00</u>

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY 13/ Lee Otemi 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
PO Box 2088
Santa Fe, NM 87504-2088

Instructions on back
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

1 API Number 30-039-26592		2 Pool Code 72319		3 Pool Name Blanco Mesaverde		
4 Property Code 7452		5 Property Name SAN JUAN 27-4 UNIT			6 Well Number 135A	
7 OGRID No. 14538		8 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY			9 Elevation 7241	

10 Surface Location

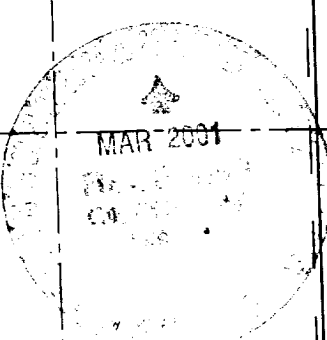
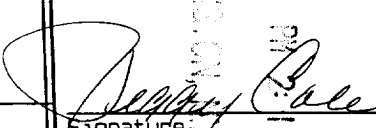

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	27N	4W		955	SOUTH	870	EAST	RIO ARriba

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.
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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

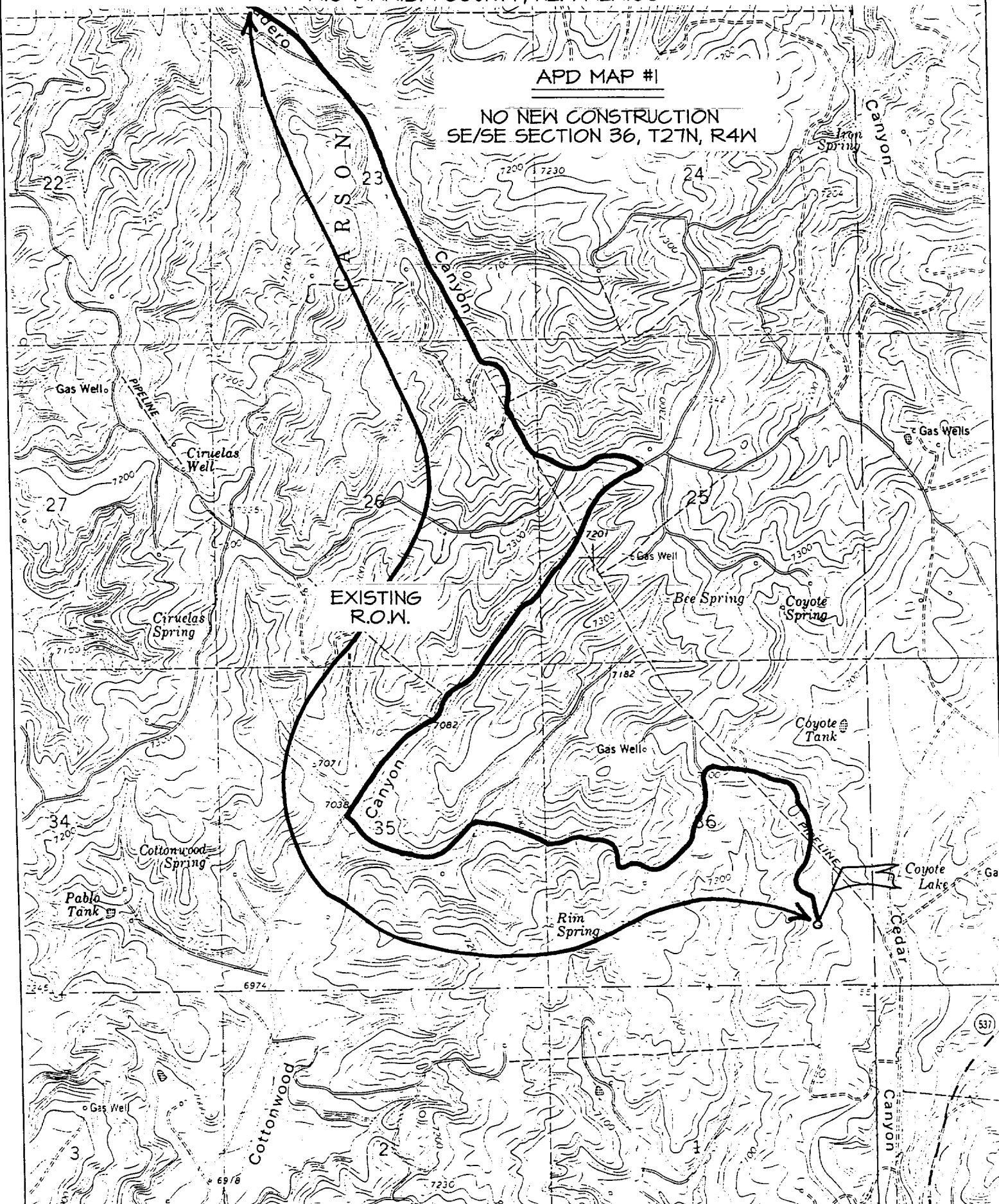
16		5273.40'		17 OPERATOR CERTIFICATION	
		135		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
				Signature: 	
				Printed Name: Peggy Cole	
				Title: Regulatory Supervisor	
5280.00'		36		Date: 11-14-00	
5280.00'		5280.00'		18 SURVEYOR CERTIFICATION	
5280.00'		LAT: 36°31.5' N LONG: 107°11.8' W		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.	
				Date of Survey: SEPTEMBER 29, 2000	
				Signature and Seal of Professional Surveyor: 	
				Certificate Number: 6857	
5280.00'		870'		NEALE C. EDWARDS NEW MEXICO 6857	

BURLINGTON RESOURCES OIL & GAS COMPANY SAN JUAN 27-4 UNIT #135A

955' FSL & 870' FEL, SECTION 36, T27N, R4W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO

APD MAP #1

NO NEW CONSTRUCTION
SE/SE SECTION 36, T27N, R4W



OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #135A
Location: 955' FSL, 870' FEL, Section 36, T-27-N, R-4-W
Rio Arriba County, New Mexico
Latitude 36° 31.5, Longitude 107° 11.8
Formation: Blanco Mesa Verde
Elevation: 7241' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	3578'	
Ojo Alamo	3578'	3688'	aquifer
Kirtland	3688'	3706'	
Fruitland	3706'	4010'	gas
Pictured Cliffs	4010'	4123'	gas
Lewis	4123'	4513'	gas
Intermediate TD	4373'		
Huerfanito Bentonite	4513'	4990'	gas
Chacra	4990'	5833'	gas
Massive Cliff House	5833'	5879'	gas
Menefee	5879'	6163'	gas
Point Lookout	6163'		gas
Total Depth	6563' —		

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- 4373'	LSND	8.4-9.0	30-60	no control
4373- 6563'	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' - 4373'	7"	23.0#	N-80
6 1/4"	4273' - 6563' —	4 1/2"	10.5#	J-55

Tubing Program: 0' -6563' 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/465 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 (1315 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 3606'. First stage: cement with 180 sx Class "G" 50/50 poz w/2% gel, 5 pps Gilsonite, 2% calcium chloride, 0.25 pps Flocele, 0.1% antifoam. Second stage: 420 sx Class "G"/Trinity Light with 2.5% sodium metasilicate, 2% calcium chloride, 1/2 pps Flocele, 10 pps Gilsonite (1315 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 3688'. Two turbolating centralizers at the base of the Ojo Alamo at 3688'. 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 230 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 (329 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):

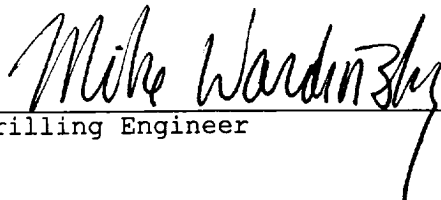
The following equipment will be operational while air/mist drilling:

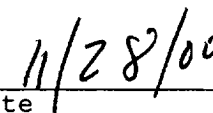
- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite 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 36 is dedicated to the Mesa Verde.
- This gas is dedicated.


Drilling Engineer


Date