### **UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT**

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a.	Type of Work DRILL	2005 AUG 10 PM 3 13	5. Lease Number NMNM-2996		
	DKIDD	DECTIVED	Unit Reporting Num	her No	
		RECEIVED	Onit Reporting Run		
		070 FARMINGTON NM		S ON CO	
1b.	Type of Well GAS		6. If Indian, All. or Trib		
2.	Operator BURLINGTON		7. Unit Agreement Nar		
	RESOURCES O	il & Gas Company LP			
3.	Address & Phone No. o	· · · · ·	8. Farm or Lease Nam	e	
	PO Box 4289, Fa	armington, NM 87499	Burnt Mesa		
	(505) 326-9700		9. Well Number #1B		
4.	Location of Well		10. Field, Pool, Wildca	t	
	900' FSL, 1005' I	?WL	Blanco Mesaverde 11. Sec., Twn, Rge, Me		
Lati	tude 36 <sup>o</sup> 56.7952, <sub>N</sub>	, Longitude 1070 31.3980, $_{ m W}$	UL M, Sec. 25, T API# 30-045- 337	32N, R7W	
14.	Distance in Miles from	Nearest Town	12. County	13. State	
	18.5 Miles Ignac	io, CO	San Juan	NM	
15.	Distance from Propose	d Location to Nearest Property or Leas	e Line		
16.	Acres in Lease		17. Acres Assigned to Well		
			DK 320 S/2		
			MV 320 S/2		
18.	Distance from Propose	d Location to Nearest Well, Drig, Comp	I, or Applied for on this Leas	se	
19.	Proposed Depth		20. Rotary or Cable To	ools	
	8268′		Rotary		
21.	Elevations (DF, FT, GR	, Etc.)	22. Approx. Date Wor	k will Start	
	6648' GR; 6660' 1	⟨B			
23.	Proposed Casing and ( See Operations				
24.	Authorized by: Regui	manda Sandara	<b>7/14/05</b> Date		
PERM	IIT NO.	APPROVAL	DATE		
APPR	OVED BY	olalo TITLE Acting	trold Managente. ) Minerals	11/7/05	
Archa	neological Report attached		<u></u>		

Threatened and Endangered Species Report attached
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 traudulent statements or presentations as to any matter within its jurisdiction.

ISTRICT 1 25 N. French Dr., Hobbs, N.M. 88240

# State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

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

# OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, NM 87505

Submit to Appropriate District Office State Lease — 4 Copies

Fee Lease - 3 Copies

2040 South Pacheco, Santa Fe, NM 87505

AMENDED REPORT 2005 AUG 10 PM

### WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name V <sup>a</sup> Pool Code <sup>1</sup>API Number 30-045- **332**75 Blanco Mesaverde/Baskhi Dakota NM 72319/71599 \* Well Number <sup>4</sup>Property Code <sup>6</sup>Property Name 18486 **1B** BURNT MESA OGRID No. <sup>8</sup>Operator Name \* Elevation BURLINGTON RESOURCES OIL AND GAS COMPANY LP 14538 6648

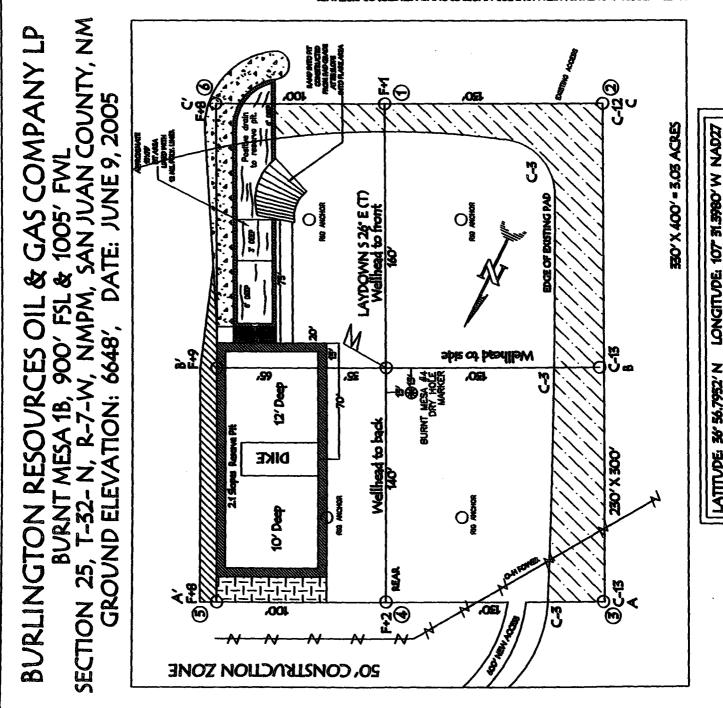
<sup>10</sup> Surface Location Range UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line County 32-N 7-1 SOUTH 25 900' WEST SAN JUAN M 1005 11 Bottom Hole Location If Different From Surface UL or lot no. Feet from the Section Township Lot Idn North/South line Feet from the East/West line County M Consolidation Code Dedicated Acres in joint or infill ts Order No. S/2 320 acres MV/DK

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

			BEN ATTROVED BI	
16				17 OPERATOR CERTIFICATION  I hereby certify that the information contained herein is free and complete to the best of my knowledge and best of
				Signature  Joni Clark  Printed Name Senior Regulatory Specialist
	-==2	5 <del></del>	2996	Title  7-7-05  Date  18 SURVEYOR CERTIFICATION  I hereby certify that the well location shows on this plat was plotted from field noise of actual surveys made by the or under my supervision, and that the same is true and correct to the bast of my belief.
1005' ,006	LAT: 36'56.7952' N. LONG: 107'31.3980' V. NAD 1927			Squature of Survey (15703)  Squature of Survey (15703)
and the state of t	F-33'-34" E			Certificado Muncher 15703

Office	State of New Mexico	Form C-103		
Office District I	Energy, Minerals and Natural Resources	May 27, 2004		
1625 N. French Dr., Hobbs, NM 88240		WELL API NO. 30-045- 332-75		
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIVISION	30-045- 22 /3 5. Indicate Type of Lease		
District III	1220 South St. Francis Dr.	STATE FEE		
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505	6. State Oil & Gas Lease No.		
District IV	·	Federal Lease NM-2996		
1220 S. St. Francis Dr., Santa Fe, NM 87505	S AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name		
	O DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Ivalie of Olit Agreement Ivalie		
DIFFERENT RESERVOIR. USE "APPLICATION	FOR PERMIT" (FORM C-101) FOR SUCH	Burnt Mesa		
PROPOSALS.)  1. Type of Well:		8. Well Number		
	Other	#1 B		
2. Name of Operator		9. OGRID Number		
3. Address of Operator	IRCES OIL & GAS COMPANY LP	14538  10. Pool name or Wildcat		
	ET, FARMINGTON, NM 87402	Blanco MV/ Basin DK		
4. Well Location				
	60 feet from the South line and Township 32N Range 7W	1005 feet from the West line  NMPM County San Juan		
Section 25	devation (Show whether DR, RKB, RT, GR, etc.)	NMPM County San Juan		
	6648' GR			
	or Closure			
Pit type New Drill Depth to Groundwat		>1000' Distance from nearest surface water >1000'		
Pit Liner Thickness: NA	mil Below-Grade Tank: Volume	bbls; Construction Material		
•	ppropriate Box to Indicate Nature of No	-		
NOTICE OF INT		SUBSEQUENT REPORT OF:		
	PLUG AND ABANDON REMEDIA CHANGE PLANS COMMEN	L WORK  CE DRILLING OPNS. P AND A		
	<b>—</b> 1	CEMENT JOB		
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OTHER: New Dri	<u> </u>			
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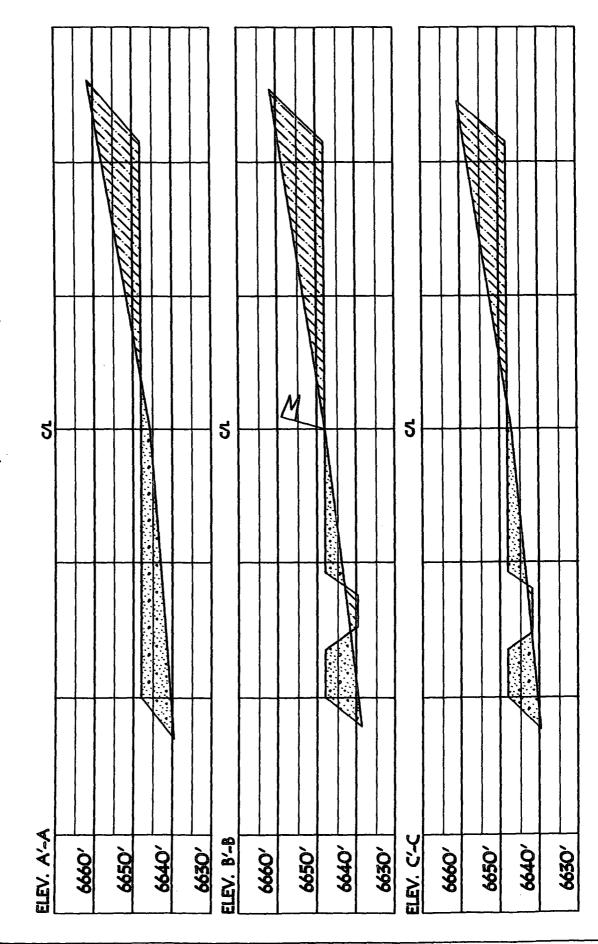
HIGHTIRE OF CVETES ON MEIT IND YND OF VCCESS FOND VILITAZI IMO (3) MORIGING DYAS BITOF 10 CONSTRUCTION" CONTRACTOR SHOWD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED NOTE. VECTOR SURVEYS IS NOT LIABLE FOR UNDERCROUND UTILITIES OR PIPELINES.



PESEAVE MT DIKE. TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND I' ABOVE SHALLOW SIDE).

LATITUDE: 36° 56.7952' N

# BURLINGTON RESOURCES OIL & GAS COMPANY LP BURNT MESA 18, 900' FSL & 1005' FWL SECTION 25, T-32-N, R-7-W, NMPM, SAN JUAN COUNTY, NM GROUND ELEVATION: 6648', DATE: JUNE 8, 2005



CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

### OPERATIONS PLAN

Well Name: Burnt Mesa #1B

Location: 900'FSL, 1005' FWL, Unit M (SWSW), Section 25, T-32-N, R-7-W

San Juan County, New Mexico

Latitude 36° 56.7952'N, Longitude 107° 31.3980'W

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6648'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2467 <b>′</b>	
Ojo Alamo	2467 <b>′</b>	4193'	aquifer
Kirtland	2585'	4075'	gas
Fruitland	3317 <b>′</b>	3343 <b>′</b>	_
Pictured Cliffs	3575 <b>'</b>	3085'	gas
Lewis	3765 <b>′</b>	2895 <b>′</b>	gas
Huerfanito Bentonite	4418'	2242'	gas
Chacra	4847 <b>′</b>	1813'	gas
Cliff House	5637 <b>′</b>	1023'	_
Menefee	5689 <b>′</b>	971 <b>′</b>	gas
Point Lookout	5892 <b>'</b>	768 <b>′</b>	gas
Mancos	6325 <b>′</b>	335 <b>′</b>	gas
Gallup	7248′	-588 <b>′</b>	gas
Greenhorn	7980 <b>'</b>	-1320'	gas
Graneros	8026'	-1366'	gas
Paguate	8143'	-1483'	gas
Upper Cubero	8152 <b>'</b>	-1492 <b>'</b>	gas
Lower Cubero	8196 <b>′</b>	-1536 <b>′</b>	gas
Oak Canyon	8258 <b>′</b>	-1598 <b>′</b>	gas
Encinal	8264 <b>'</b>	-1604 <b>'</b>	gas
TD	8268'		

### Logging Program:

Mud Logs/Coring/DST Mud logs - none
Coring - none
DST - none
Open hole - none

Cased hole - Gamma Ray/CBL

### Mud Program:

<u>Interval</u>	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud MUD/Air/Air Mist	8.4-9.0	40-50	no control
120- 3865 <b>′</b>	LSND	8.4-9.0	30-60	no control
3865'- 8268'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

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

	•			
<u>Hole Size</u>	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	$\overline{H-40}$
8 3/4"	0' - 3865 <i>'</i>	7"	20.0#	J-55
6 1/4"	0' - 8268'	4 1/2"	10.5#	J-55

### Page Two

Tubing Program:

0' - 8268'

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 4  $\frac{1}{2}$ " x2 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 pre-set drilled- cement with 23 sxs Type III cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (Bring cement to surface). Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.
- 9 5/8" surface casing conventionally drilled cement with 88 sxs Type III cement with 0.25 pps Celloflake, 2% calcium chloride. (200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

### 7" intermediate casing -

Lead with 348 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (865 cu ft-50% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

### Cementing: Continued

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 @ 2585'. Two turbolating centralizers at the base of the Ojo Alamo 2585'. 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/Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 303 sacks Premium Lite HS w/ 0.25 pps Celloflake, 0.3% CD-32, 6.25 pps LCM-1 and 1% FL-52. (599 cf 30% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float collar stacked on top of float shoe.

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

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 and Dakota 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 below the top of the Pictured Cliffs.
- The South half of Section 25 is dedicated to the Mesa Verde and Dakota.
- This gas is dedicated.

Drilling Engineer Date

Minimum BOP installation for all Comptation/Worksver Operations. 7-1/16" bore, 2000 pal minimum working pressure double gate BOP to be equipped with blind and pipe rarms. A stripping head to be installed on the top of the BOP. At BOP equipment is 2000 pal working pressure or greater encluding 600 pal stripping head.

Finance #2

Figure #3

10-02-9

Figure #1

4-20-01