UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| | APPLICATION FOR PERMIT TO DRILL, DEEP | PEN, OR PLUG BACK |
|--------------------------|--|---|
| 1a. | Type of Work DRIFTED Delper | 5. Lease Number NM12014 |
| 1b. | Type of Well GAS | Unit Reporting Number 6. If Indian, All. or Tribe |
| 2. | Operator BURLINGTON RESOURCES Oil & Gas Company | 7. Unit Agreement Name |
| 3. | Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 3 9 10 11 11 11 11 11 11 11 11 11 11 11 11 | 8. Farm or Lease Name EPNG B 9. Well Number 1A |
| 4. | Location of Well 1060' FNL, 2140' FEL Latitude 36° 57.33', Longitude 107° 27.67' | Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec 28, T-32-N, R-6-W API # 30-045-26548 |
| 14. | Distance in Miles from Nearest Town 6 miles south of Arboles, Co | 12. County 13. State San Juan NM |
| 15. | Distance from Proposed Location to Nearest Property or Lease | Line |
| 16. | Acres in Lease | 17. Acres Assigned to Well |
| 18. | Distance from Proposed Location to Nearest Well, Drlg, Compl | , or Applied for on this Lease |
| 19. | Proposed Depth 8106' | 20. Rotary or Cable Tools Rotary |
| 21. | Elevations (DF, FT, GR, Etc.) 6426' | 22. Approx. Date Work will Start |
| 23. | Proposed Casing and Cementing Program See Operations Plan attached Adhere to previous | OF APPROVAL y issued stipulations. |
| 24. | Authorized by: Frances Bond Regulatory Specialist | 5-3-0 5 Date |
| | ROVED BY TITLE Warred | PATE DE DATE DE COS |
| Threa NOTE Title 1 | aeological Report Attached atened and Endangered Species Report Attached : This format is issued in lieu of U.S. BLM Form 3160-3 8 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to any false, fictitious or fraudulent statements or presentations as to any matter with the control of the contr | o make to any department or agency of the United |

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

⁴ Property Code

6977

OGRID No.

14538

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

API Number

30-045-26548

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

⁵ Property Name

EPNG B

8 Operator Name

BURLINGTON RESOURCES OIL & GAS CO LP

¹⁰ Surface Location

² Pool Code

71599

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Well Number

1A

⁹ Elevation

6426

Fee Lease - 3 Copies

☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION PLAT

Basin Dakota

³ Pool Name

| UL or lot no. | Section | Township | Range | Lot Id | n Feet from the | North/South line | Feet from the | East/West line | County |
|---|-------------------------|----------|------------------|---------|-----------------|------------------|----------------|---------------------------------------|------------------------|
| В | 28 | 32N | 6W | | 1060 | North | 2140 | East | San Juan |
| 11 Bottom Hole Location If Different From Surface | | | | | | | | | |
| UL or lot no. | Section | Township | | | ···, ····· | | Feet from the | East/West line | County |
| 12 To Manage A Access | s ¹³ Joint o | - t-en | 14 Consolidation | C-4. 15 | Order No. | <u> </u> | | | |
| Dedicated Acre 320 ₺₽2 | | r innu | Consolidation | Code | oraer No. | | | | |
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| 4 | | | | 15 | | 2140' | Signature | <u> </u> | . 100-000 |
| | | | | l | <u> </u> | | Frances Bo | nd | |
| | | | | 1 | Jan Ja | 42 A | Printed Name | | |
| | | | | . | (NO) | (400s (3) | Regulatory | | |
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OPERATIONS PLAN FOR EPNG B #1A

Well:

EPNG B #1A

Location:

T-32-N, R-6-W, Sect. 28, Unit B; 1060' FNL, 2140' FEL

San Juan County, NM

Latitude 36^o 57.33' Longitude 107^o 27.67'

Formation:

Blanco Mesaverde and Basin Dakota

| Formation Tops: | <u>Top</u> | Bottom | Contents |
|-----------------------|------------|---------------|-----------------|
| Surface | San Jose | | |
| Ojo Alamo | 2322' | 2452' | aquifer |
| Kirtland | 2452' | 3066' | gas |
| Fruitland | 3066' | 3357' | gas |
| Pictured Cliffs | 3357' | 3503' | gas |
| Lewis | 3503' | 4197' | gas |
| Huerfanito Bentonite | 4197' | 4650' | gas |
| Chacra | 4650' | 5380' | gas |
| Massive Cliff House | 5380' | 5424' | gas |
| Menefee | 5424' | 5644' | gas |
| Massive Point Lookout | 5644' | 6128' | gas |
| Mancos | 6128' | 7023' | gas |
| Gallup | 7023' | 7753' | gas |
| Greenhorn | 7753' | 7803' | gas |
| Graneros | 7803' | 7913' | gas |
| Paguate | 7913' | 7922' | gas |
| Cubero | 7922' | 7967' | gas |
| Lower Cubero | 7967' | 8033' | gas |
| Encinal | 8033' | | gas |
| Total Depth | 8106' | | |

Logging program:

Cased hole - CBL-CCL-GR - TD to 6650'

Mud Program:

| <u>Interval</u> | <u>Type</u> | <u>Weight</u> | <u>Vis.</u> | Fluid Loss |
|-----------------|--------------|---------------|-------------|------------|
| 6149' – 8106' | Air/Nitrogen | n/a | n/a | n/a |

Casing Program:

| Hole Size 3-7/8" | Depth Interval | <u>Csg.Size</u> | <u>Wt.</u> | <u>Grade</u> |
|------------------|----------------|----------------------------|---------------------|----------------------|
| | ~6135' – 8106' | 3-1/2" Flush | 9.3#/' | L-80 |
| Tubing Prod | | <u>Tbg.Size</u> 2-1/16" | <u>Wt.</u> 3.25# | <u>Grade</u> J-55 |

Operations:

It is intended to deepen the subject well to the Dakota formation by the following procedure:

- 1. MIRU completion rig. TOOH with tubing.
- 2. Set retrievable bridge plug at +/- 4270'.
- 3. Pressure test casing to 1000 psi for 15 minutes. TOOH with bridge plug.
- 4. Lay in acid soluble cement across entire Mesaverde interval. WOC.
- 5. Drill out cement. Test casing to 500 psi for 15 minutes. Repeat cement work until pressure test holds.
- 6. Drill out shoe. Drill Dakota formation to approximately 8106' with mud logger to call final total depth. TOOH.
- 7. TIH with 3-1/2" flush joint pipe and set at total depth.
- 8. Cement with 28 sxs of type III cement (1.39 yield, 14.5 ppg). WOC. Run CBL. TOC @ 6713'.
- 9. Perforate and fracture stimulate the Dakota formation. Flow back Dakota.
- 10. Set composite plug 50' above top Dakota perforation.
- 11. Chemical cut 3-1/2" casing at +/- 6135'.
- 12. Acidize Mesaverde interval to restore production.

- 13. Drill out composite plug above the Dakota. Clean out to PBTD.
- 14. Land 2-1/16" IJ tubing.
- 15. RDMO rig. Return well to production as a commingled MV/DK producer.

BOP Specifications, Wellhead and Tests:

Surface to Total Depth:

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Completion Operations:

7 1/16" 3000 psi double gate BOP stack (Reference Figure #4). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 3000 psi for 15 minutes.

Wellhead:

9 5/8" x 7" x 4 1/2" x 2 1/16" x 3000 psi tree assembly.

General Information:

- 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.
- All BOP tests and drills will be recorded in daily drilling reports.
- · Blind and pipe rams will be equipped with hand wheels.

Cementing:

3-1/2" Production Liner

Cement to cover minimum of 1200' above the Dakota formation. Minimum TOC @ 6713'. 28 sxs type III cement (1.39 yield, 14.5 ppg). WOC a minimum of 18 hrs prior to completing.

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.
- 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 Mesaverde and/or Dakota formations will be completed and commingled if both formations are completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Dakota 2700 psi

Angela Ibara
Sr. Staff Engineer

4/25/05

Date

EPNG B #1A

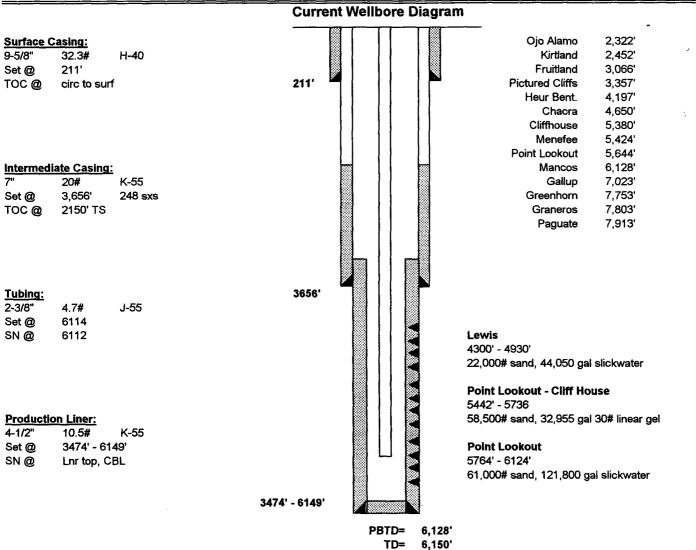
1060' FNL , 2140' FEL Unit B, Section 28, T32N, R06W San Juan County, NM

LAT: 36 deg 57.33 min

LONG: 107 deg 27.67 min

GL = 6,426'

KB= 6,438'



PLO: 5764', 86', 94', 5814', 67', 71', 5908', 17', 26', 52', 68', 85', 98', 6023', 32', 54', 6110', 24'

PLO-CH: 5442', 50', 69', 75', 97', 5503', 09', 15', 21', 78', 87', 92', 5650', 55', 60', 65', 70', 78', 5702', 07', 12', 16', 29', 36'

LW: 4300', 03', 06', 72', 76', 80', 84', 4450', 54', 58', 62', 86', 90', 94', 4632', 36', 40', 55', 60', 65', 70', 75', 80', 84', 4720', 23', 26', 62', 66', 75', 80', 85', 90', 4803', 07', 11', 27', 30', 33', 58', 62', 66', 70', 74', 4906', 08', 22', 26', 30'

ARI 04/25/05

EPNG B #1A

1060' FNL, 2140' FEL Unit B, Section 28, T32N, R06W San Juan County, NM

LAT: 36 deg 57.33 min

LONG: 107 deg 27.67 min

GL = 6,426' KB= 6,438' **Proposed Wellbore Diagram Surface Casing:** Ojo Alamo 2,322' 9-5/8" 32.3# H-40 Kirtland 2.452 211' Fruitland 3,066 Set @ TOC@ circ to surf 211' Pictured Cliffs 3,357' Heur Bent. 4,197' Chacra 4,650' Cliffhouse 5,380' Menefee 5,424' Point Lookout 5.644' Mancos 6,128 **Intermediate Casing:** 20# K-55 Gallup 7,023 3,656 Greenhorn 7,753' Set @ 248 sxs 2150' TS Graneros 7,803' TOC@ Paguate 7,913' **Tubing:** 3656' 2-1/16" 3.25 J-55 IJ **TBD** Set @ Lewis SN@ **TBD** 4300' - 4930' 22,000# sand, 44,050 gal slickwater **Point Lookout - Cliff House** 5442' - 5736 58,500# sand, 32,955 gal 30# linear gel **Production Liner:** 4-1/2" 10.5# K-55 **Point Lookout** Set @ 3474' - 6149' 5764' - 6124' SN@ Lnr top, CBL 61,000# sand, 121,800 gal slickwater 3474' - 6149' **Proposed Production Liner:** 3-1/2" FLS Set @ 6135' - 8220' TOC@ 6,713' Dakota TBD 40,000# TLC, slickwater

6135' - 8220'

PBTD=

TD=

8,104

8,106

BURLINGTON RESOURCES

BURLINGTON RESOUR

Completion/Workover Ri BOP Configuration 2,000 pai System

Drilling Rig Choke Menifold Configur 2000 pel System

Burlington Resources

2000 psi System Orithing Rig

FIG PLOOP

ROTATING HEAD.

True und

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DOUBLE BATE

Point to Total Depth. 2,000pel worlting pressure

Figure #3

4-20-01

Figure #1

4-20-01

ressure or greater exchaling 500 pel stri he BOP. All BOP equipment is 2000 psi

perama. A stripping head to be in sure double gate BOP to be eq

itions. 7-1/16" bore, 2000 pet mit kintmum BOP installation for all Com