

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|  |   |
|--|---|
| 1a. Type of Work<br>DRILL  | 5. Lease Number<br>SF-078439<br>Unit Reporting Number   |
| 1b. Type of Well<br>GAS  | 6. If Indian, All. or Tribe   |
| 2. Operator<br><b>BURLINGTON RESOURCES</b> Oil & Gas Company   | 7. Unit Agreement Name  |
| 3. Address & Phone No. of Operator<br>PO Box 4289, Farmington, NM 87499<br>(505) 326-9700              | 8. Farm or Lease Name<br>Johnston Federal<br>9. Well Number<br>1B   |
| 4. Location of Well<br>2100' FNL, 730' FWL<br>2485' 615'<br>Latitude 36° 49.6'N, Longitude 107° 44.3'W | 10. Field, Pool, Wildcat<br>Blanco Mesa Verde/Basin Dakota<br>11. Sec., Twn, Rge, Mer. (NMPM)<br>E Sec. 12, T-30-N, R-9-W<br>API # 30-045-30969 |
| 14. Distance in Miles from Nearest Town<br>18.3 miles from inter. Hwy 550 & 173 in Aztec               | 12. County<br>San Juan<br>13. State<br>NM   |
| 15. Distance from Proposed Location to Nearest Property or Lease Line<br>730'                          |   |
| 16. Acres in Lease   | 17. Acres Assigned to Well<br>320 W/2   |
| 18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease         |   |
| 19. Proposed Depth<br>7222'  | 20. Rotary or Cable Tools<br>Rotary   |
| 21. Elevations (DF, FT, GR, Etc.)<br>5835' GR  | 22. Approx. Date Work will Start  |
| 23. Proposed Casing and Cementing Program<br>See Operations Plan attached                              | DRILLING OPERATIONS AUTHORIZED ARE<br>SUBJECT TO COMPLIANCE WITH ATTACHED<br>"GENERAL REQUIREMENTS"   |
| 24. Authorized by: <u>Peggy Cole</u><br>Regulatory/Compliance Supervisor                               | Date <u>9-28-01</u>   |

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.

HOLD C104 FOR NSL

COA compliance w/ Rte 50

NAOCC

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
1301 W. Grand Avenue, Artesia, N.M. 88210

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

DISTRICT IV  
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, NM 87504-2088

Form C-102

Revised June 10, 2003  
Instructions on back

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

RECEIVED

2004 MAR 24 PM 12:20

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLATNM

|  |   |   |
|--|---|---|
| <sup>1</sup> API Number<br>30-045- 30969 | <sup>2</sup> Pool Code<br>72319/71599                                   | <sup>3</sup> Pool Name<br>Blanco Mesaverde/Basin Dakota |
| <sup>4</sup> Property Code<br>7208       | <sup>5</sup> Property Name<br>JOHNSTON FEDERAL                          | <sup>6</sup> Well Number<br>1B                          |
| <sup>7</sup> OGRID No.<br>14538          | <sup>8</sup> Operator Name<br>BURLINGTON RESOURCES OIL & GAS COMPANY LP | <sup>9</sup> Elevation<br>5835                          |

<sup>10</sup> Surface Location

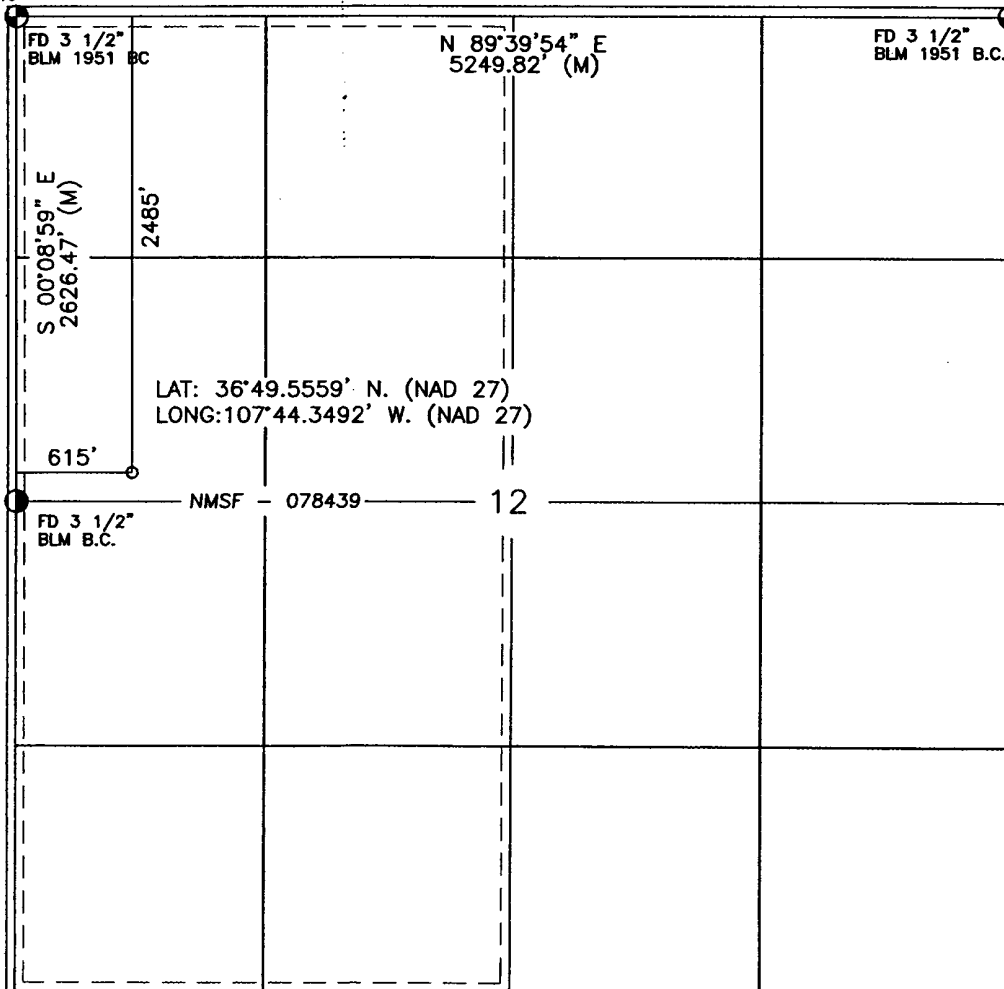
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| E             | 12      | 30-N     | 9-W   |         | 2485          | NORTH            | 615           | WEST           | SAN JUAN |

<sup>11</sup> 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 |
|--|---------|-------------------------------|-------|----------------------------------|---------------|-------------------------|---------------|----------------|--------|
| <sup>12</sup> Dedicated Acres<br>W/320 |         | <sup>13</sup> Joint or Infill |       | <sup>14</sup> Consolidation Code |               | <sup>15</sup> 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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Tammy Wimsatt*  
Signature  
Tammy Wimsatt  
Printed Name  
Regulatory Specialist  
Title  
3-24-04  
Date

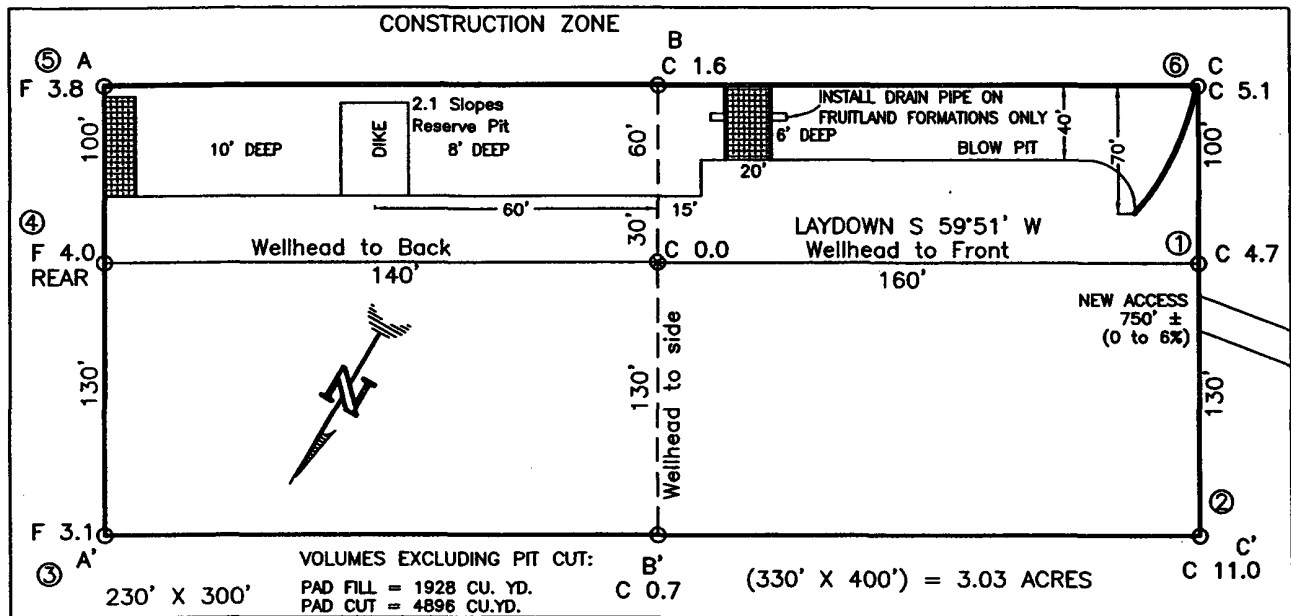
18 SURVEYOR CERTIFICATION

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

Date of Survey  
Signature and Seal of Professional Surveyor

14827  
Certificate Number

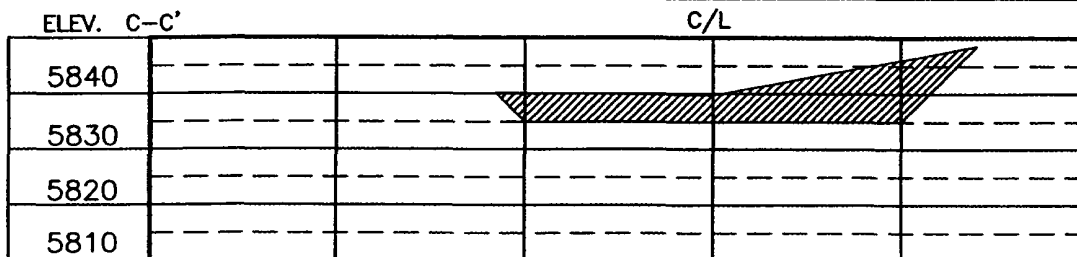
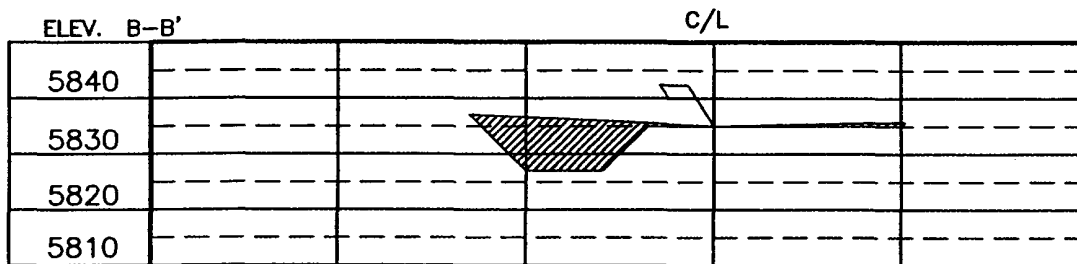
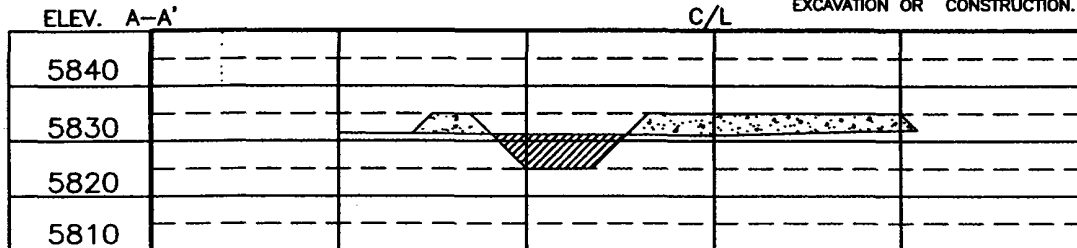
**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**JOHNSTON FEDERAL 1B, 2485 FNL 615 FWL**  
**SECTION 12, T-30-N, R-9-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 5835, DATE: FEBRUARY 23, 2004**



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.

NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

DRAWN BY: A.G.

ROW#: BR216

CADFILE: BR216CF8

DATE: 07/13/01

Daggett Enterprises, Inc.  
 Surveying and Oil Field Services  
 P. O. Box 15088 Farmington, NM 87401  
 Phone (505) 326-1772 Fax (505) 326-6019

REVISION: RESTAKE BY: A.G. DATE: 3/09/04

submitted in lieu of Form 3160-5

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

Sundry Notices and Reports on Wells

1. Type of Well  
GAS

2. Name of 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, Footage, Sec., T, R, M

2485' FNL, 615' FWL, Sec.12, T-30-N, R-9-W, NMPM

5. Lease Number  
NMSF078439

070 Farmington, NM  
6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name

8. Well Name & Number  
Johnston Federal #1B

9. API Well No.  
30-045-

10. Field and Pool  
Blanco MV/Basin DK

11. County and State  
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment

Type of Action

☐ Abandonment ☒ Change of Plans  
☐ Recompletion ☐ New Construction  
☐ Plugging Back ☐ Non-Routine Fracturing  
☐ Casing Repair ☐ Water Shut off  
☐ Altering Casing ☐ Conversion to Injection  
☐ Other -

13. Describe Proposed or Completed Operations

It is intended to move the location of the subject well from 2180' FNL, 730' FWL.  
Attached is the revised C-102 plat, cut & fill diagram, and topo map.

14. I hereby certify that the foregoing is true and correct.

Signed Tammaghini Title Regulatory Specialist Date 3/24/04

(This space for Federal or State Office use)

APPROVED BY [Signature] Title AFM Date 4-22-04

CONDITION OF APPROVAL, if any:

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 representations as to any matter within its jurisdiction.

NMOC

## OPERATIONS PLAN

**Well Name:** Johnston Federal #1B  
**Location:** 2180' FNL, 730' FWL, Sec 12, T-30-N, R-9-W  
San Juan County, NM  
Latitude 36° 49.60, Longitude 107° 44.30  
**Formation:** Blanco Mesaverde/Basin Dakota  
**Elevation:** 5835' GL

| <u>Formation Tops:</u> | <u>Top</u> | <u>Bottom</u> | <u>Contents</u> |
|------------------------|------------|---------------|-----------------|
| Surface                | San Jose   | 1327'         |                 |
| Ojo Alamo              | 1327'      | 1482'         | aquifer         |
| Kirtland               | 1482'      | 2017'         | gas             |
| Fruitland              | 2017'      | 2622'         | gas             |
| Pictured Cliffs        | 2622'      | 2767'         | gas             |
| Lewis                  | 2767'      | 3332'         | gas             |
| Intermediate TD        | 2867'      |               |                 |
| Mesa Verde             | 3332'      | 3672'         | gas             |
| Chacra                 | 3672'      | 4377'         | gas             |
| Massive Cliff House    | 4377'      | 4477'         | gas             |
| Menefee                | 4477'      | 4827'         | gas             |
| Massive Point Lookout  | 4827'      | 5247'         | gas             |
| Mancos                 | 5247'      | 6137'         | gas             |
| Gallup                 | 6137'      | 6872'         | gas             |
| Greenhorn              | 6872'      | 6922'         | gas             |
| Graneros               | 6922'      | 6977'         | gas             |
| Dakota                 | 6977'      |               |                 |
| TD                     | 7222'      |               |                 |

### Logging Program:

Cased hole - CBL-CCL-GR - TD to surface  
Open hole - none  
Cores - none

### Mud Program:

| <u>Interval</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- 2867'      | LSND        | 8.4-9.0       | 30-60       | no control        |
| 2867- 7222'     | Air/N2      | 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>Depth Interval</u> | <u>Csg. Size</u> | <u>Wt.</u> | <u>Grade</u> |
|------------------|-----------------------|------------------|------------|--------------|
| 12 1/4"          | 0' - 200'             | 9 5/8"           | 32.3#      | H-40         |
| 8 3/4"           | 0' - 2867'            | 7"               | 20.0#      | J-55         |
| 6 1/4"           | 2767' - 7222'         | 4 1/2"           | 10.5#      | J-55         |

### Tubing Program:

0' - 7222'      2 3/8"      4.7#      J-55

### BOP Specifications, Wellhead and Tests:

#### Surface to Intermediate TD -

11" 3000 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" 3000 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, 3000 psi minimum choke manifold (Reference Figure #3).

**Completion Operations -**

7 1/16" 3000 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 3000 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 drilling crew.
- All BOP tests and 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# celloflake/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/289 sx 50/50 Class G/TXI lightweight w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# celloflake/sx. Tail w/90 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps celloflake, 5 pps gilsonite, 0.1% antifoam agent (861 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 during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

**See attached alternative intermediate lead slurry.**

7" intermediate casing alternative two stage: Stage collar at 1917'. First stage: cement with 223 sx 50/50 Class "G" Poz w/2% calcium chloride, 2% gel, 1/4 pps celloflake, 5 pps gilsonite, 0.1% antifoam agent. Second stage: 223 sx 50/50 Class G/TXI lightweight w/2.5% sodium metasilicate, 2% calcium chloride, 10# gilsonite/sx and 1/2# celloflake/sx (861 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 1482'. Two turbolating centralizers at the base of the Ojo Alamo at 1482'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

## 4 1/2" Production Casing -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 444 sx 50/50 Class "G" Poz with 5% gel, 0.25% celloflake/sx, 5# gilsonite/sx, 0.1% retardant and 0.25% fluid loss additive, 0.15% dispersant, 0.1% antifoam agent (640 cu.ft.), 40% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

4 1/2" production casing alternative: Lead w/199 sx 9.5 PPG Litecrete Blend w/0.11% dispersant, 0.5% fluid loss. Tail w/128 sx Class G 50/50 poz w/5% gel, 0.25 pps celloflake, 5 pps gilsonite, 0.25% fluid loss, 0.15% dispersant, 0.1% retarder, 0.1% antifoam (685 cu.ft., 50% excess to cement 4 1/2" x 7" overlap).

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

Cement float shoe on bottom with float collar spaced on top of float shoe.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

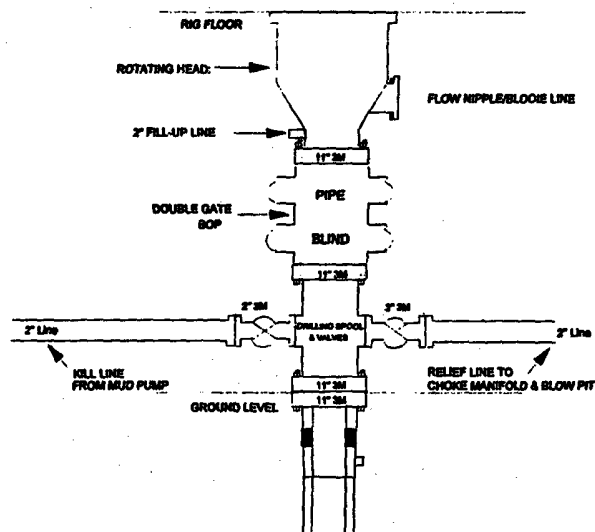
- If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

**Special Drilling Operations (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.
- 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.
- 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.

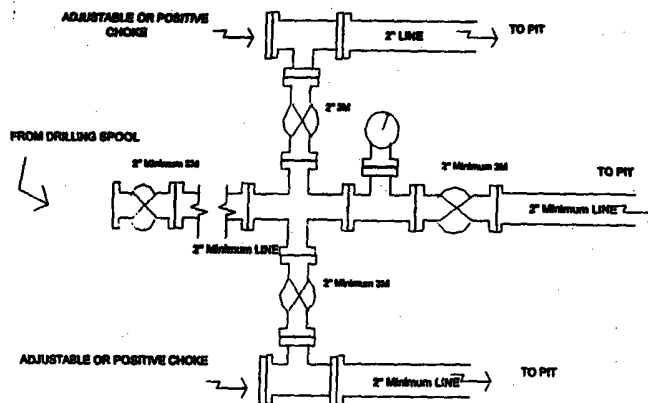
**Drilling Rig  
3000 psi System**



BOP installation from Surface Casing Point to Total Depth. 11\"/>

**Figure #1**

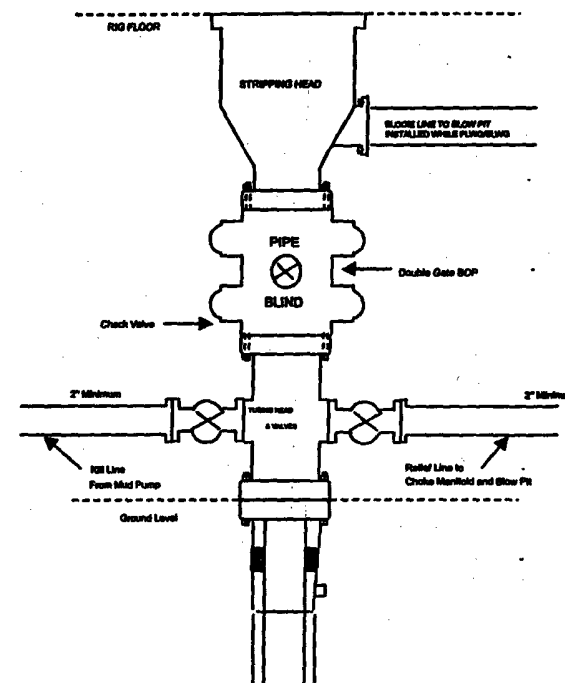
**Drilling Rig  
Choke Manifold Configuration  
3000 psi System**



Choke manifold installation from Surface Casing Point to Total Depth. 3,000psi working pressure equipment with two chokes.

**Figure #2**

**Completion/Workover Rig  
BOP Configuration  
3,000 psi System**

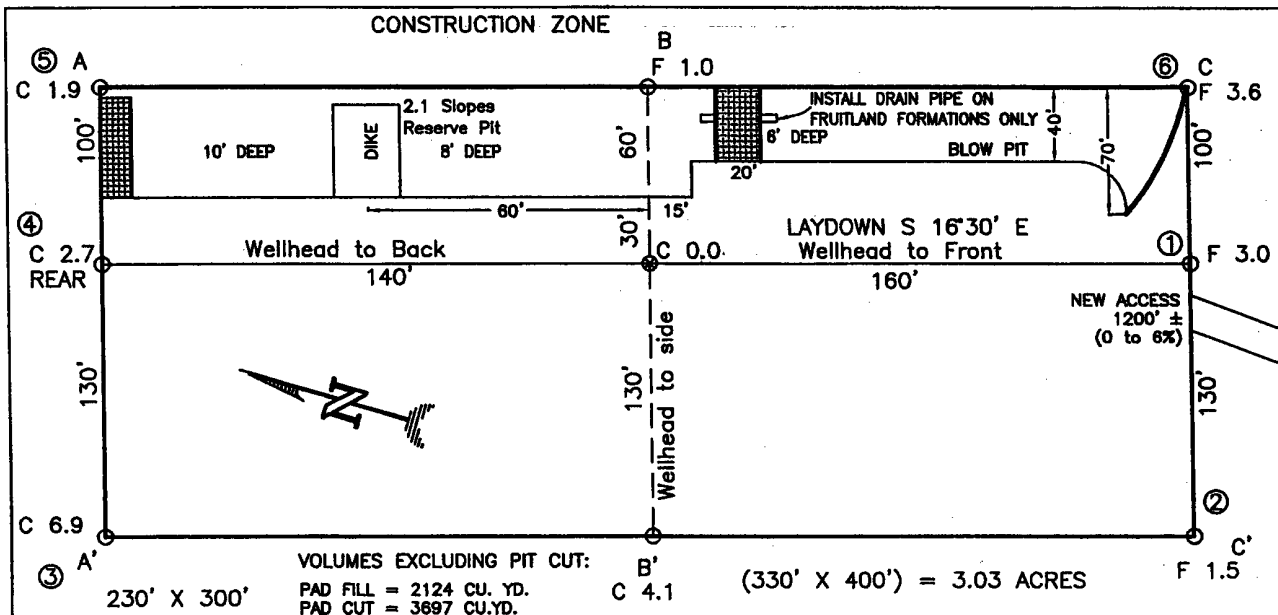


Minimum BOP installation for all Completion/Workover Operations. 7-1/16\"/>

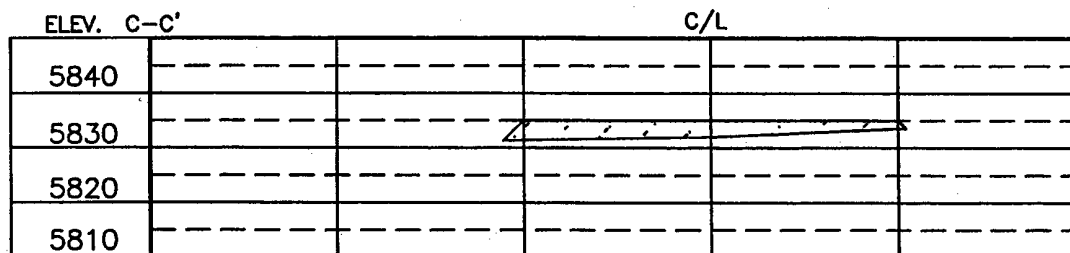
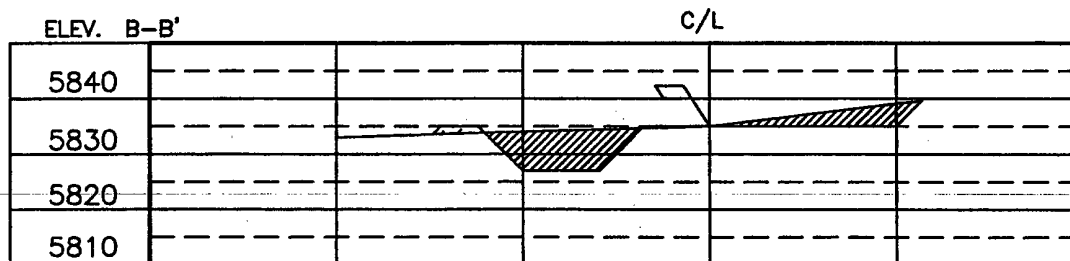
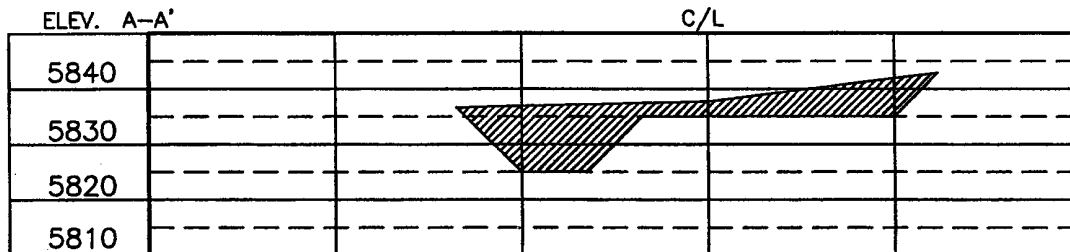
**Figure #3**



**BURLINGTON RESOURCES OIL & GAS INC.**  
**JOHNSTON FEDERAL 1B, 2180 FNL 730 FWL**  
**SECTION 12, T-30-N, R-9-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 5835, DATE: JUNE 27, 2001**



RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.



NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

DRAWN BY: A.G. ROW#: BR216 CADFILE: BR216CFB DATE: 07/13/01

**Daggett Enterprises, Inc.**  
 Surveying and Oil Field Services  
 P. O. Box 15068 Farmington, NM 87401  
 Phone (505) 326-1772 Fax (505) 326-6019

