

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

ROW/APD

FORM APPROVED  
Budget Bureau No. 1004-0136  
Expires: February 28, 1995

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Type of Work

DRILL ☒DEEPEN ☐

b. Type of Well

Oil Well ☐ Gas Well ☒ Other ☐Single Well ☒ Multiple Zone ☐

2. Name of Operator

Williams Production Company

3. Address and Telephone No

P.O. Box 3102, MS 37-2, Tulsa, OK. 74101

4. Location of Well (Footages)  
At Surface

1585' FSL 2090' FWL, NESW

proposed prod. zone

5. Lease Designation and Serial No.  
SF-078769

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
Rosa Unit8. Well Name and No.  
Rosa Unit #361

9. API Well No.

30-039-26741

10. Field and Pool, or Exploratory Area  
Basin Fruitland Coal11. Sec., T., R., M., or BLK.  
and Survey or Area  
K Section 16, T31N, R5W

14. Distance in Miles and Directions from Nearest Town or Post Office

Approximately 22.6 miles northeast of Navajo Dam Post Office (straight line)

12. County or Parish  
Rio Arriba13. State  
NM15. Distance from Proposed (Also to nearest drig. unit line, if any)  
Location to Nearest

Property or Lease Line, Ft 1585

16. No. of Acres in Lease

2560 acres

17. No. of Acres Assigned to This Well

320 acres, S/2

18. Distance from Proposed Location  
to Nearest Well Drilling, Completed,  
or Applied for, on this Lease, FT 4,625'

19. Proposed Depth

3082 KB

20. Rotary or Cable Tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc)

6260' GR

22. Approximate Date Work will Start

August 1, 2001

## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE & GRADE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT              |
|--------------|------------------------|-----------------|---------------|---------------------------------|
| 12-1/4"      | 9-5/8"                 | 36# K-55        | 250'          | 130 sx-188 cu ft Class Type 3   |
| 8-3/4"       | 7"                     | 20# K-55        | 2930'         | 325 sx-677 cu ft Type 3 65/35   |
| 6-1/4"       | 5-1/2"                 | 15.5# K-55      | 2830' - 3082' | 150 sx-204 Cu ft-Type III       |
|              |                        |                 |               | Open hole completion, no cement |

Williams Production Company proposes to drill a vertical well to develop the Basin Fruitland Coal Formation in the described location above, and in accordance with the attached Operation and Surface Use plans. **The surface is under the jurisdiction of the Carson National Forest, Jicarilla Ranger District.** Independent Contract Archaeology of La Plata, NM has surveyed the proposed location for Cultural Resources, and the report has been submitted to the BLM-FFO for review. The Forest Service will process this under their environmental procedures. Nelson Consulting submitted the EA to the Forest Service on 4-17-01, and to BLM (ROW) on 4-23-01.

This proposed well would utilize an existing gas field road, therefore no new access road would be constructed (see Pipeline & Well Plats #3 and #4). The proposed 4603-foot long pipeline would tie into Williams Gathering System on the Rosa Unit #65 (see the attached Pipeline Plat Map # 4). This application will also serve as the application for the pipeline right-of-way for the BLM with Forest Service concurrence.

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

DETERMINED BY THE BLM TO BE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

B. APPLICANT SPECIFIC INFORMATION: If proposal to deepen, give present productive zone and proposed new productive zone.

Signed

Steve Nelson

Title Agent

COPIES: BLM+4, WELL FILE+1

Date April 27, 2001

(This space for Federal or State office use)

Permit No.

Approval Date

Application approval does not warrant or certify that applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any:

/s/ V.R. Balderaz

APPROVED BY:

NMOCD

DATE

District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
PO Drawer 00, Artesia, NM 88211-0719

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                    |   |                     |                                    |
|------------------------------------|---|---------------------|------------------------------------|
| *API Number<br><b>30-039-26741</b> |   | *Pool Code<br>71629 | *Pool Name<br>Basin Fruitland Coal |
| *Property Code<br>17033            | *Property Name<br>ROSA UNIT                   |                     | *Well Number<br>361                |
| *OGRID No.<br>120782               | *Operator Name<br>WILLIAMS PRODUCTION COMPANY |                     | *Elevation<br>6260'                |

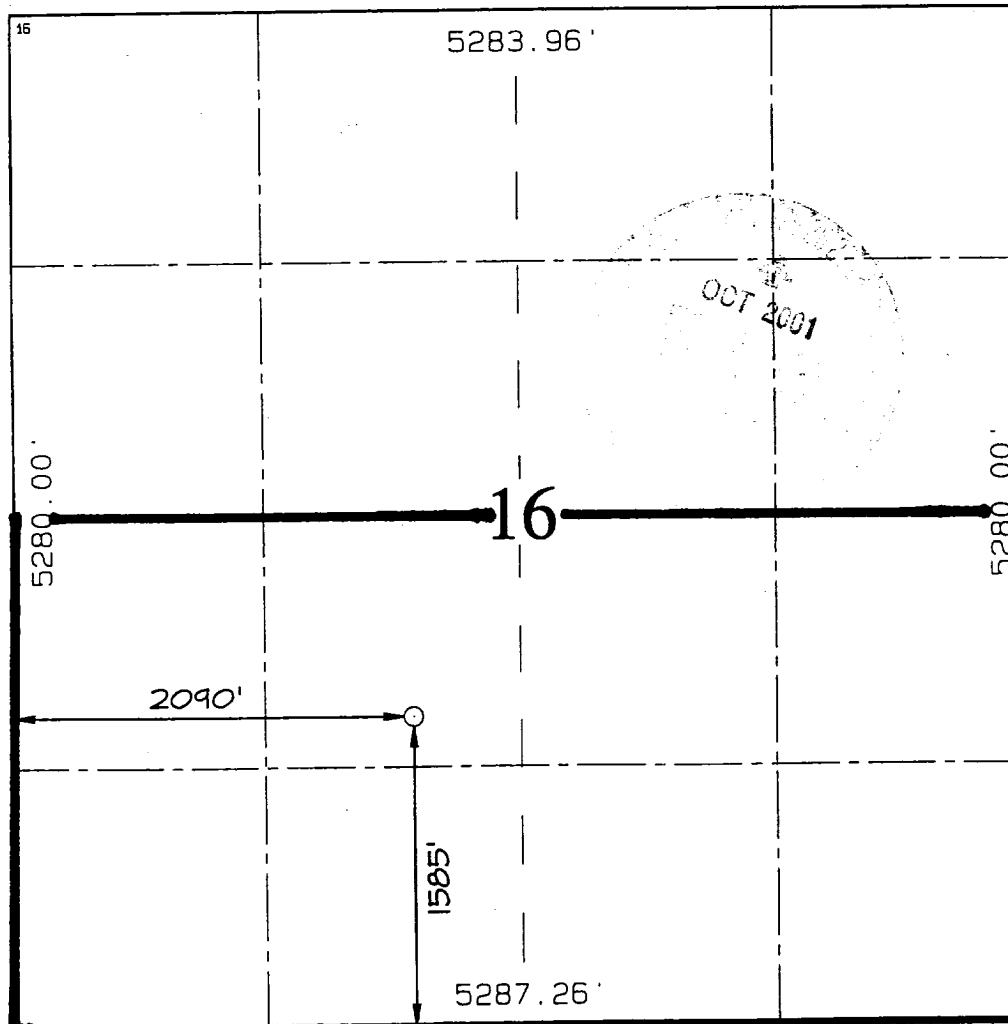
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County     |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| K             | 16      | 31N      | 5W    |         | 1585          | SOUTH            | 2090          | WEST           | RIO ARriba |

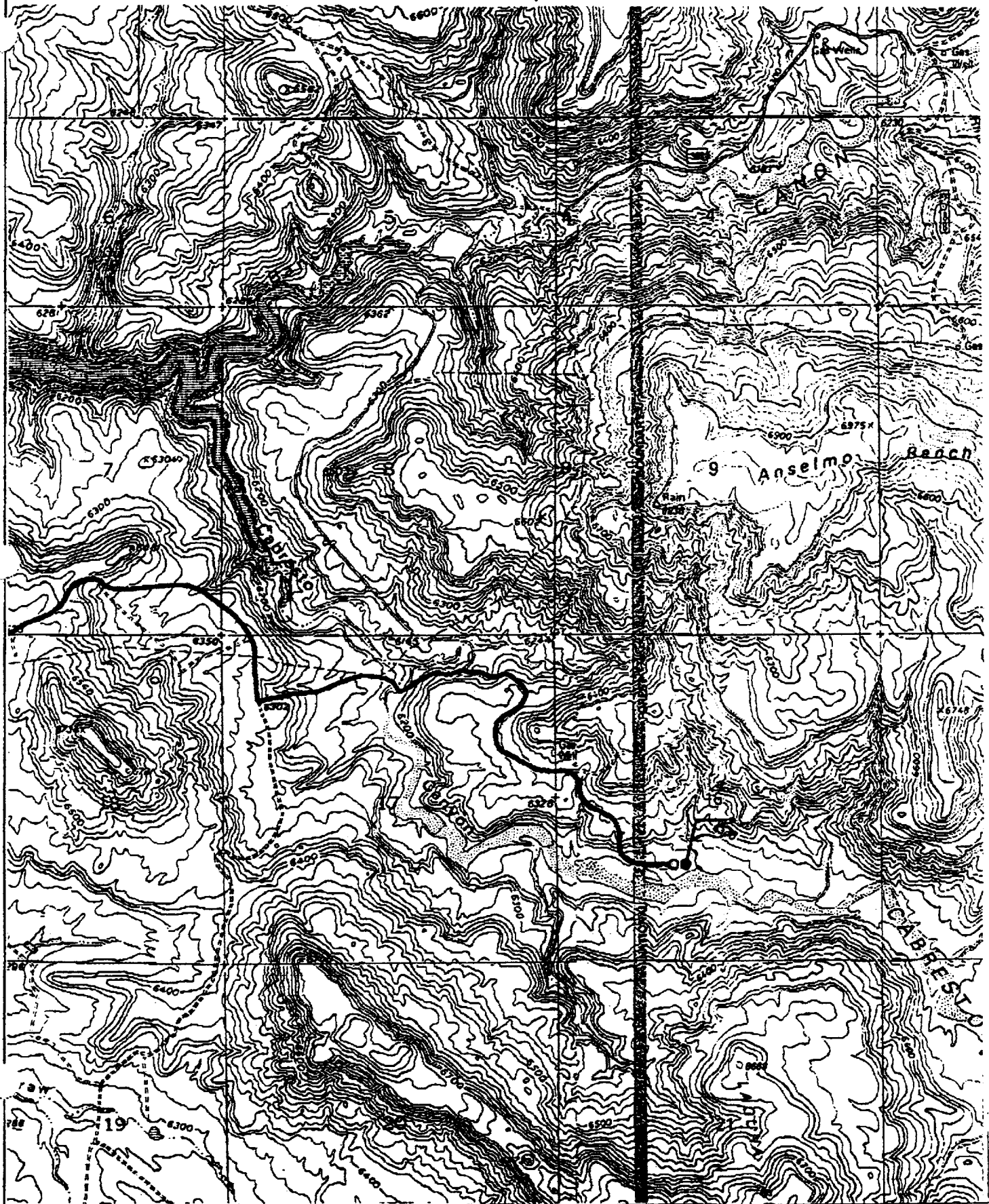
<sup>11</sup> Bottom Hole Location If Different From Surface

| 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>320 - 91/2 |         | <sup>13</sup> Joint or Infill<br>J |       | <sup>14</sup> Consolidation Code<br>II |               | <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

|   |  |
|---|--|
|  | <p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Steve Nelson</i></p> <p>Signature</p> <p>Steve Nelson</p> <p>Printed Name</p> <p>AGENT</p> <p>Title</p> <p>4-27-01</p> <p>Date</p>  |
|   | <p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>JANUARY 2, 2001</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>NEALE C. EDWARDS</p> <p>NEW MEXICO</p> <p>6857</p> <p>Certificate Number</p> <p>6857</p> |
|   |  |
|   |  |

1585' FSL & 2090' FWL, SECTION 16, T31N, R5W, N.M.P.M.  
RIO ARRIBA COUNTY, NEW MEXICO



**WILLIAMS PRODUCTION COMPANY**  
**Operations Plan**

|                            |  |                         |                      |
|----------------------------|--|-------------------------|----------------------|
| <b><u>DATE:</u></b>        | 1/04/2001                                      |                         |                      |
| <b><u>WELLNAME:</u></b>    | Rosa #361                                      | <b><u>FIELD:</u></b>    | Basin Fruitland Coal |
| <b><u>LOCATION:</u></b>    | NE/4 SW/4 Sec. 16, T31N, R5W<br>Rio Arriba, NM | <b><u>SURFACE:</u></b>  | Forest               |
| <b><u>ELEVATION:</u></b>   | 6254' GR                                       | <b><u>MINERALS:</u></b> | Fed                  |
| <b><u>TOTAL DEPTH:</u></b> | 3082'  | <b><u>LEASE #</u></b>   | SF-078769            |

**I. GEOLOGY:** Surface formation - San Jose

**A. FORMATION TOPS: ( KB)**

|                 |       |
|-----------------|-------|
| Ojo Alamo       | 2375' |
| Kirtland        | 2505' |
| Fruitland       | 2855' |
| Base of Coal    | 3080' |
| Pictured Cliffs | 3082' |
| Total Depth     | 3082' |

**B. LOGGING PROGRAM:** No logging anticipated. Mud logger will be present to determine TD.

**C. NATURAL GAUGES:** Gauge any noticeable increases in gas flow. Record all gauges in Tour book and on morning reports.

**II. DRILLING**

**A. MUD PROGRAM:** Clear water with benex to 7" casing point. Treat for lost circulation as necessary. Expect 100% returns prior to cementing. Notify Engineering of any mud losses. If coal is detected before 2950' DO NOT drill deeper until Engineering is contacted.

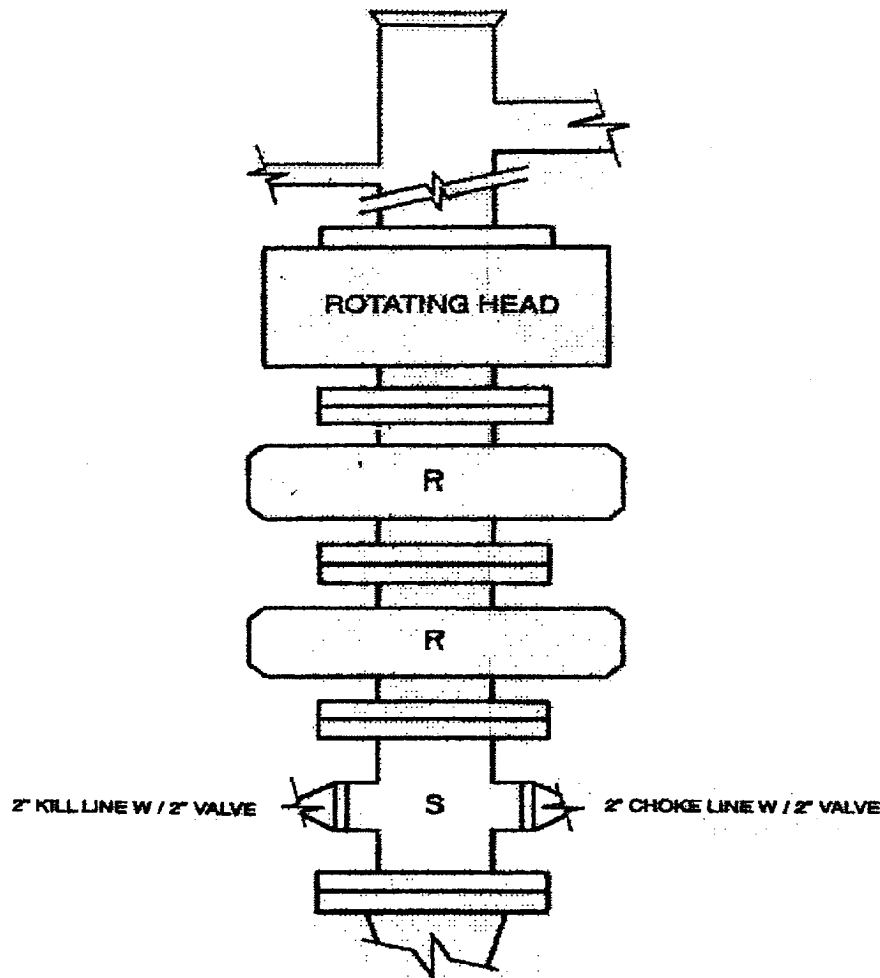
**B. Drilling Fluid:** Coal section will be drilled with Fruitland Coal water. Mud logger will pick TD at +/- 3082'.

**C. BOP TESTING:** While drill pipe is in use, the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. The drum brakes will inspected and tested each tour. All tests and inspections will be recorded in the tour book as to time and results.

**III. MATERIALS**

**A. CASING PROGRAM:**

| <u>CASING TYPE</u> | <u>HOLE SIZE</u> | <u>DEPTH</u> | <u>CASING SIZE</u> | <u>WT. &amp; GRADE</u> |
|--------------------|------------------|--------------|--------------------|------------------------|
| Surface            | 12-1/4"          | 250'         | 9-5/8"             | 36# K-55               |
| Intermediate       | 8-3/4"           | 2930'        | 7"                 | 20# K-55               |
| Prod. Liner        | 6-1/4"           | 2830-3082'   | 5-1/2"             | 15.5# K-55             |



**2M – BOP ARRANGEMENT**

**2M SYSTEM:**

- Annular preventer or double ram or two rams with one being blind and one being a pipe ram
- Kill line (2 inch minimum)
- 1 kill line valve (2 inch minimum)
- 1 choke line valve
- 2 chokes (refer to diagram)
- Upper kelly cock valve with handle available
- Safety valve and subs to fit all drill strings in use
- Pressure gauge on choke manifold
- 2 inch minimum choke line
- Fill-up line above uppermost preventer

Anticipated reservoir pressure is expected to be less than 1300 psi on all encountered zones.

All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1500 psi. The pipe and blind rams will be activated and checked for operational readiness each trip. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock with handle, floor safety valve with changeovers for each tool joint in the string and choke manifold all rated to 2000 psi