

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

1070' FSL 295' FEL, SESE

proposed prod. zone

5. Lease Designation and Serial No.  
SF-078772

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation  
Rosa Unit8. Well Name and No.  
RU-# 91B

9. API Well No.

30-039-26684

10. Field and Pool, or Exploratory Area  
Blanco-Mesa Verde11. Sec., T., R., M., or BLK.  
and Survey or Area

p Section 35, T32N, R6W

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

Approximately 22.3 miles northeast of Navajo Dam Post Office (straight line)

12. County or Parish  
Rio Arriba13. State  
NM

15. Distance from Proposed Location to Nearest

Property or Lease Line, Ft 295'

16. No. of Acres in Lease

2561.86 acres

17. No. of Acres Assigned to This Well

320 acres, E/2

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

1500'

19. Proposed Depth

6067' KB -

20. Rotary or Cable Tools

Rotary

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

6325' GR

22. Approximate Date Work will Start

April 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	500'	255 sx-352 cu ft Type III <i>circ</i>
8-3/4"	7"	20# K55	3627'	410 sx-852 cu ft Type III <i>circ</i> 170sx-238 cu ft Type III
6-1/4"	4-1/2"	10.5# K55	3527'-6067' —	80sx-116 cu ft 190sx-278 cu ft Class H + 50/50 poz+4%gel

Williams Production Co. proposes to drill a vertical well to develop the Blanco Mesa Verde 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 Bureau of Land Management-Farmington Field Office.** Independent Contract Archaeology of La Plata, NM has surveyed the proposed location for Cultural Resources, and the report has been submitted to BLM for review. Nelson Consulting has submitted an Environmental Assessment to BLM-FFO for review.

This proposed well would require the construction of 100-feet of new access road, and would then tie into an existing gas field road (see Pipeline & Well Plats #3 and #4). The proposed 290-foot long pipeline would tie into the Williams Gas Gathering System on Lateral A-54. This proposed well gathering pipeline would follow the new access road and existing gas field road (see the attached Pipeline Plat Map # 4).

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

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"CERCLA REGULATIONS"

I hereby certify that the foregoing is true and correct. 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 February 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:

APPROVED BY:

/s/ Lee Ottani

TITLE  
NMOCD

DATE

APR 16

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

District II  
PO Drawer DD, 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 30-039-26684		*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 91B
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6325'

<sup>10</sup> Surface Location

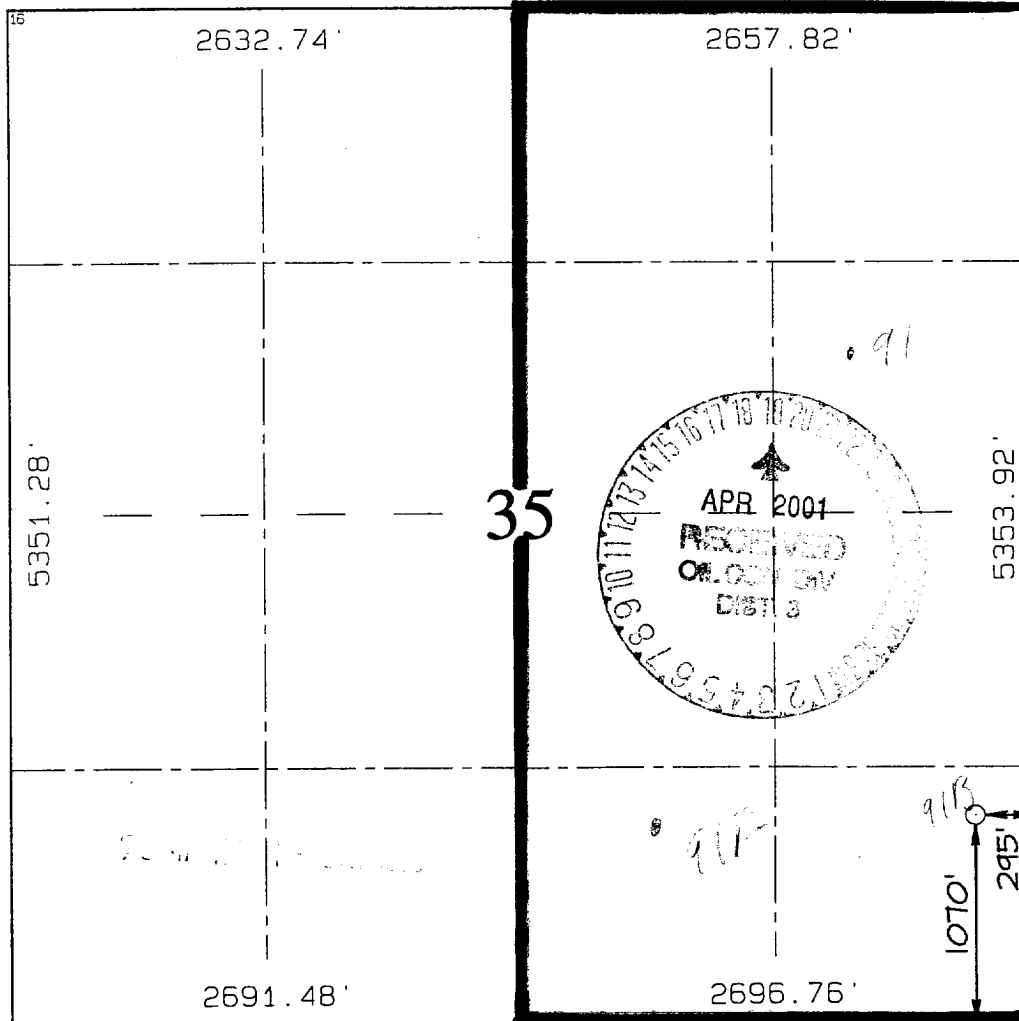
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	35	32N	6W		1070	SOUTH	295	EAST	RIO ARriba

<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 320 - E/2	<sup>13</sup> Joint or Infill I	<sup>14</sup> Consolidation Code II	<sup>15</sup> 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



<sup>17</sup> OPERATOR CERTIFICATION

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

*Steve Nelson*  
Signature  
Steve Nelson  
Printed Name  
Agent, Nelson Consulting  
Title  
February 27, 2001  
Date

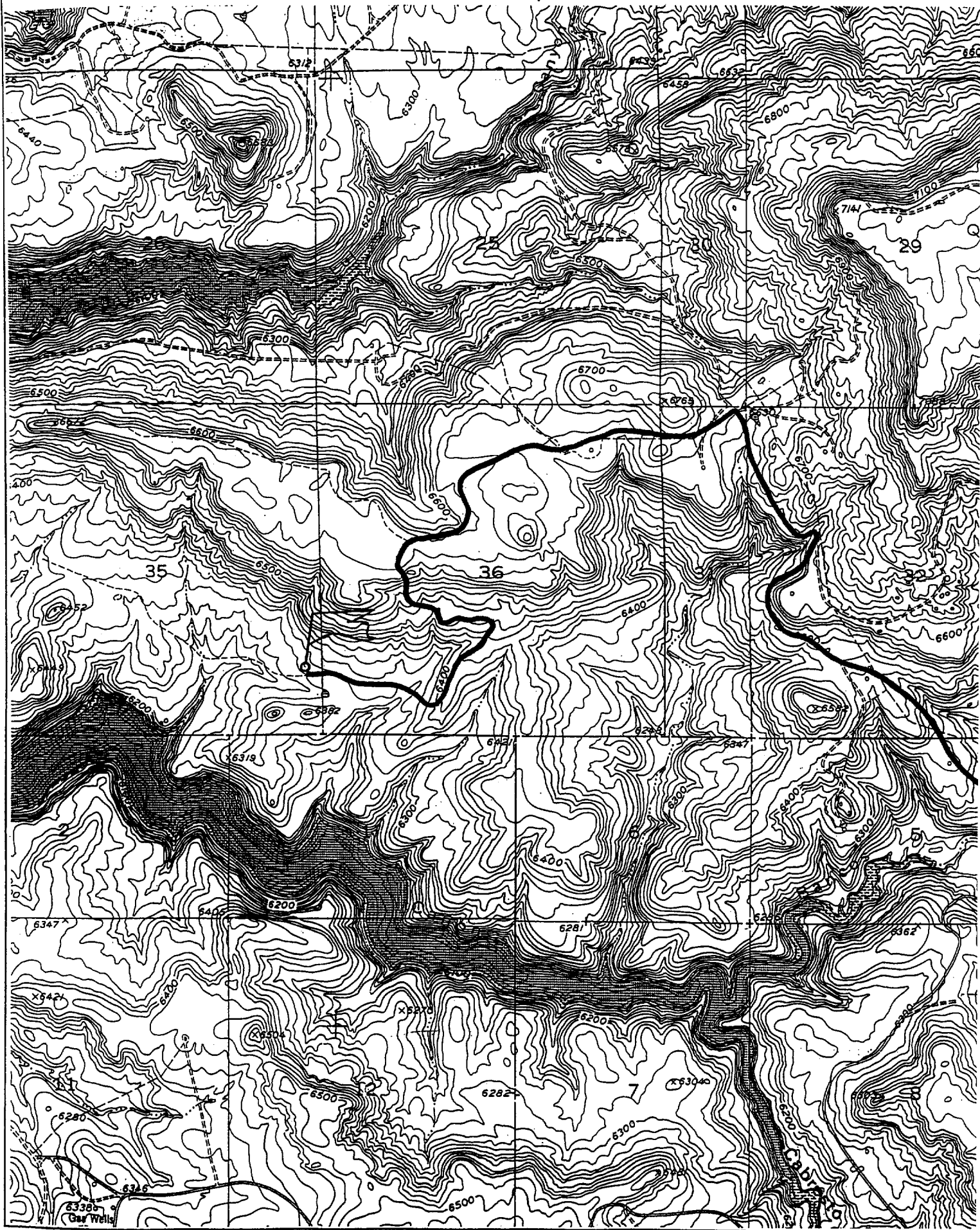
<sup>18</sup> SURVEYOR CERTIFICATION

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.

DECEMBER 7, 2000  
Date of Survey  
Signature and Seal of Professional Surveyor  
NEALE C. EDWARDS  
NEW MEXICO  
6857  
Certificate Number  
6857

1070' FSL & 295' FEL, SECTION 35, T32N, R6W, N.M.P.M.  
RIO ARriba COUNTY, NEW MEXICO

RIO ARRIBA COUNTY, NEW MEXICO



**B. FLOAT EQUIPMENT:**

1. SURFACE CASING: 9-5/8" notched regular pattern guide shoe. Run (1) standard centralizer on each of the bottom (3) joints of Surface Casing.
2. INTERMEDIATE CASING: 7" cement nose guide shoe with a self-fill insert float. Place float collar one joint above the shoe. Install one Turbulent centralizer on each of the bottom (3) joints and one standard centralizer every (4) joints to the surface casing. Total centralizers = (26) regular and (3) turbulent.
3. PRODUCTION CASING: 4-1/2" whirler type cement nose guide shoe with a latch collar on top of 20" bottom joint. Place marker joint above 5630'. Place one positive standoff turbolizer every other joint. Total turbolizers is 34.

**C. CEMENTING:**

1. SURFACE: Slurry: 255sx (352 cu.ft.) of "Type III" + 2% CaCl<sub>2</sub> + 1/4 # of cello-flake/sk (Yield = 1.39 cu.ft./sk, Weight = 14.5 #/gal.). The 125% excess should circulate cement to the surface. WOC 12 hours. Test csg to 1500psi.
2. INTERMEDIATE: Lead: 410sx (852 ft<sup>3</sup>) of "Type III" 65/35 poz + 8% gel + 1% CaCl<sub>2</sub> + 1/4 # cello-flake/sk (Yield = 2.09 ft<sup>3</sup>/sk, Weight = 12.1 #/gal.). Tail: 170sx (238 ft<sup>3</sup>) of class "Type III" + 1% CaCl<sub>2</sub> + 1/4 # cello-flake/sk. (Yield = 1.39 ft<sup>3</sup>/sk, Weight = 14.5#/gal.). The 100% excess in lead and tail should circulate cement to the surface. Total volume = 1090 ft<sup>3</sup>. WOC 12 hours. Run a temperature survey after 8 hours if cement is not circulated to the surface. Test csg. to 1500psi.
3. PRODUCTION LINER: Lead: 80sx (116 ft<sup>3</sup>) of Class-H + 50/50 poz + 4 % gel + 0.4% FL-52. (Yield = 1.45 cu.ft./sk, Weight = 13.2 #/gal.). Tail: 190 sx (278 ft<sup>3</sup>) of Class-H + 50/50 poz + 4 % gel + 0.4% FL-5 + 1/4# celloflake/sk and 4% Phenoseal (Yield = 1.45 ft<sup>3</sup>/sk, Weight = 13.2 #/gal.). Displace cement at a minimum of 8 BPM. The 50% excess in lead and tail should cover liner top. Total volume 390ft<sup>3</sup>. WOC 12 hours.

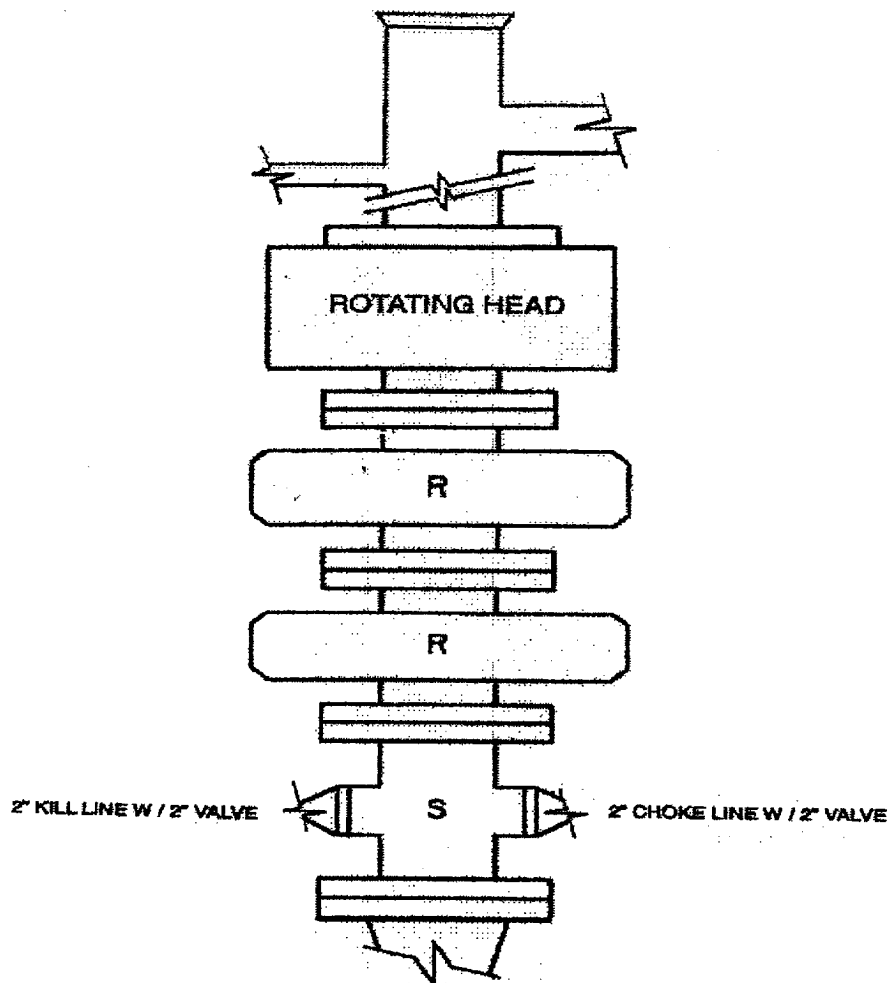
**IV COMPLETION**

**A. CBL**

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings if cement is not circulated to surface.

**B. PRESSURE TEST**

1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.



**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