

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

2010' FNL 2170' FWL, SENW

proposed prod. zone

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

Approximately 18.4 miles east of Navajo Dam Post Office (straight line)

15. Distance from Proposed Location to Nearest

Property or Lease Line, Ft 2010'

16. No. of Acres in Lease

2560 acres

17. No. of Acres Assigned to This Well

320 acres, W/2

18. Distance from Proposed Location to Nearest Well Drilling, Completed, or Applied for, on this Lease, FT 1500'

19. Proposed Depth

6058' KB -

20. Rotary or Cable Tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc)
6311' GR

22. Approximate Date Work will Start

April 1, 2001

5. Lease Designation and Serial No.
SF-078771

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation
Rosa Unit

8. Well Name and No.
RU-# 8B

9. API Well No.

30-039-26632

10. Field and Pool, or Exploratory Area
Blanco-Mesa Verde

11. Sec., T., R., M., or BLK.
and Survey or Area

Section 26, T31N, R6W

12. County or Parish
Rio Arriba

13. State
NM

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-181 cu ft Type III
8-3/4"	7"	20# K55	3613'	400 sx-836 cu ft Type III 180sx-250 cu ft Type III
6-1/4"	4-1/2"	10.5# K55	3513'-6058'	80sx-116 cu ft 190sx-276 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 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 150-feet of new access road, and would then tie into an existing gas field road (see Pipeline & Well Plats #3 and #4). The proposed 348-feet long pipeline would tie into the Williams Gas Gathering System on Lateral A-48. This proposed well gathering pipeline would follow the new access road and existing gas field road (see the attached Pipeline Plat Map # 4).

This record is subject to technical and procedural review pursuant to 43 CFR 3105.3 and appeal pursuant to 43 CFR 3106.4.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

8. Above and below the proposed well, 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 January 4, 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/ Jim Lovato

TITLE

DATE

WMD

MAR 13 2001

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994

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

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

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

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

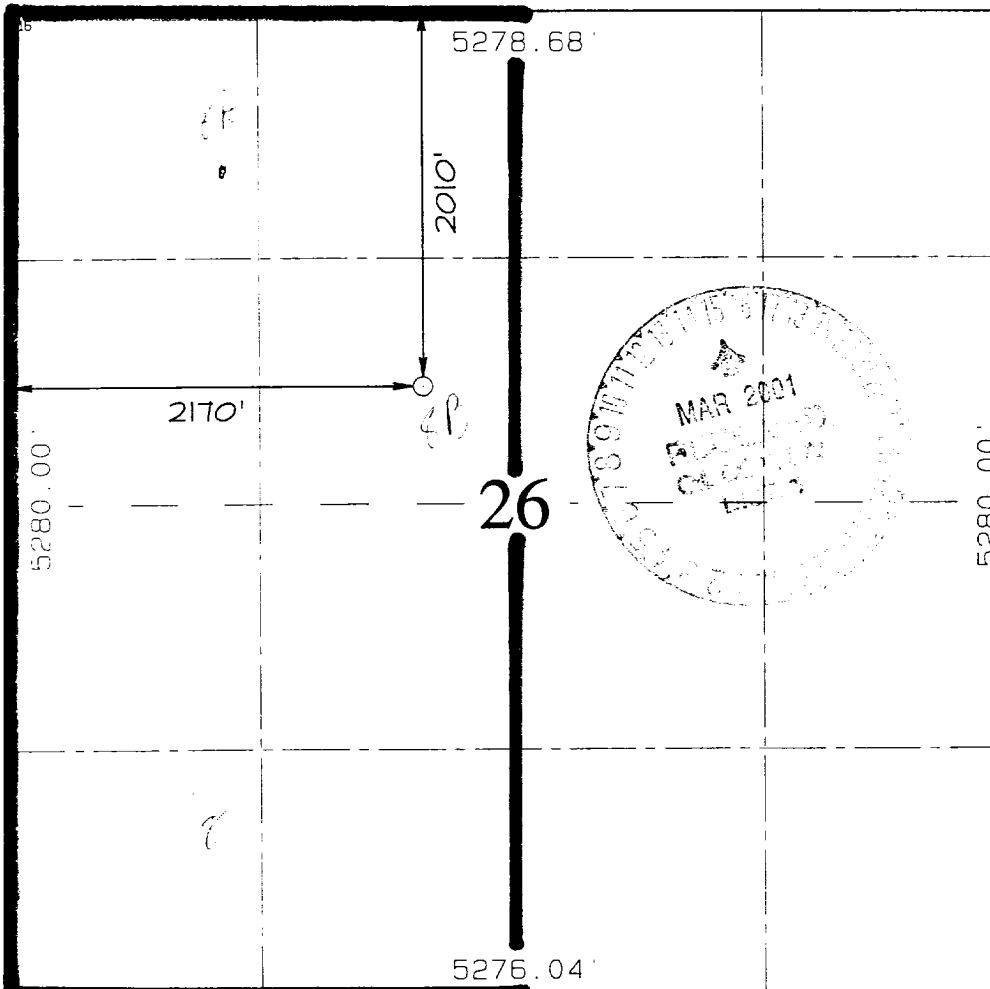
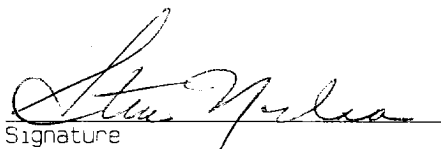

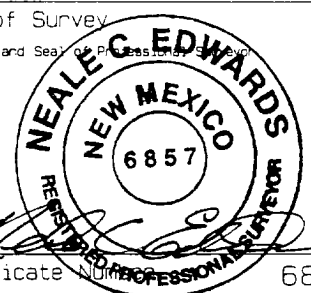
District IV
PO Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

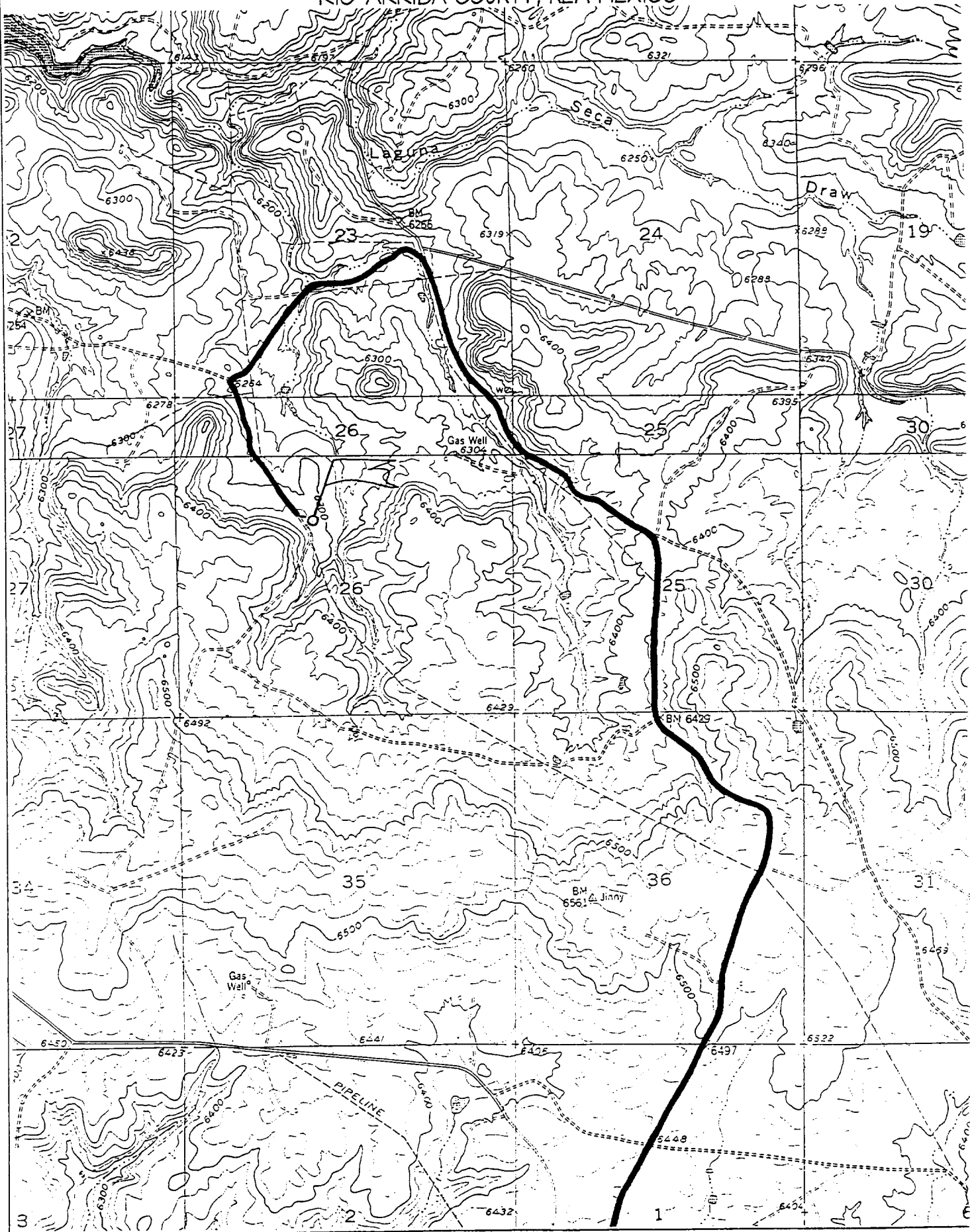
*API Number 30-039-26632		*Pool Code 72319		*Pool Name Blanco Mesavende					
*Property Code 17033		*Property Name ROSA UNIT						*Well Number 88	
*OSRIC No. 120782		*Operator Name WILLIAMS PRODUCTION COMPANY						*Elevation 6311	
10 Surface Location									
UL on lot no. F	Section 26	Township 31N	Range 6W	Lot Ion	Feet from the 2010	North/South line NORTH	Feet from the 2170	East/West line WEST	County RIO ARriba
11 Bottom Hole Location If Different From Surface									
UL on lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 320 - W/2		13 Joint or Infill I		14 Consolidation Code U		15 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>17 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> Signature Steve Nelson Printed Name Agent, Nelson Consulting Title January 4, 2001 Date</p>	
<p>18 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>SEPTEMBER 9, 2000 Date of Survey  Signature and Seal of Professional Surveyor</p> <p> Certificate Number 6857</p>			

WILLIAMS PRODUCTION COMPANY ROSA UNIT #8B

2010' FNL & 2170' FWL, SECTION 26, T31N, R6W, N.M.P.M.
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 20ft. bottom joint. Place marker joint above 5,630'. Place one positive standoff turbolizer every other joint. Total turbolizers is 34.

C. CEMENTING:

1. SURFACE: Slurry: 130sx (181 cu.ft.) of "Type III" + 2% CaCl₂ + ¼ # 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: 400sx (836 ft³) of "Type III" 65/35 poz + 8% gel + 1% CaCl₂ + ¼ # cello-flake/sk (Yield = 2.09 ft³/sk, Weight = 12.1 #/gal.). Tail: 180sx (250 ft³) of class "Type III" + 1% CaCl₂ + ¼ # cello-flake/sk. (Yield = 1.39 ft³/sk, Weight = 14.5#/gal.). The 100% excess in lead and tail should circulate cement to the surface. Total volume = 1086 ft³. 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 ft³) 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 (276 ft³) of Class-H + 50/50 poz + 4 % gel + 0.4% FL-5 + ¼# celloflake/sk and 4% Phenoseal (Yield = 1.45 ft³/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 392ft³. WOC 12 hours.

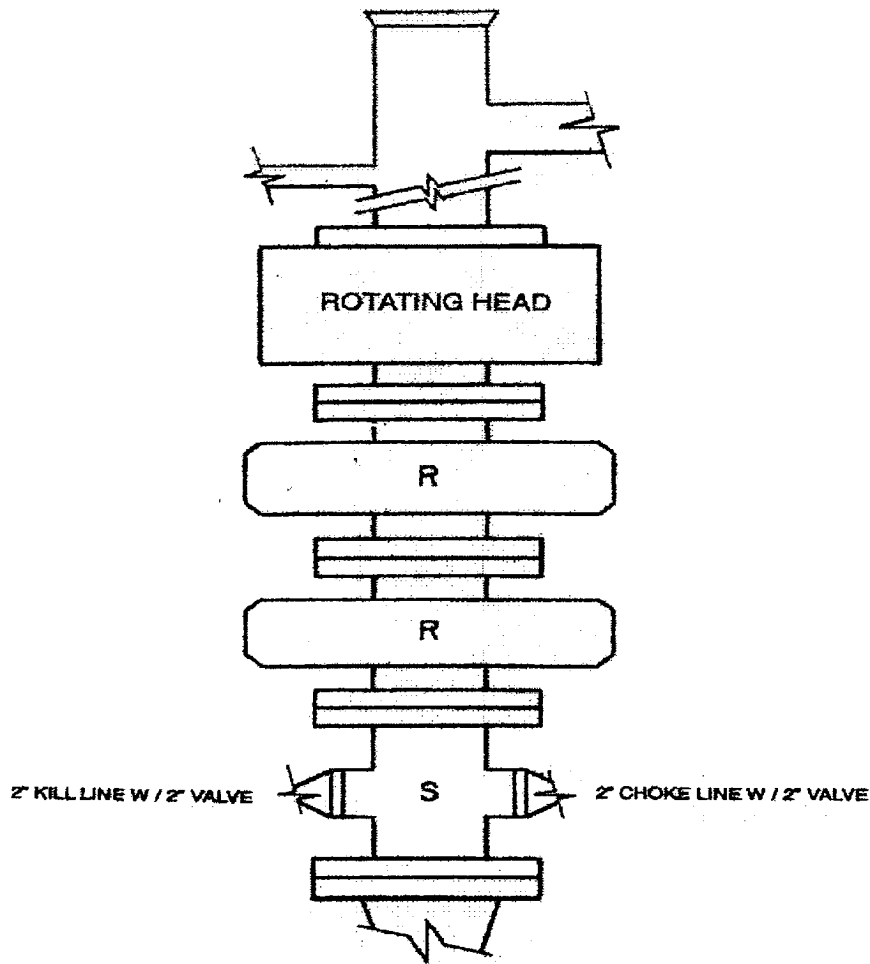
IV COMPLETION

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