

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

305' FSL 2610' FWL, SESW

proposed prod. zone

5. Lease Designation and Serial No.
SF-078767

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

Rosa Unit

8. Well Name and No.
RU-#10B

9. API Well No.

30-039-26556

10. Field and Pool, or Exploratory Area
Blanco-MV11. Sec., T., R., M., or BLK.
and Survey or Area

Section 13, T31N, R6W

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

Approximately 20.3 miles northeast of Navajo Dam Post Office (straight line)

12. County or Parish

Rio Arriba

13. State

NM

15. Distance from Proposed Location to Nearest

Property or Lease Line, Ft 305'

16. No. of Acres in Lease

2518.04 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

6115' KB

20. Rotary or Cable Tools

Rotary

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

6338' 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#	250'	130 sx-181 cu ft Type III
8-3/4"	7"	20#	3670'	410 sx-858 cu ft Type III 175sx-245 cu ft Type III
6-1/4"	4-1/2"	10.5#	3570'-6115'	80sx-116 cu ft 190sx-276 cu ft Class H + 50/50 poz

Williams Production Co. proposes to drill a vertical well to develop the Blanco MV 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 New Mexico Game & Fish Department. The minerals are Federal.** Independent Contract Archaeology has surveyed the proposed location for Cultural Resources, and the report has been submitted to the BLM for review.

This proposed well would not require a new access road (see Pipeline & Well Plats #3 and #4). The proposed 1725-foot long pipeline would follow an existing gas field road and would tie into Williams Gas Gathering System on the Rosa Unit #125E (see the attached Pipeline Plat Map # 4). A pipeline right-of-way would be secured from the New Mexico Game & Fish Department.

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

DEVELOPMENT OPERATIONS AUTHORIZED ARE
SHOWN ON SURFACE MAPS WITH ATTACHED
"DEVELOPMENT REQUIREMENTS"

14. ABOVE PROPOSED OPERATIONS PROGRAM: 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 November 6, 2000

(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

NMUCD

TITLE

AFM minerals

DATE

10/10/01

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
Revised February 21,
Instructions on
Submit to Appropriate District Office
State Lease - 4 Cc
Fee Lease - 3 Cc

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26556		*Pool Code 72319	*Pool Name Blanco Mesaverde
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 10B
*OGRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6338'

¹⁰ Surface Location

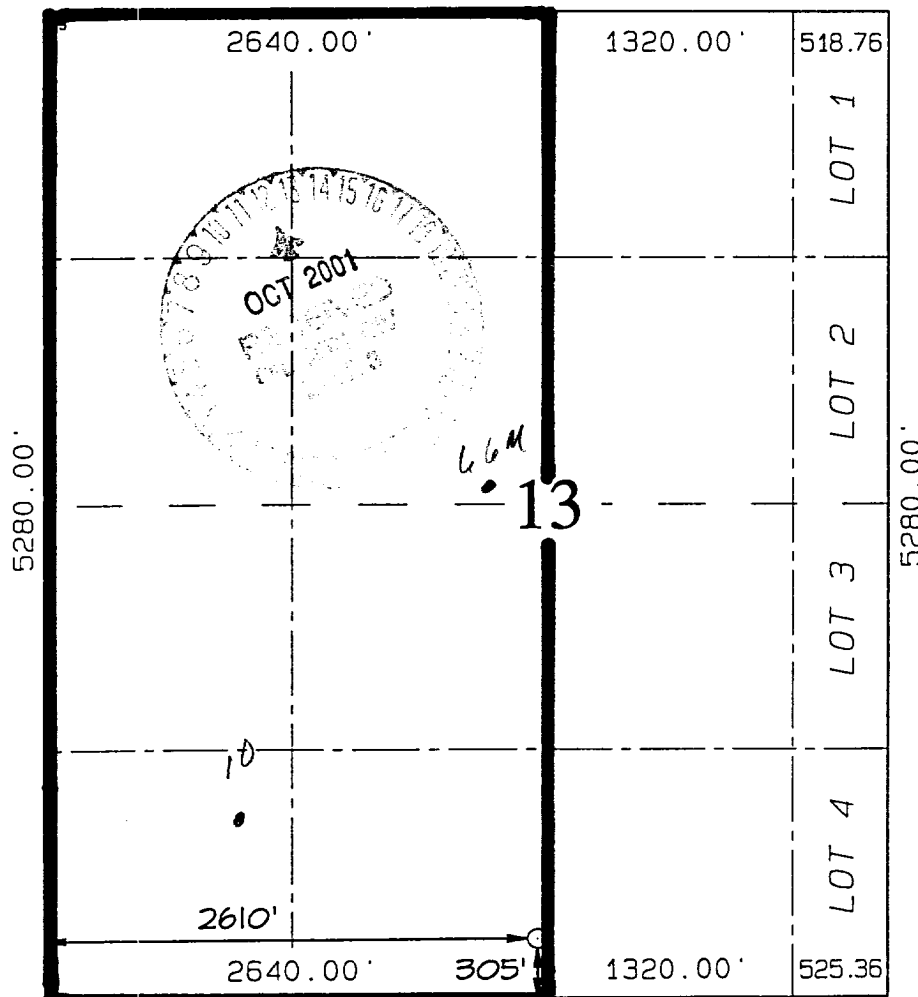
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	31N	6W		305	SOUTH	2610	WEST	RIO ARRIE

¹¹ 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

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



¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained here is true and complete to the best of my knowledge and belief.

Steve Nelson
Signature

Steve Nelson
Printed Name
Agent, Nelson Consulting
Title

November 6, 2000
Date

¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this was plotted from field notes of actual surveys made or under my supervision, and that the same is true and correct to the best of my belief.

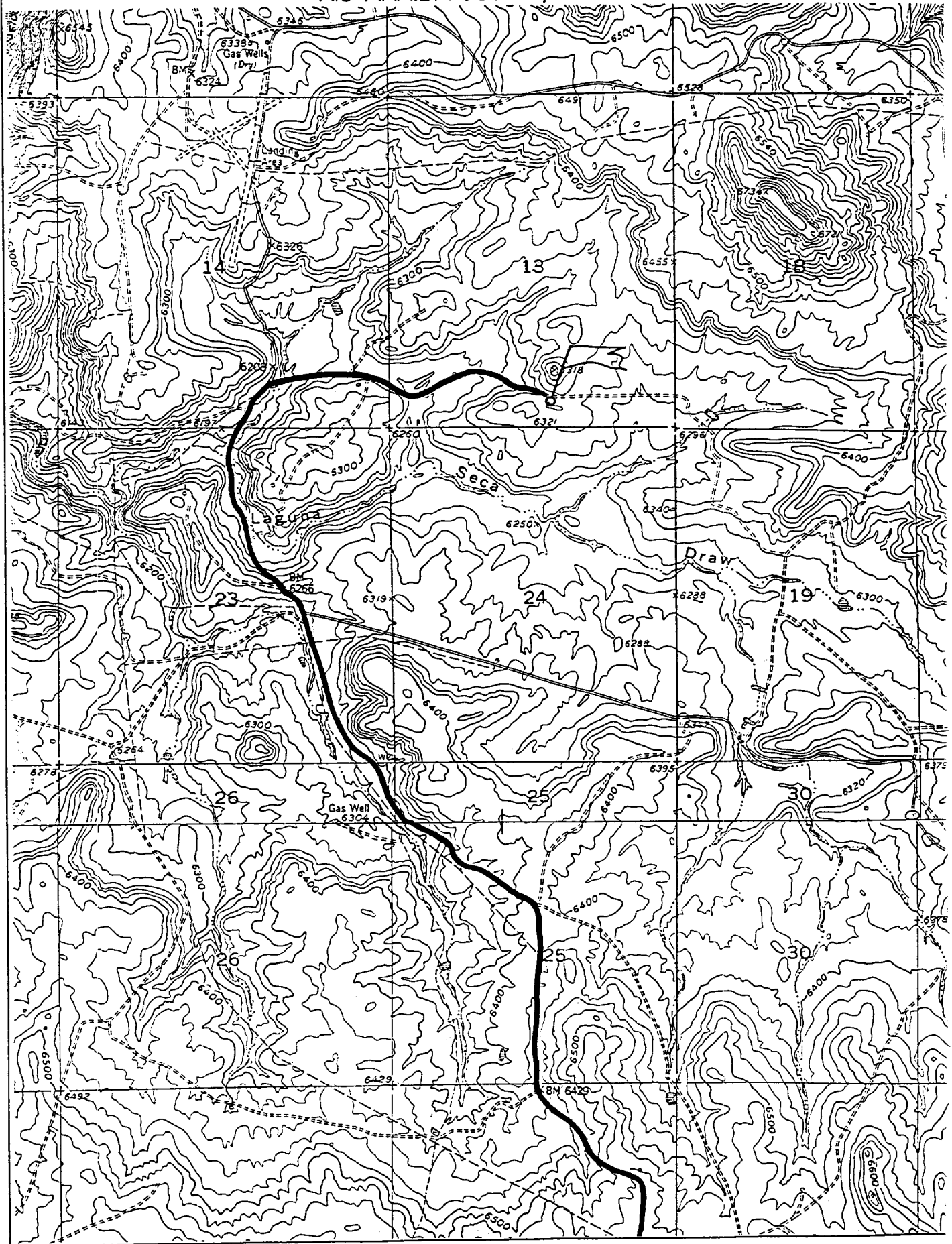
OCTOBER 17, 2000
Date of Survey

Signature and Seal

NEALE C. EDWARDS
NEW MEXICO
6857
Professional Surveyor
Certificate Number 685

WILLIAMS PRODUCTION COMPANY ROSA UNIT #10B

305' FSL & 2610' FWL, SECTION 13, 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 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: 130sx (181 cu.ft.) of "Type III" + 2% CaCl₂ + 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 (858 ft³) of "Type III" 65/35 poz + 8% gel + 1% CaCl₂ + 1/4 # cello-flake/sk (Yield = 2.09 ft³/sk, Weight = 12.1 #/gal.). Tail: 175sx (245 ft³) of class "Type III" + 1% CaCl₂ + 1/4 # 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 = 1103 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 + 1/4# 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.

*TOC at least to
3470' or higher*

IV COMPLETION

A. CBL

1. Run Cement Bond Log across all intervals to be perforated and find Top of Cement behind all casing strings.

B. PRESSURE TEST

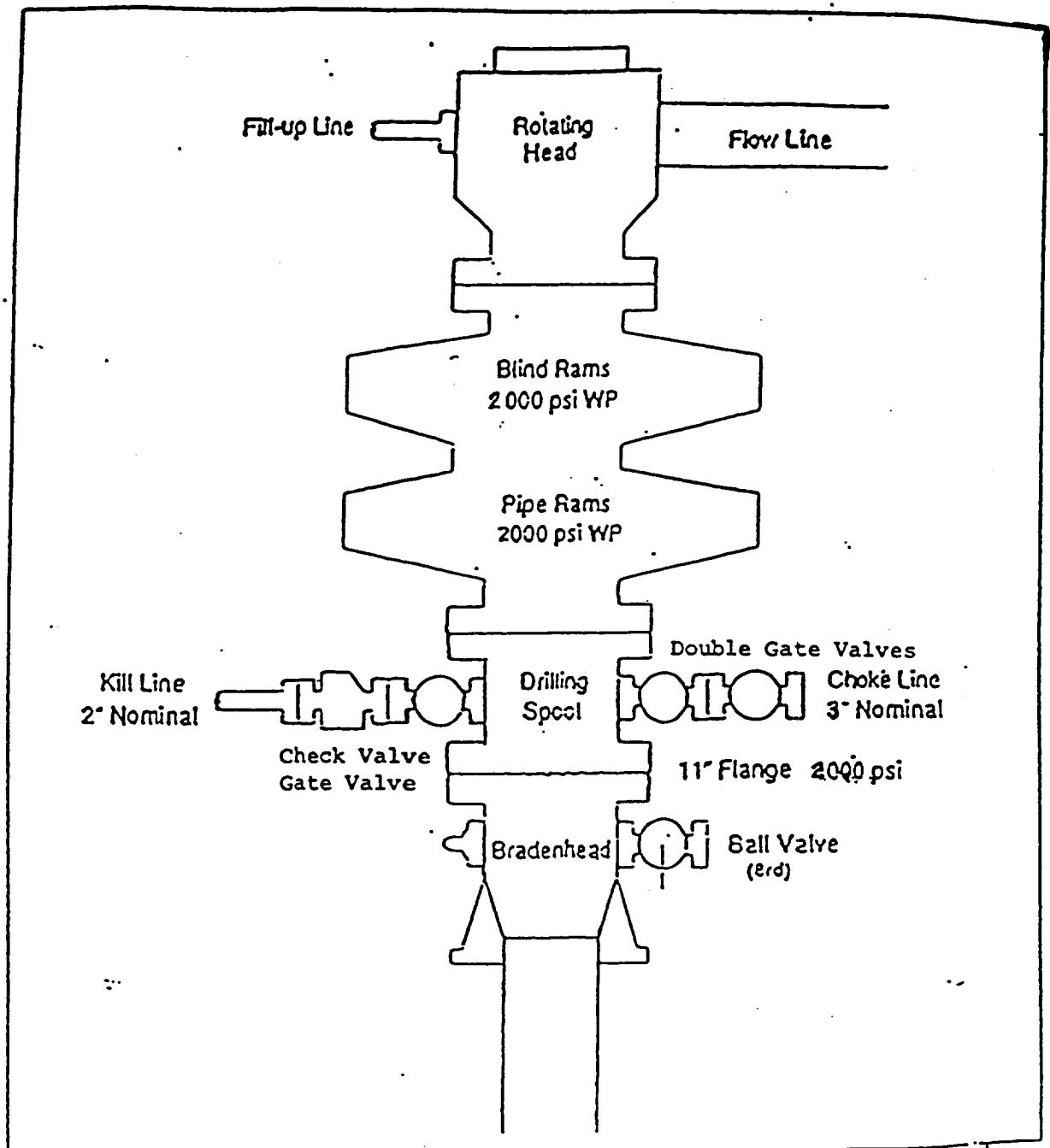
1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

C. STIMULATION

1. Stimulate with approximately 80,000# of 20/40 sand in slick water.
2. Isolate Point Lookout with a CIBP.
3. Perforate the Menefee/Cliff House as determined from the open hole logs.
4. Stimulate with approximately 80,000# of 20/40 sand in slick water.

EXHIBIT 1

BOP STACK ARRANGEMENT



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