

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

1465' FNL 225' FWL, SWNW

proposed prod. zone

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

Approximately 19.2 miles east of Navajo Dam Post Office (straight line)

15 Distance from Proposed (Also to nearest drlg. unit line, if any)
Location to Nearest

Property or Lease Line, Ft 225'

16 No. of Acres in Lease

2552.71 acres

17 No. of Acres Assigned to This Well

272.16 acres, N/2 8th A-2-1-1-1

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

1020'

19 Proposed Depth

6008' 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

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#	3613'	405 sx-844 cu ft Type III
				175sx-242 cu ft Type III
6-1/4"	4-1/2"	10.5#	3513'-6008'	80sx-116 cu ft 185sx-268 cu ft Class H + 50/50 poz

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.

This proposed well would not require a new access road (see Pipeline & Well Plats #3 and #4). The proposed 1577-foot long pipeline would tie into the Williams Gas Gathering System on the Rosa Unit #5Y. This proposed well tie would follow and utilize an existing gas field road (see the attached Pipeline Plat Map # 4).

This document is subject to review and
approval by the BLM. If approved, the BLM will issue a permit for drilling.
The BLM will issue a permit for drilling if the proposed well is in compliance with the attached
conditions of approval.

COPIES OF THIS DOCUMENT ARE
MAINTAINED WITH ATTACHED
PERMIT TO DRILL

14. Above the signature line, if the applicant is proposing to deepen, give present productive zone and proposed new productive zone

Signed

Steve Nelson

Title Agent

COPIES: BLM+4, WELL FILE+1

Date November 7, 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

/s/ Jim Lovato

TITLE

DATE

RECEIVED

MAR 13

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 DD, Artesia, NM 88211-0719

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

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26557		*Pool Code 72319	*Pool Name Blanco Mesavende
*Property Code 17033	*Property Name ROSA UNIT		*Well Number 1658
*OSRID No. 120782	*Operator Name WILLIAMS PRODUCTION COMPANY		*Elevation 6311

10 Surface Location

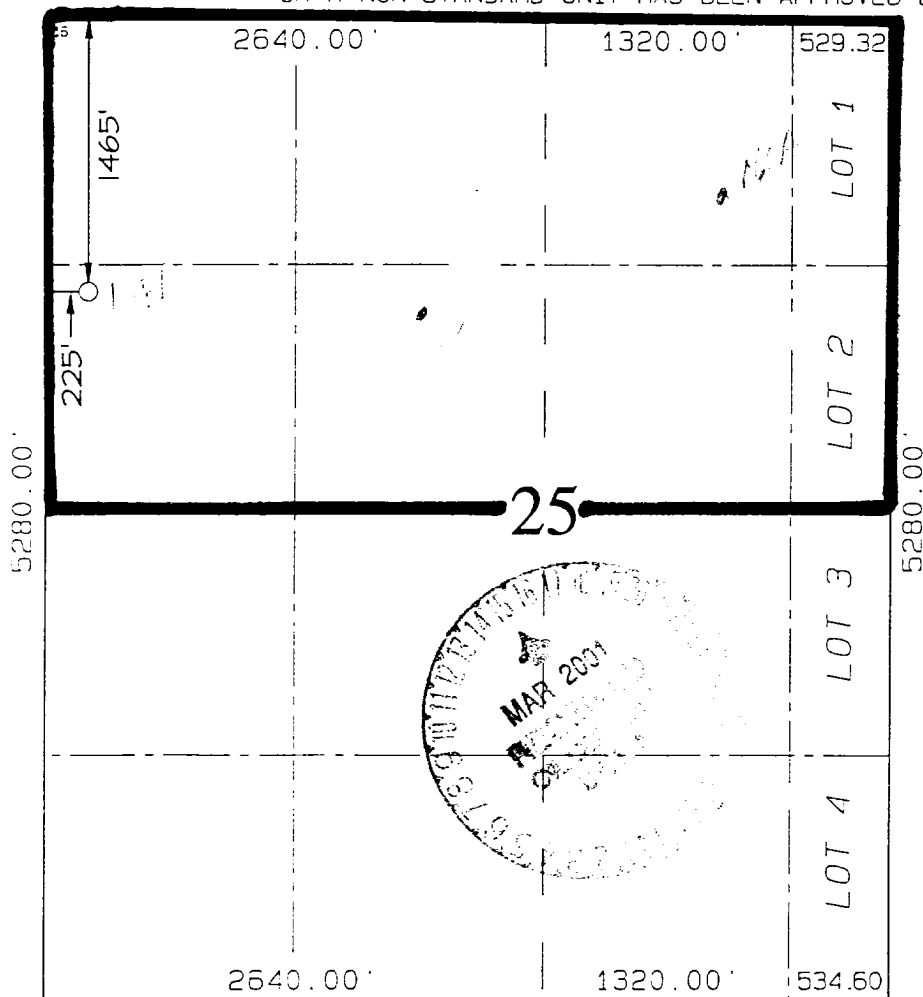
UL or lot no. E	Section 25	Township 31N	Range 6W	Lot Idn	Feet from the 1465	North/South line NORTH	Feet from the 225	East/West line WEST	County RIO ARriba
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11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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12 Dedicated Acres N/2 272.16	13 Joint or Infill I	14 Consolidation Code U	15 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



17 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
November 7, 2000
Date

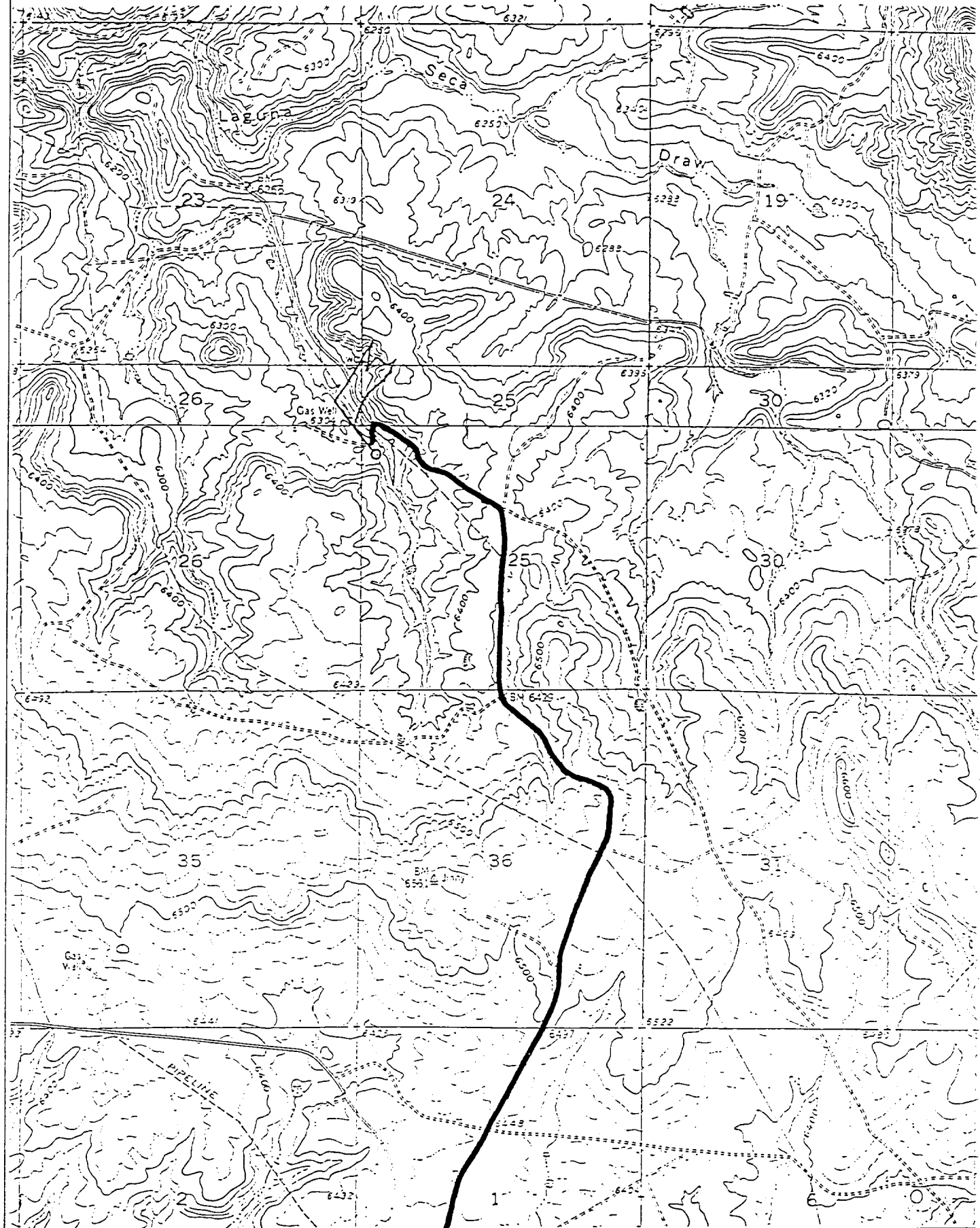
18 SURVEYOR CERTIFICATION

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.

AUGUST 29, 2000
Date of Survey
Neale C. Edwards
Signature and Seal
NEALE C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR
Certificate Number **6857**

WILLIAMS PRODUCTION COMPANY ROSA UNIT #165B

1465' FNL & 225' FWL, SECTION 25, 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: 405sx (844 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 (242 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 = 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: 185sx (268 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 384 ft³. 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.

B. PRESSURE TEST

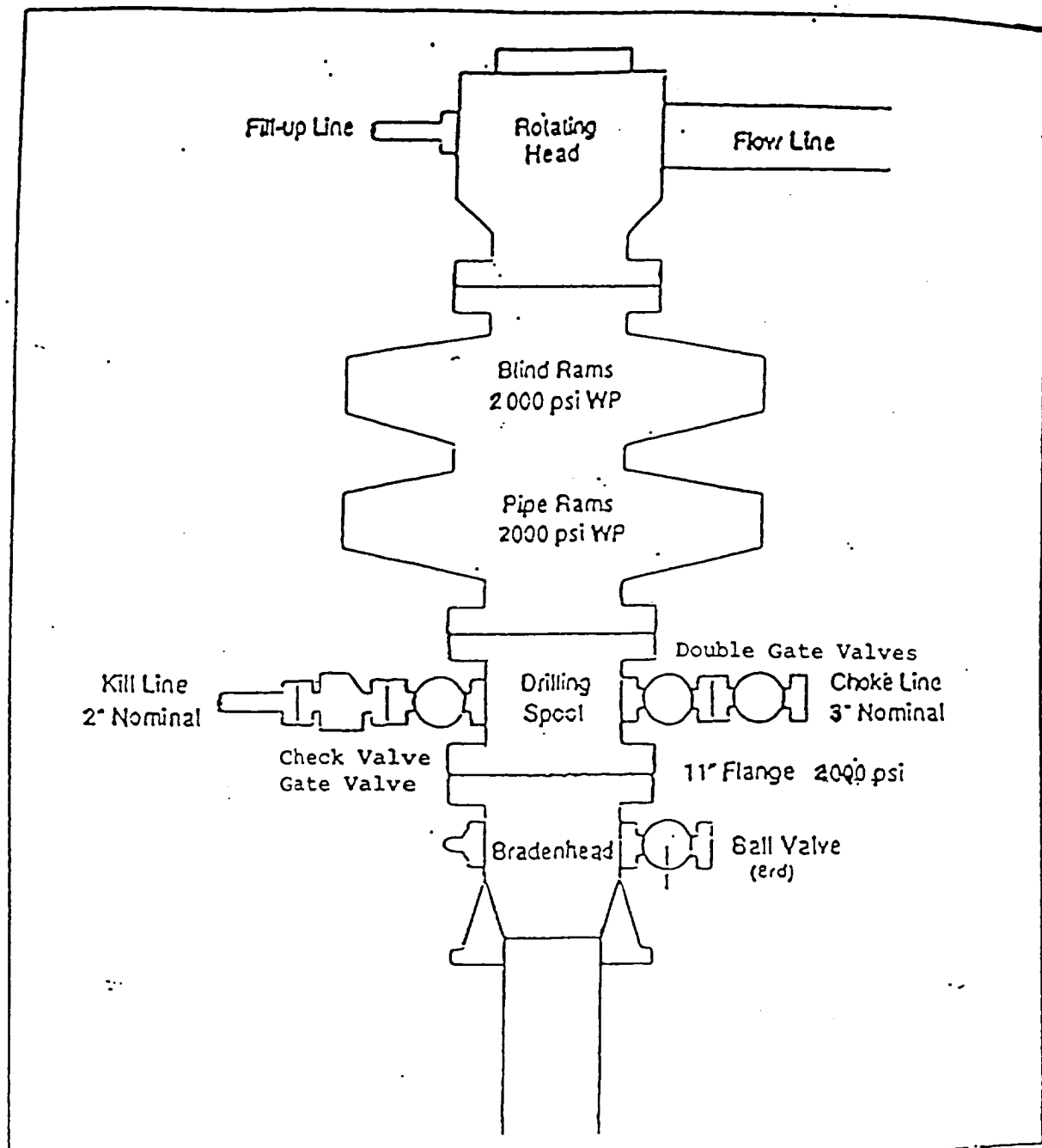
1. Pressure test 7" & 4-1/2" casing to 3300# for 15 minutes.

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 key cock with handle, floor safety valve with change overs for each tool joint in the string, and choke manifold all rated to 2000 psi.