

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER ☐

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Elm Ridge Resources, Inc.

(505) 632-3476

3. ADDRESS AND TELEPHONE NO

P. O. Box 189, Farmington, NM 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface

450' FNL & 1905' FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

3 air miles NW of Lybrook

5. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

450'

16. NO. OF ACRES IN LEASE

1,085.55

17. NO. OF ACRES ASSIGNED
TO THIS WELL

37.70

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL DRILLING COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1,046'

19. PROPOSED DEPTH

6,650'

20. ROTARY OR CABLE TOOLS

Rotary

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

7,260' ungraded

22. APPROX. DATE WORK WILL START*

Sept. 10, 2001

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	K-55 8-5/8"	24	350'	≈250 cu. ft. & to surface
7-7/8"	J-55 4-1/2"	10.5	6,650'	≈3,050 cu. ft. & to surface

procedural review pursuant to 43 CFR 3185.3,
and appeal pursuant to 43 CFR 3185.4.

ALL OTHERS OF THE BUREAU ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"



cc: BLM, Elm (D&F), OCD (via BLM)

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24

SIGNED

[Signature]

TITLE

Consultant (505) 466-8120

DATE

8-11-01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the 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

[Signature]

TITLE

AEM minerals

DATE

10/10/01

See Instructions On Reverse Side

AMOCU

State of New Mexico
Energy, Minerals & Mining Resources Department

Form C - 102

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-039-26793	Pool Code 42289	Pool Name LYBROOK GALLUP
Property Code 28962	Property Name CAMPOS 4	Well Number 3
OGRID No. 149052	Operator Name ELM RIDGE RESOURCES	Elevation 7260'

Surface Location

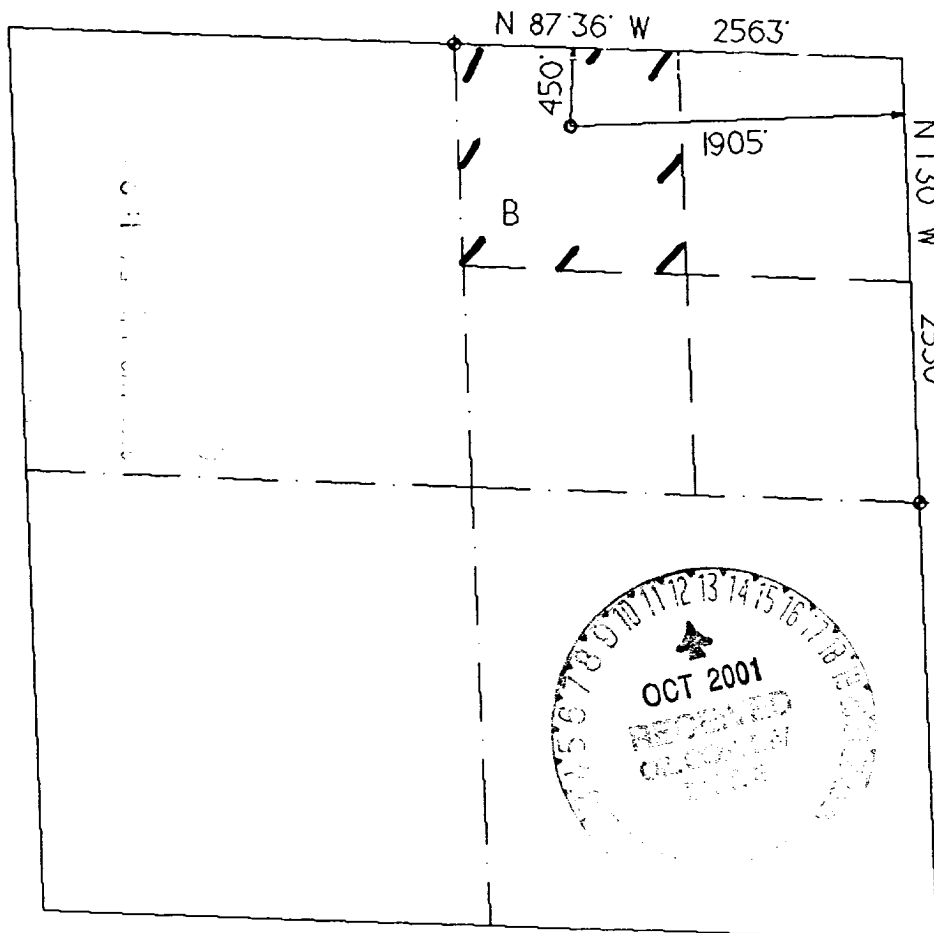
UL or Lot	Sec.	Twp.	Rge.	Lot Idh.	Feet from >	North/South	Feet from >	East/West	County
B	4	23 N.	7 W.		450	NORTH	1905	EAST	RIO ARRIBA

Bottom Hole Location If Different From Surface

UL or Lot	Sec.	Twp.	Rge.	Lot Idh.	Feet from >	North/South	Feet from >	East/West	County

Dedication	Joint ?	Consolidation	Order No.

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

Signature

Brian Wood

Printed Name

BRIAN WOOD

Title

CONSULTANT

Date

AUGUST 11, 2001

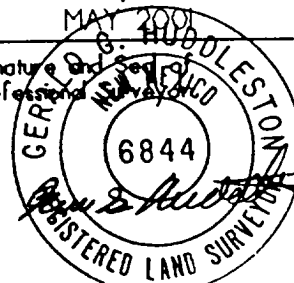
SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey

MAY 2001

Signature and Seal of Professional Surveyor



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

ELM RIDGE RESOURCES, INC.

P. O. BOX 189

3a. Address

FARMINGTON, NM 87499

3b. Phone No. (include area code)

(505) 632-3476

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

450' FNL & 1905' FEL 4-23n-7w

5. Lease Serial No.

NMSF-078272

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.

N/A

8. Well Name and No.

CAMPOS 4 #3

9. API Well No.

10. Field and Pool, or Exploratory Area

LYBROOK GALLUP

11. County or Parish, State

RIO ARRIBA, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Will change TD from 6,650' to 5,850' (into the Mayre). Production casing will be cemented to the surface in 2 stages with a stage tool set at \approx 4,350'. First stage volume will be \approx 870 cu ft consisting of \approx 215 sx Halliburton Lite with 1/4 #/sk Flocele followed by \approx 395 sx Class B with 2% CaCl₂. Second stage volume will be \approx 1,735 cu ft consisting of \approx 940 sx of Halliburton Lite with 2% CaCl₂ followed by \approx 45 sx Class B with 2% CaCl₂ to cover the Mesa Verde, Pictured Cliffs, and Ojo Alamo. Volume is based on 75% excess, but caliper log will be used to determine actual volume needed. Centralizers will be installed on the middle of the shoe joint and on every joint thereafter for a total of \approx 24 centralizers. Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only. Use API casing dope. Otherwise, no changes.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

BRIAN WOOD

Title CONSULTANT

(505) 466-8120

Signature

Brian Wood

Date 8-21-01

cc: BLM (&OCD), Elm (D&F)

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

[Signature]

Title AEM minerals

Date 10/18/01

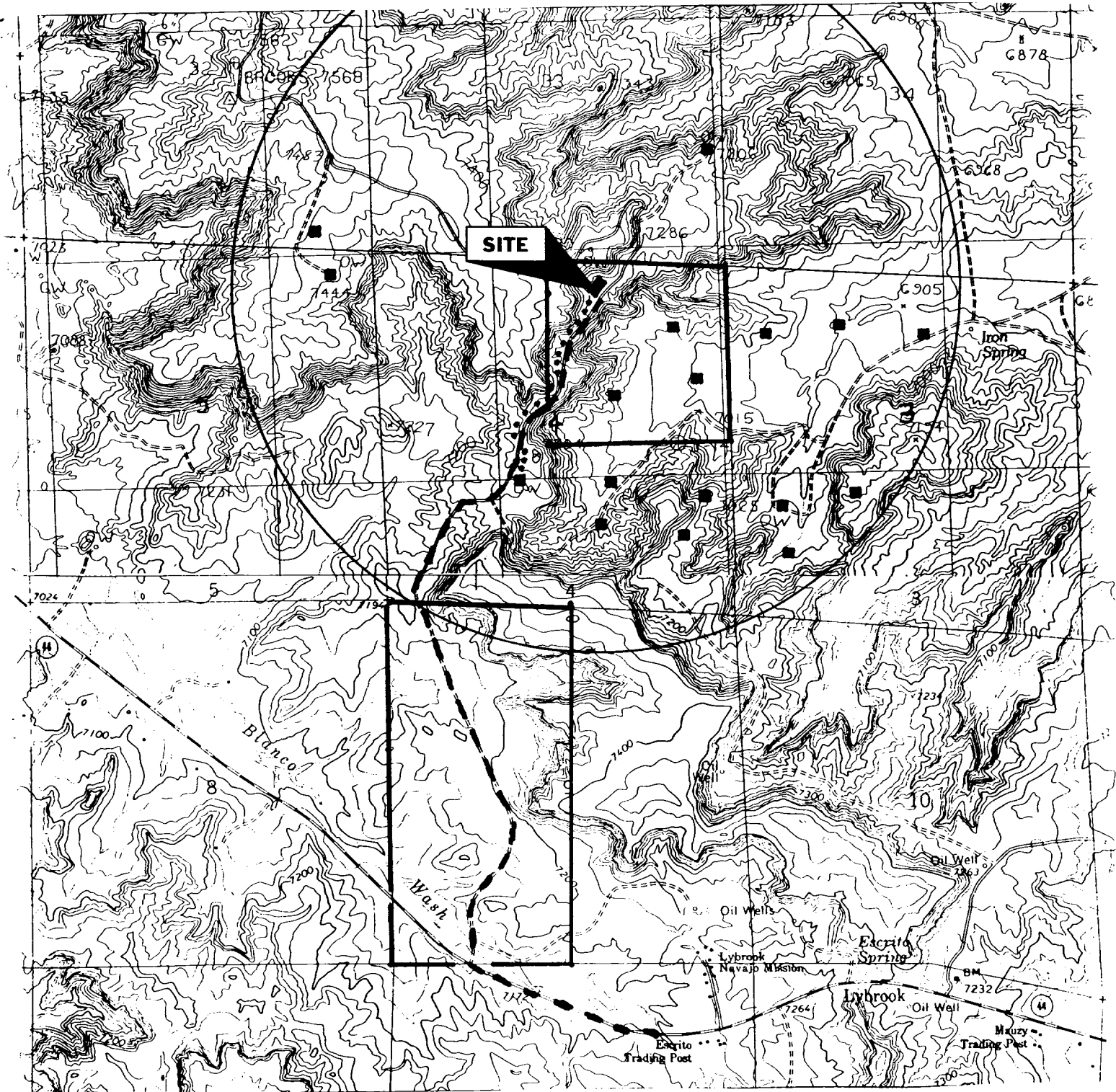
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office FFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ANADOLU

Elm Ridge Resources, Inc.
 Campos 4 #3
 450' FNL & 1905' FEL
 Sec. 4, T. 23 N., R. 7 W.
 Rio Arriba County, New Mexico



PROPOSED WELL: PROPOSED GAS LINE:
 EXISTING WELL: EXISTING ROAD:
 LEASE:

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PAGE 1

Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
San Jose	000'	12'	+7,260'
Nacimiento	100'	112'	+7,160'
Ojo Alamo	1,660'	1,672'	+5,600'
Kirtland	1,800'	1,812'	+5,460'
Fruitland Coal	2,085'	2,097'	+5,175'
Pictured Cliffs Ss	2,280'	2,292'	+4,980'
Lewis Sh	2,365'	2,377'	+4,895'
Chacra Ss	2,710'	2,722'	+4,550'
Cliff House Ss	3,815'	3,827'	+3,445'
Menefee Sh	3,865'	3,877'	+3,395'
Pt. Lookout Ss	4,660'	4,672'	+2,600'
Mancos Sh	4,810'	4,822'	+2,450'
Gallup Ss	5,420'	5,432'	+1,840'
Skelly	5,695'	5,707'	+1,565'
Mayre	5,820'	5,832'	+1,440'
Total Depth	6,650'	6,662'	+610'

* all elevations reflect the ungraded ground level of 7,260'

2. NOTABLE ZONES

<u>Oil &/or Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	San Jose	Fruitland
Pictured Cliffs	Fruitland	
Gallup	Pictured Cliffs	

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and

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PAGE 2

cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3,000 psi model is on PAGE 3.

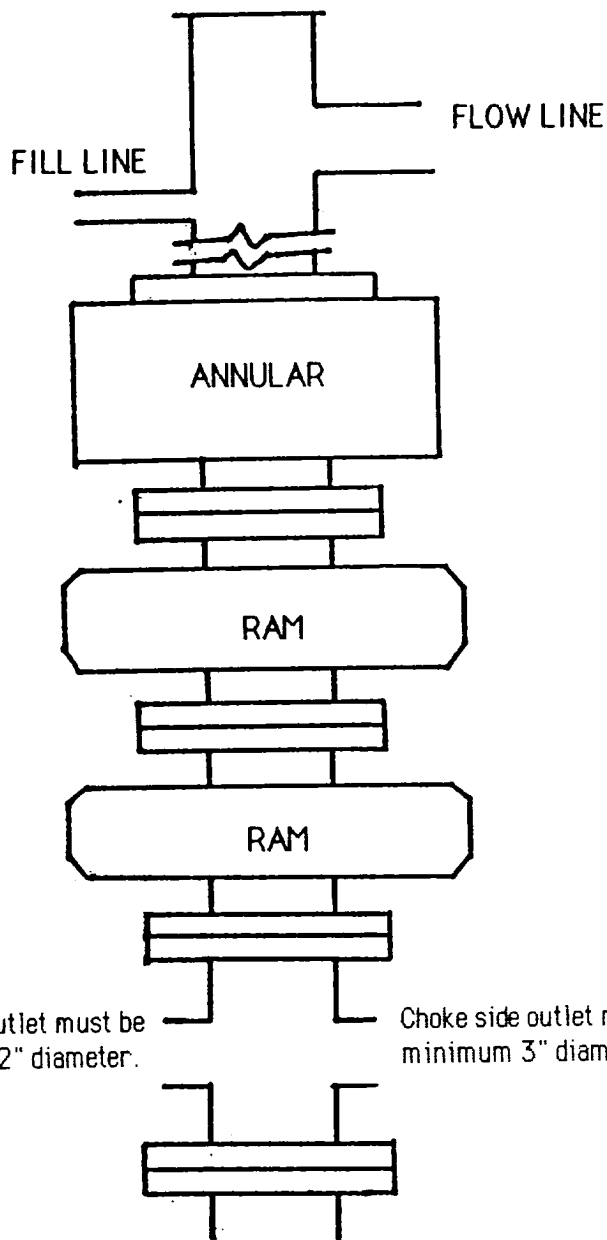
A $\geq 3,000$ psi BOP and choke manifold system will be installed and tested to 2,000 psi before drilling surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

4. CASING & CEMENT

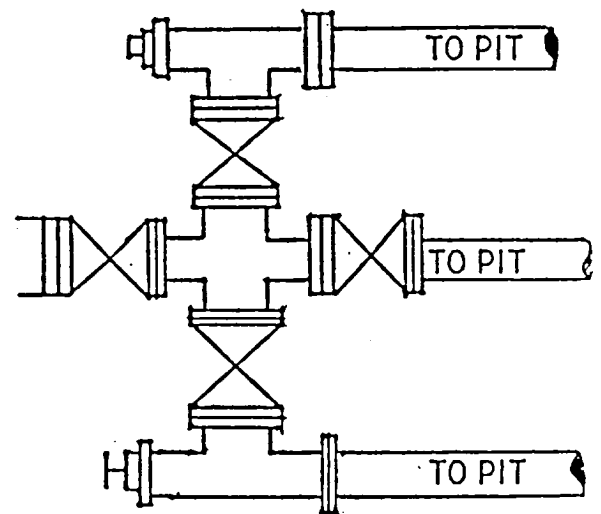
<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>GL Setting Depth</u>
12-1/4"	8-5/8"	24	K-55	ST&C	New	350'
7-7/8"	4-1/2"	10.5	J-55	LT&C	New	6,650'

Surface casing will be cemented to the surface with ≈ 250 cubic feet (≈ 250 sx) Class B with 1/4#/sk Flocele + 2% CaCl₂. Volume is based on 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Use API casing dope.



TYPICAL BOP STACK
& CHOKE MANIFOLD

There will be at least 2 chokes and 2 choke line valves (3" minimum). The choke line will be 3" in diameter. There will be a pressure gauge on the choke manifold.



Kill side outlet must be minimum 2" diameter.

Choke side outlet must be minimum 3" diameter.

Kill line will be minimum 2" diameter and have 2 valves, one of which shall be a minimum 2" check valve.

Upper kelly cock will have handle available.
Safety valve and subs will fit all drill string connections in use.
All BOPE connections subjected to well pressure will be flanged, welded, or clamped.

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Campos 4 #3
450' FNL & 1905' FEL
Sec. 4, T. 23 N., R. 7 W.
Rio Arriba County, New Mexico

PAGE 4

Production casing will be cemented to the surface in 2 stages with a stage tool set at $\approx 4,350'$. First stage volume will be $\approx 1,315$ cu ft consisting of ≈ 320 sx Halliburton Lite with 1/4 #/sk Flocele followed by ≈ 595 sx Class B with 2% CaCl_2 . Second stage volume will be $\approx 1,735$ cu ft consisting of ≈ 940 sx of Halliburton Lite with 2% CaCl_2 followed by ≈ 45 sx Class B with 2% CaCl_2 to cover the Mesa Verde, Pictured Cliffs, and Ojo Alamo. Volume is based on 75% excess, but caliper log will be used to determine actual volume needed. Centralizers will be installed on the middle of the shoe joint and on every joint thereafter for a total of ≈ 28 centralizers. Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only. Use API casing dope.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	<u>ppg</u>	<u>Viscosity</u>	<u>Fluid Loss</u>	<u>pH</u>
0' - 350'	Fresh water gel chem	9.0	50	NC	9
350' - TD'	Fresh water gel chem	9.0	38-50	6.0	9

Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well site while drilling. Mud will be checked hourly by rig personnel. Material to soak up possible oil or fuel spills will be on site.

6. CORING, TESTING, & LOGGING

No cores or DSTs are planned. DIL/GR logs will be run from TD to surface. CNL/FDC logs may be run over selected segments. Samples will be collected every 10' from 200' above the Pt. Lookout to the base of the Pt. Lookout and through the Gallup and Dakota. Samples will be collected every 30' elsewhere.