

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

Richardson Operating Co. (303) 830-8000

3. ADDRESS AND TELEPHONE NO.

1700 Lincoln, Suite 1700, Denver, Co. 80203

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

At surface

870' FNL &amp; 1205' FEL

At proposed prod. zone

Same

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

8 1/2 miles NE of Kirtland, NM

15. DISTANCE FROM PROPOSED

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

115'

16. NO. OF ACRES IN LEASE

2523.72

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

N/A

19. PROPOSED DEPTH

1,200'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

158.3/318.3

20. ROTARY OR CABLE TOOLS

Rotary

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

5,435' ungraded ground

22. APPROX. DATE WORK WILL START\*

Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7" (K-55)	20#	120'	~36 cu ft & to surface
6-1/4"	4-1/2" (K-55)	10.5#	1,200'	~220 cu ft & to surface

On sited with Neel McBride.

Archaeology report LAC 2000-31b submitted July 24, 2000.



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

TITLE

Consultant (505) 466-8120

DATE

10-2-00

(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

/s/ Jim Lovato

TITLE

DATE

MAR 20

\*See Instructions On Reverse Side

State of New Mexico  
Energy, Minerals & Mining Resources Department

Form C - 102

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

200 OCT -5 51 1-33 ☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

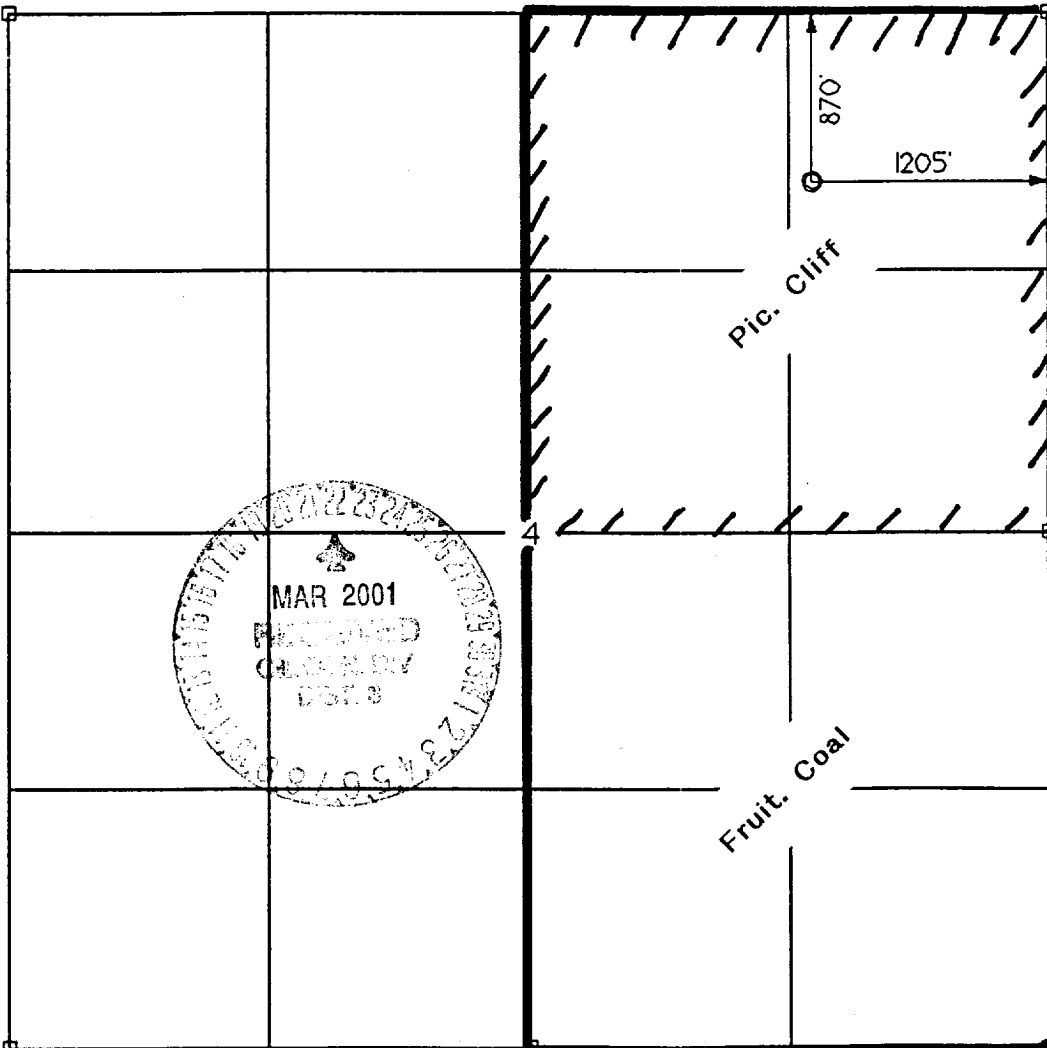
APA Number 30-045-30366	Pool Code 71629 & 86620	Pool Name FRUIT, COAL & TWIN MOUND PC
Property Code 2-7506	Property Name ROPCO	Well Number 4 - 1
OGRID No. 019219	Operator Name RICHARDSON OPERATING COMPANY	Elevation 5435'

Surface Location									
UL or Lot A	Sec. 4	Twp. 29 N.	Rge. 14 W.	Lot Id.	Feet from 870	North/South NORTH	Feet from 1205	East/West EAST	County SAN JUAN

Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County

Dedication	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <i>Brian Wood</i> Printed Name <b>BRIAN WOOD</b> Title <b>CONSULTANT</b> Date <b>OCT. 2, 2000</b>	
<b>SURVEYOR CERTIFICATION</b> 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 <b>28 MAY 2000</b> Signature and Seal of Professional Surveyor <i>Gerard S. Huddleston</i> 	

## Pressure Control Equipment

**Note: 1. An upper Kelly cock valve will be utilized during drilling. Handle will be available for easy access.**

## Pill Line

## With Emergency Backup

## Bind Rams

100

## Back Pressure

[illegible]

# Introduction

**Ball Valve**  
**3000 psi 1/2 P.**

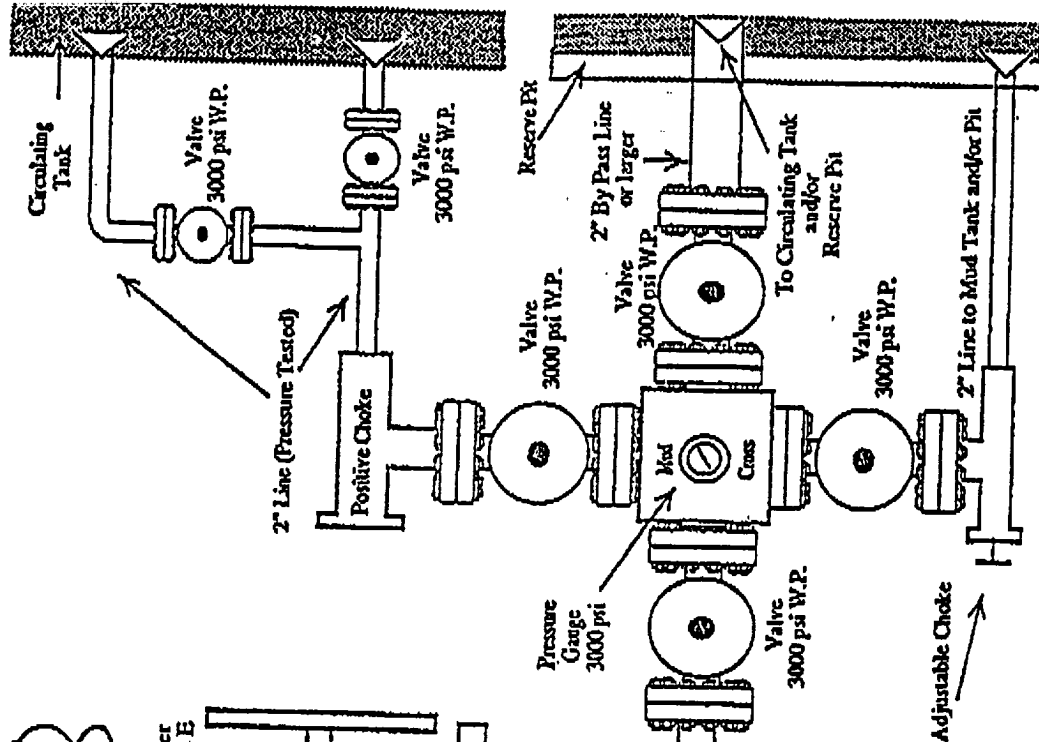
**Ground Level**

## Vibrating st

equipment

d in the

**Note:** This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.



Richardson Operating Co.  
WF Federal 4 #1  
870' FNL & 1205' FEL  
Sec. 4, T. 29 N., R. 14 W.  
San Juan County, New Mexico

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5. MUD PROGRAM

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.7 pounds per gallon. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.

6. CORING, TESTING, & LOGGING

No cores or DSTs are planned. Induction/GR, cement bond, and density logs will be run from TD to surface.

7. DOWNHOLE CONDITIONS

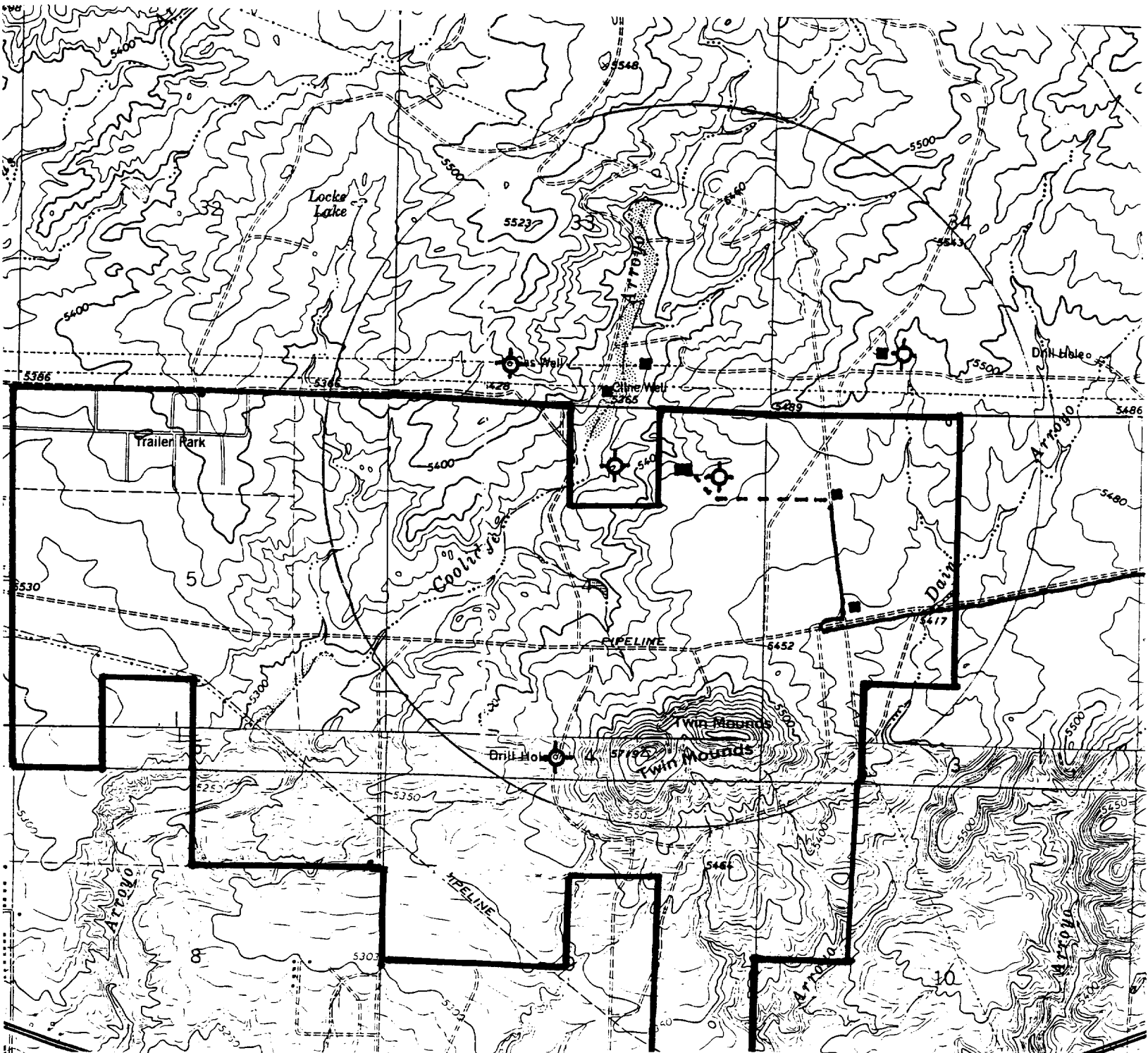
No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be  $\approx 480$  psi.

8. OTHER INFORMATION

The anticipated spud date is October 16, 2000. It is expected it will take five days to drill and one week to complete the well.

Richardson Operating Co.  
 WF Federal 4 #1  
 870' FNL & 1205' FEL  
 Sec. 4, T. 29 N., R. 14 W.  
 San Juan County, New Mexico

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|------------------|------------------------------|
| PROPOSED WELL: ■ | LEASE BOUNDARY: ———          |
| EXISTING WELL: ● | EXISTING ROAD: ~~~~~         |
| P&A WELL: ⊕      | NEW ROAD & PIPELINE: - - - - |