

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 St., Suite 1700, Denver, Co. 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface: 1254' FNL & 1939' FEL  
At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
1 air miles NE of Kirtland

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
66'

16. NO. OF ACRES IN LEASE  
238.55

17. NO. OF ACRES ASSIGNED TO THIS WELL  
320 & 160 NE/4

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

19. PROPOSED DEPTH  
660'

20. ROTARY OR TABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
5,250' ungraded

22. APPROX. DATE WORK WILL START\*  
Feb. 15, 2001

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	K-55 7"	20	120'	≈36 cu. ft. & to surface
6-1/4"	K-55 4-1/2"	10.5	660'	≈125 cu. ft. & to surface

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



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

cc: BLM, Colby, 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: 1-22-01

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE: 10/15/01

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/ V.R. Balderaz TITLE: \_\_\_\_\_ DATE: OCT - 5 2001

\*See Instructions On Reverse Side

BLM/OCD

[Handwritten mark]

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

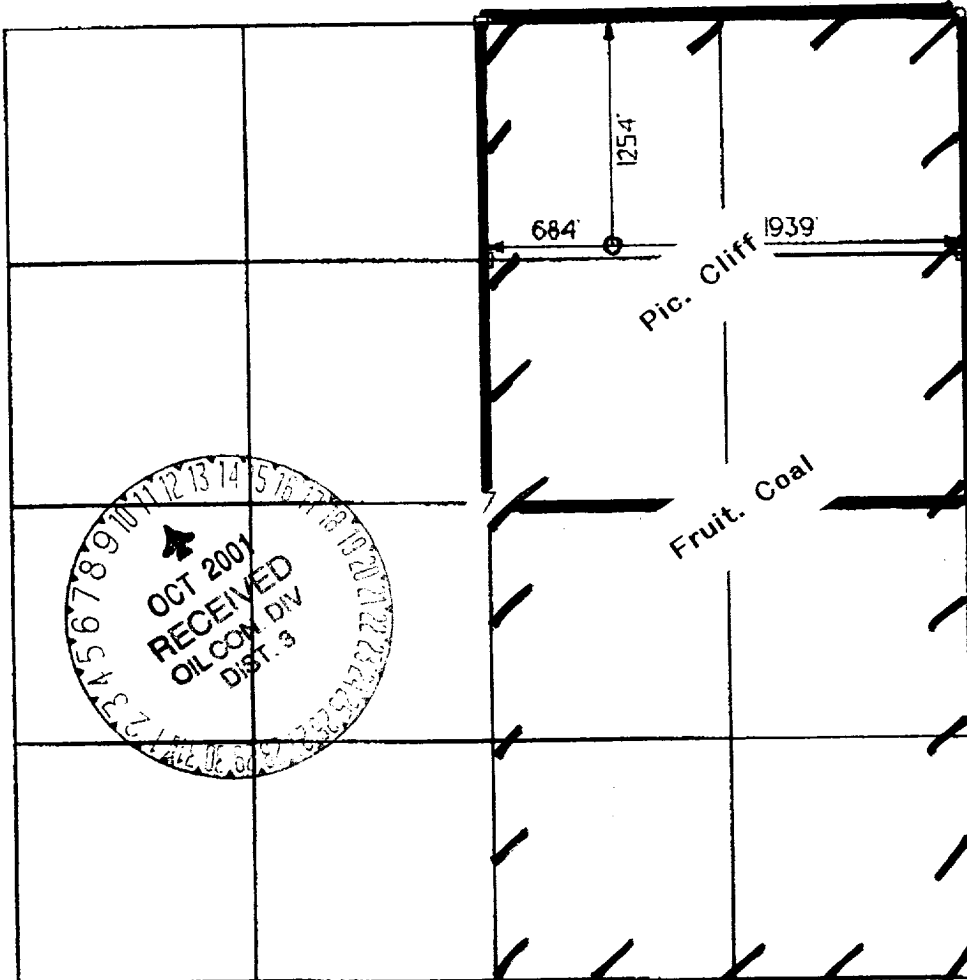
APA Number <b>30-045-30523</b>		Pool Code 71629 & 86620	Pool Name FRUIT, COAL & TWIN MOUNDS PC <del>30523</del>
Property Code <b>28963</b>	Property Name ROPCO		Well Number 7-1
OGRD No. 019219	Operator Name RICHARDSON OPERATING COMPANY		Elevation 5250'

Surface Location									County
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from >	North/South	Feet from >	East/West	
B	7	29 N.	14 W.		1254	NORTH	1939	EAST	SAN JUAN

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

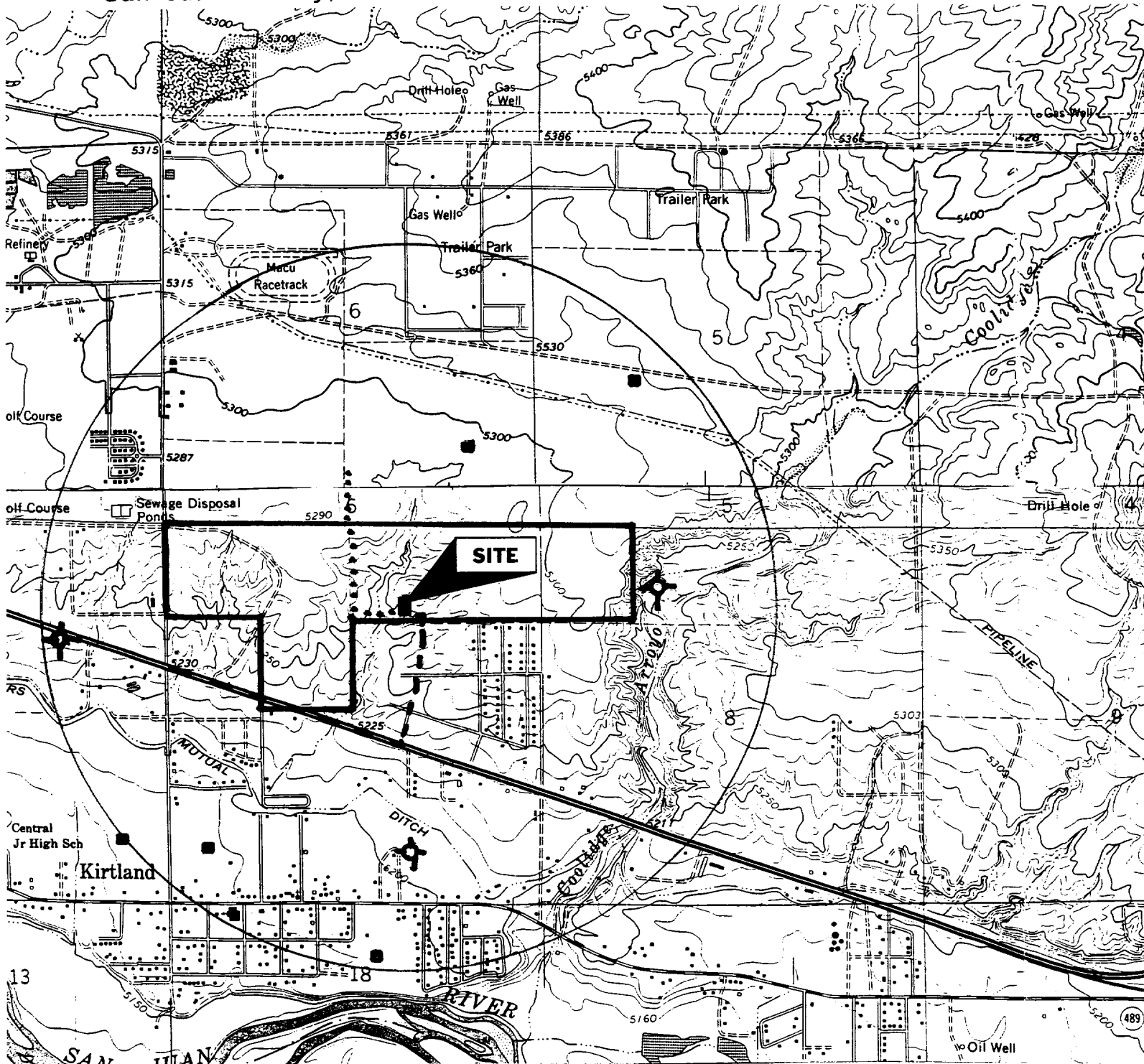
Dedication 320 PC 160 PC	Joint ?	Consolidation	Order No.
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NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<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	BRIAN WOOD
Title	CONSULTANT
Date	JAN. 22, 2001
<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	3 OCTOBER 2000
Signature	<i>[Signature]</i>
Professional Seal	

Richardson Operating Co.  
 Ropco 7 #1  
 1254' FNL & 1939' FEL  
 Sec. 7, T. 29 N., R. 14 W.  
 San Juan County, New Mexico



- PROPOSED WELL: [Symbol]
- EXISTING WELL: [Symbol]
- P&A WELL: [Symbol]
- PROPOSED PIPELINE: [Symbol]
- EXISTING ROAD: [Symbol]
- LEASE: [Symbol]

Richardson Operating Co.  
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## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
Kirtland Sh	000'	5'	+5,250'
Basal Fruitland Coal	510'	515'	+4,740'
Pictured Cliffs Ss	530'	535'	+4,720'
Total Depth (TD)*	660'	665'	+4,590'

\* all elevations reflect the ungraded ground level of 5,250'

### 2. NOTABLE ZONES

#### Gas Zones

Fruitland Coal (510')  
 Pictured Cliffs (530')

#### Water Zones

Fruitland Coal (510')

#### Coal Zones

Fruitland Coal (510')

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and 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 2,000 psi model is on PAGE 3.) Double ram or annular system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1000 psi.

Richardson Operating Co.  
 Ropco 7 #1  
 1254' FNL & 1939' FEL  
 Sec. 7, T. 29 N., R. 14 W.  
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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. BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi. Maximum expected pressure is  $\approx$ 265 psi.

#### 4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
8-3/4"	7"	20	K-55	New	120'
6-1/4"	4-1/2"	10.5	K-55	New	660'

Surface casing will be cemented to surface with  $\approx$ 36 cu. ft. ( $\approx$ 30 sx) Class B + 2% CaCl<sub>2</sub>. Volume is based on 100% excess, yield of 1.18 cu. ft./sk, and slurry weight of 15.6 PPG. WOC = 12 hours. Pressure test surface casing to 600 psi for 30 minutes.

Production casing hole will first be cleaned of rock chips by circulating at least 150% of hole volume with mud to the surface. Thirty barrels of fresh water will next be circulated. Lead with  $\approx$ 70 cu. ft. ( $\approx$ 35 sx) of Class B with 2% metasilicate (yield = 2.06 cu. ft./sk, slurry weight = 12.5 PPG). Tail with  $\approx$ 55 cu. ft. ( $\approx$ 47 sx) of Class B with 2% CaCl<sub>2</sub> (yield = 1.18 cu. ft./sk, slurry weight = 15.6 PPG). Total cement volume is  $\approx$ 125 cu. ft. based on 75% excess and circulating to surface.

Production casing will have 4-1/2" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Three centralizers will be spaced on every other joint starting above the shoe. Three turbolizers will be placed on every other joint starting from the top of the well.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0135  
Expires: January 31, 2004

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-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  
 Richardson Operating Company

3a. Address  
 3100 La Plata Hwy., Farmington, NM 87401

3b. Phone No. (include area code)  
 (505) 564-3100

4. Location of Well (Footage, Sec., T, R., M., or Survey Description)  
 1254' FNL & 1939' FEL Sec. 7-T29N-R14W, NMPM

5. Lease Serial No.  
 NMMN-101551

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.  
 ROPCO 7 #1

9. API Well No.  
 30-045-30523

10. Field and Pool, or Exploratory Area  
 Twin Mounds PC & Fruitland Coal

11. County or Parish, State  
 San Juan, New Mexico

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 checked="" 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 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	

3. 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 recomplete 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 recompletion 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.)

- 4/12/02 Spud well 8:15 AM drilled to 40', secured site, shut down
- 4/13/02 Drilled to 60', secured site, shut down.
- 4/14/02 Drilled to 140', set plug @ 132.6', 75 sx cement, circulated 4 bbls to surface, set K-55 7" 20# pipe
- 4/16/02 drilled to 640', 90 sx cement
- 4/17/02 TD reached 690', 85 sx cemented, circulated 10 bbls to surface, set K-55 4 1/2", #10.5 pipe to 660', secured location

WAITING ON CONNECTION

RECEIVED  
 2002 MAY 13 AM 11:18  
 070 FARMINGTON NM

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) Anne Jones Title Land Manager

Signature *Anne Jones* Date 5/8/02 BY *[Signature]*

ENTERED  
4-MSS

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (Signature) \_\_\_\_\_ Name (Printed/Typed) \_\_\_\_\_ Title \_\_\_\_\_

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 \_\_\_\_\_ Date MAY 20 2002

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.

(Continued on next page)

WOOD