

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

700 AUG -7 AM 11:05

070 Farmington, NM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NMSF-078329</b>
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>N/A</b>
2. Name of Operator <b>RICHARDSON OPERATING COMPANY</b>		7. If Unit or CA Agreement, Name and No. <b>N/A</b>
3a. Address <b>3100 LaPLATA HIGHWAY FARMINGTON, NM 87401</b>	3b. Phone No. (include area code) <b>(505) 564-3100</b>	8. Lease Name and Well No. <b>FEDERAL 33-32 #4</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>797' FNL &amp; 834' FWL</b> At proposed prod. zone <b>SAME</b>		9. API Well No. <b>30-045- 31832</b>
14. Distance in miles and direction from nearest town or post office* <b>7 AIR MILES S OF BLANCO</b>		10. Field and Pool, or Exploratory <b>BASIN FRUITLAND COAL</b>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>797'</b>		11. Sec., T., R., M., or Blk. and Survey or Area <b>32-28n-9w NMPM</b>
16. No. of Acres in lease <b>662.86</b>		12. County or Parish <b>SAN JUAN</b>
17. Spacing Unit dedicated to this well <b>N2 (320 ACRES)</b>		13. State <b>NM</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>248'</b>		19. Proposed Depth <b>2,200'</b>
20. BLM/BIA Bond No. on file <b>#158293308 (BLM - NATIONWIDE)</b>		21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>6,012' GL</b>
22. Approximate date work will start* <b>UPON APPROVAL</b>		23. Estimated duration <b>2 WEEKS</b>

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

Comments

This action 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 (& OCD), ConocoPhillips, Richardson

25. Signature 	Name (Printed/Typed) <b>BRIAN WOOD</b>	Date <b>8-4-03</b>
Title <b>CONSULTANT</b> <b>PHONE: 505 466-8120</b> <b>FAX: 505 466-9682</b>		
Approved by (Signature) 	Name (Printed/Typed) <b>David J. Mankiewicz</b>	Date <b>JAN 15 2004</b>
Title <b>Office</b>		

Application approval does not warrant or certify the 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, are attached.

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.

NMOCD

State of New Mexico  
Energy, Minerals & Mining Resources Department  
OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

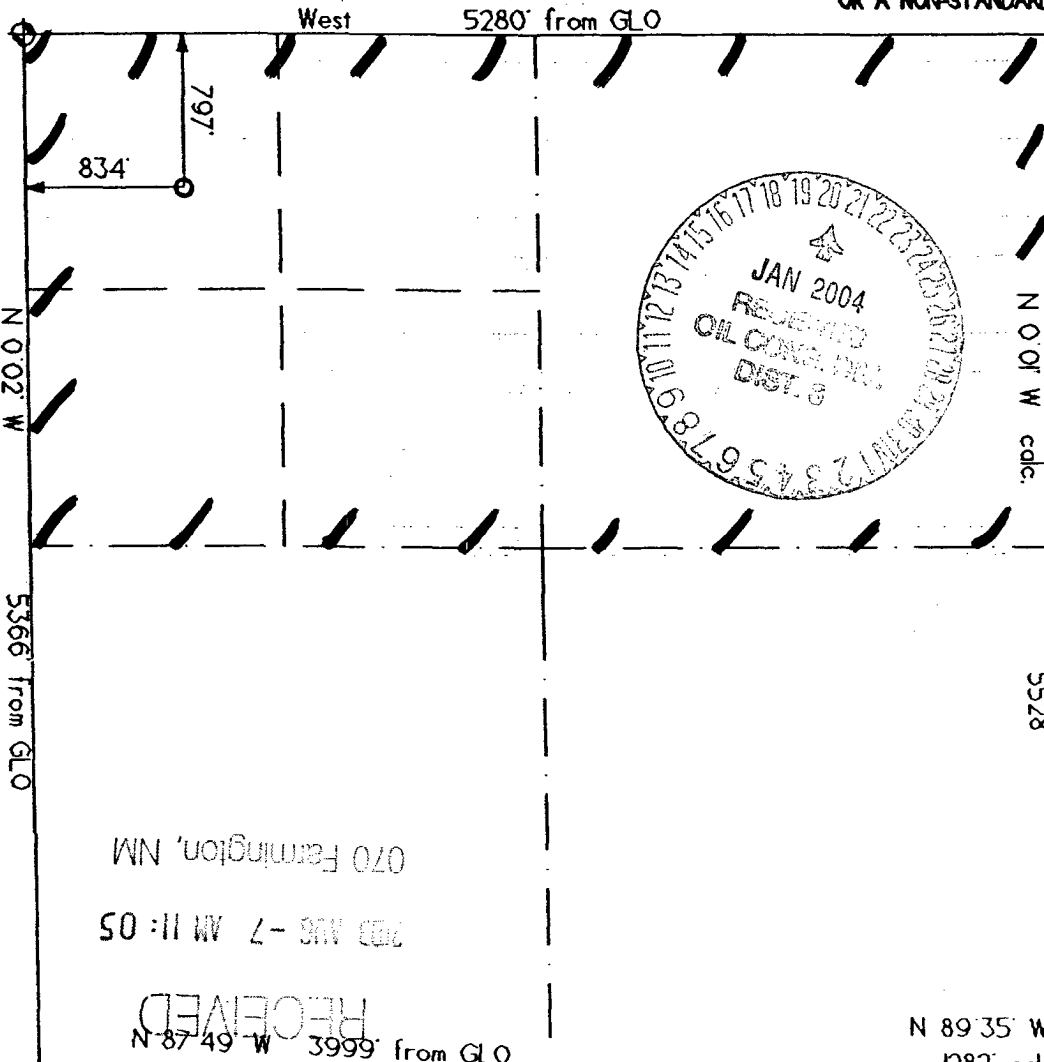
APA Number <b>30-045-31832</b>	Pool Code <b>71629</b>	Pool Name <b>BASIN FRUITLAND COAL</b>
Property Code <b>9633</b>	Property Name <b>FEDERAL</b>	Well Number <b>4</b>
OGFD No. <b>019219</b>	Operator Name <b>RICHARDSON OPERATING COMPANY</b>	Elevation <b>6012'</b>

Surface Location									
U. or Lot	Sec.	Twp.	Rge.	Lot Id.	Feet from	North/South	Feet from	East/West	County
.D	32	28 N.	.9 W.		797	NORTH	834'	WEST	SAN JUAN

Bottom Hole Location if Different From Surface									
U. or Lot	Sec.	Twp.	Rge.	Lot Id.	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



<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>B. Wood</i>	
Printed Name	<b>BRIAN WOOD</b>
Title	<b>CONSULTANT</b>
Date	<b>AUG. 4, 2003</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>7/16/03</b>	
Signed and Sealed by Professional Surveyor 	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

RECEIVED

**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, Farm, NM 87401

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

3b. Phone No. (include area code)  
505-344-3400

979' FNL & 834' FWL-Sec. 32-T28N-R9W

5. Lease Serial No.  
NMSF-078329

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.  
Federal 23-32 #2

9. API Well No.  
30-045- 31832

10. Field and Pool, or Exploratory Area  
Basin Fruitland Coal

11. County or Parish, State  
San Juan Co., NM

**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 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	

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 recomple 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.)

DEC 10 2003  
BY *[Signature]*

Richardson Operating Company requests the name of the well as referenced above, be changed from the original APD application, which as the Federal 11-32 #4. Per OCD requirements the infill well must have the same name as the parent well, which in this case is the Federal 23-32 #1. The APD has the well name as the Federal 11-32 #4. Therefore the well name shall be the Federal 23-32 #2. The APD was submitted for approval on 8-4-03. All other information submitted to the BLM shall remain the same.

A revised C-102 is attached.

This well has not been drilled.

650

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

Paul Lehrman

Title Landman

Signature

Date 11/20/03

ACCEPTED FOR RECORD

DEC 10 2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

*[Signature]* David J. Markiewicz

Title

Office

FARMINGTON DISTRICT OFFICE  
BY *[Signature]* JAN 15 2004

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.

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.

(Instructions on reverse)

FARMINGTON

Richardson Operating Company  
Federal 11-32 #4  
797' FNL & 834' FWL  
Sec. 32, T. 28 N., R. 9 W.  
San Juan County, New Mexico

PAGE 1

## Drilling Program

### 1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Nacimientos	000'	5'	+6,012'
Kirtland Shale	1,212'	1,217'	+4,800'
Fruitland Coal	1,712'	1,717'	+4,300'
Pictured Cliffs Ss	2,100'	2,105'	+3,912' -
Total Depth (TD)*	2,200'	2,205'	+3,812'

\* all elevations reflect the ungraded ground level of 5,865'

### 2. NOTABLE ZONES

#### Gas Zones

Fruitland Coal  
Pictured Cliffs

#### Water Zones

Fruitland Coal

#### Coal Zones

Fruitland Coal

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 Company  
Federal 11-32 #4  
797' FNL & 834' FWL  
Sec. 32, T. 28 N., R. 9 W.  
San Juan County, New Mexico

PAGE 2

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  $\leq 880$  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	250'
6-1/4"	4-1/2"	10.5	K-55	New	2,100'

Surface casing will be cemented to surface with  $\approx 100$  cubic feet ( $\approx 85$  sacks) Class B + 2%  $\text{CaCl}_2$ . Volume is based on  $>100\%$  excess, yield of 1.18 cubic feet per sack, and slurry weight of 15.6 pounds per gallon. W. O. C. = 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  $\approx 310$  cubic feet ( $\approx 151$  sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with  $\approx 155$  cubic feet ( $\approx 132$  sacks) of Class B with 2%  $\text{CaCl}_2$  (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume is  $\approx 465$  cubic feet based on  $>100\%$  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. Six centralizers will be spaced on every other joint starting above the shoe. Six turbolizers will be placed on every other joint starting from the top of the well.